

*Ford Motor Company*

James P. Vondra, Director  
Automotive Safety Office  
Environmental & Safety Engineering

March 10, 2003

Ms. Kathleen C. DeMeter, Director  
Office of Defects Investigation Safety Assurance  
National Highway Traffic Safety Administration  
400 Seventh Street, S.W.  
Washington, DC 20590

Dear Ms. DeMeter:

Subject: EA02-027:NVS-212am

Attached is the Ford Motor Company (Ford) response to the agency's December 12, 2002 letter requesting information relating to 3.0L V6 engine stalling complaints on 2001 through 2002 model year Ford Escape vehicles. An amended answer to Request 1 and complete answers to Requests 8 and 11 are attached. This completes our response to the December 12, 2002 letter.

Based upon our review of the materials and information presented in response to this Engineering Analysis, our prior responses to PE01-043, and our review of previous agency conclusions with respect to stalling, Ford does not believe that the reported engine stalling in the subject vehicles presents an unreasonable risk to motor vehicle safety.

Of the 13,431 incidents identified in Ford's searches that may relate to engine stalling in the subject vehicles, there have been no alleged collisions with other vehicles and only passing reference to unspecified minor injuries in one report. Three reports (MORS III #578743032, #349062132, and #504821791) allege minor damage caused by contact with objects other than vehicles, one report (MORS III Case #1372870702) alleges an accident with no reported damage, and one report (MORS III Case #1500752781 submitted in our response to PE01-043) claims the customer suffered unspecified minor injuries, but makes no mention of vehicle damage. One VOQ (Reference #8004571) attached to the agency's December 12, 2002 information request letter alleges the vehicle came to a stop by hitting a curb due to loss of power assist braking without suffering any damages. While Ford has not verified that any of these six incidents are in any way actually related to engine stalling, they equate to a rate of 0.20 per 10,000 vehicles with an alleged injury rate of 0.03 per 10,000 vehicles.

The findings from the review referenced above are consistent with the agency's findings in PE98-057. In the closing resume to PE98-057, the agency observed that when vehicles stall while in motion (reportedly the most common condition for Escape vehicles that stall), "... [t]his gives the driver time and vehicle momentum with which to maneuver onto the roadway shoulder, away from travel lanes." Although skilled drivers typically drove the vehicles that were

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the subject of PE98-057, it appears that drivers of the subject vehicles handle incidents of stalling in the same manner. The findings are also consistent with the agency's findings in an earlier report of an engine stalling study entitled "Analysis of Stalling Problems," prepared by The Transportation Systems Center (Report No. HE702/S7502), in which the agency stated that while engine stalling incident rates may be comparable to other safety defect investigations, the stalling related accident rate was lower than in most investigations that have influenced recalls. In addition to the driver's ability to maneuver the vehicle to the side of the roadway, more than 95% of the owners contacted have indicated they were able to restart the engine immediately after the stall, some without even stopping the vehicle.

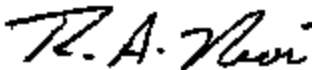
Ford has identified five potential root causes involving the design and/or manufacture of certain components on the subject vehicle that likely account for approximately 90% of the alleged engine stalling incidents. Those potential root causes are: 1) a sticking pintle within the Idle Air Control Valve (IACV); 2) a malfunctioning check valve in the On-board Refueling Vapor Recovery System (ORVRS); 3) power interruptions to the Power Control Module (PCM) involving the PCM Power Relay; 4) power interruptions to the PCM caused by loose or out-of-position connectors in the Power Distribution Box (PDB); and 5) the On-Board Diagnostic (OBD) II emissions controls calibration that could result in a fuel rich stall under certain driving conditions. TSB 02-11-6 was issued on June 5, 2002 to assist dealers in repair of the first four identified root causes.

On September 12, 2002 the OBD II calibration was revised on 2003 model year 3.0L V6 engine equipped vehicles to eliminate the potential for the fifth identified root cause to occur. On November 12, 2002, TSB 02-11-6 was revised to address the updated OBD II calibration changes and reissued as TSB 02-23-1. This TSB instructs dealers to perform all steps and is covered within Ford's normal warranty period.

Based on the continued extremely low rate of stalling related accidents and the effectiveness of TSB 02-23-1, Ford does not believe that the reported engine stalling in the subject vehicles presents an unreasonable risk to motor vehicle safety. While engine stalling may be undesirable, it does not represent an unreasonable risk to motor vehicle safety.

If you have any further questions, please contact me.

Sincerely,



James P. Vondale

Attachment

FORD MOTOR COMPANY (FORD) RESPONSE TO EA02-027

Ford's response to this Engineering Analysis (EA) information request was prepared pursuant to a diligent search for the information requested. While we have employed our best efforts to provide responsive information, the breadth of the agency's request and the requirement that information be provided on an expedited basis make this a difficult task. We nevertheless have made every effort to provide thorough and accurate information, and we would be pleased to meet with agency personnel to discuss any aspect of this Engineering Analysis.

The scope of Ford's investigation conducted to locate responsive information focused on Ford employees most likely to be knowledgeable about the subject matter of this inquiry and on review of Ford files in which responsive information ordinarily would be expected to be found and to which Ford ordinarily would refer, as more fully described in this response. Ford further notes that, as stated in the agency's broad definition of "Alleged Defect," the engine control system could include a myriad of components that we do not believe are significant contributing factors to the present stalling concerns. Therefore, although some documents relating to some of these components may be included in this response, Ford has concentrated its search for studies, surveys and investigation related documents to those conditions and components most likely to be significant contributing factors to the present stalling concerns.

Ford also notes that although electronic information was included within the scope of its search, Ford has not attempted to retrieve from computer storage electronic files that were overwritten or deleted. As the agency is aware, such files generally are unavailable to the computer user even if they still exist and are retrievable through expert means. To the extent that the agency's definition of Ford includes suppliers, contractors and affiliated enterprises for which Ford does not exercise day-to-day operational control, we note that information belonging to such entities ordinarily is not in Ford's possession, custody or control. Ford has construed this request as pertaining to vehicles manufactured for sale in the United States, its protectorates and territories.

This response provides Ford's answers to Requests 8 and 11 and a revision to our February 10, 2003 answer to Request 1. In a January 29, 2003 telephone conversation, Mr. Thomas Z. Cooper of the agency granted Ford's request for extension until March 10, 2003 to respond to Requests 8 and 11. Answers to all of the agency's other specific questions were provided in our February 10, 2003 response. As requested, after each numeric designation, we have set forth verbatim the request for information, followed by our response. Unless otherwise stated, Ford has undertaken to provide responsive documents dated from February 2, 2002 up to and including December 12, 2002, the date of your inquiry. Ford has searched business units and/or affiliates within the following offices for responsive documents: Research and Vehicle Technology, Ford Customer Service Division, North American Quality, Environmental and Safety Engineering, Truck Product Development, Purchasing, Vehicle Operations, Marketing and Sales Operations, Powertrain Operations, Office of the General Counsel, FAO Executive Offices and Business & Product Strategy.

Request 1

State, by model and model year, the number of subject vehicles Ford has manufactured for sale or lease in the United States. Separately, for each subject vehicle manufactured to date, state the following:

- a. Vehicle Identification number (VIN);
- b. Make;
- c. Model;
- d. Model Year;
- e. Date of manufacture;
- f. Date warranty coverage commenced; and
- g. The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease).

Provide the table in Microsoft Access 2000, or a compatible format, entitled "PRODUCTION DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table that provides further details regarding this submission.

#### Answer

Ford discovered possible errors in the build date database provided in our February 10, 2003 response to this request. The number representing the day of the month on which the vehicle was built may be incorrect. Therefore, we are amending our February 10, 2003 response to Request 1 and are providing the requested vehicle build information with corrected date information in Appendix A Amended (file: 2003-03-10\_A\_Amended) on the enclosed CD.

#### Request 8

Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") that relate to, or may relate to, the alleged defect in the subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, Ford. For each such action, provide the following information:

- a. Action title or identifier;
- b. The actual or planned start date;
- c. The actual or expected end date;
- d. Brief summary of the subject and objective of the action;
- e. Engineering group(s)/supplier(s) responsible for designing and for conducting the action; and,
- f. A brief summary of the findings and/or conclusions resulting from the action.

For each action identified, provide copies of all documents related to the action, regardless of whether the documents are in interim, draft, or final form. Organize the documents chronologically by action.

#### Answer

Ford is construing this request broadly and providing not only studies, surveys, and investigations, but also notes, correspondences, and other communications that were located pursuant to a diligent search of those files expected to contain documents that may be responsive to this information request. Copies of documents that were generated by the principle members of a Ford team whose primary responsibility was determination of the root causes for reported 3.0L V6 engine stalling in the subject vehicles are provided in Appendix B. Copies of all other documents are provided in Appendix C. Ford notes that it is not producing certain confidential electronic files containing engine calibration software and data that may be

responsive to this request, because: (1) it is difficult to view those files without using proprietary Ford software; and, (2) the information in the files likely is summarized in other documents that have been or are being provided. If after reviewing this response the agency determines it would like to review those files, please contact us and we will make arrangements for the data to be viewed.

Further, Ford is not providing or is redacting certain documents responsive to this request that contain information protected by the attorney-client privilege and/or work-product doctrine. Information concerning those documents is in a privilege log that will be provided under separate cover, along with copies of the documents that have been redacted by Ford. Ford has also identified certain documents responsive to this request that contain confidential financial, supplier, warranty, commercially sensitive, and proprietary engineering information which Ford will be submitting to the agency's Office of the Chief Counsel separately with a request for confidentiality.

#### Request 11

Provide Ford's assessment of the alleged defect in the subject vehicle, including:

- a. The casual or contributory factors;
- b. The failure mechanism(s);
- c. The failure modes;
- d. The risk to motor vehicle safety that it poses;
- e. What warnings, if any, the operator and other persons both inside and outside the vehicle would have that the alleged defect was occurring or subject component was malfunctioning; and,
- f. The reports included with this inquiry.

#### Answer

Based upon our review of the materials and information presented in response to this EA, our prior responses to PE01-043, and our review of previous agency conclusions with respect to stalling, Ford does not believe that the reported engine stalling in the subject vehicles presents an unreasonable risk to motor vehicle safety. The alleged engine stalling occurrences in the subject vehicles may result from a variety of causes including engine or engine control system malfunctions, operator error (for instance running out of gas) or other conditions. All of these potential causes can occur on any vehicle. Further, based upon Ford's review of the data and information submitted in response to PE01-043 and this EA, as well as Ford's review of the agency's findings and reasoning in other stalling related investigations, Ford does not believe the reported stalling presents an unreasonable risk to safety.

Ford's investigation into the reported stalling identified five potential root causes related to the design and assembly of the subject vehicles that account for approximately 90% of the alleged 3.0L V6 engine stalling incidents. As discussed in our April 12, 2002 response to PE01-043, four of these potential root causes are: 1) a sticking pintle within the Idle Air Control Valve (IACV); 2) a malfunctioning check valve in the On-board Refueling Vapor Recovery System (ORVRS); 3) power interruptions to the Power Control Module (PCM) involving the PCM Power Relay; and 4) power interruptions to the PCM caused by loose or out-of-position connectors in the Power Distribution Box (PDB). TSB 02-11-6 was issued on June 5, 2002 to assist dealers in repair of the first four identified root causes.

Subsequent to our response to PE01-043, a fifth potential root cause for stalling was identified. A fuel-rich engine stall may occur if the throttle plate is closed during a specific three second time period when a fuel system vacuum leak check is being performed by the On-Board Diagnostic (OBD) II system. This potential engine stalling condition, should it occur, will allow a driver to immediately restart the engine. To eliminate the potential for this condition to occur, the OBD II calibration was revised on 2003 model year subject vehicles on September 12, 2002.

There have been no identified reports of engine stalling without diagnostic codes being set, when appropriate, on vehicles built subsequent to September 12, 2002. The lack of diagnostic codes was common with each of the five potential root causes for engine stalling in the subject vehicles, which contributed to the complexity of identifying all potential root causes. On November 12, 2002, TSB 02-11-8 was reissued as TSB 02-23-1 with the updated OBD II calibration changes. This TSB instructs dealers to perform all steps and is covered within Ford's normal warranty period.

Ford's finding in the review of materials and information submitted in response to this EA and our responses to PE01-043 are consistent with the mid-1980s agency study of engine stalling issues. In a report entitled Analysis of Stalling Problems, which was prepared by The Transportation Systems Center (Report No. HE702/S7502), the agency noted, among other things, that although the rate of stalling complaints was comparable to the rate of complaints for other safety defect investigations, the rate of stalling-related accidents was lower than in most investigations that have led to recalls. Ford is unaware of any data since the mid-1980s that is in any way inconsistent with NHTSA's observation that there is a low risk of injury or death in the case of a stalled vehicle. Moreover, Ford is aware of at least two NHTSA investigations into stalling allegations (EA84-029 and EA84-031) that the agency closed, in part because "[a]lthough there are a large number of complaints of stalling vehicles, the risk of injury or death appears to be low."

This conclusion is consistent with the information provided in our response to Request 2 of PE01-043 and our February 10, 2003 response to Request 2 of your December 12, 2002 letter. Of the 13,431 reports and claims that may relate to the agency's investigation, there have been no allegations of collisions with other vehicles and only passing reference to unspecified minor injuries in one report. None of the reports submitted by Ford in response to this information request alleges a fatality. A total of six reports allege some sort of incident related to stalling. Three reports (MORS III Case #578743032, #349082132, and #504821791) allege minor damage caused by contact with objects other than vehicles, one report (MORS III Case #1372870702) alleges an accident with no reported damage, and one report (MORS III Case #1500752761) submitted in our response to PE01-043 makes passing reference to previous unspecified minor injuries but makes no mention of vehicle damage associated with an alleged accident. Ford has not verified that any of these incidents are in any way actually related to engine stalling. One VOQ (Reference #8004571) attached to the agency's December 12, 2002 information request letter alleges minor injuries due to increased steering efforts, but this VOQ also states that the engine was still running; we do not believe that this portion of the report describes an incident which meets the definition of the alleged defect. This same VOQ alleges that, at a later date, the vehicle came to a stop by hitting a curb due to loss of power assist braking without suffering any damages. However, a warranty claim for the same period of time as the alleged incident lists engine stalling (D21) as the Customer Concern Code.

Although Ford has not verified that any of these incidents are in fact related to engine stalling, even if all six are counted the incident rate is only 0.20 per 10,000 vehicles with an alleged injury rate of 0.03 per 10,000 vehicles. While acknowledging that stalling is not desirable, Ford

believes the conclusion stated in the agency's closing resume for PE98-057 applies to the subject investigation: "... there is no data indicating that occupants of a stalled [subject vehicle] are exposed to greater risk of injury due to the [stalling] condition."

(We have not included VOQ - Reference No. 6900706 - provided by the agency that alleges some sort of incident related to stalling in this rate because two warranty repair claims for this vehicle that correspond to the alleged incident date suggest that the engine did not stall. On December 8, 2001, the first warranty claim has the following text in the Customer Comments field:

**"CUST STATES POWER STEERING AND POWER BRAKES CUT OUT  
HAPPENED TWICE VEHICLE DID NOT STALL OK AFTER RESTARTING."**

On December 7, 2001, the second warranty claim has the following text in the Customer Comments field:

**"CUST STATES POWER STEERING AND POWER BRAKES CUT OUT  
VEHICLE DOESN T STALL CUST CONCERN CAUSED HIM TO HAVE AN  
ACCIDENT."**

The information provided in the warranty claims (engine still running) raises doubt that the incident involving this vehicle (VIN = 1FMCU04111KA88501), as recorded on the above referenced VOQ, meets the definition of the alleged defect.)

After reviewing the six reports referenced above our findings are consistent with the agency's findings in PE98-057. In the closing resume to PE98-057, the agency observed that when vehicles stall while in motion (the most common condition for Escape vehicles), "... [t]his gives the driver time and vehicle momentum with which to maneuver onto the roadway shoulder, away from travel lanes." Although skilled drivers typically drove the vehicles that were the subject of PE98-057, it appears that drivers of the subject vehicles handle incidents of stalling in the same manner. In addition to the driver's ability to maneuver the vehicle to the side of the roadway, more than 95% of the owners contacted indicated they were able to restart the engine immediately after the stall, some without even stopping the vehicle.

Although our analysis found engine stalling complaint rates for the subject vehicles to be comparable to other agency safety defect investigations, the rate of stalling-related accidents is significantly lower than in investigations of other conditions resulting in recalls. Ford believes that TSB 02-23-1 provides appropriate communication and remedy to address the root causes of potential engine stall as identified through Ford's exhaustive analysis. Based on the continued extremely low rate of stalling related accidents and the effectiveness of TSB 02-23-1, Ford does not believe that the reports of engine stalling in the subject vehicles present an unreasonable risk to motor vehicle safety.

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### CONCERNS BY CATEGORIES

Ford Motor Company

Build Date - Actual:Call	03/01/2002 -	Requested: 07/31/2001 -
Date - Actual:Purchase	03/28/200205/14/2002	04/11/2002Requested: 05/14/2002 -
Date - Actual:	- 05/14/200203/30/2002	05/14/2002Requested: 08/21/2001 -
	- 04/14/2002	04/16/2002

Containment Status: Both Contained and Not Contained  
Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

2002 ESCAPE

Total Customers Surveyed  
- Within date range: 37  
- Cumulative MYTD: 3,813

#### CC CODE - CONCERN: D21 - ENG STALLS

VIN: 1FMCU03172KC60243

Cust. Name: [REDACTED]

Cust. Phone:

Cust. Address:

Cust. City: KAHULUI, HI [REDACTED]

Build Date: 03/08/2002

Purchase Date: 04/14/2002

Dealer Name:

Dealer Phone:

30 DIS/60 DIS\*\*:

Mileage - 30DIS/60 DIS\*\*:

Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:

Increase SAT to 9 or 10

Gender:

30 / NA

600 / NA

1 / NA

N/NA

Female

Cust. Contact Date: 05/14/2002

Containment Status: Not Contained

Agent ID: prehana

Concern Comment: The customer says that the vehicle just died one day when driving about 50 mph. This concern occurred about three weeks after vehicle delivery. She hasn't changed the oil in the vehicle as of yet, and uses 89 octane fuel in the vehicle. This concern occurred when travelling downhill and no noises were associated. The vehicle had sat for about 2-3 hrs since last driven when this concern occurred and she was able to restart the vehicle right away. The check engine light was illuminated. At the time this concern was exhibited the engine temperature was warm. The customer did not check the battery. This concern only occurred this one time only. She plans on taking the vehicle to her dealership, Valley Isle Motors sometime today to have this concern addressed.

SIF \*\*\*: 3 (High)

Champion: NONE

ESCAPE-027-C 2643

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.

\*\* 30 DIS occurs at 1500 days in service and 60 DIS occurs at 4500 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.





### CONCERNS BY CATEGORIES

Ford Motor Company

Build Date - Actual/Call	03/01/2002 -	Requested: 07/31/2001 -
Date - Actual/Purchase	03/28/2002/05/14/2002	04/11/2002/Requested: 05/14/2002 -
Date - Actual:	- 05/14/2002/03/30/2002	05/14/2002/Requested: 08/21/2001 -
	- 04/14/2002	04/18/2002

Containment Status: Both Contained and Not Contained  
Plant(s): KANSAS CITY

#### CC CODE: OVERALL VEHICLE

2002 ESCAPE

Total Customers Surveyed  
- Within date range: 37  
- Cumulative MYTD: 3,813

#### CC CODE - CONCERN: D36 -- ENG HES/SURGE WHEN ACCEL

VIN: 1FMYU01B22KC84239

Cust. Name: [REDACTED]  
Cust. Phone: [REDACTED]  
Cust. Address: [REDACTED]  
Cust. City: WAHIAWA, HI [REDACTED]

Build Date: 03/07/2002  
Purchase Date: 04/14/2002  
Dealer Name:  
Dealer Phone:

30 DIS/60 DIS\*\*:  
Mileage - 30DIS/60 DIS\*\*:  
Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:  
Increase SAT to 9 or 10  
Gender:

30 / NA  
400 / NA  
9 / NA  
NA/NA  
Female

Cust. Contact Date: 06/14/2002

Containment Status: Not Contained

Agent ID: prehana

Concern Comment: The customer says that the vehicle exhibits a hesitation upon acceleration from a dead stop. She noticed this concern on the day after vehicle delivery. The A/C is usually on when this concern occurs and this is a constant concern. She does plan on mentioning this concern to her dealership Custer Ford and will do so at her convenience.

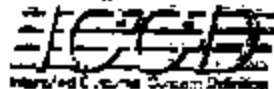
SIF \*\*\*: 1 (Low)      Champion: NONE

EM02-027-C 2844

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.

\*\* 30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



### CONCERNS BY CATEGORIES

Ford Motor Company

Build Date - Actual: Call	03/15/2002 -	Requested: 07/31/2001 -
Date - Actual: Purchase	04/11/2002/05/13/2002	04/11/2002/Requested: 05/13/2002 -
Date - Actual:	- 05/13/2002/04/08/2002	05/13/2002/Requested: 08/21/2001 -
	- 04/13/2002	04/16/2002

Containment Status: Both Contained and Not Contained  
Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
- Within date range: 38  
- Cumulative MYTD: 3,776

2002 ESCAPE

CC CODE - CONCERN: D21 - ENG STALLS

VIN: 1FMYU041E2KC84387

Cust. Name: [REDACTED]

Cust. Phone:

Cust. Address:

Cust. City: ALTAVISTA, VA [REDACTED]

Build Date: 03/29/2002

Purchase Date: 04/13/2002

Dealer Name:

Dealer Phone:

30 DIS/60 DIS\*\*:

30 / NA

Mileage - 30DIS/60 DIS\*\*:

1700 / NA

Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:

10 / NA

Increase SAT to 9 or 10

NA/NA

Gender:

Female

Cust. Contact Date: 05/13/2002

Containment Status: Not Contained

Agent ID: staniel

Concern Comment: The customer had a problem with the engine stalling while the customer was driving about 35 miles per hour. The vehicle just shut off on the customer. The concern was first noticed about two weeks ago. The oil is the same that was put in originally. The customer uses 87 regular unleaded octane. There were no noises associated with the concern. The vehicle did restart right away. The check engine light did come on, however once the vehicle was restarted the light did not come back on. The engine temperature was cold when the concern happened. The concern was intermittent and only happened the one time. The key will turn in the ignition when the vehicle is being started. The dealership advised the customer that if the concern happens again to bring it in.

SIF \*\*\*: 0 (None)

Champion: NONE

EM02-027-C 2845

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.

\*\* 30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



### CONCERNS BY CATEGORIES

Ford Motor Company

Build Date - Actual:Call 03/15/2002 - Requested: 07/31/2001 -  
 Date - Actual:Purchase 04/11/200205/13/2002 04/11/2002Requested: 05/13/2002 -  
 Date - Actual: - 05/13/200204/08/2002 05/13/2002Requested: 08/21/2001 -  
 - 04/13/2002 04/16/2002

Containment Status: Both Contained and Not Contained  
 Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
 - Within date range: 38  
 - Cumulative MYTD: 3,776

2002 ESCAPE

CC CODE - CONCERN: D06 - ENG HES/SURGE WHEN ACCEL

VIN: 1FMYU04172KD00874

Cust. Name: [REDACTED]  
 Cust. Phone: [REDACTED]  
 Cust. Address: [REDACTED]  
 Cust. City: LONDONDERRY, NH [REDACTED]

Build Date: 04/02/2002  
 Purchase Date: 04/11/2002  
 Dealer Name:  
 Dealer Phone:

30 DIS/60 DIS\*\* 32 / NA  
 Mileage - 30DIS/60 DIS\*\* 900 / NA  
 Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\* 9 / NA  
 Increase SAT to 9 or 10 NANA  
 Gender: Female

Cust. Contact Date: 05/13/2002

Containment Status: Not Contained

Agent ID: umulgra

Concern Comment: Approximately one month after purchasing the vehicle the customer noticed that it was hesitating. There is no front or rear vibration associated with this concern, and it only occurs at acceleration. The customer does not use the vehicle to move heavy cargo or pull a boat or trailer. The air conditioning or heater is not on when this concern occurs. The customer uses regular unleaded fuel, but she is not sure what grade it is. The concern generally occurs when traveling at speeds of approximately 20-35 mph. When the customer tries to accelerate, the vehicle will hesitate for a few seconds and then jerk forward a little bit. There are no noises associated with this concern, and the customer has not noticed it at any specific weather conditions. The concern was most pronounced yesterday during stop and go driving. The customer has not checked her transmission fluid and she would describe this concern as intermittent. She will mention this concern to her dealership at her earliest convenience.

SIF \*\*\*: 1 (Low)

Champion: NONE

2002-027-C 2648

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.  
 \*\* 30 DIS occurs at 1600 days in service and 60 DIS occurs at 4500 days in service.  
 \*\*\* Satisfaction Impact Factor (SIF) scale is: 0=none, 1=low, 2=medium, 3=high.



### CONCERNS BY CATEGORIES

Ford Motor Company

Build Date - Actual:Call 02/25/2002 - Requested: 07/31/2001 -  
 Date - Actual:Purchase 03/22/200205/03/2002 03/25/2002Requested: 05/03/2002 -  
 Date - Actual: - 05/03/200203/25/2002 05/03/2002Requested: 05/21/2001 -  
 - 04/03/2002 04/03/2002

Containment Status: Both Contained and Not Contained  
 Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
 - Within date range: 28  
 - Cumulative MYTD: 3,610

2002 ESCAPE

CC CODE - CONCERN: D21 - ENG STALLS

VIN: 1FMCU04172KC38487

Cust. Name: [REDACTED]

Cust. Phone:

Cust. Address:

Cust. City: ROYERSFORD, PA [REDACTED]

Build Date: 02/28/2002

Purchase Date: 03/29/2002

Dealer Name:

Dealer Phone:

30 DIS/60 DIS\*\*:

Mileage - 30DIS/60 DIS\*\*:

Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:

Increase SAT to 9 or 10

Gender:

35 / NA

900 / NA

9 / NA

NA/NA

Male

Date	Repair Order	Repair Comments
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03/29/2002

03-4285

COMPUTER DIAG SYSTEM

REPLACE RIGHT SIDE CRASH SENSOR ASSY

Cust. Contact Date: 05/03/2002

Containment Status:

Not Contained

Agent ID: wmfjgr

Concern Comment: Approximately two weeks ago the customer first experienced the concern with the vehicle stalling. The vehicle has only stalled twice. However, both times the air conditioning was on. The grade of octane that the customer uses ranges from 89 to 90. The vehicle has usually sat overnight when this concern occurs, and the engine temperature is warm when the vehicle stalls. The customer has contacted his selling dealership and they are working with him to resolve the concern.

SIF \*\*\*:

1 (Low)

Champion:

NONE

ERR3-021-C 2047

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.

\*\* 30 DIS occurs at 15/60 days in service and 60 DIS occurs at 45/60 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



### CONCERNS BY CATEGORIES

Ford Motor Company

Build Date - Actual:Call	02/22/2002 -	Requested: 07/31/2001 -
Date - Actual:Purchase	03/16/200204/24/2002	03/18/2002Requested: 04/24/2002 -
Date - Actual:	- 04/24/200203/14/2002	04/24/2002Requested: 08/21/2001 -
	- 03/25/2002	04/02/2002

Containment Status: Both Contained and Not Contained  
Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
- Within date range: 13  
- Cumulative MYTD: 3,484

2002 ESCAPE

CC CODE - CONCERN: D21 - ENG STALLS

VIN: 1FMCU04162KC80867

Cust. Name: [REDACTED]

Cust. Phone:

Cust. Address:

Cust. City: POTOMAC, MD [REDACTED]

Build Date: 03/16/2002

Purchase Date: 03/25/2002

Dealer Name:

Dealer Phone:

30 DIS/60 DIS\*\*:

Mileage - 30DIS/60 DIS\*\*:

Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:

Increase SAT to 9 or 10

Gender:

30 / NA

700 / NA

8 / NA

Y/NA

Male

Date	Repair Comments
------	-----------------

04/17/2002 COULD NOT DUPLICATE PROBLEM BUT TOOK PRECAUTIONARY STEPS SEE BELOW. ROAD TESTED FOR STALLING AND RAN WDS DIAG (NO CODES) PERFORMED SSM 15589. CHECK FOR LATEST PCM UPDATE (OK)

Cust. Contact Date: 04/24/2002

Containment Status: Not Contained

Agent ID: bookru

Concern Comment: Last Thursday, the customer was driving and the engine stalled. The customer was driving 40 mph down a hill when the concern occurred. The customer said the check engine light was illuminated when the concern occurred. The engine started immediately after. The customer uses regular unleaded fuel and hasn't had the oil changed yet. The customer took the concern to the purchasing dealer to have the concern repaired and didn't hear what he wanted to hear. The purchasing dealer said they weren't sure what caused the concern but they changed everything that could have caused it. The customer wasn't happy about what they said so they ask the dealer to buy back the vehicle. The dealership said they would buy back the vehicle for \$7000 less than what they paid for it, but the customer isn't happy with that. The customer is now thinking of getting an attorney and taking legal action. The customer would like someone to follow up with him or his wife.

SIF \*\*\*: 3 (High)

Champion: NONE

ENR2-027-C 2848

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.

\*\* 30 DIS occurs at 15/90 days in service and 60 DIS occurs at 45/60 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



Ford Motor Company

### CONCERNS BY CATEGORIES

Build Date - Actual:Call	02/22/2002 -	Requested: 07/31/2001 -
Date - Actual:Purchase	03/16/200204/24/2002	03/16/2002Requested: 04/24/2002 -
Date - Actual:	- 04/24/200203/14/2002	04/24/2002Requested: 08/21/2001 -
	- 03/25/2002	04/02/2002

Containment Status: Both Contained and Not Contained  
Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
- Within date range: 13  
- Cumulative MYTD: 3,484

2002 ESCAPE

VIN: 1FMYU04172KC47285  
Cust. Name: [REDACTED]  
Cust. Phone: [REDACTED]  
Cust. Address: [REDACTED]  
Cust. City: LIVERPOOL, NY [REDACTED]

Build Date: 02/25/2002  
Purchase Date: 03/14/2002  
Dealer Name: [REDACTED]  
Dealer Phone: [REDACTED]

30 DIS/60 DIS\*\* : 41 / NA  
Mileage - 30DIS/60 DIS\*\* : 1600 / NA  
Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\* : 9 / NA  
Increase SAT to 9 or 10 : NANA  
Gender: Male

Date	Repair Comments
------	-----------------

04/13/2002 12A850-CC=42-CCC=D21 EEC,PINPOINT,MONITOR TESTS, NECC TO REPROGRAM PCM

Cust. Contact Date: 04/24/2002 Containment Status: Not Contained

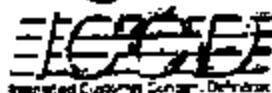
Agent ID: bcookn

Concern Comment: Two weeks after purchase, the engine stalled while driving. The concern has occurred twice. The concern occurred when the customer was driving downhill at 25 mph both times. The customer did not notice any noises associated with this concern. The vehicle did restart immediately after. The engine oil light was illuminated at the time of the concern. The engine temperature was warm when the concern occurred. The customer did not check the battery. The customer uses regular unleaded fuel and hasn't had the oil changed yet. The customer took his vehicle to the purchasing dealer (unsure of exact date) to be serviced. The service department repaired the vehicle (unsure of exact repairs made to the vehicle) to the customer's satisfaction.

SIF \*\*\*: 1 (Low) Champion: NONE

ERR2-027-C-2048

\* Measurements: Satisfaction on 1-10 scale with 1-Completely Dissatisfied and 10-Completely Satisfied; Recommendation on a 1-10 scale with 1-Definitely Would Not and 10- Definitely Would.  
\*\* 30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.  
\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



### CONCERNS BY CATEGORIES

Ford Motor Company

Build Date - Actual:Call	02/27/2002 -	Requested: 07/31/2001 -
Date - Actual:Purchase	03/06/200204/16/2002	03/13/2002Requested: 04/16/2002 -
Date - Actual:	- 04/16/200203/14/2002	04/16/2002Requested: 06/21/2001 -
	- 03/17/2002	04/02/2002

Containment Status: Both Contained and Not Contained  
 Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
 - Within date range: 13  
 - Cumulative MYTD: 3,363

2002 ESCAPE

CC CODE - CONCERN: D21 - ENG STALLS

VIN: 1FMYU01132KC51786

Cust. Name: [REDACTED]

Cust. Phone:

Cust. Address:

Cust. City: CAPE MAY COURT HOUSE, NJ [REDACTED]

Build Date: 03/01/2002

Purchase Date: 03/16/2002

Dealer Name:

Dealer Phone:

30 DIS/60 DIS\*\*:

Mileage - 30DIS/60 DIS\*\*:

Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:

Increase SAT to 9 or 10

Gender:

31 / NA

3600 / NA

6 / NA

Y/NA

Female

Cust. Contact Date: 04/16/2002

Containment Status: Not Contained

Agent ID: bslnger

Concern Comment: On the day of purchase, the customer noticed a concern with the engine stalling. The customer said that the concern occurs about 3 times per day. The customer is driving at speeds of 25-30 mph when the concern usually occurs. There are no noises associated with this concern. Today she had her foot on the brake when the engine stalled. The customer uses the recommended fuel and oil in the vehicle. When the concern occurs, the customer puts the vehicle in neutral and the engine starts back up. All of the warning lights on the dashboard illuminate after the engine stalls. The concern occurs when the engine temperature is warm and cold. The customer took the vehicle in to the purchasing dealer and they ordered a new I/K Switch, the dealership heart put the new part in the vehicle yet, she has an appointment Thursday, April 18, 2002 for the repairs to be made to the vehicle.

SIF \*\*\*: 1 (Low)

Champion: NONE

ENG-027-C 2858

\* Measurement: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.  
 \*\* 30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.  
 \*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



### CONCERNS BY CATEGORIES

Ford Motor Company

Build Date - Actual:Call	02/22/2002 -	Requested: 07/31/2001 -
Date - Actual:Purchase	03/05/200204/08/2002	03/05/2002Requested: 04/08/2002 -
Date - Actual:	- 04/08/200203/07/2002	04/08/2002Requested: 08/21/2001 -
	- 03/09/2002	04/02/2002

Containment Status: Both Contained and Not Contained  
Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
- Within date range: 14  
- Cumulative MYTD: 3,255

2002 ESCAPE

CC CODE - CONCERN: Z8352 - Compass-NEG

VIN: 1FMCU04142KC41213

Cust. Name: [REDACTED]

Cust. Phone:

Cust. Address:

Cust. City: NEOSHO, MO [REDACTED]

Build Date: 02/26/2002

Purchase Date: 03/09/2002

Dealer Name:

Dealer Phone:

30 DIS/60 DIS\*\*:

30 / NA

Mileage - 30DIS/60 DIS\*\*:

3000 / NA

Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:

10 / NA

Increase SAT to 9 or 10

NA/NA

Gender:

Female

Cust. Contact Date: 04/08/2002

Containment Status:

Not Contained

Agent ID: boockru

Concern Comment: The customer wishes there was a compass.

SIF \*\*\*: 0 (None)

Champion:

NONE

EM02-027-C 2001

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10=Definitely Would.

\*\* 30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.





### CONCERNS BY CATEGORIES

Ford Motor Company

Build Date - Actual:Call	02/22/2002 -	Requested: 07/31/2001 -
Date - Actual:Purchase	03/05/200204/08/2002	03/05/2002Requested: 04/08/2002 -
Date - Actual:	- 04/08/200203/07/2002	04/08/2002Requested: 06/21/2001 -
	- 03/08/2002	04/02/2002

Containment Status: Both Contained and Not Contained  
Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
- Within date range: 14  
- Cumulative MYTD: 3,255

2002 ESCAPE

CC CODE - CONCERN: Z8398 - Instrumentation Function-NEG

VIN: 1FMYU04182KC57867

Cust. Name: [REDACTED]

Cust. Phone: [REDACTED]

Cust. Address: [REDACTED]

Cust. City: SUMMERSVILLE, WV [REDACTED]

Build Date: 02/28/2002

Purchase Date: 03/08/2002

Dealer Name: [REDACTED]

Dealer Phone: [REDACTED]

30 DIS/60 DIS\*\*:

91 / NA

Mileage - 30DIS/60 DIS\*\*:

2000 / NA

Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:

10 / NA

Increase SAT to 9 or 10

NA/NA

Gender:

Male

Cust. Contact Date: 04/08/2002

Containment Status: Not Contained

Agent ID: bccokzu

Concern Comment: The customer wishes the windshield wiper controls were in a different location.

SIF \*\*\*: 0 (None)

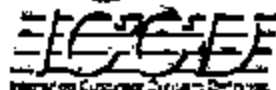
Champion: NONE

EMR-827-C 2002

\* Measurement: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.

\*\* 30 DIS occurs at 1530 days in service and 60 DIS occurs at 4560 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



### CONCERNS BY CATEGORIES

Ford Motor Company

Build Date - Actual/Call	02/22/2002 -	Requested: 07/31/2001 -
Date - Actual/Purchase	03/05/2002/04/08/2002	03/05/2002/Requested: 04/08/2002 -
Date - Actual:	- 04/08/2002/03/07/2002	04/08/2002/Requested: 08/21/2001 -
	- 03/09/2002	04/02/2002

Containment Status: Both Contained and Not Contained  
 Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
 - Within date range: 14  
 - Cumulative MYTD: 3,255

2002 ESCAPE

CC CODE - CONCERN: Z8949 - Ride & Handling-POS

VIN: 1FMYU08152KC58075

Cust. Name: [REDACTED]

Cust. Phone:

Cust. Address:

Cust. City: NORTHPORT, AL [REDACTED]

Build Date: 02/25/2002

Purchase Date: 03/08/2002

Dealer Name:

Dealer Phone:

30 DIS/60 DIS\*\*:

Mileage - 30DIS/60 DIS\*\*:

Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:

Increase SAT to 9 or 10

Gender:

30 / NA

1100 / NA

10 / NA

NANA

Female

Cust. Contact Date: 04/08/2002

Concern Comment: The customer is pleased with the ride and handling performance of the vehicle.

SIF \*\*\*: 0 (None)

Containment Status: Not Contained

Champion: NONE

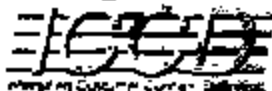
Agent ID: bsinger

ES82-827-C 2883

\* Measurement: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.

\*\* 30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



### CONCERNS BY CATEGORIES

Ford Motor Company

Build Date - Actual: Call 02/22/2002 - Requested: 07/31/2001 -  
 Date - Actual: Purchase 03/06/2002 04/08/2002 - Requested: 04/08/2002 -  
 Date - Actual: 04/08/2002 03/07/2002 - Requested: 08/21/2001 -  
 - 03/06/2002 04/02/2002

Containment Status: Both Contained and Not Contained  
 Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
 - Within date range: 14  
 - Cumulative MYTD: 3,255

2002 ESCAPE

CC CODE - CONCERN: Z9202 - Vehicle Related-POS

VIN: 1FMYU03182KC61634

Cust. Name: [REDACTED]  
 Cust. Phone: [REDACTED]  
 Cust. Address: [REDACTED]  
 Cust. City: KOUTS, IN [REDACTED]

Build Date: 02/26/2002  
 Purchase Date: 03/09/2002  
 Dealer Name:  
 Dealer Phone:

30 DIS/60 DIS\*\*:  
 Mileage - 30DIS/60 DIS\*\*:  
 Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:  
 Increase SAT to 9 or 10  
 Gender:

30 / NA  
 850 / NA  
 10 / NA  
 NA/NA  
 Female

Cust. Contact Date: 04/08/2002 Containment Status: Not Contained  
 Concern Comment: The customer is pleased with the overall quality of the vehicle.  
 SIF \*\*\*: 0 (None) Champion: NONE

Agent ID: beinger

VIN: 1FMYU04172KC71738

Cust. Name: [REDACTED]  
 Cust. Phone: [REDACTED]  
 Cust. Address: [REDACTED]  
 Cust. City: COSBY, MO [REDACTED]

Build Date: 03/05/2002  
 Purchase Date: 03/09/2002  
 Dealer Name:  
 Dealer Phone:

30 DIS/60 DIS\*\*:  
 Mileage - 30DIS/60 DIS\*\*:  
 Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:  
 Increase SAT to 9 or 10  
 Gender:

30 / NA  
 1900 / NA  
 10 / NA  
 NA/NA  
 Female

Date Repair Comments

03/08/2002 LOOSE INSTALL MISSING RIVET FOR FRONT LICENSE PLATE BRACKET

Cust. Contact Date: 04/08/2002 Containment Status: Not Contained  
 Concern Comment: The customer likes everything about the vehicle.  
 SIF \*\*\*: 0 (None) Champion: NONE

Agent ID: bockru

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.  
 \*\* 30 DIS occurs at 15/60 days in service and 60 DIS occurs at 45/60 days in service.  
 \*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.

ENR2-027-C 2004



## CONCERNS BY CATEGORIES

Build Date - Actual:Call 02/22/2002 - Requested: 07/31/2001 -  
Date - Actual:Purchase 03/05/200204/08/2002 03/05/2002Requested: 04/08/2002 -  
Date - Actual: - 04/08/200203/07/2002 04/08/2002Requested: 06/21/2001 -  
- 03/09/2002 04/02/2002

Containment Status: Both Contained and Not Contained  
Plant(s): KANSAS CITY

*Ford Motor Company*

CC CODE: OVERALL VEHICLE

2002 ESCAPE

Total Customers Surveyed  
- Within data range: 14  
- Cumulative MYTD: 8,255

EM02-027-0 2000

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.

\*\* 30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0=none, 1=low, 2=medium, 3=high.

**From:** Walker, Carrie (C.J.)  
**Sent:** Monday, April 08, 2002 11:11 AM  
**To:** Adgata, Darin; Alkoonian, Don (D.J.); Alvarado, O.J.; Baldwin, Stu; Brunkow, Greg (G.L.); Bunc, Jamie; Campbell, Wayne (C.W.); Chilcott, Michael (M.D.); Clawson, Randy (R.R.); Cookrum, Brooke; Cookrum, Frank (F.); Diaz, Carmen; Duncan, Kenny; English, Loy (L.E.); Ferguson, Jeff; Foster, Reginald (R.K.); Hansen, George (G.C.); Heinrichs, Harold (H.D.); Herr, George; Hofman, Mike (M.V.); Hughes, Jeff (J.); Kanai, Shinji (S.); King, Robert (R.F.); Lang, Jim (J.L.); Linde, Peter (P.A.); McDaniel, Keith (R.K.); Miller, Brian; Moorhouse, Scott (S.R.); New, Michael; Nichols, Ellen (E.G.); Powers, Ken (K.W.); Prabhu, Sheila; Ray, Charles; Sanders, Muriel (M.S.); Sarajian, David (D.H.); Sauer, Robert (R.M.); Savchetz, David (D.W.); Scott, Frank; Stiggenbauer, Jeff; Suarez, Rhae (R.); Summers, Robin; Syed, Shaheen; Tavenner, Cloyd; Taylor, Perry; Walker, Carrie; Wilson, Doug (D.A.); Wilson, Steve  
**Subject:** Escape ICCD from 4-5-02



Escape Summary  
4-5-02.doc



Escape Contents  
4-5-02.doc

*Carrie J. Walker*  
ICCD - Customer Relations Specialist  
Kansas City Assembly Plant  
P# 816-414-5557  
Fax# 816-459-1970



Member of Ford Motor Company

### VEHICLE SUMMARY

Build Date - 02/15/2002 -  
 Actual:Call Date - 02/25/2002 04/05/2002 -  
 Actual:Purchase Date -

Requested: 07/31/2001 -  
 02/25/2002 Requested: 04/05/2002 -  
 04/05/2002 02/25/2002 - 04/05/2002 Requested:

*Ford Motor Company*

08/21/2001 -

Actual: 03/08/2002  
 Ownership Period: 30 DIS and 60 DIS \*  
 Plant(s): KANSAS CITY

04/02/2002

VFG CATEGORY: ALL CONCERNS & DESIGN GENERAL COMMENTS  
 2002 ESCAPE - CONCERN FREQUENCY

VFG CATEGORY	FREQUENCY		AVERAGE SIF **			
	CONCERNS IDENTIFIED		ACTUAL TIME PERIOD ***		CUM. MYTD	
	ACTUAL TIME PERIOD ***	CUM. MYTD	30 DIS	60 DIS	30 DIS	60 DIS
V48 - GOOD AUTO TRANS SHIFT	1	25	2.0	0.0	1.0	0.0
V03 - SEATING	0	19	0.0	0.0	1.0	0.0
V05 - OCCUP RESTRAINTS	0	3	0.0	0.0	1.0	0.0
V07 - LATCHING & SECURITY	0	34	0.0	0.0	1.0	0.0
V09 - GLASS FUNC	0	29	0.0	0.0	1.0	0.0
V11 - WIND NOISE	0	77	0.0	0.0	1.2	0.0
V13 - MIRRORS	0	6	0.0	0.0	1.3	0.0
V15 - GLASS WIPING & WASHING	0	15	0.0	0.0	0.7	0.0
V18 - WIPER FUNC	0	10	0.0	0.0	1.2	0.0
V17 - ELEC & ACC	0	7	0.0	0.0	1.3	0.0
V19 - ELEC POWER	0	3	0.0	0.0	1.7	0.0
V21 - BRAKING	0	23	0.0	0.0	1.1	0.0
V25 - FUEL FILLING & DEL	0	2	0.0	0.0	1.5	0.0
V31 - SHEET METAL FUNC	0	13	0.0	0.0	0.8	0.0
V33 - PAINT APPEARANCE	0	31	0.0	0.0	1.0	0.0
V37 - WATER LKS	0	5	0.0	0.0	0.4	0.0
V39 - SQK & RTLE UNDET	0	18	0.0	0.0	1.3	0.0
V40 - GOOD IDLE QLTY	0	2	0.0	0.0	1.5	0.0
V41 - SMOOTH RESP	0	6	0.0	0.0	1.2	0.0
V42 - NO STALLS	0	26	0.0	0.0	1.7	0.0
V43 - QUICK & EASY START	0	10	0.0	0.0	2.2	0.0
V44 - MECH MALFUNC INDICATION	0	28	0.0	0.0	1.4	0.0

\* 30 DIS occurs at 1530 days in service and 60 DIS occurs at 4680 days in service.

\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.

\*\*\* Actual time period is a combination of the actual call, build, and purchase dates



# VEHICLE SUMMARY

Ford Motor Company

Build Date - 02/15/2002 - Requested: 07/31/2001 -  
 Actual Call Date - 02/25/2002 04/05/2002 - 02/25/2002 Requested: 04/05/2002 -  
 Actual Purchase Date - 04/05/2002 02/28/2002 - 04/05/2002 Requested:

08/21/2001 -

Actual: 03/06/2002  
 Ownership Period: 30 DIS and 60 DIS \*  
 Plant(s): KANSAS CITY

## VFG CATEGORY: ALL CONCERNS & DESIGN GENERAL COMMENTS

### 2002 ESCAPE - CONCERN FREQUENCY

Category	0	2	0.0	0.0	2.5	0.0
V46 - GOOD FUEL ECON	0	2	0.0	0.0	2.5	0.0
V47 - GOOD MANL TRANS SHFT	0	5	0.0	0.0	2.4	0.0
V49 - PWRTRAIN GOOD SOUND & NVH	0	4	0.0	0.0	1.3	0.0
V71 - I.P. & CONSOLE FUNC	0	18	0.0	0.0	0.9	0.0
V73 - INT TRIM FUNC	0	6	0.0	0.0	1.7	0.0
V74 - OTHER INT TRIM	0	27	0.0	0.0	0.9	0.0
V75 - EXT TRIM & BUMPER FUNC	0	21	0.0	0.0	1.2	0.0
V77 - LIGHTING	0	8	0.0	0.0	1.0	0.0
V79 - CLIM CTRL FUNC	0	24	0.0	0.0	1.0	0.0
V81 - ENT & COMMUN	0	19	0.0	0.0	1.4	0.0
V83 - INSTRUM FUNC	0	10	0.0	0.0	1.1	0.0
V87 - STEERING	0	5	0.0	0.0	1.4	0.0
V88 - RIDE & HNDLING	0	11	0.0	0.0	1.8	0.0
TOTAL CONCERNS:	1	548	2.0	0.0	1.2	0.0
Average Mileage:	630	3,331				

### ACTUAL TIMEPERIOD \*\*\*

	ACTUAL	CUM. MYTD
Total Customers (Sample Size):	19	3,241
Total Customers - 30 DIS:	19	3,241
Total Customers - 60 DIS:	0	0

### ACTUAL TIMEPERIO CUM. MYTD

Total Customers (Average Mileage):	641	1,410
Total Customers - 30 DIS (Average Mileage):	641	1,410
Total Customers - 60 DIS (Average Mileage):	0	0

## DESIGN GENERAL COMMENTS

### Positive Design General Comments ACTUAL TIME PERIOD \*\*\* CUM. MYTD

VEHICLE RELATED-POS	2	500
RIDE & HANDLING-POS	1	471
AUDIO-POS	0	349
ROOMINESS-POS	2	309
SMOOTH RIDE-POS	0	212

\* 30 DIS occurs at 1630 days in service and 60 DIS occurs at 4690 days in service.

\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.

\*\*\* Actual time period is a combination of the actual call, build, and purchase dates



# VEHICLE SUMMARY

Ford Motor Company

Build Date - 02/15/2002 - Requested: 07/31/2001 -  
 Actual/Call Date - 02/25/2002 04/05/2002 - 02/25/2002 Requested: 04/05/2002 -  
 Actual/Purchase Date - 04/05/2002 02/28/2002 - 04/05/2002 Requested:

03/21/2001 -

Actual: 03/06/2002  
 Ownership Period: 30 DIS and 60 DIS \*  
 Plant(s): KANSAS CITY  
 04/02/2002

## VFG CATEGORY: ALL CONCERNS & DESIGN GENERAL COMMENTS

### 2002 ESCAPE - CONCERN FREQUENCY

HEIGHT OF VEHICLE-POS	0	204
POWER-POS	0	181
BODY-POS	4	179
SUN/MOON ROOF-POS	1	142
SEATING-POS	1	118
PERFORMANCE-POS	0	97
OTHER POWERTRAIN-POS	3	85
GOOD FUEL ECONOMY-POS	0	85
ALL OTHER POSITIVE	0	52
TRUNK/CARGO AREA-POS	0	42
FRONT SEATING-POS	0	39
FORD MOTOR COMPANY-POS	0	36
GENERAL POS	0	34
GOOD AUTOMATIC TRANSMISSION	0	32
SHIFT-POS		
REMOTE/KEYLESS ENTRY-POS	0	29
SEAT ADJUSTMENT-POS	0	27
REAR SEATING-POS	0	20
PAINT APPEARANCE-POS	0	20
STORAGE SPACE-POS	0	20
OTHER SEATS-POS	0	17
OTHER INTERIOR-POS	0	16
CONSOLE-POS	0	15
LIGHTING-POS	0	15
INSTRUMENT PANEL-POS	0	14
POWER WINDOWS-POS	0	12
REAR WIPERS/WASHERS-POS	0	12
INTERIOR TRIM FUNCTION-POS	0	12
OTHER GLASS-POS	0	11
INSTRUMENTATION FUNCTION-POS	1	11
STEERING-POS	0	11
ELECTRICAL AND ACCESSORIES-POS	0	10
FUEL FILLING & DELIVERY-POS	0	9
CLIMATE CONTROL FUNCTION-POS	0	9
LOCK/LATCH POWER CONTROL-POS	0	8
SHOULD GET BETTER FUEL ECONOMY-POS	0	8
EXTERIOR TRIM & BUMPER FUNCTION-POS	0	8
GLASS FUNCTION-POS	0	7
POWERTRAIN GOOD SOUND AND NVH-POS	0	7
CUPHOLDERS-POS	0	7
PROGRAM-POS	0	7
OTHER LATCHING/SECURITY-POS	0	6
SEAT BELTS-POS	0	6
ANTI-THEFT-POS	0	5
CRUISE CONTROL-POS	0	5
CIGAR LIGHTER/POWERPOINT-POS	0	5
OTHER ELECTRICAL AND ACCESSORIES-POS	0	5
OTHER BRAKES/CHASSIS/SUSPENSION-POS	0	5
BRAKES-POS	0	5
SMOOTH RESPONSE-POS	0	5
TRIM-POS	0	5
EXTERIOR TRIM-POS	0	5
HEADLAMP-POS	0	5
HEATING, VENTILATION AND AIR	0	5
CONDITIONING-POS		
SALES EXPERIENCE-POS	0	5
AIR BAGS-POS	0	4
IGNITION SWITCH-POS	0	4

\* 30 DIS occurs at 1530 days in service and 60 DIS occurs at 4590 days in service.

\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.

\*\*\* Actual time period is a combination of the actual call, build, and purchase dates





## VEHICLE SUMMARY

Ford Motor Company

Build Date - 02/15/2002 -  
 Actual: Call Date - 02/25/2002 04/05/2002 -  
 Actual: Purchase Date -

Requested: 07/31/2001 -  
 02/25/2002 Requested: 04/05/2002 -  
 04/05/2002 02/25/2002 - 04/05/2002 Requested:

08/21/2001 -

Actual: 03/06/2002  
 Ownership Period: 30 DIS and 60 DIS \*  
 Plant(s): KANSAS CITY

04/02/2002

### VFG CATEGORY: ALL CONCERNS & DESIGN GENERAL COMMENTS

#### 2002 ESCAPE - CONCERN FREQUENCY

EXTERIOR MIRRORS-POS	0	4
ABS-POS	0	4
GOOD MANUAL TRANSMISSION SHIFT-POS	0	4
IP & CONSOLE FUNCTION-POS	0	4
ENTERTAINMENT & COMMUNICATION-POS	0	4
TIRES-POS	0	4
ROAD NOISE-POS	0	4
OTHER INTERIOR TRIM-POS	0	3
RUNNING BOARDS-POS	0	3
RESTRAINTS-POS	0	2
LATCHING AND SECURITY-POS	0	2
WIND NOISE-POS	0	2
INTERIOR MIRRORS-POS	0	2
OTHER MIRRORS-POS	0	2
GLASS WIPING & WASHING-POS	0	2
SHEET METAL FUNCTION-POS	0	2
OTHER RESTRAINTS-POS	0	1
ROOF-POS	0	1
MIRROR FUNCTION-POS	0	1
FRONT WIPERS/WASHERS-POS	0	1
ELECTRICAL POWER-POS	0	1
QUICK AND EASY START-POS	0	1
NVH-POS	0	1
CARPET/FLOOR MATS-POS	0	1
Gauges-POS	0	1
SERVICE EXPERIENCE-POS	0	1

Total Positive Comments 16 3,624

#### Negative Design General Comments

	ACTUAL TIME PERIOD ***	CUM. MYTD
--	------------------------	-----------

INSTRUMENTATION FUNCTION-NEG	0	194
VEH PROD QUAL SAT-NEG	0	153
IGNITION SWITCH-NEG	1	90
FRONT SEATING-NEG	0	79
LIGHTING-NEG	0	67
SEATING-NEG	0	60
AUDIO-NEG	0	63
Gauges-NEG	0	38
SHOULD GET BETTER FUEL ECONOMY-NEG	0	36
COMPASS-NEG	0	35
FUEL FILLING & DELIVERY-NEG	1	33
HEADLAMP-NEG	0	29
VEHICLE RELATED-NEG	0	28
ALL OTHER-NEG	1	29
STEERING-NEG	0	25
SUN/MOON ROOF-NEG	0	23
OTHER ELECTRICAL AND ACCESSORIES-NEG	0	23
OTHER LATCHING/SECURITY-NEG	0	21
LOCK/LATCH POWER CONTROL-NEG	0	20
VISORS-NEG	1	20
REMOTE/KEYLESS ENTRY-NEG	0	19
INTERIOR MIRRORS-NEG	0	19
CLIMATE CONTROL FUNCTION-NEG	0	19
BRAKES-NEG	0	18
CUPHOLDERS-NEG	0	18

\* 30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.

\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.

\*\*\* Actual time period is a combination of the actual call, build, and purchase dates



# VEHICLE SUMMARY

Ford Motor Company

Build Date - 02/15/2002 - Requested: 07/31/2001 -  
 Actual: Call Date - 02/25/2002 04/05/2002 - 02/25/2002 Requested: 04/05/2002 -  
 Actual: Purchase Date - 04/05/2002 02/28/2002 - 04/05/2002 Requested:

08/21/2001 -

Actual: 03/06/2002  
 Ownership Period: 30 DIS and 60 DIS \*  
 Plant(s): KANSAS CITY  
 04/02/2002

## VFG CATEGORY: ALL CONCERNS & DESIGN GENERAL COMMENTS

### 2002 ESCAPE - CONCERN FREQUENCY

STORAGE SPACE-NEG	0	15
POWER WINDOWS-NEG	0	14
REAR SEATING-NEG	0	13
RUNNING BOARDS-NEG	0	13
CONSOLE-NEG	1	12
EXTERIOR TRIM-NEG	0	12
SEAT ADJUSTMENT-NEG	0	11
CRUISE CONTROL-NEG	0	11
INSTRUMENT PANEL-NEG	0	11
EXTERIOR TRIM & BUMPER FUNCTION-NEG	0	11
SEAT BELTS-NEG	0	10
ASHTRAY-NEG	0	10
OTHER SEATS-NEG	0	9
LATCHING AND SECURITY-NEG	0	9
GOOD FUEL ECONOMY-NEG	0	9
IF & CONSOLE FUNCTION-NEG	0	9
HEATING, VENTILATION AND AIR CONDITIONING-NEG	0	9
SALES EXPERIENCE-NEG	0	8
EXTERIOR MIRRORS-NEG	0	8
OTHER INTERIOR-NEG	0	7
TIRES-NEG	0	7
AIR BAGS-NEG	0	6
GLASS FUNCTION-NEG	0	6
GLASS WIPING & WASHING-NEG	0	6
GOOD AUTOMATIC TRANSMISSION SHIFT-NEG	0	6
TRUNK/CARGO AREA-NEG	0	6
FORD MOTOR COMPANY-NEG	0	6
GENERAL NEG	0	6
FUEL FILLER DOOR-NEG	0	5
FRONT WIPERS/WASHERS-NEG	0	5
ENTERTAINMENT & COMMUNICATION-NEG	0	5
DOOR HANDLES-NEG	0	4
OTHER GLASS-NEG	0	4
WIND NOISE-NEG	1	4
OTHER BRAKES/CHASSIS/SUSPENSION-NEG	0	4
PAINT APPEARANCE-NEG	0	4
POWER-NEG	0	4
GLOVE BOX-NEG	0	4
HEIGHT OF VEHICLE-NEG	0	4
BODY-NEG	0	4
SMOOTH RIDE-NEG	0	4
THIRD ROW SEATING-NEG	0	3
OTHER RESTRAINTS-NEG	0	3
LOCK/LATCH MANUAL CONTROL-NEG	0	3
OTHER MIRRORS-NEG	0	3
REAR WIPERS/WASHERS-NEG	0	3
CIGAR LIGHTER/POWERPOINT-NEG	0	3
ELECTRICAL AND ACCESSORIES-NEG	0	3
SHEET METAL FUNCTION-NEG	0	3
GOOD MANUAL TRANSMISSION SHIFT-NEG	0	3
CARPET/FLOOR MATS-NEG	0	3
ROAD NOISE-NEG	0	3
ANTI-THEFT-NEG	0	2
CLOCK-NEG	0	2
OTHER POWERTRAIN-NEG	0	2
INTERIOR TRIM FUNCTION-NEG	0	2

30 DIS occurs at 1630 days in service and 60 DIS occurs at 4560 days in service.

\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.

\*\*\* Actual time period is a combination of the actual call, build, and purchase dates



## VEHICLE SUMMARY

Ford Motor Company

Build Date - 03/15/2002 - Requested: 07/31/2001 -  
 Actual:Call Date - 03/25/2002 04/05/2002 - 02/25/2002 Requested: 04/05/2002 -  
 Actual:Purchase Date - 04/05/2002 02/28/2002 - 04/05/2002 Requested:

08/21/2001 -

Actual: 03/06/2002  
 Ownership Period: 30 DIS and 60 DIS \*  
 Plant(s): KANSAS CITY  
 04/02/2002

### VFG CATEGORY: ALL CONCERNS & DESIGN GENERAL COMMENTS

#### 2002 ESCAPE - CONCERN FREQUENCY

RIDE & HANDLING-NEG	0	2
RESTRAINTS-NEG	0	1
MIRROR FUNCTION-NEG	0	1
QUICK AND EASY START-NEG	0	1
MECHANICAL MALFUNCTION INDICATOR-NEG	0	1
ROOMINESS-NEG	0	1
OTHER INTERIOR TRIM-NEG	0	1
TV/VCR/DVD-NEG	0	1
SERVICE EXPERIENCE-NEG	0	1
PROGRAM-NEG	0	1
<b>Total Negative Comments</b>	<b>6</b>	<b>1,515</b>
<b>TOTAL DESIGN GENERAL COMMENTS</b>	<b>21</b>	<b>5,138</b>

Customers Highly Satisfied with Vehicle Product Quality (Rating of 9 or 10):	PERCENT HIGHLY SATISFIED		# OF CUSTOMERS/TOTAL	
	ACTUAL	TIMEPERIO	CUM. MYTD	CUM. MYTD

30 DIS	100	80	18/19	2,920/3,241
30 DIS with zero TGW	100	82	18/18	2,589/2,775
60 DIS	-	-	0/0	0/0
60 DIS with zero TGW	-	-	0/0	0/0

\* 30 DIS occurs at 16/30 days in service and 60 DIS occurs at 45/60 days in service.  
 \*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.  
 \*\*\* Actual time period is a combination of the actual call, build, and purchase dates



### CONCERNS BY CATEGORIES

Ford Motor Company

Call Date Range - Actual: 03/07/2002 - 03/07/2002  
Call Date Range - Requested: 03/07/2002 - 03/07/2002  
Containment Status: Both Contained and Not Contained Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
- Within date range: 36  
- Cumulative MYTD: 2,768

2002 ESCAPE

CC CODE - CONCERN: D21 - ENG STALLS

VIN: 1FMYU04122KB57263

Cust. Name: [REDACTED]

Build Date: 01/02/2002

30 DIS/60 DIS\*\*: 40 / NA

Cust. Phone: [REDACTED]

Purchase Date: 01/26/2002

Mileage - 30DIS/60 DIS\*\*: 3100 / NA

Cust. Address: [REDACTED]

Dealer Name: [REDACTED]

Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*: 8 / NA

Cust. City: FELICITY, OH [REDACTED]

Dealer Phone: [REDACTED]

Increase SAT to 9 or 10 Y/NA

Gender: Female

Cust. Contact Date: 03/07/2002

Containment Status: Not Contained

Agent ID: bockru

Concern Comment: Two days after purchase, the customer was driving down a hill and the vehicle stalled. The intermittent concern has occurred 4 times, each time within five days, and always happens on the same hill. The vehicle will start immediately. The concern hasn't occurred for about two weeks now. The customer said all warning lights were illuminated each time the concern occurred. The customer uses regular unleaded fuel in the vehicle and uses the recommended oil. The customer had the oil changed for the first time yesterday (she didn't say where she went to have the oil changed) and they checked the battery and all the fluid levels and everything was normal. The customer said the engine temperature was warm every time the concern occurred. The concern hasn't affected the performance of the vehicle. The customer will be taking this concern to the purchasing dealer when it is convenient.

SIF \*\*\*: 0 (None)

Champion: NONE

2002-027-C 2003

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would

\*\* 30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



### CONCERNS BY CATEGORIES

Call Date Range - Actual: 03/06/2002 - 03/06/2002  
Call Date Range - Requested: 03/06/2002 - 03/06/2002  
Containment Status: Both Contained and Not Contained Plant(s): KANSAS CITY

*Ford Motor Company*

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
- Within date range: 29  
- Cumulative MYTD: 2,722

2002 ESCAPE

CC CODE - CONCERN: D38 - ENG HES/SURGE WHEN ACCEL

VIN: 1FMYU01152KB97978

Cust. Name: [REDACTED]

Cust. Phone:

Cust. Address:

Cust. City: SALINAS, CA [REDACTED]

Build Date: 01/10/2002

Purchase Date: 02/02/2002

Dealer Name:

Dealer Phone:

30 DIS/60 DIS\*\*:

Mileage - 30DIS/60 DIS\*\*:

Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:

Increase SAT to 9 or 10

Gender:

32 / NA

2000 / NA

10 / NA

NANA

Female

Cust. Contact Date: 03/06/2002

Containment Status: Not Contained

Agent ID: banger

Concern Comment: One week after purchase, the customer noticed a concern with the engine hesitating. This intermittent concern only occurs while the customer is accelerating while getting on the highway only. The customer is usually traveling at speeds greater than 25 mph. The customer uses regular unleaded fuel. The concern occurs regardless of the weather and road conditions. The performance of the vehicle is affected by the concern. This concern occurs while the temperature control unit is operating and not operating. The customer uses regular unleaded fuel in the vehicle. The customer will be taking this concern to the purchasing dealer for repair at the 3,000 mile check up.

SIF \*\*\*: 0 (None)

Champion: NONE

2002-027-C 2004

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.

\*\* 30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



### CONCERNS BY CATEGORIES

Call Date Range - Actual: 03/05/2002 - 03/05/2002  
Call Date Range - Requested: 03/05/2002 - 03/05/2002  
Containment Status: Both Contained and Not Contained Plant(s): KANSAS CITY

*Ford Motor Company*

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
- Within date range: 39  
- Cumulative MYTD: 2,893

2002 ESCAPE

CC CODE - CONCERN: D21 - ENG STALLS

VIN: 1FMCU041X2KB85164

Cust. Name: [REDACTED]

Cust. Phone: [REDACTED]

Cust. Address: [REDACTED]

Cust. City: WILMINGTON, DE [REDACTED]

Build Date: 01/11/2002

Purchase Date: 01/25/2002

Dealer Name:

Dealer Phone:

30 DIS/60 DIS\*\*:

Mileage - 30DIS/60 DIS\*\*:

Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:

Increase SAT to 9 or 10

Gender:

39 / NA

1200 / NA

10 / NA

NA/NA

Female

Cust. Contact Date: 03/05/2002

Containment Status: Not Contained

Agent ID: bccokru

Concern Comment: A couple of weeks ago, the customer was driving and the engine stalled. The customer said she was driving 40 mph when the concern occurred. The customer couldn't start the vehicle right away, she had to wait about ten minutes and then she could start the vehicle. The customer said the service light came on when the concern occurred. No noises were associated with the concern. The customer hasn't checked the battery or the fluid levels and hasn't noticed any leakage. The temperature control unit was not on when the concern occurred. The customer uses regular unleaded fuel in the vehicle and hasn't had the oil changed yet. The customer plans to take this concern to the purchasing dealer to be serviced when it is convenient.

SIF \*\*\*: 2 (Medium)

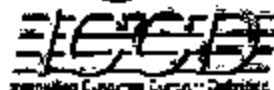
Champion: NONE

2002-027-C 2695

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10=Definitely Would.

\*\* 30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



### CONCERNS BY CATEGORIES

Call Date Range - Actual: 03/05/2002 - 03/05/2002  
Call Date Range - Requested: 03/05/2002 - 03/05/2002  
Containment Status: Both Contained and Not Contained Plant(s): KANSAS CITY

*Ford Motor Company*

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
- Within date range: 39  
- Cumulative MYTD: 2,693

2002 ESCAPE

CC CODE - CONCERN: Z8389 - Instrumentation Function-NEG

VIN: 1FMYU03142KC08073

Cust. Name: [REDACTED]

Build Date: 01/17/2002

30 DIS/60 DIS\*\*:

33 / NA

Cust. Phone: [REDACTED]

Purchase Date: 01/31/2002

Mileage - 30DIS/60 DIS\*\*:

850 / NA

Cust. Address: [REDACTED]

Dealer Name:

Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:

10 / NA

Cust. City: NAPERVILLE, IL [REDACTED]

Dealer Phone:

Increase SAT to 9 or 10

NA/NA

Gender:

Female

Cust. Contact Date: 03/05/2002

Containment Status: Not Contained

Agent ID: beinger

Concern Comment: The customer wishes the rocker switch for the windows lit up at night.

SIF \*\*\*: 0 (None)

Champion: NONE

EM02-027-C 2868

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.

\*\* 30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



### CONCERNS BY CATEGORIES

Call Date Range - Actual: 03/05/2002 - 03/05/2002  
Call Date Range - Requested: 03/05/2002 - 03/05/2002  
Containment Status: Both Contained and Not Contained Plant(s): KANSAS CITY

Ford Motor Company

#### CC CODE: OVERALL VEHICLE

2002 ESCAPE

Total Customers Surveyed  
- Within date range: 39  
- Cumulative MYTD: 2,683

#### CC CODE - CONCERN: 28901 - Smooth Ride-POS

VIN: 1FMCU04182KB65208

Cust. Name: [REDACTED]

Cust. Phone: [REDACTED]

Cust. Address: [REDACTED]

Cust. City: SINKING SPRING, PA [REDACTED]

Build Date: 01/11/2002

Purchase Date: 01/24/2002

Dealer Name:

Dealer Phone:

30 DIS/60 DIS\*\* : 40 / NA  
Mileage - 30DIS/60 DIS\*\* : 700 / NA  
Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\* : 10 / NA  
Increase SAT to 9 or 10 : NA/NA  
Gender: Female

Cust. Contact Date: 03/05/2002

Concern Comment: The customer likes the smooth ride.

SIF \*\*\*: 0 (None)

Containment Status: Not Contained

Champion: NONE

Agent ID: jmtc10

VIN: 1FMYU04112KB97418

Cust. Name: [REDACTED]

Cust. Phone: [REDACTED]

Cust. Address: [REDACTED]

Cust. City: PENN VALLEY, CA [REDACTED]

Build Date: 01/09/2002

Purchase Date: 01/26/2002

Dealer Name:

Dealer Phone:

30 DIS/60 DIS\*\* : 38 / NA  
Mileage - 30DIS/60 DIS\*\* : 100 / NA  
Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\* : 10 / NA  
Increase SAT to 9 or 10 : NA/NA  
Gender: Male

Cust. Contact Date: 03/05/2002

Concern Comment: The customer likes the way the vehicle rides.

SIF \*\*\*: 0 (None)

Containment Status: Not Contained

Champion: NONE

Agent ID: bcockru

VIN: 1FMYU04132KB76283

Cust. Name: [REDACTED]

Cust. Phone: [REDACTED]

Cust. Address: [REDACTED]

Cust. City: JACKSON, MI [REDACTED]

Build Date: 01/09/2002

Purchase Date: 01/29/2002

Dealer Name:

Dealer Phone:

30 DIS/60 DIS\*\* : 35 / NA  
Mileage - 30DIS/60 DIS\*\* : 1000 / NA  
Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\* : 10 / NA  
Increase SAT to 9 or 10 : NA/NA  
Gender: Female

Date Repair Comments

01/17/2002 REMOVE RF. TIRE AND INTER WHEEL WELL AND LOWER TRIM COVER AND FOUND WASHER HOSE WAS OFF FROM WASHER

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.

\*\* 30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.

User ID: CWALKE48

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EM2-027-C 2887





### CONCERNS BY CATEGORIES

Call Date Range - Actual: 03/05/2002 - 03/05/2002

Call Date Range - Requested: 03/05/2002 - 03/05/2002

Containment Status: Both Contained and Not Contained Plant(s): KANSAS CITY

*Ford Motor Company*

#### CC CODE: OVERALL VEHICLE

#### 2002 ESCAPE

Cust. Contact Date:	03/05/2002	Containment Status:	Not Contained
Concern Comment:	The customer likes the ride.	Champion:	NONE
SIF ***:	0 (None)		

Total Customers Surveyed  
 - Within data range: 36  
 - Cumulative MYTD: 2,893  
 Agent ID: jmitc10

EM02-027-C 2658

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.

\*\* 30 DIB occurs at 16/90 days in service and 60 DIB occurs at 45/90 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



### CONCERNS BY CATEGORIES

Ford Motor Company

Call Date Range - Actual: 03/04/2002 - 03/04/2002  
Call Date Range - Requested: 03/04/2002 - 03/04/2002  
Containment Status: Both Contained and Not Contained Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
- Within date range: 34  
- Cumulative MYTD: 2,854

2002 ESCAPE

CC CODE - CONCERN: D21 -- ENG STALLS

VIN: 1FMYU04182KB96000

Cust. Name: [REDACTED]

Cust. Phone: [REDACTED]

Cust. Address: [REDACTED]

Cust. City: GRESHAM, OR [REDACTED]

Build Date: 01/16/2002  
Purchase Date: 02/01/2002  
Dealer Name:  
Dealer Phone:

30 DIS/60 DIS\*\*:  
Mileage - 30DIS/60 DIS\*\*:  
Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:  
Increase SAT to 9 or 10  
Gender:

31 / NA  
1300 / NA  
9 / NA  
NA/NA  
Female

Date      Repair Comments

02/11/2002      WDS START UP, CODE P1131,P1151,P0136,P0156,P0171,P0174,P0401,P0457,DCL DISPLAY FOUND SHORT AND LONG FUEL TRIM HIGH, INSTALLED SMOKE MACHINE FOUND VAC LINE LOOSE FROM BANK 1 OF INTAKE MANIFOLD, RECONNECT AND CLEAR CODES, TEST DRIVE OK, RETEST PASS

Cust. Contact Date: 03/04/2002      Containment Status: Not Contained      Agent ID: jmitc10

Concern Comment: A week ago, the customer noticed her vehicle stalled when traveling 40 mph. The customer uses the prescribed oil and octane for her vehicle. The concern occurred when the customer was going downhill. The customer did not notice a noise associated with this concern. Mrs. Stanfill put her vehicle in neutral and restarted the vehicle immediately. The customer's vehicle sat for eight hours since it was last driven. The customer did not have any lights on in the interior or exterior. The customer said the engine temperature was warm. The customer did not check the battery. The concern is intermittent and occurred the one time. Mrs. Stanfill had the audio system and temperature control unit running when the vehicle stalled. Mrs. Stanfill will take her vehicle to the purchasing dealer if the concern occurs again.

SIF \*\*\*: 1 (Low)      Chempion: NONE

ENG-027-C 2000

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.

\*\* 30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



### CONCERNS BY CATEGORIES

Ford Motor Company

Call Date Range - Actual: 03/04/2002 - 03/04/2002  
Call Date Range - Requested: 03/04/2002 - 03/04/2002  
Containment Status: Both Contained and Not Contained Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
- Within date range: 34  
- Cumulative MYTD: 2,654

2002 ESCAPE

CC CODE - CONCERN: D21 - ENG STALLS

VIN: 1FMYU04152KB96000

Cust. Name: [REDACTED]

Cust. Phone: [REDACTED]

Cust. Address: [REDACTED]

Cust. City: GRESHAM, OR [REDACTED]

Build Date: 01/15/2002

Purchase Date: 02/01/2002

Dealer Name: [REDACTED]

Dealer Phone: [REDACTED]

30 DIS/60 DIS\*\*:

Mileage - 30DIS/60 DIS\*\*:

Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:

Increase SAT to 9 or 10

Gender:

31 / NA

1300 / NA

8 / NA

NANA

Female

Date Repair Comments

02/11/2002 WDS START UP, CODE P1131,P1151,P0136,P0156,P0171,P0174,P0401,P0457,DCL DISPLAY FOUND SHORT AND LONG FUEL TRIM HIGH, INSTALLED SMOKE MACHINE

FOUND VAC LINE LOOSE FROM BANK 1 OF INTAKE MANIFOLD, RECONNECT AND CLEAR CODES, TEST DRIVE OK, RETEST PASS

Cust. Contact Date: 03/04/2002

Containment Status: Not Contained

Agent ID: jmt:10

Concern Comment: A week ago, the customer noticed her vehicle stalled when travelling 40 mph. The customer uses the prescribed oil and octane for her vehicle. The concern occurred when the customer was going downhill. The customer did

not notice a noise associated with this concern. Mrs. Stanfill put her vehicle in neutral and restarted the vehicle immediately. The customer's vehicle sat for eight hours since it was last driven. The customer did not have any

lights on in the interior or exterior. The customer said the engine temperature was warm. The customer did not check the battery. The concern is intermittent and occurred the one time. Mrs. Stanfill had the audio system and temperature

control unit running when the vehicle stalled. Mrs. Stanfill will take her vehicle to the purchasing dealer if the concern occurs again.

SIF \*\*\*: 1 (Low)

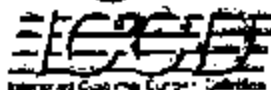
Champion: NONE

DR02-027-C 2078

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.

\*\* 30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



### CONCERNS BY CATEGORIES

Ford Motor Company

Call Date Range - Actual: 03/01/2002 - 03/01/2002  
Call Date Range - Requested: 03/01/2002 - 03/01/2002  
Containment Status: Both Contained and Not Contained Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
- Within date range: 23  
- Cumulative MYTD: 2,620

2002 ESCAPE

CC CODE - CONCERN: D21 - ENG STALLS

VIN: 1FMYU03152KB98184

Cust. Name: [REDACTED]

Cust. Phone: [REDACTED]

Cust. Address: [REDACTED]

Cust. City: CARLSBAD, CA [REDACTED]

Build Date: 01/14/2002

Purchase Date: 01/30/2002

Dealer Name:

Dealer Phone:

30 DIS/60 DIS\*\*:

Mileage - 30DIS/60 DIS\*\*:

Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:

Increase SAT to 9 or 10

Gender:

30 / NA

140 / NA

8 / NA

Y/NA

Male

Date Repair Comments

02/07/2002 REPROGRAM PCM

EEC - (QUICK TEST) - DIAGNOSIS

Cust. Contact Date: 03/01/2002

Containment Status: Not Contained

Agent ID: tsinger

Concern Comment: Two weeks after purchase, the customer noticed a concern with the engine stalling. The customer was driving 40 mph on the highway when the concern occurred. All of the warning lights illuminated when the vehicle stalled. The customer had to coast to a stop on the side of the highway. The customer uses regular unleaded fuel and has not yet had the oil changed. There were no noises associated with this concern. The customer restarted the vehicle immediately after the concern occurred. The engine temperature was warm when the concern occurred. The customer didnt check the battery to see what color the eye was. This intermittent concern has only happened one time. The customer took the vehicle in to the purchasing dealer for repair and the dealership told Mr. Sandstrom that the Escapes were having some recalls on this concern. Mr. Sandstrom was not happy to hear that considering that his vehicle stalled on a busy highway, during traffic and almost got rear ended. The dealership has reprogrammed the computer in the engine, and the customer has been happy with the repairs made to the vehicle.

SIF \*\*\*: 3 (High)

Champion:

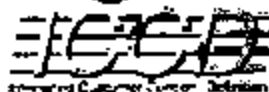
NONE

ENR2-827-C 2871

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.

\*\* 30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



### CONCERNS BY CATEGORIES

Call Date Range - Actual: 02/25/2002 - 02/25/2002  
Call Date Range - Requested: 02/25/2002 - 02/25/2002  
Containment Status: Both Contained and Not Contained Plant(s): KANSAS CITY

Ford Motor Company

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
- Within date range: 28  
- Cumulative MYTD: 2,519

2002 ESCAPE

CC CODE - CONCERN: D21 - ENG STALLS

VIN: 1FMYU03162KB05752

Cust. Name: [REDACTED]

Cust. Phone: [REDACTED]

Cust. Address: [REDACTED]

Cust. City: ACWORTH, GA [REDACTED]

Build Date: 01/15/2002

Purchase Date: 01/25/2002

Dealer Name:

Dealer Phone:

30 DIS/60 DIS\*\*:

Mileage - 30DIS/60 DIS\*\*:

Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:

Increase SAT to 9 or 10

Gender:

31 / NA

1100 / NA

7 / NA

Y/NA

Female

Date Repair Comments

02/01/2002 REPROGRAM PCM SSM 15589 CC-42 BASIC-12A650 1147 ROAD TEST VEHICLE SEVERAL MILES AND VEHICLE RAN NORMAL RUN WDS  
DIAG.CHECK FOR CODES ALL PASS CODES EVERY MODULE

Cust. Contact Date: 02/26/2002

Containment Status: Not Contained

Agent ID: beinger

Concern Comment: At 100 miles, the customer had a concern with the engine stalling. The customer said that she was driving on a four lane road at the speed of 55 mph when the concern occurred. The customer uses regular unleaded fuel and has not yet had the oil changed. The customer said that the check engine light and the oil light came on when the concern occurred. The customer could immediately restart the vehicle, however she had the vehicle towed to the purchasing dealer and didnt drive the vehicle again until the dealership repaired the concern. The engine temperature was warm when the concern occurred. The customer did not check the eye of the battery at the time the concern occurred. The intermittent concern only occurred one time. The dealership repaired the concern to the customers satisfaction.

SIF \*\*\*: 3 (High)

Champion: NONE

ENG2-027-C 2872

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.

\*\* 30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



### CONCERNS BY CATEGORIES

Ford Motor Company

Call Date Range - Actual: 02/25/2002 - 02/25/2002  
Call Date Range - Requested: 02/25/2002 - 02/25/2002  
Containment Status: Both Contained and Not Contained Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
- Within date range: 26  
- Cumulative MYTD: 2,519

2002 ESCAPE

CC CODE - CONCERN: D21 - ENG STALLS

VIN: 1FMYU04162K097480

Cust. Name: [REDACTED]

Cust. Phone: [REDACTED]

Cust. Address: [REDACTED]

Cust. City: SEVIERVILLE, TN [REDACTED]

Build Date: 01/16/2002

Purchase Date: 01/24/2002

Dealer Name:

Dealer Phone:

30 DIS/60 DIS\*\* 32 / NA  
Mileage - 30DIS/60 DIS\*\* 1500 / NA  
Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\* 10 / NA  
Increase SAT to 9 or 10 NA/NA  
Gender: Male

Cust. Contact Date: 02/25/2002

Containment Status: Not Contained

Agent ID: brockru

Concern Comment: Three days after purchase, the customer said the engine stalled while she was driving. The customer said all lights were illuminated when the concern occurred. The vehicle started right away after the concern occurred. The customer said the intermittent concern has only occurred once. The concern hasn't affected the performance of the vehicle. There were no noises associated with the concern. The customer uses regular unleaded fuel and hasn't had the oil changed yet. The customer took the concern to the purchasing dealer to be serviced right after the concern occurred. The dealership couldn't find anything that would've caused the concern. They said to bring the vehicle back if the concern occurred again.

SIF \*\*\*: 0 (None)

Champion: NONE

ENR2-027-C 2879

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.

\*\* 30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0=none, 1=low, 2=medium, 3=high.

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**From:** Shah, Kiran (K.C.)  
**Sent:** Friday, August 16, 2002 4:25 PM  
**To:** Sanders, Muriel (M.S.); Fournelle, Gilbert (G.)  
**Subject:** RE: Evap Assy

Gilbert:

Yes, based on the meeting with Visteon this morning, plan is to implement new Evap Assy Sep 9 with fully PSW'd parts.

If you have any questions, please let me know.

Muriel:

Thanks.

Regards,

*Kiran C. Shah*

**Supervisor - U204/293 Fuel Systems Engineering**  
North American Truck - Outfitters  
Telephone: (313) 32-31594 Fax: (313) 62-16025  
Address: Room: 2DG45, PDC/Mall Drop: 113  
Email: kshah1@ford.com

---Original Message---

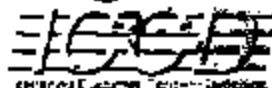
**From:** Sanders, Muriel (M.S.)  
**Sent:** Friday, August 16, 2002 4:20 PM  
**To:** Fournelle, Gilbert (G.); Shah, Kiran (K.C.)  
**Subject:** Evap Assy

Gilbert - Kiran Shah left a voicemail message that the Evap Assy will be implemented on 9/9. I had it listed as TBD on the KCAP Implementation table.

Kiran - I am no longer working in the Escape calibration group. Gilbert is taking over the stalls investigation. Please contact him with any further questions or concerns.

*Muriel Sanders*

U204 3.0L Calibration  
Ford Motor Company  
Phone: 313-32-27307  
Fax: 313-32-31786  
E-mail: msander6@ford.com



### CONCERNS BY CATEGORIES

Ford Motor Company

Build Date - Actual:Call	03/01/2002 -	Requested: 07/31/2001 -
Date - Actual:Purchase	04/04/200205/15/2002	04/11/2002Requested: 05/15/2002 -
Date - Actual:	- 05/15/200203/25/2002	05/15/2002Requested: 06/21/2001 -
	- 04/15/2002	04/16/2002

Containment Status: Both Contained and Not Contained  
Plant(s): KANSAS CITY

#### CC CODE: OVERALL VEHICLE

2002 ESCAPE

Cust. Address:

Cust. City: MOUNT GAY, WV

Dealer Name:

Dealer Phone:

Total Customers Surveyed

- Within date range: 56

- Cumulative MYTD: 3,869

Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:

Increase SAT to 9 or 10

Gender: Female

Cust. Contact Date: 05/15/2002

Containment Status: Not Contained

Agent ID: wmfgrm

Concern Comment: The customer likes the overall vehicle.

SIF \*\*\*: 0 (None)

Champion: NONE

ENR2-027-4 2675

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.

\*\* 30 DIS occurs at 15/90 days in service and 60 DIS occurs at 45/90 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.





### CONCERNS BY CATEGORIES

*Ford Motor Company*

Build Date - Actual:Call	03/01/2002 -	Requested: 07/31/2001 -
Date - Actual:Purchase	04/04/200205/15/2002	04/11/2002Requested: 05/15/2002 -
Date - Actual:	- 05/15/200203/28/2002	05/15/2002Requested: 08/21/2001 -
	- 04/15/2002	04/16/2002

Containment Status: Both Contained and Not Contained  
Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
- Within date range: 65  
- Cumulative MYTD: 3,889

2002 ESCAPE

CC CODE - CONCERN: 29249 - General Pos

VIN: 1FMCJ04122KC99708

Cust. Name: [REDACTED]  
Cust. Phone: [REDACTED]  
Cust. Address: [REDACTED]  
Cust. City: MOUNT PLEASANT, SC [REDACTED]

Build Date: 04/03/2002  
Purchase Date: 04/15/2002  
Dealer Name:  
Dealer Phone:

30 DIS/60 DIS\*\*:  
Mileage - 30DIS/60 DIS\*\*:  
Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:  
Increase SAT to 9 or 10  
Gender:

30 / NA  
1200 / NA  
10 / NA  
NA/NA  
Male

Cust. Contact Date: 05/15/2002

Containment Status: Not Contained

Agent ID: wmuigra

Concern Comment: The customer was not able to download the CD-rom because the program that is needed to run the CD was not working. However, he did find the Owners Guide and Quick Reference Guide useful.

SIF \*\*\*: 0 (None)

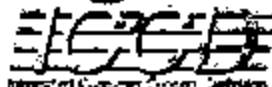
Champion: NONE

ENG2-827-C 2878

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10=Definitely Would.

\*\* 30 DIS occurs at 1650 days in service and 60 DIS occurs at 4500 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



### CONCERNS BY CATEGORIES

Ford Motor Company

Build Date - Actual:Call	03/01/2002 -	Requested: 07/31/2001 -
Date - Actual:Purchase	04/04/200205/15/2002	04/11/2002Requested: 05/15/2002 -
Date - Actual:	- 05/15/200203/29/2002	05/15/2002Requested: 08/21/2001 -
	- 04/15/2002	04/18/2002

Containment Status: Both Contained and Not Contained  
Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
- Within date range: 58  
- Cumulative MYTD: 3,869

2002 ESCAPE

CC CODE - CONCERN: ZB252 - Vehicle Related-NEG

VIN: 1FMCU04142KC83977

Cust. Name: [REDACTED]  
Cust. Phone: [REDACTED]  
Cust. Address: [REDACTED]  
Cust. City: NEW MILFORD, CT [REDACTED]

Build Date: 03/22/2002  
Purchase Date: 04/08/2002  
Dealer Name:  
Dealer Phone:

30 DIS/60 DIS\*\*:  
Mileage - 30018/60 DIS\*\*:  
Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:  
Increase SAT to 9 or 10  
Gender: Female

Cust. Contact Date: 05/15/2002  
Containment Status: Not Contained  
Concern Comment: The customer wanted the V6 engine to be a manual transmission, she suggests making this an option as well.  
SIF\*\*\*: 0 (None)  
Champion: NONE

Agent ID: wmlgms

VIN: 1FMCU04182KC73085

Cust. Name: [REDACTED]  
Cust. Phone: [REDACTED]  
Cust. Address: [REDACTED]  
Cust. City: MONTAUK, NY [REDACTED]

Build Date: 03/13/2002  
Purchase Date: 04/11/2002  
Dealer Name:  
Dealer Phone:

30 DIS/60 DIS\*\*:  
Mileage - 30018/60 DIS\*\*:  
Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:  
Increase SAT to 9 or 10  
Gender: Female

Cust. Contact Date: 05/15/2002  
Containment Status: Not Contained  
Concern Comment: The blind spots when backing up should be improved.  
SIF\*\*\*: 0 (None)  
Champion: NONE

Agent ID: atantai

EMR2-827-2 2577

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10=Definitely Would.

\*\* 30 DIS occurs at 15/90 days in service and 60 DIS occurs at 45/90 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



**CONCERNS BY CATEGORIES**

*Ford Motor Company*

Build Date - Actual:Call	03/01/2002 -	Requested: 07/31/2001 -
Date - Actual:Purchase	04/04/200205/15/2002	04/11/2002Requested: 05/15/2002 -
Date - Actual:	- 05/15/200203/28/2002	05/15/2002Requested: 08/21/2001 -
	- 04/16/2002	04/16/2002

Containment Status: Both Contained and Not Contained  
Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
- Within date range: 66  
- Cumulative MYTD: 3,869

2002 ESCAPE

CC CODE - CONCERN: Z999 - All Other-NEG

VIN: 1FMCU03162KC60211

Cust. Name: [REDACTED]  
Cust. Phone: [REDACTED]  
Cust. Address: [REDACTED]  
Cust. City: FRISCO, TX [REDACTED]

Build Date: 03/07/2002  
Purchase Date: 03/31/2002  
Dealer Name:  
Dealer Phone:

30 DIS/60 DIS\*\*:  
Mileage - 3000S/60 DIS\*\*:  
Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:  
Increase SAT to 9 or 10  
Gender:

45 / NA  
DK / NA  
9 / NA  
NANA  
Female

Cust. Contact Date: 05/15/2002  
Concern Comment:  
SIF \*\*\*: 0 (None)

Containment Status: Not Contained  
Champion: NONE

Agent ID: jmoech

EM02-027-C 2878

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.  
\*\* 30 DIS occurs at 15/60 days in service and 60 DIS occurs at 45/60 days in service.  
\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



## CONCERNS BY CATEGORIES

Build Date - Actual:Call	03/01/2002 -	Requested: 07/31/2001 -
Date - Actual:Purchase	04/04/200205/15/2002	04/11/2002Requested: 05/15/2002 -
Date - Actual:	- 05/15/200203/28/2002	05/15/2002Requested: 06/21/2001 -
	- 04/15/2002	04/15/2002

Containment Status: Both Contained and Not Contained  
Plant(s): KANSAS CITY

*Ford Motor Company*

CC CODE: OVERALL VEHICLE

2002 ESCAPE

Total Customers Surveyed  
- Within date range: 68  
- Cumulative MYTD: 3,869

EMR2-827-Q 2878

- \* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.
- \*\* 30 DIS occurs at 1630 days in service and 60 DIS occurs at 4560 days in service.
- \*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.

User ID: GWALKE48



## VEHICLE SUMMARY

Ford Motor Company

Build Date - 03/01/2002 -  
 Actual:Call Date - 03/28/200205/14/2002 -  
 Actual:Purchase Date - 05/14/200203/30/2002 -  
 Actual: 04/14/2002  
 Ownership Period: 30 DIS and 60 DIS \*  
 Plant(s): KANSAS CITY

Requested: 07/31/2001 -  
 04/11/2002Requested: 05/14/2002 -  
 05/14/2002Requested: 08/21/2001 -  
 04/16/2002

### VFG CATEGORY: ALL CONCERNS & DESIGN GENERAL COMMENTS 2002 ESCAPE - CONCERN FREQUENCY

Concern Category	Count	Weighted Count	Weighted Count	Weighted Count	Weighted Count	Weighted Count
V37 - WATER LKS	0	5	0.0	0.0	0.4	0.0
V40 - GOOD IDLE QLTY	0	2	0.0	0.0	1.5	0.0
V43 - QUICK & EASY START	0	10	0.0	0.0	2.2	0.0
V44 - MECH MALFUNC INDICATION	0	29	0.0	0.0	1.3	0.0
V46 - GOOD FUEL ECON	0	2	0.0	0.0	2.5	0.0
V47 - GOOD MANL TRANS SHIFT	0	6	0.0	0.0	2.4	0.0
V49 - PWRTRAIN GOOD SOUND & NVH	0	6	0.0	0.0	1.0	0.0
V71 - I.P. & CONSOLE FUNC	0	25	0.0	0.0	0.9	0.0
V73 - INT TRIM FUNC	0	6	0.0	0.0	1.7	0.0
V79 - CLIM CTRL FUNC	0	26	0.0	0.0	1.0	0.0
V83 - INSTRUM FUNC	0	10	0.0	0.0	1.1	0.0
V87 - STEERING	0	5	0.0	0.0	1.4	0.0
V89 - RIDE & HNDLING	0	18	0.0	0.0	1.4	0.0
TOTAL CONCERNS:	21	577	1.1	0.0	1.1	0.0
Average Mileage:	1,458	3,015				

#### ACTUAL TIMEPERIOD \*\*\*

	ACTUAL	CUM. MYTD
Total Customers (Sample Size):	37	3,813
Total Customers - 30 DIS:	37	3,813
Total Customers - 60 DIS:	0	0

#### ACTUAL TIMEPERIO CUM. MYTD

Total Customers (Average Mileage):	1,331	1,373
Total Customers - 30 DIS (Average Mileage):	1,331	1,373
Total Customers - 60 DIS (Average Mileage):	0	0

### DESIGN GENERAL COMMENTS

#### Positive Design General Comments ACTUAL TIME PERIOD \*\*\* CUM. MYTD

VEHICLE RELATED-POS	6	585
RIDE & HANDLING-POS	4	537
AUDIO-POS	9	428
ROOMINESS-POS	3	351
SMOOTH RIDE-POS	5	242
POWER-POS	2	220

30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.  
 \* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.  
 \*\*\* Actual time period is a combination of the actual call, build, and purchase dates



### VEHICLE SUMMARY

Build Date - 03/01/2002 -  
 Actual:Call Date - 03/28/200205/14/2002 -  
 Actual:Purchase Date - 05/14/200203/30/2002 -  
 Actual: 04/14/2002  
 Ownership Period: 30 D/S and 60 D/S \*  
 Plant(s): KANSAS CITY

Requested: 07/31/2001 -  
 04/11/2002Requested: 05/14/2002 -  
 05/14/2002Requested: 08/21/2001 -  
 04/15/2002

*Ford Motor Company*

#### VFG CATEGORY: ALL CONCERNS & DESIGN GENERAL COMMENTS

#### 2002 ESCAPE - CONCERN FREQUENCY

HEIGHT OF VEHICLE-POS	0	220
BODY-POS	4	216
SUNMOON ROOF-POS	2	163
SEATING-POS	0	133
PERFORMANCE-POS	3	112
OTHER POWERTRAIN-POS	0	96
GOOD FUEL ECONOMY-POS	9	72
ALL OTHER POSITIVE	0	53
FRONT SEATING-POS	9	50
TRUNK/CARGO AREA-POS	1	47
FORD MOTOR COMPANY-POS	0	37
GOOD AUTOMATIC TRANSMISSION	0	36
SHIFT-POS		
SEAT ADJUSTMENT-POS	0	35
GENERAL POS	0	35
REMOTE/KEYLESS ENTRY-POS	0	34
REAR SEATING-POS	1	30
PAINT APPEARANCE-POS	1	27
STORAGE SPACE-POS	1	23
OTHER GLASS-POS	1	19
POWER WINDOWS-POS	0	18
OTHER SEATS-POS	0	17
CONSOLE-POS	0	17
LIGHTING-POS	0	17
STEERING-POS	1	17
OTHER INTERIOR-POS	0	16
INTERIOR TRIM FUNCTION-POS	0	16
INSTRUMENT PANEL-POS	0	15
REAR WIPERS/WASHERS-POS	0	14
INSTRUMENTATION FUNCTION-POS	0	12
LOCK/LATCH POWER CONTROL-POS	0	11
ELECTRICAL AND ACCESSORIES-POS	0	10
FUEL FILLING & DELIVERY-POS	0	10
HEATING, VENTILATION AND A/R	1	10
CONDITIONING-POS		
CLIMATE CONTROL FUNCTION-POS	0	10
CRUISE CONTROL-POS	0	9
EXTERIOR TRIM & BUMPER FUNCTION-POS	1	9
SALES EXPERIENCE-POS	0	9
GLASS FUNCTION-POS	0	8
SHOULD GET BETTER FUEL ECONOMY-POS	0	8
CUPHOLDERS-POS	0	8
EXTERIOR TRIM-POS	0	8
OTHER LATCHING/SECURITY-POS	0	7
OTHER BRAKES/CHASSIS/SUSPENSION-POS	0	7
POWERTRAIN GOOD SOUND AND NVH-POS	0	7
PROGRAM-POS	0	7
SEAT BELTS-POS	0	6
ANTI-THEFT-POS	0	6
OTHER ELECTRICAL AND ACCESSORIES-POS	0	6
BRAKES-POS	0	6
TRIM-POS	0	6
RUNNING BOARDS-POS	0	6
HEADLAMP-POS	0	6
AIR BAGS-POS	0	6
WIND NOISE-POS	0	5
CIGAR LIGHTER/POWERPOINT-POS	0	5
ABS-POS	0	5
SMOOTH RESPONSE-POS	0	5
GOOD MANUAL TRANSMISSION SHIFT-POS	1	6

30 D/S occurs at 15/30 days in service and 60 D/S occurs at 45/60 days in service.  
 \*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.  
 \*\*\* Actual time period is a combination of the actual call, build, and purchase dates



4-Formulated Customer Concern Behavior

## VEHICLE SUMMARY

Build Date - 03/01/2002 -  
 Actual:Call Date - 03/28/200205/14/2002 -  
 Actual:Purchase Date - 05/14/200203/30/2002 -  
 Actual: 04/14/2002  
 Ownership Period: 30 DIS and 80 DIS \*  
 Plant(s): KANSAS CITY

Requested: 07/31/2001 -  
 04/11/2002Requested: 05/14/2002 -  
 05/14/2002Requested: 08/21/2001 -  
 04/16/2002

*Ford Motor Company*

### VFG CATEGORY: ALL CONCERNS & DESIGN GENERAL COMMENTS

#### 2002 ESCAPE - CONCERN FREQUENCY

ENTERTAINMENT & COMMUNICATION-POS	0	5
IGNITION SWITCH-POS	0	4
EXTERIOR MIRRORS-POS	0	4
IP & CONSOLE FUNCTION-POS	0	4
OTHER INTERIOR TRIM-POS	0	4
TIRES-POS	0	4
ROAD NOISE-POS	0	4
SERVICE EXPERIENCE-POS	1	3
RESTRAINTS-POS	0	2
LATCHING AND SECURITY-POS	0	2
INTERIOR MIRRORS-POS	0	2
OTHER MIRRORS-POS	0	2
GLASS WIPING & WASHING-POS	0	2
SHEET METAL FUNCTION-POS	0	2
OTHER RESTRAINTS-POS	0	1
ROOF-POS	0	1
MIRROR FUNCTION-POS	0	1
FRONT WIPER/WASHERS-POS	0	1
ELECTRICAL POWER-POS	0	1
QUICK AND EASY START-POS	0	1
NVH-POS	0	1
CARPET/FLOOR MATS-POS	0	1
GAUGES-POS	0	1
<b>Total Positive Comments</b>	<b>64</b>	<b>4,223</b>

#### Negative Design General Comments

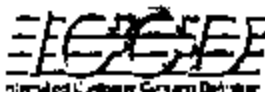
	ACTUAL TIME PERIOD ***	CUM. MYTD
--	------------------------	-----------

INSTRUMENTATION FUNCTION-NEG	5	224
IGNITION SWITCH-NEG	5	110
FRONT SEATING-NEG	4	82
SEATING-NEG	0	70
AUDIO-NEG	1	83
LIGHTING-NEG	0	58
GAUGES-NEG	1	54
SHOULD GET BETTER FUEL ECONOMY-NEG	2	44
COMPASS-NEG	0	40
FUEL FILLING & DELIVERY-NEG	1	37
HEADLAMP-NEG	0	38
VEHICLE RELATED-NEG	0	32
ALL OTHER-NEG	1	32
LOCK/LATCH POWER CONTROL-NEG	1	30
STEERING-NEG	1	29
SUN/MOON ROOF-NEG	0	26
OTHER ELECTRICAL AND ACCESSORIES-NEG	0	25
VISORS-NEG	0	25
CUPHOLDERS-NEG	0	23
EXTERIOR TRIM-NEG	3	23
OTHER LATCHING/SECURITY-NEG	0	22
REMOTE/KEYLESS ENTRY-NEG	0	21
INTERIOR MIRRORS-NEG	0	21
STORAGE SPACE-NEG	0	20
BRAKES-NEG	0	19
CLIMATE CONTROL FUNCTION-NEG	0	19
EXTERIOR TRIM & BUMPER FUNCTION-NEG	4	18
REAR SEATING-NEG	0	18
RUNNING BOARDS-NEG	0	16
POWER WINDOWS-NEG	0	14

30 DIS occurs at 1630 days in service and 80 DIS occurs at 48/60 days in service.

\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.

\*\*\* Actual time period is a combination of the actual call, build, and purchase dates



# VEHICLE SUMMARY

Ford Motor Company

Build Date - 03/01/2002 -  
 Actual Call Date - 03/28/2002/05/14/2002 -  
 Actual Purchase Date - 05/14/2002/03/30/2002 -  
 Actual - 04/14/2002  
 Ownership Period: 30 DIS and 60 DIS \*  
 Plant(s): KANSAS CITY

Requested: 07/31/2001 -  
 04/11/2002/Requested: 05/14/2002 -  
 05/14/2002/Requested: 08/21/2001 -  
 04/16/2002

## VFG CATEGORY: ALL CONCERNS & DESIGN GENERAL COMMENTS

### 2002 ESCAPE - CONCERN FREQUENCY

CONSOLE-NEG	0	13
HEATING, VENTILATION AND AIR CONDITIONING-NEG	0	13
SALES EXPERIENCE-NEG	1	13
SEAT ADJUSTMENT-NEG	1	12
CRUISE CONTROL-NEG	0	12
SEAT BELTS-NEG	1	11
INSTRUMENT PANEL-NEG	0	11
OTHER SEATS-NEG	0	10
LATCHING AND SECURITY-NEG	0	10
ASHTRAY-NEG	0	10
WIND NOISE-NEG	1	9
EXTERIOR MIRRORS-NEG	0	9
GOOD FUEL ECONOMY-NEG	0	9
IP & CONSOLE FUNCTION-NEG	0	8
TRUNK/CARGO AREA-NEG	0	8
OTHER INTERIOR-NEG	0	8
FRONT WIPERS/WASHERS-NEG	0	7
OTHER BRAKES/CHASSIS/SUSPENSION-NEG	0	7
GOOD AUTOMATIC TRANSMISSION	0	7
SHIFT-NEG		
POWER-NEG	1	7
OTHER POWERTRAIN-NEG	1	7
TIRES-NEG	0	7
ROAD NOISE-NEG	0	7
FORD MOTOR COMPANY-NEG	0	7
AIR BAGS-NEG	0	6
FUEL FILLER DOOR-NEG	0	6
GLASS FUNCTION-NEG	0	6
GLASS WIPING & WASHING-NEG	0	6
SMOOTH RIDE-NEG	0	6
GENERAL NEG	0	6
PAINT APPEARANCE-NEG	0	5
GLOVE BOX-NEG	0	5
HEIGHT OF VEHICLE-NEG	0	5
ENTERTAINMENT & COMMUNICATION-NEG	0	5
LOCK/LATCH MANUAL CONTROL-NEG	0	4
DOOR HANDLES-NEG	0	4
OTHER GLASS-NEG	0	4
REAR WIPERS/WASHERS-NEG	0	4
ROOMINESS-NEG	0	4
CARPET/FLOOR MATS-NEG	0	4
BODY-NEG	0	4
THIRD ROW SEATING-NEG	0	3
OTHER RESTRAINTS-NEG	0	3
OTHER MIRRORS-NEG	0	3
CLOCK-NEG	0	3
CIGAR LIGHTER/POWERPOINT-NEG	0	3
ELECTRICAL AND ACCESSORIES-NEG	0	3
SHEET METAL FUNCTION-NEG	0	3
GOOD MANUAL TRANSMISSION SHIFT-NEG	0	3
INTERIOR TRIM FUNCTION-NEG	1	3
RIDE & HANDLING-NEG	0	3
PROGRAM-NEG	1	3
ANTI-THEFT-NEG	0	2
TRIM-NEG	0	2
RESTRAINTS-NEG	0	1
MIRROR FUNCTION-NEG	0	1
ABS-NEG	0	1
QUICK AND EASY START-NEG	0	1

\* 30 DIS occurs at 16/50 days in service and 60 DIS occurs at 45/60 days in service.

\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.

\*\*\* Actual time period is a combination of the actual call, build, and purchase dates





## VEHICLE SUMMARY

Build Date - 03/01/2002 -  
 Actual:Call Date - 03/28/200205/14/2002 -  
 Actual:Purchase Date - 05/14/200203/30/2002 -  
 Actual: 04/14/2002  
 Ownership Period: 30 DIS and 60 DIS \*  
 Plant(s): KANSAS CITY

Requested: 07/31/2001 -  
 04/11/2002Requested: 05/14/2002 -  
 05/14/2002Requested: 08/21/2001 -  
 04/16/2002

*Ford Motor Company*

### VFG CATEGORY: ALL CONCERNS & DESIGN GENERAL COMMENTS

#### 2002 ESCAPE - CONCERN FREQUENCY

MECHANICAL MALFUNCTION INDICATOR-NEG	0	1
OTHER INTERIOR TRIM-NEG	0	1
TV/CR/DVD-NEG	0	1
SERVICE EXPERIENCE-NEG	0	1

Total Negative Comments	37	1,011
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TOTAL DESIGN GENERAL COMMENTS	91	5,834
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Customers Highly Satisfied with Vehicle Product Quality (Rating of 9 or 10):	PERCENT HIGHLY SATISFIED		# OF CUSTOMERS/TOTAL	
	ACTUAL	TIMEPERIO	ACTUAL	TIMEPERIO

	PERCENT HIGHLY SATISFIED	# OF CUSTOMERS/TOTAL
30 DIS	81	30/37
30 DIS with zero TGW	85	18/20
60 DIS	-	0/0
60 DIS with zero TGW	-	0/0

\* 30 DIS occurs at 16/30 days in service and 60 DIS occurs at 46/60 days in service.  
 \*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.  
 \*\*\* Actual time period is a combination of the actual call, build, and purchase dates



Ford Motor Company

### CONCERNS BY CATEGORIES

Build Date - Actual:Call	03/01/2002 -	Requested: 07/31/2001 -
Date - Actual:Purchase	03/28/200205/14/2002	04/11/2002Requested: 05/14/2002 -
Date - Actual:	- 05/14/200203/30/2002	05/14/2002Requested: 06/21/2001 -
	- 04/14/2002	04/16/2002

Containment Status: Both Contained and Not Contained  
Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
- Within date range: 37  
- Cumulative MYTD: 3,613

2002 ESCAPE

CC CODE - CONCERN: A18 - CD PLAYER TRBL

VIN: 1FMYU03132KC72573

Cust. Name: [REDACTED]  
Cust. Phone: [REDACTED]  
Cust. Address: [REDACTED]  
Cust. City: NASHVILLE, GA [REDACTED]

Build Date: 03/05/2002  
Purchase Date: 04/13/2002  
Dealer Name:  
Dealer Phone:

30 DIS/60 DIS\*\*:  
Mileage - 30DIS/60 DIS\*\*:  
Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:  
Increase SAT to 9 or 10  
Gender: Male

Cust. Contact Date: 05/14/2002

Containment Status: Not Contained

Agent ID: jmoeech

Concern Comment: The customer had a concern with a CD disc jamming in the CD player. The customer tried using the eject button but was unsuccessful. Eventually, the customer got the disc out with a pair of tweezers. This concern occurred a couple of weeks after delivery. This is an intermittent concern, which only occurred once. This concern occurred while the engine was running and road conditions did not play a factor. The other audio and communication features worked properly during this concern. There were no other electrical functions in use during this concern. There were no noises or stereo display error messages associated with this concern. The customer has a stereo with a six CD changer. The customer does not live near an airport, military base, hills, or mountains. The customer will mention this concern to Griffin Ford if it occurs again.

SIF \*\*\*: 0 (None)

Champion: NONE

EM2-927-C 2885

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.

\*\* 30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0=None, 1=low, 2=medium, 3=high.



### CONCERNS BY CATEGORIES

Ford Motor Company

Build Date - Actual/Call	03/01/2002 -	Requested: 07/31/2001 -
Date - Actual/Purchase	03/29/2002/05/14/2002	04/11/2002/Requested: 06/14/2002 -
Date - Actual	- 06/14/2002/03/30/2002	05/14/2002/Requested: 08/21/2001 -
	- 04/14/2002	04/16/2002

Containment Status: Both Contained and Not Contained  
 Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
 - Within data range: 37  
 - Cumulative NYTD: 3,613

2002 ESCAPE

#### CC CODE - CONCERN: B63 -- MLDNG/EXTTRM LOOSE/MISSING

VIN: 1FMYU041X2KC73976

Cust. Name: [REDACTED]

Build Date: 03/18/2002

30 DIS/60 DIS\*\*:

34 / NA

Cust. Phone:

Purchase Date: 04/10/2002

Mileage - 30DIS/60 DIS\*\*:

DK / NA

Cust. Address:

Dealer Name:

Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:

8 / NA

Cust. City: DOWNINGTOWN, PA [REDACTED]

Dealer Phone:

Increase SAT to 9 or 10

/NA

Gender:

Male

Cust. Contact Date: 05/14/2002

Containment Status: Not Contained

Agent ID: wmulgr

Concern Comment: This weekend when washing the vehicle the customer noticed that a rubber gasket was missing from the lift gate glass. The concern is located on the bottom passenger side of the lift gate glass. The customer will mention this concern to his dealership at his earliest convenience.

SIF \*\*\*: 1 (Low)

Champion: NONE

ERR2-027-C 2698

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.  
 \*\* 30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.  
 \*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



### CONCERNS BY CATEGORIES

*Ford Motor Company*

Build Date - Actual: Call	03/01/2002 -	Requested: 07/31/2001 -
Date - Actual: Purchase	03/28/2002 05/14/2002	04/11/2002 Requested: 05/14/2002 -
Date - Actual:	- 05/14/2002 03/30/2002	05/14/2002 Requested: 06/21/2001 -
	- 04/14/2002	04/15/2002

Containment Status: Both Contained and Not Contained  
Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
- Within date range: 37  
- Cumulative MYTD: 3,513

2002 ESCAPE

#### CC CODE - CONCERN: B65 - WHEEL/HUBCAP TRBL

VIN: 1FMYU03122KC91733

Cust. Name: [REDACTED]

Cust. Phone:

Cust. Address:

Cust. City: COLLINSVILLE, MS [REDACTED]

Build Date: 03/16/2002

Purchase Date: 04/12/2002

Dealer Name:

Dealer Phone:

30 DIS/60 DIS\*\*:

Mileage - 30DIS/60 DIS\*\*:

Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:

Increase SAT to 9 or 10

Gender:

32 / NA

1200 / NA

10 / NA

NA/NA

Male

Cust. Contact Date: 05/14/2002

Containment Status: Not Contained

Agent ID: jmoesch

Concern Comment: The customer has a concern with a loud chirping noise from the drivers side front wheel. This concern was first noticed by the customer a couple of days after delivery. This concern is noticed at light acceleration and at approximate speeds of 20 miles per hour and lower. The customer will mention this concern to New South Ford sometime next week.

SIF \*\*\*: 1 (Low)

Champion: NONE

ENG2-027-C 2887

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.

\*\* 30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



### CONCERNS BY CATEGORIES

Ford Motor Company

Build Date - Actual: Call	03/01/2002 -	Requested: 07/31/2001 -
Date - Actual: Purchase	03/28/2002 05/14/2002	04/11/2002 Requested: 05/14/2002 -
Date - Actual:	- 05/14/2002 03/30/2002	05/14/2002 Requested: 08/21/2001 -
	- 04/14/2002	04/16/2002

Containment Status: Both Contained and Not Contained  
Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

2002 ESCAPE

Total Customers Surveyed  
- Within date range: 37  
- Cumulative MYTD: 3,813

CC CODE - CONCERN: B69 - OTHER BUMP TRBL9

VIN: 1FMCU04172KC50827

Cust. Name: [REDACTED]  
Cust. Phone: [REDACTED]  
Cust. Address: [REDACTED]  
Cust. City: BLOOMINGTON, IL [REDACTED]

Build Date: 03/19/2002  
Purchase Date: 03/30/2002  
Dealer Name:  
Dealer Phone:

30 DIS/60 DIS\*\*:  
Mileage - 30DIS/60 DIS\*\*:  
Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:  
Increase SAT to 9 or 10  
Gender:

45 / NA  
1200 / NA  
8 / NA  
Y/NA  
Male

Cust. Contact Date: 05/14/2002

Containment Status: Not Contained

Agent ID: wmulgra

Concern Comment: Upon accepting delivery of the vehicle the customer noticed that there were two scratches on the bumpers. One scratch is located on the front bumper and the second scratch is located on the rear bumper. The customer also said both scratches are approximately four inches long. The customer used Armorall to try and remove the scratches, but as a result the bumper area that he applied the Armorall faded. The customer said he can now see two large white circles where he rubbed the Armorall. The customer will mention this concern to his dealership at his earliest convenience.

SIF\*\*\*: 2 (Medium)

Champion: NONE

5082-027-C 2888

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.

\*\* 30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



### CONCERNS BY CATEGORIES

Ford Motor Company

Build Date - Actual:Cell 03/01/2002 - Requested: 07/31/2001 -  
 Date - Actual:Purchase 03/28/200205/14/2002 04/11/2002Requested: 05/14/2002 -  
 Date - Actual: - 05/14/200203/30/2002 05/14/2002Requested: 08/21/2001 -  
 - 04/14/2002 04/16/2002

Containment Status: Both Contained and Not Contained  
 Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
 - Within date range: 37  
 - Cumulative MYTD: 3,613

2002 ESCAPE

#### CC CODE - CONCERN: F19 - CHIP/SCR PAINT

VIN: 1FMCU04112KC60218

Cust. Name: [REDACTED]  
 Cust. Phone: [REDACTED]  
 Cust. Address: [REDACTED]  
 Cust. City: SOUTH SAN FRANCISCO, CA [REDACTED]

Build Date: 03/12/2002  
 Purchase Date: 04/14/2002  
 Dealer Name: [REDACTED]  
 Dealer Phone: [REDACTED]

30 DIS/60 DIS\*\*:  
 Mileage - 30DIS/60 DIS\*\*:  
 Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:  
 Increase SAT to 9 or 10  
 Gender:

30 / NA  
 1500 / NA  
 7 / NA  
 Y/NA  
 Male

Cust. Contact Date: 06/14/2002 Containment Status: Not Contained Agent ID: stantal  
 Concern Comment: The customer is having a problem with a one swirl scratch mark about four inches wide and a foot long. The concern is located on the hood on the drivers side closer to the wind shield. The vehicle is black and there is no rust corrosion. The customer usually travels on paved roads. The customer washes his vehicle himself with a liquid soap called Car Wash Gel by Blue Coral and dries the vehicle with a shammy or soft cloth. The concern was first noticed the day the customer purchased the vehicle. The concern occurred before delivery of the vehicle. The customer had a safari bar for the front end of the bumper and a bug guard added to the vehicle. The concern was noticed before they were added. There are no dents or discolorations near the concern. The dealer is aware of the concern and will address it with the customer.

SIF \*\*\*: 2 (Medium) Champion: NONE

VIN: 1FMYU01102KD91181

Cust. Name: [REDACTED]  
 Cust. Phone: [REDACTED]  
 Cust. Address: [REDACTED]  
 Cust. City: FORT LAUDERDALE, FL [REDACTED]

Build Date: 03/19/2002  
 Purchase Date: 04/04/2002  
 Dealer Name: [REDACTED]  
 Dealer Phone: [REDACTED]

30 DIS/60 DIS\*\*:  
 Mileage - 30DIS/60 DIS\*\*:  
 Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:  
 Increase SAT to 9 or 10  
 Gender:

40 / NA  
 2500 / NA  
 9 / NA  
 NA/NA  
 Male

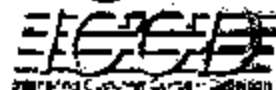
Cust. Contact Date: 05/14/2002 Containment Status: Not Contained Agent ID: jmoeach  
 Concern Comment: The customer has a concern with chips in the paint on the passengers side front door. These chips are located on the middle edge of the door below the door handle. There are four chips each approximately a quarter of an inch in size. These chips were first noticed by the customer on the third day after delivery. The vehicles paint color is Oxford White Solid. There is no rust corrosion noticed by the customer. Generally, the customer travels on paved roads. The customer washes this vehicle himself with liquid soap and a shammy to dry. The only after market modification made to this vehicle was a trailer hitch installed by the dealership. There are no dents or discolorations near the concern. The customer will mention this concern to Sawgrass Ford at his earliest convenience.

SIF \*\*\*: 3 (High) Champion: NONE

VIN: 1FMYU03132KC72573

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would  
 \*\* 30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.  
 \*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.

ES02-027-C 2000



### CONCERNS BY CATEGORIES

Ford Motor Company

Build Date - Actual:Call	03/01/2002 -	Requested: 07/31/2001 -
Date - Actual:Purchase	09/28/200205/14/2002	04/11/2002Requested: 05/14/2002 -
Date - Actual:	- 05/14/200203/30/2002	05/14/2002Requested: 08/21/2001 -
	- 04/14/2002	04/18/2002

Containment Status: Both Contained and Not Contained  
Plant(s): KANSAS CITY

#### CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
- Within date range: 37  
- Cumulative MYTD: 3,813

#### 2002 ESCAPE

Cust. Name: [REDACTED]  
Cust. Phone: [REDACTED]  
Cust. Address: [REDACTED]  
Cust. City: NASHVILLE, GA [REDACTED]

Build Date: 03/05/2002  
Purchase Date: 04/13/2002  
Dealer Name:  
Dealer Phone:

30 DIS/60 DIS\*\*:  
Mileage - 30DIS/60 DIS\*\*:  
Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:  
Increase SAT to 9 or 10  
Gender:

31 / NA  
2000 / NA  
10 / NA  
NA/NA  
Male

Cust. Contact Date: 05/14/2002 Containment Status: Not Contained Agent ID: jmcsoch  
Concern Comment: The customer has a concern with a chip in the paint on the hood. This chip is located in the center of the front curve, where the hood curves down towards the grill. This concern is approximately one quarter of an inch in size. The customer first noticed this concern three to four days after delivery. The color of the vehicle is Ebony Solid. There is no rust corrosion, dents, or discolorations associated with this concern. Generally, the customer travels on paved roads but on rear occasions travels on dirt roads. The customer washes this vehicle himself using liquid soap and cotton towels to dry. The customer is not sure whether this paint concern occurred before or after delivery of the vehicle. There are no after market modifications made to this vehicle. The customer will mention this concern to Griffin Ford at his earliest convenience.

SIF \*\*\*: 0 (None) Champion: NONE

ER02-027-C 2888

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.

\*\* 30 DIS occurs at 18/30 days in service and 60 DIS occurs at 45/60 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



Ford Motor Company

### CONCERNS BY CATEGORIES

Build Date - Actual:Call	03/01/2002 -	Requested: 07/31/2001 -
Date - Actual:Purchase	03/29/200205/14/2002	04/11/2002Requested: 05/14/2002 -
Date - Actual:	- 05/14/200203/30/2002	05/14/2002Requested: 08/21/2001 -
	- 04/14/2002	04/18/2002

Containment Status: Both Contained and Not Contained  
Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
- Within date range: 37  
- Cumulative MYTD: 3,813

2002 ESCAPE

#### CC CODE - CONCERN: L20 - REMOTE/KEYLESS ENTRY

VIN: 1FMCU04122KC71908

Cust. Name: [REDACTED]

Cust. Phone: [REDACTED]

Cust. Address: [REDACTED]

Cust. City: HAMBURG, PA [REDACTED]

Build Date: 03/22/2002

Purchase Date: 04/11/2002

Dealer Name:

Dealer Phone:

30 DIS/60 DIS\*\*:

Mileage - 30DIS/60 DIS\*\*:

Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:

Increase SAT to 9 or 10

Gender:

33 / NA

1000 / NA

10 / NA

NA/NA

Male

Cust. Contact Date: 05/14/2002

Containment Status: Not Contained

Agent ID: stantai

Concern Comment: The customer is having a problem with one key fob not working at all. The concern was first noticed a few days ago. The key fob was working and then stopped working completely on Sunday. The dealership is waiting for a new one to come in. The key fob came with the vehicle from the factory. The key fob has never suffered any damage to it or there is no foreign material lodged in the FOB.

SIF \*\*\*: 0 (None)

Champion: NONE

ENG2-027-C 2001

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10=Definitely Would.  
 \*\* 30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.  
 \*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.





### CONCERNS BY CATEGORIES

Ford Motor Company

Build Date - Actual:Call	03/01/2002 -	Requested: 07/31/2001 -
Date - Actual:Purchase	03/28/200205/14/2002	04/11/2002Requested: 05/14/2002 -
Date - Actual:	- 05/14/200203/30/2002	05/14/2002Requested: 08/21/2001 -
	- 04/14/2002	04/18/2002

Containment Status: Both Contained and Not Contained  
Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
- Within data range: 37  
- Cumulative MYTD: 3,813

2002 ESCAPE

#### CC CODE - CONCERN: L28 - OTHER LIGHTING THBL

VIN: 1FMCU03152KC83564

Cust. Name: [REDACTED]  
Cust. Phone: [REDACTED]  
Cust. Address: [REDACTED]  
Cust. City: VALDOSTA, GA [REDACTED]

Build Date: 03/21/2002  
Purchase Date: 04/12/2002  
Dealer Name:  
Dealer Phone:

30 DIS/60 DIS\*\*:  
Mileage - 30DIS/60 DIS\*\*:  
Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:  
Increase SAT to 9 or 10  
Gender: Female

32 / NA  
2068 / NA  
10 / NA  
NANA  
Female

Cust. Contact Date: 05/14/2002

Containment Status: Not Contained

Agent ID: jinceach

Concern Comment: The customer has a concern with moisture in the passengers side head lamp. This concern was first noticed by the customer approximately two weeks ago. There are no cracks in the lights. This is a constant concern. The customer will mention this concern to Cook County Ford sometime next week.

SIF \*\*\*: 0 (None)

Champion: NONE

VIN: 1FMCU04182KC91810

Cust. Name: [REDACTED]  
Cust. Phone: [REDACTED]  
Cust. Address: [REDACTED]  
Cust. City: KANSAS CITY, MO [REDACTED]

Build Date: 03/26/2002  
Purchase Date: 03/30/2002  
Dealer Name:  
Dealer Phone:

30 DIS/60 DIS\*\*:  
Mileage - 30DIS/60 DIS\*\*:  
Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:  
Increase SAT to 9 or 10  
Gender: Female

45 / NA  
3000 / NA  
10 / NA  
NANA  
Female

Date	Repair Order	Repair Comments
------	--------------	-----------------

05/09/2002	114480	3015 REMOVED FRONT BUMPER COVER R+R LH HEADLAMP ASSEMBLY INSTALLED BUMPER COVER TESTED OK
------------	--------	---

Cust. Contact Date: 05/14/2002

Containment Status: Not Contained

Agent ID: wmu/gra

Concern Comment: One week after purchasing the vehicle the customer noticed condensation in her drivers side headlight. The customer said the weather was extremely damp and rainy outside. However, she could not see any visible cracks in the headlight. The customer mentioned this concern to her dealership and it has been repaired to her satisfaction.

SIF \*\*\*: 0 (None)

Champion: NONE

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.  
\*\* 30 DIS occurs at 15/90 days in service and 60 DIS occurs at 45/90 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



### CONCERNS BY CATEGORIES

*Ford Motor Company*

Build Date - Actual:Call 03/01/2002 - Requested: 07/31/2001 -  
 Date - Actual:Purchase 03/28/200205/14/2002 04/11/2002Requested: 05/14/2002 -  
 Date - Actual: - 05/14/200203/30/2002 05/14/2002Requested: 08/21/2001 -  
 - 04/14/2002 04/18/2002

Containment Status: Both Contained and Not Contained  
 Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
 - Within date range: 37  
 - Cumulative MYTD: 3,613

2002 ESCAPE

#### CC CODE - CONCERN: N17 - NOISY BRAKES

VIN: 1FMCU03182KC80807	Build Date: 03/04/2002	30 DIS/80 DIS**:	33 / NA
Cust. Name: [REDACTED]	Purchase Date: 04/11/2002	Mileage - 30DIS/80 DIS**:	1800 / NA
Cust. Phone: [REDACTED]	Dealer Name:	Veh. Product Quality Sat.* - 30 DIS/80 DIS**:	8 / NA
Cust. Address: [REDACTED]	Dealer Phone:	Increase SAT to 9 or 10	Y/NA
Cust. City: MONROVIA, CA [REDACTED]		Gender:	Female

Cust. Contact Date: 05/14/2002 Containment Status: Not Contained Agent ID: prehana  
 Concern Comment: The customer says that when coming to a sudden stop the brakes squeal. She first noticed this concern about two weeks after vehicle delivery. No warning lights were illuminated. The only after-market modifications made to the vehicle were running boards and a trailer hitch which were installed by her selling dealership. She hasn't checked the brake fluid nor have any leaks been noticed. This concern occurs whether the vehicle is being driven after sitting over night or not. The vehicle is parked outside. This is a constant concern which she plans on addressing with her dealership Claremont Ford sometime this week.  
 SIF \*\*\*: 1 (Low) Champion: NONE

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.  
 \*\* 30 DIS occurs at 15/30 days in service and 80 DIS occurs at 45/90 days in service.  
 \*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



### CONCERNS BY CATEGORIES

Ford Motor Company

Build Date - Actual:Call	03/01/2002 -	Requested: 07/31/2001 -
Date - Actual:Purchase	03/28/200206/14/2002	04/11/2002Requested: 05/14/2002 -
Date - Actual:	- 05/14/200203/30/2002	05/14/2002Requested: 09/21/2001 -
	- 04/14/2002	04/18/2002

Containment Status: Both Contained and Not Contained  
Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
- Within date range: 37  
- Cumulative MYTD: 3,813

2002 ESCAPE

#### CC CODE - CONCERN: N60 - FRONT UNDERBODY EXT SQK AND RTL

VIN: 1FMYU01182KC89799

Cust. Name: [REDACTED]

Cust. Phone: [REDACTED]

Cust. Address: [REDACTED]

Cust. City: FORT WORTH, TX [REDACTED]

Build Date: 03/20/2002

Purchase Date: 04/12/2002

Dealer Name:

Dealer Phone:

30 DIS/60 DIS\*\*:

Mileage - 30DIS/60 DIS\*\*:

Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*:

Increase SAT to 9 or 10

Gender:

32 / NA

2000 / NA

10 / NA

NA/NA

Female

Cust. Contact Date: 05/14/2002

Containment Status: Not Contained

Agent ID: prehana

Concern Comment: The customer says that there is a squeak exhibited from the front end of the vehicle when driving. She first noticed this concern three weeks after vehicle delivery. This concern is usually apparent when driving between 50-60 mph. It can be heard over the radio, heater and A/C. No specific weather conditions are associated. This concern does not occur when slowing down or coming to a stop and it is an intermittent concern. She will address this concern with her dealership King Charlie Hillard Ford on her first oil change.

SIF \*\*\*: 0 (None)

Champion: NONE

ENG-027-C 2804

\* Measurement: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.  
 \*\* 30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.  
 \*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



### CONCERNS BY CATEGORIES

Ford Motor Company

Build Date - Actual:Call	03/01/2002 -	Requested: 07/31/2001 -
Date - Actual:Purchase	03/28/200205/14/2002	04/11/2002Requested: 05/14/2002 -
Date - Actual:	- 05/14/200203/30/2002	05/14/2002Requested: 08/21/2001 -
	- 04/14/2002	04/15/2002

Containment Status: Both Contained and Not Contained  
 Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
 - Within date range: 37  
 - Cumulative MYTD: 3,813

2002 ESCAPE

#### CC CODE - CONCERN: P68 - TRANS SHIFTS ROUGH/JERKY FROM PARK

VIN: 1FMYU04132KD00208

Cust. Name: [REDACTED]  
 Cust. Phone: [REDACTED]  
 Cust. Address: [REDACTED]  
 Cust. City: SYKESVILLE, PA [REDACTED]

Build Date: 03/28/2002  
 Purchase Date: 04/11/2002  
 Dealer Name:  
 Dealer Phone:

30 DIS/60 DIS\*\* : 33 / NA  
 Mileage - 30DIS/60 DIS\*\* : 500 / NA  
 Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\* : 8 / NA  
 Increase SAT to 9 or 10 : Y/NA  
 Gender: Female

Cust. Contact Date: 05/14/2002

Containment Status: Not Contained

Agent ID: wmulgra

Concern Comment: Last week the customer noticed that the vehicle shifts roughly from park. There is no front or rear vibration associated with this concern, and the heater or air conditioning is not on when this concern occurs. The customer said she usually notices the rough shifting when the vehicle has already warmed up. She has not changed her oil since purchasing the vehicle and she uses regular unleaded fuel. There are no noises associated with this concern, and the customer has not noticed any leakage coming from the vehicle. This is a constant concern that the customer will mention to her dealership at her earliest convenience.

SIF \*\*\*: 3 (High)

Champion: NONE

EM02-027-C 2002

\* Measurement: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.

\*\* 30 DIS occurs at 1530 days in service and 60 DIS occurs at 46/60 days in service.

\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.



Ford Motor Company

### CONCERNS BY CATEGORIES

Build Date - Actual:Call	03/01/2002 -	Requested: 07/31/2001 -
Date - Actual:Purchase	03/28/200205/14/2002	04/11/2002Requested: 05/14/2002 -
Date - Actual:	- 05/14/200203/30/2002	05/14/2002Requested: 08/21/2001 -
	- 04/14/2002	04/16/2002

Containment Status: Both Contained and Not Contained  
Plant(s): KANSAS CITY

CC CODE: OVERALL VEHICLE

Total Customers Surveyed  
- Within date range: 37  
- Cumulative MYTD: 3,813

2002 ESCAPE

CC CODE - CONCERN: R22 - WIN-AROUND FRONT SIDE DR/WIN

VIN: 1FMCU03152KC93584  
Cust. Name: [REDACTED]  
Cust. Phone: [REDACTED]  
Cust. Address: [REDACTED]  
Cust. City: VALDOSTA, GA [REDACTED]

Build Date: 03/21/2002  
Purchase Date: 04/12/2002  
Dealer Name:  
Dealer Phone:

30 DIS/60 DIS\*\*: 32 / NA  
Mileage - 30DIS/60 DIS\*\*: 2068 / NA  
Veh. Product Quality Sat.\* - 30 DIS/60 DIS\*\*: 10 / NA  
Increase SAT to 9 or 10: NANA  
Gender: Female

Cust. Contact Date: 05/14/2002 Containment Status: Not Contained Agent ID: jmceach  
Concern Comment: The customer has a concern with wind noise from both of the front side windows. This wind noise seems to be coming from the top of the windows. This concern was first noticed by the customer on the day of delivery. This concern can be heard over the air conditioning, heater, and radio. This concern is not more pronounced on windy days versus calm days. There have been no water leaks noticed by the customer. There is no difference in this concern between hot and cold days. There have been no after market modifications made to this vehicle. There is no damaged, loose, or mis-aligned moldings associated with this concern. The vehicle has a cloth interior roof. The vehicle also has a sunroof but the customer generally keeps the shade closed. This concern is noticed at approximate speeds of 55 miles per hour and higher. This concern has a rushing sound to it. This is a constant concern at the mentioned speeds. The customer will mention this concern to Cook County Ford sometime next week.

SIF \*\*\*: 2 (Medium) Champion: NONE

ENC2-827-C 2886

\* Measurements: Satisfaction on 1-10 scale with 1=Completely Dissatisfied and 10=Completely Satisfied; Recommendation on a 1-10 scale with 1=Definitely Would Not and 10= Definitely Would.  
\*\* 30 DIS occurs at 15/30 days in service and 60 DIS occurs at 45/60 days in service.  
\*\*\* Satisfaction Impact Factor (SIF) scale is: 0-none, 1-low, 2-medium, 3-high.

**From:** Suarez, Rhea (R.)  
**Sent:** Wednesday, September 25, 2002 2:28 PM  
**To:** Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Corbett, Sandra (S.M.); Hansen, George (G.C.)  
**Co:** Lintiac, Steven (S.)  
**Subject:** FW: PCM P/# for Tribute Engine Stall

**Importance:** High

Here is the info I gave Steve Lintiac (Mazda) for Ford Service calibration part number for Mazda Tribute application.

SERVICE PART: 1U7Z- 12A650-AYD\_\_\_ MODULE - ENGINE CONTROL -  
EBC V  
ENGINEERING PART: 1U7A 12A650 AYDMR\_\_\_\_\_ ORIGIN: PAPT  
SUPPLIER LOC: FINIS:  
4459907  
Vendor Part: Fax Buy:  
Motorcraft Part: Prime Suplr: 2020A  
Comparable Part: Packager Cd:  
Replaced Part: 1U7Z- 12A650-AYA Mat Content:  
Replacing Part: Ship Mit:  
0  
Buyer: SVI CHRIS MCCARTHY NBA Phone:  
734-266-9754  
Dmnd Anlyst: 92G ALEX DUTCHESHEN NDA Phone:  
734-458-0167  
Prod Anlyst: 301 TERRY SUEFFERLIN (AGENCY) NPA Phone:  
734-52-35649  
Price Anlyst: IBO DARLA JOHNSON-ALLEN Profs ID:  
Color Name: Pallet Qty:  
0  
Pnd Obs: Svc Disp: Unit Issue: 1 Overpack Qty:  
0  
Obs Not: Mech Ob Cd: Trfc Cd: 125 Max Ord Qty:  
0  
Obs Eff: Procure Cd: 4 Hvy Trk App/Cd: 2 / Min Run Qty:  
0  
Eff In: 09/19/02 Rise Hld: N Fab/Hold: N Min Ship Qty:  
0  
Eff Out: Final Rise: N Wgt UOM: Package Wgt:  
0.00  
Ord Dte: 09/19/02 Spec Pgm: N Dir Ship: D Standard Cst:  
0.00  
Commdty: 031401 Volume Grp: Rack/Plt: Dealer Net:  
0.00  
F1=Help F2=GIMA F4=PrvPart F5=NextPart F6=PIGA F9=DREA F10=HILA  
F11=ARFA

-----Original Message-----

From: Steven Limtiaco [mailto:SLimtiac@mazdausa.com]  
Sent: Thursday, September 19, 2002 7:04 PM  
To: 'rsuarez8@ford.com'  
Cc: Mike Clark  
Subject: PCM P/# for Tribute Engine Stall  
Importance: High

Rhae,

I need another favor... Could you give Sam Ferrise my parts guy's contact information so they can work together to figure out the PCM service p/#'s?  
Here it is:

David Liehti  
734-782-7609  
dliehti@mazdausa.com

The Mazda service calibration p/# is 1U7A-12A650-AYD according to the white papers. Thanks.

Steve Limtiaco  
Mazda North American Operations  
Tribute Product Support  
949-442-6514 (phone)  
949-442-6599 (fax)  
e-mail: slimtiac@mazdausa.com

**From:** Hoshino, Jun (J.)  
**Sent:** Friday, September 27, 2002 2:44 AM  
**To:** Wood, Paul (P.); Fournelle, Gilbert (G.)  
**Co:** McGee, Brett (B.L.); Wheeler, Russell (R.F.)  
**Subject:** RE: Latest Level DPFE used in Europe

Gilbert,

Would you kindly confirm (please forward this note to DPFE sensor engineer) what the parts# of DPFE sensor should be used for 2001/2002 MY European Maverick (Escape) with stall/check engine issue. My understanding is the parts# should be use 2F1E9J460 AA/AB (service parts# 2F1Z 9J460 AA, FINIS# 4416838) or YF1E-9J460-AD (service parts# YF1E-9J460-AC, FINIS# 4162714 for all Escape. However, FINIS# 3906046 (Engineering parts# F77E 9J460 AB) is listed as Maverick on UK parts catalog. Is this correct parts#?

Paul,

Russell's the DPFE sensor YF1E-9J460-AD (2A09B--built January 9th, 2002) is the latest level. Final modification has been implemented at supplier on January 7th, 2001 (Lot# should be 2A07) but parts# had not changed. And then in order to determine the latest parts, parts# has been changed to 2F1E9J460 AA/AB (service parts# 2F1Z 9J460 AA, FINIS# 4416838).

Attached note is detail of this change.

I will ask engineering regarding Finia 3908144, F63E-9J459-AA and 3508280, F57E-9J459-CA.

*Jun Hoshino*

RHD Escape/Maverick FCSD PVT Program Manager  
PVT & Field Support, Vehicle Service & Programs  
Hiroshima Japan Tel: 81-82-287-4603 Fax: 81-82-287-5220

ew Part Number for  
Kavlico dP...

-----Original Message-----

**From:** Wood, Paul (P.)  
**Sent:** Thursday, September 26, 2002 11:20 PM  
**To:** Hoshino, Jun (J.)  
**Co:** McGee, Brett (B.L.); Wheeler, Russell (R.F.)  
**Subject:** FW: Latest Level DPFE used in Europe

Jun,

The Part# and Finis for the DPFE sensor that is stocked at FoE warehouse is Part# F77E 9J460 AB, F/C 3906046. The part fitted to Russell's 2.0L Maverick (Vehicle build date 10th Apr# 2002, Vin WFOCU04B521102157) is Part# YF1E-9J460-AD, build date code on sensor 2A09B.

*Regards Paul Wood*

Ford Motor Company  
Product Concursu Engineer - Transit, Transit Connect & Import Vehicles  
FCSD - VS&P, GB-1/569  
Phone: (0) 1277 251654 - Internal: (8)734 1654  
Fax: (0) 1277 253287 - Internal: (8)734 3287  
email: pwood2@ford.com

-----Original Message-----



**From:** Wood, Paul (P.)  
**Sent:** 10 September 2002 14:04  
**To:** Dobler, Hans (H.)  
**Subject:** FW: Latest Level DPFE used in Europe

Hans,

Can you tell me what the Finis of the current DPFE sensor is that we stock for Europe for RHD Maverick. I have looked at Microcat and found Finis 3906048 on there.

Thanks.

*Regards Paul Wood*

Ford Motor Company  
Product Concern Engineer - Transit & Import Vehicles  
FCSD - VS&P, GB-1/589  
Phone: (0) 1277 251654 - Internal: (8)734 1654  
Fax: (0) 1277 253287 - Internal: (8)734 3287  
email: pwood2@ford.com

-----Original Message-----

**From:** Hoshino, Jun (J.)  
**Sent:** 10 September 2002 11:58  
**To:** Wood, Paul (P.); Wheeler, Russell (R.F.)  
**Cc:** McGee, Brett (B.L.)  
**Subject:** RE: Latest Level DPFE used in Europe

Hi Paul and Russell,

Are you able to confirm the engineering# on the DPFE sensor that are in stocked at FoE warehouse and from the Maverick.

Attached photo shows we are currently using at Hofu and are stocked at Mazda warehouse.

*Jun Hoshino*

RHD Escape/Maverick FCSD PVT Program Manager  
PVT & Field Support, Vehicle Service & Programs  
Hiroshima Japan Tel: 81-82-287-4803 Fax: 81-82-287-5220

<< File: DPFE.doc >>

-----Original Message-----

**From:** Wood, Paul (P.)  
**Sent:** Tuesday, September 10, 2002 7:11 PM  
**To:** Hoshino, Jun (J.)  
**Cc:** Wheeler, Russell (R.F.); McGee, Brett (B.L.)  
**Subject:** RE: Latest Level DPFE used in Europe

Jun,

I have searched on Microcat for the parts below but they cannot be found. The part with a base 8J460 which looks like it is the DPFE has a Finis 3906048 (F77E-9J460-AB).

*Regards Paul Wood*

Ford Motor Company  
Product Concern Engineer - Transit & Import Vehicles  
FCSD - VS&P, GB-1/589  
Phone: (0) 1277 251654 - Internal: (8)734 1654  
Fax: (0) 1277 253287 - Internal: (8)734 3287  
email: pwood2@ford.com

-----Original Message-----

From: Hoshino, Jun (J.)  
Sent: 10 September 2002 00:38  
To: Wood, Paul (P.)  
Cc: Wheeler, Russell (R.F.); McGee, Brett (B.L.)  
Subject: RE: Latest Level DPFE used in Europe

Paul,

I have checked engineering drawings, both engineering part#s (F63E9J459AA, F57E9J459CA) are the EGR Vacuum Regulator Solenoid, not DPFE sensor.

FINIS code for the new service parts# (2F1Z 9J460AA) should be 4416838.  
Old service parts# is YF1Z 9J460 AC (FINIS- 4162714).

Please confirm this parts#.

\*\*\*\*\*

SMMPEXEA Engineering to Service Cross Reference 09/09/02 19:10:20

----->

ENGINEERING PART: 2F1E 9J460 AA \_\_\_\_\_ ORIGIN: WERS

A EFFECTIVE Effective  
C SERVICE PART Service Part Description IN DATE Out Date

-----  
FINIS- 4416838- SENSOR ASY 08/09/02  
2F1Z- 9J460-AA SENSOR ASY 03/21/02  
-----

\*\*\*\*\*

*Jun Hoshino*

RHD Escape/Maverick FCSD PVT Program Manager  
PVT & Field Support, Vehicle Service & Programs  
Hiroshima Japan Tel: 81-82-287-4603 Fax: 81-82-287-6220

-----Original Message-----

From: Wood, Paul (P.)  
Sent: Monday, September 08, 2002 7:41 PM  
To: McGee, Brett (B.L.); Hoshino, Jun (J.)  
Cc: Wheeler, Russell (R.F.)  
Subject: Latest Level DPFE used in Europe

Brett, Jun,

With reference to the question from the SAQ meeting last week regarding the DPFE sensor used in Europe. I have checked on the latest (just arrived) Microcat and found the following -

3.0L - Finis 3968144 - Part No. F63E-9J459-AA

2.0L - For the DPFE base part 9J459 is shown but a message 'Not applicable to this specification' shows. On last month's Microcat the Finis was 3508280 and Part No. F57E-9J459-CA.

Either way, the latest level DPFE (2F1Z-9J460-AA) is not the part used in Europe.

*Regards Paul Wood*

Ford Motor Company

Product Concern Engineer - Transit & Import Vehicles

FCSD - VS&P, GB-1/589

Phone: (0) 1277 251654 - Internal: (8)734 1654

Fax: (0) 1277 253287 - Internal: (8)734 3287

email: pwood2@ford.com

*Muriel Sanders*

4.6L Car FEAD Systems  
Ford Motor Company  
Fax: 313-33-73813  
E-mail: msander6@ford.com

-----Original Message-----

From: Hoshino, Jun (J.)  
Sent: Wednesday, August 28, 2002 11:59 PM  
To: Sanders, Muriel (M.S.)  
Cc: Kuhnd, Noel (N.)  
Subject: RE: U204/J14 3.0L engine stall issue.

Muriel,

May be I missed understand with 2F1E-9J460-AA/AB (Service parts:2F1Z 9J 460AA). It is also Kavco made not Motorola made.

My thought is parts# 2F1E 9J460 AA was established in order to distinguish the modification parts (built after January 7th, 2002).

Am I right?

Also, Please respond with question from Taiwan.

Thanks in advance.

*Jun Hoshino*

RHD Escape/Maverick FCSD PVT Program Manager  
PVT & Field Support, Vehicle Service & Programs  
Hiroshima Japan Tel: 81-82-287-4603 Fax: 81-82-287-5220

-----Original Message-----

From: Hoshino, Jun (J.)  
Sent: Wednesday, August 28, 2002 7:35 PM  
To: Sanders, Muriel (M.S.)  
Cc: Kuhnd, Noel (N.)  
Subject: FW: U204/J14 3.0L engine stall issue.

Muriel,

Would you kindly confirm DPFE sensor status with Taiwan question below?  
Please forward this note to the correct person.

\*\*\*\*\*  
Taiwan's questions

(1) We order the P/N:2F1Z 9J460AA& AJ09 -18-211B and received the practical parts with 2F1E-9J460-AA&AB mark.

(2) Is the 2F1Z 9J460AA (without white dot) the final countermeasure(PCA), with diode? And it can solve

all the concerns we have known till now? Won't there be any other countermeasure in DPFE as you know till now?

(3) The practical parts with 2F1E-9J460-AA&AB mark are 2F1Z 9J460AA ,the final PCA parts.

Or there'll be a part with 2F1Z 9J460AA mark in the future?

(4) What's the difference between the practical parts with 2F1E-9J460-AA&AB mark?

AUTHOR: MARTIN PRICE (MPRICE28) 79133

ISM 02-05-043: REPLACED BY ISM 02-06-025  
ISM 02-05-017: REPLACED BY ISM 02-05-043  
ISM 02-01-070:REPLACED BY ISM 02-05-017

*Jun Hoshino*

RHD Escape/Maverick FCSD PVT Program Manager  
PVT & Field Support, Vehicle Service & Programs  
Hiroshima Japan Tel: 81-82-287-4603 Fax: 81-82-287-5220

-----Original Message-----

From: ctsai [mailto:ctsai@ford.com]  
Sent: Friday, August 02, 2002 6:34 PM  
To: Hoshino, Jun (J.)  
Cc: Kuhnd, Noel (N.)  
Subject: Re: U204/J14 3.0L engine stall issue.

That's great.  
Send them to me in advance.  
Then teach me how to get them from CQIS, I can access CQIS  
but I don't know how to get useful TI, especially SSM from it.  
Thanks, now I have another teacher.

C. Y. (Jack) Tsai  
Technical Support Engineer,  
SE, ACSG, FLH.  
e-mail: [ctsai@ford.com](mailto:ctsai@ford.com)  
fax: 886-3-4634164

----- Original Message -----

From: Hoshino, Jun (J.)  
To: Tsai, C (C.Y.)  
Cc: Kuhnd, Noel (N.)  
Sent: Friday, August 02, 2002 5:08 PM  
Subject: RE: U204/J14 3.0L engine stall issue.

Jack,

FCSD NA has released couple of service information (TSB, SSM, ISM) for engine stall issue, and is planning to release revised TSB. It is combined current TSB, SSM and ISM, modified IAC information will also be included. You can find related information# by Stall Meeting Minute.

If you can access CQIS, you can see the documents. If you would like me to send related information, please let me know.

*Jun Hoshino*

RHD Escape/Maverick FCSD PVT Program Manager  
PVT & Field Support, Vehicle Service & Programs  
Hiroshima Japan Tel: 81-82-287-4603 Fax: 81-82-287-5220

-----Original Message-----

From: ctasai [mailto:ctasai@ford.com]  
Sent: Thursday, August 01, 2002 7:43 PM  
To: Jun Hoshino; Kuhnd, Noel (N.)  
Cc: Wang Kim  
Subject: Re: U204/J14 3.0L engine stall issue.

C. Y. (Jack) Tsai  
Technical Support Engineer,  
SE, ACSG, FLH.  
e-mail: [ctasai@ford.com](mailto:ctasai@ford.com)  
fax: 886-3-4634164

----- Original Message -----

From: Kuhnd, Noel (N.)  
To: Tsai, C (C.Y.) ; Kuhnd, Noel (N.) ; Hoshino, Jun (J.)  
Sent: Thursday, August 01, 2002 4:51 PM  
Subject: RE: U204/J14 3.0L engine stall issue.

Hi, Noel, Jun,

The original mail is too long, let this is another new start.  
I can't understand how do you get the SAQ issues of FLH  
clearly.

Because there seems some time delay in status and progress in  
belows.

Where or whom you get these report from ( in FLH's side)?  
I want both of you can get the latest status report as we can  
afford.

Another question, do you have any global 8D report when the  
issue closed?

Is that mandatory? necessary? wanted?

Let's clarify the current status in advance.

Kim,

(She is the carline coordinator of U204 in TQD, reports Proton  
Lee.)

Please read the below SAQ items, that seems too old just like  
me.

(1) Could you afford us the latest status summary of this 10  
issues ?

And their 8D Report , if the files are too big, call me  
and share them in the PC, ok?

(2) The latest top SAQ issues in U204. ok?

Pretty girl, take them as the additional homework, alright?

C.K. and Jack (Jao) had involved the Engine Stall again.

Let's try to find something others to do in U204.

Noel,

Be my teacher again.

What do you mean "work through published TSB and SSM. An  
update will be out in a few weeks, no

drafts are available as it has to clear legal first.?"

(1) What's my role in published TSB and SSM? Simply, what I  
must do in that, my teacher.

You had told me before and I may find that in my saved files. Could you tell me again?

I don't know how to get the SSM and issue it (local unique TSB?).

(2) Update? What's the period? drafts, afforded by me? clear legal?

.....  
Hi Jack,

Can I advise to continue to work through published TSB and SSM. An update will be out in a few weeks, no drafts are available as it has to clear legal first. Continue to work with Jun, and if you get advice from another person, please pass it through Jun as well.

I note your current top SAQ issues are:

- 1/Stalls
- 2/A/C not cold
- 3/Engine idle noise
- 4/Door lock defect
- 5/Seat slide mechanism noise
- 6/Steering pull to one side
- 7/Wind noise
- 8/Parking sonar malfunction
- 9/Engine warning lite on
- 10/Mobile phone trouble

With the limited resources available, we have managed to have a few of these items covered?

Thanks

**From:** Fournelle, Gilbert (G.)  
**Sent:** Friday, September 27, 2002 8:01 AM  
**To:** Merideth, Jennifer (J.)  
**Cc:** Dalbo, Bob (R.J.)  
**Subject:** RE: help needed for KCP P5781 "1\_2\_shift fault"

The account info is as follows:

gfournel - 03lev - doav5 - 05 for BAR2 tear tag (current production)  
gfournel - 03lev - doav6 - 04 for job 2 release

Regards,

Gilbert Fournelle  
V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone: (313)3904968 Fax: (313)3231786

-----Original Message-----

**From:** Merideth, Jennifer (J.)  
**Sent:** Thursday, September 26, 2002 4:37 PM  
**To:** Fournelle, Gilbert (G.)  
**Subject:** FW: help needed for KCP P5781 "1\_2\_shift fault"

Gilbert, I need the information to do a file compare. Could you please let me know what subaccount, etc I can compare to?  
Thanks.

Regards,

Jennifer Merideth  
Phone: 734.52.35857 <mailto:jmeridet@ford.com>

Txt pg - <mailto:8883772895@alphapage.airtouch.com>

-----Original Message-----

**From:** Herr, George (G.J.)  
**Sent:** Thursday, September 26, 2002 4:35 PM  
**To:** Merideth, Jennifer (J.)  
**Cc:** Leon, Carlos (C.L.)  
**Subject:** FW: help needed for KCP P5781 "1\_2\_shift fault"

Jennifer,

Please review Carlos's data and compare to the calibration release PTSE made to address engine stall.

Carlos, engine made a calibration change to address stalls - but we reviewed it and it has no effect on transmission function. I don't see how what they changed could have affected the shift schedule. Please review your data with Jennifer...



George J. Herr  
CD4E Calibration & Program Control Supervisor  
ATO Bldg / MD #27  
734.458.0702 / 734.523.5523 (fax) / 734.297.1547 (text pager)

-----Original Message-----

From: Leon, Carlos (C.L.)  
Sent: Thursday, September 26, 2002 4:25 PM  
To: Herr, George (G.J.)  
Subject: RE: help needed for KCP P5781 "1\_2\_shift fault"

George, I heard the new tear tag was to address a Eng stall in the field. and I think is affecting the shift schedule. I have data to prove that.

-----Original Message-----

From: Herr, George (G.J.)  
Sent: Wednesday, September 25, 2002 1:23 PM  
To: Leon, Carlos (C.L.)  
Cc: Park, Soon (S.C.)  
Subject: RE: help needed for KCP P5781 "1\_2\_shift fault"

We didn't change a thing in the calibration since the 2002 MY Job#2 release a year ago.

George J. Herr  
CD4E Calibration & Program Control Supervisor  
ATO Bldg / MD #27  
734.458.0702 / 734.523.5523 (fax) / 734.297.1547 (text pager)

-----Original Message-----

From: Leon, Carlos (C.L.)  
Sent: Wednesday, September 25, 2002 12:53 PM  
To: Herr, George (G.J.)  
Cc: Park, Soon (S.C.)  
Subject: FW: help needed for KCP P5781 "1\_2\_shift fault"

You guys did it again. The new tear tags are getting failures for the 1\_2SHIFT. The 2DROP is low than 700 rpm. It is causing failures in KC. Please let me know what we can do. Thanks

-----Original Message-----

From: Guo, Bo (B.)  
To: Leon, Carlos (C.L.)  
Cc: Sulfridge, John (J.S.); Jones, Joe (J.R.)  
Sent: 9/25/02 10:07 AM  
Subject: help needed for KCP P5781 "1\_2\_shift fault"

Hi, Carlos,

Good morning!

KCP Joe called me Monday for trans test, he told me that drivers feel the shift point changed recently after a new PCM tear tag "BAR2" implemented in KCP. I am not sure what that means "shift point changed", so I did investigation from web reporting. Yesterday looks like we had worse day with 29 failures for P5871 D1\_2\_shift faults. All of them from 4x2 units, no one from 4x4 unit. Since both 4x2 and 4x4 used the same PCM tear tag "BAR2", I am not sure how it will affect 4x2 units only. As I understand that we haven't changed any parameters on trans test, no database or software change either. We need your help on this issue, I attached some log files below, could you please take a look to see if you can see any problem to cause the failures in KCP? Any feed back will be appreciated, thanks for your help in advance!

<<K3A79555.LOG>> <<K3A78827.LOG>> <<K3A78801.LOG>> <<K3A69446.LOG>>

Have a nice day!

Bo Guo

EOL testing support team U204  
Desk tel: (313)-59-47701  
Text pager: (313) 795-5240  
CDS ID: BGUO

---

**From:** Merideth, Jennifer (J.)  
**Sent:** Wednesday, September 25, 2002 1:07 PM  
**To:** Fournelle, Gilbert (G.)  
**Subject:** RE: 9/23/02 Cert Review Agenda

Could you do me a favor and email the list of calibrations that have been released recently, specifically the anti-stall and the 2003 Job 1 and 2? Thanks! (if you have the excel spreadsheet updated that would be great!)

Regards,

*Jennifer Merideth*

Phone: 914.512.9227      mailto:jmerideth@ford.com  
Tel pe - mailto:688877288@p4phsopage.ahfouch.com

-----Original Message-----

**From:** Fournelle, Gilbert (G.)  
**Sent:** Wednesday, September 25, 2002 10:35 AM  
**To:** Merideth, Jennifer (J.)  
**Subject:** RE: 9/23/02 Cert Review Agenda

Next Tuesday works fine with us. The section meeting is at 10:00 am in CR#3

Regards,

*Gilbert Fournelle*

V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904968 Fax:(313)3231786

-----Original Message-----

**From:** Merideth, Jennifer (J.)  
**Sent:** Wednesday, September 25, 2002 10:23 AM  
**To:** Fournelle, Gilbert (G.)  
**Subject:** RE: 9/23/02 Cert Review Agenda

I could come down tuesday for your section meeting too if you wanted.

Regards,

*Jennifer Merideth*

Phone: 914.512.9227      mailto:jmerideth@ford.com  
Tel pe - mailto:688877288@p4phsopage.ahfouch.com

-----Original Message-----

**From:** Fournelle, Gilbert (G.)  
**Sent:** Wednesday, September 25, 2002 10:12 AM  
**To:** Merideth, Jennifer (J.)  
**Subject:** RE: 9/23/02 Cert Review Agenda

Jennifer,

Bob Dalbo would like to discuss the changes you are working on. When are you available? I am unable to pull up your calendar on Outlook. My calendar is up to date if you would like to suggest a time.

*Gilbert Fournelle*

V6 U204 Calibration Engineering

1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904968 Fax:(313)3231786

-----Original Message-----

From: Merideth, Jennifer (J.)  
Sent: Wednesday, September 25, 2002 10:02 AM  
To: Fournelle, Gilbert (G.)  
Subject: RE: 9/23/02 Cert Review Agenda

Ok.

I have some plans to reduce TWG, I need to see how much they affect fuel econ. Do you still get time to do testing? Would you be willing to run a test with a exp cal for me? We have a lot of complaints about shift busyness that I would like to try and reduce.

Regards,

*Jennifer Merideth*

Phone:784.82.8887 <mailto:jmerideth@ford.com>  
Ed pg - <mailto:edpg@784828887.ford.com>

-----Original Message-----

From: Fournelle, Gilbert (G.)  
Sent: Wednesday, September 25, 2002 9:58 AM  
To: Merideth, Jennifer (J.)  
Subject: RE: 9/23/02 Cert Review Agenda

December is the job 2 release which was done on 9/23.

*Gilbert Fournelle*

V8 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904968 Fax:(313)3231786

-----Original Message-----

From: Merideth, Jennifer (J.)  
Sent: Wednesday, September 25, 2002 9:57 AM  
To: Fournelle, Gilbert (G.)  
Subject: RE: 9/23/02 Cert Review Agenda

I heard something about a december release... do you know anything about that?

Regards,

*Jennifer Merideth*

Phone:784.82.8887 <mailto:jmerideth@ford.com>  
Ed pg - <mailto:edpg@784828887.ford.com>

-----Original Message-----

From: Fournelle, Gilbert (G.)  
Sent: Wednesday, September 25, 2002 9:57 AM  
To: Merideth, Jennifer (J.)  
Subject: RE: 9/23/02 Cert Review Agenda

We have no future releases in the pipeline at this point.

*Gilbert Fournelle*

V8 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)

Phone:(313)3904968 Fax:(313)3231786

-----Original Message-----

From: Merideth, Jennifer (J.)  
Sent: Wednesday, September 25, 2002 9:55 AM  
To: Fournelle, Gilbert (G.)  
Subject: RE: 9/23/02 Cert Review Agenda

What releases to you have planned for the future?

Regards,

*Jennifer Merideth*

Phone:313.323.2827      jmerideth@ford.com  
Tel pg - mofbo@883772860@phppage.aitouch.com

-----Original Message-----

From: Fournelle, Gilbert (G.)  
Sent: Wednesday, September 25, 2002 9:52 AM  
To: Merideth, Jennifer (J.)  
Cc: DeBo, Bob (R.J.)  
Subject: RE: 9/23/02 Cert Review Agenda

Jennifer,

The job 2 calibration was released on 9/23, it is in emergency release to meet an MRD of 10/14 at KGAP. It is no longer possible to make any changes at this point.

*Gilbert Fournelle*

V8 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904968 Fax:(313)3231786

-----Original Message-----

From: Merideth, Jennifer (J.)  
Sent: Wednesday, September 25, 2002 9:50 AM  
To: Fournelle, Gilbert (G.)  
Subject: FW: 9/23/02 Cert Review Agenda

Gilbert, have you released the job#2 release yet? We have a couple of parameters that might be good to get changed...

Let me know!  
thanks!

Regards,

*Jennifer Merideth*

Phone:313.323.2827      jmerideth@ford.com  
Tel pg - mofbo@883772860@phppage.aitouch.com

-----Original Message-----

From: Han, George (G.J.)  
Sent: Wednesday, September 25, 2002 9:43 AM  
To: Bouamra, Joe (J.A.); Merideth, Jennifer (J.)  
Subject: RE: 9/23/02 Cert Review Agenda

Not sure if it's too late... Jennifer, please check with our PTSE counterparts to see if we can slip a fix into the Job#2 release. Joe can give you the details on what needs to be changed...

*George J. Herr*

CD4E Calibration & Program Control Supervisor  
ATO Bldg / MD #27  
734.458.0702 / 734.523.5523 (fax) / 734.287.1547 (text pager)

—Original Message—

From: Bousamra, Joe (J.A.)  
Sent: Tuesday, September 24, 2002 5:21 PM  
To: Herr, George (G.J.)  
Subject: FW: 9/23/02 Cert Review Agenda

George, take a look at this agenda. I take it that you were aware of the Job#2 release. Has it gone through? Is there an opportunity to change some of the static capacity values that affect coast braking capacity?

Regards,

*Joseph A. Bousamra*  
CD4E Calibration Technical Specialist  
☎ (734) 26-68660 📠 (734) 45-80993  
✉ JBOUSAMR@FORD.COM  
Text Pager: (734) 651-0334

—Original Message—

From: Jones, Lori (L.Y.)  
Sent: Friday, September 20, 2002 11:14 AM  
To: Andriola, John (J.); Austin, James (J.E.); Bacon, Jim; Beldin, Fred (F.); Barker, Craig (C.E.); Baumgartner, George (G.K.); Beason, Richard (R.E.); Behrke, Dave (D.P.); Bellino, Rocco (R.); Bongiovanni, Ronald (R.); Bousamra, Joe (J.A.); Bozek, Bob (R.W.); Brachel, Keith (K.M.); Brown, Robert; Brylinski, Michael (M.W.); Burnbaugh, Janet (J.M.); Byrd, James (J.E.); Canale, Linda (L.); Christensen, Lou (L.R.); Clupak, Lynn (E.R.); Coletti, O. John (J.); Conquest, Stacy (S.); Cusumano, Jacob (J.J.); Dalbo, Bob (R.J.); Deubener, John (J.A.); DeBruis, Peter (P.E.); DeLisle, Joe (J.C.); Diehl, Douglas (D.M.); Dmytro, Sheryl (S.A.); Dona, Alan (A.R.); Dreyer, Dave; Edgar, Vance (V.W.); Espinoza, Bob (R.J.); Ezban, Al; Fagerman, Todd; Falco, Chris (C.R.); Fernandez Jr., Alfredo (A.J.); Figurski, Patrick (P.M.); Finley, Rick (R.W.); Fortinos, Darryl (D.A.); Gendin, Herendra (H.S.); Gaynier, Larry (L.J.); Gibbs, Jack (J.E.); Gleegham, Tom (T.A.); Gobla, Linas; Gould, Tom; Gray, Doug (D.R.); Greene, Tom (Thomas L.); Hart, Jerry (J.); Hazime, Joe (J.); Hedger, John (J.E.); Hendricks, Kerry (K.D.); Hepburn, Jeffrey (J.S.); Hiss, Peter (P.J.); Hoan, Tim (T.M.); Holycross, Bob (R.T.); Howard, Steven (S.M.); Huck, Dave (D.E.); Jackson, Kim (K.L.); Jordan, LeBron (L.); Jorgensen, Glenn (G.B.); Kaber, Carl (C.P.); Kapitanec, Cheryl (C.); Kennedy, Michael (M.T.); Khan, Mahboob (M.); Khan, Mohammed (M.S.); Koo, Kevin (K.W.); Kobernik, Larry (L.C.); Kostin, Bill (W.A.); Kuschler, Peter (P.D.); Kulp, David (D.L.); Kure, Thomas (T.A.); Lane, Bill (B.C.); Lepetz Jr., John (J.M.); Laidner, Kevin (K.E.); Levens, Don (D.G.); Lieboritz, Michael (M.L.); Lipinski, Dan (D.J.); Lyburner, Dan (D.R.); Lyon, Peter (P.); Maral, Mark (M.J.); Martin, Don (D.G.); Mestas, Mike (B.M.); May, David (D.A.); Merlino, Timothy (T.J.); Merner, Jim (J.M.); Middleton, Kenneth; Montague, Neil (N.W.); Muszynski, George (G.H.); Nakonezny, Daryl (D.J.); Navarro, Erika (E.); Novelli, Nino (N.M.); O'Neil, Brian (B.M.); Orton, David (D.P.); Page, Fred (F.A.); Patrick, Ron; Peters, Robin (R.S.); Piazcki, Michele (M.M.); Ranspach, Paul (P.M.); Riedge, Keith (E.K.); Raymond, Dennis (D.J.); Rzack, Don (D.A.); Riordan, Paul (P.R.); Samardzich, Raul (R.J.); Sawicky, Dianne (D.K.); Sayn, Gary (G.R.); Shechnig, Rich (R.W.); Schmidt, Andrew (A.C.); Schrant, Tim (T.D.); Shawver, Kim; Sierans Jr., Lawrence (L.C.); Sims, Ivan (I.D.); Skinner, LaVonne; Skodack, Gary (G.J.); Spuller, David; Stark, Cheryl; Stelmaszczak, Robert (R.); Stoll, Bob (Robert E.); Stump, Steven (S.M.); Styrc, Jare (J.J.); Suter, Charles (C.W.); Talamonti, Joe (J.S.); Temple, William (W.H.); Terry, Christine (C.K.); Thomas, Steven (S.W.); Torres, Sean; Toth, Melissa (M.L.); Traskos, Diane (D.M.); Vann, Benny (B.); Varlone, Philip (P.D.); Violante, Ray; Weaver, Denise (D.M.); Weber, Chris (C.R.); Williams, Cynthia (C.); Wolodewicz, Wally (S.R.); Wright, Robin (R.A.); Zabidewicz, Gary (G.R.); Zammit, Joe; Zielinski, Jay (J.A.); Zimmerman, John (J.A.); Zott, Brian (B.R.); Aulter, Jim (J.E.); Bicanich, John (J.P.); Brewer, Gary (G.L.); Carnego, John (J.F.); Coletti, Carlos (C.); Gleegham, Tom; Kerr, Jerry (G.T.); Koche, Bill (B.J.); Kunde, Olof (O.); Laiberts, Larry (L.F.); Lowman, Harold (H.R.); Morris, Tom (T.H.); Wade, Wally (W.R.); Filip, Robert (R.); Micallef, James (J.M.); Pedinell, Gary (G.L.); Prami Singh, Kran (KPS.); Wade, Mary (M.R.)

Subject: 9/23/02 Cert Review Agenda

Please review for the Cert Review Meeting to be held Monday, September 23, 2002 beginning at 9:00 a.m. until 11:00 a.m.

<< File: cert agenda 09\_23.xls >>

*Lori Y. Jones*

Assistant to Mr. Neil Montague  
Emission/CAFE/CO2 Compliance  
(313) 337-2870

<< File: Jones, Lori (L.Y.).vcf >>

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**From:** Fournelle, Gilbert (G.)  
**Sent:** Friday, September 27, 2002 9:52 AM  
**To:** Grandas, Joseph (J.M.)  
**Subject:** FW: Latest Level DPFE used in Europe

Jo,

Could you answer Hoshino-san. It seems to me that the F77E 9J460 AB part is used for 2003MY (Motorola sensor) and that all 2001 and 2002 MY should use 2F1E 9J460 AA/AB.

Regards,

*Gilbert Fournelle*

V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904968 Fax:(313)3231786

-----Original Message-----

**From:** Hoshino, Jun (J.)  
**Sent:** Friday, September 27, 2002 2:44 AM  
**To:** Wood, Paul (P.); Fournelle, Gilbert (G.)  
**Cc:** McGee, Brett (B.L.); Wheeler, Russell (R.F.)  
**Subject:** RE: Latest Level DPFE used in Europe

Gilbert,

Would you kindly confirm (please forward this note to DPFE sensor engineer) what the parts# of DPFE sensor should be used for 2001/2002 MY European Maverick (Escape) with stall/check engine issue. My understanding is the parts# should be use 2F1E9J460 AA/AB (service parts# 2F1Z 9J460 AA, FINIS# 4416838) or YF1E-9J460-AD (service parts# YF1E-9J460-AC, FINIS# 4162714 for all Escape. However, FINIS# 3906048 (Engineering parts# F77E 9J460 AB) is listed as Maverick on UK parts catalog. Is this correct parts#?

Paul,

Russell's the DPFE sensor YF1E-9J460-AD (2A09B= built January 9th, 2002) is the latest level. Final modification has been implemented at supplier on January 7th, 2001 (Lot# should be 2A07) but parts# had not changed. And then in order to determine the latest parts, parts# has been changed to 2F1E9J460 AA/AB (service parts# 2F1Z 9J460 AA, FINIS# 4416838).

Attached note is detail of this change.

I will ask engineering regarding Finis 3998144, F83E-9J459-AA and 3508280, F57E-9J459-CA.

*Jun Hoshino*

RHD Escape/Maverick FCSD PVT Program Manager  
PVT & Field Support, Vehicle Service & Programs  
Hiroshima Japan Tel: 81-82-287-4603 Fax: 81-82-287-5220

ew Part Number for  
Kavlico dP...

-----Original Message-----

**From:** Wood, Paul (P.)  
**Sent:** Thursday, September 26, 2002 11:20 PM  
**To:** Hoshino, Jun (J.)



Cc: McGee, Brett (B.L.); Wheeler, Russell (R.F.)  
Subject: FW: Latest Level DPFE used in Europe

Jun,

The Part# and Finis for the DPFE sensor that is stocked at FoE warehouse is Part# F77E 9J480 AB, F/C 3906046. The part fitted to Russells 2.0L Maverick (Vehicle build date 10th April 2002, Vin WF0G0U04B521102157) is Part# YF1E-9J480-AD, build date code on sensor 2A09B.

*Regards Paul Wood*

Ford Motor Company  
Product Concern Engineer - Transit, Transit Connect & Import Vehicles  
FCSD - VS&P, GB-1/589  
Phone: (0) 1277 251654 - Internal: (8)734 1654  
Fax: (0) 1277 253287 - Internal: (8)734 3287  
email: pwood2@ford.com

-----Original Message-----

From: Wood, Paul (P.)  
Sent: 10 September 2002 14:04  
To: Dobler, Hans (H.)  
Subject: FW: Latest Level DPFE used in Europe

Hans,

Can you tell me what the Finis of the current DPFE sensor is that we stock for Europe for RHD Maverick. I have looked at Microcat and found Finis 3906046 on there.

Thanks.

*Regards Paul Wood*

Ford Motor Company  
Product Concern Engineer - Transit & Import Vehicles  
FCSD - VS&P, GB-1/589  
Phone: (0) 1277 251654 - Internal: (8)734 1654  
Fax: (0) 1277 253287 - Internal: (8)734 3287  
email: pwood2@ford.com

-----Original Message-----

From: Hoshino, Jun (J.)  
Sent: 10 September 2002 11:58  
To: Wood, Paul (P.); Wheeler, Russell (R.F.)  
Cc: McGee, Brett (B.L.)  
Subject: RE: Latest Level DPFE used in Europe

Hi Paul and Russell,

Are you able to confirm the engineering# on the DPFE sensor that are in stocked at FoE warehouse and from the Maverick.

Attached photo shows we are currently using at Hofu and are stocked at Mazda warehouse.

*Jun Hoshino*

RHD Escape/Maverick FCSD PVT Program Manager  
PVT & Field Support, Vehicle Service & Programs  
Hiroshima Japan Tel: 81-82-287-4603 Fax: 81-82-287-5220

<< File: DPFE.doc >>

-----Original Message-----

From: Wood, Paul (P.)

Sent: Tuesday, September 10, 2002 7:11 PM  
To: Hoshino, Jun (J.)  
Cc: Wheeler, Russell (R.F.); McGee, Brett (B.L.)  
Subject: RE: Latest Level DPFE used in Europe

Jun,

I have searched on Microcat for the parts below but they cannot be found. The part with a base 9J460 which looks like it is the DPFE has a Finis 3908046 (F77E-9J460-AB).

*Regards Paul Wood*

Ford Motor Company  
Product Concern Engineer - Transit & Import Vehicles  
PCSD - VS&P, GB-1/589  
Phone: (0) 1277 251654 - Internal: (8)734 1654  
Fax: (0) 1277 253287 - Internal: (8)734 3287  
email: pwood2@ford.com

-----Original Message-----

From: Hoshino, Jun (J.)  
Sent: 10 September 2002 00:38  
To: Wood, Paul (P.)  
Cc: Wheeler, Russell (R.F.); McGee, Brett (B.L.)  
Subject: RE: Latest Level DPFE used in Europe

Paul,

I have checked engineering drawings, both engineering part#s (F63E9J458AA, F57E9J459CA) are the EGR Vacuum Regulator Solenoid, not DPFE sensor.

FINIS code for the new service parts# (2F1Z 9J460AA) should be 441683B.  
Old service parts# is YF1Z 9J460 AC (FINIS- 4162714).

Please confirm this parts#.

\*\*\*\*\*  
SMMPEXEA Engineering to Service Cross Reference 09/09/02 19:10:20  
=>\_\_\_\_\_

ENGINEERING PART: 2F1E 9J460 AA \_\_\_\_\_ ORIGIN: WERS

A		EFFECTIVE	Effective
C SERVICE PART	Service Part Description	IN DATE	Out Date
FINIS- 441683B-	SENSOR ASY	08/09/02	
2F1Z- 9J460-AA	SENSOR ASY	03/21/02	

\*\*\*\*\*

*Jun Hoshino*

RHD Escape/Maverick FCSD PVT Program Manager  
PVT & Field Support, Vehicle Service & Programs  
Hiroshima Japan Tel: 81-82-287-4603 Fax: 81-82-287-5220

-----Original Message-----

**From:** Wood, Paul (P.)  
**Sent:** Monday, September 09, 2002 7:41 PM  
**To:** McGee, Brett (B.L.); Hoshino, Jun (J.)  
**Cc:** Wheeler, Russell (R.F.)  
**Subject:** Latest Level DPFE used in Europe

Brett, Jun,

With reference to the question from the SAQ meeting last week regarding the DPFE sensor used in Europe. I have checked on the latest (just arrived) Microcat and found the following -

3.0L - Flns 3998144 - Part No. F63E-9J459-AA

2.0L - For the DPFE base part 9J459 is shown but a message 'Not applicable to this specification' shows. On last months Microcat the Flns was 3508280 and Part No. F67E-9J459-CA.

Either way, the latest level DPFE (2F1Z-9J460-AA) is not the part used in Europe.

*Regards Paul Wood*

Ford Motor Company  
Product Concern Engineer - Transit & Import Vehicles  
PCSD - VS&P, GB-1/589  
Phone: (0) 1277 251654 - Internal: (8)734 1654  
Fax: (0) 1277 253287 - Internal: (8)734 3287  
email: pwood2@ford.com

*Muriel Sanders*

4.6L Car FEAD Systems  
Ford Motor Company  
Fax: 313-33-73813  
E-mail: msander6@ford.com

-----Original Message-----

From: Hoshino, Jun (J.)  
Sent: Wednesday, August 28, 2002 11:59 PM  
To: Sanders, Muriel (M.S.)  
Cc: Kuhnd, Noel (N.)  
Subject: RE: U204/J14 3.0L engine stall issue.

Muriel,

May be I missed understand with 2F1E-9J460-AA/AB (Service parts:2F1Z 9J 460AA). It is also Kavlico made not Motorola made.

My thought is parts# 2F1E 9J460 AA was established in order to distinguish the modification parts (built after January 7th, 2002).

Am I right?

Also, Please respond with question from Taiwan.

Thanks in advance.

*Jun Hoshino*

RHD Escape/Maverick FCSD PVT Program Manager  
PVT & Field Support, Vehicle Service & Programs  
Hiroshima Japan Tel: 81-82-287-4603 Fax: 81-82-287-5220

-----Original Message-----

From: Hoshino, Jun (J.)  
Sent: Wednesday, August 28, 2002 7:35 PM  
To: Sanders, Muriel (M.S.)  
Cc: Kuhnd, Noel (N.)  
Subject: FW: U204/J14 3.0L engine stall issue.

Muriel,

Would you kindly confirm DPFE sensor status with Taiwan question below?  
Please forward this note to the correct person.

.....  
Taiwan's questions

(1) We order the P/N:2F1Z 9J460AA& AJ09 -18-211B and received the practical parts with 2F1E-9J460-AA&AB mark.

(2) Is the 2F1Z 9J460AA (without white dot) the final countermeasure(PCA), with diode? And it can solve

all the concerns we have known till now? Won't there be any other countermeasure in DPFE as you know till now?

(3) The practical parts with 2F1E-9J460-AA&AB mark are 2F1Z 9J460AA ,the final PCA parts.

Or there'll be a part with 2F1Z 9J460AA mark in the future?

(4) What's the difference between the practical parts with 2F1E-9J460-AA&AB mark?

My understanding is, 2F1E-9J460-AA/AB (2F1Z 9J 460AA) is Motorola made for 2003 model and it can not retrofit to 2001/2002 models which vehicles have Kevelco made sensor. If I am correct, which level (parts#/built date) DPFE sensor should use for 2001/2002 models?

In addition, I can find out engineering parts# 2F1E 9J460 AB from FCSD parts system. (I could find out AA)

*Jun Hoshino*

RHD Escape/Maverick FCSD PVT Program Manager  
PVT & Field Support, Vehicle Service & Programs  
Hiroshima Japan Tel: 81-82-287-4603 Fax: 81-82-287-5220

-----Original Message-----

From: Kuhnd, Noel (N.)  
Sent: Wednesday, August 28, 2002 5:17 PM  
To: Hoshino, Jun (J.)  
Subject: FW: U204/314 3.0L engine stall issue.

Hi Jun,

The DPFE sensor issue was raised by me on behalf of Taiwan to North American CCRG. They (Taiwan) are aware of another level part becoming available when we change vendors. This part should be available to the markets shortly. Should I check with Warren before reporting this back to Jack, or do you already have this information for Jack?  
Regards

-----Original Message-----

From: ctsal [mailto:ctsak@ford.com]  
Sent: Wednesday, 28 August 2002 4:28 PM  
To: Kuhnd, Noel (N.); Hoshino, Jun (J.)  
Cc: Hong, Jonathan (J.); Huang, Ming Tza (M.T.); Lee, Wilson (W.); Chang, Steven (S.); Lee, Proton (P.C.); Wang, Kim (K.); Hsiao, Knight (K.)  
Subject: Re: U204/314 3.0L engine stall issue.

Jun,

After checking the stock & order record:

(1) We have been receiving the 2F1Z 9J460AA(NA) & AJ09 -18-211B (without white dot)  
instead of YF1Z 9J460 AC/AD & AJ09-18-211A(with white dot) from this May.

Comparing your SSM & Mazda TSB ( as attached file ), I'm sure they're the same issue with  
the same countermeasure.

(2) The current received parts' Lot No# are - 2E\*\*.

I repeat the main questions as follows:

(1) We order the P/N:2F1Z 9J460AA& AJ09 -18-211B and received the practical parts with 2F1E-9J460-AA&AB mark.

(2) Is the 2F1Z 9J460AA (without white dot) the final countermeasure(PCA), with diode? And it can solve

all the concerns we have known till now? Won't there be any

other countermeasure in DPFE as you know till now?

(3) The practical parts with 2F1E-9J460-AA&AB mark are 2F1Z 9J460AA, the final PCA parts.

Or there'll be a part with 2F1Z 9J460AA mark in the future?

(4) What's the difference between the practical parts with 2F1E-9J460-AA&AB mark?

Noel,

Is there any other more information about this issue?

C. Y. (Jack) Tsai  
Technical Support Engineer,  
SE, ACSI, FLH.  
e-mail: [ctsai@ford.com](mailto:ctsai@ford.com)  
fax: 886-3-4634164

----- Original Message -----

From: Hoshino, Jun (J.)

To: Tsai, CY (C.Y.)

Cc: Hsiao, Knight (K.); Wang, Kim (K.); Lee, Proton (P.C.); Chang, Steven (S.); Lee, Wilson (W.); Huang, Ming Tza (M.T.); Hong, Jonathan (J.); Kuhnd, Noel (N.)

Sent: Wednesday, August 28, 2002 12:55 PM

Subject: RE: U204/J14 3.0L engine stall issue.

Jack,

What is the level of your currently receiving DPFE sensors?

According to Ford engineering, Latest modification for DPFE sensor has been implemented in January of this year. Kavalco (the DPFE sensor supplier) has added the diode and the resistors in order to protect the sensor from voltage spike from January 7th of this year. The parts# has not changed at this time, but new parts can be identified Lot# (it is should be after 2A07). I have confirmed lot# of DPFE sensors (about 800) that are in stock at Mazda warehouse. There are 2E\*\* or 2F\*\* which mean, built in May and June of this year. I believe these parts works.

You can find lot# on the DPFE sensor body.

Early built parts (this year) had white dot, however no white dot on the current parts. (not sure why)

*Jun Hoshino*

RHD Escape/Maverick FCSD PVT Program Manager  
PVT & Field Support, Vehicle Service & Programs  
Hiroshima Japan Tel: 81-82-287-4603 Fax: 81-82-287-5220

-----Original Message-----

From: ctsai [mailto:ctsai@ford.com]

Sent: Wednesday, August 28, 2002 1:55 PM

To: Kuhnd, Noel (N.); Hoshino, Jun (J.)

Cc: Hsiao Knight W.N.; Wang Kim; Proton Lee; Chang Steven; Lee Wilson; Huang M. T.; Hong Jonathan

Subject: Re: U204/J14 3.0L engine stall issue.

Importance: High

Jun, Noel,

From the really received DPFE service parts, ACSI finds

a.P/N: AJ09-18-2118( actual P/N marked in the part is 2F1E-9J460-AA, NO WHITE DOT)

Imported from Japan Mazda.

b.P/N: 2F1Z-9J460AA( actual P/N marked in the part is 2F1E-9J460-AB, NO WHITE DOT)

I'm confused with this, my question are as belows:

(1) Is 2F1Z-9J460AA an ICA or PCA ? I mean whether another new DPFE is developed to solve current field concerns?

(2) I think the actual P/N marked in the part is meaning, why are the practical 2F1E-9J460-AA&

2F1E-9J460-AB? Is there really practical 2F1Z-9J460AA part? Or are 2F1E-9J460-AA&AB practical 2F1Z-9J460AA parts?

(3) In Engineering System, the 2F1E-9J460-AB is the minor change from -AA. What's the difference?

Does it impact our field service action?

C. Y. (Jack) Tsai  
Technical Support Engineer,  
SE, ACSG, FLH.  
e-mail: [ctsai@ford.com](mailto:ctsai@ford.com)  
fax: 886-3-4634164

----- Original Message -----

From: Hoshino, Jun (J.)

To: Tsai, C (C.Y.)

Sent: Thursday, August 08, 2002 7:41 PM

Subject: RE: U204/J14 3.0L engine stall issue.

Jack, here is currently released service information (one ISM and one TSB), it will be combined and released as revised TSB.

Article #: ISM 02-06-025 Date:  
06/17/2002

VERIFY TSB 02-11-06 HAS BEEN PERFORMED, CK PCM HARNESS

#### ESCAPE STALL

SOME 2001-2002 ESCAPES MAY EXHIBIT AN INTERMITTENT STALL, VERIFY TSB 02-11-06

HAS BEEN DONE AND PERFORM THE FOLLOWING. DISCONNECT AND INSPECT PCM HARNESS

FOR BURNED OR BENT PINS. INSPECT MAF GASKET. IF STALL IS RELATED TO RFI(E;

RADIO TOWER/2-WAY RADIO) REPLACE MAF W/1L2Z-12B579-BA. INSPECT DPFE SENSOR,

IF PART# YF1E-9J460-AD AND NO WHITE DOT PRESENT(NOTE: DOT COULD BE ANYWHERE

ON SENSOR) REPLACE WITH YF1Z-9J460-AD WITH A WHITE DOT OR 2F1Z-9J460-AA(NO

DOT REQUIRED). INSPECT C270B, C, D, C110, C133 FOR WATER INTRUSION/PIN

PROBLEMS. INSPECT G300, G100, REMOVE BATTERY TRAY AND INSPECT G104/105,

G101. INSPECT CKP HARNESS NEAR AC COMPRESSOR.

AUTHOR: MARTIN PRICE (MPRICE28) 79133

ISM 02-05-043: REPLACED BY ISM 02-06-025  
ISM 02-05-017: REPLACED BY ISM 02-05-043  
ISM 02-01-070:REPLACED BY ISM 02-05-017

*Jun Hoshino*

RHD Escape/Maverick FCSD PVT Program Manager  
PVT & Field Support, Vehicle Service & Programs  
Hiroshima Japan Tel: 81-82-287-4603 Fax: 81-82-287-5220

-----Original Message-----

From: ctsai [mailto:ctsai@ford.com]  
Sent: Friday, August 02, 2002 6:34 PM  
To: Hoshino, Jun (J.)  
Cc: Kuhnd, Noel (N.)  
Subject: Re: U204/J14 3.0L engine stall issue.

That's great.  
Send them to me in advance.  
Then teach me how to get them from CQIS, I can access CQIS  
but I don't know how to get useful TI, especially SSM from it.  
Thanks, now I have another teacher.

C. Y. (Jack) Tsai  
Technical Support Engineer,  
SE, ACSI, FLH.  
e-mail: [ctsai@ford.com](mailto:ctsai@ford.com)  
fax: 886-3-4634164

----- Original Message -----

From: Hoshino, Jun (J.)  
To: Tsai, C (C.Y.)  
Cc: Kuhnd, Noel (N.)  
Sent: Friday, August 02, 2002 5:08 PM  
Subject: RE: U204/J14 3.0L engine stall issue.

Jack,

FCSD NA has released couple of service information (TSB, SSM, ISM) for engine stall issue, and is planning to release revised TSB. It is combined current TSB, SSM and ISM, modified IAC information will also be included. You can find related information# by Stall Meeting Minute.

If you can access CQIS, you can see the documents. If you would like me to send related information, please let me know.

*Jun Hoshino*

RHD Escape/Maverick FCSD PVT Program Manager  
PVT & Field Support, Vehicle Service & Programs  
Hiroshima Japan Tel: 81-82-287-4603 Fax: 81-82-287-5220

-----Original Message-----



From: ctsai [mailto:ctsai@ford.com]  
Sent: Thursday, August 01, 2002 7:43 PM  
To: Jun Hoshino; Kuhnd, Noel (N.)  
Cc: Wang Kim  
Subject: Re: U204/J14 3.0L engine stall issue.

C. Y. (Jack) Tsai  
Technical Support Engineer,  
SE, ACSG, FLH.  
e-mail: [ctsai@ford.com](mailto:ctsai@ford.com)  
fax: 886-3-4634164

----- Original Message -----

From: Kuhnd, Noel (N.)  
To: Tsai, C (C.Y.) ; Kuhnd, Noel (N.) ; Hoshino, Jun (J.)  
Sent: Thursday, August 01, 2002 4:51 PM  
Subject: RE: U204/J14 3.0L engine stall issue.

Hi, Noel, Jun,

The original mail is too long, let this is another new start.  
I can't understand how do you get the SAQ issues of FLH  
clearly.

Because there seems some time delay in status and progress in  
belows.

Where or whom you get these report from ( in FLH's side)?

I want both of you can get the latest status report as we can  
afford.

Another question, do you have any global 8D report when the  
issue closed?

Is that mandatory? necessary? wanted?

Let's clarify the current status in advance.

Kim,

(She is the carline coordinator of U204 in TQD, reports Proton  
Lee.)

Please read the below SAQ items, that seems too old just like  
me.

(1) Could you afford us the latest status summary of this 10  
issues ?

And their 8D Report , if the files are too big, call me  
and share them in the PC, ok?

(2) The latest top SAQ issues in U204. ok?

Pretty girl, take them as the additional homework, alright?

C.K. and Jack (Jao) had involved the Engine Stall again.

Let's try to find something others to do in U204.

Noel,

Be my teacher again.

What do you mean "work through published TSB and SSM. An  
update will be out in a few weeks, no  
drafts are available as it has to clear legal first."?

(1) What's my role in published TSB and SSM? Simply, what I  
must do in that, my teacher.

You had told me before and I may find that in my saved files. Could you tell me again?

I don't know how to get the SSM and issue it (local unique TSB?).

(2) Update? What's the period? drafts, afforded by me? clear legal?

.....  
Hi Jack,

Can I advise to continue to work through published TSB and SSM. An update will be out in a few weeks, no drafts are available as it has to clear legal first. Continue to work with Jun, and if you get advice from another person, please pass it through Jun as well.

I note your current top SAQ issues are:

- 1/Stalls
- 2/A/C not cold
- 3/Engine idle noise
- 4/Door lock defect
- 5/Seat slide mechanism noise
- 6/Steering pull to one side
- 7/Wind noise
- 8/Parking sonar malfunction
- 9/Engine warning lite on
- 10/Mobile phone trouble

With the limited resources available, we have managed to have a few of these items covered?

Thanks

---

**From:** Moorhouse, Scott (S.R.)  
**Sent:** Friday, September 27, 2002 11:57 AM  
**To:** Dalbo, Bob (R.J.); Leon, Carlos (C.L.)  
**Cc:** Fournelle, Gilbert (G.); Sulfridge, John (J.S.); Guo, Bo (B.); Leonard, Michael (M.)  
**Subject:** RE: help needed for KCP P5781 "1\_2\_shift fault"

My understanding, We had 16 of them in one day, tied to an attempted eol test change, that was installed and PROMPTLY HACKED OUT. Sulfridge/Guo/Leonard could provide more info.

The info we look at, with the 10 minute rule, is that we were only affected by this one day (last wee, 24 Sept.), and it is not tied to the R11 implementation. Those above could better answer this question.

Scott Moorhouse  
U204 PTSE Resident Engineer  
Kansas City Assembly Plant  
(ph) 816-459-1965 (fax) 816-459-1728  
smoorhou@ford.com

-----Original Message-----

**From:** Dalbo, Bob (R.J.)  
**Sent:** Friday, September 27, 2002 10:43 AM  
**To:** Moorhouse, Scott (S.R.)  
**Subject:** FW: help needed for KCP P5781 "1\_2\_shift fault"

Scott,  
Are you aware of these P5781 codes Carlos Leon discusses below? We are scratching our heads trying to understand how our stall changes affect transmission shifting.

Bob Dalbo  
3.0L Calibration Supervisor  
Outfitters Calibration, NAT  
Phone: (313) 24-84947 Fax: (313) 32-31786  
Pager: (313) 795-2859 Email: rdalbo@ford.com

-----Original Message-----

**From:** Fournelle, Gilbert (G.)  
**Sent:** Friday, September 27, 2002 8:01 AM  
**To:** Merideth, Jennifer (J.)  
**Cc:** Dalbo, Bob (R.J.)  
**Subject:** RE: help needed for KCP P5781 "1\_2\_shift fault"

The account info is as follows:

gfournel - 03lev - dbav5 - 05 for BAR2 tear tag (current production)  
gfournel - 03lev - dbav6 - 04 for job 2 release

Regards,

Gilbert Fournelle  
V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone: (313)3904968 Fax: (313)3231786

-----Original Message-----

From: Merideth, Jennifer (J.)  
Sent: Thursday, September 26, 2002 4:37 PM  
To: Fournelle, Gilbert (G.)  
Subject: FW: help needed for KCP P5781 "1\_2\_shift fault"!

Gilbert, I need the information to do a file compare. Could you please let me know what subaccount, etc I can compare to?  
Thanks.

Regards,  
Jennifer Merideth  
Phone: 734.52.35857 <mailto:jmeridet@ford.com>

Txt pg - <mailto:8883772895@alphapage.airtouch.com>

-----Original Message-----

From: Herr, George (G.J.)  
Sent: Thursday, September 26, 2002 4:35 PM  
To: Merideth, Jennifer (J.)  
Cc: Leon, Carlos (C.L.)  
Subject: FW: help needed for KCP P5781 "1\_2\_shift fault"!

Jennifer,  
Please review Carlos's data and compare to the calibration release PTSE made to address engine stall.

Carlos, engine made a calibration change to address stalls - but we reviewed it and it has no effect on transmission function. I don't see how what they changed could have affected the shift schedule. Please review your data with Jennifer...

George J. Herr  
CD4E Calibration & Program Control Supervisor  
ATO Bldg / MD #27  
734.458.0702 / 734.523.5523 (fax) / 734.297.1547 (text pager)

-----Original Message-----

From: Leon, Carlos (C.L.)  
Sent: Thursday, September 26, 2002 4:25 PM  
To: Herr, George (G.J.)  
Subject: RE: help needed for KCP P5781 "1\_2\_shift fault"!

George, I heard the new tear tag was to address a Eng stall in the field. and I think is affecting the shift schedule. I have data to prove that.

-----Original Message-----

From: Herr, George (G.J.)  
Sent: Wednesday, September 25, 2002 1:23 PM  
To: Leon, Carlos (C.L.)  
Cc: Park, Soon (S.C.)  
Subject: RE: help needed for KCP P5781 "1\_2\_shift fault"

We didn't change a thing in the calibration since the 2002 MY Job#2 release a year ago.

George J. Harr  
CDME Calibration & Program Control Supervisor  
ATO Bldg / MD #27  
734.458.0702 / 734.523.5523 (fax) / 734.297.1547 (text pager)

-----Original Message-----

From: Leon, Carlos (C.L.)  
Sent: Wednesday, September 25, 2002 12:53 PM  
To: Herr, George (G.J.)  
Cc: Park, Soon (S.C.)  
Subject: FW: help needed for KCP P5781 "1\_2\_shift fault"

You guys did it again. The new tear tags are getting failures for the 1\_2SHIFT. The 2DROP is low than 700 rpm. It is causing failures in KC. Please let me know what we can do. Thanks

-----Original Message-----

From: Guo, Bo (B.)  
To: Leon, Carlos (C.L.)  
Cc: Sulfridge, John (J.S.); Jones, Joe (J.R.)  
Sent: 9/25/02 10:07 AM  
Subject: help needed for KCP P5781 "1\_2\_shift fault"

Hi, Carlos,

Good morning!

KCP Joe called me Monday for trans test, he told me that drivers feel the shift point changed recently after a new PCM tear tag "BAR2" implemented in KCP. I am not sure what that means "shift point changed", so I did investigation from web reporting. Yesterday looks like we had worse day with 29 failures for P5871 D1\_2\_shift faults. All of them from 4x2 units, no one from 4x4 unit. Since both 4x2 and 4x4 used the same PCM tear tag "BAR2", I am not sure how it will affect 4x2 units only. As I understand that we haven't changed any parameters on trans test, no database or software change either. We need your help on this issue, I attached some log files below, could you please take a look to see if you can see any problem to cause the failures in KCP? Any feed back will be appreciated, thanks for your help in advance!

<<K3A79555.LOG>> <<K3A78827.LOG>> <<K3A78801.LOG>> <<K3A69446.LOG>>

Have a nice day!

Bo Guo

EOL testing support team U204  
Desk tel: (313)-59-47701  
Text pager: (313) 795-5240  
CDS ID: BGUO

---

**From:** Fournelle, Gilbert (G.)  
**Sent:** Monday, September 30, 2002 7:40 AM  
**To:** Dalbo, Bob (R.J.)  
**Subject:** FW: Escape Stall Update

***Gilbert Fournelle***

V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904988 Fax:(313)3231786

-----Original Message-----

**From:** Vainstra, Tim (T.W.)  
**Sent:** Sunday, September 29, 2002 5:51 PM  
**To:** Fournelle, Gilbert (G.)  
**Cc:** Corbett, Sandra (S.M.)  
**Subject:** Escape Stall Update

Just FYI -> Source: [REDACTED]

On September 20th I was interviewed and videotaped for WKRC TV here in Cincinnati regarding my "stalling" issue. I am currently on my second Escape in less than six months. The first was taken back by Ford thanks to the "lemon law." However, I have now found that I paid \$73 to have the title transferred and I shouldn't have paid anything. So hopefully I'll be getting that back!

Escape #2 stalled on 9/3 and been back in the shop last week. The TSB that was announced on 9/9 was performed and has not affected a darn thing. The idle still dips to near stalling constantly and I am just waiting for it to stall again!

Currently, Channel 12 is planning on airing the interview and any additional information during the 11:00 pm news broadcast with [REDACTED]. There have been several other people who have contacted him with the same problem. I encourage everyone who has had a stalling problem here in Cincinnati to do the same. If enough people complain and get involved, we may just cause enough grief for Ford to have to take some more drastic measures than they have taken so far.

**Subject:** 3.0L U204 Phantom stall meeting  
**Location:** TEE CR#1

**Start:** Thu 10/3/2002 2:00 PM  
**End:** Thu 10/3/2002 3:00 PM  
**Show Time As:** Tentative

**Recurrences:** (none)

**Meeting Status:** Not yet responded

**Required Attendees:** Fournelle, Gilbert (G.); Altoonian, Don (D.J.); Bauer, Scott (S.C.); Bhojwani, Kamal (K.); Blackburn, Thomas (T.J.); Bogerna, John (P.); Cary Powell (E-mail); Chick, John (J.); Chih, Ming-Niu (M.N.); Chin, Darrel (D.); Corbett, Sandra (S.M.); Dalbo, Bob (R.J.); De Pena, Juan (J.E.); Diaz, Timothy (T.P.); Duvall, Allen (A.W.); Fascetti, Bob (R.J.); Fournelle, Gilbert (G.); Freeland, Mark (M.); Giles, Stuart (S.); Gokhale, Renuka (R.V.); Goodwin, William (W.R.); Grewal, Bill (B.S.); Grimes, Jeff (J.R.); Hansen, George (G.C.); Herr, George (G.J.); Hofman, Michael (M.V.); Holmes, Jeffrey (J.R.); Hoshino, Jun (J.); Ichikawa, Jyunichiro (J.); Jensen, Ted (T.E.); Jones, Andy; Jordan, Donald (D.E.); Kanai, Shinji (S.); Khan, Naveed; Kosko, Jeff (J.R.); Kwon, Soon (S.K.); Lawler, Dave (D.A.); La, Dzung (D.H.); Lintiac, Steven (S.); Linde, Peter (P.A.); Lu, Jane (J.); Marck, Edmond (E.C.); Marlanco, Tom (T.E.); Matea, John (J.); Maurer, James (J.B.); Mazzella, Gary (G.R.); McDonald, John; McGee, Brett (B.L.); Mooney, Larry (L.); Moorhouse, Scott (S.F.); TMORGA43 was deleted 20021116; Morishima, Shigeki (S.); Nakano, Hideki (H.); Nematollahi, Sonya (S.); 'Nikolai, bernie'; Notaboorn, Jim (J.E.); Ortman, James (J.W.); Powers, Ken (K.W.); Price, Martin (M.); Raquepau, Alden (A.P.); Rothweiler, Daniel (D.); Sanders, Muriel (M.S.); Shah, Kiran (K.C.); Shiralehi, Masaru (M.); Stigpenbauer, Jeffrey (J.R.); Suarez, Rhea (R.); Takasawa, Keith (K.D.); Takubo, Hirochi (H.); Veenstra, Tim (T.W.); Wakerell, Ray (R.A.); Wettach, Bill (B.); Williams, Lee (LHW.)

Meeting agenda and meeting minutes will be send separately on a weekly basis.

toll free: 1-866-227-7015  
Ford net: 954-1208  
International: 1-630-893-6145

pass code: 8402370#  
moderator code: 3457370



---

**From:** Puda, Joseph (J.K.)  
**Sent:** Tuesday, October 01, 2002 1:03 PM  
**To:** Fournelle, Gilbert (G.); Hurley, Robert (R.E.)  
**Cc:** Puda, Joseph (J.K.); Soo, Brian 'Ninja' (B.T.)  
**Subject:** FW: URGENT: U204 V6 4x2 Needed for SQ Evaluation

Vehicle also needs a processor with an M5 emulator to flash latest trans. cal. and tweak cal.

—Original Message—

**From:** Puda, Joseph (J.K.)  
**Sent:** Tuesday, October 01, 2002 12:54 PM  
**To:** Fournelle, Gilbert (G.); Hurley, Robert (R.E.)  
**Cc:** Puda, Joseph (J.K.); Soo, Brian 'Ninja' (B.T.)  
**Subject:** FW: URGENT: U204 V6 4x2 Needed for SQ Evaluation

Gilbert and Bob,

Bob Dalbo left phone message to contact Gil regarding use of U204 V6 4x2 if it is available. Per discussion with Bob this morning, a vehicle is not available for 4 straight days. An alternative would be to break up my instrumentation and testing into 4 hour increments to occur over 7 days (need not be successive days) when the vehicle is available to avoid disruption of your testing. I would need to have the vehicle for the following timeframes and would return to you after each timeslot:

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I would prefer to have instrumentation installed today or tomorrow if available and the trans. cal. tweaked Thursday or Friday. Please let me know if you can accommodate.

—Original Message—

**From:** Puda, Joseph (J.K.)  
**Sent:** Monday, September 30, 2002 4:25 PM  
**To:** Dalbo, Bob (R.J.)  
**Cc:** Puda, Joseph (J.K.); Taylor, James (J.D.); Franzoskalis, Petros (P.); Bodjock, Scott (S.A.); Lipa, Jeffrey (J.A.); LaVoie, Vincent (V.P.); Racine, Darrin (D.); Betkey, Maria (M.L.); Haengol, Miles (M.); Beck, Jim (J.F.); Soo, Brian 'Ninja' (B.T.)  
**Subject:** URGENT: U204 V6 4x2 Needed for SQ Evaluation

Bob,

U204 SQ need a V6 4x2 vehicle to evaluate stiffer rear mounts...preferably the V6 4x2 loaned to Chun Wu for Idle NVH evaluation. Our need would be for Tuesday - Friday this week. Please let me know when you could provide one.

---

**From:** Fournelle, Gilbert (G.)  
**Sent:** Tuesday, October 01, 2002 2:02 PM  
**To:** Puda, Joseph (J.K.); Hurley, Robert (R.E.)  
**Co:** Soo, Brian 'Ninja' (B.T.)  
**Subject:** RE: URGENT: U204 V6 4x2 Needed for SQ Evaluation

Mr. Puda,

There is no vehicle available for this week. All 4X2 are currently being used for testing. The vehicle which Chun Wu used is 564w388. The vehicle would be ready for you on Monday (10/7) and you can use it for four consecutive days.

Regards,

*Gilbert Fournelle*

V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904968 Fax:(313)3231788

-----Original Message-----

**From:** Puda, Joseph (J.K.)  
**Sent:** Tuesday, October 01, 2002 1:03 PM  
**To:** Fournelle, Gilbert (G.); Hurley, Robert (R.E.)  
**Co:** Puda, Joseph (J.K.); Soo, Brian 'Ninja' (B.T.)  
**Subject:** FW: URGENT: U204 V6 4x2 Needed for SQ Evaluation

Vehicle also needs a processor with an M5 emulator to flash latest trans. cal. and tweak cal.

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**Sent:** Tuesday, October 01, 2002 12:54 PM  
**To:** Fournelle, Gilbert (G.); Hurley, Robert (R.E.)  
**Co:** Puda, Joseph (J.K.); Soo, Brian 'Ninja' (B.T.)  
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**To:** Dalbo, Bob (R.J.)  
**Cc:** Puda, Joseph (J.K.); Taylor, James (J.D.); Frantzeskakis, Petros (P.); Bodjeck, Scott (S.A.); Lipe, Jeffrey (J.A.); LaVoie, Vincent (V.P.); Racine, Darrin (D.); Bebej, Maris (M.L.); Haenggi, Miles (M.); Beck, Jim (J.F.); Soo, Brian 'Ninja' (B.T.)  
**Subject:** URGENT: U204 V6 4x2 Needed for SQ Evaluation

Bob,  
U204 SQ need a V6 4x2 vehicle to evaluate stiffer rear mounts...preferably the V6 4x2 loaned to Chun Wu for Idle NVH evaluation. Our need would be for Tuesday - Friday this week. Please let me know when you could provide one.

---

**From:** Puda, Joseph (J.K.)  
**Sent:** Thursday, October 03, 2002 11:21 AM  
**To:** Nikolopoulos, Nathan (N.L.); Diakhr, Markian (M.O.); Haenggl, Miles (M.); Welsh, David (D.R.)  
**Cc:** Taylor, James (J.D.); Puda, Joseph (J.K.); Fournelle, Gilbert (G.)  
**Subject:** URGENT: U204 V6 4x2 Needed for SQ Evaluation

Nathan & Markian,

I will need your support early next week as I will have a U204 V6 4x2 for only 4 days. Instrumentation and parts changes will need to be coordinated as follows:

10/7	Instrument seat accel, engine speed, throttle position	Monday morning	(Nathan)
10/7	tweak vehicle trans. calibration	early Monday afternoon	(Markian)
10/7	test baseline SQ	by COB Monday	(Puda)
10/8	Install 171 N/mm rear mount	Tuesday morning	(Nathan)
10/8	process baseline PROSIG data		(Puda)
10/8	test 171 N/mm rear mount SQ	Tuesday afternoon	(Puda)
10/9	Install 120 N/mm rear mount	Wednesday morning	(Nathan)
10/9	process 171 N/mm rear mount PROSIG data		(Puda)
10/9	test 120 N/mm rear mount SQ	Wednesday afternoon	(Puda)
10/10	install original mount and mass damper	Thursday morning	(Nathan)
10/10	process 120 N/mm rear mount PROSIG data		(TBD)
10/10	test mass damper SQ	Thursday afternoon	(TBD)
10/10	remove mass damper and return vehicle	Thursday afternoon	(TBD)
10/10	process mass damper PROSIG data		(TBD)

Please let me know if you can support this effort.

Miles and David,

Can I use your mass damper developed for U204 I4 4x2 to determine effect it would have on V6 4x2?

-----Original Message-----

**From:** Puda, Joseph (J.K.)  
**Sent:** Wednesday, October 02, 2002 4:21 PM  
**To:** Fournelle, Gilbert (G.)  
**Cc:** Puda, Joseph (J.K.); Hurley, Robert (R.E.)  
**Subject:** FW: URGENT: U204 V6 4x2 Needed for SQ Evaluation

Gil,

Please schedule me for 10/7 thru 10/10. Thanks.

-----Original Message-----

**From:** Fournelle, Gilbert (G.)  
**Sent:** Tuesday, October 01, 2002 2:02 PM  
**To:** Puda, Joseph (J.K.); Hurley, Robert (R.E.)  
**Cc:** Soo, Brian 'Ninja' (B.T.)  
**Subject:** RE: URGENT: U204 V6 4x2 Needed for SQ Evaluation

Mr. Puda,

There is no vehicle available for this week. All 4X2 are currently being used for testing. The vehicle which Chun Wu used is 564w388. The vehicle would be ready for you on Monday (10/7) and you can use it for four consecutive days.

Regards,

## ***Gilbert Fournelle***

V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904968 Fax:(313)3231786

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**Subject:** FW: URGENT: U204 V6 4x2 Needed for SQ Evaluation

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**To:** Dalbo, Bob (R.L.)  
**Cc:** Puda, Joseph (J.K.); Taylor, James (J.D.); Frantzeskakis, Petros (P.); Bodjack, Scott (S.A.); Lips, Jeffrey (J.A.); LaVole, Vincent (V.P.); Racine, Darrin (D.); Betley, Maria (M.L.); Haengg, Miles (M.); Beck, Jim (J.F.); Soo, Brian 'Ninja' (B.T.)  
**Subject:** URGENT: U204 V6 4x2 Needed for SQ Evaluation

Bob,

U204 SQ need a V6 4x2 vehicle to evaluate stiffer rear mounts...preferably the V6 4x2 loaned to Chun Wu for Idle NVH evaluation. Our need would be for Tuesday - Friday this week. Please let me know when you could provide one.

---

**From:** Jensen, Ted (T.E.)  
**Sent:** Friday, October 04, 2002 12:50 PM  
**To:** Fournelle, Gilbert (G.)  
**Subject:** FW: Ranger Stalls

Gilbert,

Can you help on this? Please forward the number to Dick.

Ted

-----Original Message-----

**From:** Wanat, Richard (R.L.)  
**Sent:** Friday, October 04, 2002 12:20 PM  
**To:** Janakiraman, Ram (V.); Jensen, Ted (T.E.)  
**Cc:** Wanat, Richard (R.L.)  
**Subject:** RE: Ranger Stalls

Ram,

On the U204, the calibrations are not in CPR for the 2001 3.0L. I checked with the CPR guru and he says they are all marked "cancelled" in the mother database so they did not show in CPR.

Do you or Ted Jensen happen to have the full calibration ID for that year? It would be something like: DOAR63W, for example only.

Thanks.

Regards,

*Dick Wanat*

Calibration Technical Specialist  
PD/R&VT/P&AE-CAPE  
Phone: (313)32-20165 FAX: (313)24-65899  
Room: 1F08 Bldg: Dynamometer Lab  
Email: rwanat@ford.com

-----Original Message-----

**From:** Janakiraman, Ram (V.)  
**Sent:** Friday, October 04, 2002 8:43 AM  
**To:** Wanat, Richard (R.L.)  
**Subject:** RE: Ranger Stalls

Dick

What about the U204 (Escape)? Did they have the ldc\_cl logic in 2001? The overall STALLS R/1000 (i.e. across all components) has gone up from 14.13 (in 01my) to 29.24 (in 02my) at 8MIS - more than doubled!! And the TGW has gone from 14 to 29.....

I just saw your other mail....the numbers there are by model year i.e. it is a comparison of Sep-Mar registrations in 2001

to Sep-Mar registrations in 2002 (it has gone from 6 to 17). Similarly, the R/1000 in 2001 at 7MIS was 5.73 and the comparative R/1000 for 02MY is 9.57. So both TGWs and R/1000 are a direct year-over-year comparison.

Ram,

—Original Message—

From: Wanat, Richard (R.L.)  
Sent: Friday, October 04, 2002 7:22 AM  
To: Janakraman, Ram (V.)  
Cc: Wanat, Richard (R.L.)  
Subject: Ranger Steels

Ram,

I checked CPR. The 3.0L Ranger started using the ldc\_cl logic in 2002. It was calibrated out before that.

Does the warranty or tgw or ccc data show an increase between 2001 and 2002?

Regards,

*Dick Wanat*

Calibration Technical Specialist  
PD/R&VT/P&AE-CAPE  
Phone: (313)32-20185 FAX: (313)24-85399  
Room: 1F08 Bldg: Dynamometer Lab  
Email: rwanat@ford.com

---

**From:** Suarez, Rhao (R.)  
**Sent:** Monday, October 07, 2002 12:38 PM  
**To:** Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Grzincik, Karen (K.M.); Suetterlin, Terry (T.D.)  
**Co:** Lawler, Dave (D.A.); Farris, Sam (S.J.); Jaater, Daniel (D.C.)  
**Subject:** PCM service information in WERS

I am checking to see if all the WERS information for the service PCMs, has been done so I can re-submit the Parts Request for the Stall concern? Until this is complete, the Parts group cannot sign off on this to get the PCMs parts available and to release the Stall TSB. We are also planning to release a SSM with the calibration information and this will also need a parts request sign off.

Please let me know if any assistance is needed to get this completed.

Thanks!

*Rhao M. Suarez*

Rhao Michael Suarez  
Product Concern Engineer - Escape / Tribute / Maverick  
PVT & Field Support / FCSD  
DSC II (room 548) / 1800 Fairlane Dr. / Allen Park, MI 48101  
Phone: 313-32-23344 Pager: 313-798-8242  
Fax: 313-33-78337  
Email: rsuarez8@ford.com



---

**From:** Grzincic, Karen (K.M.)  
**Sent:** Monday, October 07, 2002 12:48 PM  
**To:** Krohn, Maggie (M.M.)  
**Cc:** Lawler, Dave (D.A.); Ferriss, Sam (S.J.); Jaster, Daniel (D.C.); Suarez, Rhae (R.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Suetterlin, Terry (T.D.)  
**Subject:** RE: PCM service information in WERS

I assume this is something you're working on?

**Karen M. Grzincic**  
PCM Engineering Change Specialist  
TEL: 313-322-4593  
FAX: 313-323-6743  
E-MAIL: kgrzinc1@ford.com

-----Original Message-----

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**Sent:** Monday, October 07, 2002 12:38 PM  
**To:** Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Grzincic, Karen (K.M.); Suetterlin, Terry (T.D.)  
**Cc:** Lawler, Dave (D.A.); Ferriss, Sam (S.J.); Jaster, Daniel (D.C.)  
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Thanks!

*Rhae M. Suarez*

Rhae Michael Suarez  
Product Concern Engineer - Escape / Tribute / Maverick  
PVT & Field Support / FCSD  
DSC II (room 548) / 1800 Fairlane Dr. / Allen Park, MI 48101  
Phone: 313-32-23344 Pager: 313-796-8242  
Fax: 313-33-78337  
Email: rsuarez8@ford.com

---

**From:** Fournelle, Gilbert (G.)  
**Sent:** Monday, October 07, 2002 1:17 PM  
**To:** Bogema, John (P.)  
**Subject:** FW: PCM service information in WERS

Have you talked to Karen yet to add the WERS info?

*Gilbert Fournelle*

V8 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904968 Fax:(313)3231788

—Original Message—

**From:** Grzincic, Karen (K.M.)  
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**To:** Krohn, Maggie (M.M.)  
**Cc:** Lawler, Dave (D.A.); Ferrise, Sam (S.J.); Jester, Daniel (D.C.); Suarez, Rhae (R.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Suetterlin, Terry (T.D.)  
**Subject:** RE: PCM service information in WERS

I assume this is something you're working on?

Karen M. Grzincic  
PCM Engineering Change Specialist  
TEL: 313-322-4693  
FAX: 313-323-6743  
E-MAIL: kgrzinc1@ford.com

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**Sent:** Monday, October 07, 2002 12:38 PM  
**To:** Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Grzincic, Karen (K.M.); Suetterlin, Terry (T.D.)  
**Cc:** Lawler, Dave (D.A.); Ferrise, Sam (S.J.); Jester, Daniel (D.C.)  
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Phone: 313-32-23344 Pager: 313-798-6242  
Fax: 313-33-78337  
Email: rsuarez6@ford.com

---

**From:** Khali, Imran (I.)  
**Sent:** Tuesday, October 08, 2002 10:44 AM  
**To:** Fournelle, Gilbert (G.); Matesa, John (J.)  
**Cc:** Falandino, Mike (M.P.); Dalbo, Bob (R.J.); Lewis, Bill (B.C.); Smith, Jeffrey (J.M.)  
**Subject:** Status Report on GIB ADS not working -U204 program

Gilbert/John

The GIB(PCM) ADS acting up in one of your lab vehicle was damaged. Someone drilled a hole on one side of the shell casing to install that ADS in a rack, there were metal shaving all over the GIB board. Please who ever is doing the install do not drill any extra holes in any CALVIN hardware.

We recommend to call ISA for CALVIN installation in future.

*Regards,*

**Imran Khali**

*Calibration Tools Systems & Support Engineer  
RAVT-Caps, Algorithm Design Engineering & Process Tools  
Software Electronics Support Section*

**Ford Motor Company**  
Powertrain Operations Engine Engineering  
21500 Oakwood Blvd.  
Mail Drop: 74, Cube EW157  
Dearborn, MI 48121  
Phone: 313-39-04192  
Fax: 313-24-88430  
Text page: ikhali  
Numeric Page: 1-800-page-mch(724-3624)  
Pin #: 1596076

---

**From:** Fournelle, Gilbert (G.)  
**Sent:** Tuesday, October 08, 2002 11:34 AM  
**To:** Bopema, John (P.); Dalbo, Bob (R.J.); Hockaday Jr., John (J.C.); Hurley, Robert (R.E.);  
Malasa, John (J.); Mikota, Dennis (D.P.)  
**Subject:** FW: Status Report on GIB ADS not working -U204 program

FYI

***Gilbert Fournelle***

V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904968 Fax:(313)3231786

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*Calibration Tools Systems & Support Engineer  
R&VT-Cape, Algorithm Design Engineering & Process Tools  
Software Electronics Support Section*

**Ford Motor Company**  
Powertrain Operations Engine Engineering  
21500 Oakwood Blvd.  
Mail Drop: 74, Cube EW157  
Dearborn, MI 48121  
Phone: 313-39-04192  
Fax: 313-24-88430  
Text page: ikhalil  
Numeric Page: 1-800-page-mcl(724-3834)  
Pin #: 1596076

---

**From:** Pepitone, Gil (J.)  
**Sent:** Thursday, October 10, 2002 12:00 PM  
**To:** Dalbo, Bob (R.J.); Altonian, Don (D.J.); Fournelle, Gilbert (G.); Suarez, Rhae (R.); Corbett, Sandra (S.M.)  
**Cc:** Pepitone, Gil (J.); DiAngelo, Renaldo (R.); Surti, P. J. (P.J.); Noteboom, Jim (J.E.)  
**Subject:** Additional Proposed Revisions/Inclusions to Existing TSB 02-11-6 3.0L Escape Stalls  
**Importance:** High

Good morning everyone: on Sept 19<sup>th</sup>, I had called into the Escape Stalls Team meeting to present my proposed changes to this existing TSB. My discussion centered upon the possibility of an EVAP (VMV) duty cycle which does NOT change from a zero % value while at idle. TNI for VMV is the result. The meeting's conclusion was that there would be a follow-up series of discussions and I would be informed of those results.

Please provide any decisions which may have been made.

Since that time, I have been repeatedly contacted by local Florida Technicians regarding the Concern of 3.0L Escape Stalls. Of course I cited the existence of the above TSB, and referenced not only the need to follow it exactly, but mentioned the above potential VMV cycling issue mentioned above.

But I also found myself including the ADDITIONAL, known issues which are included in numerous SSM and ISMs, which reference vehicle harness ground checks, engine connection checks, kickpanel connector checks and the possibility of MAFs affected by local EMC. Also, I mentioned the most recent issue of WDS level updates prior to 21.3 NOT having the latest calibration updates. Please note that these updates were thought to have been included, but were inadvertently left out. I have recent E-mails describing these details if one requires.

Also, I found that the TSB's Step 4 and 5 required a more simple "translation" for most Techs to understand. Without my specific effort to describe them in a more basic manner, these steps are indeed skipped. The Techs are quick to replace a part (a.k.a. the IAC update), but when it comes to interpreting a complicated diagnostic step, that part is often overlooked.

As a result, I further suggest that in addition to the first issue of a lazy VMV duty cycle, (which may need the prompting with short drive cycle), the inclusion of the details ALL the existing SSMs and ISMs, plus a review of the wording of some Steps of the existing TSB. We need to reach our audience better to help lower Warranty costs.

For the short term, an SSM could be released asap highlighting some (i.e. the WDS level/calibration issue) of these items.

I volunteer to assist in the re-writing of those sections and/or a review of any changes prior to re-publication. If a re-publication is in process regarding my first suggestion for the VMV cycle issue, these additional changes could coincide with this re-release.

Please advise,  
Gil Pepitone  
954-753-9989 Office  
954-242-2066 Cell

**From:** Sloan, Burt (B.E.)  
**Sent:** Tuesday, October 15, 2002 3:16 PM  
**To:** Adams, Kerry (K.N.); Whitehead, Joe (J.P.); Hart, Jenny (J.); Boyk, Greg (G.J.); Lockhart, Marek (M.C.); Gibson, Patrick (P.W.); Lyon, Peter (P.M.)  
**Cc:** Kiar, Jerry (G.T.); Hofman, Michael (M.V.); Corbett, Sandra (S.M.); Van Wierneersoh, John (J.R.); Adams, Kerry (K.N.); Austin, James (J.E.); Bogema, John (P.); Boyk, Greg (G.J.); Coffey, Dan (D.C.); Crowley, Pat (P.J.); Dakhlallah, Haseem (H.A.); Dalbo, Bob (R.J.); Delaroderie, Jim (J.A.); Dennis, Matt (M.A.); Dixon, Mark (M.R.); Fascetti, Bob (R.J.); Fournelle, Gilbert (G.); Gaynier, Larry (L.J.); Gibson, Patrick (P.W.); Hansen, George (G.C.); Hedges, John (J.E.); Hille, Kevin (K.T.); Kleiszewski, Mark (M.D.); King, Brian (B.M.); Kosko, Jeff (J.R.); Lewis, Marvin (M.A.); Limatta, Gary (G.D.); Liller, David (D.J.); Lyon, Peter (P.M.); Matkovich, Dale (D.M.); Mazzella, Gary (G.R.); McIntee, Brian (B.E.); Newman, Chris (C.W.); Perlick, Don (D.A.); Putney, Bill (W.); Ross, Ann (A.M.); Sabin, Scott (S.M.); Scott, Damon (D.A.); Sloan, Burt (B.E.); Squires, Mark (D.M.); Steimasozak, Robert (R.); Turner, Donald (D.A.); Waitach, Bill (B.); Whitehead, Joe (J.P.); Young, Dan (D.G.)  
**Subject:** U152, UP207, & U204 Drivability Team Meeting 10/16/02

**U152, UP207, & U204 Drivability Team**  
**Oct. 16, 2002**  
**8:00 am to 10:00 am**  
**TEE - Conference Rm 1**

**Call In Phone Number:** 9-1-877-877-7126  
**Participant Code:** 6341969 #

**Oct. 16, 2002 Meeting Agenda:**

- |  |                              |
|--|------------------------------|
| 1) UP207 & U152 Black Smoke issue<br>Fishbone review and potential root causes   | Kerry Adams<br>Joe Whitehead |
| 2) U152 4.0L Hesitation / Rough Running On Cold Start after<br>engagement<br>Results of Gaylord Michigan dealer visit and next steps | Jenny Hart<br>Greg Boyk      |
| 3) UP207 Stalls Claims Analysis Follow Up<br>Low fuel pressure claims analysis   | Marek Lockhart               |
| 4) UP207 EEC 8 Sigma Project Scope discussion  | Pat Gibson                   |
| 5) U152 4.6L Stalls Follow UP<br>Review Claims analysis  | Pete Lyon                    |
| 6) U152 4.6L D02 No Start<br>Review Claims analysis  | Pete Lyon                    |
| 7) U152 4.0L D02 No Start<br>Review Claims Analysis  | John Hedges                  |

**Oct. 9, 2002 Meeting Minutes:**

- 1) UP207 Stalls Loose Connections VRT feedback  
Bob Stelmaszczak to provide break out of claims to Tom Hoffman
- 2) UP207 Stalls Claims Analysis Follow Up  
Bob Stelmaszczak to provide break out of claims to Marek Lockhart
- 3) UP207 Stalls Claims Analysis Follow UP  
Tamra Green & Joe Deeb did not show
- 4) U152 4.6L IAC Review Stx Sigma #8020  
Ram Janakiraman provided an excellent analysis of IAC variability  
Ram's data showed that the low IAC spec needs to be raised considerably  
Ram is to present to the Robin Wright Driveability Affinity Team on 10/17/02
- 5) UP207 & U152 Black Smoke issue  
Scott Sabin and Kerry Adams are creating a team to develop a fishbone  
diagram for low barometer  
Kerry Adams is finding a buy back that duplicates the issue

**From:** Fournelle, Gilbert (G.)  
**Sent:** Wednesday, October 16, 2002 11:06 AM  
**To:** Alconian, Don (D.J.); Bauer, Scott (S.C.); Bhowani, Kamal (K.); Blackburn, Thomas (T.J.); Bogema, John (P.); Cary Powell (E-mail); Chick, John (J.); Chih, Ming-Niu (M.N.); Chin, Derrel (D.); Corbett, Sandra (S.M.); Dalbo, Bob (R.J.); De Pena, Juan (J.E.); Diez, Timothy (T.P.); Duval, Allen (A.W.); Fascetti, Bob (R.J.); Fournelle, Gilbert (G.); Freeland, Mark (M.); Giles, Stuart (S.); Gokhale, Renuka (R.V.); Goodwin, William (W.R.); Grewal, Bill (B.S.); Grimes, Jeff (J.R.); Hansen, George (G.C.); Herr, George (G.J.); Hofman, Michael (M.V.); Holmes, Jeffrey (J.R.); Hoshino, Jun (J.); Ichikawa, Jyunichiro (J.); Jensen, Ted (T.E.); Jones, Andy; Jordan, Donald (D.E.); Kanai, Shinji (S.); Khan, Naveed; Kosko, Jeff (J.R.); Kwon, Soon (S.K.); Lawler, Dave (D.A.); Le, Dzung (D.H.); Lintiac, Steven (S.); Linde, Peter (P.A.); Liu, Jane (J.); Marck, Edmond (E.C.); Marianos, Tom (T.E.); Matasa, John (J.); Maurer, James (J.B.); Mazzella, Gary (G.R.); McDonald, John; McGee, Brett (B.L.); Mooney, Larry (L.); Moorhouse, Scott (S.R.); Morgan, Tomiko (T.T.); Morishima, Shigeaki (S.); Nakano, Hideki (H.); Nemalofahl, Sonya (S.); Nikolai, Bernie; Noteboom, Jim (J.E.); Ortman, James (J.W.); Powers, Ken (K.W.); Price, Martin (M.); Raquepau, Aiden (A.P.); Rothweller, Daniel (D.); Shah, Kiran (K.C.); Shiralahi, Maseru (M.); Stiggenbauer, Jeffrey (J.R.); Suarez, Rhae (R.); Takasawa, Keith (K.D.); Takubo, Hirochi (H.); Veenstra, Tim (T.W.); Wakanel, Ray (R.A.); Wettach, Bill (B.); Williams, Lee (LHW.)  
**Subject:** Phantom stall meeting for 10/17/02 cancelled

The phantom stall meeting is cancelled for tomorrow 10/17/02 due to the fact that the calibration group is on a hot weather test trip. Meeting notices will be sent out next week for future stall meetings.

Regards,

*Gilbert Fournelle*  
V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904966 Fax:(313)3231786



**From:** Price, Martin (M.)  
**Sent:** Friday, October 18, 2002 6:37 AM  
**To:** Altoonian, Don (D.J.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Limtiaco, Steven (S.); Rothweiler, Daniel (D.); Sanders, Muriel (M.S.); Suarez, Rhae (R.)  
**Subject:** FW: Escape stall with new cal

anyone interested?

*Martin Price*

Cleveland Engine Specialist, DSC I #353  
1700 Fairlane Dr, Allen Park, MI 48101  
mprice28@ford.com ph. (313)317-9133

—Original Message—

**From:** Loh, Chau (C)  
**Sent:** Thursday, October 17, 2002 5:07 PM  
**To:** Price, Martin (M.)  
**Subject:** Escape stall with new cal

I'm not sure if you're interested but cust is still alleging a stall concern with new pcm cal.

Caller Name: BRAIN PEDONE (T) Report#: 2IYEB018 NHL  
Call Type (G/N/C): C Print Rpt(S/D): \_ Ctl #: Date: 10/17/2002  
Dealer ID: 07708 Windward Ford Phone: (800) 288-7000  
OASIS YES Contacted Oasie History: \_ Grid: \_\_\_  
Symptom: 8 07 7 00 DRVABL STALL/QUITS DECELERATION  
Addtl Sym: INTERM STALL Causal Cond: \_\_\_ How/When Code: \_\_\_  
Vehicle: 2002 ESCAPE 4X2,XLT ,MPV 1FMYU03172KD66889 Bld: 05/23/2002  
Engine: 3.0L DUR Serial: 438799088 Cal: 2M11A30 A/C: A Odom: 2907 M  
Trans: CD4E E Serial: 2LBPEB7121420 Body Conv: \_\_\_

*James Loh*

*Service Engineer*  
*Ford Technical Hotline*  
1700 Fairlane Drive #333  
Allen Park, MI 48101  
(313)317-9134  
cloh2@ford.com

**From:** Dan Rothweiler [DRothwei@mazdausa.com]  
**Sent:** Friday, October 18, 2002 8:04 AM  
**To:** Price, Martin (M.); Altoonian, Don (D.J.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Steven Lintiaco; Dan Rothweiler; Sanders, Muriel (M.S.); Suarez, Rhae (R.)  
**Co:** Chris Capuzzo  
**Subject:** RE: Escape stall with new cal

Is the stall reproducible? Was the Evap vent line cleared? I think the new strategy should take away that possibility but you never know. Also check the PCM calibration part number in the log viewer on WDS to confirm that the new cal is really in there. If none of this reveals anything then this vehicle should be inspected.

Daniel H. Rothweiler  
Mazda North American Operations  
Fixed Operations Technical Specialist  
Office: 732-868-2135  
Fax: 214-442-5222  
Cellular: 732-547-8578

<http://www.mazdausa.com/mazda6>

-----Original Message-----

**From:** Price, Martin (M.) [mailto:mprice28@ford.com]  
**Sent:** Friday, October 18, 2002 8:37 AM  
**To:** Altoonian, Don (D.J.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Lintiaco, Steven (S.); Rothweiler, Daniel (D.); Sanders, Muriel (M.S.); Suarez, Rhae (R.)  
**Subject:** FW: Escape stall with new cal

anyone interested?

Marti Price  
Cleveland Engine Specialist, DSC I #353  
1700 Fairlane Dr, Allen Park, MI 48101  
mprice28@ford.com ph. (313)317-9133

> -----Original Message-----

> **From:** Loh, Chou (C.)  
> **Sent:** Thursday, October 17, 2002 5:07 PM  
> **To:** Price, Martin (M.)  
> **Subject:** Escape stall with new cal

> I'm not sure if you're interested but cust is still alleging a stall concern with new pcm cal.

>  
>  
> **Caller Name:** BRAIN            **PEDONE**            ( T )            **Report#:**  
2IYEB018

NHL

> Call Type (G/N/C): C Print Rpt(S/D): \_ Ctl #: Date:  
10/17/2002  
> Dealer ID: 07708 Windward Ford Phone: (808)  
266-7000

> OASIS YES Contacted Oasis History: \_ Grid: \_

> Symptom: 6 07 7 00 DRVABL STALL/QUITS DECELERATION

> Addl Sym: INTERM STALL Causal Cond: \_ How/When  
Code: \_

> Vehicle: 2002 ESCAPE 4X2, XLT ,MPV 1FMYU03172KD66889 Bld:  
05/23/2002

> Engine: 3.0L DUR Serial: 438799086 Cal: 2M11A30 A/C: A Odom:  
2907

M

> Trans: CDAE E Serial: 2L8PEB7121420 Body Conv: \_

>  
> Jamesloh  
> Service Engineer  
> Ford Technical Hotline  
> 1700 Fairlane Drive #335  
> Allen Park, MI 48111  
> (313)317-9134  
> cloh2@ford.com  
>

---

**From:** awardsuite@therobbincoco.com  
**Sent:** Monday, October 07, 2002 5:21 PM  
**To:** pfournal@ford.com  
**Subject:** Congratulations

**Congratulations Gilbert,**

**Robert Dalbo has selected you to be a recipient of an award under the Ford Motor Company's Recognition Award Program.**

**Thank you very much for the extraordinary effort on your part to resolve the R10 strategy issue and to reflash trucks at KCAP. Your efforts were instrumental in resolving this issue and in finally resolving the stall issue. Bob Fascetti and I appreciate all the time and effort you put into these projects.**

**Please follow the ordering instructions below to make your selection from an array of awards intended to acknowledge your contributions.**

**You may choose a gift of your choice by using your Internet browser and logging on to <http://www.awardsuite.com>. Enter your certificate # 72726699346 to access your award catalog and place your order. Once you have entered <http://www.awardsuite.com>, you may refer to our online Help by clicking on the Help menu option if you have any questions.**

**Alternatively, you may call Customer Support Services at 1-800-454-4387. Customer Support Service Representatives are available Monday - Friday, 8:00 AM - 5:00 PM Eastern Standard Time.**

**We look forward to hearing from you.**

---

**From:** Fournelle, Gilbert (G.)  
**Sent:** Tuesday, October 08, 2002 7:57 AM  
**To:** 'gfournelle@umich.edu'  
**Subject:** FW: Congratulations

FYI

Love,

*Gilbert Fournelle*

V8 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904868 Fax:(313)3231788

-----Original Message-----

**From:** awardsuite@therobbinsco.com [mailto:awardsuite@therobbinsco.com]  
**Sent:** Monday, October 07, 2002 5:21 PM  
**To:** gfournel@ford.com  
**Subject:** Congratulations

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We look forward to hearing from you.

---

**From:** Fournelle, Gilbert (G.)  
**Sent:** Tuesday, October 08, 2002 7:59 AM  
**To:** 'fournsam@umich.edu'  
**Subject:** FW: Congratulations

FYI

Love,

*Gilbert Fournelle*

V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904968 Fax:(313)3231786

—Original Message—

**From:** awardsuite@therobbinsco.com [mailto:awardsuite@therobbinsco.com]  
**Sent:** Monday, October 07, 2002 5:21 PM  
**To:** gfournel@ford.com  
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Alternatively, you may call Customer Support Services at 1-800-454-4387. Customer Support Service Representatives are available Monday - Friday, 8:00 AM - 5:00 PM Eastern Standard Time.

We look forward to hearing from you.

---

**From:** Fascetti, Bob (R.J.)  
**Sent:** Wednesday, October 23, 2002 8:05 AM  
**To:** 'BDyke@Visteon.com'; 'SMarsha1@visteon.com'; 'BYoakum@visteon.com'; Woodings, Andrew (A.T.)  
**Cc:** Nichols, Ellen (E.G.); Hughes, Jeff (J.); Altonian, Don (D.J.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Hofman, Michael (M.V.); Corbett, Sandra (S.M.); Ray, Charles (C.); Hansen, George (G.C.); Moorhouse, Scott (S.R.)  
**Subject:** RE: Escape MAF sensor with misplaced gasket

It's time to change this design. The gasket needs to be captured by the fasteners. Lets get this done now, please. We've been thru it, and know what to do.

-----Original Message-----

**From:** Moorhouse, Scott (S.R.)  
**Sent:** Tuesday, October 22, 2002 7:21 PM  
**To:** 'BDyke@Visteon.com'; 'SMarsha1@visteon.com'; 'BYoakum@visteon.com'; Woodings, Andrew (A.T.)  
**Cc:** Nichols, Ellen (E.G.); Hughes, Jeff (J.); Altonian, Don (D.J.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Hofman, Michael (M.V.); Corbett, Sandra (S.M.); Ray, Charles (C.); Moorhouse, Scott (S.R.); Hansen, George (G.C.)  
**Subject:** Escape MAF sensor with misplaced gasket

Attached find pictures of MAF sensor assy captured at KCAP today (rolls test failure) for maf gasket mispositioned in assy.

The MAF is not only one of the top ten contributors to check engine light on the vehicle, but this exact condition has been shown to be responsible for vehicle stalls in the field.

This gasket was grossly mispositioned, and as such, was captured at EOL for a MAF fault. Our EOL will not capture all of these faults. For this reason, I am requesting that Sandusky be represented at KCAP Friday, Nov. 8 (next Escape Powertrain report out to Plant Management) to present six panel on containment and corrective action.

Ellen Nichols, Jeff Hughes, as we have captured this issue before at KCAP, and it is perhaps our only stalls contributor which is not satisfactorily closed, I would presume that you would support this approach. I have the part in question.

<< File: MVC-008F.JPG >> << File: MVC-010F.JPG >> << File: MVC-017F.JPG >> << File: MVC-018F.JPG >> << File: MVC-019F.JPG >>

Scott Moorhouse  
U204 PTSE Resident Engineer  
Kansas City Assembly Plant  
(ph) 816-459-1985 (fax) 816-459-1728  
*smoorhou@ford.com*

---

**From:** Dalbo, Bob (R.J.)  
**Sent:** Wednesday, October 23, 2002 12:47 PM  
**To:** McCarthy, Fran (F.); Florini, John (J.J.); Gilbert Fournelle  
**Cc:** Coryea, Kevin (K.W.); Hansen, George (G.C.); Mancini, Doug (D.J.); Boggs, Dave (D.L.); Whitworth, Rudy (A.R.); Hoffman, Tom (T.W.); Corbett, Sandra (S.M.)  
**Subject:** RE: Escape VMV Warranty

Fran/John,

There are still two possible reasons for these VMV replacements:

- 1) Dealers are erroneously replacing them
- 2) The part specifications that influence stalling are not defined or inadequately defined.

We have already discovered one part (an evap system check valve) where reason 2 caused stalls.

We look forward to your participation in our 2:00 Thursday stall meeting. This week's meeting will be strictly call-in since the calibration team is at APG. Gilbert Fournelle will send out the meeting notice shortly.

**Bob Dalbo**

3.0L Calibration Supervisor  
Outfitters Calibration, NAT  
Phone: (313) 24-84847 Fax: (313) 32-31788  
Pager: (313) 795-2859 Email: [rdalbo@ford.com](mailto:rdalbo@ford.com)

-----Original Message-----

**From:** McCarthy, Fran (F.)  
**Sent:** Tuesday, October 22, 2002 6:27 PM  
**To:** Whitworth, Rudy (A.R.); Hoffman, Tom (T.W.); Florini, John (J.J.); Corbett, Sandra (S.M.)  
**Cc:** Coryea, Kevin (K.W.); Hansen, George (G.C.); Mancini, Doug (D.J.); Boggs, Dave (D.L.); McCarthy, Fran (F.); Dalbo, Bob (R.J.)  
**Subject:** Escape VMV Warranty

I am sending you the following documents relative to Escape VMV Warranty

1. Top 20 Customer Concern Codes for -9C915-. You will notice that "Stall" is No. 2 on the list (TSB 02-11-6 for IAC replacement also includes VMV replacement).
2. Dealer parts return list (with symptom) with Eaton test results. Most dealers are replacing VMVs for Stall issue. Eaton is finding TNI as a result of their testing.

I am meeting with the Stall Team next week to examine the reason for including the VMV in their TSB. Unless the VMV is saturated with fuel, it probably shouldn't create a stall concern (according to my discussion with Doug Mancini). I received and logged in all these parts; no traces or noticeable fuel smell coming from the VMVs that would suggest fuel saturation).

Kevin Coryea has developed a revised EVR cover with standoffs that appear to address contamination issues (we opened a number of samples that had just completed 12 hours exposure to dust and found those with revised cover were clean). Excellent news!

I have requested Eaton supply me with a number of staged failures on their Escape VMVs



so that we can test them in-vehicle. We intend to verify whether the staged failures are indeed responsible for what the dealers are seeing. (Our team was surprised with the Siemens VMVs that contamination (non-brass) caused a P1450 DTC and not a P0455).

<< File: 2001 2002 TOP NCC 9C915.xls >>

<< File: Dealer Parts Return List.xls >>

That's all for now.

*Fran McCarthy St. Clair (fmccarth)*  
*VMV & EVMV*  
*Outfitter Stationery Components*  
*Phone: (313) 32-25718*  
*Fax: (313) 84-50578*  
*E-Mail: fmccarth@ford.com*

---

**From:** McCarthy, Fran (F.)  
**Sent:** Wednesday, October 23, 2002 12:55 PM  
**To:** Dalbo, Bob (R.J.); Florini, John (J.J.); Fournelle, Gilbert (G.);  
'marchsanderson@eaton.com'; 'hafflerol@eaton.com'  
**Cc:** Coryea, Kevin (K.W.); Hansen, George (G.C.); Mancini, Doug (D.J.); Boggs, Dave (D.L.);  
Whitworth, Rudy (A.R.); Hoffman, Tom (T.W.); Corbett, Sandra (S.M.)  
**Subject:** RE: Escape VMV Warranty

Bob,

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Thanks a lot Bob.

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**Sent:** Wednesday, October 23, 2002 12:47 PM  
**To:** McCarthy, Fran (F.); Florini, John (J.J.); Gilbert Fournelle  
**Cc:** Coryea, Kevin (K.W.); Hansen, George (G.C.); Mancini, Doug (D.J.); Boggs, Dave (D.L.); Whitworth, Rudy (A.R.); Hoffman, Tom (T.W.); Corbett, Sandra (S.M.)  
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*Bob Dalbo*

*3.0L Calibration Supervisor*  
*Outfitters Calibration, NAT*  
*Phone: (313) 24-84947 Fax: (313) 32-31786*  
*Pager: (313) 795-2859 Email: rdbd@ford.com*

-----Original Message-----

**From:** McCarthy, Fran (F.)  
**Sent:** Tuesday, October 22, 2002 5:27 PM  
**To:** Whitworth, Rudy (A.R.); Hoffman, Tom (T.W.); Florini, John (J.J.); Corbett, Sandra (S.M.)  
**Cc:** Coryea, Kevin (K.W.); Hansen, George (G.C.); Mancini, Doug (D.J.); Boggs, Dave (D.L.); McCarthy, Fran (F.); Dalbo, Bob

**Subject:** (R.J.)  
Escape VMV Warranty

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1. Top 20 Customer Concern Codes for -9C915-. You will notice that "Stall" is No. 2 on the list (TSB 02-11-6 for IAC replacement also includes VMV replacement).
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*Fran McCarthy St. Clair (fmccarth)*  
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*Outfitter Stationery Components*  
*Phone: (313) 32-25718*  
*Fax: (313) 84-50578*  
*E-Mail: fmccarth@ford.com*

**From:** Dalbo, Bob (R.J.)  
**Sent:** Wednesday, October 23, 2002 1:03 PM  
**To:** McCarthy, Fran (F.); Florini, John (J.J.); Fournelle, Gilbert (G.);  
marchsanderson@eaton.com; hallierol@eaton.com; Rothweiler, Daniel (D.)  
**Cc:** Coryea, Kevin (K.W.); Hansen, George (G.C.); Mancini, Doug (D.J.); Boggs, Dave (D.L.);  
Whitworth, Rudy (A.R.); Hoffman, Tom (T.W.); Corbett, Sandra (S.M.)  
**Subject:** RE: Escape VMV Warranty

Fran,  
I believe Dan Rothweiler of Mazda confirmed that the VMV discussed here did in fact cause stalling on that vehicle. We have shown via simulation that the VMV can cause a stall if it sticks shut and pops open after its input duty cycle has ramped high. We will be happy to discuss this and the diagnostic in the TSB this Thursday.

## *Bob Dalbo*

3.DL Calibration Supervisor  
Outfitters Calibration, NAT  
Phone: (313) 24-84847 Fax: (313) 32-31786  
Pager: (313) 795-2859 Email: rdalbo@ford.com

—Original Message—

**From:** McCarthy, Fran (F.)  
**Sent:** Wednesday, October 23, 2002 12:55 PM  
**To:** Dalbo, Bob (R.J.); Florini, John (J.J.); Fournelle, Gilbert (G.); marchsanderson@eaton.com; hallierol@eaton.com  
**Cc:** Coryea, Kevin (K.W.); Hansen, George (G.C.); Mancini, Doug (D.J.); Boggs, Dave (D.L.); Whitworth, Rudy (A.R.); Hoffman, Tom (T.W.); Corbett, Sandra (S.M.)  
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**To:** Whitworth, Rudy (A.R.); Hoffman, Tom (T.W.); Florini, John (J.J.); Corbett, Sandra (S.M.)  
**Cc:** Coryea, Kevin (K.W.); Hansen, George (G.C.); Mancini, Doug (D.J.); Boggs, Dave (D.L.); McCarthy, Fran (F.); Dalbo, Bob (R.J.)  
**Subject:** Escape VMV Warranty

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*Fran McCarthy St. Clair (fmccarth)*  
VMV & EVMV  
Outfitter Stationary Components  
Phone: (313) 32-25718  
Fax: (313) 84-50578  
E-Mail: [fmccarth@ford.com](mailto:fmccarth@ford.com)

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**Subject:** Canceled: 3.0L U204 Phantom stall meeting  
**Location:** TEE CR#1

**Start:** Thu 10/24/2002 2:00 PM  
**End:** Thu 12/19/2002 3:00 PM  
**Show Time As:** Free

**Recurrence:** (none)

**Meeting Status:** Not yet responded

**Required Attendees:** Fournelle, Gilbert (G.)  
**Optional Attendees:** Freeland, Mark (M.); Nakano, Hideki (H.); Hofman, Michael (M.V.); Piroo, Martin (M.); Takasawa, Keith (K.D.); Lawler, Dave (D.A.); Hoshino, Jun (J.)

**Importance:** High

Meeting agenda and meeting minutes will be send separately on a weekly basis.

toll free: 1-888-227-7015  
Ford net: 954-1208  
International: 1-630-693-6145

pass code: 8402370#  
moderator code: 3457370

**Subject:** Updated: 3.0L U204 Phantom stall meeting  
**Location:** TEE CR#1

**Start:** Thu 10/24/2002 2:00 PM  
**End:** Thu 12/19/2002 3:00 PM  
**Show Time As:** Tentative

**Recurrence:** (none)

**Meeting Status:** Not yet responded

**Required Attendees:** Fournelle, Gilbert (G.); Altoonian, Don (D.J.); Bauer, Scott (S.C.); Bhojwani, Kamal (K.); Blackburn, Thomas (T.J.); Bogema, John (P.); Cary Powell (E-mail); Chick, John (J.); Chih, Ming-Niu (M.N.); Chin, Darrel (D.); Corbett, Sandra (S.M.); Dalbo, Bob (R.J.); De Pena, Juan (J.E.); Diez, Timothy (T.P.); Duvall, Allen (A.W.); Fascetti, Bob (R.J.); Fournelle, Gilbert (G.); Freeland, Mark (M.); Giles, Stuart (S.); Goldhale, Renuka (R.V.); Goodwin, William (W.R.); Grewal, Bill (B.S.); Grimes, Jeff (J.R.); Hansen, George (G.C.); Herr, George (G.J.); Hofman, Michael (M.V.); Holmes, Jeffrey (J.R.); Hoshino, Jun (J.); Ichikawa, Jiyunichiro (J.); Jensen, Ted (T.E.); Jones, Andy; Jordan, Donald (D.E.); Kanai, Shiro (S.); Khan, Naveed; Koeko, Jeff (J.R.); Kwon, Soon (S.K.); Lawler, Dave (D.A.); Le, Dzong (D.H.); Limitaco, Steven (S.); Linda, Peter (P.A.); Liu, Jane (J.); Marck, Edmond (E.C.); Marianos, Tom (T.E.); Matesa, John (J.); Maurer, James (J.B.); Mazzella, Gary (G.R.); McDonald, John; McGee, Brett (B.L.); Mooney, Larry (L.); Moorhouse, Scott (S.R.); TMORGA43 was deleted 20021116; Morishima, Shigeki (S.); Nakano, Hideki (H.); Nematollah, Sonya (S.); Nikolaj, bernie; Noteboom, Jim (J.E.); Ortman, James (J.W.); Powers, Ken (K.W.); Price, Martin (M.); Raquepau, Alden (A.P.); Rothweller, Daniel (D.); Shah, Kiran (K.C.); Shirahsi, Masaru (M.); Stiggenbauer, Jeffrey (J.R.); Suarez, Rhea (R.); Takasawa, Keith (K.D.); Takubo, Hiroichi (H.); Venatra, Tim (T.W.); Wakenell, Ray (R.A.); Wettach, Bill (B.); Williams, Lee (LHW.)

Meeting agenda and meeting minutes will be send separately on a weekly basis.

toll free: 1-866-227-7015  
Ford net: 954-1208  
International: 1-630-893-6145

pass code: 8402370#  
moderator code: 3457370

**Subject:** Updated: 3.01. U204 Phantom stall meeting  
**Location:** TEE CR#1

**Start:** Thu 10/24/2002 2:00 PM  
**End:** Thu 10/24/2002 3:00 PM  
**Show Time As:** Tentative

**Recurrence:** Weekly  
**Recurrence Pattern:** every Thursday from 2:00 PM to 3:00 PM

**Meeting Status:** Not yet responded

**Required Attendees:** Fournelle, Gilbert (G.); Alconian, Don (D.J.); Bauer, Scott (S.C.); Bhotwani, Kamal (K.); Blackburn, Thomas (T.J.); Bogema, John (P.); Cary Powell (E-mail); Chick, John (J.); Chin, Ming-Niu (M.N.); Chin, Darrel (D.); Corbett, Sandra (S.M.); Dabo, Bob (R.J.); De Pena, Juan (J.E.); Diaz, Timothy (T.P.); Duvall, Allen (A.W.); Fascetti, Bob (R.J.); Fournelle, Gilbert (G.); Freeland, Mark (M.); Giles, Stuart (S.); Gokhale, Renuka (R.V.); Goodwin, William (W.R.); Grewal, Bill (B.S.); Grimes, Jeff (J.F.); Hansen, George (G.C.); Herr, George (G.J.); Hofman, Michael (M.V.); Holmes, Jeffrey (J.R.); Hoshino, Jun (J.); Ichikawa, Jiyunichiro (J.); Jensen, Ted (T.E.); Jones, Andy; Jordan, Donald (D.E.); Kanai, Shinji (S.); Khan, Neveed; Koeko, Jeff (J.R.); Kwon, Soon (S.K.); Lawler, Dave (D.A.); Le, Dzung (D.H.); Limtlaco, Steven (S.); Linda, Peter (P.A.); Liu, Jane (J.); Marck, Edmond (E.C.); Marlane, Tom (T.E.); Matess, John (J.); Maurer, James (J.B.); Mazzella, Gary (G.R.); McDonald, John; McGee, Brett (B.L.); Mooney, Larry (L.); Moorhouse, Scott (S.R.); TMORGA43 was deleted 20021116; Morishima, Shigeki (S.); Nakano, Hideki (H.); Nematollahi, Sonya (S.); Nikolai, Bernie; Noteboom, Jim (J.E.); Orman, James (J.W.); Powers, Ken (K.W.); Price, Martin (M.); Requespau, Alden (A.P.); Rothweller, Daniel (D.); Shah, Kiran (K.C.); Shirahsi, Masaru (M.); Sillgenbauer, Jeffrey (J.R.); Suarez, Rhae (R.); Takasawa, Keith (K.D.); Takubo, Hirochi (H.); Veenstra, Tim (T.W.); Wakenell, Ray (R.A.); Wettach, Bill (B.); Williams, Lee (L.H.W.)

**Optional Attendees:** Hofman, Michael (M.V.)

I made a mistake in the previous meeting notice (it was one continuous meeting instead of a weekly 1 hour meeting). Sorry for the inconvenience.

Meeting agenda and meeting minutes will be send separately on a weekly basis.

toll free: 1-866-227-7015  
Ford net: 954-1206  
International: 1-630-693-6145

pass code: 8402370#  
moderator code: 3457370



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**From:** Fournelle, Gilbert (G.)  
**Sent:** Wednesday, October 23, 2002 1:59 PM  
**To:** Goodwin, William (W.R.)  
**Subject:** RE: Updated: 3.0L U204 Phantom stall meeting

It should be fixed now. Thanks for the note.

Sincerely,

***Gilbert Fournelle***

V8 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904988 Fax:(313)3231786

—Original Appointment—

**From:** Goodwin, William (W.R.)  
**Sent:** Wednesday, October 23, 2002 1:55 PM  
**To:** Fournelle, Gilbert (G.)  
**Subject:** Tentative: Updated: 3.0L U204 Phantom stall meeting  
**When:** Thursday, October 24, 2002 2:00 PM to Thursday, December 19, 2002 3:00 PM (GMT-05:00) Eastern Time (US & Canada).  
**Where:** TEE CR#1

Gilbert,

You inadvertently set up this meeting to last for 2 months continuously. Could you please correct this.

**From:** Erol, Halil [HalilErol@eaton.com]  
**Sent:** Wednesday, October 23, 2002 3:47 PM  
**To:** Dalbo, Bob (R.J.); McCarthy, Fran (F.); Fiorini, John (J.J.); Fournelle, Gilbert (G.); Sanderson, Marc H; Rothweiler, Daniel (D.)  
**Cc:** Coryea, Kevin (K.W.); Hansen, George (G.C.); Mancini, Doug (D.J.); Boggs, Dave (D.L.); Whitworth, Rudy (A.R.); Hoffman, Tom (T.W.); Corbett, Sandra (S.M.)  
**Subject:** RE: Escape VMV Warranty

Fran,  
Per my explanation at EATON yesterday, the positive pressure from the canister port to the engine port of any VMV should not exceed 18-19 in of H2O pressure. Spec is 17.5 in of H2O+. Otherwise, fuel tank will overflow through canister to the manifold of engine.  
Halil Erol

-----Original Message-----

**From:** Dalbo, Bob (R.J.) [mailto:rdalbo@ford.com]  
**Sent:** Wednesday, October 23, 2002 1:03 PM  
**To:** McCarthy, Fran (F.); Fiorini, John (J.J.); Fournelle, Gilbert (G.); Sanderson, Marc H; Erol, Halil; Rothweiler, Daniel (D.)  
**Cc:** Coryea, Kevin (K.W.); Hansen, George (G.C.); Mancini, Doug (D.J.); Boggs, Dave (D.L.); Whitworth, Rudy (A.R.); Hoffman, Tom (T.W.); Corbett, Sandra (S.M.)  
**Subject:** RE: Escape VMV Warranty

Fran,  
I believe Dan Rothweiler of Mazda confirmed that the VMV discussed here did in fact cause stalling on that vehicle. We have shown via simulation that the VMV can cause a stall if it sticks shut and pops open after its input duty cycle has ramped high. We will be happy to discuss this and the diagnostic in the TSB this Thursday.

Bob Dalbo  
3.0L Calibration Supervisor  
Outfitters Calibration, NAT  
Phone: (313) 24-84947 Fax: (313) 32-31786  
Pager: (313) 795-2859 Email: rdalbo@ford.com

> -----Original Message-----

> **From:** McCarthy, Fran (F.)  
> **Sent:** Wednesday, October 23, 2002 12:55 PM  
> **To:** Dalbo, Bob (R.J.); Fiorini, John (J.J.); Fournelle, Gilbert (G.); 'marchsanderson@eaton.com'; 'halilerol@eaton.com'  
> **Cc:** Coryea, Kevin (K.W.); Hansen, George (G.C.); Mancini, Doug (D.J.); Boggs, Dave (D.L.); Whitworth, Rudy (A.R.); Hoffman, Tom (T.W.); Corbett, Sandra (S.M.)  
> **Subject:** RE: Escape VMV Warranty  
>

> Bob,  
> You may have noticed on the Dealer Returned Parts List that the VMV from the Tribute that you gave me for analysis was found to be "Good" after testing it at Eaton. Something else caused  
> that stall problem on the Tribute but it was not the VMV. We should discuss this further at the  
> 2:00 meeting tomorrow. The engineers from Eaton will be on line for this meeting as well.

> Thanks a lot Bob.

>  
> Fran McCarthy St. Clair (fmccarth)  
> VMV & EVMV  
> Outfitter Stationery Components  
> Phone: (313) 32-25718  
> Fax: (313) 84-50578  
> E-Mail: fmccarth@ford.com

> -----Original Message-----

> From: Dalbo, Bob (R.J.)  
> Sent: Wednesday, October 23, 2002 12:47 PM  
> To: McCarthy, Fran (F.); Fiorini, John (J.J.); Gilbert Fournelle  
> Cc: Coryea, Kevin (K.W.); Hansen, George (G.C.); Mancini, Doug (D.J.);

Boggs, Dave (D.L.); Whitworth, Rudy (A.R.); Hoffman, Tom (T.W.); Corbett, Sandra (S.M.)

> Subject: RE: Escape VMV Warranty

> Fran/John,

> There are still two possible reasons for these VMV replacements:

> 1) Dealers are erroneously replacing them

> 2) The part specifications that influence stalling are not defined or inadequately defined.

> We have already discovered one part (an evap system check valve) where reason 2 caused stalls.

> We look forward to your participation in our 2:00 Thursday stall meeting.

This week's meeting will be strictly call-in since the calibration team is

at APG. Gilbert Fournelle will send out the meeting notice shortly.

> Bob Dalbo

> 3.0L Calibration Supervisor

> Outfitters Calibration, NAT

> Phone: (313) 24-84947 Fax: (313) 32-31786

> Pager: (313) 795-2859 Email: rdalbo@ford.com

> -----Original Message-----

> From: McCarthy, Fran (F.)

> Sent: Tuesday, October 22, 2002 6:27 PM

> To: Whitworth, Rudy (A.R.); Hoffman, Tom (T.W.); Fiorini, John

(J.J.);  
Corbett, Sandra (S.M.)  
> Cc: Coryea, Kevin (K.W.); Hansen, George (G.C.); Mancini, Doug  
(D.J.);  
Boggs, Dave (D.L.); McCarthy, Fran (F.); Dalbo, Bob (R.J.)  
> Subject: Escape VMV Warranty  
>  
> I am sending you the following documents relative to Escape VMV  
Warranty  
>  
> 1. Top 20 Customer Concern Codes for -9C915-. You will notice  
that  
> "Stall" is No. 2 on the list (TSB 02-11-6 for IAC  
replacement  
> also includes VMV replacement).  
>  
> 2. Dealer parts return list (with symptom) with Eaton test  
results.  
Most  
> dealers are replacing VMVs for Stall issue. Eaton is  
finding  
TMI as a  
> result of their testing.  
>  
> I am meeting with the Stall Team next week to examine the reason for  
including the VMV in their TSB. Unless the VMV is saturated with fuel,  
it  
probably shouldn't create a stall concern (according to my discussion  
with  
Doug Mancini). I received and logged in all these parts; no traces or  
noticeable fuel smell coming from the VMVs that would suggest fuel  
saturation).  
>  
> Kevin Coryea has developed a revised EVR cover with standoffs that  
appear  
to address  
> contamination issues (we opened a number of samples that had just  
completed 12 hours  
> exposure to dust and found those with revised cover were clean).  
Excellent news!!  
>  
> I have requested Eaton supply me with a number of staged failures on  
their  
Escape VMVs  
> so that we can test them in-vehicle. We intend to verify whether the  
staged failures are indeed responsible for what the dealers are seeing.  
(Our team was surprised with the Siemens VMVs  
> that contamination (non-brass) caused a P1450 DTC and not a P0455).  
>  
> << File: 2001 2002 TOP NCC 9C915.xls >> <<  
File:  
Dealer Parts Return List.xls >>  
>  
> That's all for now.  
>  
> Fran McCarthy St. Clair (fmccarth)  
> VMV & EVMV  
> Outfitter Stationery Components  
> Phone: (313) 32-25718

> Fax: (313) 84-50578  
> E-Mail: [fnccarth@ford.com](mailto:fnccarth@ford.com)  
>  
>  
>

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**From:** Grimes, Jeff (J.R.)  
**Sent:** Thursday, October 24, 2002 2:32 PM  
**To:** Fournelle, Gilbert (G.); Suarez, Rhae (R.)  
**Subject:** Latest SSM/TSB planned for stalls

Can someone forward me the latest verbage on the new TSB/SSM being drafted...

Internally, we are having some discussion about removing IAC and DPFE from the "default replacement"

Some verbage clarifying a part # check may be suitable...but I want to take a look...

*Jeff Grimes*  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company  
ph: (313) 322-6237 fax: (313) 594-7323  
e-mail: jgrimes1@ford.com

**From:** Sloan, Burt (B.E.)  
**Sent:** Friday, October 25, 2002 1:39 PM  
**Cc:** Klar, Jerry (G.T.); Hofman, Michael (M.V.); Corbett, Sandra (S.M.); Van Wiemeersch, John (J.R.); Adams, Kerry (K.N.); Austin, James (J.E.); Bogema, John (P.); Boyk, Greg (G.J.); Coffey, Dan (D.C.); Crowley, Pat (P.J.); Dakhallah, Hassan (H.A.); Dalbo, Bob (R.J.); DeLaroderie, Jim (J.A.); Dennis, Matt (M.A.); Dixon, Mark (M.R.); Fascetti, Bob (R.J.); Fournelle, Gilbert (G.); Gaynier, Larry (L.J.); Gibson, Patrick (P.W.); Hansen, George (G.C.); Hedges, John (J.E.); Hille, Kevin (K.T.); Kleiszewski, Mark (M.D.); King, Brian (B.M.); Kosko, Jeff (J.R.); Lewis, Marvin (M.A.); Limatta, Gary (G.D.); Liller, David (D.J.); Lyon, Peter (P.M.); Matkovich, Dale (D.M.); Mazzella, Gary (G.R.); McIntee, Brian (B.E.); Newman, Chris (C.W.); Perlick, Don (D.A.); Putney, Bill (W.); Ross, Ann (A.M.); Sabin, Scott (S.M.); Schwochert, Steven (S.P.); Scott, Damon (D.A.); Sloan, Burt (B.E.); Squires, Mark (D.M.); Stelmazozak, Robert (R.); Turner, Donald (D.A.); Wettach, Bill (B.); Whitehead, Joe (J.P.); Young, Dan (D.G.)  
**Subject:** FW: U152, UP207, & U204 Drivability Team Meeting 10/30/02

Per Pat's request, I am forwarding his note.

-----Original Message-----

**From:** Crowley, Pat (P.J.)  
**Sent:** Friday, October 25, 2002 10:47 AM  
**To:** Sloan, Burt (B.E.)  
**Subject:** RE: U152, UP207, & U204 Drivability Team Meeting 10/30/02

Your minutes come close to capturing what I said, but they might be a little misleading. Could you forward this to the team?

1) We investigated the distortion caused by assembling the TB to the intake flange. The effect on airflow was equal whether assembled to a flat steel plate or to an intake manifold because it is caused by bolt and gasket loading, not the shape of the flange. The change in airflow due to assembly is consistent and is small compared to the variation caused by heat and humidity, so working to improve flatness will not provide any real benefit.

2) Moisture absorption and heat exposure are causing the throttle body housing to grow and shrink, respectively. The the magnitude of the effect on airflow is being quantified, but an engineering estimate is 1.5 to 2.0 SCFM based on the change to bore diameter. This is being verified by test in environmental chamber. The most promising improvement is an increase in the glass fiber content. There are risks, however, that need to be evaluated.

*Patrick J. Crowley*  
Six Sigma Black Belt Candidate  
Cyclone V8 Systems Engineering  
Ph. 313-390-2672  
FAX 313-322-9265

-----Original Message-----

**From:** Sloan, Burt (B.E.)  
**Sent:** Friday, October 25, 2002 9:55 AM  
**To:** Adams, Kerry (K.N.); Whitehead, Joe (J.P.); Sabin, Scott (S.M.); Hart, Jenny (J.); Boyk, Greg (G.J.); Lyon, Peter (P.M.); Hedges, John (J.E.)  
**Cc:** Klar, Jerry (G.T.); Hofman, Michael (M.V.); Corbett, Sandra (S.M.); Van Wiemeersch, John (J.R.); Adams, Kerry (K.N.); Austin, James (J.E.); Bogema, John (P.); Boyk, Greg (G.J.); Coffey, Dan (D.C.); Crowley, Pat (P.J.); Dakhallah, Hassan (H.A.); Dalbo, Bob (R.J.); DeLaroderie, Jim (J.A.); Dennis, Matt (M.A.); Dixon, Mark (M.R.); Fascetti, Bob (R.J.); Fournelle, Gilbert (G.); Gaynier, Larry (L.J.); Gibson, Patrick (P.W.); Hansen, George (G.C.); Hedges, John (J.E.); Hille, Kevin (K.T.); Kleiszewski, Mark (M.D.); King, Brian (B.M.); Kosko, Jeff (J.R.); Lewis, Marvin (M.A.); Limatta, Gary (G.D.); Liller, David (D.J.); Lyon, Peter (P.M.); Matkovich, Dale (D.M.); Mazzella, Gary (G.R.); McIntee, Brian (B.E.); Newman, Chris (C.W.); Perlick, Don (D.A.); Putney, Bill (W.); Ross, Ann (A.M.); Sabin, Scott (S.M.); Schwochert, Steven (S.P.); Scott, Damon (D.A.); Sloan, Burt (B.E.);

Subject: U152, UP207, & U204 Drivability Team Meeting 10/30/02

**U152, UP207, & U204 Drivability Team  
Oct. 30, 2002  
8:00 am to 10:00 am  
TEE - Conference Rm 1**

**Call In Phone Number: 9-1-877-877-7126  
Participant Code: 6341969 #**

**Oct. 23, 2002 Meeting Agenda:**

- |  |   |
|--|---|
| 1) UP207 & U152 Black Smoke Issue<br>Fishbone review and potential root causes                         | Kerry Adams<br>Joe Whitehead<br>Scott Sabin |
| 2) U152 4.0L Hesitation / Rough Running On Cold Start after<br>engagement<br>Discuss Root Cause Status | Jenny Hart<br>Greg Boyk                     |
| 3) U152 4.6L Stalls Follow Up<br>Review Overall Claims analysis  | Pete Lyon                                   |
| 4) U152 4.0L D02 No Start<br>Review Claims Analysis  | John Hedges                                 |

**Oct. 16, 2002 Meeting Minutes:**

- 1) UP207 & U152 Black Smoke Issue  
Scott Sabin and Don Perlick continue to work on root cause
- 2) UP207 Stalls Claims Analysis Follow Up  
Burt will review claims for Duplicates  
Fuel Pump Pressure Lower limit of spec was raised Sep 02  
This may result in more repairs  
Marek is looking at the diagnostic procedures for stalls  
Will report out in two weeks
- 3) U152 Power Distribution Box 6 Sigma Project Review  
Ran & Gary stated this project is in the define stage, providing the financials and scope. This project will focus on assy the nut to the B + Battery Cable  
Will report out within a month
- 4) U152 4.0L TB to Intake Interface discussion  
  
Pat Crowley stated that the unfinished surfaces of the TB & Intake interface does not affect distortion of the TB. Pat states it is the torque pushing on the TB gasket that distorts the TB.



Pat states heat and Humidity affecting the plastic causes the TB distortion  
Pat is investigating a material change of the TB  
John Hedgee recommends a 6 sigma project on dynamic variability of  
IAC, MAF and TB

**From:** Dalbo, Bob (R.J.)  
**Sent:** Wednesday, October 30, 2002 4:07 PM  
**To:** Bob Fascetti  
**Cc:** Rothweiler, Daniel (D.); Gilbert Fournelle  
**Subject:** FW: Failed Eaton VMV from Bob Dalbo - X-Ray Results

**Importance:** High

Well, well, well. The "TNI" VMV that Dan Rothweiler returned for staffing is actually bad.

## *Bob Dalbo*

3.0L Calibration Supervisor  
Outitters Calibration, NAT  
Phone: (313) 24-84847 Fax: (313) 32-31786  
Pager: (313) 795-2859 Email: [rdalbo@ford.com](mailto:rdalbo@ford.com)

### —Original Message—

**From:** McCarthy, Fran (F.)  
**Sent:** Wednesday, October 30, 2002 10:50 AM  
**To:** Lloyd, John (J.M.); Boggs, Dave (D.L.); Cornea, Kevin (K.W.); McCarthy, Fran (F.); Odum, Iles (I.C.); Altonian, Don (D.L.); Stuart, Stephanie (S.S.)  
**Cc:** Dalbo, Bob (R.J.); Corbett, Sandra (S.M.); Florini, John (J.J.); Abbasi, Basel (B.A.); Whitworth, Rudy (A.R.); Hofman, Michael (M.V.); Hansen, George (G.C.); Dumier, Jeff (J.D.); Mancini, Doug (D.J.)  
**Subject:** Failed Eaton VMV from Bob Dalbo - X-Ray Results  
**Importance:** High

### BACKGROUND

Bob Dalbo returned Eaton VMV #37 for analysis. VMV was believed to be functioning intermittently causing random stalls on a 3.0L Escape. The VMV was given to Eaton for testing and found to be "good" based on their tests.

### X-RAY ANALYSIS

VMV #37 was x-rayed at Ford Central Lab on 30-Oct-2002 by Alex Zinkosky. The VMV was x-rayed (1) "as is" and then (2) after tapping the VMV. His findings are as follows:

1. The diaphragm is warped.
2. The diaphragm is binding up on one side. The diaphragm shifted position after being tapped and moved to a center position.
3. The spring was off-center along with the diaphragm. The spring also moved back to the center position after being tapped.
4. Obvious contaminant was found wrapped around the calibration screw. It did not shift position after being tapped. Contaminant looks like plastic flashing.
5. The Scraeder valve appears to be stuck open. It did not close after being tapped.

### NEXT STEPS

This VMV needs a teardown analysis with the right people present. There appears to be several opportunities for black belt projects given the information we found (above). One of the more important projects might well be why Eaton's test equipment did not detect a problem.

I will set up a meeting to discuss dissemination of these projects to the Black Belts (per discussion with Rudy Whitworth this a.m.). In the meantime, I am still receiving 100% of all Eaton VMVs from the field and engineering. I intend to continue this practice; however, I will have a mix of these parts that will be x-rayed (resource considerations at Central Lab) prior to delivery to Eaton. I would suggest that we consider increasing our dialogue with Eaton on a regular basis (as opposed to every 2 weeks) and involve Ford STA

(Stephanie Stuart) In this project.

That's all for now.

*Fran McCarthy St. Clair (fmccarth)*  
*VMV & EVMV*  
*Outfitter Stationary Components*  
*Phone: (313) 32-25718*  
*Fax: (313) 84-50578*  
*E-Mail: fmccarth@ford.com*

---

**From:** Lawler, Dave (D.A.)  
**Sent:** Thursday, October 31, 2002 7:40 AM  
**To:** Fournelle, Gilbert (G.)  
**Subject:** Out of Office AutoReply: 3.0L U204 Phantom stall meeting agenda 10/31/02

I'm out-of-office: In MI for FCSD Business Meetings, Training, and some Vacation Time.  
I will be back in-office Wednesday 11/6/2002.

While I'm gone, Contact ...  
Rhae Suarez (RSUAREZ8/8-313-322-3344)  
for Escape Vehicle Issues,  
and  
Tom Niland (TNILAND/313-337-3702) or  
Ed Schrader (ESCHRADE/8-635-2314)  
for F-150 Vehicle Issues.  
and  
Les Little (LLITTLE3/816-414-5546)  
for Blackwood In-Plant/KCAP issues.

Thanks.

---

**From:** Fournelle, Gilbert (G.)  
**Sent:** Thursday, October 31, 2002 11:15 AM  
**To:** Wanat, Richard (R.L.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Bogema, John (P.)  
**Subject:** Meeting minutes with Dick Wanat on MAF feedback algorithm

General consensus exists on the following items:

- The MAF feedback algorithm is able to adjust airflow during a decel, whereas RPM control cannot.
- The MAF feedback algorithm drives ISCKAM errors close to zero if the air characterization is done correctly.
- The MAF feedback algorithm needs a KAM correction for stall robustness (as implemented in Black Oak).
- The Ranger MAF feedback strategy nor calibration was not optimized for stall robustness.

Disagreement exists on the following issues:

- DESMAF is the desired mass airflow to operate at a certain RPM.
  - It is Mr. Wanat's position that DESMAF contains fudge factors to operate at a certain RPM.
  - It is the position of the 3.0L U204 calibration team however, that the main "fudge" factor is the error in ISC valve characterization. If one guarantees that DESMAF agrees with AM, the only fudge factors left are the relatively small ISCKAMs due to engine friction etc. When the calibration of the air tables is performed, the tables are populated with the measurement AM. Therefore, we would like to have an agreement between DESMAF and AM, since the tables feed into desmaf during normal operation.
- The fact that the ISCKAMs are driven to 0 is desirable.
  - Mr. Wanat does not feel comfortable with the fact the ISCKAMs are small when MAF feedback algorithm is enabled.
  - It is our position that small ISCKAMs prove that the air tables have been calibrated correctly. If we get the amount of air which we would like to get ( $desmaf=am$ ) then engine is actually running at the RPM which we desire ( $ISCKAM=0$ , means no error in RPM). There is absolutely no loss in functionality. The error due to ISC valve characterization is stored in a KAM value ( $IDC\_CL\_KAM$ ) rather than as one or more of the four ISCKAMS, and is not lost. In addition it will reduce the time needed to update the slow learning ISCKAMs.
- $IDC\_CL\_KAM$  updates very fast, which is desirable.
  - Mr. Wanat feels that this may be an issue.
  - We rely on the fact that the algorithm updates fast to be able to be robust against non repeatable behavior in ISC valves.
- MAF feedback should be enabled at idle.
  - Mr. Wanat feels that this algorithm should not be enabled at idle, so that the ISCKAMs learn the entire air error.
  - We believe functionality is enhanced with fast MAF feedback enabled at idle. There would be a serious discontinuity if MAF feedback was dropped upon entering RPM control. The source of the correction stored in  $IDC\_CL\_KAM$  is and remains an error in ISC valve characterization. This does not suddenly change upon entering RPM control. It therefore makes no sense to relearn the correction which already has been learned in  $IDC\_CL\_KAM$  in ISCKAM.
- MAF feedback is necessary to achieve current warranty targets.
  - Mr. Wanat feels that non MAF feedback strategy is adequate and sufficient.

- The 3.0L U204 team believes that with the current hardware specifications of ISC valves, it is imperative to enable MAF feedback to increase robustness and improve stall warranty.

Regards,

*Gilbert Fournelle*

V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904968 Fax:(313)3231786

**From:** Dan Rothweiler [DRothwei@mazdausa.com]  
**Sent:** Thursday, October 31, 2002 12:35 PM  
**To:** Dalbo, Bob (R.J.); Bob Fascetti  
**Cc:** Gilbert Fournelle; Don Altoonian; McCarthy, Fran (F.)  
**Subject:** RE: Failed Eaton VMV from Bob Dalbo - X-Ray Results

Bob, I mentioned this on last weeks conference call. According to one of our technicians, he has a Tribute VMV that was apparently stuck closed. I have requested that part to be shipped to me and I will forward it to you. He also indicated that it wasn't intermittently acting up but stuck all the time. I'll let you know when I ship the VMV to you. I won't be on today's call but I wanted to let you know.

Daniel H. Rothweiler  
Mazda North American Operations  
Fixed Operations Technical Specialist  
Office: 732-868-2135  
Fax: 214-442-5222  
Cellular: 732-547-8578

<http://www.mazdausa.com/mazda6>

-----Original Message-----

**From:** Dalbo, Bob (R.J.) [mailto:rdalbo@ford.com]  
**Sent:** Wednesday, October 30, 2002 4:07 PM  
**To:** Bob Fascetti  
**Cc:** Rothweiler, Daniel (D.); Gilbert Fournelle  
**Subject:** FW: Failed Eaton VMV from Bob Dalbo - X-Ray Results  
**Importance:** High

Well, well, well. The "TNI" VMV that Dan Rothweiler returned for stalling is actually bad.

Bob Dalbo  
3.0L Calibration Supervisor  
Outfitters Calibration, NAT  
Phone: (313) 24-84947 Fax: (313) 32-31786  
Pager: (313) 795-2859 Email: rdalbo@ford.com

> -----Original Message-----

> **From:** McCarthy, Fran (F.)  
> **Sent:** Wednesday, October 30, 2002 10:50 AM  
> **To:** Lloyd, John (J.N.); Boggs, Dave (D.L.); Coryea, Kevin (K.W.); McCarthy, Fran (F.); Odum, Ike (I.C.); Altoonian, Don (D.J.); Stuart, Stephanie (S.S.)  
> **Cc:** Dalbo, Bob (R.J.); Corbett, Sandra (S.M.); Fiorini, John (J.J.); Abbasi, Basel (B.A.); Whitworth, Rudy (A.R.); Hofman, Michael (M.V.); Hansen, George (G.C.); Dumler, Jeff (J.D.); Mancini, Doug (D.J.)

> Subject: Failed Eaton VMV from Bob Dalbo - X-Ray Results  
> Importance: High  
>  
> BACKGROUND  
> Bob Dalbo returned Eaton VMV #37 for analysis. VMV was believed to be functioning intermittently causing random stalls on a 3.0L Escape. The VMV was given to Eaton for testing and found to be "good" based on their tests.  
>  
> X-RAY ANALYSIS  
> VMV #37 was x-rayed at Ford Central Lab on 30-Oct-2002 by Alex Zinkosky. The VMV was x-rayed (1) "as is" and then (2) after tapping the VMV. His findings are as follows:  
>  
> 1. The diaphragm is warped.  
> 2. The diaphragm is binding up on one side. The diaphragm shifted position after being tapped and moved to a center position.  
> 3. The spring was off-center along with the diaphragm. The spring also moved back to the center position after being tapped.  
> 4. Obvious contaminant was found wrapped around the calibration screw. It did not shift position after being tapped. Contaminant looks like plastic flashing.  
> 5. The Scraeder valve appears to be stuck open. It did not close after being tapped.  
>  
> NEXT STEPS  
> This VMV needs a teardown analysis with the right people present. There appears to be several opportunities for black belt projects given the information we found (above). One of the more important projects might well be why Eaton's test equipment did not detect a problem.  
>  
> I will set up a meeting to discuss dissemination of these projects to the Black Belts (per discussion with Rudy Whitworth this a.m.). In the meantime, I am still receiving 100% of all Eaton VMVs from the field and engineering. I intend to continue this practice; however,  
> I will have a mix of these parts that will be x-rayed (resource considerations at Central Lab) prior to delivery to Eaton. I would suggest that we consider increasing our dialogue with Eaton on a regular basis (as opposed to every 2 weeks) and involve



Ford

STA

> (Stephanie Stuart) in this project.

>

> That's all for now.

>

>

>

> Fran McCarthy St. Clair (fmccarth)

> VMV & EVMV

> Outfitter Stationary Components

> Phone: (313) 32-25718

> Fax: (313) 84-50578

> E-Mail: fmccarth@ford.com

>

>

---

**From:** McCarthy, Fran (F.)  
**Sent:** Thursday, October 31, 2002 12:38 PM  
**To:** Rothweiler, Daniel (D.); Dalbo, Bob (R.J.); Bob Fascetti  
**Cc:** Fournelle, Gilbert (G.); Altoonlan, Don (D.J.); McCarthy, Fran (F.)  
**Subject:** RE: Failed Eaton VMV from Bob Dalbo - X-Ray Results

If you find any more suspect VMV's please contact me. I want to have these parts x-rayed before they go to Eaton for testing. Thanks.

Fran McCarthy St. Clair (fmccarth)  
VMV & EVMV  
Outfitter Stationary Components  
Phone: (313) 32-25718  
Fax: (313) 84-50578  
E-Mail: fmccarth@ford.com

-----Original Message-----

**From:** Dan Rothweiler [mailto:DRothwei@mazdausa.com]  
**Sent:** Thursday, October 31, 2002 12:35 PM  
**To:** 'Dalbo, Bob (R.J.)'; Bob Fascetti  
**Cc:** Gilbert Fournelle; 'Don Altoonlan'; 'McCarthy, Fran (F.)'  
**Subject:** RE: Failed Eaton VMV from Bob Dalbo - X-Ray Results

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Daniel H. Rothweiler  
Mazda North American Operations  
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Office: 732-868-2135  
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Cellular: 732-547-8578

<http://www.mazdausa.com/mazda6>

-----Original Message-----

**From:** Dalbo, Bob (R.J.) [mailto:rdalbo@ford.com]  
**Sent:** Wednesday, October 30, 2002 4:07 PM  
**To:** Bob Fascetti  
**Cc:** Rothweiler, Daniel (D.); Gilbert Fournelle  
**Subject:** FW: Failed Eaton VMV from Bob Dalbo - X-Ray Results  
**Importance:** High

Well, well, well. The "TNI" VMV that Dan Rothweiler returned for stalling is actually bad.

Bob Dalbo  
3.0L Calibration Supervisor  
Outfitters Calibration, NAT  
Phone: (313) 24-84947 Fax: (313) 32-31786  
Pager: (313) 795-2859 Email: rdalbo@ford.com

> -----Original Message-----

> From: McCarthy, Fran (F.)  
> Sent: Wednesday, October 30, 2002 10:50 AM  
> To: Lloyd, John (J.N.); Boggs, Dave (D.L.); Coryea, Kevin (K.W.); McCarthy, Fran (F.); Odum, Ike (I.C.); Altoonian, Don (D.J.); Stuart, Stephanie (S.S.)  
> Cc: Dalbo, Bob (R.J.); Corbett, Sandra (S.M.); Fiorini, John (J.J.); Abbasi, Basel (B.A.); Whitworth, Rudy (A.R.); Hofman, Michael (M.V.); Hansen, George (G.C.); Dumler, Jeff (J.D.); Mancini, Doug (D.J.)  
> Subject: Failed Eaton VMV from Bob Dalbo - X-Ray Results  
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> NEXT STEPS

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appears to be several opportunities for black belt projects given the information we found (above). One of the more important projects might well

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> Eaton on a regular basis (as opposed to every 2 weeks) and involve Ford

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> (Stephanie Stuart) in this project.

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> That's all for now.

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> Fax: (313) 84-50578

> E-Mail: fmccarth@ford.com

>

>

---

**From:** McCarthy, Fran (F.)  
**Sent:** Thursday, October 31, 2002 2:58 PM  
**To:** Rhearn, Gary (G.M.)  
**Cc:** Price, Martin (M.); Altonian, Don (D.J.); McCarthy, Fran (F.); Florini, John (J.J.); Abbaal, Basel (B.A.); Skipton, Ralph (R.D.); Snyder, Robert (R.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); 'marchanderson@eaton.com'; 'hallerol@eaton.com'  
**Subject:** ESCAPE VMV Diagnostic Review  
**Importance:** High  
**Follow Up Flag:** Follow up  
**Due By:** Friday, November 01, 2002 3:00 PM  
**Flag Status:** Flagged

Gary,

I need to use 2 stalls for 2 consecutive days the week of 11/11/02 at QFTF to perform VMV diagnostics on Escape vehicles (3.0L and 2.3L). Included in this request is a need for WDS and Vacu-Tech Smoke detector as well as Technical support.

What days do you have available? Please advise. Thanks.

*Fran McCarthy St. Clair (fmccarth)  
VMV & EVMV  
Outfitter Stationary Components  
Phone: (313) 32-25718  
Fax: (313) 84-50578  
E-Mail: fmccarth@ford.com*

---

**From:** Dalbo, Bob (R.J.)  
**Sent:** Thursday, October 31, 2002 4:58 PM  
**To:** Rothweiler, Daniel (D.); Dalbo, Bob (R.J.); Bob Fascetti  
**Cc:** Fournelle, Gilbert (G.); Altoonien, Don (D.J.); McCarthy, Fran (F.)  
**Subject:** RE: Failed Eaton VMV from Bob Dalbo - X-Ray Results

Dan,  
Please send Don or me the parts and we'll get them to Fran.

Bob Dalbo  
3.0L Calibration Supervisor  
Outfitters Calibration, NAT  
Phone: (313) 24-84947 Fax: (313) 32-31786  
Pager: (313) 795-2859 Email: rdalbo@ford.com

-----Original Message-----

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**Sent:** Thursday, October 31, 2002 12:35 PM  
**To:** 'Dalbo, Bob (R.J.)'; Bob Fascetti  
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McCarthy, Fran (F.); Odum, Ike (I.C.); Altoonian, Don (D.J.); Stuart,  
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> Cc: Dalbo, Bob (R.J.); Corbett, Sandra (S.M.); Ficrini, John (J.J.);  
Abbasi, Basel (B.A.); Whitworth, Rudy (A.R.); Hofman, Michael (M.V.);  
Hansen, George (G.C.); Dumler, Jeff (J.D.); Mancini, Doug (D.J.)  
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> VMV & EVMV

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> Phone: (313) 32-25718

> Fax: (313) 84-50578

> E-Mail: fmccarth@ford.com

>

>



**Subject:** Canceled: 3.0L U204 Phantom stall meeting  
**Location:** TEE CR#1

**Start:** Thu 11/7/2002 2:00 PM  
**End:** Thu 11/7/2002 3:00 PM  
**Show Time As:** Free

**Recurrence:** Weekly  
**Recurrence Pattern:** every Thursday from 2:00 PM to 3:00 PM

**Meeting Status:** Not yet responded

**Required Attendees:** Fournelle, Gilbert (G.); Altoonlan, Don (D.J.); Bauer, Scott (S.C.); Bhowani, Kamal (K.); Blackburn, Thomas (T.J.); Bogema, John (P.); Cary Powell (E-mail); Chik, John (J.); Chih, Ming-Niu (M.N.); Chin, Darrel (D.); Corbett, Sandra (S.M.); Dalbo, Bob (R.J.); De Pena, Juan (J.E.); Diaz, Timothy (T.P.); Duvall, Allen (A.W.); Fascetti, Bob (R.J.); Fournelle, Gilbert (G.); Freeland, Mark (M.); Giles, Stuart (S.); Goldhale, Renuka (R.V.); Goodwin, William (W.R.); Grewal, Bill (B.S.); Grimes, Jeff (J.R.); Hansen, George (G.C.); Herr, George (G.J.); Hofman, Michael (M.V.); Holmes, Jeffrey (J.R.); Hoshino, Jun (J.); Ichikawa, Jiyunohiro (J.); Jensen, Ted (T.E.); Jonas, Andy; Jordan, Donald (D.E.); Kanak, Shinji (S.); Khan, Naveed; Kosko, Jeff (J.R.); Lawler, Dave (D.A.); Le, Dzung (D.H.); Lintisco, Steven (S.); Linde, Peter (P.A.); Liu, Jane (J.); Marck, Edmond (E.C.); Marianos, Tom (T.E.); Matasa, John (J.); Maurer, James (J.B.); Mazzella, Gary (G.R.); McCarthy, Fran (F.); McDonald, John; McGee, Bratt (B.L.); Mooney, Larry (L.); Moorhouse, Scott (S.R.); TMORGA43 was deleted 20021116; Morishima, Shigeki (S.); Nakano, Hideki (H.); Namatollahi, Sonya (S.); Nikolai, bernie; Noteboom, Jim (J.E.); Orzman, James (J.W.); Powers, Ken (K.W.); Price, Martin (M.); Raquepau, Aiden (A.P.); Rothweiler, Daniel (D.); Shah, Kiran (K.C.); Shiralahi, Masaru (M.); Stippenbauer, Jeffrey (J.R.); Suarez, Rhas (R.); Takasawa, Keith (K.D.); Takubo, Hirochi (H.); Venatra, Tim (T.W.); Wakanell, Ray (R.A.); Wettach, Bill (B.); Williams, Les (LHW.); Hoshino, Jun (J.); Kwon, Soon (S.K.)  
**Optional Attendees:** Hofman, Michael (M.V.); Nakano, Hideki (H.); Lawler, Dave (D.A.); Grimes, Jeff (J.R.); Price, Martin (M.); Moorhouse, Scott (S.R.); Hoshino, Jun (J.); Blackburn, Thomas (T.J.)

**Importance:** High

This meeting is cancelled due to a U204 test trip. The next meeting will be held at the regular scheduled time on 11/14/02 at 2:00pm

Meeting agenda and meeting minutes will be send separately on a weekly basis.

toll free: 1-888-227-7015  
Ford net: 954-1206  
International: 1-630-693-6145

pass code: B402370#  
moderator code: 3457370

From: Steven Lintiac [SLintiac@mazdausa.com]  
Sent: Monday, November 04, 2002 2:51 PM  
To: 'Fournelle, Gilbert (G.)'  
Cc: 'rdalbo@ford.com'; 'rsuarez8@ford.com'; 'dlawler1@ford.com'  
Subject: IAC Valve Packaging

ENTIRE PAGE  
CONFIDENTIAL

Gilbert,

I received the IAC valves to repair the Mazda buybacks. I opened up 10 boxes and none of them have instructions warning the technician to flash the PCM to the latest calibration before installing. In earlier discussions, I thought this was something that was to be included with the IAC valve packaging. Did this plan change ?

Ford p/# 1L8Z-9F715-AA  
Mazda p/# AJ71-20-660

Steve Lintiac  
Mazda North American Operations  
Tribute Product Support  
949-442-6514 (phone)  
949-442-6599 (fax)  
e-mail: slintiac@mazdausa.com

-----Original Message-----

From: Fournelle, Gilbert (G.) [mailto:gfournelle@ford.com]  
Sent: Sunday, November 03, 2002 10:01 PM  
To: Altoonian, Don (D.J.); Bauer, Scott (S.C.); Ebojwani, Kamal (K.); Blackburn, Thomas (T.J.); Bogema, John (P.); Cary Powell (E-mail); Chick, John (J.); Chih, Ming-Niu (M.N.); Chin, Darrel (D.); Corbett, Sandra (S.M.); Dalbo, Bob (R.J.); De Pena, Juan (J.E.); Diez, Timothy (T.P.); Duvall, Allen (A.W.); Fascetti, Bob (R.J.); Fournelle, Gilbert (G.); Freeland, Mark (M.); Giles, Stuart (S.); Gokhale, Renuka (R.V.); Goodwin, William (W.R.); Grewal, Bill (B.S.); Grimes, Jeff (J.R.); Hansen, George (G.C.); Herr, George (G.J.); Hofman, Michael (M.V.); Holmes, Jeffrey (J.R.); Hoshino, Jun (J.); Ichikawa, Jiyunichiro (J.); Jensen, Ted (T.E.); Jones, Andy; Jordan, Donald (D.E.); Kanai, Shinji (S.); Khan, Naveed; Kosko, Jeff (J.R.); Lawler, Dave (D.A.); Le, Dzong (D.H.); Lintiac, Steven (S.); Linde, Peter (P.A.); Liu, Jane (J.); Marck, Edmond (E.C.); Marianos, Tom (T.E.); Matesa, John (J.); Maurer, James (J.B.); Mazzella, Gary (G.R.); McCarthy, Fran (F.); McDonald, John; McGee, Brett (B.L.); Mooney, Larry (L.); Moorhouse, Scott (S.R.); Morgan, Tomiko (T.T.); Morishima, Shigeki (S.); Nakano, Hideki (H.); Nematollahi, Sonya (S.); Nikolai, Bernie; Noteboom, Jim (J.E.); Ortmann, James (J.W.); Powers, Daniel (K.W.); Price, Martin (M.); Raquepau, Alden (A.P.); Rothweiler, Daniel (D.); Shah, Kiran (K.C.); Shiraishi, Masaru (M.); Stilgenbauer, Jeffrey (J.R.); Suarez, Rhae (R.); Takasawa, Keith (K.D.); Takubo, Hiroichi (H.); Veenstra, Tim (T.W.); Wakenell, Ray (R.A.); Wettach, Bill (B.); Williams, Les (LHW.)  
Cc: Hofman, Michael (M.V.); Nakano, Hideki (H.); Lawler, Dave (D.A.); Grimes, Jeff (J.R.); Price, Martin (M.); Moorhouse, Scott (S.R.); Hoshino, Jun (J.); Blackburn, Thomas (T.J.)  
Subject: Canceled: 3.0L U204 Phantom stall meeting

Importance: High

When: Thursday, November 07, 2002 2:00 PM-3:00 PM (GMT-05:00) Eastern  
Time  
(US & Canada).  
Where: TEE CR#1

\*~\*~\*~\*~\*~\*~\*~\*~\*~\*

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Meeting agenda and meeting minutes will be send separately on a weekly  
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toll free: 1-866-227-7015  
Ford net: 954-1206  
International: 1-630-693-6145

pass code: 8402370#  
moderator code: 3457370

---

**From:** Steven Lintiac [SLintiac@mazdausa.com]  
**Sent:** Wednesday, November 06, 2002 6:56 PM  
**To:** 'Kaercher, Don (D.F.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lam (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Lapkewych, Michael (M.P.); Hayes, April (A.A.); Nielsen, Christian (C.A.)'  
**Cc:** Darrel Chin; Mike Clark; Dave Lammert; Mike Radulovich; Larry Mooney; 'tokunaga.mi@sv.mazda.co.jp'; 'Suarez, Rhee (R.); Lawler, Dave (D.A.); 'sterrise@ford.com'; 'daltooni@ford.com'  
**Subject:** RE: Fined Pintle Hold-up

Don,

Some additional items to consider:

- Although the TSB instructs technicians to reflash the PCM, it is not explicit that the reflash be done as a condition to installing the new IAC valve.
- There are many more items in the TSB that may confuse technicians into thinking they need to perform the entire procedure for just an IAC valve replacement.
- Mazda's TSB number is different than Ford's. Will there be separate stickers for IAC valves shipped to Mazda? Suggestion: Rather than referring to the TSB number and to prevent making separate stickers for the Ford and Mazda TSB numbers, we might want the sticker to say, "Vehicle PCM must be reflashed to latest calibration available on WDS software B21.7 or later, PRIOR to installation of this part." I believe this statement covers both Ford and Mazda. Bob Dalbo, will this work?
- Lastly, can we put the sticker on the part itself? There is a chance that the technician is handed a part w/o the box.

Anyway, hope these comments help.

*Steve Lintiac*

Mazda North American Operations

Tribute Product Support

949-442-6514 (phone)

949-442-6599 (fax)

e-mail: slintiac@mazdausa.com

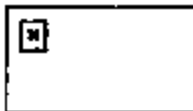
-----Original Message-----

**From:** Kaercher, Don (D.F.) [mailto:dkaerche@ford.com]  
**Sent:** Wednesday, November 06, 2002 1:28 PM  
**To:** Terzes, Laura (L.D.); Sanders, Muriel (M.S.); Grimes, Jeff (J.R.); Yeung, Lam (.); Wettach, Bill (B.); Suarez, Rhee (R.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Kaercher, Don (D.F.); Hightower, Eric (E.); Lapkewych, Michael (M.P.); Hayes, April (A.A.); Nielsen, Christian (C.A.)  
**Cc:** Lintiac, Steven (S.); Giblin, Michael (M.); Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Fournelle, Gilbert (G.); Dalbo, Bob (R.J.); Suarez, Rhee (R.); Lawler, Dave (D.A.)  
**Subject:** Fined Pintle Hold-up

Here is a copy of our agreement. Apparently it was not done. Here is what needs to happen:

1. We need the TSB number for our "sticker" and so cataloging can include the info in the catalog.
2. April Hayes in packaging will work with Sam Ferrise to get labels for Hitachi. We will also send labels to Mazda and PRC to sticker the parts already packaged.
3. Purchasing (Chris Nielsen) will probably have to adjust the packaging price to include the cost of the sticker.
4. Mike Lopkewych will have the part cataloged with a message similar to the sticker.

Sorry for all the confusion.....



*Don Kaercher*

*Ford Motor Company*

*FCSD PS&L QSF/Recall/Top 100 Dept. Mgr.*

*NPDC 1310C Text Pager: (734) 797-5993*

*e-mail: [dkaerche@ford.com](mailto:dkaerche@ford.com)*

Phone: (734) 266-9793 Fax: (734) 266-1166

---Original Message---

From: Terzes, Laura (L.D.)

Sent: Thursday, August 08, 2002 11:06 AM

To: Sanders, Muriel (M.S.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Suarez, Rhae (R.)

Cc: Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Kaercher, Don (D.F.); Hightower, Eric (E.);

Lopkewych, Michael (M.P.)

Subject: RE: Finned Pintle Hold-up

See below in RED text answers to questions #4 and #6.

Don, Michael and Eric: IAC part for Escape TSB we discussed today.

---Original Message---

From: Sanders, Muriel (M.S.)

Sent: Thursday, August 08, 2002 10:39 AM

To: Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Suarez, Rhae (R.); Terzes, Laura (L.D.)

Cc: Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.)

Subject: RE: Finned Pintle Hold-up

Importance: High

The black text below are the answers to Tom Durfee's (Service Engineering) questions. He is rejecting the concern until these items are addressed. Please let me know when this information has been added to the concern.

**Len/Jeff/Bill** - I do not have WERS access. Will one of you please add the responses to items 1-3 & 7 for me. Thanks!

**Rhase/Laura** - Please answer items 4 & 6.

1. Other IAC's have had this new fin pintle design and no PCM reflash was required why does this vehicle line need a reflash with an IAC change?

We have data showing that the finned pintle valve is not transparent to the guide A valve. The mean finned pintle ISC duty cycle at idle is 3% higher than with the current production valve.

2. If the new IAC is installed and no reflash is done what is the failure mode?

Possible (low probability) stall at warm startup or engagement.

3. Does the calibration have to be updated with the new IAC?

Yes, applicable calibration numbers were entered in this concern by John Bogema on 7/25/02.

4. If the calib has to be update with this new IAC, how does the out of warranty customer get notified of this requirement?

FCSD PS&L (Parts, Supply & Logistics) has agreed to work with their service parts packaging engineering to place a sticker on the Motorcraft box indicating the IAC change may require a calibration update, and refer to TSB XX-xxx-xx. Rhase Suarez will place information in the Parts Request comments section to insure the sticker is produced and fixed to package.

5. number was skipped by Tom

6. In the parts FCSD catalog we can have a flag that calls out a new PCM/Rc-flash but this is not a six sigma repair.

FCSD, PS&L, has agreed to place a flag in the on-line service parts system, GCAT, indicating the new IAC part may require a calibration change. Also, the TSB will list all prior calibrations that must be updated to perform the service procedure and to insure compatibility with the new IAC part.

7. A TSB will need to be issued to the field and there is not enough information in this concern to release a TSB. New PCM part numbers will have to be release in WERS for the new calibration. The stall TSB is written and is waiting for approval of this concern. We cannot get the finned pintle IAC service part number necessary for the TSB until this concern is approved.

The calibration part numbers were released in C11390580. They will be available to Fordstar on 8/9/02.

**Muriel Sanders**

U204 3.0L Calibration

Ford Motor Company

Phone: 313-32-27307

Fax: 313-32-31786

E-mail: msander6@ford.com

-----Original Message-----

From: Dalbo, Bob (R.J.)

Sent: Wednesday, August 07, 2002 5:20 PM

**To:** Galante, Chris (C.R.); Terzes, Laura (L.D.); Fascetti, Bob (R.J.)  
**Cc:** Sanders, Muriel (M.S.); Fournelle, Gilbert (G.)  
**Subject:** Finned Pintle Hold-up  
**Importance:** High

Chris,

Yes, the finned pintle IACV does require a calibration change on the Escape/Tribute. The service calibrations will be available Friday (8/9). We have a TSB in for review that explains that the calibration update is required for the new IACV.

Who in service engineering is rejecting this concern? We need to bring them up to speed on this change and the urgency to complete it.

Laura,

How does FCSD manage coordinated parts changes like this IACV/calibration combination? Is that process already underway for this change?

*Bob Dalbo*

3.0L Calibration Supervisor  
Outfitters Calibration, NAT  
Phone: (313) 24-84947 Fax: (313) 32-31786  
Pager: (313) 795-2859 Email: [rdalbo@ford.com](mailto:rdalbo@ford.com)

—Original Message—


**From:** Galante, Chris (C.R.)  
**Sent:** Wednesday, August 07, 2002 10:47 AM  
**To:** Dalbo, Bob (R.J.)  
**Subject:** calibration change for Escape

Hi Bob.

We spoke earlier about the calibration change for Escape related to stalls, and you gave me a concern number (C11390555) which is related to the finned pintle IAC change. Does the IAC change require the calibration change??

The reason I ask is that service engineering is likely rejecting the concern for, among other reasons, the chance that a customer who has a vehicle out of warranty may change the IAC themselves and not be aware that a TSB exists requiring a reflash. Something I'm curious to know is that on the modular products, we introduced the finned pintle design without any calibration change. Why would the Escape be unique in this regard? If not, should we disassociate the calibration change and IAC change (i.e. have two separate concerns)?

*Christopher R. Galante*  
[cgalante@ford.com](mailto:cgalante@ford.com)

 Fax: (313) 337-3813

Phone: (313) 845-6067  
Pager: (313) 795-2807

*V-Engine Engineering - Ford Motor Co.*





**From:** Kaercher, Don (D.F.)

**Sent:** Thursday, November 07, 2002 8:04 AM

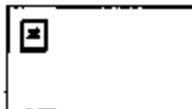
**To:** Lintiac, Steven (S.); Kaercher, Don (D.F.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lam (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Lapkewych, Michael (M.P.); Hayes, April (A.A.); Nielsen, Christian (C.A.)

**Cc:** Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); tokunaga.mi@sv.mazda.co.jp; Suarez, Rhae (R.); Lawler, Dave (D.A.); Ferrise, Sam (S.J.); Altoonian, Don (D.J.)

**Subject:** RE: Fined Pintle Hold-up

Steve, I can reply to some of your suggestions. The first two are really dealing with the TSB service procedure, of which we have no input (we do not normally even see the actual text). Regarding the TSB number on the sticker, I don't have any issue with your suggestion. My only concern is will a wholesale or over-the-counter customer understand the meaning? I want it to be something that a dealer, independent garage or retail customer can understand to the point they realize they may have to have an additional "procedure" done at the dealer.

Regarding the sticker being on the part, you can do that with the stickers we send you, but the agreement we had going in to this was that this was done via a packaging spec versus WERs, so the sticker must be on the box versus the part. To change that would require the sticker to be added to the part in WERs, and you would have to work through Laura Terzes to get that done. Thanks Stevell



*Don Kaercher*

*Ford Motor Company*

*FCSD PSAL QSF/Recall/Top 100 Dept. Mgr.*

*NPDC 1310C Text Pager: (734) 797-5993*

*e-mail: [dkaerche@ford.com](mailto:dkaerche@ford.com)*

Phone: (734) 266-9793 Fax: (734) 266-1166

—Original Message—

**From:** Steven Lintiac [mailto:SLintiac@mazdausa.com]

**Sent:** Wednesday, November 06, 2002 6:56 PM

**To:** 'Kaercher, Don (D.F.)'; 'Terzes, Laura (L.D.)'; 'Grimes, Jeff (J.R.)'; 'Yeung, Lam (.); 'Wettach, Bill (B.); 'Fournelle, Gilbert (G.); 'Fascetti, Bob (R.J.)'; 'Dalbo, Bob (R.J.)'; 'Hightower, Eric (E.)'; 'Lapkewych, Michael (M.P.)'; 'Hayes, April (A.A.)'; 'Nielsen, Christian (C.A.)'

**Cc:** Darrel Chin; Mike Clark; Dave Lammert; Mike Radulovich; Larry Mooney; tokunaga.mi@sv.mazda.co.jp; 'Suarez, Rhae (R.)'; 'Lawler, Dave (D.A.)'; 'sferrise@ford.com'; 'daltoon@ford.com'

**Subject:** RE: Fined Pintle Hold-up

Don,

Some additional items to consider:

- Although the TSB instructs technicians to reflash the PCM, it is not explicit that the reflash be done as a condition to installing the new IAC valve.
- There are many more items in the TSB that may confuse technicians into thinking they need to perform the entire procedure for just an IAC valve replacement.
- Mazda's TSB number is different than Ford's. Will there be separate stickers for IAC valves shipped to Mazda? Suggestion: Rather than referring to the TSB number and to prevent making separate stickers for the Ford and Mazda TSB numbers, we might want the sticker to say, "Vehicle PCM must be reflashed to latest calibration available on WDS software B21.7 or later, PRIOR to installation of this part." I believe this statement covers both Ford and Mazda. Bob Dalbo, will this work?
- Lastly, can we put the sticker on the part itself? There is a chance that the technician is handed a part w/o the box.

Anyway, hope these comments help.

*Steve Lintacco*

Mazda North American Operations

Tribute Product Support

949-442-6514 (phone)

949-442-6599 (fax)

e-mail: slintacc@mazdausa.com

-----Original Message-----

From: Kaercher, Don (D.F.) [mailto:dkaerche@ford.com]

Sent: Wednesday, November 06, 2002 1:28 PM

To: Terzes, Laura (L.D.); Sanders, Muriel (M.S.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.);

Suarez, Rhae (R.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Kaercher, Don (D.F.);

Hightower, Eric (E.); Lapkewych, Michael (M.P.); Hayes, April (A.A.); Nielsen, Christian (C.A.)

Cc: Lintacco, Steven (S.); Giblin, Michael (M.); Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.);

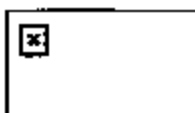
Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.ml@sv.mazda.co.jp'; Fournelle, Gilbert (G.); Dalbo, Bob (R.J.); Suarez, Rhae (R.); Lawler, Dave (D.A.)

Subject: Finned Pintle Hold-up

Here is a copy of our agreement. Apparently it was not done. Here is what needs to happen:

1. We need the TSB number for our "sticker" and so cataloging can include the info in the catalog.
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3. Purchasing (Chris Nielsen) will probably have to adjust the packaging price to include the cost of the sticker.
4. Mike Lapkewych will have the part cataloged with a message similar to the sticker.

Sorry for all the confusion.....



*Don Kaercher*

*Ford Motor Company*

*FCSD PSD&L QSF/Recall/Top 100 Dept. Mgr.*

*NPDC 1310C Text Pager: (734) 797-5993*

*e-mail: [dkaerche@ford.com](mailto:dkaerche@ford.com)*

Phone: (734) 266-9793 Fax: (734) 266-1166

—Original Message—

From: Terzes, Laura (L.D.)

Sent: Thursday, August 08, 2002 11:06 AM

To: Sanders, Muriel (M.S.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Suarez, Rhae (R.)

Cc: Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Kaercher, Don (D.F.); Hightower, Eric (E.);

Lapkewych, Michael (M.P.)

Subject: RE: Fined Pintle Hold-up

See below in RED text answers to questins #4 and #6.

Don, Michael and Eric: IAC part for Escape TSB we discussed today.

—Original Message—

From: Sanders, Muriel (M.S.)

Sent: Thursday, August 08, 2002 10:39 AM

To: Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Suarez, Rhae (R.); Terzes, Laura (L.D.)

Cc: Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.)

Subject: RE: Fined Pintle Hold-up

Importance: High

The black text below are the answers to Tom Durfee's (Service Engineering) questions. He is rejecting the concern until these items are addressed. Please let me know when this information has been added to the concern.

Lem/Jeff/Bill - I do not have WERS access. Will one of you please add the responses to items 1-3 & 7 for me. Thanks!

Rhae/Laura - Please answer items 4 & 6.

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We have data showing that the finned pintle valve is not transparent to the guide A valve. The mean finned pintle ISC duty cycle at idle is 3% higher than with the current production valve.

2. If the new IAC is installed and no reflash is done what is the failure mode?

Possible (low probability) stall at warm startup or engagement.

3. Does the calibration have to be updated with the new IAC?

Yes, applicable calibration numbers were entered in this concern by John Bogema on 7/25/02.

4. If the calib has to be update with this new IAC, how does the out of warranty customer get notified of this requirement?

FCSD PS&L (Parts, Supply & Logistics) has agreed to work with their service parts packaging engineering to place a sticker on the Motorcraft box indicating the IAC change may require a calibration update, and refer to TSB XX-xxx-xx. Fhae Suarez will place information in the Parts Request comments section to insure the sticker is produced and fixed to package.

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The calibration part numbers were released in C11390580. They will be available to Fordstar on 8/9/02.

*Muriel Sanders*

U204 3.0L Calibration

Ford Motor Company

Phone: 313-32-27307

Fax: 313-32-31786

E-mail: msander6@ford.com

—Original Message—

From: Dalbo, Bob (R.J.)

Sent: Wednesday, August 07, 2002 5:20 PM

To: Galante, Chris (C.R.); Terzes, Laura (L.D.); Fascetti, Bob (R.J.)

Cc: Sanders, Muriel (M.S.); Fournelle, Gilbert (G.)

Subject: Finned Pintle Hold-up

Importance: High

Chris,

Yes, the finned pintle IACV does require a calibration change on the Escape/Tribute. The service calibrations will be available Friday (8/9). We have a TSB in for review that explains that the callbration update is required for the new IACV.

Who in service engineering is rejecting this concern? We need to bring them up to speed on this change and the urgency to complete it.

Laura,

How does FCSD manage coordinated parts changes like this IACV/calibration combination? Is that process already underway for this change?

**Bob Dalbo**

3.0L Calibration Supervisor  
Outfitters Calibration, NAT  
Phone: (313) 24-84947 Fax: (313) 32-31766  
Pager: (313) 795-2859 Email: [rdalbo@ford.com](mailto:rdalbo@ford.com)

-----Original Message-----



From: Galante, Chris (C.R.)  
Sent: Wednesday, August 07, 2002 10:47 AM  
To: Dalbo, Bob (R.J.)  
Subject: calibration change for Escape

Hi Bob.

We spoke earlier about the calibration change for Escape related to stalls, and you gave me a concern number (C11390555) which is related to the finned pintle IAC change. Does the IAC change require the calibration change??

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**Christopher R. Galante**  
[cgalante@ford.com](mailto:cgalante@ford.com)

 Fax: (313) 337-3813  
 Phone: (313) 845-6067  
Pager: (313) 795-2807

**V-Engine Engineering - Ford Motor Co.**



---

**From:** Lapkewych, Michael (M.P.)  
**Sent:** Thursday, November 07, 2002 8:14 AM  
**To:** Kaercher, Don (D.F.); Limblaco, Steven (S.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lam (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Hayes, April (A.A.); Nielsen, Christian (C.A.)  
**Cc:** Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); tokunaga.mi@sv.mazda.co.jp; Suarez, Rhae (R.); Lawler, Dave (D.A.); Ferrise, Sam (S.J.); Altonian, Don (D.J.)  
**Subject:** RE: Fined Pintle Hold-up

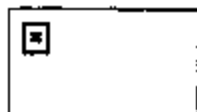
*Greetings , per Steve's suggestion we here in cataloging can add that note "Vehicle PCM must be reflashed to latest calibration available on WDS software B21.7 or later, PRIOR to installation of this part." to the catalog information if that helps MIKE*

—Original Message—

**From:** Kaercher, Don (D.F.)  
**Sent:** Thursday, November 07, 2002 8:04 AM  
**To:** Limblaco, Steven (S.); Kaercher, Don (D.F.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lam (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Lapkewych, Michael (M.P.); Hayes, April (A.A.); Nielsen, Christian (C.A.)  
**Cc:** Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); tokunaga.mi@sv.mazda.co.jp; Suarez, Rhae (R.); Lawler, Dave (D.A.); Ferrise, Sam (S.J.); Altonian, Don (D.J.)  
**Subject:** RE: Fined Pintle Hold-up

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*Don Kaercher*

*Ford Motor Company  
FCSD PS&L QSF/Recall/Top 100 Dept. Mgr.  
NPDC 1310C Text Pager: (734) 797-5993*

*e-mail: dkaerche@ford.com*

Phone: (734) 266-9793 Fax: (734) 266-1166

-----Original Message-----

From: Steven Lintiac [mailto:SLintiac@mazdausa.com]

Sent: Wednesday, November 06, 2002 6:56 PM

To: 'Kaercher, Don (D.F.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Lapkewych, Michael (M.P.); Hayes, April (A.A.); Nielsen, Christian (C.A.)

Cc: Darrel Chin; Mike Clark; Dave Lammert; Mike Radulovich; Larry Mooney; 'tokunaga.ml@sv.mazda.co.jp'; 'Suarez, Rhae (R.); Lawler, Dave (D.A.); 'sferrise@ford.com'; 'daltoni@ford.com'

Subject: RE: Finned Pintle Hold-up

Don,

Some additional items to consider:

- Although the TSB instructs technicians to reflash the PCM, it is not explicit that the reflash be done as a condition to installing the new IAC valve.

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Anyway, hope these comments help.

*Steve Lintiac*

Mazda North American Operations

Tribute Product Support

949-442-6014 (phone)

949-442-6299 (fax)

e-mail: slintiac@mazdausa.com

-----Original Message-----

From: Kaercher, Don (D.F.) [mailto:dkaerche@ford.com]

Sent: Wednesday, November 06, 2002 1:28 PM

To: Terzes, Laura (L.D.); Sanders, Muriel (M.S.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Suarez, Rhae (R.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Kaercher, Don (D.F.); Hightower, Eric (E.); Lapkewych, Michael (M.P.); Hayes, April (A.A.); Nielsen, Christian (C.A.)

Cc: Lintiac, Steven (S.); Gilbin, Michael (M.); Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.ml@sv.mazda.co.jp'; Fournelle, Gilbert (G.); Dalbo, Bob (R.J.); Suarez, Rhae (R.); Lawler, Dave (D.A.)

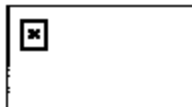
Subject: Finned Pintle Hold-up

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happen:

1. We need the TSB number for our "sticker" and so cataloging can include the info in the catalog.
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Sorry for all the confusion.....



*Don Kaercher*

*Ford Motor Company*

*FCSD PS&L QSF/Recall/Top 100 Dept. Mgr.*

*NPDC 1310C Text Pager: (734) 797-5993*

*e-mail: [dkaerche@ford.com](mailto:dkaerche@ford.com)*

Phone: (734) 266-9793 Fax: (734) 266-1166

-----Original Message-----

From: Terzes, Laura (L.D.)

Sent: Thursday, August 08, 2002 11:06 AM

To: Sanders, Muriel (M.S.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Suarez, Rhae (R.)

Cc: Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Kaercher, Don (D.F.); Hightower, Eric (E.);

Lapkewych, Michael (M.P.)

Subject: RE: Finned Pintle Hold-up

See below in RED text answers to questions #4 and #6.

Don, Michael and Eric: IAC part for Escape TSB we discussed today.

-----Original Message-----

From: Sanders, Muriel (M.S.)

Sent: Thursday, August 08, 2002 10:39 AM

To: Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Suarez, Rhae (R.); Terzes, Laura (L.D.)

Cc: Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.)

Subject: RE: Finned Pintle Hold-up

Importance: High

The black text below are the answers to Tom Durfee's (Service Engineering) questions. He is rejecting the concern until these items are addressed. Please let me know when this information has been added to the concern.



**Lam/Jeff/Bill** - I do not have WERS access. Will one of you please add the responses to items 1-3 & 7 for me. Thanks!

**Rhae/Laura** - Please answer items 4 & 6.

1. Other IAC's have had this new fin pintle design and no PCM reflash was required why does this vehicle line need a reflash with an IAC change?

We have data showing that the finned pintle valve is not transparent to the guide A valve. The mean finned pintle ISC duty cycle at idle is 3% higher than with the current production valve.

2. If the new IAC is installed and no reflash is done what is the failure mode?

Possible (low probability) stall at warm startup or engagement.

3. Does the calibration have to be updated with the new IAC?

Yes, applicable calibration numbers were entered in this concern by John Bogema on 7/25/02.

4. If the calib has to be update with this new IAC, how does the out of warranty customer get notified of this requirement?

FCSD PS&L (Parts, Supply & Logistics) has agreed to work with their service parts packaging engineering to place a sticker on the Motorcraft box indicating the IAC change may require a calibration update, and refer to TSB XX-xxx-xx. Rhae Suarez will place information in the Parts Request comments section to insure the sticker is produced and fixed to package.

5. number was skipped by Tom

6. In the parts FCSD catalog we can have a flag that calls out a new PCM/Re-flash but this is not a six sigma repair.

FCSD, PS&L, has agreed to place a flag in the on-line service parts system, GCAT, indicating the new IAC part may require a calibration change. Also, the TSB will list all prior calibrations that must be updated to perform the service procedure and to insure compatibility with the new IAC part.

7. A TSB will need to be issued to the field and there is not enough information in this concern to release a TSB. New PCM part numbers will have to be release in WERS for the new calibration.

The stall TSB is written and is waiting for approval of this concern. We cannot get the finned pintle IAC service part number necessary for the TSB until this concern is approved.

The calibration part numbers were released in C11390580. They will be available to Fordstar on 8/9/02.

**Muriel Sanders**

U204 3.0L Calibration

Ford Motor Company

Phone: 313-32-27307

Fax: 313-32-31786

E-mail: msander6@ford.com

-----Original Message-----

From: Dalbo, Bob (R.J.)

Sent: Wednesday, August 07, 2002 5:20 PM  
To: Galante, Chris (C.R.); Terzes, Laura (L.D.); Fascetti, Bob (R.J.)  
Cc: Sanders, Muriel (M.S.); Fournelle, Gilbert (G.)  
Subject: Finned Pintle Hold-up  
Importance: High

Chris,

Yes, the finned pintle IACV does require a calibration change on the Escape/Tribute. The service calibrations will be available Friday (8/9). We have a TSB In for review that explains that the calibration update is required for the new IACV.

Who in service engineering is rejecting this concern? We need to bring them up to speed on this change and the urgency to complete it.

Laura,

How does FCSD manage coordinated parts changes like this IACV/calibration combination? Is that process already underway for this change?

*Bob Dalbo*

3.0L Calibration Supervisor  
Outfitters Calibration, NAT  
Phone: (313) 24-84947 Fax: (313) 32-31788  
Pager: (313) 795-2850 Email: [rdalbo@ford.com](mailto:rdalbo@ford.com)

—Original Message—



From: Galante, Chris (C.R.)  
Sent: Wednesday, August 07, 2002 10:47 AM  
To: Dalbo, Bob (R.J.)  
Subject: calibration change for Escape

Hi Bob.

We spoke earlier about the calibration change for Escape related to stalls, and you gave me a concern number (C11390555) which is related to the finned pintle IAC change. Does the IAC change require the calibration change??

The reason I ask is that service engineering is likely rejecting the concern for, among other reasons, the chance that a customer who has a vehicle out of warranty may change the IAC themselves and not be aware that a TSB exists requiring a reflash. Something I'm curious to know is that on the modular products, we introduced the finned pintle design without any calibration change. Why would the Escape be unique in this regard? If not, should we disassociate the calibration change and IAC change (i.e. have two separate concerns)?

*Christopher R. Galante*  
[czgalante@ford.com](mailto:czgalante@ford.com)

 Fax: (313) 337-3813  
 Phone: (313) 845-6067  
Pager: (313) 795-2807

**V-Engine Engineering - Ford Motor Co.**



**From:** Altoonian, Don (D.J.)  
**Sent:** Thursday, November 07, 2002 9:59 AM  
**To:** Lapkewych, Michael (M.P.); Kaercher, Don (D.F.); Lintiac, Steven (S.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Hayes, April (A.A.); Nielsen, Christian (C.A.)  
**Cc:** Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Lawler, Dave (D.A.); Ferrise, Sam (S.J.)  
**Subject:** RE: Fimned Pintle Hold-up

Michael, should we not say that your dealer has to reflash to the latest EEC module calibration when installing this valve? The Joe Blow customer does not have the slightest idear what a WDS, or an NGS is. Then to help the dealer, we could say that the calibration has to be obtained from CD-ROM 21.7 or later.

-----Original Message-----

**From:** Lapkewych, Michael (M.P.)  
**To:** Kaercher, Don (D.F.); Lintiac, Steven (S.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Hayes, April (A.A.); Nielsen, Christian (C.A.)  
**Cc:** Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Lawler, Dave (D.A.); Ferrise, Sam (S.J.); Altoonian, Don (D.J.)  
**Sent:** 11/7/02 8:13 AM  
**Subject:** RE: Fimned Pintle Hold-up

Greetings , per Steve's suggestion we here in cataloging can add that note "Vehicle PCM must be reflashed to latest calibration available on WDS software B21.7 or later, PRIOR to installation of this part." to the catalog information if that helps MIKE

-----Original Message-----

**From:** Kaercher, Don (D.F.)  
**Sent:** Thursday, November 07, 2002 8:04 AM  
**To:** Lintiac, Steven (S.); Kaercher, Don (D.F.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Lapkewych, Michael (M.P.); Hayes, April (A.A.); Nielsen, Christian (C.A.)  
**Cc:** Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Lawler, Dave (D.A.); Ferrise, Sam (S.J.); Altoonian, Don (D.J.)  
**Subject:** RE: Fimned Pintle Hold-up

Steve, I can reply to some of your suggestions. The first two are really dealing with the TSB service procedure, of which we have no input (we do not normally even see the actual text). Regarding the TSB number on the sticker, I don't have any issue with your suggestion. My only concern is will a wholesale or over-the-counter customer understand the meaning? I want it to be something that a dealer, independant garage or retail customer can understand to the point they realize they may have to have an additional "procedure" done at the dealer.

Regarding the sticker being on the part, you can do that with the stickers we send you, but the agreement we had going in to this was that this was done via a packaging spec versus WERs, so the sticker must be on the box versus the part. To change that would require the sticker to be added to the part in WERs, and you would have to work through Laura Terzes to get that done. Thanks Steve!!

<outbind://4/usflag\_sm%20(2).gif> Don Kaercher  
Ford Motor Company  
FCSD PS&L QSF/Recall/Top 100 Dept. Mgr.  
NPDC 1310C Text Pager: (734) 797-5993  
e-mail: dkaerche@ford.com  
\*Phone: (734) 266-9793 \*Fax: (734) 266-1166

-----Original Message-----

From: Steven Limtiaco [mailto:SLimtiaco@mazdausa.com]  
Sent: Wednesday, November 06, 2002 6:56 PM  
To: 'Kaercher, Don (D.P.)'; 'Terzes, Laura (L.D.)'; 'Grimes, Jeff (J.R.)'; 'Yeung, Lem (.); 'Wettach, Bill (B.)'; 'Fournelle, Gilbert (G.)'; 'Fascetti, Bob (R.J.)'; 'Dalbo, Bob (R.J.)'; 'Hightower, Eric (E.)'; 'Lapkewych, Michael (M.P.)'; 'Hayes, April (A.A.)'; 'Nielsen, Christian (C.A.)'  
Cc: Darrel Chin; Mike Clark; Dave Lammert; Mike Radulovich; Larry Mooney; 'tokunaga.mi@av.mazda.co.jp'; 'Suarez, Rhae (R.)'; 'Lawler, Dave (D.A.)'; 'sferrise@ford.com'; 'daltoni@ford.com'  
Subject: RE: Finned Pintle Hold-up

Don,

Some additional items to consider:

- Although the TSB instructs technicians to reflash the PCM, it is not explicit that the reflash be done as a condition to installing the new IAC valve.
- There are many more items in the TSB that may confuse technicians into thinking they need to perform the entire procedure for just an IAC valve replacement.
- Mazda's TSB number is different than Ford's. Will there be separate stickers for IAC valves shipped to Mazda? Suggestion: Rather than referring to the TSB number and to prevent making separate stickers for the Ford and Mazda TSB numbers, we might want the sticker to say, "Vehicle PCM must be reflashed to latest calibration available on WDS software B21.7 or later, PRIOR to installation of this part." I believe this statement covers both Ford and Mazda. Bob Dalbo, will this work?
- Lastly, can we put the sticker on the part itself? There is a chance that the technician is handed a part w/o the box.

Anyway, hope these comments help.

Steve Limtiaco  
Mazda North American Operations  
Tribute Product Support  
949-442-6514 (phone)

949-442-6599 (fax)  
e-mail: slimtiac@mazdausa.com

-----Original Message-----

From: Kaercher, Don (D.F.) [mailto:dkaerche@ford.com]  
Sent: Wednesday, November 06, 2002 1:28 PM  
To: Terzes, Laura (L.D.); Sanders, Muriel (M.S.); Grimes, Jeff (J.R.);  
Yeung, Lem (.); Wettach, Bill (B.); Suarez, Rhae (R.); Fournelle,  
Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Kaercher, Don  
(D.F.); Hightower, Eric (E.); Lapkewych, Michael (M.P.); Hayes, April  
(A.A.); Nielsen, Christian (C.A.)  
Cc: Lintiac, Steven (S.); Giblin, Michael (M.); Chin, Darrel (D.);  
Clark, Michael (M.); Lammert, David (D.); Račulovich, Michael (M.);  
Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Fournelle, Gilbert  
(G.); Dalbo, Bob (R.J.); Suarez, Rhae (R.); Lawler, Dave (D.A.)  
Subject: Finned Pintle Hold-up

Here is a copy of our agreement. Apparently it was not done. Here is  
what needs to happen:

1. We need the TSB number for our "sticker" and so cataloging can  
include the info in the catalog.
2. April Hayes in packaging will work with Sam Ferrise to get  
labels for Hitachi. We will also send labels to Mazda and PRC to  
sticker the parts already packaged.
3. Purchasing (Chris Nielsen) will probably have to adjust the  
packaging price to include the cost of the sticker.
4. Mike Lapkewych will have the part cataloged with a message  
similar to the sticker.

Sorry for all the confusion.....

<outbind://5/usflag\_sm%20(2).gif> Don Kaercher  
Ford Motor Company  
PCSD PS&L QSF/Recall/Top 100 Dept. Mgr.  
NPDC 1310C Text Pager: (734) 797-5993  
e-mail: dkaerche@ford.com  
\*Phone: (734) 266-9793 \*Fax: (734) 266-1166

-----Original Message-----

From: Terzes, Laura (L.D.)  
Sent: Thursday, August 08, 2002 11:06 AM  
To: Sanders, Muriel (M.S.); Grimes, Jeff (J.R.); Yeung, Lem (.);  
Wettach, Bill (B.); Suarez, Rhae (R.)  
Cc: Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.);  
Kaercher, Don (D.F.); Hightower, Eric (E.); Lapkewych, Michael (M.P.)  
Subject: RE: Finned Pintle Hold-up

See below in RED text answers to questions #4 and #6.  
Don, Michael and Eric: IAC part for Escape TSB we discussed today.

-----Original Message-----

From: Sanders, Muriel (M.S.)  
Sent: Thursday, August 08, 2002 10:39 AM  
To: Grimes, Jeff (J.R.); Yeung, Lem (.); Wattach, Bill (B.); Suarez, Rhae (R.); Terzes, Laura (L.D.)  
Cc: Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.)  
Subject: RE: Finned Pintle Hold-up  
Importance: High

The black text below are the answers to Tom Durfee's (Service Engineering) questions. He is rejecting the concern until these items are addressed. Please let me know when this information has been added to the concern.

Lem/Jeff/Bill - I do not have WERS access. Will one of you please add the responses to items 1-3 & 7 for me. Thanks!  
Rhae/Laura - Please answer items 4 & 6.

1. Other IAC's have had this new fin pintle design and no PCM reflash was required why does this vehicle line need a reflash with an IAC change?

We have data showing that the finned pintle valve is not transparent to the guide A valve. The mean finned pintle ISC duty cycle at idle is 3% higher than with the current production valve.

2. If the new IAC is installed and no reflash is done what is the failure mode?

Possible (low probability) stall at warm startup or engagement.

3. Does the calibration have to be updated with the new IAC?

Yes, applicable calibration numbers were entered in this concern by John Bogema on 7/25/02.

4. If the calib has to be update with this new IAC, how does the out of warranty customer get notified of this requirement?

FCSD PS&L (Parts, Supply & Logistics) has agreed to work with their service parts packaging engineering to place a sticker on the Motorcraft box indicating the IAC change may require a calibration update, and refer to TSB XI-XXX-XX. Rhae Suarez will place information in the Parts Request comments section to insure the sticker is produced and fixed to package.

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7. A TSB will need to be issued to the field and there is not enough information in this concern to release a TSB. New PCM part numbers will have to be release in WERS for the new calibration.

The stall TSB is written and is waiting for approval of this concern. We cannot get the finned pintle IAC service part number necessary for the TSB until this concern is approved.

The calibration part numbers were released in C11390580. They will be available to Fordstar on 8/9/02.

Muriel Sanders  
U204 3.0L Calibration  
Ford Motor Company  
Phone: 313-32-27307  
Fax: 313-32-31786  
E-mail: msandar6@ford.com

-----Original Message-----

From: Dalbo, Bob (R.J.)  
Sent: Wednesday, August 07, 2002 5:20 PM  
To: Galante, Chris (C.R.); Terzes, Laura (L.D.); Fascetti, Bob (R.J.)  
Cc: Sanders, Muriel (M.S.); Fournelle, Gilbert (G.)  
Subject: Firmed Pintle Hold-up  
Importance: High

Chris,

Yes, the finned pintle IACV does require a calibration change on the Escape/Tribute. The service calibrations will be available Friday (8/9). We have a TSB in for review that explains that the calibration update is required for the new IACV.

Who in service engineering is rejecting this concern? We need to bring them up to speed on this change and the urgency to complete it.

Laura,

How does FCSD manage coordinated parts changes like this IACV/calibration combination? Is that process already underway for this change?

Bob Dalbo  
3.0L Calibration Supervisor  
Outfitters Calibration, NAT  
Phone: (313) 24-84947 Fax: (313) 32-31786  
Pager: (313) 795-2859 Email: rdalbo@ford.com

-----Original Message-----

From: Galante, Chris (C.R.)  
Sent: Wednesday, August 07, 2002 10:47 AM  
To: Dalbo, Bob (R.J.)  
Subject: calibration change for Escape

Hi Bob.

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The reason I ask is that service engineering is likely rejecting the concern for, among other reasons, the chance that a customer who has a vehicle out of warranty may change the IAC themselves and not be aware that a TSB exists requiring a reflash. Something I'm curious to know is that on the modular products, we introduced the finned pintle design



without any calibration change. Why would the Escape be unique in this regard? If not, should we disassociate the calibration change and IAC change (i.e. have two separate concerns)?

Christopher R. Galante  
cgalante@ford.com

\* Fax: (313) 337-3813  
\* Phone: (313) 845-6067  
Pager: (313) 795-2807

V-Engine Engineering - Ford Motor Co.

<<usaf1ag.gif>>

**From:** Kaercher, Don (D.F.)  
**Sent:** Thursday, November 07, 2002 10:02 AM  
**To:** Altoonian, Don (D.J.); Lapkewych, Michael (M.P.); Lintiac, Steven (S.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Hayes, April (A.A.); Nielsen, Christian (C.A.)  
**Cc:** Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Lawler, Dave (D.A.); Ferrise, Sam (S.J.)  
**Subject:** RE: Finned Pintle Hold-up

Can't that be misunderstood? If I have this IAC replaced, and flash to 21.7, then need another IAC three years from now, couldn't I misunderstand and think I have to flash again?

Don Kaercher  
Ford Motor Company  
FCSD PS&L QSF/Recall/Top 100 Dept. Mgr.  
NPDC 1310C Text Pager: (734) 797-5993  
e-mail: dkaerche@ford.com  
\*Phone: (734) 266-9793 \*Fax: (734) 266-1166

-----Original Message-----

**From:** Altoonian, Don (D.J.)  
**Sent:** Thursday, November 07, 2002 9:59 AM  
**To:** Lapkewych, Michael (M.P.); Kaercher, Don (D.F.); Lintiac, Steven (S.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Hayes, April (A.A.); Nielsen, Christian (C.A.)  
**Cc:** Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Lawler, Dave (D.A.); Ferrise, Sam (S.J.)  
**Subject:** RE: Finned Pintle Hold-up

Michael, should we not say that your dealer has to reflash to the latest EEC module calibration when installing this valve? The Joe Blow customer does not have the slightest idear what a WDS, or an NGS is. Then to help the dealer, we could say that the calibration has to be obtained from CD-ROM 21.7 or later.

-----Original Message-----

**From:** Lapkewych, Michael (M.P.)  
**To:** Kaercher, Don (D.F.); Lintiac, Steven (S.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Hayes, April (A.A.); Nielsen, Christian (C.A.)  
**Cc:** Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Lawler, Dave (D.A.); Ferrise, Sam (S.J.); Altoonian, Don (D.J.)  
**Sent:** 11/7/02 8:13 AM  
**Subject:** RE: Finned Pintle Hold-up

Greetings , per Steve's suggestion we here in cataloging can add that note "Vehicle PCM must be reflashed to latest calibration available on WDS software B21.7 or later, PRIOR to installation of this part." to the catalog information if that helps MIKE

-----Original Message-----

From: Kaercher, Don (D.F.)

Sent: Thursday, November 07, 2002 8:04 AM

To: Limtiaco, Steven (S.); Kaercher, Don (D.F.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Lapkewych, Michael (M.P.); Hayes, April (A.A.); Nielsen, Christian (C.A.)

Cc: Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.);

Radulovich, Michael (M.); Mooney, Larry (L.);

'tokunaga.mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Lawler, Dave (D.A.);

Ferrise, Sam (S.J.); Altoonian, Don (D.J.)

Subject: RE: Finned Pintle Hold-up

Steve, I can reply to some of your suggestions. The first two are really dealing with the TSB service procedure, of which we have no input (we do not normally even see the actual text). Regarding the TSB number on the sticker, I don't have any issue with your suggestion. My only concern is will a wholesale or over-the-counter customer understand the meaning? I want it to be something that a dealer, independent garage or retail customer can understand to the point they realize they may have to have an additional "procedure" done at the dealer.

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<outbind://4/usflag\_sm%20(2).gif> Don Kaercher  
Ford Motor Company  
FCSD PS&L QSF/Recall/Top 100 Dept. Mgr.  
NEDC 1310C Text Pager: (734) 797-5993  
e-mail: dkaerche@ford.com  
\*Phone: (734) 266-9793 \*Fax: (734) 266-1166

-----Original Message-----

From: Steven Limtiaco [mailto:SLimtiac@mazdausa.com]

Sent: Wednesday, November 06, 2002 6:56 PM

To: 'Kaercher, Don (D.F.)'; 'Terzes, Laura (L.D.)'; 'Grimes, Jeff (J.R.)'; 'Yeung, Lem (.); 'Wettach, Bill (B.)'; 'Fournelle, Gilbert (G.)'; 'Fascetti, Bob (R.J.)'; 'Dalbo, Bob (R.J.)'; 'Hightower, Eric (E.)'; 'Lapkewych, Michael (M.P.)'; 'Hayes, April (A.A.)'; 'Nielsen, Christian (C.A.)'

Cc: Darrel Chin; Mike Clark; Dave Lammert; Mike Radulovich; Larry Mooney; 'tokunaga.mi@sv.mazda.co.jp'; 'Suarez, Rhae (R.)'; 'Lawler, Dave (D.A.)'; 'sferrise@ford.com'; 'daltoon1@ford.com'

Subject: RE: Finned Pintle Hold-up

Don,

Some additional items to consider:

- Although the TSB instructs technicians to reflash the PCM, it is not explicit that the reflash be done as a condition to installing the new IAC valve.
- There are many more items in the TSB that may confuse technicians into thinking they need to perform the entire procedure for just an IAC valve replacement.
- Mazda's TSB number is different than Ford's. Will there be separate stickers for IAC valves shipped to Mazda? Suggestion: Rather than referring to the TSB number and to prevent making separate stickers for the Ford and Mazda TSB numbers, we might want the sticker to say, "Vehicle PCM must be reflashed to latest calibration available on WDS software B21.7 or later, PRIOR to installation of this part." I believe this statement covers both Ford and Mazda. Bob Dalbo, will this work?
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Anyway, hope these comments help.

Steve Lintiac  
Mazda North American Operations  
Tribute Product Support  
949-442-6514 (phone)  
949-442-6599 (fax)  
e-mail: slintiac@mazdausa.com

-----Original Message-----

From: Kaercher, Don (D.F.) [mailto:dkaerche@ford.com]  
Sent: Wednesday, November 06, 2002 1:28 PM  
To: Terzes, Laura (L.D.); Sanders, Muriel (M.S.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Suarez, Rhae (R.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Kaercher, Don (D.F.); Hightower, Eric (E.); Lapkawych, Michael (M.P.); Hayes, April (A.A.); Nielsen, Christian (C.A.)  
Cc: Lintiac, Steven (S.); GIBLIN, Michael (M.); Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Fournelle, Gilbert (G.); Dalbo, Bob (R.J.); Suarez, Rhae (R.); Lawler, Dave (D.A.)  
Subject: Finned Pintle Hold-up

Here is a copy of our agreement. Apparently it was not done. Here is what needs to happen:

1. We need the TSB number for our "sticker" and so cataloging can include the info in the catalog.
2. April Hayes in packaging will work with Sam Ferrise to get labels for Hitachi. We will also send labels to Mazda and PRC to sticker the parts already packaged.
3. Purchasing (Chris Nielsen) will probably have to adjust the packaging price to include the cost of the sticker.

4. Mike Lapkewych will have the part cataloged with a message similar to the sticker.

Sorry for all the confusion.....

<outbind://5/usflag\_sm%20(2).gif> Don Kaercher  
Ford Motor Company  
FCSD PS&L QSF/Recall/Top 100 Dept. Mgr.  
NPDC 1310C Text Pager: (734) 797-5993  
e-mail: dkaerche@ford.com  
\*Phone: (734) 266-9793 \*Fax: (734) 266-1166

-----Original Message-----

From: Terzes, Laura (L.D.)  
Sent: Thursday, August 08, 2002 11:06 AM  
To: Sanders, Muriel (M.S.); Grimes, Jeff (J.R.); Yeung, Lem (.);  
Wettach, Bill (B.); Suarez, Rhae (R.)  
Cc: Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.);  
Kaercher, Don (D.F.); Hightower, Eric (E.); Lapkewych, Michael (M.P.)  
Subject: RE: Finned Pintle Hold-up

See below in RED text answers to questions #4 and #6.  
Don, Michael and Eric: IAC part for Escape TSB we discussed today.

-----Original Message-----

From: Sanders, Muriel (M.S.)  
Sent: Thursday, August 08, 2002 10:39 AM  
To: Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Suarez,  
Rhae (R.); Terzes, Laura (L.D.)  
Cc: Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.)  
Subject: RE: Finned Pintle Hold-up  
Importance: High

The black text below are the answers to Tom Durfee's (Service Engineering) questions. He is rejecting the concern until these items are addressed. Please let me know when this information has been added to the concern.

Lem/Jeff/Bill - I do not have WERS access. Will one of you please add the responses to items 1-3 & 7 for me. Thanks!  
Rhae/Laura - Please answer items 4 & 6.

1. Other IAC's have had this new fin pintle design and no PCM reflash was required why does this vehicle line need a reflash with an IAC change?

We have data showing that the finned pintle valve is not transparent to the guide A valve. The mean finned pintle ISC duty cycle at idle is 3% higher than with the current production valve.

2. If the new IAC is installed and no reflash is done what is the failure mode?

Possible (low probability) stall at warm startup or engagement.

3. Does the calibration have to be updated with the new IAC?

Yes, applicable calibration numbers were entered in this concern by John Bogema on 7/25/02.

4. If the calib has to be update with this new IAC, how does the out of warranty customer get notified of this requirement?  
FCSD PS&L (Parts, Supply & Logistics) has agreed to work with their service parts packaging engineering to place a sticker on the Motorcraft box indicating the IAC change may require a calibration update, and refer to TSB XX-XXX-XX. Rhae Suarez will place information in the Parts Request comments section to insure the sticker is produced and fixed to package.

5. number was skipped by Tom

6. In the parts FCSD catalog we can have a flag that calls out a new PCM/Re-flash but this is not a six sigma repair.  
FCSD, PS&L, has agreed to place a flag in the on-line service parts system, GCAT, indicating the new IAC part may require a calibration change. Also, the TSB will list all prior calibrations that must be updated to perform the service procedure and to insure compatibility with the new IAC part.

7. A TSB will need to be issued to the field and there is not enough information in this concern to release a TSB. New PCM part numbers will have to be release in WERS for the new calibration.  
The stall TSB is written and is waiting for approval of this concern. We cannot get the finned pintle IAC service part number necessary for the TSB until this concern is approved.  
The calibration part numbers were released in C11390580. They will be available to Fordstar on 8/9/02.

Muriel Sanders  
U204 3.0L Calibration  
Ford Motor Company  
Phone: 313-32-27307  
Fax: 313-32-31786  
E-mail: msander6@ford.com

-----Original Message-----

From: Dalbo, Bob (R.J.)  
Sent: Wednesday, August 07, 2002 5:20 PM  
To: Galante, Chris (C.R.); Terzes, Laura (L.D.); Fascetti, Bob (R.J.)  
Cc: Sanders, Muriel (M.S.); Fournelle, Gilbert (G.)  
Subject: Finned Pintle Hold-up  
Importance: High

Chris,  
Yes, the finned pintle IACV does require a calibration change on the Escape/Tribute. The service calibrations will be available Friday (8/9). We have a TSB in for review that explains that the calibration update is required for the new IACV.

Who in service engineering is rejecting this concern? We need to bring them up to speed on this change and the urgency to complete it.

Laura,  
How does FCSD manage coordinated parts changes like this IACV/calibration combination? Is that process already underway for this

change?

Bob Dalbo  
3.0L Calibration Supervisor  
Outfitters Calibration, NAT  
Phone: (313) 24-84947 Fax: (313) 32-31786  
Pager: (313) 795-2859 Email: rdalbo@ford.com

-----Original Message-----

From: Galante, Chris (C.R.)  
Sent: Wednesday, August 07, 2002 10:47 AM  
To: Dalbo, Bob (R.J.)  
Subject: calibration change for Escape

Hi Bob.

We spoke earlier about the calibration change for Escape related to stalls, and you gave me a concern number (C11390555) which is related to the finned pintle IAC change. Does the IAC change require the calibration change??

The reason I ask is that service engineering is likely rejecting the concern for, among other reasons, the chance that a customer who has a vehicle out of warranty may change the IAC themselves and not be aware that a TSB exists requiring a reflash. Something I'm curious to know is that on the modular products, we introduced the finned pintle design without any calibration change. Why would the Escape be unique in this regard? If not, should we disassociate the calibration change and IAC change (i.e. have two separate concerns)?

Christopher R. Galante  
cgalante@ford.com

\* Fax: (313) 337-3813  
\* Phone: (313) 845-6067  
Pager: (313) 795-2807

V-Engine Engineering - Ford Motor Co.

<<usaflag.gif>>

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**From:** Hayes, April (A.A.)  
**Sent:** Thursday, November 07, 2002 4:11 PM  
**To:** Kaercher, Don (D.F.); Terzas, Laura (L.D.); Sanders, Muriel (M.S.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Suarez, Rhae (R.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Lapkewych, Michael (M.P.); Nielsen, Christian (C.A.)  
**Cc:** Lintiacco, Steven (S.); Giblin, Michael (M.); Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.ml@sv.mazda.co.jp'; Fournelle, Gilbert (G.); Dalbo, Bob (R.J.); Suarez, Rhae (R.); Lawler, Dave (D.A.); Moyer, Douglas (D.C.)  
**Subject:** RE: Finned Pintle Hold-up

Don & Sam -

Attached is the L1792 label for your review. It is a 1" x 3" label, white stock with black type. Please advise if this label is acceptable ASAP. If deemed acceptable, we can have 4500 printed labels available for shipment Monday 11/11/02 using Whitlam Label Co. Additional labels can be purchased via Whitlam or from the Printer of choice. The material specification with details of the L1792 will also be available Monday. Label requirement was added to the Packaging Specification today.

Thank you.

April Hayes  
Black Belt Candidate  
FCSD Package Engineering  
ph: 734-523-3584  
fax: 734-523-3430  
email: ahayes14@ford.com

-----Original Message-----

**From:** Kaercher, Don (D.F.)  
**Sent:** Wednesday, November 06, 2002 4:28 PM  
**To:** Terzas, Laura (L.D.); Sanders, Muriel (M.S.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Suarez, Rhae (R.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Kaercher, Don (D.F.); Hightower, Eric (E.); Lapkewych, Michael (M.P.); Hayes, April (A.A.); Nielsen, Christian (C.A.)  
**Cc:** Lintiacco, Steven (S.); Giblin, Michael (M.); Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.ml@sv.mazda.co.jp'; Fournelle, Gilbert (G.); Dalbo, Bob (R.J.); Suarez, Rhae (R.); Lawler, Dave (D.A.)  
**Subject:** Finned Pintle Hold-up

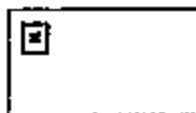
Here is a copy of our agreement. Apparently it was not done. Here is what needs to happen:

1. We need the TSB number for our "sticker" and so cataloging can include the info in the catalog.
2. April Hayes in packaging will work with Sam Ferrise to get labels for Hitachi. We will also send labels to Mazda and PRC to sticker the parts already packaged.
3. Purchasing (Chris Nielsen) will probably have to adjust the packaging price to include the cost of the sticker.



4. Mike Lapkewych will have the part cataloged with a message similar to the sticker.

Sorry for all the confusion.....



*Don Kaercher*

*Ford Motor Company*

*FCSD PS&L QSF/Recall/Top 100 Dept. Mgr.*

*NPDC 1310C Text Pager: (734) 797-5993*

*e-mail: [dkaerche@ford.com](mailto:dkaerche@ford.com)*

Phone: (734) 266-9793 Fax: (734) 266-1168

-----Original Message-----

From: Terzes, Laura (L.D.)

Sent: Thursday, August 08, 2002 11:05 AM

To: Sanders, Muriel (M.S.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Suarez, Rhae (R.)

Cc: Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Kaercher, Don (D.F.); Hightower, Eric (E.);

Lapkewych, Michael (M.P.)

Subject: RE: Finned Pintle Hold-up

See below in RED text answers to questins #4 and #6.

Don, Michael and Eric: IAC part for Escape TSB we discussed today.

-----Original Message-----

From: Sanders, Muriel (M.S.)

Sent: Thursday, August 08, 2002 10:39 AM

To: Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Suarez, Rhae (R.); Terzes, Laura (L.D.)

Cc: Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.)

Subject: RE: Finned Pintle Hold-up

Importance: High

The black text below are the answers to Tom Durfee's (Service Engineering) questions. He is rejecting the concern until these items are addressed. Please let me know when this information has been added to the concern.

Lem/Jeff/Bill - I do not have WERS access. Will one of you please add the responses to items 1-3 & 7 for me. Thanks!

Rhae/Laura - Please answer items 4 & 6.

1. Other IAC's have had this new fin pintle design and no PCM reflash was required why does this vehicle line need a reflash with an IAC change?

We have data showing that the finned pintle valve is not transparent to the guide A valve. The mean finned pintle ISC duty cycle at idle is 3% higher than with the current production valve.

2. If the new IAC is installed and no reflash is done what is the failure mode?

Possible (low probability) stall at warm startup or engagement.

3. Does the calibration have to be updated with the new IAC?

Yes, applicable calibration numbers were entered in this concern by John Bogema on 7/25/02.

4. If the calib has to be update with this new IAC, how does the out of warranty customer get notified of this requirement?

FCSD PS&L (Parts, Supply & Logistics) has agreed to work with their service parts packaging engineering to place a sticker on the Motorcraft box indicating the IAC change may require a calibration update, and refer to TSB XX-xxx-xx. Rhas Suarez will place information in the Parts Request comments section to insure the sticker is produced and fixed to package.

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FCSD, PS&L, has agreed to place a flag in the on-line service parts system, GCAT, indicating the new IAC part may require a calibration change. Also, the TSB will list all prior calibrations that must be updated to perform the service procedure and to insure compatibility with the new IAC part.

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The calibration part numbers were released in C11390580. They will be available to Fordstar on 8/9/02.

*Muriel Sanders*

U204 3.0L Calibration

Ford Motor Company

Phone: 313-32-27307

Fax: 313-32-31786

E-mail: msander6@ford.com

—Original Message—

From: Dalbo, Bob (R.J.)

Sent: Wednesday, August 07, 2002 5:20 PM

To: Galante, Chris (C.R.); Terzas, Laura (L.D.); Fascetti, Bob (R.J.)

Cc: Sanders, Muriel (M.S.); Fournelle, Gilbert (G.)

Subject: Finned Pintle Hold-up

Importance: High

Chris,

Yes, the finned pintle IACV does require a calibration change on the Escape/Tribute. The service calibrations will be available Friday (8/9). We have a TSB in for review that explains that the calibration update is required for the new IACV.

Who in service engineering is rejecting this concern? We need to bring them up to speed

on this change and the urgency to complete it.

Laura,

How does FCSD manage coordinated parts changes like this IACV/calibration combination? Is that process already underway for this change?

*Bob Dalbo*

3.0L Calibration Supervisor  
Outfitters Calibration, NAT  
Phone: (313) 24-84947 Fax: (313) 32-31786  
Pager: (313) 795-2859 Email: [rdalbo@ford.com](mailto:rdalbo@ford.com)

-----Original Message-----



From: Galante, Chris (C.R.)  
Sent: Wednesday, August 07, 2002 10:47 AM  
To: Dalbo, Bob (R.J.)  
Subject: calibration change for Escape

Hi Bob.

We spoke earlier about the calibration change for Escape related to stalls, and you gave me a concern number (C11390555) which is related to the finned pintle IAC change. Does the IAC change require the calibration change??

The reason I ask is that service engineering is likely rejecting the concern for, among other reasons, the chance that a customer who has a vehicle out of warranty may change the IAC themselves and not be aware that a TSB exists requiring a reflash. Something I'm curious to know is that on the modular products, we introduced the finned pintle design without any calibration change. Why would the Escape be unique in this regard? If not, should we disassociate the calibration change and IAC change (i.e. have two separate concerns)?

*Christopher R. Galante*  
[cgalante@ford.com](mailto:cgalante@ford.com)

 Fax: (313) 337-3813  
 Phone: (313) 845-6067  
Pager: (313) 795-2807

*V-Engine Engineering - Ford Motor Co.*

**From:** Kaercher, Don (D.F.)  
**Sent:** Friday, November 08, 2002 7:23 AM  
**To:** Lawler, Dave (D.A.)  
**Cc:** Altoonian, Don (D.J.); Lapkewych, Michael (M.P.); Lintiacco, Steven (S.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Hayes, April (A.A.); Nielsen, Christian (C.A.); Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Ferrise, Sam (S.J.)  
**Subject:** FW: Fined Pintle Hold-up

OK Dave, here's the scoop. As expected, we are getting several recommendations as to what verbiage should be on the sticker and in the catalog. We are now losing time. Parts should not be making this decision. I need you to make a decision, and send the exact verbiage you want to April Hayes. Then we can get moving today, and the rest of us will just have to live with it. Thanks!!

Don Kaercher  
Ford Motor Company  
FCSD PS&L QSF/Recall/Top 100 Dept. Mgr.  
NPDC 1310C Text Pager: (734) 797-5993  
e-mail: dkaerche@ford.com  
\*Phone: (734) 266-9793 \*Fax: (734) 266-1166

-----Original Message-----

**From:** Altoonian, Don (D.J.)  
**Sent:** Thursday, November 07, 2002 5:02 PM  
**To:** Kaercher, Don (D.F.)  
**Subject:** RE: Fined Pintle Hold-up

Don, I guess that it could, but it has to be flashed so the new valve functions properly. I guess that we could say when changing from what ever the old # is to the new 1L8Z-9F715-AA is the only time that a reflash is required.

-----Original Message-----

**From:** Kaercher, Don (D.F.)  
**Sent:** Thursday, November 07, 2002 10:02 AM  
**To:** Altoonian, Don (D.J.); Lapkewych, Michael (M.P.); Lintiacco, Steven (S.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Hayes, April (A.A.); Nielsen, Christian (C.A.)  
**Cc:** Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Lawler, Dave (D.A.); Ferrise, Sam (S.J.)  
**Subject:** RE: Fined Pintle Hold-up

Can't that be misunderstood? If I have this IAC replaced, and flash to 21.7, then need another IAC three years from now, couldn't I misunderstand and think I have to flash again?

Don Kaercher  
Ford Motor Company  
FCSD P&L QSP/Recall/Top 100 Dept. Mgr.  
NFDC 1310C Text Pager: (734) 797-5993  
e-mail: dkaerche@ford.com  
\*Phone: (734) 266-9793 \*Fax: (734) 266-1166

-----Original Message-----

From: Altoonian, Don (D.J.)  
Sent: Thursday, November 07, 2002 9:59 AM  
To: Lapkewych, Michael (M.P.); Kaercher, Don (D.F.); Limtiaco, Steven (S.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Hayes, April (A.A.); Nielsen, Christian (C.A.)  
Cc: Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Lawler, Dave (D.A.); Ferrise, Sam (S.J.)  
Subject: RE: Finned Pintle Hold-up

Michael, should we not say that your dealer has to reflash to the latest EEC module calibration when installing this valve? The Joe Blow customer does not have the slightest idea what a WDS, or an NGS is. Then to help the dealer, we could say that the calibration has to be obtained from CD-ROM 21.7 or later.

-----Original Message-----

From: Lapkewych, Michael (M.P.)  
To: Kaercher, Don (D.F.); Limtiaco, Steven (S.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Hayes, April (A.A.); Nielsen, Christian (C.A.)  
Cc: Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Lawler, Dave (D.A.); Ferrise, Sam (S.J.); Altoonian, Don (D.J.)  
Sent: 11/7/02 8:13 AM  
Subject: RE: Finned Pintle Hold-up

Greetings , per Steve's suggestion we here in cataloging can add that note "Vehicle PCM must be reflashed to latest calibration available on WDS software B21.7 or later, PRIOR to installation of this part." to the catalog information if that helps MIKE

-----Original Message-----

From: Kaercher, Don (D.F.)  
Sent: Thursday, November 07, 2002 8:04 AM  
To: Limtiaco, Steven (S.); Kaercher, Don (D.F.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Lapkewych, Michael (M.P.); Hayes, April (A.A.); Nielsen, Christian (C.A.)  
Cc: Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Lawler, Dave (D.A.);

Ferrise, Sam (S.J.); Altoonian, Don (D.J.)  
Subject: RE: Finned Pintle Hold-up

teve, I can reply to some of your suggestions. The first two are really dealing with the TSB service procedure, of which we have no input (we do not normally even see the actual text). Regarding the TSB number on the sticker, I don't have any issue with your suggestion. My only concern is will a wholesale or over-the-counter customer understand the meaning? I want it to be something that a dealer, independent garage or retail customer can understand to the point they realize they may have to have an additional "procedure" done at the dealer.

Regarding the sticker being on the part, you can do that with the stickers we send you, but the agreement we had going in to this was that this was done via a packaging spec versus WERS, so the sticker must be on the box versus the part. To change that would require the sticker to be added to the part in WERS, and you would have to work through Laura Terzes to get that done. Thanks Steve!!

<outbind://4/usflag\_sm%20(2).gif> Don Kaercher  
Ford Motor Company  
FCSD PS&L QSF/Recall/Top 100 Dept. Mgr.  
NPDC 1310C Text Pager: (734) 797-5993  
e-mail: dkaerche@ford.com  
\*Phone: (734) 266-9793 \*Fax: (734) 266-1166

-----Original Message-----

From: Steven Limtiaco [mailto:SLimtiaco@mazdausa.com]  
Sent: Wednesday, November 06, 2002 6:56 PM  
To: 'Kaercher, Don (D.F.)'; 'Terzes, Laura (L.D.)'; 'Grimes, Jeff (J.R.)'; 'Yeung, Lem (.); 'Wettach, Bill (B.)'; 'Fournelle, Gilbert (G.)'; 'Fascetti, Bob (R.J.)'; 'Dalbo, Bob (R.J.)'; 'Hightower, Eric (E.)'; 'Lapkewych, Michael (M.P.)'; 'Hayes, April (A.A.)'; 'Nielsen, Christian (C.A.)'  
Cc: Darrel Chin; Mike Clark; Dave Lammert; Mike Radulovich; Larry Mooney; 'tokunaga.mi@sv.mazda.co.jp'; 'Suarez, Rhae (R.)'; 'Lawler, Dave (D.A.)'; 'sferrise@ford.com'; 'daltoon@ford.com'  
Subject: RE: Finned Pintle Hold-up

Don,

Some additional items to consider:

- Although the TSB instructs technicians to reflash the PCM, it is not explicit that the reflash be done as a condition to installing the new IAC valve.
- There are many more items in the TSB that may confuse technicians into thinking they need to perform the entire procedure for just an IAC valve replacement.
- Mazda's TSB number is different than Ford's. Will there be separate stickers for IAC valves shipped to Mazda? Suggestion: Rather than referring to the TSB number and to prevent making separate stickers for the Ford and Mazda TSB numbers, we might want the sticker to say, "Vehicle PCM must be reflashed to latest calibration available on WDS software B21.7 or later, PRIOR to installation of this part." I believe

this statement covers both Ford and Mazda. Bob Dalbo, will this work ?

- Lastly, can we put the sticker on the part itself? There is a chance that the technician is handed a part w/o the box.

Anyway, hope these comments help.

Steve Lintiac  
Mazda North American Operations  
Tribute Product Support  
949-442-6514 (phone)  
949-442-6599 (fax)  
e-mail: slintiac@mazdausa.com

-----Original Message-----

From: Kaercher, Don (D.F.) [mailto:dkaerche@ford.com]  
Sent: Wednesday, November 06, 2002 1:28 PM  
To: Terzes, Laura (L.D.); Sanders, Muriel (M.S.); Grimes, Jeff (J.R.);  
Yeung, Lem (.); Wettach, Bill (B.); Suarez, Rhae (R.); Fournelle,  
Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Kaercher, Don  
(D.F.); Hightower, Eric (E.); Lapkewych, Michael (M.P.); Hayes, April  
(A.A.); Nielsen, Christian (C.A.)  
Cc: Lintiac, Steven (S.); Giblin, Michael (M.); Chin, Darrel (D.);  
Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.);  
Moonay, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Fournelle, Gilbert  
(G.); Dalbo, Bob (R.J.); Suarez, Rhae (R.); Lawler, Dave (D.A.)  
Subject: Fimmed Pintle Hold-up

Here is a copy of our agreement. Apparently it was not done. Here is what needs to happen:

1. We need the TSB number for our "sticker" and so cataloging can include the info in the catalog.
2. April Hayes in packaging will work with Sam Ferrise to get labels for Hitachi. We will also send labels to Mazda and PRC to sticker the parts already packaged.
3. Purchasing (Chris Nielsen) will probably have to adjust the packaging price to include the cost of the sticker.
4. Mike Lapkewych will have the part cataloged with a message similar to the sticker.

Sorry for all the confusion.....

<outbind://5/usflag\_sm@20(2).gif> Don Kaercher  
Ford Motor Company  
FCSD PS&L QSF/Recall/Top 100 Dept. Mgr.  
NPDC 1310C Text Pager: (734) 797-5993  
e-mail: dkaerche@ford.com  
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-----Original Message-----

From: Terzes, Laura (L.D.)  
Sent: Thursday, August 08, 2002 11:06 AM  
To: Sanders, Muriel (M.S.); Grimes, Jeff (J.R.); Yeung, Lem (.);  
Wettach, Bill (B.); Suarez, Rhae (R.)  
Cc: Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.);  
Kaercher, Don (D.F.); Hightower, Eric (E.); Lapkewych, Michael (M.P.)  
Subject: RE: Fimmed Pintle Hold-up

See below in RED text answers to questions #4 and #6.  
Don, Michael and Eric: IAC part for Escape TSB we discussed today.

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From: Sanders, Muriel (M.S.)  
Sent: Thursday, August 08, 2002 10:39 AM  
To: Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Suarez,  
Rhae (R.); Terzes, Laura (L.D.)  
Cc: Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.)  
Subject: RE: Fimmed Pintle Hold-up  
Importance: High

The black text below are the answers to Tom Durfee's (Service Engineering) questions. He is rejecting the concern until these items are addressed. Please let me know when this information has been added to the concern.

Lem/Jeff/Bill - I do not have NERS access. Will one of you please add the responses to items 1-3 & 7 for me. Thanks!  
Rhae/Laura - Please answer items 4 & 6.

1. Other IAC's have had this new fin pintle design and no PCM reflash was required why does this vehicle line need a reflash with an IAC change?

We have data showing that the finned pintle valve is not transparent to the guide A valve. The mean finned pintle ISC duty cycle at idle is 3% higher than with the current production valve.

2. If the new IAC is installed and no reflash is done what is the failure mode?

Possible (low probability) stall at warm startup or engagement.

3. Does the calibration have to be updated with the new IAC?

Yes, applicable calibration numbers were entered in this concern by John Bogema on 7/25/02.

4. If the calib has to be update with this new IAC, how does the out of warranty customer get notified of this requirement?

FCSD PS&L (Parts, Supply & Logistics) has agreed to work with their service parts packaging engineering to place a sticker on the Motorcraft box indicating the IAC change may require a calibration update, and refer to TSB XX-xxx-xx. Rhae Suarez will place information in the Parts Request comments section to insure the sticker is produced and fixed to package.

5. number was skipped by Tom

6. In the parts FCSD catalog we can have a flag that calls out a new PCM/Re-flash but this is not a six sigma repair.



FCSD, PS&L, has agreed to place a flag in the on-line service parts system, GCAT, indicating the new IAC part may require a calibration change. Also, the TSB will list all prior calibrations that must be updated to perform the service procedure and to insure compatibility with the new IAC part.

7. A TSB will need to be issued to the field and there is not enough information in this concern to release a TSB. New PCM part numbers will have to be release in WERS for the new calibration. The stall TSB is written and is waiting for approval of this concern. We cannot get the finned pintle IAC service part number necessary for the TSB until this concern is approved. The calibration part numbers were released in C11390580. They will be available to Fordstar on 8/9/02.

Muriel Sanders  
U204 3.0L Calibration  
Ford Motor Company  
Phone: 313-32-27307  
Fax: 313-32-31786  
E-mail: msander6@ford.com

-----Original Message-----

From: Dalbo, Bob (R.J.)  
Sent: Wednesday, August 07, 2002 5:20 PM  
To: Galante, Chris (C.R.); Terzes, Laura (L.D.); Fascetti, Bob (R.J.)  
Cc: Sanders, Muriel (M.S.); Fournelle, Gilbert (G.)  
Subject: Finned Pintle Hold-up  
Importance: High

Chris,  
Yes, the finned pintle IACV does require a calibration change on the Escape/Tribute. The service calibrations will be available Friday (8/9). We have a TSB in for review that explains that the calibration update is required for the new IACV.

Who in service engineering is rejecting this concern? We need to bring them up to speed on this change and the urgency to complete it.

Laura,  
How does FCSD manage coordinated parts changes like this IACV/calibration combination? Is that process already underway for this change?

Bob Dalbo  
3.0L Calibration Supervisor  
Outfitters Calibration, NAT  
Phone: (313) 24-84947 Fax: (313) 32-31786  
Pager: (313) 795-2859 Email: rdalbo@ford.com

-----Original Message-----

From: Galante, Chris (C.R.)  
Sent: Wednesday, August 07, 2002 10:47 AM  
To: Dalbo, Bob (R.J.)  
Subject: calibration change for Escape

Hi Bob.

We spoke earlier about the calibration change for Escape related to stalls, and you gave me a concern number (C11390555) which is related to the finned pintle IAC change. Does the IAC change require the calibration change??

The reason I ask is that service engineering is likely rejecting the concern for, among other reasons, the chance that a customer who has a vehicle out of warranty may change the IAC themselves and not be aware that a TSB exists requiring a reflash. Something I'm curious to know is that on the modular products, we introduced the finned pintle design without any calibration change. Why would the Escape be unique in this regard? If not, should we disassociate the calibration change and IAC change (i.e. have two separate concerns)?

Christopher R. Galante  
cgalante@ford.com

\* Fax: (313) 337-3813  
\* Phone: (313) 845-6067  
Pager: (313) 795-2807

V-Engine Engineering - Ford Motor Co.

<<usaflag.gif>>

**From:** Grimes, Jeff (J.R.)  
**Sent:** Friday, November 08, 2002 8:18 AM  
**To:** Kaercher, Don (D.F.); Lawler, Dave (D.A.); Jensen, Ted (T.E.)  
**Co:** Altoonian, Don (D.J.); Lapkewych, Michael (M.P.); Lintiac, Steven (S.); Terzes, Laura (L.D.); Yeung, Lem (L.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Hayes, April (A.A.); Nielsen, Christian (C.A.); Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Ferrise, Sam (S.J.)  
**Subject:** RE: Finned Pintle Hold-up

How about removing the IAC from the TSB...and letting the component stand on its own.

This would allow the TSB to go forward for the public's benefit, without wasting more time on verbiage.

Jeff Grimes  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company  
ph: (313) 322-5237 fax: (313) 594-7323  
e-mail: jgrimes1@ford.com

-----Original Message-----

**From:** Kaercher, Don (D.F.)  
**Sent:** Friday, November 08, 2002 7:23 AM  
**To:** Lawler, Dave (D.A.)  
**Cc:** Altoonian, Don (D.J.); Lapkewych, Michael (M.P.); Lintiac, Steven (S.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lem (L.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Hayes, April (A.A.); Nielsen, Christian (C.A.); Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Ferrise, Sam (S.J.)  
**Subject:** FW: Finned Pintle Hold-up

OK Dave, here's the scoop. As expected, we are getting several recommendations as to what verbiage should be on the sticker and in the catalog. We are now losing time. Parts should not be making this decision. I need you to make a decision, and send the exact verbiage you want to April Hayes. Then we can get moving today, and the rest of us will just have to live with it. Thanks!!

Don Kaercher  
Ford Motor Company  
FCSD PS&L QSF/Recall/Top 100 Dept. Mgr.  
NPDC 1310C Text Pager: (734) 797-5993  
e-mail: dkaerche@ford.com  
\*Phone: (734) 266-9793 \*Fax: (734) 266-1166

-----Original Message-----

**From:** Altoonian, Don (D.J.)  
**Sent:** Thursday, November 07, 2002 5:02 PM  
**To:** Kaercher, Don (D.F.)  
**Subject:** RE: Finned Pintle Hold-up

Don, I guess that it could, but it has to be flashed so the new valve functions properly. I guess that we could say when changing from what ever the old # is to the new 1L8Z-9F715-AA is the only time that a reflash is required.

-----Original Message-----

From: Kaercher, Don (D.F.)  
Sent: Thursday, November 07, 2002 10:02 AM  
To: Altoonian, Don (D.J.); Lapkewych, Michael (M.P.); Lintiac, Steven (S.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Hayes, April (A.A.); Nielsen, Christian (C.A.)  
Cc: Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Lawler, Dave (D.A.); Ferrise, Sam (S.J.)  
Subject: RE: Finned Pintle Hold-up

Can't that be misunderstood? If I have this IAC replaced, and flash to 21.7, then need another IAC three years from now, couldn't I misunderstand and think I have to flash again?

Don Kaercher  
Ford Motor Company  
PCSD PS&L QSP/Recall/Top 100 Dept. Mgr.  
NPDC 1310C Text Pager: (734) 797-5993  
e-mail: dkaerche@ford.com  
\*Phone: (734) 266-9793 \*Fax: (734) 266-1166

-----Original Message-----

From: Altoonian, Don (D.J.)  
Sent: Thursday, November 07, 2002 9:59 AM  
To: Lapkewych, Michael (M.P.); Kaercher, Don (D.F.); Lintiac, Steven (S.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Hayes, April (A.A.); Nielsen, Christian (C.A.)  
Cc: Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Lawler, Dave (D.A.); Ferrise, Sam (S.J.)  
Subject: RE: Finned Pintle Hold-up

Michael, should we not say that your dealer has to reflash to the latest EEC module calibration when installing this valve? The Joe Blow customer does not have the slightest idear what a WDS, or an NGS is. Then to help the dealer, we could say that the calibration has to be obtained from CD-ROM 21.7 or later.

-----Original Message-----

From: Lapkewych, Michael (M.P.)  
To: Kaercher, Don (D.F.); Lintiac, Steven (S.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Fournelle,

Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Hayes, April (A.A.); Nielsen, Christian (C.A.)  
Cc: Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Lawler, Dave (D.A.); Ferrise, Sam (S.J.); Altoonian, Don (D.J.)  
Sent: 11/7/02 8:13 AM  
Subject: RE: Firmed Pintle Hold-up

Greetings , per Steve's suggestion we here in cataloging can add that note "Vehicle PCM must be reflashed to latest calibration available on WDS software B21.7 or later, PRIOR to installation of this part." to the catalog information if that helps MIKE

-----Original Message-----

From: Kaercher, Don (D.F.)  
Sent: Thursday, November 07, 2002 8:04 AM  
To: Lintiac, Steven (S.); Kaercher, Don (D.F.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Lapkewych, Michael (M.P.); Hayes, April (A.A.); Nielsen, Christian (C.A.)  
Cc: Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Lawler, Dave (D.A.); Ferrise, Sam (S.J.); Altoonian, Don (D.J.)  
Subject: RE: Firmed Pintle Hold-up

Steve, I can reply to some of your suggestions. The first two are really dealing with the TSB service procedure, of which we have no input (we do not normally even see the actual text). Regarding the TSB number on the sticker, I don't have any issue with your suggestion. My only concern is will a wholesale or over-the-counter customer understand the meaning? I want it to be something that a dealer, independent garage or retail customer can understand to the point they realize they may have to have an additional "procedure" done at the dealer.

Regarding the sticker being on the part, you can do that with the stickers we send you, but the agreement we had going in to this was that this was done via a packaging spec versus WERs, so the sticker must be on the box versus the part. To change that would require the sticker to be added to the part in WERs, and you would have to work through Laura Terzes to get that done. Thanks Steve!!

<outbind://4/usflag\_sm#20(2).gif> Don Kaercher  
Ford Motor Company  
PCSD PS&L QSF/Recall/Top 100 Dept. Mgr.  
NPDC 1310C Text Pager: (734) 797-5993  
e-mail: dkaerche@ford.com  
\*Phone: (734) 266-9793 \*Fax: (734) 266-1166

-----Original Message-----

From: Steven Lintiac [mailto:SLintiac@mazdausa.com]  
Sent: Wednesday, November 06, 2002 6:56 PM  
To: 'Kaercher, Don (D.F.)'; 'Terzes, Laura (L.D.)'; 'Grimes, Jeff (J.R.)'; 'Yeung, Lem (.); 'Wettach, Bill (B.)'; 'Fournelle, Gilbert (G.)'; 'Fascetti, Bob (R.J.)'; 'Dalbo, Bob (R.J.)'; 'Hightower, Eric (E.)'; 'Lapkewych, Michael (M.P.)'; 'Hayes, April (A.A.)'; 'Nielsen, Christian (C.A.)'

Cc: Darrel Chin; Mike Clark; Dave Lammert; Mike Radulovich; Larry Mooney; 'tokunaga.mi@sv.mazda.co.jp'; 'Suarez, Rhae (R.)'; 'Lawler, Dave (D.A.)'; 'sferrise@ford.com'; 'daltoni@ford.com'  
Subject: RE: Finned Pintle Hold-up

Don,

Some additional items to consider:

- Although the TSB instructs technicians to reflash the PCM, it is not explicit that the reflash be done as a condition to installing the new IAC valve.
- There are many more items in the TSB that may confuse technicians into thinking they need to perform the entire procedure for just an IAC valve replacement.
- Mazda's TSB number is different than Ford's. Will there be separate stickers for IAC valves shipped to Mazda? Suggestion: Rather than referring to the TSB number and to prevent making separate stickers for the Ford and Mazda TSB numbers, we might want the sticker to say, "Vehicle PCM must be reflashed to latest calibration available on WDS software B21.7 or later, PRIOR to installation of this part." I believe this statement covers both Ford and Mazda. Bob Dalbo, will this work?
- Lastly, can we put the sticker on the part itself? There is a chance that the technician is handed a part w/o the box.

Anyway, hope these comments help.

Steve Lintiacco  
Mazda North American Operations  
Tribute Product Support  
949-442-6514 (phone)  
949-442-6599 (fax)  
e-mail: slintiac@mazdausa.com

-----Original Message-----

From: Kaercher, Don (D.F.) [mailto:dkaerche@ford.com]  
Sent: Wednesday, November 06, 2002 1:28 PM  
To: Terzes, Laura (L.D.); Sanders, Muriel (M.S.); Grimes, Jeff (J.R.); Yeung, Lam (.); Wettach, Bill (B.); Suarez, Rhae (R.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Kaercher, Don (D.F.); Hightower, Eric (E.); Lapkewych, Michael (M.P.); Hayes, April (A.A.); Nielsen, Christian (C.A.)  
Cc: Lintiacco, Steven (S.); Gibling, Michael (M.); Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Fournelle, Gilbert (G.); Dalbo, Bob (R.J.); Suarez, Rhae (R.); Lawler, Dave (D.A.)  
Subject: Finned Pintle Hold-up

Here is a copy of our agreement. Apparently it was not done. Here is what needs to happen:

1. We need the TSB number for our "sticker" and so cataloging can

include the info in the catalog.

2. April Hayes in packaging will work with Sam Ferrise to get labels for Hitachi. We will also send labels to Mazda and PRC to sticker the parts already packaged.

3. Purchasing (Chris Nielsen) will probably have to adjust the packaging price to include the cost of the sticker.

4. Mike Lapkewych will have the part cataloged with a message similar to the sticker.

Sorry for all the confusion.....

<outbind://5/usflag\_sm%20(2).gif> Don Kaercher  
Ford Motor Company  
FCSD PS&L QSF/Recall/Top 100 Dept. Mgr.  
NPDC 1310C Text Pager: (734) 797-5993  
e-mail: dkaerche@ford.com  
\*Phone: (734) 266-9793 \*Fax: (734) 266-1166

-----Original Message-----

From: Terzes, Laura (L.D.)  
Sent: Thursday, August 08, 2002 11:06 AM  
To: Sanders, Muriel (M.S.); Grimes, Jeff (J.R.); Yeung, Lem (.);  
Wettach, Bill (B.); Suarez, Rhae (R.)  
Cc: Fournelle, Gilbert (G.); Pascetti, Bob (R.J.); Dalbo, Bob (R.J.);  
Kaercher, Don (D.F.); Hightower, Eric (E.); Lapkewych, Michael (M.P.)  
Subject: RE: Finned Pintle Hold-up

See below in RED text answers to questions #4 and #6.  
Don, Michael and Eric: IAC part for Escape TSB we discussed today.

-----Original Message-----

From: Sanders, Muriel (M.S.)  
Sent: Thursday, August 08, 2002 10:39 AM  
To: Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Suarez,  
Rhae (R.); Terzes, Laura (L.D.)  
Cc: Fournelle, Gilbert (G.); Pascetti, Bob (R.J.); Dalbo, Bob (R.J.)  
Subject: RE: Finned Pintle Hold-up  
Importance: High

The black text below are the answers to Tom Durfee's (Service Engineering) questions. He is rejecting the concern until these items are addressed. Please let me know when this information has been added to the concern.

Lem/Jeff/Bill - I do not have WERS access. Will one of you please add the responses to items 1-3 & 7 for me. Thanks!  
Rhae/Laura - Please answer items 4 & 6.

1. Other IAC's have had this new fin pintle design and no PCM reflash was required why does this vehicle line need a reflash with an IAC change?  
We have data showing that the finned pintle valve is not transparent to

the guide A valve. The mean finned pintle ISC duty cycle at idle is 3% higher than with the current production valve.

2. If the new IAC is installed and no reflash is done what is the failure mode?

Possible (low probability) stall at warm startup or engagement.

3. Does the calibration have to be updated with the new IAC?

Yes, applicable calibration numbers were entered in this concern by John Bogema on 7/25/02.

4. If the calib has to be update with this new IAC, how does the out of warranty customer get notified of this requirement?

FCSD PS&L (Parts, Supply & Logistics) has agreed to work with their service parts packaging engineering to place a sticker on the Motorcraft box indicating the IAC change may require a calibration update, and refer to TSB XX-xxx-xx. Rhae Suarez will place information in the Parts Request comments section to insure the sticker is produced and fixed to package.

5. number was skipped by Tom

6. In the parts FCSD catalog we can have a flag that calls out a new PCM/Re-flash but this is not a six sigma repair.

FCSD, PS&L, has agreed to place a flag in the on-line service parts system, GCAT, indicating the new IAC part may require a calibration change. Also, the TSB will list all prior calibrations that must be updated to perform the service procedure and to insure compatibility with the new IAC part.

7. A TSB will need to be issued to the field and there is not enough information in this concern to release a TSB. New PCM part numbers will have to be release in WERS for the new calibration.

The stall TSB is written and is waiting for approval of this concern. We cannot get the finned pintle IAC service part number necessary for the TSB until this concern is approved.

The calibration part numbers were released in C11390580. They will be available to Fordstar on 8/9/02.

Muriel Sanders  
F204 3.0L Calibration  
Ford Motor Company  
Phone: 313-32-27307  
Fax: 313-32-31786  
E-mail: msander6@ford.com

-----Original Message-----

From: Dalbo, Bob (R.J.)  
Sent: Wednesday, August 07, 2002 5:20 PM  
To: Galante, Chris (C.R.); Terzes, Laura (L.D.); Fascetti, Bob (R.J.)  
Cc: Sanders, Muriel (M.S.); Fournelle, Gilbert (G.)  
Subject: Finned Pintle Hold-up  
Importance: High

Chris,

Yes, the finned pintle IACV does require a calibration change on the Escape/Tribute. The service calibrations will be available Friday (8/9). We have a TSB in for review that explains that the calibration



update is required for the new IACV.

Who in service engineering is rejecting this concern? We need to bring them up to speed on this change and the urgency to complete it.

Laura,  
How does FCSD manage coordinated parts changes like this IACV/calibration combination? Is that process already underway for this change?

Bob Dalbo  
3.0L Calibration Supervisor  
Outfitters Calibration, NAT  
Phone: (313) 24-84947 Fax: (313) 32-31786  
Pager: (313) 795-2859 Email: rdalbo@ford.com

-----Original Message-----

From: Galante, Chris (C.R.)  
Sent: Wednesday, August 07, 2002 10:47 AM  
To: Dalbo, Bob (R.J.)  
Subject: calibration change for Escape

Hi Bob.

We spoke earlier about the calibration change for Escape related to stalls, and you gave me a concern number (C11390555) which is related to the finned pintle IAC change. Does the IAC change require the calibration change??

The reason I ask is that service engineering is likely rejecting the concern for, among other reasons, the chance that a customer who has a vehicle out of warranty may change the IAC themselves and not be aware that a TSB exists requiring a reflash. Something I'm curious to know is that on the modular products, we introduced the finned pintle design without any calibration change. Why would the Escape be unique in this regard? If not, should we disassociate the calibration change and IAC change (i.e. have two separate concerns)?

Christopher R. Galante  
cgalante@ford.com

\* Fax: (313) 337-3813  
\* Phone: (313) 845-6067  
Pager: (313) 795-2807

V-Engine Engineering - Ford Motor Co.

<<usaf1ag.gif>>

**From:** Kaercher, Don (D.F.)  
**Sent:** Friday, November 08, 2002 9:47 AM  
**To:** Grimes, Jeff (J.R.); Lawler, Dave (D.A.); Jensen, Ted (T.E.)  
**Cc:** Altoonian, Don (D.J.); Lapkewych, Michael (M.P.); Lintiacco, Steven (S.); Terzes, Laura (L.D.); Yeung, Lem (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Hayes, April (A.A.); Nielsen, Christian (C.A.); Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Ferrise, Sam (S.J.)  
**Subject:** RE: Finned Pintle Hold-up

That would be up to Dave.

Don Kaercher  
Ford Motor Company  
FCSD PS&L QSP/Recall/Top 100 Dept. Mgr.  
NPDC 1310C Text Pager: (734) 797-5993  
e-mail: dkaerche@ford.com  
\*Phone: (734) 266-9793 \*Fax: (734) 266-1166

-----Original Message-----

**From:** Grimes, Jeff (J.R.)  
**Sent:** Friday, November 08, 2002 9:16 AM  
**To:** Kaercher, Don (D.F.); Lawler, Dave (D.A.); Jensen, Ted (T.E.)  
**Cc:** Altoonian, Don (D.J.); Lapkewych, Michael (M.P.); Lintiacco, Steven (S.); Terzes, Laura (L.D.); Yeung, Lem (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Hayes, April (A.A.); Nielsen, Christian (C.A.); Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Ferrise, Sam (S.J.)  
**Subject:** RE: Finned Pintle Hold-up

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This would allow the TSB to go forward for the public's benefit, without wasting more time on verbage.

Jeff Grimes  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company  
ph: (313) 322-5237 fax: (313) 594-7323  
e-mail: jgrimes1@ford.com

-----Original Message-----

**From:** Kaercher, Don (D.F.)  
**Sent:** Friday, November 08, 2002 7:23 AM  
**To:** Lawler, Dave (D.A.)  
**Cc:** Altoonian, Don (D.J.); Lapkewych, Michael (M.P.); Lintiacco, Steven (S.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Hayes, April (A.A.); Nielsen, Christian (C.A.); Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.);

'tokunaga.mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Ferrise, Sam (S.J.)  
Subject: FW: Finned Pintle Hold-up

OK Dave, here's the scoop. As expected, we are getting several recommendations as to what verbiage should be on the sticker and in the catalog. We are now losing time. Parts should not be making this decision. I need you to make a decision, and send the exact verbiage you want to April Hayes. Then we can get moving today, and the rest of us will just have to live with it. Thanks!!

Don Kaercher  
Ford Motor Company  
FCSD PS&L QSF/Recall/Top 100 Dept. Mgr.  
NPDC 1310C Text Pager: (734) 797-5993  
e-mail: dkaerche@ford.com  
\*Phone: (734) 266-9793 \*Fax: (734) 266-1166

-----Original Message-----

From: Altoonian, Don (D.J.)  
Sent: Thursday, November 07, 2002 5:02 PM  
To: Kaercher, Don (D.F.)  
Subject: RE: Finned Pintle Hold-up

Don, I guess that it could, but it has to be flashed so the new valve functions properly. I guess that we could say when changing from what ever the old # is to the new 1L8Z-9F715-AA is the only time that a reflash is required.

-----Original Message-----

From: Kaercher, Don (D.F.)  
Sent: Thursday, November 07, 2002 10:02 AM  
To: Altoonian, Don (D.J.); Lapkewych, Michael (M.P.); Lintiac, Steven (S.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Young, Lem (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Hayes, April (A.A.); Nielsen, Christian (C.A.)  
Cc: Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.);  
'tokunaga.mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Lawler, Dave (D.A.); Ferrise, Sam (S.J.)  
Subject: RE: Finned Pintle Hold-up

Can't that be misunderstood? If I have this IAC replaced, and flash to 21.7, then need another IAC three years from now, couldn't I misunderstand and think I have to flash again?

Don Kaercher  
Ford Motor Company  
FCSD PS&L QSF/Recall/Top 100 Dept. Mgr.  
NPDC 1310C Text Pager: (734) 797-5993  
e-mail: dkaerche@ford.com  
\*Phone: (734) 266-9793 \*Fax: (734) 266-1166

-----Original Message-----

From: Altoonian, Don (D.J.)  
Sent: Thursday, November 07, 2002 9:59 AM  
To: Lapkewych, Michael (M.P.); Kaercher, Don (D.F.); Lintiacco, Steven (S.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Hayes, April (A.A.); Nielsen, Christian (C.A.)  
Cc: Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Lawler, Dave (D.A.); Ferrise, Sam (S.J.)  
Subject: RE: Finned Pintle Hold-up

Michael, should we not say that your dealer has to reflash to the latest EEC module calibration when installing this valve? The Joe Blow customer does not have the slightest idea what a WDS, or an NGS is. Then to help the dealer, we could say that the calibration has to be obtained from CD-ROM 21.7 or later.

-----Original Message-----

From: Lapkewych, Michael (M.P.)  
To: Kaercher, Don (D.F.); Lintiacco, Steven (S.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Hayes, April (A.A.); Nielsen, Christian (C.A.)  
Cc: Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Lawler, Dave (D.A.); Ferrise, Sam (S.J.); Altoonian, Don (D.J.)  
Sent: 11/7/02 8:13 AM  
Subject: RE: Finned Pintle Hold-up

Greetings , per Steve's suggestion we here in cataloging can add that note "Vehicle PCM must be reflashed to latest calibration available on WDS software B21.7 or later, PRIOR to installation of this part." to the catalog information if that helps MIKE

-----Original Message-----

From: Kaercher, Don (D.F.)  
Sent: Thursday, November 07, 2002 8:04 AM  
To: Lintiacco, Steven (S.); Kaercher, Don (D.F.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Lapkewych, Michael (M.P.); Hayes, April (A.A.); Nielsen, Christian (C.A.)  
Cc: Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Lawler, Dave (D.A.); Ferrise, Sam (S.J.); Altoonian, Don (D.J.)  
Subject: RE: Finned Pintle Hold-up

Steve, I can reply to some of your suggestions. The first two are really dealing with the TSB service procedure, of which we have no input (we do not normally even see the actual text). Regarding the TSB number on the sticker, I don't have any issue with your suggestion. My only concern is will a wholesale or over-the-counter customer understand the meaning? I want it to be something that a dealer, independent garage or

retail customer can understand to the point they realize they may have to have an additional "procedure" done at the dealer.

Regarding the sticker being on the part, you can do that with the stickers we send you, but the agreement we had going in to this was that this was done via a packaging spec versus WERs, so the sticker must be on the box versus the part. To change that would require the sticker to be added to the part in WERs, and you would have to work through Laura Terzes to get that done. Thanks Steve!!

<outbind://4/usflag\_sm%20(2).gif> Don Kaercher  
Ford Motor Company  
FCSD PS&L QSF/Recall/Top 100 Dept. Mgr.  
NPDC 1310C Text Pager: (734) 797-5993  
e-mail: dkaerche@ford.com  
\*Phone: (734) 266-9793 \*Fax: (734) 266-1166

-----Original Message-----

From: Steven Limtiaco [mailto:SLimtiaco@mazdausa.com]  
Sent: Wednesday, November 06, 2002 6:56 PM  
To: 'Kaercher, Don (D.F.)'; 'Terzes, Laura (L.D.)'; 'Grimes, Jeff (J.R.)'; 'Yeung, Lem (.); 'Wettach, Bill (B.)'; 'Fournelle, Gilbert (G.)'; 'Fascetti, Bob (R.J.)'; 'Dalbo, Bob (R.J.)'; 'Hightower, Eric (E.)'; 'Lapkewych, Michael (M.P.)'; 'Hayes, April (A.A.)'; 'Nielsen, Christian (C.A.)'  
Cc: Darrel Chin; Mike Clark; Dave Lammert; Mike Radulovich; Larry Mooney; 'tokunaga.mi@sv.mazda.co.jp'; 'Suarez, Rhae (R.)'; 'Lawler, Dave (D.A.)'; 'sferrise@ford.com'; 'daltoni@ford.com'  
Subject: RE: Finned Pintle Hold-up

Don,

Some additional items to consider:

- Although the TSB instructs technicians to reflash the PCM, it is not explicit that the reflash be done as a condition to installing the new IAC valve.

- There are many more items in the TSB that may confuse technicians into thinking they need to perform the entire procedure for just an IAC valve replacement.

- Mazda's TSB number is different than Ford's. Will there be separate stickers for IAC valves shipped to Mazda? Suggestion: Rather than referring to the TSB number and to prevent making separate stickers for the Ford and Mazda TSB numbers, we might want the sticker to say, "Vehicle PCM must be reflashed to latest calibration available on WDS software B21.7 or later, PRIOR to installation of this part." I believe this statement covers both Ford and Mazda. Bob Dalbo, will this work ?

- Lastly, can we put the sticker on the part itself? There is a chance that the technician is handed a part w/o the box.

Anyway, hope these comments help.

Steve Limtiaco  
Mazda North American Operations

Tribute Product Support  
949-442-6514 (phone)  
949-442-6599 (fax)  
e-mail: slintiac@mazdausa.com

-----Original Message-----

From: Kaercher, Don (D.F.) [mailto:dkaerche@ford.com]  
Sent: Wednesday, November 06, 2002 1:28 PM  
To: Terzes, Laura (L.D.); Sanders, Muriel (M.S.); Grimes, Jeff (J.R.);  
Yeung, Lem (.); Wettach, Bill (B.); Suarez, Rhae (R.); Fournelle,  
Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Kaercher, Don  
(D.F.); Hightower, Eric (E.); Lapkewych, Michael (M.P.); Hayes, April  
(A.A.); Nielsen, Christian (C.A.)  
Cc: Limtiaco, Steven (S.); Giblin, Michael (M.); Chin, Darrel (D.);  
Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.);  
Mooney, Larry (L.); 'tokunaga.mi@sv.mazda.co.jp'; Fournelle, Gilbert  
(G.); Dalbo, Bob (R.J.); Suarez, Rhae (R.); Lawler, Dave (D.A.)  
Subject: Finned Pintle Hold-up

Here is a copy of our agreement. Apparently it was not done. Here is what needs to happen:

1. We need the TSB number for our "sticker" and so cataloging can include the info in the catalog.
2. April Hayes in packaging will work with Sam Ferrise to get labels for Hitachi. We will also send labels to Mazda and PRC to sticker the parts already packaged.
3. Purchasing (Chris Nielsen) will probably have to adjust the packaging price to include the cost of the sticker.
4. Mike Lapkewych will have the part cataloged with a message similar to the sticker.

Sorry for all the confusion.....

<outbind://5/usflag\_sm%20(2).gif> Don Kaercher  
Ford Motor Company  
FCSD P&L QSP/Recall/Top 100 Dept. Mgr.  
NFDC 1310C Text Pager: (734) 797-5993  
e-mail: dkaerche@ford.com  
\*Phone: (734) 266-9793 \*Fax: (734) 266-1166

-----Original Message-----

From: Terzes, Laura (L.D.)  
Sent: Thursday, August 08, 2002 11:06 AM  
To: Sanders, Muriel (M.S.); Grimes, Jeff (J.R.); Yeung, Lem (.);  
Wettach, Bill (B.); Suarez, Rhae (R.)  
Cc: Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.);  
Kaercher, Don (D.F.); Hightower, Eric (E.); Lapkewych, Michael (M.P.)  
Subject: RE: Finned Pintle Hold-up

See below in RED text answers to questions #4 and #6.

Don, Michael and Eric: IAC part for Escape TSB we discussed today.

-----Original Message-----

From: Sanders, Muriel (M.S.)  
Sent: Thursday, August 08, 2002 10:39 AM  
To: Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Suarez, Rhae (R.); Terzes, Laura (L.D.)  
Cc: Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.)  
Subject: RE: Finned Pintle Hold-up  
Importance: High

The black text below are the answers to Tom Durfee's (Service Engineering) questions. He is rejecting the concern until these items are addressed. Please let me know when this information has been added to the concern.

Lem/Jeff/Bill - I do not have WERS access. Will one of you please add the responses to items 1-3 & 7 for me. Thanks!  
Rhae/Laura - Please answer items 4 & 6.

1. Other IAC's have had this new fin pintle design and no PCM reflash was required why does this vehicle line need a reflash with an IAC change?

We have data showing that the finned pintle valve is not transparent to the guide A valve. The mean finned pintle ISC duty cycle at idle is 3% higher than with the current production valve.

2. If the new IAC is installed and no reflash is done what is the failure mode?

Possible (low probability) stall at warm startup or engagement.

3. Does the calibration have to be updated with the new IAC?

Yes, applicable calibration numbers were entered in this concern by John Bogema on 7/25/02.

4. If the calib has to be update with this new IAC, how does the out of warranty customer get notified of this requirement?

FCSD PS&L (Parts, Supply & Logistics) has agreed to work with their service parts packaging engineering to place a sticker on the Motorcraft box indicating the IAC change may require a calibration update, and refer to TSB XX-xxx-xx. Rhae Suarez will place information in the Parts Request comments section to insure the sticker is produced and fixed to package.

5. number was skipped by Tom

6. In the parts FCSD catalog we can have a flag that calls out a new PCM/Re-flash but this is not a six sigma repair.

FCSD, PS&L, has agreed to place a flag in the on-line service parts system, GCAT, indicating the new IAC part may require a calibration change. Also, the TSB will list all prior calibrations that must be updated to perform the service procedure and to insure compatibility with the new IAC part.

7. A TSB will need to be issued to the field and there is not enough information in this concern to release a TSB. New PCM part numbers will have to be release in WERS for the new calibration.

The stall TSB is written and is waiting for approval of this concern.

We cannot get the finned pintle IAC service part number necessary for the TSB until this concern is approved. The calibration part numbers were released in C11390580. They will be available to Fordstar on 8/9/02.

Muriel Sanders  
U204 3.0L Calibration  
Ford Motor Company  
Phone: 313-32-27307  
Fax: 313-32-31786  
E-mail: msander6@ford.com

-----Original Message-----

From: Dalbo, Bob (R.J.)  
Sent: Wednesday, August 07, 2002 5:20 PM  
To: Galante, Chris (C.R.); Terzes, Laura (L.D.); Fascetti, Bob (R.J.)  
Cc: Sanders, Muriel (M.S.); Fournelle, Gilbert (G.)  
Subject: Finned Pintle Hold-up  
Importance: High

Chris,  
Yes, the finned pintle IACV does require a calibration change on the Escape/Tribute. The service calibrations will be available Friday (8/9). We have a TSB in for review that explains that the calibration update is required for the new IACV.

Who in service engineering is rejecting this concern? We need to bring them up to speed on this change and the urgency to complete it.

Laura,  
How does PCSD manage coordinated parts changes like this IACV/calibration combination? Is that process already underway for this change?

Bob Dalbo  
3.0L Calibration Supervisor  
Outfitters Calibration, NAT  
Phone: (313) 24-84947 Fax: (313) 32-31786  
Pager: (313) 795-2859 Email: rdalbo@ford.com

-----Original Message-----

From: Galante, Chris (C.R.)  
Sent: Wednesday, August 07, 2002 10:47 AM  
To: Dalbo, Bob (R.J.)  
Subject: calibration change for Escape

Hi Bob.

We spoke earlier about the calibration change for Escape related to stalls, and you gave me a concern number (C11390555) which is related to the finned pintle IAC change. Does the IAC change require the calibration change??

The reason I ask is that service engineering is likely rejecting the concern for, among other reasons, the chance that a customer who has a vehicle out of warranty may change the IAC themselves and not be aware



that a TSB exists requiring a reflash. Something I'm curious to know is that on the modular products, we introduced the finned pintle design without any calibration change. Why would the Escape be unique in this regard? If not, should we disassociate the calibration change and IAC change (i.e. have two separate concerns)?

Christopher R. Galante  
cgalante@ford.com

\* Fax: (313) 337-3813  
\* Phone: (313) 845-6067  
Pager: (313) 795-2807

V-Engine Engineering - Ford Motor Co.

<<usaflag.gif>>

**From:** Lawler, Dave (D.A.)  
**Sent:** Friday, November 08, 2002 10:30 AM  
**To:** Kaercher, Don (D.F.); Hayes, April (A.A.)  
**Cc:** Altoonian, Don (D.J.); Lapkewych, Michael (M.P.); Lintaco, Steven (S.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Nielsen, Christian (C.A.); Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga\_mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Ferrise, Sam (S.J.)  
**Subject:** RE: Finned Pintle Hold-up

All,  
I do not want to remove the IAC from the T.S.B.

April,  
Use verbage as follows:

"Installing this 1L8Z-9F715-AA part to replace a similar part with a different part number REQUIRES that the Vehicle PCM be reflashed to latest calibration available on WDS software B21.7 or later, PRIOR TO THE INSTALLATION OF THE NEW PART."

Thanks.

Dave Lawler  
FCSD Program Manager - L.H.D. Escape/Tribute/Maverick  
DLAWLER1 Office: 816-414-5602 Pager: 313-754-1760

-----Original Message-----

**From:** Kaercher, Don (D.F.)  
**Sent:** Friday, November 08, 2002 6:23 AM  
**To:** Lawler, Dave (D.A.)  
**Cc:** Altoonian, Don (D.J.); Lapkewych, Michael (M.P.); Lintaco, Steven (S.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Hayes, April (A.A.); Nielsen, Christian (C.A.); Chin, Darrel (D.); Clark, Michael (M.); Lammert, David (D.); Radulovich, Michael (M.); Mooney, Larry (L.); 'tokunaga\_mi@sv.mazda.co.jp'; Suarez, Rhae (R.); Ferrise, Sam (S.J.)  
**Subject:** FW: Finned Pintle Hold-up

OK Dave, here's the scoop. As expected, we are getting several recommendations as to what verbiage should be on the sticker and in the catalog. We are now losing time. Parts should not be making this decision. I need you to make a decision, and send the exact verbiage you want to April Hayes. Then we can get moving today, and the rest of us will just have to live with it. Thanks!!

Don Kaercher  
Ford Motor Company  
FCSD PS&L QSF/Recall/Top 100 Dept. Mgr.  
NPDC 1310C Text Pager: (734) 797-5993  
e-mail: dkaerche@ford.com  
\*Phone: (734) 266-9793 \*Fax: (734) 266-1166

-----Original Message-----

From: Altoonian, Don (D.J.)  
Sent: Thursday, November 07, 2002 5:02 PM  
To: Kaercher, Don (D.F.)  
Subject: RE: Finned Pintle Hold-up

Don, I guess that it could, but it has to be flashed so the new valve functions properly. I guess that we could say when changing from what ever the old # is to the new 1LBZ-9F715-AA is the only time that a reflash is required.

-----Original Message-----

From: Kaercher, Don (D.F.)  
Sent: Thursday, November 07, 2002 10:02 AM  
To: Altoonian, Don (D.J.); Lapkewych, Michael (M.P.); Lintinco, Steven (S.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lam (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Hayes, April (A.A.); Nielsen, Christian (C.A.)  
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Subject: RE: Finned Pintle Hold-up

Can't that be misunderstood? If I have this IAC replaced, and flash to 21.7, then need another IAC three years from now, couldn't I misunderstand and think I have to flash again?

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-----Original Message-----

From: Lapkewych, Michael (M.P.)  
To: Kaercher, Don (D.F.); Limtiaco, Steven (S.); Terzes, Laura (L.D.); Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.); Hightower, Eric (E.); Hayes, April (A.A.); Nielsen, Christian (C.A.)  
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Sent: Wednesday, November 06, 2002 6:56 PM  
To: 'Kaercher, Don (D.F.)'; 'Terzes, Laura (L.D.)'; 'Grimes, Jeff (J.R.)'; 'Yeung, Lem (.); 'Wettach, Bill (B.)'; 'Fournelle, Gilbert (G.)'; 'Fascetti, Bob (R.J.)'; 'Dalbo, Bob (R.J.)'; 'Hightower, Eric (E.)'; 'Lapkewych, Michael (M.P.)'; 'Hayes, April (A.A.)'; 'Nielsen, Christian (C.A.)'  
Cc: Darrel Chin; Mike Clark; Dave Lammert; Mike Radulovich; Larry Mooney; 'tokunaga.mi@sv.mazda.co.jp'; 'Suarez, Rhae (R.)'; 'Lawler, Dave (D.A.)'; 'sferrise@ford.com'; 'daltoni@ford.com'  
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Some additional items to consider:

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Anyway, hope these comments help.

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Tribute Product Support  
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e-mail: slintiac@mazdausa.com

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(G.); Dalbo, Bob (R.J.); Suarez, Rhae (R.); Lawler, Dave (D.A.)  
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Sorry for all the confusion.....

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NPDC 1310C Text Pager: (734) 797-5993  
e-mail: dkaerche@ford.com  
\*Phone: (734) 266-9793 \*Fax: (734) 266-1166

-----Original Message-----

From: Terzes, Laura (L.D.)  
Sent: Thursday, August 08, 2002 11:06 AM  
To: Sanders, Muriel (M.S.); Grimes, Jeff (J.R.); Yeung, Lem (.);  
Wettach, Bill (B.); Suarez, Rhae (R.)  
Cc: Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.);  
Kaercher, Don (D.F.); Hightower, Eric (E.); Lapkewych, Michael (M.P.)  
Subject: RE: Finned Pintle Hold-up

See below in RED text answers to questions #4 and #6.  
Don, Michael and Eric: IAC part for Escape TSB we discussed today.

-----Original Message-----

From: Sanders, Muriel (M.S.)  
Sent: Thursday, August 08, 2002 10:39 AM  
To: Grimes, Jeff (J.R.); Yeung, Lem (.); Wettach, Bill (B.); Suarez,  
Rhae (R.); Terzes, Laura (L.D.)  
Cc: Fournelle, Gilbert (G.); Fascetti, Bob (R.J.); Dalbo, Bob (R.J.)  
Subject: RE: Finned Pintle Hold-up  
Importance: High

The black text below are the answers to Tom Durfee's (Service Engineering) questions. He is rejecting the concern until these items are addressed. Please let me know when this information has been added to the concern.

Lem/Jeff/Bill - I do not have WERS access. Will one of you please add the responses to items 1-3 & 7 for me. Thanks!  
Rhae/Laura - Please answer items 4 & 6.

1. Other IAC's have had this new fin pintle design and no PCM reflash was required why does this vehicle line need a reflash with an IAC change?

We have data showing that the finned pintle valve is not transparent to the guide A valve. The mean finned pintle ISC duty cycle at idle is 3% higher than with the current production valve.

2. If the new IAC is installed and no reflash is done what is the failure mode?

Possible (low probability) stall at warm startup or engagement.

3. Does the calibration have to be updated with the new IAC?

Yes, applicable calibration numbers were entered in this concern by John Bogema on 7/25/02.

4. If the calib has to be update with this new IAC, how does the out of warranty customer get notified of this requirement?

FCSD PSEL (Parts, Supply & Logistics) has agreed to work with their service parts packaging engineering to place a sticker on the Motorcraft box indicating the IAC change may require a calibration update, and refer to TSB XX-xxx-xx. Rhae Suarez will place information in the Parts Request comments section to insure the sticker is produced and fixed to package.

5. number was skipped by Tom

6. In the parts FCSD catalog we can have a flag that calls out a new PCM/Re-Flash but this is not a six sigma repair.

FCSD, PSEL, has agreed to place a flag in the on-line service parts system, GCAT, indicating the new IAC part may require a calibration change. Also, the TSB will list all prior calibrations that must be updated to perform the service procedure and to insure compatibility with the new IAC part.

7. A TSB will need to be issued to the field and there is not enough information in this concern to release a TSB. New PCM part numbers will have to be release in WERS for the new calibration.

The stall TSB is written and is waiting for approval of this concern. We cannot get the finned pintle IAC service part number necessary for the TSB until this concern is approved.

The calibration part numbers were released in C11390580. They will be available to Fordstar on 8/9/02.

Muriel Sanders  
U204 3.0L Calibration  
Ford Motor Company  
Phone: 313-32-27307  
Fax: 313-32-31786  
E-mail: msander6@ford.com

-----Original Message-----

From: Dalbo, Bob (R.J.)

Sent: Wednesday, August 07, 2002 5:20 PM

To: Galante, Chris (C.R.); Terzes, Laura (L.D.); Fascetti, Bob (R.J.)

Cc: Sanders, Muriel (M.S.); Fournelle, Gilbert (G.)  
Subject: Finned Pintle Hold-up  
Importance: High

Chris,

Yes, the finned pintle IACV does require a calibration change on the Escape/Tribute. The service calibrations will be available Friday (8/9). We have a TSB in for review that explains that the calibration update is required for the new IACV.

Who in service engineering is rejecting this concern? We need to bring them up to speed on this change and the urgency to complete it.

Laura,

How does FCSD manage coordinated parts changes like this IACV/calibration combination? Is that process already underway for this change?

Bob Dalbo  
3.0L Calibration Supervisor  
Outfitters Calibration, NAT  
Phone: (313) 24-84947 Fax: (313) 32-31786  
Pager: (313) 795-2859 Email: rdalbo@ford.com

-----Original Message-----

From: Galante, Chris (C.R.)  
Sent: Wednesday, August 07, 2002 10:47 AM  
To: Dalbo, Bob (R.J.)  
Subject: calibration change for Escape

Hi Bob.

We spoke earlier about the calibration change for Escape related to stalls, and you gave me a concern number (C11390555) which is related to the finned pintle IAC change. Does the IAC change require the calibration change??

The reason I ask is that service engineering is likely rejecting the concern for, among other reasons, the chance that a customer who has a vehicle out of warranty may change the IAC themselves and not be aware that a TSB exists requiring a reflash. Something I'm curious to know is that on the modular products, we introduced the finned pintle design without any calibration change. Why would the Escape be unique in this regard? If not, should we disassociate the calibration change and IAC change (i.e. have two separate concerns)?

Christopher R. Galante  
cgalante@ford.com

\* Fax: (313) 337-3813  
\* Phone: (313) 845-5067  
Pager: (313) 795-2807

V-Engine Engineering - Ford Motor Co.



<<usaflag.gif>>

---

**From:** Fournelle, Gilbert (G.)  
**Sent:** Wednesday, November 20, 2002 2:16 PM  
**To:** Lockhart, Marek (M.C.)  
**Cc:** Dalbo, Bob (R.J.); Chih, Ming-Niu (M.N.); Favor, Richard (R.A.); Shah, Kiran (K.C.)  
**Subject:** RE: Escape Stalls

Marek,

There is a known concern with 3.0L Escape stalls during deceleration which has been addressed in TSB 02-23-01. I attached a TSB which was released for this problem on 11/12/02. It addresses a variety of different root causes which could cause a potential stall. You can contact me for further info if needed.



Regards,

*Gilbert Fournelle*  
V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904968 Fax:(313)3231786

-----Original Message-----  
**From:** Shah, Kiran (K.C.)  
**Sent:** Wednesday, November 20, 2002 2:00 PM  
**To:** Fournelle, Gilbert (G.)  
**Cc:** Dalbo, Bob (R.J.); Chih, Ming-Niu (M.N.); Favor, Richard (R.A.)  
**Subject:** FW: Escape Stalls

Gilbert:

As per our telephone conversation, the details on the stall are in the note below. Would you please guide Marek Lockhart related to the fix (TSB) and cc me? Thanks.

Regards,

*Kiran C. Shah*  
Supervisor - U204/293 Fuel Systems Engineering  
North American Truck - Outfitters  
Telephone: (313) 32-31684 Fax: (313) 39-00652  
Address: Room: 2B-K29, PDC/Mall Drop: 222  
Email: kshah1@ford.com

-----Original Message-----  
**From:** Lockhart, Marek (M.C.)  
**Sent:** Wednesday, November 20, 2002 8:16 AM  
**To:** Shah, Kiran (K.C.)  
**Subject:** Escape Stalls

Guess what?

My 3.0L Escape stalled during a decel event this morning (6% downhill grade, going from 30 to 20 mph, very light braking, 1/2-tank of gas, 45F, dry pavement).

Are you aware of any stall concerns?

---

**Marek C. Lockhart**

Supervisor, Outfitter Truck Fuel Systems

Ford Motor Company

PDC, Room 2B-J20

Phone: (313) 323-7492

**From:** Fournelle, Gilbert (G.)  
**Sent:** Thursday, November 21, 2002 10:25 AM  
**To:** Nehasil, Linda (L.F.)  
**Co:** Dalbo, Bob (R.J.)  
**Subject:** RE: Status of Exhaust Mega Project Vehicles

Linda,

I don't have a nice test plan put together at this time. Below is an outline of what needs to happen on the engine calibration side (please contact Dave Huck for OBD requirements):

- Age 2 sets of catalysts to 120K: 4 weeks
- Receive 2 calibration vehicles: 4 weeks (simultaneous with cat aging)
  - instrument, change torque converter
- Change catalysts on calibration vehicles: 2 weeks
- **Need additional calibrator at this point in time**
- Catalyst temperature model verification/calibration 2 weeks
- Sea level US emission calibration
  - 75 CVS emission 3 weeks
  - US06/SC03 emissions 2 weeks
  - Cold CO test 2 weeks
  - 50 F 75 CVS 1 week
- Europe Stag 4 emissions testing
  - ambient temp 2 weeks
  - Cold CO test 2 weeks
- Altitude emissions
  - 75 CVS emissions 2 weeks
  - Cold CO test 2 weeks
- Sulfur smell test (NS31) 1 week

Regards,

*Gilbert Fournelle*

V8 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904968 Fax:(313)3231788

—Original Message—

**From:** Nehasil, Linda (L.F.)  
**Sent:** Thursday, November 21, 2002 8:25 AM  
**To:** Dalbo, Bob (R.J.); Fournelle, Gilbert (G.)  
**Subject:** RE: Status of Exhaust Mega Project Vehicles

Does a test plan exist for the Exhaust Mega Project, for the 6 months that the 2 vehicles will be needed for? I am thinking that it might not be pulled together in a sand-able form, otherwise I would have received something? Please advise, thanks!

Quality comes first....  
Linda F. Nehasil  
Escape Powertrain PMT

32-38671

-----Original Message-----

From: Bottenberg, John (J.A.)  
Sent: Thursday, November 21, 2002 7:55 AM  
To: Nehasil, Linda (L.F.)  
Subject: RE: Status of Exhaust Mega Project Vehicles

Linda,

We need a better work plan that what has been communicated to us by the Cal team.  
Would you please work with Bob to lay this out?  
I did not know we could not start testing right away.

Thanks.

-----Original Message-----

From: Dalbo, Bob (R.J.)  
Sent: Wednesday, November 20, 2002 4:55 PM  
To: Nehasil, Linda (L.F.); Bottenberg, John (J.A.); Roberts, Janet (J.); Ondrejko, Rick (R.T.); Mikota, Dennis (D.P.)  
Subject: RE: Status of Exhaust Mega Project Vehicles

Linda,

We need to age the catalysts before we install them. This takes about a month. Meanwhile, we will begin instrumenting the vehicles to run in APTL.

Janet,

Could you please forward the part numbers for the oast iron maniacats (the ones to be delivered on 11/22) to Dennis Mikota?

Dennis,

Once you get part numbers (the underbody will probably be carryover), please put an aging request in to Steve Petro.

**Bob Dalbo**

3.0L Calibration Supervisor  
Outfitters Calibration, NAT  
Phone: (313) 24-84947 Fax: (313) 32-31786  
Pager: (313) 795-2859 Email: [rdalbo@ford.com](mailto:rdalbo@ford.com)

-----Original Message-----

From: Nehasil, Linda (L.F.)  
Sent: Wednesday, November 20, 2002 8:39 AM  
To: Bottenberg, John (J.A.); Roberts, Janet (J.); Dalbo, Bob (R.J.); Ondrejko, Rick (R.T.)  
Subject: Status of Exhaust Mega Project Vehicles

Here is the status of my efforts to have two vehicles updated by Dec. 1st for Bob to start calibration testing:

\* 584W278 (Janet's vehicle) - in Denver on test until Friday, 11/22. Janet when will this vehicle be back in Dearborn?

\* 586W376 - I think the accountability issue has been resolved just awaiting dept. transfer from Joe Juan's to Bob Fascetti's dept. Would like to take vehicle to Livonia Trans. tomorrow, 11/21.

\* Prototype manifolds to be delivered 11/22. Due to the short week, next week the update of the manifolds may need to take place in the calibration garage. Bob, is this possible for next week?

\* 2005.5 torque convertor availability? Would like to have W376 to Liv. Trans. tomorrow, 11/21 for update (provided dept. transfer works out and I am working on that). Rick need to know if we can get this vehicle

updated 11/21, 11/22?

\* As for W279, it will have to be updated at Livonia Trans. next week, hopefully it will be back in Dearborn, Monday, 11/25 and can be delivered to Livonia then. Janet, what do you think? I can help you on Monday.

Bob, I see that you need an additional head (from meeting minutes of 11/13) to do this calibration work. I assume this person is not on board yet so who will be starting testing on 12/1? If you get the vehicles a few days late is that going to be an issue? I never got a test plan so I am not sure what testing will be started on 12/1.

I will be out of the office 11/19, 11/20 and 11/25 so wanted to let the team know where we stand.

Quality comes first....

Linda F. Nehasil

Escape Powertrain PMT

32-38671

**From:** Hansen, George (G.C.)  
**Sent:** Tuesday, November 26, 2002 10:47 AM  
**To:** Corbett, Sandra (S.M.); Holman, Michael (M.V.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.)  
**Cc:** Altoonian, Don (D.J.); Moorhouse, Scott (S.R.)  
**Subject:** 3.0L Stalling Claims

There are 5 Stalling Claims since 9/11/02.

- VIN 1FMYU93189KA90908 / 10/14/02 Build Date; 10/16/02 Repair Date; 10 Miles on Vehicle; Customer Comment: "ON TEST DRIVE BEFORE PDI VEHICLE LOST POWER AND DIED RESTARTED BUT RAN ROUGH AND HAD NO POWER", Technician Diagnosed a Faulty Mass Air Sensor. No further repairs on Vehicle.

- VIN 1FMYU03173KA90389 / 10/2/02 Build Date; 10/11/02 Repair Date; 52 Miles on Vehicle; Customer Comment: "CHECK ENGINE STALL", Technician Diagnosed a Fuel Sender Circuit Fault. Second Repair on 10/17/02 for a PATS issue.

-VIN 1FMYU03143KA9141B / 10/3/02 Build Date; 10/18/02 Repair Date; 220 Miles on Vehicle; Customer Comment: "CUSTOMER STATES TRUCK CUT OFF AT STOP LIGHT, NOW IT IS RUNNING ROUGH AND SMELLS LIKE SOMETHING IS BURNING.", Technician Diagnosed an EGR Valve Stuck Open. No further repairs on Vehicle.

- VIN 1FMYU93183KA78880 / 9/24/02 Build Date; 9/27/02 Repair Date; 4 Miles on Vehicle; Customer Comment: "CHECK FOR STALLING 12A850 42 D21 12650D 0.2 12650D55 0.3", Technician Comment: "PERFORM DIAG; LITE ON N; CODES ALL PASS; CLEANED AND TIGHTEN CONNECTORS". Don Altoonian will follow up with Dealership on Monday 12/2/02.

- VIN 1FMCU03143KA60342 / 9/24/02 Build Date; 10/7/02 Repair Date; 12 Miles on Vehicle; Customer Comment: "CK VEHICLE STALLS". Technician Comment: "CHECK VEHICLE FOR STALLING CONCERN.WDS EEC TEST,KOEO,KOER PASS.DCL DISPLAY CHECK ALL PIDS.CHK IAC 32 PERC,TP OK,EVAP SYSTEM OK,ALL GROUNDS OK,DPFE OK,PCM CALIBRATION OK.ROADTEST OK." Don Altoonian will follow up with Dealership on Monday 12/2/02.

Don can update the Team after he has contacted the dealerships.

George Hansen  
Escape, PTQRT  
2H-D63, PDC  
(313) 84-51800  
ghansen4

---

**From:** Fascetti, Bob (R.J.)  
**Sent:** Tuesday, November 26, 2002 10:49 AM  
**To:** Hansen, George (G.C.); Corbett, Sandra (S.M.); Hofman, Michael (M.V.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.)  
**Cc:** Altoonian, Don (D.J.); Moorhouse, Scott (S.R.)  
**Subject:** RE: 3.0L Stalling Claims

Relative to our problem, this is actually good news. Our issue has never been one of infant mortality.

-----Original Message-----

**From:** Hansen, George (G.C.)  
**Sent:** Tuesday, November 26, 2002 10:47 AM  
**To:** Corbett, Sandra (S.M.); Hofman, Michael (M.V.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.)  
**Cc:** Altoonian, Don (D.J.); Moorhouse, Scott (S.R.)  
**Subject:** 3.0L Stalling Claims

There are 5 Stalling Claims since 9/11/02.

- VIN 1FMYU83183KA90308 / 10/14/02 Build Date; 10/16/02 Repair Date; 10 Miles on Vehicle; Customer Comment: "ON TEST DRIVE BEFORE PDI VEHICLE LOST POWER AND DIED RESTARTED BUT RAN ROUGH AND HAD NO POWER", Technician Diagnosed a Faulty Mass Air Sensor. No further repairs on Vehicle.

- VIN 1FMYU03173KA90369 / 10/2/02 Build Date; 10/11/02 Repair Date; 52 Miles on Vehicle; Customer Comment: "CHECK ENGINE STALL", Technician Diagnosed a Fuel Sender Circuit Fault. Second Repair on 10/17/02 for a PATS Issue.

-VIN 1FMYU03143KA91416 / 10/3/02 Build Date; 10/18/02 Repair Date; 220 Miles on Vehicle; Customer Comment: "CUSTOMER STATES TRUCK CUT OFF AT STOP LIGHT, NOW IT IS RUNNING ROUGH AND SMELLS LIKE SOMETHING IS BURNING.", Technician Diagnosed an EGR Valve Stuck Open. No further repairs on Vehicle.

- VIN 1FMYU83183KA78660 / 9/24/02 Build Date; 9/27/02 Repair Date; 4 Miles on Vehicle; Customer Comment: "CHECK FOR STALLING 12A850 42 D21 12850D 0.2 12860D55 0.9", Technician Comment: "PERFORM DIAG; LITE ON N; CODES ALL PASS; CLEANED AND TIGHTEN CONNECTORS". Don Altoonian will follow up with Dealership on Monday 12/2/02.

- VIN 1FMGU03143KA80342 / 9/24/02 Build Date; 10/7/02 Repair Date; 12 Miles on Vehicle; Customer Comment: "CK VEHICLE STALLS", Technician Comment: "CHECK VEHICLE FOR STALLING CONCERN.WDS EEC TEST,KOEO,KOER PASS.DCL DISPLAY CHECK ALL PIDS.CHK IAC 32 PERC,TP OK,EVAP SYSTEM OK,ALL GROUNDS OK,DPFE OK,PCM CALIBRATION OK.ROADTEST OK." Don Altoonian will follow up with Dealership on Monday 12/2/02.

Don can update the Team after he has contacted the dealerships.

George Hansen  
Escape, PTQRT  
2H-D63, PDC  
(313) 84-51800  
ghansen4



**From:** Hansen, George (G.C.)  
**Sent:** Tuesday, November 26, 2002 10:55 AM  
**To:** Fascetti, Bob (R.J.); Corbett, Sandra (S.M.); Hofman, Michael (M.V.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.)  
**Cc:** Altoonian, Don (D.J.); Moorhouse, Scott (S.R.)  
**Subject:** RE: 3.0L Stalling Claims

I talked with Scott. One of the unknown vehicles is in Missouri, he will be contacting the dealership and update when he knows more.

—  
**George Hansen**  
Escape, PTQRT  
2H-D63, PDC  
(313) 84-51800  
ghansen4

—Original Message—

**From:** Fascetti, Bob (R.J.)  
**Sent:** Tuesday, November 26, 2002 10:49 AM  
**To:** Hansen, George (G.C.); Corbett, Sandra (S.M.); Hofman, Michael (M.V.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.)  
**Cc:** Altoonian, Don (D.J.); Moorhouse, Scott (S.R.)  
**Subject:** RE: 3.0L Stalling Claims

Relative to our problem, this is actually good news. Our issue has never been one of infant mortality.

—Original Message—

**From:** Hansen, George (G.C.)  
**Sent:** Tuesday, November 26, 2002 10:47 AM  
**To:** Corbett, Sandra (S.M.); Hofman, Michael (M.V.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Fascetti, Bob (R.J.)  
**Cc:** Altoonian, Don (D.J.); Moorhouse, Scott (S.R.)  
**Subject:** 3.0L Stalling Claims

There are 5 Stalling Claims since 9/11/02.

- VIN 1FMYU93183KA90308 / 10/14/02 Build Date; 10/16/02 Repair Date; 10 Miles on Vehicle; Customer Comment: "ON TEST DRIVE BEFORE PDI VEHICLE LOST POWER AND DIED RESTARTED BUT RAN ROUGH AND HAD NO POWER", Technician Diagnosed a Faulty Mass Air Sensor. No further repairs on Vehicle.

- VIN 1FMYU03173KA90389 / 10/2/02 Build Date; 10/11/02 Repair Date; 52 Miles on Vehicle; Customer Comment: "CHECK ENGINE STALL", Technician Diagnosed a Fuel Sender Circuit Fault. Second Repair on 10/17/02 for a PAT8 issue.

-VIN 1FMYU03143KA91418 / 10/3/02 Build Date; 10/18/02 Repair Date; 220 Miles on Vehicle; Customer Comment: "CUSTOMER STATES TRUCK CUT OFF AT STOP LIGHT, NOW IT IS RUNNING ROUGH AND SMELLS LIKE SOMETHING IS BURNING.", Technician Diagnosed an EGR Valve Stuck Open. No further repairs on Vehicle.

- VIN 1FMYU93183KA78860 / 9/24/02 Build Date; 9/27/02 Repair Date; 4 Miles on Vehicle; Customer Comment: "CHECK FOR STALLING 12A650 42 D21 12650D 0.2 12650D55 0.3", Technician Comment: "PERFORM DIAG; LITE ON N; CODES ALL PASS; CLEANED AND TIGHTEN CONNECTORS". Don Altoonian will follow up with Dealership on Monday 12/2/02.

- VIN 1FMCU03143KA60342 / 9/24/02 Build Date; 10/7/02 Repair Date; 12 Miles on Vehicle; Customer Comment: "CK VEHICLE STALLS", Technician Comment: "CHECK VEHICLE FOR STALLING CONCERN.WDS EEC TEST,KOEO,KOER PASS.DCL DISPLAY CHECK ALL PIDS.CHK IAC 32 PERC,TP OK,EVAP SYSTEM OK,ALL GROUNDS OK,DPFE OK,PCM CALIBRATION OK.ROADTEST OK." Don Altoonian will follow up with Dealership on Monday 12/2/02.

Don can update the Team after he has contacted the dealerships.

-  
George Hansen  
Escape, PTQRT  
2H-D83, PDC  
(313) 84-51800  
ghansen4

**From:** Lopez, Al [al.lopez@perkinelmer.com]  
**Sent:** Tuesday, December 03, 2002 3:13 PM  
**To:** 'Fournelle, Gilbert (G.); Lopez, Al; Grimes, Jeff (J.R.); 'spenkev@ford.com'; Fedason, Ken (K.S.); 'Daniel, Paul (P.A.); 'Koeko, Jeff (J.R.); 'Wadley, Jeffrey (J.G.); 'Smaldone, Ronald (R.P.)  
**Cc:** Bogema, John (P.)  
**Subject:** RE: PerkinElmer EGR Problem.

Jeff K, Steve,

We will switch calibrations as per Gilbert's note below. The orifice plates at 29.5mm will be installed as well.

Thanks  
Al

-----Original Message-----

**From:** Fournelle, Gilbert (G.) [SMTP:gfournel@ford.com]  
**Sent:** Tuesday, December 03, 2002 10:13 AM  
**To:** 'Lopez, Al'; Fournelle, Gilbert (G.); Grimes, Jeff (J.R.)  
**Cc:** Bogema, John (P.)  
**Subject:** RE: PerkinElmer EGR Problem.

The calibration you are using is for a strategy which was never released for production with a 3.0L V6 D204. Please us the attached VRF and MCS file (latest release for MY 2001, with no PATS and no MIL for blank VID block).

Regards,

Gilbert Fournelle  
V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone: (313)3904968 Fax: (313)3231786

-----Original Message-----

**From:** Lopez, Al [mailto:al.lopez@perkinelmer.com]  
**Sent:** Tuesday, December 03, 2002 10:54 AM  
**To:** 'Fournelle, Gilbert (G.)'; Grimes, Jeff (J.R.)  
**Cc:** Bogema, John (P.)  
**Subject:** RE: PerkinElmer EGR Problem.

Gilbert, below is the calibration:

Ford ORI/SBG Test 1  
2001 Model 3.0L 4V V6 (Escape)  
Calibration: (doap0.vrf) / (u204pv.mcs)

Thanks  
Al

-----Original Message-----

From: Fournelle, Gilbert (G.) [SMTP:gfournel@ford.com]  
Sent: Tuesday, December 03, 2002 09:46 AM  
To: Grimes, Jeff (J.R.); Lopez, Al  
Cc: Bogema, John (P.)  
Subject: RE: PerkinElmer EGR Problem.

Jeff/Al,

Could you please tell me what calibration you are running. It looks like EGR\_DES at .29 load and 1850 RPM should be somewhat higher 6.5% as opposed to 3%.

If you are asking for 3% at this speed load, the delpr value is very small.

Since we cannot accurately control the EGR flow at small delpr values, we turn EGR off below a certain mass flow rate (desem < mindes\_cl) and we turn it back on if desem > mindes\_sh. With the small delpr values you are reporting, it looks like you are bouncing of the minimum clip. EGR\_DES will not be equal to zero if the clip is active and you will not have an agreement between EGR\_RATE\_DES and EGR\_RATE\_ACT during this condition even though the hardware is functioning properly.

Regards

Gilbert Fournelle  
V6 U204 Calibration Engineering  
1A27 Truck Engine Engineering (TEE)  
Phone: (313)3904968 Fax: (313)3231786

-----Original Message-----

From: Bogema, John (P.)  
Sent: Tuesday, December 03, 2002 10:11 AM  
To: Fournelle, Gilbert (G.)  
Subject: FW: PerkinElmer EGR Problem.  
Importance: High

Gilbert,

Please expand my earlier explanation.

-----Original Message-----

From: Grimes, Jeff (J.R.)  
Sent: Tuesday, December 03, 2002 8:19 AM  
To: Bogema, John (P.)  
Cc: ''  
Subject: RE: PerkinElmer EGR Problem.  
Importance: High

John, can I ask you to expand a little, and help Al out.

He  
is

running a

Sludge DV test for us (new TB, IAC robustness, etc)...

obviously

We need to make sure EGR is functionally normally, as it  
contributes to contamination...

Thanx

Jeff Grimes  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company  
ph: (313) 322-5237 fax: (313) 594-7323  
e-mail: jgrimes1@ford.com

-----Original Message-----

From: Bogema, John (P.)  
Sent: Monday, December 02, 2002 5:18 PM  
To: Grimes, Jeff (J.R.)  
Subject: RE: PerkinElmer EGR Problem.

Jeff,

Without going into too much detail, it looks like you

are

crossing a

load /

observations  
seen.  
minimum egr mass line. That would result in the

John P. Bogema  
3.0L Escape Calibration Engineering  
Phone:313.33.75133  
Location:TEE 1AE22  
Email:JBOGEMA@FORD.COM

-----Original Message-----

From: Grimes, Jeff (J.R.)

Sent: Wednesday, November 27, 2002 12:46 PM  
To: Bogema, John (P.)  
Subject: FW: PerkinElmer EGR Problem.

Can you comment on the notes below...This is an engine  
we shipped  
for

"sludge" testing...

Thanx

Jeff Grimes  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company  
ph: (313) 322-5237 fax: (313) 594-7323  
e-mail: jgrimes1@ford.com

-----Original Message-----

From: Lopez, Al [mailto:al.lopez@perkinelmer.com]  
Sent: Wednesday, November 27, 2002 12:04 PM  
To: 'Grimes, Jeff (J.R.)'  
Subject: RE: PerkinElmer EGR Problem.

It was generated with the new sensor. The original  
sensor  
never  
worked at  
all.

-----Original Message-----

From: Grimes, Jeff (J.R.)  
[SMTP:jgrimes1@ford.com]  
Sent: Wednesday, November 27, 2002 10:47 AM  
To: 'Lopez, Al'  
Subject: RE: PerkinElmer EGR Problem.

OK, thanx.  
Was the data below generated with the old or new sensor?  
Jeff Grimes  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company  
ph: (313) 322-5237 fax: (313) 594-7323  
e-mail: jgrimes1@ford.com

-----Original Message-----

From: Lopez, Al  
[mailto:al.lopez@perkinelmer.com]  
Sent: Wednesday, November 27, 2002 10:02 AM  
To: 'Grimes, Jeff (J.R.)'  
Subject: RE: PerkinElmer EGR Problem.

Jeff,  
The original sensor that came with the engine and was no  
good has  
the  
following part numbers stamped on it:

YFIE-9J460-AB

PBT-GF30

The sensor that was purchased from the local dealer:

2FIE-9J460-AB

PBT-GF30

-----Original Message-----

From: Grimes, Jeff (J.R.)

[SMTP:jgrimes1@ford.com]

Sent: Wednesday, November 27, 2002

07:55

AM

To: 'Lopez, Al'

Subject: RE: PerkinElmer EGR

Problem.

Al, can you get me the Delta PF sensor part number...

Thank

Jeff Grimes

OPD & Value Engineering

Duratec Engine Programs, U204

Ford Motor Company

ph: (313) 322-5237 fax: (313) 594-7323

e-mail: jgrimes1@ford.com

-----Original Message-----

From: Lopez, Al

[mailto:al.lopez@perkinelmer.com]

Sent: Tuesday, November 26, 2002 1:16

PM

To: 'spenkevi@ford.com'; 'Fedeson,

Ken

(K.S.)';

'Daniel,

Paul

(P.A.)'; 'Kosko, Jeff (J.R.)'; 'Wadley, Jeffrey

(J.G.)';

'Walsh, Tim

(T.)';

'Saldone, Ronald (R.P.)'; 'Grimes, Jeff (J.R.)'

Cc: Schoppe, Dean; Bond, Stacy

Subject: PerkinElmer EGR Problem.

Steve, below is the EGR data for the 3 stages. I noticed

that in

second

stage the EGR actual is correct but then it cuts out to

zero. Not

sure what

is happening first - a loss of DELPR signal or a loss of

flow. Our

recent

experience with the bad DELPR sensor may indicate a faulty signal.

Or, the

calibration is on a borderline and is toggling between

off

and on.

EGR_ACT	DELPR	Stage	Speed	EEC	Load	EGR_DES
0		1	750	0.17	0	0
0 -		2	1850	0.29	2.8 - 3.0	
3.1 0 -	2.0					
4.0		3	2600	0.37	4.0 - 4.2	
- 4.2	8.8					
	- 9.2					

Thanks

Al

<< File: DOAR6.VRF >> << File: 01\_FNP.MCS >>



**From:** Lopez, Al [al.lopez@perkinelmer.com]  
**Sent:** Tuesday, December 03, 2002 3:15 PM  
**To:** Lopez, Al; Fournelle, Gilbert (G.); Grimes, Jeff (J.R.); 'spenkevi@ford.com'; Fedeson, Ken (K.S.); Daniel, Paul (P.A.); Kosko, Jeff (J.R.); Wadley, Jeffrey (J.G.); Smaldone, Ronald (R.P.)  
**Cc:** Bogema, John (P.)  
**Subject:** RE: PerkinElmer EGR Problem.

Gilbert, Steve,

How will this new calibration affect the spark. I have a bad feeling that the ORI measurements we have performed to date will be void.

-----Original Message-----

**From:** Lopez, Al  
**Sent:** Tuesday, December 03, 2002 02:13 PM  
**To:** 'Fournelle, Gilbert (G.)'; Lopez, Al; Grimes, Jeff (J.R.); 'spenkevi@ford.com'; 'Fedeson, Ken (K.S.)'; 'Daniel, Paul (P.A.)'; 'Kosko, Jeff (J.R.)'; 'Wadley, Jeffrey (J.G.)'; 'Smaldone, Ronald (R.P.)'  
**Cc:** Bogema, John (P.)  
**Subject:** RE: PerkinElmer EGR Problem.

Jeff K, Steve,

We will switch calibrations as per Gilbert's note below. The orifice plates at 29.5mm will be installed as well.

Thanks  
Al

-----Original Message-----

**From:** Fournelle, Gilbert (G.) [SMTP:gfournel@ford.com]  
**Sent:** Tuesday, December 03, 2002 10:13 AM  
**To:** 'Lopez, Al'; Fournelle, Gilbert (G.); Grimes, Jeff (J.R.)  
**Cc:** Bogema, John (P.)  
**Subject:** RE: PerkinElmer EGR Problem.

The calibration you are using is for a strategy which was never released for production with a 3.0L V6 U204. Please use the attached VRF and MCS file (latest release for MY 2001, with no PATS and no MIL for blank VID block).

Regards,

Gilbert Fournelle  
V6 U204 Calibration Engineering  
1AK27 Truck Engine Engineering (TEE)  
Phone: (313)3904968 Fax: (313)3231786

-----Original Message-----

From: Lopez, Al [mailto:al.lopez@perkinelmer.com]  
Sent: Tuesday, December 03, 2002 10:54 AM  
To: 'Fournelle, Gilbert (G.)'; Grimes, Jeff (J.R.)  
Cc: Bogema, John (P.)  
Subject: RE: PerkinElmer EGR Problem.

Gilbert, below is the calibration:

Ford ORI/SEG Test 1  
2001 Model 3.0L 4V V6 (Escape)  
Calibration: (doap0.vrf) / (u204pv.mcs)

Thanks  
Al

-----Original Message-----

From: Fournelle, Gilbert (G.)  
[SMTP:gfournel@ford.com]  
Sent: Tuesday, December 03, 2002 09:46 AM  
To: Grimes, Jeff (J.R.); Lopez, Al  
Cc: Bogema, John (P.)  
Subject: RE: PerkinElmer EGR Problem.

Jeff/Al,

Could you please tell me what calibration you  
are  
running. It looks  
like  
EGR\_DES at .29 load and 1850 RPM should be  
somewhat  
higher 6.5% as  
opposed  
to 3%.

If you are asking for 3% at this speed load, the  
delpr value is very  
small.

Since we cannot accurately control the EGR flow  
at  
small delpr  
values, we

turn EGR off below a certain mass flow rate  
(desem <  
mindes\_cl) and  
we turn  
it back on if desem > mindes\_sh. With the small  
delpr values you  
are  
reporting, it looks like you are bouncing of the  
minimum clip.

EGR\_DES will  
not be equal to zero if the clip is active and  
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will not have an agreement between EGR\_RATE\_DES and EGR\_RATE\_ACT  
during this condition even though the hardware is functioning properly.

Regards

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V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone: (313)3904968 Fax: (313)3231786

-----Original Message-----

From: Bogema, John (P.)  
Sent: Tuesday, December 03, 2002 10:11 AM  
To: Fournelle, Gilbert (G.)  
Subject: FW: PerkinElmer EGR Problem.  
Importance: High

Gilbert,

Please expand my earlier explanation.

-----Original Message-----

From: Grimes, Jeff (J.R.)  
Sent: Tuesday, December 03, 2002 8:19 AM  
To: Bogema, John (P.)  
Cc: ''  
Subject: RE: PerkinElmer EGR Problem.  
Importance: High

John, can I ask you to expand a little, and help  
Al  
out. He is running a  
etc)... Sludge DV test for us (new TB, IAC robustness,

We need to make sure EGR is functionally  
normally,  
as it obviously contributes to contamination...

Thanx

Jeff Grimes  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company  
ph: (313) 322-5237 fax: (313) 594-7323  
e-mail: jgrimes1@ford.com

-----Original Message-----

From: Bogema, John (P.)  
Sent: Monday, December 02, 2002 5:18 PM

To: Grimes, Jeff (J.R.)  
Subject: RE: PerkinElmer EGR Problem.

Jeff,

Without going into too much detail, it looks like you are crossing a load / minimum agr mass line. That would result in the observations seen.

John P. Bogema  
3.0L Escape Calibration Engineering  
Phone:313.33.75133  
Location:TEE 1AE22  
Email:JBOGEMA@FORD.COM

-----Original Message-----

From: Grimes, Jeff (J.R.)  
Sent: Wednesday, November 27, 2002 12:46 PM  
To: Bogema, John (P.)  
Subject: FW: PerkinElmer EGR Problem.

Can you comment on the notes below...This is an engine we shipped for

"sludge" testing...

Thank

Jeff Grimes  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company  
ph: (313) 322-5237 fax: (313) 594-7323  
e-mail: jgrimes1@ford.com

-----Original Message-----

From: Lopez, Al  
[mailto:al.lopez@perkinelmer.com]  
Sent: Wednesday, November 27, 2002 12:04 PM  
To: 'Grimes, Jeff (J.R.)'  
Subject: RE: PerkinElmer EGR Problem.

It was generated with the new sensor. The original sensor never worked at all.

-----Original Message-----

From: Grimes, Jeff (J.R.)  
[SMTP:jgrimes1@ford.com]  
Sent: Wednesday, November 27, 2002

10:47  
AM

To: 'Lopez, Al'

Subject: RE: PerkinElmer EGR

Problem.

OK, thanx.  
Was the data below generated with the old or new  
sensor?

Jeff Grimes  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company  
ph: (313) 322-5237 fax: (313) 594-7323  
e-mail: jgrimes1@ford.com

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Problem.

Jeff,  
The original sensor that came with the engine  
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was no good has

the  
following part numbers stamped on it:  
YFIE-9J460-AB  
PBT-GF30  
The sensor that was purchased from the local

dealer:

2FIE-9J460-AB  
PBT-GF30

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Sent: Wednesday, November 27,

2002  
07:55 AM

To: 'Lopez, Al'  
Subject: RE: PerkinElmer

EGR  
Problem.

Al, can you get me the Delta PF sensor part  
number...

Thanx  
Jeff Grimes  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company  
ph: (313) 322-5237 fax: (313)  
594-7323  
e-mail: jgrimes1@ford.com

-----Original Message-----  
From: Lopez, Al

[mailto:al.lopez@perkinelmer.com]

Sent: Tuesday, November 26,

2002

1:16 PM

To: 'spankevi@ford.com';

'Fedson, Ken (R.S.)';

'Daniel,

Paul

(P.A.); 'Kosko, Jeff (J.R.)'; 'Wadley,

Jeffrey (J.G.)';

'Walsh, Tim

(T.)';

'Smaldone, Ronald (R.P.)'; 'Grimes, Jeff

(J.R.)'

Cc: Schoppe, Dean; Bond, Stacy

Subject: PerkinElmer EGR Problem.

Steve, below is the EGR data for the 3 stages.

I noticed

that in second stage the EGR actual is correct but then it cuts

out to

zero. Not sure what is happening first - a loss of DELPR signal or

a loss of

flow. Our recent experience with the bad DELPR sensor may

indicate a faulty signal.

Or, the calibration is on a borderline and is toggling

between off and on.

EGR_DES	EGR_ACT DELPR	Stage	Speed	EGR	Load
0		1	750	0.17	0
0		2	1850	0.29	2.8 -
3.0	0 -				
0 - 3.1	2.0				
4.2		3	2600	0.37	4.0 -
4.0 - 4.2	8.8				
	- 9.2				

Thanks

Al

<< File: DOAR6.VRF >> << File: 01\_FNP.MCS >>

**From:** Fournelle, Gilbert (G.)  
**Sent:** Tuesday, December 03, 2002 3:47 PM  
**To:** Lopez, Al; Fournelle, Gilbert (G.); Grimes, Jeff (J.R.); Penkevich, Steven (S.P.); Fedeson, Ken (K.S.); Daniel, Paul (P.A.); Kosko, Jeff (J.R.); Wadley, Jeffrey (J.G.); Smaldone, Ronald (R.P.)  
**Cc:** Bogema, John (P.)  
**Subject:** RE: PerkinElmer EGR Problem.

I have no way to assess the impact on the spark since I have no idea what DOAP0 was. The calibration I provided you with is the latest service calibration for 2001MY. I am almost certain that there are changes in borderline spark compared to what you were running, but I cannot quantify this since I have no record of the calibration/strategy you were running.

Regards,

Gilbert Fournelle  
V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TRE)  
Phone: (313)3904968 Fax: (313)3231786

-----Original Message-----

**From:** Lopez, Al [mailto:al.lopez@perkinelmer.com]  
**Sent:** Tuesday, December 03, 2002 3:15 PM  
**To:** Lopez, Al; 'Fournelle, Gilbert (G.)'; 'Grimes, Jeff (J.R.)'; 'spenkevi@ford.com'; 'Fedeson, Ken (K.S.)'; 'Daniel, Paul (P.A.)'; 'Kosko, Jeff (J.R.)'; 'Wadley, Jeffrey (J.G.)'; 'Smaldone, Ronald (R.P.)'  
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**Subject:** RE: PerkinElmer EGR Problem.

Jeff K. Steve,

We will switch calibrations as per Gilbert's note below. The orifice plates at 29.5mm will be installed as well.

Thanks

Al

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From: Fournelle, Gilbert (G.) [SMTP:gfournel@ford.com]  
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The calibration you are using is for a strategy which was never released for production with a 3.0L V6 U204. Please use the attached VRF and MCS file (latest release for MY 2001, with no PATS and no MIL for blank VID block).

Regards,

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1AE27 Truck Engine Engineering (TEE)  
Phone: (313)3904968 Fax: (313)3231786

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Subject: RE: PerkinElmer EGR Problem.

Gilbert, below is the calibration:

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Calibration: (doap0.vrf) / (u204pv.mcs)

Thanks  
Al

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Cc: Bogema, John (P.)  
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Jeff/Al,

Could you please tell me what calibration you are running. It looks



like  
somewhat  
higher 6.5% as  
opposed  
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If you are asking for 3% at this speed load, the  
delpr value is very  
small.

Since we cannot accurately control the EGR flow  
at  
small delpr

values, we  
turn EGR off below a certain mass flow rate

(desem <  
mindes\_cl) and

we turn  
it back on if desem > mindes\_sh. With the small  
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are

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EGR\_DES will  
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Sludge DV test for us (new TB, IAC robustness,  
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We need to make sure EGR is functionally  
normally,  
as it obviously  
contributes to contamination...

Thanx

Jeff Grimes  
OPD & Value Engineering  
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load /  
minimum egr mass line. That would result in the  
observations seen.

John P. Bogema  
3.0L Escape Calibration Engineering  
Phone:313.33.75133  
Location:TEE LAE22  
Email:JBOGEMA@FORD.COM

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OPD & Value Engineering  
Duratec Engine Programs, U204  
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ph: (313) 322-5237 fax: (313) 594-7323  
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YPIE-9J460-AB  
PBT-GP30  
The sensor that was purchased from the local

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2FIE-9J460-AB  
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2002  
07:55 AM

Sent: Wednesday, November 27,

To: 'Lopez, Al'  
Subject: RE: PerkinElmer

EGR  
Problem.

Al, can you get me the Delta PF sensor part  
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Thank  
Jeff Grimes  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company  
ph: (313) 322-5237 fax: (313)  
e-mail: jgrimes1@ford.com

594-7323

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From: Lopez, Al

[mailto:al.lopez@perkinelmer.com]

Sent: Tuesday, November 26,

2002  
1:16 PM

To: 'spankevi@ford.com';

'Fedeson, Ken (K.S.)';  
'Daniel,

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Jeffrey (J.G.)';

'Walsh, Tim  
(T.)';

'Smaldone, Ronald (R.P.)'; 'Grimes, Jeff

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Cc: Schopps, Dean; Bond, Stacy  
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I  
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EGR_DES	EGR_ACT DELPR	Stage	Speed	EBC	Load
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0		2	1850	0.29	2.8 -
3.0					
0 - 3.1	0 - 2.0	3	2600	0.37	4.0 -
4.2					
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Thanks

Al

<< File: DOAR6.VRF >> << File: 01\_FNP.MCS >>

---

**From:** Wadley, Jeffrey (J.G.)  
**Sent:** Tuesday, December 03, 2002 3:53 PM  
**To:** Fournelle, Gilbert (G.); Lopez, Al; Grimes, Jeff (J.R.); Penkevich, Steven (S.P.); Fedeson, Ken (K.S.); Daniel, Paul (P.A.); Kosko, Jeff (J.R.); Smaldone, Ronald (R.P.)  
**Cc:** Bogema, John (P.)  
**Subject:** RE: PerkinElmer EGR Problem.

Is this cal set up for Dyno use? Auto trans turned off, etc?

-----Original Message-----

**From:** Fournelle, Gilbert (G.)  
**Sent:** Tuesday, December 03, 2002 3:47 PM  
**To:** 'Lopez, Al'; Fournelle, Gilbert (G.); Grimes, Jeff (J.R.); Penkevich, Steven (S.P.); Fedeson, Ken (K.S.); Daniel, Paul (P.A.); Kosko, Jeff (J.R.); Wadley, Jeffrey (J.G.); Smaldone, Ronald (R.P.)  
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Gilbert Fournelle  
V6 D204 Calibration Engineering  
LAE27 Truck Engine Engineering (TEE)  
Phone: (313)3904968 Fax: (313)3231786

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was  
never released for production with a 3.0L V6 U204. Please us the  
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VRF and MCS file (latest release for MY 2001, with no PATS and no MIL  
for  
blank VID block).

Regards,

Gilbert Fournelle  
V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
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Ford ORI/SBG Test 1  
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Calibration: (doasp0.vrf) / (u204pv.mcs)

Thanks  
Al

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To: Grimes, Jeff (J.R.); Lopez, Al  
Cc: Bogema, John (P.)  
Subject: RE: PerkinElmer EGR Problem.

Jeff/Al,

Could you please tell me what calibration you  
are  
running. It looks

like  
EGR\_DES at .29 load and 1850 RPM should be  
somewhat  
higher 6.5% as  
opposed  
to 3%.

If you are asking for 3% at this speed load, the  
delpr value is very  
small.

Since we cannot accurately control the EGR flow  
at  
small delpr

values, we  
turn EGR off below a certain mass flow rate

(desem <  
mindes\_cl) and  
we turn

it back on if desem > mindes\_sh. With the small  
delpr values you  
are

reporting, it looks like you are bouncing of the  
minimum clip.

EGR\_DES will  
not be equal to zero if the clip is active and

you  
will not have an

agreement between EGR\_RATE\_DES and EGR\_RATE\_ACT  
during this

condition even  
though the hardware is functioning properly.

Regards

Gilbert Fournelle  
V6 U204 Calibration Engineering  
1A27 Truck Engine Engineering (TEE)  
Phone: (313)3904968 Fax: (313)3231786

-----Original Message-----

From: Bogema, John (P.)  
Sent: Tuesday, December 03, 2002 10:11 AM  
To: Fournelle, Gilbert (G.)  
Subject: FW: PerkinElmer EGR Problem.  
Importance: High



Gilbert,

Please expand my earlier explanation.

-----Original Message-----

From: Grimes, Jeff (J.R.)  
Sent: Tuesday, December 03, 2002 8:19 AM  
To: Bogema, John (P.)  
Cc: ''  
Subject: RE: PerkinElmer EGR Problem.  
Importance: High

John, can I ask you to expand a little, and help  
Al  
out. He is  
          running a  
          sludge DV test for us (new TB, IAC robustness,  
etc)...

We need to make sure EGR is functionally  
normally,  
as it obviously  
contributes to contamination...

Thank

Jeff Grimes  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company  
ph: (313) 322-5237 fax: (313) 594-7323  
e-mail: jgrimes1@ford.com

-----Original Message-----

From: Bogema, John (P.)  
Sent: Monday, December 02, 2002 5:18 PM  
To: Grimes, Jeff (J.R.)  
Subject: RE: PerkinElmer EGR Problem.

Jeff,

Without going into too much detail, it looks  
like  
you are crossing a  
          load /  
          minimum egr mass line. That would result in the  
observations seen.

John P. Bogema  
3.0L Escape Calibration Engineering  
Phone:313.33.75133  
Location:TEE 1AE22  
Email:JBOGEMA@FORD.COM

-----Original Message-----

From: Grimes, Jeff (J.R.)  
Sent: Wednesday, November 27, 2002 12:46 PM

To: Bogema, John (P.)  
Subject: FW: PerkinElmer EGR Problem.

Can you comment on the notes below...This is an engine we shipped for

"sludge" testing...

Thank

Jeff Grimes  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company  
ph: (313) 322-5237 fax: (313) 594-7323  
e-mail: jgrimes1@ford.com

-----Original Message-----

From: Lopez, Al  
[mailto:al.lopez@perkinelmer.com]  
Sent: Wednesday, November 27, 2002 12:04 PM  
To: 'Grimes, Jeff (J.R.)'  
Subject: RE: PerkinElmer EGR Problem.

It was generated with the new sensor. The original sensor never worked at all.

-----Original Message-----

From: Grimes, Jeff (J.R.)  
[SMTP:jgrimes1@ford.com]  
Sent: Wednesday, November 27, 2002 10:47 AM

To: 'Lopez, Al'  
Subject: RE: PerkinElmer EGR Problem.

OK, thank.  
Was the data below generated with the old or new sensor?

Jeff Grimes  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company  
ph: (313) 322-5237 fax: (313) 594-7323  
e-mail: jgrimes1@ford.com

-----Original Message-----

From: Lopez, Al  
[mailto:al.lopez@perkinelmer.com]  
Sent: Wednesday, November 27, 2002 10:02 AM

To: 'Grimes, Jeff (J.R.)'  
Subject: RE: PerkinElmer EGR Problem.

and  
was no good has

Jeff,  
The original sensor that came with the engine

the  
following part numbers stamped on it:  
YFIE-9J460-AB  
PBT-GF30

dealer:

The sensor that was purchased from the local

2FIE-9J460-AB  
PBT-GF30

-----Original Message-----

From: Grimes, Jeff (J.R.)

[SMTP:jgrimes1@ford.com]

Sent: Wednesday, November 27,

2002  
07:55 AM

To: 'Lopez, Al'  
Subject: RE: PerkinElmer

EGR  
Problem.

Al, can you get me the Delta PF sensor part  
number...

Thank  
Jeff Grimes  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company  
ph: (313) 322-5237 fax: (313)

594-7323

e-mail: jgrimes1@ford.com

-----Original Message-----

From: Lopez, Al

[mailto:al.lopez@perkinelmer.com]

Sent: Tuesday, November 26,

2002  
1:16 PM

To: 'spenkevi@ford.com';

'Fedeson, Ken (K.S.)';  
'Daniel,

Paul  
(P.A.); 'Kosko, Jeff (J.R.)'; 'Wadley,

Jeffrey (J.G.)';

'Walsh, Tim  
(T.)';

'Smaidone, Ronald (R.P.)'; 'Grimes, Jeff

(J.R.)'

Cc: Schoppe, Dean; Bond, Stacy  
Subject: PerkinElmer EGR Problem.

I  
noticed

Steve, below is the EGR data for the 3 stages.

that in  
second

out  
to

stage the EGR actual is correct but then it cuts

a  
loss of

zero. Not  
sure what  
is happening first - a loss of DELPR signal or

indicate a  
faulty signal.

flow. Our  
recent  
experience with the bad DELPR sensor may

Or, the  
calibration is on a borderline and is toggling  
between off and on.

EGR_DES	EGR_ACT DELPR	Stage	Speed	EEC	Load
0		1	750	0.17	0
0		2	1850	0.29	2.8 -
3.0					
0 - 3.1	0 - 2.0	3	2600	0.37	4.0 -
4.2					
4.0 - 4.2	8.8 - 9.2				

Thanks  
Al

<< File: DOAR6.VRF >> << File: 01\_FNP.MCS >>

---

**From:** Fournelle, Gilbert (G.)  
**Sent:** Tuesday, December 03, 2002 4:22 PM  
**To:** Wadley, Jeffrey (J.G.)  
**Subject:** RE: PerkinElmer EGR Problem.

This is not a dyno calibration. It is a vehicle calibration with the two modifications mentioned below.

Gilbert Fournelle  
V6 U204 Calibration Engineering  
1A227 Truck Engine Engineering (TEE)  
Phone: (313)3904968 Fax: (313)3231786

-----Original Message-----

**From:** Wadley, Jeffrey (J.G.)  
**Sent:** Tuesday, December 03, 2002 3:53 PM  
**To:** Fournelle, Gilbert (G.); 'Lopez, Al'; Grimes, Jeff (J.R.); Penkevich, Steven (S.P.); Fedeson, Ken (K.S.); Daniel, Paul (P.A.); Kosko, Jeff (J.R.); Smaldone, Ronald (R.P.)  
**Cc:** Bogema, John (P.)  
**Subject:** RE: PerkinElmer EGR Problem.

Is this cal set up for Dyno use? Auto trans turned off, etc?

-----Original Message-----

**From:** Fournelle, Gilbert (G.)  
**Sent:** Tuesday, December 03, 2002 3:47 PM  
**To:** 'Lopez, Al'; Fournelle, Gilbert (G.); Grimes, Jeff (J.R.); Penkevich, Steven (S.P.); Fedeson, Ken (K.S.); Daniel, Paul (P.A.); Kosko, Jeff (J.R.); Wadley, Jeffrey (J.G.); Smaldone, Ronald (R.P.)  
**Cc:** Bogema, John (P.)  
**Subject:** RE: PerkinElmer EGR Problem.

I have no way to assess the impact on the spark since I have no idea what DOAP0 was. The calibration I provided you with is the latest service calibration for 2001MY. I am almost certain that there are changes in borderline spark compared to what you were running, but I cannot quantify this since I have no record of the calibration/strategy you were running.

Regards,

Gilbert Fournelle  
V6 U204 Calibration Engineering  
1A227 Truck Engine Engineering (TEE)  
Phone: (313)3904968 Fax: (313)3231786

-----Original Message-----

**From:** Lopez, Al [mailto:al.lopez@perkinelmer.com]  
**Sent:** Tuesday, December 03, 2002 3:15 PM  
**To:** Lopez, Al; 'Fournelle, Gilbert (G.)'; 'Grimes, Jeff (J.R.)';

'spenkevi@ford.com'; 'Pedeson, Ken (K.S.)'; 'Daniel, Paul (P.A.)';  
'Kosko, Jeff (J.R.)'; 'Wadley, Jeffrey (J.G.)'; 'Smaldone, Ronald  
(R.P.)'  
Cc: 'Bogema, John (P.)'  
Subject: RE: PerkinElmer EGR Problem.

Gilbert, Steve,

How will this new calibration affect the spark. I have a bad feeling  
that  
the ORI measurements we have performed to date will be void.

-----Original Message-----

From: Lopez, Al  
Sent: Tuesday, December 03, 2002 02:13 PM  
To: 'Fournelle, Gilbert (G.)'; Lopez, Al; Grimes, Jeff  
(J.R.);  
'spenkevi@ford.com'; 'Pedeson, Ken (K.S.)'; 'Daniel, Paul (P.A.)';  
'Kosko,  
Jeff (J.R.)'; 'Wadley, Jeffrey (J.G.)'; 'Smaldone, Ronald (R.P.)'  
Cc: Bogema, John (P.)  
Subject: RE: PerkinElmer EGR Problem.

Jeff K, Steve,

We will switch calibrations as per Gilbert's note below. The  
orifice plates at 29.5mm will be installed as well.

Thanks  
Al

-----Original Message-----

From: Fournelle, Gilbert (G.) [SMTP:gfournel@ford.com]  
Sent: Tuesday, December 03, 2002 10:13 AM  
To: 'Lopez, Al'; Fournelle, Gilbert (G.); Grimes,  
Jeff  
(J.R.)  
Cc: Bogema, John (P.)  
Subject: RE: PerkinElmer EGR Problem.

The calibration you are using is for a strategy which  
was  
never released for production with a 3.0L V6 U204. Please use the  
attached  
VRF and MCS file (latest release for MY 2001, with no PATS and no MIL  
for  
blank VID block).

Regards,

Gilbert Fournelle  
V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone: (313)3904968 Fax: (313)3231786

-----Original Message-----

From: Lopez, Al [mailto:al.lopez@perkinelmer.com]

Sent: Tuesday, December 03, 2002 10:54 AM  
To: 'Fournelle, Gilbert (G.)'; Grimes, Jeff (J.R.)  
Cc: Bogema, John (P.)  
Subject: RE: PerkinElmer EGR Problem.

Gilbert, below is the calibration:

Ford ORI/DBG Test 1  
2001 Model 3.0L 4V V6 (Escape)  
Calibration: (doap0.vrf) / (u204pv.mcs)

Thanks  
Al

-----Original Message-----

From: Fournelle, Gilbert (G.)  
[SMTP:gfournel@ford.com]  
Sent: Tuesday, December 03, 2002 09:46 AM  
To: Grimes, Jeff (J.R.); Lopez, Al  
Cc: Bogema, John (P.)  
Subject: RE: PerkinElmer EGR Problem.

Jeff/Al,

Could you please tell me what calibration you  
are  
running. It looks  
like  
EGR\_DES at .29 load and 1850 RPM should be  
somewhat  
higher 6.5% as  
opposed  
to 3%.

If you are asking for 3% at this speed load, the  
delpr value is vary  
small.

Since we cannot accurately control the EGR flow  
at  
small delpr  
values, we  
turn EGR off below a certain mass flow rate  
(desem <  
mindes\_cl) and  
we turn  
it back on if desem > mindes\_sh. With the small  
delpr values you  
are  
reporting, it looks like you are bouncing of the  
minimum clip.

EGR\_DES will  
not be equal to zero if the clip is active and  
you  
will not have an  
agreement between EGR\_RATE\_DES and EGR\_RATE\_ACT  
during this

condition even

though the hardware is functioning properly.

Regards

Gilbert Fournelle  
V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone: (313) 3904968 Fax: (313) 3231786

-----Original Message-----

From: Bogema, John (P.)  
Sent: Tuesday, December 03, 2002 10:11 AM  
To: Fournelle, Gilbert (G.)  
Subject: FW: PerkinElmer EGR Problem.  
Importance: High

Gilbert,

Please expand my earlier explanation.

-----Original Message-----

From: Grimes, Jeff (J.R.)  
Sent: Tuesday, December 03, 2002 8:19 AM  
To: Bogema, John (P.)  
Cc: ''  
Subject: RE: PerkinElmer EGR Problem.  
Importance: High

John, can I ask you to expand a little, and help

Al

out. He is

running a

Sludge DV test for us (new TB, IAC robustness,  
etc)...

normally,  
as it obviously

We need to make sure EGR is functionally

contributes to contamination...

Thank

Jeff Grimes  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company  
ph: (313) 322-5237 fax: (313) 594-7323  
e-mail: jgrimes1@ford.com

-----Original Message-----

From: Bogema, John (P.)  
Sent: Monday, December 02, 2002 5:18 PM  
To: Grimes, Jeff (J.R.)  
Subject: RE: PerkinElmer EGR Problem.



Jeff,

Without going into too much detail, it looks like you are crossing a load / minimum egr mass line. That would result in the observations seen.

John P. Bogema  
3.0L Escape Calibration Engineering  
Phone:313.33.75133  
Location:TEE 1AE22  
Email:JBOGEMA@FORD.COM

-----Original Message-----  
From: Grimes, Jeff (J.R.)  
Sent: Wednesday, November 27, 2002 12:46 PM  
To: Bogema, John (P.)  
Subject: FW: PerkinElmer EGR Problem.

Can you comment on the notes below...This is an engine we shipped for

"sludge" testing...

Thanx

Jeff Grimes  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company  
ph: (313) 322-5237 fax: (313) 594-7323  
e-mail: jgrimes1@ford.com

-----Original Message-----  
From: Lopez, Al  
[mailto:al.lopez@perkinelmer.com]  
Sent: Wednesday, November 27, 2002 12:04 PM  
To: 'Grimes, Jeff (J.R.)'  
Subject: RE: PerkinElmer EGR Problem.

It was generated with the new sensor. The original sensor never worked at all.

-----Original Message-----  
From: Grimes, Jeff (J.R.)  
[SMTP:jgrimes1@ford.com]  
Sent: Wednesday, November 27, 2002 10:47 AM

To: 'Lopez, Al'  
Subject: RE: PerkinElmer EGR Problem.

OK, thanx.  
Was the data below generated with the old or new  
sensor?

Jeff Grimes  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company  
ph: (313) 322-5237 fax: (313) 594-7323  
e-mail: jgrimes1@ford.com

-----Original Message-----

From: Lopez, Al  
[mailto:al.lopez@perkinelmer.com]  
Sent: Wednesday, November 27, 2002

10:02  
AM

To: 'Grimes, Jeff (J.R.)'  
Subject: RE: PerkinElmer EGR

Problem.

Jeff,  
The original sensor that came with the engine  
and  
was no good has

the  
following part numbers stamped on it:  
YFIR-9J460-AB  
PBT-GF30  
The sensor that was purchased from the local

dealer:

2FIR-9J460-AB  
PBT-GF30

-----Original Message-----

From: Grimes, Jeff (J.R.)  
[SMTP:jgrimes1@ford.com]  
Sent: Wednesday, November 27,

2002  
07:55 AM

To: 'Lopez, Al'  
Subject: RE: PerkinElmer

EGR  
Problem.

Al, can you get me the Delta PF sensor part  
number...

Thank  
Jeff Grimes  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company  
ph: (313) 322-5237 fax: (313)  
594-7323  
e-mail: jgrimes1@ford.com

-----Original Message-----

From: Lopez, Al  
[mailto:al.lopez@perkinelmer.com]  
Sent: Tuesday, November 26,

2002

1:16 PM

To: 'spenkevi@ford.com';

'Federson, Ken (K.S.)';

'Daniel,

Paul

(P.A.)'; 'Kosko, Jeff (J.R.)'; 'Wadley,

Jeffrey (J.G.)';

'Walsh, Tim

(T.)';

'Smaldone, Ronald (R.P.)'; 'Grimes, Jeff

(J.R.)'

Cc: Schoppe, Dean; Bond, Stacy

Subject: PerkinElmer EGR Problem.

Steve, below is the EGR data for the 3 stages.

I noticed

that in

second

stage the EGR actual is correct but then it cuts

out to

zero. Not

sure what

is happening first - a loss of DELPR signal or

a loss of

flow. Our

recent

experience with the bad DELPR sensor may

indicate a faulty signal.

Or, the

calibration is on a borderline and is toggling

between off and on.

Stage Speed EEC Load

EGR\_DES

EGR\_ACT

DELPR

1 750 0.17 0

0

0

2 1850 0.29 2.8 -

3.0

0 - 3.1

0 -

2.0

3 2600 0.37 4.0 -

4.2

4.0 - 4.2

8.8

- 9.2

Thanks

Al

<< File: DQAR6.VRF >> << File: 01\_FNP.MCS >>

**From:** Penkevich, Steven (S.P.)  
**Sent:** Tuesday, December 03, 2002 4:54 PM  
**To:** 'Lopez, Al; Fournelle, Gilbert (G.); Grimes, Jeff (J.R.); Penkevich, Steven (S.P.); Fedeson, Ken (K.S.); Daniel, Paul (P.A.); Kosko, Jeff (J.R.); Wadley, Jeffrey (J.G.); Smaldone, Ronald (R.P.)'  
**Cc:** Bogema, John (P.)  
**Subject:** RE: PerkinElmer EGR Problem.

Shouldn't be an issue. When you run the ORI testing you are manually setting borderline spark so you should be o.k. The only area you'd be off would be during the deposit formation cycle and even a 2° drift in spark shouldn't cause any problems.

Install the new smaller diameter orifice plates in the exhaust and see how the EGR parameters look with the original values of MINDES. If levels look good continue, if not set the MINDES to give you the desired EGR flow. Either way, continue using the calibration originally provided as it has been modified to run on the dynamometer.

-----Original Message-----

**From:** Lopez, Al [mailto:al.lopez@perkinelmer.com]  
**Sent:** Tuesday, December 03, 2002 3:15 PM  
**To:** Lopez, Al; 'Fournelle, Gilbert (G.)'; 'Grimes, Jeff (J.R.)'; 'spenkevi@ford.com'; 'Fedeson, Ken (K.S.)'; 'Daniel, Paul (P.A.)'; 'Kosko, Jeff (J.R.)'; 'Wadley, Jeffrey (J.G.)'; 'Smaldone, Ronald (R.P.)'  
**Cc:** 'Bogema, John (P.)'  
**Subject:** RE: PerkinElmer EGR Problem.

Gilbert, Steve,

How will this new calibration affect the spark. I have a bad feeling that the ORI measurements we have performed to date will be void.

-----Original Message-----

**From:** Lopez, Al  
**Sent:** Tuesday, December 03, 2002 02:13 PM  
**To:** 'Fournelle, Gilbert (G.)'; Lopez, Al; Grimes, Jeff (J.R.); 'spenkevi@ford.com'; 'Fedeson, Ken (K.S.)'; 'Daniel, Paul (P.A.)'; 'Kosko, Jeff (J.R.)'; 'Wadley, Jeffrey (J.G.)'; 'Smaldone, Ronald (R.P.)'  
**Cc:** Bogema, John (P.)  
**Subject:** RE: PerkinElmer EGR Problem.

Jeff K, Steve,

We will switch calibrations as per Gilbert's note below. The orifice plates at 29.5mm will be installed as well.

Thanks  
Al

-----Original Message-----

**From:** Fournelle, Gilbert (G.) [SMTP:gfournel@ford.com]

Sent: Tuesday, December 03, 2002 10:13 AM  
To: 'Lopez, Al'; Fournelle, Gilbert (G.); Grimes,

Jeff  
(J.R.)

Cc: Bogema, John (P.)  
Subject: RE: PerkinElmer EGR Problem.

The calibration you are using is for a strategy which was never released for production with a 3.0L V6 U204. Please us the attached VRF and MCS file (latest release for MY 2001, with no PATS and no MIL for blank VID block).

Regards,

Gilbert Fournelle  
V6 U204 Calibration Engineering  
1A27 Truck Engine Engineering (TEE)  
Phone:(313)3904968 Fax:(313)3231786

-----Original Message-----

From: Lopez, Al [mailto:al.lopez@perkinelmer.com]  
Sent: Tuesday, December 03, 2002 10:54 AM  
To: 'Fournelle, Gilbert (G.)'; Grimes, Jeff (J.R.)  
Cc: Bogema, John (P.)  
Subject: RE: PerkinElmer EGR Problem.

Gilbert, below is the calibration:

Ford ORI/SBG Test 1  
2001 Model 3.0L 4V V6 (Escape)  
Calibration: (doap0.vrf) / (u204pv.mcs)

Thanks  
Al

-----Original Message-----

From: Fournelle, Gilbert (G.)  
[SMTP:gfournel@ford.com]  
Sent: Tuesday, December 03, 2002 09:46 AM  
To: Grimes, Jeff (J.R.); Lopez, Al  
Cc: Bogema, John (P.)  
Subject: RE: PerkinElmer EGR Problem.

Jeff/Al,

Could you please tell me what calibration you are running. It looks like EGR\_DES at .29 load and 1850 RPM should be somewhat higher 6.5% as

opposed  
to 3%.

If you are asking for 3% at this speed load, the  
delpr value is very  
small.

Since we cannot accurately control the EGR flow  
at  
small delpr  
values, we  
turn EGR off below a certain mass flow rate  
(desem <  
mindez\_cl) and  
we turn  
it back on if desem > mindez\_sh. With the small  
delpr values you  
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reporting, it looks like you are bouncing of the  
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EGR\_DES will  
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Gilbert Fournelle  
V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone: (313)3904968 Fax: (313)3231786

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Sent: Tuesday, December 03, 2002 10:11 AM  
To: Fournelle, Gilbert (G.)  
Subject: FW: PerkinElmer EGR Problem.  
Importance: High

Gilbert,

Please expand my earlier explanation.

-----Original Message-----  
From: Grimes, Jeff (J.R.)  
Sent: Tuesday, December 03, 2002 8:19 AM  
To: Bogema, John (P.)  
Cc: ''  
Subject: RE: PerkinElmer EGR Problem.  
Importance: High

John, can I ask you to expand a little, and help

A1

out. He is

running a  
Sludge DV test for us (new TB, IAC robustness,  
etc)...

We need to make sure EGR is functionally  
normally,  
as it obviously  
contributes to contamination...

Thanx

Jeff Grimes  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company  
ph: (313) 322-5237 fax: (313) 594-7323  
e-mail: jgrimes1@ford.com

-----Original Message-----

From: Bogema, John (P.)  
Sent: Monday, December 02, 2002 5:18 PM  
To: Grimes, Jeff (J.R.)  
Subject: RE: PerkinElmer EGR Problem.

Jeff,

Without going into too much detail, it looks  
like  
you are crossing a  
load /  
minimum egr mass line. That would result in the  
observations seen.

John P. Bogema  
3.0L Escape Calibration Engineering  
Phone:313.33.75133  
Location:TEB 1A22  
Email:JBOGEMA@FORD.COM

-----Original Message-----

From: Grimes, Jeff (J.R.)  
Sent: Wednesday, November 27, 2002 12:46 PM  
To: Bogema, John (P.)  
Subject: FW: PerkinElmer EGR Problem.

Can you comment on the notes below...This is an  
engine we shipped  
for

"sludge" testing...

Thanx

Jeff Grimes  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company

ph: (313) 322-5237 fax: (313) 594-7323  
e-mail: jgrimes1@ford.com

-----Original Message-----

From: Lopez, Al  
[mailto:al.lopez@perkinelmer.com]  
Sent: Wednesday, November 27, 2002 12:04 PM  
To: 'Grimes, Jeff (J.R.)'  
Subject: RE: PerkinElmer EGR Problem.

It was generated with the new sensor. The original sensor never

worked at all.

-----Original Message-----

From: Grimes, Jeff (J.R.)  
[SMTP:jgrimes1@ford.com]  
Sent: Wednesday, November 27, 2002 10:47 AM

To: 'Lopez, Al'  
Subject: RE: PerkinElmer EGR Problem.

OK, thank.  
Was the data below generated with the old or new sensor?

Jeff Grimes  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company  
ph: (313) 322-5237 fax: (313) 594-7323  
e-mail: jgrimes1@ford.com

-----Original Message-----

From: Lopez, Al  
[mailto:al.lopez@perkinelmer.com]  
Sent: Wednesday, November 27, 2002 10:02 AM

To: 'Grimes, Jeff (J.R.)'  
Subject: RE: PerkinElmer EGR Problem.

Jeff,  
The original sensor that came with the engine and was no good has

the following part numbers stamped on it:  
YFIE-9J460-AB  
PBT-GF30  
The sensor that was purchased from the local

dealer:  
2FIE-9J460-AB  
PBT-GF30

-----Original Message-----

From: Grimes, Jeff (J.R.)



{SMTP:jgrimes1@ford.com}

Sent: Wednesday, November 27,

2002  
07:55 AM

To: 'Lopez, Al'  
Subject: RE: PerkinElmer

EGR  
Problem.

Al, can you get me the Delta PF sensor part  
number...

Thank  
Jeff Grimes  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company  
ph: (313) 322-5237 fax: (313)  
e-mail: jgrimes1@ford.com

594-7323

-----Original Message-----

From: Lopez, Al

[mailto:al.lopez@perkinelmer.com]

Sent: Tuesday, November 26,

2002  
1:16 PM

To: 'spenkevi@ford.com';

'Fedeson, Ken (K.S.)';  
'Daniel,

Paul

(P.A.)'; 'Kosko, Jeff (J.R.)'; 'Wadley,

Jeffrey (J.G.)';

'Walsh, Tim  
(T.)';

'Smaldone, Ronald (R.P.)'; 'Grimes, Jeff

(J.R.)'

Cc: Schoppe, Dean; Bond, Stacy  
Subject: PerkinElmer EGR Problem.

Steve, below is the EGR data for the 3 stages.

I  
noticed

that in  
second  
stage the EGR actual is correct but then it cuts

out  
to

zero. Not  
sure what  
is happening first - a loss of DELPR signal or

a  
loss of

flow. Our  
recent  
experience with the bad DELPR sensor may

indicate a  
faulty signal.

Or, the  
calibration is on a borderline and is toggling

between off and on.

EGR_DES	EGR_ACT DELPR	Stage	Speed	EBC	Load
0		1	750	0.17	0
0					
3.0		2	1850	0.29	2.8 -
0 - 3.1	0 -				
	2.0				
4.2		3	2600	0.37	4.0 -
4.0 - 4.2	6.8				
	- 9.2				

Thanks

Al

<< File: DOAR6.VRF >> << File: 01\_FNP.MCS >>

**From:** Penkevich, Steven (S.P.)  
**Sent:** Tuesday, December 03, 2002 5:27 PM  
**To:** Penkevich, Steven (S.P.); Lopez, Al; Fournelle, Gilbert (G.); Grimes, Jeff (J.R.); Fedeson, Ken (K.S.); Daniel, Paul (P.A.); Kosko, Jeff (J.R.); Wadley, Jeffrey (J.G.); Smaldone, Ronald (R.P.)  
**Cc:** Bogema, John (P.)  
**Subject:** RE: PerkinElmer EGR Problem.

Al, ignore my last note regarding the calibration. Use the calibration files that Gilbert sent down since he has modified it for PATS.

-----Original Message-----

**From:** Penkevich, Steven (S.P.)  
**Sent:** Tuesday, December 03, 2002 4:54 PM  
**To:** 'Lopez, Al'; Fournelle, Gilbert (G.); Grimes, Jeff (J.R.); Penkevich, Steven (S.P.); Fedeson, Ken (K.S.); Daniel, Paul (P.A.); Kosko, Jeff (J.R.); Wadley, Jeffrey (J.G.); Smaldone, Ronald (R.P.)  
**Cc:** Bogema, John (P.)  
**Subject:** RE: PerkinElmer EGR Problem.

Shouldn't be an issue. When you run the ORI testing you are manually setting borderline spark so you should be o.k. The only area you'd be off would be during the deposit formation cycle and even a 2° drift in spark shouldn't cause any problems.

Install the new smaller diameter orifice plates in the exhaust and see how the EGR parameters look with the original values of MINDES. If levels look good continue, if not set the MINDES to give you the desired EGR flow. Either way, continue using the calibration originally provided as it has been modified to run on the dynamometer.

-----Original Message-----

**From:** Lopez, Al [mailto:al.lopez@perkinelmer.com]  
**Sent:** Tuesday, December 03, 2002 3:15 PM  
**To:** Lopez, Al; 'Fournelle, Gilbert (G.)'; 'Grimes, Jeff (J.R.)'; 'spenkevi@ford.com'; 'Fedeson, Ken (K.S.)'; 'Daniel, Paul (P.A.)'; 'Kosko, Jeff (J.R.)'; 'Wadley, Jeffrey (J.G.)'; 'Smaldone, Ronald (R.P.)'  
**Cc:** 'Bogema, John (P.)'  
**Subject:** RE: PerkinElmer EGR Problem.

Gilbert, Steve,

How will this new calibration affect the spark. I have a bad feeling that the ORI measurements we have performed to date will be void.

-----Original Message-----

**From:** Lopez, Al  
**Sent:** Tuesday, December 03, 2002 02:13 PM  
**To:** 'Fournelle, Gilbert (G.)'; Lopez, Al; Grimes, Jeff (J.R.); 'spenkevi@ford.com'; 'Fedeson, Ken (K.S.)'; 'Daniel, Paul (P.A.)'; 'Kosko, Jeff (J.R.)'; 'Wadley, Jeffrey (J.G.)'; 'Smaldone, Ronald (R.P.)'

Cc: Bogema, John (P.)  
Subject: RE: PerkinElmer EGR Problem.

Jeff K. Steve,

We will switch calibrations as per Gilbert's note below. The orifice plates at 29.5mm will be installed as well.

Thanks  
Al

-----Original Message-----

From: Fournelle, Gilbert (G.) [SMTP:gfournel@ford.com]  
Sent: Tuesday, December 03, 2002 10:13 AM  
To: 'Lopez, Al'; Fournelle, Gilbert (G.); Grimes,

Jeff  
(J.R.)

Cc: Bogema, John (P.)  
Subject: RE: PerkinElmer EGR Problem.

The calibration you are using is for a strategy which was never released for production with a 3.0L V6 U204. Please use the attached VRF and MCS file (latest release for MY 2001, with no PATS and no MIL for blank VID block).

Regards,

Gilbert Fournelle  
V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone: (313) 3904968 Fax: (313) 3231786

-----Original Message-----

From: Lopez, Al [mailto:al.lopez@parkinelmer.com]  
Sent: Tuesday, December 03, 2002 10:54 AM  
To: 'Fournelle, Gilbert (G.)'; Grimes, Jeff (J.R.)  
Cc: Bogema, John (P.)  
Subject: RE: PerkinElmer EGR Problem.

Gilbert, below is the calibration:

Ford ORI/SEB Test 1  
2001 Model 3.0L 4V V6 (Escape)  
Calibration: (doap0.vrf) / (u204pv.mcs)

Thanks  
Al

-----Original Message-----

From: Fournelle, Gilbert (G.)  
[SMTP:gfournel@ford.com]  
Sent: Tuesday, December 03, 2002 09:46 AM

To: Grimes, Jeff (J.R.); Lopez, Al  
Cc: Bogema, John (P.)  
Subject: RE: PerkinElmer EGR Problem.

Jeff/Al,

Could you please tell me what calibration you  
are running. It looks like  
EGR\_DES at .29 load and 1850 RPM should be  
somewhat higher 6.5% as opposed  
to 3%.

If you are asking for 3% at this speed load, the  
delpr value is very small.

Since we cannot accurately control the EGR flow  
at small delpr values, we  
turn EGR off below a certain mass flow rate  
(desem < mindes\_cl) and  
we turn  
it back on if desem > mindes\_sh. With the small  
delpr values you are

reporting, it looks like you are bouncing of the  
minimum clip.

EGR\_DES will  
not be equal to zero if the clip is active and  
you will not have an  
agreement between EGR\_RATE\_DES and EGR\_RATE\_ACT  
during this condition even  
though the hardware is functioning properly.

Regards

Gilbert Fournelle  
V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone: (313)3904968 Fax: (313)3231786

-----Original Message-----

From: Bogema, John (P.)  
Sent: Tuesday, December 03, 2002 10:11 AM  
To: Fournelle, Gilbert (G.)  
Subject: FW: PerkinElmer EGR Problem.  
Importance: High

Gilbert,

Please expand my earlier explanation.

-----Original Message-----

From: Grimes, Jeff (J.R.)  
Sent: Tuesday, December 03, 2002 8:19 AM  
To: Bogema, John (P.)  
Cc: ''  
Subject: RE: PerkinElmer EGR Problem.  
Importance: High

John, can I ask you to expand a little, and help  
Al  
out. He is  
running a  
Sludge DV test for us (new TB, IAC robustness,  
etc)...

We need to make sure EGR is functionally  
normally,  
as it obviously  
contributes to contamination...

Thank

Jeff Grimes  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company  
ph: (313) 322-5237 fax: (313) 594-7323  
e-mail: jgrimes1@ford.com

-----Original Message-----

From: Bogema, John (P.)  
Sent: Monday, December 02, 2002 5:18 PM  
To: Grimes, Jeff (J.R.)  
Subject: RE: PerkinElmer EGR Problem.

Jeff,

Without going into too much detail, it looks  
like  
you are crossing a  
load /  
minimum egr mass line. That would result in the  
observations seen.

John P. Bogema  
3.0L Escape Calibration Engineering  
Phone:313.33.75133  
Location:TEE 1A22  
Email:JBOGEMA@FORD.COM

-----Original Message-----

From: Grimes, Jeff (J.R.)  
Sent: Wednesday, November 27, 2002 12:46 PM  
To: Bogema, John (P.)  
Subject: FW: PerkinElmer EGR Problem.

Can you comment on the notes below...This is an engine we shipped for

"sludge" testing...

Thank

Jeff Grimes  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company  
ph: (313) 322-5237 fax: (313) 594-7323  
e-mail: jgrimes1@ford.com

-----Original Message-----

From: Lopez, Al  
[mailto:al.lopez@perkinelmer.com]  
Sent: Wednesday, November 27, 2002 12:04 PM  
To: 'Grimes, Jeff (J.R.)'  
Subject: RE: PerkinElmer EGR Problem.

It was generated with the new sensor. The original sensor never worked at all.

-----Original Message-----

From: Grimes, Jeff (J.R.)  
[SMTP:jgrimes1@ford.com]  
Sent: Wednesday, November 27, 2002 10:47 AM

To: 'Lopez, Al'  
Subject: RE: PerkinElmer EGR Problem.

OK, thank.  
Was the data below generated with the old or new sensor?

Jeff Grimes  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company  
ph: (313) 322-5237 fax: (313) 594-7323  
e-mail: jgrimes1@ford.com

-----Original Message-----

From: Lopez, Al  
[mailto:al.lopez@perkinelmer.com]  
Sent: Wednesday, November 27, 2002 10:02 AM

To: 'Grimes, Jeff (J.R.)'  
Subject: RE: PerkinElmer EGR Problem.

Jeff,

The original sensor that came with the engine  
and was no good has

the  
following part numbers stamped on it:  
YFIR-9J460-AB  
PBT-GF30

The sensor that was purchased from the local  
dealer:

2FIR-9J460-AB  
PBT-GF30

-----Original Message-----

From: Grimes, Jeff (J.R.)

[SMTP:jgrimes1@ford.com]

Sent: Wednesday, November 27,

2002  
07:55 AM

To: 'Lopez, Al'  
Subject: RE: PerkinElmer

EGR  
Problem.

Al, can you get me the Delta PF sensor part  
number...

Thank  
Jeff Grimes  
OPD & Value Engineering  
Duratec Engine Programs, U204  
Ford Motor Company  
ph: (313) 322-5237 fax: (313)

594-7323

e-mail: jgrimes1@ford.com

-----Original Message-----

From: Lopez, Al

[mailto:al.lopez@perkinelmer.com]

Sent: Tuesday, November 26,

2002  
1:16 PM

To: 'spenkevi@ford.com';

'Pederson, Ken (K.S.)';  
'Daniel,

Paul  
(P.A.)'; 'Kosko, Jeff (J.R.)'; 'Wadley,

Jeffrey (J.G.)';  
'Walsh, Tim  
(T.)';

'Smaldone, Ronald (R.P.)'; 'Grimes, Jeff

(J.R.)'

Cc: Schoppe, Dean; Bond, Stacy  
Subject: PerkinElmer EGR Problem.

I  
noticed

Steve, below is the EGR data for the 3 stages.

out

that in  
second  
stage the EGR actual is correct but then it cuts



to

zero. Not  
sure what  
is happening first - a loss of DELPR signal or

a  
loss of

flow. Our  
recent  
experience with the bad DELPR sensor may

indicate a  
faulty signal.

Or, the  
calibration is on a borderline and is toggling  
between off and on.

EGR_DES	EGR_ACT DELPR	Stage	Speed	EFC	Load
0		1	750	0.17	0
0		2	1850	0.29	2.8 -
3.0					
0 - 3.1	0 - 2.0				
4.2		3	2600	0.37	4.0 -
4.0 - 4.2	8.8 - 9.2				

Thanks

Al

<< File: DOAR6.VRF >> << File: 01\_FNP.MCS >>

---

**From:** Fournelle, Gilbert (G.)  
**Sent:** Wednesday, December 04, 2002 3:37 PM  
**To:** Lewis, Bill (B.C.); Khalil, Imran (I.); Jones, Andy (A.); Smith, Jeffrey (J.M.)  
**Cc:** McDonald, John (J.R.); Falandino, Mike (M.P.)  
**Subject:** RE: CALVIN problems

I did a KAM save on 1 on W273 vehicles. The other vehicle is scheduled to run in 3 hours, and I will do the KAM save after the test (today I will just run without Calvin on in W275, there seem to be only issues when Calvin is powered up).

Attached is the Kam data

***Gilbert Fournelle***

V8 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904968 Fax:(313)3231788

—Original Message—

**From:** Lewis, Bill (B.C.)  
**Sent:** Wednesday, December 04, 2002 2:42 PM  
**To:** 'Ramseyer, Mark (M.); Khalil, Imran (I.); Jones, Andy (A.); Fournelle, Gilbert (G.)  
**Cc:** Fisher, Rolfe (R.M.); McDonald, John (J.R.); Dalbo, Bob (R.J.); Falandino, Mike (M.P.); Lewis, Bill (B.C.); Smith, Jeffrey (J.M.)  
**Subject:** RE: CALVIN problems

We have asked Imran to get in touch with Gilbert and do a KAM save on one or both of the modules after an assumed reset. Our KAM save includes the Kernel error log and this may have some valuable information.

Is it possible that a peripheral controller would cause a reset and how do we know if peripheral devices on all 3 modules are programmed the same?

***Bill Lewis***

R&VT\_Cape-PCSE  
Software and Calibration Tools Department  
POEE Building, MD# 74  
E-Mail, blewis30@ford.com  
Phone (313)-845-5301

—Original Message—

From: Ramseyer, Mark (M.) [mailto:mramsey@visteon.com]

Sent: Wednesday, December 04, 2002 1:16 PM

To: 'Khalil, Imran (I.); Jones, Andy (A.); Fournelle, Gilbert (G.)

Cc: Fisher, Rolfe (R.M.); McDonald, John (J.R.); Dalbo, Bob (R.J.); Falandino, Mike (M.P.); Lewis, Bill (B.C.); Smith, Jeffrey (J.M.)

Subject: RE: CALVIN problems

Gilbert, Imran,

I haven't seen Andy around in the last hour or so and he is the one who has the history of the modules you mentioned. He is also the one who would know whether we have any available to ship.

I did look closely at 2 modules from Gilbert in the last few months. Both of these were described as having "resets", but further explanation indicated that the display would sometimes stop for a few seconds and then continue on correctly. I also saw this phenomenon and after much time examining most of the signals did not find anything unusual. Conversations with the Ford Calvin people (Jeff Smith) helped me to record some internal Calvin variables. Examination of these recorder files showed that the PCM and its communication to the Calvin ADS was just fine. Further discussion of this issue with Ford Calvin people led them to believe that the freezing of the display was due to PC software, specifically Windows. I also heard that LBO-5xx modules have exhibited this same behaviour, but I have not heard of any returns because of this.

I looked at your recording and agree that it does seem to indicate a PCM reset. I am not familiar with most of the variables, including atmr1, but having RPM (N) change from 700 to 0 to 600 within 0.2 seconds is strange. This occurs at the same time atmr1 is cleared and starts counting again, along with some other variables that seem to start acting strangely. I am a little bothered that putmr is not captured after 3.7 seconds, and also that all channels are not recorded except 1 after about 30% of the recording. I am not familiar enough with Calvin to know if this is unusual or not, or if it provides any clues.

This does seem similar to an HSO-4xx module which recently was having some unexpected resets.

This was traced to a problem in the TPU microcode. I am not certain whether these would use the same microcode since this is a Black Oak module and the HSO is a Spanish Oak, but it is

certainly something to consider. I've attached the email that has some of the explanation. (I understand that the same software is used in all 3 modules and 1 works fine but 2 don't. I'm just trying to think of anything that might be helpful.)

I can't think of anything else right now. If I can think of some other data to capture to resolve this, or some other experiment I'll let you know.

**Mark Ramseyer**

Powertrain Digital Devices - Energy Management Systems  
Visteon Corporation  
17000 Rotunda Dr.  
Dearborn, MI 48121  
Room C324-55

phone/fax: (313) 755-5163  
<mailto:mramseye@visteon.com>

—Original Message—

From: Khalil, Imran (I.) [<mailto:ikhalik@ford.com>]  
Sent: Wednesday, December 04, 2002 11:35 AM  
To: 'mramseye@visteon.com'; 'ajones8@visteon.com'  
Cc: 'rfisher1@visteon.com'; 'jmccona3@visteon.com'; Fournelle, Gilbert (G.); Dalbo, Bob (R.J.); Falandino, Mike (M.P.); Lewis, Bill (B.C.); Smith, Jeffrey (J.M.)  
Subject: FW: CALVIN problems  
Importance: High

Andy/Mark,

Please look at this issue, if you have couple of LBO51s in a good working condition. Please FedEx overnight to Gilbert in Denver or give it to me, I will ship today. I have his strategy files if you need them to test the PCM here with CALVIN let me know.

Address is:

4800 Ironton  
Denver, CO 80239

phone: 1-303-3715680

—Original Message—

From: Fournelle, Gilbert (G.)  
Sent: Tuesday, December 03, 2002 7:16 PM  
To: Khalil, Imran (I.)  
Cc: Dalbo, Bob (R.J.)  
Subject: CALVIN problems

Imran,

I have three Calvin vehicles in Denver. One vehicle, w274, is a vehicle which I have been running in the lab. Another, w275, is one you looked at a while ago when I had problems with the first batch of CP processors.

W274 is running fine with no issues. The other 2 experience processor resets at random times. This time I do not see the message that the processor goes into LOS. However, atmr1 does reset to 0 when the vehicle has a "hiccup", as can be seen in the attached file. The vehicles run without any issues when Calvin is turned off. I do not know what I can do at this point. I don't have spare processors, these are processors which I previously returned to Visteon and Visteon could not find any problems. I cannot do my work if the processor keeps resetting.

If I the processor from 275 is placed in 274, 274 starts having issues. I do not think that it is an issue with my Calvin hardware. I do think it follows the processor. Something went wrong when we switched to CP processors LBO51, I did not have any such issues with the LBO50 processor. Do you have any suggestions? I cannot use my 1 good processor between vehicles since I need updated KAM values for my emissions tests.

<<STALLHDF>>

Regards,

*Gilbert Fournelle*

V6 U204 Calibration Engineering

1AE27 Truck Engine Engineering (TEE)

Phone:(313)3904968 Fax:(313)3231786



: 20C0780028000C0280001002800014028000160280001C000000000000000000000009C  
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:20FE4000A2  
:20FE600082  
:20FE800062  
:20FEA00042  
:20FEC00000000000P12P14800010800003FFD500000792C00000000D0000000000000000C6  
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:20FFF0000001D0B87FF8FFCC7FF803000000300237AADADDD000D0B87FF840B4500000006F  
:20FFF2000123456780050FBFC0000000400000000000000000000000000000000000062  
:08FF400010002000BC5F9C3D95  
:00000001FF



---

**From:** Fournelle, Gilbert (G.)  
**Sent:** Wednesday, December 04, 2002 3:43 PM  
**To:** 'Jones, Andy (A.); Khalil, Imran (I.); Ramseyer, Mark (M.)  
**Cc:** Fisher, Rollie (R.M.); McDonald, John (J.R.); Fournelle, Gilbert (G.); Dalbo, Bob (R.J.); Falandino, Mike (M.P.); Lewis, Bill (B.C.); Smith, Jeffrey (J.M.); Laginess, Mark (M.S.); MacArthur, David (D.R.); Krentkowski, Theodore (T.E.); Gould, Robert (R.M.)  
**Subject:** RE: CALVIN problems

The processor from w273 is being shipped with Airborne Express to the address mentioned below. I would like to hold on to the other processor since the vehicle can driven with it if Calvin is not powered up.

Regards,

*Gilbert Fournelle*

V8 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904988 Fax:(313)3231786

—Original Message—

**From:** Jones, Andy (A.) [mailto:ajones8@visteon.com]  
**Sent:** Wednesday, December 04, 2002 3:08 PM  
**To:** 'Khalil, Imran (I.); Ramseyer, Mark (M.)  
**Cc:** Fisher, Rollie (R.M.); McDonald, John (J.R.); Fournelle, Gilbert (G.); Dalbo, Bob (R.J.); Falandino, Mike (M.P.); Lewis, Bill (B.C.); Smith, Jeffrey (J.M.); Laginess, Mark (M.S.); MacArthur, David (D.R.); Krentkowski, Theodore (T.E.); Rob Gould (E-mail)  
**Subject:** RE: CALVIN problems

Imran, Gilbert,

Unfortunately we do not have any LBO-A51 PCMs in stock to send as replacements. The suggestion I have is for you to FedEx one or both of the suspect PCMs to us back in Dearborn and we will attempt to reproduce the fault and find what is causing it. I spoke with the Supervisor of our PCM hardware design group and he has committed to prioritizing this analysis as soon as the modules arrive. If you would prefer send the PCMs back one at a time so you maintain some functionality on two of your vehicles that is fine.

Please ship the modules to:

Attention: Dave MacArthur  
Visteon Energy Management Applications Building  
15200 Commerce Drive North  
Dearborn, MI 48120

We will also need copies of the files you are running in your Calvin so that we can duplicate your setup.

Regards,

Andy Jones (AJONES8)  
Visteon Powertrain Control Systems  
e-mail: ajones8@visteon.com  
C309, Visteon Technical Center, Dearborn  
Tel: (313) 75-51593 Fax: (313) 75-52857

-----Original Message-----

From: Khalil, Imran (I.) [mailto:lkhalil@ford.com]  
Sent: Wednesday, December 04, 2002 11:35 AM  
To: 'mramseye@visteon.com'; 'ajones8@visteon.com'  
Cc: 'rfisher1@visteon.com'; 'jmcdfona3@visteon.com'; Fournelle, Gilbert (G.); Dalbo, Bob (R.J.); Falandino, Mike (M.P.); Lewis, Bill (B.C.); Smith, Jeffrey (J.M.)  
Subject: FW: CALVIN problems  
Importance: High

Andy/Mark,

Please look at this issue, if you have couple of LBO51s in a good working condition. Please FedEx overnight to Gilbert in Denver or give it to me, I will ship today. I have his strategy files if you need them to test the PCM here with CALVIN let me know.

Address is:

4600 Ironton  
Denver, CO 80239

phone: 1-303-3715680

-----Original Message-----

From: Fournelle, Gilbert (G.)  
Sent: Tuesday, December 03, 2002 7:16 PM  
To: Khalil, Imran (I.)  
Cc: Dalbo, Bob (R.J.)  
Subject: CALVIN problems

Imran,

I have three Calvin vehicles in Denver. One vehicle, w274, is a vehicle which I have been running in the lab. Another, w275, is one you looked at a while ago when I had problems with the first batch of CP processors.

W274 is running fine with no issues. The other 2 experience processor resets at random times. This time I do not see the message that the processor goes into LOS. However, atm1 does reset to 0 when the vehicle has a "hiccup", as can be seen in the attached file. The vehicles run without any issues when Calvin is turned off. I do not know what I can do at this point. I don't have spare processors, these are processors which I previously returned to Visteon and Visteon could not find any problems. I cannot do my work if the

processor keeps resetting.

If I the processor from 275 is placed in 274, 274 starts having issues. I do not think that it is an issue with my Calvin hardware. I do think it follows the processor. Something went wrong when we switched to CP processors LBO51, I did not have any such issues with the LBO50 processor. Do you have any suggestions? I cannot use my 1 good processor between vehicles since I need updated KAM values for my emissions tests.

<<STALLHDF>>

Regards,

*Gilbert Fournelle*

V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904868 Fax:(313)3231788

---

**From:** Fournelle, Gilbert (G.)  
**Sent:** Wednesday, December 04, 2002 6:53 PM  
**To:** Lewis, Bill (B.C.); Khalil, Imran (I.); Jones, Andy (A.); Smith, Jeffrey (J.M.)  
**Cc:** McDonald, John (J.R.); Falandino, Mike (M.P.)  
**Subject:** RE: CALVIN problems

Attached is the KAM save from W275

Regards,

*Gilbert Fournelle*

V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904968 Fax:(313)3231786

-----Original Message-----

**From:** Fournelle, Gilbert (G.)  
**Sent:** Wednesday, December 04, 2002 3:37 PM  
**To:** Lewis, Bill (B.C.); Khalil, Imran (I.); Jones, Andy (A.); Smith, Jeffrey (J.M.)  
**Cc:** McDonald, John (J.R.); Falandino, Mike (M.P.)  
**Subject:** RE: CALVIN problems

I did a KAM save on 1 on W273 vehicles. The other vehicle is scheduled to run in 3 hours, and I will do the KAM save after the test (today I will just run without Calvin on in W275, there seem to be only issues when Calvin is powered up).

Attached is the Kam data

*Gilbert Fournelle*

V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904968 Fax:(313)3231786

-----Original Message-----

**From:** Lewis, Bill (B.C.)  
**Sent:** Wednesday, December 04, 2002 2:42 PM  
**To:** Ramseyer, Mark (M.); Khalil, Imran (I.); Jones, Andy (A.); Fournelle, Gilbert (G.)  
**Cc:** Fisher, Rolfe (R.M.); McDonald, John (J.R.); Dalbo, Bob (R.J.); Falandino, Mike (M.P.); Lewis, Bill (B.C.); Smith, Jeffrey (J.M.)  
**Subject:** RE: CALVIN problems

We have asked Imran to get in touch with Gilbert and do a KAM save on one or both of the modules after an assumed reset. Our KAM save includes the Kernel error log and this may have some valuable information.

Is it possible that a peripheral controller would cause a reset and how do we know if peripheral devices on all 3 modules are programmed the same?

*Bill Lewis*

R&VT\_Cape-PCSE  
Software and Calibration Tools Department  
POEE Building, MD# 74  
E-Mail, blewis30@ford.com  
Phone (313)-845-5301

---Original Message---

From: Ramseyer, Mark (M.) [mailto:mramseye@visteon.com]  
Sent: Wednesday, December 04, 2002 1:16 PM  
To: 'Khalif, Imran (I.); Jones, Andy (A.); Fournelle, Gilbert (G.)  
Cc: Fisher, Rollie (R.M.); McDonald, John (J.R.); Dalbo, Bob (R.J.); Falandino, Mike (M.P.); Lewis, Bill (B.C.); Smith, Jeffrey (J.M.)  
Subject: RE: CALVIN problems

Gilbert, Imran,

I haven't seen Andy around in the last hour or so and he is the one who has the history of the modules you mentioned. He is also the one who would know whether we have any available to ship.

I did look closely at 2 modules from Gilbert in the last few months. Both of these were described as having "resets", but further explanation indicated that the display would sometimes stop for a few seconds and then continue on correctly. I also saw this phenomenon and after much time examining most of the signals did not find anything unusual. Conversations with the Ford Calvin people (Jeff Smith) helped me to record some internal Calvin variables. Examination of these recorder files showed that the PCM and its communication to the Calvin ADS was just fine. Further discussion of this issue with Ford Calvin people led them to believe that the freezing of the display was due to PC software, specifically Windows. I also heard that LBO-5xx modules have exhibited this same behaviour, but I have not heard of any returns because of this.

I looked at your recording and agree that it does seem to indicate a PCM reset. I am not familiar

with most of the variables, including atmr1, but having RPM (N) change from 700 to 0 to 600 within 0.2 seconds is strange. This occurs at the same time atmr1 is cleared and starts counting again, along with some other variables that seem to start acting strangely. I am a little bothered that putmr is not captured after 3.7 seconds, and also that all channels are not recorded except 1 after about 30% of the recording. I am not familiar enough with Calvin to know if this is unusual or not, or if it provides any clues.

This does seem similar to an HSO-4xx module which recently was having some unexpected resets. This was traced to a problem in the TPU microcode. I am not certain whether these would use the same microcode since this is a Black Oak module and the HSO is a Spanish Oak, but it is certainly something to consider. I've attached the email that has some of the explanation. (I understand that the same software is used in all 3 modules and 1 works fine but 2 don't. I'm just trying to think of anything that might be helpful.)

I can't think of anything else right now. If I can think of some other data to capture to resolve this, or some other experiment I'll let you know.

**Mark Ramseyer**

Powertrain Digital Devices - Energy Management Systems  
Visteon Corporation  
17000 Rotunda Dr.  
Dearborn, MI 48121  
Room C324-55

phone/fax: (313) 755-5163  
<mailto:mramseye@visteon.com>

—Original Message—

From: Khalil, Imran (I.) [<mailto:ikhali@ford.com>]  
Sent: Wednesday, December 04, 2002 11:35 AM  
To: 'mramseye@visteon.com'; 'ajones8@visteon.com'  
Cc: 'rfisher1@visteon.com'; 'jmcdone3@visteon.com'; Fournelle, Gilbert (G.); Dalbo, Bob (R.J.); Felandino, Mike (M.P.); Lewis, Bill (B.C.); Smith, Jeffrey (J.M.)  
Subject: FW: CALVIN problems  
Importance: High

Andy/Mark,

Please look at this issue, if you have couple of LBO51s in a good working condition. Please FedEx overnight to Gilbert in Denver or give it to me, I will ship today. I have his strategy files if you need them to test the PCM here with CALVIN let me know.

Address is:

4600 Ironton  
Denver, CO 80239

phone: 1-303-3715680

—Original Message—

From: Fournelle, Gilbert (G.)  
Sent: Tuesday, December 03, 2002 7:16 PM  
To: Khalil, Imran (I.)  
Cc: Debo, Bob (R.J.)  
Subject: CALVIN problems

Imran,

I have three Calvin vehicles in Denver. One vehicle, w274, is a vehicle which I have been running in the lab. Another, w275, is one you looked at a while ago when I had problems with the first batch of CP processors.

W274 is running fine with no issues. The other 2 experience processor resets at random times. This time I do not see the message that the processor goes into LOS. However, almr1 does reset to 0 when the vehicle has a "hiccup", as can be seen in the attached file. The vehicles run without any issues when Calvin is turned off. I do not know what I can do at this point. I don't have spare processors, these are processors which I previously returned to Visteon and Visteon could not find any problems. I cannot do my work if the processor keeps resetting.

If I the processor from 275 is placed in 274, 274 starts having issues. I do not think that it is an issue with my Calvin hardware. I do think it follows the processor. Something went wrong when we switched to CP processors LBO51, I did not have any such issues with the LBO50 processor. Do you have any suggestions? I cannot use my 1 good processor between vehicles since I need updated KAM values for my emissions tests.

<<STALLHDF>>

Regards,

*Gilbert Fournelle*

V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904968 Fax:(313)3231786









**Subject:** Canceled: 3.0L U204 Phantom stall meeting  
**Location:** TEE CR#1

**Start:** Thu 12/5/2002 2:00 PM  
**End:** Thu 12/5/2002 3:00 PM  
**Show Time As:** Free

**Recurrence:** Weekly  
**Recurrence Pattern:** every Thursday from 2:00 PM to 3:00 PM

**Meeting Status:** Not yet responded

**Required Attendees:** Fournelle, Gilbert (G.); Altoonlan, Don (D.J.); Bauer, Scott (S.C.); Bhojwani, Kamal (K.); Blackburn, Thomas (T.J.); Bopema, John (P.); Cary Powell (E-mail); Chick, John (J.); Chin, Ming-Niu (M.N.); Chin, Darrel (D.); Corbett, Sandra (S.M.); Dalbo, Bob (R.J.); De Pena, Juan (J.E.); Diaz, Timothy (T.P.); Duvall, Allen (A.W.); Fascetti, Bob (R.J.); Fournelle, Gilbert (G.); Frestland, Mark (M.); Gilles, Stuart (S.); Gokhale, Renuka (R.V.); Goodwin, William (W.F.); Grewal, Bill (B.S.); Grimes, Jeff (J.R.); Hansen, George (G.C.); Herr, George (G.J.); Hofman, Michael (M.V.); Holmes, Jeffrey (J.R.); Hoshino, Jun (J.); Ichikawa, Jyunichiro (J.); Jensen, Ted (T.E.); Jones, Andy; Jordan, Donald (D.E.); Kanai, Shinji (S.); Khan, Navsed; Kosko, Jeff (J.R.); Lawler, Dave (D.A.); Le, Dzong (D.H.); Limiaco, Steven (S.); Linde, Peter (P.A.); Liu, Jane (J.); Marok, Edmond (E.C.); Marinos, Tom (T.E.); Matea, John (J.); Maurer, James (J.B.); Mazzeia, Gary (G.R.); McCarthy, Fran (F.); McDonald, John; McGee, Brett (B.L.); Mooney, Larry (L.); Moorhouse, Scott (S.R.); Morishima, Shigeki (S.); Nakano, Hideki (H.); Nematollahi, Sonya (S.); Nikolei, bernie; Noteboom, Jim (J.E.); Ortmann, James (J.W.); Ott, David (D.J.); Powers, Ken (K.W.); Price, Martin (M.); Raquepau, Alden (A.P.); Rothweiler, Daniel (D.); Shah, Kiren (K.C.); Shiraiishi, Masaru (M.); Stoenbauer, Jeffrey (J.R.); Suarez, Rhea (R.); Takasawa, Kalth (K.D.); Takubo, Hirochi (H.); TMORGA43 was deleted 20021116; Veenstra, Tim (T.W.); Wakenell, Ray (R.A.); Wettach, Bill (B.); Williams, Lee (LHW.); Yeung, Lam (L.); Kwon, Soon (S.K.)

**Optional Attendees:** Hofman, Michael (M.V.); Nakano, Hideki (H.); Lawler, Dave (D.A.); Grimes, Jeff (J.R.); Price, Martin (M.); Moorhouse, Scott (S.R.); Hoshino, Jun (J.); Blackburn, Thomas (T.J.)

**Importance:** High

This meeting is cancelled due to a U204 high altitude test trip.

Meeting agenda and meeting minutes will be send separately on a weekly basis.

toll free: 1-888-227-7015  
Ford net: 854-1206  
International: 1-630-693-6145

pass code: 8402370#  
moderator code: 3457370

---

**From:** Fournelle, Gilbert (G.)  
**Sent:** Friday, December 06, 2002 9:41 AM  
**To:** Holter, Corey (C.K.); Veenstra, Tim (T.W.)  
**Co:** Corbett, Sandra (S.M.); Dalbo, Bob (R.J.)  
**Subject:** RE: Escape stalling issue

Corey,

At this point in time, we think that we have adequately addressed the stall issue. A TSB 02-23-1 has been released on 11/14/02 with a comprehensive procedure to diagnose and fix this stall issue. Since the release of the latest calibration on 9/11/02 there have been no complaints with phantom stall issues. The call volume to both the Mazda Tribute and Ford Escape hotline has declined by more than 50% since the release of the TSB. The attached meeting agenda lists all the actions we have taken with implementation dates. We still have weekly meetings to discuss this issue. I will send a meeting notice and meeting agenda to you for the next meeting (possibly not until December 19th due to a calibration trip).

Regards,

██████████                      ██████████  
sting minutes for J204 Phantom Stall  
14/02 3...                      meeting age...

*Gilbert Fournelle*  
V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904968 Fax:(313)3231786

—Original Message—

**From:** Holter, Corey (C.K.)  
**Sent:** Friday, December 06, 2002 8:49 AM  
**To:** Veenstra, Tim (T.W.)  
**Cc:** Fournelle, Gilbert (G.); Corbett, Sandra (S.M.)  
**Subject:** RE: Escape stalling issue

Thanks. Apparently the sister of a Ford employee was told not to buy an Escape (by the Ford dealer!) due to the stalling issue. Would like a brief status to give to him. thanks - and I'll also be following-up with the dealer!

Corey Holter  
Ford Division - Escape Marketing Manager  
P: 313-845-1042  
F: 313-845-0310  
Regent Court - 9S152  
chopter@ford.com

—Original Message—

**From:** Veenstra, Tim (T.W.)  
**Sent:** Friday, December 06, 2002 7:01 AM  
**To:** Holter, Corey (C.K.)  
**Cc:** Fournelle, Gilbert (G.); Corbett, Sandra (S.M.)  
**Subject:** RE: Escape stalling issue

I would contact Gilbert (Calibration) or Sandra (Powertrain PMT Leader) to discuss the current status of stalls!

-----Original Message-----

**From:** Holter, Corey (C.K.)  
**Sent:** Thursday, December 05, 2002 12:51 PM  
**To:** Veenstra, Tim (T.W.)  
**Subject:** Escape stalling issue

Tim,

I am the new Escape Marketing Manager, replacing Vivian Palmer. Look forward to meeting you in person.

I've been asked to look into this issue. It is getting a lot of discussion on the Edmunds.com bulletin boards.

Was this a real problem? Is it still a problem? Is there a fix? Thanks in advance.

Corey Holter  
Ford Division - Escape Marketing Manager  
P: 313-845-1042  
F: 313-845-0310  
Regent Court - 9S152  
cholver@ford.com

---

**From:** Boggs, Dave (D.L.)  
**Sent:** Tuesday, December 10, 2002 9:38 AM  
**To:** Dalbo, Bob (R.J.); Fournelle, Gilbert (G.)  
**Subject:** RE: Calibration files for 02 Escape

Bob, Gilbert,

Can you give me the latest level release for 02 MY that has the fixes for stall and whatever else? I'm not looking into the stall issue but trying to determine if the Evap monitor meets the entry conditions but then load increases or duty cycle decreases to the point where the tank pressure cannot drop to the target level in time and sets the P0455 (Gross Leak) code. I want to record manifold vacuum, tank pressure, and duty cycle while the monitor is running to see why the MIL is coming on.

I've also asked Randy Shelton for the files but haven't heard back from him yet and don't know if he has the right ones for me.

Dave

-----Original Message-----

**From:** Dalbo, Bob (R.J.)  
**Sent:** Monday, December 09, 2002 4:48 PM  
**To:** Boggs, Dave (D.L.); Gilbert Fournelle  
**Subject:** RE: Calibration files for 02 Escape

Dave,

If you know the build date for the truck, Gilbert Fournelle can provide the files.

*Bob Dalbo*

3.0L Calibration Supervisor  
Outfitters Calibration, NAT  
Phone: (313) 24-84847 Fax: (313) 32-31788  
Pager: (313) 795-2859 Email: [rdalbo@ford.com](mailto:rdalbo@ford.com)

-----Original Message-----

**From:** Boggs, Dave (D.L.)  
**Sent:** Monday, December 09, 2002 2:59 PM  
**To:** Dalbo, Bob (R.J.)  
**Subject:** Calibration files for 02 Escape

Bob, I need to get the calibration files (MCS, VRF) for the 2002 V6 Escape in order to look at data with RCON. Can you tell me who your engineer is responsible for the release and ask him to send me the files please?

Thanks,  
David Boggs  
6-Sigma Black Belt  
(313) 322-5838 fax: (313) 322-1316

---

**From:** Hale, Tony (A.S.)  
**Sent:** Tuesday, December 10, 2002 9:58 AM  
**To:** Hockaday Jr., John (J.C.); Hurley, Robert (R.E.); Page, James (J.A.)  
**Cc:** Bogema, John (P.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Matasa, John (J.); Mikota, Dennis (D.P.)  
**Subject:** RE: 2005 Calibration Vehicles

I'll check.

Tony Hale  
U204 Duratec Systems Engineer  
1-313-248-8482  
Ahale7@ford.com

-----Original Message-----

**From:** Hockaday Jr., John (J.C.)  
**Sent:** Tuesday, December 10, 2002 8:42 AM  
**To:** Hale, Tony (A.S.); Hurley, Robert (R.E.); Page, James (J.A.)  
**Cc:** Bogema, John (P.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Matasa, John (J.); Mikota, Dennis (D.P.)  
**Subject:** RE: 2005 Calibration Vehicles

It would be nice if we could get gaskets also.. Is this possible?

-----Original Message-----

**From:** Hale, Tony (A.S.)  
**Sent:** Tuesday, December 10, 2002 7:16 AM  
**To:** Hurley, Robert (R.E.); Page, James (J.A.)  
**Cc:** Bogema, John (P.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Hockaday Jr., John (J.C.); Matasa, John (J.); Mikota, Dennis (D.P.)  
**Subject:** RE: 2005 Calibration Vehicles

Robert,

Thanks. Will Do.

Jim,

I've put 15 Oil Pan Baffles on your desk. Can you get these over to John Hockaday at TEE for me please.

Thanks,

Tony Hale  
U204 Duratec Systems Engineer  
1-313-248-8482  
Ahale7@ford.com

-----Original Message-----

**From:** Hurley, Robert (R.E.)  
**Sent:** Monday, December 09, 2002 5:49 PM  
**To:** Hale, Tony (A.S.)  
**Cc:** Bogema, John (P.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Hockaday Jr., John (J.C.); Matasa, John (J.); Mikota, Dennis (D.P.)  
**Subject:** RE: 2005 Calibration Vehicles

Ship the parts to the TEE building attention John Hockaday. We'll have them installed when we get back. We need 15 to update the fleet.

-----Original Message-----

**From:** Hale, Tony (A.S.)  
**Sent:** Monday, December 09, 2002 12:04 PM

To: Hurley, Robert (R.E.); Mach, Dennis (D.M.)  
Cc: Dalbo, Bob (R.J.)  
Subject: 2005 Calibration Vehicles

Robert/Dennis,

You recently failed another engine in Colorado. One of the three possible issues I think may be responsible is Oil Aeration caused a dropped exhaust valve. We have a fix for this issue. Or at least, a vast improvement that has helped us pass our DV. A new Oil Pan Baffle that allows the Oil to flow back in the pan more easily.

Are you interested in retrofitting your calibration vehicles with them. I think it will help a great deal. Please let me know.

If the answer is yes, please let me know how many you need, and where you want them shipped. It should be easy to install. Drop the oil pan, replace baffle, re-install oil pan.

Tony Hale  
U204 Duratec Systems Engineer  
1-313-248-8482  
Ahale7@ford.com



---

**From:** Fournelle, Gilbert (G.)  
**Sent:** Tuesday, December 10, 2002 10:18 AM  
**To:** Boggs, Dave (D.L.)  
**Subject:** RE: Calibration files for 02 Escape

Attached are the files for the latest level (with pats\_dm\_flg=1 and P1639aw=0 for development)

  
02FLEVNP.MCS

  
DOAR6.VRF

Regards,

*Gilbert Fournelle*

V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904968 Fax:(313)3231786

-----Original Message-----

**From:** Boggs, Dave (D.L.)  
**Sent:** Tuesday, December 10, 2002 9:38 AM  
**To:** Dalbo, Bob (R.J.); Fournelle, Gilbert (G.)  
**Subject:** RE: Calibration files for 02 Escape

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**To:** Boggs, Dave (D.L.); Gilbert Fournelle  
**Subject:** RE: Calibration files for 02 Escape

Dave,

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*Bob Dalbo*

3.0L Calibration Supervisor  
Outfiters Calibration, NAT  
Phone: (313) 24-84947 Fax: (313) 32-31786  
Pager: (313) 795-2859 Email: [rdalbo@ford.com](mailto:rdalbo@ford.com)

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**Sent:** Monday, December 09, 2002 2:59 PM  
**To:** Dalbo, Bob (R.J.)  
**Subject:** Calibration files for 02 Escape

Bob, I need to get the calibration files (MCS, VRF) for the 2002 V6 Escape in order to look at data with RCON. Can you tell me who your engineer is responsible for the release and ask him to send me the files please?

Thanks,  
David Boggs  
6-Sigma Black Belt  
(313) 322-5838 fax: (313) 322-1315

---

**From:** Fournelle, Gilbert (G.)  
**Sent:** Tuesday, December 10, 2002 11:47 AM  
**To:** 'Ramseyer, Mark (M.); Smith, Jeffrey (J.M.); Jones, Andy (A.); Fournelle, Gilbert (G.)'  
**Cc:** Khalil, Imran (I.); Falandino, Mike (M.P.); Lewis, Bill (B.C.)  
**Subject:** RE: CALVIN problems

The problem occurs at random times. My vehicles are running on a chassis roll at the Denver emissions lab. They are in a controlled 70F environment. The resets occur at random intervals. During a 75CVS test I did get 4 resets during a 1380 second interval, with the first reset occurring after about 100-200 seconds. There are no error messages or warnings which pop up. If the resets occurs above 35 mph, the vehicle will keep running since the transmission is still driving the engine. I can see in my A/F that a reset occurred (also in atmr1). I also let a vehicle idle in the garage. The vehicle will stall after at most 200 seconds of idling.

I did get a spare processor sent from Dearborn (our only spare) and I do have 2 out of 3 Calvin vehicles running without issues. I am convinced that it is processor/tab board issue since I did not swap any Calvin hardware and I don't have any problems with this last processor. I still am using the same mdb and the same laptop.

### *Gilbert Fournelle*

V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904968 Fax:(313)3231786

-----Original Message-----

**From:** Ramseyer, Mark (M.) [mailto:mramseye@visteon.com]  
**Sent:** Tuesday, December 10, 2002 11:27 AM  
**To:** 'Smith, Jeffrey (J.M.); Jones, Andy (A.); 'gfournel@ford.com'  
**Cc:** Khalil, Imran (I.); Falandino, Mike (M.P.); Lewis, Bill (B.C.)  
**Subject:** RE: CALVIN problems

All,

This module was received last week.

I hooked it up on our Calvin system and ran it without stimulus while watching PUTMR and a few other variables. (I had ATMR1 displayed but it didn't change because there was no stimulus.)

About 5 minutes of evaluation showed nothing unusual. There were no resets.

I took the module to the Ford Calvin lab and had Jeff Smith and Bill Lewis put it on their Calvin system, again with no stimulus. About 60 minutes of evaluation showed nothing unusual. There were no resets.

Andy Jones and I hooked up the module to our HIL while having Calvin attached. We set the HIL to 750 RPM and setup a Calvin recording with a trigger on atmr1 < 1 for 0.1 seconds. Manually resetting the module via Calvin tripped this trigger and caused a recording just like we expected. This made sure we set up the trigger correctly. After 6 hours of testing with the HIL and Calvin, we didn't get any triggers on atmr1. Additionally atmr1 was very large when we stopped the evaluation, indicating it did not reset.

This module has remained completely intact as it was received. NO disassembly of any hardware has been done and NO erasing or programming of the flash has been done.

The HIL for this module is being used for other development on this module this morning. Andy is investigating getting a vehicle so we can get to even more realistic testing to try to duplicate the issue. We plan to hook this module up to the HIL/vehicle for more testing when it becomes available.

One potential way to continue to make progress on this is for Gilbert to capture several more kernel logs and send them back for evaluation. The more (in)consistency we see the more we might be guided to the problem. Gilbert, could you also please describe when & how this situation occurs? how soon after crank? when in the day? after a soak? Does it do it repeatedly during any run or only a few times after cranking? The more we know the better we can test.

Any other ideas?  
Thanks.

**Mark Ramseyer**  
Powertrain Digital Devices - Energy Management Systems  
Visteon Corporation  
17000 Rotunda Dr.  
Dearborn, MI 48121  
Room C324-55

phone/fax: (313) 755-5163  
<mailto:mramseye@visteon.com>

-----Original Message-----

From: Smith, Jeffrey (J.M.) [<mailto:jsmit350@ford.com>]  
Sent: Thursday, December 05, 2002 12:51 PM  
To: 'Jones, Andy (A.); Ramseyer, Mark (M.)'  
Cc: Khalil, Imran (I.); Falandino, Mike (M.P.); Lewis, Bill (B.C.)  
Subject: RE: CALVIN problems

Was this module received? Is this being debugged as a module problem or a TAB board

problem? The CALVIN team is willing to offer any assistance needed to resolve this issue if it is seen as a TAB board issue.

*Jeffrey Smith*

Ford Motor Company  
Powertrain Operations Engine Engineering  
21500 Oakwood Blvd.  
Dearborn, MI USA 48121  
Phone: (313) 323-8419  
Lab:(313)843-0498  
Mail Drop 76, Cube ER161

—Original Message—

**From:** Fournelle, Gilbert (G.)  
**Sent:** Wednesday, December 04, 2002 3:43 PM  
**To:** 'Jones, Andy (A.); Khalil, Imran (I.); Ramseyer, Mark (M.)  
**Cc:** Fisher, Rollie (R.M.); McDonald, John (J.R.); Fournelle, Gilbert (G.); Dalbo, Bob (R.J.); Falandino, Mike (M.P.); Lewis, Bill (B.C.); Smith, Jeffrey (J.M.); Laginess, Mark (M.S.); MacArthur, David (D.R.); Krentkowski, Theodore (T.E.); Gould, Robert (R.M.)  
**Subject:** RE: CALVIN problems

The processor from w273 is being shipped with Airborne Express to the address mentioned below. I would like to hold on to the other processor since the vehicle can driven with it if Calvin is not powered up.

Regards,

*Gilbert Fournelle*

V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904968 Fax:(313)3231788

—Original Message—

**From:** Jones, Andy (A.) [mailto:ajones8@visteon.com]  
**Sent:** Wednesday, December 04, 2002 3:08 PM  
**To:** 'Khalil, Imran (I.); Ramseyer, Mark (M.)  
**Cc:** Fisher, Rollie (R.M.); McDonald, John (J.R.); Fournelle, Gilbert (G.); Dalbo, Bob (R.J.); Falandino, Mike (M.P.); Lewis, Bill (B.C.); Smith, Jeffrey (J.M.); Laginess, Mark (M.S.); MacArthur, David (D.R.); Krentkowski, Theodore (T.E.); Rob Gould (E-mail)  
**Subject:** RE: CALVIN problems

Imran, Gilbert,

Unfortunately we do not have any LBO-A51 PCMs in stock to send as replacements. The suggestion I have is for you to FedEx one or both of the suspect PCMs to us back in Dearborn and we will attempt to reproduce the fault and find what is causing it. I spoke with the Supervisor of our PCM hardware design group and he has committed to prioritizing this analysis as soon as the modules arrive. If you would prefer send the PCMs back one at a time so you maintain some functionality on two of your vehicles that is fine.

Please ship the modules to:

Attention: Dave MacArthur  
Visteon Energy Management Applications Building  
15200 Commerce Drive North  
Dearborn, MI 48120

We will also need copies of the files you are running in your Calvin so that we can duplicate your setup.

Regards,

Andy Jones (AJONES8)  
Visteon Powertrain Control Systems  
e-mail: ajones8@visteon.com  
C309, Visteon Technical Center, Dearborn  
Tel: (313) 75-51593 Fax: (313) 75-52857

-----Original Message-----

From: Khalil, Imran (I.) [mailto:ikhalil@ford.com]  
Sent: Wednesday, December 04, 2002 11:35 AM  
To: 'mramseye@visteon.com'; 'ajones8@visteon.com'  
Cc: 'rfisher1@visteon.com'; 'jmccona3@visteon.com'; Fournelle, Gilbert (G.); Dalbo, Bob (R.J.); Falandino, Mike (M.P.); Lewis, Bill (B.C.); Smith, Jeffrey (J.M.)  
Subject: FW: CALVIN problems  
Importance: High

Andy/Mark,

Please look at this issue, if you have couple of LBO51s in a good working condition. Please FedEx overnight to Gilbert in Denver or give it to me, I will ship today. I have his strategy files if you need them to test the PCM here with CALVIN let me know.

Address is:

4800 Ironton  
Denver, CO 80239

phone: 1-303-9715880

-----Original Message-----

From: Fournelle, Gilbert (G.)  
Sent: Tuesday, December 03, 2002 7:16 PM  
To: Khalil, Imran (I.)  
Cc: Dalbo, Bob (R.J.)  
Subject: CALVIN problems

Imran,

I have three Calvin vehicles in Denver. One vehicle, w274, is a vehicle which I have been running in the lab. Another, w275, is one you looked at a while ago when I had problems with the first batch of CP processors.

W274 is running fine with no issues. The other 2 experience processor resets at random times. This time I do not see the message that the processor goes into LOS. However, atm1 does reset to 0 when the vehicle has a "hiccup", as can be seen in the attached file. The vehicles run without any issues when Calvin is turned off. I do not know what I can do at this point. I don't have spare processors, these are processors which I previously returned to Visteon and Visteon could not find any problems. I cannot do my work if the processor keeps resetting.

If I the processor from 275 is placed in 274, 274 starts having issues. I do not think that it is an issue with my Calvin hardware. I do think it follows the processor. Something went wrong when we switched to CP processors LBO51, I did not have any such issues with the LBO50 processor. Do you have any suggestions? I cannot use my 1 good processor between vehicles since I need updated KAM values for my emissions tests.

<<STALLHDF>>

Regards,

*Gilbert Fournelle*

V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904968 Fax:(313)3231786

---

**From:** Fournelle, Gilbert (G.)  
**Sent:** Thursday, December 12, 2002 1:14 PM  
**To:** 'Jones, Andy (A.)'  
**Subject:** RE: CALVIN problems

I am running with a 120V AC Inverter, which is connected to an aux battery. My vehicles have an aux timer box. I have also ran without the inverter, similar to driving on the public road. One of my vehicles (the one that had been working best) does not have an aux battery since APTL now requires them to be covered and vented outside of the vehicle and no covers were available. I am not using the delay timer in the lab. I manually turn the timer box on.

Regards,

*Gilbert Fournelle*

V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904968 Fax:(313)3231786

-----Original Message-----

**From:** Jones, Andy (A.) [mailto:ajones8@visteon.com]  
**Sent:** Thursday, December 12, 2002 1:04 PM  
**To:** 'Fournelle, Gilbert (G.)'  
**Subject:** RE: CALVIN problems

Gilbert, How is your Calvin unit powered in the vehicle. Is it running off 12v or off a 120v AC inverter? If 12v, are you running off the aux battery timer box?

Thanks.

Regards,

Andy Jones (AJONES8)  
Visteon Powertrain Control Systems  
e-mail: ajones8@visteon.com  
C309, Visteon Technical Center, Dearborn  
Tel: (313) 75-51593 Fax: (313) 75-52857

-----Original Message-----

**From:** Fournelle, Gilbert (G.) [mailto:gfournel@ford.com]  
**Sent:** Tuesday, December 10, 2002 11:47 AM  
**To:** 'Ramseyer, Mark (M.Y.); Smith, Jeffrey (J.M.); Jones, Andy (A.); Fournelle, Gilbert (G.)  
**Cc:** Khalil, Imran (I.); Falandino, Mike (M.P.); Lewis, Bill (B.C.)  
**Subject:** RE: CALVIN problems

The problem occurs at random times. My vehicles are running on a chassis roll at the Denver emissions lab. They are in a controlled 70F environment. The resets occur at random intervals. During a 75CVS test I did get 4 resets during a 1380 second interval, with



the first reset occurring after about 100-200 seconds. There are no error messages or warnings which pop up. If the resets occurs above 35 mph, the vehicle will keep running since the transmission is still driving the engine. I can see in my A/F that a reset occurred (also in atm1). I also let a vehicle idle in the garage. The vehicle will stall after at most 200 seconds of idling.

I did get a spare processor sent from Dearborn (our only spare) and I do have 2 out of 3 Calvin vehicles running without issues. I am convinced that it is processor/tab board issue since I did not swap any Calvin hardware and I don't have any problems with this last processor. I still am using the same mdb and the same laptop.

### *Gilbert Fournelle*

V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904968 Fax:(313)3231788

#### —Original Message—

From: Ramseyer, Mark (M.) [mailto:mramseye@visteon.com]  
Sent: Tuesday, December 10, 2002 11:27 AM  
To: 'Smith, Jeffrey (J.M.); Jones, Andy (A.); g'fournel@ford.com'  
Cc: Khalil, Imran (I.); Falandino, Mike (M.P.); Lewis, Bill (B.C.)  
Subject: RE: CALVIN problems

All,

This module was received last week.

I hooked it up on our Calvin system and ran it without stimulus while watching PUTMR and a few other variables. (I had ATMR1 displayed but it didn't change because there was no stimulus.)

About 5 minutes of evaluation showed nothing unusual. There were no resets.

I took the module to the Ford Calvin lab and had Jeff Smith and Bill Lewis put it on their Calvin system, again with no stimulus. About 80 minutes of evaluation showed nothing unusual. There were no resets.

Andy Jones and I hooked up the module to our HIL while having Calvin attached. We set the HIL

to 750 RPM and setup a Calvin recording with a trigger on atm1 < 1 for 0.1 seconds.

Manually

resetting the module via Calvin tripped this trigger and caused a recording just like we expected.

This made sure we set up the trigger correctly. After 6 hours of testing with the HIL and Calvin,

we didn't get any triggers on atm1. Additionally atm1 was very large when we stopped the evaluation, indicating it did not reset.

This module has remained completely intact as it was received. NO disassembly of any

hardware  
has been done and NO erasing or programming of the flash has been done.

The HIL for this module is being used for other development on this module this morning. Andy is investigating getting a vehicle so we can get to even more realistic testing to try to duplicate the issue. We plan to hook this module up to the HIL/vehicle for more testing when it becomes available.

One potential way to continue to make progress on this is for Gilbert to capture several more kernel logs and send them back for evaluation. The more (in)consistency we see the more we might be guided to the problem. Gilbert, could you also please describe when & how this situation occurs? how soon after crank? when in the day? after a soak? Does it do it repeatedly during any run or only a few times after cranking? The more we know the better we can test.

Any other ideas?  
Thanks.

**Mark Ramseyer**  
Powertrain Digital Devices - Energy Management Systems  
Visteon Corporation  
17000 Rotunda Dr.  
Dearborn, MI 48121  
Room C324-55

phone/fax: (313) 755-5163  
<mailto:mrameave@visteon.com>

-----Original Message-----

From: Smith, Jeffrey (J.M.) [<mailto:jsmit350@ford.com>]  
Sent: Thursday, December 05, 2002 12:51 PM  
To: 'Jones, Andy (A.); 'Ramseyer, Mark (M.)'  
Cc: Khell, Imran (I.); Falandino, Mike (M.P.); Lewis, Bill (B.C.)  
Subject: RE: CALVIN problems

Was this module received? Is this being debugged as a module problem or a TAB board problem? The CALVIN team is willing to offer any assistance needed to resolve this issue if it is seen as a TAB board issue.

*Jeffrey Smith*

Ford Motor Company  
Powertrain Operations Engine Engineering  
21500 Oakwood Blvd.  
Dearborn, MI USA 48121  
Phone: (313) 323-8419  
Lab: (313) 845-0498

Mail Drop 76, Cube ER161

—Original Message—

From: Fournelle, Gilbert (G.)

Sent: Wednesday, December 04, 2002 3:43 PM

To: 'Jones, Andy (A.); Khalil, Imran (I.); Ramsayer, Mark (M.)

Cc: Fisher, Rollie (R.M.); McDonald, John (J.R.); Fournelle, Gilbert (G.); Dalbo, Bob (R.J.); Falandino, Mike (M.P.); Lewis, Bill (B.C.); Smith, Jeffrey (J.M.); Laginess, Mark (M.S.); MacArthur, David (D.R.); Krentkowski, Theodore (T.E.); Gould, Robert (R.M.)

Subject: RE: CALVIN problems

The processor from w273 is being shipped with Airborne Express to the address mentioned below. I would like to hold on to the other processor since the vehicle can driven with it if Calvin is not powered up.

Regards,

*Gilbert Fournelle*

V6 U204 Calibration Engineering

1AE27 Truck Engine Engineering (TEE)

Phone:(313)3904968 Fax:(313)3231786

—Original Message—

From: Jones, Andy (A.) [mailto:ajones8@visteon.com]

Sent: Wednesday, December 04, 2002 3:08 PM

To: 'Khalil, Imran (I.); Ramsayer, Mark (M.)

Cc: Fisher, Rollie (R.M.); McDonald, John (J.R.); Fournelle, Gilbert (G.); Dalbo, Bob (R.J.); Falandino, Mike (M.P.); Lewis, Bill (B.C.); Smith, Jeffrey (J.M.); Laginess, Mark (M.S.); MacArthur, David (D.R.); Krentkowski, Theodore (T.E.); Rob Gould (E-mail)

Subject: RE: CALVIN problems

Imran, Gilbert,

Unfortunately we do not have any LBO-A51 PCMs in stock to send as replacements. The suggestion I have is for you to FedEx one or both of the suspect PCMs to us back in Dearborn and we will attempt to reproduce the fault and find what is causing it. I spoke with the Supervisor of our PCM hardware design group and he has committed to prioritizing this analysis as soon as the modules arrive. If you would prefer send the PCMs back one at a time so you maintain some functionality on two of your vehicles that is fine.

Please ship the modules to:

Attention: Dave MacArthur

Visteon Energy Management Applications Building

15200 Commerce Drive North

Dearborn, MI 48120

We will also need copies of the files you are running in your Calvin so that we can duplicate your setup.

Regards,

Andy Jones (AJONESB)

Visteon Powertrain Control Systems

e-mail: ajones8@visteon.com

C309, Visteon Technical Center, Dearborn

Tel: (313) 75-51593 Fax: (313) 75-52857

-----Original Message-----

From: Khall, Imran (I.) [mailto:ikhall@ford.com]

Sent: Wednesday, December 04, 2002 11:35 AM

To: 'mramseye@visteon.com'; 'ajones8@visteon.com'

Cc: 'rfisher1@visteon.com'; 'jmcclona3@visteon.com'; Fournelle, Gilbert (G.); Dalbo, Bob (R.J.); Falandino, Mike (M.P.); Lewis, Bill (B.C.); Smith, Jeffrey (J.M.)

Subject: FW: CALVIN problems

Importance: High

Andy/Mark,

Please look at this issue, if you have couple of LBO51s in a good working condition. Please FedEx overnight to Gilbert in Denver or give it to me, I will ship today. I have his strategy files if you need them to test the PCM here with CALVIN let me know.

Address is:

4600 Ironton  
Denver, CO 80239

phone: 1-303-3715680

-----Original Message-----

From: Fournelle, Gilbert (G.)

Sent: Tuesday, December 03, 2002 7:16 PM

To: Khall, Imran (I.)

Cc: Dalbo, Bob (R.J.)

Subject: CALVIN problems

Imran,

I have three Calvin vehicles in Denver. One vehicle, w274, is a vehicle which I have been running in the lab. Another, w275, is one you looked at a while ago when I had problems with the first batch of CP processors.

W274 is running fine with no issues. The other 2 experience processor resets at random times. This time I do not see the message that the processor goes into LOS. However, atm1 does reset to 0 when the vehicle has a "hiccup", as can be seen in the attached file. The vehicles run without any issues when Calvin is turned off. I do not know what I can do at this point. I don't have spare processors, these are processors which I previously returned to Visteon and Visteon could not find any problems. I cannot do my work if the

processor keeps resetting.

If I the processor from 275 is placed in 274, 274 starts having issues. I do not think that it is an issue with my Calvin hardware. I do think it follows the processor. Something went wrong when we switched to CP processors LBO51, I did not have any such issues with the LBO50 processor. Do you have any suggestions? I cannot use my 1 good processor between vehicles since I need updated KAM values for my emissions tests.

<<STALLHDF>>

Regards,

*Gilbert Fournelle*

V6 U204 Calibration Engineering  
1AE27 Truck Engine Engineering (TEE)  
Phone:(313)3904988 Fax:(313)3231786

**Subject:** FW: Updated: Feb 5, 2003 CTW Prep  
**Location:** POEE-A069 (18)

**Start:** Wed 1/8/2003 12:00 PM  
**End:** Wed 1/8/2003 1:00 PM  
**Show Time As:** Tentative

**Recurrence:** (none)

**Meeting Status:** Not yet responded

**Required Attendees:** Grimes, Jeff (J.R.); Fournelle, Gilbert (G.)

**Importance:** High

Gilbert,

I need the presentation we discussed this morning in time to support this meeting.  
- Bob Dalbo

—Original Appointment—

**From:** Grimes, Jeff (J.R.)  
**Sent:** Monday, January 06, 2003 2:40 PM  
**To:** Grimes, Jeff (J.R.); Moore, Donald (D.R.); Yeung, Lem (L.); West, Tony (T.); Rose, Robert (R.A.); Arnold, James (J.A.); Goodwin, William (W.R.); Gogate, Anil (A.B.); Wettach, Bill (B.); Ogden, Christopher (C.W.); Szalki, Michael (M.E.); Peterson, Craig (C.); Arant, Michael (M.P.); Antonov, Simon (S.); Heidinger, Craig (C.W.); Maclaren, Ron (R.A.); Dalbo, Bob (R.J.); Grandas, Joseph (J.M.); Lenn, Pamela (P.J.); Makowski, Scott (S.A.)  
**Cc:** Sventickas, Ed (E.); Strick, Holly (H.A.)  
**Subject:** Updated: Feb 5, 2003 CTW Prep  
**When:** Wednesday, January 08, 2003 12:00 PM-1:00 PM (GMT-05:00) Eastern Time (US & Canada).  
**Where:** POEE-A069 (18)  
**Importance:** High

**For those not in POEE...**

**Audio Call-In:**

- 866-274-3057 or
- 954-1146

**Passcode: 8132131**

Review Roadmaps (should be 95% complete) and Deep Dives. A final followup will be held around the 21st of January, prior to publishing on the 28th.

1. Coil Diagnostics - Jeff Grimes
2. CEP#2 T-Joint cleanliness actions (Craig Heidinger)
3. Engine Exchanges - Ron Maclaren
4. Oil Aeration Improvements - Chris Ogden

Back up documentation should be pretty well ready as well...as below

1. U204 Stalls final information - Bob Dalbo
2. 0-1 MIS Issues - Ron Maclaren
3. Throttle Sticking, U204 - Jeff Grimes
4. Hofu Tick - Mike Arant
5. IABV, D186 and U204 - Bill Wettach
6. Cleanliness follow up to Kapp review - R. Maclaren

7. Torque Converter Balance - Simon Antonov
8. Kavlico/Motorola DPFE - Joe Grandas

Please call me or Pam Lemm if you have any questions...

*Jeff Grimes*  
Duratec OPD and Value Engineering  
V-Engine Engineering  
(313) 32-25237 *jgrimes1*

---

**From:** Sanders, Muriel (M.S.)  
**Sent:** Thursday, January 09, 2003 5:17 PM  
**To:** Fournelle, Gilbert (G.); Dalbo, Bob (R.J.)  
**Subject:** FW: Request for information

See note below.

The attached note is what had been done to the Escape last time I heard from this person. I told him to have the dealer perform TSB 02-08-06.

**Sister Escape**

***Muriel Sanders***

4.6L Car FEAD Systems  
Ford Motor Company  
Phone: 313-32-23210  
Fax: 313-33-73813  
E-mail: msander6@ford.com

-----Original Message-----

**From:** Donath, Anthony (A.G.)  
**Sent:** Thursday, January 09, 2003 4:31 PM  
**To:** Sanders, Muriel (M.S.)  
**Subject:** RE: Request for information

Hi, I wrote to you last May about my sisters Escape stalling problem. It has been fine up until this week. It did the same thing, stalling at 40mph. It is currently in the dealership. I was wondering if there are any new fixes?. Thanks Tony

-----Original Message-----

**From:** Sanders, Muriel (M.S.)  
**Sent:** Friday, May 17, 2002 9:57 AM  
**To:** Donath, Anthony (A.G.)  
**Subject:** FW: Request for information

Hi Tony,

I am part of the team that is working on the Escape stalling issue. From your e-mail I see that the dealership has already replaced the relay. Have there been any other repairs done on your sister's vehicle? Also, do you know approximately when she last had the vehicle serviced?

***Muriel Sanders***

U204 3.0L Calibration  
Ford Motor Company  
Phone: 313-32-27307  
Fax: 313-32-31786  
E-mail: msander6@ford.com

-----Original Message-----

**From:** Dalbo, Bob (R.J.)  
**Sent:** Thursday, May 16, 2002 5:53 PM  
**To:** Benz, Greg (G.H.)  
**Cc:** Sanders, Muriel (M.S.)



**Subject:** RE: Request for information

Muriel Sanders is currently the point person in my group for this issue. She can contact Tony to facilitate getting the latest fixes onto this vehicle.

**Bob Dalbo**

3.0L Calibration Supervisor  
Outfitters Calibration, NAT  
Phone: (313) 24-84947 Fax: (313) 32-31788  
Pager: (313) 795-2859 Email: [rdalbo@ford.com](mailto:rdalbo@ford.com)

—Original Message—

**From:** Benz, Greg (G.H.)  
**Sent:** Thursday, May 16, 2002 8:22 AM  
**To:** Dalbo, Bob (R.J.)  
**Subject:** FW: Request for information

Bob-

Who is handling questions on the V6 for this?

—Original Message—

**From:** Doneth, Anthony (A.G.)  
**Sent:** Wednesday, May 15, 2002 9:06 PM  
**To:** Benz, Greg (G.H.)  
**Subject:** Request for information

Hi, I am trying to find out some information about the 2002 3.0L stalling problem and if there is a fix. My sister bought a 2002 Escape in November and loves it. Twice now it has stalled a 40 mph. The dealer first tried relay replacement and that did not help. I see from web sites that this is a fairly common complaint. Any help you could give me would be appreciated. She loves the truck but is looking to get rid of it if they can't fix it. Thanks Tony

---

**From:** Doneth, Anthony (A.G.)  
**Sent:** Monday, May 20, 2002 5:22 PM  
**To:** Sanders, Muriel (M.S.)  
**Subject:** Sister Escape

Here is what has been done to the vehicle  
>Muriel, here is a list of the things that my sister has had done to her  
Escape. Thanks  
for your help. Tony

since I purchased on 11/01/01.

- > VIN #1FMCU04182KB12245
- > Has date of being assembled 10/25/01 & 10/26/01
- > 12/19/01 Odometer 1054-Tires were replaced by Dealer
- > 01/05/02 Odometer 1509-Oil change by Dealer
- > 01/09/02 Odometer 1547-Engine died while coasting uphill at 40mph, vehicle
- > restarted after stopping. Dealer replaced a relay, part #FMC\* FOAZ 14n089
- > A.
- > 01/28/02 Odometer 1899-Leaking power steering fluid, Dealer replaced the
- > steering gear assembly.
- > 05/03/02 Odometer 3949-Engine died again when at 40 mph, within 3 blocks
- > of
- > previous spot of earlier episode. Started right up after coasting to a
- > stop. Dealer said "they changed the program". Checked again with Dealer
- > because we were under the impression that idle settings has been changed.
- > Dealer informed us that "version of program" had been changed instead.
- > Dealer is checking with the "Tech" to make sure what was really done.
- >
- > I think that covers it. If you need anything else let me know. We do
- > have
- > copies of the invoices that have all the Ford "codes" of what was done.

---

**From:** Dalbo, Bob (R.J.)  
**Sent:** Thursday, January 09, 2003 5:25 PM  
**To:** Doneth, Anthony (A.G.)  
**Cc:** Fournelle, Gilbert (G.); Sanders, Muriel (M.S.)  
**Subject:** RE: Request for information

Mr. Doneth,

There is a new, very much improved TSB for this issue - 02-23-1. If the dealer faithfully follows every step in this TSB, the issue will be resolved.

*Bob Dalbo*

3.0L Calibration Supervisor  
Outfitters Calibration, NAT  
Phone: (313) 24-84947 Fax: (313) 32-31786  
Pager: (313) 795-2859 Email: [rdalbo@ford.com](mailto:rdalbo@ford.com)

-----Original Message-----

**From:** Sanders, Muriel (M.S.)  
**Sent:** Thursday, January 09, 2003 5:17 PM  
**To:** Fournelle, Gilbert (G.); Dalbo, Bob (R.J.)  
**Subject:** FW: Request for information

See note below.

The attached note is what had been done to the Escape last time I heard from this person. I told him to have the dealer perform TSB 02-08-06.

<< Message: Sister Escape >>

*Muriel Sanders*

4.6L Car HEAD Systems  
Ford Motor Company  
Phone: 313-32-23210  
Fax: 313-33-73813  
E-mail: [msander6@ford.com](mailto:msander6@ford.com)

-----Original Message-----

**From:** Doneth, Anthony (A.G.)  
**Sent:** Thursday, January 09, 2003 4:31 PM  
**To:** Sanders, Muriel (M.S.)  
**Subject:** RE: Request for information

Hi, I wrote to you last May about my sisters Escape stalling problem. It has been fine up until this week. It did the same thing, stalling at 40mph. It is currently in the dealership. I was wondering if there are any new fixes?. Thanks Tony

-----Original Message-----

**From:** Sanders, Muriel (M.S.)  
**Sent:** Friday, May 17, 2002 9:57 AM  
**To:** Doneth, Anthony (A.G.)  
**Subject:** FW: Request for information

Hi Tony,

I am part of the team that is working on the Escape stalling issue. From your e-mail I see that the dealership has already replaced the relay. Have there been any other repairs done on your sister's vehicle? Also, do you know approximately when she last had the vehicle serviced?

***Muriel Sanders***

U204 3.0L Calibration  
Ford Motor Company  
Phone: 313-32-27307  
Fax: 313-32-31786  
E-mail: msander6@ford.com

—Original Message—

From: Dalbo, Bob (R.J.)  
Sent: Thursday, May 16, 2002 5:53 PM  
To: Benz, Greg (G.H.)  
Cc: Sanders, Muriel (M.S.)  
Subject: RE: Request for information

Muriel Sanders is currently the point person in my group for this issue. She can contact Tony to facilitate getting the latest fixes onto this vehicle.

***Bob Dalbo***

3.0L Calibration Supervisor  
Outfitters Calibration, NAT  
Phone: (313) 24-84947 Fax: (313) 32-31788  
Pager: (313) 795-2859 Email: rdalbo@ford.com

—Original Message—

From: Benz, Greg (G.H.)  
Sent: Thursday, May 16, 2002 8:22 AM  
To: Dalbo, Bob (R.J.)  
Subject: FW: Request for information

Bob-

Who is handling questions on the V6 for this?

—Original Message—

From: Doneth, Anthony (A.G.)  
Sent: Wednesday, May 15, 2002 9:06 PM  
To: Benz, Greg (G.H.)  
Subject: Request for information

Hi, I am trying to find out some information about the 2002 3.0L stalling problem and if there is a fix. My sister bought a 2002 Escape in November and loves it. Twice now it has stalled a 40 mph. The dealer first tried relay replacement and that did not help. I see from web sites that this is a fairly common complaint. Any help you could give me would be appreciated. She loves the truck but is looking to get rid of it if they can't fix it. Thanks Tony

---

**From:** Myers, Dan (D.P.)  
**Sent:** Tuesday, September 24, 2002 6:02 PM  
**To:** Suarez, Rhae (R.)  
**Cc:** Price, Martin (M.); Altoonian, Don (D.J.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Lintaco, Steven (S.); Rothweiler, Daniel (D.); Sanders, Muriel (M.S.); Lawler, David (D.A.); Hayduk, Mark (M.S.)  
**Subject:** RE: another wds issue?

Rhae,  
FYI

I just updated my WDS with B21.1A from the LAN and it still won't allow me to update 3.0L Escapes to the latest level. It is stating that the 2L8A-AA calibration (what is currently in the vehicle) is the latest level for the 2002 Escape. Not the 2U7A-CZB that I was able to download from WDS version B20.12 last week. How can I get a copy of the calibrations (for 01-03) on disc so I won't have to reschedule any more vehicles?

Thanks,

*Dan Myers*

Field Quality Engineer - Iowa  
Enhanced Concern Identification

[dmyers4@ford.com](mailto:dmyers4@ford.com)

Cell 563-505-9002  
Office 563-289-9991  
Fax 563-289-1364

-----Original Message-----

**From:** Suarez, Rhae (R.)  
**Sent:** Tuesday, September 17, 2002 12:06 PM  
**To:** Price, Martin (M.); Altoonian, Don (D.J.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Lintaco, Steven (S.); Rothweiler, Daniel (D.); Sanders, Muriel (M.S.); Lawler, David (D.A.); Myers, Dan (D.P.)  
**Subject:** FW: another wds issue?

FYI -

-----Original Message-----

**From:** Marianos, Tom (T.E.)  
**Sent:** Tuesday, September 17, 2002 12:46 PM  
**To:** Suarez, Rhae (R.)  
**Subject:** RE: another wds issue?

This is already a high priority, We are working on it.

-----Original Message-----

**From:** Suarez, Rhae (R.)  
**Sent:** Tuesday, September 17, 2002 12:39 PM  
**To:** Price, Martin (M.); Altoonian, Don (D.J.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Lintaco, Steven (S.); Rothweiler, Daniel (D.); Sanders, Muriel (M.S.)  
**Cc:** Myers, Dan (D.P.); Marianos, Tom (T.E.); Lawler, David (D.A.)  
**Subject:** RE: another wds issue?

I just got a message from Dan Myer (FQE) with the same concern. He had to go to another dealer that hasn't updated their WDS to version 21 yet in order to help a customer out. We need to fix this ASAP.

*Rhae M. Suarez*

Rhae Michael Suarez  
Product Concern Engineer - Escape / Tribute / Maverick  
PVT & Field Support / FCSD  
DSC II (room 548) / 1800 Fairlane Dr. / Allen Park, MI 48101  
Phone: 313-32-23844 Pager: 313-796-6242  
Fax: 313-33-76337  
Email: rsuarez8@ford.com

—Original Message—

From: Price, Martin (M.)  
Sent: Tuesday, September 17, 2002 11:51 AM  
To: Altonian, Don (D.J.); DeBo, Bob (R.J.); Fournelle, Gilbert (G.); Lintaco, Steven (S.); Rothweller, Daniel (D.); Sanders, Muriel (M.S.); Suarez, Rhae (R.)  
Subject: another wds issue?

It appears now on version 21.1 wds isn't linking some of the updates. The 2L8A-AD does not show to update to 2U7A-CZB, in fact 2U7A-CZA doesn't update to CZB. I think the 2001 calibrations are ok. I did not check 2003's.

*Martin Price*

Cleveland Engine Specialist, DSC I #353  
1700 Fairlane Dr, Allen Park, MI 48101  
mprice28@ford.com ph. (313)317-9133

---

**From:** Marlanos, Tom (T.E.)  
**Sent:** Wednesday, September 25, 2002 10:26 AM  
**To:** Salamon Jr., Peter (P.F.); Dalbo, Bob (R.J.); Suarez, Rhas (R.); Terzes, Laura (L.D.); Stiegel, Mark (M.S.); Fascetti, Bob (R.J.)  
**Cc:** Jordan, LeBron (L.); Judson, Roger (R.); Dorony, Kenneth (K.R.); Tieman, Paul (P.D.); Price, Martin (M.); Altonian, Don (D.J.); Fournelle, Gilbert (G.); Limitaco, Steven (S.); Rothweller, Daniel (D.); Sanders, Muriel (M.S.); Lawler, David (D.A.); Hayduk, Mark (M.S.)  
**Subject:** RE: another wds issue?

OK everyone, here is what has happened.

We had a an update for U204 in early August covered by white paper 1891, where a series of service fix part numbers replaced previous running change releases.

We chained all of those together the running changes with the service fixes and released to the field as we were authorized to do.

The very next week, the newly released calibrations were found to create a surge issue, so we were asked by Powertrain to immediately unchain the new from the old. Which we did.

In late August/Early September, white paper 1921 was released, which replaced the first service release calibrations with a new one. We then made our updates and released to the field.

In the process of updating, the 1921 white paper never referenced the previous running calibrations so the chaining of the production calibrations to the service fixes was not made.

We can fix this in in B21.3 later this week.

This may sound confusing, so let me try to make more simple.

1. Let's say you have calibration A and you replace it wit calibration B, so

A => B

2. A problem is found and now we are told to change our logic to:

A does not go to B

so you have a stand alone A and a stand alone B (that is not flashable now).

A Stand alone

B Stand alone (although not flashable)

3. Now Calibration C comes out and we are told that it replaces Calibration B, so you now have:

A stand alone

B => C

C is the latest.

In this case, we were not told to point Cal A at Cal C.

We will fix this week, but this is how we got to this point.

I hope that this explains it all.

If you have any questions, feel free to ask.

Tom

-----Original Message-----

From: Salamon Jr., Peter (P.F.)  
Sent: Wednesday, September 25, 2002 8:41 AM  
To: Marianos, Tom (T.E.); Judson, Roger (R.)  
Cc: Tierman, Paul (P.D.); Jordan, LeBron (L.); Dornoy, Kenneth (K.R.)  
Subject: FW: another wds issue?  
Importance: High

Tom / Roger,

I thought that all was OK with the Escape, including instructions to the hotline and the field on how to load the software. Have you heard of any concerns in the field? Is this a one-off?

Regards,  
*Pete*

-----Original Message-----

From: Terzes, Laura (L.D.)  
Sent: Wednesday, September 25, 2002 8:25 AM  
To: Salamon Jr., Peter (P.F.); Dornoy, Kenneth (K.R.)  
Subject: FW: another wds issue?

Someone pls. confirm and respond on status.

*Laura Terzes*

Manager, Outfitters Concerns  
FC8D, Customer Service Engineering  
PDC TVC 1JF58  
(313) 32-36572 / fax (313) 24-88181 / lterzes.ford.com

-----Original Message-----

From: Dalbo, Bob (R.J.)  
Sent: Tuesday, September 24, 2002 6:07 PM  
To: Marianos, Tom (T.E.); Jordan, LeBron (L.)  
Cc: Terzes, Laura (L.D.); Bob Fascetti  
Subject: FW: another wds issue?

LeBron/Tom,  
Do we still have a WDS issue?

*Bob Dalbo*

3.0L Calibration Supervisor  
Outfitters Calibration, NAT  
Phone: (313) 24-84947 Fax: (313) 32-31788  
Pager: (313) 795-2858 Email: rdalbo@ford.com

-----Original Message-----

From: Myers, Dan (D.P.)  
Sent: Tuesday, September 24, 2002 6:02 PM  
To: Suarez, Rhee (R.)  
Cc: Price, Martin (M.); Alzonien, Don (D.J.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Limilaco, Steven (S.); Rothweiler, Daniel (D.); Sanders, Muriel (M.S.); Lawler, David (D.A.); Hayduk, Mark (M.S.)  
Subject: RE: another wds issue?

Rhee,  
FYI



I just updated my WDS with B21.1A from the LAN and it still won't allow me to update 3.0L Escapes to the latest level. It is stating that the 2L8A-AA calibration (what is currently in the vehicle) is the latest level for the 2002 Escape. Not the 2U7A-CZB that I was able to download from WDS version B20.12 last week. How can I get a copy of the calibrations (for 01-09) on disc so I won't have to reschedule any more vehicles?

Thanks,

*Dan Myers*

Field Quality Engineer - Iowa  
Enhanced Concern Identification

[dm Myers4@ford.com](mailto:dm Myers4@ford.com)

Cell 563-505-9002  
Office 563-289-9991  
Fax 563-289-1364

-----Original Message-----

From: Suarez, Rhae (R.)  
Sent: Tuesday, September 17, 2002 12:06 PM  
To: Price, Martin (M.); Alkonian, Don (D.J.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Lintisco, Steven (S.); Rothweiler, Daniel (D.); Sanders, Muriel (M.S.); Lawler, David (D.A.); Myers, Dan (D.P.)  
Subject: FW: another wds issue?

FYI -

-----Original Message-----

From: Marland, Tom (T.E.)  
Sent: Tuesday, September 17, 2002 12:46 PM  
To: Suarez, Rhae (R.)  
Subject: RE: another wds issue?

This is already a high priority, We are working on it.

-----Original Message-----

From: Suarez, Rhae (R.)  
Sent: Tuesday, September 17, 2002 12:39 PM  
To: Price, Martin (M.); Alkonian, Don (D.J.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Lintisco, Steven (S.); Rothweiler, Daniel (D.); Sanders, Muriel (M.S.)  
Cc: Myers, Dan (D.P.); Marland, Tom (T.E.); Lawler, David (D.A.)  
Subject: RE: another wds issue?

I just got a message from Dan Myer (FQE) with the same concern. He had to go to another dealer that hasn't updated their WDS to version 21 yet in order to help a customer out. We need to fix this ASAP.

*Rhae M. Suarez*

Rhae Michael Suarez  
Product Concern Engineer - Escape / Tribute / Maverick  
PVT & Field Support / FCSD  
DSC II (room 548) / 1800 Fairlane Dr. / Allen Park, MI 48101  
Phone: 313-32-23344 Pager: 313-796-6242  
Fax: 313-33-78337  
Email: rsuarez8@ford.com

-----Original Message-----

From: Price, Martin (M.)  
Sent: Tuesday, September 17, 2002 11:51 AM  
To: Alkonian, Don (D.J.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Lintisco, Steven (S.); Rothweiler, Daniel (D.); Sanders, Muriel

**Subject:** (M.S.): Suarez, Rhea (R.)  
another wds issue?

It appears now on version 21.1 wds isn't linking some of the updates. The 2L8A-AD does not show to update to 2U7A-CZB, in fact 2U7A-CZA doesn't update to CZB. I think the 2001 calibrations are ok. I did not check 2003's.

*Marti Price*

Cleveland Engine Specialist, DSC I #353  
1700 Fairlane Dr, Allen Park, MI 48101  
mprice28@ford.com ph. (313)317-9133

---

**From:** Marianos, Tom (T.E.)  
**Sent:** Wednesday, September 25, 2002 10:36 AM  
**To:** Myers, Dan (D.P.)  
**Cc:** Price, Martin (M.); Altoonian, Don (D.J.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Lintiacco, Steven (S.); Rothweiler, Daniel (D.); Sanders, Muriel (M.S.); Lawler, David (D.A.); Hayduk, Mark (M.S.); Suarez, Rhae (R.)  
**Subject:** RE: another wds issue?

Dan,  
I understand the issues and we will fix this ASAP with a B21.3 Update, but I have another question.

Can you go back and verify the part number in the PCM. 2L8A-AA should not be recognized by WDS. It was never WERS released, and should not be in the field.

Thanks,

Tom Marianos  
ACBG/DSP/WDS PCM Reprogramming  
tmarian1@ford.com  
Ph.:313-390-5032  
Fax: 313-248-4370

-----Original Message-----

**From:** Myers, Dan (D.P.)  
**Sent:** Tuesday, September 24, 2002 6:02 PM  
**To:** Suarez, Rhae (R.)  
**Cc:** Price, Martin (M.); Altoonian, Don (D.J.); Dalbo, Bob (R.J.); Fournelle, Gilbert (G.); Lintiacco, Steven (S.); Rothweiler, Daniel (D.); Sanders, Muriel (M.S.); Lawler, David (D.A.); Hayduk, Mark (M.S.)  
**Subject:** RE: another wds issue?

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Thanks,

*Dan Myers*

Field Quality Engineer - Iowa  
Enhanced Concern Identification

[dmvers4@ford.com](mailto:dmvers4@ford.com)

Cell 563-505-9002  
Office 563-289-8991  
Fax 563-289-1364

minmph.txt

Created by: PC-CFR, Version, 6.0-1 on: 6/25/2002 at 7:14:00 AM  
Model Year - 1999 2000 2001 2002  
All Engine sizes  
All Transmissions  
All Vehicles

Parameters

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MINMPH

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	MINMPH
ALAPL6	8-96J R10SN	1999	6.8	E4OD	ECONOLINE	Undef	12
ALAPLCY	8-74C R11FB	1999	5.4	E4OD	ECONOLINE	Undef	8
ALAPLE7	8-98E R13FB	1999	6.8	E4OD	ECONOLINE	Undef	12
ALAPLKZ	8-48K R11FM	1999	5.4	E4OD	ECONOLINE	Undef	3
ALAPLS3	8-74S R11C	1999	5.4	E4OD	ECONOLINE	Undef	8
ALAPLTW	8-98T R19C	1999	6.8	E4OD	ECONOLINE	Undef	8
ALAPLTX	8-74T R11C	1999	5.4	E4OD	ECONOLINE	Undef	8
ALAPLUZ	8-74U R11C	1999	5.4	E4OD	ECONOLINE	Undef	3
ALAPLV4	8-74V R11C	1999	5.4	E4OD	ECONOLINE	Undef	3
ALAPLW5	8-98W R19C	1999	6.8	E4OD	ECONOLINE	Undef	12
ALAPLX8	8-98X R19C	1999	6.8	E4OD	ECONOLINE	Undef	12
ALAPLY4	8VZA-AY FSN	1999	5.4	E4OD	ECONOLINE	Undef	8
ALAQ0N4	7-48N R10SN	1999	5.4	E4OD	ECONOLINE-NGV	Undef	3
ALAQ0NP	7-48N R06SN	1999	5.4	E4OD	ECONOLINE-NGV	3.75/4.10	3
BUADDH	8-10D R11	1999	3.4	AX4N	TAURUS SHO	3.77	3
BUADDMH	8-10M R11	1999	3.4	AX4N	TAURUS SHO	3.77	3
BUAEOA7	8LDA-JAE	1999	3	AX4N	TAU/SABLE 4V	3.98	3
BUAEOAR	8LDA-BAB AC	1999	3	AX4N	TAU/SABLE 4V	3.98	3
BUAEOAT	8LDA-GA B	1999	3	AX4N	TAU/SABLE 4V	3.98	3
BUAEOAU	8LDA-QAD	1999	3	AX4N	TAU/SABLE 4V	3.98	3
BUAEOAV	8-14A R12	1999	3	AX4N	TAU/SABLE 4V	3.98	3
BUAEOAW	8LDA-JA C	1999	3	AX4N	TAU/SABLE 4V	3.98	3
BUAEOAY	8LDA-GAD	1999	3	AX4N	TAU/SABLE 4V	3.98	3
BUAEOB8	8LAA-ABD	1999	3	AX4N	TAU/SABLE 2V	3.77	3
BUAEOBT	8LDA-ABB AFB	1999	3	AX4N	TAU/SABLE 4V	3.98	3
BUAEOBU	8LDA-BAD	1999	3	AX4N	TAU/SABLE 4V	3.98	3
BUAEOBV	8LDA-ABD	1999	3	AX4N	TAU/SABLE 4V	3.98	3
BUAEOBY	8LAAFB	1999	3	AX4N & AX4S	TAU/SABLE 2V	3.77	3
BUAEO03	8LDA-ADC	1999	3	AX4N	TAU/SABLE 4V	3.98	3
BUAEO0V	8LDA-BDC	1999	3	AX4N	TAU/SABLE 4V	3.98	3
BUAEO0W	8LDA-ADA	1999	3	AX4N	TAU/SABLE 4V	3.98	3
BUAEO0X	8LDA-BDA	1999	3	AX4N	TAU/SABLE 4V	3.98	3
BUAEO07	8LAA-BNC	1999	3	AX4N	TAU/SABLE 2V	Undef	3
BUAE1A8	8LAA-AAD	1999	3	AX4S	TAU/SABLE 2V	3.77	3
BUAE1B8	8LAA-B9C	1999	3	AX4S	TAU/SABLE 2V	Undef	3
BVAJAA2	8LAA-EA EE	1999	3	AX4S	WIN126	3.98	4
BVAJAA4	8LAA-EA EE	1999	3	AX4S	WIN126	3.98	4
BVAJAAZ	8LAA-GA EG	1999	3	AX4S	WIN126	3.98	4
BVAJAS6	0A31A80E10	2000	3.8	AX4S	WIN126	3.58	4
BVAJAS7	0A31C80B10	2000	3.8	AX4S	WIN126 ULEV & WIN126/ULEV	3.58	4
BVAJAS9	0A31A80B05	2000	3.8	AX4S	WIN126 COST SAVE	3.58	4
BVAJASG	0A31C80B10	2000	3.8	AX4S	WIN126 ULEV & WIN126/ULEV	3.58	4
BVAJASH	0A31A80B05	2000	3.8	AX4S	WIN126 COST SAVE	3.58	4
BVAJASS	0A31A80G10	2000	3.8	AX4S	WIN126	3.58	4
BVAJAST	0A31B80B10	2000	3.8	AX4S	WIN126	3.58	4
BVAJABZ	0A31B80B10	2000	3.8	AX4S	WIN126	3.58	4
BWAK9N2	1DD14N0510	2001	3	4F50N	TAU/SABLE 4V	3.98	5
BWAK4N6	1DD12N0510	2001	3	4F50N	TAU/SABLE 2V	3.77	5
BWAK498	1DD1280510	2001	3	AX4S	TAU/SABLE 2V	3.77	5
BWAK9N3	1DD1FN0512	2001	3	4F50N	D188 - FFV Ethanol	3.77	5
BWAK9S3	1DD1F90512	2001	3	AX4S	D188 - FFV Ethanol	3.77	5
BXAN96Z	0DD13N0505	2000	3	AX4N	D188 CB Cat - 2V Calif & D188 COST SAVE - CALIF & D188 CB Cat - 2V CALIF	3.77	5
BXAN98P	0DD12N0B11	2000	3	AX4N	TAU/SABLE 2V	3.77	5
BXAN9NJ	0DD13N0A05	2000	3	AX4N	D188 CB Cat - 2V Fed	3.77	5
BXAN9NK	0DD12N0A10	2000	3	AX4N	TAU/SABLE 2V	3.77	5
BXAN9SP	0DD1280A10	2000	3	AX4S	TAU/SABLE 2V	3.77	5
BXAN9SZ	0DD1380A05	2000	3	AX4S	D188 CB Cat - 2V Fed	3.77	5

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	MINMPH
BXANB5H	0DD15N0606	2000	3	AX4N	D186 CS Cat - 4V Calif & D186 CSCat - Cal 4V & D186 CSCat - 2V CALIF & D186 CS CAT CALIF 4V & D186 COST SAVE CALIF 4V & D186 COST SAVE - CALIF	3.98	3
BXANB5M	0DD15N0606	2000	3	AX4N	D186 CS Cat - 4V Calif & D186 COST SAVE CALIF 4V & D186 CSCat - Cal 4V & D186 CSCat - 2V CALIF & D186 CS CAT CALIF 4V & D186 COST SAVE - CALIF	3.98	3
BXANBAJ	0DD15N0A05	2000	3	AX4N	D186 CS Cat - 4V Fed & D186 CS CAT FED 4V & D186 CSCat Fed 4V	3.98	3
BXANBAK	0DD14N0A06	2000	3	AX4N	TAU/SABLE 4V	3.98	3
BXANBAN	0DD14N0A06	2000	3	AX4N	TAU/SABLE 4V	3.98	3
BXANBAZ	0DD15N0A05	2000	3	AX4N	D186 CS Cat - 4V Fed & D186 CSCat Fed 4V & D186 CS CAT FED 4V	3.98	3
BXANBBL	0DD14N0B06	2000	3	AX4N	TAU/SABLE 4V	3.98	3
BXANBBZ	0DD14N0B06	2000	3	AX4N	TAU/SABLE 4V	3.98	3
BXANS04	0DD1SD0606	2000	3	AX4S	D186 - FFV Ethanol	3.77	5
BXANS0Y	0DD1ND0505	2000	3	AX4N	D186 - FFV W/AX4N & D186-FFV W/AX4N	3.77	5
CRAIBK9	9VNA-BK BC	1999	4.8	4R70W	FORD/MERCURY	2.73	6
CRAIBL6	9VNA-AL BFM	1999	4.8	4R70W	FORD/MERCURY	3.27	6
CRAIBL8	9VNA-BL BC	1999	4.8	4R70W	FORD/MERCURY	3.27	6
CRAIBM8	9VNA-BM BC	1999	4.8	4R70W	LINC.TOWNCAR	3.08	5
CRAIBS8	9VNA-B9 B	1999	4.8	4R70W	LINC.TOWNCAR	3.27	5
CRAICAZ	9VNA-AAE	1999	4.8	4R70W	FORD/MERCURY	3.55	5
CRAICD2	9VNA-GD CG	1999	4.8	4R70W	FORD/MERCURY	3.08	6
CRAICE3	9VNA-GE CG	1999	4.8	4R70W	FORD/MERCURY	3.27	6
CRAICF3	9VNA-GF CG	1999	4.8	4R70W	LINC.TOWNCAR	3.08	6
CRAICK5	9VNA-AK CFB	1999	4.8	4R70W	FORD/MERCURY	2.73	5
CRAICL5	9VNA-AL CFM	1999	4.8	4R70W	FORD/MERCURY	3.27	5
CRAICLZ	9VNA-AL CFM	1999	4.8	4R70W	FORD/MERCURY	3.27	5
CRAIDM2	9VNA-BM BC	1999	4.8	4R70W	LINC.TOWNCAR	3.08	5
CRAIDM8	9VNA-AM CFB	1999	4.8	4R70W	LINC.TOWNCAR	3.08	7.5
CRAIDSZ	9VNA-B5 B	1999	4.8	4R70W	LINC.TOWNCAR	3.27	5
CSAH1G4	1FB1NG0505	2001	4.8	4R70W	FORD Nat. Gas	2.73	3
CSAH1GZ	2FB1NG0505	2002	4.8	4R70W	FORD Nat. Gas	2.73	3
CSAH1L3	6-18L F06S	1999	4.8	4R70W	FORD Nat. Gas	2.73	3
CSAH1V4	9VNA-AV A	1999 & 2000 & 2001	4.8	4R70W	FORD Nat. Gas	2.73	3
CVAE7BY	9VXM-ABC	1999	4.8	T45	MUSTANG COBRA	3.27	0
CVAE7F8	0ZE2CF0610	2000	4.8	T45	MUSTANG COBRA	3.27	0
CVAE7R5	0ZE2CP0606	2000	5.4	Undef	MUSTANG COBRA R	Undef	5
CVAF1A3	9VXM-AAC	1999	4.8	T45	MUSTANG GT	3.27	5
CVAF1A8	9VXM-BAD	1999	4.8	T45	MUSTANG GT	3.27	5
CVAF1B9	9VXM-ABC	1999	4.8	T45	MUSTANG GT	3.27	5
CVAF1B8	9VXM-BBD	1999	4.8	T45	MUSTANG GT	3.27	6
CVAF1C3	9VXA-AAC	1999 & 2000	4.8	4R70W	MUSTANG GT	3.27	5
CVAF1CX	9VXA-ABC	1999 & 2000	4.8	4R70W	MUSTANG GT	3.27	5
CVAF1CY	9VXA-BAC	1999	4.8	4R70W	MUSTANG GT	3.27	5
CVAF1CZ	9VXA-BBC	1999	4.8	4R70W	MUSTANG GT	3.27	5
CVBA0A2	9LMA-BA BC & 9LMA-BAB	1999 & 2000	3.8	4R70W	MUSTANG	3.27	3
CVBA0A4	9LMA-BA BC & 9LMA-BAB	1999 & 2000	3.8	4R70W	MUSTANG	3.27	3
CVBA0BX	9LMA-AB BFB & 9LMA-ABB	1999 & 2000	3.8	4R70W	MUSTANG	3.27	3
CVBA0BZ	9LMA-AB BFB & 9LMA-ABB	1999 & 2000	3.8	4R70W	MUSTANG	3.27	3

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	MINMPH
CVBA2B3	9LMM-BBC	2000 & 1999	3.8	T50D	MUSTANG	3.06 & 3.27	3
CVBA2B5	9LMM-BBC	2000 & 1999	3.8	T50D	MUSTANG	3.06 & 3.27	3
CVBA2B6	9LMM-ABC	1999 & 2000	3.8	T50D	MUSTANG	3.27 & 3.06	3
CVBA2BZ	9LMM-ABC	1999 & 2000	3.8	T50D	MUSTANG	3.27 & 3.06	3
CXAB3H5	9VNA-BH CFB & 9VNA-BHC	1999	4.6	4R70W	LINC.TOWNCAR	3.55	7.5
DOAR3AY	0M11A30512	2002	3	CD4E	U204	Undef	3
DOAR3B5	0M11B30512	2002	3	CD4E	U204	Undef	3
DOAR3C5	0M11C30512	2002	3	CD4E	U204	Undef	3
DOAR43B	2M11B30510	2002	3	C4DE	U204 Cat. Opt.	Undef	3
DOAR43T	2M11C30510	2002	3	C4DE	U204 Cat. Opt.	Undef	3
DOAR43W	2M11A30510	2002	3	C4DE	U204 Cat. Opt.	Undef	3
DVAN923	0M12A20512	2001 & 2002	2	G6M	U204	Undef	1.5
DVAN924	0M12B20512	2001 & 2002	2	G6M	U204	Undef	1.5
DVAN92U	0M12A20512	2001 & 2002	2	G6M	U204	Undef	1.5
DVAN92Y	0M11A20513	2001 & 2002	2	CD4E	U204	Undef	3
DVANA2Z	0M11A20520	2002	2	Undef	U204	Undef	3
FBAC0CC	BLAA-AC B	1999	3	AX48	DN101 - FFV Ethanol	3.77	3
FCAK0CZ	9VWA-ACB	1999	4.6	AX4N	CONTINENTAL	3.56	3
FCAL0CY	9VWA-JCD	2001 & 2000 & 1999	4.6	4F50N & AX4N	CONTINENTAL	3.56	3
FDBA057	1A31A90G12	2001	3.8	4F50N	WIN126	3.56	4
FDBA05U	1A31A90Q13	2001	3.8	Undef	WIN126	Undef	4
FDBA05X	1A31A90G12	2001	3.8	4F50N	WIN126	3.56	4
FDBC056	1A31A90512	2001	3.8	4F50N	WIN126	3.56	4
FHAF8F3	2DD13F0511	2002	3	Undef	D186 FFV Pt-Rh CAT OPT	Undef	6
FHAF8N2	2DD13N0511	2002	3	4F50N	D186 2V Pt-Rh CAT OPT	3.77	6
FHAF8N4	2DD14N0511	2002	3	4F50N	D186 4V & TAU/SABLE 4V	3.68	3
FHAF8NW	2DD15N0508	2002	3	4F50N	D186 4V PT-RH CAT OPT	3.68	3
FHAF8NZ	2DD12N0511	2002	3	4F50N	TAU/SABLE 2V	3.77	6
FHAF8S2	2DD13S0511	2002	3	AX48	D186 2V Pt-Rh CAT OPT	3.77	6
FHAF8S4	2DD1F80507	2002	3	AX48	D186 - FFV Ethanol	3.77	5
FHAF8V4	2DD13V0511	2002	3	Undef	D186 FFV Pt-Rh CAT OPT	Undef	6
FJAE0A8	2A31CA0508	2002	3.8	4F50N	WIN126	3.56	4
FJAE0CZ	2A31ZC0510	2002	3.8	4F50N	2002.5 WIN126 Cat Opt	3.56	4
GRAK8EG	8-04E R13FM & 8EQA-AK A	1999	2	F4E3	ESCORT/TRACER 4V	3.74	3.5
GRAK8EX	8-03E R13FM	1999	2	G6M	ESCORT/TRACER 4V	4.11	3.5
GRAK8KY	8EQM-BK A	1999	2	G6M	ESCORT/TRACER 4V	4.11	3.5
GRAK8KZ	8EQM-AK A	1999	2	G6M	ESCORT/TRACER 4V	4.11	3.5
GRAK8RF	8-04R R13C & 8EQA-BK A	1999	2	F4E3	ESCORT/TRACER 4V	3.74	3.5
GRAK8RX	8-03R R13C	1999	2	G6M	ESCORT/TRACER 4V	4.11	3.5
GRAK8RY	8-03R R13C	1999	2	G6M	ESCORT/TRACER 4V	4.11	3.5
GVAK8B3	7-08B R12	1999	2	F4E3	ESCORT/TRACER 2V	3.74	4
GVAK8C3	7-07C R12	1999	2	G6M	ESCORT/TRACER 2V	3.65	6
GWAG8G3	8EQM-AG A	1999	2	G6M	ESCORT/TRACER 2V	3.65	12
GWAG8G6	8EQM-BG BC	1999	2	MTX75	ESCORT/TRAC 2V LEV	3.65	12
GWAG8GY	8EQA-BG A	1999	2	F4E3	ESCORT/TRACER 2V	3.74	6
GWAG8GZ	8EQA-AG A	1999	2	F4E3	ESCORT/TRACER 2V	3.74	6
GWAG8H3	8EQA-AH A	1999	2	F4E3	ESCORT/TRACER 2V	3.74	6
JAAS8B3	9WHA-ABK	2000	3.9	5R55W	DEW98	3.58	6
JAAS8B8	9WHA-ABK	2000	3.9	5R55W	DEW98	3.31	6
JAAS8B9	9LDA-BBH	2001 & 2000	3	5R55N & 5R55W	DEW98	3.07 & 3.58	5
JAAS8N2	9LDA-ENE	2000	3	Undef	DEW98	Undef	5
JAAS7A3	9WHA-AAG	2000	3.9	Undef	DEW98	3.31	6
JAAS7A7	9WHA-EAJ	2000	3.9	5R55N	DEW98	3.58	6
JAAS7A8	9WHA-BAH	2000	3.9	5R55W	DEW98	3.31	6
JAAS7C8	9LDA-BCG	2000	3	5R55W	DEW98	3.58	5

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	MINMPH
JAA8789	9LDA-ESG	2000	3	5R55W	DEW98	3.58	5
JAA78A2	9LDA-AAH	2000	3	5R55N	DEW98	3.58	6
JAA78A3	9LDA-ACG	2000	3	5R55W	DEW98	3.58	6
JBA88A5	9LDM-AAE	2000	3	M5GR	DEW98	3.07	3
JBA83A2	9LDM-EAG	2000	3	M5GR	DEW98	3.07	3
JBA83CZ	9LDM-ACG	2000 & 2001	3	M5GR	DEW98 & DEW98 M/T	3.07	6
JBAT588	1LQ2890512	2001	3	GERTAG	DEW98 M/T	3.07	5
JBAT587	1LQ2890511	2001	3	GERTAG	DEW98 M/T	3.07	6
JDBC1M8	28R12M0505	2002	3.9	5R55N	M205	3.58	8
JDBD4B8	2LQ17B0510	2002	3	5R55N	DEW V8 .75 O/D	3.58	3
JDBD4BZ	2LQ18B0512	2002	3	5R55S	DEW98	3.58	3
JDBD4SV	2LQ18B0512	2002	3	5R55S	DEW98	3.58	3
JDBD4SW	2LQ1760510	2002	3	5R55N	DEW V8 .75 O/D	3.58	3
JEATEF8	1U51AF0B15	2002	4	5R55W	U152 FFV 2001.5	3.27/3.55	6
JEATEG8	1U51BG0A15	2002	4	5R55W	U152 2001.5	3.27/3.55	5
JEATEGW	1U51AG0M15	2002	4	5R55W	U152 2001.5	3.27/3.55	5
JEATEGY	1U51AG0M15	2002	4	5R55W	U152 2001.5	3.27/3.55	6
JEATFF8	1U51AF0B21	2002	4	5R55W	U152 FFV 2001.5	3.27/3.55	5
JEATFG8	1U51BG0A21	2002	4	5R55W	U152 2001.5	3.27/3.55	6
JEATFGX	1U51AG0M21	2002	4	5R55W	U152 2001.5	3.27/3.55	6
JEATFGY	1U51BG0A21	2002	4	5R55W	U152 2001.5	3.27/3.55	5
JEAU159	1U51A60M18	2002	4.8	5R55W	U152 2001.5	3.27/3.55	5
JEAU159	1U51A80B18	2002	4.8	5R55W	U152 2001.5	3.27/3.55	5
JEAU252	1U51A60M10	2002	4.8	5R55W	U152 2001.5	3.27/3.55	6
JEAU258	1U51A60B10	2002	4.8	5R55W	U152 2001.5	3.27/3.55	5
JEBF452	2U51A60510	2002	4.8	5R55S	U152	3.27/3.55	6
JEBF45Z	2U51A60M10	2002	4.8	5R55S	U152	3.27/3.55	5
JEBFEF4	2U51AF0B09	2002	4	5R55S	U152 FFV	Undef	5
JEBFEG4	2U51BG0A08	2002	4	5R55S	U152	Undef	5
JEBFEGZ	2U51AG0M08	2002	4	5R55S	U152	Undef	6
JFA05G8	1U52AG0B11	2002	4	M5	U152 2001.5	3.27/3.55	2
JFA05G6	1U52AG0B15	2002	4	M5	U152 2001.5	3.27/3.55	2
JFBD6G2	2U52AG0506	2002	4	M5	U152	3.27/3.55	2
JJBD387	2LQ2890512	2002	3	5R55S	DEW98	3.07	5
KAAB8D2	9EQM-AD DFM	1999	2	MTX75	99.5 CDW	3.82	120
KAAB8D5	9EQA-BD EC	1999	2	CD4E	99.5 CDW	3.82	2.5
KAAB8D7	9EQA-MD C	1999	2	CD4E	99.5 CDW	4.23	2.5
KAAB8DW	9EQA-AD EFB	1999	2	CD4E	99.5 CDW	3.82	2.5
KAAB8DY	9EQM-AD DFM	1999	2	MTX75	99.5 CDW	3.82	120
KAAB8DZ	9EQM-BD D	1999	2	MTX75	99.5 CDW	3.82	120
KAAB9VU	9EQA-MV C	2000	2	CD4E	CONTOUR/MYSTIQUE	4.23	2.5
KAABAV3	9EQA-BV F	2000	2	CD4E	CONTOUR/MYSTIQUE	3.82	2.5
KAABAVU	9EQM-AV F	2000	2	MTX75	CONTOUR/MYSTIQUE	3.82	120
KAABAVV	9EQA-AV F	2000	2	CD4E	CONTOUR/MYSTIQUE	3.82	2.5
KAABAVW	9EQM-AV F	2000	2	MTX75	CONTOUR/MYSTIQUE	3.82	120
KAABAVX	9EQM-BV F	2000	2	MTX75	CONTOUR/MYSTIQUE	3.82	120
KAABAZ2	0NB1FZ0A06	2000	2	CD4E	CDW AFCYM	3.82	2.5
KAABAZY	0NB1FZ0B05	2000	2	CD4E	CDW AFCYM	3.82	2.5
KBAN2H2	9LCM-AH A	1999	2.5	MTX75	CONTOUR SVT 99.5	4.06	3.5
KBAN2H8	9LCM-EH C	1999	2.5	MTX75	MONDEO ST200 99.5	3.81	3.5
KBAN4CE	9LCA-AC DFM	1999	2.5	CD4E	BRONCO & CDW/SW 99.5	3.77	8
KBAN4CG	9LCA-BC DC	1999	2.5	CD4E	BRONCO	3.77	8
KBAN4CH	9LCA-AC DFM	1999	2.5	CD4E	BRONCO & CDW/SW 99.5	3.77	8
KBAN4D5	9LCA-ED CE	1999	2.5	CD4E	99.5 COUGAR/MONDEO	3.77	8
KBAN4DC	9LCM-AD EFM	1999	2.5	MTX75	99.5 SW	4.06	2.5
KBAN4DK	9LCM-BD EC	1999	2.5	MTX75	99.5 SW	4.06	2.5
KBAN4DL	9LCA-BD DC	1999	2.5	CD4E	99.5 SW	3.77	8
KBAN4DM	9LCA-AD DFB	1999	2.5	CD4E	99.5 SW	3.77	8
KBAN4X2	9LCM-AX C	1999	2.5	MTX75	CONTOUR SVT 99.5	4.06	3.5
KBAN4X8	9LCM-AH C	1999	2.5	MTX75	CONTOUR SVT 99.5	4.06	3.5
KBAN7D2	9LCM-ED EE	1999	2.5	MTX75	99.5 COUGAR/MONDEO	3.82	2.5
KBAN7D4	9LCA-ED DE	1999	2.5	CD4E	99.5 COUGAR/MONDEO	3.77	8
KBAN7H7	9LCM-EH G	2000	2.5	MTX75	MONDEO/COUGAR ST200	3.81	3.5
KBAN7VQ	9LCM-BV H	2000	2.5	MTX75	CDW192/SW184	4.06	2.5



Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	MINMPH
KBAN7VH	9LCA-BV H	2000	2.5	CD4E	CDW182/SW184	3.77	8
KBAN7WW	9LCA-BW G	2000	2.5	CD4E	COUGAR SW184	3.77	8
KBAN7WX	9LCM-BW G	2000	2.6	MTX	COUGAR SW184	4.08	2.6
KBAN7X4	9LCM-AXE	2000	2.6	MTX75	CONTOUR SVT	4.08	3.6
KBAT1DB	1Z25D0610	2001	2.6	MTX	COUGAR SW184	4.08	2.6
KBAT1DC	1Z27D0610	2001	2.6	MTX	COUGAR SW184	4.08	2.6
KBAT1DD	1Z2AD0610	2001	2.5	MTX	COUGAR SW184	Undef	2.6
KBAT1DH	1Z21AD0610	2001	2.5	CD4E	COUGAR SW184	3.77	8
KBAT1DN	1Z21ED0610	2001	2.5	CD4E	COUGAR SW184	3.77	8
KBAT1DP	1Z21SD0610	2001	2.5	CD4E	COUGAR SW184	3.77	8
KBAT1DQ	1Z2ED0610	2001	2.5	MTX	COUGAR SW184	Undef	2.5
KBAT2D4	2Z2ED0600	2002	2.6	MTX	COUGAR SW184	4.08	2.5
KBAT2DW	2Z25D0500	2002	2.6	MTX	COUGAR SW184	4.08	2.6
KBAT2DX	2Z27D0500	2002	2.6	MTX	COUGAR SW184	4.08	2.6
KBAT2DY	2Z2AD0500	2002	2.5	MTX	COUGAR SW184	Undef	2.6
KBAU0D8	2Z21ED0608	2002	2.5	CD4E	COUGAR SW184	3.77	8
KBAU0D6	2Z21AD0606	2002	2.5	CD4E	COUGAR SW184	3.77	8
KBAU0D7	2Z21SD0606	2002	2.5	CD4E	COUGAR SW184	3.77	8
KHA14A5	9LCA-EA DE	1999	2.5	CD4E	98.5 COUGAR/MONDEO	3.77	8
KHA15A9	9LCA-AA EFM	1999	2.5	CD4E	98.5 CDW/SW	3.77	8
KHA15AA	9LCA-AA EFM	1999	2.5	CD4E	98.5 CDW/SW	3.77	8
KHA15AR	9LCA-BA EC	1999	2.5	CD4E	98.5 CDW/SW	3.77	8
KHA15AT	9LCA-EA DE	1999	2.5	CD4E	98.5 COUGAR/MONDEO	3.77	8
KHA15AU	9LCA-EA DE	1999	2.5	CD4E	98.5 COUGAR/MONDEO	3.77	8
KHA15B9	9LCA-AB EFB	1999	2.5	CD4E	98.5 SW	3.77	8
KHA15BM	9LCA-BB EC	1999	2.5	CD4E	98.5 SW	3.77	8
KHA16SH	9LCA-BB HC	1999	2.5	CD4E	98.5 CDW/SW	3.77	8
KHA16SR	9LCA-AS GFM	1999	2.5	CD4E	98.5 CDW/SW	3.77	8
KHA16SB	9LCA-AS GFM	1999	2.5	CD4E	98.5 CDW/SW	3.77	8
KHA16SV	9LCA-ES GE	1999	2.5	CD4E	98.5 COUGAR/MONDEO	3.77	8
KHA16TB	9LCA-BT HC	1999	2.5	CD4E	98.5 SW	3.77	8
KHA16TX	9LCA-AT GFB	1999	2.5	CD4E	98.5 SW	3.77	8
KHA18A9	9LCM-EA F	1999	2.6	MTX75	98.5 COUGAR/MONDEO	3.82	2.6
KHA18AA	9LCM-AA FFM	1999	2.6	MTX75	98.5 CDW/SW	4.08	2.6
KHA18AL	9LCM-AA FFM	1999	2.6	MTX75	98.5 CDW/SW	4.08	2.6
KHA18AM	9LCM-BA FC	1999	2.6	MTX75	98.5 CDW/SW	4.08	2.6
KHA18AU	9LCM-EA EE	1999	2.6	MTX75	98.5 COUGAR/MONDEO	3.82	2.6
KHA18BA	9LCM-AB FFB	1999	2.5	MTX75	98.5 SW	4.08	2.6
KHA18BT	9LCM-BB FC	1999	2.5	MTX75	98.5 SW	4.08	2.6
KIAB1E2	9EQM-AE DFB	1999 & 2000	2	MTX75	98.5 SW & COUGAR SW184	3.82	120
KIAB1EZ	9EQM-BE DC	1999 & 2000	2	MTX75	98.5 SW & COUGAR SW184	3.82	120
KIAB4Z4	0Z2A20610	2001 & 2000	2	MTX75	COUGAR SW184	3.82	120
KIAC0Z5	2Z2A20500	2002	2	MTX75	COUGAR SW184	3.82	120
KMAK698	0AK2590512	2000	2	B5	FOCUS C170 SPI	3.81	2
KMAK6ZC	0AK25Z0512	2000	2	MTX75	FOCUS C170 ZETEC	3.82	2
KNAG4A5	9EQM-AA FFB	1999	2	CD4E	98.5 CDW	3.82	2.5
KNAG4AP	9EQM-AA FFM	1999	2	MTX75	98.5 CDW	3.82	120
KNAG4AQ	9EQM-BA FC	1999	2	MTX75	98.5 CDW	3.82	120
KNAG4AR	9EQM-AA FFM	1999	2	MTX75	98.5 CDW	3.82	120
KNAG4AS	9EQM-BA FC	1999	2	CD4E	98.5 CDW	3.82	2.5
KNAG4C5	9EQM-AC FFB	1999	2	MTX75	98.5 SW	3.82	120
KNAG4CP	9EQM-AC EFB	1999	2	CD4E	98.5 SW	3.82	2.5
KNAG4CS	9EQM-BC EC	1999	2	CD4E	98.5 SW	3.82	2.5
KNAG4CT	9EQM-BC FC	1999	2	MTX75	98.5 SW	3.82	120
KNAG4M4	9EQM-AM A	1999	2	CD4E	CDW AFOVM	3.82	2.5
KNAG4M4	9EQM-BN A	1999	2	CD4E	CDW AFOVM	3.82	2.5
KNAG6F3	9EQM-AR C	1999	2	CD4E	CDW AFOVM	3.82	2.5
KNAG6RZ	9EQM-BR C	1999	2	CD4E	CDW AFOVM	3.82	2.5
KNAG6S8	9EQM-BB HC	1999	2	CD4E	98.5 CDW	3.82	2.5
KNAG6E2	9EQM-AS HFB	1999	2	CD4E	98.5 CDW	3.82	2.5
KNAG6T5	9EQM-AT GFB	1999	2	CD4E	98.5 SW	3.82	2.5
KNAG6TY	9EQM-BT GC	1999	2	CD4E	98.5 SW	3.82	2.5
KRAF688	1AK2A90A11	2002 & 2001	2.0 & 3.5	B5	FOCUS C170 SPI & WIN Cat OPT	3.733	2

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	MINMPH
KRAF6Z4	1AK2AZ0509	2001	2	MTX	FOCUS G170 ZETEC	3.82	2
KRAF6ZZ	2AK2AZ0M00	2002	2	Undef	FOCUS MEXICO	Undef	2
KRAF6S4	1AK2AS0512	2002	2.0 & 3.0	B5	FOCUS G170 SPI & WIN Cat OPT	3.739	2
KRAF6S8	2AK2BS0A10	2002	2	B5	FOCUS SPI CAT OPT	3.81	2
KRAF6Z4	1AK2AZ0617	2002	2	MTX	FOCUS G170 ZETEC	3.82	2
KRAF6Z8	2AK2BZ0A10	2002	2	MTX	FOCUS ZETEC CAT OPT	3.82	2
MAAG4A9	9WAM-AA BSN	1999	6.8	M6	PHN131	Undef	8
MAAG4A4	9WAA-AA FSN	1999	6.8	Undef	PHN131	Undef	12
MAAG4AZ	9VZM-MA BM	1999	5.4	M4	PHN131	Undef	14.5
MAAG4B4	9VZM-AB BFB	1999	5.4	M6	PHN131	Undef	14.5
MAAG4CB	9WAM-AC BFB	1999	6.8	M6	PHN131	Undef	12
MAAG4CD	9WAA-BC FC	1999	6.8	4R100	PHN131	Undef	12
MAAG4D2	9WAA-BD GC	1999	6.8	4R100	PHN131	Undef	3
MAAG4F3	9VZA-AF FFB	1999	5.4	4R100	PHN131	Undef	4
MAAG4F4	9WAA-AF FSN	1999	6.8	4R100	PHN131	Undef	12
MAAG4FF	9WAM-BF FC	1999	6.8	M6	PHN131	Undef	3
MAAG4HE	9WAA-AH FFB	1999	6.8	4R100	PHN131	Undef	12
MAAG4H4	9WAA-AJ FSN	1999	6.8	4R100	PHN131	Undef	12
MAAG4J3	9VZA-BJ FC	1999	5.4	4R100	PHN131	Undef	3
MAAG4LZ	9WAA-BL FC	1999	6.8	4R100	PHN131	Undef	12
MAAG4VZ	9WAA-BV GC	1999	6.8	4R100	PHN131	Undef	3
MAAG4YD	9WAA-BY FC	1999	6.8	4R100	PHN131	Undef	12
MAAG4ZE	9WAA-BZ FC	1999	6.8	4R100	PHN131	Undef	12
MBAIBA1	9WCA-BAF & 9WCA-BA F	1999	5.4	4R100	UN173 4V OFF/LEV & UN93/UN173 4V	Undef	10
MBAIBBA	9VZA-AB FFB	1999	5.4	4R100	PN102	Undef	3
MBAIBCA	9VZA-BC F	1999	5.4	Undef	PN98	Undef	3
MBAIBEB	9VZA-BED	1999	5.4	4R100	UN93 2V OFF/LEV	Undef	3
MBAIBEB	9VZA-BE F	1999	5.4	Undef	UN93 2V & UN93/UN173 2V	Undef	3
MBAIBED	9VZA-BE G	1999	5.4	4R100	UN93 2V & UN93/UN173 2V	Undef	3
MBAIBEZ	9VZA-AE DFM	1999	5.4	4R100	UN93 2V & UN93/UN173 2V	Undef	3
MBAIBFA	9VZA-BF F	1999	5.4	Undef	PN102	Undef	3
MBAIBN7	9VZA-AN DSN	1999	5.4	E400	PN102-NGV	Undef	3
MBAIBPF	9VZA-AP GFB	1999	5.4	Undef	PN98	Undef	3
MMAF1H8	1E414H0510	2001 & 2002	5.4	4R100	ECONOLINE-NGV	Undef	3
MMAF1HJ	1E418H0B10	2001	6.8	4R100	ECONOLINE	Undef	6
MMAF1J8	1E414J0B05	2001	5.4	4R100	ECONOLINE	Undef	3
MMAF1Q9	1F724Q0M05	2001	5.4	M4	P131	Undef	3
MMAF1X2	1F614X0511	2002	5.4	4R100	PN98 2V NGV & PN98 NGV	Undef	3
MMAF1Z8	1E414I0510	2001 & 2002	5.4	4R100	ECONOLINE-NGV	Undef	3
MMAH0A8	1F728A0B15	2001	6.8	M6	P131	Undef	8
MMAH0AD	1F728A0B05	2001	6.8	M6	P131	Undef	8
MMAH0CR	1F718C0B15	2001	6.8	4R100	P131	Undef	3
MMAH0CX	1F718C0B10	2001	6.8	4R100	P131	Undef	3
MMAH0CY	1F717C0B15	2001	6.8	4R100	P131	Undef	3
MMAH0CZ	1F717C0B10	2001	6.8	4R100	P131	Undef	3
MMAH0DC	1F714D0B15	2001	5.4	4R100	P131	Undef	3
MMAH0DD	1L118D0B15	2001	6.8	4R100	UW137	Undef	3
MMAH0DI	1L118D0B10	2001	6.8	4R100	UW137	Undef	3
MMAH0DZ	1L114D0B15	2001	5.4	4R100	UW137	Undef	3
MMAH0N7	1E418N0510	2001	6.8	4R100	ECONOLINE	Undef	12
MMAH0NA	1L118NA15	2001	6.8	4R100	UW137	Undef	12
MMAH0NB	1F714N0B15	2001	5.4	4R100	P131	Undef	3
MMAH0NJ	1F717N0B15	2001	6.8	4R100	P131	Undef	12
MMAH0NR	1E414NA10	2001	5.4	4R100	ECONOLINE	Undef	3
MMAH0NS	1L114NA15	2001	5.4	4R100	UW137	Undef	3
MMAH0NT	1F714NA15	2001	5.4	4R100	P131	Undef	3
MMAH0NV	1F718N0B15	2001	6.8	4R100	P131	Undef	12
MMAH0P8	1E418PA10	2001	6.8	4R100	ECONOLINE	Undef	12
MMAH0P7	1F718PA15	2001	6.8	4R100	P131	Undef	12
MMAH0P9	1F724PA15	2001	5.4	M5	P131	Undef	3
MMAH0PK	1F717PA15	2001	6.8	4R100	P131	Undef	12
MMAH0Q8	1E418QB10	2001	6.8	4R100	ECONOLINE	Undef	12

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	MINMPH
MMAH0R7	1E414R0B10	2001	5.4	4R100	ECONOLINE	Undef	3
MMAH0R8	1E418R0B10	2001	6.8	4R100	ECONOLINE	Undef	12
MMAH0R9	1F717R0B15	2001	6.8	4R100	P131	Undef	12
MMAH0R0	1F718R0B15	2001	6.8	4R100	P131	Undef	12
MMAH0T7	1F718T0B15	2001	6.8	4R100	P131	Undef	12
MMAH0U6	1F728U0M00	2001	6.8	M5	P131	4.88/5.38	8
MMAH0U8	1F728U0615	2001	6.8	M5	P131	Undef	8
MMAH0U7	1E414U0B10	2001	5.4	4R100	ECONOLINE	Undef	3
MMAH0V7	1F728V0A16	2001	6.8	M5	P131	Undef	8
MMAH0X7	1E414X0S10	2001	5.4	4R100	ECONOLINE	Undef	3
MMAH0Y7	1E414Y0S10	2001	5.4	4R100	ECONOLINE	Undef	3
MNAE0Y6	1F514Y0S06	2001	5.4	4R100	PN98 8C	Undef	3
MPAL0PZ	0F724P0A10	2000	5.4	4R100	P131	Undef	3
MPAL0Q3	0F724Q0M10	2000	5.4	4R100	P131	Undef	3
MPAL0BF	0B314B0S11	2000	5.4	4R100	UN83 2V	Undef	3
MPAL0D4	0F714D0B11	2000	5.4	4R100	P131	Undef	3
MPAL0DX	0L114D0B11	2000	5.4	Undef	UW137	Undef	3
MPAL0DY	0F514D0B11	2000	5.4	4R70W	PN98	Undef	3
MPAL0G7	0F514G0A11	2000	5.4	4R100	PN98	Undef	3
MPAL0H7	0F514H0A11	2000	5.4	4R100	PN98	Undef	3
MPAL0H9	0E414H0S11	2000	5.4	Undef	ECONOLINE-NGV	Undef	3
MPAL0J7	0E414J0B11	2000	5.4	4R100	ECONOLINE	Undef	3
MPAL0M7	0F514M0B11	2000	5.4	4R100	PN98	Undef	3
MPAL0N4	0F714N0A11	2000	5.4	4R100	P131	Undef	3
MPAL0N8	0E414N0A11	2000	5.4	4R100	ECONOLINE	Undef	3
MPAL0NX	0L114N0A11	2000	5.4	Undef	UW137	Undef	3
MPAL0R8	0E414R0B11	2000	5.4	4R100	ECONOLINE	Undef	3
MPAL0U8	0E414U0B11	2000	5.4	4R100	ECONOLINE	Undef	3
MPAL0X9	0F514X0S10	2000	5.4	4R100	PN102-NGV	Undef	3
MPAL0XC	0E414X0S12	2000	5.4	4R100	ECONOLINE	Undef	3
MPAL0YB	0E414Y0S12	2000	5.4	4R100	ECONOLINE	Undef	3
MPAM0AG	0F728A0B11	2000	6.8	M5	P131	Undef	8
MPAM0J8	0F728J0S11	2000	6.8	M5	P131	Undef	12
MPAM0V9	0F728V0A11	2000	6.8	M5	P131	Undef	12
MPAM1C4	0F717C0B11	2000	6.8	4R100	P131	Undef	3
MPAM1CN	0F718C0B11	2000	6.8	4R100	P131	Undef	3
MPAM1DF	0L118D0B11	2000	6.8	4R100	UW137	Undef	3
MPAM1HZ	0E418H0B13	2000	6.8	4R100	ECONOLINE	Undef	8
MPAM1N5	0F717N0S11	2000	6.8	4R100	P131	Undef	12
MPAM1NU	0F718N0S11	2000	6.8	4R100	P131	Undef	12
MPAM1NV	0L118N0A11	2000	6.8	4R100	UW137	Undef	12
MPAM1NY	0E418N0S11	2000	6.8	4R100	ECONOLINE	Undef	12
MPAM1P4	0E418P0A11	2000	6.8	4R100	ECONOLINE	Undef	12
MPAM1PX	0F717P0A11	2000	6.8	4R100	P131	Undef	12
MPAM1PZ	0F718P0A11	2000	6.8	4R100	P131	Undef	12
MPAM1Q3	0E418Q0B11	2000	6.8	4R100	ECONOLINE	Undef	12
MPAM1QZ	0F718Q0S11	2000	6.8	4R100	P131	Undef	12
MPAM1R3	0E418R0B11	2000	6.8	4R100	ECONOLINE	Undef	12
MPAM1R4	0F717R0B11	2000	6.8	4R100	P131	Undef	12
MPAM1R5	0F718R0B11	2000	6.8	4R100	P131	Undef	12
MPAM1T4	0F717T0B11	2000	6.8	4R100	P131	Undef	12
MPAM1T5	0F718T0B11	2000	6.8	4R100	P131	Undef	12
MQAH1BH	1B314B0S10	2001	5.4	4R100	UN83 2V	Undef	3
MQAH1BG	1B315B0S10	2001	5.4	4R100	UN173 4V	Undef	10
MQAH1DE	1F514D0B10	2001	5.4	4R100	PN98	Undef	3
MQAH1HB	1F514H0A10	2001	5.4	4R100	PN98	3081/3.55/ 3.73	3
MQAH1MB	1F514M0B10	2001	5.4	4R100	PN98	Undef	3
MQAH0AP	2N115A0S15	2002	5.4	4R100	CAL-1 4V	Undef	10
MQAH0B2	2B314B0S05	2002	5.4	4R100	UN83 2V	Undef	3
MQAH0B6	2B314B0M00	2002	5.4	Undef	UN83 2V	Undef	3
MQAH0BF	2B315B0S05	2002	5.4	4R100	UN173 4V	3.73	10
MRAD9K5	6VZA-AK FFB	1999 & 2000	5.4	4R100	PN98 8C	Undef	3
MZAH0A6	2F726A0B11	2002	6.8	M5	P131	Undef	2

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	MINMPH
MZAHQB8	2F728B0B11	2002	6.8	M6	P131	Undef	2
MZAHQCB	2F718C0B11	2002	6.8	4R100	P131	Undef	3
MZAHQCE	2F717C0B11	2002	6.8	4R100	P131	Undef	3
MZAHQD2	2L118D0B11	2002	6.8	4R100	UW137	Undef	3
MZAHQD4	2L114D0B11	2002	5.4	4R100	UW137	Undef	3
MZAHQD9	2F717D0B11	2002	6.8	4R100	P131	Undef	3
MZAHQDF	2F718D0B11	2002	6.8	4R100	P131	Undef	3
MZAHQDZ	2F714D0B11	2002	5.4	4R100	P131	Undef	3
MZAHQE4	2F714E0B11	2002	5.4	4R100	P131	Undef	3
MZAHQF4	2F714F0B18	2002	5.4	4R100	P131	Undef	3
MZAHQG4	2F714G0B18	2002	5.4	4R100	P131	Undef	3
MZAHQHA	2E418H0B11	2002	6.8	4R100	ECONOLINE	Undef	6
MZAHQJB	2E414J0B10	2002	5.4	4R100	ECONOLINE	Undef	3
MZAHQM8	2F718M0B11	2002	6.8	4R100	P131	Undef	3
MZAHQMX	2F717M0B11	2002	6.8	4R100	P131	Undef	3
MZAHQN3	2E414N0A18	2002	5.4	4R100	ECONOLINE	Undef	3
MZAHQN4	2F718N0511	2002	6.8	4R100	P131	Undef	3
MZAHQN5	2F717N0511	2002	6.8	4R100	P131	Undef	3
MZAHQN8	2F714N0A08	2002	5.4	4R100	P131	Undef	3
MZAHQNH	2E414N0A08	2002	5.4	4R100	ECONOLINE	Undef	3
MZAHQNV	2L118N0A11	2002	6.8	4R100	UW137	Undef	3
MZAHQNW	2E418N0511	2002	6.8	4R100	ECONOLINE	Undef	3
MZAHQNX	2L114N0A18	2002	5.4	4R100	UW137	Undef	3
MZAHQNZ	2F714N0A18	2002	5.4	4R100	P131	Undef	3
MZAHQP3	2E418P0A11	2002	6.8	4R100	ECONOLINE	Undef	3
MZAHQP5	2F718P0A11	2002	6.8	4R100	P131	Undef	3
MZAHQP6	2F724P0A18	2002	5.4	M8	P131	Undef	3
MZAHQPX	2F724P0A06	2002	5.4	M8	P131	Undef	3
MZAHQPZ	2F717P0A11	2002	6.8	4R100	P131	Undef	3
MZAHQR3	2E414R0B18	2002	5.4	4R100	ECONOLINE	Undef	3
MZAHQR4	2E414R0B08	2002	5.4	4R100	ECONOLINE	Undef	3
MZAHQR4	2E414R0B08	2002	5.4	4R100	ECONOLINE	Undef	3
MZAHQR6	2F718R0B11	2002	6.8	4R100	P131	Undef	3
MZAHQRU	2F717R0B11	2002	6.8	4R100	P131	Undef	3
MZAHQRY	2E418R0B11	2002	6.8	4R100	ECONOLINE	Undef	3
MZAHQ86	2F718S0B11	2002	6.8	4R070W	P131	Undef	3
MZAHQ8Z	2F717S0B11	2002	6.8	4R100	P131	Undef	3
MZAHQT6	2F718T0B11	2002	6.8	4R100	P131	Undef	3
MZAHQTZ	2F717T0B11	2002	6.8	4R100	P131	Undef	3
MZAHQU5	2E418U0606	2002	6.8	4R100	ECONOLINE	Undef	3
MZAHQUU	2E414U0B06	2002	5.4	4R100	ECONOLINE	Undef	3
MZAHQUY	2E414U0B18	2002	5.4	4R100	ECONOLINE	Undef	3
MZAHQUZ	2F728U0M11	2002	6.8	M5	P131	Undef	2
MZAHQV3	2F728V0A11	2002	6.8	M8	P131	Undef	2
MZAHQX5	2E414X0518	2002	5.4	4R100	ECONOLINE	Undef	3
MZAHQXX	2E414X0506	2002	5.4	4R100	ECONOLINE	Undef	3
MZAHQY5	2E414Y0518	2002	5.4	4R100	ECONOLINE	Undef	3
MZAHQYY	2E414Y0506	2002	5.4	4R100	ECONOLINE	Undef	3
MZAHQZ3	2E418Q0B11	2002	6.8	4R100	ECONOLINE	Undef	3
MZAHQZ4	2F718Q0511	2002	6.8	4R100	P131	Undef	3
MZAHQZY	2F724Q0M11	2002	5.4	M5	P131	Undef	3
MZAJOU8	2E418U0610	2002	6.8	4R100	ECONOLINE	Undef	3
OCAMQD2	2F514D0B17	2002	5.4	4R100	2002.25 PN98 Cat Opt	Undef	3
OCAMQH2	2F514H0A17	2002	5.4	4R100	2002.25 PN98 Cat Opt	Undef	3
ODAGQA3	2F526Q0A06	2002	4.8	M5	PN98 2V	Undef	6
ODAGQJ3	2F526J0B06	2002	4.8	M5	PN98 2V	Undef	6
ODAGQK3	2F526K0B06	2002	4.8	M5	PN98 2V	Undef	6
ODAGQP3	2F526P0A06	2002	4.8	M5	PN98 2V	Undef	6
ODAJQD9	2F518D0B07	2002	4.8	4R100	PN98 2V	Undef	4
ODAJQEB	2F518E0B07	2002	4.8	4R70W	PN98 2V	Undef	4
ODAJQM8	2F518M0A07	2002	4.8	4R70W	PN98 2V	Undef	4
ODAJQNB	2F518N0A07	2002	4.8	4R70W	PN98 2V	Undef	4
ODAL1AZ	2F514A0B06	2002	5.4	4R70W	2002.5 PN98 ULEV 4R70W	Undef	9
ODAL1D5	2F518D0B18	2002	4.8	4R70W	2002.25 PN98 Cat Opt	Undef	4

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	MINMPH
ODAL1EY	2F518E0B18	2002	4.6	4R70W	2002.25 PN98 Cat Opt	Undef	4
ODAL1J4	2F528J0B18	2002	4.6	M5	2002.25 PN98 Cat Opt	Undef	8
ODAL1M5	2F518M0A18	2002	4.6	4R70W	2002.25 PN98 Cat Opt	Undef	4
ODAL1N5	2F518N0A18	2002	4.6	4R70W	2002.25 PN98 Cat Opt	Undef	4
ODAL1P4	2F528P0A18	2002	4.6	M5	2002.25 PN98 Cat Opt	Undef	8
ODAL1Z4	2F528Z0A18	2002	4.6	M5	2002.25 PN98 Cat Opt	Undef	8
OHAG0CH	2F512C0505	2002	4.2	4R70W	PN98 2V	Undef	8
OHAG0DY	2E412D0A10	2002	4.2	4R70W	ECONOLINE	Undef	20
OHAG0DZ	2F512D0505	2002	4.2	4R70W	PN98 2V	Undef	8
OHAG0E3	2E412E0A10	2002	4.2	4R70W	ECONOLINE	Undef	20
OHAG0F3	2E412F0A10	2002	4.2	4R70W	ECONOLINE	Undef	20
OHAG0GA	2E412G0A08	2002	4.2	4R70W	ECONOLINE	Undef	20
OHAG0GD	2F522G0505	2002	4.2	M5	PN98 2V	Undef	7
OHAG0HC	2F522H0505	2002	4.2	M5	PN98 2V	Undef	8
OHAG0HW	2E412H0B10	2002	4.2	4R70W	ECONOLINE	Undef	20
OHAG0J3	2E412J0B10	2002	4.2	4R70W	ECONOLINE	Undef	20
OHAG0KC	2E412K0B08	2002	4.2	4R70W	ECONOLINE	Undef	20
OHAG0L3	2E412L0B10	2002	4.2	4R70W	ECONOLINE	Undef	20
OHAK1C8	2F512C0516	2002	4.2	4R70W	2002.25 PN98 Cat Opt	Undef	8
OHAK1D5	2F512D0516	2002	4.2	4R70W	2002.25 PN98 Cat Opt	Undef	8
OHAK1G8	2F522G0516	2002	4.2	M5	2002.25 PN98 Cat Opt	Undef	7
OHAK1H8	2F522H0516	2002	4.2	M5	2002.25 PN98 Cat Opt	Undef	8
OIAH0EV	2E418E0511	2002	4.8	4R70W	ECONOLINE	Undef	7.5
OIAH0EW	2E414E0512	2002	5.4	4R70W	ECONOLINE	Undef	5
OMAD3Y2	2F514Y0508	2002	5.4	4R100	PN98 8C	Undef	3
OMAE1W2	2F514W0505	2002	5.4	4R100	P225 SuperCrew Harley-Davidson	Undef	3
PAAD6A1	9B1A-BA AC	1998	2.5	4R44E	PN-150/PN-151	4.1	8
PAAD6A6	9B1A-AA AFM	1998	2.5	4R44E	PN-150/PN-151	4.1	8
PAAD7A2	9B1M-BA F	2001	2.5	M5	PN-150/PN-151	Undef	3
PAAD7B3	9B1M-AB F	2001	2.5	M5	PN-150/PN-151	3.46/3.73	3
PAAD7C3	9B1M-AC F	2001	2.5	M5	PN-150/PN-151	Undef	3
PAAD8A2	9LAA-MAB	1999	3	M5	PN-150/PN-151	3.73	8
PAAD8A8	9LAA-MA B	1999	3	4R44E	PN-150/PN-151	3.73	2.5
PAAD8AA	9LAA-MA B	1999	3	4R44E	PN-150/PN-151	3.73	2.5
PAAD8AC	9LAA-MA F	2000	3	M5	PN-150/PN-151	3.73	8
PAAD8B7	9LAA-MB B	1999	3	4R44E	PN-150/PN-151	3.73/4.10	2.5
PAAD8BA	9LAA-MB F	2000	3	M5	PN-150/PN-151	3.73	8
PAAD8CA	9LAA-MC G	2000	3	M5	PN-150/PN-151 & PN150/51 99.25MY	4.1	8
PAADAAG	9LAA-MAG	1999	3	4R44E	PN150/51 99.25MY	3.73 & 4.10	2.5
PAADAAH	9LAA-MA J	2000	3	4R44E	PN-150/PN-151	3.73	2.5
PAADAAZ	9B1A-BA K	2001	2.5	5R44E	PN-150/PN-151	4.1	8
PAADAB8	9B1A-AB H	2001	2.5	4R44E	PN-150/PN-151	4.1	8
PAADAB9	9LAA-MB J	2000	3	4R44E	PN-150/PN-151	3.73/4.10	2.5
PAADACJ	9LAA-MC H	2000	3	4R44E	PN-150/PN-151 & PN150/51 99.25MY	4.1	2.5
PBAD7B8	9LTM-AB B	1998	4	M5	PN-150/PN-151	3.27/3.73	3
PBAD7B7	9LTM-BB BC	1998	4	M5	PN-150/PN-151	3.08/3.55	3
PBAD7B6	9LTA-AB BFM	1998	4	5R55E	PN-150/PN-151	3.56/3.73	8
PBAD7BZ	9LTA-BB BC	1998	4	5R55E	PN-150/PN-151	3.56/3.73	8
PBAD7C8	9LTM-AC BFM	1998	4	M5	PN-150/PN-151	3.56	3
PBAD7C7	9LTM-BC BC	1998	4	M5	PN-150/PN-151	3.08/3.55	3
PBAD7CC	9LTA-AC BFM	1998	4	5R55E	PN-150/PN-151	3.56	8
PBAD7CZ	9LTA-BC BC	1998	4	5R55E	PN-150/PN-151	3.56	8
PBAD9B5	9LTM-BB GC	2000 & 1999	4	M5	PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.08/3.55 & 3.27 & 3.27/3.73	3
PBAD9C5	9LTM-BC GC	2000 & 1999	4	M5	PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.08 & 3.08/3.55	3
PBAD9D5	9LTM-AD AFM	2000 & 1999	4	M5	PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.08/3.55 & 3.27/3.73	3

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	MINMPH
PBAD9E5	9LTM-AE AFM	2000 & 1999	4 M5		PN-150/151 SOHC & PN-150/PN-151 & PN150/51 99.25MY	3.55 & 3.08/3.55	3
PBADAB5	9LTA-BB H	2000 & 1999	4 5R55E		PN-150/151 SOHC & PN-150/PN-151 & PN150/51 99.25MY	3.55/3.73	8
PBADAC5	9LTA-BC H	2000 & 1999	4 5R56E		PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.55	8
PBADAD5	9LTA-AD F	2000 & 1999	4 5R56E		PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.55/3.73	8
PBADA E5	9LTA-AE F	2000 & 1999	4 5R56E		PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.55	8
PCAF5A3	9LTM-BA F & 9LTM-BA F8	2000 & 1999	4 M5		UN-150 & UN-150 CFF/LEV	3.27/3.55	3
PCAF5A6	9LTM-AA F	1999 & 2000	4 M5		UN-150 & UN-150 CFF & UN-180 CFF/LEV	3.27/3.55	3
PCAF5A8	9LTA-BA G	2000 & 1999	4 5R56E		UN-150 & UN-150 CFF & UN-150 CFF/LEV	3.73/4.10	6
PCAG4A2	9NEA-BA H	2000 & 1999	4 5R55E		UN-150 SOHC & UN160 SOHC CFF	3.27/3.55	2
PCAG848	0811A40507	2001	4 5R56E		P207 SOHC 2000.5 & U207 SOHC 2000.5	Undef	2
PCAG84Z	0U31A40506	2000	4 5R56E		UN-150 SOHC & UN160 SOHC CFF	3.27/3.55	2
PCAH04Z	0U31A40518	2001	4 5R56E		UN-150 SOHC	3.27/3.55	2
PDAE3AN	9LAM-BA J	2000	3 M5		PN-150/PN-151 FFV	3.73	3
PDAE3AU	9LAM-AA J	2000	3 M5		PN-150/PN-151 FFV	3.73	3
PDAE3BM	9LAM-BB J	2000	3 M5		PN-150/PN-151 FFV	3.73	3
PDAE3BS	9LAM-AB J	2000	3 M5		PN-150/PN-151 FFV	3.73	3
PDAE3CD	9LAM-AC H	2000	3 M5		PN-150/PN-151 FFV	4.1	3
PDAE3CX	9LAM-BC H	2000	3 M5		PN-150/PN-151 FFV	4.1	3
PDAE3HD	9LAA-BH C	1999	3 4R44E		PN-150/PN-151 FFV	3.73	2.5
PDAE3HM	9LAA-AH C	1999	3 4R44E		PN-150/PN-151 FFV	3.73	2.5
PDAE3JU	9LAA-AJ C	1999	3 4R44E		PN-150/PN-151 FFV	3.73/4.10	2.5
PDAE3JY	9LAA-BJ C	1999	3 4R44E		PN-150/PN-151 FFV	3.73/4.10	2.5
PDAE6H7	9LAA-AH K	2000	3 4R44E		PN-150/PN-151 FFV	3.73	2.5
PDAE6HX	9LAA-BH K	2000	3 4R44E		PN-150/PN-151 FFV	3.73	2.5
PDAE6J7	9LAA-BK J	2000	3 4R44E		PN-150/PN-151 FFV	4.1	2.5
PDAE6J8	9LAA-AJ K	2000	3 4R44E		PN-150/PN-151 FFV	3.73/4.10	2.5
PDAE6JY	9LAA-BJ K	2000	3 4R44E		PN-150/PN-151 FFV	3.73/4.10	2.5
PDAE6K8	9LAA-AK J	2000	3 4R44E		PN-150/PN-151 FFV	4.1	2.5
PEAV2G4	1U72AG0508	2002 & 2001	4 M5		U207	Undef	3
PEAV345	1U71A40508	2001	4 5R56E		U207 FFV	Undef	3
PEAV438	1R31A30512	2001	3 5R44E		PN-150/PN-151	3.73	8
PEAV43T	1R31B30512	2001	3 5R44E		PN-150/PN-151	3.73/4.10	8
PEAV44T	1R31C40518	2001	4 5R55E		PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/4.10	3
PEAV44U	1R31B40518	2001	4 5R55E		PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/4.10	3
PEAV44V	1R31A40518	2001	4 5R56E		PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55	3
PEAV44W	1R32C40518	2001	4 M5		PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/4.10	4
PEAV44X	1R32B40518	2001	4 M5		PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/4.10	4
PEAV44Y	1R32A40518	2001	4 M5		PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55	4
PEAV45S	1R32A40517	2002	4 M5		PN-150/151 SOHC	3.55	4
PEAV45S	1R31B40517	2002	4 5R56E		PN-150/151 SOHC	3.55/3.73/4.10	3
PEAV45V	1R31A40517	2002	4 5R56E		PN-150/151 SOHC	3.55	3
PEAV45X	1R31C40517	2002	4 5R56E		PN-150/151 SOHC	3.55/3.73/4.10	3

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	MPH
PEAV45Y	1R32C40517	2002	4 M5		PN-150/151 SOHC	3.55/3.73/4.10	4
PEAV46Z	1R32B40517	2002	4 M5		PN-150/151 SOHC	3.55/3.73/4.10	4
PEAV9F5	1R31AF0512	2001	3 5R55E		PN-150/PN-151 FFV	3.73	8
PEAV0S2	1U71PS0512	2001 & 2002	4 5R55E		U207 USPS & U207 USPS FFV	Undef	3
PEAW049	1S11A40510	2002 & 2001	4 5R55E		P207 Cat. Opt. & P207 SOHC & U207 SOHC	Undef	6
PEAW0G9	1U72AG0508	2002	4 M5		U207	Undef	3
PEAW0GY	1U71AG0510	2002 & 2001	4 5R55E		U207	Undef	6
PEAW0GZ	1U71AG0510	2002 & 2001	4 6R55E		U207	Undef	6
PEAW142	1S12A40508	2002	4 M5		P207 SOHC & U207 SOHC	Undef	3
PEAW1G3	1U72AG0508	2002	4 M5		U207	Undef	3
PLAC06M	9NEA-AB Y	2000	4 Undef		UN150 P8 SOHC FFV	3.55	2
PLAE4B5	9NEA-AB B	2000	4 Undef		UN150 PS SOHC FFV	3.55	2
PRAR325	1R32B20512	2002 & 2001	2.3 M5		PN-150/PN-151 & PN150/51 2001.25	4.1	3.5
PRAR32X	1R32B20M12	2002 & 2001	2.3 M5		PN-150/PN-151 & PN150/51 2001.25	Undef	3.5
PRAR32Y	1R32A20M12	2002 & 2001	2.3 M5		PN-150/PN-151 & PN150/51 2001.25	3.73	3.5
PRAR32Z	1R32A20512	2002 & 2001	2.3 M5		PN-150/PN-151 & PN150/51 2001.25	3.73	3.5
PYAE1F7	2S11AF0505	2002	4 5R55E		P207 FFV	Undef	3
PYAF245	2S12A40508	2002	4 M5		P207 SOHC 2002.5	Undef	3
PYAF246	2S11A40508	2002	4 5R55E		P207 SOHC 2002.5	Undef	3
PYAF2G2	2U72AG0M05	2002	4 M5		U207 2002.5	Undef	3
PYAF2G5	2U72AG0506	2002	4 M5		U207 2002.5	Undef	3
PYAF2G8	2U71AG0506	2002	4 5R55E		U207 2002.5	Undef	3
PYAF2GZ	2U71AG0M05	2002	4 5R55E		U207 2002.5	Undef	3
QBAA0AA	0AJ1AZ0A12	2000	2 F4E3		CT120 4V	3.74	3.5
QBAA0AC	0AJ2RZ0A13	2000	2 G5M		CT120 4V	4.1	3.5
QBAA0AW	0AJ2AZ0A12	2000	2 G5M		CT120 4V	4.1	3.5
QBAA0BC	0AJ1AZ0B12	2000	2 F4E3		CT120 4V	3.74	3.5
QBAA0BV	0AJ2RZ0B13	2000	2 G5M		CT120 4V	4.1	3.5
QBAA0BW	0AJ2AZ0B12	2000	2 G5M		CT120 4V	4.1	3.5
QBAC0ZY	1AJ2AZ0506	2001 & 2002	2 G5M		CT120 4V	4.1	3.5
QBAC1Z2	1AJ1AZ0507	2001 & 2002	2 F4E3		CT120 4V	3.74	3.5
QBAC1Z8	2AJ1BZ0515	2002	2 F4E3		CT120 4V CAT OPT	3.74	3.5
QBAC1ZZ	2AJ2BZ0515	2002	2 G5M		CT120 4V CAT OPT	4.1	3.5
QCAA0G3	9EQA-AG A	1999	2 F4E3		ESCORT/TRACER 2V	3.74	6
QCAA0G4	9EQM-AG A	1999	2 G5M		ESCORT/TRACER 2V	3.85	12
QCAA0GY	9EQM-BG BC	1999	2 MTX75		ESCORT/TRAC 2V LEV	3.85	12
QCAA0GZ	9EQA-BG A	1999	2 F4E3		ESCORT/TRACER 2V	3.74	6
QCAA0H3	9EQA-AH A	1999	2 F4E3		ESCORT/TRACER 2V	3.74	6
QCAA198	0AJ1A90505	2000	2 F4E3		CT120 2V	3.74	6
QCAA199	0AJ2A90506	2000	2 G5M		CT120 2V	3.85	12
QCAC135	1AJ1A90500	2001	2 F4E3		CT120 2V	3.74	6
QCAE133	2AJ1A90505	2002	2 F4E3		CT120 2V	Undef	6
RBAECC9	9LYA-AC F	1999	4.2 4R70W		ECONOLINE	Undef	20
RBAECCR	9LYA-BC F	1999	4.2 4R70W		ECONOLINE	Undef	20
RBAECDV	9LYA-AD F	1999	4.2 4R70W		ECONOLINE	Undef	20
RBAECE3	9LYA-AE F	1999	4.2 4R70W		ECONOLINE	Undef	20
RBAECET	9LYA-BE F	1999	4.2 4R70W		ECONOLINE	Undef	20
RBAECF9	9LYA-BF F	1999	4.2 4R70W		ECONOLINE	Undef	20
RBAECFA	9LYA-AF F	1999	4.2 4R70W		ECONOLINE	Undef	20
RBAECG3	9LYA-BG F	1999	4.2 4R70W		ECONOLINE	Undef	20
RBAEDAC	9VNM-AA F	1999	4.8 M5		PN102	Undef	12
RBAEDAG	9VNM-BA F	1999	4.8 M5		PN102	Undef	12
RBAEDBB	9VNA-BB FC	1999	4.8 4R70W		PN98	Undef	10
RBAEDBM	9VNM-AB F	1999	4.8 M5		PN102	Undef	12
RBAEDBN	9VNM-BB F	1999	4.8 M5		PN102	Undef	12
RBAEDC3	9VNM-AC FFB	1999	4.8 M5		PN98	Undef	12
RBAEDCB	9LYM-AC C	1999	4.2 M5		PN98	3.31/3.56	6

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	MINMPH
RBAEDCU	9VNM-BC FC	1999	4.6	M5	PN98	Undef	12
RBAEDCV	9VNA-BC FC	1999	4.6	4R70W	PN98	Undef	10
RBAEDDA	9VNM-AD FFB	1999	4.6	M5	PN98	Undef	12
RBAEDDB	9VNA-AD FFB	1999	4.6	4R70W	PN98	Undef	10
RBAEDDU	9VNM-BD FC	1999	4.6	M5	PN98	Undef	12
RBAEDEB	9VNM-AE BM	1999	4.6	M5	PN98	3.55	12
RBAEDEB	9VNA-AE FFB	1999	4.6	4R70W	PN98	Undef	10
RBAEDGC	9VNA-BG H	1999	4.6	4R70W	UN93	Undef	15
RBAEDGP	9VNA-BG H	1999	4.6	4R70W	UN93	Undef	15
RBAEDHB	9LYA-AH CM	1999	4.2	4R70W	PN98	3.55	8
RBAEDJ7	9VNA-AJ BM	1999	4.6	4R70W	PN98	3.55	10
RBAEDN9	9VNA-BN CC	1999	4.6	Undef	PN102	Undef	10
RBAEDPB	9VNA-AP CF	1999	4.6	Undef	PN102	Undef	10
RBAEEA5	9LYM-AA GB	1999	4.2	M5	PN98	Undef	7
RBAEEA8	9LYA-AA GFB	1999	4.2	4R70W	PN98	Undef	8
RBAEEAY	9LYM-BA GC	1999	4.2	M5	PN98	Undef	7
RBAEEAZ	9LYA-BA GC	1999	4.2	4R70W	PN98	Undef	8
RBAEEB5	9LYA-AB GFB	1999	4.2	4R70W	PN98	Undef	8
RBAEEBX	9LYM-BB GC	1999	4.2	M5	PN98	Undef	8
RBAEEBY	9LYA-BB GC	1999	4.2	4R70W	PN98	Undef	8
RBAEEBZ	9LYM-AB GFB	1999	4.2	M5	PN98	Undef	8
RDABCHZ	9VZA-AH FFM	1999	5.4	4R70W	ECONOLINE	Undef	3
RDABCLZ	9VZA-BL FC	1999	5.4	4R70W	ECONOLINE	Undef	3
RDABDC4	9VZA-AC GFB	1999	5.4	4R70W	PN98	Undef	3
RDABDD4	9VZA-AD HFB	1999	5.4	4R70W	PN98	Undef	3
READ0A7	9VAA-BA J	2001 & 2000 & 1999	5	4R70W	UN-150 & UN-150 CFF/LEV	3.73	4
RFAH5E9	0E414E0510	2000	5.4	4R70W	ECONOLINE	Undef	3
RFAH8D7	0E416D0A10	2000	4.6	4R70W	ECONOLINE	Undef	7.5
RFAH8E7	0E416E0B10	2000	4.6	4R70W	ECONOLINE	Undef	7.5
RGAF2G0	1FB1GP0G10	2001	4.6	4R70W	FORD/MERCURY	3.08	3
RGAF2G6	1FB1GX0G10	2001	4.6	4R70W	FORD/MERCURY	3.08	3
RGAF2GZ	1VC1TX0G10	2001	4.6	4R70W	LINC.TOWNCAR	3.08	3
RGAF2FX	2FB1UP0G00	2002	4.6	4R70W	FORD/MERCURY	3.08	3
RGAF2XH	2FB1UX0G00	2002	4.6	4R70W	FORD/MERCURY	3.08	3
RHAG7A5	0F514A0A08	2000	5.4	4R70W	PN98	Undef	3
RHAG7A8	0F516A0A08	2000	4.6	4R70W	PN98	Undef	10
RHAG7A9	0F526IA08	2000	4.6	M5	PN98	Undef	12
RHAG7B5	0F516B0A08	2000	4.6	4R70W	PN98	Undef	10
RHAG7HC	0F526HA08	2000	4.6	M5	PN98	Undef	12
RHAG7N5	0F514N0A08	2000	5.4	4R70W	PN98	Undef	3
RHAGB0C	0B316C0511	2000	4.6	4R70W	UN93	Undef	6
RHAGB09	0F516D0B11	2000	4.6	4R70W	PN98	Undef	10
RHAGBEA	0F516E0B11	2000	4.6	4R70W	PN98	Undef	10
RHAGBEZ	0F514E0B13	2000	5.4	4R70W	PN98	Undef	3
RHAGBFN	0F514F0A12	2000	5.4	Undef	PN98	Undef	3
RHAGBJ7	0F526J0B11	2000	4.6	M5	PN98	Undef	12
RHAGBK8	0F526K0B11	2000	4.6	M5	PN98	Undef	12
RHAGBML	0F516M0A11	2000	4.6	4R70W	PN98	Undef	10
RHAGBNH	0F516N0A11	2000	4.6	4R70W	PN98	Undef	10
RHAGBPE	0F526P0A11	2000	4.6	M5	PN98	Undef	12
RHAGBZF	0F526Q0A11	2000	4.6	M5	PN98	Undef	12
RIA2E3	1E414E0510	2001	5.4	4R70W	ECONOLINE	Undef	3
RNAH2D7	1F512D0510	2001	4.2	4R70W	PN98	Undef	8
RNAH2DZ	1E412D0A10	2001	4.2	4R70W	ECONOLINE	Undef	20
RNAH2E7	1E412E0A10	2001	4.2	4R70W	ECONOLINE	Undef	20
RNAH2F7	1E412F0A10	2001	4.2	4R70W	ECONOLINE	Undef	20
RNAH2G7	1E412G0A10	2001	4.2	4R70W	ECONOLINE	Undef	20
RNAH2H7	1E412H0B10	2001	4.2	4R70W	ECONOLINE	Undef	20
RNAH2J7	1E412J0B10	2001	4.2	4R70W	ECONOLINE	Undef	20
RNAH2K7	1E412K0B10	2001	4.2	4R70W	ECONOLINE	Undef	20
RNAH2L7	1E412L0B10	2001	4.2	4R70W	ECONOLINE	Undef	20
ROAF7A7	0F512A0A08	2000	4.2	4R70W	PN98	Undef	8
ROAF7B7	0F512B0A08	2000	4.2	4R70W	PN98	Undef	8



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ROAF7C7	0F512C0B08	2000	4.2	4R70W	PN98	Undef	8
ROAF7D2	0E412D0A07	2000	4.2	4R070W	ECONOLINE	Undef	20
ROAF7D7	0F512D0B08	2000	4.2	4R70W	PN98	Undef	8
ROAF7E2	0E412E0A07	2000	4.2	4R070W	ECONOLINE	Undef	20
ROAF7E7	0F522E0A07	2000	4.2	M5	PN98	Undef	7
ROAF7F6	0F522F0A07	2000	4.2	M5	PN98	Undef	8
ROAF7FZ	0E412F0A07	2000	4.2	4R070W	ECONOLINE	Undef	20
ROAF7G6	0F522G0B07	2000	4.2	M5	PN98	Undef	7
ROAF7GZ	0E412G0A07	2000	4.2	4R070W	ECONOLINE	Undef	20
ROAF7H2	0E412H0B07	2000	4.2	4R070W	ECONOLINE	Undef	20
ROAF7H8	0F522H0B07	2000	4.2	M5	PN98	Undef	8
ROAF7J4	0E412J0B07	2000	4.2	4R070W	ECONOLINE	Undef	20
ROAF7K4	0E412K0B07	2000	4.2	4R070W	ECONOLINE	Undef	20
ROAF7L2	0E412L0B07	2000	4.2	4R70W	ECONOLINE	Undef	20
RQAD6B3	0VC1FB0G10	2000	4.8	4R70W	LINC.TOWNCAR	3.08	8
RQAD6B7	0FB1FB0A11	2000	4.8	4R70W	FORD/MERCURY	2.73	8
RQAD6B8	0VC1FB0B11	2000	4.8	4R70W	LINC.TOWNCAR	3.08	8
RQAD6BT	0FB1FB0G10	2000	4.8	4R70W	FORD/MERCURY	3.08	8
RQAD6BU	0VC1FB0A11	2000	4.8	4R70W	LINC.TOWNCAR	3.08	8
RQAD6BV	0FB1FB0B11	2000	4.8	4R70W	FORD/MERCURY	2.73	8
RQAD6BW	0FB1FB0A11	2000	4.8	4R70W	FORD/MERCURY	2.73	8
RQAD6H7	0FB1FH0A11	2000	4.8	4R70W	FORD/MERCURY	3.55	8
RQAD6H8	0VC1FH0B11	2000	4.8	4R70W	LINC.TOWNCAR	3.55	8
RQAD6HW	0FB1FH0B11	2000	4.8	4R70W	FORD/MERCURY	3.55	8
RQAD6HX	0VC1FH0A11	2000	4.8	4R70W	LINC.TOWNCAR	3.55	8
RQAD6P7	0FB1FP0A11	2000	4.8	4R70W	FORD/MERCURY	3.27	8
RQAD6PZ	0FB1FP0G10	2000	4.8	4R70W	FORD/MERCURY	3.27	8
RTA11P2	1ZE13P0610	2001	3.8	4R70W	MUSTANG	3.27	3
RTA11P3	1ZE23P0A10	2001	3.8	T5	MUSTANG	3.27	3
RTA11P4	1ZE13P0A10	2001	3.8	4R70W	MUSTANG	3.27	3
RTA11PZ	1ZE23P0610	2001	3.8	T5	MUSTANG	3.27	3
RTAJ0F4	2ZE2MF0600	2002	3.8	T45	MUSTANG G8	3.27	3
RTAJ0FZ	2ZE1MF0600	2002	3.8	Undef	MUSTANG G8	3.27	3
RTAJ0R4	2ZE2CR0A05	2002	3.8	Undef	MUSTANG Cost Save	Undef	3
RTAJ0RZ	2ZE1CR0A05	2002	3.8	Undef	MUSTANG Cost Save	Undef	3
RVAF3C8	1ZE24C0607	2001	4.8	TR3680	MUSTANG COBRA	3.27	0
RVAFAT8	1ZE1GT0610	2001	4.8	4R70W	MUSTANG GT	3.27	4
RWAI1CL	1B318C0505	2001	4.8	4R70W	2001.5 UN93 Cat Opt	Undef	8
RWAI2D7	1F518D0B12	2001	4.8	4R70W	2001.5 PN98 Cat Opt 5.4PF5	Undef	8
RWAI2DC	1B318D0510	2001	4.8	4R70W	2001.5 UN93 Cat Opt	Undef	8
RWAI2DH	2B318D0505	2002	4.8	4R70W	2001.5 UN93 Cat Opt & UN93 2V	Undef	4
RWAI2E6	1F514E0B11	2001	5.4	4R70W	PN98	Undef	3
RWAI2E7	1F518E0B12	2001	4.8	4R70W	2001.5 PN98 Cat Opt 5.4PF5	Undef	8
RWAI2EZ	1F514E0B11	2001	5.4	4R70W	PN98	Undef	3
RWAI2F5	1F514F0A11	2001	5.4	4R70W	PN98	Undef	3
RWAI2F7	1F514F0A11	2001	5.4	4R70W	PN98	Undef	3
RWAI2M7	1F518M0A12	2001	4.8	4R70W	2001.5 PN98 Cat Opt 6.4PF5	Undef	8
RWAI2N7	1F518N0A12	2001	4.8	4R70W	2001.5 PN98 Cat Opt 6.4PF5	Undef	8
RYAF0T3	2ZE1GT0506	2002	4.8	4R070W	MUSTANG GT	3.27	4
SAAF6B3	0AK15S0513	2000	2	FN	FOCUS C170 SPI	3.907	7
SAAF6Z6	0AK15Z0512	2000	2	FN	FOCUS C170 ZETEC	3.907	6
SAAF6ZB	0AK15Z0512	2000	2	FN	FOCUS C170 ZETEC	3.907	6
SBAF8S7	1AK1A80A18	2002 & 2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT	3.733	7
SBAF8S8	1AK1A80510	2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT	3.688	7
SBAF8S9	1AK1A80A10	2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT	3.688	7
SBAF8Z3	1AK1AZ0610	2001	2	4F27E	FOCUS C170 ZETEC	3.907	6
SBAF8Z6	2AK1AZ0M00	2002	2	Undef	FOCUS MEXICO	Undef	6
SBAF8Z7	1AK1AZ0A10	2001	2	4F27E	FOCUS C170 ZETEC	3.907	6
SBAF8Z8	1AK1AZ0610	2001	2	4F27E	FOCUS C170 ZETEC	3.907	6
SBAF8Z9	1AK1AZ0A18	2002 & 2001	2	4F27E	FOCUS C170 ZETEC	3.958	6

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	MINMPH
SBAF6ZZ	1AK1AZ0A10	2001		24F27E	FOCUS C170 ZETEC	3.907	6
SBAF784	1AK1AS0617	2002	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT	3.733	7
SBAF786	2AK1B80A10	2002		24F27E	FOCUS SPI CAT OPT	3.883	7
SBAF7Z4	1AK1AZ0517	2002		24F27E	FOCUS C170 ZETEC	3.956	6
SBAF7ZB	2AK1BZ0A10	2002		24F27E	FOCUS ZETEC CAT OPT	3.904	6

Created by: PC-CFR, Version, 5.0-4 on: 10/11/2001 at 12:07:12 PM  
Model Year - 2001  
All Engine sizes  
All Transmissions  
All Vehicles

Parameters

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IDC\_MIN  
IDC\_MAX  
GI  
VSCLE

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	IDC_MIN	IDC_MAX	GI	VISCLP
BWAK3N2	1DD14N0510	2001	3	4F50N	TAU/SABLE 4V	3.68	0	0	0	1
BWAK4N8	1DD12N0510	2001	3	4F50N	TAU/SABLE 2V	3.77	0	0	0	1
BWAK4S8	1DD12S0510	2001	3	AX4S	TAU/SABLE 2V	3.77	0	0	0	1
BWAK8N3	1DD1FN0512	2001	3	4F50N	D188 - FFV Ethanol	3.77	0	0	0	1
BWAK8S3	1DD1F80512	2001	3	AX4S	D188 - FFV Ethanol	3.77	0	0	0	1
CSAH1G4	1FB1NG0505	2001	4.8	4R70W	FORD Nat. Gas	2.73	0	0	0	1
CSAH1V4	9VNA-AV A	2001	4.8	4R70W	FORD Nat. Gas	2.73	0	0	0	1
DVAN823	0M12A20512	2001	2	G6M	U204	Undef	0	0	0	1
DVAN824	0M12B20512	2001	2	G5M	U204	Undef	0	0	0	1
DVAN82U	0M12A20512	2001	2	G6M	U204	Undef	0	0	0	1
DVAN82Y	0M11A20513	2001	2	CD4E	U204	Undef	0	0	0	1
FDBA0CM	1A31NC0610	2001	3.8	AX4N	WIN128 CAT OPT & WIN128 CAT OPT	3.58	0	0	0	1
FDBA0S7	1A31A90G12	2001	3.8	4F50N	WIN128	3.58	0	0	0	1
FDBA0S9	1A31A90612	2001	3.8	4F50N	WIN128	3.58	0	0	0	1
FDBA0SU	1A31AS0Q13	2001	3.8	Undef	WIN128	Undef	0	0	0	1
FDBA0SX	1A31A90G12	2001	3.8	4F50N	WIN128	3.58	0	0	0	1
FEA10N3	1JC1BN0511	2001	4.8	4F50N	CONTINENTAL	3.66	0	0	0	0
JAA86B9	9LDA-BBH	2001	3	5R55N	DEW88	3.07	N/A	N/A	N/A	0
JBA83CZ	9LDM-ACG	2001	3	M5GR	DEW88 M/T	3.07	N/A	N/A	N/A	0
KBAT1DB	1ZN25D0510	2001	2.5	MTX	COUGAR SW184	4.08	0	0	0	6
KBAT1DC	1ZN27D0510	2001	2.5	MTX	COUGAR SW184	4.08	0	0	0	6
KBAT1DD	1ZN2AD0510	2001	2.5	MTX	COUGAR SW184	Undef	0	0	0	5
KBAT1DH	1ZN1AD0510	2001	2.5	CD4E	COUGAR SW184	3.77	0	0	0	0
KBAT1DN	1ZN1ED0E10	2001	2.5	CD4E	COUGAR SW184	3.77	0	0	0	0
KBAT1DP	1ZN1SD0510	2001	2.5	CD4E	COUGAR SW184	3.77	0	0	0	0
KBAT1DQ	1ZN2ED0E10	2001	2.5	MTX	COUGAR SW184	Undef	0	0	0	5
KIAB4Z4	0ZN2AZ0510	2001	2	MTX76	COUGAR SW184	3.82	0	0	0	10
KRAF6S5	1AK2A90511	2001	2.0 & 3.8	B5	FOCUS C170 SPI & WIN Cat OPT	3.733	0	0	0	1
KRAF6S8	1AK2A90A11	2001	2.0 & 3.8	B5	FOCUS C170 SPI & WIN Cat OPT	3.733	0	0	0	1
KRAF6Z4	1AK2AZ0508	2001	2	MTX	FOCUS C170 ZETEC	3.82	0	0	0	1
KRAF6ZV	1AK2AZ0518	2001	2	MTX	FOCUS C170 ZETEC	3.82	0	0	0	1
MMAF1DC	1L114D0B06	2001	5.4	4R100	UW137	Undef	0	0	0	3
MMAF1H4	1E414H0505	2001	5.4	4R100	ECONOLINE-NGV	Undef	0	0.98999017	0	3
MMAF1H8	1E414H0510	2001	5.4	4R100	ECONOLINE-NGV	Undef	0	0.98999017	0	3
MMAF1HJ	1E418H0B10	2001	6.8	4R100	ECONOLINE	Undef	0	0	0	1
MMAF1J6	1E414J0B05	2001	5.4	4R100	ECONOLINE	Undef	0	0	0	3
MMAF1Q9	1F724Q0M05	2001	5.4	M4	P131	Undef	0	0	0	0
MMAF1Z8	1E414K0510	2001	5.4	4R100	ECONOLINE-NGV	Undef	0	0.98999017	0	3
MMAH0A8	1F728A0B15	2001	6.8	M6	P131	Undef	0	0	0	1
MMAH0AD	1F728A0B05	2001	6.8	M6	P131	Undef	0	0	0	1
MMAH0CL	1F717C0B15	2001	6.8	4R100	P131	Undef	0	0	0	1
MMAH0CR	1F718C0B15	2001	6.8	4R100	P131	Undef	0	0	0	1
MMAH0CW	1F717C0B10	2001	6.8	4R100	P131	Undef	0	0	0	1
MMAH0CX	1F718C0B10	2001	6.8	4R100	P131	Undef	0	0	0	1

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	IDC_MIN	IDC_MAX	GI	VISCLP	
MMAH00C	1F714D0B15	2001	5.4	4R100	P131	Undef	0	0	0	3	
MMAH00D	1L118D0B15	2001	6.8	4R100	UW137	Undef	0	0	0	1	
MMAH00I	1L118D0B10	2001	6.8	4R100	UW137	Undef	0	0	0	1	
MMAH00Z	1L114D0B15	2001	5.4	4R100	UW137	Undef	0	0	0	3	
MMAH0N7	1E418N0510	2001	6.8	4R100	ECONOLINE	Undef	0	0	0	1	
MMAH0NA	1L118N0A15	2001	6.8	4R100	UW137	Undef	0	0	0	1	
MMAH0NB	1F714N0B15	2001	5.4	4R100	P131	Undef	0	0	0	0	
MMAH0NR	1E414N0A10	2001	5.4	4R100	ECONOLINE	Undef	0	0	0	3	
MMAH0NS	1L114N0A15	2001	5.4	4R100	UW137	Undef	0	0	0	0	
MMAH0NT	1F714N0A15	2001	5.4	4R100	P131	Undef	0	0	0	0	
MMAH0NU	1F717N0515	2001	6.8	4R100	P131	Undef	0	0	0	1	
MMAH0NV	1F718N0515	2001	6.8	4R100	P131	Undef	0	0	0	1	
MMAH0P6	1E418P0A10	2001	6.8	4R100	ECONOLINE	Undef	0	0	0	1	
MMAH0P7	1F718P0A15	2001	6.8	4R100	P131	Undef	0	0	0	1	
MMAH0P8	1F724P0A15	2001	5.4	M5	P131	Undef	0	0	0	0	
MMAH0PY	1F717P0A15	2001	6.8	4R100	P131	Undef	0	0	0	1	
MMAH0Q6	1E418Q0B10	2001	6.8	4R100	ECONOLINE	Undef	0	0	0	1	
MMAH0R7	1E414R0B10	2001	5.4	4R100	ECONOLINE	Undef	0	0	0	3	
MMAH0R8	1E418R0B10	2001	6.8	4R100	ECONOLINE	Undef	0	0	0	1	
MMAH0RW	1F717R0B15	2001	6.8	4R100	P131	Undef	0	0	0	1	
MMAH0RX	1F718R0B15	2001	6.8	4R100	P131	Undef	0	0	0	1	
MMAH0T7	1F718T0B15	2001	6.8	4R100	P131	Undef	0	0	0	1	
MMAH0TY	1F717T0B15	2001	6.8	4R100	P131	Undef	0	0	0	1	
MMAH0U5	1F728U0M00	2001	6.8	M5	P131	4.68/5.38	0	0	0	0	
MMAH0U6	1F728U0515	2001	6.8	M5	P131	Undef	0	0	0	0	
MMAH0U7	1E414U0B10	2001	5.4	4R100	ECONOLINE	Undef	0	0	0	3	
MMAH0V7	1F728V0A15	2001	6.8	M5	P131	Undef	0	0	0	0	
MMAH0X7	1E414X0510	2001	5.4	4R100	ECONOLINE	Undef	0	0	0	3	
MMAH0Y7	1E414Y0510	2001	5.4	4R100	ECONOLINE	Undef	0	0	0	3	
MNAE0Y6	1F514Y0505	2001	5.4	4R100	PN96 SC	Undef	0	0	0	3	
MQAH1BS	1B316B0510	2001	6.4	4R100	UN173 4V	Undef	0	0	0	3	
MQAH1DE	1F514D0B10	2001	5.4	4R100	PN96	Undef	0	0	0	3	
MQAH1HB	1F514H0A10	2001	5.4	4R100	PN96	3031/3.55/3.73	0	0	0	3	
MQAH1MB	1F514M0B10	2001	5.4	4R100	PN96	Undef	0	0	0	3	
PAAD7A2	9B1M-BA F	2001	2.5	M5	PN-150/PN-151	Undef	0.9899017	0.9899017	0	0	
PAAD7B3	9B1M-AB F	2001	2.5	M5	PN-150/PN-151	3.45/3.73	0.9899017	0.9899017	0	0	
PAAD7C3	9B1M-AC F	2001	2.5	M5	PN-150/PN-151	Undef	0.9899017	0.9899017	0	0	
PAADAAZ	9B1A-BA K	2001	2.5	5R44E	PN-150/PN-151		4.1	0.9899017	0.9899017	0	0
PAADAB8	9B1A-AB H	2001	2.5	4R44E	PN-150/PN-151		4.1	0.9899017	0.9899017	0	0
PCAG846	0S11A40507	2001	4	6R65E	P207 SOHC 2000.5 & U207 SOHC 2000.5	Undef	0	0	0	0	
PCAH04Z	0U31A40518	2001	4	6R65E	UN-180 SOHC	3.27/3.55	0	0	0	0	
PEAV246	1S12A40608	2001	4	M5	P207 SOHC & U207 SOHC	Undef	0	0	0	3	
PEAV2G4	1U72AG0506	2001	4	M5	U207	Undef	0	0	0	3	
PEAV345	1U71A40508	2001	4	6R65E	U207 FFV	Undef	0	0	0	3	

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	IDC_MIN	IDC_MAX	GI	VSCLP
PEAV3F4	1S11AF0500	2001	4	5R55E	P207 FFV & U207 SOHC	Undef	0	0	0	3
PEAV43S	1R31A30612	2001	3	5R44E	PN-150/PN-151	3.73	0	0	0	8
PEAV43T	1R31B30512	2001	3	5R44E	PN-150/PN-151	3.73/4.10	0	0	0	8
PEAV449	1S11A40510	2001	4	5R55E	P207 Cat. Opt. & U207 SOHC & P207 SOHC	Undef	0	0	0	3
PEAV44T	1R31C40518	2001	4	5R55E	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/4.10	0	0	0	3
PEAV44U	1R31B40518	2001	4	5R55E	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/4.10	0	0	0	3
PEAV44V	1R31A40518	2001	4	5R55E	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55	0	0	0	3
PEAV44W	1R32C40518	2001	4	M5	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/4.10	0	0	0	3
PEAV44X	1R32B40518	2001	4	M5	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/4.10	0	0	0	3
PEAV44Y	1R32A40518	2001	4	M5	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55	0	0	0	3
PEAV4G7	1U71AG0610	2001	4	5R55E	U207	Undef	0	0	0	3
PEAV9F5	1R31AF0512	2001	3	5R55E	PN-150/PN-151 FFV	3.73	0	0	0	8
PEAV9S2	1U71P80512	2001	4	5R55E	U207 USPS & U207 USPS FFV	Undef	0	0	0	3
PRAQ25R	1R32A20510	2001	2.3	M5	PN150/51 2001.25	Undef	0	0	0	2
PRAQ25V	1R32B20510	2001	2.3	M5	PN150/51 2001.25	Undef	0	0	0	2
PRAQ2MD	1R32B20M10	2001	2.3	M5	PN150/51 2001.25	Undef	0	0	0	2
PRAQ2MH	1R32A20M10	2001	2.3	M5	PN150/51 2001.25	Undef	0	0	0	2
PRAF324	1R31A20511	2001	2.3	5R44E	PN150/51 2001.25	4.1	0.049987789	0.049987789	0.0078125	2
QBAC0ZV	1AJ2AZ0606	2001	2	G5M	CT120 4V	4.1	0	0	0	1
QBAC1Z2	1AJ1AZ0607	2001	2	F4E3	CT120 4V	3.74	0	0	0	1
QCAC1S5	1AJ1AS0500	2001	2	F4E3	CT120 2V	3.74	0	0	0	0
READ0A7	9VAA-BA J	2001	6	4R70W	JN-150	3.73	0.1499939	0.68999017	0	0
RGAF25E	1FB1GB0510	2001	4.6	4R70W	FORD/MERCURY	2.73	0	0	0	1
RGAF28R	1VC1PB0606	2001	4.6	4R70W	ENFN CAT OPT	3.08	0	0	0	1
RGAF28S	1FB1PB0606	2001	4.6	4R70W	ENFN CAT OPT	2.73	0	0	0	1
RGAF28W	1VC1SB0611	2001	4.6	4R70W	LINC.TOWNCAR	3.08	0	0	0	1
RGAF2GD	1FB1GP0610	2001	4.6	4R70W	FORD/MERCURY	3.08	0	0	0	1
RGAF2GF	1FB1GX0610	2001	4.6	4R70W	FORD/MERCURY	3.08	0	0	0	1
RGAF2GZ	1VC1TX0610	2001	4.6	4R70W	LINC.TOWNCAR	3.08	0	0	0	1
RGAF2H6	1FB1HH0611	2001	4.6	4R70W	FORD/MERCURY	3.27	0	0	0	1
RGAF2HF	1FB1GH0510	2001	4.6	4R70W	FORD/MERCURY	3.55	0	0	0	1
RGAF2HK	1VC1LH0511	2001	4.6	4R70W	LINC.TOWNCAR	3.55	0	0	0	1
RGAF2HR	1VC1PH0508	2001	4.6	4R70W	ENFN CAT OPT	3.55	0	0	0	1
RGAF2H8	1FB1PH0508	2001	4.6	4R70W	ENFN CAT OPT	3.27	0	0	0	1
RGAF2ME	1FB1GX0M10	2001	4.6	4R70W	FORD/MERCURY	2.73	0	0	0	1
RGAF2PF	1FB1GP0511	2001	4.6	4R70W	FORD/MERCURY	3.27	0	0	0	1
RGAF2PY	1FB1PP0506	2001	4.6	4R70W	ENFN CAT OPT	3.27	0	0	0	1
RGAF2XR	1FB1PX0M06	2001	4.6	4R70W	ENFN CAT OPT	2.73	0	0	0	1
RIA2E3	1E414E0610	2001	6.4	4R70W	ECONOLINE	Undef	0	0	0	3
RNAH2D7	1F512D0610	2001	4.2	4R70W	PN88	Undef	0	0	0	1
RNAH2DZ	1E412D0A10	2001	4.2	4R70W	ECONOLINE	Undef	0	0	0	1
RNAH2E7	1E412E0A10	2001	4.2	4R70W	ECONOLINE	Undef	0	0	0	1
RNAH2F7	1E412F0A10	2001	4.2	4R70W	ECONOLINE	Undef	0	0	0	1

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	IDC_MIN	IDC_MAX	GI	V8CLP
RNAH2G7	1E412G0A10	2001	4.2	4R70W	ECONOLINE	Undef	0	0	0	1
RNAH2H7	1E412H0B10	2001	4.2	4R70W	ECONOLINE	Undef	0	0	0	1
RNAH2J7	1E412J0B10	2001	4.2	4R70W	ECONOLINE	Undef	0	0	0	1
RNAH2K7	1E412K0B10	2001	4.2	4R70W	ECONOLINE	Undef	0	0	0	1
RNAH2L7	1E412L0B10	2001	4.2	4R70W	ECONOLINE	Undef	0	0	0	1
RTA11P2	1ZE13P0610	2001	3.8	4R70W	MUSTANG	3.27	0	0	0	2
RTA11P3	1ZE23P0A10	2001	3.8	T5	MUSTANG	3.27	0	0	0	2
RTA11PY	1ZE13P0A10	2001	3.8	4R70W	MUSTANG	3.27	0	0	0	2
RTA11PZ	1ZE23P0510	2001	3.8	T5	MUSTANG	3.27	0	0	0	2
RVAF3C4	1ZE24C0607	2001	4.6	TR3650	MUSTANG COBRA	3.27	0	0	0	2
RVAFAT9	1ZE2GT0510	2001	4.6	TR3650	MUSTANG GT	3.27	0	0	0	2
RVAFAT8	1ZE1GT0510	2001	4.6	4R70W	MUSTANG GT	3.27	0	0	0	2
RVAFB4	1ZE2GB0510	2001	4.6	TR3650	2001.5 Mustang Built	3.27	0	0	0	2
RWA11CL	1B316C0605	2001	4.6	4R70W	2001.5 UN93 Cat Opt	Undef	0	0	0	3
RWA12D5	1F516D0B12	2001	4.6	4R70W	2001.5 PN98 Cat Opt 5.4PF5	Undef	0	0	0	3
RWA12DC	1B316D0510	2001	4.6	4R70W	2001.5 UN93 Cat Opt	Undef	0	0	0	3
RWA12E6	1F516E0B12	2001	4.6	4R70W	2001.5 PN98 Cat Opt 5.4PF5	Undef	0	0	0	3
RWA12E6	1F514E0B11	2001	5.4	4R70W	PN98	Undef	0	0	0	3
RWA12F6	1F514F0A11	2001	5.4	4R70W	PN98	Undef	0	0	0	3
RWA12M5	1F516M0A12	2001	4.6	4R70W	2001.5 PN98 Cat Opt 5.4PF5	Undef	0	0	0	3
RWA12N5	1F516N0A12	2001	4.6	4R70W	2001.5 PN98 Cat Opt 5.4PF5	Undef	0	0	0	3
SBAF897	1AK1A50A18	2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT	3.733	0	0	0	1
SBAF89W	1AK1A90516	2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT	3.733	0	0	0	1
SBAF88X	1AK1A50510	2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT	3.686	0	0	0	1
SBAF88Y	1AK1A50A10	2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT	3.686	0	0	0	1
SBAF823	1AK1AZ0510	2001	2	4F27E	FOCUS C170 ZETEC	3.907	0	0	0	1
SBAF827	1AK1AZ0516	2001	2	4F27E	FOCUS C170 ZETEC	3.858	0	0	0	1
SBAF82W	1AK1AZ0A10	2001	2	4F27E	FOCUS C170 ZETEC	3.907	0	0	0	1
SBAF82X	1AK1AZ0510	2001	2	4F27E	FOCUS C170 ZETEC	3.907	0	0	0	1
SBAF82Y	1AK1AZ0A16	2001	2	4F27E	FOCUS C170 ZETEC	3.858	0	0	0	1
SBAF82Z	1AK1AZ0A10	2001	2	4F27E	FOCUS C170 ZETEC	3.907	0	0	0	1

Created by: PC-CPR, Version, 6.0-1 on: 2/13/2002 at 6:53:21 AM  
All Model Years  
All Engine sizes  
All Transmissions  
All Vehicles

Parameters

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VSCLP  
GI  
IDC\_MIN  
IDC\_MAX



Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
AABMOBA	5-58B R10FB	1995	4	4R55E	UN-105	3.27/3.73 & 3.55	N/A	N/A	N/A	N/A
AABMORW	5-58R R10C	1995	4	4R55E	UN-105	3.27 & 3.55 & 3.27/3.73	N/A	N/A	N/A	N/A
AABMAB2	5-58B R10FB	1995	4	4R55E	UN-105	3.27/3.73 & 3.55	N/A	N/A	N/A	N/A
AABMAR2	5-58R R10C	1995	4	4R55E	UN-105	3.27 & 3.27/3.73 & 3.55	N/A	N/A	N/A	N/A
AABNOB4	5-57B R06FB	1995	4	M5	UN-105	3.27/3.55/3.73	N/A	N/A	N/A	N/A
AABNOR3	5-57R R05C	1995	4	M5	UN-105	3.27/3.55/3.73	N/A	N/A	N/A	N/A
ACAQBLK	4-54L R10FB	1994	5	E40D	F-SER/BRONCO	3.08/3.55	N/A	N/A	N/A	N/A
ACAQBLO	5-54L R10FB	1995	5	E40D	F-SER/BRONCO		3.55	N/A	N/A	N/A
ACAQBLP	4-54L R10FB	1994	5	E40D	F-SER/BRONCO	3.08/3.55	N/A	N/A	N/A	N/A
ACAQSMJ	4-54M R10FB	1994	5	E40D	F-SER/BRONCO		4.1	N/A	N/A	N/A
ACAQBMM	4-54M R10FB	1994	5	E40D	F-SER/BRONCO		4.1	N/A	N/A	N/A
ACAQBMP	5-54M R10FB	1995	5	E40D	F-SER/BRONCO		4.1	N/A	N/A	N/A
ACAQBPS	4-54P R10C	1994	5	E40D	F-SER/BRONCO		3.55	N/A	N/A	N/A
ACAQBPL	4-54P R10C	1994	5	E40D	F-SER/BRONCO		3.55	N/A	N/A	N/A
ACAQBPO	5-54P R10C	1995	5	E40D	F-SER/BRONCO		3.55	N/A	N/A	N/A
ACAQBOS	4-54Q R10C	1994	5	E40D	F-SER/BRONCO		4.1	N/A	N/A	N/A
ACAQBON	4-54Q R10C	1994	5	E40D	F-SER/BRONCO		4.1	N/A	N/A	N/A
ACAQBOR	5-54Q R10C	1995	5	E40D	F-SER/BRONCO		4.1	N/A	N/A	N/A
ADBQ2BE	5-12B M05M	1995	2.5	CD4E	CDW27		3.77	N/A	N/A	N/A
ADBQ2BG	5-11B R11FB	1995	2.5	MTX75	CDW27		4.06	N/A	N/A	N/A
ADBQ2TD	5-11T R11S	1995	2.5	MTX75	CDW27		4.06	N/A	N/A	N/A
ADBQ2TJ	5-12T R11S	1995	2.5	CD4E	CDW27		3.77	N/A	N/A	N/A
ADBQAM5	5-12B M06M	1995	2.5	CD4E	CDW27		3.77	N/A	N/A	N/A
ADBQATB	5-12T R11S	1995	2.5	CD4E	CDW27		3.77	N/A	N/A	N/A
AFANDA3	5-03A M05M	1995	2	MTX75	CDW27		3.82	127.5	0.43000001	-0.2
AFANDA6	5-03A R06FB	1995	2	MTX75	CDW27		3.82	127.5	0.43000001	-0.2
AFANDAD	5-04A R10FB	1995	2	CD4E	CDW27		3.82	127.5	0.43000001	-0.2
AFANDP8	5-03P R05C	1995	2	MTX75	CDW27		3.82	127.5	0.43000001	-0.2
AFANDPC	5-04P R10C	1995	2	CD4E	CDW27		3.82	127.5	0.43000001	-0.2
AFANDPH	5-04P R10C	1995	2	CD4E	CDW27		3.82	127.5	0.43000001	-0.2
AFANEAG	5-04A R10FB	1995	2	CD4E	CDW27		3.82	127.5	0.43000001	-0.2
AFANEAH	5-04A R10FB	1995	2	CD4E	CDW27		3.82	127.5	0.43000001	-0.2
AFANEAY	5-04A R10FB	1995	2	CD4E	CDW27		3.82	127.5	0.43000001	-0.2
AFANEAZ	5-04A R10FB	1995	2	CD4E	CDW27		3.82	127.5	0.43000001	-0.2
AFANEP5	5-04P R10C	1995	2	CD4E	CDW27		3.82	127.5	0.43000001	-0.2
AGANFBD	6-54B R11FB	1995	6.8	E40D	F-SER/BRONCO		3.55	N/A	N/A	N/A
AGANFJG	6-52J R10SN	1995	4.9	E40D	ECONOLINE		3.73	N/A	N/A	N/A
AGANFKD	6-54K R11FB	1995	6.8	E40D	ECONOLINE		3.73	N/A	N/A	N/A
AGANFKZ	6-52K R10SN	1995	4.9	E40D	ECONOLINE	3.08 & 3.31 & 3.08/3.55	N/A	N/A	N/A	N/A
AGANFPA	6-54P R11C	1995	5	E40D	F-SER/BRONCO		3.55	N/A	N/A	N/A
AGANFOA	6-54Q R11C	1995	5	E40D	F-SER/BRONCO		4.1	N/A	N/A	N/A
AGANFRX	6-54R R11C	1995	6.8	E40D	ECONOLINE	3.55/3.73	N/A	N/A	N/A	N/A
AGANFTD	6-54T R11C	1995	5.8	E40D	F-SER/BRONCO		3.55	N/A	N/A	N/A
AGANNE9	6-54E R11FB	1995	6.8	E40D	F-SER/BRONCO		4.1	N/A	N/A	N/A
AGANNH8	6-54H R11FB	1995	5.8	E40D	F-SER/BRONCO		4.1	N/A	N/A	N/A
AGANNJ5	6-72J R05SN	1995	4.9	C8	F-SERIES		4.1	N/A	N/A	N/A

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	VSCLP	GN	IDC MIN	IDC MAX
AGANNL8	8-84L R11FB	1998	5.8	E4OD	ECONOLINE	3.73	N/A	N/A	N/A	N/A
AGANNLA	8-82L R06SN	1998	4.9	C8	ECONOLINE	3.08/3.65 & 3.54/3.73 & 3.31	N/A	N/A	N/A	N/A
AGANNM6	8-72M R06SN	1998	4.9	C8	ECONOLINE	3.73	N/A	N/A	N/A	N/A
AGANNN3	8-88N R06C	1996 & 1997	7.5	C8	F-SERIES	3.55/4.10	N/A	N/A	N/A	N/A
AGANNP4	8-87P R10C	1996 & 1997	7.5	M6	F-SERIES	3.55/4.10	N/A	N/A	N/A	N/A
AGANNP5	8-88P R10C	1996 & 1997	7.5	E4OD	F-SERIES	3.55/4.10	N/A	N/A	N/A	N/A
AGANNP6	7-87P R00C	1997	7.5	M6	F-SERIES	3.55/4.10	N/A	N/A	N/A	N/A
AGANNP7	7-88P R00C	1997	7.5	E4OD	F-SERIES	3.55 & 3.55/4.10	N/A	N/A	N/A	N/A
AGANNQ3	8-97Q R06C	1996 & 1997	7.6	M6	F-SERIES	4.10 & 3.55/4.10	N/A	N/A	N/A	N/A
AGANNQ5	8-98Q R10C	1996 & 1997	7.5	E4OD	F-SERIES	3.55 & 3.55/4.10	N/A	N/A	N/A	N/A
AGANNR5	8-88R R10C	1996	7.5	E4OD	ECONOLINE	4.1	N/A	N/A	N/A	N/A
AGANNR8	8-76R R11C	1996	5.8	E4OD	ECONOLINE	3.73/4.09	N/A	N/A	N/A	N/A
AGANNS5	8-88S R10C	1996	7.5	E4OD	ECONOLINE	3.55	N/A	N/A	N/A	N/A
AGANNS6	8-84S R11C	1996	5.8	E4OD	F-SER/BRONCO	4.1	N/A	N/A	N/A	N/A
AGANNS8	8-78S R11C	1996	5.8	E4OD	F-SER/BRONCO	4.1	N/A	N/A	N/A	N/A
AGANNTY	8-88T R10C	1996 & 1997	7.5	C8	F-SERIES	3.55/4.10	N/A	N/A	N/A	N/A
AGANNTZ	8-78T R11C	1996	5.8	E4OD	F-SER/BRONCO	3.55	N/A	N/A	N/A	N/A
AGANQJ6	8-54J R12FB	1996	5	E4OD	F-SER/BRONCO	3.55	N/A	N/A	N/A	N/A
AGANQM6	8-54M R12FB	1996	5	E4OD	F-SER/BRONCO	3.85	N/A	N/A	N/A	N/A
AHACAP5	5-78P R10C	1995	5.8	E4OD	F-SER/BRONCO	3.55 & 4.10	N/A	N/A	N/A	N/A
AHACAR6	5-76R R10C	1995	5.8	E4OD	ECONOLINE	3.54 & 4.10	N/A	N/A	N/A	N/A
AHACARY	5-64R R10C	1995	5.8	E4OD	ECONOLINE	3.55/3.73	N/A	N/A	N/A	N/A
AHACAS5	5-76S R10C	1995	5.8	E4OD	F-SER/BRONCO	4.1	N/A	N/A	N/A	N/A
AHACASX	5-84S R10C	1995	5.8	E4OD	F-SER/BRONCO	3.55	N/A	N/A	N/A	N/A
AHACAT5	5-78T R10C	1995	5.8	E4OD	F-SER/BRONCO	4.1	N/A	N/A	N/A	N/A
AHACATX	5-84T R10C	1995	5.8	E4OD	F-SER/BRONCO	3.55	N/A	N/A	N/A	N/A
AHACAUX	5-78U R10C	1995	5.8	E4OD	ECONOLINE	3.73/4.09 & 4.10	N/A	N/A	N/A	N/A
AJAP3E8	5-68E R06FB	1995	4	4R55E	PN-105/PN-106	3.08/3.55	N/A	N/A	N/A	N/A
AJAP5A4	5-48A R05FB	1995	2.3	M5	PN-105/PN-106	3.45/3.73	N/A	N/A	N/A	N/A
AJAP6AZ	5-60A R05FB	1995	2.3	4R44E	PN-105/PN-106	3.73	N/A	N/A	N/A	N/A
AJAP6B2	5-49B R06FB	1995	2.3	M5	PN-105/PN-106	4.1	N/A	N/A	N/A	N/A
AJAP5F2	5-67F R06FB	1995	4	M5	PN-105/PN-106	3.08/3.55	N/A	N/A	N/A	N/A
AJAP5F3	5-66F R00FB	1995	3	4R44E	PN-105/PN-106	3.45/3.73	N/A	N/A	N/A	N/A
AJAP5FY	5-55F R00FB	1995	3	M5	PN-105/PN-106	3.45/3.73	N/A	N/A	N/A	N/A
AJAP5FZ	5-56F R06FB	1995	4	4R55E	PN-105/PN-106	3.08/3.55	N/A	N/A	N/A	N/A
AJAP5H2	5-56H R08FB	1995	4	4R55E	PN-105/PN-106	3.27/3.73	N/A	N/A	N/A	N/A
AJAP5HX	5-56H R00FB	1995	3	4R44E	PN-105/PN-106	3.73/4.10	N/A	N/A	N/A	N/A
AJAP5HY	5-55H R05FB	1995	3	M5	PN-105/PN-106	3.73	N/A	N/A	N/A	N/A
AJAP5HZ	5-57H R06FB	1995	4	M5	PN-105/PN-106	3.27/3.73	N/A	N/A	N/A	N/A
AJAP5Q2	5-49Q R06C	1995	2.3	M5	PN-105/PN-106	4.1	N/A	N/A	N/A	N/A
AJAP5R2	5-65R R05C	1995	3	M5	PN-105/PN-106	3.73	N/A	N/A	N/A	N/A
AJAP5RZ	5-56R R05C	1995	3	4R44E	PN-105/PN-106	3.73/4.10	N/A	N/A	N/A	N/A
AJAP5S2	5-57S R06C	1995	4	M5	PN-105/PN-106	3.08/3.55	N/A	N/A	N/A	N/A
AJAP5SW	5-56S R05C	1995	3	4R44E	PN-105/PN-106	3.45/3.73	N/A	N/A	N/A	N/A
AJAP5SX	5-55S R06C	1995	3	M5	PN-105/PN-106	3.45/3.73	N/A	N/A	N/A	N/A
AJAP5SY	5-56S R06C	1995	4	4R55E	PN-105/PN-106	3.08/3.55	N/A	N/A	N/A	N/A

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
AJAP5T2	6-57T R06C	1995	4	M5	PN-105/PN-108	3.08/3.55 & 3.27/3.73	N/A	N/A	N/A	N/A
AJAP5T4	5-49T R05C	1995	2.3	M5	PN-105/PN-108	3.45/3.73	N/A	N/A	N/A	N/A
AJAP5T8	6-58T R06C	1995	4	4R55E	PN-105/PN-108	3.27 & 3.27/3.73	N/A	N/A	N/A	N/A
AJAP5TY	5-50T R06C	1995	2.3	4R44E	PN-105/PN-108		3.73	N/A	N/A	N/A
AJAP5TZ	5-49T R05C	1995	2.3	M5	PN-105/PN-108	3.45/3.73	N/A	N/A	N/A	N/A
AJAP5U6	5-58U R06C	1995	4	4R55E	PN-105/PN-108	3.08/3.55	N/A	N/A	N/A	N/A
AJAQ4H6	6-58H R11FB	1996	4	4R55E	PN-105/PN-108	3.08/3.55	N/A	N/A	N/A	N/A
AJAQ6A4	6-50A R10FB	1996	2.3	4R44E	PN-105/PN-108		3.73	N/A	N/A	N/A
AJAQ6A7	6-49A R10FB	1996	2.3	M5	PN-105/PN-108	3.45/3.73	N/A	N/A	N/A	N/A
AJAQ6B5	6-49B R10FB	1996	2.3	M5	PN-105/PN-108		4.1	N/A	N/A	N/A
AJAQ5D2	6-58S R11C	1996	4	4R55E	PN-105/PN-108	3.08/3.55	N/A	N/A	N/A	N/A
AJAQ5F2	6-57F R11FB	1996	4	M5	PN-105/PN-108	3.08/3.55	N/A	N/A	N/A	N/A
AJAQ5F3	6-58F R11FB	1996	3	4R44E	PN-105/PN-108	3.45/3.73	N/A	N/A	N/A	N/A
AJAQ6F4	6-56F R11FB	1996	3	M5	PN-105/PN-108	3.45/3.73	N/A	N/A	N/A	N/A
AJAQ5FZ	6-58F R11FB	1996	4	4R55E	PN-105/PN-108	3.08/3.55	N/A	N/A	N/A	N/A
AJAQ5H3	6-57H R11FB	1996	4	M5	PN-105/PN-108	3.27/3.73	N/A	N/A	N/A	N/A
AJAQ5H4	6-58H R11FB	1996	3	4R44E	PN-105/PN-108	3.73/4.10	N/A	N/A	N/A	N/A
AJAQ6H5	6-55H R11FB	1996	3	M5	PN-105/PN-108		3.73	N/A	N/A	N/A
AJAQ6Q5	6-49Q R10C	1996	2.3	M5	PN-105/PN-108		4.1	N/A	N/A	N/A
AJAQ6R3	6-58R R11C	1996	3	4R44E	PN-105/PN-108	3.73/4.10	N/A	N/A	N/A	N/A
AJAQ6R4	6-56R R11C	1996	3	M5	PN-105/PN-108		3.73	N/A	N/A	N/A
AJAQ5S2	6-57S R11C	1996	4	M5	PN-105/PN-108	3.08/3.55	N/A	N/A	N/A	N/A
AJAQ5S3	6-55S R11C	1996	3	M5	PN-105/PN-108	3.45/3.73	N/A	N/A	N/A	N/A
AJAQ5S5	6-58S R11C	1996	3	4R44E	PN-105/PN-108	3.45/3.73	N/A	N/A	N/A	N/A
AJAQ6T2	6-57T R11C	1996	4	M5	PN-105/PN-108	3.27/3.73	N/A	N/A	N/A	N/A
AJAQ6T4	6-50T R10C	1996	2.3	4R44E	PN-105/PN-108		3.73	N/A	N/A	N/A
AJAQ6T5	6-58T R11C	1996	4	4R55E	PN-105/PN-108	3.08/3.55	N/A	N/A	N/A	N/A
AJAQ6T7	6-49T R10C	1996	2.3	M5	PN-105/PN-108	3.45/3.73	N/A	N/A	N/A	N/A
AKAM9A9	6-03A R12FB	1996	2	MTX75	CDW27		3.84	127.5	0.4296875	-0.2000122 0.20001221
AKAM9AV	6-04A R12FB	1996	2	CD4E	CDW27		3.92	127.5	0	0 0
AKAM9AW	6-04A R12FB	1996	2	CD4E	CDW27		3.92	127.5	0	0 0
AKAM9AX	6-03A R12FB	1996	2	MTX75	CDW27		3.84	127.5	0.4296875	-0.2000122 0.20001221
AKAM9P4	6-04P R12C	1996	2	CD4E	CDW27		3.92	127.5	0	0 0
AKAM9P6	6-04P R12C	1996	2	CD4E	CDW27		3.92	127.5	0	0 0
AKAM9P9	6-03P R12C	1996	2	MTX75	CDW27		3.84	127.5	0.4296875	-0.2000122 0.20001221
AKAM9PG	6-04P R12C	1996	2	CD4E	CDW27		3.92	127.5	0	0 0
AKAM9PL	6-04P R12C	1996	2	CD4E	CDW27		3.92	127.5	0	0 0
AKAMAC5	7-03C R05FM	1997	2	MTX75	CONTOURMYSTIQ UE		3.84	127.5	0.4296875	-0.2000122 0.20001221
AKAMACB	7-12C R10FM	1997	2.5	CD4E	CONTOURMYSTIQ UE		4.06	0	0	0 0
AKAMACC	7-11C R10FB	1997	2.5	MTX75	CONTOURMYSTIQ UE		4.06	0	0	0 0
AKAMACU	7-03C R05FM	1997	2	MTX75	CONTOURMYSTIQ UE		3.84	127.5	0.4296875	-0.2000122 0.20001221

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	V8CLP	GI	IDC_MIN	IDC_MAX
AKAMACW	7-03C R05FM	1997	2	MTX75	CONTOUR/MYSTIQ UE	3.84	127.5	0.4296875	-0.2000122	0.20001221
AKAMAMC	7-12C R10FM	1997	2.5	CD4E	CONTOUR/MYSTIQ UE	4.08	0	0	0	0
AKAMASS	7-03S R05C	1997	2	MTX75	CONTOUR/MYSTIQ UE	3.84	127.5	0.4296875	-0.2000122	0.20001221
AKAMASA	7-12S R10C	1997	2.5	CD4E	CONTOUR/MYSTIQ UE	3.77	0	0	0	0
AKAMASC	7-11S R10C	1997	2.5	MTX75	CONTOUR/MYSTIQ UE	4.08	0	0	0	0
AKAMBB7	6-11B R10FB	1996	2.5	MTX75	CDW27	4.08	0	0	0	0
AKAMBB8	6-12B R10FB	1996	2.5	CD4E	CDW27	3.77	0	0	0	0
AKAMBC2	7-12C R10FM	1997	2.5	CD4E	CONTOUR/MYSTIQ UE	4.08	0	0	0	0
AKAMBCY	7-11C R10FB	1997	2.5	MTX75	CONTOUR/MYSTIQ UE	4.08	0	0	0	0
AKAMBCZ	7-12C R10FM	1997	2.5	CD4E	CONTOUR/MYSTIQ UE	4.08	0	0	0	0
AKAMBW4	6-12B R10FB	1996	2.5	CD4E	CDW27	3.77	0	0	0	0
AKAMBS2	7-11S R10C	1997	2.5	MTX75	CONTOUR/MYSTIQ UE	4.08	0	0	0	0
AKAMBSZ	7-12S R10C	1997	2.5	CD4E	CONTOUR/MYSTIQ UE	3.77	0	0	0	0
AKAMBT8	6-12T R10C	1996	2.5	CD4E	CDW27	3.77	0	0	0	0
AKAMBTZ	6-11T R10C	1996	2.5	MTX75	CDW27	4.08	0	0	0	0
AKAMHC8	7-04C R10FB	1997	2	CD4E	CONTOUR/MYSTIQ UE	3.92	127.5	0	0	0
AKAMHCJ	7-04C R05FB & 7-04C R10FB	1997	2	CD4E	CONTOUR/MYSTIQ UE	3.92	127.5	0	0	0
AKAMHSF	7-04S R10C	1997	2	CD4E	CONTOUR/MYSTIQ UE	3.92	127.5	0	0	0
AKAMHSZ	7-04S R10C	1997	2	CD4E	CONTOUR/MYSTIQ UE	3.92	127.5	0	0	0
AKAR0G6	6-04G R10FB	1996	2	CD4E	CDW27	3.92	127.5	0	0	0
AKAR0GB	6-04G R10FB	1996	2	CD4E	CDW27	3.92	127.5	0	0	0
AKAR0GY	7-04G R00FB	1997	2	CD4E	CONTOUR/MYSTIQ UE	3.92	127.5	0	0	0
AKAR0N5	6-04N R10C	1996	2	CD4E	CDW27	3.92	127.5	0	0	0
AKAR0N6	7-04N R00C	1997	2	CD4E	CONTOUR/MYSTIQ UE	3.92	127.5	0	0	0
AKAR0N7	6-04N R10C	1996	2	CD4E	CDW27	3.92	127.5	0	0	0
ALAPLJ6	8-86J R10SN	1996	6.8	E40D	ECONOLINE	Under	0	N/A	N/A	N/A
ALAPLJ7	7-86J R12SN	1997	6.8	E40D	ECONOLINE	Under	0	N/A	N/A	N/A
ALAPIY5	7-86Y R12C	1997	6.8	E40D	ECONOLINE	Under	0	N/A	N/A	N/A
ALAPIY7	8-86Y R05C	1996	6.8	E40D	ECONOLINE	4.1	0	N/A	N/A	N/A
ALAPKD8	7-46D R07FB	1997	5.4	E40D	PN86	3.55	0	N/A	N/A	N/A

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	G1	IDC_MIN	IDC_MAX
ALAPKE3	7-46E R07FB	1997	5.4	E40D	PN102	3.31 & 3.31/3.73		0 N/A	N/A	N/A
ALAPKF3	7-46F R10FB	1998 & 1997	5.4	E40D	UN173(a) & UN93/UN173 (a)	3.31 & 3.73		0 N/A	N/A	N/A
ALAPKR3	7-46R R07C	1997	5.4	E40D	PN98	3.06 & 3.56		0 N/A	N/A	N/A
ALAPKT3	7-46T R07C	1997	5.4	E40D	PN102	3.31 & 3.31/3.73		0 N/A	N/A	N/A
ALAPKU3	7-46U R10C	1998 & 1997	5.4	E40D	UN173(a) & UN93 & UN93/UN173 (a)	3.31 & 3.31/3.73		0 N/A	N/A	N/A
ALAPLC7	7-74C R12FB	1997	5.4	E40D	ECONOLINE	Undef		0 N/A	N/A	N/A
ALAPLCY	8-74C R11FB	1999	5.4	E40D	ECONOLINE	Undef		0 N/A	N/A	N/A
ALAPLE8	7-98E R12FB	1997	6.8	E40D	ECONOLINE	Undef		0 N/A	N/A	N/A
ALAPLE7	8-98E R13FB	1999	6.8	E40D	ECONOLINE	Undef		0 N/A	N/A	N/A
ALAPLK8	7-46K R12FB	1997	5.4	E40D	ECONOLINE	Undef		0 N/A	N/A	N/A
ALAPLKZ	8-46K R11FM	1999	5.4	E40D	ECONOLINE	Undef		0 N/A	N/A	N/A
ALAPLQ6	7-46Q R12C	1997	5.4	E40D	ECONOLINE	Undef		0 N/A	N/A	N/A
ALAPLS3	8-74S R11C	1999	5.4	E40D	ECONOLINE	Undef		0 N/A	N/A	N/A
ALAPLS8	7-74S R12C	1997	5.4	E40D	ECONOLINE	Undef		0 N/A	N/A	N/A
ALAPLT5	7-74T R12C	1997	5.4	E40D	ECONOLINE	Undef		0 N/A	N/A	N/A
ALAPLT9	7-98T R12C	1997	6.8	E40D	ECONOLINE	Undef		0 N/A	N/A	N/A
ALAPLTW	8-98T R18C	1999	6.8	E40D	ECONOLINE	Undef		0 N/A	N/A	N/A
ALAPLTX	8-74T R11C	1999	5.4	E40D	ECONOLINE	Undef		0 N/A	N/A	N/A
ALAPLU6	7-74U R12C	1997	5.4	E40D	ECONOLINE	Undef		0 N/A	N/A	N/A
ALAPLUZ	8-74U R11C	1999	5.4	E40D	ECONOLINE	Undef		0 N/A	N/A	N/A
ALAPLV4	8-74V R11C	1999	5.4	E40D	ECONOLINE	Undef		0 N/A	N/A	N/A
ALAPLW6	8-96W R13C	1999	6.8	E40D	ECONOLINE	Undef		0 N/A	N/A	N/A
ALAPLW8	7-96W R12C	1997	6.8	E40D	ECONOLINE	Undef		0 N/A	N/A	N/A
ALAPLX5	7-96X R12C	1997	6.8	E40D	ECONOLINE	Undef		0 N/A	N/A	N/A
ALAPLX8	8-96X R13C	1999	6.8	E40D	ECONOLINE	Undef		0 N/A	N/A	N/A
ALAPLY4	9VZA-AY F8N	1999	5.4	E40D	ECONOLINE	Undef		0 N/A	N/A	N/A
ALAQ0N4	7-46N R108N	1999	5.4	E40D	ECONOLINE-NGV	Undef		0 N/A	N/A	N/A
ALAQ0NP	7-46N R05SN	1997 & 1998 & 1999	5.4	E40D	ECONOLINE-NGV	3.73/4.10		0 N/A	N/A	N/A
ALAQ0W1	7-46W R05SN	1997 & 1998	5.4	E40D	PN102-NGV		3.73	0 N/A	N/A	N/A
ANAJ7B4	7-57B R10FM	1997	4	M5	UN-106		3.55	0	0	0.9899017 0.9899017
ANAJ7BK	7-58B R10FM	1997	4	5R55E	UN-106	3.56/3.73		0	0	0.9899017 0.9899017
ANAJ7C2	7-58C R11FM	1997	4	5R55E	UN-106 SOHC	3.73/4.10		0	0	0 0
ANAJ7QB	7-58C R11FM	1997	4	5R55E	UN-106 SOHC	3.73/4.10		0	0	0 0
ANAJ7F3	7-57F R10FM	1997	4	M5	PN-105/PN-106	3.08/3.55		0	0	0.9899017 0.9899017
ANAJ7FL	7-58F R10FM	1997	4	5R55E	PN-105/PN-106	3.08/3.55		0	0.5	0.25 0.8500061
ANAJ7FV	7-58F R10FM	1997	4	5R55E	PN-105/PN-106	3.08/3.55		0	0.5	0.25 0.8500061
ANAJ7H3	7-57H R10FM	1997	4	M5	PN-105/PN-106	3.08/3.73		0	0	0.9899017 0.9899017
ANAJ7HG	7-58H R10FM	1997	4	5R55E	PN-105/PN-106	3.08/3.73		0	0.5	0.25 0.8500061
ANAJ7HY	7-58H R10FM	1997	4	5R55E	PN-105/PN-106	3.08/3.73		0	0.5	0.25 0.8500061
ANAJ7J7	7-58J R11FB	1997	4	5R55E	AEROSTAR		3.56	0	0	0.9899017 0.9899017
ANAJ7K4	7-58K R11FB	1997	4	5R55E	AEROSTAR		3.73	0	0	0.9899017 0.9899017
ANAJ7N4	7-58N R11C	1997	4	5R55E	AEROSTAR		3.73	0	0	0.9899017 0.9899017
ANAJ7Q5	7-58Q R11C	1997	4	5R55E	AEROSTAR		3.55	0	0	0.9899017 0.9899017

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	VSCLP	GI	IDC_MIN	IDC_MAX	
ANAJ7R4	7-57R R10C	1997	4	M5	UN-105	3.27/3.73 & 3.55	0	0	0.98999017	0.98999017	
ANAJ7RC	7-58R R06C	1997	4	5R55E	UN-105		3.73	0	0.98999017	0.98999017	
ANAJ7S3	7-57S R10C	1997	4	M5	PN-105/PN-108	3.08 & 3.08/3.55	0	0	0.98999017	0.98999017	
ANAJ7S1	7-58S R10C	1997	4	5R55E	PN-105/PN-108	3.08/3.55	0	0.5	0.25	0.8500061	
ANAJ78R	7-58S R10C	1997	4	5R55E	PN-105/PN-108	3.08/3.55	0	0.5	0.25	0.8500061	
ANAJ7T3	7-57T R10C	1997	4	M5	PN-105/PN-108	3.08/3.55 & 3.73	0	0	0.98999017	0.98999017	
ANAJ7T7	7-58T R10C	1997	4	5R55E	PN-105/PN-108		3.73	0	0.5	0.25	0.8500061
ANAJ7TL	7-58T R10C	1997	4	5R55E	PN-105/PN-108		3.73	0	0.5	0.25	0.8500061
ANAJ7V2	7-58V R11C	1997	4	5R55E	UN-105 SOHC	3.27/3.55	0	0	0	0	
ANAJ7VB	7-58V R11C	1997	4	5R55E	UN-105 SOHC	3.27/3.55	0	0	0	0	
ANAJ8B4	7-58B R10FM	1997	4	5R55E	UN-106	3.55/3.73	0	0	0.98999017	0.98999017	
ANAJ8B6	7-57B R10FM	1997	4	M5	UN-105		3.55	0	0.98999017	0.98999017	
ANAJ8C6	7-58C R11FM	1997	4	5R55E	UN-106 SOHC	3.73/4.10	0	0	0	0	
ANAJ8R3	7-57R R10C	1997	4	M5	UN-105	3.27/3.73 & 3.55	0	0	0.98999017	0.98999017	
ANAJ8RZ	7-58R R05C	1997	4	5R55E	UN-105		3.73	0	0.98999017	0.98999017	
ANAJ8V8	7-58V R11C	1997	4	5R55E	UN-105 SOHC	3.27/3.55	0	0	0.98999017	0.98999017	
AOAG1B3	6-58B R06FB	1998	4	4R55E	UN-105		3.73	N/A	N/A	N/A	
AOAG3J5	6-58J R10FB	1998	4	4R55E	AEROSTAR	3.27/3.55	N/A	N/A	N/A	N/A	
AOAG3LX	6-56J R10FB	1998	3	4R44E	AEROSTAR	3.45/3.73	N/A	N/A	N/A	N/A	
AOAG3K5	6-58K R10FB	1998	4	4R55E	AEROSTAR		3.73	N/A	N/A	N/A	
AOAG3N8	6-58N R10C	1998	4	4R55E	AEROSTAR		3.73	N/A	N/A	N/A	
AOAG3Q6	6-58Q R10C	1998	4	4R55E	AEROSTAR	3.27 & 3.27/3.55	N/A	N/A	N/A	N/A	
AOAG3TX	6-58T R10C	1998	3	4R44E	AEROSTAR	3.45/3.73	N/A	N/A	N/A	N/A	
AOAG4B5	6-58B R10FB	1998	4	4R55E	UN-105		3.73	N/A	N/A	N/A	
AOAG4R8	6-58R R10C	1998	4	4R55E	UN-106		3.73	N/A	N/A	N/A	
AOAG5B8	6-57B R10FB	1998	4	M5	UN-106		3.55	N/A	N/A	N/A	
AOAG5R9	6-57R R10C	1998	4	M5	UN-105		3.55	N/A	N/A	N/A	
APAD1A0	7-49A R08FM	1997	2.3	M5	PN-105/PN-108	3.45/3.73	N/A	N/A	N/A	N/A	
APAD1TK	7-49T R06C	1997	2.3	M5	PN-105/PN-108	Undef	N/A	N/A	N/A	N/A	
APAD2F3	7-55F R10FM	1997	3	M5	PN-105/PN-108	3.45/3.73	N/A	N/A	N/A	N/A	
APAD2F4	7-55F R10FM	1997	3	M5	PN-105/PN-108	3.45/3.73	N/A	N/A	N/A	N/A	
APAD2FZ	7-56F R10FM	1997	3	4R44E	PN-105/PN-108	3.45/3.73	N/A	N/A	N/A	N/A	
APAD2H3	7-55H R10FM	1997	3	M5	PN-105/PN-108	Undef	N/A	N/A	N/A	N/A	
APAD2H4	7-55H R10FM	1997	3	M5	PN-105/PN-108	Undef	N/A	N/A	N/A	N/A	
APAD2HZ	7-56H R10FM	1997	3	4R44E	PN-105/PN-108	3/73/4.10	N/A	N/A	N/A	N/A	
APAD2J7	7-56J R11FB	1997	3	4R44E	AEROSTAR		3.73	N/A	N/A	N/A	
APAD2R3	7-55R R10C	1997	3	M5	PN-105/PN-108		3.73	N/A	N/A	N/A	
APAD2R4	7-55R R10C	1997	3	M5	PN-105/PN-108		3.73	N/A	N/A	N/A	
APAD2R5	7-55R R10C	1997	3	4R44E	PN-105/PN-108	3.73 & 3.73/4.10	N/A	N/A	N/A	N/A	
APAD2S3	7-55S R10C	1997	3	M5	PN-105/PN-108	3.45/3.73	N/A	N/A	N/A	N/A	
APAD2S4	7-55S R10C	1997	3	M5	PN-105/PN-108	3.45/3.73	N/A	N/A	N/A	N/A	
APAD2SZ	7-56S R10C	1997	3	4R44E	PN-105/PN-108	3.45/3.73	N/A	N/A	N/A	N/A	
APAD2TZ	7-58T R11C	1997	3	4R44E	AEROSTAR		3.73	N/A	N/A	N/A	
APAD3A3	7-50A R08FM	1997	2.3	4R44E	PN-105/PN-108		3.73	N/A	N/A	N/A	
APAD3F3	7-56F R10FM	1997	3	4R44E	PN-105/PN-108	3.45/3.73	N/A	N/A	N/A	N/A	
APAD3H3	7-58H R10FM	1997	3	4R44E	PN-105/PN-108	3/73/4.10	N/A	N/A	N/A	N/A	

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
APAD3R3	7-56R R10C	1997	3.4R44E		PN-105/PN-108	3.73 & 3.73/4.10	N/A	N/A	N/A	N/A
APAD3S3	7-56S R10C	1997	3.4R44E		PN-105/PN-108	3.45/3.73	N/A	N/A	N/A	N/A
APAD3T3	7-50T R08C	1997	2.34R44E		PN-105/PN-108		3.73	N/A	N/A	N/A
APAD8A5	7-49A R08FM	1997	2.3M5		PN-105/PN-108	3.45/3.73	N/A	N/A	N/A	N/A
ATAN0F4	8-11F R05SM	1998	2.5	MTX75	CONTOUR SVT		4.08	0	0	0
ATAN1P3	8-04P R10C	1998	2	CD4E	CONTOUR/MYSTIQ UE		3.92	127.5	0	-0.2000122 0.20001221
ATAN1P4	8-04P R12C	1998	2	CD4E	CONTOUR/MYSTIQ UE		3.92	127.5	0	-0.2000122 0.20001221
ATAQ0B5	8-11B R10FM	1998	2.5	MTX75	CONTOUR/MYSTIQ UE		4.08	0	0	0
ATAQ0BY	8-11B R10FM	1998	2.5	MTX75	CONTOUR/MYSTIQ UE		4.08	0	0	0
ATAQ0T5	8-11T R10C	1998	2.5	MTX75	CONTOUR/MYSTIQ UE		4.08	0	0	0
ATAR0B3	8-12B R10	1998	2.5	CD4E	CONTOUR/MYSTIQ UE		3.77	0	0	0
ATAR0B4	8-12B R10	1998	2.5	CD4E	CONTOUR/MYSTIQ UE		3.77	0	0	0
ATAR0T3	8-12T R10C	1998	2.5	CD4E	CONTOUR/MYSTIQ UE		3.77	0	0	0
ATAR1B3	8-12B R10	1998	2.5	CD4E	CONTOUR/MYSTIQ UE		3.77	0	0	0
ATAR1BZ	8-12B R10	1998	2.5	CD4E	CONTOUR/MYSTIQ UE		3.77	0	0	0
ATAR1T3	8-12T R10C	1998	2.5	CD4E	CONTOUR/MYSTIQ UE		3.77	0	0	0
ATAR2B3	8-11B R10FM	1998	2.5	MTX75	CONTOUR/MYSTIQ UE		4.08	0	0	0
ATAR2B4	8-12B R10	1998	2.5	CD4E	CONTOUR/MYSTIQ UE		3.77	0	0	0
ATAR2BW	8-12B R10	1998	2.5	CD4E	CONTOUR/MYSTIQ UE		3.77	0	0	0
ATAR2BX	8-12B R10	1998	2.5	CD4E	CONTOUR/MYSTIQ UE		3.77	0	0	0
ATAR2BY	8-12B R10	1998	2.5	CD4E	CONTOUR/MYSTIQ UE		3.77	0	0	0
ATAR2BZ	8-11B R10FM	1998	2.5	MTX75	CONTOUR/MYSTIQ UE		4.08	0	0	0
ATAR2T3	8-11T R10C	1998	2.5	MTX75	CONTOUR/MYSTIQ UE		4.08	0	0	0
ATAR2T4	8-12T R10C	1998	2.5	CD4E	CONTOUR/MYSTIQ UE		3.77	0	0	0
ATAR2TZ	8-12T R10C	1998	2.5	CD4E	CONTOUR/MYSTIQ UE		3.77	0	0	0
8AAV9A4	2-10A R11FB	1993	3	AX4S	TAURUS/SABLE		2.37	N/A	N/A	N/A

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	GI	IDC_ABN	IDC_MAX
BAAV9BI	2-16R R11FB	1993 & 1994	3.8	AX4S	TAURUS/SABLE	3.37	N/A	N/A	N/A	N/A
BAAV9CE	2-16C R11FB	1993 & 1994	3.8	AX4S	TAURUS/SABLE	3.19	N/A	N/A	N/A	N/A
BAAVBD6	3-16D R10FB	1994	3.8	AX4S	CONTINENTAL	3.37	N/A	N/A	N/A	N/A
BAAVBR9	2-16R R10C & 4-16R R00C	1993 & 1994	3.8	AX4S	CONTINENTAL	3.37	N/A	N/A	N/A	N/A
BAAVDD4	4-16D R10FB	1994	3.8	AX4S	CONTINENTAL	3.37	N/A	N/A	N/A	N/A
BAAVDR5	4-16R R10C	1994	3.8	AX4S	CONTINENTAL	3.37	N/A	N/A	N/A	N/A
BABMFA5	4-10A R00FB	1994	3	AX4S	TAURUS/SABLE	3.37	N/A	N/A	N/A	N/A
BABMFAZ	5-10A R00FB	1995	3	AX4S	TAURUS/SABLE	3.37	N/A	N/A	N/A	N/A
BABMFB9	4-16B R00FB	1994 & 1995	3.8	AX4S	TAURUS/SABLE	3.37	N/A	N/A	N/A	N/A
BABMFCO	5-16C R10FB	1995	3.8	AX4S	TAURUS/SABLE	3.19	N/A	N/A	N/A	N/A
BABMFDE	4-16C R00FB	1994	3.8	AX4S	TAURUS/SABLE	3.19	N/A	N/A	N/A	N/A
BABMFCF	4-16Q R05C	1994 & 1995	3.8	AX4S	TAURUS/SABLE	3.19	N/A	N/A	N/A	N/A
BABMFS5	4-10B R00C	1994	3	AX4S	TAURUS/SABLE	3.37	N/A	N/A	N/A	N/A
BABMFSX	5-10B R00C	1995	3	AX4S	TAURUS/SABLE	3.37	N/A	N/A	N/A	N/A
BABR0B2	4-10B R00FB	1994	3	AX4N	TAURUS AX4N	3.37	N/A	N/A	N/A	N/A
BABT0B3	5-10B R05FB	1995	3	AX4N	TAURUS/SABLE	3.37	N/A	N/A	N/A	N/A
BABT0T2	5-10T R05C	1995	3	AX4N	TAURUS/SABLE	3.37	N/A	N/A	N/A	N/A
BBAEBC6	3-10C R10FB	1993	3	AX4S	TAU(3.0/3.2)SHO	3.77	N/A	N/A	N/A	N/A
BBAOCCR	4-10C R00FB	1994 & 1995	3.2	AX4S	TAU(3.0/3.2)SHO	3.77	N/A	N/A	N/A	N/A
BCAP1GZ	5-10G R05FB	1995	3	AX4S	TAURUS FFV	3.37	N/A	N/A	N/A	N/A
BEAVGD5	5-38D R10FB	1995	4.6	AX4N	CONTINENTAL	3.56	0	0	0	0
BEAVGD8	5-38D R10FB	1995	4.6	AX4N	CONTINENTAL	3.56	0	0	0	0
BEAVGD9	5-38D R10FB	1996	4.6	AX4N	CONTINENTAL & CONTOUR/MYSTIQUE	3.56	0	0	0	0
BEAVGDY	5-38D R10FB	1995	4.6	AX4N	CONTINENTAL	3.56	0	0	0	0
BEAVGR4	5-38R J00J	1995	4.6	AX4N	CONTINENTAL & CONTOUR/MYSTIQUE	3.56	0	0	0	0
BEAVGR8	5-38R R10C	1996	4.6	AX4N	CONTINENTAL & CONTOUR/MYSTIQUE	3.56	0	0	0	0
BFAGBL6	4-82J R11FB	1995	3.8	AX4S	WIN88	3.37	N/A	N/A	N/A	N/A
BFAGBL7	4-82J R10	1995	3.8	AX4S	WIN88	3.37	N/A	N/A	N/A	N/A
BFAGB88	4-82B R11C	1995	3.8	AX4S	WIN88	3.37	N/A	N/A	N/A	N/A
BFAGB67	4-82B R10	1995	3.8	AX4S	WIN88	3.37	N/A	N/A	N/A	N/A
BGAHDK4	5-58K R05FB	1995	3	AX4S	WIN88	3.98	N/A	N/A	N/A	N/A
BGAHDP5	5-58P R05C	1995	3	AX4S	WIN88	3.98	N/A	N/A	N/A	N/A
BGAIBK4	5-58K R16FB	1996	3	AXODE	WIN88	3.98	N/A	N/A	N/A	N/A
BGAIBK8	5-58K E16	1995	3	AX4S	WIN88	3.98	N/A	N/A	N/A	N/A
BGAIBKE	5-58K E16	1995	3	AX4S	WIN88	3.98	N/A	N/A	N/A	N/A
BGAIBKZ	5-58K R16FB	1995 & 1996 & 1997	3	AX4S & AXODE	WIN88	3.98	N/A	N/A	N/A	N/A
BGAIBP4	5-58P R16C	1996	3	AXODE	WIN88	3.98	N/A	N/A	N/A	N/A

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
BGAIBPC	6-58P R18C	1995 & 1996 & 1997		AX4S & SAXODE	WIN88		3.98 N/A	N/A	N/A	N/A
BGAJAKB	6-58K E10 & 6-58K E10E	1997 & 1998		3 AX4S	WIN88		3.98 N/A	N/A	N/A	N/A
BGAJAKY	6-58K E10E	1998		3 AX4S	WIN88	Undef	N/A	N/A	N/A	N/A
BHAIFA5	6LDA-GA CG	1998		3 AX4N	TAURUS 4V		3.77 N/A	N/A	N/A	N/A
BHAIGA4	6-10A R12FB	1998		3 AX4S	TAURUS 2V		3.77 N/A	N/A	N/A	N/A
BHAIGAY	6-14A R11FB	1998		3 AX4N	TAURUS 4V		3.77 N/A	N/A	N/A	N/A
BHAIGAZ	6LDA-JA DJ	1998		3 AX4N	TAURUS 4V		3.77 N/A	N/A	N/A	N/A
BHAIGB4	6-10B R12FB	1998		3 AX4N	TAURUS 2V		3.77 N/A	N/A	N/A	N/A
BHAIGS4	6-10S R12C	1998		3 AX4S	TAURUS 2V		3.77 N/A	N/A	N/A	N/A
BHAIGSY	6-14S R11C	1998		3 AX4N	TAURUS 4V		3.77 N/A	N/A	N/A	N/A
BHAIGT4	6-10T R12C	1998		3 AX4N	TAURUS 2V		3.77 N/A	N/A	N/A	N/A
BHAJ9S3	6L5A-JA CJ	1998	3.4	AX4N	TAURUS SHO		3.77 N/A	N/A	N/A	N/A
BHAJ9D3	6-10D R08FB	1998	3.4	AX4N	TAURUS SHO		3.77 N/A	N/A	N/A	N/A
BHAJ9M3	6-10M R08C	1998	3.4	AX4N	TAURUS SHO		3.77 N/A	N/A	N/A	N/A
BHAJFA5	7L5A-JACJ	1997	3.4	AX4N	TAURUS SHO		3.77 N/A	N/A	N/A	N/A
BHAJFD5	7-10D R10FB	1997	3.4	AX4N	TAURUS SHO		3.77 N/A	N/A	N/A	N/A
BHAJFM3	7-10M R10C	1997	3.4	AX4N	TAURUS SHO		3.77 N/A	N/A	N/A	N/A
BHAJGA5	7L5A-JACJ	1997	3.4	AX4N	TAURUS SHO		3.77 N/A	N/A	N/A	N/A
BHAJGD5	7-10D R10FB	1997	3.4	AX4N	TAURUS SHO		3.77 N/A	N/A	N/A	N/A
BHAJGQZ	6-10D R08FB	1998	3.4	AX4N	TAURUS SHO		3.77 N/A	N/A	N/A	N/A
BHAJGM5	7-10M R10C	1997	3.4	AX4N	TAURUS SHO		3.77 N/A	N/A	N/A	N/A
BHAJGM6	6-10M R06C	1998	3.4	AX4N	TAURUS SHO		3.77 N/A	N/A	N/A	N/A
BJAF5CB	6-10C R10FB	1998		3 AX4S	TAURUS FFV & TAURUS FFV-ETHANOL		3.77	0	0	0
BJAF5CH	6-10C R10FB	1998		3 AX4S	TAURUS FFV & TAURUS FFV-ETHANOL		3.77	0	0	0
BJAF5CM	6-10C R10FB	1998		3 AX4S	TAURUS FFV & TAURUS FFV-ETHANOL		3.77	0	0	0
BJAF5CP	6-10C R10FB	1998		3 AX4S	TAURUS FFV & TAURUS FFV-ETHANOL		3.77	0	0	0
BJAF5G6	6-10G R10C & 6-10G R10FB	1998		3 AX4S	TAURUS FFV & TAURUS FFV-METHANOL		3.77	0	0	0
BJAF5G8	6-10G R10C & 6-10G R10FB	1998		3 AX4S	TAURUS FFV & TAURUS FFV-METHANOL		3.77	0	0	0
BJAF5GD	6-10G R10C	1998		3 AX4S	TAURUS FFV & TAURUS FFV-METHANOL		3.77	0	0	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
BJAF5GG	6-10G R10C	1998	3	AX4S	TAURUS FFV & TAURUS FFV-METHANOL		3.77	0	0	0
BLAE7A8	7LDA-QA CQG	1997	3	AX4N	TALI/SABLE 4V		3.77	N/A	N/A	N/A
BLAE7AX	7LDA-QA DG	1997	3	AX4N	TALI/SABLE 4V		3.77	N/A	N/A	N/A
BLAE8A4	7-10A R12FB	1997	3	AX4S	TALI/SABLE 2V		3.77	N/A	N/A	N/A
BLAE8A9	7LDA-JA DJ	1997	3	AX4N	TALI/SABLE 4V		3.77	N/A	N/A	N/A
BLAE8AU	7-14A R10FM	1997	3	AX4N	TALI/SABLE 4V		3.77	N/A	N/A	N/A
BLAE8AV	7-10A R12FB	1997	3	AX4S	TALI/SABLE 2V		3.77	N/A	N/A	N/A
BLAE8AW	7-10A R10FB	1997	3	AX4S	TALI/SABLE 2V		3.77	N/A	N/A	N/A
BLAE8AY	7-10A R10FB	1997	3	AX4S	TALI/SABLE 2V		3.77	N/A	N/A	N/A
BLAE8B4	7-10B R12FB	1997	3	AX4N	TALI/SABLE 2V		3.77	N/A	N/A	N/A
BLAE8B7	7-10B R10FB	1997	3	AX4N	TALI/SABLE 2V		3.77	N/A	N/A	N/A
BLAE8BX	7-10B R12FB	1997	3	AX4N	TALI/SABLE 2V		3.77	N/A	N/A	N/A
BLAE8BY	7-10B R10FB	1997	3	AX4N	TALI/SABLE 2V		3.77	N/A	N/A	N/A
BLAE8P4	7-10R R11C	1997	3	AX4S	TALI/SABLE 2V		3.77	N/A	N/A	N/A
BLAE8P7	7-10R R11C	1997	3	AX4S	TALI/SABLE 2V		3.77	N/A	N/A	N/A
BLAE8S4	7-14S R10C	1997	3	AX4N	TALI/SABLE 4V		3.77	N/A	N/A	N/A
BMAE8RZ	7-38R J08J	1997	4.8	AX4N	CONTINENTAL		3.56	0	0	0
BMAE8D4	7-38D R12FM	1997	4.8	AX4N	CONTINENTAL		3.56	0	0	0
BMAE8RZ	7-38R R12C	1997	4.8	AX4N	CONTINENTAL		3.56	0	0	0
BNAF9D3	8-36D R10FM	1998	4.8	AX4N	CONTINENTAL	Undef		0	0	0
BOAD8KX	8-58K G10G	1998	3	AX4S	WIN88	Undef		0	0	0
BOADAK3	8-58K R11FB	1998	3	AX4S	WIN88		3.98	0	0	0
BOADAQ3	8-58Q R05C	1998	3	AX4S	WIN88		3.98	0	0	0
BOADBE3	8-58K E10E	1998	3	AX4S	WIN88		3.98	0	0	0
BOADBF3	8-58K F10FF	1998	3	AX4S	WIN88	Undef		0	0	0
BOADBJ6	8-82J R12FM	1998	3.8	AX4S	WIN88		3.56	2	1.5	0
BOADBJ6	8-82J R12FM	1998	3.8	AX4S	WIN88		3.56	2	0	0
BOADBK3	8-58K E10E	1998	3	AX4S	WIN88		3.98	0	0	0
BOADBK6	8-82K R12FM	1998	3.8	AX4S	WIN88		3.56	2	1.5	0
BOADBK8	8-82K R12FM	1998	3.8	AX4S	WIN88		3.56	2	0	0
BOADBKZ	8-58K F10FF	1998	3	AX4S	WIN88	Undef		0	0	0
BOADBP5	8-82P R05C	1998	3.8	AX4S	WIN88		3.56	2	1.5	0
BOADBP8	8-82P R05C	1998	3.8	AX4S	WIN88		3.56	2	0	0
BOADBQ8	8-82Q R05C	1998	3.8	AX4S	WIN88		3.56	2	1.5	0
BOADBQ8	8-82Q R05C	1998	3.8	AX4S	WIN88		3.56	2	0	0
BOADBS5	8-82S R11C	1998	3.8	AX4S	WIN88		3.56	2	1.5	0
BOADBS8	8-82S R11C	1998	3.8	AX4S	WIN88		3.56	2	0	0
BOADBT4	8-82T R11C	1998	3.8	AX4S	WIN88		3.56	2	1.5	0
BOADBT8	8-82T R11C	1998	3.8	AX4S	WIN88		3.56	2	0	0
BOAE4J7	8-82J R21FM	1998	3.8	AX4S	WIN88 98.5		3.56	2	1.5	0
BOAE4JF	8-82J R18FM	1998	3.8	AX4S	WIN88 98.5		3.56	2	0	0
BOAE4JL	8-82J R18FM	1998	3.8	AX4S	WIN88 98.5		3.56	2	1.5	0
BOAE4JZ	8-82J R21FM	1998	3.8	AX4S	WIN88 98.5		3.56	2	0	0
BOAE4K3	8-58K E18E	1998	3	AX4S	WIN88 98.5	Undef		0	0	0

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	V9CLP	GI	IDC_MIN	IDC_MAX
BOAE4KJ	8-82K R18FM	1998	3.8	AX4S	WIN98 98.5	3.58	2	1.5	0	0.9899017
BOAE4KK	8-82K R21FM	1998	3.8	AX4S	WIN98 98.5	3.58	2	0	0	0
BOAE4KL	8-82K R18FM	1998	3.8	AX4S	WIN98 98.5	3.58	2	0	0	0
BOAE4KM	8-58K F18FF	1998	3	AX4S	WIN98 98.5		0	0	0	0
BOAE4KN	8-58K G18G	1998	3	AX4S	WIN98 98.5		0	0	0	0
BOAE4KP	8-58K E18E	1998	3	AX4S	WIN98 98.5		0	0	0	0
BOAE4KQ	8-82K R21FM	1998	3.8	AX4S	WIN98 98.5	3.58	2	1.5	0	0.9899017
BOAE4KS	8-58K F18FF	1998	3	AX4S	WIN98 98.5		0	0	0	0
BOAE4KT	8-58K G18G	1998	3	AX4S	WIN98 98.5		0	0	0	0
BOAE4KU	8-58K R18FB	1998	3	AX4S	WIN98 98.5	3.98	0	0	0	0
BOAE4P8	8-82P R18C	1998	3.8	AX4S	WIN98 98.5	3.58	2	0	0	0
BOAE4PG	8-82P R18C	1998	3.8	AX4S	WIN98 98.5	3.58	2	1.5	0	0.9899017
BOAE4Q8	8-82Q R18C	1998	3.8	AX4S	WIN98 98.5	3.58	2	0	0	0
BOAE4QB	8-58Q R18C	1998	3	AX4S	WIN98 98.5	3.98	0	0	0	0
BOAE4QG	8-82Q R18C	1998	3.8	AX4S	WIN98 98.5	3.58	2	1.5	0	0.9899017
BOAE4QY	8-58Q R18C	1998	3	AX4S	WIN98 98.5	3.98	0	0	0	0
BPAB5JD	8-82J R11FB & 8-82J R11FM	1996 & 1997	3.8	AX4S	WIN98	3.58	N/A	N/A	N/A	N/A
BPAB5SZ	8-82S R11C	1997	3.8	AX4S	WIN98	3.58	N/A	N/A	N/A	N/A
BPAB6JE	8-82J R11FB	1996	3.8	AX4S	WIN98	3.58	N/A	N/A	N/A	N/A
BTAE1CQ	7-10C R10FC	1997	3	AX4S	TAURUS FFV-ETHANOL	3.77	0	0	0	0
BTAE1CU	7-10C R10FC	1997	3	AX4S	TAURUS FFV-ETHANOL	3.77	0	0	0	0
BTAE1QS	7-10G R10SN	1997	3	AX4S	TAURUS FFV-METHANOL	3.77	0	0	0	0
BTAE2CN	8-10C R05SN	1998	3	AX4S	TAURUS FFV-ETHANOL	3.77	0	0	0	0
BTAE2G8	8-10G R05C & 8-10G R05FB	1998	3	AX4S	TAURUS FFV-METHANOL	3.77	0	0	0	0
BUAD8A3	8-10A R06FB	1998	3	AX4S & AX4N	TAUSABLE 2V	3.77	1	0	0	0
BUAD8A4	8-10A R11FB	1998	3	AX4S & AX4N	TAUSABLE 2V	3.77	1	0	0	0
BUAD8B3	8-10B R08FB	1998	3	AX4N	TAUSABLE 2V	3.77	1	0	0	0
BUAD8T3	8-10T R06C	1998	3	AX4N	TAUSABLE 2V	3.77	1	0	0	0
BUAD8T4	8-10T R11C	1998	3	AX4N	TAUSABLE 2V	3.77	1	0	0	0
BUADDH	8-10D R11	1998	3.4	AX4N	TAURUS SHO	3.77	1	0	0	0
BUADDMH	8-10M R11	1998	3.4	AX4N	TAURUS SHO	3.77	1	0	0	0
BUAE0A7	8LDA-JAE	1998	3	AX4N	TAUSABLE 4V	3.98	1	0	0	0
BUAE0AR	8LDA-BAB AC	1998	3	AX4N	TAUSABLE 4V	3.98	1	0	0	0
BUAE0AS	8LDA-QA BO	1998	3	AX4N	TAUSABLE 4V	3.98	1	0	0	0
BUAE0AT	8LDA-GA B	1996 & 1998	3	AX4N	TAUSABLE 4V	3.98	1	0	0	0
BUAE0AU	8LDA-QAD	1998	3	AX4N	TAUSABLE 4V	3.98	1	0	0	0
BUAE0AV	8-14A R12	1998	3	AX4N	TAUSABLE 4V	3.98	1	0	0	0
BUAE0AW	8LDA-JA C	1998 & 1999	3	AX4N	TAUSABLE 4V	3.98	1	0	0	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
BUAEOAX	8-14A R10FM	1998	3	AX4N	TAU/SABLE 4V		3.98	1	0	0
BUAEOAY	8LDA-QAD	1999	3	AX4N	TAU/SABLE 4V		3.98	1	0	0
BUAEOB6	8-10B R08FB	1998	3	AX4N	TAU/SABLE 2V		3.77	1	0	0
BUAEOB8	8LAA-ABD	1999	3	AX4N	TAU/SABLE 2V		3.77	1	0	0
BUAEOBT	8LDA-ABB AFB	1999	3	AX4N	TAU/SABLE 4V		3.98	1	0	0
BUAEOBU	8LDA-BAD	1999	3	AX4N	TAU/SABLE 4V		3.98	1	0	0
BUAEOBV	8LDA-ABD	1999	3	AX4N	TAU/SABLE 4V		3.98	1	0	0
BUAEOBX	8-10B R11FB	1998	3	AX4N	TAU/SABLE 2V		3.77	1	0	0
BUAEOBY	8LAAFB	1998 & 1999	3	AX4N & AX4S	TAU/SABLE 2V		3.77	1	0	0
BUAEOO3	8LDA-ADC	1999	3	AX4N	TAU/SABLE 4V		3.98	1	0	0
BUAEOOV	8LDA-BDC	1999	3	AX4N	TAU/SABLE 4V		3.98	1	0	0
BUAEOOW	8LDA-ADA	1999	3	AX4N	TAU/SABLE 4V		3.98	1	0	0
BUAEOOX	8LDA-BDA	1999	3	AX4N	TAU/SABLE 4V		3.98	1	0	0
BUAEOO7	8LAA-BNC	1999	3	AX4N	TAU/SABLE 2V	Undef		1	0	0
BUAEOO3	8-14S R10C	1998	3	AX4N	TAU/SABLE 4V		3.98	1	0	0
BUAEOO6	8-10T R05C	1998	3	AX4N	TAU/SABLE 2V		3.77	1	0	0
BUAEOO8	8-10T R11C	1998	3	AX4N	TAU/SABLE 2V		3.77	1	0	0
BUAE1A8	8LAA-AAD	1999	3	AX4S	TAU/SABLE 2V		3.77	1	0	0
BUAE1AY	8-10A R11FB	1998	3	AX4N & AX4S	TAU/SABLE 2V		3.77	1	0	0
BUAE1AZ	8-10A R05FB	1998	3	AX4S & AX4N	TAU/SABLE 2V		3.77	1	0	0
BUAE1S8	8LAA-BSC	1999	3	AX4S	TAU/SABLE 2V	Undef		1	0	0
BVAJAA2	8LAA-EA EE	1999	3	AX4S	WIN128		3.98	1	0	0
BVAJAA4	8LAA-EA EE	1999	3	AX4S	WIN128		3.98	1	0	0
BVAJAAZ	8LAA-GA EG	1999	3	AX4S	WIN128		3.98	1	0	0
BVAJAS6	0A31ASDE10	2000	3.8	AX4S	WIN128		3.58	1	0	0
BVAJAS7	0A31CSOB10	2000	3.8	AX4S	WIN128 ULEV & WIN128/ULEV		3.58	1	0	0
BVAJAS9	0A31ASOB05	2000	3.8	AX4S	WIN128 COST SAVE		3.58	1	0	0
BVAJASG	0A31CSOB10	2000	3.8	AX4S	WIN128 ULEV & WIN128/ULEV		3.58	1	0	0
BVAJASH	0A31ASOB05	2000	3.8	AX4S	WIN128 COST SAVE		3.58	1	0	0
BVAJAS8	0A31ASOB10	2000	3.8	AX4S	WIN128		3.58	1	0	0
BVAJAST	0A31BSOB10	2000	3.8	AX4S	WIN128		3.58	1	0	0
BVAJASZ	0A31BSOB10	2000	3.8	AX4S	WIN128		3.58	1	0	0
BWAK3N2	1DD14N0610	2001	3	4F50N	TAU/SABLE 4V		3.98	1	0	0
BWAK4N8	1DD12N0610	2001	3	4F50N	TAU/SABLE 2V		3.77	1	0	0
BWAK4S8	1DD12S0510	2001	3	AX4S	TAU/SABLE 2V		3.77	1	0	0
BWAK6N3	1DD1FN0512	2001	3	4F50N	D186 - FFV Ethanol		3.77	1	0	0
BWAK6S3	1DD1F60512	2001	3	AX4S	D186 - FFV Ethanol		3.77	1	0	0
BXAN8AL	0DD12N0A10	2000	3	AX4N	TAU/SABLE 2V		3.77	1	0	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	V9CLP	GI	IDC_MIN	IDC_MAX
BXANBAZ	0DD13N0A05	2000	3	AX4N	D188 CS Cat - 2V Fed	3.77	1	0	0	0
BXANBNC	0DD12N0B11	2000	3	AX4N	TALU/SABLE 2V	3.77	1	0	0	0
BXANBMM	0DD13N0606	2000	3	AX4N	D188 CS Cat - 2V Calif & D188 CSCat - 2V CALIF & D188 COST SAVE - CALIF	3.77	1	0	0	0
BXANBSE	0DD1380A05	2000	3	AX4S	D188 CS Cat - 2V Fed	3.77	1	0	0	0
BXANBSG	0DD1290A10	2000	3	AX4S	TALU/SABLE 2V	3.77	1	0	0	0
BXANBSH	0DD15N0608	2000	3	AX4N	D188 CS Cat - 4V Calif & D188 CSCat - Cal 4V & D188 CSCat - 2V CALIF & D188 CS CAT CALIF 4V & D188 COST SAVE CALIF 4V & D188 COST SAVE - CALIF	3.98	1	0	0	0
BXANBSM	0DD15N0508	2000	3	AX4N	D188 CS Cat - 4V Calif & D188 COST SAVE CALIF 4V & D188 CSCat - Cal 4V & D188 CSCat - 2V CALIF & D188 CS CAT CALIF 4V & D188 COST SAVE - CALIF	3.98	1	0	0	0
BXANBAJ	0DD15N0A05	2000	3	AX4N	D188 CS Cat - 4V Fed & D188 CS CAT FED 4V & D188 CSCat Fed 4V	3.98	1	0	0	0
BXANBAK	0DD14N0A05	2000	3	AX4N	TALU/SABLE 4V	3.98	1	0	0	0
BXANBAN	0DD14N0A05	2000	3	AX4N	TALU/SABLE 4V	3.98	1	0	0	0
BXANBAZ	0DD15N0A05	2000	3	AX4N	D188 CS Cat - 4V Fed & D188 CSCat Fed 4V & D188 CS CAT FED 4V	3.98	1	0	0	0
BXANBBL	0DD14N0B06	2000	3	AX4N	TALU/SABLE 4V	3.98	1	0	0	0
BXANBBZ	0DD14N0B08	2000	3	AX4N	TALU/SABLE 4V	3.98	1	0	0	0
BXANBD3	0DD18D0508	2000	3	AX4S	D188 - FFV Ethanol	3.77	1	0	0	0
BXANSD5	0DD1ND0505	2000	3	AX4N	D188 - FFV W/AX4N & D188-FFV W/AX4N	3.77	1	0	0	0

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
CABC8HK	4-18H R00FB	1994	4.8	AODE	FORD/MERCURY	3.27	N/A	N/A	N/A	N/A
CABC8IL	4-18I R00FB	1994	4.8	AODE	FORD/MERCURY	3.27	N/A	N/A	N/A	N/A
CABHAEM	4-18E R00FB	1994	4.8	AODE	LINC.TOWNCAR	3.86	N/A	N/A	N/A	N/A
CABHAJL	4-18J R00FB	1994	4.8	AODE	LINC.TOWNCAR	3.08	N/A	N/A	N/A	N/A
CBAZ0E5	4-54E R10FB	1994 & 1995	5	AODEW	F-SER/BRONCO	3.31 & 3.55	N/A	N/A	N/A	N/A
CBAZ0JW	4-54J R10FB	1994 & 1995	5	AODEW	F-SER/BRONCO	3.08	N/A	N/A	N/A	N/A
CBAZ0KF	4-54K R10FB	1994 & 1995	5	AODEW	ECONOLINE	3.31	N/A	N/A	N/A	N/A
CBAZ0R2	4-54R R10C	1994 & 1995	5	AODEW	F-SER/BRONCO	3.31 & 3.55	N/A	N/A	N/A	N/A
CBAZ09G	4-54S R10C	1994	5	AODEW	F-SER/BRONCO	3.08	N/A	N/A	N/A	N/A
CBAZ0TI	4-64T R10C	1994 & 1995	5	AODEW	ECONOLINE	3.31 & 3.55	N/A	N/A	N/A	N/A
CBAZAAY	4-22A R00FB	1994 & 1995	5	AODE	MUSTANG	2.73	N/A	N/A	N/A	N/A
CBAZAAZ	4-21A R00FB	1994 & 1995	5	T500	MUSTANG	2.73 & 3.08 & 2.73/3.08	N/A	N/A	N/A	N/A
CBAZACK	4-22C R00FB	1994 & 1995	5	AODE	MUSTANG	3.27	N/A	N/A	N/A	N/A
CBAZAF6	4-21F R00FB	1994 & 1995	5	T500	MUSTANG COBRA	3.08	N/A	N/A	N/A	N/A
CBAZAG7	5-23G R00	1995	5.8	MAN	MUSTANG COBRA	3.27	N/A	N/A	N/A	N/A
CCAQEA9	4-18A R10FB	1994	4.8	4R70W	T-BIRD/COUGAR	3.08	N/A	N/A	N/A	N/A
CCAQEA8	5-18A R00FB	1995	4.8	4R70W	T-BIRD/COUGAR	3.08	N/A	N/A	N/A	N/A
CCAQEB5	4-18B R10FB	1994	4.8	Undef	T-BIRD/COUGAR	Undef	N/A	N/A	N/A	N/A
CCAQEB9	4-16E R10FB	1995 & 1994	3.8	T500	MUSTANG	2.73	N/A	N/A	N/A	N/A
CCAQEE8	4-16E R10FB	1994 & 1995	3.8	AODE	MUSTANG	2.73	N/A	N/A	N/A	N/A
CCAQEP6	4-16P R10	1994	4.8	Undef	T-BIRD/COUGAR	Undef	N/A	N/A	N/A	N/A
CCAQEPX	4-16P R10C	1994 & 1995	3.8	T500	MUSTANG	2.73	N/A	N/A	N/A	N/A
CCAQEPY	4-16P R10C	1994 & 1995	3.8	AODE	MUSTANG	2.73	N/A	N/A	N/A	N/A
CDAN4A7	6-20A R11FM	1996 & 1997	4.8	4R70W	MUSTANG	3.08	N/A	N/A	N/A	N/A
CDAN4A8	6-19A R11FM	1996 & 1997	4.8	T45	MUSTANG	2.73	N/A	N/A	N/A	N/A
CDAN4BH	7-18B R11FM	1997	4.8	4R70W	T-BIRD/COUGAR	3.27	N/A	N/A	N/A	N/A
CDAN4C5	6-20C R11FM	1996 & 1997	4.8	4R70W	MUSTANG	3.27	N/A	N/A	N/A	N/A
CDAN4C7	6-19C R11FM	1996 & 1997	4.8	T450D	MUSTANG	3.27	N/A	N/A	N/A	N/A
CDAN4E2	6-16E R06FB	1996	3.8	T500	MUSTANG	2.73	N/A	N/A	N/A	N/A
CDAN4EQ	7-16E R05FB	1997	3.8	4R70W	MUSTANG	2.73	N/A	N/A	N/A	N/A
CDAN4ER	6-16E R06FB	1996	3.8	4R70W	MUSTANG	2.73	N/A	N/A	N/A	N/A
CDAN4ES	7-16E R05FB	1997	3.8	T500	MUSTANG	2.73	N/A	N/A	N/A	N/A
CDAN4ET	6-16E R06FB	1996	3.8	T500	MUSTANG	2.73	N/A	N/A	N/A	N/A
CDAN4EX	6-16E R06FB	1996	3.8	4R70W	MUSTANG	2.73	N/A	N/A	N/A	N/A
CDAN4F4	6-18F R12FB	1996	4.8	4R70W	FORD/MERCURY	2.73	N/A	N/A	N/A	N/A
CDAN4FZ	7-16F R10FB	1997	3.8	4R70W	T-BIRD/COUGAR	3.27	N/A	N/A	N/A	N/A
CDAN4H3	6-16H R12FB	1996	4.8	4R70W	FORD/MERCURY	3.27	N/A	N/A	N/A	N/A
CDAN4HM	6-16H R12FB	1996	4.8	4R70W	FORD/MERCURY	3.27	N/A	N/A	N/A	N/A
CDAN4M	6-16I R12FB	1996	4.8	4R70W	FORD/MERCURY	3.27	N/A	N/A	N/A	N/A
CDAN4M5	6-19M R12C	1996	4.8	4R70W	FORD/MERCURY	2.73	N/A	N/A	N/A	N/A
CDAN4MZ	6-37M R10S & 6-37M R10SM	1997 & 1996	4.8	T450D	MUSTANG COBRA	3.27	N/A	N/A	N/A	N/A
CDAN4N3	6-18N R12C	1996	4.8	4R70W	FORD/MERCURY	3.27	N/A	N/A	N/A	N/A
CDAN4NZ	6-37N R10S & 6-37N R10SM	1997 & 1996	4.8	T45 & T450D	MUSTANG COBRA	3.27	N/A	N/A	N/A	N/A
CDAN4P2	6-15P R06C	1996	3.8	T500	MUSTANG	2.73	N/A	N/A	N/A	N/A

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
CDAN4P7	6-20P R11C	1996 & 1997	4.6	4R70W	MUSTANG		3.08	N/A	N/A	N/A
CDAN4PA	6-19P R11C	1996 & 1997	4.6	T450D	MUSTANG		2.73	N/A	N/A	N/A
CDAN4PD	6-16P R06C	1996	3.8	T60D	MUSTANG		2.73	N/A	N/A	N/A
CDAN4PE	7-15P R05C	1997	3.8	T60D	MUSTANG		2.73	N/A	N/A	N/A
CDAN4PF	7-18P R11C	1997	4.6	4R70W	T-BIRD/COUGAR		3.27	N/A	N/A	N/A
CDAN4PT	7-16P R06C	1997	3.8	4R70W	MUSTANG		2.73	N/A	N/A	N/A
CDAN4PU	6-16P R06C	1996	3.8	4R70W	MUSTANG		2.73	N/A	N/A	N/A
CDAN4PX	6-16P R05C	1996	3.8	4R70W	MUSTANG		2.73	N/A	N/A	N/A
CDAN4T5	6-20T R11C	1996 & 1997	4.6	4R70W	MUSTANG		3.27	N/A	N/A	N/A
CDAN4T7	6-18T R11C	1996 & 1997	4.6	T45	MUSTANG		3.27	N/A	N/A	N/A
CDAN4TY	7-16T R10C	1997	3.8	4R70W	T-BIRD/COUGAR		3.27	N/A	N/A	N/A
CDAN6E5	6-18E R11FB	1996	4.6	4R70W	LINC.TOWNCAR		3.27	N/A	N/A	N/A
CDAN6F3	6-18F R12FB	1996	4.6	4R70W	FORD/MERCURY		2.73	N/A	N/A	N/A
CDAN6H3	6-18H R12FB	1996	4.6	4R70W	FORD/MERCURY		3.27	N/A	N/A	N/A
CDAN6HZ	6-18H R12FB	1996	4.6	4R70W	FORD/MERCURY		3.27	N/A	N/A	N/A
CDAN6I3	6-18I R12FB	1996	4.6	4R70W	FORD/MERCURY		3.27	N/A	N/A	N/A
CDAN6J5	6-18J R11FB	1996	4.6	4R70W	LINC.TOWNCAR		3.08	N/A	N/A	N/A
CDAN6M3	6-18M R12C	1996	4.6	4R70W	FORD/MERCURY		2.73	N/A	N/A	N/A
CDAN6N3	6-18N R12C	1996	4.6	4R70W	FORD/MERCURY		3.27	N/A	N/A	N/A
CDAN6Q8	6-18Q R11C	1996	4.6	4R70W	LINC.TOWNCAR		3.08	N/A	N/A	N/A
CDAN6S6	6-18S R11C	1996	4.6	4R70W	LINC.TOWNCAR		3.27	N/A	N/A	N/A
CDAP3E9	7-18E R11	1997	4.6	4R70W	LINC.TOWNCAR		3.08	N/A	N/A	N/A
CDAP3F9	7-18F R05	1997	4.6	4R70W	FORD/MERCURY		2.73	N/A	N/A	N/A
CDAP3FD	7-18F R11FB	1997	4.6	4R70W	FORD/MERCURY		2.73	N/A	N/A	N/A
CDAP3H9	7-18H R06	1997	4.6	4R70W	FORD/MERCURY		3.27	N/A	N/A	N/A
CDAP3HA	7-18H R11FM	1997	4.6	4R70W	FORD/MERCURY		3.27	N/A	N/A	N/A
CDAP3HB	7-18H R11FM	1997	4.6	4R70W	FORD/MERCURY		3.27	N/A	N/A	N/A
CDAP3I9	7-18I R06FB	1997	4.6	4R70W	FORD/MERCURY		3.27	N/A	N/A	N/A
CDAP3JB	7-18I R12FB	1997	4.6	4R70W	FORD/MERCURY		3.27	N/A	N/A	N/A
CDAP3JA	7-18J R11FM	1997	4.6	4R70W	LINC.TOWNCAR		3.08	N/A	N/A	N/A
CDAP3MB	7-18M R05C	1997	4.6	4R70W	FORD/MERCURY		2.73	N/A	N/A	N/A
CDAP3ME	7-18M R11C	1997	4.6	4R70W	FORD/MERCURY		2.73	N/A	N/A	N/A
CDAP3NE	7-18N R05C	1997	4.6	4R70W	FORD/MERCURY		3.27	N/A	N/A	N/A
CDAP3NA	7-18N R11C	1997	4.6	4R70W	FORD/MERCURY		3.27	N/A	N/A	N/A
CDAP3QB	7-18Q R11C	1997	4.6	4R70W	LINC.TOWNCAR		3.08	N/A	N/A	N/A
CDAP3SA	7-18S R11C	1997	4.6	4R70W	LINC.TOWNCAR		3.27	N/A	N/A	N/A
CDBA4KC	6-38K R10C & 6-38K R10FB	1996	4.6	4R70W	MARK	3.27 & 3.31	N/A	N/A	N/A	N/A
CDBA4LA	6-38L R10FB	1996	4.6	4R70W	MARK		3.07	N/A	N/A	N/A
CDBA4QE	6-38Q R10C	1996	4.6	4R70W	MARK		3.07	N/A	N/A	N/A
CFAK7T6	6-54T R11C	1996	5	4R70W	ECONLINE		3.31	N/A	N/A	N/A
CFAK8E6	6-53E R12FB	1996	6	M5	F-SERV/BRONCO		3.55	N/A	N/A	N/A
CFAK8EY	6-54E R12FB	1996	6	4R70W	F-SERV/BRONCO		3.55	N/A	N/A	N/A
CFAK8F6	6-53F R12FB	1996	6	M5	F-SERV/BRONCO		3.08	N/A	N/A	N/A
CFAK8G6	6-53G R12FB	1996	5	M5	F-SERV/BRONCO		3.55	N/A	N/A	N/A
CFAK8K6	6-54K R12FB	1996	5	4R70W	ECONLINE		3.31	N/A	N/A	N/A

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
CGAK8E8	5-18E R13FB	1995	4.6	4R70W	LINC.TOWNCAR	3.27	N/A	N/A	N/A	N/A
CGAK8EA	5-18E R13FB	1995	4.6	4R70W	LINC.TOWNCAR	3.27	N/A	N/A	N/A	N/A
CGAK8F4	5-18F R14FB	1995	4.6	4R70W	FORDMERCURY	2.73	N/A	N/A	N/A	N/A
CGAK8H5	5-18H R14FB	1995	4.6	4R70W	FORDMERCURY	3.27	N/A	N/A	N/A	N/A
CGAK8J8	5-18J R13FB	1995	4.6	4R70	LINC.TOWNCAR	3.08	N/A	N/A	N/A	N/A
CGAK8JA	5-18J R13FB	1995	4.6	4R70	LINC.TOWNCAR	3.08	N/A	N/A	N/A	N/A
CGAK8M2	5-18M R10C	1995	4.6	4R70W	FORDMERCURY	2.73	N/A	N/A	N/A	N/A
CGAK8N2	5-18N R10C	1995	4.6	4R70W	FORDMERCURY	3.27	N/A	N/A	N/A	N/A
CGAK8Q6	5-18Q R10C	1995	4.6	4R70	LINC.TOWNCAR	3.08	N/A	N/A	N/A	N/A
CGAK8Q8	5-18Q R10C	1995	4.6	4R70	LINC.TOWNCAR	3.08	N/A	N/A	N/A	N/A
CGAK8S6	5-18S R10C	1995	4.6	4R70W	LINC.TOWNCAR	3.27	N/A	N/A	N/A	N/A
CGAK8S8	5-18S R10C	1995	4.6	4R70W	LINC.TOWNCAR	3.27	N/A	N/A	N/A	N/A
CJAB1J4	8-44J R06FM	1998	4.2	4R70W	ECONOLINE	Undef	0	0	0.98999017	0.98999017
CJAB1K3	8-44K R10FM	1998	4.2	4R70W	ECONOLINE	Undef	0	0	0.98999017	0.98999017
CJAB1L4	8-44L R05SN	1998	4.2	4R70W	ECONOLINE	Undef	0	0	0.98999017	0.98999017
CJAB1MX	8-44M R05FB	1998	4.8	4R70W	ECONOLINE	Undef	0	0	0	0
CJAB1MY	8-44M R10SN	1998	4.2	4R70W	ECONOLINE	Undef	0	0	0.98999017	0.98999017
CJAB1T5	8-44T R05C	1998	4.2	4R70W	ECONOLINE	Undef	0	0	0.98999017	0.98999017
CJAB1U9	8-44U R10C	1998	4.2	4R70W	ECONOLINE	Undef	0	0	0.98999017	0.98999017
CJAB1WZ	8-44W R05C	1998	4.8	4R70W	ECONOLINE	Undef	0	0	0	0
CMA9K3	7-38K R12FB	1997	4.6	4R70W	MARK	3.07	0	0	0	0
CMA9LZ	7-38L R12FB	1997	4.6	4R70W	MARK	3.07	0	0	0	0
CMA9K7	8-38K R05FB	1998	4.8	4R70W	MARK	3.07	0	0	0	0
CNAB0C6	7-47C R11FB	1997 & 1998	4.6	M5	PN96	3.08	N/A	N/A	N/A	N/A
CNAB0CZ	7-48C R11FB	1997	4.6	4R70W	PN96	3.08	N/A	N/A	N/A	N/A
CNAB0D8	7-47D R11FB & 7-47D R11FM	1997 & 1998	4.8	M5	PN96	3.55	N/A	N/A	N/A	N/A
CNAB0DZ	7-48D R11FB	1997	4.6	4R70W	PN96	3.55	N/A	N/A	N/A	N/A
CNAB0E8	7-48E R11FB	1997	4.6	4R70W	PN96	3.55	N/A	N/A	N/A	N/A
CNAB0O6	7-47O R11C	1997 & 1998	4.8	M5	PN96	3.08	N/A	N/A	N/A	N/A
CNAB0Q6	7-49Q R11C	1997	4.6	4R70W	PN96	3.08	N/A	N/A	N/A	N/A
CNAB0R5	7-47R R11C	1997 & 1998	4.5	M5	PN96	3.55	N/A	N/A	N/A	N/A
CNAB0RY	7-48R R11C	1997	4.6	4R70W	PN96	3.55	N/A	N/A	N/A	N/A
CNAB0S6	7-48S R11C	1997	4.6	4R70W	PN96	3.55	N/A	N/A	N/A	N/A
CNAB1C3	8-48C R05FB	1998	4.8	4R70W	PN96	Undef	N/A	N/A	N/A	N/A
CNAB1D6	8-48D R05FM	1998	4.8	4R70W	PN96	Undef	N/A	N/A	N/A	N/A
CNAB1E3	8-48E R05FB	1998	4.8	4R70W	PN96	Undef	N/A	N/A	N/A	N/A
CNAB1O3	8-49O R05C	1998	4.6	4R70W	PN96	Undef	N/A	N/A	N/A	N/A
CNAB1R3	8-48R R05C	1998	4.8	4R70W	PN96	Undef	N/A	N/A	N/A	N/A
CNAB1S3	8-48S R05C	1998	4.6	4R70W	PN96	Undef	N/A	N/A	N/A	N/A
COAD3L4	8-18L R11B	1996 & 1997	4.6	4R70W	FORD Nat. Gas	2.73	N/A	N/A	N/A	N/A
COAD4L2	7-18L R10B	1997	4.6	4R70W	FORD Nat. Gas	2.73	N/A	N/A	N/A	N/A
CPAI1F6	7-48F R05FB	1997	4.6	4R70W	PN102	3.31	0	0	0.98999017	0.98999017
CPAI1F9	7-47F R05FB	1997 & 1998	4.6	M5	PN102	3.31	0	0	0.98999017	0.98999017
CPAI1G6	7-48G R05FB	1997	4.6	4R70W	PN102	3.73	0	0	0.98999017	0.98999017
CPAI1G7	7-47G R05FB	1997 & 1998	4.6	M5	PN102	3.73	0	0	0.98999017	0.98999017

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	VSCPL	GI	IDC_MIN	IDC_MAX
CPAI1M3	7-48M R11FB	1997	4.8	4R70W	ECONOLINE	3.31/3.55	0	0	0	0
CPAI1P8	7-48P R05C	1997	4.8	4R70W	PN102		3.31	0	0.98999017	0.98999017
CPAI1S7	7-47S R05C	1997 & 1998	4.8	M6	PN102		3.31	0	0.98999017	0.98999017
CPAI1T8	7-48T R06C	1997	4.8	4R70W	PN102		3.73	0	0.98999017	0.98999017
CPAI1T7	7-47T R06C	1997 & 1998	4.8	M6	PN102		3.73	0	0.98999017	0.98999017
CPAI1W3	7-48W R11C	1997	4.8	4R70W	ECONOLINE	3.31/3.55	0	0	0	0
CPAI3J4	7-44J R10FB	1997	4.2	4R70W	ECONOLINE	3.31/3.55	0	0	0.98999017	0.98999017
CPAI3K9	7-44K R10FB	1997	4.2	4R70W	ECONOLINE	3.31/3.55/3.73	0	0	0.98999017	0.98999017
CPAI3L5	7-44L R10SN	1997	4.2	4R70W	ECONOLINE		4.1	0	0.98999017	0.98999017
CPAI3M5	7-44M R10SN	1997	4.2	4R70W	ECONOLINE		4.09	0	0.98999017	0.98999017
CPAI3T6	7-44T R10C	1997	4.2	4R70W	ECONOLINE	3.31/3.55	0	0	0.98999017	0.98999017
CPAI3U8	7-44U R10C	1997	4.2	4R70W	ECONOLINE	3.31/3.55/3.73	0	0	0.98999017	0.98999017
CPAIAJ4	7-48J R10FM	1997	4.8	4R70W	UN93		3.31	0	0.98999017	0.98999017
CPAIAU7	7-48U R10C	1997	4.8	4R70W	UN93		3.55	0	0.98999017	0.98999017
CPAISJ7	7-48J R10FM & 8-48J R10FM	1997 & 1998	4.8	4R70W	UN93		3.31	0	0.98999017	0.98999017
CPAIBUG	7-48U R10C & 8-48U R10C	1997 & 1998	4.8	4R70W	UN93		3.55	0	0.98999017	0.98999017
CPAJ0F3	8-48F R06FB	1998	4.8	4R70	PN102	Undef	0	0	0.98999017	0.98999017
CPAJ0G3	8-48G R06FB	1998	4.8	4R70W	PN102	Undef	0	0	0.98999017	0.98999017
CPAJ0P3	8-48P R05C	1998	4.8	4R70W	PN102	Undef	0	0	0.98999017	0.98999017
CPAJ0T3	8-48T R06C	1998	4.8	4R70W	PN102	Undef	0	0	0.98999017	0.98999017
CQAB2G2	7-54G R13FM	1997	5.4	4R70W	UN-103		3.73	N/A	N/A	N/A
CQAB3G2	7-54G R13FM	1997	5.4	4R70W	UN-106		3.73	N/A	N/A	N/A
CRAI8AG	8-18A R10FM	1998	4.8	T45	MUSTANG		2.73	0	0	0
CRAI8AX	8-20A R10FM	1998	4.8	4R70W	MUSTANG		3.08	0	0	0
CRAI8BG	8-18B R10FM	1998	4.8	T45	MUSTANG		2.73	0	0	0
CRAI8BY	8-20B R10FM	1998	4.8	4R70W	MUSTANG		3.08	0	0	0
CRAI8CA	8-20C R10FM	1998	4.8	4R70W	MUSTANG		3.27	0	0	0
CRAI8CG	8-18C R10FM	1998	4.8	T45	MUSTANG		3.27	0	0	0
CRAI8DA	8-20D R10FM	1998	4.8	4R70W	MUSTANG		3.27	0	0	0
CRAI8DG	8-19D R10FM	1998	4.8	T45	MUSTANG		3.27	0	0	0
CRAI8E2	8-15E R05FB	1998	3.8	T50D	MUSTANG		2.73	0	0	0
CRAI8EZ	8-16E R06FB	1998	3.8	4R70W	MUSTANG		2.73	0	0	0
CRAI8P3	8-15P R05C	1998	3.8	T50D	MUSTANG		2.73	0	0	0
CRAI8P9	8-19P R10C	1998	4.8	T45	MUSTANG		2.73	0	0	0
CRAI8PY	8-20P R10C	1998	4.8	4R70W	MUSTANG		3.08	0	0	0
CRAI8R6	8-20R R10C	1998	4.8	4R70W	MUSTANG		3.08	0	0	0
CRAI8R9	8-19R R10C	1998	4.8	T45	MUSTANG		2.73	0	0	0
CRAI8SG	8-19S R10C	1998	4.8	T45	MUSTANG		3.27	0	0	0
CRAI8SY	8-20S R10C	1998	4.8	4R70W	MUSTANG		3.27	0	0	0
CRAI8TA	8-20T R10C	1998	4.8	4R70W	MUSTANG		3.27	0	0	0
CRAI8TG	8-19T R10C	1998	4.8	T45	MUSTANG		3.27	0	0	0
CRAIBD3	8VNA-GD FG	1998	4.8	4R70W	FORD/MERCURY		2.73	0	0	0
CRAIBE5	8VNA-GE FG	1998	4.8	4R70W	FORD/MERCURY		3.27	0	0	0
CRAIBFZ	8VNA-GF FG	1998	4.8	4R70W	LINC.TOWNCAR		3.08	0	0	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	V8CLP	GI	IDC_MIN	IDC_MAX
CRAIBK9	9VNA-BK BC	1999	4.6	4R70W	FORD/MERCURY	2.73	0	0	0	0
CRAIBL6	9VNA-AL BFM	1999	4.6	4R70W	FORD/MERCURY	3.27	0	0	0	0
CRAIBL8	9VNA-BL BC	1999	4.6	4R70W	FORD/MERCURY	3.27	0	0	0	0
CRAIBM8	9VNA-BM BC	1999	4.6	4R70W	LINC.TOWNCAR	3.08	0	0	0	0
CRAIBS8	9VNA-BS B	1999	4.6	4R70W	LINC.TOWNCAR	3.27	0	0	0	0
CRAICAZ	9VNA-AAE	1999	4.6	4R70W	FORD/MERCURY	3.55	0	0	0	0
CRAICD2	9VNA-QD CG	1999	4.6	4R70W	FORD/MERCURY	3.08	0	0	0	0
CRAICE3	9VNA-GE CG	1999	4.6	4R70W	FORD/MERCURY	3.27	0	0	0	0
CRAICE6	8-18E R128M	1998	4.6	4R70W	LINC.TOWNCAR	3.55	0	0	0	0
CRAICF3	9VNA-GF CG	1999	4.6	4R70W	LINC.TOWNCAR	3.08	0	0	0	0
CRAICF4	8-18F R12FB	1998	4.6	4R70W	FORD/MERCURY	2.73	0	0	0	0
CRAICH4	8-18H R12FM	1998	4.6	4R70W	FORD/MERCURY	3.27	0	0	0	0
CRAICHZ	8-18H R12FM	1998	4.6	4R70W	FORD/MERCURY	3.27	0	0	0	0
CRAICI7	8-18I R12FM	1998	4.6	4R70W	FORD/MERCURY	3.27	0	0	0	0
CRAICJ6	8-18J R11FB	1998	4.6	4R70W	LINC.TOWNCAR	3.08	0	0	0	0
CRAICK6	9VNA-AK CFB	1999	4.6	4R70W	FORD/MERCURY	2.73	0	0	0	0
CRAICL5	9VNA-AL CFM	1999	4.6	4R70W	FORD/MERCURY	3.27	0	0	0	0
CRAICLZ	9VNA-AL CFM	1999	4.6	4R70W	FORD/MERCURY	3.27	0	0	0	0
CRAICM3	8-18M R13	1998	4.6	4R70W	FORD/MERCURY	2.73	0	0	0	0
CRAICN3	8-18N R13	1998	4.6	4R70W	FORD/MERCURY	3.27	0	0	0	0
CRAIOE6	8-18E R12SM	1998	4.6	4R70W	LINC.TOWNCAR	3.55	0	0	0	0
CRAIDJ5	8-18J R11FB	1998	4.6	4R70W	LINC.TOWNCAR	3.08	0	0	0	0
CRAIDM2	9VNA-EM BC	1999	4.6	4R70W	LINC.TOWNCAR	3.08	0	0	0	0
CRAIDM6	9VNA-AM CFB	1999	4.6	4R70W	LINC.TOWNCAR	3.08	0	0	0	0
CRAIDQ2	8-18Q R13SN	1998	4.6	4R70W	LINC.TOWNCAR	3.08	0	0	0	0
CRAIDS2	8-18S R13S	1998	4.6	4R70W	LINC.TOWNCAR	3.27	0	0	0	0
CRAIDS2	9VNA-BS B	1999	4.6	4R70W	LINC.TOWNCAR	3.27	0	0	0	0
CRAJOM8	8-37M R10FM	1999	4.6	T45	MUSTANG COBRA	3.27	0	0	0	0
CRAJOP2	8-18P R05C	1998	3.8	4R70W	MUSTANG	2.73	0	0	0	0
CSAH1G4	1FB1NG0606	2001	4.6	4R70W	FORD Nat. Gas	2.73	1	0	0	0
CSAH1GZ	2FB1NG0606	2002	4.6	4R70W	FORD Nat. Gas	2.73	1	0	0	0
CSAH1L3	8-18L R06S	1998 & 1999	4.6	4R70W	FORD Nat. Gas	2.73	1	0	0	0
CSAH1V4	9VNA-AV A	1999 & 2001 & 2000	4.6	4R70W	FORD Nat. Gas	2.73	1	0	0	0
CTAA6CY	6-47C R10FB	1997	4.6	M5	PN96	3.08	N/A	N/A	N/A	N/A
CTAA6CZ	6-48C R10FB	1997	4.6	4R70W	PN96	3.08	N/A	N/A	N/A	N/A
CTAA6D6	6-47D R10FB	1997	4.6	M5	PN96	3.55	N/A	N/A	N/A	N/A
CTAA6D8	6-48D R10FB	1997	4.6	4R70W	PN96	3.08	N/A	N/A	N/A	N/A
CTAA6EZ	6-48E R10FB	1997	4.6	4R70W	PN96	3.08	N/A	N/A	N/A	N/A
CTAA6QA	6-48Q R10C	1997	4.6	4R70W	PN96	3.08	N/A	N/A	N/A	N/A
CTAA6QZ	6-47Q R10C	1997	4.6	M5	PN96	3.08	N/A	N/A	N/A	N/A
CTAA6RB	6-48R R10C	1997	4.6	4R70W	PN96	3.55	N/A	N/A	N/A	N/A
CTAA6RZ	6-47R R10C	1997	4.6	M5	PN96	3.55	N/A	N/A	N/A	N/A
CTAA6SC	6-48S R10C	1997	4.6	4R70W	PN96	3.55	N/A	N/A	N/A	N/A
CTAA6E2	6-49E R11FB	1997	4.2	M5	PN96	3.08	N/A	N/A	N/A	N/A
CTAA6E3	6-44E R11FB	1997	4.2	4R70W	PN96	3.08	N/A	N/A	N/A	N/A

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	V8CLP	GI	IDC_MIN	IDC_MAX
CTAABF2	6-43F R11FB	1997	4.2	M5	PN96		3.55	N/A	N/A	N/A
CTAABF4	6-44F R11FB	1997	4.2	4R70W	PN96		3.55	N/A	N/A	N/A
CTAABR3	6-43R R11C	1997	4.2	M5	PN96		3.08	N/A	N/A	N/A
CTAABR4	6-44R R11C	1997	4.2	4R70W	PN96		3.08	N/A	N/A	N/A
CTAAB83	6-43S R11C	1997	4.2	M5	PN96		3.55	N/A	N/A	N/A
CTAAB86	6-44S R11C	1997	4.2	4R70W	PN96		3.55	N/A	N/A	N/A
CTAF4E8	7-43E R11FB	1997	4.2	M5	PN96		3.08	N/A	N/A	N/A
CTAF4E9	7-44E R11FB	1997	4.2	Undef	PN96	Undef		N/A	N/A	N/A
CTAF4F8	7-43F R11FB	1997	4.2	M5	PN96		3.55	N/A	N/A	N/A
CTAF4FH	7-44F R11FB	1997	4.2	4R70W	PN96		3.55	N/A	N/A	N/A
CTAF4R3	7-43R R11C	1997	4.2	M5	PN96		3.08	N/A	N/A	N/A
CTAF4RZ	7-44R R11C	1997	4.2	4R70W	PN96		3.08	N/A	N/A	N/A
CTAF4S3	7-43S R11C	1997	4.2	M5	PN96		3.55	N/A	N/A	N/A
CTAF4S2	7-44S R11C	1997	4.2	4R70W	PN96		3.55	N/A	N/A	N/A
CTAF5E6	8-44E R06FB	1998	4.2	4R70W	PN96	Undef		N/A	N/A	N/A
CTAF5E7	8-43E R06FB	1998	4.2	M5	PN96		3.08	N/A	N/A	N/A
CTAF5F7	8-44F R06FB	1998	4.2	4R70W	PN96	Undef		N/A	N/A	N/A
CTAF5FZ	8-43F R06FB	1998	4.2	M5	PN96		3.55	N/A	N/A	N/A
CTAF6R4	8-44R R05C	1998	4.2	4R70W	PN96	Undef		N/A	N/A	N/A
CTAF5RZ	8-43R R00C	1998	4.2	M5	PN96		3.08	N/A	N/A	N/A
CTAF5S4	8-44S R05C	1998	4.2	4R70W	PN96	Undef		N/A	N/A	N/A
CTAF5S2	8-43S R00C	1998	4.2	M5	PN96		3.55	N/A	N/A	N/A
CTBAFG4	8-54G R12FB	1998		54R70W	UN-105		3.73	N/A	N/A	N/A
CTBAFG6	8-54G R12FB	1998		54R70W	UN-105		3.73	N/A	N/A	N/A
CVAE7BY	9VMM-ABC	1999	4.8	T45	MUSTANG COBRA		3.27	3	0	0
CVAE7F8	0ZE2CF0510	2000	4.8	T45	MUSTANG COBRA		3.27	3	0	0
					MUSTANG COBRA					
CVAE7R6	0ZE2CR0506	2000	5.4	Undef	R	Undef		3	0	0
CVAF1A8	9VXM-AAC	1999	4.6	T45	MUSTANG GT		3.27	2	0	0
CVAF1A8	9VXM-BAD	1999	4.6	T45	MUSTANG GT		3.27	2	0	0
CVAF1B3	9VXM-ABC	1999	4.6	T45	MUSTANG GT		3.27	2	0	0
CVAF1B6	9VXM-BBD	1999	4.6	T45	MUSTANG GT		3.27	2	0	0
CVAF1C3	9VXA-AAC	1999 & 2000	4.6	4R70W	MUSTANG GT		3.27	2	0	0
CVAF1CX	9VXA-ABC	2000 & 1999	4.6	4R70W	MUSTANG GT		3.27	2	0	0
CVAF1CY	9VXA-BAC	1999	4.6	4R70W	MUSTANG GT		3.27	2	0	0
CVAF1CZ	9VXA-BBC	1999	4.6	4R70W	MUSTANG GT		3.27	2	0	0
CVBA0A2	9LMA-BA BC & 9LMA-BAB	1999 & 2000	3.8	4R70W	MUSTANG		3.27	2	0	0
CVBA0A4	9LMA-BA BC & 9LMA-BAB	1999 & 2000	3.8	4R70W	MUSTANG		3.27	2	0	0
CVBA0BX	9LMA-AB BFB & 9LMA-ABB	1999 & 2000	3.8	4R70W	MUSTANG		3.27	2	0	0
CVBA0BZ	9LMA-AB BFB & 9LMA-ABB	1999 & 2000	3.8	4R70W	MUSTANG		3.27	2	0	0
CVBA2B3	9LMA-BBC	2000 & 1999	3.8	T50D	MUSTANG	3.08 & 3.27		2	0	0
CVBA2B5	9LMA-BBC	2000 & 1999	3.8	T50D	MUSTANG	3.08 & 3.27		2	0	0

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	V8CLP	GI	IDC_MIN	IDC_MAX
CVBA2B6	9LMM-ABC	1999 & 2000	3.8	T5OD	MUSTANG	3.27 & 3.08	2	0	0	0
CVBA2BZ	9LMM-ABC	2000 & 1999	3.8	T5OD	MUSTANG	3.08 & 3.27	2	0	0	0
CXAB9H5	9VNA-BH CFB & 9VNA-BHC	1999	4.8	4F70W	LINC.TOWNCAR	3.55	0	0	0	0
CZAJLL3	4-36L R06FB	1994	4.8	4F70W	MARK	3.07	N/A	N/A	N/A	N/A
CZAJLJY	4-36L R00FB	1994	4.8	4F70W	MARK	3.07	N/A	N/A	N/A	N/A
CZAJLQV	4-36Q R00C	1994	4.8	4F70W	MARK	3.07	N/A	N/A	N/A	N/A
CZAV0M7	4-18M R00C	1994	4.8	AODE	FORD/MERCURY	3.08	N/A	N/A	N/A	N/A
CZAV0N8	4-18N R00C	1994	4.8	AODE	FORD/MERCURY	3.27	N/A	N/A	N/A	N/A
CZAV0GJ	4-18Q R00C	1994	4.8	AODE	LINC.TOWNCAR	3.08	N/A	N/A	N/A	N/A
CZAV09K	4-18S R00C	1994	4.8	AODE	LINC.TOWNCAR	3.55	N/A	N/A	N/A	N/A
CZAW0A1	4-16A R06FB	1996 & 1994	3.8	4F70W	T-BIRD S/C	3.08 & 3.27/3.31	N/A	N/A	N/A	N/A
CZAW0A4	4-16A M06M	1996 & 1994	3.8	4F70W	T-BIRD S/C	3.08 & 3.27	N/A	N/A	N/A	N/A
CZAW0AX	4-15A R00FB	1994 & 1995	3.8	M5F2	T-BIRD S/C	2.73	N/A	N/A	N/A	N/A
DOAR3AY	0M11A30512	2002	3	CD4E	U204	Undef	120	0.25	-0.1000061	0.1000061
DOAR3B5	0M11B30512	2002	3	CD4E	U204	Undef	120	0.25	-0.1000061	0.1000061
DOAR3C5	0M11C30512	2002	3	CD4E	U204	Undef	120	0.25	-0.1000061	0.1000061
DOAR43S	2M11B30510	2002	3	C4DE	U204 Cat. Opt.	Undef	120	0.25	-0.1000061	0.1000061
DOAR43T	2M11C30510	2002	3	C4DE	U204 Cat. Opt.	Undef	120	0.25	-0.1000061	0.1000061
DOAR43W	2M11A30510	2002	3	C4DE	U204 Cat. Opt.	Undef	120	0.25	-0.1000061	0.1000061
DVAN923	0M12A20512	2001 & 2002	2	G5M	U204	Undef	1	0	0	0
DVAN924	0M12B20512	2001 & 2002	2	G5M	U204	Undef	1	0	0	0
DVAN92U	0M12A20512	2001 & 2002	2	G5M	U204	Undef	1	0	0	0
DVAN92Y	0M11A20513	2001 & 2002	2	CD4E	U204	Undef	1	0	0	0
DVANA2Z	0M11A20520	2002	2	Undef	U204	Undef	1	0	0	0
DVAP02K	3M12A20500	2003	2	G6M	U204	Undef	1	0	0	0
FBAC0CC	9LAA-AC B	1999	3	AX4S	DN101 - FFV Ethanol	3.77	0	0	0	0
FCAK0CZ	9VWA-ACB	1999	4.8	AX4N	CONTINENTAL	3.56	0	0	0	0
FCALDCY	9VWA-JCD	2001 & 1999 & 2000	4.8	4F50N & AX4N	CONTINENTAL	3.56	0	0	0	0
FDBA0CM	1A31NC0510	2001	3.8	AX4N	WIN126 CAT OPT & WIN126 CAT OPT	3.56	1	0	0	0
FDBA0S7	1A31AS0G12	2001	3.8	4F50N	WIN126	3.56	1	0	0	0
FDBA089	1A31AS0512	2001	3.8	4F50N	WIN126	3.56	1	0	0	0
FDBA08U	1A31AS0G13	2001	3.8	Undef	WIN126	Undef	1	0	0	0
FDBA08X	1A31AS0G12	2001	3.8	4F50N	WIN126	3.56	1	0	0	0
FEAR0N3	1JC1BN0511	2001 & 2002	4.8	4F50N	CONTINENTAL	3.56	0	0	0	0
FHAF6N4	2DD14N0511	2002	3	4F50N	D186 4V & TAUSABLE 4V	3.96	1	0	0	0
FHAF6NS	2DD15N0508	2003 & 2002	3	4F50N	D186 4V & D186 4V PT-RH CAT OPT	3.96	1	0	0	0
FHAF6NW	2DD12N0511	2002	3	4F50N	TAUSABLE 2V	3.77	1	0	0	0
FHAF683	2DD1F80507	2002	3	AX4S	D186 - FFV Ethanol	3.77	1	0	0	0
FHAF7A2	3DD1BA0500	2003	3	4F50N	D186 4V ACCFD	3.96	1	0	0	0

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
FHAF7F3	2DD13FD510	2002	3	4F50N	D186 FFV Pt-Rh CAT OPT	3.77	1	0	0	0
FHAF7N3	2DD13N0510	2002	3	4F50N	D186 2V Pt-Rh CAT OPT	3.77	1	0	0	0
FHAF7N4	3DD12N0500	2003	3	4F50N	D186 2V ACCRO	3.77	1	0	0	0
FHAF7NZ	3DD1FN0600	2003	3	Undef	D186 FFV ACCRO	Undef	1	0	0	0
FHAF7S3	3DD12S0500	2003	3	AX4S	D186 2V ACCRO	3.77	1	0	0	0
FHAF7S4	2DD13S0510	2002	3	AX4S	D186 2V Pt-Rh CAT OPT	3.77	1	0	0	0
FHAF7S7	3DD1FS0600	2003	3	AX4S	D186 FFV ACCRO & D186 FFV ACCRO	3.77	1	0	0	0
FHAF7V4	2DD13V0510	2002	3	AX4S	D186 FFV Pt-Rh CAT OPT	3.77	1	0	0	0
FJAD1A7	2A31CA0506	2002	3.8	4F50N	WIN126	3.56	1	0	0	0
FJAE0A6	3A31BA0500	2003	3.8	4F50N	WIN126	3.56	1	0	0	0
FJAE0C9	2A31ZC0606	2002	3.8	4F50N	2002.5 WIN126 Cat Opt	3.56	1	0	0	0
GCAVLB4	5-08B R10FB	1995	1.9	4EAT	ESCORT/TRACER	4.06	N/A	N/A	N/A	N/A
GCAVLC3	5-07C R10FB	1995	1.9	M5	ESCORT/TRACER	3.62	N/A	N/A	N/A	N/A
GCAVLC4	5-08C R10FB	1995	1.9	4EAT	ESCORT/TRACER	4.06	N/A	N/A	N/A	N/A
GCAVLT3	5-07T R10C	1995	1.9	M5	ESCORT/TRACER	3.62	N/A	N/A	N/A	N/A
GCAVLT4	5-08T R10C	1995	1.9	4EAT	ESCORT/TRACER	4.06	N/A	N/A	N/A	N/A
GDAF2JQ	2-56J R00FB	1993	3	A4LD	AEROSTAR	3.45/3.73 & 4.10	N/A	N/A	N/A	N/A
GDAF2T6	2-56T R00C	1993	3	A4LD	AEROSTAR	3.45/3.73 & 4.10	N/A	N/A	N/A	N/A
GDAF3J6	4-56J R10FB	1995	3	A4LD	AEROSTAR	3.45/3.73 & 4.10	N/A	N/A	N/A	N/A
GDBE1FC	3-55F R00FB	1993	3	A4LD	RANGER	3.45 & 3.45/3.73	N/A	N/A	N/A	N/A
GDBE1HD	3-56H R00FB	1993	3	A4LD	RANGER	3.73/4.10	N/A	N/A	N/A	N/A
GDBG0M6	4-49M R05C	1994	2.3	M5	RANGER	4.1	N/A	N/A	N/A	N/A
GDBG0P8	4-49P R10SN	1994	2.3	M5	PN-66 R/C	3.08	N/A	N/A	N/A	N/A
GDBG0R4	4-49R R00C	1994	2.3	M5	RANGER	3.08	N/A	N/A	N/A	N/A
GDBG0T4	4-49T R00C & 4-49U R05SN & 4-49U R10SN	1994	2.3	M5	PN-66 & PN-66 R/C & RANGER	3.45 & 3.45/3.73 & 4.10	N/A	N/A	N/A	N/A
GDBG0T5	4-49T R00C	1994	2.3	M5	PN-66 & RANGER	3.45 & 3.45/3.73	N/A	N/A	N/A	N/A
GDBG0TM	4-56T R00C	1994	3	A4LD	PN-66	3.73 & 3.73/4.10	N/A	N/A	N/A	N/A
GDBG0TO	4-49T R00C	1994	2.3	M5	PN-66 & RANGER	3.45 & 3.45/3.73	N/A	N/A	N/A	N/A
GDBG0TW	4-49T R00C	1994	2.3	M5	PN-66 & RANGER	3.45 & 3.45/3.73	N/A	N/A	N/A	N/A
GDBG0UR	4-56U R00C	1994	3	A4LD	PN-66	3.45 & 3.45/3.73	N/A	N/A	N/A	N/A
GDBG0UY	4-49U R10SN	1994	2.3	M5	PN-66 R/C	3.45/3.73 & 4.10	N/A	N/A	N/A	N/A
GDBH0A3	4-58A R10FB	1994	4	A4HD	EXPLORER R/C	3.73	N/A	N/A	N/A	N/A
GDBH0B3	4-58B R10FB	1994	4	A4HD	EXPLORER R/C	3.08/3.27	N/A	N/A	N/A	N/A
GDBH0B4	4-57B R10FB	1994	4	M5	EXPLORER R/C	3.27/3.73 & 3.55	N/A	N/A	N/A	N/A
GDBH0F2	4-55F R10FB	1994	3	M5	RANGER R/C	3.45/3.73	N/A	N/A	N/A	N/A
GDBH0F3	4-56F R10FB	1994	3	A4LD	RANGER R/C	3.45/3.73	N/A	N/A	N/A	N/A
GDBH0F4	4-55F R10FB	1994	3	M5	RANGER R/C	3.45/3.73	N/A	N/A	N/A	N/A

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
GDBH0H2	4-55H R10FB	1994	3M5		RANGER R/C	Undef	N/A	N/A	N/A	N/A
GDBH0H3	4-58H R10FB	1994	3M5		RANGER R/C	Undef	N/A	N/A	N/A	N/A
GDBH0HX	4-55H R10FB	1994	3M5		RANGER R/C	Undef	N/A	N/A	N/A	N/A
GDBH0P2	4-58P R10C	1994	4A4HD		EXPLORER R/C		3.73	N/A	N/A	N/A
GDBH0R2	4-55R R10C	1994	3M5		RANGER R/C	3.45/3.73	N/A	N/A	N/A	N/A
GDBH0R3	4-58R R10C	1994	4A4HD		EXPLORER R/C	3.08/3.27	N/A	N/A	N/A	N/A
GDBH0R4	4-57R R10C	1994	4M5		EXPLORER R/C	3.27/3.73 & 3.56	N/A	N/A	N/A	N/A
GDBH0S2	4-58S R10FC	1994	4M5		PN-88 R/C	3.08/3.56	N/A	N/A	N/A	N/A
GDBH0S3	4-58S R10C	1994	4A4HD		RANGER R/C	3.08/3.56	N/A	N/A	N/A	N/A
GDBH0S4	4-57S R10C	1994	4M5		RANGER R/C	3.08/3.56 & 3.27/3.73	N/A	N/A	N/A	N/A
GDBH0SX	4-55S R10C	1994	3M5		RANGER R/C	3.45/3.73	N/A	N/A	N/A	N/A
GDBH0T2	4-58T R10FC	1994	4M5		PN-88 R/C	3.27/3.73	N/A	N/A	N/A	N/A
GDBH0T3	4-58T R10C	1994	4A4HD		RANGER R/C	3.27/3.73	N/A	N/A	N/A	N/A
GDBH0T4	4-57T R10C	1994	4M5		RANGER R/C	3.27/3.73	N/A	N/A	N/A	N/A
GDBH0US	4-58U R10C	1994	4A4HD		RANGER R/C	3.08/3.56	N/A	N/A	N/A	N/A
GEADBFN	3-22F R10FB	1993	5A0D		T-BIRD/COUGAR	2.73/3.08	N/A	N/A	N/A	N/A
GPAP0C4	6-07C R05B	1998	1.9M5		ESCORT/TRACER 2V		3.62	N/A	N/A	N/A
GPAP0CZ	6-07C R05B	1998	1.9M5		ESCORT/TRACER 2V		3.62	N/A	N/A	N/A
GPAQ0C4	6-08C R06B	1998	1.9F4E		ESCORT/TRACER 2V		4.05	N/A	N/A	N/A
GPAQ0CZ	6-08C R06B	1998	1.9F4E		ESCORT/TRACER 2V		4.08	N/A	N/A	N/A
GRAK8EG	8-04E R13FM & 9EQA-AK A	1998 & 1999	2F4E3		ESCORT/TRACER 4V	3.74 & 3.92	N/A	N/A	N/A	N/A
GRAK8EX	8-03E R13FM	1998 & 1999	2G5M		ESCORT/TRACER 4V	4.10 & 4.11	N/A	N/A	N/A	N/A
GRAK8KY	9EQM-BK A	1999	2G5M		ESCORT/TRACER 4V		4.11	N/A	N/A	N/A
GRAK8KZ	9EQM-AK A	1999	2G5M		ESCORT/TRACER 4V		4.11	N/A	N/A	N/A
GRAK8RF	8-04R R13C & 9EQA-BK A	1998 & 1999	2F4E3		ESCORT/TRACER 4V	3.74 & 3.92	N/A	N/A	N/A	N/A
GRAK8RX	8-03R R13C	1998 & 1999	2G5M		ESCORT/TRACER 4V	4.10 & 4.11	N/A	N/A	N/A	N/A
GRAK8RY	8-03R R13C	1998 & 1999	2G5M		ESCORT/TRACER 4V	4.10 & 4.11	N/A	N/A	N/A	N/A
GSALIA9	2-16A R10FB	1993	3.8A0D		T-BIRD S/C		3.27	N/A	N/A	N/A
GSALIAA	2-15A R10FB	1993	3.8M5R2		T-BIRD S/C		2.73	N/A	N/A	N/A
GSALIFW	3-22F R10FB	1993	5A0D		T-BIRD/COUGAR	2.73/3.08	N/A	N/A	N/A	N/A
GSALIFX	3-22F R10FB	1993	5A0D		T-BIRD/COUGAR	2.73/3.08	N/A	N/A	N/A	N/A
GSALIT2	3-22T R10C	1993	5A0D		T-BIRD/COUGAR		3.08	N/A	N/A	N/A
GSALIT7	3-22T R10C	1993	6A0D		T-BIRD/COUGAR		3.08	N/A	N/A	N/A
GSALWT2	2-16T R10C	1993	3.8A0D		T-BIRD/COUGAR		3.27	N/A	N/A	N/A
GSARJDE	4-08D R10FB	1994	3MTX4		TEMPO/TOPAZ		3.52	N/A	N/A	N/A

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	V8CLP	GI	IDC_MIN	IDC_MAX
GSARJE4	4-28E R11FB	1994	2.3	FLC	TEMPO/TOPAZ		3.28	N/A	N/A	N/A
GSARJE5	4-28E R11FB	1994	2.3	FLC	TEMPO/TOPAZ		3.28	N/A	N/A	N/A
GSARJEX	2-28E R12FB	1994	2.3	FLC	TEMPO/TOPAZ		3.28	N/A	N/A	N/A
GSARJF6	4-28F R11FB	1994	2.3	MTX3	TEMPO/TOPAZ		3.88	N/A	N/A	N/A
GSARJF9	4-10F R10FB	1994	3	FLC	TEMPO/TOPAZ		3.88	N/A	N/A	N/A
GSARJNA	4-09N R10C	1994	3	MTX4	TEMPO/TOPAZ		3.62	N/A	N/A	N/A
GSARJQ5	4-25Q R11C	1994	2.3	MTX3	TEMPO/TOPAZ		3.88	N/A	N/A	N/A
GSARJQ7	4-10Q R10C	1994	3	FLC	TEMPO/TOPAZ		3.88	N/A	N/A	N/A
GSARJRA	4-28R R11C	1994	2.3	FLC	TEMPO/TOPAZ		3.28	N/A	N/A	N/A
GSARJRB	4-28R R11C	1994	2.3	FLC	TEMPO/TOPAZ		3.28	N/A	N/A	N/A
GSARJRX	2-28R R11C	1994	2.3	FLC	TEMPO/TOPAZ		3.28	N/A	N/A	N/A
GSARKEW	2-28E R12FB	1994	2.3	FLC	TEMPO/TOPAZ		3.28	N/A	N/A	N/A
GSARKEY	4-28E R11FB	1994	2.3	FLC	TEMPO/TOPAZ		3.28	N/A	N/A	N/A
GSARKRV	2-28R R11C	1994	2.3	FLC	TEMPO/TOPAZ		3.28	N/A	N/A	N/A
GSARKRW	4-28R R11C	1994	2.3	FLC	TEMPO/TOPAZ		3.28	N/A	N/A	N/A
GTAS2AB	1-08A R05FB	1993	2.3	A4LD	MUSTANG		3.73	N/A	N/A	N/A
GTAS2AD	1-08A R05FB	1993	2.3	T5OD	MUSTANG		3.45	N/A	N/A	N/A
GTAS299	1-06S R05C	1993	2.3	A4LD	MUSTANG		3.73	N/A	N/A	N/A
GTAS26A	1-05S R05C	1993	2.3	T5OD	MUSTANG		3.45	N/A	N/A	N/A
GTASGL1	2-58J R00FB	1993	4	A4HD	AEROSTAR	3.27 & 3.27/3.55		N/A	N/A	N/A
GTASGL3	2-58K R00FB	1993	4	A4HD	AEROSTAR		3.73	N/A	N/A	N/A
GTASGL4	2-58L R00C	1993	4	A4HD	AEROSTAR		3.73	N/A	N/A	N/A
GTASHAF	3-58A R00FB	1993	4	A4HD	EXPLORER		3.73	N/A	N/A	N/A
GTASHAO	3-58A R00FB	1993	4	A4HD	EXPLORER		3.73	N/A	N/A	N/A
GTASHAX	3-80A R00FB	1993	4	A4HD	NAVAJO		3.73	N/A	N/A	N/A
GTASHB6	3-59B R00FB	1993	4	M5	NAVAJO	3.27/3.73		N/A	N/A	N/A
GTASHB8	3-80B R00FB	1993	4	A4HD	NAVAJO	3.08/3.27		N/A	N/A	N/A
GTASHB9	3-89B R00FB	1993	4	A4HD	EXPLORER	3.08 & 3.27		N/A	N/A	N/A
GTASHBV	3-68B R00FB	1993	4	A4HD	EXPLORER	3.08 & 3.27		N/A	N/A	N/A
GTASHBX	3-67B R00FB	1993	4	M5	EXPLORER	3.27 & 3.27/3.73 & 3.55/3.73		N/A	N/A	N/A
GTASHE7	4-58E R10FB	1994	4	A4LD	RANGER R/C	3.08/3.55		N/A	N/A	N/A
GTASHF4	4-57F R10FB	1994	4	M5	RANGER R/C	3.08/3.55		N/A	N/A	N/A
GTASHFX	4-58F R10FB	1994	4	A4HD	RANGER R/C	3.08/3.55		N/A	N/A	N/A
GTASHH3	4-69H R10FB	1994	4	A4HD	RANGER R/C	3.27/3.73		N/A	N/A	N/A
GTASHH4	4-67H R10FB	1994	4	M5	RANGER R/C	3.08/3.55 & 3.27/3.73		N/A	N/A	N/A
GTASH88	3-50S R008N	1993	2.3	A4LD	RANGER		3.73	N/A	N/A	N/A
GTASH8D	3-49S R008N	1993	2.3	M5	RANGER	3.08/3.45 & 4.10 & 3.73		N/A	N/A	N/A
GTASJGH	4-48K R00FB	1994	2.3	M5	RANGER		3.08	N/A	N/A	N/A
GTASJM5	4-50M R10FB	1994	2.3	A4LD	PN-68 R/C		3.73	N/A	N/A	N/A
GTASJ8F	4-49S R00FB	1994	2.3	M5	PN-68 & RANGER	3.45/3.73 & 3.73 & 4.10		N/A	N/A	N/A
GTASRS2	4-49S R11FB	1994	2.3	M5	PN-68 & RANGER	3.45/3.73 & 3.73 & 4.10		N/A	N/A	N/A
GTBSGJK	5-58J R10FB	1995	4	A4HD	AEROSTAR	3.27/3.55		N/A	N/A	N/A
GTBSGKJ	5-58K R10FB	1995	4	A4HD	AEROSTAR		3.73	N/A	N/A	N/A
GVAKBB3	7-08B R12 & 7-08B R12FO & 7-08B R12FM	1999 & 1998 & 1997		F4E9 & 2F4EM	ESCORT/TRACER 2V		3.74	N/A	N/A	N/A

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
GVAKBC3	7-07C R12 & 7-07C R12FM	1998 & 1997	2	G5M	ESCORT/TRACER 2V	3.85	N/A	N/A	N/A	N/A
GVAKBCY	7-08C R12FM	1997	2	F4EM	ESCORT/TRACER 2V	3.74	N/A	N/A	N/A	N/A
GVAKBP3	7-08P R12C	1997	2	F4EM	ESCORT/TRA LEV	3.74	N/A	N/A	N/A	N/A
GVAKB8S	7-08S R10C	1997	2	F4EM	ESCORT/TRACER 2V	3.74	N/A	N/A	N/A	N/A
GVAKBT3	7-07T R12C	1997	2	G6M	ESCORT/TRACER 2V	3.85	N/A	N/A	N/A	N/A
GVAKBTZ	7-08T R10C	1997	2	F4EM	ESCORT/TRACER 2V	3.74	N/A	N/A	N/A	N/A
GVAKBW3	7-08W R12C	1997	2	F4EM	ESCORT/TRA LEV	3.74	N/A	N/A	N/A	N/A
GWAG8G3	9EQM-AG A	1999	2	G6M	ESCORT/TRACER 2V	3.85	0	0	0	0
GWAG8G8	9EQM-BG BC	1999	2	MTX75	ESCORT/TRAC 2V LEV	3.85	0	0	0	0
GWAG8GY	9EQA-BG A	1999	2	F4E3	ESCORT/TRACER 2V	3.74	0	0	0	0
GWAG8GZ	9EQA-AG A	1999	2	F4E3	ESCORT/TRACER 2V	3.74	0	0	0	0
GWAG8H3	9EQA-AH A	1999	2	F4E3	ESCORT/TRACER 2V	3.74	0	0	0	0
GWAG8T2	6-07T R11C	1998	2	G5M	ESCORT/TRACER 2V	3.85	0	0	0	0
JAAS8B3	9WHA-ABK	2000	3.9	5R55W	DEW98	3.58	0	N/A	N/A	N/A
JAAS8B6	9WHA-BSK	2000	3.9	5R55W	DEW98	3.91	0	N/A	N/A	N/A
JAAS8B8	9LDA-BBH	2001 & 2000	3	5R55N & 5R55W	DEW98	3.07 & 3.58	0	N/A	N/A	N/A
JAAS8N2	9LDA-EJE	2000	3	Undef	DEW98	Undef	0	N/A	N/A	N/A
JAAS7A3	9WHA-AAG	2000	3.9	Undef	DEW98	3.31	0	N/A	N/A	N/A
JAAS7A7	9WHA-EAJ	2000	3.9	5R55N	DEW98	3.58	0	N/A	N/A	N/A
JAAS7A8	9WHA-BAH	2000	3.9	5R55W	DEW98	3.31	0	N/A	N/A	N/A
JAAS7C8	9LDA-BOG	2000	3	5R55W	DEW98	3.58	0	N/A	N/A	N/A
JAAS798	9LDA-ESG	2000	3	5R55W	DEW98	3.58	0	N/A	N/A	N/A
JAAT4A9	9LDA-AAH	2000	3	5R55N	DEW98	3.58	0	N/A	N/A	N/A
JAAT4C2	9LDA-ACG	2000	3	5R55W	DEW98	3.58	0	N/A	N/A	N/A
JBAR8A5	9LDM-AAE	2000	3	M5GR	DEW98	3.07	0	N/A	N/A	N/A
JBAS3A2	9LDM-EAG	2000	3	M5GR	DEW98	3.07	0	N/A	N/A	N/A
JBAS3CZ	9LDM-ACG	2000 & 2001	3	M5GR	DEW98 & DEW98 MT	3.07	0	N/A	N/A	N/A
JD8C1M8	28R12M0505	2002	3.9	5R55N	M205	3.58	0	N/A	N/A	N/A
JD8D4B2	2LQ18B0M11	2002	3.9	5R55N	DEW98	3.31	0	N/A	N/A	N/A
JD8D4B4	2LQ18B0M10	2002	3.9	5R55N	DEW .75 O/D & DEW98 VCT	3.31	0	N/A	N/A	N/A
JD8D4B6	2LQ18B0511	2002	3	5R55N	DEW98	3.58	0	N/A	N/A	N/A
JD8D4B7	2LQ17B0510	2002	3	5R55N	DEW V8 .75 O/D	3.58	0	N/A	N/A	N/A



Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	V8CLP	GI	IDC_MIN	IDC_MAX
JDBD4B8	2LQ1890511	2002	3.9	Undef	DEW98		3.31	0	N/A	N/A
JDBD4BY	2LQ19B0510	2002	3.9	5R55N	DEW .75 O/D & DEW98 VCT		3.31	0	N/A	N/A
JDBD4M5	29R12M0612	2002	3.9	5R55N	M206		3.58	0	N/A	N/A
JDBD4M9	2SR11M0610	2002	3.9	5R55N	M206 .75 O/D		3.58	0	N/A	N/A
JDBD485	2LQ1890M10	2002	3.9	5R55N	DEW .75 O/D & DEW98 VCT		3.31	0	N/A	N/A
JDBD496	2LQ1890511	2002	3.9	5R55N	DEW98		3.58	0	N/A	N/A
JDBD4S8	2LQ1790510	2002	3.9	5R55N	DEW V6 .75 O/D		3.58	0	N/A	N/A
JDBD4S9	2LQ1890511	2002	3.9	5R55N	DEW98		3.31	0	N/A	N/A
JDBD4SX	2LQ1890510	2002	3.9	5R55N	DEW .75 O/D & DEW98 VCT		4000	0	N/A	N/A
JDBD4SZ	2LQ1890M11	2002	3.9	5R55N	DEW98		3.31	0	N/A	N/A
JEATEF8	1U51AF0B15	2002	4.5	5R55W	U152 FFV 2001.5	3.27/3.55		1	N/A	N/A
JEATEGW	1U51AG0M15	2002	4.5	5R55W	U152 2001.5	3.27/3.55		1	N/A	N/A
JEATEGX	1U51BG0A15	2002	4.5	5R55W	U152 2001.5	3.27/3.55		1	N/A	N/A
JEATFF4	1U51AF0B21	2002	4.5	5R55W	U152 FFV 2001.5	3.27/3.55		1	N/A	N/A
JEATFG4	1U51AG0M21	2002	4.5	5R55W	U152 2001.5	3.27/3.55		1	N/A	N/A
JEATFGY	1U51BG0A21	2002	4.5	5R55W	U152 2001.5	3.27/3.55		1	N/A	N/A
JEAU163	1U51A50M16	2002	4.6	5R55W	U152 2001.5	3.27/3.55		1	N/A	N/A
JEAU159	1U51A50B16	2002	4.6	5R55W	U152 2001.5	3.27/3.55		1	N/A	N/A
JEAU252	1U51A50M10	2002	4.6	5R55W	U152 2001.5	3.27/3.55		1	N/A	N/A
JEAU269	1U51A50B10	2002	4.6	5R55W	U152 2001.5	3.27/3.55		1	N/A	N/A
JEBF252	2U51A50M08	2002	4.6	5R55S	U152	3.27/3.55		1	N/A	N/A
JEBF258	2U51A50B08	2002	4.6	5R55S	U152	3.27/3.55		1	N/A	N/A
JEBFCF2	2U51AF0B06	2002	4.5	5R55S	U152 FFV	3.27/3.55		1	N/A	N/A
JEBFCG2	2U51BG0A06	2002	4.5	5R55S	U152	3.27/3.55		1	N/A	N/A
JEBFCO2	2U51AG0M06	2002	4.5	5R55S	U152	3.27/3.55		1	N/A	N/A
JECDO63	3U51A50500	2003	4.6	6R56S	U152	3.27/3.55		1	N/A	N/A
JECDAF5	3U51AF0500	2003	4.5	5R55S	U152 FFV	3.27/3.55		1	N/A	N/A
JECDAGX	3U51AG0M00	2003	4.6	5R55S	U152	3.27/3.55		1	N/A	N/A
JFAO5G9	1U52AG0B11	2002	4	M5	U152 2001.5	3.27/3.55		1	N/A	N/A
JFAO6G5	1U52AG0B15	2002	4	M5	U152 2001.5	3.27/3.55		1	N/A	N/A
JFBD6Q2	2U52AG0609	2002	4	M5	U152	3.27/3.55		1	N/A	N/A
JFCC0GW	3U52AG0500	2003	4	M5	U152	3.27/3.55		1	N/A	N/A
JJBD3S2	2LQ2880511	2002	3.5	5R55N	DEW98		3.07	0	N/A	N/A
JKANA57	2U81A50600	2003	4.6	5R55S	U231 4V	Undef		1	N/A	N/A
JKAO163	2U81A50504	2003	4.6	5R55S	U231 4V	Undef		1	N/A	N/A
JKAPA58	2U81A50505	2003	4.6	5R55S	U231 4V	Undef		1	N/A	N/A
KAABD2	9EQM-AD DFM	1999	2	MTX75	99.5 CDW		3.82	10	0	0
KAABD5	9EQA-BD EC	1999	2	CD4E	99.5 CDW		3.82	10	0	0
KAABD7	9EQA-MD C	1999	2	CD4E	99.5 CDW		4.28	10	0	0
KAABDW	9EQA-AD EPB	1999	2	CD4E	99.5 CDW		3.82	10	0	0
KAABDY	9EQM-AD DFM	1999	2	MTX75	99.5 CDW		3.82	10	0	0
KAABDZ	9EQM-BD D	1999	2	MTX75	99.5 CDW		3.82	10	0	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
KAAK9YU	9EQA-MV C	2000	2	CD4E	CONTOUR/MYSTIQ UE	4.28	10	0	0	0
KAAKAV3	9EQA-BV F	2000	2	CD4E	CONTOUR/MYSTIQ UE	3.92	10	0	0	0
KAAKAVU	9EQM-AV F	2000	2	MTX75	CONTOUR/MYSTIQ UE	3.92	10	0	0	0
KAAKAVV	9EQA-AV F	2000	2	CD4E	CONTOUR/MYSTIQ UE	3.92	10	0	0	0
KAAKAVW	9EQM-AV F	2000	2	MTX75	CONTOUR/MYSTIQ UE	3.92	10	0	0	0
KAAKAVX	9EQM-BV F	2000	2	MTX75	CONTOUR/MYSTIQ UE	3.92	10	0	0	0
KAAKAZ2	0NB1FZ0A06	2000	2	CD4E	CDW AFQVM	3.92	10	0	0	0
KAAKAZY	0NB1FZ0B06	2000	2	CD4E	CDW AFQVM	3.92	10	0	0	0
KBAN2H2	9LCM-AH A	1999	2.5	MTX75	CONTOUR SVT 99.5	4.06	0	0	0	0
KBAN2H3	9LCM-EH C	1999	2.5	MTX75	MONDEO ST200 99.5	3.81	0	0	0	0
KBAN4CE	9LCA-AC DFM	1999	2.5	CD4E	BRONCO & CDW/SW 99.5	3.77	0	0	0	0
KBAN4CG	9LCA-BC DC	1999	2.5	CD4E	BRONCO	3.77	0	0	0	0
KBAN4CH	9LCA-AC DFM	1999	2.5	CD4E	BRONCO & CDW/SW 99.5	3.77	0	0	0	0
KBAN4DS	9LCA-ED CE	1999	2.5	CD4E	99.5 COUGAR/MONDEO	3.77	0	0	0	0
KBAN4DC	9LCM-AD EFM	1999	2.5	MTX75	99.5 SW	4.06	5	0	0	0
KBAN4DK	9LCM-BD EC	1999	2.5	MTX75	99.5 SW	4.06	5	0	0	0
KBAN4DL	9LCA-BD DC	1999	2.5	CD4E	99.5 SW	3.77	0	0	0	0
KBAN4DM	9LCA-AD DFB	1999	2.5	CD4E	99.5 SW	3.77	0	0	0	0
KBAN4X2	9LCM-AX C	1999	2.5	MTX75	CONTOUR SVT 99.5	4.06	0	0	0	0
KBAN4X3	9LCM-AH C	1999	2.5	MTX75	CONTOUR SVT 99.5	4.06	0	0	0	0
KBAN7D2	9LCM-ED EE	1999	2.5	MTX75	99.5 COUGAR/MONDEO	3.82	0	0	0	0
KBAN7D4	9LCA-ED DE	1999	2.5	CD4E	99.5 COUGAR/MONDEO	3.77	0	0	0	0
KBAN7H7	9LCM-EH G	2000	2.5	MTX75	MONDEO/COUGAR ST200	3.81	0	0	0	0
KBAN7YQ	9LCM-BV H	2000	2.5	MTX75	CDW162/SW164	4.06	5	0	0	0
KBAN7VR	9LCA-BV H	2000	2.5	CD4E	CDW162/SW164	3.77	0	0	0	0
KBAN7WW	9LCA-BW G	2000	2.5	CD4E	COUGAR SW164	3.77	0	0	0	0
KBAN7WX	9LCM-BW G	2000	2.5	MTX	COUGAR SW164	4.06	5	0	0	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Asse Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
KBAT7X4	9LCM-AXE	2000	2.5	MTX75	CONTOUR SVT	4.06	0	0	0	0
KBAT1DB	1ZN25D0510	2001	2.5	MTX	COUGAR SW164	4.06	5	0	0	0
KBAT1DC	1ZN27D0510	2001	2.5	MTX	COUGAR SW164	4.06	5	0	0	0
KBAT1DD	1ZN2AD0510	2001	2.5	MTX	COUGAR SW164	Undef	5	0	0	0
KBAT1DH	1ZN1AD0510	2001	2.5	CD4E	COUGAR SW164	3.77	0	0	0	0
KBAT1DN	1ZN1ED0E10	2001	2.5	CD4E	COUGAR SW164	3.77	0	0	0	0
KBAT1DP	1ZN1ED0E10	2001	2.5	CD4E	COUGAR SW164	3.77	0	0	0	0
KBAT1DQ	1ZN2ED0E10	2001	2.5	MTX	COUGAR SW164	Undef	5	0	0	0
KBAT2D4	2ZN2ED0E00	2002	2.5	MTX	COUGAR SW164	4.06	5	0	0	0
KBAT2DW	2ZN25D0500	2002	2.5	MTX	COUGAR SW164	4.06	6	0	0	0
KBAT2DX	2ZN27D0500	2002	2.5	MTX	COUGAR SW164	4.06	5	0	0	0
KBAT2DY	2ZN2AD0500	2002	2.5	MTX	COUGAR SW164	Undef	5	0	0	0
KBAU0D3	2ZN1ED0E05	2002	2.5	CD4E	COUGAR SW164	3.77	0	0	0	0
KBAU0D6	2ZN1AD0505	2002	2.6	CD4E	COUGAR SW164	3.77	0	0	0	0
KBAU0D7	2ZN1ED0505	2002	2.6	CD4E	COUGAR SW164	3.77	0	0	0	0
KHA1A5	9LCA-EA DE	1999	2.5	CD4E	98.5 COUGAR/MONDEO	3.77	0	0	0	0
KHA1A9	9LCA-AA EFM	1999	2.5	CD4E	98.5 CDW/SW	3.77	0	0	0	0
KHA1AA	9LCA-AA EFM	1999	2.5	CD4E	98.5 CDW/SW	3.77	0	0	0	0
KHA1AF	9LCA-BA EC	1999	2.6	CD4E	98.5 CDW/SW	3.77	0	0	0	0
KHA1AT	9LCA-EA DE	1999	2.5	CD4E	98.5 COUGAR/MONDEO	3.77	0	0	0	0
KHA1AU	9LCA-EA DE	1999	2.5	CD4E	98.5 COUGAR/MONDEO	3.77	0	0	0	0
KHA1B9	9LCA-AB EFB	1999	2.6	CD4E	98.5 SW	3.77	0	0	0	0
KHA1BM	9LCA-BB EC	1999	2.6	CD4E	98.5 SW	3.77	0	0	0	0
KHA1BH	9LCA-BB HC	1999	2.5	CD4E	98.5 CDW/SW	3.77	0	0	0	0
KHA1BR	9LCA-AS GFM	1999	2.5	CD4E	98.5 CDW/SW	3.77	0	0	0	0
KHA1BS	9LCA-AS GFM	1999	2.5	CD4E	98.5 CDW/SW	3.77	0	0	0	0
KHA1BV	9LCA-ES GE	1999	2.5	CD4E	98.5 COUGAR/MONDEO	3.77	0	0	0	0
KHA1BT	9LCA-BT HC	1999	2.6	CD4E	98.5 SW	3.77	0	0	0	0
KHA1BX	9LCA-AT GFB	1999	2.6	CD4E	98.5 SW	3.77	0	0	0	0
KHA1B9	9LCM-EA F	1999	2.6	MTX75	98.5 COUGAR/MONDEO	3.82	0	0	0	0
KHA1BA	9LCM-AA FFM	1999	2.6	MTX75	98.5 CDW/SW	4.06	0	0	0	0
KHA1BAL	9LCM-AA FFM	1999	2.6	MTX75	98.5 CDW/SW	4.06	0	0	0	0
KHA1BAM	9LCM-BA FC	1999	2.6	MTX75	98.5 CDW/SW	4.06	0	0	0	0
KHA1BAU	9LCM-EA EE	1999	2.5	MTX75	98.5 COUGAR/MONDEO	3.82	0	0	0	0

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
KHAI8EA	8LCM-AB FFB	1999	2.5	MTX75	98.5 SW	4.08	0	0	0	0
KHAI8BT	8LCM-EB FC	1999	2.5	MTX75	98.5 SW	4.08	0	0	0	0
KIAB1E2	9EQM-AE DFB	1999 & 2000	2	MTX75	99.5 SW & COUGAR SW164	3.82	10	0	0	0
KIAB1EZ	9EQM-BE DC	1999 & 2000	2	MTX75	99.5 SW & COUGAR SW164	3.82	10	0	0	0
KIAB4Z4	0ZN2AZ0510	2001 & 2000	2	MTX75	COUGAR SW164	3.82	10	0	0	0
KIAC0Z6	2ZN2AZ0500	2002	2	MTX75	COUGAR SW164	3.82	10	0	0	0
KMAK688	0AK25S0512	2000	2	B5	FOCUS C170 SPI	3.81	1	0	0	0
KMAK6ZC	0AK25Z0512	2000	2	MTX75	FOCUS C170 ZETEC	3.82	1	0	0	0
KNAG4A5	9EQA-AA FFB	1999	2	C4DE	98.5 CDW	3.82	127.5	0	-0.2000122	0.20001221
KNAG4AP	9EQM-AA FFM	1999	2	MTX75	98.5 CDW	3.82	127.5	0	-0.2000122	0.20001221
KNAG4AQ	9EQM-BA FC	1999	2	MTX75	98.5 CDW	3.82	127.5	0	-0.2000122	0.20001221
KNAG4AR	9EQM-AA FFM	1999	2	MTX75	98.5 CDW	3.82	127.5	0	-0.2000122	0.20001221
KNAG4A8	9EQA-BA FC	1999 & 1998	2	CD4E & C4DE	98.5 CDW & CONTOUR/MYSTIQUE	3.82	127.5	0	-0.2000122	0.20001221
KNAG4C5	9EQM-AC FFB	1999	2	MTX75	98.5 SW	3.82	127.5	0	-0.2000122	0.20001221
KNAG4CF	9EQA-AC FFB	1999	2	CD4E	98.5 SW	3.82	127.5	0	-0.2000122	0.20001221
KNAG4C8	9EQA-BC EC	1999	2	CD4E	98.5 SW	3.82	127.5	0	-0.2000122	0.20001221
KNAG4CT	9EQM-BC FC	1999	2	MTX75	98.5 SW	3.82	127.5	0	-0.2000122	0.20001221
KNAG4M4	9EQA-AM A	1999	2	CD4E	CDW AFOVM	3.82	127.5	0	-0.2000122	0.20001221
KNAG4N4	9EQA-BN A	1999	2	CD4E	CDW AFOVM	3.82	127.5	0	-0.2000122	0.20001221
KNAG5R3	9EQA-AR C	1999	2	CD4E	CDW AFOVM	3.82	127.5	0	-0.2000122	0.20001221
KNAG5RZ	9EQA-AR C	1999	2	CD4E	CDW AFOVM	3.82	127.5	0	-0.2000122	0.20001221
KNAG586	9EQA-B8 HC	1999	2	C4DE	98.5 CDW	3.82	127.5	0	-0.2000122	0.20001221
KNAG5SZ	9EQA-AS HFB	1999	2	C4DE	98.5 CDW	3.82	127.5	0	-0.2000122	0.20001221
KNAG5T5	9EQA-AT GFB	1999	2	CD4E	98.5 SW	3.82	127.5	0	-0.2000122	0.20001221
KNAG5TY	9EQA-BT GC	1999	2	CD4E	98.5 SW	3.82	127.5	0	-0.2000122	0.20001221
KRAF585	1AK2AS0511	2002 & 2001	2.0 & 3.8	B5	FOCUS C170 SPI & WIN Cat OPT	3.733	1	0	0	0
KRAF588	1AK2AS0A11	2002 & 2001	2.0 & 3.8	B5	FOCUS C170 SPI & WIN Cat OPT	3.733	1	0	0	0
KRAF58A	2AK2BS0A05	2002	2	B5	FOCUS SPI CAT OPT	3.81	1	0	0	0
KRAF5Z4	1AK2AZ0508	2001	2	MTX	FOCUS C170 ZETEC	3.82	1	0	0	0
KRAF5Z8	2AK2BZ0A05	2002	2	MTX	FOCUS ZETEC CAT OPT	3.82	1	0	0	0
KRAF5ZV	1AK2AZ0516	2002 & 2001	2	MTX	FOCUS C170 ZETEC	3.82	1	0	0	0
KRAF5ZZ	2AK2AZ0M00	2002	2	Undef	FOCUS MEXICO	Undef	1	0	0	0
LHAT3PX	2-54P R12C	1993	5	E40D	F-SERBRONCO	3.56 & 3.56/4.10	N/A	N/A	N/A	N/A
LHAT3XW	2-54X R12A	1993	5	E40D	F-SERBRONCO	3.55/4.10	N/A	N/A	N/A	N/A

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
LHAWAA1	1-76A R00S	1993	5.8	E4OD	ECONOLINE & F-SER/BRONCO	3.54/4.10 & 3.65/4.10	N/A	N/A	N/A	N/A
LHAZ1E6	2-64E R11FB	1993	5.8	E4OD	F-SER/BRONCO	3.55 & 4.10	N/A	N/A	N/A	N/A
LHAZ1H8	2-64H R11FB	1993	5.8	E4OD	F-SER/BRONCO	3.08 & 3.55	N/A	N/A	N/A	N/A
LHAZ1S5	2-64S R11C	1993	5.8	E4OD	F-SER/BRONCO	3.55 & 4.10	N/A	N/A	N/A	N/A
LHAZ2HC	5-52H R10FB	1995	4.9	E4OD	F-SERIES	3.08/3.55	N/A	N/A	N/A	N/A
LHAZ2HF1	3-52H R10FB	1993	4.9	E4OD	BRONCO	3.08 & 3.08/3.55	N/A	N/A	N/A	N/A
LHAZ2J2	3-52J R10FB	1993 & 1994	4.9	E4OD	BRONCO & F-SERIES	3.08/3.55	N/A	N/A	N/A	N/A
LHAZ2JB	5-52J R10FB	1995	4.9	E4OD	F-SERIES	3.08/3.55	N/A	N/A	N/A	N/A
LHAZ2JP	3-52J R10FB	1993	4.9	E4OD	BRONCO	3.08/3.55	N/A	N/A	N/A	N/A
LHAZ2K2	3-52K R10FB	1993 & 1994	4.9	E4OD	ECONOLINE	3.08/3.55 & 3.73-HD	N/A	N/A	N/A	N/A
LHAZ2KO	5-52K R10FB	1995	4.9	E4OD	ECONOLINE	3.08/3.55 & 3.73 & 3.73-HD	N/A	N/A	N/A	N/A
LHAZ2Q2	3-52Q R10C	1994 & 1993	4.9	E4OD	ECONOLINE	3.31/3.55 & 3.55/3.73	N/A	N/A	N/A	N/A
LHAZ2QM	3-52Q R10C	1993	4.9	E4OD	ECONOLINE	3.55/3.73	N/A	N/A	N/A	N/A
LHAZ2R2	3-52R R10C	1993 & 1994	4.9	E4OD	BRONCO & F-SERIES	3.31/3.55	N/A	N/A	N/A	N/A
LHAZ2RB	3-52R R10C	1993	4.9	E4OD	BRONCO	3.31/3.55	N/A	N/A	N/A	N/A
LHAZ2S2	3-52S R10C	1993 & 1994	4.9	E4OD	BRONCO & F-SERIES	3.55 & 3.31/3.55	N/A	N/A	N/A	N/A
LHAZ2SK	3-52S R10C	1993	4.9	E4OD	BRONCO		3.55	N/A	N/A	N/A
LHB81GA	3-64G R00FB	1993	5.8	E4OD	F-SER SPORT		4.1	N/A	N/A	N/A
LHB88B4	3-68B R00S	1993	7.5	E4OD	F-SERIES/HD	4.83/5.13	N/A	N/A	N/A	N/A
LHB8BE5	3-68E R00S	1993	7.5	E4OD	ECONOLINE/HD	3.54/4.10	N/A	N/A	N/A	N/A
LHB8CA2	3-68A R00S	1993	7.5	E4OD	F-SERIES/HD	3.55/4.10	N/A	N/A	N/A	N/A
LHBGDAX	4-76A R10SN	1994	5.8	E4OD	ECONOLINE & F-SER/BRONCO	3.54/4.10 & 3.55/4.10	N/A	N/A	N/A	N/A
LHBG0BX	5-64B R10FB	1995	5.8	E4OD	F-SER/BRONCO		3.55	N/A	N/A	N/A
LHBGDE4	5-64E R00FB	1995	5.8	E4OD	F-SER/BRONCO	3.55 & 4.10	N/A	N/A	N/A	N/A
LHBGDEA	4-64E R10FB	1994	5.8	E4OD	F-SER/BRONCO	3.55 & 4.10	N/A	N/A	N/A	N/A
LHBGDH3	6-64H R00FB	1995	5.8	E4OD	F-SER/BRONCO	3.08 & 3.55	N/A	N/A	N/A	N/A
LHBGDH4	4-64H R10FB	1994	5.8	E4OD	F-SER/BRONCO	3.08 & 3.55	N/A	N/A	N/A	N/A
LHBGDK3	5-64K R00FB	1995	5.8	E4OD	ECONOLINE	3.55/3.73 & 3.73-HD	N/A	N/A	N/A	N/A
LHBGDK6	4-64K R10FB	1994	5.8	E4OD	ECONOLINE	3.55/3.73 & 3.73-HD	N/A	N/A	N/A	N/A
LHBGDS3	4-64S R10C	1994	5.8	E4OD	F-SER/BRONCO	3.55 & 4.10	N/A	N/A	N/A	N/A
LHBH1G5	6-64G R00FB	1995	5.8	E4OD	F-SER SPORT		4.1	N/A	N/A	N/A
LHBH1GD	4-64G R10FB	1994	5.8	E4OD	F-SER SPORT		4.1	N/A	N/A	N/A
LHBJA2	4-98A R00SA	1994	7.5	E4OD	F-SERIES	3.55 & 3.55/4.10	N/A	N/A	N/A	N/A
LHBJAAX	6-98A R00FF	1995	7.5	E4OD	F-SERIES	3.55 & 3.55/4.10	N/A	N/A	N/A	N/A
LHBJ1BA	5-88B R00SN	1995	7.5	E4OD	F-SERIES	4.83/5.13	N/A	N/A	N/A	N/A
LHBJ1BZ	4-88B R11SA	1994	7.5	E4OD	F-SERIES	4.83/5.13	N/A	N/A	N/A	N/A
LHBJD4	5-88D R00SN	1995	7.5	E4OD	F-SERIES		4.56	N/A	N/A	N/A
LHBJE2	4-88E R00SA	1994	7.5	E4OD	ECONOLINE	3.54/4.10 & 3.55	N/A	N/A	N/A	N/A
LHBJ1EX	6-88E R00FF	1995	7.5	E4OD	ECONOLINE	3.54/4.10 & 4.08 & 3.55	N/A	N/A	N/A	N/A
LHBL0A4	6-88A R00FB	1997 & 1996	7.5	E4OD	F-SERIES	3.55/4.10	N/A	N/A	N/A	N/A

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
LHBL0A8	4-76A R10SN	1994	6.8	E4OD	ECONOLINE & F-SER/BRONCO	3.54/4.10 & 3.55/4.10	N/A	N/A	N/A	N/A
LHBLDAD	6-76A R05FB & 7-76A R00FB	1996 & 1997	6.8	C6 & E4OD	ECONOLINE & F-SER/BRONCO & F-SERIES	3.55/4.10	N/A	N/A	N/A	N/A
LHBLDAY	5-76A R06FB	1995	6.8	E4OD	ECONOLINE & F-SER/BRONCO	3.54/4.09 & 4.10 & 3.55/4.10	N/A	N/A	N/A	N/A
LHBLDB7	6-88B R00SN	1996 & 1997	7.5	E4OD	ECONOLINE & F-SERIES	4.83 & 4.63/5.13	N/A	N/A	N/A	N/A
LHBLDC2	6-88D R00FB	1996	7.5	E4OD	F-SERIES	4.58	N/A	N/A	N/A	N/A
LHBLDE4	6-98E R00FB	1996	7.5	E4OD	ECONOLINE	3.55 & 3.55/4.10	N/A	N/A	N/A	N/A
LLAP1KA	2-54K R11FN	1993	5	AOD	ECONOLINE	3.55	N/A	N/A	N/A	N/A
LLAP1T8	2-54T R11C	1993	5	AOD	ECONOLINE	3.55	N/A	N/A	N/A	N/A
LLAP1V8	2-54V R11A	1993	5	AOD	ECONOLINE	3.55	N/A	N/A	N/A	N/A
LLAQBH3	1-87H R058	1993 & 1994	7	M5	BRONCO & F-SERIES/HD	Undef	N/A	N/A	N/A	N/A
LLAQBH4	1-88H R068	1993 & 1994	7	C8	BRONCO & F-SERIES/HD	Undef	N/A	N/A	N/A	N/A
LLAT1E4	3-51E R10FB	1993 & 1995 & 1994	4.9	M5	BRONCO & F-SERIES	3.31/3.55	N/A	N/A	N/A	N/A
LLAT1F2	3-51F R10FB	1993 & 1995 & 1994	4.9	M5	BRONCO & F-SERIES	2.73 & 2.73/3.08	N/A	N/A	N/A	N/A
LLAT1G6	3-51G R10FB	1993 & 1995 & 1994	4.9	M5	BRONCO & F-SERIES	3.08	N/A	N/A	N/A	N/A
LLAT1J2	1-71J R10FA	1993 & 1994 & 1995	4.9	M5	BRONCO & F-SERIES & ECONOLINE	4.10 & 4.10-DRW & 3.73	N/A	N/A	N/A	N/A
LLAT1J5	1-72J R10FA	1993 & 1994 & 1995	4.9	C8	BRONCO & F-SERIES	4.10 & 4.10-DRW	N/A	N/A	N/A	N/A
LLAT1L4	3-52L R10FB	1994 & 1995 & 1993	4.9	C8	ECONOLINE	2.73/3.08 & 3.54-H/D & 3.73-H/D & 3.54/3.55	N/A	N/A	N/A	N/A
LLAT1M4	2-72M R00F	1994 & 1995 & 1993	4.9	C8	ECONOLINE	3.73 & 4.08 & 4.10 & 4.10-DRW & 3.73/4.09	N/A	N/A	N/A	N/A
LLAT1R2	3-51R R10C	1993 & 1994 & 1995	4.9	M5	BRONCO & F-SERIES	3.31/3.55	N/A	N/A	N/A	N/A
LLATAA1	1-76A R008	1993	5.8	M5	F-SER/BRONCO	3.55/4.10	N/A	N/A	N/A	N/A
LLATAC1	1-76C R008	1993	5.8	C8	F-SER/BRONCO	3.55/4.10	N/A	N/A	N/A	N/A
LLAVCB6	3-88B R005	1993 & 1994	7	C8	BRONCO & F-SERIES/HD	Undef	N/A	N/A	N/A	N/A
LLAVCBX	3-87B R005	1993 & 1994	7	M5	BRONCO & F-SERIES/HD	Undef	N/A	N/A	N/A	N/A
LLAYAA4	3-87A R005	1993	7.5	M6	F-SERIES/HD	3.55/4.10	N/A	N/A	N/A	N/A
LLAYAB4	3-87B R005	1993	7.5	M5	F-SERIES/HD	4.83/5.13	N/A	N/A	N/A	N/A
LLAYAF4	3-88F R005	1993	7.5	C8	F-SERIES/HD	4.83/5.13	N/A	N/A	N/A	N/A
LLAZ1E3	4-53E R00FB	1994 & 1995	5	M5	F-SER/BRONCO	3.55 & 4.10	N/A	N/A	N/A	N/A

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
LLBBA07	4-75A R108N & 6-75A R05FB	1994 & 1996	5.8	M5	F-SER/BRONCO	3.55/4.10	N/A	N/A	N/A	N/A
LLBBA0Y	4-97A R00FF	1995 & 1994	7.6	M6	F-SERIES	3.55 & 3.55/4.10	N/A	N/A	N/A	N/A
LLBBA0Z	6-97A R00FB	1996 & 1997	7.6	M5	F-SERIES	3.55 & 3.55/4.10	N/A	N/A	N/A	N/A
LLBBAB2	6-97B R00S & 6-97B R00SN	1997 & 1996	7.5	M5	F-SERIES	4.63/5.13	N/A	N/A	N/A	N/A
LLBBABA	4-97B R11SA & 4-97B R11SN	1994 & 1995	7.5	M5	F-SERIES	4.63/5.13	N/A	N/A	N/A	N/A
LLBBABM	5-87B R00S	1996 & 1996 & 1997	7	M5	F-SERIES	Undef	N/A	N/A	N/A	N/A
LLBBABN	5-88B R00S	1996 & 1996 & 1997	7	C6	F-SERIES	Undef	N/A	N/A	N/A	N/A
LLBBAC6	4-76C R108N & 6-76C R05FB	1994 & 1996	6.8	C6	F-SER/BRONCO	Undef	N/A	N/A	N/A	N/A
LLBBAF3	4-88F R00FF	1995 & 1994	7.5	C6	F-SERIES	3.55/4.10	N/A	N/A	N/A	N/A
LLBBAF4	6-88F R00FB	1996 & 1997	7.5	C6	F-SERIES	3.55/4.10	N/A	N/A	N/A	N/A
LLBBAHM	6-87H R00S	1997 & 1996 & 1996	7	M5	F-SERIES	3.55/4.10	N/A	N/A	N/A	N/A
LLBBAHN	5-88H R00S	1996 & 1996 & 1997	7	C6	F-SERIES	Undef	N/A	N/A	N/A	N/A
LTAF0A1	1-97A R00SA	1993	7.5	M5	BRONCO	3.55/4.10 & 4.63/5.13	N/A	N/A	N/A	N/A
LUVFDED	3-53E R10FB	1993	5	M5 & T16	F-SER/BRONCO	3.55 & 4.10 & 3.08 & 3.55/4.10	N/A	N/A	N/A	N/A
LUVDFE	3-53F R10FB	1993	5	M5	F-SER/BRONCO	3.08 & 3.55	N/A	N/A	N/A	N/A
MAAF3D2	8-46D R10FB	1998	5.4	E40D	PN96	3.08/3.55	0	N/A	N/A	N/A
MAAF3D4	8-46D R10FB	1998	5.4	E40D	PN98	3.08/3.55	0	N/A	N/A	N/A
MAAF3E3	8-46E R10FB	1998	5.4	E40D	PN102	3.31/3.37	0	N/A	N/A	N/A
MAAF3E5	8-46E R10FB	1998	5.4	E40D	PN102	3.31/3.37	0	N/A	N/A	N/A
MAAF3F3	8-46F R10FM	1998	5.4	E40D	UN93AUN173	3.31-3.73	0	N/A	N/A	N/A
MAAF3F5	8-46F R10FM	1998	5.4	E40D	UN93AUN173	3.31-3.73	0	N/A	N/A	N/A
MAAF3R3	8-46R R10C	1998	5.4	E40D	PN96	3.08/3.55	0	N/A	N/A	N/A
MAAF3R5	8-46R R10C	1998	5.4	E40D	PN98	3.08/3.55	0	N/A	N/A	N/A
MAAF3T3	8-46T R10C	1998	5.4	E40D	PN102	3.31/3.73	0	N/A	N/A	N/A
MAAF3T5	8-46T R10C	1998	5.4	E40D	PN102	3.31/3.73	0	N/A	N/A	N/A
MAAF3U3	8-46U R10C	1998	5.4	E40D	UN93UN173 (Cal)	3.31/3.73	0	N/A	N/A	N/A
MAAF3U5	8-46U R10C	1998	5.4	E40D	UN93UN173 (Cal)	3.31/3.73	0	N/A	N/A	N/A
MAAG4A3	9WAM-AA B6N	1999	6.8	M5	PHN131	Undef	0	N/A	N/A	N/A
MAAG4A4	9WAA-AA F6N	1999	6.8	Undef	PHN131	Undef	0	N/A	N/A	N/A
MAAG4AZ	9VZM-MA BM	1999	6.4	M4	PHN131	Undef	0	N/A	N/A	N/A
MAAG4B4	9VZM-AB BFB	1999	6.4	M5	PHN131	Undef	0	N/A	N/A	N/A
MAAG4CB	9WAM-AC BFB	1999	6.8	M5	PHN131	Undef	0	N/A	N/A	N/A
MAAG4CD	9WAA-BC FC	1999	6.8	4R100	PHN131	Undef	0	N/A	N/A	N/A
MAAG4D2	9WAA-BD GC	1999	6.8	4R100	PHN131	Undef	0	N/A	N/A	N/A
MAAG4F3	9VZA-AF FFB	1999	6.4	4R100	PHN131	Undef	0	N/A	N/A	N/A
MAAG4F4	9WAA-AF F6N	1999	6.8	4R100	PHN131	Undef	0	N/A	N/A	N/A
MAAG4FF	9WAM-BF FC	1999	6.8	M5	PHN131	Undef	0	N/A	N/A	N/A

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Aide Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
MAAG4HE	9WAA-AH FFB	1999	6.8	4R100	PHN131	Undef	0	N/A	N/A	N/A
MAAG4H	9WAA-AI FSM	1999	6.8	4R100	PHN131	Undef	0	N/A	N/A	N/A
MAAG4J3	9VZA-BJ FC	1999	5.4	4R100	PHN131	Undef	0	N/A	N/A	N/A
MAAG4LZ	9WAA-BL FC	1999	6.8	4R100	PHN131	Undef	0	N/A	N/A	N/A
MAAG4VZ	9WAA-BV GC	1999	6.8	4R100	PHN131	Undef	0	N/A	N/A	N/A
MAAG4YD	9WAA-BY FC	1999	6.8	4R100	PHN131	Undef	0	N/A	N/A	N/A
MAAG4ZE	9WAA-BZ FC	1999	6.8	4R100	PHN131	Undef	0	N/A	N/A	N/A
MBAIBAJ	9WCA-BAF & 9WCA-BA F	1999	5.4	4R100	UN173 4V CFF/LEV & UN93/UN173 4V	Undef	3	0	0	0
MBAIBBA	9VZA-AB FFB	1999	5.4	4R100	PN102	Undef	3	0	0	0
MBAIBCA	9VZA-BC F	1999	5.4	Undef	PN96	Undef	3	0	0	0
MBAIBEG	9VZA-BED	1999	5.4	4R100	UN93 2V CFF/LEV	Undef	3	0	0	0
MBAIBEB	9VZA-BE F	1999	5.4	Undef	UN93 2V & UN93/UN173 2V	Undef	3	0	0	0
MBAIBED	9VZA-BE G	1999	5.4	4R100	UN93 2V & UN93/UN173 2V	Undef	3	0	0	0
MBAIBEZ	9VZA-AE DFM	1999	5.4	4R100	UN93 2V & UN93/UN173 2V	Undef	3	0	0	0
MBAIBFA	9VZA-BF F	1999	5.4	Undef	PN102	Undef	3	0	0	0
MBAIBN7	9VZA-AN DSN	1999	5.4	E40D	PN102-NGV	Undef	3	0	0	0.98999017
MBAIBPF	9VZA-AP GFB	1999	5.4	Undef	PN96	Undef	3	0	0	0
MLAE0R6	8-74R R00C	1999	5.4	E40D	ECONOLINE	Undef	0	N/A	N/A	N/A
MMAF1H8	1E414H0510	2001 & 2002	5.4	4R100	ECONOLINE-NGV	Undef	3	0	0	0.98999017
MMAF1HJ	1E418H0B10	2001	6.8	4R100	ECONOLINE	Undef	1	0	0	0
MMAF1J6	1E414J0B05	2001	5.4	4R100	ECONOLINE	Undef	3	0	0	0
MMAF1Q9	1F724Q0M05	2001	5.4	M4	P131	Undef	0	0	0	0
MMAF1X2	1F514X0511	2002 & 2003	5.4	4R100	PN96 2V NGV & PN96 NGV	Undef	3	0	0	0.98999017
MMAF1Z6	1E414H0510 & 1E414J0510	2003 & 2002 & 2001	5.4	4R100	ECONOLINE-NGV	Undef	3	0	0	0.98999017
MMAH0A8	1F728A0B15	2001	6.8	M5	P131	Undef	1	0	0	0
MMAH0AD	1F728A0B05	2001	6.8	M5	P131	Undef	1	0	0	0
MMAH0CR	1F718C0B15	2001	6.8	4R100	P131	Undef	1	0	0	0
MMAH0CX	1F718C0B10	2001	6.8	4R100	P131	Undef	1	0	0	0
MMAH0CY	1F717C0B15	2001	6.8	4R100	P131	Undef	1	0	0	0
MMAH0CZ	1F717C0B10	2001	6.8	4R100	P131	Undef	1	0	0	0
MMAH0DC	1F714D0B15	2001	5.4	4R100	P131	Undef	3	0	0	0
MMAH0DD	1L118D0B15	2001	6.8	4R100	UW137	Undef	1	0	0	0
MMAH0DI	1L118D0B10	2001	6.8	4R100	UW137	Undef	1	0	0	0
MMAH0DZ	1L114D0B15	2001	5.4	4R100	UW137	Undef	3	0	0	0
MMAH0N7	1E418N0510	2001	6.8	4R100	ECONOLINE	Undef	1	0	0	0
MMAH0NA	1L118N0A15	2001	6.8	4R100	UW137	Undef	1	0	0	0
MMAH0NB	1F714N0B15	2001	5.4	4R100	P131	Undef	0	0	0	0
MMAH0NJ	1F717N0B15	2001	6.8	4R100	P131	Undef	1	0	0	0
MMAH0NR	1E414N0A10	2001	5.4	4R100	ECONOLINE	Undef	3	0	0	0
MMAH0NS	1L114N0A15	2001	5.4	4R100	UW137	Undef	0	0	0	0



Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
MMAH0NT	1F714NQA16	2001	6.4	4R100	P131	Undef	0	0	0	0
MMAH0NV	1F718N0515	2001	6.8	4R100	P131	Undef	1	0	0	0
MMAH0P6	1E418PCA10	2001	6.8	4R100	ECONOLINE	Undef	1	0	0	0
MMAH0P7	1F718P0A15	2001	6.8	4R100	P131	Undef	1	0	0	0
MMAH0P9	1F724P0A15	2001	6.4	M5	P131	Undef	0	0	0	0
MMAH0PK	1F717P0A15	2001	6.8	4R100	P131	Undef	1	0	0	0
MMAH0Q8	1E418Q0B10	2001	6.8	4R100	ECONOLINE	Undef	1	0	0	0
MMAH0R7	1E414R0B10	2001	5.4	4R100	ECONOLINE	Undef	3	0	0	0
MMAH0R8	1E418R0B10	2001	6.8	4R100	ECONOLINE	Undef	1	0	0	0
MMAH0RL	1F717R0B15	2001	6.8	4R100	P131	Undef	1	0	0	0
MMAH0FX	1F718R0B15	2001	6.8	4R100	P131	Undef	1	0	0	0
MMAH0T7	1F718T0B15	2001	6.8	4R100	P131	Undef	1	0	0	0
MMAH0U6	1F728U0M00	2001	6.8	M5	P131	4.88/5.36	0	0	0	0
MMAH0U8	1F728U0515	2001	6.8	M5	P131	Undef	0	0	0	0
MMAH0U7	1E414U0B10	2001	5.4	4R100	ECONOLINE	Undef	3	0	0	0
MMAH0V7	1F728V0A15	2001	6.8	M5	P131	Undef	0	0	0	0
MMAH0X7	1E414X0510	2001	5.4	4R100	ECONOLINE	Undef	3	0	0	0
MMAH0Y7	1E414Y0510	2001	5.4	4R100	ECONOLINE	Undef	3	0	0	0
MNAE0Y6	1F514Y0505	2001	5.4	4R100	PN98 5C	Undef	3	0	0	0
MPAL4PZ	0F724P0A10	2000	5.4	4R100	P131	Undef	0	0	0	0
MPAL4Q9	0F724Q0M10	2000	5.4	4R100	P131	Undef	0	0	0	0
MPAL6BF	0B314B0511	2000	5.4	4R100	UN93 2V	Undef	3	0	0	0
MPAL6D4	0F714D0B11	2000	5.4	4R100	P131	Undef	3	0	0	0
MPAL6DX	0L114D0B11	2000	5.4	Undef	UW137	Undef	3	0	0	0
MPAL6DY	0F514D0B11	2000	5.4	4R70W	PN98	Undef	3	0	0	0
MPAL6G7	0F514G0A11	2000	5.4	4R100	PN98	Undef	3	0	0	0
MPAL6H7	0F514H0A11	2000	5.4	4R100	PN98	Undef	3	0	0	0
MPAL6H8	0E414H0511	2000	5.4	Undef	ECONOLINE-NGV	Undef	3	0	0	0.98999017
MPAL6J7	0E414J0B11	2000	5.4	4R100	ECONOLINE	Undef	3	0	0	0
MPAL6M7	0F514M0B11	2000	5.4	4R100	PN98	Undef	3	0	0	0
MPAL6N4	0F714N0A11	2000	5.4	4R100	P131	Undef	0	0	0	0
MPAL6N8	0E414N0A11	2000	5.4	4R100	ECONOLINE	Undef	3	0	0	0
MPAL6NX	0L114N0A11	2000	5.4	Undef	UW137	Undef	0	0	0	0
MPAL6R8	0E414R0B11	2000	5.4	4R100	ECONOLINE	Undef	3	0	0	0
MPAL6U8	0E414U0B11	2000	5.4	4R100	ECONOLINE	Undef	3	0	0	0
MPAL6X9	0F514X0510	2000	5.4	4R100	PN102-NGV	Undef	3	0	0	0.98999017
MPAL6XC	0E414X0512	2000	5.4	4R100	ECONOLINE	Undef	3	0	0	0
MPAL6YB	0E414Y0512	2000	5.4	4R100	ECONOLINE	Undef	3	0	0	0
MPAM0AG	0F728A0B11	2000	6.8	M5	P131	Undef	1	0	0	0
MPAM0U5	0F728U0511	2000	6.8	M5	P131	Undef	0	0	0	0
MPAM0V9	0F728V0A11	2000	6.8	M5	P131	Undef	0	0	0	0
MPAM1C4	0F717C0B11	2000	6.8	4R100	P131	Undef	1	0	0	0
MPAM1CN	0F718C0B11	2000	6.8	4R100	P131	Undef	1	0	0	0
MPAM1DF	0L118D0B11	2000	6.8	4R100	UW137	Undef	1	0	0	0
MPAM1H2	0E418H0B18	2000	6.8	4R100	ECONOLINE	Undef	1	0	0	0
MPAM1NS	0F717N0511	2000	6.8	4R100	P131	Undef	1	0	0	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
MPAM1NU	0F718N0511	2000	6.8	4R100	P131	Undef		1	0	0
MPAM1NV	0L118N0A11	2000	6.8	4R100	UW137	Undef		1	0	0
MPAM1NY	0E418N0511	2000	6.8	4R100	ECONOLINE	Undef		1	0	0
MPAM1P4	0E418P0A11	2000	6.8	4R100	ECONOLINE	Undef		1	0	0
MPAM1PX	0F717P0A11	2000	6.8	4R100	P131	Undef		1	0	0
MPAM1PZ	0F718P0A11	2000	6.8	4R100	P131	Undef		1	0	0
MPAM1Q8	0E418Q0B11	2000	6.8	4R100	ECONOLINE	Undef		1	0	0
MPAM1QZ	0F718Q0511	2000	6.8	4R100	P131	Undef		1	0	0
MPAM1R8	0E418R0B11	2000	6.8	4R100	ECONOLINE	Undef		1	0	0
MPAM1R4	0F717R0B11	2000	6.8	4R100	P131	Undef		1	0	0
MPAM1R5	0F718R0B11	2000	6.8	4R100	P131	Undef		1	0	0
MPAM1T4	0F717T0B11	2000	6.8	4R100	P131	Undef		1	0	0
MPAM1T5	0F718T0B11	2000	6.8	4R100	P131	Undef		1	0	0
MQAH1B8	1B314B0510	2001	5.4	4R100	UN93 2V	Undef		3	0	0
MQAH1B6	1B315B0510	2001	5.4	4R100	UN173 4V	Undef		3	0	0
MQAH1DE	1F514DC0B10	2001	5.4	4R100	PN96	Undef		3	0	0
MQAH1HB	1F514H0A10	2001	5.4	4R100	PN96	3031/3.55/3.73		3	0	0
MQAH1MB	1F514M0B10	2001	5.4	4R100	PN96	Undef		3	0	0
MQAH0AP	2N115A0515	2002	5.4	4R100	CAL-1 4V	Undef		3	0	0
MQAH0B2	2B314B0505	2002	5.4	4R100	UN93 2V	Undef		3	0	0
MQAH0B6	2B314B0M00	2002	5.4	Undef	UN93 2V	Undef		3	0	0
MQAH0BF	2B315B0505	2002	5.4	4R100	UN173 4V	Undef	3.73	3	0	0
MRAD9K6	0VZA-AK PFB	1999 & 2000	5.4	4R100	PN96 BC	Undef		3	0	0
MTAL1B7	3B515B0507	2003	5.4	4R70W	U228 4V & UN173 4V	Undef		3	0	0
MZAH0A5	2F728A0B11	2003 & 2002	6.8	M5	P131		4.3	1	0	0
MZAH0B8	2F728B0B11	2003 & 2002	6.8	M5 & M9	P131		4.3	1	0	0
MZAH0CB	2F718C0B11	2003 & 2002	6.8	4R100	P131	3.73/4.30		1	0	0
MZAH0CE	2F717C0B11	2003 & 2002	6.8	4R100	P131	3.73/4.30		1	0	0
MZAH0D2	2L118D0B11	2003 & 2002	6.8	4R100	UW137		4.3	1	0	0
MZAH0D4	2L114D0B11	2003 & 2002	6.4	4R100	UW137	3.73/4.10		3	0	0
MZAH0D6	2F717D0B11	2003 & 2002	6.8	4R100	P131	3.73/4.30		1	0	0
MZAH0DF	2F718D0B11	2003 & 2002	6.8	4R100	P131	3.73/4.30		1	0	0
MZAH0DZ	2F714D0B11	2003 & 2002	6.4	4R100	P131	3.73/4.30		3	0	0
MZAH0E4	2F714E0B11	2003 & 2002	5.4	4R100	P131		3.73	3	0	0
MZAH0F4	2F714F0B11	2002	5.4	4R100	P131	Undef		3	0	0
MZAH0F5	3F714F0B00	2003	5.4	4R100	P131		3.73	3	0	0
MZAH0G4	2F714G0B16	2002	6.4	4R100	P131	Undef		3	0	0
MZAH0G5	3F714G0B00	2003	5.4	4R100	P131		3.73	3	0	0
MZAH0HA	2E418H0B11	2003 & 2002	6.8	4R100	ECONOLINE	3.73/4.10		1	0	0
MZAH0J6	3E414J0B00	2003	5.4	4R100	ECONOLINE	3.55/4.10		3	0	0
MZAH0J8	2E414J0B10	2002	5.4	4R100	ECONOLINE	Undef		3	0	0
MZAH0M8	2F717M0B11	2002	6.8	4R100	P131	Undef		1	0	0
MZAH0M9	2F718M0B11	2002	6.8	4R100	P131	Undef		1	0	0
MZAH0M3	3F717M0B00	2003	6.8	4R100	P131	3.73/4.30		1	0	0
MZAH0MY	3F718M0B00	2003	6.8	4R100	P131	3.73/4.30		1	0	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
MZAH0N3	2E414N0A18	2002	6.4	4R100	ECONOLINE	Undef		3	0	0
MZAH0N4	2F718N0511	2002	6.8	4R100	P131	Undef		1	0	0
MZAH0N5	2F717N0511	2002	6.8	4R100	P131	Undef		1	0	0
MZAH0N6	2F714N0B18	2002	6.4	4R100	P131	Undef		3	0	0
MZAH0ND	3E414N0A00	2003	6.4	4R100	ECONOLINE	3.55/4.10		3	0	0
MZAH0NK	3F714N0A00	2003	6.4	4R100	P131		3.73	3	0	0
MZAH0NL	3F714N0B00	2003	6.4	4R100	P131		3.73	3	0	0
MZAH0NM	3L114N0A00	2003	6.4	4R100	UW137	3.73/4.10		3	0	0
MZAH0NP	3F717N0500	2003	6.8	4R100	P131	4.88/5.38		1	0	0
MZAH0NR	3F718N0600	2003	6.8	4R100	P131	4.88/5.38		1	0	0
MZAH0NS	3L118N0A00	2003	6.8	4R100	UW137	3.73/4.30		1	0	0
MZAH0NT	3E418N0600	2003	6.8	4R100	ECONOLINE		4.63	1	0	0
MZAH0NV	2L118N0A11	2002	6.8	4R100	UW137	Undef		1	0	0
MZAH0NW	2E418N0511	2002	6.8	4R100	ECONOLINE	Undef		1	0	0
MZAH0NX	2L114N0A18	2002	6.4	4R100	UW137	Undef		3	0	0
MZAH0NZ	2F714N0A18	2002	6.4	4R100	P131	Undef		3	0	0
MZAH0P2	3E418P0A00	2003	6.8	4R100	ECONOLINE	3.73/4.10		1	0	0
MZAH0P3	2E418P0A11	2002	6.8	4R100	ECONOLINE	Undef		1	0	0
MZAH0P5	2F718P0A11	2002	6.8	4R100	P131	Undef		1	0	0
MZAH0P6	2F724P0A18	2002	6.4	M5	P131	Undef		3	0	0
MZAH0P8	3F724P0A00	2003	6.4	M5	P131		3.73	3	0	0
MZAH0PY	3F718P0A00	2003	6.8	4R100	P131	3.73/4.30		1	0	0
MZAH0PZ	2F717P0A11	2002	6.8	4R100	P131	Undef		1	0	0
MZAH0R2	3E418R0B00	2003	6.8	4R100	ECONOLINE		4.1	1	0	0
MZAH0R3	2E414R0B18	2002	6.4	4R100	ECONOLINE	Undef		3	0	0
MZAH0R6	2F718R0B11	2002	6.8	4R100	P131	Undef		1	0	0
MZAH0RU	2F717R0B11	2002	6.8	4R100	P131	Undef		1	0	0
MZAH0RV	3F718R0B00	2003	6.8	4R100	P131	3.73/4.30		1	0	0
MZAH0RW	3F717R0B00	2003	6.8	4R100	P131	3.73/4.30		1	0	0
MZAH0RX	3E414R0B00	2003	6.4	4R100	ECONOLINE	3.55/4.10		3	0	0
MZAH0RY	2E418R0B11	2002	6.8	4R100	ECONOLINE	Undef		1	0	0
MZAH0S5	2F718S0B11	2002	6.8	4R070W	P131	Undef		1	0	0
MZAH0S7	2F717S0B11	2002	6.8	4R100	P131	Undef		1	0	0
MZAH0T6	2F718T0B11	2002	6.8	4R100	P131	Undef		1	0	0
MZAH0TZ	2F717T0B11	2002	6.8	4R100	P131	Undef		1	0	0
MZAH0U4	3E418U0500	2003	6.8	4R100	ECONOLINE	4.88/5.38		1	0	0
MZAH0U5	2E418U0606	2002	6.8	4R100	ECONOLINE	Undef		1	0	0
MZAH0UV	3F728U0M00	2003	6.8	M5	P131	Undef		1	0	0
MZAH0UW	3F728U0600	2003	6.8	M5	P131	4.88/5.38		1	0	0
MZAH0UX	3E414U0B00	2003	6.4	4R100	ECONOLINE	3.55/4.10		3	0	0
MZAH0UY	2E414U0B18	2002	6.4	4R100	ECONOLINE	Undef		3	0	0
MZAH0UZ	2F728U0M11	2002	6.8	M5	P131	Undef		1	0	0
MZAH0V3	2F728V0A11	2002	6.8	M5	P131	Undef		1	0	0
MZAH0VZ	3F728V0A00	2003	6.8	M5	P131	3.73/4.30		1	0	0
MZAH0X5	2E414X0618	2002	6.4	4R100	ECONOLINE	Undef		3	0	0
MZAH0XZ	3E414X0500	2003	6.4	4R100	ECONOLINE		4.56	3	0	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
MZAH0Y5	2E414Y0616	2002	5.4	4R100	ECONOLINE	Undef		3	0	0
MZAH0YZ	3E414Y0600	2003	5.4	4R100	ECONOLINE		4.63	3	0	0
MZAH0Z3	2E418Q0811	2002	6.8	4R100	ECONOLINE	Undef		1	0	0
MZAH0Z4	2F718Q0511	2002	6.8	4R100	P131	Undef		1	0	0
MZAH0ZW	3F724Q0M00	2003	5.4	M5	P131		4.88	3	0	0
MZAH0ZX	3F718Q0600	2003	6.8	4R100	P131		5.38	1	0	0
MZAH0ZY	2F724Q0M11	2002	5.4	M5	P131	Undef		3	0	0
MZAH0ZZ	3E418Q0800	2003	6.8	4R100	ECONOLINE		4.1	1	0	0
OCAH0D7	2F514D0806	2002	5.4	4R100	PN96 2V	Undef		3	0	0
OCAH0H7	2F514H0A06	2002	5.4	4R100	PN96 2V	Undef		3	0	0
OCAL0H4	2F514H0A16	2002	5.4	4R100	2002.25 PN96 Cat Opt	Undef		3	0	0
OCAM0D2	2F514D0B17	2002 & 2003	5.4	4R100	2002.25 PN96 Cat Opt & PN96 2V & PN96 LPG BI-FUEL	Undef		3	0	0
OCAM0H2	2F514H0A17	2003	5.4	4R100	PN96 2V	Undef		3	0	0
OCAM0H2	2F514H0A17	2003	5.4	4R100	PN96 2V	Undef		3	0	0
ODAG0A3	2F526Q0A05	2002	4.6	M5	PN96 2V	Undef		3	0	0
ODAG0J3	2F526J0B05	2002	4.6	M5	PN96 2V	Undef		3	0	0
ODAG0K3	2F526K0B05	2002	4.6	M5	PN96 2V	Undef		3	0	0
ODAG0P3	2F526P0A05	2002	4.6	M5	PN96 2V	Undef		3	0	0
ODAJ0D9	2F516D0807	2002	4.8	4R100	PN96 2V	Undef		3	0	0
ODAJ0E3	2F514E0B07	2002	5.4	4R70W	PN96 2V	Undef		3	0	0
ODAJ0EB	2F516E0B07	2002	4.6	4R70W	PN96 2V	Undef		3	0	0
ODAJ0F5	2F514F0A07	2002	5.4	4R70W	PN96 2V	Undef		3	0	0
ODAJ0M9	2F516M0A07	2002	4.6	4R70W	PN96 2V	Undef		3	0	0
ODAJ0NB	2F516N0A07	2002	4.6	4R70W	PN96 2V	Undef		3	0	0
ODAL1AZ	2F514A0B06	2002 & 2003	5.4	4R70W	2002.5 PN96 ULEV 4R70W	Undef		3	0	0
ODAL1D5	2F516D0816	2002	4.8	4R70W	2002.25 PN96 Cat Opt	Undef		3	0	0
ODAL1DZ	3F516D0800	2003	4.6	4R70W	PN96 2V (ACCRO)	Undef		3	0	0
ODAL1E5	2F514E0816	2002	5.4	4R70W	2002.25 PN96 Cat Opt	Undef		3	0	0
ODAL1EV	3F516E0800	2003	4.6	4R70W	PN96 2V (ACCRO)	Undef		3	0	0
ODAL1EX	3F514E0800	2003	5.4	4R70W	PN96 2V (ACCRO)	Undef		3	0	0
ODAL1EY	2F516E0816	2002	4.8	4R70W	2002.25 PN96 Cat Opt	Undef		3	0	0
ODAL1F5	2F514F0A16	2002	5.4	4R70W	2002.25 PN96 Cat Opt	Undef		3	0	0
ODAL1FZ	3F514F0A00	2003	5.4	4R70W	PN96 2V (ACCRO)	Undef		3	0	0
ODAL1J3	3F526J0B00	2003	4.8	M5	PN96 2V (ACCRO)	Undef		3	0	0
ODAL1J4	2F526J0B16	2002	4.8	M5	2002.25 PN96 Cat Opt	Undef		3	0	0
ODAL1K3	3F526K0B00	2003	4.8	M5	PN96 2V (ACCRO)	Undef		3	0	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
ODAL1M5	2F516MCA16	2002	4.8	4R70W	2002.25 PN96 Cat Opt	Undef		3	0	0
ODAL1MZ	3F516MCA00	2003	4.8	4R70W	PN96 2V (ACCFIO)	Undef		3	0	0
ODAL1N5	2F516NOA16	2002	4.8	4R70W	2002.25 PN96 Cat Opt	Undef		3	0	0
ODAL1NZ	3F516NOA00	2003	4.8	4R70W	PN96 2V (ACCFIO)	Undef		3	0	0
ODAL1P3	3F526POA00	2003	4.8	M5	PN96 2V (ACCFIO)	Undef		3	0	0
ODAL1P4	2F526POA16	2002	4.8	M5	2002.25 PN96 Cat Opt	Undef		3	0	0
ODAL1Z3	3F526Q0A00	2003	4.8	M5	PN96 2V (ACCFIO)	Undef		3	0	0
ODAL1Z4	2F526Q0A16	2002	4.8	M5	2002.25 PN96 Cat Opt	Undef		3	0	0
OHAG0CH	2F512C0605	2002	4.2	4R70W	PN96 2V	Undef		1	0	0
OHAG0D3	2E412D0A06	2002	4.2	4R70W	ECONOLINE	Undef		1	0	0
OHAG0DB	3E412D0A00	2003	4.2	4R70W	ECONOLINE		3.55	1	0	0
OHAG0DZ	2F512D0606	2002	4.2	4R70W	PN96 2V	Undef		1	0	0
OHAG0E7	3E412E0A00	2003	4.2	4R70W	ECONOLINE		3.73	1	0	0
OHAG0E8	2E412E0A06	2002	4.2	4R70W	ECONOLINE	Undef		1	0	0
OHAG0F7	3E412F0A00	2003	4.2	4R70W	ECONOLINE		4.08	1	0	0
OHAG0F9	2E412F0A06	2002	4.2	4R70W	ECONOLINE	Undef		1	0	0
OHAG0G8	3E412G0A00	2003	4.2	4R70W	ECONOLINE		4.08	1	0	0
OHAG0GA	2E412G0A06	2002	4.2	4R70W	ECONOLINE	Undef		1	0	0
OHAG0GD	2F522G0605	2002	4.2	M5	PN96 2V	Undef		1	0	0
OHAG0H3	2E412H0B06	2002	4.2	4R70W	ECONOLINE	Undef		1	0	0
OHAG0HC	2F522H0606	2002	4.2	M5	PN96 2V	Undef		1	0	0
OHAG0HY	3E412H0B00	2003	4.2	4R70W	ECONOLINE		3.55	1	0	0
OHAG0J8	3E412J0B00	2003	4.2	4R70W	ECONOLINE		4.09	1	0	0
OHAG0JC	2E412J0B06	2002	4.2	4R70W	ECONOLINE	Undef		1	0	0
OHAG0K6	3E412K0B00	2003	4.2	4R70W	ECONOLINE		4.08	1	0	0
OHAG0KC	2E412K0B06	2002	4.2	4R70W	ECONOLINE	Undef		1	0	0
OHAG0L7	3E412L0B00	2003	4.2	4R70W	ECONOLINE		3.73	1	0	0
OHAG0LC	2E412L0B06	2002	4.2	4R70W	ECONOLINE	Undef		1	0	0
OHAK1C6	2F512C0516	2002 & 2003	4.2	4R70W	2002.25 PN96 Cat Opt & PN96 2V	Undef		1	0	0
OHAK1D6	2F512D0516	2002 & 2003	4.2	4R70W	2002.25 PN96 Cat Opt & PN96 2V	Undef		1	0	0
OHAK1G6	2F522G0516	2002 & 2003	4.2	M5	2002.25 PN96 Cat Opt & PN96 2V	Undef		1	0	0
OHAK1H6	2F522H0516	2002 & 2003	4.2	M5	2002.25 PN96 Cat Opt & PN96 2V	Undef		1	0	0
OIAH0D6	3E416D0500	2003	4.8	4R70W	ECONOLINE		3.55	3	0	0
OIAH0EA	2E414E0510	2002	5.4	4R70W	ECONOLINE	Undef		3	0	0
OIAH0EF	2E416E0510	2002	4.8	4R70W	ECONOLINE	Undef		3	0	0
OIAH0EZ	3E414E0500	2003	6.4	4R70W	ECONOLINE	3.55/3.73		3	0	0
OIAH0F3	3E416F0500	2003	4.8	4R70W	ECONOLINE		3.73	3	0	0
OIAH0HB	3E416H0500	2003	4.8	4R70W	ECONOLINE		4.1	3	0	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	V8CLP	GI	IDC_MIN	IDC_MAX
OMAD3Y2	2F514Y0506	2002 & 2003	5.4	4R100	PN86 GC	Undef		3	0	0
OMAE1W2	2F514W0505	2002 & 2003	5.4	4R100	P226 SuperCrew Harley-Davidson	Undef		3	0	0
PAAD4AE	8-50A R05FM	1998	2.5	4R44E	PN-150/PN-151		3.73	0	0.9899017	0.9899017
PAAD5FD	8-55F R05	1998	3	M5	PN-150/PN-151	3.45/3.73		0	0.9899017	0.9899017
PAAD6FZ	8-66F R05	1998	3	M5	PN-150/PN-151	3.45/3.73		0	0.9899017	0.9899017
PAAD8H4	8-55H R05FM	1998	3	M5	PN-150/PN-151		3.73	0	0.9899017	0.9899017
PAAD6RZ	8-55R R05C	1998	3	M5	PN-150/PN-151		3.73	0	0.9899017	0.9899017
PAAD5S7	8-55S R05C	1998	3	M5	PN-150/PN-151	3.45/3.73		0	0.9899017	0.9899017
PAAD6A1	9B1A-BA AC	1998	2.5	4R44E	PN-150/PN-151		4.1	0	0.9899017	0.9899017
PAAD6A8	9B1A-AA AFM	1998	2.5	4R44E	PN-150/PN-151		4.1	0	0.9899017	0.9899017
PAAD6A7	8-48A R05FM	1998	2.5	M5	PN-150/PN-151	3.45/3.73		0	0.9899017	0.9899017
PAAD6F7	8-56F R15FM	1998	3	4R44E	PN-150/PN-151	3.45/3.73		0	0.9899017	0.9899017
PAAD6FE	8-56F R15FM	1998	3	4R44E	PN-150/PN-151	3.45/3.73		0	0.9899017	0.9899017
PAAD6H6	8-56H R15FM	1998	3	4R44E	PN-150/PN-151	3.73/4.10		0	0.9899017	0.9899017
PAAD6R3	8-55R R15C	1998	3	4R44E	PN-150/PN-151	3.73/4.10		0	0.9899017	0.9899017
PAAD6S4	8-55S R15C	1998	3	4R44E	PN-150/PN-151	3.45/3.73		0	0.9899017	0.9899017
PAAD6T8	8-49T R06C	1998	2.5	M5	PN-150/PN-151	3.45/3.73		0	0.9899017	0.9899017
PAAD6TG	8-50T R06C	1998	2.5	4R44E	PN-150/PN-151		3.73	0	0.9899017	0.9899017
PAAD7A2	9B1M-BA F	2001	2.5	M5	PN-150/PN-151	Undef		0	0.9899017	0.9899017
PAAD7B3	9B1M-AB F	2001	2.5	M5	PN-150/PN-151	3.45/3.73		0	0.9899017	0.9899017
PAAD7C3	9B1M-AC F	2001	2.5	M5	PN-150/PN-151	Undef		0	0.9899017	0.9899017
PAAD8A2	9LAA-MAB	1999	3	M5	PN-150/PN-151		3.73	0	0.9899017	0.9899017
PAAD8A8	9LAA-MA B	1999	3	4R44E	PN-150/PN-151		3.73	0	0.9899017	0.9899017
PAAD8AA	9LAA-MA B	1999	3	4R44E	PN-150/PN-151		3.73	0	0.9899017	0.9899017
PAAD8AC	9LAA-MA F	2000	3	M5	PN-150/PN-151		3.73	0	0.9899017	0.9899017
PAAD8B7	9LAA-MB B	1999	3	4R44E	PN-150/PN-151	3.73/4.10		0	0.9899017	0.9899017
PAAD8BA	9LAA-MB F	2000	3	M5	PN-150/PN-151		3.73	0	0.9899017	0.9899017
PAAD8CA	9LAA-MC G	2000	3	M5	PN-150/PN-151 & PN150/51 99.25MY		4.1	0	0.9899017	0.9899017
PAADAA8	9LAA-MAG	1999	3	4R44E	PN150/51 99.25MY	3.73 & 4.10		0	0.9899017	0.9899017
PAADAAH	9LAA-MA J	2000	3	4R44E	PN-150/PN-151		3.73	0	0.9899017	0.9899017
PAADAAZ	9B1A-BA K	2001	2.5	5R44E	PN-150/PN-151		4.1	0	0.9899017	0.9899017
PAADAB8	9B1A-AB H	2001	2.5	4R44E	PN-150/PN-151		4.1	0	0.9899017	0.9899017
PAADAB9	9LAA-MB J	2000	3	4R44E	PN-150/PN-151	3.73/4.10		0	0.9899017	0.9899017
PAADACJ	9LAA-MC H	2000	3	4R44E	PN-150/PN-151 & PN150/51 99.25MY		4.1	0	0.9899017	0.9899017
PBAD5F4	8-57F R10	1998	4	M5	PN-150/PN-151	3.08/3.55		0	0.5	0.25 0.8500061
PBAD5FD	8-58F R15FM	1998	4	5R55E	PN-150/PN-151	3.08/3.55		0	0.5	0.25 0.8500061
PBAD6H4	8-57H R10FM	1998	4	M5	PN-150/PN-151	3.27/3.73		0	0.5	0.25 0.8500061
PBAD6HD	8-56H R15FM	1998	4	5R55E	PN-150/PN-151	3.08/3.55		0	0.5	0.25 0.8500061
PBAD6S4	8-57S R10C	1998	4	M5	PN-150/PN-151	3.08/3.55		0	0.5	0.25 0.8500061
PBAD58D	8-58S R15C	1998	4	5R55E	PN-150/PN-151	3.08/3.55		0	0.5	0.25 0.8500061
PBAD5T4	8-57T R10C	1998	4	M5	PN-150/PN-151	3.27/3.73		0	0.5	0.25 0.8500061
PBAD5TD	8-58T R15C	1998	4	5R55E	PN-150/PN-151	3.08/3.55		0	0.5	0.25 0.8500061
PBAD7B6	9LTM-AB B	1999	4	M5	PN-150/PN-151	3.27/3.73		0	0.5	0.25 0.8500061

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	GI	IDC_MIN	IDC_MAX	
PBAD7B7	9LTM-BB BC	1999	4	M5	PN-150/PN-151	3.08/3.55		0	0.6	0.25	0.8500061
PBAD7BC	9LTA-AB BFM	1999	4	5R55E	PN-150/PN-151	3.55/3.73		0	0.5	0.25	0.8500061
PBAD7BZ	9LTA-BB BC	1999	4	5R56E	PN-150/PN-151	3.55/3.73		0	0.5	0.25	0.8500061
PBAD7C6	9LTM-AC BFM	1999	4	M5	PN-150/PN-151		3.55	0	0.5	0.25	0.8500061
PBAD7C7	9LTM-BC BC	1999	4	M5	PN-150/PN-151	3.08/3.55		0	0.6	0.25	0.8500061
PBAD7C8	9LTA-AC BFM	1999	4	5R55E	PN-150/PN-151		3.55	0	0.5	0.25	0.8500061
PBAD7CZ	9LTA-BC BC	1999	4	5R56E	PN-150/PN-151		3.55	0	0.5	0.25	0.8500061
PBAD9B5	9LTM-BB GC	2000 & 1999	4	M5	PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.08/3.55 & 3.27 & 3.27/3.73		0	0.6	0.25	0.8500061
PBAD9C6	9LTM-BC GC	2000 & 1999	4	M5	PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.08 & 3.08/3.55		0	0.5	0.25	0.8500061
PBAD9D6	9LTM-AD AFM	2000 & 1999	4	M5	PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.08/3.55 & 3.27/3.73		0	0.5	0.25	0.8500061
PBAD9E6	9LTM-AE AFM	2000 & 1999	4	M5	PN-150/151 SOHC & PN-150/PN-151 & PN150/51 99.25MY	3.55 & 3.08/3.55		0	0.5	0.25	0.8500061
PBADA86	9LTA-BB H	2000 & 1999	4	5R55E	PN-150/151 SOHC & PN-150/PN-151 & PN150/51 99.25MY	3.55/3.73		0	0.5	0.25	0.8500061
PBADA96	9LTA-BC H	2000 & 1999	4	5R56E	PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151		3.55	0	0.5	0.25	0.8500061
PBADAD6	9LTA-AD F	2000 & 1999	4	5R56E	PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.55/3.73		0	0.5	0.25	0.8500061
PBADAE6	9LTA-AE F	2000 & 1999	4	5R56E	PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151		3.55	0	0.5	0.25	0.8500061
PCAF5A3	9LTM-BA F & 9LTM-BA F6	2000 & 1999	4	M5	UN-150 & UN-150 CFF/LEV	3.27/3.55		0	0.5	0.25	0.8500061
PCAF5A6	9LTM-AA F	1999 & 2000	4	M5	UN-150 & UN-150 CFF & UN-150 CFF/LEV	3.27/3.55		0	0.6	0.25	0.8500061
PCAF5A8	9LTA-BA G	2000 & 1999	4	5R56E	UN-150 & UN-150 CFF/LEV	3.73/4.10		0	0.5	0.25	0.8500061
PCAG4A2	9NEA-BA H	2000 & 1999	4	5R55E	UN-150 SOHC & UN150 SOHC CFF	3.27/3.55		0	0	0	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
PCAG848	0S11A40507	2001	4.5R55E		U207 SOHC 2000.5 & P207 SOHC 2000.5	Undef	0	0	0	0
PCAG84Z	0U91A40606	2000	4.5R55E		UN-150 SOHC & UN150 SOHC CFF	3.27/3.55	0	0	0	0
PCAH04Z	0U91A40616	2001	4.5R55E		UN-150 SOHC	3.27/3.55	0	0	0	0
PDAE3AN	9LAM-BA J	2000	3 M5		PN-150/PN-151 FFV	3.73	0	0	0	0
PDAE3AU	9LAM-AA J	2000	3 M5		PN-150/PN-151 FFV	3.73	0	0	0	0
PDAE3BM	9LAM-BB J	2000	3 M5		PN-150/PN-151 FFV	3.73	0	0	0	0
PDAE3BS	9LAM-AB J	2000	3 M5		PN-150/PN-151 FFV	3.73	0	0	0	0
PDAE3CD	9LAM-AC H	2000	3 M5		PN-150/PN-151 FFV	4.1	0	0	0	0
PDAE3CX	9LAM-BC H	2000	3 M5		PN-150/PN-151 FFV	4.1	0	0	0	0
PDAE3HD	9LAA-BH C	1999	3.4R44E		PN-150/PN-151 FFV	3.73	0	0	0	0
PDAE3HM	9LAA-AH C	1999	3.4R44E		PN-150/PN-151 FFV	3.73	0	0	0	0
PDAE3JJ	9LAA-AJ C	1999	3.4R44E		PN-150/PN-151 FFV	3.73/4.10	0	0	0	0
PDAE3JY	9LAA-BJ C	1999	3.4R44E		PN-150/PN-151 FFV	3.73/4.10	0	0	0	0
PDAE6H7	9LAA-AH K	2000	3.4R44E		PN-150/PN-151 FFV	3.73	0	0	0	0
PDAE6HX	9LAA-BH K	2000	3.4R44E		PN-150/PN-151 FFV	3.73	0	0	0	0
PDAE6J7	9LAA-BK J	2000	3.4R44E		PN-150/PN-151 FFV	4.1	0	0	0	0
PDAE6J8	9LAA-AJ K	2000	3.4R44E		PN-150/PN-151 FFV	3.73/4.10	0	0	0	0
PDAE6JY	9LAA-BJ K	2000	3.4R44E		PN-150/PN-151 FFV	3.73/4.10	0	0	0	0
PDAE6K6	9LAA-AK J	2000	3.4R44E		PN-150/PN-151 FFV	4.1	0	0	0	0
PEAV248	1S12A40608	2001 & 2002	4 M5		U207 SOHC & P207 SOHC	Undef	3	0	0	0
PEAV2G4	1U72AG0606	2002 & 2001	4 M5		U207	Undef	3	0	0	0
PEAV345	1U71A40608	2001	4.5R55E		U207 FFV	Undef	3	0	0	0
PEAV436	1R31A30512	2001	3.5R44E		PN-150/PN-151	3.73	8	0	0	0
PEAV49T	1R31B30512	2001	3.5R44E		PN-150/PN-151	3.73/4.10	8	0	0	0



Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VISCLP	GI	IDC_MIN	IDC_MAX
PEAV449	1S11A40510	2001 & 2002	4	5R55E	U207 SOHC & P207 Cat. Opt. & P207 SOHC	Undef		3	0	0
PEAV44T	1R31C40516	2001	4	5R55E	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/4.10		3	0	0
PEAV44U	1R31B40516	2001	4	5R55E	PN150/51 Cat. Opt. & PN-150/151 SOHC	3.55/3.73/4.10		3	0	0
PEAV44V	1R31A40516	2001	4	5R55E	PN-150/151 SOHC & PN150/51 Cat. Opt.		3.55	3	0	0
PEAV44W	1R32C40516	2001	4	M5	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/4.10		3	0	0
PEAV44X	1R32B40516	2001	4	M5	PN150/51 Cat. Opt. & PN-150/151 SOHC	3.55/3.73/4.10		3	0	0
PEAV44Y	1R32A40516	2001	4	M5	PN-150/151 SOHC & PN150/51 Cat. Opt.		3.55	3	0	0
PEAV463	1R32A40517	2002	4	M5	PN-150/151 SOHC	3.55		3	0	0
PEAV45S	1R31B40517	2002	4	5R55E	PN-150/151 SOHC	3.55/3.73/4.10		3	0	0
PEAV45V	1R31A40517	2002	4	5R55E	PN-150/151 SOHC		3.55	3	0	0
PEAV45X	1R31C40517	2002	4	5R55E	PN-150/151 SOHC	3.55/3.73/4.10		3	0	0
PEAV45Y	1R32C40517	2002	4	M5	PN-150/151 SOHC	3.55/3.73/4.10		3	0	0
PEAV45Z	1R32B40517	2002	4	M5	PN-150/151 SOHC	3.55/3.73/4.10		3	0	0
PEAV407	1U71A0510	2002 & 2001	4	6R56E	U207	Undef		3	0	0
PEAV6F5	1R31AF0512	2001	3	5R56E	PN-150/PN-151 FFV		3.73	0	0	0
PEAV982	1U71P80512	2001 & 2002	4	6R56E	U207 USPS & U207 USPS FFV	Undef		3	0	0
PLAC08M	9NEA-AB Y	2000	4	Undef	UN150 PS SOHC FFV		3.55	0	0	0
PLAE4B5	9NEA-AB B	2000	4	Undef	UN150 PS SOHC FFV		3.55	0	0	0
PRAR325	1R32B20512	2002 & 2001	2.3	M5	PN-150/PN-151 & PN150/51 2001.25		4.1	2	0	0
PRAR32X	1R32B20M12	2002 & 2001	2.3	M5	PN-150/PN-151 & PN150/51 2001.25	Undef		2	0	0
PRAR32Y	1R32A20M12	2002 & 2001	2.3	M5	PN-150/PN-151 & PN150/51 2001.25		3.73	2	0	0
PRAR32Z	1R32A20512	2002 & 2001	2.3	M5	PN-150/PN-151 & PN150/51 2001.25		3.73	2	0	0
PYAE147	2812A40505	2002	4	M5	P207 SOHC 2002.5	Undef		3	0	0
PYAE148	2811A40505	2002	4	5R55E	P207 SOHC 2002.5	Undef		3	0	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
PYAE1F7	2811AF0505	2002	4	5R55E	P207 FFV	Undef		3	0	0
PYAE1G8	2U72AG0M00	2002	4	M5	U207 2002.5	Undef		3	0	0
PYAE1G4	2U71AG0M00	2002	4	5R55E	U207 2002.5	Undef		3	0	0
PYAE1G5	2U71AG0505	2002	4	5R55E	U207 2002.5	Undef		3	0	0
PYAE1G6	2U72AG0505	2003 & 2002	4	M5	U207 2002.5	Undef		3	0	0
PYAF1F4	2R31AF0500	2002	3	5R55E	PN-150/PN-151 FFV	3.73		8	0.1015625	-0.1000061 0.1000061
PYAF1FJ	2R31AF0505	2002 & 2003	3	5R55E	PN-150/PN-151 FFV	3.73		8	0.1015625	-0.1000061 0.1000061
PYBB03D	3R32A30500	2003	3	M5	PN-150/PN-151	3.73		8	0.1015625	-0.1000061 0.1000061
PYBB03E	3R32B30500	2003	3	M5	PN-150/PN-151	3.73		8	0.1015625	-0.1000061 0.1000061
PYBB03Z	3R31B30500	2003	3	5R44E	PN-150/PN-151	3.73/4.10		8	0.1015625	-0.1000061 0.1000061
PYBB044	3R31A40500	2003	4	5R55E	PN-150/151 SOHC	3.55		3	0	0
PYBB045	3R32A40500	2003	4	M5	PN-150/151 SOHC			3	0	0
PYBB04W	3R31C40500	2003	4	5R55E	PN-150/151 SOHC	3.73/4.10		3	0	0
PYBB04X	3R31B40500	2003	4	5R55E	PN-150/151 SOHC	3.73/4.10		3	0	0
PYBB04Y	3R32C40500	2003	4	M5	PN-150/151 SOHC	3.73/4.10		3	0	0
PYBB04Z	3R32B40500	2003	4	M5	PN-150/151 SOHC	3.73/4.10		3	0	0
PYBB05D	3R31A30500	2003	3	5R44E	PN-150/PN-151	3.73		8	0.1015625	-0.1000061 0.1000061
PYBD049	3S11A40500	2003	4	5R55E	P207 SOHC	Undef		3	0	0
PYBD04B	3S12A40500	2003	4	M5	P207 SOHC	Undef		3	0	0
PYBD0G6	3U72AG0500	2003	4	M5	U207	Undef		3	0	0
PYBD0GD	3U71AG0500	2003	4	5R55E	U207	Undef		3	0	0
QAAC8B3	8-58B R05	1998	4	5R55E	UN-150	3.55		0	0	0.98999017 0.98999017
QAAC8BZ	8-57B R05FM	1998	4	M5	UN-150	3.27/3.73		0	0	0.98999017 0.98999017
QAAC8C6	8-58C R10FM	1998	4	5R55E	UN-150 SOHC	3.27		0	0	0 0
QAAC8R3	8-58R R05	1998	4	5R55E	UN-150	3.27/3.73/4.10		0	0	0.98999017 0.98999017
QAAC8RZ	8-57R R05C	1998	4	M5	UN-150	3.27/3.73		0	0	0.98999017 0.98999017
QAAC8V6	8-58V R10C	1998	4	5R55E	UN-150 SOHC	3.73/4.10		0	0	0 0
QBAA0AA	0AJ1A20A12	2000	2	F4E3	CT120 4V	3.74		1	0	0 0
QBAA0AC	0AJ2R20A13	2000	2	G5M	CT120 4V	4.1		1	0	0 0
QBAA0AW	0AJ2A20A12	2000	2	G5M	CT120 4V	4.1		1	0	0 0
QBAA0BC	0AJ1A20B12	2000	2	F4E3	CT120 4V	3.74		1	0	0 0
QBAA0BV	0AJ2R20B13	2000	2	G5M	CT120 4V	4.1		1	0	0 0
QBAA0BW	0AJ2A20B12	2000	2	G5M	CT120 4V	4.1		1	0	0 0
QBAC0ZY	1AJ2A20506	2001 & 2002	2	G5M	CT120 4V	4.1		1	0	0 0
QBAC1Z2	1AJ1A20507	2001 & 2002	2	F4E3	CT120 4V	3.74		1	0	0 0
QBAC1Z4	2AJ2B20500	2002	2	G5M	CT120 4V CAT OPT	4.1		1	0	0 0
QBAC1Z8	2AJ1B20500	2002	2	F4E3	CT120 4V CAT OPT	3.74		1	0	0 0
QCAA0B3	8-08B R08FB	1998	2	F4E3	ESCORT/TRACER 2V	3.74		0	0	0 0
QCAA0BZ	8-08B R10FB	1998	2	F4E3	ESCORT/TRACER 2V	3.74		0	0	0 0
QCAA0C3	8-08C R08FB	1998	2	F4E3	ESCORT/TRACER 2V	3.74		0	0	0 0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	G1	IDC_MIN	IDC_MAX
QCAA0C4	8-07C R10FB	1998	2	G5M	ESCORT/TRACER 2V	3.85	0	0	0	0
QCAA0CZ	8-08C R10FB	1998	2	F4E3	ESCORT/TRACER 2V	3.74	0	0	0	0
QCAA0G3	9EQA-AG A	1999	2	F4E3	ESCORT/TRACER 2V	3.74	0	0	0	0
QCAA0G4	9EQM-AG A	1999	2	G5M	ESCORT/TRACER 2V	3.85	0	0	0	0
QCAA0GY	9EQM-BG BC	1999	2	MTX75	ESCORT/TRAC 2V LEV	3.85	0	0	0	0
QCAA0GZ	9EQA-BG A	1999	2	F4E3	ESCORT/TRACER 2V	3.74	0	0	0	0
QCAA0H3	9EQA-AH A	1999	2	F4E3	ESCORT/TRACER 2V	3.74	0	0	0	0
QCAA0P3	8-08P R08C	1998	2	F4E3	ESCORT/TRACER 2V	3.74	0	0	0	0
QCAA0PZ	8-08P R10C	1998	2	F4E3	ESCORT/TRACER 2V	3.74	0	0	0	0
QCAA0T4	8-07T R10C	1998	2	G5M	ESCORT/TRACER 2V	3.85	0	0	0	0
QCAA1S8	0AJ1AS0605	2000	2	F4E3	CT120 2V	3.74	0	0	0	0
QCAA1S9	0AJ2AS0505	2000	2	G5M	CT120 2V	3.85	0	0	0	0
QCAC1S6	1AJ1AS0500	2001	2	F4E3	CT120 2V	3.74	0	0	0	0
QCAE1S3	2AJ1AS0605	2002	2	F4E3	CT120 2V	Undef	0	0	0	0
RAAD4R4	8-54G R05FM	1998	5	4R70W	UN-150	3.73	0	0	0.1499939	0.98999017
RAAD4RZ	8-54U R05C	1998	5	4R70W	UN-150	3.73	0	0	0.1499939	0.98999017
RBAECC9	9LYA-AC F	1999	4.2	4R70W	ECONOLINE	Undef	1	0	0	0
RBAECCR	9LYA-BC F	1999	4.2	4R70W	ECONOLINE	Undef	1	0	0	0
RBAECDV	9LYA-AD F	1999	4.2	4R70W	ECONOLINE	Undef	1	0	0	0
RBAECE9	9LYA-AE F	1999	4.2	4R70W	ECONOLINE	Undef	1	0	0	0
RBAECET	9LYA-BE F	1999	4.2	4R70W	ECONOLINE	Undef	1	0	0	0
RBAECF3	9LYA-BF F	1999	4.2	4R70W	ECONOLINE	Undef	1	0	0	0
RBAECFA	9LYA-AF F	1999	4.2	4R70W	ECONOLINE	Undef	1	0	0	0
RBAECG3	9LYA-BG F	1999	4.2	4R70W	ECONOLINE	Undef	1	0	0	0
RBAEDAC	9VNM-AA F	1999	4.8	M5	PN102	Undef	1	0	0	0
RBAEDAG	9VNM-BA F	1999	4.8	M5	PN102	Undef	1	0	0	0
RBAEDBB	9VNA-BB FC	1999	4.8	4R70W	PN96	Undef	1	0	0	0
RBAEDBM	9VNM-AB F	1999	4.8	M5	PN102	Undef	1	0	0	0
RBAEDBN	9VNM-BB F	1999	4.8	M5	PN102	Undef	1	0	0	0
RBAEDC8	9VNM-AC FFB	1999	4.8	M5	PN96	Undef	1	0	0	0
RBAEDCB	9LYM-AC C	1999	4.2	M5	PN96	3.31/3.55	1	0	0	0
RBAEDCU	9VNM-BC FC	1999	4.8	M5	PN96	Undef	1	0	0	0
RBAEDCV	9VNA-BC FC	1999	4.8	4R70W	PN96	Undef	1	0	0	0
RBAEDDA	9VNM-AD FFB	1999	4.8	M5	PN96	Undef	1	0	0	0
RBAEDDB	9VNA-AD FFB	1999	4.8	4R70W	PN96	Undef	1	0	0	0
RBAEDDU	9VNM-BD FC	1999	4.8	M5	PN96	Undef	1	0	0	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
RBAED68	9VNA-AE BM	1999	4.8	M5	PN98	3.55	1	0	0	0
RBAED6B	9VNA-AE FFB	1999	4.8	4R70W	PN98	Undef	1	0	0	0
RBAEDGC	9VNA-BG H	1999	4.8	4R70W	UN93	Undef	1	0	0	0
RBAEDGP	9VNA-BG H	1999	4.8	4R70W	UN93	Undef	1	0	0	0
RBAEDHB	9LYA-AH CM	1999	4.8	4R70W	PN98	3.55	1	0	0	0
RBAEDJ7	9VNA-AJ BM	1999	4.8	4R70W	PN98	3.55	1	0	0	0
RBAEDN9	9VNA-BN CC	1999	4.8	Undef	PN102	Undef	1	0	0	0
RBAEDPB	9VNA-AP CF	1999	4.8	Undef	PN102	Undef	1	0	0	0
RBAEEA6	9LYM-AA GB	1999	4.2	M5	PN98	Undef	1	0	0	0
RBAEEA8	9LYA-AA GFB	1999	4.2	4R70W	PN98	Undef	1	0	0	0
RBAEEAY	9LYM-BA GC	1999	4.2	M5	PN98	Undef	1	0	0	0
RBAEEAZ	9LYA-BA GC	1999	4.2	4R70W	PN98	Undef	1	0	0	0
RBAEEB6	9LYA-AB GFB	1999	4.2	4R70W	PN98	Undef	1	0	0	0
RBAEEB8	9LYM-BB GC	1999	4.2	M5	PN98	Undef	1	0	0	0
RBAEEBY	9LYA-BB GC	1999	4.2	4R70W	PN98	Undef	1	0	0	0
RBAEEBZ	9LYM-AB GFB	1999	4.2	M5	PN98	Undef	1	0	0	0
RDABCHZ	9VZA-AH FFM	1999	5.4	4R70W	ECONOLINE	Undef	3	0	0	0
RDABCLZ	9VZA-BL FC	1999	5.4	4R70W	ECONOLINE	Undef	3	0	0	0
RDABDC4	9VZA-AC GFB	1999	5.4	4R70W	PN98	Undef	3	0	0	0
RDABDD4	9VZA-AD HFB	1999	5.4	4R70W	PN98	Undef	3	0	0	0
READ0A7	9VAA-BA J	2001 & 1999 & 2000	5	4R70W	UN-150 & UN-150 CFF/LEV	3.73	0	0	0.1488939	0.98999017
RFAH6EG	OE414E0510	2000	5.4	4R70W	ECONOLINE	Undef	3	0	0	0
RFAH6D7	OE416D0A10	2000	4.8	4R70W	ECONOLINE	Undef	1	0	0	0
RFAH6E7	OE416E0B10	2000	4.8	4R70W	ECONOLINE	Undef	1	0	0	0
RGAF25E	1FB1GB0510	2001	4.8	4R70W	FORD/MERCURY	2.73	1	0	0	0
RGAF28R	1VC1PB0608	2001 & 2002	4.8	4R70W	ENVN CAT OPT & LINC.TOWNCAR	3.08	1	0	0	0
RGAF28S	1FB1PB0508	2002 & 2001	4.8	4R70W	ENVN CAT OPT & FORD/MERCURY	2.73	1	0	0	0
RGAF28W	1VC1SB0511	2001	4.8	4R70W	LINC.TOWNCAR	3.08	1	0	0	0
RGAF2GD	1FB1GP0G10	2001	4.8	4R70W	FORD/MERCURY	3.08	1	0	0	0
RGAF2GF	1FB1GX0G10	2001	4.8	4R70W	FORD/MERCURY	3.08	1	0	0	0
RGAF2GZ	1VC1TX0G10	2001	4.8	4R70W	LINC.TOWNCAR	3.08	1	0	0	0
RGAF2H9	1FB1HH0511	2001	4.8	4R70W	FORD/MERCURY	3.27	1	0	0	0
RGAF2HF	1FB1GH0510	2001	4.8	4R70W	FORD/MERCURY	3.55	1	0	0	0
RGAF2HK	1VC1LH0511	2001	4.8	4R70W	LINC.TOWNCAR	3.55	1	0	0	0
RGAF2HR	1VC1PH0508	2001 & 2002	4.8	4R70W	ENVN CAT OPT & LINC.TOWNCAR	3.55	1	0	0	0
RGAF2HS	1FB1PH0508	2001 & 2002	4.8	4R70W	ENVN CAT OPT & FORD/MERCURY	3.27	1	0	0	0
RGAF2L3	2FB1GL0500	2002	4.8	4R70W	ENVN CAT OPT & FORD/MERCURY	2.73	1	0	0	0
RGAF2ME	1FB1GX0M10	2001	4.8	4R70W	FORD/MERCURY	2.73	1	0	0	0
RGAF2PF	1FB1GP0511	2001	4.8	4R70W	FORD/MERCURY	3.27	1	0	0	0
RGAF2PX	2FB1UP0G00	2002	4.8	4R70W	FORD/MERCURY	3.08	1	0	0	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
RGAF2PY	1FB1FP0506	2001 & 2002	4.6	4R70W	ENVFN CAT OPT & FORD/MERCURY		3.27	1	0	0
RGAF2X3	2FB1PX0M00	2002	4.6	4R70W	FORD/MERCURY		2.73	1	0	0
RGAF2XH	2FB1UX0G00	2002	4.6	4R70W	FORD/MERCURY		3.08	1	0	0
RGAF2XR	1FB1PX0M06	2001	4.6	4R70W	ENVFN CAT OPT		2.73	1	0	0
RHAG7A5	0F514A0A06	2000	5.4	4R70W	PN96	Undef		3	0	0
RHAG7A6	0F516A0A06	2000	4.6	4R70W	PN96	Undef		1	0	0
RHAG7A8	0F5280A06	2000	4.6	M5	PN96	Undef		1	0	0
RHAG7B6	0F516B0A06	2000	4.6	4R70W	PN96	Undef		1	0	0
RHAG7HC	0F528H0A06	2000	4.6	M5	PN96	Undef		1	0	0
RHAG7N5	0F514N0A06	2000	5.4	4R70W	PN96	Undef		3	0	0
RHAG8CC	0B31BC0511	2000	4.6	4R70W	UN93	Undef		1	0	0
RHAG8D9	0F518D0B11	2000	4.6	4R70W	PN96	Undef		1	0	0
RHAG8EA	0F516E0B11	2000	4.6	4R70W	PN96	Undef		1	0	0
RHAG8EZ	0F514E0B13	2000	5.4	4R70W	PN96	Undef		3	0	0
RHAG8FN	0F514FOA12	2000	5.4	Undef	PN96	Undef		3	0	0
RHAG8J7	0F528J0B11	2000	4.6	M5	PN96	Undef		1	0	0
RHAG8K9	0F528K0B11	2000	4.6	M5	PN96	Undef		1	0	0
RHAG8MI	0F516MAA11	2000	4.6	4R70W	PN96	Undef		1	0	0
RHAG8NH	0F516NA011	2000	4.6	4R70W	PN96	Undef		1	0	0
RHAG8PE	0F528POA11	2000	4.6	M5	PN96	Undef		1	0	0
RHAG8ZF	0F528Q0A11	2000	4.6	M5	PN96	Undef		1	0	0
RIAI2E3	1E414E0510	2001	5.4	4R70W	ECONOLINE	Undef		3	0	0
RKAO1A8	3B714A0507	2003	5.4	4R70W	U222 2V	Undef		3	0	0
RKAO1AY	3B714A0M07	2003	5.4	4R70W	U222 2V	Undef		3	0	0
RKAO1B5	3B716B0M09	2003	4.6	4R70W	U222 2V & UN93	Undef		1	0	0
RKAO1B9	3B716B0509	2003	4.6	4R70W	U222 2V & UN93	Undef		1	0	0
RNAH2D7	1F512D0510	2001	4.2	4R70W	PN96	Undef		1	0	0
RNAH2DZ	1E412D0A10	2001	4.2	4R70W	ECONOLINE	Undef		1	0	0
RNAH2E7	1E412E0A10	2001	4.2	4R70W	ECONOLINE	Undef		1	0	0
RNAH2F7	1E412FOA10	2001	4.2	4R70W	ECONOLINE	Undef		1	0	0
RNAH2G7	1E412GOA10	2001	4.2	4R70W	ECONOLINE	Undef		1	0	0
RNAH2H7	1E412H0B10	2001	4.2	4R70W	ECONOLINE	Undef		1	0	0
RNAH2J7	1E412J0B10	2001	4.2	4R70W	ECONOLINE	Undef		1	0	0
RNAH2K7	1E412K0B10	2001	4.2	4R70W	ECONOLINE	Undef		1	0	0
RNAH2L7	1E412L0B10	2001	4.2	4R70W	ECONOLINE	Undef		1	0	0
ROAF7A7	0F512A0A06	2000	4.2	4R70W	PN96	Undef		1	0	0
ROAF7B7	0F512B0A06	2000	4.2	4R70W	PN96	Undef		1	0	0
ROAF7C7	0F512C0B06	2000	4.2	4R70W	PN96	Undef		1	0	0
ROAF7D2	0E412D0A07	2000	4.2	4R70W	ECONOLINE	Undef		1	0	0
ROAF7D7	0F512D0B06	2000	4.2	4R70W	PN96	Undef		1	0	0
ROAF7E2	0E412E0A07	2000	4.2	4R70W	ECONOLINE	Undef		1	0	0
ROAF7E7	0F522E0A07	2000	4.2	M5	PN96	Undef		1	0	0
ROAF7F8	0F522FOA07	2000	4.2	M5	PN96	Undef		1	0	0
ROAF7FZ	0E412FOA07	2000	4.2	4R70W	ECONOLINE	Undef		1	0	0
ROAF7GB	0F522G0B07	2000	4.2	M5	PN96	Undef		1	0	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
ROAF7GZ	0E412G0A07	2000	4.2	4R070W	ECONOLINE	Undef		1	0	0
ROAF7H2	0E412H0B07	2000	4.2	4R070W	ECONOLINE	Undef		1	0	0
ROAF7H6	0F522H0B07	2000	4.2	M5	PN96	Undef		7	0	0
ROAF7J4	0E412J0B07	2000	4.2	4R070W	ECONOLINE	Undef		1	0	0
ROAF7K4	0E412K0B07	2000	4.2	4R070W	ECONOLINE	Undef		1	0	0
ROAF7L2	0E412L0B07	2000	4.2	4R70W	ECONOLINE	Undef		1	0	0
RQAD6B3	0VC1FB0G10	2000	4.6	4R70W	LINC.TOWNCAR		3.08	1	0	0
RQAD6B7	0FB1FB0A11	2000	4.6	4R70W	FORD/MERCURY		2.73	1	0	0
RQAD6B8	0VC1FB0B11	2000	4.6	4R70W	LINC.TOWNCAR		3.08	1	0	0
RQAD6BT	0FB1FB0G10	2000	4.6	4R70W	FORD/MERCURY		3.08	1	0	0
RQAD6BU	0VC1FB0A11	2000	4.6	4R70W	LINC.TOWNCAR		3.08	1	0	0
RQAD6BV	0FB1FB0B11	2000	4.6	4R70W	FORD/MERCURY		2.73	1	0	0
RQAD6BW	0FB1FB0A11	2000	4.6	4R70W	FORD/MERCURY		2.73	1	0	0
RQAD6H7	0FB1FH0A11	2000	4.6	4R70W	FORD/MERCURY		3.55	1	0	0
RQAD6H8	0VC1FH0B11	2000	4.6	4R70W	LINC.TOWNCAR		3.55	1	0	0
RQAD6HW	0FB1FH0B11	2000	4.6	4R70W	FORD/MERCURY		3.55	1	0	0
RQAD6HX	0VC1FH0A11	2000	4.6	4R70W	LINC.TOWNCAR		3.55	1	0	0
RQAD6P7	0FB1FP0A11	2000	4.6	4R70W	FORD/MERCURY		3.27	1	0	0
RQAD6PZ	0FB1FP0G10	2000	4.6	4R70W	FORD/MERCURY		3.27	1	0	0
RTA1P2	1ZE13P0510	2001	3.8	4R70W	MUSTANG		3.27	2	0	0
RTA1P3	1ZE23P0A10	2001	3.8	T5	MUSTANG		3.27	2	0	0
RTA1PY	1ZE13P0A10	2001	3.8	4R70W	MUSTANG		3.27	2	0	0
RTA1PZ	1ZE23P0510	2001	3.8	T5	MUSTANG		3.27	2	0	0
RTAJ0F4	2ZE2MF0500	2002 & 2003	3.8	T45	MUSTANG GS		3.27	2	0	0
RTAJ0FZ	2ZE1MF0500	2003 & 2002	3.8	4R070W	MUSTANG GS		3.27	2	0	0
RTAJ0F4	2ZE2CR0A05	2002 & 2003	3.8	T5	MUSTANG Cost Save & MUSTANG V6 ACCRO		3.27	2	0	0
RTAJ0RZ	2ZE1CR0A05	2002 & 2003	3.8	4R070W	MUSTANG Cost Save & MUSTANG V8 ACCRO		27-Mar	2	0	0
RVAF3C8	1ZE24C0507	2001	4.6	TR3650	MUSTANG COBRA		3.27	3	0	0
RVAFAT3	1ZE2GT0510	2001	4.6	TR3650	MUSTANG GT		3.27	2	0	0
RVAFAT6	1ZE1GT0510	2001	4.6	4R70W	MUSTANG GT		3.27	2	0	0
RVAFBB4	1ZE2GB0510	2001	4.6	TR3650	2001.5 Mustang Built		3.27	2	0	0
RWA11CL	1B316C0505	2001	4.6	4R70W	2001.5 UN93 Cat Opt	Undef		3	0	0
RWA12D7	1F518D0B12	2001	4.6	4R70W	2001.5 PN96 Cat Opt 5.4PF5	Undef		3	0	0
RWA12DC	1B316D0510	2001	4.6	4R70W	2001.5 UN93 Cat Opt	Undef		3	0	0
RWA12DH	2B316D0506	2002	4.6	4R70W	2001.5 UN93 Cat Opt & UN93 2V	Undef		3	0	0
RWA12E6	1F514E0B11	2001	5.4	4R70W	PN96	Undef		3	0	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	V5CLP	GI	IDC_MIN	IDC_MAX
RWAI2E7	1F516E0B12	2001	4.8	4R70W	2001.5 PN98 Cat Opt 5.4PF5	Undef	3	0	0	0
RWAI2EZ	1F514E0B11	2001	5.4	4R70W	PN98	Undef	3	0	0	0
RWAI2F5	1F514F0A11	2001	5.4	4R70W	PN98	Undef	3	0	0	0
RWAI2F7	1F514F0A11	2001	5.4	4R70W	PN98	Undef	3	0	0	0
RWAI2M7	1F516M0A12	2001	4.8	4R70W	2001.5 PN98 Cat Opt 5.4PF5	Undef	3	0	0	0
RWAI2N7	1F518N0A12	2001	4.8	4R70W	2001.5 PN98 Cat Opt 5.4PF5	Undef	3	0	0	0
RYAF0C5	3ZE2AC0500	2003	4.8	TR3850	MUSTANG GT (ACCRO)	3.27	2	0	0	0
RYAF0CZ	3ZE1AC0500	2003	4.8	4R70W	MUSTANG GT (ACCRO)	3.27	2	0	0	0
RYAF0T3	2ZE1GT0806	2002	4.8	4R70W	MUSTANG GT	3.27	2	0	0	0
RYAF0T6	2ZE2GT0506	2002	4.8	TR3850	MUSTANG GT	3.27	2	0	0	0
RZAM0B2	3FB1MB0500	2003	4.8	4R70W	MARAUDER	3.55	1	0	0	0
RZAN0B4	3FB1MB0506	2003	4.8	4R70W	MARAUDER	3.55	1	0	0	0
RZAO1B8	3VC1LB0506	2003	4.8	4R70W	LINC.TOWNCAR	3.27	1	0	0	0
RZAO1BU	3FB1GB0506	2003	4.8	4R70W	FORD/MERCURY	2.73	1	0	0	0
RZAO1BV	3VC1SB0M06	2003	4.8	4R70W	LINC.TOWNCAR	3.55	1	0	0	0
RZAO1BW	3VC1SB0506	2003	4.8	4R70W	LINC.TOWNCAR	3.27	1	0	0	0
RZAO1H8	3VC1LH0507	2003	4.8	4R70W	LINC.TOWNCAR	3.55	1	0	0	0
RZAO1HW	3FB1GH0506	2003	4.8	4R70W	FORD/MERCURY	3.27	1	0	0	0
RZAO1HX	3VC1UH0G06	2003	4.8	4R70W	LINC.TOWNCAR	3.55	1	0	0	0
RZAO1L4	3FB1GL0506	2003	4.8	4R70W	FORD/MERCURY	2.73	1	0	0	0
RZAO1L6	3VC1UL0G05	2003	4.8	4R70W	LINC.TOWNCAR	3.27	1	0	0	0
RZAO1P4	3FB1GP0506	2003	4.8	4R70W	FORD/MERCURY	3.27	1	0	0	0
RZAO1PY	3FB1UP0G06	2003	4.8	4R70W	FORD/MERCURY	2.73	1	0	0	0
RZAO1X8	3VC1UX0G06	2003	4.8	4R70W	LINC.TOWNCAR	3.27	1	0	0	0
RZAO1X7	3FB1GX0M06	2003	4.8	4R70W	FORD/MERCURY	2.73	1	0	0	0
RZAO1XY	3FB1UX0G06	2003	4.8	4R70W	FORD/MERCURY	2.73	1	0	0	0
SAAR8S3	0AK15S0513	2000		2 FN	FOCUS C170 SPI	3.686	1	0	0	0
SAAR8Z5	0AK15Z0512	2000		2 FN	FOCUS C170 ZETEC	3.907	1	0	0	0
SAAR8ZB	0AK15Z0512	2000		2 FN	FOCUS C170 ZETEC	3.907	1	0	0	0
SBAF6S7	1AK1A50A16	2002 & 2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT	3.733	1	0	0	0
SBAF6SC	2AK1B80A05	2002		2 4F27E	FOCUS SPI CAT OPT	3.693	1	0	0	0
SBAF6SW	1AK1A50516	2002 & 2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT	3.733	1	0	0	0
SBAF6SX	1AK1A90510	2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT	3.686	1	0	0	0
SBAF6SY	1AK1A50A10	2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT	3.686	1	0	0	0

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	GI	IDC_MIN	IDC_MAX
SBAF8Z3	1AK1AZ0510	2001	2.4	F27E	FOCUS C170 ZETEC	3.907	1	0	0	0
SBAF8Z5	2AK1AZ0M00	2002	2	Undef	FOCUS MEXICO	Undef	1	0	0	0
SBAF8Z7	1AK1AZ0516	2002 & 2001	2.4	F27E	FOCUS C170 ZETEC	3.856	1	0	0	0
SBAF8ZD	2AK1BZ0A05	2002	2.4	F27E	FOCUS ZETEC CAT OPT	3.904	1	0	0	0
SBAF8ZW	1AK1AZ0A10	2001	2.4	F27E	FOCUS C170 ZETEC	3.907	1	0	0	0
SBAF8ZX	1AK1AZ0510	2001	2.4	F27E	FOCUS C170 ZETEC	3.907	1	0	0	0
SBAF8ZY	1AK1AZ0A16	2002 & 2001	2.4	F27E	FOCUS C170 ZETEC	3.856	1	0	0	0
SBAF8ZZ	1AK1AZ0A10	2001	2.4	F27E	FOCUS C170 ZETEC	3.907	1	0	0	0
SBDB055	3AK1A80500	2003	2.4	F27E	C170 SPI (ACCRO)	3.733	1	0	0	0



Created by: PC-CPR, Version, 6.0-1 on: 7/10/2002 at 3:49:10 PM  
Model Year - 2002 2001 2000 1999  
All Engine sizes  
All Transmissions  
All Vehicles

Parameters

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PGM\_LOAD\_MIN

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	LOAD_ML
ALAPL6	8-96J R10SN	1999	6.8	E4OD	ECONOLINE	Undef	0.20001221
ALAPLCY	8-74C R11FB	1999	5.4	E4OD	ECONOLINE	Undef	0.20001221
ALAPLE7	8-98E R13FB	1999	6.8	E4OD	ECONOLINE	Undef	0.20001221
ALAPLKZ	8-48K R11FM	1999	5.4	E4OD	ECONOLINE	Undef	0.20001221
ALAPL9S	8-74S R11C	1999	5.4	E4OD	ECONOLINE	Undef	0.20001221
ALAPLTW	8-98T R13C	1999	6.8	E4OD	ECONOLINE	Undef	0.20001221
ALAPLTX	8-74T R11C	1999	5.4	E4OD	ECONOLINE	Undef	0.20001221
ALAPLUZ	8-74U R11C	1999	5.4	E4OD	ECONOLINE	Undef	0.20001221
ALAPLV4	8-74V R11C	1999	5.4	E4OD	ECONOLINE	Undef	0.20001221
ALAPLW5	8-98W R13C	1999	6.8	E4OD	ECONOLINE	Undef	0.20001221
ALAPLX6	8-96X R13C	1999	6.8	E4OD	ECONOLINE	Undef	0.20001221
ALAPLY4	9VZA-AY F8N	1999	6.4	E4OD	ECONOLINE	Undef	0.20001221
ALAC0N4	7-46N R108N	1999	6.4	E4OD	ECONOLINE-NGV	Undef	0.20001221
ALAC0NP	7-46N R068N	1999	6.4	E4OD	ECONOLINE-NGV	3.73/4.10	0.20001221
BUADD0H	8-10D R11	1999	3.4	AX4N	TAURUS SHO	3.77	0
BUADD0M	8-10M R11	1999	3.4	AX4N	TAURUS SHO	3.77	0
BUAED07	8LDA-JAE	1999	3	AX4N	TAU/SABLE 4V	3.98	1
BUAED0F	9LDA-BAB AC	1999	3	AX4N	TAU/SABLE 4V	3.98	0
BUAED0T	8LDA-CA B	1999	3	AX4N	TAU/SABLE 4V	3.98	1
BUAED0U	8LDA-QAD	1999	3	AX4N	TAU/SABLE 4V	3.98	1
BUAED0V	8-14A R12	1999	3	AX4N	TAU/SABLE 4V	3.98	0
BUAED0W	8LDA-JA C	1999	3	AX4N	TAU/SABLE 4V	3.98	1
BUAED0Y	8LDA-QAD	1999	3	AX4N	TAU/SABLE 4V	3.98	1
BUAEOB6	8LAA-ABD	1999	3	AX4N	TAU/SABLE 2V	3.77	0
BUAEOBT	8LDA-ABB AFB	1999	3	AX4N	TAU/SABLE 4V	3.98	0
BUAEOBU	8LDA-BAD	1999	3	AX4N	TAU/SABLE 4V	3.98	0
BUAEOBV	8LDA-ABD	1999	3	AX4N	TAU/SABLE 4V	3.98	0
BUAEOBY	8LAAF8	1999	3	AX4N & AX4S	TAU/SABLE 2V	3.77	0
BUAEOC3	8LDA-ADC	1999	3	AX4N	TAU/SABLE 4V	3.98	0
BUAEOCV	9LDA-BDC	1999	3	AX4N	TAU/SABLE 4V	3.98	0
BUAEOCW	8LDA-ADA	1999	3	AX4N	TAU/SABLE 4V	3.98	0
BUAEOCX	8LDA-9DA	1999	3	AX4N	TAU/SABLE 4V	3.98	0
BUAEOG7	8LAA-BNC	1999	3	AX4N	TAU/SABLE 2V	Undef	0
BUAE1A8	8LAA-AAD	1999	3	AX4S	TAU/SABLE 2V	3.77	0
BUAE1B8	8LAA-B8C	1999	3	AX4S	TAU/SABLE 2V	Undef	0
BVAJAA2	8LAA-EA EE	1999	3	AX4S	WIN128	3.58	0.1000061
BVAJAA4	8LAA-EA EE	1999	3	AX4S	WIN128	3.58	0.1000061
BVAJAAZ	8LAA-GA EG	1999	3	AX4S	WIN128	3.58	0.1000061
BVAJAS6	0A31AS0E10	2000	3.8	AX4S	WIN128	3.58	0.1000061
BVAJAS7	0A31C80B10	2000	3.8	AX4S	WIN128 ULEV & WIN128/ULEV	3.58	0.1000061
BVAJAS9	0A31AS0B05	2000	3.8	AX4S	WIN128 COST SAVE	3.58	0.1000061
BVAJASG	0A31C80B10	2000	3.8	AX4S	WIN128 ULEV & WIN128/ULEV	3.58	0.1000061
BVAJASH	0A31AS0B05	2000	3.8	AX4S	WIN128 COST SAVE	3.58	0.1000061
BVAJASS	0A31AS0G10	2000	3.8	AX4S	WIN128	3.58	0.1000061
BVAJAST	0A31B80B10	2000	3.8	AX4S	WIN128	3.58	0.1000061
BVAJASZ	0A31B80B10	2000	3.8	AX4S	WIN128	3.58	0.1000061
BWAK3N2	1DD14N0510	2001	3	4F50N	TAU/SABLE 4V	3.98	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	N	LOAD_MIL
BWAK4N8	1DD12N0510	2001	3	4F50N	TAU/SABLE 2V	3.77		0
BWAK496	1DD12S0510	2001	3	AX4S	TAU/SABLE 2V	3.77		0
BWAK8N3	1DD1F80512	2001	3	4F50N	D186 - FFV Ethanol	3.77		0
BWAK883	1DD1F80512	2001	3	AX4S	D186 - FFV Ethanol	3.77		0
BXAN85Z	0DD13N0505	2000	3	AX4N	D186 CS Cat - 2V Calif & D186 COST SAVE - CALIF & D186 CSCat - 2V CALIF	3.77		0
BXAN8BP	0DD12N0B11	2000	3	AX4N	TAU/SABLE 2V	3.77		0
BXAN8AJ	0DD13N0A05	2000	3	AX4N	D186 CS Cat - 2V Fed	3.77		0
BXAN8NK	0DD12N0A10	2000	3	AX4N	TAU/SABLE 2V	3.77		0
BXAN8SP	0DD12S0A10	2000	3	AX4S	TAU/SABLE 2V	3.77		0
BXAN8SZ	0DD13S0A05	2000	3	AX4S	D186 CS Cat - 2V Fed	3.77		0
BXANB5H	0DD15N0505	2000	3	AX4N	D186 CS Cat - 4V Calif & D186 CSCat - Cal 4V & D186 CSCat - 2V CALIF & D186 CS CAT CALIF 4V & D186 COST SAVE CALIF 4V & D186 COST SAVE - CALIF	3.98		0
BXANB5M	0DD15N0505	2000	3	AX4N	D186 CS Cat - 4V Calif & D186 COST SAVE CALIF 4V & D186 CSCat - Cal 4V & D186 CSCat - 2V CALIF & D186 CS CAT CALIF 4V & D186 COST SAVE - CALIF	3.98		0
BXANBAJ	0DD15N0A05	2000	3	AX4N	D186 CS Cat - 4V Fed & D186 CS CAT FED 4V & D186 CSCat Fed 4V	3.98		0
BXANBAK	0DD14N0A08	2000	3	AX4N	TAU/SABLE 4V	3.98		0
BXANBAN	0DD14N0A08	2000	3	AX4N	TAU/SABLE 4V	3.98		0
BXANBAZ	0DD15N0A05	2000	3	AX4N	D186 CS Cat - 4V Fed & D186 CSCat Fed 4V & D186 CS CAT FED 4V	3.98		0
BXANBBL	0DD14N0B08	2000	3	AX4N	TAU/SABLE 4V	3.98		0
BXANBBZ	0DD14N0B08	2000	3	AX4N	TAU/SABLE 4V	3.98		0
BXANS04	0DD15D0508	2000	3	AX4S	D186 - FFV Ethanol	3.77		0
BXANS0Y	0DD1ND0505	2000	3	AX4N	D186 - FFV W/AX4N & D186-FFV W/AX4N	3.77		0
CRAIBK9	9VNA-BK BC	1999	4.8	4R70W	FORDMERCURY	2.73	0.049987789	
CRAIBL6	9VNA-AL BFM	1999	4.8	4R70W	FORDMERCURY	3.27	0.049987789	
CRAIBL8	9VNA-BL BC	1999	4.8	4R70W	FORDMERCURY	3.27	0.049987789	
CRAIBM8	9VNA-BM BC	1999	4.8	4R70W	LINC.TOWNCAR	3.08	0.049987789	
CRAIBS8	9VNA-BS B	1999	4.8	4R70W	LINC.TOWNCAR	3.27	0.049987789	
CRAICAZ	9VNA-AAE	1999	4.8	4R70W	FORDMERCURY	3.55	0.049987789	
CRAICD2	9VNA-GD CG	1999	4.8	4R70W	FORDMERCURY	3.08	0.20001221	
CRAICE3	9VNA-GE CG	1999	4.8	4R70W	FORDMERCURY	3.27	0.20001221	
CRAICP3	9VNA-GF CG	1999	4.8	4R70W	LINC.TOWNCAR	3.08	0.20001221	
CRAICK5	9VNA-AK CFB	1999	4.8	4R70W	FORDMERCURY	2.73	0.049987789	
CRAICL5	9VNA-AL CFM	1999	4.8	4R70W	FORDMERCURY	3.27	0.049987789	
CRAICLZ	9VNA-AL CFM	1999	4.8	4R70W	FORDMERCURY	3.27	0.049987789	
CRAIDM2	9VNA-BM BC	1999	4.8	4R70W	LINC.TOWNCAR	3.08	0.049987789	
CRAIDM8	9VNA-AM CFB	1999	4.8	4R70W	LINC.TOWNCAR	3.08	0.049987789	

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	N	LOAD_ML
CRAIDSZ	9VNA-B5 B	1999	4.8	4R70W	LINC.TOWNCAR	3.27		0.049987789
CSAH1G4	1FB1NG0505	2001	4.8	4R70W	FORD Nat. Gas	2.73		0.20001221
CSAH1GZ	2FB1NG0505	2002	4.8	4R70W	FORD Nat. Gas	2.73		0.20001221
CSAH1L3	B-18L R06S	1999	4.8	4R70W	FORD Nat. Gas	2.73		0.20001221
CSAH1V4	9VNA-AV A	1999 & 2000 & 2001	4.8	4R70W	FORD Nat. Gas	2.73		0.20001221
CVAE7BY	9VMM-ABC	1999	4.8	T45	MUSTANG COBRA	3.27		0.049987789
CVAE7F8	0ZE2CF0510	2000	4.8	T45	MUSTANG COBRA	3.27		0.049987789
CVAE7R5	0ZE2CR0508	2000	5.4	Undef	MUSTANG COBRA R	Undef		0.049987789
CVAF1A8	9VXM-AAC	1999	4.8	T45	MUSTANG GT	3.27		0.049987789
CVAF1A8	9VXM-BAD	1999	4.8	T45	MUSTANG GT	3.27		0.049987789
CVAF1B3	9VXM-ABC	1999	4.8	T45	MUSTANG GT	3.27		0.049987789
CVAF1B5	9VXM-BBD	1999	4.8	T45	MUSTANG GT	3.27		0.049987789
CVAF1C3	9VXA-AAC	1999 & 2000	4.8	4R70W	MUSTANG GT	3.27		0.049987789
CVAF1CX	9VXA-ABC	1999 & 2000	4.8	4R70W	MUSTANG GT	3.27		0.049987789
CVAF1CY	9VXA-BAC	1999	4.8	4R70W	MUSTANG GT	3.27		0.049987789
CVAF1CZ	9VXA-BBC	1999	4.8	4R70W	MUSTANG GT	3.27		0.049987789
CVBA0A2	9LMA-BA BC & 9LMA-BAB	1999 & 2000	3.8	4R70W	MUSTANG	3.27		0.049987789
CVBA0A4	9LMA-BA BC & 9LMA-BAB	1999 & 2000	3.8	4R70W	MUSTANG	3.27		0.049987789
CVBA0BX	9LMA-AB BFB & 9LMA-ABB	1999 & 2000	3.8	4R70W	MUSTANG	3.27		0.049987789
CVBA0BZ	9LMA-AB BFB & 9LMA-ABB	1999 & 2000	3.8	4R70W	MUSTANG	3.27		0.049987789
CVBA2B3	9LMM-BBC	2000 & 1999	3.8	T50D	MUSTANG	3.08 & 3.27		0.049987789
CVBA2B5	9LMM-BBC	2000 & 1999	3.8	T50D	MUSTANG	3.08 & 3.27		0.049987789
CVBA2B8	9LMM-ABC	1999 & 2000	3.8	T50D	MUSTANG	3.27 & 3.08		0.049987789
CVBA2BZ	9LMM-ABC	1999 & 2000	3.8	T50D	MUSTANG	3.27 & 3.08		0.049987789
CXAB3H5	9VNA-BH CFB & 9VNA-BHC	1999	4.8	4R70W	LINC.TOWNCAR	3.55		0.049987789
DOAR3AY	0M11A30512	2002		3CD4E	U204	Undef		0
DOAR3B6	0M11B30512	2002		3CD4E	U204	Undef		0
DOAR3C5	0M11C30512	2002		3CD4E	U204	Undef		0
DOAR436	2M11B30510	2002		3C4DE	U204 Cat. Opt.	Undef		0
DOAR43T	2M11C30510	2002		3C4DE	U204 Cat. Opt.	Undef		0
DOAR43W	2M11A30510	2002		3C4DE	U204 Cat. Opt.	Undef		0
DVAN823	0M12A20512	2001 & 2002	2	G5M	U204	Undef		0
DVAN824	0M12B20512	2001 & 2002	2	G5M	U204	Undef		0
DVAN82U	0M12A20512	2001 & 2002	2	G5M	U204	Undef		0
DVAN82Y	0M11A20513	2001 & 2002	2	CD4E	U204	Undef		0
DVANA2Z	0M11A20520	2002	2	Undef	U204	Undef		0
FBAC0CC	9LAA-AC B	1999	3	AX4S	DN101 - FFV Ethanol	3.77		0.20001221
FGAK0CZ	9VWA-ACB	1999	4.8	AX4N	CONTINENTAL	3.58		0
FCAL0CY	9VWA-JCD	2001 & 2000 & 1999	4.8	4F50N & AX4N	CONTINENTAL	3.58		0
FDBA087	1A31A90G12	2001	3.8	4F50N	WIN128	3.58		0.1000081
FDBA09U	1A31A90Q13	2001	3.8	Undef	WIN128	Undef		0.1000081
FDBA0SX	1A31A90G12	2001	3.8	4F50N	WIN128	3.58		0.1000081
FDBC058	1A31A90512	2001	3.8	4F50N	WIN128	3.58		0.1000081
FHAF8F3	2DD13F0511	2002	3	Undef	D186 FFV Pt-Rh CAT OPT	Undef		0
FHAF8N2	2DD13N0511	2002	3	4F50N	D186 2V Pt-Rh CAT OPT	3.77		0
FHAF8N4	2DD14N0511	2002	3	4F50N	D186 4V & TALI/SABLE 4V	3.98		0
FHAF8NW	2DD18N0508	2002	3	4F50N	D186 4V PT-RH CAT OPT	3.98		0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	n	LOAD_MI
FHAF8NZ	2DD12N0511	2002	3.4F50N		TAUSABLE 2V	3.77		0
FHAF8S2	2DD15S0511	2002	3.4X4S		D186 2V Pt-Rh CAT OPT	3.77		0
FHAF85Y	2DD1FS0507	2002	3.4X4S		D186 - FFV Ethanol	3.77		0
FHAF8V4	2DD13V0511	2002	3.Undef		D186 FFV Pt-Rh CAT OPT	Undef		0
FJAE0A8	2A31CA0506	2002	3.8.4F50N		WIN126	3.58		0.1000081
FJAE0CZ	2A31ZC0510	2002	3.8.4F50N		2002.8 WIN126 Cat Opt	3.58		0.1000061
GRAK8E3	8-04E R13FM & 9EQA-AK A	1999	2.F4E3		ESCORT/TRACER 4V	3.74		0
GRAK8EX	8-03E R13FM	1999	2.G5M		ESCORT/TRACER 4V	4.11		0
GRAK8KY	9EQM-BK A	1999	2.G5M		ESCORT/TRACER 4V	4.11		0
GRAK8KZ	9EQM-AK A	1999	2.G5M		ESCORT/TRACER 4V	4.11		0
GRAK8RF	8-04R R13C & 9EQA-BK A	1999	2.F4E3		ESCORT/TRACER 4V	3.74		0
GRAK8RX	8-03R R13C	1999	2.G5M		ESCORT/TRACER 4V	4.11		0
GRAK8RY	8-03R R13C	1999	2.G5M		ESCORT/TRACER 4V	4.11		0.20001221
GVAK8B3	7-06B R12	1999	2.F4E3		ESCORT/TRACER 2V	3.74		0.29998779
GVAK8C3	7-07C R12	1999	2.G5M		ESCORT/TRACER 2V	3.85		0.29998779
GWAG8G3	9EQM-AG A	1999	2.G5M		ESCORT/TRACER 2V	3.85		0
GWAG8G6	9EQM-BG BC	1999	2.MTX75		ESCORT/TRAC 2V LEV	3.85		0
GWAG8GY	9EQM-BG A	1999	2.F4E3		ESCORT/TRACER 2V	3.74		0
GWAG8GZ	9EQM-AG A	1999	2.F4E3		ESCORT/TRACER 2V	3.74		0
GWAG8H3	9EQM-AH A	1999	2.F4E3		ESCORT/TRACER 2V	3.74		0
JAAS8B3	9WHA-ABK	2000	3.9.5R55W		DEW98	3.58		0.050000001
JAAS8B8	9WHA-ABK	2000	3.9.5R55W		DEW98	3.31		0.050000001
JAAS8B9	9LDA-BBH	2001 & 2000	3.5R55N & 5R55W		DEW98	3.07 & 3.58		0.050000001
JAAS8N2	9LDA-ENE	2000	3.Undef		DEW98	Undef		0.050000001
JAAS7A3	9WHA-AGG	2000	3.9.Undef		DEW98	3.31		0.050000001
JAAS7A7	9WHA-EAJ	2000	3.9.5R55N		DEW98	3.58		0.050000001
JAAS7A8	9WHA-BAH	2000	3.9.5R55W		DEW98	3.31		0.050000001
JAAS7C9	9LDA-BCG	2000	3.5R55W		DEW98	3.58		0.050000001
JAAS7S9	9LDA-ESG	2000	3.5R55W		DEW98	3.58		0.050000001
JAAT8A2	9LDA-AAH	2000	3.5R55N		DEW98	3.58		0.050000001
JAAT8A3	9LDA-ACG	2000	3.5R55W		DEW98	3.58		0.050000001
JBAR8A6	9LDM-AAE	2000	3.M5GR		DEW98	3.07		0.050000001
JBAS3A2	9LDM-EAG	2000	3.M5GR		DEW98	3.07		0.050000001
JBAS3CZ	9LDM-ACG	2000 & 2001	3.M5GR		DEW98 & DEW98 MT	3.07		0.050000001
JBAT5S6	1LQ26S0512	2001	3.GERTAG		DEW98 MT	3.07		0.050000001
JBAT5S7	1LQ26S0511	2001	3.GERTAG		DEW98 MT	3.07		0.050000001
JD8C1M8	2SR12M0505	2002	3.9.5R55N		M205	3.58		0.050000001
JD8D436	2LQ1780510	2002	3.5R55N		DEW V8 .75 O/D	3.58		0.050000001
JD8D43Z	2LQ1680512	2002	3.5R55S		DEW98	3.58		0.050000001
JD8D45V	2LQ1680512	2002	3.5R55S		DEW98	3.58		0.050000001
JD8D49W	2LQ1780510	2002	3.5R55N		DEW V8 .75 O/D	3.58		0.050000001
JEATEF8	1U51AF0B15	2002	4.5R55W		U152 FFV 2001.5	3.27/3.55		0.25
JEATEG8	1U51BG0A15	2002	4.5R55W		U152 2001.5	3.27/3.55		0.25
JEATEGW	1U51AG0M15	2002	4.5R55W		U152 2001.5	3.27/3.55		0.25
JEATEGY	1U51AG0M15	2002	4.5R55W		U152 2001.5	3.27/3.55		0.25
JEATFF6	1U51AF0B21	2002	4.5R55W		U152 FFV 2001.5	3.27/3.55		0.25
JEATFG6	1U51BG0A21	2002	4.5R55W		U152 2001.5	3.27/3.55		0.25

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	h	LOAD_ML
JEATFGX	1U51AG0M21	2002	4	5R55W	U152 2001.5	3.273.55		0.25
JEATFGY	1U51BG0A21	2002	4	5R55W	U152 2001.5	3.273.55		0.25
JEAU159	1U51A50M16	2002	4.6	5R55W	U152 2001.5	3.273.55		0.25
JEAU159	1U51A50B16	2002	4.6	5R55W	U152 2001.5	3.273.55		0.25
JEAU252	1U51A50M10	2002	4.6	5R55W	U152 2001.5	3.273.55		0.25
JEAU259	1U51A50B10	2002	4.6	5R55W	U152 2001.5	3.273.55		0.25
JEBF462	2U51A50510	2002	4.6	5R55S	U152	3.273.55		0.25
JEBF45Z	2U51A50M10	2002	4.6	5R55S	U152	3.273.55		0.25
JEBFEF4	2U51AF0509	2002	4	5R55S	U152 FFV	Undef		0.25
JEBFEG4	2U51BG0A09	2002	4	5R55S	U152	Undef		0.25
JEBFEGZ	2U51AG0M08	2002	4	5R55S	U152	Undef		0.25
JFA05G9	1U52AG0B11	2002	4	M5	U152 2001.5	3.273.55		0.25
JFA06G5	1U52AG0B15	2002	4	M5	U152 2001.5	3.273.55		0.25
JFBD6G2	2U52AG0506	2002	4	M5	U152	3.273.55		0.25
JJBD387	2LQ2680512	2002	3	5R55S	DEW98		3.07	0.050000001
KAAB8D2	9EQM-AD DFM	1999	2	MTX75	99.5 CDW		3.82	0.1000081
KAAB8D5	9EQM-BD EC	1999	2	CD4E	99.5 CDW		3.82	0.1000081
KAAB8D7	9EQM-MD C	1999	2	CD4E	99.5 CDW		4.23	0.1000061
KAAB8DW	9EQM-AD EFB	1999	2	CD4E	99.5 CDW		3.82	0.1000061
KAAB8DY	9EQM-AD DFM	1999	2	MTX75	99.5 CDW		3.82	0.1000061
KAAB8DZ	9EQM-BD D	1999	2	MTX75	99.5 CDW		3.82	0.1000061
KAAB9VU	9EQM-MV C	2000	2	CD4E	CONTOUR/MYSTIQUE		4.23	0.1000061
KAABAV3	9EQM-BV F	2000	2	CD4E	CONTOUR/MYSTIQUE		3.82	0.1000061
KAABAVU	9EQM-AV F	2000	2	MTX75	CONTOUR/MYSTIQUE		3.82	0.1000061
KAABAVV	9EQM-AV F	2000	2	CD4E	CONTOUR/MYSTIQUE		3.82	0.1000061
KAABAVW	9EQM-AV F	2000	2	MTX75	CONTOUR/MYSTIQUE		3.82	0.1000061
KAABAVX	9EQM-BV F	2000	2	MTX75	CONTOUR/MYSTIQUE		3.82	0.1000061
KAABAZ2	0NB1FZ0A05	2000	2	CD4E	CDW AFOVM		3.82	0.1000061
KAABAZY	0NB1FZ0B05	2000	2	CD4E	CDW AFOVM		3.82	0.1000061
KBAN2H2	9LCM-AH A	1999	2.5	MTX75	CONTOUR SVT 99.5		4.06	0
KBAN2H3	9LCM-EH C	1999	2.5	MTX75	MONDEO ST200 99.5		3.81	0
KBAN40E	9LCA-AC DFM	1999	2.5	CD4E	BRONCO & CDW/SW 99.5		3.77	0
KBAN40G	9LCA-BC DC	1999	2.5	CD4E	BRONCO		3.77	0
KBAN40H	9LCA-AC DFM	1999	2.5	CD4E	BRONCO & CDW/SW 99.5		3.77	0
KBAN4D5	9LCA-ED CE	1999	2.5	CD4E	99.5 COUGAR/MONDEO		3.77	0.20001221
KBAN4DC	9LCM-AD EFM	1999	2.5	MTX75	99.5 SW		4.06	0
KBAN4DK	9LCM-BD EC	1999	2.5	MTX75	99.5 SW		4.06	0
KBAN4DL	9LCA-BD DC	1999	2.5	CD4E	99.5 SW		3.77	0
KBAN4DM	9LCA-AD DFB	1999	2.5	CD4E	99.5 SW		3.77	0
KBAN4X2	9LCM-AX C	1999	2.5	MTX75	CONTOUR SVT 99.5		4.06	0
KBAN4XB	9LCM-AH C	1999	2.5	MTX75	CONTOUR SVT 99.5		4.06	0
KBAN7D2	9LCM-ED EE	1999	2.5	MTX75	99.5 COUGAR/MONDEO		3.82	0.20001221
KBAN7D4	9LCA-EO DE	1999	2.5	CD4E	99.5 COUGAR/MONDEO		3.77	0.20001221
KBAN7H7	9LCM-EH G	2000	2.5	MTX75	MONDEO/COUGAR ST200		3.81	0
KBAN7VQ	9LCM-BV H	2000	2.5	MTX75	CDW162/SW164		4.06	0
KBAN7VR	9LCA-BV H	2000	2.5	CD4E	CDW162/SW164		3.77	0
KBAN7WW	9LCA-BW G	2000	2.5	CD4E	COUGAR SW164		3.77	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	N	LOAD_ML
KBAN7WX	9LCM-BW G	2000	2.5	MTX	COUGAR SW164	4.06		0
KBAN7X4	9LCM-AXE	2000	2.5	MTX75	CONTOUR SVT	4.06		0
KBAT1DB	1ZN2BD0610	2001	2.5	MTX	COUGAR SW164	4.06		0
KBAT1DC	1ZN27D0610	2001	2.5	MTX	COUGAR SW164	4.06		0
KBAT1DD	1ZN2AD0610	2001	2.5	MTX	COUGAR SW164	Undef		0
KBAT1DH	1ZN1AD0610	2001	2.6	CD4E	COUGAR SW164	3.77		0
KBAT1DN	1ZN1ED0610	2001	2.5	CD4E	COUGAR SW164	3.77		1
KBAT1DP	1ZN1SD0610	2001	2.5	CD4E	COUGAR SW164	3.77		0
KBAT1DQ	1ZN2ED0610	2001	2.6	MTX	COUGAR SW164	Undef		1
KBAT2D4	2ZN2ED0E00	2002	2.5	MTX	COUGAR SW164	4.06		1
KBAT2DW	2ZN2SD0500	2002	2.5	MTX	COUGAR SW164	4.06		0
KBAT2DX	2ZN27D0500	2002	2.5	MTX	COUGAR SW164	4.06		0
KBAT2DY	2ZN2AD0500	2002	2.5	MTX	COUGAR SW164	Undef		0
KBAU0D3	2ZN1ED0E05	2002	2.5	CD4E	COUGAR SW164	3.77		1
KBAU0D8	2ZN1AD0505	2002	2.6	CD4E	COUGAR SW164	3.77		0
KBAU0D7	2ZN1SD0505	2002	2.5	CD4E	COUGAR SW164	3.77		0
KHAI4A5	9LCA-EA DE	1999	2.5	CD4E	98.5 COUGAR/MONDEO	3.77	0.20001221	
KHAI6A9	9LCA-AA EFM	1999	2.5	CD4E	98.5 CDW/SW	3.77	0.20001221	
KHAI5AA	9LCA-AA EFM	1999	2.5	CD4E	98.5 CDW/SW	3.77	0.20001221	
KHAI5AF	9LCA-BA EC	1999	2.5	CD4E	98.5 CDW/SW	3.77	0.20001221	
KHAI5AT	9LCA-EA DE	1999	2.6	CD4E	98.5 COUGAR/MONDEO	3.77	0.20001221	
KHAI5AU	9LCA-EA DE	1999	2.5	CD4E	98.5 COUGAR/MONDEO	3.77	0.20001221	
KHAI5B9	9LCA-AB EFB	1999	2.5	CD4E	98.5 SW	3.77	0.20001221	
KHAI5EM	9LCA-BB EC	1999	2.5	CD4E	98.5 SW	3.77	0.20001221	
KHAI68H	9LCA-B6 HC	1999	2.5	CD4E	98.5 CDW/SW	3.77	0.20001221	
KHAI6SR	9LCA-AS GFM	1999	2.5	CD4E	98.5 CDW/SW	3.77	0.20001221	
KHAI6SS	9LCA-AS GFM	1999	2.5	CD4E	98.5 CDW/SW	3.77	0.20001221	
KHAI6SV	9LCA-ES GE	1999	2.6	CD4E	98.5 COUGAR/MONDEO	3.77	0.20001221	
KHAI6TB	9LCA-BT HC	1999	2.5	CD4E	98.5 SW	3.77	0.20001221	
KHAI6TX	9LCA-AT GFB	1999	2.5	CD4E	98.5 SW	3.77	0.20001221	
KHAI8A9	9LCM-EA F	1999	2.5	MTX75	98.5 COUGAR/MONDEO	3.82	0.20001221	
KHAI8AA	9LCM-AA FFM	1999	2.6	MTX75	98.5 CDW/SW	4.06	0.20001221	
KHAI8AL	9LCM-AA FFM	1999	2.5	MTX75	98.5 CDW/SW	4.06	0.20001221	
KHAI8AM	9LCM-BA FC	1999	2.6	MTX75	98.5 CDW/SW	4.06	0.20001221	
KHAI8AU	9LCM-EA EE	1999	2.5	MTX75	98.5 COUGAR/MONDEO	3.82	0.20001221	
KHAI8BA	9LCM-AB FFB	1999	2.5	MTX75	98.5 SW	4.06	0.20001221	
KHAI8BT	9LCM-BB FC	1999	2.6	MTX75	98.5 SW	4.06	0.20001221	
KIAB1E2	9EQM-AE DFB	1999 & 2000		2 MTX75	99.5 SW & COUGAR SW164	3.82	0.1000061	
KIAB1EZ	9EQM-BE DG	1999 & 2000		2 MTX75	99.5 SW & COUGAR SW164	3.82	0.1000061	
KIAB4Z4	0ZN2AZ0610	2001 & 2000		2 MTX75	COUGAR SW164	3.82	0.1000061	
KIAC0Z5	2ZN2AZ0600	2002		2 MTX75	COUGAR SW164	3.82	0.1000061	
KMAK8S8	0AK25S0612	2000		2 B5	FOCUS C170 SPI	3.51		0
KMAK8ZC	0AK25Z0612	2000		2 MTX75	FOCUS C170 ZETEC	3.82		0
KNAG4A5	8EQM-AA FFB	1999		2 C4DE	98.5 CDW	3.82	0.1000061	
KNAG4AP	8EQM-AA FFM	1999		2 MTX75	98.5 CDW	3.82	0.1000061	
KNAG4AQ	8EQM-BA FC	1999		2 MTX75	98.5 CDW	3.82	0.1000061	
KNAG4AF	8EQM-AA FFM	1999		2 MTX75	98.5 CDW	3.82	0.1000061	

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	N	LOAD_ML
KNAG4AS	9EQA-BA FC	1999	2	CD4E	98.5 CDW	3.92		0.1000061
KNAG4C6	9EQM-AC FFB	1999	2	MTX75	98.5 SW	3.92		0.1000061
KNAG4CR	9EQA-AG EPB	1999	2	CD4E	98.5 SW	3.92		0.1000061
KNAG4CS	9EQA-BC EC	1999	2	CD4E	98.5 SW	3.92		0.1000061
KNAG4CT	9EQM-BC FC	1999	2	MTX75	98.5 SW	3.92		0.1000061
KNAG4M4	9EQA-AM A	1999	2	CD4E	CDW AFCVM	3.92		0.1000061
KNAG4N4	9EQA-BN A	1999	2	CD4E	CDW AFCVM	3.92		0.1000061
KNAG5F9	9EQA-AP C	1999	2	CD4E	CDW AFCVM	3.92		0.1000061
KNAG5FZ	9EQA-BR C	1999	2	CD4E	CDW AFCVM	3.92		0.1000061
KNAG598	9EQA-B8 HC	1999	2	C4DE	98.5 CDW	3.92		0.1000061
KNAG59Z	9EQA-A8 HFB	1999	2	C4DE	98.5 CDW	3.92		0.1000061
KNAG5T5	9EQA-AT GFB	1999	2	CD4E	98.5 SW	3.92		0.1000061
KNAG5TY	9EQA-BT GC	1999	2	CD4E	98.5 SW	3.92		0.1000061
KRAF588	1AK2A80A11	2002 & 2001	2.0 & 3.8	B5	FOCUS C170 SPI & WIN Cat OPT	3.733		0
KRAF5Z4	1AK2AZ0509	2001	2	MTX	FOCUS C170 ZETEC	3.92		0
KRAF5ZZ	2AK2AZ0M00	2002	2	Undef	FOCUS MEXICO	Undef		0
KRAF6S4	1AK2A8051E	2002	2.0 & 3.8	B5	FOCUS C170 SPI & WIN Cat OPT	3.733		0
KRAF6S6	2AK2B90A10	2002	2	B5	FOCUS SPI CAT OPT	3.61		0
KRAF6Z4	1AK2AZ0517	2002	2	MTX	FOCUS C170 ZETEC	3.92		0
KRAF6Z6	2AK2BZ0A10	2002	2	MTX	FOCUS ZETEC CAT OPT	3.92		0
MAAG4A3	9WAM-AA B8N	1999	6.8	M5	PHN131	Undef		0.20001221
MAAG4A4	9WAA-AA F8N	1999	6.8	Undef	PHN131	Undef		0.20001221
MAAG4AZ	9VZM-MA B8M	1999	6.4	M4	PHN131	Undef		0.20001221
MAAG4B4	9VZM-AB BFB	1999	6.4	M5	PHN131	Undef		0.20001221
MAAG4CB	9WAM-AC BFB	1999	6.8	M5	PHN131	Undef		0.20001221
MAAG4CD	9WAA-BC FC	1999	6.8	4R100	PHN131	Undef		0.20001221
MAAG4D2	9WAA-BD GC	1999	6.8	4R100	PHN131	Undef		0.20001221
MAAG4F3	9VZA-AF FFB	1999	6.4	4R100	PHN131	Undef		0.20001221
MAAG4F4	9WAA-AF F8N	1999	6.8	4R100	PHN131	Undef		0.20001221
MAAG4FF	9WAM-BF FC	1999	6.8	M5	PHN131	Undef		0.20001221
MAAG4HE	9WAA-AH FFB	1999	6.8	4R100	PHN131	Undef		0.20001221
MAAG4I4	9WAA-AI FSM	1999	6.8	4R100	PHN131	Undef		0.20001221
MAAG4J3	9VZA-BJ FC	1999	6.4	4R100	PHN131	Undef		0.20001221
MAAG4LZ	9WAA-BL FC	1999	6.8	4R100	PHN131	Undef		0.20001221
MAAG4VZ	9WAA-BV GC	1999	6.8	4R100	PHN131	Undef		0.20001221
MAAG4YD	9WAA-BY FC	1999	6.8	4R100	PHN131	Undef		0.20001221
MAAG4ZE	9WAA-BZ FC	1999	6.8	4R100	PHN131	Undef		0.20001221
MBAIBAJ	9WGA-BAF & 9WGA-BA F	1999	5.4	4R100	UN173 4V CFF/LEV & UN93/UN173 4V	Undef		0.20001221
MBAIBBA	9VZA-AB FFB	1999	6.4	4R100	PN102	Undef		0.20001221
MBAIBCA	9VZA-BC F	1999	5.4	Undef	PN98	Undef		0.20001221
MBAIBEB	9VZA-BED	1999	5.4	4R100	UN93 2V CFF/LEV	Undef		0.20001221
MBAIBEB	9VZA-BE F	1999	5.4	Undef	UN93 2V & UN93/UN173 2V	Undef		0.20001221
MBAIBED	9VZA-BE G	1999	5.4	4R100	UN93 2V & UN93/UN173 2V	Undef		0.20001221
MBAIBEZ	9VZA-AE DFM	1999	6.4	4R100	UN93 2V & UN93/UN173 2V	Undef		0.20001221
MBAIBFA	9VZA-BF F	1999	6.4	Undef	PN102	Undef		0.20001221
MBAIBN7	9VZA-AN D8N	1999	5.4	E40D	PN102-NGV	Undef		0.20001221
MBAIBPF	9VZA-AP GFB	1999	5.4	Undef	PN98	Undef		0.20001221



Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	N	_LOAD_MI
MMAF1H8	1E414H0510	2001 & 2002	5.4	4R100	ECONOLINE-NGV	Undef		0.20001221
MMAF1HJ	1E418H0B10	2001	6.8	4R100	ECONOLINE	Undef		0.1000061
MMAF1J8	1E414J0806	2001	5.4	4R100	ECONOLINE	Undef		0.1000061
MMAF1Q9	1F724Q0M05	2001	5.4	M4		Undef		0.20001221
MMAF1X2	1F514X0511	2002	5.4	4R100	PN98 2V NGV & PN98 NGV	Undef		0.20001221
MMAF1Z8	1E414I0510	2001 & 2002	5.4	4R100	ECONOLINE-NGV	Undef		0.20001221
MMAHQ08	1F728A0B15	2001	6.8	M5	P131	Undef		0.20001221
MMAHQ0D	1F728A0B06	2001	6.8	M5	P131	Undef		0.20001221
MMAHQ0C	1F718C0B15	2001	6.8	4R100	P131	Undef		0.20001221
MMAHQ0X	1F718C0B10	2001	6.8	4R100	P131	Undef		0.20001221
MMAHQ0Y	1F717C0B15	2001	6.8	4R100	P131	Undef		0.20001221
MMAHQ0Z	1F717C0B10	2001	6.8	4R100	P131	Undef		0.20001221
MMAHQ0C	1F714D0B15	2001	5.4	4R100	P131	Undef		0.20001221
MMAHQ0D	1L118D0B15	2001	6.8	4R100	UW137	Undef		0.20001221
MMAHQ0I	1L118D0B10	2001	6.8	4R100	UW137	Undef		0.20001221
MMAHQ0Z	1L114D0B15	2001	5.4	4R100	UW137	Undef		0.20001221
MMAHQ0N7	1E418N0510	2001	6.8	4R100	ECONOLINE	Undef		0.20001221
MMAHQ0NA	1L118N0A15	2001	6.8	4R100	UW137	Undef		0.20001221
MMAHQ0NB	1F714N0B15	2001	5.4	4R100	P131	Undef		0.20001221
MMAHQ0NJ	1F717N0515	2001	6.8	4R100	P131	Undef		0.20001221
MMAHQ0NR	1E414N0A10	2001	5.4	4R100	ECONOLINE	Undef		0.20001221
MMAHQ0NS	1L114N0A15	2001	5.4	4R100	UW137	Undef		0.20001221
MMAHQ0NT	1F714N0A15	2001	5.4	4R100	P131	Undef		0.20001221
MMAHQ0NV	1F718N0515	2001	6.8	4R100	P131	Undef		0.20001221
MMAHQ0P6	1E418P0A10	2001	6.8	4R100	ECONOLINE	Undef		0.20001221
MMAHQ0P7	1F718P0A15	2001	6.8	4R100	P131	Undef		0.20001221
MMAHQ0P9	1F724P0A15	2001	5.4	M5	P131	Undef		0.20001221
MMAHQ0PK	1F717P0A15	2001	6.8	4R100	P131	Undef		0.20001221
MMAHQ0Q8	1E418Q0B10	2001	6.8	4R100	ECONOLINE	Undef		0.1000061
MMAHQ0R7	1E414R0B10	2001	5.4	4R100	ECONOLINE	Undef		0.1000061
MMAHQ0R8	1E418R0B10	2001	6.8	4R100	ECONOLINE	Undef		0.20001221
MMAHQ0RL	1F717R0B15	2001	6.8	4R100	P131	Undef		0.20001221
MMAHQ0RX	1F718R0B15	2001	6.8	4R100	P131	Undef		0.20001221
MMAHQ0T7	1F718T0B15	2001	6.8	4R100	P131	Undef		0.20001221
MMAHQ0U5	1F728U0M00	2001	6.8	M5	P131	4.88/5.38		0.20001221
MMAHQ0U6	1F728U0515	2001	6.8	M5	P131	Undef		0.20001221
MMAHQ0U7	1E414U0B10	2001	5.4	4R100	ECONOLINE	Undef		0.20001221
MMAHQ0V7	1F728V0A15	2001	6.8	M5	P131	Undef		0.20001221
MMAHQ0X7	1E414X0510	2001	5.4	4R100	ECONOLINE	Undef		0.1000061
MMAHQ0Y7	1E414Y0510	2001	5.4	4R100	ECONOLINE	Undef		0.20001221
MNAE0Y6	1F514Y0506	2001	5.4	4R100	PN98 8C	Undef		0.1500244
MPAL0PZ	0F724P0A10	2000	5.4	4R100	P131	Undef		0.20001221
MPAL0QS	0F724Q0M10	2000	5.4	4R100	P131	Undef		0.20001221
MPAL0SF	0B314S0511	2000	5.4	4R100	UN98 2V	Undef		0.1499939
MPAL0S4	0F714S0B11	2000	5.4	4R100	P131	Undef		0.20001221
MPAL0SX	0L114D0B11	2000	5.4	Undef	UW137	Undef		0.20001221
MPAL0DY	0F514D0B11	2000	5.4	4R70W	PN98	Undef		0.1499939

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	n	LOAD_M
MPAL8G7	0F514G0A11	2000	5.4	4R100	PN96	Undef		0.1499939
MPAL8H7	0F514H0A11	2000	5.4	4R100	PN96	Undef		0.1499939
MPAL8H9	0E414H0511	2000	5.4	Undef	ECONOLINE-NGV	Undef		0.20001221
MPALBJ7	0E414J0B11	2000	5.4	4R100	ECONOLINE	Undef		0.1000061
MPALBM7	0F514M0B11	2000	5.4	4R100	PN96	Undef		0.1499939
MPALBN4	0F714N0A11	2000	5.4	4R100	P131	Undef		0.20001221
MPALBN6	0E414N0A11	2000	5.4	4R100	ECONOLINE	Undef		0.20001221
MPALBNK	0L114N0A11	2000	5.4	Undef	UW137	Undef		0.20001221
MPALBP6	0E414P0B11	2000	5.4	4R100	ECONOLINE	Undef		0.1000061
MPALBU6	0E414U0B11	2000	5.4	4R100	ECONOLINE	Undef		0.20001221
MPALBX9	0F514X0510	2000	5.4	4R100	PN102-NGV	Undef		0.20001221
MPALBXC	0E414X0512	2000	5.4	4R100	ECONOLINE	Undef		0.1000061
MPALBYB	0E414Y0512	2000	5.4	4R100	ECONOLINE	Undef		0.20001221
MPAM0A3	0F728A0B11	2000	6.8	M5	P131	Undef		0.20001221
MPAM0U8	0F728U0511	2000	6.8	M5	P131	Undef		0.20001221
MPAM0V9	0F728V0A11	2000	6.8	M5	P131	Undef		0.20001221
MPAM1C4	0F717C0B11	2000	6.8	4R100	P131	Undef		0.20001221
MPAM1CN	0F718C0B11	2000	6.8	4R100	P131	Undef		0.20001221
MPAM1DF	0L118D0B11	2000	6.8	4R100	UW137	Undef		0.20001221
MPAM1HZ	0E418H0B13	2000	6.8	4R100	ECONOLINE	Undef		0.1000061
MPAM1N6	0F717N0511	2000	6.8	4R100	P131	Undef		0.20001221
MPAM1NJ	0F718N0511	2000	6.8	4R100	P131	Undef		0.20001221
MPAM1NV	0L118N0A11	2000	6.8	4R100	UW137	Undef		0.20001221
MPAM1NY	0E418N0511	2000	6.8	4R100	ECONOLINE	Undef		0.20001221
MPAM1P4	0E418P0A11	2000	6.8	4R100	ECONOLINE	Undef		0.20001221
MPAM1PX	0F717P0A11	2000	6.8	4R100	P131	Undef		0.20001221
MPAM1PZ	0F718P0A11	2000	6.8	4R100	P131	Undef		0.20001221
MPAM1Q3	0E418Q0B11	2000	6.8	4R100	ECONOLINE	Undef		0.1000061
MPAM1QZ	0F718Q0511	2000	6.8	4R100	P131	Undef		0.20001221
MPAM1R3	0E418R0B11	2000	6.8	4R100	ECONOLINE	Undef		0.20001221
MPAM1R4	0F717R0B11	2000	6.8	4R100	P131	Undef		0.20001221
MPAM1R5	0F718R0B11	2000	6.8	4R100	P131	Undef		0.20001221
MPAM1T4	0F717T0B11	2000	6.8	4R100	P131	Undef		0.20001221
MPAM1T5	0F718T0B11	2000	6.8	4R100	P131	Undef		0.20001221
MQAH1BH	1B314B0510	2001	5.4	4R100	UN93 2V	Undef		0.1499939
MQAH1B6	1B315B0510	2001	5.4	4R100	UN175 4V	Undef		0.1499939
MQAH1DE	1F514D0B10	2001	5.4	4R100	PN96	Undef		0.1499939
MQAH1HB	1F514H0A10	2001	5.4	4R100	PN96	3037/3.55/3.73		0.1499939
MQAH1MB	1F514M0B10	2001	5.4	4R100	PN96	Undef		0.1499939
MQAH0AP	2N115A0515	2002	5.4	4R100	CAL-1 4V	Undef		0.1499939
MQAH0B2	2B314B0505	2002	5.4	4R100	UN93 2V	Undef		0.1499939
MQAH0B6	2B314B0M00	2002	5.4	Undef	UN93 2V	Undef		0.1499939
MQAH0BF	2B315B0606	2002	5.4	4R100	UN175 4V	3.73		0.1499939
MRAD3K5	9VZA-AK FFB	1999 & 2000	5.4	4R100	PN96 8C	Undef		0.1600244
MZAH0A5	2F728A0B11	2002	6.8	M5	P131	Undef		0.20001221
MZAH0B6	2F728B0B11	2002	6.8	M5	P131	Undef		0.20001221
MZAH0C8	2F718C0B11	2002	6.8	4R100	P131	Undef		0.20001221

Strategy	Combination No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	N	LOAD_Mil
MZAH0CE	2F717C0B11	2002	6.8	4R100	P131	Undef		0.20001221
MZAH0DE	2L118D0B11	2002	6.8	4R100	UW137	Undef		0.20001221
MZAH0D4	2L114D0B11	2002	5.4	4R100	UW137	Undef		0.20001221
MZAH0D9	2F717D0B11	2002	6.8	4R100	P131	Undef		0.20001221
MZAH0DF	2F718D0B11	2002	6.8	4R100	P131	Undef		0.20001221
MZAH0DZ	2F714D0B11	2002	5.4	4R100	P131	Undef		0.20001221
MZAH0E4	2F714E0B11	2002	5.4	4R100	P131	Undef		0.20001221
MZAH0F4	2F714F0B16	2002	5.4	4R100	P131	Undef		0.20001221
MZAH0G4	2F714G0B16	2002	5.4	4R100	P131	Undef		0.20001221
MZAH0HA	2E418H0B11	2002	6.8	4R100	ECONOLINE	Undef		0.1000061
MZAH0JB	2E414J0B10	2002	5.4	4R100	ECONOLINE	Undef		0.1000061
MZAH0M6	2F718M0B11	2002	6.8	4R100	P131	Undef		0.20001221
MZAH0MX	2F717M0B11	2002	6.8	4R100	P131	Undef		0.20001221
MZAH0N3	2E414N0A16	2002	5.4	4R100	ECONOLINE	Undef		0.20001221
MZAH0N4	2F718N0S11	2002	6.8	4R100	P131	Undef		0.20001221
MZAH0N5	2F717N0S11	2002	6.8	4R100	P131	Undef		0.20001221
MZAH0N9	2F714N0A06	2002	5.4	4R100	P131	Undef		0.20001221
MZAH0NH	2E414N0A06	2002	5.4	4R100	ECONOLINE	Undef		0.20001221
MZAH0NV	2L118N0A11	2002	6.8	4R100	UW137	Undef		0.20001221
MZAH0NW	2E418N0S11	2002	6.8	4R100	ECONOLINE	Undef		0.20001221
MZAH0NX	2L114N0A16	2002	5.4	4R100	UW137	Undef		0.20001221
MZAH0NZ	2F714N0A16	2002	5.4	4R100	P131	Undef		0.20001221
MZAH0P3	2E418P0A11	2002	6.8	4R100	ECONOLINE	Undef		0.20001221
MZAH0P5	2F718P0A11	2002	6.8	4R100	P131	Undef		0.20001221
MZAH0P8	2F724P0A16	2002	6.4M6		P131	Undef		0.20001221
MZAH0PX	2F724P0A06	2002	6.4M6		P131	Undef		0.20001221
MZAH0PZ	2F717P0A11	2002	6.8	4R100	P131	Undef		0.20001221
MZAH0R3	2E414R0B16	2002	5.4	4R100	ECONOLINE	Undef		0.1000061
MZAH0R4	2E414R0B06	2002	5.4	4R100	ECONOLINE	Undef		0.1000061
MZAH0R4	2E414R0B06	2002	5.4	4R100	ECONOLINE	Undef		0.1000061
MZAH0R6	2F718R0B11	2002	6.8	4R100	P131	Undef		0.20001221
MZAH0RU	2F717R0B11	2002	6.8	4R100	P131	Undef		0.20001221
MZAH0RY	2E418R0B11	2002	6.8	4R100	ECONOLINE	Undef		0.1000061
MZAH0S5	2F718S0B11	2002	6.8	4R070W	P131	Undef		0.20001221
MZAH0SZ	2F717S0B11	2002	6.8	4R100	P131	Undef		0.20001221
MZAH0T5	2F718T0B11	2002	6.8	4R100	P131	Undef		0.20001221
MZAH0TZ	2F717T0B11	2002	6.8	4R100	P131	Undef		0.20001221
MZAH0U5	2E418U0S06	2002	6.8	4R100	ECONOLINE	Undef		0.20001221
MZAH0UR	2E414U0B05	2002	5.4	4R100	ECONOLINE	Undef		0.1000061
MZAH0UY	2E414U0B16	2002	5.4	4R100	ECONOLINE	Undef		0.1000061
MZAH0UZ	2F728U0M11	2002	6.8M5		P131	Undef		0.20001221
MZAH0V3	2F728V0A11	2002	6.8M6		P131	Undef		0.20001221
MZAH0X5	2E414X0S16	2002	5.4	4R100	ECONOLINE	Undef		0.1000061
MZAH0XX	2E414X0S05	2002	5.4	4R100	ECONOLINE	Undef		0.1000061
MZAH0Y5	2E414Y0S16	2002	5.4	4R100	ECONOLINE	Undef		0.20001221
MZAH0YY	2E414Y0S05	2002	5.4	4R100	ECONOLINE	Undef		0.20001221
MZAH0Z3	2E418Z0B11	2002	6.8	4R100	ECONOLINE	Undef		0.1000061

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	iv	LOAD_ML
MZAH0Z4	2F718Q0511	2002	6.8	4R100	P131	Undef		0.20001221
MZAH0ZY	2F724Q0M11	2002	5.4	M5	P131	Undef		0.20001221
MZAJ0U8	2E418U0510	2002	6.8	4R100	ECONOLINE	Undef		0.20001221
OCAM0D2	2F514D0B17	2002	5.4	4R100	2002.25 PN96 Cat Opt	Undef		0.1499939
OCAM0H2	2F514H0A17	2002	5.4	4R100	2002.25 PN96 Cat Opt	Undef		0.1499939
ODAG0A3	2F526Q0A05	2002	4.8	M5	PN96 2V	Undef		0.1499939
ODAG0J3	2F526J0B05	2002	4.8	M5	PN96 2V	Undef		0.1499939
ODAG0K3	2F526K0B05	2002	4.8	M5	PN96 2V	Undef		0.1499939
ODAG0P3	2F526P0A05	2002	4.8	M5	PN96 2V	Undef		0.1499939
ODAJ0D9	2F518D0B07	2002	4.8	4R100	PN96 2V	Undef		0.1499939
ODAJ0E9	2F518E0B07	2002	4.8	4R70W	PN96 2V	Undef		0.1499939
ODAJ0M9	2F518M0A07	2002	4.8	4R70W	PN96 2V	Undef		0.1499939
ODAJ0N9	2F518N0A07	2002	4.8	4R70W	PN96 2V	Undef		0.1499939
ODAL1A2	2F514A0B06	2002	6.4	4R70W	2002.5 PN96 ULEV 4R70W	Undef		0.1499939
ODAL1D5	2F518D0B16	2002	4.8	4R70W	2002.25 PN96 Cat Opt	Undef		0.1499939
ODAL1EY	2F518E0B16	2002	4.8	4R70W	2002.25 PN96 Cat Opt	Undef		0.1499939
ODAL1J4	2F526J0B16	2002	4.8	M5	2002.25 PN96 Cat Opt	Undef		0.1499939
ODAL1M5	2F518M0A16	2002	4.8	4R70W	2002.25 PN96 Cat Opt	Undef		0.1499939
ODAL1N5	2F518N0A16	2002	4.8	4R70W	2002.25 PN96 Cat Opt	Undef		0.1499939
ODAL1P4	2F526P0A16	2002	4.8	M5	2002.25 PN96 Cat Opt	Undef		0.1499939
ODAL1Z4	2F526Q0A16	2002	4.8	M5	2002.25 PN96 Cat Opt	Undef		0.1499939
OHAG0CH	2F512C0B05	2002	4.2	4R70W	PN96 2V	Undef		0.1499939
OHAG0DY	2E412D0A10	2002	4.2	4R70W	ECONOLINE	Undef		0.1000061
OHAG0DZ	2F512D0B05	2002	4.2	4R70W	PN96 2V	Undef		0.1499939
OHAG0E3	2E412E0A10	2002	4.2	4R70W	ECONOLINE	Undef		0.1000061
OHAG0F3	2E412F0A10	2002	4.2	4R70W	ECONOLINE	Undef		0.1000061
OHAG0GA	2E412G0A06	2002	4.2	4R70W	ECONOLINE	Undef		0.1000061
OHAG0GD	2F522G0B05	2002	4.2	M5	PN96 2V	Undef		0.1499939
OHAG0HC	2F522H0B05	2002	4.2	M5	PN96 2V	Undef		0.1499939
OHAG0HW	2E412H0B10	2002	4.2	4R70W	ECONOLINE	Undef		0.1000061
OHAG0J3	2E412J0B10	2002	4.2	4R70W	ECONOLINE	Undef		0.1000061
OHAG0KC	2E412K0B06	2002	4.2	4R70W	ECONOLINE	Undef		0.1000061
OHAG0L3	2E412L0B10	2002	4.2	4R70W	ECONOLINE	Undef		0.1000061
OHAK1C6	2F512C0B16	2002	4.2	4R70W	2002.25 PN96 Cat Opt	Undef		0.1499939
OHAK1D5	2F512D0B16	2002	4.2	4R70W	2002.25 PN96 Cat Opt	Undef		0.1499939
OHAK1G6	2F522G0B16	2002	4.2	M5	2002.25 PN96 Cat Opt	Undef		0.1499939
OHAK1H6	2F522H0B16	2002	4.2	M5	2002.25 PN96 Cat Opt	Undef		0.1499939
OIAH0EV	2E418E0511	2002	4.8	4R70W	ECONOLINE	Undef		0.1499939
OIAH0EW	2E414E0512	2002	5.4	4R70W	ECONOLINE	Undef		0.1000061
OMAD3Y2	2F514Y0B06	2002	5.4	4R100	PN96 SC	Undef		0.1500244
OMAE1W2	2F514W0B05	2002	5.4	4R100	P225 SuperCrew Harley-Davidson	Undef		0.1500244
PAAD6A1	9B1A-BA AC	1999	2.5	4R44E	PN-150/PN-151	4.1		0.20001221
PAAD6A8	9B1A-AA AFM	1999	2.5	4R44E	PN-150/PN-151	4.1		0.20001221
PAAD7A2	9B1M-BA F	2001	2.5	M5	PN-150/PN-151	Undef		0.20001221
PAAD7B3	9B1M-AB F	2001	2.5	M5	PN-150/PN-151	3.45/3.75		0.20001221
PAAD7C3	9B1M-AC F	2001	2.5	M5	PN-150/PN-151	Undef		0.20001221
PAAD8A2	9L1M-MA5	1999	3	M5	PN-150/PN-151	3.73		0.20001221

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	Nr	LOAD_ML
PAAD8A8	9LAA-MA B	1999	3.4R44E		PN-150/PN-151	3.73		0.20001221
PAAD8AA	9LAA-MA B	1999	3.4R44E		PN-150/PN-151	3.73		0.20001221
PAAD8AC	9LAM-MA F	2000	3M5		PN-150/PN-151	3.73		0.20001221
PAAD8B7	9LAA-MB B	1999	3.4R44E		PN-150/PN-151	3.73/4.10		0.20001221
PAAD8BA	9LAM-MB F	2000	3M5		PN-150/PN-151	3.73		0.20001221
PAAD8CA	9LAM-MC G	2000	3M5		PN-150/PN-151 & PN150/51 99.25MY	4.1		0.20001221
PAADAAG	9LAA-MAG	1999	3.4R44E		PN150/51 99.25MY	3.73 & 4.10		0.20001221
PAADAAH	9LAA-MA J	2000	3.4R44E		PN-150/PN-151	3.73		0.20001221
PAADAAZ	9B1A-BA K	2001	2.5 5R44E		PN-150/PN-151	4.1		0.20001221
PAADAB8	9B1A-AB H	2001	2.5 4R44E		PN-150/PN-151	4.1		0.20001221
PAADAB9	9LAA-MB J	2000	3.4R44E		PN-150/PN-151	3.73/4.10		0.20001221
PAADACJ	9LAA-MC H	2000	3.4R44E		PN-150/PN-151 & PN150/51 99.25MY	4.1		0.20001221
PBAD7B9	9LTM-AB B	1999	4M5		PN-150/PN-151	3.27/3.73		0.20001221
PBAD7B7	9LTM-BB BC	1999	4M5		PN-150/PN-151	3.08/3.55		0.20001221
PBAD7BC	9LTA-AB BFM	1999	4.5R55E		PN-150/PN-151	3.55/3.73		0.20001221
PBAD7BZ	9LTA-BB BC	1999	4.5R55E		PN-150/PN-151	3.55/3.73		0.20001221
PBAD7C8	9LTM-AC BFM	1999	4M5		PN-150/PN-151	3.55		0.20001221
PBAD7C7	9LTM-BC BC	1999	4M5		PN-150/PN-151	3.08/3.55		0.20001221
PBAD7CC	9LTA-AC BFM	1999	4.5R55E		PN-150/PN-151	3.55		0.20001221
PBAD7CZ	9LTA-BC BC	1999	4.5R55E		PN-150/PN-151	3.55		0.20001221
PBAD9B5	9LTM-BB GC	2000 & 1999	4M5		PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.08/3.55 & 3.27 & 3.27/3.73		0.20001221
PBAD9C5	9LTM-BC GC	2000 & 1999	4M5		PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.08 & 3.08/3.55		0.20001221
PBAD9D5	9LTM-AD AFM	2000 & 1999	4M5		PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.08/3.55 & 3.27/3.73		0.20001221
PBAD9E5	9LTM-AE AFM	2000 & 1999	4M5		PN-150/151 SOHC & PN-150/PN-151 & PN150/51 99.25MY	3.55 & 3.08/3.55		0.20001221
PBADAB5	9LTA-BB H	2000 & 1999	4.5R55E		PN-150/151 SOHC & PN-150/PN-151 & PN150/51 99.25MY	3.55/3.73		0.20001221
PBADAC5	9LTA-BC H	2000 & 1999	4.5R55E		PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.55		0.20001221
PBADAD5	9LTA-AD F	2000 & 1999	4.5R55E		PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.55/3.73		0.20001221
PBADA E5	9LTA-AE F	2000 & 1999	4.5R55E		PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.55		0.20001221
PCAF5A3	9LTM-BA F & 9LTM-BA F8	2000 & 1999	4M5		UN-150 & UN-150 CFF/LEV	3.27/3.55		0.26999901
PCAF5A6	9LTM-AA F	1999 & 2000	4M5		UN-150 & UN-150 CFF & UN-150 CFF/LEV	3.27/3.55		0.26999901
PCAF5A8	9LTA-BA G	2000 & 1999	4.5R55E		UN-150 & UN-150 CFF & UN-150 CFF/LEV	3.73/4.10		0.26999901
PCAB4A2	9NEA-BA H	2000 & 1999	4.6R55E		UN-150 SOHC & UN150 SOHC CFF	3.27/3.55		0.3500061
PCA8646	0811A40507	2001	4.6R55E		P207 SOHC 2000.5 & U207 SOHC 2000.5	Undef		0.3500061
PCA864Z	0U31A40505	2000	4.6R55E		UN-150 SOHC & UN150 SOHC CFF	3.27/3.55		0.3500061
PCA804Z	0U31A40516	2001	4.5R55E		UN-150 SOHC	3.27/3.55		0.3500061
PDAE3AN	9LAM-BA J	2000	3M5		PN-150/PN-151 FFV	3.73		0.125

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	N	LOAD_MF
PDAE3AU	9LAM-AA J	2000	3 M5		PN-150/PN-151 FFV		3.73	0.125
PDAE3BM	9LAM-BB J	2000	3 M5		PN-150/PN-151 FFV		3.73	0.125
PDAE3BS	9LAM-AB J	2000	3 M5		PN-150/PN-151 FFV		3.73	0.125
PDAE3CD	9LAM-AC H	2000	3 M5		PN-150/PN-151 FFV		4.1	0.125
PDAE3CX	9LAM-BC H	2000	3 M5		PN-150/PN-151 FFV		4.1	0.125
PDAE3HD	9LAA-BH C	1999	3 4R44E		PN-150/PN-151 FFV		3.73	0.125
PDAE3HM	9LAA-AH C	1999	3 4R44E		PN-150/PN-151 FFV		3.73	0.125
PDAE3J	9LAA-AJ C	1999	3 4R44E		PN-150/PN-151 FFV	3.73/4.10		0.125
PDAE3JY	9LAA-BJ C	1999	3 4R44E		PN-150/PN-151 FFV	3.73/4.10		0.125
PDAE6H7	9LAA-AH K	2000	3 4R44E		PN-150/PN-151 FFV		3.73	0.125
PDAE6HX	9LAA-BH K	2000	3 4R44E		PN-150/PN-151 FFV		3.73	0.125
PDAE6J7	9LAA-BK J	2000	3 4R44E		PN-150/PN-151 FFV		4.1	0.125
PDAE6J8	9LAA-AJ K	2000	3 4R44E		PN-150/PN-151 FFV	3.73/4.10		0.125
PDAE6JY	9LAA-BJ K	2000	3 4R44E		PN-150/PN-151 FFV	3.73/4.10		0.125
PDAE6K6	9LAA-AK J	2000	3 4R44E		PN-150/PN-151 FFV		4.1	0.125
PEAV2G4	1U72AG0506	2002 & 2001	4 M5		U207	Undef		0.20001221
PEAV345	1U71A40506	2001	4 5R55E		U207 FFV	Undef		0.20001221
PEAV43S	1R31A30512	2001	3 5R44E		PN-150/PN-151		3.73	0.1499939
PEAV43T	1R31B30512	2001	3 5R44E		PN-150/PN-151	3.73/4.10		0.1499939
PEAV44T	1R31C40516	2001	4 5R55E		PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/4.10		0.20001221
PEAV44U	1R31B40516	2001	4 5R55E		PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/4.10		0.20001221
PEAV44V	1R31A40516	2001	4 5R55E		PN-150/151 SOHC & PN150/51 Cat. Opt.		3.55	0.20001221
PEAV44W	1R32C40516	2001	4 M5		PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/4.10		0.20001221
PEAV44X	1R32B40516	2001	4 M5		PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/4.10		0.20001221
PEAV44Y	1R32A40516	2001	4 M5		PN-150/151 SOHC & PN150/51 Cat. Opt.		3.55	0.20001221
PEAV45S	1R32A40517	2002	4 M5		PN-150/151 SOHC	3.55		0.20001221
PEAV459	1R31B40517	2002	4 5R55E		PN-150/151 SOHC	3.55/3.73/4.10		0.20001221
PEAV46V	1R31A40517	2002	4 5R55E		PN-150/151 SOHC		3.55	0.20001221
PEAV45X	1R31C40517	2002	4 5R55E		PN-150/151 SOHC	3.55/3.73/4.10		0.20001221
PEAV45Y	1R32C40517	2002	4 M5		PN-150/151 SOHC	3.55/3.73/4.10		0.20001221
PEAV45Z	1R32B40517	2002	4 M5		PN-150/151 SOHC	3.55/3.73/4.10		0.20001221
PEAV8F8	1R31AF0512	2001	3 5R55E		PN-150/PN-151 FFV		3.73	0.1499939
PEAV8S2	1U71PS0512	2001 & 2002	4 5R55E		U207 USPS & U207 USPS FFV	Undef		0.20001221
PEAW049	1S11A40510	2002 & 2001	4 5R55E		P207 Cat. Opt. & P207 SOHC & U207 SOHC	Undef		0.20001221
PEAW099	1U72AG0506	2002	4 M5		U207	Undef		0.20001221
PEAW0GY	1U71AG0510	2002 & 2001	4 5R55E		U207	Undef		0.20001221
PEAW0QZ	1U71AG0510	2002 & 2001	4 5R55E		U207	Undef		0.20001221
PEAW142	1S12A40506	2002	4 M5		P207 SOHC & U207 SOHC	Undef		0.20001221
PEAW1G9	1U72AG0506	2002	4 M5		U207	Undef		0.20001221
PLAC08M	BNEA-AB Y	2000	4 Undef		UN150 PS SOHC FFV		3.55	0.3500061

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	n	LOAD_ML
PLAE4B5	9NEA-AB B	2000	4	Undef	UN150 PG SOHC FFV	3.55		0.3600061
PRAR325	1R32B20512	2002 & 2001	2.3	M5	PN-150/PN-151 & PN150/S1 2001.25	4.1		0
PRAR32X	1R32B20M12	2002 & 2001	2.3	M5	PN-150/PN-151 & PN150/S1 2001.25	Undef		0
PRAR32Y	1R32A20M12	2002 & 2001	2.3	M5	PN-150/PN-151 & PN150/S1 2001.25	3.73		0
PRAR32Z	1R32A20512	2002 & 2001	2.3	M5	PN-150/PN-151 & PN150/S1 2001.25	3.73		0
PYAE1F7	2S11AF0505	2002	4	5R55E	P207 FFV	Undef		0.20001221
PYAP246	2S12A40508	2002	4	M5	P207 SOHC 2002.5	Undef		0.20001221
PYAF246	2S11A40506	2002	4	5R55E	P207 SOHC 2002.5	Undef		0.20001221
PYAF2G2	2U72AG0M06	2002	4	M5	U207 2002.5	Undef		0.20001221
PYAF2G5	2U72AG0508	2002	4	M5	U207 2002.5	Undef		0.20001221
PYAF2G8	2U71AG0508	2002	4	5R55E	U207 2002.5	Undef		0.20001221
PYAF2GZ	2U71AG0M05	2002	4	5R55E	U207 2002.5	Undef		0.20001221
QBAA0AA	0AJ1AZ0A12	2000	2	F4E3	CT120 4V	3.74		0
QBAA0AC	0AJ2RZ0A13	2000	2	G5M	CT120 4V	4.1		0
QBAA0AW	0AJ2AZ0A12	2000	2	G5M	CT120 4V	4.1		0
QBAA0BC	0AJ1AZ0B12	2000	2	F4E3	CT120 4V	3.74		0
QBAA0BY	0AJ2RZ0B13	2000	2	G5M	CT120 4V	4.1		0
QBAA0BW	0AJ2AZ0B12	2000	2	G5M	CT120 4V	4.1		0
QBAC0ZY	1AJ2AZ0506	2001 & 2002	2	G5M	CT120 4V	4.1		0
QBAC1Z2	1AJ1AZ0507	2001 & 2002	2	F4E3	CT120 4V	3.74		0
QBAC1Z8	2AJ1BZ0616	2002	2	F4E3	CT120 4V CAT OPT	3.74		0
QBAC1ZZ	2AJ2BZ0616	2002	2	G5M	CT120 4V CAT OPT	4.1		0
QCAA0G3	9EQA-AG A	1999	2	F4E3	ESCORT/TRACER 2V	3.74		0
QCAA0G4	9EQM-AG A	1999	2	G5M	ESCORT/TRACER 2V	3.85		0
QCAA0GY	9EQM-BG BC	1999	2	MTX75	ESCORT/TRACER 2V LEV	3.85		0
QCAA0GZ	9EQA-BG A	1999	2	F4E3	ESCORT/TRACER 2V	3.74		0
QCAA0H3	9EQA-AH A	1999	2	F4E3	ESCORT/TRACER 2V	3.74		0
QCAA1S8	0AJ1A80506	2000	2	F4E3	CT120 2V	3.74		0
QCAA1S9	0AJ2A80505	2000	2	G5M	CT120 2V	3.85		0
QCAC1S6	1AJ1A80500	2001	2	F4E3	CT120 2V	3.74		0
QCAE1S3	2AJ1A80506	2002	2	F4E3	CT120 2V	Undef		0
RBAECC8	9LYA-AC F	1999	4.2	4R70W	ECONOLINE	Undef		0.049987789
RBAECCR	9LYA-BC F	1999	4.2	4R70W	ECONOLINE	Undef		0.049987789
RBAECDV	9LYA-AD F	1999	4.2	4R70W	ECONOLINE	Undef		0.049987789
RBAECE9	9LYA-AE F	1999	4.2	4R70W	ECONOLINE	Undef		0.049987789
RBAECET	9LYA-BE F	1999	4.2	4R70W	ECONOLINE	Undef		0.049987789
RBAECP9	9LYA-BF F	1999	4.2	4R70W	ECONOLINE	Undef		0.049987789
RBAECFA	9LYA-AF F	1999	4.2	4R70W	ECONOLINE	Undef		0.049987789
RBAECG9	9LYA-BG F	1999	4.2	4R70W	ECONOLINE	Undef		0.049987789
RBAEDAC	9VNM-AA F	1999	4.8	M5	PN102	Undef		0.20001221
RBAEDAG	9VNM-BA F	1999	4.8	M5	PN102	Undef		0.20001221
RBAEDBE	9VNA-BB FC	1999	4.8	4R70W	PN96	Undef		0.20001221
RBAEDBM	9VNM-AB F	1999	4.8	M5	PN102	Undef		0.20001221
RBAEDBN	9VNM-BB F	1999	4.8	M5	PN102	Undef		0.20001221
RBAEDC8	9VNM-AC FFB	1999	4.8	M5	PN96	Undef		0.20001221
RBAEDCB	9LYM-AC C	1999	4.2	M5	PN96	3.31/3.55		0.27999661
RBAEDCU	9VNM-BC FC	1999	4.8	M5	PN96	Undef		0.20001221

Strategy	Combination No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	N	LOAD_M
RBAEDCV	9VNA-BC FC	1999	4.8	4R70W	PN96	Undef		0.20001221
RBAEDDA	9VNM-AD FFB	1999	4.8	M5	PN96	Undef		0.20001221
RBAEDDB	9VNA-AD FFB	1999	4.8	4R70W	PN96	Undef		0.20001221
RBAEDDU	9VNM-BD FC	1999	4.8	M5	PN96	Undef		0.20001221
RBAEDE8	9VNM-AE BM	1999	4.8	M5	PN96		3.55	0.20001221
RBAEDEB	9VNA-AE FFB	1999	4.8	4R70W	PN96	Undef		0.20001221
RBAEDGC	9VNA-BG H	1999	4.8	4R70W	UN93	Undef		0.20001221
RBAEDGP	9VNA-BG H	1999	4.8	4R70W	UN93	Undef		0.20001221
RBAEDHB	9LYA-AH CM	1999	4.2	4R70W	PN96		3.65	0.27999881
RBAEDJ7	9VNA-AJ BM	1999	4.8	4R70W	PN96		3.55	0.20001221
RBAEDN9	9VNA-BN CC	1999	4.8	Undef	PN102	Undef		0.20001221
RBAEDPB	9VNA-AP CF	1999	4.8	Undef	PN102	Undef		0.20001221
RBAEEA5	9LYM-AA GB	1999	4.2	M5	PN96	Undef		0.27999881
RBAEEA6	9LYA-AA GFB	1999	4.2	4R70W	PN96	Undef		0.27999881
RBAEEAY	9LYM-BA GC	1999	4.2	M5	PN96	Undef		0.27999881
RBAEEAZ	9LYA-BA GC	1999	4.2	4R70W	PN96	Undef		0.27999881
RBAEEB6	9LYA-AB GFB	1999	4.2	4R70W	PN96	Undef		0.27999881
RBAEEBX	9LYM-BB GC	1999	4.2	M5	PN96	Undef		0.27999881
RBAEEBY	9LYA-BB GC	1999	4.2	4R70W	PN96	Undef		0.27999881
RBAEEBZ	9LYM-AB GFB	1999	4.2	M5	PN96	Undef		0.27999881
RDABCHZ	9VZA-AH FFM	1999	5.4	4R70W	ECONOLINE	Undef		0.20001221
RDABCLZ	9VZA-BL FC	1999	5.4	4R70W	ECONOLINE	Undef		0.20001221
RDABDC4	9VZA-AC GFB	1999	5.4	4R70W	PN96	Undef		0.20001221
RDABDD4	9VZA-AD HFB	1999	5.4	4R70W	PN96	Undef		0.20001221
READA7	9VAA-BA J	2001 & 2000 & 1998	5.4	4R70W	UN-150 & UN-150 CFF/LEV		3.73	0.25
RFAH6EG	0E414E0510	2000	5.4	4R70W	ECONOLINE	Undef		0.1499939
RFAH6D7	0E418D0A10	2000	4.8	4R70W	ECONOLINE	Undef		0.1499939
RFAH6E7	0E418E0B10	2000	4.8	4R70W	ECONOLINE	Undef		0.1499939
RGAF2GD	1FB1GP0G10	2001	4.8	4R70W	FORD/MERCURY		3.08	0.049987789
RGAF2GF	1FB1GX0G10	2001	4.8	4R70W	FORD/MERCURY		3.08	0.049987789
RGAF2GZ	1VC1TX0G10	2001	4.8	4R70W	LINC.TOWNCAR		3.08	0.049987789
RGAF2PK	2FB1UP0G00	2002	4.8	4R70W	FORD/MERCURY		3.08	0.049987789
RGAF2XH	2FB1UX0G00	2002	4.8	4R70W	FORD/MERCURY		3.08	0.049987789
RHAG7A5	0F514A0A06	2000	5.4	4R70W	PN96	Undef		0.1499939
RHAG7A8	0F518A0A06	2000	4.8	4R70W	PN96	Undef		0.1499939
RHAG7A9	0F528A0A06	2000	4.8	M5	PN96	Undef		0.1499939
RHAG7B5	0F518B0A06	2000	4.8	4R70W	PN96	Undef		0.1499939
RHAG7HC	0F528H0A06	2000	4.8	M5	PN96	Undef		0.1499939
RHAG7N5	0F514N0A06	2000	5.4	4R70W	PN96	Undef		0.1499939
RHAGBCC	09S16C0511	2000	4.8	4R70W	UN93	Undef		0.1499939
RHAGBD9	0F518D0B11	2000	4.8	4R70W	PN96	Undef		0.1499939
RHAGBEA	0F518E0B11	2000	4.8	4R70W	PN96	Undef		0.1499939
RHAGBEZ	0F514E0B19	2000	5.4	4R70W	PN96	Undef		0.1499939
RHAGBPN	0F514FOA12	2000	5.4	Undef	PN96	Undef		0.1499939
RHAGBJ7	0F528J0B11	2000	4.8	M5	PN96	Undef		0.1499939
RHAGBK8	0F528K0B11	2000	4.8	M5	PN96	Undef		0.1499939
RHAGBM1	0F518MA11	2000	4.8	4R70W	PN96	Undef		0.1499939



Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	N	LOAD_MF
RHAGBNH	0F516NQA11	2000	4.6	4R70W	PN98	Undef		0.1499939
RHAGBPE	0F526PQA11	2000	4.6	M5	PN98	Undef		0.1499939
RHAGBZF	0FB26QQA11	2000	4.6	M5	PN98	Undef		0.1499939
RAI2E3	1E414E0510	2001	5.4	4R70W	ECONOLINE	Undef		0.1000061
RNAH2D7	1F512D0510	2001	4.2	4R70W	PN98	Undef		0.1499939
RNAH2DZ	1E412DQA10	2001	4.2	4R70W	ECONOLINE	Undef		0.1000061
RNAH2E7	1E412EQA10	2001	4.2	4R70W	ECONOLINE	Undef		0.1000061
RNAH2F7	1E412FQA10	2001	4.2	4R70W	ECONOLINE	Undef		0.1000061
RNAH2G7	1E412GQA10	2001	4.2	4R70W	ECONOLINE	Undef		0.1000061
RNAH2H7	1E412HQB10	2001	4.2	4R70W	ECONOLINE	Undef		0.1000061
RNAH2J7	1E412JOB10	2001	4.2	4R70W	ECONOLINE	Undef		0.1000061
RNAH2K7	1E412KQB10	2001	4.2	4R70W	ECONOLINE	Undef		0.1000061
RNAH2L7	1E412LOB10	2001	4.2	4R70W	ECONOLINE	Undef		0.1000061
ROAF7A7	0F512ADA06	2000	4.2	4R70W	PN98	Undef		0.1499939
ROAF7B7	0F512BDA06	2000	4.2	4R70W	PN98	Undef		0.1499939
ROAF7C7	0F512CDB06	2000	4.2	4R70W	PN98	Undef		0.1499939
ROAF7D2	0E412DQA07	2000	4.2	4R70W	ECONOLINE	Undef		0.1000061
ROAF7D7	0F512DDB06	2000	4.2	4R70W	PN98	Undef		0.1499939
ROAF7E2	0E412EQA07	2000	4.2	4R70W	ECONOLINE	Undef		0.1000061
ROAF7E7	0F522EQA07	2000	4.2	M5	PN98	Undef		0.1499939
ROAF7F6	0F522FQA07	2000	4.2	M5	PN98	Undef		0.1499939
ROAF7FZ	0E412FQA07	2000	4.2	4R70W	ECONOLINE	Undef		0.1000061
ROAF7G6	0F522GQB07	2000	4.2	M5	PN98	Undef		0.1499939
ROAF7GZ	0E412GQA07	2000	4.2	4R70W	ECONOLINE	Undef		0.1000061
ROAF7H2	0E412HQB07	2000	4.2	4R70W	ECONOLINE	Undef		0.1000061
ROAF7H6	0F522HQB07	2000	4.2	M5	PN98	Undef		0.1499939
ROAF7J4	0E412JOB07	2000	4.2	4R70W	ECONOLINE	Undef		0.1000061
ROAF7K4	0E412KQB07	2000	4.2	4R70W	ECONOLINE	Undef		0.1000061
ROAF7L2	0E412LOB07	2000	4.2	4R70W	ECONOLINE	Undef		0.1000061
RQAD6B3	0VC1FB0G10	2000	4.6	4R70W	LINC.TOWNCAR		3.08	0.049987789
RQAD6B7	0FB1FB0A11	2000	4.6	4R70W	FORD/MERCURY		2.73	0.049987789
RQAD6B8	0VC1FB0B11	2000	4.6	4R70W	LINC.TOWNCAR		3.08	0.049987789
RQAD6BT	0FB1FB0G10	2000	4.6	4R70W	FORD/MERCURY		3.08	0.049987789
RQAD6BU	0VC1FB0A11	2000	4.6	4R70W	LINC.TOWNCAR		3.08	0.049987789
RQAD6BV	0FB1FB0B11	2000	4.6	4R70W	FORD/MERCURY		2.73	0.049987789
RQAD6BW	0FB1FB0A11	2000	4.6	4R70W	FORD/MERCURY		2.73	0.049987789
RQAD6H7	0FB1FH0A11	2000	4.6	4R70W	FORD/MERCURY		3.55	0.049987789
RQAD6H8	0VC1FH0B11	2000	4.6	4R70W	LINC.TOWNCAR		3.55	0.049987789
RQAD6HW	0FB1FH0B11	2000	4.6	4R70W	FORD/MERCURY		3.55	0.049987789
RQAD6HX	0VC1FH0A11	2000	4.6	4R70W	LINC.TOWNCAR		3.55	0.049987789
RQAD6P7	0FB1FP0A11	2000	4.6	4R70W	FORD/MERCURY		3.27	0.049987789
RQAD6PZ	0FB1FP0G10	2000	4.6	4R70W	FORD/MERCURY		3.27	0.049987789
RTAI1P2	1ZE13P0510	2001	3.8	4R70W	MUSTANG		3.27	0.049987789
RTAI1P3	1ZE23PQA10	2001	3.8	T5	MUSTANG		3.27	0.049987789
RTAI1PY	1ZE13PQA10	2001	3.8	4R70W	MUSTANG		3.27	0.049987789
RTAI1PZ	1ZE23P0510	2001	3.8	T5	MUSTANG		3.27	0.049987789
RTA10F4	2ZE2MF0500	2002	3.8	T45	MUSTANG G6		3.27	0.049987789

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	N	LOAD_ML
RTAJ0FZ	2ZE1MF0500	2002	3.8	Undef	MUSTANG GS	3.27		0.049987789
RTAJ0R4	2ZE2CR0A05	2002	3.8	Undef	MUSTANG Cost Save	Undef		0.049987789
RTAJ0RZ	2ZE1CR0A06	2002	3.8	Undef	MUSTANG Cost Save	Undef		0.049987789
RVAF3C8	1ZE24C0507	2001	4.6	TR3650	MUSTANG COBRA	3.27		0.049987789
RVAFAT8	1ZE1GT0510	2001	4.6	4R70W	MUSTANG GT	3.27		0.049987789
RWAJ1CL	1B916C0506	2001	4.6	4R70W	2001.5 UN93 Cat Opt	Undef		0.1499939
RWAJ2D7	1F516D0512	2001	4.6	4R70W	2001.5 PN96 Cat Opt 5.4PF5	Undef		0.1499939
RWAJ2DC	1B916D0510	2001	4.6	4R70W	2001.5 UN93 Cat Opt	Undef		0.1499939
RWAJ2DH	2B916D0506	2002	4.6	4R70W	2001.5 UN93 Cat Opt & UN93 2V	Undef		0.1499939
RWAJ2E6	1F514E0B11	2001	5.4	4R70W	PN96	Undef		0.1499939
RWAJ2E7	1F516E0B12	2001	4.6	4R70W	2001.5 PN96 Cat Opt 5.4PF5	Undef		0.1499939
RWAJ2EZ	1F514E0B11	2001	5.4	4R70W	PN96	Undef		0.1499939
RWAJ2F5	1F514F0A11	2001	5.4	4R70W	PN96	Undef		0.1499939
RWAJ2F7	1F514F0A11	2001	5.4	4R70W	PN96	Undef		0.1499939
RWAJ2M7	1F516M0A12	2001	4.6	4R70W	2001.5 PN96 Cat Opt 5.4PF5	Undef		0.1499939
RWAJ2N7	1F516N0A12	2001	4.6	4R70W	2001.5 PN96 Cat Opt 5.4PF5	Undef		0.1499939
RYAF0T3	2ZE1GT0506	2002	4.6	4R70W	MUSTANG GT	3.27		0.049987789
8AAF6S3	0AK15S0513	2000		2FN	FOCUS C170 SPI	3.686		0
8AAF6Z5	0AK15Z0512	2000		2FN	FOCUS C170 ZETEC	3.907		0
8AAF6ZB	0AK15Z0512	2000		2FN	FOCUS C170 ZETEC	3.907		0
8BAF6S7	1AK1A80A18	2002 & 2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT	3.733		0
8BAF68X	1AK1A80510	2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT	3.686		0
8BAF6SY	1AK1A90A10	2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT	3.686		0
8BAF6Z3	1AK1AZ0510	2001		24F27E	FOCUS C170 ZETEC	3.907		0
8BAF6Z5	2AK1AZ0M00	2002		2Undef	FOCUS MEXICO	Undef		0
8BAF6ZW	1AK1AZ0A10	2001		24F27E	FOCUS C170 ZETEC	3.907		0
8BAF6ZX	1AK1AZ0510	2001		24F27E	FOCUS C170 ZETEC	3.907		0
8BAF6ZY	1AK1AZ0A16	2002 & 2001		24F27E	FOCUS C170 ZETEC	3.866		0
8BAF6ZZ	1AK1AZ0A10	2001		24F27E	FOCUS C170 ZETEC	3.907		0
8BAF7S4	1AK1A90517	2002	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT	3.733		0
8BAF7S8	2AK1BS0A10	2002		24F27E	FOCUS SPI CAT OPT	3.893		0
8BAF7Z4	1AK1AZ0517	2002		24F27E	FOCUS C170 ZETEC	3.956		0
8BAF7Z8	2AK1BZ0A10	2002		24F27E	FOCUS ZETEC CAT OPT	3.904		0

Created by: PC-CPR, Version, 6.0-1 on: 6/6/2002 at 9:41:23 AM  
Model Year - 1999 2000 2001 2002 2003  
All Engine sizes  
All Transmissions  
All Vehicles

Parameters

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RATCH\_MIN  
RATCH\_MIN\_A  
RATDIFF  
RATKAM\_MIN  
RATKAM\_MIN\_A  
DTFMAX

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	RATCH_MIN	RATCH_MIN_A	RATDIFF	RATKAM_MIN	RATKAM_MIN_A	DTPM_AX
ALAPLJ8	8-96J R108N	1999	6.8	E40D	ECONOLINE	Undef	100	N/A	10	150	N/A	90
ALAPLCY	8-74C R11FB	1999	5.4	E40D	ECONOLINE	Undef	100	N/A	10	150	N/A	90
ALAPLE7	8-98E R13FB	1999	6.8	E40D	ECONOLINE	Undef	100	N/A	10	150	N/A	90
ALAPLKZ	8-48K R11FM	1999	5.4	E40D	ECONOLINE	Undef	100	N/A	5	100	N/A	90
ALAPL33	8-74S R11C	1999	5.4	E40D	ECONOLINE	Undef	100	N/A	10	150	N/A	90
ALAPLTW	8-95T R13C	1999	6.8	E40D	ECONOLINE	Undef	100	N/A	30	250	N/A	90
ALAPLTX	8-74T R11C	1999	5.4	E40D	ECONOLINE	Undef	100	N/A	10	150	N/A	90
ALAPLUZ	8-74U R11C	1999	5.4	E40D	ECONOLINE	Undef	100	N/A	5	100	N/A	90
ALAPLV4	8-74V R11C	1999	5.4	E40D	ECONOLINE	Undef	100	N/A	5	100	N/A	90
ALAPLW5	8-98W R13C	1999	6.8	E40D	ECONOLINE	Undef	100	N/A	10	150	N/A	90
ALAPLX8	8-95X R13C	1999	6.8	E40D	ECONOLINE	Undef	100	N/A	10	150	N/A	90
ALAPLY4	9VZA-AY FSN	1999	6.4	E40D	ECONOLINE	Undef	100	N/A	10	150	N/A	90
ALAQ0N4	7-46N R109N	1999	5.4	E40D	ECONOLINE-NGV	Undef	144	N/A	8	150	N/A	10
ALAQ0NP	7-46N R058N	1999	5.4	E40D	ECONOLINE-NGV	9.73/4.10	144	N/A	8	150	N/A	10
BUA0DDH	8-10D R11	1999	3.4	AX4N	TAURUS SHO	3.77	N/A	N/A	N/A	N/A	N/A	115
BUA0DMH	8-10M R11	1999	3.4	AX4N	TAURUS SHO	3.77	N/A	N/A	N/A	N/A	N/A	115
BUA0E0A7	8LDA-JAE	1999	3	AX4N	TAU/SABLE 4V	3.98	N/A	N/A	N/A	N/A	N/A	90
BUA0E0AH	8LDA-BAB AC	1999	3	AX4N	TAU/SABLE 4V	3.98	N/A	N/A	N/A	N/A	N/A	90
BUA0E0AT	8LDA-GA B	1999	3	AX4N	TAU/SABLE 4V	3.98	N/A	N/A	N/A	N/A	N/A	90
BUA0E0AU	8LDA-QAD	1999	3	AX4N	TAU/SABLE 4V	3.98	N/A	N/A	N/A	N/A	N/A	90
BUA0E0AV	8-14A R12	1999	3	AX4N	TAU/SABLE 4V	3.98	N/A	N/A	N/A	N/A	N/A	90
BUA0E0AW	8LDA-JA C	1999	3	AX4N	TAU/SABLE 4V	3.98	N/A	N/A	N/A	N/A	N/A	90
BUA0E0AY	8LDA-QAD	1999	3	AX4N	TAU/SABLE 4V	3.98	N/A	N/A	N/A	N/A	N/A	90
BUA0E0B8	8LAA-ABD	1999	3	AX4N	TAU/SABLE 2V	3.77	N/A	N/A	N/A	N/A	N/A	90
BUA0E0BT	8LDA-ABB AFB	1999	3	AX4N	TAU/SABLE 4V	3.98	N/A	N/A	N/A	N/A	N/A	90
BUA0E0BU	8LDA-BAD	1999	3	AX4N	TAU/SABLE 4V	3.98	N/A	N/A	N/A	N/A	N/A	90
BUA0E0BV	8LDA-ABD	1999	3	AX4N	TAU/SABLE 4V	3.98	N/A	N/A	N/A	N/A	N/A	90
BUA0E0BY	8LAAF8	1999	3	AX4N & AX4S	TAU/SABLE 2V	3.77	N/A	N/A	N/A	N/A	N/A	90
BUA0E0D3	8LDA-ADC	1999	3	AX4N	TAU/SABLE 4V	3.98	N/A	N/A	N/A	N/A	N/A	90
BUA0E0DV	8LDA-BDC	1999	3	AX4N	TAU/SABLE 4V	3.98	N/A	N/A	N/A	N/A	N/A	90
BUA0E0DW	8LDA-ADA	1999	3	AX4N	TAU/SABLE 4V	3.98	N/A	N/A	N/A	N/A	N/A	90
BUA0E0DX	8LDA-BDA	1999	3	AX4N	TAU/SABLE 4V	3.98	N/A	N/A	N/A	N/A	N/A	90
BUA0E0N7	8LAA-BNC	1999	3	AX4N	TAU/SABLE 2V	Undef	N/A	N/A	N/A	N/A	N/A	90
BUA0E1A8	8LAA-AAD	1999	3	AX4S	TAU/SABLE 2V	3.77	N/A	N/A	N/A	N/A	N/A	90
BUA0E1S8	8LAA-B8C	1999	3	AX4S	TAU/SABLE 2V	Undef	N/A	N/A	N/A	N/A	N/A	90
BVAJAA2	8LAA-EA EE	1999	3	AX4S	WIN126	3.98	100	N/A	4	150	N/A	6
BVAJAA4	8LAA-EA EE	1999	3	AX4S	WIN126	3.98	100	N/A	4	150	N/A	6
BVAJAAZ	8LAA-GA EG	1999	3	AX4S	WIN126	3.98	100	N/A	4	150	N/A	5
BVAJAS6	0A31AS0E10	2000	3.8	AX4S	WIN126	3.56	100	N/A	4	170	N/A	5
BVAJAS7	0A31CS0B10	2000	3.8	AX4S	WIN126 ULEV & WIN126/ULEV	3.56	100	N/A	4	170	N/A	6
BVAJAS9	0A31AS0B05	2000	3.8	AX4S	WIN126 COST SAVE	3.56	100	N/A	4	170	N/A	6
BVAJAS0	0A31CS0B10	2000	3.8	AX4S	WIN126 ULEV & WIN126/ULEV	3.56	100	N/A	4	170	N/A	5
BVAJASH	0A31AS0B05	2000	3.8	AX4S	WIN126 COST SAVE	3.56	100	N/A	4	170	N/A	6
BVAJASS	0A31AS0G10	2000	3.8	AX4S	WIN126	3.56	100	N/A	4	170	N/A	6

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	RATCH_MIN	RATCH_MIN_A	RATDIFF	RATKAM_MIN	RATKAM_MIN_A	DTPM_AX
BVAJAST	0A31B60B10	2000	3.8	AX4S	WIN128	3.68	100	N/A	4	170	N/A	8
BVAJASZ	0A31B60B10	2000	3.8	AX4S	WIN128	3.68	100	N/A	4	170	N/A	8
BWAK3N2	1DD14N0510	2001	3	4F50N	TAU/SABLE 4V	3.98	150	N/A	5	150	N/A	0.018
BWAK4N8	1DD12N0510	2001	3	4F50N	TAU/SABLE 2V	3.77	150	N/A	6	135	N/A	8
BWAK4S8	1DD12N0510	2001	3	AX4S	TAU/SABLE 2V	3.77	150	N/A	6	135	N/A	8
BWAK6N3	1DD1FN0512	2001	3	4F50N	D186 - FFV Ethanol	3.77	150	N/A	5	135	N/A	8
BWAK6S3	1DD1FS0512	2001	3	AX4S	D186 - FFV Ethanol	3.77	150	N/A	6	135	N/A	8
					D186 CS Cat - 2V Calif & D186 COST SAVE - CALIF & D186 CSCat - 2V CALIF	3.77	150	N/A	5	134	N/A	8
EXAN9SZ	0DD18N0505	2000	3	AX4N		3.77	150	N/A	5	134	N/A	8
EXAN9BP	0DD12N0B11	2000	3	AX4N	TAU/SABLE 2V	3.77	150	N/A	6	134	N/A	8
EXAN9NJ	0DD19N0A05	2000	3	AX4N	D186 CS Cat - 2V Fed	3.77	150	N/A	6	134	N/A	8
EXAN9NK	0DD12N0A10	2000	3	AX4N	TAU/SABLE 2V	3.77	150	N/A	8	134	N/A	8
EXAN8SP	0DD1280A10	2000	3	AX4S	TAU/SABLE 2V	3.77	150	N/A	5	134	N/A	8
EXAN8SZ	0DD1390A05	2000	3	AX4S	D186 CS Cat - 2V Fed	3.77	150	N/A	5	134	N/A	8
					D186 CS Cat - 4V Calif & D186 CSCat - Cal 4V & D186 CSCat - 2V CALIF & D186 CS CAT CALIF 4V & D186 COST SAVE CALIF 4V & D186 COST SAVE - CALIF	3.98	150	N/A	5	150	N/A	0.018
EXAN8SH	0DD15N0508	2000	3	AX4N		3.98	150	N/A	5	150	N/A	0.018
					D186 CS Cat - 4V Calif & D186 COST SAVE CALIF 4V & D186 CSCat - Cal 4V & D186 CSCat - 2V CALIF & D186 CS CAT CALIF 4V & D186 COST SAVE - CALIF	3.98	150	N/A	5	150	N/A	0.018
EXAN8SM	0DD15N0508	2000	3	AX4N		3.98	150	N/A	5	150	N/A	0.018
					D186 CS Cat - 4V Fed & D186 CS CAT FED 4V & D186 CSCat Fed 4V	3.98	150	N/A	5	150	N/A	0.018
EXANBAJ	0DD15N0A05	2000	3	AX4N		3.98	150	N/A	5	150	N/A	0.018
EXANBAK	0DD14N0A05	2000	3	AX4N	TAU/SABLE 4V	3.98	150	N/A	5	150	N/A	0.018
EXANBAN	0DD14N0A06	2000	3	AX4N	TAU/SABLE 4V	3.98	150	N/A	5	150	N/A	0.018
					D186 CS Cat - 4V Fed & D186 CSCat Fed 4V & D186 CS CAT FED 4V	3.98	150	N/A	5	150	N/A	0.018
EXANBAZ	0DD15N0A05	2000	3	AX4N		3.98	150	N/A	5	150	N/A	0.018
EXAN8BL	0DD14N0B06	2000	3	AX4N	TAU/SABLE 4V	3.98	150	N/A	5	150	N/A	0.018
EXAN8B2	0DD14N0B06	2000	3	AX4N	TAU/SABLE 4V	3.98	150	N/A	5	150	N/A	0.018
EXAN8D4	0DD18D0508	2000	3	AX4S	D186 - FFV Ethanol	3.77	150	N/A	5	134	N/A	8
					D186 - FFV W/AX4N & D186-FFV W/AX4N	3.77	150	N/A	5	134	N/A	8
EXAN8DY	0DD1ND0505	2000	3	AX4N		3.77	150	N/A	5	134	N/A	8
CFAIBK9	9VNA-BK BC	1999	4.6	4R70W	FORD/MERCURY	2.79	100	N/A	30	250	N/A	90
CFAIBL6	9VNA-AL BFM	1999	4.6	4R70W	FORD/MERCURY	3.27	100	N/A	30	250	N/A	10
CFAIBL8	9VNA-BL BC	1999	4.6	4R70W	FORD/MERCURY	3.27	100	N/A	30	250	N/A	90
CFAIBMB	9VNA-BM BC	1999	4.6	4R70W	LINC.TOWNCAR	3.08	100	N/A	30	250	N/A	90

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	RATCH_MIN	RATCH_MIN_A	RATDIFF	RATKAM_MIN	RATKAM_MIN_A	DTPM_AX
CRAIBS8	9VNA-BS B	1999	4.8	4R70W	LINC.TOWNCAR	3.27	100	N/A	30	250	N/A	90
CRAICAZ	9VNA-AAE	1999	4.8	4R70W	FORD/MERCURY	3.55	100	N/A	30	250	N/A	10
CRAICD2	9VNA-GD CG	1999	4.8	4R70W	FORD/MERCURY	3.08	100	N/A	30	250	N/A	10
CRAICE3	9VNA-GE CG	1999	4.8	4R70W	FORD/MERCURY	3.27	100	N/A	30	250	N/A	10
CRAICF3	9VNA-GF CG	1999	4.8	4R70W	LINC.TOWNCAR	3.08	100	N/A	30	250	N/A	10
CRAICK6	9VNA-AK CFB	1999	4.8	4R70W	FORD/MERCURY	2.73	100	N/A	30	250	N/A	10
CRAICL6	9VNA-AL CFM	1999	4.8	4R70W	FORD/MERCURY	3.27	100	N/A	30	250	N/A	10
CRAICLZ	9VNA-AL CFM	1999	4.8	4R70W	FORD/MERCURY	3.27	100	N/A	30	250	N/A	10
CRAIDM2	9VNA-BM BC	1999	4.8	4R70W	LINC.TOWNCAR	3.08	100	N/A	30	250	N/A	90
CRAIDM9	9VNA-AM CFB	1999	4.8	4R70W	LINC.TOWNCAR	3.08	100	N/A	30	250	N/A	7
CRAIDSZ	9VNA-B9 B	1999	4.8	4R70W	LINC.TOWNCAR	3.27	100	N/A	30	250	N/A	90
CSAH1G4	1FB1NG0605	2001	4.8	4R70W	FORD Nat. Gas	2.73	100	N/A	4	150	N/A	90
CSAH1GZ	2FB1NG0605	2002	4.8	4R70W	FORD Nat. Gas	2.73	100	N/A	4	150	N/A	90
CSAH1L3	8-18L R06S	1999	4.8	4R70W	FORD Nat. Gas	2.73	100	N/A	4	150	N/A	90
CSAH1V4	9VNA-AV A	1999 & 2000 & 2001	4.8	4R70W	FORD Nat. Gas	2.73	100	N/A	4	150	N/A	90
CVAE7BY	9VMM-ABC	1999	4.8	T45	MUSTANG COBRA	3.27	100	N/A	30	150	N/A	20
CVAE7F8	0ZE2CF0510	2000	4.8	T45	MUSTANG COBRA	3.27	100	N/A	30	150	N/A	20
CVAE7R6	0ZE2CF0508	2000	6.4	Undef	MUSTANG COBRA R	Undef	100	N/A	30	150	N/A	10
CVAF1A3	9VXM-AAC	1999	4.8	T45	MUSTANG GT	3.27	150	N/A	2	150	N/A	90
CVAF1A8	9VXM-BAD	1999	4.8	T45	MUSTANG GT	3.27	150	N/A	2	150	N/A	90
CVAF1B3	9VXM-ABC	1999	4.8	T45	MUSTANG GT	3.27	150	N/A	2	150	N/A	90
CVAF1B8	9VXM-BBD	1999	4.8	T45	MUSTANG GT	3.27	150	N/A	2	150	N/A	90
CVAF1C3	9VXA-AAC	1999 & 2000	4.8	4R70W	MUSTANG GT	3.27	150	N/A	2	150	N/A	90
CVAF1CX	9VXA-ABC	1999 & 2000	4.8	4R70W	MUSTANG GT	3.27	150	N/A	2	150	N/A	90
CVAF1CY	9VXA-BAC	1999	4.8	4R70W	MUSTANG GT	3.27	150	N/A	2	150	N/A	90
CVAF1CZ	9VXA-BBC	1999	4.8	4R70W	MUSTANG GT	3.27	150	N/A	2	150	N/A	90
CVBA0A2	9LMA-BA BC & 9LMA-BAB	1999 & 2000	3.8	4R70W	MUSTANG	3.27	150	N/A	5	150	N/A	90
CVBA0A4	9LMA-BA BC & 9LMA-BAB	1999 & 2000	3.8	4R70W	MUSTANG	3.27	150	N/A	5	150	N/A	90
CVBA0B3	9LMA-AB BFB & 9LMA-ABB	1999 & 2000	3.8	4R70W	MUSTANG	3.27	150	N/A	5	150	N/A	90
CVBA0BZ	9LMA-AB BFB & 9LMA-ABB	1999 & 2000	3.8	4R70W	MUSTANG	3.27	150	N/A	5	150	N/A	90
CVBA2B3	9LMM-BBC	2000 & 1999	3.8	T50D	MUSTANG	3.08 & 3.27	150	N/A	5	150	N/A	90
CVBA2B5	9LMM-BBC	2000 & 1999	3.8	T50D	MUSTANG	3.08 & 3.27	150	N/A	5	150	N/A	90
CVBA2B8	9LMM-ABC	1999 & 2000	3.8	T50D	MUSTANG	3.27 & 3.08	150	N/A	5	150	N/A	90

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	RATCH_MIN	RATCH_MIN_A	RATDIFF	RATKAM_MIN	RATKAM_MIN_A	OTPM_AX
CVBA2BZ	9LMM-ABC	1999 & 2000	3.8	T50D	MUSTANG	3.27 & 3.08	150	N/A	5	150	N/A	90
CXAB3H5	9VNA-BH CFB & 9VNA-BHC	1999	4.6	4R70W	LINC.TOWNCAR	3.55	100	N/A	30	250	N/A	7
DOAR3AY	0M11A90512	2002	3	CD4E	U204	Undef	100	N/A	30	150	N/A	90
DOAR3B5	0M11B30512	2002	3	CD4E	U204	Undef	100	N/A	30	150	N/A	90
DOAR3C5	0M11C30512	2002	3	CD4E	U204	Undef	100	N/A	30	150	N/A	90
DOAR439	2M11B30510	2002	3	C4DE	U204 Cat. Opt.	Undef	100	N/A	30	150	N/A	90
DOAR43T	2M11C30510	2002	3	C4DE	U204 Cat. Opt.	Undef	100	N/A	30	150	N/A	90
DOAR43W	2M11A30510	2002	3	C4DE	U204 Cat. Opt.	Undef	100	N/A	30	150	N/A	90
DOAV332	3M11A30500	2003	3	C4DE	U204	Undef	100	N/A	30	150	N/A	90
DOAV33Z	3M11B30500	2003	3	C4DE	U204	Undef	100	N/A	30	150	N/A	90
DVAN923	0M12A20512	2001 & 2002	2	G5M	U204	Undef	100	N/A	4	250	N/A	3
DVAN924	0M12B20512	2001 & 2002	2	G5M	U204	Undef	100	N/A	4	250	N/A	3
DVAN92U	0M12A20512	2001 & 2002	2	G5M	U204	Undef	100	N/A	4	250	N/A	3
DVAN92Y	0M11A20513	2001 & 2002	2	CD4E	U204	Undef	100	N/A	4	250	N/A	3
DVANA2Z	0M11A20520	2002	2	Undef	U204	Undef	100	N/A	4	250	N/A	3
FBAC0CC	9LAA-AC B	1999	3	AX4S	DN101 - FFV Ethanol	3.77	N/A	N/A	N/A	N/A	N/A	90
FCAK0CZ	9VWA-ACB	1999	4.6	AX4N	CONTINENTAL	3.58	100	N/A	4	180	N/A	90
FCAL0CY	9VWA-JCD	2001 & 1999 & 2000	4.6	4F50N & AX4N	CONTINENTAL	3.58	100	N/A	4	180	N/A	90
FDBA0S7	1A31A90G12	2001	3.8	4F50N	WIN126	3.58	100	N/A	4	170	N/A	5
FDBA0SU	1A31A90Q13	2001	3.8	Undef	WIN126	Undef	100	N/A	4	170	N/A	5
FDBA0SX	1A31A90G12	2001	3.8	4F50N	WIN126	3.58	100	N/A	4	170	N/A	5
FDBC056	1A31A90512	2001	3.8	4F50N	WIN126	3.58	100	N/A	4	170	N/A	5
FHAF6N4	2DD14N0511	2002	3	4F50N	D186 4V & TAU/SABLE 4V	3.98	160	N/A	5	150	N/A	0.018
FHAF6N5	2DD15N0508	2002	3	4F50N	D186 4V Pt-Rh CAT OPT	3.98	160	N/A	5	150	N/A	0.018
FHAF7N9	3DD1FN0506	2003	3	4F50N	D186 FFV ACCRO	3.77	140	N/A	5	134	N/A	5
FHAF7N8	3DD12N0505	2003	3	4F50N	D186 2V ACCRO	3.77	140	N/A	5	134	N/A	5
FHAF786	3DD12S0506	2003	3	AX4S	D186 2V ACCRO	3.77	140	N/A	5	134	N/A	5
FHAF78C	3DD1F80505	2003	3	AX4S	D186 FFV ACCRO & D186 FFV ACCRO	3.77	140	N/A	5	134	N/A	5
FHAF8F9	2DD13F0611	2002	3	Undef	D186 FFV Pt-Rh CAT OPT	Undef	140	N/A	5	134	N/A	5
FHAF8N2	2DD13N0511	2002	3	4F50N	D186 2V Pt-Rh CAT OPT	3.77	140	N/A	5	134	N/A	5
FHAF8N3	3DD1JN0500	2003	3	4F50N	D186 2V & D186 2V Pt-Rh CAT OPT	3.77	140	N/A	5	134	N/A	5
FHAF8N5	3DD1ZN0500	2003	3	4F50N	D186 - FFV Ethanol	3.77	140	N/A	5	134	N/A	5
FHAF8NZ	2DD12N0511	2002	3	4F50N	TAU/SABLE 2V	3.77	140	N/A	5	134	N/A	5
FHAF8S2	2DD13S0511	2002	3	AX4S	D186 2V Pt-Rh CAT OPT	3.77	140	N/A	5	134	N/A	5

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	RATCH_MIN	RATCH_MIN_A	RATDIFF	RATKAM_MIN	RATKAM_MIN_A	OTPM AX
FHAF889	3DD1J80500	2003	3	AX4S	D188 2V & D188 2V Pt-Rh CAT OPT	3.77	140	N/A	5	134	N/A	5
FHAF886	3DD1Z80500	2003	3	AX4S	D188 - FFV Ethanol	3.77	140	N/A	5	134	N/A	5
FHAF88Y	2DD1F80507	2002	3	AX4S	D188 - FFV Ethanol	3.77	140	N/A	5	134	N/A	5
FHAF8V4	2DD13V0611	2002	3	Undef	D188 FFV Pt-Rh CAT OPT	Undef	140	N/A	5	134	N/A	5
FJAE0A6	3AS1BA0600	2003	3.8	4F50N	WIN126	3.58	100	N/A	4	170	N/A	5
FJAE0A8	2AS1CA0508	2002	3.8	4F50N	WIN126	3.58	100	N/A	4	170	N/A	5
FJAE0CZ	2AS1ZC0510	2002	3.8	4F50N	2002.5 WIN126 Cat Opt	3.58	100	N/A	4	170	N/A	5
GRAK8EG	8-04E R13FM & 9EQA-AK A	1999	2	F4E3	ESCORT/TRACER 4V	3.74	100	N/A	30	120	N/A	3
GRAK8EX	8-03E R13FM	1999	2	G5M	ESCORT/TRACER 4V	4.11	100	N/A	30	120	N/A	3
GRAK8KY	9EQM-BK A	1999	2	G5M	ESCORT/TRACER 4V	4.11	100	N/A	30	120	N/A	3
GRAK8KZ	9EQM-AK A	1999	2	G5M	ESCORT/TRACER 4V	4.11	100	N/A	30	120	N/A	3
GRAK8RF	8-04R R13C & 9EQA-BK A	1999	2	F4E3	ESCORT/TRACER 4V	3.74	100	N/A	30	120	N/A	3
GRAK8FX	8-03R R13C	1999	2	G5M	ESCORT/TRACER 4V	4.11	100	N/A	30	120	N/A	3
GRAK8FY	8-03R R13C	1999	2	G5M	ESCORT/TRACER 4V	4.11	100	N/A	30	120	N/A	3
GVAK8B9	7-08B R12	1999	2	F4E3	ESCORT/TRACER 2V	3.74	134	N/A	4	N/A	N/A	90
GVAK8C3	7-07C R12	1999	2	G5M	ESCORT/TRACER 2V	3.85	134	N/A	4	N/A	N/A	90
GWAG8G3	9EQM-AG A	1999	2	G5M	ESCORT/TRACER 2V	3.85	134	N/A	4	250	N/A	90
GWAG8G6	9EQM-BG BC	1999	2	MTX75	ESCORT/TRAC 2V LEV	3.85	134	N/A	4	250	N/A	90
GWAG8GY	9EQA-BG A	1999	2	F4E3	ESCORT/TRACER 2V	3.74	134	N/A	4	250	N/A	90
GWAG8QZ	9EQA-AG A	1999	2	F4E3	ESCORT/TRACER 2V	3.74	134	N/A	4	250	N/A	90
GWAG8H3	9EQA-AH A	1999	2	F4E3	ESCORT/TRACER 2V	3.74	134	N/A	4	250	N/A	90
JAAS8B3	9WHA-ABK	2000	3.9	5R55W	DEW98	3.58	140	N/A	5	148	N/A	5
JAAS8B8	9WHA-ABK	2000	3.9	5R55W	DEW98	3.31	140	N/A	5	148	N/A	5
JAAS8B9	9LDA-BBH	2001 & 2000	3	5R55N & 5R55W	DEW98	3.07 & 3.58	140	N/A	5	148	N/A	5
JAAS8N2	9LDA-ENE	2000	3	Undef	DEW98	Undef	140	N/A	5	148	N/A	5
JAAS7A3	9WHA-AAG	2000	3.9	Undef	DEW98	3.31	140	N/A	5	148	N/A	5
JAAS7A7	9WHA-EAJ	2000	3.9	5R55N	DEW98	3.58	140	N/A	5	148	N/A	5
JAAS7A8	9WHA-BAH	2000	3.9	5R55W	DEW98	3.31	140	N/A	5	148	N/A	5
JAAS7C8	9LDA-BCG	2000	3	5R55W	DEW98	3.58	140	N/A	5	148	N/A	5
JAAS7S9	9LDA-ESG	2000	3	5R55W	DEW98	3.58	140	N/A	5	148	N/A	5
JAAT4A8	9LDA-AAH	2000	3	5R55N	DEW98	3.58	140	N/A	5	148	N/A	5
JAAT4C2	9LDA-ACG	2000	3	5R55W	DEW98	3.58	140	N/A	5	148	N/A	5
JBAR8A5	9LDM-AAE	2000	3	M5GR	DEW98	3.07	140	N/A	5	148	N/A	5
JBAS3A2	9LDM-EAG	2000	3	M5GR	DEW98	3.07	140	N/A	5	148	N/A	5
JBAS3CZ	9LDM-ACG	2000 & 2001	3	M5GR	DEW98 & DEW98 M/T	3.07	140	N/A	5	148	N/A	5
JDBC1M8	25F12M0505	2002	3.9	5R55N	M205	3.58	140	N/A	5	148	N/A	5
JDBD4B2	2LQ19B0M11	2002	3.9	5R55N	DEW98	3.31	140	N/A	5	148	N/A	5
JDBD4B4	2LQ19B0M10	2002	3.9	5R55N	DEW .75 O/D & DEW98 VCT	3.31	140	N/A	5	148	N/A	5
JDBD4B8	2LQ19B0511	2002	3.9	Undef	DEW98	3.31	140	N/A	5	148	N/A	5



Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	RATCHL MIN	RATCHL MIN_A	RATDIFF	RATKAM MIN	RATKAM MIN_A	DTPM AX
JDBD4BY	2LQ19B0510	2002	3.9	5R55N	DEW .75 Q/D & DEW98 VCT	3.31	140	N/A	5	148	N/A	5
JDBD4M5	28R12M0512	2002	3.8	5R55N	M205	3.58	140	N/A	6	148	N/A	6
JDBD4M6	28R11M0510	2002	3.9	5R55N	M206 .75 Q/D	3.58	140	N/A	5	148	N/A	6
JDBD496	2LQ19B0M10	2002	3.9	5R55N	DEW .75 Q/D & DEW98 VCT	3.31	140	N/A	5	148	N/A	6
JDBD498	2LQ18S0511	2002	3.9	5R55N	DEW98	3.58	140	N/A	5	148	N/A	5
JDBD499	2LQ18S0511	2002	3.9	5R55N	DEW98	3.31	140	N/A	5	148	N/A	5
JDBD4SX	2LQ19B0510	2002	3.9	5R55N	DEW .75 Q/D & DEW98 VCT	4.00	140	N/A	6	148	N/A	6
JDBD4SZ	2LQ18S0M11	2002	3.9	5R55N	DEW98	3.31	140	N/A	5	148	N/A	5
JEATEF8	1U51AF0B16	2002	4	5R55W	U152 FFV 2001.5	3.27/3.55	150	N/A	4	160	N/A	90
JEATEG8	1U51BG0A15	2002	4	5R55W	U152 2001.5	3.27/3.55	150	N/A	4	160	N/A	90
JEATEGW	1U51AG0M15	2002	4	5R55W	U152 2001.5	3.27/3.55	160	N/A	4	160	N/A	90
JEATEGY	1U61AG0M15	2002	4	5R55W	U152 2001.5	3.27/3.55	150	N/A	4	160	N/A	90
JEATFF6	1U61AF0B21	2002	4	5R55W	U152 FFV 2001.5	3.27/3.55	160	N/A	4	150	N/A	90
JEATFG8	1U51BG0A21	2002	4	5R55W	U152 2001.5	3.27/3.55	150	N/A	4	150	N/A	90
JEATFGX	1U51AG0M21	2002	4	5R55W	U152 2001.5	3.27/3.55	150	N/A	4	160	N/A	90
JEATFGY	1U51BG0A21	2002	4	5R55W	U152 2001.5	3.27/3.55	160	N/A	4	150	N/A	90
JEAU163	1U51A50M16	2002	4.8	5R55W	U152 2001.5	3.27/3.55	100	N/A	0.5	100	N/A	4
JEAU158	1U51A50B18	2002	4.8	5R55W	U152 2001.5	3.27/3.55	100	N/A	0.6	100	N/A	4
JEAU252	1U51A50M10	2002	4.8	5R55W	U152 2001.5	3.27/3.55	100	N/A	0.5	100	N/A	4
JEAU259	1U51A50B10	2002	4.8	5R55W	U152 2001.5	3.27/3.55	100	N/A	0.5	100	N/A	4
JEBF452	2U51A50510	2002	4.8	5R55S	U152	3.27/3.55	100	N/A	0.6	100	N/A	4
JEBF45Z	2U51A50M10	2002	4.8	5R55S	U152	3.27/3.55	100	N/A	0.6	100	N/A	4
JEBFEF4	2U51AF0508	2002	4	5R55S	U152 FFV	Undef	150	N/A	4	150	N/A	90
JEBFEG4	2U51BG0A08	2002	4	5R55S	U152	Undef	160	N/A	4	150	N/A	90
JEBFEGZ	2U51AG0M08	2002	4	5R55S	U152	Undef	150	N/A	4	150	N/A	90
JECE3A9	3U51A50505	2003	4.8	5R55S	U152	3.27/3.55	138	N/A	0.6	138	N/A	4
JECEEF2	3U51AF0506	2003	4	5R55S	U152 FFV	3.27/3.55	140	N/A	4	135	N/A	90
JECEEG2	3U51AG0505	2003	4	5R55S	U152	3.27/3.55	140	N/A	4	135	N/A	90
JECEEGZ	3U51AG0M05	2003	4	5R55S	U152	3.27/3.55	140	N/A	4	135	N/A	90
JFA05G8	1U52AG0B11	2002	4	M6	U152 2001.5	3.27/3.55	150	N/A	4	150	N/A	90
JFA06G5	1U52AG0B15	2002	4	M6	U152 2001.5	3.27/3.55	160	N/A	4	150	N/A	90
JFB06G2	2U52AG0508	2002	4	M6	U152	3.27/3.55	160	N/A	4	150	N/A	90
JJBD352	2LQ28S0511	2002	3.9	5R55N	DEW98	3.07	140	N/A	5	148	N/A	5
JKAP853	3U81A50500	2003	4.8	5R55S	U231 4V ACCRO	Undef	100	N/A	0.5	100	N/A	4
JKAPE83	2U81A50507	2003	4.8	5R55S	U231 4V	Undef	140	N/A	0.6	100	N/A	4
KAAK8D2	9EQM-AD DFM	1999	2	MTX75	99.5 CDW	3.82	100	N/A	4	150	N/A	8
KAAK8D5	9EQA-BD EC	1999	2	CD4E	99.5 CDW	3.92	100	N/A	4	160	N/A	8
KAAK8D7	9EQA-MD C	1999	2	CD4E	99.5 CDW	4.23	100	N/A	4	150	N/A	8
KAAK8DW	9EQA-AD EFB	1999	2	CD4E	99.5 CDW	3.92	100	N/A	4	150	N/A	8
KAAK8DY	9EQM-AD DFM	1999	2	MTX75	99.5 CDW	3.82	100	N/A	4	160	N/A	8
KAAK8DZ	9EQM-BD D	1999	2	MTX75	99.5 CDW	3.82	100	N/A	4	150	N/A	8
KAAK8VU	9EQA-MV C	2000	2	CD4E	CONTOURMYSTIQUE	4.23	100	N/A	4	150	N/A	8
KAAKAV3	9EQA-BV F	2000	2	CD4E	CONTOURMYSTIQUE	3.92	100	N/A	4	150	N/A	8
KAAKAVU	9EQM-AV F	2000	2	MTX75	CONTOURMYSTIQUE	3.82	100	N/A	4	160	N/A	8

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	RATCH_MIN	RATCH_MIN_A	RATDIFF	RATKAM_MIN	RATKAM_MIN_A	OTPM_AX
KAACKV	9EQM-AV F	2000	2	CD4E	CONTOUR/MYSTIQUE	3.82	100	N/A	4	150	N/A	8
KAACKVW	9EQM-AV F	2000	2	MTX75	CONTOUR/MYSTIQUE	3.82	100	N/A	4	150	N/A	8
KAACKVX	9EQM-BV F	2000	2	MTX75	CONTOUR/MYSTIQUE	3.82	100	N/A	4	150	N/A	8
KAACKZ	0NB1FZ0A05	2000	2	CD4E	CDW AFQVM	3.82	100	N/A	4	150	N/A	8
KAACKZY	0NB1FZ0B05	2000	2	CD4E	CDW AFQVM	3.82	100	N/A	4	150	N/A	8
KBAN2H2	9LCM-AH A	1999	2.5	MTX75	CONTOUR SVT 99.5	4.06	100	N/A	4	125	N/A	1
KBAN2H3	9LCM-EH C	1999	2.3	MTX75	MONDEO ST200 99.5	3.81	100	N/A	4	125	N/A	1
KBAN4CE	9LCA-AC DFM	1999	2.5	CD4E	BRONCO & CDW/SW 99.5	3.77	100	N/A	4	160	N/A	2
KBAN4CG	9LCA-BC DC	1999	2.5	CD4E	BRONCO	3.77	100	N/A	4	160	N/A	2
KBAN4CH	9LCA-AC DFM	1999	2.5	CD4E	BRONCO & CDW/SW 99.5	3.77	100	N/A	4	150	N/A	2
KBAN4D5	9LCA-ED CE	1999	2.5	CD4E	99.5 COUGAR/MONDEO	3.77	100	N/A	4	150	N/A	90
KBAN4DC	9LCM-AD EFM	1999	2.5	MTX75	99.5 SW	4.06	100	N/A	4	150	N/A	2
KBAN4DK	9LCM-BO EC	1999	2.5	MTX75	99.5 SW	4.06	100	N/A	4	150	N/A	2
KBAN4DL	9LCA-ED DC	1999	2.5	CD4E	99.5 SW	3.77	100	N/A	4	160	N/A	2
KBAN4DM	9LCA-AD DFB	1999	2.5	CD4E	99.5 SW	3.77	100	N/A	4	160	N/A	2
KBAN4X2	9LCM-AX C	1999	2.5	MTX75	CONTOUR SVT 99.5	4.06	100	N/A	4	125	N/A	1
KBAN4X8	9LCM-AH C	1999	2.5	MTX75	CONTOUR SVT 99.5	4.06	100	N/A	4	125	N/A	1
KBAN7D2	9LCM-ED EE	1999	2.5	MTX75	99.5 COUGAR/MONDEO	3.82	100	N/A	4	150	N/A	2
KBAN7D4	9LCA-ED DE	1999	2.5	CD4E	99.5 COUGAR/MONDEO	3.77	100	N/A	4	160	N/A	2
KBAN7H7	9LCM-EH G	2000	2.5	MTX75	MONDEO/COUGAR ST200	3.81	100	N/A	4	125	N/A	1
KBAN7VQ	9LCM-BV H	2000	2.5	MTX75	CDW162/SW164	4.06	100	N/A	4	150	N/A	2
KBAN7VR	9LCA-BV H	2000	2.5	CD4E	CDW162/SW164	3.77	100	N/A	4	160	N/A	2
KBAN7WW	9LCA-BW G	2000	2.5	CD4E	COUGAR SW164	3.77	100	N/A	4	150	N/A	2
KBAN7WX	9LCM-BW G	2000	2.5	MTX	COUGAR SW164	4.06	100	N/A	4	150	N/A	2
KBAN7X4	9LCM-AXE	2000	2.5	MTX75	CONTOUR SVT	4.06	100	N/A	4	125	N/A	1
KBAT1DB	1Z225D0510	2001	2.5	MTX	COUGAR SW164	4.06	100	N/A	4	160	N/A	2
KBAT1DC	1Z227D0510	2001	2.5	MTX	COUGAR SW164	4.06	100	N/A	4	160	N/A	2
KBAT1DD	1Z22AD0510	2001	2.5	MTX	COUGAR SW164	Undef	100	N/A	4	150	N/A	2
KBAT1DH	1Z21AD0510	2001	2.5	CD4E	COUGAR SW164	3.77	100	N/A	4	150	N/A	2
KBAT1DN	1Z21ED0510	2001	2.5	CD4E	COUGAR SW164	3.77	100	N/A	4	150	N/A	2
KBAT1DP	1Z215D0510	2001	2.5	CD4E	COUGAR SW164	3.77	100	N/A	4	160	N/A	2
KBAT1DQ	1Z22ED0510	2001	2.5	MTX	COUGAR SW164	Undef	100	N/A	4	150	N/A	2
KBAT2D4	2Z22ED0600	2002	2.5	MTX	COUGAR SW164	4.06	100	N/A	4	150	N/A	2
KBAT2DW	2Z225D0600	2002	2.5	MTX	COUGAR SW164	4.06	100	N/A	4	150	N/A	2
KBAT2DX	2Z227D0600	2002	2.5	MTX	COUGAR SW164	4.06	100	N/A	4	160	N/A	2
KBAT2DY	2Z22AD0500	2002	2.5	MTX	COUGAR SW164	Undef	100	N/A	4	160	N/A	2
KBAU0D3	2Z21ED0605	2002	2.5	CD4E	COUGAR SW164	3.77	100	N/A	4	160	N/A	2
KBAU0D8	2Z21AD0506	2002	2.5	CD4E	COUGAR SW164	3.77	100	N/A	4	150	N/A	2
KBAU0D7	2Z215D0506	2002	2.5	CD4E	COUGAR SW164	3.77	100	N/A	4	160	N/A	2
KHAI4A8	9LCA-EA DE	1999	2.5	CD4E	99.5 COUGAR/MONDEO	3.77	100	N/A	4	160	N/A	90
KHAI5A8	9LCA-AA EFM	1999	2.5	CD4E	99.5 CDW/SW	3.77	100	N/A	4	150	N/A	90
KHAI5AA	9LCA-AA EFM	1999	2.5	CD4E	99.5 CDW/SW	3.77	100	N/A	4	150	N/A	90
KHAI5AR	9LCA-BA EC	1999	2.5	CD4E	99.5 CDW/SW	3.77	100	N/A	4	150	N/A	90
KHAI5AT	9LCA-EA DE	1999	2.5	CD4E	99.5 COUGAR/MONDEO	3.77	100	N/A	4	160	N/A	90

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	RATCH_MIN	RATCH_MIN_A	RATDIFF	RATKAM_MIN	RATKAM_MIN_A	DTPM_AX
KHAI5AU	9LCA-EA DE	1999	2.5	CD4E	98.5 COUGAR/MONDEO	3.77	100	N/A	4	150	N/A	90
KHAI5BQ	9LCA-AB EFB	1999	2.5	CD4E	98.5 SW	3.77	100	N/A	4	150	N/A	90
KHAI5BM	9LCA-BB EC	1999	2.5	CD4E	98.5 SW	3.77	100	N/A	4	150	N/A	90
KHAI5SH	9LCA-BB HC	1999	2.5	CD4E	98.5 CDW/SW	3.77	100	N/A	4	150	N/A	90
KHAI5SR	9LCA-AS GFM	1999	2.5	CD4E	98.5 CDW/SW	3.77	100	N/A	4	150	N/A	90
KHAI5SS	9LCA-AS GFM	1999	2.5	CD4E	98.5 CDW/SW	3.77	100	N/A	4	150	N/A	90
KHAI5SV	9LCA-ES GE	1999	2.5	CD4E	98.5 COUGAR/MONDEO	3.77	100	N/A	4	150	N/A	90
KHAI5TB	9LCA-BT HC	1999	2.5	CD4E	98.5 SW	3.77	100	N/A	4	150	N/A	90
KHAI5TX	9LCA-AT GFB	1999	2.5	CD4E	98.5 SW	3.77	100	N/A	4	150	N/A	90
KHAI8AD	9LCM-EA F	1999	2.5	MTX75	98.5 COUGAR/MONDEO	3.82	100	N/A	4	150	N/A	90
KHAI8AA	9LCM-AA FFM	1999	2.5	MTX75	98.5 CDW/SW	4.06	100	N/A	4	150	N/A	90
KHAI8AL	9LCM-AA FFM	1999	2.5	MTX75	98.5 CDW/SW	4.06	100	N/A	4	150	N/A	90
KHAI8AM	9LCM-BA FC	1999	2.5	MTX75	98.5 CDW/SW	4.06	100	N/A	4	150	N/A	90
KHAI8AU	9LCM-EA EE	1999	2.5	MTX75	98.5 COUGAR/MONDEO	3.82	100	N/A	4	150	N/A	90
KHAI8BA	9LCM-AB FFB	1999	2.5	MTX75	98.5 SW	4.06	100	N/A	4	150	N/A	90
KHAI8BT	9LCM-BB FC	1999	2.5	MTX75	98.5 SW	4.06	100	N/A	4	150	N/A	90
KIAB1E2	9EQM-AE DFB	1999 & 2000	2	MTX75	98.5 SW & COUGAR SW164	3.82	100	N/A	4	150	N/A	8
KIAB1EZ	9EQM-BE DC	1999 & 2000	2	MTX75	98.5 SW & COUGAR SW164	3.82	100	N/A	4	150	N/A	8
KIAB4Z4	0Z2AZ0510	2001 & 2000	2	MTX75	COUGAR SW164	3.82	100	N/A	4	150	N/A	8
KIAC0Z6	2Z2AZ0600	2002	2	MTX75	COUGAR SW164	3.82	100	N/A	4	150	N/A	8
KMAK6S8	0AK25S0612	2000	2	B5	FOCUS C170 SPI	3.81	134	N/A	4	250	N/A	90
KMAK6ZC	0AK25Z0612	2000	2	MTX75	FOCUS C170 ZETEC	3.82	100	N/A	4	250	N/A	8
KNAG4A5	9EQA-AA FFB	1999	2	C4DE	98.5 CDW	3.82	100	N/A	4	150	N/A	90
KNAG4AP	9EQM-AA FFM	1999	2	MTX75	98.5 CDW	3.82	100	N/A	4	150	N/A	90
KNAG4AQ	9EQM-BA FC	1999	2	MTX75	98.5 CDW	3.82	100	N/A	4	150	N/A	90
KNAG4AR	9EQM-AA FFM	1999	2	MTX75	98.5 CDW	3.82	100	N/A	4	150	N/A	90
KNAG4AS	9EQA-BA FC	1999	2	CD4E	98.5 CDW	3.82	100	N/A	4	150	N/A	90
KNAG4C5	9EQM-AC FFB	1999	2	MTX75	98.5 SW	3.82	100	N/A	4	150	N/A	90
KNAG4CR	9EQA-AC EFB	1999	2	CD4E	98.5 SW	3.82	100	N/A	4	150	N/A	90
KNAG4CS	9EQA-BC EC	1999	2	CD4E	98.5 SW	3.82	100	N/A	4	150	N/A	90
KNAG4CT	9EQM-BC FC	1999	2	MTX75	98.5 SW	3.82	100	N/A	4	150	N/A	90
KNAG4M4	9EQA-AM A	1999	2	CD4E	CDW AFQVM	3.82	100	N/A	4	150	N/A	90
KNAG4N4	9EQA-BN A	1999	2	CD4E	CDW AFQVM	3.82	100	N/A	4	150	N/A	90
KNAG5R3	9EQA-AR C	1999	2	CD4E	CDW AFQVM	3.82	100	N/A	4	150	N/A	90
KNAG5RZ	9EQA-BR C	1999	2	CD4E	CDW AFQVM	3.82	100	N/A	4	150	N/A	90
KNAG5S6	9EQA-BB HC	1999	2	C4DE	98.5 CDW	3.82	100	N/A	4	150	N/A	90
KNAG6SZ	9EQA-AS HFB	1999	2	C4DE	98.5 CDW	3.82	100	N/A	4	150	N/A	90
KNAG6T6	9EQA-AT GFB	1999	2	CD4E	98.5 SW	3.82	100	N/A	4	150	N/A	90
KNAG6TY	9EQA-BT GC	1999	2	CD4E	98.5 SW	3.82	100	N/A	4	150	N/A	90
KRAF5S8	1AK2AS0A11	2002 & 2001	2.0 & 3.8	B5	FOCUS C170 SPI & WIN Cat OPT	3.73S	134	N/A	4	250	N/A	90

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	RATCH_MIN	RATCH_MIN_A	RATDIFF	RATKAM_MIN	RATKAM_MIN_A	DTPM_AX
KRAF6Z4	1AK2AZ0509	2001	2	MTX	FOCUS C170 ZETEC	3.82	100	N/A	4	250	N/A	3
KRAF5ZZ	2AK2AZ0M00	2002	2	Undef	FOCUS MEXICO	Undef	100	N/A	4	250	N/A	3
KRAF6S4	1AK2AS0512	2002	2.0 & 3.8	B5	FOCUS C170 SPI & WIN Cat OPT	3.733	134	N/A	4	250	N/A	90
KRAF6S6	2AK2BS0A10	2002	2	B5	FOCUS SPI CAT OPT	3.61	134	N/A	4	250	N/A	90
KRAF6Z4	1AK2AZ0517	2002	2	MTX	FOCUS C170 ZETEC	3.82	100	N/A	4	250	N/A	3
KRAF6Z6	2AK2BZ0A10	2002	2	MTX	FOCUS ZETEC CAT OPT	3.82	100	N/A	4	250	N/A	3
MAAG4A3	9WAM-AA BSN	1999	6.8	M5	PHN131	Undef	100	N/A	4	150	N/A	6
MAAG4A4	9WAA-AA FSN	1999	6.8	Undef	PHN131	Undef	100	N/A	10	150	N/A	90
MAAG4AZ	9VZM-MA BM	1999	5.4	M4	PHN131	Undef	100	N/A	5	150	N/A	90
MAAG4B4	9VZM-AB BFB	1999	5.4	M5	PHN131	Undef	100	N/A	5	150	N/A	90
MAAG4CB	9WAM-AC BFB	1999	6.8	M5	PHN131	Undef	100	N/A	4	150	N/A	6
MAAG4CD	9WAA-BC FC	1999	6.8	4R100	PHN131	Undef	100	N/A	10	150	N/A	90
MAAG4D2	9WAA-BD GC	1999	6.8	4R100	PHN131	Undef	100	N/A	30	250	N/A	90
MAAG4F3	9VZA-AF FFB	1999	5.4	4R100	PHN131	Undef	100	N/A	30	170	N/A	90
MAAG4F4	9WAA-AF FSN	1999	6.8	4R100	PHN131	Undef	100	N/A	10	150	N/A	90
MAAG4FF	9WAM-BF FC	1999	6.8	M5	PHN131	Undef	100	N/A	30	250	N/A	90
MAAG4HE	9WAA-AH FFB	1999	6.8	4R100	PHN131	Undef	100	N/A	10	150	N/A	90
MAAG4J4	9WAA-AJ FSN	1999	6.8	4R100	PHN131	Undef	100	N/A	10	150	N/A	90
MAAG4J3	9VZA-BJ FC	1999	5.4	4R100	PHN131	Undef	100	N/A	30	100	N/A	90
MAAG4LZ	9WAA-BL FC	1999	6.8	4R100	PHN131	Undef	100	N/A	10	150	N/A	90
MAAG4VZ	9WAA-BV GC	1999	6.8	4R100	PHN131	Undef	100	N/A	30	250	N/A	90
MAAG4YD	9WAA-BY FC	1999	6.8	4R100	PHN131	Undef	100	N/A	10	150	N/A	90
MAAG4ZE	9WAA-BZ FC	1999	6.8	4R100	PHN131	Undef	100	N/A	10	150	N/A	90
MBAIBAJ	9WCA-BAF & 9WCA-BA F	1999	5.4	4R100	UN173 4V CFF/LEV & UN93UN173 4V	Undef	150	N/A	5	150	N/A	4
MBAIBBA	9VZA-AB FFB	1999	5.4	4R100	PN102	Undef	100	N/A	5	150	N/A	4
MBAIBCA	9VZA-BC F	1999	5.4	Undef	PN96	Undef	100	N/A	5	150	N/A	4
MBAIBEB	9VZA-BED	1999	5.4	4R100	UN93 2V CFF/LEV	Undef	100	N/A	5	150	N/A	4
MBAIBEB	9VZA-BE F	1999	5.4	Undef	UN93 2V & UN93/UN173 2V	Undef	100	N/A	5	150	N/A	4
MBAIBED	9VZA-BE G	1999	5.4	4R100	UN93 2V & UN93/UN173 2V	Undef	100	N/A	5	150	N/A	4
MBAIBEZ	9VZA-AE DFM	1999	5.4	4R100	UN93 2V & UN93/UN173 2V	Undef	100	N/A	5	150	N/A	4
MBAIBFA	9VZA-BF F	1999	5.4	Undef	PN102	Undef	100	N/A	5	150	N/A	4
MBAIBN7	9VZA-AN DSN	1999	5.4	E40D	PN102-NGV	Undef	144	N/A	8	150	N/A	10
MBAIBPF	9VZA-AP GFB	1999	5.4	Undef	PN96	Undef	100	N/A	5	150	N/A	4
MMAF1H8	1E414H0510	2001 & 2002	5.4	4R100	ECONOLINE-NGV	Undef	144	N/A	8	150	N/A	10
MMAF1HJ	1E418H0810	2001	6.8	4R100	ECONOLINE	Undef	100	N/A	30	150	N/A	5
MMAF1J6	1E414J0806	2001	5.4	4R100	ECONOLINE	Undef	100	N/A	4	100	N/A	8
MMAF1Q9	1F724Q0M06	2001	5.4	M4	P131	Undef	100	N/A	30	100	N/A	90
MMAF1X2	1F514X0511	2002 & 2003	5.4	4R100	PN96 2V NGV & PN96 NGV	Undef	144	N/A	8	150	N/A	10

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	RATCH_MIN	RATCH_MIN_A	RATDIFF	RATKAM_MIN	RATKAM_MIN_A	OTPM AX
MMAF1Z8	1E414H0510 & 1E414H0510	2003 & 2001 & 2002	5.4	4R100	ECONOLINE-NGV	Undef	144	N/A	8	150	N/A	10
MMAH0A8	1F728A0B15	2001	6.8	M5	P131	Undef	100	N/A	30	150	N/A	5
MMAH0AD	1F728A0B05	2001	6.8	M5	P131	Undef	100	N/A	30	150	N/A	6
MMAH0CR	1F718C0B15	2001	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	6
MMAH0CX	1F718C0B10	2001	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	6
MMAH0CY	1F717C0B15	2001	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MMAH0CZ	1F717C0B10	2001	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MMAH0DC	1F714D0B15	2001	5.4	4R100	P131	Undef	100	N/A	30	100	N/A	90
MMAH0DD	1L118D0B15	2001	6.8	4R100	UW137	Undef	100	N/A	30	150	N/A	5
MMAH0DI	1L118D0B10	2001	6.8	4R100	UW137	Undef	100	N/A	30	150	N/A	6
MMAH0DZ	1L114D0B15	2001	5.4	4R100	UW137	Undef	100	N/A	30	100	N/A	90
MMAH0N7	1E418N0510	2001	6.8	4R100	ECONOLINE	Undef	100	N/A	30	150	N/A	5
MMAH0NA	1L118N0A15	2001	6.8	4R100	UW137	Undef	100	N/A	30	150	N/A	6
MMAH0NB	1F714N0B15	2001	5.4	4R100	P131	Undef	100	N/A	30	100	N/A	90
MMAH0NJ	1F717N0515	2001	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MMAH0NR	1E414N0A10	2001	5.4	4R100	ECONOLINE	Undef	100	N/A	30	100	N/A	90
MMAH0NS	1L114N0A15	2001	5.4	4R100	UW137	Undef	100	N/A	30	100	N/A	90
MMAH0NT	1F714N0A15	2001	5.4	4R100	P131	Undef	100	N/A	30	100	N/A	90
MMAH0NV	1F718N0515	2001	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MMAH0P8	1E418P0A10	2001	6.8	4R100	ECONOLINE	Undef	100	N/A	30	150	N/A	5
MMAH0P7	1F718P0A15	2001	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MMAH0P9	1F724P0A15	2001	5.4	M5	P131	Undef	100	N/A	30	100	N/A	90
MMAH0PK	1F717P0A15	2001	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MMAH0Q8	1E418Q0B10	2001	6.8	4R100	ECONOLINE	Undef	100	N/A	30	150	N/A	6
MMAH0R7	1E414R0B10	2001	5.4	4R100	ECONOLINE	Undef	100	N/A	30	100	N/A	90
MMAH0R8	1E418R0B10	2001	6.8	4R100	ECONOLINE	Undef	100	N/A	30	150	N/A	5
MMAH0RL	1F717R0B15	2001	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MMAH0RX	1F718R0B15	2001	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	6
MMAH0T7	1F718T0B15	2001	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MMAH0U5	1F728U0M00	2001	6.8	M6	P131	4.88/5.38	100	N/A	30	150	N/A	6
MMAH0U6	1F728U0515	2001	6.8	M6	P131	Undef	100	N/A	30	150	N/A	5
MMAH0U7	1E414U0B10	2001	5.4	4R100	ECONOLINE	Undef	100	N/A	30	100	N/A	90
MMAH0V7	1F728V0A15	2001	6.8	M5	P131	Undef	100	N/A	30	150	N/A	5
MMAH0X7	1E414X0510	2001	5.4	4R100	ECONOLINE	Undef	100	N/A	30	100	N/A	90
MMAH0Y7	1E414Y0510	2001	5.4	4R100	ECONOLINE	Undef	100	N/A	30	100	N/A	90
MMAE0Y5	1F514Y0505	2001	5.4	4R100	PN98 8C	Undef	100	N/A	5	150	N/A	10
MPAL4PZ	0F724P0A10	2000	5.4	4R100	P131	Undef	100	N/A	30	100	N/A	90
MPAL4Q3	0F724Q0M10	2000	5.4	4R100	P131	Undef	100	N/A	30	100	N/A	90
MPAL8BF	0B314B0511	2000	5.4	4R100	UN93 2V	Undef	100	N/A	5	150	N/A	4
MPAL8D4	0F714D0B11	2000	5.4	4R100	P131	Undef	100	N/A	30	100	N/A	90
MPAL8DX	0L114D0B11	2000	5.4	Undef	UW137	Undef	100	N/A	30	100	N/A	90
MPAL8DY	0F514D0B11	2000	5.4	4R70W	PN98	Undef	100	N/A	5	150	N/A	4

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	RATCH_MIN	RATCH_MIN_A	RATCHDIFF	RATKAM_MIN	RATKAM_MIN_A	DTPM_AX
MPAL6G7	0F514G0A11	2000	5.4	4R100	PN96	Undef	100	N/A	5	150	N/A	4
MPAL6H7	0F514H0A11	2000	5.4	4R100	PN96	Undef	100	N/A	5	150	N/A	4
MPAL6H9	0E414H0511	2000	5.4	Undef	ECONOLINE-NGV	Undef	144	N/A	8	150	N/A	10
MPAL6J7	0E414J0B11	2000	5.4	4R100	ECONOLINE	Undef	100	N/A	4	100	N/A	8
MPAL6M7	0F514M0B11	2000	5.4	4R100	PN96	Undef	100	N/A	5	150	N/A	4
MPAL6N4	0F714N0A11	2000	5.4	4R100	P131	Undef	100	N/A	30	100	N/A	90
MPAL6N6	0E414N0A11	2000	5.4	4R100	ECONOLINE	Undef	100	N/A	30	100	N/A	90
MPAL6NX	0L114N0A11	2000	5.4	Undef	LW137	Undef	100	N/A	30	100	N/A	90
MPAL6R6	0E414R0B11	2000	5.4	4R100	ECONOLINE	Undef	100	N/A	30	100	N/A	90
MPAL6U8	0E414U0B11	2000	5.4	4R100	ECONOLINE	Undef	100	N/A	30	100	N/A	90
MPAL6X9	0F514X0510	2000	5.4	4R100	PN102-NGV	Undef	144	N/A	8	150	N/A	10
MPAL6XC	0E414X0512	2000	5.4	4R100	ECONOLINE	Undef	100	N/A	30	100	N/A	90
MPAL6YB	0E414Y0512	2000	5.4	4R100	ECONOLINE	Undef	100	N/A	30	100	N/A	90
MPAM0A9	0F728A0B11	2000	6.8	M5	P131	Undef	100	N/A	30	150	N/A	5
MPAM0U8	0F728U0511	2000	6.8	M5	P131	Undef	100	N/A	30	180	N/A	8
MPAM0V9	0F728V0A11	2000	6.8	M5	P131	Undef	100	N/A	30	150	N/A	5
MPAM1C4	0F717C0B11	2000	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MPAM1CN	0F718C0B11	2000	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MPAM1DF	0L118D0B11	2000	6.8	4R100	LW137	Undef	100	N/A	30	150	N/A	5
MPAM1HZ	0E418H0B13	2000	6.8	4R100	ECONOLINE	Undef	100	N/A	30	150	N/A	5
MPAM1N5	0F717N0511	2000	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MPAM1NU	0F718N0511	2000	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MPAM1NV	0L118N0A11	2000	6.8	4R100	LW137	Undef	100	N/A	30	150	N/A	5
MPAM1NY	0E418N0511	2000	6.8	4R100	ECONOLINE	Undef	100	N/A	30	150	N/A	5
MPAM1P4	0E418P0A11	2000	6.8	4R100	ECONOLINE	Undef	100	N/A	30	150	N/A	5
MPAM1PX	0F717P0A11	2000	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MPAM1PZ	0F718P0A11	2000	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MPAM1Q3	0E418Q0B11	2000	6.8	4R100	ECONOLINE	Undef	100	N/A	30	150	N/A	5
MPAM1QZ	0F718Q0511	2000	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MPAM1R3	0E418R0B11	2000	6.8	4R100	ECONOLINE	Undef	100	N/A	30	150	N/A	5
MPAM1R4	0F717R0B11	2000	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MPAM1R5	0F718R0B11	2000	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MPAM1T4	0F717T0B11	2000	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MPAM1T6	0F718T0B11	2000	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MQAH1BH	1B314B0510	2001	5.4	4R100	UN93 2V	Undef	100	N/A	5	150	N/A	4
MQAH1BS	1B315B0510	2001	5.4	4R100	UN173 4V	Undef	150	N/A	5	150	N/A	4
MQAH1DE	1F514D0B10	2001	5.4	4R100	PN96	Undef	100	N/A	5	150	N/A	4
MQAH1HB	1F514H0A10	2001	5.4	4R100	PN96	3031/3.55/3.73	100	N/A	5	150	N/A	4
MQAH1MB	1F514M0B10	2001	5.4	4R100	PN96	Undef	100	N/A	5	150	N/A	4
MQAH0AP	2N118A0516	2002	5.4	4R100	CAL-1 4V	Undef	150	N/A	5	150	N/A	4
MQAH0B2	2B314B0505	2002	5.4	4R100	UN93 2V	Undef	100	N/A	5	150	N/A	4
MQAH0B6	2B314B0M00	2002	5.4	Undef	UN93 2V	Undef	100	N/A	5	150	N/A	4
MQAH0BF	2B315B0505	2002	5.4	4R100	UN173 4V	3.73	150	N/A	5	150	N/A	4

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	RATCH_MIN	RATCH_MIN_A	RATDIFF	RATKAM_MIN	RATKAM_MIN_A	DTPM_AX
MQAI1A4	3N115A0500	2003	5.4	4R100	CAL-1 4V	Undef	150	N/A	5	150	N/A	4
MQAI1A7	3N115A0M00	2003	5.4	4R100	CAL-1 4V	Undef	150	N/A	5	150	N/A	4
MRAD3K5	8VZA-AK FFB	1999 & 2000	5.4	4R100	PN86 8C	Undef	100	N/A	5	150	N/A	10
MTAL1B7	3B515B0507	2003	5.4	4R70W	U228 4V & UN173 4V	Undef	150	N/A	5	150	N/A	4
MTAM2E4	3B515E0500	2003	5.4	4R100	U228 4V ACCRO	Undef	150	N/A	5	136	N/A	4
MZAH057	3E416N0505	2003	5.8	4R100	ECONOLINE	Undef	100	N/A	30	160	N/A	5
MZAH0A5	2F728A0B11	2003 & 2002	5.8	M5	P131	4.3	100	N/A	30	150	N/A	5
MZAH0AA	3L118N0A06	2003	5.8	4R100	UW137	Undef	100	N/A	30	150	N/A	5
MZAH0B5	2F728B0B11	2003 & 2002	6.8	M5 & M6	P131	4.3	100	N/A	30	150	N/A	5
MZAH0CB	2F718C0B11	2003 & 2002	6.8	4R100	P131	3.73/4.30	100	N/A	30	150	N/A	5
MZAH0CE	2F717C0B11	2003 & 2002	6.8	4R100	P131	3.73/4.30	100	N/A	30	150	N/A	5
MZAH0D2	2L118D0B11	2003 & 2002	6.8	4R100	UW137	4.3	100	N/A	30	160	N/A	5
MZAH0D4	2L114D0B11	2003 & 2002	5.4	4R100	UW137	3.73/4.10	100	N/A	30	100	N/A	90
MZAH0D9	2F717D0B11	2003 & 2002	6.8	4R100	P131	3.73/4.30	100	N/A	30	160	N/A	5
MZAH0DF	2F718D0B11	2003 & 2002	6.8	4R100	P131	3.73/4.30	100	N/A	30	150	N/A	5
MZAH0DZ	2F714D0B11	2003 & 2002	5.4	4R100	P131	3.73/4.30	100	N/A	30	100	N/A	90
MZAH0E4	2F714E0B11	2003 & 2002	5.4	4R100	P131	3.73	100	N/A	30	100	N/A	90
MZAH0F4	2F714F0B16	2002	5.4	4R100	P131	Undef	100	N/A	30	100	N/A	90
MZAH0G4	2F714G0B16	2002	5.4	4R100	P131	Undef	100	N/A	30	100	N/A	90
MZAH0HA	2E418H0B11	2003 & 2002	6.8	4R100	ECONOLINE	3.73/4.10	100	N/A	30	150	N/A	5
MZAH0JB	2E414J0B10	2002	5.4	4R100	ECONOLINE	Undef	100	N/A	4	100	N/A	8
MZAH0MB	2F718M0B11	2002	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MZAH0MX	2F717M0B11	2002	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MZAH0N3	2E414N0A16	2002	5.4	4R100	ECONOLINE	Undef	100	N/A	30	100	N/A	90
MZAH0N4	2F718N0511	2002	6.8	4R100	P131	Undef	100	N/A	30	160	N/A	5
MZAH0N5	2F717N0511	2002	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MZAH0N8	2F714N0A06	2002	5.4	4R100	P131	Undef	100	N/A	30	100	N/A	90
MZAH0NH	2E414N0A06	2002	5.4	4R100	ECONOLINE	Undef	100	N/A	30	100	N/A	90
MZAH0NV	2L118N0A11	2002	6.8	4R100	UW137	Undef	100	N/A	30	150	N/A	5
MZAH0NW	2E418N0511	2002	6.8	4R100	ECONOLINE	Undef	100	N/A	30	150	N/A	5
MZAH0NX	2L114N0A16	2002	5.4	4R100	UW137	Undef	100	N/A	30	100	N/A	90
MZAH0NZ	2F714N0A16	2002	5.4	4R100	P131	Undef	100	N/A	30	100	N/A	90

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	RATCH_MIN	RATCH_MIN_A	RATDIFF	RATKAM_MIN	RATKAM_MIN_A	DTPM_AX
MZAH0P3	2E418POA11	2002	6.8	4R100	ECONOLINE	Undef	100	N/A	30	150	N/A	5
MZAH0P5	2F718PCA11	2002	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MZAH0P6	2F724PCA16	2002	5.4	M6	P131	Undef	100	N/A	30	100	N/A	90
MZAH0PX	2F724POA05	2002	5.4	M6	P131	Undef	100	N/A	30	100	N/A	90
MZAH0PZ	2F717POA11	2002	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MZAH0F3	2E414R0B18	2002	5.4	4R100	ECONOLINE	Undef	100	N/A	30	100	N/A	90
MZAH0R4	2E414R0B08	2002	6.4	4R100	ECONOLINE	Undef	100	N/A	30	100	N/A	90
MZAH0R6	2F718R0B11	2002	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MZAH0RU	2F717R0B11	2002	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MZAH0RV	3F718R0B00	2003	6.8	4R100	P131	3.73/4.30	100	N/A	30	150	N/A	5
MZAH0RY	2E418R0B11	2002	6.8	4R100	ECONOLINE	Undef	100	N/A	30	150	N/A	5
MZAH0S6	2F718S0B11	2002	6.8	4R070W	P131	Undef	100	N/A	30	150	N/A	5
MZAH0SZ	2F717S0B11	2002	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MZAH0T5	2F718T0B11	2002	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MZAH0TZ	2F717T0B11	2002	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MZAH0U5	2E418U0505	2002	6.8	4R100	ECONOLINE	Undef	100	N/A	30	150	N/A	5
MZAH0UU	2E414U0B06	2002	5.4	4R100	ECONOLINE	Undef	100	N/A	30	100	N/A	90
MZAH0UY	2E414U0B16	2002	5.4	4R100	ECONOLINE	Undef	100	N/A	30	100	N/A	90
MZAH0UZ	2F728U0M11	2002	6.8	M5	P131	Undef	100	N/A	30	150	N/A	5
MZAH0V3	2F728V0A11	2002	6.8	M6	P131	Undef	100	N/A	30	150	N/A	5
MZAH0X5	2E414X0516	2002	5.4	4R100	ECONOLINE	Undef	100	N/A	30	100	N/A	90
MZAH0XX	2E414X0505	2002	5.4	4R100	ECONOLINE	Undef	100	N/A	30	100	N/A	90
MZAH0Y5	2E414Y0516	2002	5.4	4R100	ECONOLINE	Undef	100	N/A	30	100	N/A	90
MZAH0YY	2E414Y0505	2002	5.4	4R100	ECONOLINE	Undef	100	N/A	30	100	N/A	90
MZAH0Z3	2E418Z0B11	2002	6.8	4R100	ECONOLINE	Undef	100	N/A	30	150	N/A	5
MZAH0Z4	2F718Z0511	2002	6.8	4R100	P131	Undef	100	N/A	30	150	N/A	5
MZAH0ZF	3F724Z0M08	2003	5.4	Undef	P131	Undef	100	N/A	30	100	N/A	90
MZAH0ZY	2F724Z0M11	2002	5.4	M5	P131	Undef	100	N/A	30	100	N/A	90
MZAH0ZZ	3E418Z0B00	2003	6.8	4R100	ECONOLINE	4.1	100	N/A	30	150	N/A	5
MZAJ0J8	2E418J0510	2002	6.8	4R100	ECONOLINE	Undef	100	N/A	30	150	N/A	5
MZAJ0JZ	3E418J0506	2003	6.8	4R100	ECONOLINE	Undef	100	N/A	30	150	N/A	5
OCAM0Z2	9F514Q0B00	2003	5.4	4R100	PN96 LPG BI-FUEL & 2003.5 PN96 CNG BIFUEL	Undef	100	N/A	5	150	N/A	4
OCAM0D2	2F514D0B17	2002 & 2003	5.4	4R100	2002.25 PN96 Cat Opt & PN96 2V	Undef	100	N/A	5	150	N/A	4
OCAM0H2	2F514H0A17	2003 & 2002	5.4	4R100	PN96 2V & 2002.25 PN96 Cat Opt	Undef	100	N/A	5	150	N/A	4
ODAG0A3	2F526Q0A05	2002	4.6	M5	PN96 2V	Undef	100	N/A	4	100	N/A	4
ODAG0J3	2F526J0B05	2002	4.6	M5	PN96 2V	Undef	100	N/A	4	100	N/A	4
ODAG0K3	2F526K0B05	2002	4.6	M5	PN96 2V	Undef	100	N/A	4	100	N/A	4
ODAG0P3	2F526P0A05	2002	4.6	M6	PN96 2V	Undef	100	N/A	4	100	N/A	4
ODAJ0D9	2F518D0B07	2002	4.6	4R100	PN96 2V	Undef	100	N/A	4	100	N/A	4
ODAJ0E9	2F518E0B07	2002	4.6	4R70W	PN96 2V	Undef	100	N/A	4	100	N/A	4
ODAJ0M9	2F518M0A07	2002	4.6	4R70W	PN96 2V	Undef	100	N/A	4	100	N/A	4



Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	RATCH_MIN	RATCH_MIN_A	RATDIFF	RATKAM_MIN	RATKAM_MIN_A	DTPM_AX
ODAJ0NB	2F518NQA07	2002	4.6	4R70W	PN96 2V	Undef	100	N/A	4	100	N/A	4
ODAL1AZ	2F514ADE08	2002	5.4	4R70W	2002.5 PN96 ULEV 4R70W	Undef	100	N/A	5	150	N/A	4
ODAL1D5	2F516DOB16	2002	4.6	4R70W	2002.25 PN96 Cat Opt	Undef	100	N/A	4	100	N/A	4
ODAL1EY	2F518EOB16	2002	4.6	4R70W	2002.25 PN96 Cat Opt	Undef	100	N/A	4	100	N/A	4
ODAL1J4	2F528JOB16	2002	4.6	M5	2002.25 PN96 Cat Opt	Undef	100	N/A	4	100	N/A	4
ODAL1M5	2F516MDA16	2002	4.6	4R70W	2002.25 PN96 Cat Opt	Undef	100	N/A	4	100	N/A	4
ODAL1N5	2F516NDA16	2002	4.6	4R70W	2002.25 PN96 Cat Opt	Undef	100	N/A	4	100	N/A	4
ODAL1P4	2F528POA16	2002	4.6	M5	2002.25 PN96 Cat Opt	Undef	100	N/A	4	100	N/A	4
ODAL1Z4	2F528QQA16	2002	4.6	M5	2002.25 PN96 Cat Opt	Undef	100	N/A	4	100	N/A	4
OHAG0CH	2F512C0506	2002	4.2	4R70W	PN96 2V	Undef	150	N/A	7	170	N/A	5
OHAG0D3	2E412D0A06	2002	4.2	4R70W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
OHAG0DB	3E412D0A00	2003	4.2	4R70W	ECONOLINE	3.55	100	N/A	7	100	N/A	10
OHAG0DZ	2F512D0506	2002	4.2	4R70W	PN96 2V	Undef	150	N/A	7	170	N/A	5
OHAG0E7	3E412E0A00	2003	4.2	4R70W	ECONOLINE	3.73	100	N/A	7	100	N/A	10
OHAG0E9	2E412E0A06	2002	4.2	4R70W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
OHAG0F7	3E412F0A00	2003	4.2	4R70W	ECONOLINE	4.09	100	N/A	7	100	N/A	10
OHAG0F8	2E412F0A06	2002	4.2	4R70W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
OHAG0G8	3E412G0A00	2003	4.2	4R70W	ECONOLINE	4.09	100	N/A	7	100	N/A	10
OHAG0GA	2E412G0A06	2002	4.2	4R70W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
OHAG0GD	2F522G0506	2002	4.2	M5	PN96 2V	Undef	100	N/A	7	100	N/A	5
OHAG0H3	2E412H0B06	2002	4.2	4R70W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
OHAG0HC	2F522H0506	2002	4.2	M5	PN96 2V	Undef	100	N/A	7	100	N/A	5
OHAG0HY	3E412H0B00	2003	4.2	4R70W	ECONOLINE	3.55	100	N/A	7	100	N/A	10
OHAG0J8	3E412J0B00	2003	4.2	4R70W	ECONOLINE	4.09	100	N/A	7	100	N/A	10
OHAG0JC	2E412J0B06	2002	4.2	4R70W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
OHAG0K8	3E412K0B00	2003	4.2	4R70W	ECONOLINE	4.09	100	N/A	7	100	N/A	10
OHAG0KC	2E412K0B06	2002	4.2	4R70W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
OHAG0L7	3E412L0B00	2003	4.2	4R70W	ECONOLINE	3.73	100	N/A	7	100	N/A	10
OHAG0LC	2E412L0B06	2002	4.2	4R70W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
OHAK1C8	2F512C0516	2002 & 2003	4.2	4R70W	2002.25 PN96 Cat Opt & PN96 2V	Undef	150	N/A	5	170	N/A	5
OHAK1D5	2F512D0516	2002 & 2003	4.2	4R70W	2002.25 PN96 Cat Opt & PN96 2V	Undef	150	N/A	5	170	N/A	5
OHAK1G8	2F522G0516	2002 & 2003	4.2	M5	2002.25 PN96 Cat Opt & PN96 2V	Undef	100	N/A	5	100	N/A	5
OHAK1H6	2F522H0516	2002 & 2003	4.2	M5	2002.25 PN96 Cat Opt & PN96 2V	Undef	100	N/A	5	100	N/A	5
OIAH0D6	3E416D0500	2003	4.8	4R70W	ECONOLINE	3.55	100	N/A	4	100	N/A	8
OIAH0EF	2E416E0510	2002	4.8	4R70W	ECONOLINE	Undef	100	N/A	4	100	N/A	8
OIAH0EY	2E414E0511	2002	5.4	4R70W	ECONOLINE	Undef	100	N/A	4	100	N/A	8
OIAH0F9	3E416F0600	2003	4.6	4R70W	ECONOLINE	3.73	100	N/A	4	100	N/A	8
OIAH0H2	3E416H0506	2003	4.6	4R70W	ECONOLINE	Undef	100	N/A	4	100	N/A	8
OMAD3Y2	2F514Y0606	2002	5.4	4R100	PN96 SC	Undef	100	N/A	5	150	N/A	10
OMAD3Y3	3F514Y0500	2003	5.4	4R100	PN96 SC	Undef	100	N/A	5	150	N/A	10

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	RATCH MIN	RATCH MIN_A	RATDIFF	RATKAM MIN	RATKAM MIN_A	DTPM AX
OMAE1W2	2F514W0505	2002 & 2003	5.4	4R100	P225 SuperCrew Harley-Davidson	Undef	100	N/A	5	150	N/A	10
PAAD6A1	9B1A-BA AC	1999	2.5	4R44E	PN-150/PN-151	4.1	140	N/A	4	150	N/A	90
PAAD6A6	9B1A-AA AFM	1999	2.5	4R44E	PN-150/PN-151	4.1	140	N/A	4	150	N/A	90
PAAD7A2	9B1M-BA F	2001	2.5	M5	PN-150/PN-151	Undef	140	N/A	4	150	N/A	90
PAAD7B3	9B1M-AB F	2001	2.5	M5	PN-150/PN-151	3.45/3.73	140	N/A	4	150	N/A	90
PAAD7C3	9B1M-AC F	2001	2.5	M5	PN-150/PN-151	Undef	140	N/A	4	150	N/A	90
PAAD8A2	9LAA-MAB	1999	3	M5	PN-150/PN-151	3.73	140	N/A	3	150	N/A	10
PAAD8A8	9LAA-MA B	1999	3	4R44E	PN-150/PN-151	3.73	140	N/A	3	150	N/A	10
PAAD8AA	9LAA-MA B	1999	3	4R44E	PN-150/PN-151	3.73	140	N/A	3	150	N/A	10
PAAD8AC	9LAA-MA F	2000	3	M5	PN-150/PN-151	3.73	140	N/A	3	150	N/A	10
PAAD8B7	9LAA-MB B	1999	3	4R44E	PN-150/PN-151	3.73/4.10	140	N/A	3	150	N/A	10
PAAD8BA	9LAA-MB F	2000	3	M5	PN-150/PN-151	3.73	140	N/A	3	150	N/A	10
PAAD8CA	9LAA-MC G	2000	3	M5	PN-150/PN-151 & PN150/51 99.25MY	4.1	140	N/A	3	150	N/A	10
PAADAAG	9LAA-MAG	1999	3	4R44E	PN150/51 99.25MY	3.73 & 4.10	140	N/A	3	150	N/A	10
PAADAAH	9LAA-MA J	2000	3	4R44E	PN-150/PN-151	3.73	140	N/A	3	150	N/A	10
PAADAAZ	9B1A-BA K	2001	2.5	5R44E	PN-150/PN-151	4.1	140	N/A	4	150	N/A	90
PAADAB6	9B1A-AB H	2001	2.5	4R44E	PN-150/PN-151	4.1	140	N/A	4	150	N/A	90
PAADAB9	9LAA-MB J	2000	3	4R44E	PN-150/PN-151	3.73/4.10	140	N/A	3	150	N/A	10
PAADACJ	9LAA-MC H	2000	3	4R44E	PN-150/PN-151 & PN150/51 99.25MY	4.1	140	N/A	3	150	N/A	10
PBAD7B6	9LTM-AB B	1999	4	M5	PN-150/PN-151	3.27/3.73	140	N/A	0.5	150	N/A	1
PBAD7B7	9LTM-BB BC	1999	4	M5	PN-150/PN-151	3.08/3.55	140	N/A	0.5	150	N/A	1
PBAD7BC	9LTA-AB BFM	1999	4	5R55E	PN-150/PN-151	3.55/3.73	140	N/A	0.5	150	N/A	1
PBAD7BZ	9LTA-BB BC	1999	4	5R55E	PN-150/PN-151	3.55/3.73	140	N/A	0.5	150	N/A	1
PBAD7C8	9LTM-AC BFM	1999	4	M5	PN-150/PN-151	3.65	140	N/A	0.5	150	N/A	1
PBAD7C7	9LTM-BC BC	1999	4	M5	PN-150/PN-151	3.08/3.55	140	N/A	0.5	150	N/A	1
PBAD7CC	9LTA-AC BFM	1999	4	5R55E	PN-150/PN-151	3.55	140	N/A	0.5	150	N/A	1
PBAD7CZ	9LTA-BC BC	1999	4	5R55E	PN-150/PN-151	3.55	140	N/A	0.5	150	N/A	1
PBAD9B5	9LTM-BB GC	2000 & 1999	4	M5	PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.08/3.55 & 3.27 & 3.27/3.73	140	N/A	0.5	150	N/A	1
PBAD9C5	9LTM-BC GC	2000 & 1999	4	M5	PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.08 & 3.08/3.55	140	N/A	0.5	150	N/A	1
PBAD9D5	9LTM-AD AFM	2000 & 1999	4	M5	PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.08/3.55 & 3.27/3.73	140	N/A	0.5	150	N/A	1
PBAD9E5	9LTM-AE AFM	2000 & 1999	4	M5	PN-150/151 SOHC & PN-150/PN-151 & PN150/51 99.25MY	3.55 & 3.08/3.55	140	N/A	0.5	150	N/A	1
PBADAB5	9LTA-BB H	2000 & 1999	4	5R55E	PN-150/151 SOHC & PN-150/PN-151 & PN150/51 99.25MY	3.55/3.73	140	N/A	0.5	150	N/A	1

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	RATCH_MIN	RATCH_MIN_A	RATDIFF	RATKAM_MIN	RATKAM_MIN_A	DTPM AX
PBADAC5	9LTA-BC H	2000 & 1999	4	5R55E	PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.55	140	N/A	0.5	150	N/A	1
PBADAD5	9LTA-AD F	2000 & 1999	4	5R56E	PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.55/3.73	140	N/A	0.5	150	N/A	1
PBADAE5	9LTA-AE F	2000 & 1999	4	5R56E	PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.55	140	N/A	0.5	150	N/A	1
PCAF5A3	9LTM-BA F & 9LTM-BA FS	2000 & 1999	4	M5	UN-160 & UN-150 CFF/LEV	3.27/3.55	140	N/A	0.5	150	N/A	1
PCAF5A6	9LTM-AA F	1999 & 2000	4	M5	UN-150 & UN-150 CFF & UN-150 CFF/LEV	3.27/3.55	140	N/A	0.5	150	N/A	1
PCAF5A8	9LTA-BA G	2000 & 1999	4	5R56E	UN-160 & UN-150 CFF & UN-150 CFF/LEV	3.73/4.10	140	N/A	0.5	150	N/A	1
PCAG4A2	9NEA-BA H	2000 & 1999	4	5R56E	UN-150 SOHC & UN150 SOHC CFF	3.27/3.55	190	N/A	4	180	N/A	90
PCAG6A6	OS11A40507	2001	4	5R56E	P207 SOHC 2000.5 & U207 SOHC 2000.5	Undef	190	N/A	4	190	N/A	90
PCAG6AZ	OU31A40605	2000	4	5R56E	UN-150 SOHC & UN150 SOHC CFF	3.27/3.55	190	N/A	4	190	N/A	90
PCAF04Z	OU31A40516	2001	4	5R56E	UN-150 SOHC	3.27/3.55	190	N/A	4	190	N/A	90
PDAE3AN	9LAM-BA J	2000	3	M5	PN-160/PN-151 FFV	3.73	140	N/A	3	150	N/A	10
PDAE3AU	9LAM-AA J	2000	3	M5	PN-150/PN-151 FFV	3.73	140	N/A	3	160	N/A	10
PDAE3BM	9LAM-BB J	2000	3	M5	PN-160/PN-151 FFV	3.73	140	N/A	3	160	N/A	10
PDAE3BS	9LAM-AB J	2000	3	M5	PN-150/PN-151 FFV	3.73	140	N/A	3	150	N/A	10
PDAE3CD	9LAM-AC H	2000	3	M5	PN-150/PN-151 FFV	4.1	140	N/A	3	150	N/A	10
PDAE3CX	9LAM-BC H	2000	3	M5	PN-160/PN-151 FFV	4.1	140	N/A	3	150	N/A	10
PDAE3HD	9LAA-BH C	1999	3	4R44E	PN-160/PN-151 FFV	3.73	140	N/A	3	150	N/A	10
PDAE3HM	9LAA-AH C	1999	3	4R44E	PN-160/PN-151 FFV	3.73	140	N/A	3	150	N/A	10
PDAE3J	9LAA-AJ C	1999	3	4R44E	PN-150/PN-151 FFV	3.73/4.10	140	N/A	3	160	N/A	10
PDAE3JY	9LAA-BJ C	1999	3	4R44E	PN-160/PN-151 FFV	3.73/4.10	140	N/A	3	150	N/A	10
PDAE6H7	9LAA-AH K	2000	3	4R44E	PN-160/PN-151 FFV	3.73	140	N/A	3	150	N/A	10
PDAE6HX	9LAA-BH K	2000	3	4R44E	PN-160/PN-151 FFV	3.73	140	N/A	3	160	N/A	10
PDAE6J7	9LAA-BK J	2000	3	4R44E	PN-150/PN-151 FFV	4.1	140	N/A	3	150	N/A	10
PDAE6J8	9LAA-AJ K	2000	3	4R44E	PN-160/PN-151 FFV	3.73/4.10	140	N/A	3	150	N/A	10
PDAE6JY	9LAA-BJ K	2000	3	4R44E	PN-160/PN-151 FFV	3.73/4.10	140	N/A	3	150	N/A	10
PDAE6K6	9LAA-AK J	2000	3	4R44E	PN-150/PN-151 FFV	4.1	140	N/A	3	160	N/A	10
PEAV2G4	1U72AG0608	2002 & 2001	4	M5	U207	Undef	140	N/A	0.5	150	N/A	1
PEAV346	1U71A40508	2001	4	5R55E	U207 FFV	Undef	140	N/A	0.5	150	N/A	1
PEAV43S	1R31A30512	2001	3	5R44E	PN-150/PN-151	3.73	140	N/A	3	150	N/A	10
PEAV43T	1R31B30512	2001	3	5R44E	PN-150/PN-151	3.73/4.10	140	N/A	3	150	N/A	10
PEAV44T	1R31C40516	2001	4	5R55E	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/4.10	140	N/A	0.5	150	N/A	1
PEAV44U	1R31B40516	2001	4	5R56E	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/4.10	140	N/A	0.5	150	N/A	1

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	RATCH_MIN	RATCH_MIN_A	RATDFF	RATKAM_MIN	RATKAM_MIN_A	DTPM_AX
PEAV44V	1R31A40518	2001	4	5R55E	PN-160/151 SOHC & PN160/61 Cat. Opt.	3.55	140	N/A	0.5	150	N/A	1
PEAV44W	1R32C40518	2001	4	M5	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/4.10	140	N/A	0.5	150	N/A	1
PEAV44X	1R32B40518	2001	4	M5	PN-160/161 SOHC & PN160/61 Cat. Opt.	3.55/3.73/4.10	140	N/A	0.5	150	N/A	1
PEAV44Y	1R32A40518	2001	4	M5	PN-160/151 SOHC & PN150/51 Cat. Opt.	3.55	140	N/A	0.5	150	N/A	1
PEAV463	1R32A40517	2002	4	M5	PN-160/161 SOHC	3.55	140	N/A	0.5	150	N/A	1
PEAV46S	1R31B40617	2002	4	5R55E	PN-160/151 SOHC	3.55/3.73/4.10	140	N/A	0.5	160	N/A	1
PEAV45V	1R31A40517	2002	4	5R55E	PN-150/151 SOHC	3.55	140	N/A	0.5	150	N/A	1
PEAV46X	1R31C40617	2002	4	5R55E	PN-160/151 SOHC	3.55/3.73/4.10	140	N/A	0.5	160	N/A	1
PEAV45Y	1R32C40617	2002	4	M5	PN-150/151 SOHC	3.55/3.73/4.10	140	N/A	0.5	150	N/A	1
PEAV45Z	1R32B40517	2002	4	M5	PN-160/161 SOHC	3.55/3.73/4.10	140	N/A	0.5	160	N/A	1
PEAV9F5	1R31AF0512	2001	3	5R55E	PN-160/PN-151 FFV	3.73	140	N/A	3	160	N/A	10
PEAV9S2	1U71PS0612	2001 & 2002	4	5R55E	U207 USPB & U207 USPB FFV	Undef	140	N/A	0.5	150	N/A	1
PEAW049	1S11A40510	2002 & 2001	4	5R55E	P207 Cat. Opt. & P207 SOHC & U207 SOHC	Undef	140	N/A	0.5	135	N/A	1
PEAW0G9	1U72AG0506	2002	4	M5	U207	Undef	140	N/A	0.5	150	N/A	1
PEAW0GY	1U71AG0510	2002 & 2001	4	5R55E	U207	Undef	140	N/A	0.5	135	N/A	1
PEAW0GZ	1U71AG0510	2002 & 2001	4	5R55E	U207	Undef	140	N/A	0.5	135	N/A	1
PEAW142	1S12A40508	2002	4	M5	P207 SOHC & U207 SOHC	Undef	140	N/A	0.5	150	N/A	1
PEAW1G3	1U72AG0508	2002	4	M5	U207	Undef	140	N/A	0.5	150	N/A	1
PLA006M	6NEA-AB Y	2000	4	Undef	UN150 P8 SOHC FFV	3.55	190	N/A	4	190	N/A	90
PLA0485	6NEA-AB B	2000	4	Undef	UN150 P8 SOHC FFV	3.55	190	N/A	4	190	N/A	90
PRAR325	1R32B20512	2002 & 2001	2.3	M5	PN-160/PN-151 & PN160/51 2001.25	4.1	140	N/A	5	135	N/A	5
PRAR32X	1R32B20M12	2002 & 2001	2.3	M5	PN-150/PN-151 & PN150/51 2001.25	Undef	140	N/A	5	195	N/A	5
PRAR32Y	1R32A20M12	2002 & 2001	2.3	M5	PN-160/PN-151 & PN150/51 2001.25	3.73	140	N/A	5	135	N/A	5
PRAR32Z	1R32A20512	2002 & 2001	2.3	M5	PN-160/PN-151 & PN150/51 2001.25	3.73	140	N/A	5	135	N/A	5
PRCD026	3R32A20M00	2003	2.3	M5	PN-150/PN-151	3.73	140	N/A	5	135	N/A	5
PRCD02Y	3R32B20M00	2003	2.3	M5	PN-150/PN-151	Undef	140	N/A	5	135	N/A	5
PYAE1F7	2S11AF0506	2002	4	5R55E	P207 FFV	Undef	140	N/A	0.5	150	N/A	1
PYAF1F4	2R31AF0500	2002	3	5R55E	PN-160/PN-151 FFV	3.73	140	N/A	3	150	N/A	10

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	RATCH_MN	RATCH_MIN_A	RATDIFF	RATKAM_MIN	RATKAM_MIN_A	DTPM_AX
PYAF1FJ	2R31AF0505	2002	3	5R55E	PN-150/PN-151 FFV	3.73	140	N/A	3	150	N/A	10
PYAF245	2S12A40505	2002	4	M5	P207 SOHC 2002.5	Undef	140	N/A	0.5	150	N/A	1
PYAF246	2S11A40505	2002	4	5R55E	P207 SOHC 2002.5	Undef	140	N/A	0.5	150	N/A	1
PYAF2G2	2U72AG0M05	2002	4	M5	U207 2002.5	Undef	140	N/A	0.5	150	N/A	1
PYAF2G6	2U72AG0505	2002	4	M5	U207 2002.5	Undef	140	N/A	0.5	150	N/A	1
PYAF2G8	2U71AG0505	2002	4	5R56E	U207 2002.5	Undef	140	N/A	0.5	150	N/A	1
PYAF2GZ	2U71AG0M05	2002	4	5R56E	U207 2002.5	Undef	140	N/A	0.5	150	N/A	1
PYBD23H	3R31C30500	2003	3	5R44E	PN-150 ACCRO	3.73	140	N/A	3	138	N/A	10
PYBD24D	3R31C40505	2003	4	5R56E	PN-150/151 SOHC	3.55/3.73/4.10	140	N/A	0.5	138	N/A	1
PYBD24E	3S11B40500	2003	4	5R56E	P207 ACCRO	Undef	140	N/A	0.5	138	N/A	1
PYBD24F	3R31A40505	2003	4	5R56E	PN-150/151 SOHC	3.55	140	N/A	0.5	138	N/A	1
PYBD24K	3S11A40505	2003	4	5R55E	P207 SOHC	Undef	140	N/A	0.5	138	N/A	1
PYBD24R	3S12A40505	2003	4	M5	P207 SOHC	Undef	140	N/A	0.5	138	N/A	1
PYBD24T	3R32C40505	2003	4	M5	PN-150/151 SOHC	3.55/3.73/4.10	140	N/A	0.5	135	N/A	1
PYBD24U	3R32B40505	2003	4	M5	PN-150/151 SOHC	3.55/3.73/4.10	140	N/A	0.5	135	N/A	1
PYBD24V	3R32A40505	2003	4	M5	PN-150/151 SOHC	3.55	140	N/A	0.5	135	N/A	1
PYBD24W	3R31B40505	2003	4	5R55E	PN-150/151 SOHC	3.55/3.73/4.10	140	N/A	0.5	138	N/A	1
PYBD2D3	3R32D40500	2003	4	M5	PN-150 ACCRO	3.55	140	N/A	0.5	135	N/A	1
PYBD2D4	3R31D40500	2003	4	5R55E	PN-150 ACCRO	3.55	140	N/A	0.5	135	N/A	1
PYBD2E4	3R31E40500	2003	4	5R55E	PN-150 ACCRO	3.55/3.73/4.10	140	N/A	0.5	135	N/A	1
PYBD2F4	3R31F40500	2003	4	5R55E	PN-150 ACCRO	3.55/3.73/4.10	140	N/A	0.5	135	N/A	1
PYBD2GY	3U71B05050	2003	4	5R56E	U207 ACCRO	Undef	140	N/A	0.5	138	N/A	1
PYBD2GZ	3U71AG0505	2003	4	5R56E	U207	Undef	140	N/A	0.5	138	N/A	1
QBAA0AA	0AJ1AZ0A12	2000	2	F4E3	CT120 4V	3.74	100	N/A	30	120	N/A	3
QBAA0AC	0AJ2FZ0A13	2000	2	G5M	CT120 4V	4.1	100	N/A	30	120	N/A	3
QBAA0AW	0AJ2AZ0A12	2000	2	G5M	CT120 4V	4.1	100	N/A	30	120	N/A	3
QBAA0BC	0AJ1AZ0B12	2000	2	F4E3	CT120 4V	3.74	100	N/A	30	120	N/A	3
QBAA0BV	0AJ2FZ0B13	2000	2	G5M	CT120 4V	4.1	100	N/A	30	120	N/A	3
QBAA0BW	0AJ2AZ0B12	2000	2	G5M	CT120 4V	4.1	100	N/A	30	120	N/A	3
QBAC0ZY	1AJ2AZ0505	2001 & 2002	2	G5M	CT120 4V	4.1	100	N/A	30	120	N/A	3
QBAC1Z2	1AJ1AZ0507	2001 & 2002	2	F4E3	CT120 4V	3.74	100	N/A	30	120	N/A	3
QBAC1Z8	2AJ1BZ0515	2002	2	F4E3	CT120 4V CAT OPT	3.74	100	N/A	30	120	N/A	3
QBAC1ZZ	2AJ2BZ0515	2002	2	G5M	CT120 4V CAT OPT	4.1	100	N/A	30	120	N/A	3
QCAA0G3	9EQA-AG A	1999	2	F4E3	ESCORT/TRACER 2V	3.74	134	N/A	4	250	N/A	90
QCAA0G4	9EQM-AG A	1999	2	G5M	ESCORT/TRACER 2V	3.85	134	N/A	4	250	N/A	90
QCAA0GY	9EOM-BG BC	1999	2	MTX75	ESCORT/TRAC 2V LEV	3.85	134	N/A	4	250	N/A	90

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	RATCH_MEN	RATCH_MIN_A	RATDIFF	RATKAM_MIN	RATKAM_MIN_A	DTFM_AX
QCAA0GZ	9EQA-BG A	1999	2	F4E3	ESCORT/TRACER 2V	3.74	134	N/A	4	250	N/A	80
QCAA0H3	9EQA-AH A	1999	2	F4E3	ESCORT/TRACER 2V	3.74	134	N/A	4	250	N/A	90
QCAA1S8	0AJ1A80505	2000	2	F4E3	CT120 2V	3.74	134	N/A	4	250	N/A	90
QCAA1S9	0AJ2A80505	2000	2	G5M	CT120 2V	3.85	134	N/A	4	250	N/A	90
QCAC1S5	1AJ1A90600	2001	2	F4E3	CT120 2V	3.74	134	N/A	4	250	N/A	90
QCAE1S3	2AJ1A90605	2002	2	F4E3	CT120 2V	Undef	134	N/A	4	250	N/A	90
RBAECC9	9LYA-AC F	1999	4.2	4R70W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
RBAECCR	9LYA-BC F	1999	4.2	4R70W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
RBAECDV	9LYA-AD F	1999	4.2	4R70W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
RBAECE9	9LYA-AE F	1999	4.2	4R70W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
RBAECET	9LYA-BE F	1999	4.2	4R70W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
RBAECP8	9LYA-BF F	1999	4.2	4R70W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
RBAECFA	9LYA-AF F	1999	4.2	4R70W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
RBAECG3	9LYA-BG F	1999	4.2	4R70W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
RBAEDAC	9VNM-AA F	1999	4.6	M5	PN102	Undef	100	N/A	4	100	N/A	4
RBAEDAG	9VNM-BA F	1999	4.6	M5	PN102	Undef	100	N/A	4	100	N/A	4
RBAEDBB	9VNA-BB FC	1999	4.6	4R70W	PN98	Undef	100	N/A	4	100	N/A	4
RBAEDBM	9VNM-AB F	1999	4.6	M5	PN102	Undef	100	N/A	4	100	N/A	4
RBAEDBN	9VNM-BB F	1999	4.6	M5	PN102	Undef	100	N/A	4	100	N/A	4
RBAEDCB	9VNM-AC FFB	1999	4.6	M5	PN98	Undef	100	N/A	4	100	N/A	4
RBAEDCB	9LYM-AC C	1999	4.2	M5	PN98	3.31/3.55	100	N/A	7	100	N/A	5
RBAEDCU	9VNM-BC FC	1999	4.6	M5	PN98	Undef	100	N/A	4	100	N/A	4
RBAEDCV	9VNA-BC FC	1999	4.6	4R70W	PN98	Undef	100	N/A	4	100	N/A	4
RBAEDDA	9VNM-AD FFB	1999	4.6	M5	PN98	Undef	100	N/A	4	100	N/A	4
RBAEDDB	9VNA-AD FFB	1999	4.6	4R70W	PN98	Undef	100	N/A	4	100	N/A	4
RBAEDDU	9VNM-BD FC	1999	4.6	M5	PN98	Undef	100	N/A	4	100	N/A	4
RBAEDE8	9VNM-AE BM	1999	4.6	M5	PN98	3.55	100	N/A	4	100	N/A	4
RBAEDEB	9VNA-AE FFB	1999	4.6	4R70W	PN98	Undef	100	N/A	4	100	N/A	4
RBAEDGC	9VNA-BG H	1999	4.6	4R70W	UN93	Undef	100	N/A	4	100	N/A	4
RBAEDGP	9VNA-BG H	1999	4.6	4R70W	UN93	Undef	100	N/A	4	100	N/A	4
RBAEDHB	9LYA-AH CM	1999	4.2	4R70W	PN98	3.55	100	N/A	7	100	N/A	5
RBAEDJ7	9VNA-AJ BM	1999	4.6	4R70W	PN98	3.55	100	N/A	4	100	N/A	4
RBAEDN9	9VNA-BN CC	1999	4.6	Undef	PN102	Undef	100	N/A	4	100	N/A	4
RBAEDPB	9VNA-AP CF	1999	4.6	Undef	PN102	Undef	100	N/A	4	100	N/A	4
RBAEEA5	9LYM-AA GB	1999	4.2	M5	PN98	Undef	100	N/A	7	100	N/A	5
RBAEEA8	9LYA-AA GFB	1999	4.2	4R70W	PN98	Undef	100	N/A	7	100	N/A	5
RBAEEAY	9LYM-BA GC	1999	4.2	M5	PN98	Undef	100	N/A	7	100	N/A	5
RBAEEAZ	9LYA-BA GC	1999	4.2	4R70W	PN98	Undef	100	N/A	7	100	N/A	5
RBAEEB5	9LYA-AB GFB	1999	4.2	4R70W	PN98	Undef	100	N/A	7	100	N/A	5
RBAEEBX	9LYM-BB GC	1999	4.2	M5	PN98	Undef	100	N/A	7	100	N/A	5
RBAEEBY	9LYA-BB GC	1999	4.2	4R70W	PN98	Undef	100	N/A	7	100	N/A	5
RBAEEBZ	9LYM-AB GFB	1999	4.2	M5	PN98	Undef	100	N/A	7	100	N/A	5
RDABCHZ	9VZA-AH FFM	1999	5.4	4R70W	ECONOLINE	Undef	100	N/A	5	100	N/A	90
RDABCLZ	9VZA-BL FC	1999	5.4	4R70W	ECONOLINE	Undef	100	N/A	5	100	N/A	90

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	RATCH_MIN	RATCH_MIN_A	RATDIFF	RATKAM_MIN	RATKAM_MIN_A	DTPM_AX
RDABDC4	9VZA-AC GFB	1999	5.4	4R70W	PN96	Undef	100	N/A	5	160	N/A	10
RDABDD4	9VZA-AD HFB	1999	5.4	4R70W	PN96	Undef	100	N/A	5	150	N/A	10
READ0A7	9VAA-BA J	2001 & 2000 & 1998	5.4	4R70W	UN-150 & UN-150 CFF/LEV	3.73	150	N/A	2	180	N/A	80
RFAH5EG	0E414E0810	2000	5.4	4R70W	ECONOLINE	Undef	100	N/A	4	100	N/A	8
RFAH6D7	0E418DQA10	2000	4.6	4R70W	ECONOLINE	Undef	100	N/A	4	100	N/A	8
RFAH8E7	0E418E0B10	2000	4.6	4R70W	ECONOLINE	Undef	100	N/A	4	100	N/A	8
RGAF2GD	1FB1GP0G10	2001	4.6	4R70W	FORD/MERCURY	3.08	100	N/A	30	250	N/A	10
RGAF2GF	1FB1GX0G10	2001	4.6	4R70W	FORD/MERCURY	3.08	100	N/A	30	250	N/A	10
RGAF2GZ	1VC1TX0G10	2001	4.6	4R70W	LINC.TOWN/CAR	3.08	100	N/A	30	250	N/A	10
RGAF2PX	2FB1UP0G00	2002	4.6	4R70W	FORD/MERCURY	3.08	100	N/A	30	250	N/A	10
RGAF2XH	2FB1UX0G00	2002	4.6	4R70W	FORD/MERCURY	3.08	100	N/A	30	250	N/A	10
RHAG7A5	0F514A0A08	2000	5.4	4R70W	PN96	Undef	100	N/A	5	160	N/A	4
RHAG7A6	0F518A0A08	2000	4.6	4R70W	PN96	Undef	100	N/A	4	100	N/A	4
RHAG7A9	0F528CA08	2000	4.6	M5	PN96	Undef	100	N/A	4	100	N/A	4
RHAG7B5	0F518B0A08	2000	4.6	4R70W	PN96	Undef	100	N/A	4	100	N/A	4
RHAG7HC	0F528HA08	2000	4.6	M5	PN96	Undef	100	N/A	4	100	N/A	4
RHAG7N5	0F514NA08	2000	5.4	4R70W	PN96	Undef	100	N/A	5	160	N/A	4
RHAGBCC	0B318C0511	2000	4.6	4R70W	UN93	Undef	100	N/A	4	100	N/A	4
RHAGBD9	0F518DB11	2000	4.6	4R70W	PN96	Undef	100	N/A	4	100	N/A	4
RHAGBEA	0F518EB11	2000	4.6	4R70W	PN96	Undef	100	N/A	4	100	N/A	4
RHAGBEZ	0F514EB13	2000	5.4	4R70W	PN96	Undef	100	N/A	5	160	N/A	4
RHAGBFN	0F514FA12	2000	5.4	Undef	PN96	Undef	100	N/A	5	150	N/A	4
RHAGBJ7	0F528JB11	2000	4.6	M5	PN96	Undef	100	N/A	4	100	N/A	4
RHAGBK8	0F528KB11	2000	4.6	M5	PN96	Undef	100	N/A	4	100	N/A	4
RHAGBBI	0F518MA11	2000	4.6	4R70W	PN96	Undef	100	N/A	4	100	N/A	4
RHAGBNH	0F518NA11	2000	4.6	4R70W	PN96	Undef	100	N/A	4	100	N/A	4
RHAGBPE	0F528PA11	2000	4.6	M5	PN96	Undef	100	N/A	4	100	N/A	4
RHAGBZF	0F528QA11	2000	4.6	M5	PN96	Undef	100	N/A	4	100	N/A	4
RIAJ2E3	1E414E0610	2001	5.4	4R70W	ECONOLINE	Undef	100	N/A	4	100	N/A	8
RKAP1E5	3B714E0500	2003	5.4	4R70W	U222 2V ACCRD	Undef	140	N/A	5	135	N/A	5
RNAH2D7	1F512D0610	2001	4.2	4R70W	PN96	Undef	150	N/A	7	170	N/A	5
RNAH2DZ	1E412DDA10	2001	4.2	4R70W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
RNAH2E7	1E412EDA10	2001	4.2	4R70W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
RNAH2F7	1E412FDA10	2001	4.2	4R70W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
RNAH2G7	1E412GDA10	2001	4.2	4R70W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
RNAH2H7	1E412H0B10	2001	4.2	4R70W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
RNAH2J7	1E412J0B10	2001	4.2	4R70W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
RNAH2K7	1E412K0B10	2001	4.2	4R70W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
RNAH2L7	1E412L0B10	2001	4.2	4R70W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
ROAF7A7	0F512A0A08	2000	4.2	4R70W	PN96	Undef	100	N/A	7	100	N/A	5
ROAF7B7	0F512B0A08	2000	4.2	4R70W	PN96	Undef	100	N/A	7	100	N/A	5
ROAF7C7	0F512C0B08	2000	4.2	4R70W	PN96	Undef	100	N/A	7	100	N/A	5

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	RATCH_MIN	RATCH_MIN_A	RATDIFF	RATKAM_MIN	RATKAM_MIN_A	DTPM_AX
ROAF7D2	0E412D0A07	2000	4.2	4R070W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
ROAF7D7	0F512D0B06	2000	4.2	4R70W	PN98	Undef	100	N/A	7	100	N/A	5
ROAF7E2	0E412E0A07	2000	4.2	4R070W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
ROAF7E7	0F822E0A07	2000	4.2	M5	PN98	Undef	100	N/A	7	100	N/A	5
ROAF7F8	0F522F0A07	2000	4.2	M5	PN98	Undef	100	N/A	7	100	N/A	5
ROAF7FZ	0E412F0A07	2000	4.2	4R070W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
ROAF7G8	0F522G0B07	2000	4.2	M5	PN98	Undef	100	N/A	7	100	N/A	5
ROAF7QZ	0E412Q0A07	2000	4.2	4R070W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
ROAF7H2	0E412H0B07	2000	4.2	4R070W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
ROAF7H8	0F622H0B07	2000	4.2	M5	PN98	Undef	100	N/A	7	100	N/A	5
ROAF7J4	0E412J0B07	2000	4.2	4R070W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
ROAF7K4	0E412K0B07	2000	4.2	4R070W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
ROAF7L2	0E412L0B07	2000	4.2	4R70W	ECONOLINE	Undef	100	N/A	7	100	N/A	10
RQAD8B3	0VC1FB0G10	2000	4.8	4R70W	LINC.TOWNCAR	3.08	100	N/A	30	250	N/A	10
RQAD8B7	0FB1FB0A11	2000	4.8	4R70W	FORDMERCURY	2.73	100	N/A	30	250	N/A	10
RQAD8B8	0VC1FB0B11	2000	4.8	4R70W	LINC.TOWNCAR	3.08	100	N/A	30	250	N/A	10
RQAD8B9	0FB1FB0G10	2000	4.8	4R70W	FORDMERCURY	3.08	100	N/A	30	250	N/A	10
RQAD8BU	0VC1FB0A11	2000	4.8	4R70W	LINC.TOWNCAR	3.08	100	N/A	30	250	N/A	10
RQAD8BV	0FB1FB0B11	2000	4.8	4R70W	FORDMERCURY	2.73	100	N/A	30	250	N/A	10
RQAD8BW	0FB1FB0A11	2000	4.8	4R70W	FORDMERCURY	2.73	100	N/A	30	250	N/A	10
RQAD8H7	0FB1FH0A11	2000	4.8	4R70W	FORDMERCURY	3.55	100	N/A	30	250	N/A	10
RQAD8H8	0VC1FH0B11	2000	4.8	4R70W	LINC.TOWNCAR	3.55	100	N/A	30	250	N/A	10
RQAD8HW	0FB1FH0B11	2000	4.8	4R70W	FORDMERCURY	3.55	100	N/A	30	250	N/A	10
RQAD8HX	0VC1FH0A11	2000	4.8	4R70W	LINC.TOWNCAR	3.55	100	N/A	30	250	N/A	10
RQAD8P7	0FB1FP0A11	2000	4.8	4R70W	FORDMERCURY	3.27	100	N/A	30	250	N/A	10
RQAD8PZ	0FB1FP0G10	2000	4.8	4R70W	FORDMERCURY	3.27	100	N/A	30	250	N/A	10
RTA1P2	1ZE13P0510	2001	3.8	4R70W	MUSTANG	3.27	150	N/A	6	150	N/A	90
RTA1P3	1ZE23P0A10	2001	3.8	T5	MUSTANG	3.27	150	N/A	6	150	N/A	90
RTA1PY	1ZE13P0A10	2001	3.8	4R70W	MUSTANG	3.27	150	N/A	6	150	N/A	90
RTA1PZ	1ZE23P0510	2001	3.8	T5	MUSTANG	3.27	150	N/A	6	150	N/A	90
RTAJ0F4	2ZE2MF0500	2002 & 2003	3.8	T45	MUSTANG GS	3.27	150	N/A	5	150	N/A	90
RTAJ0FZ	2ZE1MF0600	2002 & 2003	3.8	4R070W	MUSTANG GS	3.27	150	N/A	5	150	N/A	90
RTAJ0F4	2ZE2CF0A05	2002 & 2003	3.8	T5	MUSTANG Cost Save & MUSTANG V6 (ACCRO)	3.27	150	N/A	5	150	N/A	90
RTAJ0FZ	2ZE1CF0A05	2002 & 2003	3.8	4R070W	MUSTANG Cost Save & MUSTANG V8 (ACCRO)	27-Mar	150	N/A	5	150	N/A	90
RVAF3C8	1ZE24C0607	2001	4.8	TR9850	MUSTANG COBRIA	3.27	100	N/A	30	150	N/A	20
RVAFAT6	1ZE1GT0510	2001	4.8	4R70W	MUSTANG GT	3.27	150	N/A	2	150	N/A	90
RVAFAT8	1ZE1GT0510	2001	4.8	4R70W	MUSTANG GT	3.27	150	N/A	2	150	N/A	90
RWA11CL	1B316C0505	2001	4.8	4R70W	2001.5 UN93 Cat Opt	Undef	100	N/A	4	100	N/A	4
RWA12D7	1F516D0B12	2001	4.8	4R70W	2001.5 PN98 Cat Opt 5.4PF5	Undef	100	N/A	4	100	N/A	4
RWA12DC	1B316D0510	2001	4.8	4R70W	2001.5 UN93 Cat Opt	Undef	100	N/A	4	100	N/A	4



Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	RATCH_MIN	RATCH_MIN_A	RATDIFF	RATKAM_MIN	RATKAM_MIN_A	DTPM_AX
RWAI2DH	2B316D0505	2002	4.6	4R70W	2001.5 UN93 Cat Opt & UN93 2V	Undef	100	N/A	4	100	N/A	4
RWAI2E6	1F514E0B11	2001	5.4	4R70W	PN98	Undef	100	N/A	5	150	N/A	4
RWAI2E7	1F516E0B12	2001	4.6	4R70W	2001.5 PN98 Cat Opt 5.4PF5	Undef	100	N/A	4	100	N/A	4
RWAI2EZ	1F514E0B11	2001	5.4	4R70W	PN98	Undef	100	N/A	5	150	N/A	4
RWAI2F5	1F514F0A11	2001	5.4	4R70W	PN98	Undef	100	N/A	5	150	N/A	4
RWAI2F7	1F514F0A11	2001	5.4	4R70W	PN98	Undef	100	N/A	5	150	N/A	4
RWAI2M7	1F516M0A12	2001	4.6	4R70W	2001.5 PN98 Cat Opt 5.4PF5	Undef	100	N/A	4	100	N/A	4
RWAI2N7	1F516N0A12	2001	4.6	4R70W	2001.5 PN98 Cat Opt 5.4PF5	Undef	100	N/A	4	100	N/A	4
RYAF0T3	2ZE1GT0508	2002	4.6	4R070W	MUSTANG GT	3.27	150	N/A	2	150	N/A	90
RYAF1C8	3ZE1AC0505	2003	4.6	4R70W	MUSTANG GT (ACCRO)	3.27	150	N/A	2	140	N/A	90
RYAF1CZ	3ZE2AC0505	2003	4.6	TR9850	MUSTANG GT (ACCRO)	3.27	150	N/A	2	140	N/A	90
RYBE1C9	2ZE28G0508	2003	4.6	TR9850	MUSTANG TERMINATOR	3.58	138	N/A	90	136	N/A	20
RZAO2HZ	3VC1UH0G10	2003	4.6	4R70W	LINC.TOWNCAR	3.55	100	N/A	30	250	N/A	10
RZAO2PZ	3FB1UP0G10	2003	4.6	4R70W	FORD/MERCURY	2.73	100	N/A	30	250	N/A	10
RZAO2X9	3FB1UX0G10	2003	4.6	4R70W	FORD/MERCURY	2.73	100	N/A	30	250	N/A	10
RZAO2XZ	3VC1UX0G10	2003	4.6	4R70W	LINC.TOWNCAR	3.27	100	N/A	80	250	N/A	10
SAAR683	0AK1590513	2000	2	FN	FOCUS C170 SPI	3.688	134	N/A	4	250	N/A	90
SAAR6Z5	0AK15Z0512	2000	2	FN	FOCUS C170 ZETEC	3.907	100	N/A	4	250	N/A	3
SAAR6ZB	0AK15Z0512	2000	2	FN	FOCUS C170 ZETEC	3.907	100	N/A	4	250	N/A	3
SBAF6S7	1AK1A80A16	2002 & 2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT	3.733	134	N/A	4	250	N/A	90
SBAF68X	1AK1A80510	2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT	3.688	134	N/A	4	250	N/A	90
SBAF68Y	1AK1A80A10	2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT	3.688	134	N/A	4	250	N/A	90
SBAF6Z3	1AK1AZ0510	2001	2	4F27E	FOCUS C170 ZETEC	3.907	100	N/A	4	250	N/A	3
SBAF6Z5	2AK1AZ0M00	2002	2	Undef	FOCUS MEXICO	Undef	100	N/A	4	250	N/A	3
SBAF6ZW	1AK1AZ0A10	2001	2	4F27E	FOCUS C170 ZETEC	3.907	100	N/A	4	250	N/A	3
SBAF6ZK	1AK1AZ0510	2001	2	4F27E	FOCUS C170 ZETEC	3.907	100	N/A	4	250	N/A	3
SBAF6ZY	1AK1AZ0A16	2002 & 2001	2	4F27E	FOCUS C170 ZETEC	3.956	100	N/A	4	250	N/A	3
SBAF6ZZ	1AK1AZ0A10	2001	2	4F27E	FOCUS C170 ZETEC	3.907	100	N/A	4	250	N/A	3
SBAF784	1AK1A80517	2002	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT	3.733	134	N/A	4	250	N/A	90
SBAF786	2AK1B80A10	2002	2	4F27E	FOCUS SPI CAT OPT	3.683	134	N/A	4	250	N/A	90
SBAF7Z4	1AK1AZ0517	2002	2	4F27E	FOCUS C170 ZETEC	3.958	100	N/A	4	250	N/A	3
SBAF7Z6	2AK1BZ0A10	2002	2	4F27E	FOCUS ZETEC CAT OPT	3.904	100	N/A	4	250	N/A	3
SBDC2S9	3AK1AS0506	2003	2	4F27E	C170 SPI (ACCRO)	3.733	138	N/A	4	136	N/A	90
SBDC2ZA	3AK1AZ0505	2003	2	4F27E	C170 ZETEC (ACCRO)	3.958	138	N/A	4	136	N/A	3

Created by: PC-CFR, Version, 6.0-1 on: 9/11/2002 at 4:00:55 PM  
Model Year - 2000 2001 2002 2003  
All Engine sizes  
All Transmissions  
All Vehicles

Parameters

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SPK\_LOLD\_STP

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	SPK_LOAD_STP
BVAJAS6	0A31A90E10	2000	3.8	AX4S	WIN126	3.56	0.13984839
BVAJAS7	0A31C90B10	2000	3.8	AX4S	WIN126 ULEV & WIN126/ULEV	3.56	0.13984839
BVAJAS9	0A31AB0B05	2000	3.8	AX4S	WIN126 COST SAVE	3.56	0.13984839
BVAJASG	0A31CS0B10	2000	3.8	AX4S	WIN126 ULEV & WIN126/ULEV	3.56	0.13984839
BVAJASH	0A31AS0B05	2000	3.8	AX4S	WIN126 COST SAVE	3.56	0.13984839
BVAJASS	0A31A90G10	2000	3.8	AX4S	WIN126	3.56	0.13984839
BVAJAST	0A31BS0B10	2000	3.8	AX4S	WIN126	3.56	0.13984839
BVAJASZ	0A31BS0B10	2000	3.8	AX4S	WIN126	3.56	0.13984839
BWAK3N2	1DD14N0510	2001	3	4F50N	TAU/SABLE 4V	3.98	0.009765625
BWAK4NB	1DD12N0510	2001	3	4F50N	TAU/SABLE 2V	3.77	0
BWAK48A	1DD12S0510	2001	3	AX4S	TAU/SABLE 2V	3.77	0
BWAK7N2	1DD1FN0512	2001	3	4F50N	D186 - FFV Ethanol	3.77	0.00976563
BWAK79Z	1DD1F80512	2001	3	AX4S	D186 - FFV Ethanol	3.77	0.00976563
EXAN85Z	0DD13N0505	2000	3	AX4N	D186 CS Cat - 2V Calif & D186 COST SAVE - CALIF & D186 CSCat - 2V CALIF	3.77	0
EXAN86P	0DD12N0B11	2000	3	AX4N	TAU/SABLE 2V	3.77	0
EXAN8WJ	0DD13N0A05	2000	3	AX4N	D186 CS Cat - 2V Fed	3.77	0
EXAN9NK	0DD12N0A10	2000	3	AX4N	TAU/SABLE 2V	3.77	0
EXAN89P	0DD12S0A10	2000	3	AX4S	TAU/SABLE 2V	3.77	0
EXAN89Z	0DD13S0A05	2000	3	AX4S	D186 CS Cat - 2V Fed	3.77	0
EXANB5H	0DD16N0506	2000	3	AX4N	D186 CS Cat - 4V Calif & D186 CSCat - Cal 4V & D186 CSCat - 2V CALIF & D186 CS CAT CALIF 4V & D186 COST SAVE CALIF 4V & D186 COST SAVE - CALIF	3.98	0.009765625
EXANB5M	0DD16N0506	2000	3	AX4N	D186 CS Cat - 4V Calif & D186 COST SAVE CALIF 4V & D186 CSCat - Cal 4V & D186 CSCat - 2V CALIF & D186 CS CAT CALIF 4V & D186 COST SAVE - CALIF	3.98	0.009765625
EXANBAJ	0DD16N0A05	2000	3	AX4N	D186 CS Cat - 4V Fed & D186 CS CAT FED 4V & D186 CSCat Fed 4V	3.98	0.009765625
EXANBAK	0DD14N0A06	2000	3	AX4N	TAU/SABLE 4V	3.98	0.009765625
EXANBAN	0DD14N0A06	2000	3	AX4N	TAU/SABLE 4V	3.98	0.009765625
EXANBAZ	0DD15N0A05	2000	3	AX4N	D186 CS Cat - 4V Fed & D186 CSCat Fed 4V & D186 CS CAT FED 4V	3.98	0.009765625
EXANBBL	0DD14N0B06	2000	3	AX4N	TAU/SABLE 4V	3.98	0.009765625
EXANBBZ	0DD14N0B06	2000	3	AX4N	TAU/SABLE 4V	3.98	0.009765625
EXANBDM	0DD1SD0508	2000	3	AX4S	D186 - FFV Ethanol	3.77	0
EXANSDY	0DD1ND0506	2000	3	AX4N	D186 - FFV W/AX4N & D186-FFV W/AX4N	3.77	0
CSAH1G4	1FB1NG0505	2001	4.6	4R70W	FORD Nat. Gas	2.73	N/A
CSAH1GZ	2FB1NG0505	2002	4.6	4R70W	FORD Nat. Gas	2.73	N/A
CSAH1V4	9VNA-AV A	2001 & 2000	4.6	4R70W	FORD Nat. Gas	2.73	N/A
CVAE7F8	0ZE2CF0510	2000	4.6	T45	MUSTANG COBRA	3.27	0
CVAE7R5	0ZE2CR0508	2000	6.4	Undef	MUSTANG COBRA R	Undef	0
CVAF1C9	9VXA-AAC	2000	4.6	4R70W	MUSTANG GT	3.27	0
CVAF1CX	9VXA-ABC	2000	4.6	4R70W	MUSTANG GT	3.27	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	SPK_LOAD_STP
CVBA0A2	9LMA-BAB	2000	3.8	4R70W	MUSTANG	3.27	0.5
CVBA0A4	9LMA-BAB	2000	3.8	4R70W	MUSTANG	3.27	0.6
CVBA0BX	9LMA-ABB	2000	3.8	4R70W	MUSTANG	3.27	0.5
CVBA0BZ	9LMA-ABB	2000	3.8	4R70W	MUSTANG	3.27	0.5
CVBA2B3	9LMM-BBC	2000	3.8	Undef	MUSTANG	3.08	0.5
CVBA2B5	9LMM-BBC	2000	3.8	Undef	MUSTANG	3.08	0.5
CVBA2B6	9LMM-ABC	2000	3.8	Undef	MUSTANG	3.08	0.5
CVBA2BZ	9LMM-ABC	2000	3.8	Undef	MUSTANG	3.08	0.5
DOAV53S	0M11C30512	2002	3	CD4E	U204	Undef	0
DOAV53Y	0M11B30512	2002	3	CD4E	U204	Undef	0
DOAV533	3M11B30511	2003	3	C4DE	U204	Undef	0
DOAV536	3M11A30511	2003	3	C4DE	U204	Undef	0
DVAN923	0M12A20512	2001 & 2002	2	G5M	U204	Undef	0.13964839
DVAN924	0M12B20512	2001 & 2002	2	G5M	U204	Undef	0.13964839
DVAN92U	0M12A20512	2001 & 2002	2	G6M	U204	Undef	0.13964839
DVAN92Y	0M11A20513	2001 & 2002	2	CD4E	U204	Undef	0.13964839
DVANA2Z	0M11A20520	2002	2	Undef	U204	Undef	0.13964839
FCALDCY	8VWA-JCD	2001 & 2000	4.6	4F50N & AX4N	CONTINENTAL	3.58	0.099609382
FDBA067	1A31A80G12	2001	3.8	4F50N	WIN126	3.58	0.13964839
FDBA0SU	1A31A80C13	2001	3.8	Undef	WIN126	Undef	0.13964839
FDBA06X	1A31A80G12	2001	3.8	4F50N	WIN126	3.58	0.13964839
FDBC066	1A31A80512	2001	3.8	4F50N	WIN126	3.58	0.13964839
FHAF8N2	2DD13ND511	2002	3	4F50N	D186 2V Pt-Rh CAT OPT	3.77	0.009765625
FHAF8N3	3DD1JN0500	2003	3	4F50N	D186 2V & D186 2V Pt-Rh CAT OPT	3.77	0.009765625
FHAF8N4	2DD14ND511	2002	3	4F50N	D186 4V & TAU/SABLE 4V	3.98	0.009765625
FHAF8N5	3DD12N0500	2003	3	4F50N	D186 - FFV Ethanol	3.77	0.009765625
FHAF8NW	2DD15ND500	2002	3	4F50N	D186 4V Pt-Rh CAT OPT	3.98	0.009765625
FHAF8NZ	2DD12ND511	2002	3	4F50N	TAU/SABLE 2V	3.77	0.009765625
FHAF8S2	2DD13S0511	2002	3	AX4S	D186 2V Pt-Rh CAT OPT	3.77	0.009765625
FHAF8S3	3DD1J60500	2003	3	AX4S	D186 2V & D186 2V Pt-Rh CAT OPT	3.77	0.009765625
FHAF8S5	3DD1ZS0500	2003	3	AX4S	D186 - FFV Ethanol	3.77	0.009765625
FHAF8F2	2DD13F0511	2002	3	Undef	D186 FFV Pt-Rh CAT OPT	Undef	0.009765625
FHAF8S3	2DD1F80507	2002	3	AX4S	D186 - FFV Ethanol	3.77	0.009765625
FHAF8V6	2DD13V0511	2002	3	Undef	D186 FFV Pt-Rh CAT OPT	Undef	0.009765625
FJAE0A8	2A31CA0508	2002	3.8	4F50N	WIN126	3.58	0.13964839
FJAE0CZ	2A31ZC0510	2002	3.8	4F50N	2002.5 WIN126 Cat Opt	3.58	0.13964839
JAAS8B3	9WHA-ABK	2000	3.9	5R55W	DEW98	3.58	0
JAAS8B8	9WHA-BEK	2000	3.9	5R56W	DEW98	3.51	0
JAAS8B9	9LDA-BBH	2001 & 2000	3	5R58N & 5R56W	DEW98	3.07 & 3.58	0
JAAS8N2	9LDA-ENE	2000	3	Undef	DEW98	Undef	0
JAAS7A3	9WHA-AAG	2000	3.9	Undef	DEW98	3.51	0
JAAS7A7	9WHA-EAJ	2000	3.9	5R58N	DEW98	3.58	0
JAAS7A8	9WHA-BAH	2000	3.9	5R55W	DEW98	3.51	0
JAAS7C9	9LDA-BCG	2000	3	5R55W	DEW98	3.58	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	SPK_LOAD_STP
JAA57S9	9LDA-E9G	2000	3	5R55W	DEW98	3.58	0
JAA76A2	9LDA-AAH	2000	3	6R55N	DEW98	3.58	0
JAAT6A3	9LDA-ACG	2000	3	5R55W	DEW98	3.58	0
JBAP9A5	9LDM-AAE	2000	3	M5GR	DEW98	3.07	0
JBAS9A2	9LDM-EAG	2000	3	M5GR	DEW98	3.07	0
JBASSCZ	9LDM-ACG	2000 & 2001	3	M5GR	DEW98 & DEW98 MT	3.07	0
JBAT568	1LQ28S0512	2001	3	GERTAG	DEW98 MT	3.07	0
JBAT567	1LQ28S0511	2001	3	GERTAG	DEW98 MT	3.07	0
JDBC1M8	2SR12M0505	2002	3.8	6R55N	M205	3.58	0
JDBD4B6	2LQ17B0510	2002	3	5R55N	DEW V8 .75 O/D	3.58	0
JDBD4BZ	2LQ16B0512	2002	3	5R55S	DEW98	3.58	0
JDBD45V	2LQ16B0512	2002	3	6R55S	DEW98	3.58	0
JDBD45W	2LQ17S0510	2002	3	6R55N	DEW V8 .75 O/D	3.58	0
JEATEF8	1U51AF0B15	2002	4	6R55W	U152 FFV 2001.5	3.27/3.55	0.025
JEATE08	1U51BG0A15	2002	4	5R55W	U152 2001.5	3.27/3.55	0.025
JEATEGW	1U51AG0M15	2002	4	5R55W	U152 2001.5	3.27/3.55	0.025
JEATEGY	1U51AG0M15	2002	4	5R55W	U152 2001.5	3.27/3.55	0.025
JEATFF8	1U51AF0B21	2002	4	6R55W	U152 FFV 2001.5	3.27/3.55	0.025
JEATFG8	1U51BG0A21	2002	4	5R55W	U152 2001.5	3.27/3.55	0.025
JEATFGX	1U51AG0M21	2002	4	5R55W	U152 2001.5	3.27/3.55	0.025
JEATFGY	1U51BG0A21	2002	4	6R55W	U152 2001.5	3.27/3.55	0.025
JEAU153	1U51A50M16	2002	4.8	5R55W	U152 2001.5	3.27/3.55	0.001
JEAU158	1U51A50B18	2002	4.8	5R55W	U152 2001.5	3.27/3.55	0.001
JEAU262	1U51A50M10	2002	4.8	5R55W	U152 2001.5	3.27/3.55	0.001
JEAL259	1U51A50B10	2002	4.8	5R55W	U152 2001.5	3.27/3.55	0.001
JEBFEF4	2U51AF0509	2002	4	5R55S	U152 FFV	Undef	0.025
JEBFEG4	2U51BG0A08	2002	4	6R55S	U162	Undef	0.025
JEBFEGZ	2U51AG0M08	2002	4	6R55S	U152	Undef	0.025
JECE453	3U51A50508	2003	4.8	5R55S	U152	3.27/3.55	0.05000001
JECE455	3U51A50M08	2003	4.8	5R55S	U152	3.27/3.55	0.05000001
JECEFF2	3U51AF0506	2003	4	6R55S	U162 FFV	3.27/3.55	0.025
JECEFF8	3U51BF0505	2003	4	6R55S	U162 FFV ACCRO	3.27/3.55	0.025
JECEFG2	3U51AG0508	2003	4	5R55S	U152	3.27/3.55	0.025
JECEFG7	3U51BG0505	2003	4	5R55S	U152 ACCRO	3.27/3.55	0.025
JECEFGY	3U51BG0M05	2003	4	6R55S	U162 ACCRO	3.27/3.55	0.025
JECEFGZ	3U51AG0M08	2003	4	5R55S	U152	3.27/3.55	0.025
JFA05G9	1U52AG0B11	2002	4	M5	U152 2001.5	3.27/3.55	0
JFA06G5	1U52AG0B15	2002	4	M5	U152 2001.5	3.27/3.55	0
JFB06G2	2U52AG0508	2002	4	M5	U152	3.27/3.55	0
JIAN1DZ	3LQ16B0507	2003	3	5R55S	DEWV8	3.58	0.25
JJBD3S7	2LQ28S0512	2002	3	5R55S	DEW98	3.07	0
JKAPE63	2U81A50507	2003	4.8	5R55S	U231 4V	Undef	0.001
JKAPH56	3U81A50806	2003	4.8	5R55S	U231 4V ACCRO	Undef	0.001
KAAB9VU	8EQA-MV C	2000	2	CD4E	CONTOURMYSTIQUE	4.23	0.099608382
KAAB9V3	8EQA-BV F	2000	2	CD4E	CONTOURMYSTIQUE	3.92	0.099608382

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	SPK_LOAD_STP
KAAKAVU	9EQM-AV F	2000	2	MTX75	CONTOUR/MYSTIQUE	3.82	0.099809382
KAAKAVV	9EQA-AV F	2000	2	CD4E	CONTOUR/MYSTIQUE	3.82	0.099809382
KAAKAVW	9EQM-AV F	2000	2	MTX75	CONTOUR/MYSTIQUE	3.82	0.099809382
KAAKAVX	9EQM-BV F	2000	2	MTX75	CONTOUR/MYSTIQUE	3.82	0.099809382
KAAKAZ2	0NB1FZ0A05	2000	2	CD4E	CDW AFOVM	3.82	0.099809382
KAAKAZY	0NB1FZ0B05	2000	2	CD4E	CDW AFOVM	3.82	0.099809382
KBAN7H7	9LCM-EH G	2000	2.8	MTX75	MONDEO/COUGAR ST200	3.81	0.00990625
KBAN7VQ	9LCM-BV H	2000	2.5	MTX75	CDW162/SW164	4.08	0
KBAN7VR	9LCA-BV H	2000	2.5	CD4E	CDW162/SW164	3.77	0
KBAN7WW	9LCA-BW G	2000	2.5	CD4E	COUGAR SW164	3.77	0
KBAN7WX	9LCM-BW G	2000	2.8	MTX	COUGAR SW164	4.08	0
KBAN7X4	9LCM-AXE	2000	2.6	MTX75	CONTOUR SVT	4.08	0
KBAT1DB	1ZN25D0510	2001	2.5	MTX	COUGAR SW164	4.08	0.1503906
KBAT1DC	1ZN27D0510	2001	2.5	MTX	COUGAR SW164	4.08	0.1503906
KBAT1DD	1ZN2AD0510	2001	2.6	MTX	COUGAR SW164	Undef	0.1503906
KBAT1DH	1ZN1AD0510	2001	2.6	CD4E	COUGAR SW164	3.77	0.1503906
KBAT1DN	1ZN1ED0E10	2001	2.5	CD4E	COUGAR SW164	3.77	0.1503906
KBAT1DP	1ZN15D0510	2001	2.5	CD4E	COUGAR SW164	3.77	0.1503906
KBAT1DQ	1ZN2ED0E10	2001	2.5	MTX	COUGAR SW164	Undef	0.1503906
KBAT2D4	2ZN2ED0E00	2002	2.5	MTX	COUGAR SW164	4.08	0.1503906
KBAT2DW	2ZN25D0500	2002	2.6	MTX	COUGAR SW164	4.08	0.1503906
KBAT2DX	2ZN27D0500	2002	2.5	MTX	COUGAR SW164	4.08	0.1503906
KBAT2DY	2ZN2AD0500	2002	2.5	MTX	COUGAR SW164	Undef	0.1503906
KBAL0D3	2ZN1ED0E05	2002	2.5	CD4E	COUGAR SW164	3.77	0.1503906
KBAU0D8	2ZN1AD0505	2002	2.5	CD4E	COUGAR SW164	3.77	0.1503906
KBAU0D7	2ZN15D0505	2002	2.6	CD4E	COUGAR SW164	3.77	0.1503906
KIAB1E2	9EQM-AE DFB	2000	2	MTX75	COUGAR SW164	3.82	0.099809382
KIAB1EZ	9EQM-BE DC	2000	2	MTX75	COUGAR SW164	3.82	0.099809382
KIAB4Z4	0ZN2AZ0510	2001 & 2000	2	MTX75	COUGAR SW164	3.82	0.099809382
KIAC0Z5	2ZN2AZ0500	2002	2	MTX75	COUGAR SW164	3.82	0.099809382
KMAK0S8	0AK25S0512	2000	2	B5	FOCUS C170 SPI	3.81	0
KMAK6ZC	0AK25Z0512	2000	2	MTX75	FOCUS C170 ZETEC	3.82	0.13964839
KRAF5S6	1AK2A90A11	2002 & 2001	2.0 & 3.8	B5	FOCUS C170 SPI & WIN Cat OPT	3.733	0
KRAF5Z4	1AK2AZ0609	2001	2	MTX	FOCUS C170 ZETEC	3.82	0.13964839
KRAF5ZZ	2AK2AZ0M00	2002	2	Undef	FOCUS MEXICO	Undef	0.13964839
KRAF6S4	1AK2AS0512	2002	2.0 & 3.8	B5	FOCUS C170 SPI & WIN Cat OPT	3.733	0
KRAF6S8	2AK2B50A10	2002	2	B5	FOCUS SPI CAT OPT	3.81	0
KRAF6Z4	1AK2AZ0517	2002	2	MTX	FOCUS C170 ZETEC	3.82	0.13964839
KRAF6Z8	2AK2BZ0A10	2002	2	MTX	FOCUS ZETEC CAT OPT	3.82	0.13964839
KRDC2S2	3AK2AS0510	2003	2	B5	C170 SPI (ACCRO)	3.733	0
KRDC2Z2	3AK2AZ0510	2003	2	MTX75	C170 ZETEC (ACCRO)	Undef	0.13964839
MMAF1H8	1E414H0510	2001 & 2002	5.4	4R100	ECONOLINE-NGV	Undef	0
MMAF1HJ	1E418H0B10	2001	6.8	4R100	ECONOLINE	Undef	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	SPK_LOAD_STP
MMAF1J8	1E414J0B05	2001	5.4	4R100	ECONOLINE	Undef	0
MMAF1Q9	1F724Q0M05	2001	5.4	M4	P131	Undef	0
MMAF1X2	1F514X0511	2002 & 2003	5.4	4R100	PN96 2V NGV & PN96 NGV	Undef	0
MMAF1Z6	1E414H0510 & 1E414D0510	2003 & 2002 & 2001	5.4	4R100	ECONOLINE-NGV	Undef	0
MMAHDAB	1F728A0B15	2001	6.8	M5	P131	Undef	0.1503908
MMAHDAD	1F728A0B05	2001	6.8	M5	P131	Undef	0.1503908
MMAHDGR	1F716C0B15	2001	6.8	4R100	P131	Undef	0.1503908
MMAHDGX	1F716C0B10	2001	6.8	4R100	P131	Undef	0.1503908
MMAHDGY	1F717C0B15	2001	6.8	4R100	P131	Undef	0.1503908
MMAHDGZ	1F717C0B10	2001	6.8	4R100	P131	Undef	0.1503908
MMAHDHC	1F714D0B15	2001	5.4	4R100	P131	Undef	0
MMAHDOD	1L116D0B15	2001	6.8	4R100	UW137	Undef	0.1503908
MMAHODI	1L116D0B10	2001	6.8	4R100	UW137	Undef	0.1503908
MMAHODZ	1L114D0B15	2001	5.4	4R100	UW137	Undef	0
MMAHON7	1E418N0510	2001	6.8	4R100	ECONOLINE	Undef	0
MMAHONA	1L116NDA15	2001	6.8	4R100	UW137	Undef	0
MMAHONB	1F714N0B15	2001	5.4	4R100	P131	Undef	0
MMAHONJ	1F717N0515	2001	6.8	4R100	P131	Undef	0
MMAHONS	1L114NDA15	2001	5.4	4R100	UW137	Undef	0
MMAHONT	1F714NDA15	2001	5.4	4R100	P131	Undef	0
MMAHONV	1F718N0515	2001	6.8	4R100	P131	Undef	0
MMAHOP6	1E418P0A10	2001	6.8	4R100	ECONOLINE	Undef	0
MMAHOP7	1F718P0A15	2001	6.8	4R100	P131	Undef	0
MMAHOP9	1F724P0A15	2001	5.4	M5	P131	Undef	0
MMAHOPK	1F717P0A15	2001	6.8	4R100	P131	Undef	0
MMAHDQ8	1E418Q0B10	2001	6.8	4R100	ECONOLINE	Undef	0
MMAHOR7	1E414R0B10	2001	5.4	4R100	ECONOLINE	Undef	0
MMAHOR8	1E418R0B10	2001	6.8	4R100	ECONOLINE	Undef	0
MMAHORL	1F717R0B15	2001	6.8	4R100	P131	Undef	0
MMAHOFX	1F718R0B15	2001	6.8	4R100	P131	Undef	0
MMAHOT7	1F718T0B15	2001	6.8	4R100	P131	Undef	0
MMAHOU5	1F728U0M00	2001	6.8	M5	P131	4.88/5.38	0
MMAHOU6	1F728U0515	2001	6.8	M5	P131	Undef	0
MMAHOU7	1E414U0B10	2001	5.4	4R100	ECONOLINE	Undef	0
MMAHOV7	1F728V0A15	2001	6.8	M5	P131	Undef	0
MMAHOX7	1E414X0510	2001	5.4	4R100	ECONOLINE	Undef	0
MMAHOY7	1E414Y0510	2001	5.4	4R100	ECONOLINE	Undef	0
MNAE0Y5	1F614Y0605	2001	5.4	4R100	PN96 SC	Undef	0.2001953
MPAL4PZ	0F724P0A10	2000	5.4	4R100	P131	Undef	0
MPAL4Q3	0F724Q0M10	2000	5.4	4R100	P131	Undef	0
MPAL6BF	0B314B0511	2000	5.4	4R100	UN93 2V	Undef	0
MPAL6D4	0F714D0B11	2000	5.4	4R100	P131	Undef	0
MPAL6DX	0L114D0B11	2000	5.4	Undef	UW137	Undef	0
MPAL6DY	0F514D0B11	2000	5.4	4R70W	PN96	Undef	0

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MPALB97	0F514GDA11	2000	5.4	4R100	PN98	Undef	0
MPALB17	0F514HDA11	2000	5.4	4R100	PN98	Undef	0
MPALB19	0E414H0511	2000	5.4	Undef	ECONOLINE-NGV	Undef	0
MPAL6J7	0E414J0511	2000	5.4	4R100	ECONOLINE	Undef	0
MPAL6M7	0F514M0B11	2000	5.4	4R100	PN98	Undef	0
MPAL8N4	0F714NDA11	2000	5.4	4R100	P131	Undef	0
MPAL8NA	0E414NDA11	2000	5.4	4R100	ECONOLINE	Undef	0
MPAL8NX	0L114NDA11	2000	5.4	Undef	UW137	Undef	0
MPAL8P8	0E414R0B11	2000	5.4	4R100	ECONOLINE	Undef	0
MPAL8UB	0E414U0B11	2000	5.4	4R100	ECONOLINE	Undef	0
MPAL8X9	0F514X0B10	2000	5.4	4R100	PN102-NGV	Undef	0
MPAL8XC	0E414X0512	2000	5.4	4R100	ECONOLINE	Undef	0
MPAL8YB	0E414Y0512	2000	5.4	4R100	ECONOLINE	Undef	0
MPAM0AG	0F728A0B11	2000	6.8	M5	P131	Undef	0.1503908
MPAM0UB	0F728U0511	2000	6.8	M5	P131	Undef	0
MPAM0V9	0F728VDA11	2000	6.8	M5	P131	Undef	0
MPAM1C4	0F717C0B11	2000	6.8	4R100	P131	Undef	0.1503908
MPAM1CN	0F718C0B11	2000	6.8	4R100	P131	Undef	0.1503908
MPAM1DF	0L118D0B11	2000	6.8	4R100	UW137	Undef	0.1503908
MPAM1HZ	0E418H0B13	2000	6.8	4R100	ECONOLINE	Undef	0
MPAM1N5	0F717N0511	2000	6.8	4R100	P131	Undef	0
MPAM1NU	0F718N0511	2000	6.8	4R100	P131	Undef	0
MPAM1NV	0L118NDA11	2000	6.8	4R100	UW137	Undef	0
MPAM1NY	0E418N0511	2000	6.8	4R100	ECONOLINE	Undef	0
MPAM1P4	0E418PDA11	2000	6.8	4R100	ECONOLINE	Undef	0
MPAM1PX	0F717PDA11	2000	6.8	4R100	P131	Undef	0
MPAM1PZ	0F718PDA11	2000	6.8	4R100	P131	Undef	0
MPAM1Q3	0E418Q0B11	2000	6.8	4R100	ECONOLINE	Undef	0
MPAM1QZ	0F718Q0511	2000	6.8	4R100	P131	Undef	0
MPAM1R3	0E418R0B11	2000	6.8	4R100	ECONOLINE	Undef	0
MPAM1R4	0F717R0B11	2000	6.8	4R100	P131	Undef	0
MPAM1R5	0F718R0B11	2000	6.8	4R100	P131	Undef	0
MPAM1T4	0F717T0B11	2000	6.8	4R100	P131	Undef	0
MPAM1T5	0F718T0B11	2000	6.8	4R100	P131	Undef	0
MQAH1BH	1B314B0510	2001	5.4	4R100	UN93 2V	Undef	0
MQAH1BS	1B315B0510	2001	5.4	4R100	UN173 4V	Undef	0
MQAH1DE	1F514D0B10	2001	5.4	4R100	PN98	Undef	0
MQAH1HB	1F514HDA10	2001	5.4	4R100	PN98	3031/3.66/ 3.73	0
MQAH1MB	1F514M0B10	2001	5.4	4R100	PN98	Undef	0
MQAIDAP	2N115A0515	2002	5.4	4R100	GAL-1 4V	Undef	0
MQAIDB2	2B314B0505	2002	5.4	4R100	UN93 2V	Undef	0
MQAIDB5	2B314B0M00	2002	5.4	Undef	UN93 2V	Undef	0
MQAIDBF	2B315B0505	2002	5.4	4R100	UN173 4V	3.73	0
MQAIA4	3N115A0500	2003	5.4	4R100	GAL-1 4V	Undef	0



Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	8PK_LOAD_STP
MCA1A7	3N115A0M00	2003	5.4	4R100	CAL-1 4V	Undef	0
MPAD3K5	9VZA-AK FFB	2000	5.4	4R100	PN06 SC	Undef	0.030273439
MTAL1B7	3B515B0507	2003	5.4	4R70W	U228 4V & UN173 4V	Undef	0
MTAME7	3B515E0505	2003	5.4	4R100	U228 4V ACCRO	Undef	0
MZAH057	3E418N0505	2003	6.8	4R100	ECONOLINE	Undef	0.1503906
MZAH0A5	2F728A0B11	2003 & 2002	6.8	M5	P131	4.3	0.1503906
MZAH0AA	3L118N0A05	2003	6.8	4R100	UW137	Undef	0.1503906
MZAH0B8	2F728B0B11	2003 & 2002	6.8	M5 & M6	P131	4.3	0.1503906
MZAH0CB	2F718C0B11	2003 & 2002	6.8	4R100	P131	3.73/4.30	0.1503906
MZAH0CE	2F717C0B11	2003 & 2002	6.8	4R100	P131	3.73/4.30	0.1503906
MZAH0D2	2L118D0B11	2003 & 2002	6.8	4R100	UW137	4.3	0.1503906
MZAH0D4	2L114D0B11	2003 & 2002	5.4	4R100	UW137	3.73/4.10	0
MZAH0D9	2F717D0B11	2003 & 2002	6.8	4R100	P131	3.73/4.30	0.1503906
MZAH0DF	2F718D0B11	2003 & 2002	6.8	4R100	P131	3.73/4.30	0.1503906
MZAH0DZ	2F714D0B11	2003 & 2002	5.4	4R100	P131	3.73/4.30	0
MZAH0E4	2F714E0B11	2003 & 2002	5.4	4R100	P131	3.73	0
MZAH0F4	2F714F0B11	2002	5.4	4R100	P131	Undef	0.25
MZAH0G4	2F714G0B11	2002	5.4	4R100	P131	Undef	0.25
MZAH0HA	2E418H0B11	2003 & 2002	6.8	4R100	ECONOLINE	3.73/4.10	0
MZAH0JB	2E414J0B10	2002	5.4	4R100	ECONOLINE	Undef	0
MZAH0M8	2F718M0B11	2002	6.8	4R100	P131	Undef	0.1503906
MZAH0MX	2F717M0B11	2002	6.8	4R100	P131	Undef	0.1503906
MZAH0N4	2F718N0B11	2002	6.8	4R100	P131	Undef	0.1503906
MZAH0N5	2F717N0B11	2002	6.8	4R100	P131	Undef	0.1503906
MZAH0N9	2F714N0A05	2002	5.4	4R100	P131	Undef	0.25
MZAH0NV	2L118N0A11	2002	6.8	4R100	UW137	Undef	0.1503906
MZAH0NW	2E418N0B11	2002	6.8	4R100	ECONOLINE	Undef	0.1503906
MZAH0NX	2L114N0A15	2002	5.4	4R100	UW137	Undef	0.25
MZAH0NZ	2F714N0A15	2002	5.4	4R100	P131	Undef	0.25
MZAH0P3	2E418P0A11	2002	6.8	4R100	ECONOLINE	Undef	0.1503906
MZAH0P5	2F718P0A11	2002	6.8	4R100	P131	Undef	0.1503906
MZAH0P8	2F724P0A15	2002	5.4	M5	P131	Undef	0.25
MZAH0PX	2F724P0A05	2002	5.4	M5	P131	Undef	0.25
MZAH0PZ	2F717P0A11	2002	6.8	4R100	P131	Undef	0.1503906
MZAH0R3	2E414R0B15	2002	5.4	4R100	ECONOLINE	Undef	0.25
MZAH0R4	2E414R0B05	2002	5.4	4R100	ECONOLINE	Undef	0.25
MZAH0R8	2F718R0B11	2002	6.8	4R100	P131	Undef	0.1503906
MZAH0RU	2F717R0B11	2002	6.8	4R100	P131	Undef	0.1503906
MZAH0RY	2E418R0B11	2002	6.8	4R100	ECONOLINE	Undef	0.1503906
MZAH0S5	2F718S0B11	2002	6.8	4R070W	P131	Undef	0.1503906
MZAH0S2	2F717S0B11	2002	6.8	4R100	P131	Undef	0.1503906
MZAH0T5	2F718T0B11	2002	6.8	4R100	P131	Undef	0.1503906
MZAH0TZ	2F717T0B11	2002	6.8	4R100	P131	Undef	0.1503906
MZAH0U5	2E418U0505	2002	6.8	4R100	ECONOLINE	Undef	0.1503906
MZAH0UU	2E414U0B05	2002	5.4	4R100	ECONOLINE	Undef	0.25

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	SPK_LOAD_STP
MZAH0UJY	2E414U0B18	2002	5.4	4R100	ECONOLINE	Undef	0.25
MZAH0UJZ	2F728U0M11	2002	6.8	M5	P131	Undef	0.1503908
MZAH0V3	2F728V0A11	2002	6.8	M5	P131	Undef	0.1503908
MZAH0X6	2E414X0B18	2002	5.4	4R100	ECONOLINE	Undef	0.25
MZAH0X0X	2E414X0B06	2002	5.4	4R100	ECONOLINE	Undef	0.25
MZAH0Y5	2E414Y0B18	2002	5.4	4R100	ECONOLINE	Undef	0.25
MZAH0YY	2E414Y0B06	2002	5.4	4R100	ECONOLINE	Undef	0.25
MZAH0Z3	2E418Z0B11	2002	6.8	4R100	ECONOLINE	Undef	0.1603908
MZAH0Z4	2F718Z0B11	2002	6.8	4R100	P131	Undef	0.1503908
MZAH0ZF	3F724Z0Q08	2003	5.4	Undef	P131	Undef	0.25
MZAH0ZY	2F724Z0Q11	2002	5.4	M5	P131	Undef	0.25
MZAJ0U8	2E418U0B10	2002	6.8	4R100	ECONOLINE	Undef	0.1503908
MZAJ0UZ	3E418U0B06	2003	6.8	4R100	ECONOLINE	Undef	0.1503908
OCAM0H4	2F514H0A18	2003	5.4	4R100	PN98 2V	Undef	0
OCAM0Z6	3F514I0B05	2003	6.4	4R100	PN98 LPG BI-FUEL	Undef	0
DCCB0V2	3F514V0B00	2003	5.4	4R100	2003.5 PN98 CNG BIFUEL	Undef	0
ODAG0A3	2F528A0A05	2002	4.8	M5	PN98 2V	Undef	0.099809382
ODAG0J3	2F528J0B05	2002	4.8	M5	PN98 2V	Undef	0.099809382
ODAG0K3	2F528K0B05	2002	4.8	M5	PN98 2V	Undef	0.099809382
ODAG0P3	2F528P0A05	2002	4.8	M5	PN98 2V	Undef	0.099809382
ODAJ0D9	2F518D0B07	2002	4.8	4R100	PN98 2V	Undef	0.099809382
ODAJ0EB	2F518E0B07	2002	4.8	4R70W	PN98 2V	Undef	0.099809382
ODAJ0M9	2F518M0A07	2002	4.8	4R70W	PN98 2V	Undef	0.099809382
ODAJ0NB	2F518N0A07	2002	4.8	4R70W	PN98 2V	Undef	0.099809382
ODAL1A7	3F514A0B10	2003	5.4	4R70W	2002.5 PN98 ULEV 4R70W	Undef	0
ODAL1AZ	2F514A0B06	2002	5.4	4R70W	2002.5 PN98 ULEV 4R70W	Undef	0
ODAL1DS	2F518D0B16	2002	4.8	4R70W	2002.25 PN98 Cat Opt	Undef	0.099809382
ODAL1DE	3F518D0B10	2003	4.8	4R70W	PN98 2V (ACCRO)	Undef	0.099809382
ODAL1EE	3F518E0B10	2003	4.8	4R70W	PN98 2V (ACCRO)	Undef	0.099809382
ODAL1ER	3F514E0B10	2003	5.4	4R70W	PN98 2V (ACCRO)	Undef	0
ODAL1EY	2F518E0B18	2002	4.8	4R70W	2002.25 PN98 Cat Opt	Undef	0.099809382
ODAL1FA	3F514F0A10	2003	5.4	4R70W	PN98 2V (ACCRO)	Undef	0
ODAL1J4	2F528J0B18	2002	4.8	M5	2002.25 PN98 Cat Opt	Undef	0.099809382
ODAL1JC	3F528J0B10	2003	4.8	M5	PN98 2V (ACCRO)	Undef	0.099809382
ODAL1KC	3F528K0B10	2003	4.8	M5	PN98 2V (ACCRO)	Undef	0.099809382
ODAL1M5	2F518M0A18	2002	4.8	4R70W	2002.25 PN98 Cat Opt	Undef	0.099809382
ODAL1ME	3F518M0A10	2003	4.8	4R70W	PN98 2V (ACCRO)	Undef	0.099809382
ODAL1N5	2F518N0A18	2002	4.8	4R70W	2002.25 PN98 Cat Opt	Undef	0.099809382
ODAL1NE	3F518N0A10	2003	4.8	4R70W	PN98 2V (ACCRO)	Undef	0.099809382
ODAL1P4	2F528P0A18	2002	4.8	M5	2002.25 PN98 Cat Opt	Undef	0.099809382
ODAL1PC	3F528P0A10	2003	4.8	M5	PN98 2V (ACCRO)	Undef	0.099809382
ODAL1Z4	2F528Z0A18	2002	4.8	M5	2002.25 PN98 Cat Opt	Undef	0.099809382
ODAL1ZC	3F528Z0A10	2003	4.8	M5	PN98 2V (ACCRO)	Undef	0.099809382
DHAG0DY	2E412D0A10	2002	4.2	4R70W	ECONOLINE	Undef	0
DHAG0E3	2E412E0A10	2002	4.2	4R70W	ECONOLINE	Undef	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	SPK_LOAD_STP
OHAG0F8	2E412FOA10	2002	4.2	4R70W	ECONOLINE	Undef	0
OHAG0G8	3E412G0A00	2003	4.2	4R70W	ECONOLINE	4.08	0
OHAG0GA	2E412G0A06	2002	4.2	4R70W	ECONOLINE	Undef	0
OHAG0HW	2E412H0B10	2002	4.2	4R70W	ECONOLINE	Undef	0
OHAG0J3	2E412J0B10	2002	4.2	4R70W	ECONOLINE	Undef	0
OHAG0K8	3E412K0B00	2003	4.2	4R70W	ECONOLINE	4.08	0
OHAG0KC	2E412K0B06	2002	4.2	4R70W	ECONOLINE	Undef	0
OHAG0L3	2E412L0B10	2002	4.2	4R70W	ECONOLINE	Undef	0
OHAK1C0	2F512C0517	2003	4.2	4R70W	PN86 2V	Undef	0
OHAK1D0	2F512D0617	2003	4.2	4R70W	PN86 2V	Undef	0
OHAK1GZ	2F522G0517	2003	4.2	M5	PN86 2V	Undef	0
OHAK1HB	2F522H0617	2003	4.2	M5	PN86 2V	Undef	0
OIAH0EV	2E418E0611	2002	4.8	4R70W	ECONOLINE	Undef	0
OIAH0EW	2E414E0612	2002	5.4	4R70W	ECONOLINE	Undef	0
OMADSY2	2F514Y0506	2002	5.4	4R100	PN86 8C	Undef	0.2001953
PAAD7A2	9B1M-BA F	2001	2.5	M5	PN-150/PN-151	Undef	N/A
PAAD7B3	9B1M-AB F	2001	2.5	M5	PN-150/PN-151	3.45/3.73	N/A
PAAD7C3	9B1M-AC F	2001	2.5	M5	PN-150/PN-151	Undef	N/A
PAAD8AC	9LAM-MA F	2000	3	M5	PN-150/PN-151	3.73	N/A
PAAD8BA	9LAM-MB F	2000	3	M5	PN-150/PN-151	3.73	N/A
PAAD8CA	9LAM-MC G	2000	3	M5	PN-150/PN-151 & PN150/51 99.25MY	4.1	N/A
PAADAAH	9LAA-MA J	2000	3	4R44E	PN-150/PN-151	3.73	N/A
PAADAAZ	9B1A-BA K	2001	2.5	4R44E	PN-150/PN-151	4.1	N/A
PAADAB8	9B1A-AB H	2001	2.5	4R44E	PN-150/PN-151	4.1	N/A
PAADAB9	9LAA-MB J	2000	3	4R44E	PN-150/PN-151	3.73/4.10	N/A
PAADACJ	9LAA-MC H	2000	3	4R44E	PN-150/PN-151 & PN150/51 99.25MY	4.1	N/A
PBAD9B5	9LTM-BB GC	2000	4	M5	PN-150/151 SOHC & PN-150/PN-151 & PN150/51 99.25MY	3.08/3.55 & 3.27 & 3.27/3.73	N/A
PBAD9C5	9LTM-BC GC	2000	4	M5	PN-150/151 SOHC & PN-150/PN-151 & PN150/51 99.25MY	3.08 & 3.08/3.55	N/A
PBAD9D5	9LTM-AD AFM	2000	4	M5	PN-150/151 SOHC & PN-150/PN-151	3.08/3.55 & 3.27/3.73	N/A
PBAD9E5	9LTM-AE AFM	2000	4	M5	PN-150/151 SOHC & PN-150/PN-151	3.55	N/A
PBADAB5	9LTA-BB H	2000	4	5R55E	PN-150/151 SOHC & PN-150/PN-151 & PN150/51 99.25MY	3.55/3.73	N/A
PBADAC5	9LTA-BC H	2000	4	5R55E	PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.55	N/A
PBADAD5	9LTA-AD F	2000	4	5R55E	PN-150/151 SOHC & PN-150/PN-151 & PN150/51 99.25MY	3.55/3.73	N/A
PBADAES	9LTA-AE F	2000	4	5R55E	PN-150/151 SOHC & PN-150/PN-151 & PN150/51 99.25MY	3.55	N/A
PCAF5A3	9LTM-BA F	2000	4	M5	UN-150 & UN-150 CFF/LEV	3.27/3.55	0
PCAF5A6	9LTM-AA F	2000	4	M5	UN-150 CFF & UN-150 CFF/LEV	3.27/3.55	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	SPK_LOAD_STP
PCAF5A8	9LTA-BA G	2000	4	5R55E	UN-150	3.73/4.10	0
PCAG4A2	9NEA-BA H	2000	4	5R55E	UN-150 SOHC & UN150 SOHC CFF	3.27/3.56	0
PCAG846	0S11A40507	2001	4	5R55E	P207 SOHC 2000.5 & U207 SOHC 2000.5	Undef	0
PCAQ84Z	0U31A40505	2000	4	5R55E	UN-150 SOHC & UN150 SOHC CFF	3.27/3.56	0
PCAHD4Z	0U31A40516	2001	4	5R55E	UN-150 SOHC	3.27/3.56	0
PDAE3AN	9LAM-BA J	2000	3	M5	PN-150/PN-151 FFV	3.73	0
PDAE3AU	9LAM-AA J	2000	3	M5	PN-150/PN-151 FFV	3.73	0
PDAE3BM	9LAM-BB J	2000	3	M5	PN-150/PN-151 FFV	3.73	0
PDAE3BS	9LAM-AB J	2000	3	M5	PN-150/PN-151 FFV	3.73	0
PDAE3CD	9LAM-AC H	2000	3	M5	PN-150/PN-151 FFV	4.1	0
PDAE3CX	9LAM-BC H	2000	3	M5	PN-150/PN-151 FFV	4.1	0
PDAE6H7	9LAA-AH K	2000	3	4R44E	PN-150/PN-151 FFV	3.73	0
PDAE6HX	9LAA-BH K	2000	3	4R44E	PN-150/PN-151 FFV	3.73	0
PDAE6J7	9LAA-BK J	2000	3	4R44E	PN-150/PN-151 FFV	4.1	0
PDAE6J8	9LAA-AJ K	2000	3	4R44E	PN-150/PN-151 FFV	3.73/4.10	0
PDAE6JY	9LAA-EJ K	2000	3	4R44E	PN-150/PN-151 FFV	3.73/4.10	0
PDAE6K8	9LAA-AK J	2000	3	4R44E	PN-150/PN-151 FFV	4.1	0
PEAV204	1U72AG0508	2002 & 2001	4	M5	U207	Undef	0
PEAV345	1U71A40508	2001	4	5R55E	U207 FFV	Undef	0
PEAV438	1R31A30612	2001	3	5R44E	PN-150/PN-151	3.73	0.25
PEAV43T	1R31B30512	2001	3	5R44E	PN-150/PN-151	3.73/4.10	0.25
PEAV44T	1R31C40516	2001	4	5R55E	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/ 4.10	0
PEAV44U	1R31B40516	2001	4	5R55E	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/ 4.10	0
PEAV44V	1R31A40516	2001	4	5R55E	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55	0
PEAV44W	1R32C40516	2001	4	M5	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/ 4.10	0
PEAV44X	1R32B40516	2001	4	M5	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/ 4.10	0
PEAV44Y	1R32A40516	2001	4	M5	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55	0
PEAV453	1R32A40517	2002	4	M5	PN-150/151 SOHC	3.55	0
PEAV458	1R31B40517	2002	4	5R55E	PN-150/151 SOHC	3.55/3.73/ 4.10	0
PEAV45V	1R31A40517	2002	4	5R55E	PN-150/151 SOHC	3.55	0
PEAV45X	1R31C40517	2002	4	5R55E	PN-150/151 SOHC	3.55/3.73/ 4.10	0
PEAV45Y	1R32C40517	2002	4	M5	PN-150/151 SOHC	3.55/3.73/ 4.10	0
PEAV45Z	1R32B40517	2002	4	M5	PN-150/151 SOHC	3.55/3.73/ 4.10	0
PEAV9F6	1R31AF0612	2001	3	5R55E	PN-150/PN-151 FFV	3.73	0.25
PEAV9S2	1U71PS0612	2001 & 2002	4	5R55E	U207 USPS & U207 USPS FFV	Undef	0.1503908
PEAW049	1S11A40510	2002 & 2001	4	5R55E	P207 Cat. Opt. & P207 SOHC & U207 SOHC	Undef	0
PEAW0G9	1U72AG0508	2002	4	M5	U207	Undef	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	SPK_LOLD_STP
PEAW0GY	1U71AG0510	2002 & 2001	4	5R55E	U207	Undef	0
PEAW0GZ	1U71AG0510	2002 & 2001	4	5R55E	U207	Undef	0
PEAW142	1S12A40506	2002	4	M5	P207 SOHC & U207 SOHC	Undef	0
PEAW1G3	1U72AG0506	2002	4	M6	U207	Undef	0
PLAC08M	8NEA-AB Y	2000	4	Undef	UN150 PS SOHC FFV	3.55	0
PLAE4B5	8NEA-AB B	2000	4	Undef	UN150 PS SOHC FFV	3.55	0
PRAR325	1R32B20512	2002 & 2001	2.3	M5	PN-150/PN-151 & PN150/51 2001.25	4.1	0.099609382
PRAR32X	1R32B20M12	2002 & 2001	2.3	M5	PN-150/PN-151 & PN150/51 2001.25	Undef	0.099609382
PRAR32Y	1R32A20M12	2002 & 2001	2.3	M5	PN-150/PN-151 & PN150/51 2001.25	3.73	0.099609382
PRAR32Z	1R32A20512	2002 & 2001	2.3	M5	PN-150/PN-151 & PN150/51 2001.25	3.73	0.099609382
PRCD02a	3R32A20M00	2003	2.3	M5	PN-150/PN-151	3.73	0.099609382
PRCD02Y	3R32B20M00	2003	2.3	M5	PN-150/PN-151	Undef	0.099609382
PYAE1F7	2S11AF0505	2002	4	5R55E	P207 FFV	Undef	0.1503906
PYAE36	2R31B30507	2002	3	5R44E	PN-150/PN-151	3.73/4.10	0.25
PYAE37	2R31A30507	2002	3	5R44E	PN-150/PN-151	3.73	0.25
PYAE38	2R32A30507	2002	3	M5	PN-150/PN-151	3.73	0.25
PYAE3T	2R32B30507	2002	3	M5	PN-150/PN-151	3.73	0.25
PYAF1FW	2R31AF0511	2002 & 2003	3	5R55E	PN-150/PN-151 FFV	3.73	0.25
PYAF245	2S12A40506	2002	4	M5	P207 SOHC 2002.5	Undef	0
PYAF246	2S11A40506	2002	4	5R55E	P207 SOHC 2002.5	Undef	0.1503906
PYAF202	2U72AG0M05	2002	4	M5	U207 2002.5	Undef	0
PYAF205	2U72AG0506	2002	4	M5	U207 2002.5	Undef	0
PYAF208	2U71AG0506	2002	4	5R55E	U207 2002.5	Undef	0.1503906
PYAF20Z	2U71AG0M06	2002	4	5R55E	U207 2002.5	Undef	0.1503906
PYBD23P	3R31A30510	2003	3	5R44E	PN-150/PN-151	3.73	0.25
PYBD23U	3R31B30510	2003	3	5R44E	PN-150/PN-151	3.73/4.10	0.25
PYBD23V	3R32B30510	2003	3	M5	PN-150/PN-151	3.73	0.25
PYBD23W	3R32A30510	2003	3	M5	PN-150/PN-151	3.73	0.25
PYBD247	3R31D40506	2003	4	5R55E	PN-150 ACCRO	3.55	0
PYBD24D	3R31C40505	2003	4	5R55E	PN-150/151 SOHC	3.55/3.73/ 4.10	0
PYBD24F	3R31A40505	2003	4	5R55E	PN-150/151 SOHC	3.55	0
PYBD24K	3S11A40505	2003	4	5R55E	P207 SOHC	Undef	0.1503906
PYBD24H	3S12A40505	2003	4	M5	P207 SOHC	Undef	0
PYBD24T	3R32C40505	2003	4	M5	PN-150/151 SOHC	3.55/3.73/ 4.10	0
PYBD24U	3R32B40505	2003	4	M5	PN-150/151 SOHC	3.55/3.73/ 4.10	0
PYBD24V	3R32A40505	2003	4	M5	PN-150/151 SOHC	3.55	0
PYBD24W	3R31B40505	2003	4	5R55E	PN-150/151 SOHC	3.55/3.73/ 4.10	0
PYBD207	3R32C30505	2003	3	M5	PN-150 ACCRO	3.73	0.25
PYBD20C	3R31C30505	2003	3	5R44E	PN-150 ACCRO	3.73	0.25
PYBD206	3R32D40505	2003	4	M5	PN-150 ACCRO	3.55	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	SPK_LOAD_STP
PYBD2E6	3R32E40505	2003	4 M5		PN-150 ACCRO	3.55/3.73/ 4.10	0
PYBD2E7	3R31E40506	2003	4 5R55E		PN-150 ACCRO	3.55/3.73/ 4.10	0
PYBD2F6	3R32F40505	2003	4 M5		PN-150 ACCRO	3.55/3.73/ 4.10	0
PYBD2F7	3R31F40506	2003	4 5R55E		PN-150 ACCRO	3.55/3.73/ 4.10	0
PYBD2GY	3U71BG0500	2003	4 5R55E		U207 ACCRO	Undef	0.1503906
PYBD2GZ	3U71AG0506	2003	4 5R55E		U207	Undef	0.1503906
QBAA0AA	0AJ1AZ0A12	2000	2 F4E3		CT120 4V	3.74	0
QBAA0AC	0AJ2RZ0A13	2000	2 G5M		CT120 4V	4.1	0
QBAA0AW	0AJ2AZ0A12	2000	2 G5M		CT120 4V	4.1	0
QBAA0BC	0AJ1AZ0B12	2000	2 F4E3		CT120 4V	3.74	0
QBAA0BV	0AJ2RZ0B13	2000	2 G5M		CT120 4V	4.1	0
QBAA0BW	0AJ2AZ0B12	2000	2 G5M		CT120 4V	4.1	0
QBAC0ZY	1AJ2AZ0508	2001 & 2002	2 G5M		CT120 4V	4.1	0
QBAC1Z2	1AJ1AZ0507	2001 & 2002	2 F4E3		CT120 4V	3.74	0
QCAA1S8	0AJ1AS0505	2000	2 F4E3		CT120 2V	3.74	0
QCAA1S9	0AJ2AS0506	2000	2 G5M		CT120 2V	3.85	0
QCAC1S5	1AJ1AS0500	2001	2 F4E3		CT120 2V	3.74	0
QCAE1S3	2AJ1AS0505	2002	2 F4E3		CT120 2V	Undef	0
READ0A7	8VAA-BA J	2001 & 2000	6 4R70W		UN-150	3.73	N/A
RFAH5E9	0E414E0510	2000	5.4 4R70W		ECONOLINE	Undef	0
RFAH6D7	0E416D0A10	2000	4.8 4R70W		ECONOLINE	Undef	0
RFAH6E7	0E416E0B10	2000	4.8 4R70W		ECONOLINE	Undef	0
RGAF2G0	1FB1GP0G10	2001	4.8 4R70W		FORDMERCURY	3.08	0 000000382
RGAF2GF	1FB1GX0G10	2001	4.8 4R70W		FORDMERCURY	3.08	0 000000382
RGAF2GZ	1VC1TX0G10	2001	4.8 4R70W		LINC.TOWNCAR	3.08	0 000000382
RGAF2PX	2FB1UP0G00	2002	4.8 4R70W		FORDMERCURY	3.08	0 000000382
RGAF2XH	2FB1UX0G00	2002	4.8 4R70W		FORDMERCURY	3.08	0 000000382
RHAG7A5	0F514QA06	2000	5.4 4R70W		PN96	Undef	0
RHAG7A6	0F516QA06	2000	4.8 4R70W		PN96	Undef	0
RHAG7A9	0F526QA06	2000	4.8 M5		PN96	Undef	0
RHAG7B5	0F516BA06	2000	4.8 4R70W		PN96	Undef	0
RHAG7HC	0F526HA06	2000	4.8 M5		PN96	Undef	0
RHAG7N5	0F614NDA06	2000	5.4 4R70W		PN96	Undef	0
RHAGBCC	0B316C0B11	2000	4.8 4R70W		UN83	Undef	0.099609382
RHAGBD9	0F516DB11	2000	4.8 4R70W		PN96	Undef	0
RHAGBEA	0F516EB11	2000	4.8 4R70W		PN96	Undef	0
RHAGBEZ	0F514EB13	2000	5.4 4R70W		PN96	Undef	0
RHAGBFN	0F514FA12	2000	5.4 Undef		PN96	Undef	0
RHAGBJ7	0F526JB11	2000	4.8 M5		PN96	Undef	0
RHAGBK9	0F526KB11	2000	4.8 M5		PN96	Undef	0
RHAGBML	0F516MA11	2000	4.8 4R70W		PN96	Undef	0

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	SPK_LOAD_STP
RHAGBNH	0F516N0A11	2000	4.6	4R70W	PN96	Undef	0
RHAGBPE	0F526P0A11	2000	4.6	M5	PN96	Undef	0
RHAGBZF	0F526Q0A11	2000	4.6	M5	PN96	Undef	0
RIAI2E3	1E414E0510	2001	5.4	4R70W	ECONOLINE	Undef	0
RKAP4E4	3B714E0506	2003	5.4	4R70W	U222 2V ACCRO	Undef	0
RKAP4EY	3B714E0M06	2003	5.4	4R70W	U222 2V ACCRO	Undef	0
RNAH2D7	1F512D0510	2001	4.2	4R70W	PN96	Undef	0
RNAH2DZ	1E412D0A10	2001	4.2	4R70W	ECONOLINE	Undef	0
RNAH2E7	1E412E0A10	2001	4.2	4R70W	ECONOLINE	Undef	0
RNAH2F7	1E412F0A10	2001	4.2	4R70W	ECONOLINE	Undef	0
RNAH2G7	1E412G0A10	2001	4.2	4R70W	ECONOLINE	Undef	0
RNAH2H7	1E412H0B10	2001	4.2	4R70W	ECONOLINE	Undef	0
RNAH2J7	1E412J0B10	2001	4.2	4R70W	ECONOLINE	Undef	0
RNAH2K7	1E412K0B10	2001	4.2	4R70W	ECONOLINE	Undef	0
RNAH2L7	1E412L0B10	2001	4.2	4R70W	ECONOLINE	Undef	0
ROAF7A7	0F512A0A06	2000	4.2	4R70W	PN96	Undef	0
ROAF7B7	0F512B0A06	2000	4.2	4R70W	PN96	Undef	0
ROAF7C7	0F512C0B06	2000	4.2	4R70W	PN96	Undef	0
ROAF7D2	0E412D0A07	2000	4.2	4R70W	ECONOLINE	Undef	0
ROAF7D7	0F512D0B06	2000	4.2	4R70W	PN96	Undef	0
ROAF7E2	0E412E0A07	2000	4.2	4R70W	ECONOLINE	Undef	0
ROAF7E7	0F522E0A07	2000	4.2	M5	PN96	Undef	0
ROAF7F6	0F522F0A07	2000	4.2	M5	PN96	Undef	0
ROAF7FZ	0E412F0A07	2000	4.2	4R70W	ECONOLINE	Undef	0
ROAF7G6	0F522G0B07	2000	4.2	M5	PN96	Undef	0
ROAF7GZ	0E412G0A07	2000	4.2	4R70W	ECONOLINE	Undef	0
ROAF7H2	0E412H0B07	2000	4.2	4R70W	ECONOLINE	Undef	0
ROAF7H8	0F522H0B07	2000	4.2	M5	PN96	Undef	0
ROAF7J4	0E412J0B07	2000	4.2	4R70W	ECONOLINE	Undef	0
ROAF7K4	0E412K0B07	2000	4.2	4R70W	ECONOLINE	Undef	0
ROAF7L2	0E412L0B07	2000	4.2	4R70W	ECONOLINE	Undef	0
RQAD6B3	0VC1FB0G10	2000	4.8	4R70W	LINC.TOWNCAR	3.08	0.099609382
RQAD6B7	0FB1FB0A11	2000	4.8	4R70W	FORD/MERCURY	2.73	0.099609382
RQAD6B8	0VC1FB0B11	2000	4.8	4R70W	LINC.TOWNCAR	3.08	0.099609382
RQAD6BT	0FB1FB0G10	2000	4.8	4R70W	FORD/MERCURY	3.08	0.099609382
RQAD6BU	0VC1FB0A11	2000	4.8	4R70W	LINC.TOWNCAR	3.08	0.099609382
RQAD6BV	0FB1FB0B11	2000	4.8	4R70W	FORD/MERCURY	2.73	0.099609382
RQAD6BW	0FB1FB0A11	2000	4.8	4R70W	FORD/MERCURY	2.73	0.099609382
RQAD6H7	0FB1FH0A11	2000	4.8	4R70W	FORD/MERCURY	3.56	0.099609382
RQAD6H8	0VC1FH0B11	2000	4.8	4R70W	LINC.TOWNCAR	3.56	0.099609382
RQAD6HW	0FB1FH0B11	2000	4.8	4R70W	FORD/MERCURY	3.56	0.099609382
RQAD6HX	0VC1FH0A11	2000	4.8	4R70W	LINC.TOWNCAR	3.56	0.099609382
RQAD6P7	0FB1FP0A11	2000	4.8	4R70W	FORD/MERCURY	3.27	0.099609382
RQAD6PZ	0FB1FP0G10	2000	4.8	4R70W	FORD/MERCURY	3.27	0.099609382
RTAI1P2	1ZE13P0510	2001	3.8	4R70W	MUSTANG	3.27	0.099609382

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	SPK_LOAD_STP
RTAJ1P8	1ZE23P0A10	2001	3.8	T5	MUSTANG	3.27	0.099609382
RTAJ1PY	1ZE13P0A10	2001	3.8	4R70W	MUSTANG	3.27	0.099609382
RTAJ1PZ	1ZE23P0510	2001	3.8	T5	MUSTANG	3.27	0.099609382
RTAJ1P2	3ZE2MF0510	2003	3.8	T45	MUSTANG GS	3.27	0.099609382
RTAJ1F8	3ZE1MF0510	2003	3.8	Undef	MUSTANG GS	3.27	0.099609382
RTAJ1R3	3ZE2CR0A10	2003	3.8	Undef	MUSTANG V8 (ACCRO)	Undef	0.099609382
RTAJ1R4	2ZE1CR0A10 & 3ZE1CR0A10	2002 & 2003	3.8	4R70W	MUSTANG Cost Save & MUSTANG V8 (ACCRO)	3.27	0.099609382
RVAF3C8	1ZE24C0507	2001	4.8	TR3650	MUSTANG COBRA	3.27	0.5
RVAFAT6	1ZE1GT0510	2001	4.8	4R70W	MUSTANG GT	3.27	0
RWAI1CL	1B818C0605	2001	4.8	4R70W	2001.5 UN93 Cat Opt	Undef	0.099609382
RWAI2D7	1F516D0612	2001	4.8	4R70W	2001.5 PN96 Cat Opt 5.4PF5	Undef	0.099609382
RWAI2DC	1B818D0610	2001	4.8	4R70W	2001.5 UN93 Cat Opt	Undef	0.099609382
RWAI2DH	2B818D0605	2002	4.8	4R70W	2001.5 UN93 Cat Opt & UN93 2V	Undef	0.099609382
RWAI2E8	1F514E0B11	2001	5.4	4R70W	PN96	Undef	0
RWAI2E7	1F516E0B12	2001	4.8	4R70W	2001.5 PN96 Cat Opt 5.4PF5	Undef	0.099609382
RWAI2EZ	1F514E0B11	2001	5.4	4R70W	PN96	Undef	0
RWAI2F5	1F514F0A11	2001	5.4	4R70W	PN96	Undef	0
RWAI2F7	1F514F0A11	2001	5.4	4R70W	PN96	Undef	0
RWAI2M7	1F516M0A12	2001	4.8	4R70W	2001.5 PN96 Cat Opt 5.4PF5	Undef	0.099609382
RWAI2N7	1F516N0A12	2001	4.8	4R70W	2001.5 PN96 Cat Opt 5.4PF5	Undef	0.099609382
RYAF0T3	2ZE1GT0506	2002	4.8	4R70W	MUSTANG GT	3.27	0
RYAF1C8	3ZE1AC0505	2003	4.8	4R70W	MUSTANG GT (ACCRO)	3.27	0
RYAF1CZ	3ZE2AC0505	2003	4.8	TR3650	MUSTANG GT (ACCRO)	3.27	0
RYAF1T4	2ZE2GT0510	2002	4.8	TR3650	MUSTANG GT	3.27	0
RYAK1Z4	3ZE1M10508	2003	4.8	4R70W	MUSTANG MACH 1 (ACCRO)	3.27	0.5
RYAK1Z7	3ZE2M10508	2003	4.8	TR3650	MUSTANG MACH 1 (ACCRO)	3.27	0.5
RZAO2HZ	3VC1UH0G10	2003	4.8	4R70W	LINC.TOWNCAR	3.55	0.009785825
RZAO2FZ	3FB1UP0G10	2003	4.8	4R70W	FORD/MERCURY	2.73	0.009785825
RZAO2X3	3FB1UX0G10	2003	4.8	4R70W	FORD/MERCURY	2.73	0.009785825
RZAO2XZ	3VC1UX0G10	2003	4.8	4R70W	LINC.TOWNCAR	3.27	0.009785825
RZAS0BE	3VC1AB0516	2003	4.8	4R70W	LINC. TOWNCAR J2 & LINC.TN CAR ACCRO	3.27	0.009785825
RZAS0BF	3FB1AB0515	2003	4.8	Undef	FORD/MERC ACCRO	Undef	0.009785825
RZAS0BX	3VC1AB0M15	2003	4.8	4R70W	LINC. TOWNCAR J2 & LINC.TN CAR ACCRO	3.55	0.009785825
RZAS0HE	3FB1AH0515	2003	4.8	4R70W	FORD/MERC ACCRO	3.27	0.009785825
RZAS0LB	3FB1AL0515	2003	4.8	4R70W	FORD/MERC ACCRO	2.73	0.009785825
RZAS0LF	3VC1AL0515	2003	4.8	4R70W	LINC. TOWNCAR J2 & LINC.TN CAR ACCRO	3.27	0.009785825
RZAS0PA	3FB1AP0515	2003	4.8	4R70W	FORD/MERC ACCRO	3.27	0.009785825
RZAS0TG	3FB1AT0515	2003	4.8	4R70W	FORD/MERC ACCRO	2.73	0.009785825
RZAS0XE	3FB1AX0M15	2003	4.8	AX4N	FORD/MERC ACCRO	2.73	0.009785825
SAAR8S3	0AK1580513	2000	2	FN	FOCUS C170 SPI	3.907	0
SAAR8Z5	0AK15Z0512	2000	2	FN	FOCUS C170 ZETEC	3.907	0.13984839
SAAR8ZB	0AK15Z0512	2000	2	FN	FOCUS C170 ZETEC	3.907	0.13984839
SBAF8S7	1AK1AS0A16	2002 & 2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cal OPT	3.733	0



Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	SPK_LOAD_STP
SBAF68X	1AK1A80510	2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT	3.888	0
SBAF68Y	1AK1A80A10	2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT	3.888	0
SBAF6Z3	1AK1A20510	2001	2	4F27E	FOCUS C170 ZETEC	3.907	0.13984839
SBAF6Z5	2AK1A20M00	2002	2	Undef	FOCUS MEXICO	Undef	0.13984839
SBAF6ZW	1AK1A20A10	2001	2	4F27E	FOCUS C170 ZETEC	3.907	0.13984839
SBAF6ZK	1AK1A20510	2001	2	4F27E	FOCUS C170 ZETEC	3.907	0.13984839
SBAF6ZY	1AK1A20A16	2002 & 2001	2	4F27E	FOCUS C170 ZETEC	3.956	0.13984839
SBAF6ZZ	1AK1A20A10	2001	2	4F27E	FOCUS C170 ZETEC	3.907	0.13984839
SBAF7S4	1AK1A80617	2002	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT	3.733	0
SBAF7S6	2AK1B90A10	2002	2	4F27E	FOCUS SPI CAT OPT	3.893	0
SBAF7Z4	1AK1A20617	2002	2	4F27E	FOCUS C170 ZETEC	3.966	0.13984839
SBAF7Z8	2AK1B20A10	2002	2	4F27E	FOCUS ZETEC CAT OPT	3.904	0.13984839
SBDC3SY	3AK1A80510	2003	2	4F27E	C170 SPI (ACCRO)	3.733	0
SBDC3Z3	3AK1A20610	2003	2	4F27E	C170 ZETEC (ACCRO)	3.956	0.13984839

Created by: PC-CPR, Version, 5.0-4 on: 10/11/2001 at 11:16:08 AM  
Model Year - 2001  
All Engine sizes  
All Transmissions  
All Vehicles

Parameters

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VSCLP  
VSCLPD  
VSCLP\_W

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	VSCLPD	VSCLP_W
BWAK3N2	1DD14N0510	2001	3.4F50N	3 4F50N	TAU/SABLE 4V	3.98	1	N/A	N/A
BWAK4N8	1DD12N0510	2001	3.4F50N	3 4F50N	TAU/SABLE 2V	3.77	1	N/A	N/A
BWAK486	1DD12S0510	2001	3 AX4S	3 AX4S	TAU/SABLE 2V	3.77	1	N/A	N/A
BWAK6N3	1DD1FN0612	2001	3.4F50N	3 4F50N	D186 - FFV Ethanol	3.77	1	N/A	N/A
BWAK6S3	1DD1FS0512	2001	3 AX4S	3 AX4S	D186 - FFV Ethanol	3.77	1	N/A	N/A
CSAH1G4	1FB1NG0506	2001	4.8 4R70W	4 4R70W	FORD Net. Gas	2.73	1	N/A	N/A
CSAH1V4	0VNA-AV A	2001	4.8 4R70W	4 4R70W	FORD Net. Gas	2.73	1	N/A	N/A
DVAN823	0M12A20512	2001	2 G5M	2 G5M	U204	Undef	1	N/A	N/A
DVAN824	0M12B20612	2001	2 G5M	2 G5M	U204	Undef	1	N/A	N/A
DVAN82U	0M12A20612	2001	2 G5M	2 G5M	U204	Undef	1	N/A	N/A
DVAN82Y	0M11A20613	2001	2 CD4E	2 CD4E	U204	Undef	1	N/A	N/A
FDBA0CM	1A31NC0510	2001	3.8 AX4N	3 4F50N	WIN126 CAT OPT & WIN126 CAT OPT	3.56	1	N/A	N/A
FDBA0S7	1A31AS0G12	2001	3.8 4F50N	3 4F50N	WIN126	3.56	1	N/A	N/A
FDBA0S8	1A31AS0612	2001	3.8 4F50N	3 4F50N	WIN126	3.56	1	N/A	N/A
FDBA0SU	1A31AS0G13	2001	3.8 Undef	3 4F50N	WIN126	Undef	1	N/A	N/A
FDBA0SX	1A31AS0G12	2001	3.8 4F50N	3 4F50N	WIN126	3.56	1	N/A	N/A
FEAK0N3	1JC1BN0511	2001	4.8 4F50N	4 4F50N	CONTINENTAL	3.56	0	N/A	N/A
JAA86B8	9LDA-B6H	2001	3 5F55N	3 5F55N	DEW98	3.07	0	N/A	N/A
JBAS3CZ	9LDM-AC3	2001	3 M5GR	3 M5GR	DEW98 MT	3.07	0	N/A	N/A
KBAT1DB	1ZN26D0510	2001	2.5 MTX	2 5F55N	COUGAR SW164	4.08	5	N/A	N/A
KBAT1DC	1ZN27D0510	2001	2.5 MTX	2 5F55N	COUGAR SW164	4.08	5	N/A	N/A
KBAT1DD	1ZN2AD0510	2001	2.5 MTX	2 5F55N	COUGAR SW164	Undef	5	N/A	N/A
KBAT1DH	1ZN1AD0510	2001	2.5 CD4E	2 5F55N	COUGAR SW164	3.77	0	N/A	N/A
KBAT1DN	1ZN1ED0E10	2001	2.5 CD4E	2 5F55N	COUGAR SW164	3.77	0	N/A	N/A
KBAT1DP	1ZN16D0510	2001	2.5 CD4E	2 5F55N	COUGAR SW164	3.77	0	N/A	N/A
KBAT1DQ	1ZN2ED0E10	2001	2.5 MTX	2 5F55N	COUGAR SW164	Undef	5	N/A	N/A
KIAB4Z4	0ZN2AZ0510	2001	2 MTX76	2 5F55N	COUGAR SW164	3.82	10	N/A	N/A
KRAF5S5	1AK2AS0511	2001	2.0 & 3.8	B5	FOCUS C170 SPI & WIN Cat OPT	3.733	1	N/A	N/A
KRAF5S6	1AK2AS0A11	2001	2.0 & 3.8	B5	FOCUS C170 SPI & WIN Cat OPT	3.733	1	N/A	N/A
KRAF5Z4	1AK2AZ0608	2001	2 MTX	2 5F55N	FOCUS C170 ZETEC	3.82	1	N/A	N/A
KRAF5ZV	1AK2AZ0516	2001	2 MTX	2 5F55N	FOCUS C170 ZETEC	3.82	1	N/A	N/A
MMAF1DC	1L114D0806	2001	5.4 4R100	4 4R100	UW137	Undef	3	N/A	N/A
MMAF1H4	1E414H0506	2001	5.4 4R100	4 4R100	ECONOLINE-NGV	Undef	3	N/A	N/A
MMAF1H8	1E414H0510	2001	5.4 4R100	4 4R100	ECONOLINE-NGV	Undef	3	N/A	N/A
MMAF1HJ	1E418H0810	2001	6.8 4R100	4 4R100	ECONOLINE	Undef	1	N/A	N/A
MMAF1J8	1E414J0805	2001	5.4 4R100	4 4R100	ECONOLINE	Undef	3	N/A	N/A
MMAF1Q9	1F724Q0M05	2001	6.4 M4	4 4R100	P131	Undef	0	N/A	N/A
MMAF1Z6	1E414K0510	2001	5.4 4R100	4 4R100	ECONOLINE-NGV	Undef	3	N/A	N/A
MMAHQ08	1F728A0B15	2001	6.8 M5	4 4R100	P131	Undef	1	N/A	N/A
MMAHQ0D	1F728A0B05	2001	6.8 M5	4 4R100	P131	Undef	1	N/A	N/A
MMAHQ0CL	1F717C0B16	2001	6.8 4R100	4 4R100	P131	Undef	1	N/A	N/A
MMAHQ0CR	1F718C0B16	2001	6.8 4R100	4 4R100	P131	Undef	1	N/A	N/A
MMAHQ0CW	1F717C0B10	2001	6.8 4R100	4 4R100	P131	Undef	1	N/A	N/A

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	VSCLPD	VSCLP_W
MMAH0CX	1F718C0B10	2001	6.8	4R100	P131	Undef	1	N/A	N/A
MMAH0DC	1F714D0B15	2001	5.4	4R100	P131	Undef	3	N/A	N/A
MMAH0DD	1L118D0B15	2001	6.8	4R100	UW137	Undef	1	N/A	N/A
MMAH0DI	1L118D0B10	2001	6.8	4R100	UW137	Undef	1	N/A	N/A
MMAH0DZ	1L114D0B15	2001	5.4	4R100	UW137	Undef	3	N/A	N/A
MMAH0N7	1E418N0510	2001	6.8	4R100	ECONOLINE	Undef	1	N/A	N/A
MMAH0NA	1L118N0A15	2001	6.8	4R100	UW137	Undef	1	N/A	N/A
MMAH0NB	1F714N0B15	2001	5.4	4R100	P131	Undef	0	N/A	N/A
MMAH0NF	1E414N0A10	2001	5.4	4R100	ECONOLINE	Undef	3	N/A	N/A
MMAH0NS	1L114N0A15	2001	5.4	4R100	UW137	Undef	0	N/A	N/A
MMAH0NT	1F714N0A15	2001	5.4	4R100	P131	Undef	0	N/A	N/A
MMAH0NJ	1F717N0515	2001	6.8	4R100	P131	Undef	1	N/A	N/A
MMAH0NV	1F718N0515	2001	6.8	4R100	P131	Undef	1	N/A	N/A
MMAH0P6	1E418P0A10	2001	6.8	4R100	ECONOLINE	Undef	1	N/A	N/A
MMAH0P7	1F718P0A15	2001	6.8	4R100	P131	Undef	1	N/A	N/A
MMAH0P9	1F724P0A15	2001	5.4	M5	P131	Undef	0	N/A	N/A
MMAH0PY	1F717P0A15	2001	6.8	4R100	P131	Undef	1	N/A	N/A
MMAH0Q8	1E418Q0B10	2001	6.8	4R100	ECONOLINE	Undef	1	N/A	N/A
MMAH0R7	1E414R0B10	2001	5.4	4R100	ECONOLINE	Undef	3	N/A	N/A
MMAH0R8	1E418R0B10	2001	6.8	4R100	ECONOLINE	Undef	1	N/A	N/A
MMAH0RW	1F717R0B15	2001	6.8	4R100	P131	Undef	1	N/A	N/A
MMAH0RX	1F718R0B15	2001	6.8	4R100	P131	Undef	1	N/A	N/A
MMAH0T7	1F718T0B15	2001	6.8	4R100	P131	Undef	1	N/A	N/A
MMAH0TY	1F717T0B15	2001	6.8	4R100	P131	Undef	1	N/A	N/A
MMAH0U6	1F728U0M00	2001	6.8	M5	P131	4.88/5.38	0	N/A	N/A
MMAH0U8	1F728U0515	2001	6.8	M5	P131	Undef	0	N/A	N/A
MMAH0U7	1E414U0B10	2001	5.4	4R100	ECONOLINE	Undef	3	N/A	N/A
MMAH0V7	1F728V0A15	2001	6.8	M5	P131	Undef	0	N/A	N/A
MMAH0X7	1E414X0510	2001	5.4	4R100	ECONOLINE	Undef	3	N/A	N/A
MMAH0Y7	1E414Y0510	2001	5.4	4R100	ECONOLINE	Undef	3	N/A	N/A
MNAE0Y5	1F514Y0505	2001	5.4	4R100	PN98 30	Undef	3	N/A	N/A
MCAH1B5	1B316B0510	2001	5.4	4R100	UN173 4V	Undef	3	N/A	N/A
MCAH1DE	1F514D0B10	2001	5.4	4R100	PN98	Undef	3	N/A	N/A
MCAH1HB	1F514H0A10	2001	5.4	4R100	PN98	3.031/3.66/3.73	3	N/A	N/A
MCAH1MB	1F514M0B10	2001	5.4	4R100	PN98	Undef	3	N/A	N/A
PAAD7A2	9B1M-BA F	2001	2.6	M5	PN-150/PN-151	Undef	0	N/A	N/A
PAAD7B3	9B1M-AB F	2001	2.6	M5	PN-150/PN-151	3.45/3.73	0	N/A	N/A
PAAD7C3	9B1M-AC F	2001	2.6	M5	PN-150/PN-151	Undef	0	N/A	N/A
PAADAAZ	9B1A-BA K	2001	2.5	5R44E	PN-150/PN-151	4.1	0	N/A	N/A
PAADAB8	9B1A-AB H	2001	2.5	4R44E	PN-150/PN-151	4.1	0	N/A	N/A
PCA3646	0S11A40507	2001	4	5R55E	P207 SOHC 2000.5 & U207 SOHC 2000.5	Undef	0	N/A	N/A
PCA404Z	0U31A40510	2001	4	5R56E	UN-160 SOHC	3.27/3.55	0	N/A	N/A
PEAV248	1S12A40608	2001	4	M5	P207 SOHC & U207 SOHC	Undef	3	N/A	N/A

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	VSCLPD	VSCLP_W
PEAV2G4	1U72AG0508	2001	4	M5	U207	Undef	3	N/A	N/A
PEAV345	1U71A40508	2001	4	5R55E	U207 FFV	Undef	3	N/A	N/A
PEAV3F4	1S11AF0500	2001	4	5R55E	P207 FFV & U207 SOHC	Undef	3	N/A	N/A
PEAV43S	1R31A30512	2001	3	5R44E	PN-150/PN-151	3.73	8	N/A	N/A
PEAV43T	1R31B30512	2001	3	5R44E	PN-150/PN-151	3.73/4.10	8	N/A	N/A
PEAV448	1S11A40510	2001	4	5R55E	P207 Cat. Opt. & U207 SOHC & P207 SOHC	Undef	3	N/A	N/A
PEAV44T	1R31C40518	2001	4	5R55E	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/4.10	3	N/A	N/A
PEAV44U	1R31B40518	2001	4	5R55E	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/4.10	3	N/A	N/A
PEAV44V	1R31A40518	2001	4	5R55E	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55	3	N/A	N/A
PEAV44W	1R32C40518	2001	4	M5	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/4.10	3	N/A	N/A
PEAV44X	1R32B40518	2001	4	M5	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/4.10	3	N/A	N/A
PEAV44Y	1R32A40518	2001	4	M5	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55	3	N/A	N/A
PEAV4G7	1U71AG0510	2001	4	5R55E	U207	Undef	3	N/A	N/A
PEAV6F6	1R31AF0512	2001	3	5R55E	PN-150/PN-151 FFV	3.73	8	N/A	N/A
PEAV9S2	1U71PS0512	2001	4	5R55E	U207 USPB & U207 USPB FFV	Undef	3	N/A	N/A
PRAQ25R	1R32A20510	2001	2.9	M5	PN150/51 2001.25	Undef	2	N/A	N/A
PRAQ25V	1R32B20510	2001	2.9	M5	PN150/51 2001.25	Undef	2	N/A	N/A
PRAQ2MD	1R32B20M10	2001	2.9	M5	PN150/51 2001.25	Undef	2	N/A	N/A
PRAQ2MH	1R32A20M10	2001	2.9	M5	PN150/51 2001.25	Undef	2	N/A	N/A
PRAR324	1R31A20511	2001	2.9	5R44E	PN150/51 2001.25	4.1	2	N/A	N/A
QBAC0ZY	1A1A2AZ0508	2001	2	G5M	GT120 4V	4.1	1	N/A	N/A
QBAC1Z2	1A1AZ0507	2001	2	F4E3	GT120 4V	3.74	1	N/A	N/A
QCAC1S6	1A1A80500	2001	2	F4E3	GT120 2V	3.74	0	N/A	N/A
READ0A7	0VAA-BA J	2001	5	4R70W	UN-150	3.73	0	N/A	N/A
RGAF25E	1FB1GB0510	2001	4.8	4R70W	FORD/MERCURY	2.73	1	N/A	N/A
RGAF2BR	1VC1PB0508	2001	4.8	4R70W	ENVFN CAT OPT	3.08	1	N/A	N/A
RGAF2B6	1FB1PB0508	2001	4.8	4R70W	ENVFN CAT OPT	2.73	1	N/A	N/A
RGAF2BW	1VC1SB0511	2001	4.8	4R70W	LINC.TOWNCAR	3.08	1	N/A	N/A
RGAF2GD	1FB1GP0510	2001	4.8	4R70W	FORD/MERCURY	3.08	1	N/A	N/A
RGAF2GF	1FB1GX0510	2001	4.8	4R70W	FORD/MERCURY	3.08	1	N/A	N/A
RGAF2GZ	1VC1TX0510	2001	4.8	4R70W	LINC.TOWNCAR	3.08	1	N/A	N/A
RGAF2H9	1FB1HF0511	2001	4.8	4R70W	FORD/MERCURY	3.27	1	N/A	N/A
RGAF2HF	1FB1GH0510	2001	4.8	4R70W	FORD/MERCURY	3.55	1	N/A	N/A
RGAF2HK	1VC1LH0511	2001	4.8	4R70W	LINC.TOWNCAR	3.55	1	N/A	N/A
RGAF2HR	1VC1PH0508	2001	4.8	4R70W	ENVFN CAT OPT	3.55	1	N/A	N/A
RGAF2HS	1FB1PH0508	2001	4.8	4R70W	ENVFN CAT OPT	3.27	1	N/A	N/A
RGAF2ME	1FB1GX0M10	2001	4.8	4R70W	FORD/MERCURY	2.73	1	N/A	N/A
RGAF2PF	1FB1GP0511	2001	4.8	4R70W	FORD/MERCURY	3.27	1	N/A	N/A
RGAF2PY	1FB1PP0508	2001	4.8	4R70W	ENVFN CAT OPT	3.27	1	N/A	N/A
RGAF2XR	1FB1PX0M08	2001	4.8	4R70W	ENVFN CAT OPT	2.73	1	N/A	N/A
RIAJ2E3	1E414E0510	2001	5.4	4R70W	ECONOLINE	Undef	3	N/A	N/A
RNAI2D7	1F512D0510	2001	4.2	4R70W	PN98	Undef	1	N/A	N/A

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	VSCLP	VSCLPD	VSCLP_W
RNAH2DZ	1E412D0A10	2001	4.2	4R70W	ECONOLINE	Under		1 N/A	N/A
RNAH2E7	1E412E0A10	2001	4.2	4R70W	ECONOLINE	Under		1 N/A	N/A
RNAH2F7	1E412F0A10	2001	4.2	4R70W	ECONOLINE	Under		1 N/A	N/A
RNAH2G7	1E412G0A10	2001	4.2	4R70W	ECONOLINE	Under		1 N/A	N/A
RNAH2H7	1E412H0B10	2001	4.2	4R70W	ECONOLINE	Under		1 N/A	N/A
RNAH2J7	1E412J0B10	2001	4.2	4R70W	ECONOLINE	Under		1 N/A	N/A
RNAH2K7	1E412K0B10	2001	4.2	4R70W	ECONOLINE	Under		1 N/A	N/A
RNAH2L7	1E412L0B10	2001	4.2	4R70W	ECONOLINE	Under		1 N/A	N/A
RTA1P2	1ZE13P0510	2001	3.8	4R70W	MUSTANG		3.27	2 N/A	N/A
RTA1P3	1ZE23P0A10	2001	3.8	T5	MUSTANG		3.27	2 N/A	N/A
RTA1PY	1ZE13P0A10	2001	3.8	4R70W	MUSTANG		3.27	2 N/A	N/A
RTA1PZ	1ZE23P0510	2001	3.8	T5	MUSTANG		3.27	2 N/A	N/A
RVAF3C4	1ZE24C0507	2001	4.8	TR3850	MUSTANG COBRA		3.27	3 N/A	N/A
RVAFAT3	1ZE2GT0510	2001	4.8	TR3850	MUSTANG GT		3.27	2 N/A	N/A
RVAFAT6	1ZE1GT0510	2001	4.8	4R70W	MUSTANG GT		3.27	2 N/A	N/A
RVAF8B4	1ZE2GB0510	2001	4.8	TR3850	2001.5 Mustang Bullit		3.27	2 N/A	N/A
RWA11CL	1B316C0505	2001	4.8	4R70W	2001.5 UN83 Cat Opt	Under		3 N/A	N/A
RWA12D5	1F516D0B12	2001	4.8	4R70W	2001.5 PN86 Cat Opt 5.4PF5	Under		3 N/A	N/A
RWA12DC	1B316D0510	2001	4.8	4R70W	2001.5 UN83 Cat Opt	Under		3 N/A	N/A
RWA12E6	1F516E0B12	2001	4.8	4R70W	2001.5 PN86 Cat Opt 5.4PF6	Under		3 N/A	N/A
RWA12E8	1F514E0B11	2001	5.4	4R70W	PN86	Under		3 N/A	N/A
RWA12F6	1F514F0A11	2001	5.4	4R70W	PN86	Under		3 N/A	N/A
RWA12M5	1F516M0A12	2001	4.8	4R70W	2001.5 PN86 Cat Opt 5.4PF6	Under		3 N/A	N/A
RWA12N5	1F516N0A12	2001	4.8	4R70W	2001.5 PN86 Cat Opt 5.4PF5	Under		3 N/A	N/A
SBAF6S7	1AK1AS0A16	2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT		3.733	1 N/A	N/A
SBAF6SW	1AK1AS0516	2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT		3.733	1 N/A	N/A
SBAF6SX	1AK1AS0510	2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT		3.888	1 N/A	N/A
SBAF6SY	1AK1AS0A10	2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT		3.888	1 N/A	N/A
SBAF6Z3	1AK1AZ0510	2001		2 4F27E	FOCUS C170 ZETEC		3.907	1 N/A	N/A
SBAF6Z7	1AK1AZ0516	2001		2 4F27E	FOCUS C170 ZETEC		3.956	1 N/A	N/A
SBAF6ZW	1AK1AZ0A10	2001		2 4F27E	FOCUS C170 ZETEC		3.907	1 N/A	N/A
SBAF6ZX	1AK1AZ0510	2001		2 4F27E	FOCUS C170 ZETEC		3.907	1 N/A	N/A
SBAF6ZY	1AK1AZ0A16	2001		2 4F27E	FOCUS C170 ZETEC		3.956	1 N/A	N/A
SBAF6ZZ	1AK1AZ0A10	2001		2 4F27E	FOCUS C170 ZETEC		3.907	1 N/A	N/A

Created by: PC-CFR, Version, 6.0-1 on: 3/14/2002 at 10:34:53 AM  
Model Year - 2002 2001 2000 1999  
All Engine sizes  
All Transmissions  
All Vehicles

Parameters

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TC\_UNDER

TC\_OVER

Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	TC_UNDER	TC_OVER
RBAECC9	9LYA-AC F	1999	4.2	4R70W	ECONOLINE	Undef	1	2
RBAECCR	9LYA-BC F	1999	4.2	4R70W	ECONOLINE	Undef	1	2
RBAECDV	9LYA-AD F	1999	4.2	4R70W	ECONOLINE	Undef	1	2
RBAECE9	9LYA-AE F	1999	4.2	4R70W	ECONOLINE	Undef	1	2
RBAECET	9LYA-BE F	1999	4.2	4R70W	ECONOLINE	Undef	1	2
RBAECF9	9LYA-BF F	1999	4.2	4R70W	ECONOLINE	Undef	1	2
RBAECFA	9LYA-AF F	1999	4.2	4R70W	ECONOLINE	Undef	1	2
RBAECG9	9LYA-BG F	1999	4.2	4R70W	ECONOLINE	Undef	1	2
ROAF7D9	0E412D0A07	2000	4.2	4R070W	ECONOLINE	Undef	1	2
ROAF7E2	0E412EDA07	2000	4.2	4R070W	ECONOLINE	Undef	1	2
ROAF7FZ	0E412F0A07	2000	4.2	4R070W	ECONOLINE	Undef	1	2
ROAF7GZ	0E412G0A07	2000	4.2	4R070W	ECONOLINE	Undef	1	2
ROAF7H2	0E412H0B07	2000	4.2	4R070W	ECONOLINE	Undef	1	2
ROAF7J4	0E412J0B07	2000	4.2	4R070W	ECONOLINE	Undef	1	2
ROAF7K4	0E412K0B07	2000	4.2	4R070W	ECONOLINE	Undef	1	2
ROAF7L2	0E412L0B07	2000	4.2	4R70W	ECONOLINE	Undef	1	2
JEAL153	1U51A50M16	2002	4.6	5R55W	U152 2001.5	3.27/3.55	1	2.25
JEAL159	1U51A50B16	2002	4.6	5R55W	U152 2001.5	3.27/3.55	1	2.25
JEAL252	1U51A50M10	2002	4.6	5R55W	U152 2001.5	3.27/3.55	1	2.25
JEAL259	1U51A50B10	2002	4.6	5R55W	U152 2001.5	3.27/3.55	1	2.25
BVAJAA2	9LAA-EA EE	1999	3	AX4S	WIN126	3.98	1	3
BVAJAA4	9LAA-EA EE	1999	3	AX4S	WIN126	3.98	1	3
BVAJAAZ	9LAA-GA EG	1999	3	AX4S	WIN126	3.98	1	3
CRAIBK9	9VNA-BK BC	1999	4.8	4R70W	FORD/MERCURY	2.73	1	3
CRAIBL8	9VNA-BL BC	1999	4.8	4R70W	FORD/MERCURY	3.27	1	3
CRAIBM8	9VNA-BM BC	1999	4.8	4R70W	LINC.TOWN CAR	3.08	1	3
CRAIBS8	9VNA-BS B	1999	4.8	4R70W	LINC.TOWN CAR	3.27	1	3
CRAIDM2	9VNA-BM BC	1999	4.8	4R70W	LINC.TOWN CAR	3.08	1	3
CRAIDSZ	9VNA-BS B	1999	4.8	4R70W	LINC.TOWN CAR	3.27	1	3
KBAN4DC	9LCM-AD EFM	1999	2.5	MTX75	98.5 SW	4.06	1	3
KBAN4DK	9LCM-BD EC	1999	2.5	MTX75	98.5 SW	4.06	1	3
KBAN7D2	9LCM-ED EE	1999	2.5	MTX75	98.5 COUGAR/MONDEO	3.82	1	3
KNAG4A5	9EQM-AA FFB	1999	2	CD4E	98.5 CDW	3.82	1	3
KNAG4AP	9EQM-AA FFM	1999	2	MTX75	98.5 CDW	3.82	1	3
KNAG4AQ	9EQM-BA FC	1999	2	MTX75	98.5 CDW	3.82	1	3
KNAG4AR	9EQM-AA FFM	1999	2	MTX75	98.5 CDW	3.82	1	3
KNAG4A8	9EQM-BA FC	1999	2	CD4E	98.5 CDW	3.82	1	3
KNAG4C5	9EQM-AC FFB	1999	2	MTX75	98.5 SW	3.82	1	3
KNAG4CR	9EQM-AC FFB	1999	2	CD4E	98.5 SW	3.82	1	3
KNAG4CS	9EQM-BC EC	1999	2	CD4E	98.5 SW	3.82	1	3
KNAG4CT	9EQM-BC FC	1999	2	MTX75	98.5 SW	3.82	1	3
KNAG5R9	9EQM-AR C	1999	2	CD4E	CDW AFQVM	3.82	1	3
KNAG5RZ	9EQM-BR C	1999	2	CD4E	CDW AFQVM	3.82	1	3
KNAG5S6	9EQM-BS HC	1999	2	CD4E	98.5 CDW	3.82	1	3
KNAG5S2	9EQM-AS HFB	1999	2	CD4E	98.5 CDW	3.82	1	3
KNAG5T5	9EQM-AT FFB	1999	2	CD4E	98.5 SW	3.82	1	3
KNAG5TY	9EQM-BT GC	1999	2	CD4E	98.5 SW	3.82	1	3

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	TC_UNDER	TC_OVER
JBAR9A5	9LDM-AAE	2000	3	M5GR	DEW98	3.07	1	3
JBAS3A2	9LDM-EAG	2000	3	M5GR	DEW98	3.07	1	3
KBAN7VQ	9LCM-BV H	2000	2.8	MTX75	CDW182/SW184	4.08	1	3
KBAN7WX	9LCM-BW G	2000	2.8	MTX	COUGAR SW184	4.08	1	3
JD8D4B5	2LQ1890511	2002	3	5R55N	DEW98	3.58	1	3
JD8D4B7	2LQ1780510	2002	3	5R55N	DEW V8 .75 Q/D	3.58	1	3
JD8D4B8	2LQ1890511	2002	3	5R55N	DEW98	3.58	1	3
JD8D4B9	2LQ1780510	2002	3	5R55N	DEW V8 .75 Q/D	3.58	1	3
JEATEP3	1U51AF0815	2002	4	5R55W	U152 FFV 2001.5	3.273.55	1	3
JEATEG3	1U51BG0A15	2002	4	5R55W	U152 2001.5	3.273.55	1	3
JEATEGW	1U51AG0M15	2002	4	5R55W	U152 2001.5	3.273.55	1	3
JEATEGY	1U51AG0M15	2002	4	5R55W	U152 2001.5	3.273.55	1	3
JEATPF6	1U51AF0821	2002	4	5R55W	U152 FFV 2001.5	3.273.55	1	3
JEATPG6	1U51BG0A21	2002	4	5R55W	U152 2001.5	3.273.55	1	3
JEATPGX	1U51AG0M21	2002	4	5R55W	U152 2001.5	3.273.55	1	3
JEATPGY	1U51BG0A21	2002	4	5R55W	U152 2001.5	3.273.55	1	3
JEBFEF4	2U51AF0509	2002	4	5R55S	U152 FFV	Undef	1	3
JEBFEG4	2U51BG0A08	2002	4	5R55S	U152	Undef	1	3
JEBFEGZ	2U51AG0M08	2002	4	5R55S	U152	Undef	1	3
JIBD3S2	2LQ2890511	2002	3	5R55N	DEW98	3.07	1	3
JBAS3C2	9LDM-ACG	2000 & 2001	3	M5GR	DEW98 & DEW98 M/T	3.07	1	3
KAAK8D6	9EQA-BD EC	1999	2	CD4E	99.5 CDW	3.92	1	5
KAAK8D7	9EQA-MD C	1999	2	CD4E	99.5 CDW	4.23	1	5
KAAK8D9	9EQA-AD ERB	1999	2	CD4E	99.5 CDW	3.92	1	5
KAAK9VJ	9EQA-MV C	2000	2	CD4E	CONTOUR/MYSTIQUE	4.23	1	5
KAAKAV3	9EQA-BV F	2000	2	CD4E	CONTOUR/MYSTIQUE	3.92	1	5
KAAKAVV	9EQA-AV F	2000	2	CD4E	CONTOUR/MYSTIQUE	3.92	1	5
KAAKAZ2	0NB1FZ0A05	2000	2	CD4E	CDW AFQVM	3.92	1	5
KAAKAZY	0NB1FZ0B05	2000	2	CD4E	CDW AFQVM	3.92	1	5
JAAS6B3	9WHA-ABK	2000	3.9	5R55W	DEW98	3.58	1	3
JAAS6B4	9WHA-ABK	2000	3.9	5R55W	DEW98	3.31	1	3
JAAS6H2	9LDA-ENE	2000	3	Undef	DEW98	Undef	1	3
JAAS7A3	9WHA-AAG	2000	3.9	Undef	DEW98	3.31	1	3
JAAS7A7	9WHA-EAJ	2000	3.9	5R55N	DEW98	3.58	1	3
JAAS7A8	9WHA-BAH	2000	3.9	5R55W	DEW98	3.31	1	3
JAAS7C8	9LDA-BCG	2000	3	5R55W	DEW98	3.58	1	3
JAAS7S9	9LDA-ESG	2000	3	5R55W	DEW98	3.58	1	3
JAAT4A9	9LDA-AAH	2000	3	5R55N	DEW98	3.58	1	3
JAAT4C2	9LDA-ACG	2000	3	5R55W	DEW98	3.58	1	3
JD8C1M8	2SR12M0505	2002	3.9	5R55N	M205	3.58	1	3
JD8D4B2	2LQ1890M11	2002	3.9	5R55N	DEW98	3.31	1	3
JD8D4B4	2LQ1990M10	2002	3.9	5R55N	DEW .75 Q/D & DEW98 VCT	3.31	1	3
JD8D4B9	2LQ1890511	2002	3.9	Undef	DEW98	3.31	1	3
JD8D4BY	2LQ1990510	2002	3.9	5R55N	DEW .75 Q/D & DEW98 VCT	3.31	1	3
JD8D4M5	2SR12M0512	2002	3.9	5R55N	M206	3.58	1	3
JD8D4M8	2SR11M0510	2002	3.9	5R55N	M205 .75 Q/D	3.58	1	3
JD8D4S5	2LQ1990M10	2002	3.9	5R55N	DEW .75 Q/D & DEW98 VCT	3.31	1	3

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	TC_UNDER	IC_OVER
JDBD489	2LQ18S0511	2002	3.8	5R55N	DEW98	3.31	1	6
JDBD48X	2LQ18S0510	2002	3.8	5R55N	DEW .75 O/D & DEW98 VCT	4.000	1	6
JDBD48Z	2LQ18S0M11	2002	3.8	5R55N	DEW98	3.31	1	6
JAA868B	8LDA-BBH	2001 & 2000		5R55N & 3 5R55W	DEW98	3.07 & 3.68	1	6
CHAGDGD	2F522G0505	2002	4.2	M5	PN98 2V	Undef	1.25	2.5
CHAGDHC	2F522H0505	2002	4.2	M5	PN98 2V	Undef	1.25	2.5
CHAK1G6	2F522G0516	2002	4.2	M5	2002.25 PN98 Cat Opt	Undef	1.25	2.5
CHAK1H6	2F522H0516	2002	4.2	M5	2002.25 PN98 Cat Opt	Undef	1.25	2.5
PEAV44T	1R31C40518	2001	4	5R55E	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/4.10	1.5	1.53125
PEAV44U	1R31B40516	2001	4	5R55E	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/4.10	1.5	1.53125
PEAV44V	1R31A40516	2001	4	5R55E	PN-150/151 SOHC & PN150/51 Cat. Opt.		3.55	1.5 1.53125
PEAV44W	1R32C40518	2001	4	M5	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/4.10	1.5	1.53125
PEAV44X	1R32B40516	2001	4	M5	PN-150/151 SOHC & PN150/51 Cat. Opt.	3.55/3.73/4.10	1.5	1.53125
PEAV44Y	1R32A40516	2001	4	M5	PN-150/151 SOHC & PN150/51 Cat. Opt.		3.55	1.5 1.53125
PEAV463	1R32A40517	2002	4	M5	PN-150/151 SOHC	3.55	1.5	1.53125
PEAV458	1R31B40517	2002	4	5R55E	PN-150/151 SOHC	3.55/3.73/4.10	1.5	1.53125
PEAV45V	1R31A40517	2002	4	5R55E	PN-150/151 SOHC		3.55	1.5 1.53125
PEAV45X	1R31C40517	2002	4	5R55E	PN-150/151 SOHC	3.55/3.73/4.10	1.5	1.53125
PEAV45Y	1R32C40517	2002	4	M5	PN-150/151 SOHC	3.55/3.73/4.10	1.5	1.53125
PEAV45Z	1R32B40517	2002	4	M5	PN-150/151 SOHC	3.55/3.73/4.10	1.5	1.53125
RBAEDCB	8LYM-AC C	1999	4.2	M5	PN98	3.31/3.55	1.5	2
RBAEEA5	8LYM-AA GB	1999	4.2	M5	PN98	Undef	1.5	2
RBAEEAY	8LYM-BA GC	1999	4.2	M5	PN98	Undef	1.5	2
RBAEEBX	8LYM-BB GC	1999	4.2	M5	PN98	Undef	1.5	2
RBAEEBZ	8LYM-AB GFB	1999	4.2	M5	PN98	Undef	1.5	2
ROAF7E7	0F522EDA07	2000	4.2	M5	PN98	Undef	1.5	2
ROAF7F8	0F522F0A07	2000	4.2	M5	PN98	Undef	1.5	2
ROAF7G6	0F522G0B07	2000	4.2	M5	PN98	Undef	1.5	2
ROAF7H6	0F522H0B07	2000	4.2	M5	PN98	Undef	1.5	2
RNAH2DZ	1E412D0A10	2001	4.2	4R70W	ECONOLINE	Undef	1.5	2
RNAH2E7	1E412E0A10	2001	4.2	4R70W	ECONOLINE	Undef	1.5	2
RNAH2F7	1E412F0A10	2001	4.2	4R70W	ECONOLINE	Undef	1.5	2
RNAH2G7	1E412G0A10	2001	4.2	4R70W	ECONOLINE	Undef	1.5	2
RNAH2H7	1E412H0B10	2001	4.2	4R70W	ECONOLINE	Undef	1.5	2
RNAH2J7	1E412J0B10	2001	4.2	4R70W	ECONOLINE	Undef	1.5	2
RNAH2K7	1E412K0B10	2001	4.2	4R70W	ECONOLINE	Undef	1.5	2
RNAH2L7	1E412L0B10	2001	4.2	4R70W	ECONOLINE	Undef	1.5	2
RBAEDHB	8LYA-AH CM	1999	4.2	4R70W	PN98		3.55	1.5 3
RBAEEA8	8LYA-AA GFB	1999	4.2	4R70W	PN98	Undef	1.5	3
RBAEEAZ	8LYA-BA GC	1999	4.2	4R70W	PN98	Undef	1.5	3
RBAEEB5	8LYA-AB GFB	1999	4.2	4R70W	PN98	Undef	1.5	3
RBAEEBY	8LYA-BB GC	1999	4.2	4R70W	PN98	Undef	1.5	3
RDABDC4	8VZA-AC GFB	1999	5.4	4R70W	PN98	Undef	1.5	3
RDABDD4	8VZA-AD HFB	1999	5.4	4R70W	PN98	Undef	1.5	3
PCAG64Z	0U31A40505	2000	4	5R55E	UN-150 SOHC & UN150 SOHC CFF	3.27/3.55	1.5	3
RHAG7A5	0F514A0A08	2000	5.4	4R70W	PN98	Undef	1.5	3

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	TC_UNDER	TC_OVER
RHAG7N5	0F514NDA06	2000	5.4	4R70W	PN96	Undef	1.5	3.0
RHAGBEZ	0F514E0B13	2000	5.4	4R70W	PN96	Undef	1.5	3.0
RHAGBFN	0F514F0A12	2000	5.4	Undef	PN96	Undef	1.5	3.0
ROAF7A7	0F512A0A06	2000	4.2	4R70W	PN96	Undef	1.5	3.0
ROAF7B7	0F512B0A06	2000	4.2	4R70W	PN96	Undef	1.5	3.0
ROAF7C7	0F512C0B06	2000	4.2	4R70W	PN96	Undef	1.5	3.0
ROAF7D7	0F512D0B06	2000	4.2	4R70W	PN96	Undef	1.5	3.0
PCAG846	0611A40607	2001	4	5R55E	P207 SOHC 2000.5 & U207 SOHC 2000.5	Undef	1.5	3.0
PCAH04Z	0U31A40616	2001	4	5R55E	LN-150 SOHC	3.27/3.55	1.5	3.0
PEAV345	1U71A40506	2001	4	5R55E	U207 FFV	Undef	1.5	3.0
RMAH2D7	1F512D0610	2001	4.2	4R70W	PN96	Undef	1.5	3.0
RWAL2E8	1F514E0B11	2001	5.4	4R70W	PN96	Undef	1.5	3.0
RWAL2EZ	1F514E0B11	2001	5.4	4R70W	PN96	Undef	1.5	3.0
RWAL2F5	1F514F0A11	2001	5.4	4R70W	PN96	Undef	1.5	3.0
RWAL2F7	1F514F0A11	2001	5.4	4R70W	PN96	Undef	1.5	3.0
ODAL1AZ	2F514A0B08	2002	5.4	4R70W	2002.5 PN96 ULEV 4R70W	Undef	1.5	3.0
OHAG0CH	2E512C0606	2002	4.2	4R70W	PN96 2V	Undef	1.5	3.0
OHAG0D3	2E412D0A06	2002	4.2	4R70W	ECONLINE	Undef	1.5	3.0
OHAG0DZ	2E512D0505	2002	4.2	4R70W	PN96 2V	Undef	1.5	3.0
OHAG0E9	2E412E0A06	2002	4.2	4R70W	ECONLINE	Undef	1.5	3.0
OHAG0F8	2E412F0A06	2002	4.2	4R70W	ECONLINE	Undef	1.5	3.0
OHAG0GA	2E412G0A06	2002	4.2	4R70W	ECONLINE	Undef	1.5	3.0
OHAG0H3	2E412H0B08	2002	4.2	4R70W	ECONLINE	Undef	1.5	3.0
OHAG0JC	2E412J0B06	2002	4.2	4R70W	ECONLINE	Undef	1.5	3.0
OHAG0KC	2E412K0B06	2002	4.2	4R70W	ECONLINE	Undef	1.5	3.0
OHAG0LC	2E412L0B08	2002	4.2	4R70W	ECONLINE	Undef	1.5	3.0
OHAK1C8	2F512C0516	2002	4.2	4R70W	2002.25 PN96 Cat Opt	Undef	1.5	3.0
OHAK1D6	2F512D0616	2002	4.2	4R70W	2002.25 PN96 Cat Opt	Undef	1.5	3.0
PEAW042	1S11A40510	2002	4	5R55E	P207 Cat. Opt. & U207 SOHC & P207 SOHC	Undef	1.5	3.0
PEAW0G3	1U71AG0510	2002	4	5R55E	U207	Undef	1.5	3.0
PEAW0G6	1U71AG0510	2002	4	5R55E	U207	Undef	1.5	3.0
PEAW0G9	1U72AG0508	2002	4	M5	U207	Undef	1.5	3.0
PEAW142	1S12A40506	2002	4	M5	P207 SOHC & U207 SOHC	Undef	1.5	3.0
PEAW1G3	1U72AG0508	2002	4	M5	U207	Undef	1.5	3.0
PYAF1F7	2S11AF0505	2002	4	5R55E	P207 FFV	Undef	1.5	3.0
PYAF245	2S12A40506	2002	4	M5	P207 SOHC 2002.5	Undef	1.5	3.0
PYAF246	2S11A40606	2002	4	5R55E	P207 SOHC 2002.5	Undef	1.5	3.0
PYAF2G2	2U72AG0M05	2002	4	M5	U207 2002.5	Undef	1.5	3.0
PYAF2G5	2U72AG0606	2002	4	M5	U207 2002.5	Undef	1.5	3.0
PYAF2G8	2U71AG0506	2002	4	5R55E	U207 2002.5	Undef	1.5	3.0
PYAF2GZ	2U71AG0M05	2002	4	5R55E	U207 2002.5	Undef	1.5	3.0
PCAG4A2	9NEA-BA H	2000 & 1999	4	5R55E	LN-150 SOHC & LN150 SOHC CFF	3.27/3.55	1.5	3.0
PEAV8S2	1U71PS0612	2001 & 2002	4	5R55E	U207 USFS & U207 USFS FFV	Undef	1.5	3.0
PEAV234	1U72AG0506	2002 & 2001	4	M5	U207	Undef	1.5	3.0
ODAJ0D9	2F516D0B07	2002	4.8	4R100	PN96 2V	Undef	1.5	3.5
ODAJ0EB	2F516E0B07	2002	4.8	4R70W	PN96 2V	Undef	1.5	3.5
ODAJ0M9	2F516M0A07	2002	4.8	4R70W	PN96 2V	Undef	1.5	3.5

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	TC_UNDER	TC_OVER
ODAL0NB	2F518N0A07	2002	4.8	4R70W	PN98 2V	Under	1.5	3.5
ODAL1D5	2F518D0B16	2002	4.8	4R70W	2002.25 PN98 Cat Opt	Under	1.5	3.5
ODAL1EY	2F518E0B16	2002	4.8	4R70W	2002.25 PN98 Cat Opt	Under	1.5	3.5
ODAL1M5	2F518M0A16	2002	4.8	4R70W	2002.25 PN98 Cat Opt	Under	1.5	3.5
ODAL1N5	2F518N0A16	2002	4.8	4R70W	2002.25 PN98 Cat Opt	Under	1.5	3.5
RWA2DH	2B318D0505	2002	4.8	4R70W	2001.5 UN93 Cat Opt & UN93 2V	Under	1.5	3.5
MPAL8D4	0F714D0B11	2000	5.4	4R100	P131	Under	1.5	4
MPAL8DX	0L114D0B11	2000	5.4	Under	UW137	Under	1.5	4
MPAM0AG	0F728A0B11	2000	6.8	M5	P131	Under	1.5	4
MPAM1C4	0F717C0B11	2000	6.8	4R100	P131	Under	1.5	4
MPAM1CN	0F718C0B11	2000	6.8	4R100	P131	Under	1.5	4
MPAM1DF	0L118D0B11	2000	6.8	4R100	UW137	Under	1.5	4
MMAH0A8	1F728A0B15	2001	6.8	M5	P131	Under	1.5	4
MMAH0AD	1F728A0B05	2001	6.8	M5	P131	Under	1.5	4
MMAH0CR	1F718C0B16	2001	6.8	4R100	P131	Under	1.5	4
MMAH0CX	1F718C0B10	2001	6.8	4R100	P131	Under	1.5	4
MMAH0CY	1F717C0B15	2001	6.8	4R100	P131	Under	1.5	4
MMAH0CZ	1F717C0B10	2001	6.8	4R100	P131	Under	1.5	4
MMAH0DC	1F714D0B16	2001	5.4	4R100	P131	Under	1.5	4
MMAH0DD	1L118D0B15	2001	6.8	4R100	UW137	Under	1.5	4
MMAH0DI	1L118D0B10	2001	6.8	4R100	UW137	Under	1.5	4
MMAH0DZ	1L114D0B15	2001	5.4	4R100	UW137	Under	1.5	4
MZAH0A5	2F728A0B11	2002	6.8	M5	P131	Under	1.5	4
MZAH0B8	2F728B0B11	2002	6.8	M5	P131	Under	1.5	4
MZAH0CB	2F718C0B11	2002	6.8	4R100	P131	Under	1.5	4
MZAH0CE	2F717C0B11	2002	6.8	4R100	P131	Under	1.5	4
MZAH0D2	0L118D0B11	2002	6.8	4R100	UW137	Under	1.5	4
MZAH0D4	2L114D0B11	2002	5.4	4R100	UW137	Under	1.5	4
MZAH0D9	2F717D0B11	2002	6.8	4R100	P131	Under	1.5	4
MZAH0DF	2F718D0B11	2002	6.8	4R100	P131	Under	1.5	4
MZAH0DZ	2F714D0B11	2002	5.4	4R100	P131	Under	1.5	4
MZAH0E4	2F714E0B11	2002	5.4	4R100	P131	Under	1.5	4
MZAH0M5	2F718M0B11	2002	6.8	4R100	P131	Under	1.5	4
MZAH0MX	2F717M0B11	2002	6.8	4R100	P131	Under	1.5	4
MZAH0N4	2F718N0B11	2002	6.8	4R100	P131	Under	1.5	4
MZAH0N5	2F717N0B11	2002	6.8	4R100	P131	Under	1.5	4
MZAH0NV	2L118N0A11	2002	6.8	4R100	UW137	Under	1.5	4
MZAH0NW	2E418N0B11	2002	6.8	4R100	ECONOLINE	Under	1.5	4
MZAH0P3	2E418P0A11	2002	6.8	4R100	ECONOLINE	Under	1.5	4
MZAH0P5	2E418P0A11	2002	6.8	4R100	ECONOLINE	Under	1.5	4
MZAH0P6	2F718P0A11	2002	6.8	4R100	P131	Under	1.5	4
MZAH0PZ	2F717P0A11	2002	6.8	4R100	P131	Under	1.5	4
MZAH0R5	2F718R0B11	2002	6.8	4R100	P131	Under	1.5	4
MZAH0RU	2F717R0B11	2002	6.8	4R100	P131	Under	1.5	4
MZAH0RY	2E418R0B11	2002	6.8	4R100	ECONOLINE	Under	1.5	4
MZAH0S5	2F718S0B11	2002	6.8	4R070W	P131	Under	1.5	4
MZAH0SZ	2F717S0B11	2002	6.8	4R100	P131	Under	1.5	4

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	TC_UNDER	IC_OVER
MZAH0T5	2F718T0B11	2002	6.8	4R100	P131	Undef	1.5	4
MZAH0T2	2F717T0B11	2002	6.8	4R100	P131	Undef	1.5	4
MZAH0L5	2E418U0505	2002	6.8	4R100	ECONOLINE	Undef	1.5	4
MZAH0LJ	2F728U0M11	2002	6.8	M5	P131	Undef	1.5	4
MZAH0V3	2F728V0A11	2002	6.8	M6	P131	Undef	1.5	4
MZAH0Z3	2E418Q0B11	2002	6.8	4R100	ECONOLINE	Undef	1.5	4
MZAH0Z4	2F718Q0S11	2002	6.8	4R100	P131	Undef	1.5	4
ALAPLTV	8-98T R13C	1999	6.8	E400	ECONOLINE	Undef	1.5	5
MAAG4D2	9WAA-BD GC	1999	6.8	4R100	PHN131	Undef	1.5	5
MAAG4FF	9WAM-BF FC	1999	6.8	M5	PHN131	Undef	1.5	5
MAAG4VZ	9WAA-BV GC	1999	6.8	4R100	PHN131	Undef	1.5	5
MPAL4PZ	0F724P0A10	2000	5.4	4R100	P131	Undef	1.5	5.203125
MPAL4C3	0F724Q0M10	2000	5.4	4R100	P131	Undef	1.5	5.203125
MPAL8N4	0F714N0A11	2000	5.4	4R100	P131	Undef	1.5	5.203125
MPAL8N6	0E414N0A11	2000	5.4	4R100	ECONOLINE	Undef	1.5	5.203125
MPAL8N8	0L114N0A11	2000	5.4	Undef	UW137	Undef	1.5	5.203125
MPAL8R8	0E414R0B11	2000	5.4	4R100	ECONOLINE	Undef	1.5	5.203125
MPAL8U9	0E414U0B11	2000	5.4	4R100	ECONOLINE	Undef	1.5	5.203125
MPAL8XC	0E414X0512	2000	5.4	4R100	ECONOLINE	Undef	1.5	5.203125
MPAL8YB	0E414Y0512	2000	5.4	4R100	ECONOLINE	Undef	1.5	5.203125
MMAF1C9	1F724Q0M05	2001	5.4	M4	P131	Undef	1.5	5.203125
MMAH0NB	1F714N0B15	2001	5.4	4R100	P131	Undef	1.5	5.203125
MMAH0NF	1E414N0A10	2001	5.4	4R100	ECONOLINE	Undef	1.5	5.203125
MMAH0N6	1L114N0A15	2001	5.4	4R100	UW137	Undef	1.5	5.203125
MMAH0NT	1F714N0A15	2001	5.4	4R100	P131	Undef	1.5	5.203125
MMAH0P9	1F724P0A15	2001	5.4	M5	P131	Undef	1.5	5.203125
MMAH0R7	1E414R0B10	2001	5.4	4R100	ECONOLINE	Undef	1.5	5.203125
MMAH0U7	1E414U0B10	2001	5.4	4R100	ECONOLINE	Undef	1.5	5.203125
MMAH0X7	1E414X0510	2001	5.4	4R100	ECONOLINE	Undef	1.5	5.203125
MMAH0Y7	1E414Y0510	2001	5.4	4R100	ECONOLINE	Undef	1.5	5.203125
MZAH0F4	2F714F0B16	2002	5.4	4R100	P131	Undef	1.5	5.203125
MZAH0G4	2F714G0B16	2002	5.4	4R100	P131	Undef	1.5	5.203125
MZAH0N3	2E414N0A16	2002	5.4	4R100	ECONOLINE	Undef	1.5	5.203125
MZAH0N9	2F714N0A06	2002	5.4	4R100	P131	Undef	1.5	5.203125
MZAH0N8	2E414N0A06	2002	5.4	4R100	ECONOLINE	Undef	1.5	5.203125
MZAH0N8	2L114N0A16	2002	5.4	4R100	UW137	Undef	1.5	5.203125
MZAH0N2	2F714N0A16	2002	5.4	4R100	P131	Undef	1.5	5.203125
MZAH0P6	2F724P0A16	2002	5.4	M6	P131	Undef	1.5	5.203125
MZAH0PX	2F724P0A05	2002	5.4	M6	P131	Undef	1.5	5.203125
MZAH0R3	2E414R0B15	2002	5.4	4R100	ECONOLINE	Undef	1.5	5.203125
MZAH0R4	2E414R0B06	2002	5.4	4R100	ECONOLINE	Undef	1.5	5.203125
MZAH0UJ	2E414U0B05	2002	5.4	4R100	ECONOLINE	Undef	1.5	5.203125
MZAH0UY	2E414U0B16	2002	5.4	4R100	ECONOLINE	Undef	1.5	5.203125
MZAH0X5	2E414X0516	2002	5.4	4R100	ECONOLINE	Undef	1.5	5.203125
MZAH0XX	2E414X0505	2002	5.4	4R100	ECONOLINE	Undef	1.5	5.203125
MZAH0Y5	2E414Y0516	2002	5.4	4R100	ECONOLINE	Undef	1.5	5.203125
MZAH0YY	2E414Y0505	2002	5.4	4R100	ECONOLINE	Undef	1.5	5.203125

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	TC_UNDER	TC_OVER
MZAKZY	2F724C0M11	2002	5.4	M5	P131	Undef	1.5	5.203125
BVAJAS6	0A31AS0E10	2000	3.8	AX4B	WIN126	3.58	1.601583	3.5
BVAJAS7	0A31CS0B10	2000	3.8	AX4B	WIN126 ULEV & WIN126/ULEV	3.58	1.601583	3.5
BVAJAS8	0A31AS0B06	2000	3.8	AX4B	WIN126 COST SAVE	3.58	1.601583	3.5
BVAJAS9	0A31CS0B10	2000	3.8	AX4B	WIN126 ULEV & WIN126/ULEV	3.58	1.601583	3.5
BVAJAS10	0A31AS0B05	2000	3.8	AX4B	WIN126 COST SAVE	3.58	1.601583	3.5
BVAJAS11	0A31AS0G10	2000	3.8	AX4B	WIN126	3.58	1.601583	3.5
BVAJAS12	0A31BS0B10	2000	3.8	AX4B	WIN126	3.58	1.601583	3.5
BVAJAS13	0A31BS0B10	2000	3.8	AX4B	WIN126	3.58	1.601583	3.5
FDBA0CM	1A31NC0510	2001	3.8	AX4N	WIN126 CAT OPT & WIN126 CAT OPT	3.58	1.601583	3.5
FDBA0S7	1A31AS0G12	2001	3.8	4F50N	WIN126	3.58	1.601583	3.5
FDBA0S8	1A31AS0G12	2001	3.8	4F50N	WIN126	3.58	1.601583	3.5
FDBA0SU	1A31AS0Q13	2001	3.8	Undef	WIN126	Undef	1.601583	3.5
FDBA0SK	1A31AS0G12	2001	3.8	4F50N	WIN126	3.58	1.601583	3.5
FJAE0AB	2A31CA0506	2002	3.8	4F50N	WIN126	3.58	1.601583	3.5
FJAE0CZ	2A31ZC0510	2002	3.8	4F50N	2002.5 WIN126 Cat Opt	3.58	1.601583	3.5
BXANBSH	0DD15N0506	2000	3	AX4N	D186 CS Cat - 4V Cat & D186 CSCat - Cat 4V & D186 CSCat - 2V CALIF & D186 CS CAT CALIF 4V & D186 COST SAVE CALIF 4V & D186 COST SAVE - CALIF	3.98	2	2.5
BXANBSM	0DD15N0508	2000	3	AX4N	D186 CS Cat - 4V Cat & D186 COST SAVE CALIF 4V & D186 CSCat - Cat 4V & D186 CSCat - 2V CALIF & D186 CS CAT CALIF 4V & D186 COST SAVE - CALIF	3.98	2	2.5
BXANBAJ	0DD15N0A06	2000	3	AX4N	D186 CS Cat - 4V Fed & D186 CS CAT FED 4V & D186 CSCat Fed 4V	3.98	2	2.5
BXANBAK	0DD14N0A06	2000	3	AX4N	TALISABLE 4V	3.98	2	2.5
BXANBAN	0DD14N0A06	2000	3	AX4N	TALISABLE 4V	3.98	2	2.5
BXANBAZ	0DD15N0A06	2000	3	AX4N	D186 CS Cat - 4V Fed & D186 CSCat Fed 4V & D186 CS CAT FED 4V	3.98	2	2.5
BXANBEL	0DD14N0B06	2000	3	AX4N	TALISABLE 4V	3.98	2	2.5
BXANBEC	0DD14N0B06	2000	3	AX4N	TALISABLE 4V	3.98	2	2.5
BWAK3N2	1DD14N0510	2001	3	4F50N	TALISABLE 4V	3.98	2	2.5
FHAF8N4	2DD14N0511	2002	3	4F50N	D186 4V & TALISABLE 4V	3.98	2	2.5
FHAF6N5	2DD15N0506	2002	3	4F50N	D186 4V FT-FH CAT OPT	3.98	2	2.5
CRAIBL6	8VNA-AL BPM	1999	4.6	4R70W	FORD/MERCURY	3.27	2	3
CRAICAZ	8VNA-AAE	1999	4.6	4R70W	FORD/MERCURY	3.55	2	3
CRAICD2	8VNA-CD CG	1999	4.6	4R70W	FORD/MERCURY	3.08	2	3
CRAICE8	8VNA-GE CG	1999	4.6	4R70W	FORD/MERCURY	3.27	2	3
CRAICP8	8VNA-GF CG	1999	4.6	4R70W	LINC.TOWNCAR	3.08	2	3
CRAICK5	8VNA-AK CFB	1999	4.6	4R70W	FORD/MERCURY	2.73	2	3
CRAICL5	8VNA-AL CPM	1999	4.6	4R70W	FORD/MERCURY	3.27	2	3
CRAICLZ	8VNA-AL CPM	1999	4.6	4R70W	FORD/MERCURY	3.27	2	3
PLAC0BM	8NEA-AB Y	2000	4	Undef	UN150 PS SOHC FFV	3.55	2	3
PLAE4B6	8NEA-AB B	2000	4	Undef	UN150 PS SOHC FFV	3.55	2	3
RTAJ1P2	1ZE13P0510	2001	3.8	4R70W	MUSTANG	3.27	2	3
RTAJ1P3	1ZE23P0A10	2001	3.8	T8	MUSTANG	3.27	2	3

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	TC_UNDER	IC_OVER
RTA11PY	1ZE19PQA10	2001	3.8	4R70W	MUSTANG	3.27	2	3
RTA11PZ	1ZE23P0510	2001	3.8	T5	MUSTANG	3.27	2	3
RWA11CL	1B316C0505	2001	4.8	4R70W	2001.5 UN98 Cat Opt	Undef	2	3
RWA12D7	1F516C0B12	2001	4.8	4R70W	2001.5 PN96 Cat Opt 5.4PF5	Undef	2	3
RWA12DC	1B316C0510	2001	4.8	4R70W	2001.5 UN98 Cat Opt	Undef	2	3
RWA12E7	1F516E0B12	2001	4.8	4R70W	2001.5 PN96 Cat Opt 5.4PF5	Undef	2	3
RWA12M7	1F516M0A12	2001	4.8	4R70W	2001.5 PN96 Cat Opt 5.4PF5	Undef	2	3
RWA12N7	1F516N0A12	2001	4.8	4R70W	2001.5 PN96 Cat Opt 5.4PF5	Undef	2	3
RTA10F4	2ZE2MF0500	2002	3.8	T45	MUSTANG GS	3.27	2	3
RTA10FZ	2ZE1MF0500	2002	3.8	Undef	MUSTANG GS	3.27	2	3
RTA10R4	2ZE3CR0A05	2002	3.8	Undef	MUSTANG Cool Save	Undef	2	3
RTA10RZ	2ZE1CR0A05	2002	3.8	Undef	MUSTANG Cool Save	Undef	2	3
KBAN2H2	9LCM-AH A	1999	2.5	MTX75	CONTOUR SVT 99.5	4.06	2	4
KBAN2H3	9LCM-EH C	1999	2.5	MTX75	MONDEO ST200 99.5	3.81	2	4
KBAN4X2	9LCM-AX C	1999	2.5	MTX75	CONTOUR SVT 99.5	4.06	2	4
KBAN4X3	9LCM-AH C	1999	2.5	MTX75	CONTOUR SVT 99.5	4.06	2	4
KBAN7H7	9LCM-EH G	2000	2.5	MTX75	MONDEO/COUGAR ST200	3.81	2	4
KBAN7X4	9LCM-AXE	2000	2.5	MTX75	CONTOUR SVT	4.06	2	4
RHAGBCC	0B816C0511	2000	4.8	4R70W	UN98	Undef	2	4
RGAF25E	1FB1GB0510	2001	4.8	4R70W	FORD/MERCURY	2.73	2	4
RGAF25W	1VC16B0511	2001	4.8	4R70W	LINC.TOWNCAR	3.06	2	4
RGAF26D	1FB1GP0510	2001	4.8	4R70W	FORD/MERCURY	3.06	2	4
RGAF26F	1FB1GX0510	2001	4.8	4R70W	FORD/MERCURY	3.06	2	4
RGAF26Z	1VC1TX0510	2001	4.8	4R70W	LINC.TOWNCAR	3.06	2	4
RGAF2H9	1FB1H0511	2001	4.8	4R70W	FORD/MERCURY	3.27	2	4
RGAF2HF	1FB1GH0510	2001	4.8	4R70W	FORD/MERCURY	3.55	2	4
RGAF2HK	1VC1LH0511	2001	4.8	4R70W	LINC.TOWNCAR	3.55	2	4
RGAF2ME	1FB1GX0510	2001	4.8	4R70W	FORD/MERCURY	2.73	2	4
RGAF2PF	1FB1GP0511	2001	4.8	4R70W	FORD/MERCURY	3.27	2	4
RGAF2XR	1FB1PX0508	2001	4.8	4R70W	EN/FN CAT OPT	2.73	2	4
RGAF2L3	2FB1GL0500	2002	4.8	4R70W	EN/FN CAT OPT & FORD/MERCURY	2.73	2	4
RGAF2PX	2FB1LP0500	2002	4.8	4R70W	FORD/MERCURY	3.06	2	4
RGAF2X3	2FB1FX0500	2002	4.8	4R70W	FORD/MERCURY	2.73	2	4
RGAF2XH	2FB1UX0500	2002	4.8	4R70W	FORD/MERCURY	3.06	2	4
RYAF0T3	2ZE1GT0508	2002	4.8	4R70W	MUSTANG GT	3.27	2	4
RGAF2BR	1VC1PB0506	2001 & 2002	4.8	4R70W	EN/FN CAT OPT & LINC.TOWNCAR	3.06	2	4
RGAF2HR	1VC1PH0506	2001 & 2002	4.8	4R70W	EN/FN CAT OPT & LINC.TOWNCAR	3.55	2	4
RGAF2H8	1FB1PH0506	2001 & 2002	4.8	4R70W	EN/FN CAT OPT & FORD/MERCURY	3.27	2	4
RGAF2PY	1FB1PP0508	2001 & 2002	4.8	4R70W	EN/FN CAT OPT & FORD/MERCURY	3.27	2	4
RGAF2BS	1FB1PB0506	2002 & 2001	4.8	4R70W	EN/FN CAT OPT & FORD/MERCURY	2.73	2	4
MNAE0Y5	1F514Y0505	2001	5.4	4R100	PN98 SC	Undef	2	4.5
OMAD3Y2	2F514Y0508	2002	5.4	4R100	PN98 SC	Undef	2	4.5
OMAE1W2	2F514W0505	2002	5.4	4R100	P225 SuperCrew Harley-Davidson	Undef	2	4.5
MRAD3K5	8VZA-AK FFB	1999 & 2000	5.4	4R100	PN98 SC	Undef	2	4.5
PAAD8A1	8B1A-BA AC	1999	2.5	4R44E	PN-150/PN-151	4.1	2	5
PAAD8A5	8B1A-AA AFM	1999	2.5	4R44E	PN-150/PN-151	4.1	2	5
RQAD9B3	0VC1FB0510	2000	4.8	4R70W	LINC.TOWNCAR	3.06	2	5

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	TC_UNDER	TC_OVER
RQAD6B7	0FB1FB0A11	2000	4.6	4R70W	FORD/MERCURY	2.73	2	6
RQAD6B8	0VC1FB0B11	2000	4.6	4R70W	LINC.TOWNCAR	3.08	2	6
RQAD6B9	0FB1FB0G10	2000	4.6	4R70W	FORD/MERCURY	3.08	2	6
RQAD6BU	0VC1FB0A11	2000	4.6	4R70W	LINC.TOWNCAR	3.08	2	5
RQAD6BV	0FB1FB0B11	2000	4.6	4R70W	FORD/MERCURY	2.73	2	6
RQAD6BW	0FB1FB0A11	2000	4.6	4R70W	FORD/MERCURY	2.73	2	5
RQAD6H7	0FB1FH0A11	2000	4.6	4R70W	FORD/MERCURY	3.55	2	6
RQAD6H8	0VC1FH0B11	2000	4.6	4R70W	LINC.TOWNCAR	3.55	2	6
RQAD6H9	0FB1FH0B11	2000	4.6	4R70W	FORD/MERCURY	3.55	2	6
RQAD6HX	0VC1FH0A11	2000	4.6	4R70W	LINC.TOWNCAR	3.55	2	5
RQAD6P7	0FB1FP0A11	2000	4.6	4R70W	FORD/MERCURY	3.27	2	6
RQAD6PZ	0FB1FP0G10	2000	4.6	4R70W	FORD/MERCURY	3.27	2	5
PAADAAZ	9B1A-BA K	2001	2.5	5R44E	PN-150/PN-151	4.1	2	5
PAADAB8	9B1A-AB H	2001	2.5	4R44E	PN-150/PN-151	4.1	2	5
CRADM8	9VNA-AM CFB	1999	4.6	4R70W	LINC.TOWNCAR	3.08	2	6
CVAF1A3	9VXA-AAC	1999	4.6	T45	MUSTANG GT	3.27	2	6
CVAF1A8	9VXA-BAD	1999	4.6	T45	MUSTANG GT	3.27	2	6
CVAF1B3	9VXA-ABC	1999	4.6	T45	MUSTANG GT	3.27	2	6
CVAF1B8	9VXA-BBD	1999	4.6	T45	MUSTANG GT	3.27	2	6
CVAF1CY	9VXA-BAC	1999	4.6	4R70W	MUSTANG GT	3.27	2	6
CVAF1CZ	9VXA-BBC	1999	4.6	4R70W	MUSTANG GT	3.27	2	6
OXAB3H5	9VNA-BH CFB & 9VNA-BHC	1999	4.6	4R70W	LINC.TOWNCAR	3.55	2	6
RVAFAT3	1ZE2GT0510	2001	4.6	TR3850	MUSTANG GT	3.27	2	6
RVAFAT6	1ZE1GT0510	2001	4.6	4R70W	MUSTANG GT	3.27	2	6
RVAFBB4	1ZE2QB0510	2001	4.6	TR3850	2001.5 Mustang Bullit	3.27	2	6
RYAF0T8	2ZE2GT0506	2002	4.6	TR3850	MUSTANG GT	3.27	2	6
CVAF1C3	9VXA-AAC	1999 & 2000	4.6	4R70W	MUSTANG GT	3.27	2	6
CVAF1CX	9VXA-ABC	1999 & 2000	4.6	4R70W	MUSTANG GT	3.27	2	6
CVBA0A2	9LMA-BA BC & 9LMA-BAB	1999 & 2000	3.8	4R70W	MUSTANG	3.27	2	6
CVBA0A4	9LMA-BA BC & 9LMA-BAB	1999 & 2000	3.8	4R70W	MUSTANG	3.27	2	6
CVBA0B3	9LMA-AB BFB & 9LMA-ABE	1999 & 2000	3.8	4R70W	MUSTANG	3.27	2	6
CVBA0BZ	9LMA-AB BFB & 9LMA-ABE	1999 & 2000	3.8	4R70W	MUSTANG	3.27	2	6
CVBA2B6	9LMM-ABC	1999 & 2000	3.8	T60D	MUSTANG	3.27 & 3.08	2	6
CVBA2BZ	9LMM-ABC	1999 & 2000	3.8	T60D	MUSTANG	3.27 & 3.08	2	6
CVBA2B3	9LMM-BBC	2000 & 1999	3.8	T60D	MUSTANG	3.08 & 3.27	2	6
CVBA2B5	9LMM-BBC	2000 & 1999	3.8	T60D	MUSTANG	3.08 & 3.27	2	6
DVAN823	0M12A20512	2001 & 2002	2	G5M	U204	Under	2	6
DVAN824	0M12B20512	2001 & 2002	2	G5M	U204	Under	2	6
DVAN82U	0M12A20512	2001 & 2002	2	G5M	U204	Under	2	6
ODAG0A3	2F528J0B05	2002	4.6	M5	PN98 2V	Under	2	7
ODAG0J3	2F528J0B05	2002	4.6	M5	PN98 2V	Under	2	7
ODAG0K3	2F528K0B05	2002	4.6	M5	PN98 2V	Under	2	7

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	TC_UNDER	TC_OVER
ODAGOP3	2F526P0A05	2002	4.6	M5	PN98 2V	Undef	2	7
ODAL1J4	2F526J0B16	2002	4.6	M5	2002.25 PN98 Cat Opt	Undef	2	7
ODAL1P4	2F526P0A16	2002	4.6	M5	2002.25 PN98 Cat Opt	Undef	2	7
ODAL1Z4	2F526Q0A16	2002	4.6	M5	2002.25 PN98 Cat Opt	Undef	2	7
DVANA2Z	0M11A20520	2002	2	Undef	U204	Undef	2	12
DVANA2Y	0M11A20513	2001 & 2002	2	CD4E	U204	Undef	2	12
RBAEDBB	9VNA-BB FC	1999	4.6	4R70W	PN98	Undef	2.5	3.5
RBAEDCV	9VNA-BC FC	1999	4.6	4R70W	PN98	Undef	2.5	3.5
RBAEDDB	9VNA-AD FFB	1999	4.6	4R70W	PN98	Undef	2.5	3.5
RBAEDDB	9VNA-AE FFB	1999	4.6	4R70W	PN98	Undef	2.5	3.5
RBAEDL7	9VNA-AJ BM	1999	4.6	4R70W	PN98	3.55	2.5	3.5
RHAG7A8	0F518A0A06	2000	4.6	4R70W	PN98	Undef	2.5	3.5
RHAG7B5	0F518B0A06	2000	4.6	4R70W	PN98	Undef	2.5	3.5
RHAG8D9	0F518D0B11	2000	4.6	4R70W	PN98	Undef	2.5	3.5
RHAG8EA	0F518E0B11	2000	4.6	4R70W	PN98	Undef	2.5	3.5
RHAG8M	0F518M0A11	2000	4.6	4R70W	PN98	Undef	2.5	3.5
RHAG8NH	0F518N0A11	2000	4.6	4R70W	PN98	Undef	2.5	3.5
RBAEDM9	9VNA-BN CC	1999	4.6	Undef	PN102	Undef	2.5	4
RBAEDPB	9VNA-AP CF	1999	4.6	Undef	PN102	Undef	2.5	4
JEBF853	2U51A60507	2002	4.6	5R55B	U152	Undef	2.5	4
JEBF8M3	2U51A50M07	2002	4.6	5R55B	U162	Undef	2.5	4
MBAIBBA	9VZA-AB FFB	1999	5.4	4R100	PN102	Undef	2.5	4.5
MBAIBCA	9VZA-BC F	1999	5.4	Undef	PN98	Undef	2.5	4.5
MBAIBEB	9VZA-BED	1999	5.4	4R100	UN93 2V CFFA/LEV	Undef	2.5	4.5
MBAIBEE	9VZA-BE F	1999	5.4	Undef	UN93 2V & UN93/UN173 2V	Undef	2.5	4.5
MBAIBED	9VZA-BE G	1999	5.4	4R100	UN93 2V & UN93/UN173 2V	Undef	2.5	4.5
MBAIBEZ	9VZA-AE DFM	1999	5.4	4R100	UN93 2V & UN93/UN173 2V	Undef	2.5	4.5
MBAIBFA	9VZA-BF F	1999	5.4	Undef	PN102	Undef	2.5	4.5
MBAIBPF	9VZA-AP GFB	1999	5.4	Undef	PN98	Undef	2.5	4.5
MPAL6BF	0F514B0B11	2000	5.4	4R100	UN93 2V	Undef	2.5	4.5
MPAL6DY	0F514D0B11	2000	5.4	4R70W	PN98	Undef	2.5	4.5
MPAL6G7	0F514G0A11	2000	5.4	4R100	PN98	Undef	2.5	4.5
MPAL6H7	0F514H0A11	2000	5.4	4R100	PN98	Undef	2.5	4.5
MPAL6M7	0F514M0B11	2000	5.4	4R100	PN98	Undef	2.5	4.5
MQAH1BH	1F514B0B10	2001	5.4	4R100	UN93 2V	Undef	2.5	4.5
MQAH1DE	1F514DCB10	2001	5.4	4R100	PN98	Undef	2.5	4.5
MQAH1HB	1F514H0A10	2001	5.4	4R100	PN98	3091/3.55/3.73	2.5	4.5
MQAH1MB	1F514M0B10	2001	5.4	4R100	PN98	Undef	2.5	4.5
MQAH1B2	2B514B0505	2002	5.4	4R100	UN93 2V	Undef	2.5	4.5
MQAH1B8	2B514B0M00	2002	5.4	Undef	UN93 2V	Undef	2.5	4.5
OCAM0D2	2F514D0B17	2002	5.4	4R100	2002.25 PN98 Cat Opt	Undef	2.5	4.5
OCAM0H2	2F514H0A17	2002	5.4	4R100	2002.25 PN98 Cat Opt	Undef	2.5	4.5
ALAPLKZ	8-4BK R11FM	1999	5.4	E40D	ECONOLINE	Undef	2.5	5
ALAPLVZ	8-74U R11C	1999	5.4	E40D	ECONOLINE	Undef	2.5	5
ALAPLV4	8-74V R11C	1999	5.4	E40D	ECONOLINE	Undef	2.5	5
RDABCHZ	9VZA-AH FFM	1999	5.4	4R70W	ECONOLINE	Undef	2.5	5
RDABCLZ	9VZA-BL FC	1999	5.4	4R70W	ECONOLINE	Undef	2.5	5

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	TC_UNDER	TC_OVER
MAAG4J3	0VZA-BJ FC	1999	5.4	4R100	PHN131	Undef	2.5	5.203125
RBAEDAC	0VNM-AA F	1999	4.8	M5	PN102	Undef	2.5	8
RBAEDAG	0VNM-BA F	1999	4.8	M5	PN102	Undef	2.5	8
RBAEDBM	0VNM-AB F	1999	4.8	M5	PN102	Undef	2.5	8
RBAEDBN	0VNM-BB F	1999	4.8	M5	PN102	Undef	2.5	8
RBAEDCB	0VNM-AC FFB	1999	4.8	M5	PN96	Undef	2.6	8
RBAEDCU	0VNM-BC FC	1999	4.8	M5	PN96	Undef	2.6	8
RBAEDDA	0VNM-AD FFB	1999	4.8	M5	PN96	Undef	2.6	8
RBAEDDU	0VNM-BD FC	1999	4.8	M5	PN96	Undef	2.6	8
RBAEDEB	0VNM-AE BM	1999	4.8	M5	PN96		3.55	2.5
SAAR988	0AK15S0519	2000		2 FN	FOCUS C170 SPI		3.686	2.5
SBAF65X	1AK1A50510	2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT		3.686	2.5
SBAF65Y	1AK1A50A10	2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT		3.686	2.5
SBAF65C	2AK1B50A05	2002		2 4F27E	FOCUS SPI CAT OPT		3.683	2.5
SBAF657	1AK1A50A16	2002 & 2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT		3.733	2.5
SBAF65W	1AK1A50516	2002 & 2001	2.0 & 3.8	4F27E	FOCUS C170 SPI & WIN Cat OPT		3.733	2.5
RHAG7A9	0F5280A08	2000	4.8	M5	PN96	Undef	2.5	7
RHAG7HC	0F5280A06	2000	4.8	M5	PN96	Undef	2.5	7
RHAG8J7	0F528J0811	2000	4.8	M5	PN96	Undef	2.5	7
RHAG8K8	0F528K0811	2000	4.8	M5	PN96	Undef	2.5	7
RHAG8PE	0F528P0A11	2000	4.8	M5	PN96	Undef	2.5	7
RHAG8ZF	0F528Q0A11	2000	4.8	M5	PN96	Undef	2.5	7
PRAF325	1R32B20512	2002 & 2001	2.3	M5	PN-150/PN-151 & PN150/51 2001.25		4.1	2.5
PRAF32X	1R32B20M12	2002 & 2001	2.3	M5	PN-150/PN-151 & PN150/51 2001.25	Undef		2.5
PRAF32Y	1R32A20M12	2002 & 2001	2.3	M5	PN-150/PN-151 & PN150/51 2001.25		3.73	2.5
PRAF32Z	1R32A20512	2002 & 2001	2.3	M5	PN-150/PN-151 & PN150/51 2001.25		3.73	2.5
GVAK8B3	7-08B R12	1999		2 F4E3	ESCORT/TRACER 2V		3.74	2.5
GVAK8C3	7-07C R12	1999		2 G5M	ESCORT/TRACER 2V		3.85	2.5
GWAG8G3	9EQM-AG A	1999		2 G5M	ESCORT/TRACER 2V		3.85	2.5
GWAG8G6	9EQM-BG BC	1999		2 MTX75	ESCORT/TRAC 2V LEV		3.85	2.5
GWAG8GY	9EQA-BG A	1999		2 F4E3	ESCORT/TRACER 2V		3.74	2.5
GWAG8GZ	9EQA-AG A	1999		2 F4E3	ESCORT/TRACER 2V		3.74	2.5
GWAG8H3	9EQA-AH A	1999		2 F4E3	ESCORT/TRACER 2V		3.74	2.5
QCAA0G3	9EQA-AG A	1999		2 F4E3	ESCORT/TRACER 2V		3.74	2.5
QCAA0G4	9EQM-AG A	1999		2 G5M	ESCORT/TRACER 2V		3.85	2.5
QCAA0G7	9EQM-BG BC	1999		2 MTX75	ESCORT/TRAC 2V LEV		3.85	2.5
QCAA0GZ	9EQA-BG A	1999		2 F4E3	ESCORT/TRACER 2V		3.74	2.5
QCAA0H3	9EQA-AH A	1999		2 F4E3	ESCORT/TRACER 2V		3.74	2.5
QCAA158	0AJ1A50505	2000		2 F4E3	GT120 2V		3.74	2.5
QCAA159	0AJ2A50505	2000		2 G5M	GT120 2V		3.85	2.5
QCA0185	1AJ1A50500	2001		2 F4E3	GT120 2V		3.74	2.5
QCAE193	2AJ1A50505	2002		2 F4E3	GT120 2V	Undef		2.5
CSA-R1L3	8-18L R068	1999	4.8	4R70W	FORD Nat. Gas		2.73	3

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axis Ratio	TC_UNDER	TC_OVER
KBAN4CE	9LCA-AC DFM	1999	2.5	CD4E	BRONCO & CDW/SW 89.5	3.77	3	3
KBAN4CG	9LCA-BC DC	1999	2.5	CD4E	BRONCO	3.77	3	3
KBAN4CH	9LCA-AC DFM	1999	2.5	CD4E	BRONCO & CDW/SW 89.5	3.77	3	3
KBAN4D5	9LCA-ED CE	1999	2.5	CD4E	99.5 COUGARMONDEO	3.77	3	3
KBAN4DL	9LCA-BD DC	1999	2.5	CD4E	99.5 SW	3.77	3	3
KBAN4DM	9LCA-AD DFB	1999	2.5	CD4E	99.5 SW	3.77	3	3
KBAN7D4	9LCA-ED DE	1999	2.5	CD4E	99.5 COUGARMONDEO	3.77	3	3
KHA14A5	9LCA-EA DE	1999	2.5	CD4E	99.5 COUGARMONDEO	3.77	3	3
KHA15A9	9LCA-AA EFM	1999	2.5	CD4E	99.5 CDW/SW	3.77	3	3
KHA15AA	9LCA-AA EFM	1999	2.5	CD4E	99.5 CDW/SW	3.77	3	3
KHA15AF	9LCA-BA EC	1999	2.5	CD4E	99.5 CDW/SW	3.77	3	3
KHA16AT	9LCA-EA DE	1999	2.5	CD4E	99.5 COUGARMONDEO	3.77	3	3
KHA16AU	9LCA-EA DE	1999	2.5	CD4E	99.5 COUGARMONDEO	3.77	3	3
KHA16B9	9LCA-AB EFB	1999	2.5	CD4E	99.5 SW	3.77	3	3
KHA16BM	9LCA-8B EC	1999	2.5	CD4E	99.5 SW	3.77	3	3
KHA16SH	9LCA-8S HC	1999	2.5	CD4E	99.5 CDW/SW	3.77	3	3
KHA16SF	9LCA-AS GFM	1999	2.5	CD4E	99.5 CDW/SW	3.77	3	3
KHA16SG	9LCA-AS GFM	1999	2.5	CD4E	99.5 CDW/SW	3.77	3	3
KHA16SV	9LCA-ES GE	1999	2.5	CD4E	99.5 COUGARMONDEO	3.77	3	3
KHA16TB	9LCA-BT HC	1999	2.5	CD4E	99.5 SW	3.77	3	3
KHA16TX	9LCA-AT GFB	1999	2.5	CD4E	99.5 SW	3.77	3	3
KHA18A9	9LCA-EA F	1999	2.5	MTX75	99.5 COUGARMONDEO	3.82	3	3
KHA18AA	9LCA-AA FFM	1999	2.5	MTX75	99.5 CDW/SW	4.06	3	3
KHA18AL	9LCA-AA FFM	1999	2.5	MTX75	99.5 CDW/SW	4.06	3	3
KHA18AM	9LCA-BA FC	1999	2.5	MTX75	99.5 CDW/SW	4.06	3	3
KHA18AU	9LCA-EA EE	1999	2.5	MTX75	99.5 COUGARMONDEO	3.82	3	3
KHA18BA	9LCA-AB FFB	1999	2.5	MTX75	99.5 SW	4.06	3	3
KHA18BT	9LCA-8B FC	1999	2.5	MTX75	99.5 SW	4.06	3	3
KNAG4M4	9EQA-AM A	1999	2	CD4E	CDW APCVM	3.92	3	3
KNAG4N4	9EQA-BN A	1999	2	CD4E	CDW APCVM	3.92	3	3
KBAN7VR	9LCA-BV H	2000	2.5	CD4E	CDW182/SW164	3.77	3	3
KBAN7WW	9LCA-BW G	2000	2.5	CD4E	COUGAR SW154	3.77	3	3
CSAH1G4	1FB1NG0605	2001	4.8	4R70W	FORD Nat. Gas	2.73	3	3
CSAH1GZ	2FB1NG0605	2002	4.8	4R70W	FORD Nat. Gas	2.73	3	3
CSAH1V4	9VNA-AV A	1999 & 2001	4.8	4R70W	FORD Nat. Gas	2.73	3	3
MBA1BN7	9VZA-AN DSN	1999	6.4	E4CD	PN102-NGV	Under	3	4
RBAEDGC	9VNA-BG H	1999	4.8	4R70W	UN83	Under	3	4
RBAEDGP	9VNA-BG H	1999	4.8	4R70W	UN83	Under	3	4
MPAL8X9	0F514X0510	2000	6.4	4R100	PN102-NGV	Under	3	4
MPAMOU8	0F728U0511	2000	6.8	M5	P131	Under	3	4
MPAMOV9	0F728V0A11	2000	6.8	M5	P131	Under	3	4
MMAHOU5	1F728U0M00	2001	6.8	M5	P131	4.88/5.38	3	4
MMAHOU6	1F728U0515	2001	6.8	M5	P131	Under	3	4
MMAHOV7	1F728V0A15	2001	6.8	M5	P131	Under	3	4
MMAF1X2	1FB14X0511	2002	5.4	4R100	PN86 2V NGV & PN86 NGV	Under	3	4
PYAF1F4	2FR1AF0500	2002	3.6	R55E	PN-150/PN-151 FFV	3.73	3	4

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Ade Ratio	TC_UNDER	TC_OVER
PYAF1FJ	2F31AF0505	2002	3.8	5R55E	PN-150/PN-151 FFV	3.73	3	4
KAACKD2	9EQM-AD DFM	1999	2	MTX75	99.5 CDW	3.82	3	5
KAACKDY	9EQM-AD DFM	1999	2	MTX75	99.5 CDW	3.82	3	5
KAACKDZ	9EQM-BD D	1999	2	MTX75	99.5 CDW	3.82	3	5
BXAN85Z	0DD13N0605	2000	3	AX4N	D188 CS Cat - 2V Calif & D188 COST SAVE - CALIF & D188 CSCat - 2V CALIF	3.77	3	5
BXAN86P	0DD12N0911	2000	3	AX4N	TALISABLE 2V	3.77	3	5
BXAN86U	0DD13N0A05	2000	3	AX4N	D188 CS Cat - 2V Fed	3.77	3	5
BXAN86K	0DD12N0A10	2000	3	AX4N	TALISABLE 2V	3.77	3	5
BXAN86P	0DD12S0A10	2000	3	AX4S	TALISABLE 2V	3.77	3	5
BXAN86Z	0DD13S0A05	2000	3	AX4S	D188 CS Cat - 2V Fed	3.77	3	5
BXAN86D	0DD13D0609	2000	3	AX4S	D188 - FFV Ethanol	3.77	3	5
BXAN86Y	0DD1ND0605	2000	3	AX4N	D188 - FFV W/AX4N & D188-FFV W/AX4N	3.77	3	5
KAACKAVU	9EQM-AV F	2000	2	MTX75	CONTOUR/MYSTIQUE	3.82	3	5
KAACKAVW	9EQM-AV F	2000	2	MTX75	CONTOUR/MYSTIQUE	3.82	3	5
KAACKAVX	9EQM-BV F	2000	2	MTX75	CONTOUR/MYSTIQUE	3.82	3	5
BWAK4N8	1DD12N0510	2001	3	4F50N	TALISABLE 2V	3.77	3	5
BWAK4S8	1DD12S0510	2001	3	AX4S	TALISABLE 2V	3.77	3	5
BWAK6N8	1DD1FN0512	2001	3	4F50N	D188 - FFV Ethanol	3.77	3	5
BWAK6S8	1DD1FS0512	2001	3	AX4S	D188 - FFV Ethanol	3.77	3	5
FHAF6NW	2DD12N0611	2002	3	4F50N	TALISABLE 2V	3.77	3	5
FHAF6S3	2DD1FS0507	2002	3	AX4S	D188 - FFV Ethanol	3.77	3	5
FHAF7F3	2DD18F0510	2002	3	4F50N	D188 FFV Pt-Rh CAT OPT	3.77	3	5
FHAF7S4	2DD13S0510	2002	3	AX4S	D188 2V Pt-Rh CAT OPT	3.77	3	5
FHAF7V4	2DD13V0510	2002	3	AX4S	D188 FFV Pt-Rh CAT OPT	3.77	3	5
KIAC0Z5	2Z2AZ0500	2002	2	MTX75	COUGAR SW154	3.82	3	5
KIAB1E2	9EQM-AE DFB	1999 & 2000	2	MTX75	99.5 SW & COUGAR SW154	3.82	3	5
KIAB1E3	9EQM-BE DC	1999 & 2000	2	MTX75	99.5 SW & COUGAR SW154	3.82	3	5
KIAB4Z4	0Z2AZ0510	2001 & 2000	2	MTX75	COUGAR SW154	3.82	3	5
KMAK6S6	0AK25S0512	2000	2	B5	FOCUS C170 SPI	3.61	3	5
KRAF5SA	2AK2BS0A05	2002	2	B5	FOCUS SPI CAT OPT	3.61	3	5
KRAF5S5	1AK2AS0511	2002 & 2001	2.0 & 3.8	B5	FOCUS C170 SPI & WIN Cat OPT	3.733	3	5
KRAF5S8	1AK2AS0A11	2002 & 2001	2.0 & 3.8	B5	FOCUS C170 SPI & WIN Cat OPT	3.733	3	5
DCAR3AY	0M11A30512	2002	3	CD4E	U204	Under	3.5	4.5
DCAR3B5	0M11B30512	2002	3	CD4E	U204	Under	3.5	4.5
DCAR3C5	0M11C30512	2002	3	CD4E	U204	Under	3.5	4.5
DCAR438	2M11B30510	2002	3	C4DE	U204 Cat. Opt.	Under	3.5	4.5
DCAR43T	2M11C30510	2002	3	C4DE	U204 Cat. Opt.	Under	3.5	4.5
DCAR43W	2M11A30510	2002	3	C4DE	U204 Cat. Opt.	Under	3.5	4.5
BUAE0A7	8LDA-JAE	1999	3	AX4N	TALISABLE 4V	3.96	3.5	5
BUAE0AR	8LDA-BAB AC	1999	3	AX4N	TALISABLE 4V	3.96	3.5	5
BUAE0AT	8LDA-GA B	1999	3	AX4N	TALISABLE 4V	3.96	3.5	5
BUAE0AU	8LDA-QAD	1999	3	AX4N	TALISABLE 4V	3.96	3.5	5
BUAE0AV	8-14A R12	1999	3	AX4N	TALISABLE 4V	3.96	3.5	5
BUAE0AW	8LDA-JA C	1999	3	AX4N	TALISABLE 4V	3.96	3.5	5

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	TC_UNDER	TC_OVER
BUAEDAY	8LDA-GAD	1999	3	AX4N	TAU/SABLE 4V	3.98	3.5	5
BUAEDBT	8LDA-ABB AFB	1999	3	AX4N	TAU/SABLE 4V	3.98	3.5	5
BUAEDBU	8LDA-BAD	1999	3	AX4N	TAU/SABLE 4V	3.98	3.5	5
BUAEDBV	8LDA-ABD	1999	3	AX4N	TAU/SABLE 4V	3.98	3.5	5
BUAEDDS	8LDA-ADC	1999	3	AX4N	TAU/SABLE 4V	3.98	3.5	5
BUAEDDV	8LDA-BDC	1999	3	AX4N	TAU/SABLE 4V	3.98	3.5	5
BUAEDDW	8LDA-ADA	1999	3	AX4N	TAU/SABLE 4V	3.98	3.5	5
BUAEDDX	8LDA-BDA	1999	3	AX4N	TAU/SABLE 4V	3.98	3.5	5
PEAV43S	1R31A30512	2001	3	5R44E	PN-150/PN-151		3.73	3.5
PEAV43T	1R31B30512	2001	3	5R44E	PN-150/PN-151	3.73/4.10		3.5
PEAV6F5	1R31AF0512	2001	3	5R55E	PN-150/PN-151 FFV		3.73	3.5
PCA00CZ	9VWA-ACB	1999	4.5	AX4N	CONTINENTAL		3.58	3.75
FCALDCY	9VWA-JCD	2001 & 2000 & 1999	4.5	4F50N & AX4N	CONTINENTAL		3.58	3.75
PEA10N3	1JC1BN0511	2001 & 2002	4.5	4F50N	CONTINENTAL		3.58	3.75
JFAC6G8	1U52AG0811	2002	4	M5	U152 2001.5	3.27/3.65		4
JFAC6G6	1U52AG0815	2002	4	M5	U152 2001.5	3.27/3.55		4
JFBD6G2	2U52AG0808	2002	4	M5	U152	3.27/3.65		4
MPAM1N5	0F717N0511	2000	6.8	4R100	P131	Under		4
MPAM1NU	0F718N0511	2000	6.8	4R100	P131	Under		4
MPAM1NV	0L118NDA11	2000	6.8	4R100	UW137	Under		4
MPAM1PX	0F717POA11	2000	6.8	4R100	P131	Under		4
MPAM1PZ	0F718POA11	2000	6.8	4R100	P131	Under		4
MPAM1QZ	0F718Q0511	2000	6.8	4R100	P131	Under		4
MPAM1R4	0F717ROB11	2000	6.8	4R100	P131	Under		4
MPAM1R5	0F718ROB11	2000	6.8	4R100	P131	Under		4
MPAM1T4	0F717TOB11	2000	6.8	4R100	P131	Under		4
MPAM1T6	0F718TOB11	2000	6.8	4R100	P131	Under		4
KBAT1DB	12N25D0510	2001	2.5	MTX	COUGAR SW184		4.08	4
KBAT1DC	12N27D0510	2001	2.5	MTX	COUGAR SW184		4.08	4
KBAT1DD	12N2AD0510	2001	2.5	MTX	COUGAR SW184	Under		4
KBAT1DH	12N1AD0510	2001	2.5	CD4E	COUGAR SW184		3.77	4
KBAT1DN	12N1ED0510	2001	2.5	CD4E	COUGAR SW184		3.77	4
KBAT1DP	12N15D0510	2001	2.5	CD4E	COUGAR SW184		3.77	4
KBAT1DQ	12N2ED0510	2001	2.5	MTX	COUGAR SW184	Under		4
MMAH0NA	1L118NDA15	2001	6.8	4R100	UW137	Under		4
MMAH0NJ	1F717N0515	2001	6.8	4R100	P131	Under		4
MMAH0NV	1F718N0515	2001	6.8	4R100	P131	Under		4
MMAH0P7	1F718POA15	2001	6.8	4R100	P131	Under		4
MMAH0PK	1F717POA15	2001	6.8	4R100	P131	Under		4
MMAH0RL	1F717ROB15	2001	6.8	4R100	P131	Under		4
MMAH0RX	1F718ROB15	2001	6.8	4R100	P131	Under		4
MMAH0T7	1F718TOB15	2001	6.8	4R100	P131	Under		4
KBAT2D4	22N2ED0500	2002	2.5	MTX	COUGAR SW184		4.08	4
KBAT2DW	22N25D0500	2002	2.5	MTX	COUGAR SW184		4.08	4
KBAT2DX	22N27D0500	2002	2.5	MTX	COUGAR SW184		4.08	4
KBAT2DY	22N2AD0500	2002	2.5	MTX	COUGAR SW184	Under		4

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	TC_UNDER	TC_OVER
KBAU003	22N1ED0E06	2002	2.5	CD4E	COUGAR S/W '04	3.77	4	6
KBAU006	22N1AD0506	2002	2.5	CD4E	COUGAR S/W '04	3.77	4	5
KBAU007	22N1SD0505	2002	2.5	CD4E	COUGAR S/W '04	3.77	4	5
PBAD7B6	9LTM-AB B	1999	4 M5		PN-150/PN-151	3.08/3.55	4	6
PBAD7B7	9LTM-BB BC	1999	4 M5		PN-150/PN-151	3.08/3.55	4	6
PBAD7BC	9LTA-AB BFM	1999	4 5R55E		PN-150/PN-151	3.08/3.73	4	6
PBAD7BZ	9LTA-BB BC	1999	4 5R55E		PN-150/PN-151	3.08/3.73	4	6
PBAD7C6	9LTM-AC BFM	1999	4 M5		PN-150/PN-151	3.55	4	6
PBAD7C7	9LTM-BC BC	1999	4 M5		PN-150/PN-151	3.08/3.55	4	6
PBAD7CC	9LTA-AC BFM	1999	4 5R55E		PN-150/PN-151	3.55	4	6
PBAD7CZ	9LTA-BC BC	1999	4 5R55E		PN-150/PN-151	3.55	4	6
PCAF5A8	9LTM-AA F	1999 & 2000	4 M5		UN-150 & UN-150 CFF & UN-150 CFF/LEV	3.27/3.55	4	6
PBAD9B5	9LTM-BB GC	2000 & 1999	4 M5		PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.08/3.55 & 3.27 & 3.27/3.73	4	6
PBAD9C5	9LTM-BC GC	2000 & 1999	4 M5		PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.08 & 3.08/3.55	4	6
PBAD9D5	9LTM-AD AFM	2000 & 1999	4 M5		PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.08/3.55 & 3.27/3.73	4	6
PBAD9E5	9LTM-AE AFM	2000 & 1999	4 M5		PN-150/151 SOHC & PN-150/PN-151 & PN150/51 99.25MY	3.55 & 3.08/3.55	4	6
PBADA65	9LTA-BB H	2000 & 1999	4 5R55E		PN-150/151 SOHC & PN-150/PN-151 & PN150/51 99.25MY	3.55/3.73	4	6
PBADA65	9LTA-BC H	2000 & 1999	4 5R55E		PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.55	4	6
PBADA65	9LTA-AD F	2000 & 1999	4 5R55E		PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.55/3.73	4	6
PBADA65	9LTA-AE F	2000 & 1999	4 5R55E		PN-150/151 SOHC & PN150/51 99.25MY & PN-150/PN-151	3.55	4	6
PCAF5A3	9LTM-BA F & 9LTM-BA FB	2000 & 1999	4 M5		UN-150 & UN-150 CFF/LEV	3.27/3.55	4	6
PCAF5A8	9LTA-BA G	2000 & 1999	4 5R55E		UN-150 & UN-150 CFF & UN-150 CFF/LEV	3.73/4.10	4	6
READ0A7	8VAA-BA J	2001 & 2000 & 1999	5 4R7DW		UN-150 & UN-150 CFF/LEV	3.73	4	6
BUAE0B8	9LAA-ABD	1999	3 AX4N		TAU/SABLE 2V	3.77	4	7
BUAE0BY	9LAAF B	1999	3 AX4N & AX4S		TAU/SABLE 2V	3.77	4	7
BUAE0N7	9LAA-BNC	1999	3 AX4N		TAU/SABLE 2V	Undef	4	7
BUAE1A9	9LAA-AAD	1999	3 AX4S		TAU/SABLE 2V	3.77	4	7
BUAE1S9	9LAA-BSC	1999	3 AX4S		TAU/SABLE 2V	Undef	4	7
ALAG0N4	7-46N R109N	1999	5.4 E40D		ECONOLINE-NGV	Undef	4	8
ALAG0NP	7-46N R055N	1999	5.4 E40D		ECONOLINE-NGV	3.73/4.10	4	8
MPAL0J7	0E414J0B11	2000	5.4 4R100		ECONOLINE	Undef	4	8
RFAH5EG	0E414E0510	2000	5.4 4R70W		ECONOLINE	Undef	4	8
RFAH0D7	0E4180DA10	2000	4.6 4R70W		ECONOLINE	Undef	4	8
RFAH0E7	0E418E0B10	2000	4.6 4R70W		ECONOLINE	Undef	4	8
MMAF1J8	1E414J0B05	2001	5.4 4R100		ECONOLINE	Undef	4	8
RIA02E9	1E414E0510	2001	5.4 4R70W		ECONOLINE	Undef	4	8

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	TC_UNDER	TC_OVER
MZAH0JB	2E414J0810	2002	5.4	4R100	ECONOLINE	Undef	4	8
QIAH0EA	2E414E0610	2002	5.4	4R70W	ECONOLINE	Undef	4	8
QIAH0EF	2E419E0510	2002	4.8	4R70W	ECONOLINE	Undef	4	8
GRAK8EG	8-04E R13FM & 9EQA-AK A	1999		2F4E3	ESCORT/TRACER 4V	3.74	4.5	8
GRAK8RF	8-04R R13C & 9EQA-BK A	1999		2F4E3	ESCORT/TRACER 4V	3.74	4.5	8
QBAA0AA	0AJ1A20A12	2000		2F4E3	CT120 4V	3.74	4.5	8
QBAA0BC	0AJ1A20B12	2000		2F4E3	CT120 4V	3.74	4.5	8
QBAC1Z8	2AJ1B20500	2002		2F4E3	CT120 4V CAT OPT	3.74	4.5	8
QBAC1Z2	1AJ1A20607	2001 & 2002		2F4E3	CT120 4V	3.74	4.5	8
FBAC0CC	9LAA-AC B	1999		3AX4S	DM101 - FFV Ethanol	3.77	5	5
MZAH0HA	2E419H0811	2002	6.8	4R100	ECONOLINE	Undef	5	6
GVAE7BY	9V1M4-ABC	1999	4.6	T45	MUSTANG COBRA	3.27	6	7
MAAG4AZ	9VZM-MA BM	1999	5.4	M4	PHN131	Undef	5	7
MAAG4B4	9VZM-AB BFB	1999	5.4	M5	PHN131	Undef	6	7
PAAD8A2	9LAM-MAB	1999		3M5	PN-150/PN-151	3.73	6	7
PAAD8A8	9LAA-MA B	1999		34R44E	PN-150/PN-151	3.73	5	7
PAAD8AA	9LAA-MA B	1999		34R44E	PN-150/PN-151	3.73	6	7
PAAD8B7	9LAA-MB B	1999		34R44E	PN-150/PN-151	3.73/4.10	6	7
PAAD8A3	9LAA-MAG	1999		34R44E	PN150/51 99.25MY	3.73 & 4.10	5	7
PDAE3HD	9LAA-BH C	1999		34R44E	PN-150/PN-151 FFV	3.73	5	7
PDAE3HM	9LAA-AH C	1999		34R44E	PN-150/PN-151 FFV	3.73	6	7
PDAE3JJ	9LAA-AJ C	1999		34R44E	PN-150/PN-151 FFV	3.73/4.10	5	7
PDAE3JY	9LAA-BJ C	1999		34R44E	PN-150/PN-151 FFV	3.73/4.10	5	7
GVAE7FB	0ZE20F0610	2000	4.8	T45	MUSTANG COBRA	3.27	5	7
PAAD8AC	9LAM-MA F	2000		3M5	PN-150/PN-151	3.73	6	7
PAAD8BA	9LAM-MB F	2000		3M5	PN-150/PN-151	3.73	6	7
PAAD8CA	9LAM-MC G	2000		3M5	PN-150/PN-151 & PN150/51 99.25MY	4.1	5	7
PAAD8AH	9LAA-MA J	2000		34R44E	PN-150/PN-151	3.73	5	7
PAAD8B9	9LAA-MB J	2000		34R44E	PN-150/PN-151	3.73/4.10	6	7
PAAD8AJ	9LAA-MC H	2000		34R44E	PN-150/PN-151 & PN150/51 99.25MY	4.1	5	7
PDAE3AN	9LAM-BA J	2000		3M5	PN-150/PN-151 FFV	3.73	5	7
PDAE3AU	9LAM-AA J	2000		3M5	PN-150/PN-151 FFV	3.73	5	7
PDAE3BM	9LAM-BB J	2000		3M5	PN-150/PN-151 FFV	3.73	5	7
PDAE3BS	9LAM-AB J	2000		3M5	PN-150/PN-151 FFV	3.73	6	7
PDAE3CD	9LAM-AC H	2000		3M5	PN-150/PN-151 FFV	4.1	5	7
PDAE3CX	9LAM-BC H	2000		3M5	PN-150/PN-151 FFV	4.1	6	7
PDAE3H7	9LAA-AH K	2000		34R44E	PN-150/PN-151 FFV	3.73	5	7
PDAE3HX	9LAA-BH K	2000		34R44E	PN-150/PN-151 FFV	3.73	5	7
PDAE3J7	9LAA-BK J	2000		34R44E	PN-150/PN-151 FFV	4.1	5	7
PDAE3J8	9LAA-AJ K	2000		34R44E	PN-150/PN-151 FFV	3.73/4.10	6	7
PDAE3JY	9LAA-BJ K	2000		34R44E	PN-150/PN-151 FFV	3.73/4.10	5	7
PDAE3K8	9LAA-AK J	2000		34R44E	PN-150/PN-151 FFV	4.1	5	7
RVAF3C8	1ZE24C0507	2001	4.8	TR3850	MUSTANG COBRA	3.27	6	7
BUAD00H	8-10D R11	1999		3.4AX4N	TAURUS SHO	3.77	5	8
BUAD00M	8-10M R11	1999		3.4AX4N	TAURUS SHO	3.77	5	8

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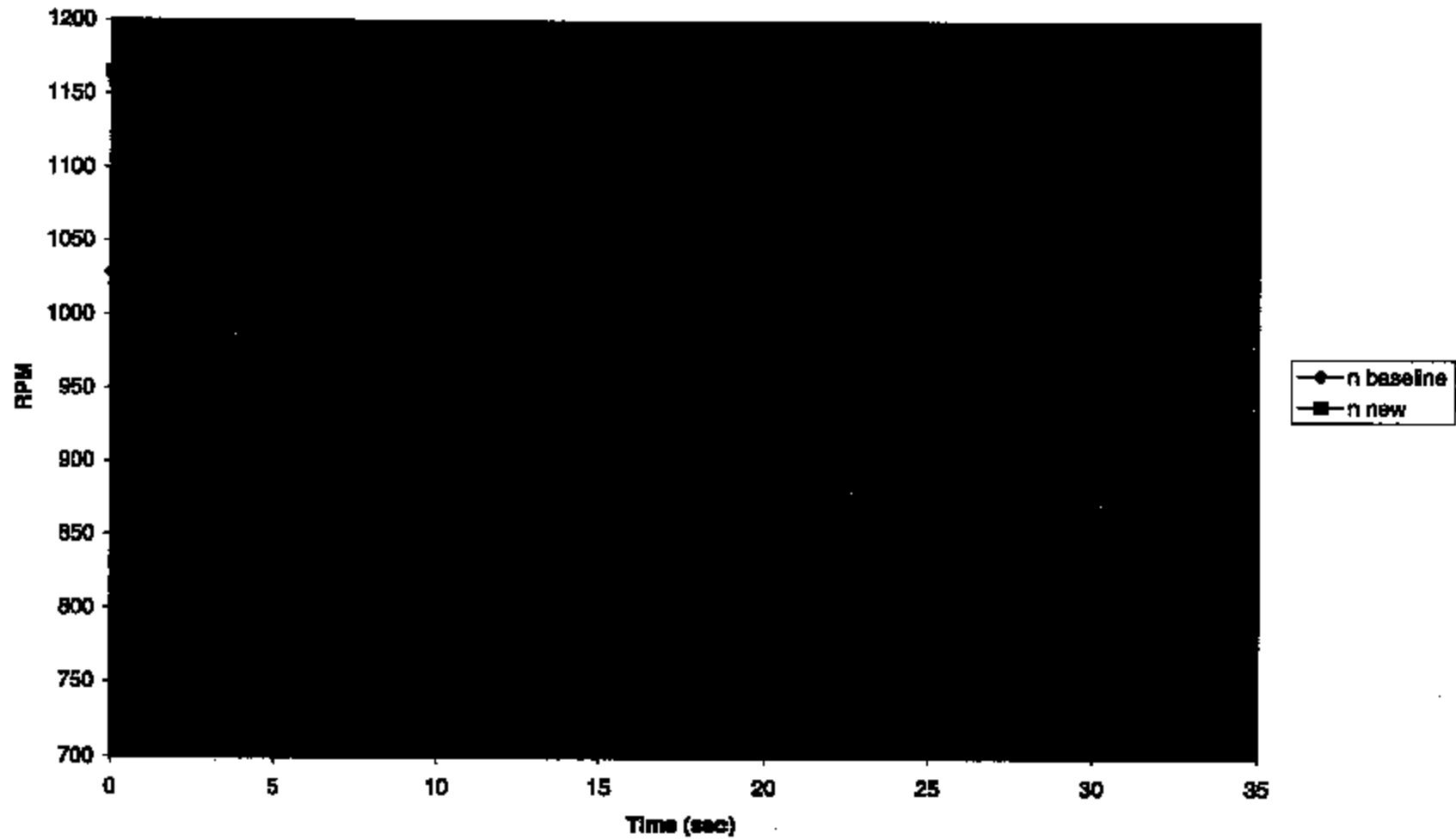
Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Axle Ratio	TC_UNDER	IC_OVER
KMAK8ZC	0AK25Z0512	2000	2	MTX75	FOCUS C170 ZETEC	3.82	5	8
SAAR8Z5	0AK18Z0512	2000	2	FN	FOCUS C170 ZETEC	3.907	5	8
SAAR8Z5	0AK18Z0512	2000	2	FN	FOCUS C170 ZETEC	3.907	5	8
KRAF8Z4	1AK2AZ0509	2001	2	MTX	FOCUS C170 ZETEC	3.82	5	8
PAAD7A2	9B1M-BA F	2001	2.5	M5	PN-150/PN-151	Under	5	8
PAAD7B3	9B1M-AB F	2001	2.5	M5	PN-150/PN-151	3.45/3.73	5	8
PAAD7C3	9B1M-AC F	2001	2.5	M5	PN-150/PN-151	Under	5	8
SBAF8Z3	1AK1AZ0510	2001	2	4F27E	FOCUS C170 ZETEC	3.907	5	8
SBAF8ZW	1AK1AZ0A10	2001	2	4F27E	FOCUS C170 ZETEC	3.907	5	8
SBAF8ZX	1AK1AZ0510	2001	2	4F27E	FOCUS C170 ZETEC	3.907	5	8
9BAF8ZZ	1AK1AZ0A10	2001	2	4F27E	FOCUS C170 ZETEC	3.907	5	8
KRAF5Z8	2AK2BZ0A05	2002	2	MTX	FOCUS ZETEC CAT OPT	3.82	5	8
KRAF5ZZ	2AK2AZ0M00	2002	2	Under	FOCUS MEXICO	Under	5	8
SBAF8Z5	2AK1AZ0M00	2002	2	Under	FOCUS MEXICO	Under	5	8
SBAF8ZD	2AK1BZ0A05	2002	2	4F27E	FOCUS ZETEC CAT OPT	3.904	5	8
KRAF5ZV	1AK2AZ0516	2002 & 2001	2	MTX	FOCUS C170 ZETEC	3.82	5	8
SBAF8Z7	1AK1AZ0516	2002 & 2001	2	4F27E	FOCUS C170 ZETEC	3.958	5	8
SBAF8ZY	1AK1AZ0A16	2002 & 2001	2	4F27E	FOCUS C170 ZETEC	3.958	5	8
ALAPL6	8-96J R108N	1999	5.8	E40D	ECONOLINE	Under	6	7
ALAPL7	8-96E R13FB	1999	5.8	E40D	ECONOLINE	Under	6	7
ALAPLW5	8-96W R13C	1999	5.8	E40D	ECONOLINE	Under	6	7
ALAPLX8	8-96X R13C	1999	5.8	E40D	ECONOLINE	Under	6	7
MAAG4A4	9WAA-AA FSN	1999	5.8	Under	PHN131	Under	6	7
MAAG4CD	9WAA-BC FC	1999	5.8	4R100	PHN131	Under	6	7
MAAG4F4	9WAA-AF FSN	1999	5.8	4R100	PHN131	Under	6	7
MAAG4HE	9WAA-AH FFB	1999	5.8	4R100	PHN131	Under	6	7
MAAG4M	9WAA-AJ FSN	1999	5.8	4R100	PHN131	Under	6	7
MAAG4LZ	9WAA-BL FC	1999	5.8	4R100	PHN131	Under	6	7
MAAG4YD	9WAA-BY FC	1999	5.8	4R100	PHN131	Under	6	7
MAAG4ZE	9WAA-BZ FC	1999	5.8	4R100	PHN131	Under	6	7
GRAK8EX	8-03E R13FM	1999	2	G5M	ESCORT/TRACER 4V	4.11	6	8
GRAK8KY	9ECM-BK A	1999	2	G5M	ESCORT/TRACER 4V	4.11	6	8
GRAK8KZ	9ECM-AK A	1999	2	G5M	ESCORT/TRACER 4V	4.11	6	8
GRAK8RX	8-03R R13C	1999	2	G5M	ESCORT/TRACER 4V	4.11	6	8
GRAK8RY	8-03R R13C	1999	2	G5M	ESCORT/TRACER 4V	4.11	6	8
MBA8BAJ	9WCA-BAF & 9WCA-BA F	1999	5.4	4R100	UNI73 4V CFF/LEV & UN98/UNI73 4V	Under	6	8
QBAADAC	0AJ2R20A13	2000	2	G5M	CT120 4V	4.1	6	8
QBAADAW	0AJ2A20A12	2000	2	G5M	CT120 4V	4.1	6	8
QBAADBV	0AJ2R20B13	2000	2	G5M	CT120 4V	4.1	6	8
QBAADBW	0AJ2A20B12	2000	2	G5M	CT120 4V	4.1	6	8
MQAH1B5	1B315B0510	2001	5.4	4R100	UNI73 4V	Under	6	8
MQAH0AP	2N115A0515	2002	5.4	4R100	CAL-1 4V	Under	6	8
MQAH0BF	2B315B0506	2002	5.4	4R100	UNI73 4V	3.75	6	8
QBAC1Z4	2AJ2B20500	2002	2	G5M	CT120 4V CAT OPT	4.1	6	8
QBAC0ZY	1AJ2AZ0506	2001 & 2002	2	G5M	CT120 4V	4.1	6	8
CVAE7R5	0ZE2CR0506	2000	5.4	Under	MUSTANG COBRA R	Under	7	9

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Strategy	Calibration No	Model Year	Engine Size	Transmission	Vehicle Application	Acce Ratio	TC_UNDER	IC_OVER
ALAPLCY	8-74C R11FB	1999	5.4	E40D	ECONOLINE	Undef	8	10
ALAPL83	8-74S R11C	1999	5.4	E40D	ECONOLINE	Undef	8	10
ALAPLTX	8-74T R11C	1999	5.4	E40D	ECONOLINE	Undef	8	10
ALAPLY4	9VZA-AY F8N	1999	5.4	E40D	ECONOLINE	Undef	8	10
MAAG4A3	9WAM-AA B8N	1999	6.8	M5	PHN131	Undef	8	10
MAAG4C8	9WAM-AC BFB	1999	6.8	M5	PHN131	Undef	8	10
MAAG4F3	9VZA-AF FFB	1999	5.4	4R100	PHN131	Undef	8	10
MPAM1HZ	0E418H0B13	2000	6.8	4R100	ECONOLINE	Undef	8	10
MPAM1NY	0E418N0S11	2000	6.8	4R100	ECONOLINE	Undef	8	10
MPAM1P4	0E418P0A11	2000	6.8	4R100	ECONOLINE	Undef	8	10
MPAM1Q8	0E418Q0B11	2000	6.8	4R100	ECONOLINE	Undef	8	10
MPAM1R3	0E418R0B11	2000	6.8	4R100	ECONOLINE	Undef	8	10
MMAF1HJ	1E418H0B10	2001	6.8	4R100	ECONOLINE	Undef	8	10
MMAH0N7	1E418N0S10	2001	6.8	4R100	ECONOLINE	Undef	8	10
MMAH0P8	1E418P0A10	2001	6.8	4R100	ECONOLINE	Undef	8	10
MMAH0Q8	1E418Q0B10	2001	6.8	4R100	ECONOLINE	Undef	8	10
MMAH0R9	1E418R0B10	2001	6.8	4R100	ECONOLINE	Undef	8	10
MPAL8H9	0E414H0S11	2000	5.4	Undef	ECONOLINE-NGV	Undef	10	14
MMAF1H8	1E414H0S10	2001 & 2002	5.4	4R100	ECONOLINE-NGV	Undef	10	14
MMAF1Z6	1E414I0S10	2001 & 2002	5.4	4R100	ECONOLINE-NGV	Undef	10	14
						MIN	1	1.59125
						MAX	10	14
						Average	2.8835008	4.8831122

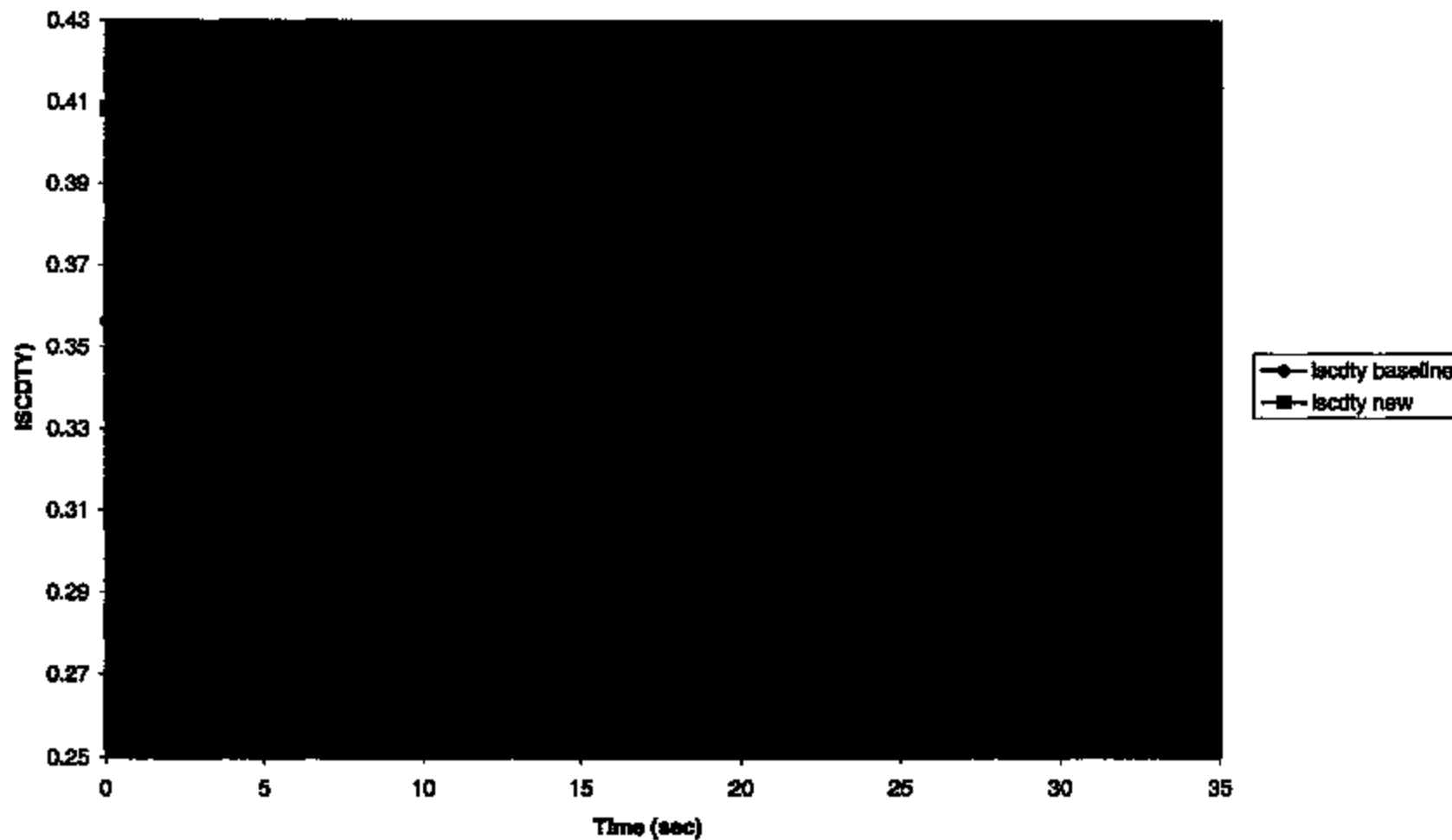
**Decel comparison  
40mph → 25 mph**



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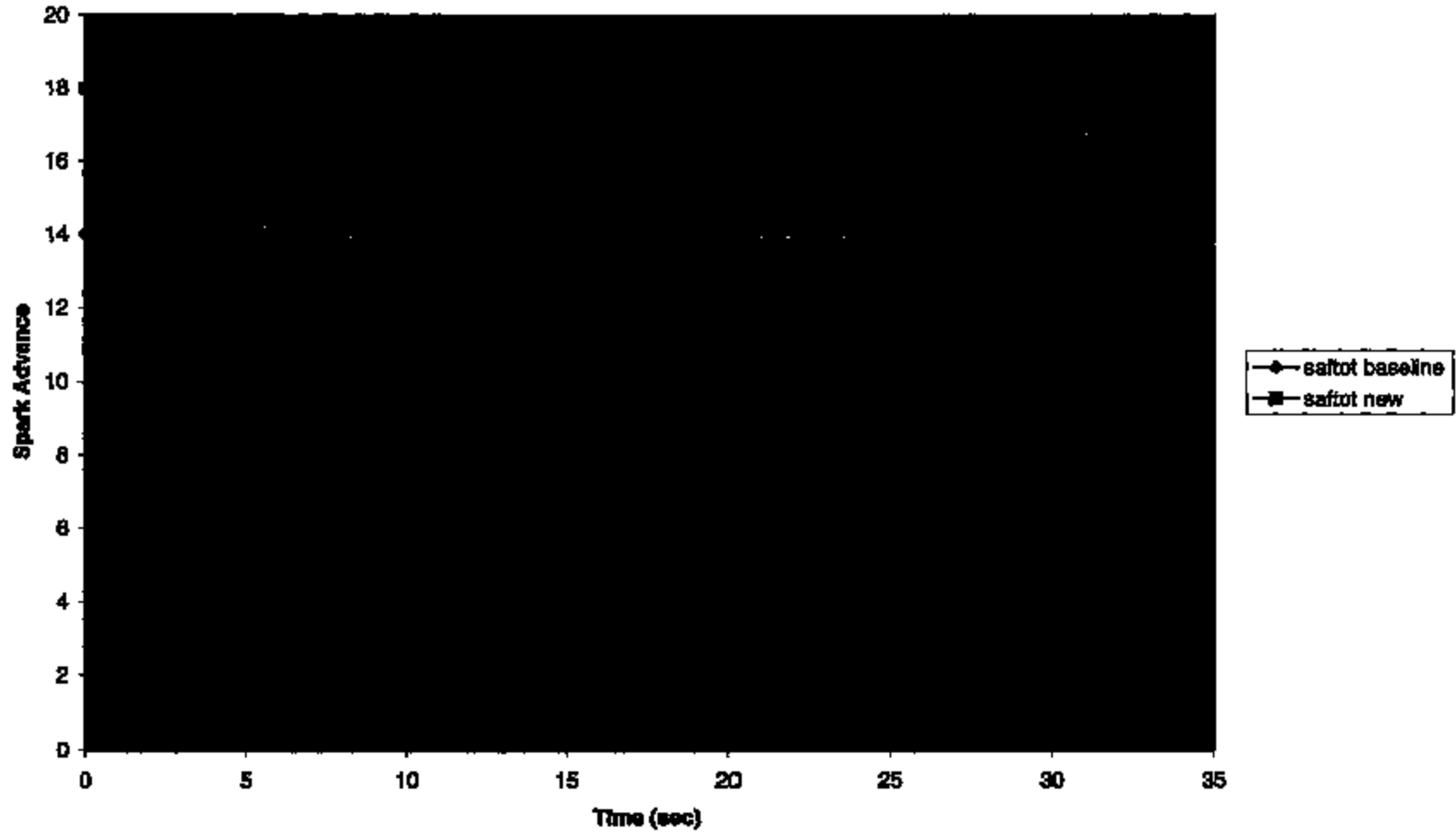
Decel Comparison  
40 mph -> 25 mph



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ISCDTY

Decel Comparison  
40 mph -> 25 mph



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