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Ford Motor Company P. O. Box 1904 Dearborn, Michigan 48121

June 24, 2005

TO:

All U.S. Ford and Lincoln Mercury Dealers

SUBJECT:

Customer Satisfaction Program 04B26: Certain 1997 Model Year Ford Crown

Victoria and Mercury Grand Marquis Vehicles - Brake Line Abrasion

Ref:

Advance Notice-Customer Satisfaction Program 04B26: February 28, 2005 Certain

1997 Model Year Ford Crown Victoria and Mercury Grand Marquis Vehicles Brake Line

Abrasion

PROGRAM TERMS

New! This program will be in effect until July 31, 2006, regardless of mileage.

AFFECTED VEHICLES

This program covers certain 1997 model year Ford Crown Victoria and Mercury Grand Marquis vehicles with Electronic Traction Control built at the St. Thomas Assembly Plant from March 20, 1997 through October 22, 1997. Affected vehicles are identified in OASIS. In addition, for a list of vehicles assigned to your dealership, visit https://web.fsavinlists.dealerconnection.com.

REASON FOR THIS PROGRAM

The affected vehicles may experience abrasion of the rear brake tube near the floor pan stiffening rib and the #3 transmission cross member. Over time, the tube may contact the stiffening rib, and the brake tube mastic cover may become abraded to the extent that the rear brake tube may begin to leak. The brake system is divided into two circuits, front and rear. The leak may result in loss of braking function to the rear circuit, however the front brake circuit remains fully functional.

SERVICE ACTION

At no charge to the vehicle owner, dealers are to inspect the brake tubes for indication of a leak near the #3 transmission cross member. If a leak is not found, the brake tubes will be repositioned using revised tube bundle clips. If a leak is found, the tube will be repaired or replaced.

NOTE: This program covers only brake tube leakage repairs caused by brake tube contact with the floor pan in the area <u>located directly under the driver's door near the transmission support cross member</u>. This program does not cover any repair for leakage found outside this area.

ATTACHMENTS

Attachment I: Administrative Information

Attachment II: Labor Allowances and Parts Ordering Information

Attachment III: Technical Information

Customer Notification Letter

QUESTIONS?

Claims	1-800-423-8851				
Specia	Special Service Support Center				
•	Parts (Dealer Only)	1-800-207-2444			
•	Technical and All Other (Dealer Only)	1-800-325-5621			

Sincerely, Frank M. Ligar

Frank M. Ligon

Certain 1997 Model Year Ford Crown Victoria and Mercury Grand Marquis Vehicles
Brake Line Abrasion

OASIS ACTIVATED? Yes

FSA VIN LIST ACTIVATED? Yes

Available through FMCDealer.com or at https://web.fsavinlists.dealerconnection.com. Owner names and addresses will be available by July 15, 2005.

NOTE: Your FSA VIN list may contain owner names and addresses obtained from motor vehicle registration records. The use of such motor vehicle registration data for any purpose other than in connection with this program is a violation of law in several states, provinces, and countries. Accordingly, you must limit the use of this listing to the follow-up necessary to complete this field service action.

STOCK VEHICLES

Correct all affected units in your new vehicle inventory before delivery.

SOLD VEHICLES

- Owners of affected vehicles will be directed to dealers for repairs
- Immediately contact any of your affected owners whose vehicles are not on your VIN lists but are identified in OASIS. Give the owner a copy of the Customer Notification Letter and schedule a service date.
- Correct other affected vehicles identified in OASIS which are brought to your dealership.

TITLE BRANDED / SALVAGED VEHICLES

Affected title branded and salvaged vehicles are eligible for this Field Service Action.

RELATED DAMAGE

• If a related damage condition exists that you believe to be caused by the covered condition, call the Special Service Support Center to request approval prior to the repair of any related damage. Requests for approval after completion of the repair will not be granted.

ADDITIONAL LABOR TIME

- If a condition exists that requires additional labor time when completing the 04B26D labor operation (complete rear brake tube replacement), the additional time must be claimed on the repair with labor operation 04B26D; no approval is required, do not submit as a Related Damage Repair. Follow the instructions in "Claims Preparation & Submission" as outlined in the Warranty and Policy Manual, for appropriate use of "Actual Time" and claiming instructions.
- If you encounter aftermarket equipment or modifications to the vehicle which might prevent the repair of the covered condition, call the Special Service Support Center.

Certain 1997 Model Year Ford Crown Victoria and Mercury Grand Marquis Vehicles
Brake Line Abrasion

OWNER REFUNDS

- Ford Motor Company will only refund owner-paid repairs covered by this program if the repair
 was performed before the date of the Customer Notification Letter (or after the date of the
 letter if an emergency repair was made away from the servicing dealer.) Refund claims that
 include other non-covered repairs, or those judged by Ford to be excessive, will not be
 accepted for reimbursement.
- Refund Claiming Information. (Submit on separate repair line.)

Program Code: 04B26Misc. Expense: REFUND

Misc. Expense: ADMINMisc. Expense: 0.2 Hrs.

RENTAL VEHICLES

The use of rental vehicles is not authorized for this program, unless the vehicle is found to have brake tubes leaking and replacement brake tube kit (5W7Z-2269-A) is required.

CLAIMS PREPARATION AND SUBMISSION

- Enter claims using Direct Warranty Entry (DWE).
- Refund or related damage must be claimed on a repair line that is separate from the repair line on which the FSA is claimed.
- "MT" labor should be submitted on a separate repair line with the related damage flag checked.
- The use of MT (actual time) must comply with warranty and policy guidelines as outlined in the Warranty and Policy Manual. "Actual Time" repairs require technician time stamps on the Repair Order. (See "Time Recording Procedure" on page 14 of Section 1 in the Warranty and Policy Manual.)
- Refer to ACESII manual for claims preparation and submission information.

Certain 1997 Model Year Ford Crown Victoria and Mercury Grand Marquis Vehicles
Brake Line Abrasion

LABOR ALLOWANCES

Description	Labor Operation	Labor Time
Inspect brake tubes for leakage (no leakage found), install bundle clips, reposition and check for clearance	04B26A	0.6 Hours
Inspect brake tubes for leakage (leakage found), replace damaged section of one (1) brake tube, reposition one existing brake tube, install bundle clips, and check for clearance	04B26B	1.9 Hours
Inspect brake tubes for leakage (leakage found), replace damaged sections of two (2) brake tubes, install bundle clips, and check for clearance	04B26C	2.4 Hours
Inspect brake tubes for leakage (leakage found, tubes cannot be spliced), replace both rear brake tubes with new 3-piece rear brake tubes, install bundle clips, and check for clearance	04B26D	4.0 Hours

PARTS REQUIREMENTS / ORDERING INFORMATION

Parts will not be direct shipped for this program. Order your parts requirements through normal order processing channels.

The following parts are required when the rear brake tubes are not leaking.

NOTE: Most vehicles will require only this kit.

Part Number	Description	Quantity
F7AZ-2L198-A	Clip Kit – tube bundle clips for repositioning existing rear brake tubes	1 kit required per vehicle

The following parts are required only if a damaged section of the rear brake tubing is being replaced.

Part Number	Description	Quantity
F7AZ-2L198-A	Clip Kit – tube bundle clips for repositioning existing rear brake tubes	1 kit required per vehicle
Procure Locally (Claim as OSP)	Bulk Brake Tubing material and union fittings (use when leaking brake tubes can be repaired by splicing)	As Required
PM - 1	Motorcraft High Performance DOT-3 Motor Vehicle Brake Fluid	As Required

Certain 1997 Model Year Ford Crown Victoria and Mercury Grand Marquis Vehicles
Brake Line Abrasion

The following parts are required only if both rear brake tube assemblies must be replaced.

Part Number	Description	Quantity
5W7Z-2269-A *	Brake Tube Kit * – 3-piece replacement rear brake tube set (use when leaking brake tubes cannot be repaired by splicing) *	1 kit required per vehicle (only if tubes cannot be spliced)
PM - 1	Motorcraft High Performance DOT-3 Motor Vehicle Brake Fluid	As Required
E9AZ-5E241-A	Gasket - converter to exhaust pipe	1 – As Required
56143-S100	Bolt – exhaust, converter to exhaust pipe	2 – As Required (Sold in pack of 2)
391188-S100	Nut - exhaust, converter to exhaust pipe	2 – As Required (Sold in pack of 2)

^{*} Clip Kit F7AZ-2L198-A is included in the 3-piece Brake Tube Kit 5W7Z-2269-A. If ordering 5W7Z-2269-A, do not order F7AZ-2L198-A.

Parts Support Center

We are introducing several new methods to contact the Parts Support Center for questions or for ordering assistance regarding recall parts:

• E-mail: Ford@Renkim.com

• FAX: 1-888-374-8040

New Phone number: 1-800-207-2444

When contacting the Parts Support Center please provide:

- Dealer Name and P & A code
- Contact Name
- Phone number and E-mail address
- FSA # 04B26 -

Part number and QTY being requested or question / concern regarding part

DEALER PRICE

For latest prices, refer to DOES II.

EXCESS STOCK RETURN

Excess stock returned for credit must have been purchased from Ford Customer Service Division in accordance with Policy Procedure Bulletin 4000.

CERTAIN 1997 MODEL YEAR CROWN VICTORIA AND GRAND MARQUIS MODELS EQUIPPED WITH ELECTRONIC TRACTION CONTROL — BRAKE TUBE INSPECTION

OVERVIEW

This program involves inspecting the brake tubes located directly below the driver's door area, near the transmission crossmember, for leakage due to contact with the floor pan. If no leakage is found, the brake tubes will be adjusted by installing *new* mounting clips. If leakage is found, the brake tubes will be repaired by splicing in *new* sections of brake tube. If the brake tube cannot be repaired, it will be replaced with newly designed service parts.

NOTE: Technicians must judge for themselves, on a case by case basis, if an acceptable splice can be made based on the condition of the brake tubes.

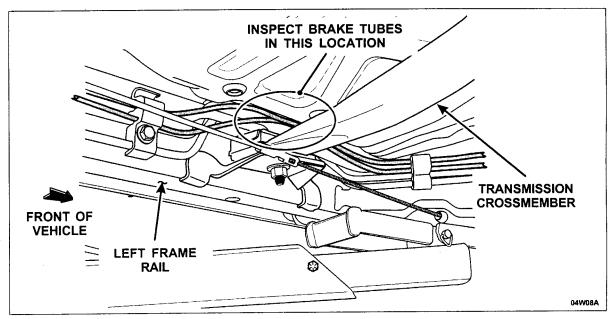
NOTE: This program covers only brake tube leakage caused by contact with the floor pan in the area located directly under the driver's door near the transmission crossmember. Any leakage found outside this area is not covered by this program.

INSPECTION

- 1. Turn the air suspension switch OFF, if equipped, then raise the vehicle on a hoist.
- 2. Inspect the brake tubes along the left frame rail directly below the driver's door area and above the transmission crossmember. See Figure 1.

NOTE: Technicians must judge for themselves, on a case by case basis, if an acceptable splice can be made based on the condition of the brake tubes.

- If the brake tubes are not leaking proceed to Brake Tube Adjustment in this Attachment III.
- If either one (1) or both brake tubes are leaking and the tubes can be spliced proceed to Brake Line Repair in this Attachment III.
- If either one (1) or both brake tubes are leaking and cannot be spliced lower the vehicle down but not off the hoist, and proceed to Brake Tube Replacement in this Attachment III.



CPR © 2005 FORD MOTOR COMPANY DEARBORN, MICHIGAN 48121 06/05 FIGURE 1

BRAKE TUBE ADJUSTMENT

NOTE: This repair must only be performed if there are no brake fluid leaks in the subject area between the transmission crossmember and the floor pan.

NOTE: When installing the tubes to the *new* clips, be sure to install the fuel and air suspension tubes in the same slot locations as in the original clips.

NOTE: Only vehicles equipped with air suspension will have air suspension tubes routed through the bundle clips.

1. Mark the location of the #3 and #4 bundle clips (nearest the transmission crossmember) on the frame rail to assure proper positioning of the *new* clips. See Figures 2 and 3.

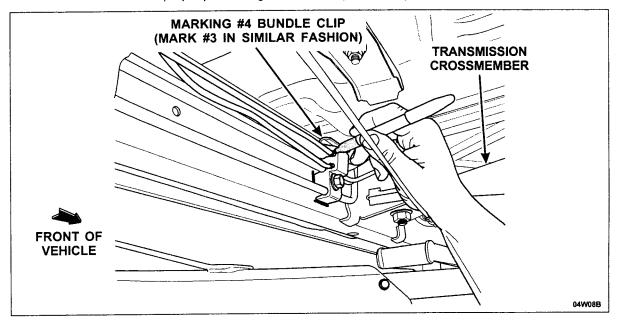


FIGURE 2

2. Remove the bolts for the #3 and #4 bundle clips. See Figure 3.

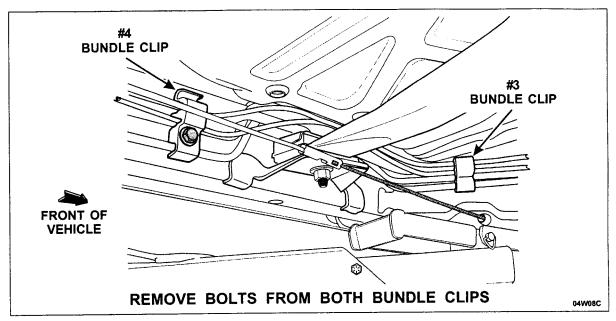


FIGURE 3

3. CAUTION: Do not damage the brake, air or fuel tubes while removing them from the clips.

Carefully pry the brake, air and fuel tubes out of the clips and remove the clips from the vehicle.

Discard the clips.



4. CAUTION: Do not damage the brake, air or fuel tubes while installing them into the new clips.

CAUTION: Position the clips in the same location as the original clips before installing any tubes. The clips will be very difficult to reposition once tubes are installed.

NOTE: The *new* clips are designed to reposition the brake tubes away from the floor pan.

Position the fuel, brake and air suspension tubes into the **new** #3 bundle clip in the sequence shown in the illustration below. See Figure 4.

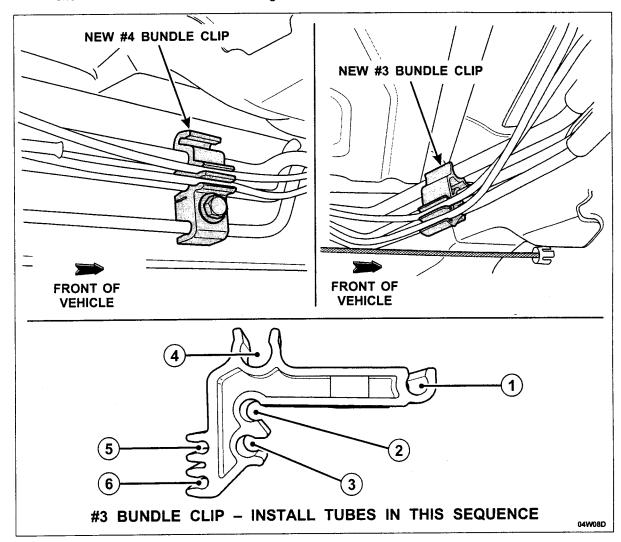


FIGURE 4

- 5. Install the bolts. Tighten to 15 Nm (11 lb-ft).
- 6. If necessary, adjust the brake tubes away from the floor pan and transmission crossmember. There should be at least 8 mm (approximately 3/8 inch) clearance between the tubes and floor pan or crossmember.
- 7. Lower the vehicle. Turn the air suspension switch ON, if equipped, and release the vehicle.



BRAKE LINE REPAIR

NOTE: This procedure must only be performed if brake fluid leakage caused by brake tube contact with the floor pan is present in the area between the transmission crossmember and the floor pan and only if the brake tubes can be spliced.

1. Mark the location of the #3 and #4 bundle clips (nearest the transmission crossmember) on the frame rail and fuel tubes to assure proper positioning of the *new* clips. See Figure 5.

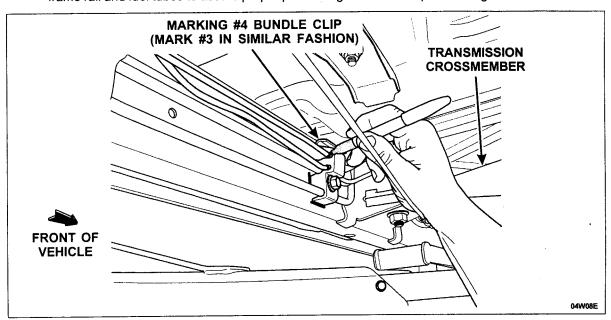
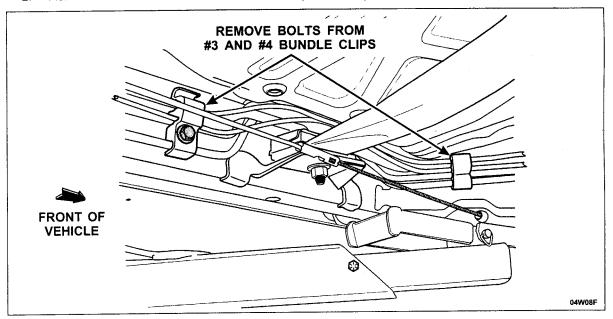


FIGURE 5

2. Remove the bolts for the #3 and #4 bundle clips. See Figure 6.



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FIGURE 6

3. CAUTION: Do not damage the brake or fuel tubes while removing them from the clips.

Carefully pry the brake and fuel tubes out of the clips and remove the clips from the vehicle. Discard the clips.

4. Using a small-frame tube cutter, cut the brake tube(s) as shown in Figure 7.

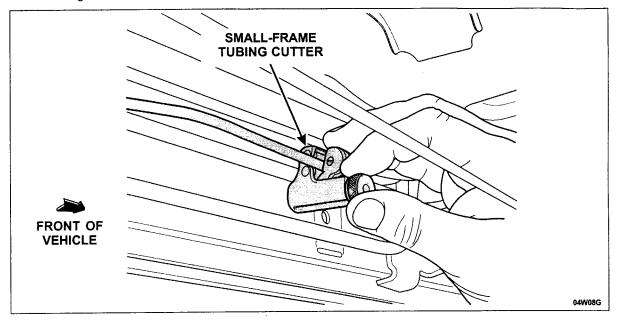


FIGURE 7

- 5. Obtain the needed length of 6-mm bulk brake tubing and appropriate unions to replace the cut out section(s).
- 6. NOTE: Install the union fittings onto the tubes prior to making the flares.

 Using a commercially available flare tool, make 45° (SAE) double flares on all tube ends.
- 7. Using the removed brake tube as a guide, bend the **new** brake tube to match the contour of the old brake tube.
- 8. Install the *new* tube(s) and tighten the union fittings hand tight.

9. CAUTION: Do not damage the brake, air or fuel tubes while installing them into the new clips.

CAUTION: Position the *new* clips in the same location as the originals before installing any tubes. The clips will be very difficult to reposition once tubes are installed.

NOTE: The *new* clips are designed to reposition the brake tubes away from the floor pan.

Position the fuel, brake and air suspension tubes into the **new** #3 bundle clip in the sequence shown in the illustration below. See Figure 8.

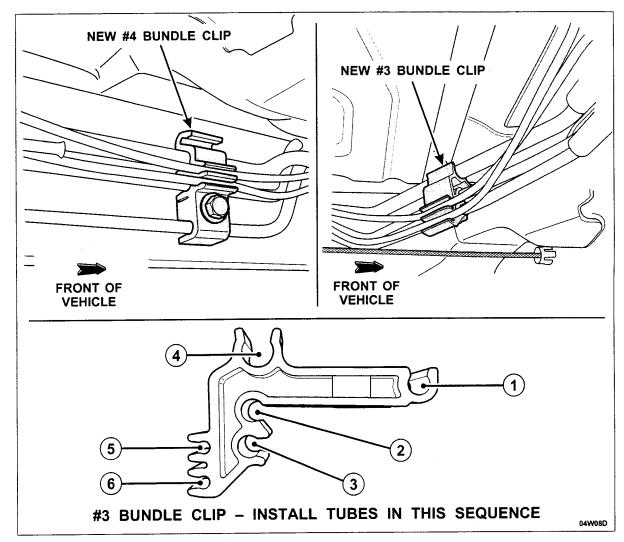
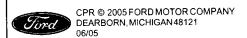


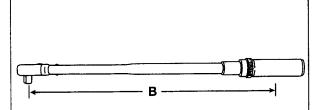
FIGURE 8

10. Install the bolts. Tighten to 15 Nm (11 lb-ft).

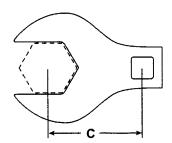


11. CAUTION: When tightening the brake tube union fittings, a crowfoot adapter must be used on a torque wrench. This increases the length of the tool and changes the actual torque value. To achieve the proper torque on the fasteners, you must use the formula provided in this document to calculate the proper setting for the torque wrench/crowfoot you are using. See Figure 9.

Tighten the brake tube union fittings to the calculated torque specification to achieve 16 Nm (12 lb-ft).



MEASURE FROM CENTER OF SQUARE DRIVE TO CENTER OF HANDGRIP WITH TORQUE WRENCH SET AT "0"



MEASURE FROM CENTERLINE OF SQUARE DRIVE TO CENTERLINE OF FASTENER

- A = Desired torque of fastener
- B = Torque wrench length measurement
- C = Crowfoot Adapter length measurement
- D = Required setting of torque wrench

Example of typical tool application:

$$\frac{16 \text{ Nm} \times 14}{14 + 1.25} = \frac{224}{15.25} = 15 \text{ Nm}$$

04W08i

FIGURE 9

- 12. If necessary, adjust the brake tubes away from the floor pan and transmission crossmember. There should be at least 8 mm (approximately 3/8 inch) clearance between the tubes and floor pan or crossmember.
- 13. Lower the vehicle. Turn the air suspension switch ON, if equipped.
- 14. Proceed to Brake System Bleeding in this Attachment III.



BRAKE TUBE REPLACEMENT

NOTE: This procedure must only be performed if brake fluid leakage caused by brake tube contact with the floor pan is present in the area near the transmission crossmember and only if the brake tubes cannot be spliced. Both rear brake tubes will be replaced from the ABS hydraulic control unit (HCU) to their connections with the rear brake tubes in the area near the left rear wheel. The original tubes will be cut out and the *new* lines will be installed in three (3) sections, eliminating the need to remove the vehicle body.

REMOVAL

- 1. Open the hood.
- 2. Remove the air cleaner assembly and outlet tube.
- 3. CAUTION: Use caution to avoid damaging tubes that are not being serviced when removing tubes from any of the separator or bundle clips.

NOTE: There are a total of six (6) brake tubes attached to the ABS HCU.

- The two (2) on the very top are the supply tubes.
- The four (4) tubes on the side are the "delivery" tubes leading to front and rear wheels.
- The two (2) "rear" delivery tubes that are being replaced are located on the side of HCU closest
 to the front of the vehicle.

NOTE: Before disconnecting or removing any brake tubes, note the routing and location of the tubes in relation to other tubes and nearby components.

Disconnect the two (2) tubes for the rear brakes from the ABS HCU. See Figure 10.

4. Note the positions of the brake tubes in the black separator clips, then disengage the two (2) rear brake tubes from the black separator clips in the engine compartment. Keep the separator clips attached to the other tubes. See Figure 10.

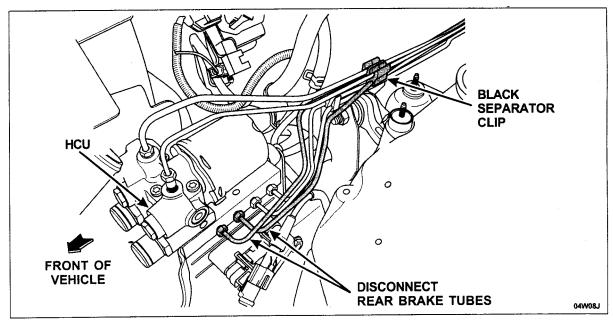


FIGURE 10



5. Remove the bolt for the #1 bundle clip (located on the frame rail in front of the dash panel below the brake booster). See Figure 11.

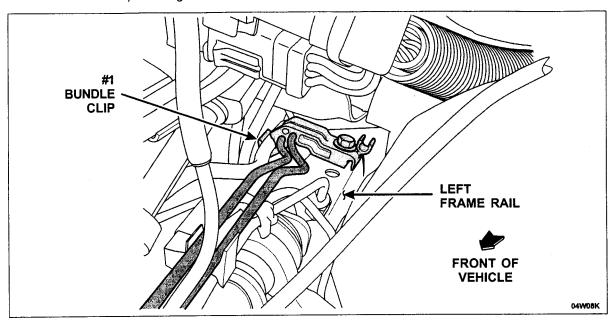


FIGURE 11

- 6. Partially raise the vehicle on the hoist.
- 7. Remove the left rear wheel and tire assembly.
- 8. Mark the location of the #7, #8 and #9 bundle clips on the frame rail, then remove the bolts for the #7 and #9 bundle clips (located on the frame around the left rear wheel area accessible once the wheel is removed). The #8 clip has no bolt. See Figure 12.

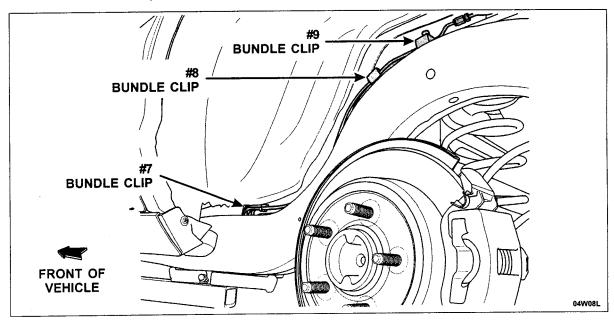
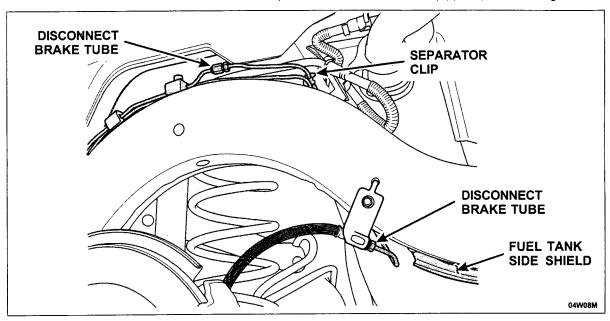


FIGURE 12



- 9. Disengage the small white separator clip from the brake tube near the fuel filler neck. Retain the clips for reuse. See Figure 13.
- 10. Disconnect the brake tubes at the left rear brake jounce hose and at the brake crossover tube leading to the right rear brake assembly. See Figure 13.
- 11. Remove the fuel tank side shield, held in place on the frame with two (2) pushpins. See Figure 13.

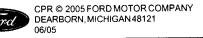


- 12. CAUTION: Prior to removing the brake tubes from the #7, #8 and #9 bundle clips, pay close attention to the position of the tubes in the clips.
 - The outboard tube is connected to the crossover tube leading to the right rear brake.
 - The inboard tube is connected to the left rear brake jounce hose.

Upon installation of the *new* tubes, this positioning must be maintained. Do not allow the tubes to crisscross.

Carefully pry the brake tubes out of the #7, #8 and #9 bundle clips. Remove the #7 bundle clip from the vehicle.

- 13. Raise the vehicle on the hoist.
- 14. Disconnect the left heated oxygen sensor (HO2S) and catalyst monitor sensor (CMS), then remove the left catalytic converter.



15. NOTE: The #3 and #4 bundle clips are supplied with the *new* tubes. Separator clips (small white clips and larger black clips) are supplied on the *new* tubes primarily to maintain their orientation during shipment. Except in locations that interfere with tube positioning or bundle clip installation, these clips may remain on the tubes after installation.

To gain access to the #2 bundle clip bolt, pull the noise shield down from between the frame rail and the floor pan and let it hang near the transmission. See Figure 14.

- 16. Mark the locations of all the bundle clips on the frame and on the fuel tubes.
- 17. Remove the #2 bundle clip bolt. See Figure 14.

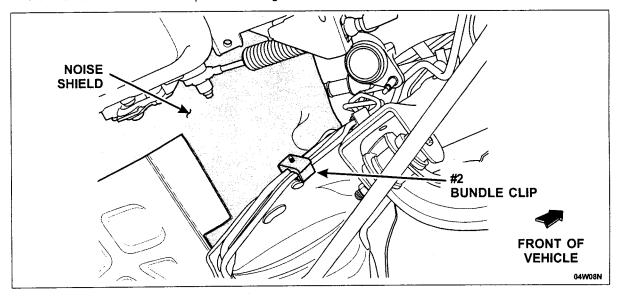


FIGURE 14

18. Remove the bolts for the #3, #4, #5 and #6 bundle clips. See Figure 15.

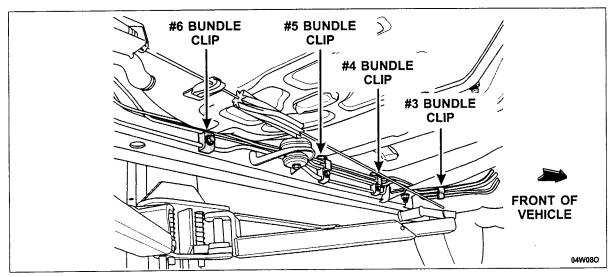


FIGURE 15



- 19. Carefully pry the air, fuel and brake tubes out of the bundle clips.
- 20. NOTE: It is recommended that the old tubes be cut in the same locations as the union fittings located on the *new* service tubes. This will allow you the opportunity to remove the old lines in the reverse direction of the *new* lines to be installed. These locations are at left front "torque box", or above where the cross brace is bolted to the underside of the square section of frame, and above the fuel filter mounting area where the brake tubes bend upwards to cross over the frame.

Using side cutters or equivalent, and following the *new* brake tubes as a guide, cut the brake tubes into sections. See Figure 16.

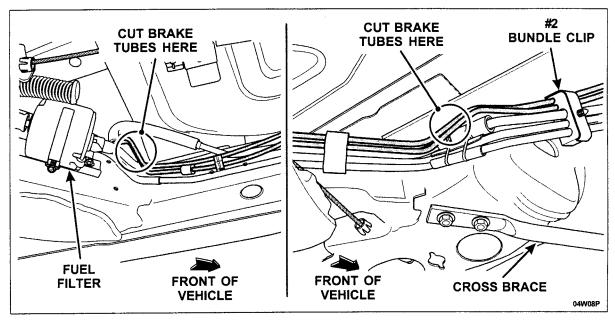


FIGURE 16

21. NOTE: While removing the front section of brake tubes, do not remove the brake tubes from the #1 bundle clip. It will be necessary to transfer the bundle clip to the *new* tube assembly prior to installation and having the clip in the original position will assist in proper positioning onto the *new* tubes.

NOTE: During tube removal, try not to bend the lines or force them out of the vehicle. Pay particular attention to how the tubes must be positioned and rotated or maneuvered in order to install the *new* tubes into their proper locations. This is most important when installing the rear sections over the frame rail and the front sections up along the frame into the engine compartment.

Remove the brake tube sections as follows:

- · Front Section
 - a) Remove this section from beneath the vehicle, noting the location of surrounding components such as the steering shaft, shift cable, wire harnesses, fuel, air and other brake tubes.
- · Center Section
 - a) Remove this section sliding it from behind the body mount then around the transmission crossmember.
 - b) The crossmember and parking brake cable DO NOT have to be removed.
- Rear Section
 - a) Partially lower the vehicle if necessary.
 - b) Gently maneuver the rear-most end of the brake tubes up and around the frame behind the axle first.
 - c) Carefully twist the tube to free it from around the frame forward of the axle and remove it from the vehicle from the wheel house area.

INSTALLATION

For detailed views of the *new* brake tubes installed, see figures 17 through 26.

1. CAUTION: Keep all caps in place in the tube ends during installation to avoid getting foreign material in the brake tubes.

CAUTION: Do not force or bend the brake tubes during installation.

Install the new brake tubes as follows:

- · Rear Section
 - a) Start by carefully inserting the tubes in over the frame in front of the rear axle, twisting the tubes over the frame.
 - b) Maneuver the tubes over the frame behind the axle.
 - c) The tubes should not be under stress when positioned. They should rest naturally in place on the frame rail and should align with their corresponding connectors.
 - d) Make sure the tubes are positioned and installed in the #7, #8 and #9 clips as the original tubes were (parallel to each other and do not crisscross).
 - The outboard tube must be connected to the crossover tube leading to the right rear brake.
 - The inboard tube must be connected to the left rear brake jounce hose.
 - e) Remove the shipping caps and loosely connect the tubes to their corresponding connectors. Do not fully tighten at this time.
 - f) Inspect the area of the *new* brake tubes where the #8 bundle clip was originally located on the frame. The black plastic coating on the brake tubes will interfere with installation of the #8 bundle clip. Avoid installing the clip over the plastic coating by positioning the clip rearward a few millimeters. DO NOT trim the plastic coating. Damage to the corrosion protection beneath the plastic coating may occur. See Figure 26.



Center Section –

- a) Partially raise the vehicle, if necessary.
- b) Guide this section up and over the transmission crossmember and parking brake cable, then through the body mount.
- c) Position the fuel, brake and air suspension tubes into the **new**#3 bundle clip in the sequence shown in the illustration. See Figure 20.
- d) Position the *new* fuel, brake and air suspension tubes into the #4 bundle clip into the appropriate slots of the *new* clips.
- e) Remove the shipping caps then loosely connect the tubes to their corresponding connectors on the rear section of the brake tubes. Do not fully tighten at this time.
- f) Position onto the frame rail, but do not install the bolts for the #5 and #6 bundle clips, and carefully clamp all tubes into their proper slots of the clips.

Front Section –

NOTE: Once the tubes are installed into the bundle clips, it is very difficult to reposition the clips along the tubes. Be sure the bundle clips are positioned properly along the tubes before snapping the tubes into the clips.

- a) Transfer the #1 bundle clip onto the **new** tube assembly using the removed tube section as a quide.
- b) From beneath the vehicle, guide the forward tube section up between the frame rail and the engine.
- c) If necessary, have an assistant on a ladder or platform to help guide the tube section in place.
- d) Position the tube section properly around the other tubes, the shift cable, steering shaft and the wire harnesses.
- e) Position the #1 bundle clip between the frame rail and the fuel tubes, but DO NOT engage the tubes into the clip at this time.
- f) Remove the shipping caps then loosely connect the tubes to their corresponding connectors on the center tube section.
- g) Partially lower the vehicle.
- h) Loosely connect the tubes to the HCU fittings.
- i) Inspect the existing black bundle clips. Replace only if damaged. It is recommended that the original clips be used to minimize any possible damage that could occur while prying the other tubes out of the clips. Discard the unused black bundle clips and secure all brake tubes to the remaining clips.
- i) Install the bolt at the #1 bundle clip.
- k) Raise the hoist.
- I) Remove the small white separator clip from the lower end of the tube assembly.
- m)Remove the shipping caps and loosely connect the tubes to the center tube section.
- n) Install the #2 bundle clip, then engage the fuel, air and brake tubes to it.
- o) Engage the fuel tubes to the #1 bundle clip.

· Final Assembly -

- a) With all brake tube sections installed and loosely connected to each other, install the remaining bundle clip bolts. Tighten the bolts to 15 Nm (11 lb-ft). Note: Bolts for #1, #2, #3, #7 and #9 bundle clips will not be accessible with a torque wrench. Using hand tools, be sure these are sufficiently hand tightened.
- b) Inspect that all necessary small white separator clips and black rubber insulators are in place and properly secured to the brake tubes. See Figures 13, 17, 18, 19 and 23. Four (4) extra rubber grommets are provided in the service kit. These grommets are to be used to assure brake tube-to-brake tube clearance, along with brake tube clearance to fuel tubes, vapor tubes, air suspension tubes and the vehicle frame rail. They ARE NOT to be used to provide clearance between the brake tubes and the floor pan. If the brake tubes are within 8 mm (approximately 3/8 inch) of the floor pan, manually adjust the tubes to obtain the minimum clearance.
- c) Inspect the entire length of the *newly* installed brake tubes for any contact with the frame or surrounding components. Adjust tubes as necessary to obtain at least 8 mm (approximately 3/8 inch) clearance from any stationary object.
- d) Reposition the noise shield back above the frame rail.
- e) Install the plastic fuel tank shield using the two (2) pushpins.
- f) Tighten all brake tube union connections to 16 Nm (12 lb-ft).
- g) Install the left catalytic converter using a **new** flange gasket and **new** attaching hardware. Tighten the flange bolts and the manifold nuts to 41 Nm (30 lb-ft). Connect the HO2S and CMS sensor connectors.
- h) Install the left rear wheel and tire assembly. Tighten the wheel nuts to 129 Nm (95 lb-ft).
- i) Install the air cleaner assembly and outlet tube. Tighten tube clamps and assembly nuts to 3 Nm (27 lb-in).
- i) Proceed to Brake Bleeding in this Attachment III.

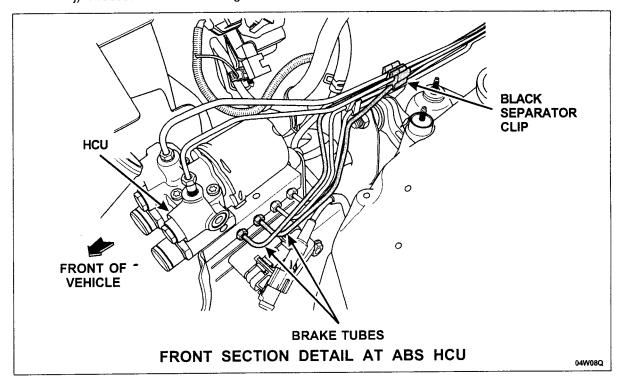


FIGURE 17



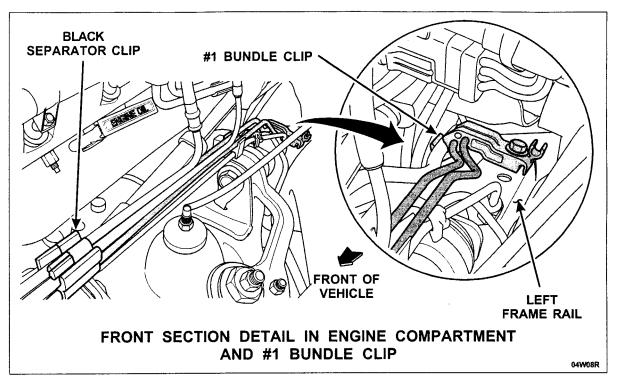


FIGURE 18

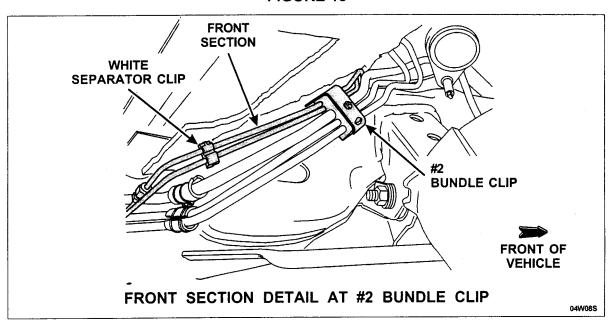
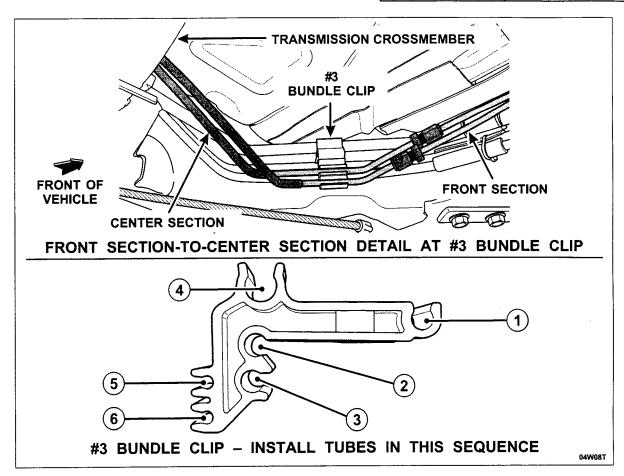


FIGURE 19





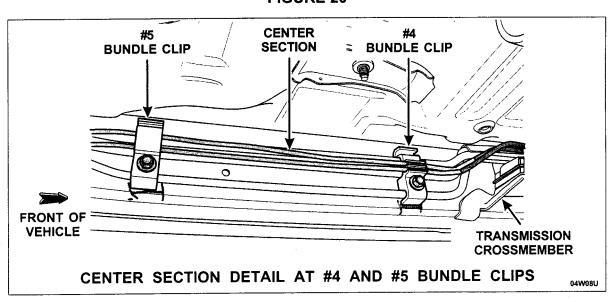
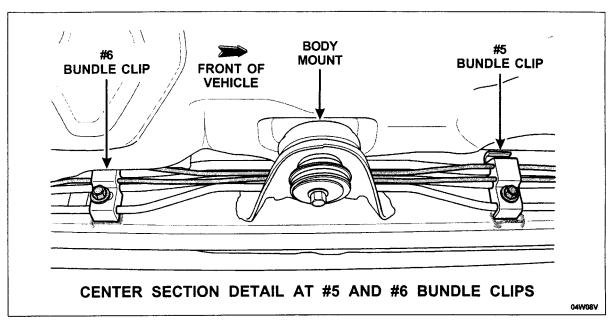


FIGURE 21





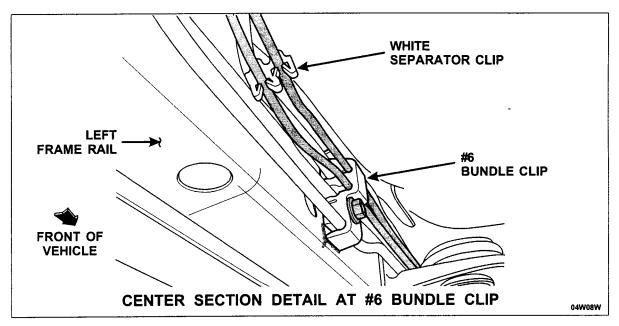
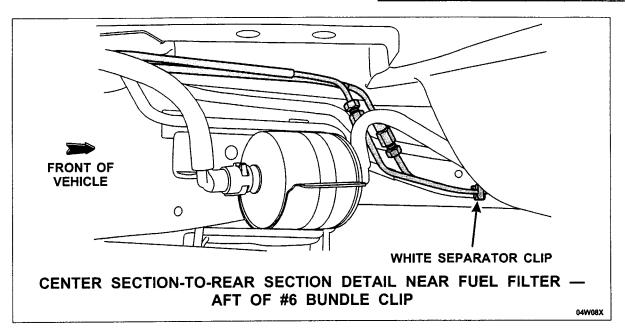


FIGURE 23



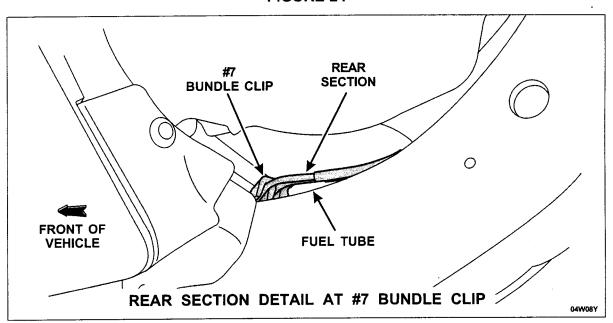


FIGURE 25

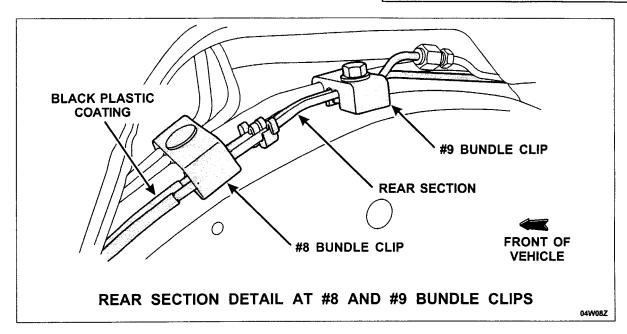


FIGURE 26

BRAKE SYSTEM BLEEDING

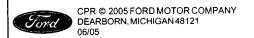
Bleed the brake system as follows:

- · First, perform either a manual or a pressure bleed.
- · Second, bleed the anti-lock brake system.
- Third, perform another manual or pressure bleed.

MANUAL BLEEDING

The primary and secondary (front and rear) hydraulic brake systems are individual systems and are bled separately. Bleed the longest tube first on the individual system being serviced. During the complete bleeding operation, DO NOT allow the brake master cylinder reservoir to run dry. Keep the master cylinder reservoirs filled with High Performance DOT-3 Motor Vehicle Brake Fluid C6AZ-19542-AB or DOT-3 equivalent meeting Ford specification ESA-M6C25-A. Never reuse brake fluid that has been drained from the hydraulic system or has been allowed to stand in an open container for an extended period of time.

- To bleed the brake system, position a suitable box wrench on the bleeder fitting on the brake wheel cylinder. Attach a rubber drain tube to the bleeder fitting. The end of the tube should fit snugly around the bleeder fitting.
- 2. Submerge the free end of the tube in a container partially filled with clean brake fluid and loosen the bleeder fitting approximately ¾ of a turn.
- 3. Have an assistant push the brake pedal down slowly through its full travel. Close the bleeder fitting; then return the brake pedal to full-release position. Repeat this operation until air bubbles cease to appear at the submerged end of the bleeder tube.



- When the fluid is completely free of air bubbles, secure the bleeder fitting and remove the bleeder tube.
- 5. Repeat this procedure at the brake wheel cylinder on the opposite side. Refill the brake master cylinder reservoir after each wheel cylinder is bled and install the master cylinder cap and gasket. Make sure the diaphragm-type gasket is properly positioned in the master cylinder cap. When the bleeding operation is completed, the fluid level should be at the MAX line to 4.0 mm (0.16 inch) below MAX line.
- 6. If the primary (front brake) system is to be bled, repeat Steps 2 through 5 at the RH front brake caliper and ending at the LH front brake caliper. Bleed the brake master cylinder at the bleed screw after all calipers are bled.

PRESSURE BLEEDING

For pressure bleeding, use a bladder-type bleeder tank only, such as Rotunda Brake Bleeder 104-00064 or equivalent.

Bleed the longest tubes first. The bleeder tank should contain enough *new* brake fluid to complete the bleeding operation. Use High Performance DOT-3 Motor Vehicle Brake Fluid C6AZ-19542-AB or DOT-3 equivalent fluid meeting Ford specification ESA-M6C25-A. Never reuse brake fluid that has been drained from the hydraulic system. The tank should be charged with approximately 69-206 kPa (10-30 psi) of air pressure.

CAUTION: Never exceed 344 kPa (50 psi) pressure or damage to brake system may occur.

- 1. Clean all dirt from the master cylinder reservoir cover.
- Remove the brake master cylinder reservoir cover. Fill the master cylinder reservoir with the specified brake fluid. Install the pressure bleeder adapter tool to the brake master cylinder and attach the bleeder tank hose to the fitting on the adapter. Master cylinder pressure bleeder adapter tools can be obtained from various manufacturers. Follow the instructions of the manufacturer to install the adapter.
- 3. If the rear wheel cylinders (the secondary brake system) are to be bled, use a suitable box wrench on the bleeder fitting at the RH rear brake wheel cylinder. Attach a bleeder tube snugly around the bleeder fitting.
- Open the valve on the bleeder tank to admit pressurized brake fluid into the brake master cylinder reservoir.
- 5. Submerge the free end of the tube in a container partially filled with clean brake fluid and loosen the bleeder fitting.
- 6. When air bubbles cease to appear in the fluid at the submerged end of the bleeder tube, close the bleeder fitting. Remove the tube. Replace rubber dust cap on bleeder screw.

- 7. Attach a bleeder tube and repeat Steps 4, 5 and 6 at the LH rear caliper.
- 8. On front brakes, repeat Steps 4, 5 and 6 starting at the RH disc brake caliper (2B120) and ending at the LH disc brake caliper.
- 9. When the bleeding operation is completed, close the bleeder tank valve and remove the tank hose from the adapter fitting.
- Remove the pressure bleeder adapter tool from brake master cylinder. Fill the brake master cylinder reservoir to between MAX line and 4.0 mm (0.16 inch) below MAX line. Install the brake master cylinder filler cap.

ANTI-LOCK BRAKE SYSTEM BLEEDING

Any time service is performed on the ABS valve block or pump and motor assembly, a special bleed procedure must be followed to make sure no air is trapped in the ABS control and modulator assembly. If this procedure is not done, the customer could experience a spongy pedal after actuating ABS.

Using Rotunda New Generation Star (NGS) Tester 007-00500 or equivalent:

- 1. Hook up New Generation Star (NGS) Tester or equivalent to the serial data link connector below the instrument panel as if retrieving diagnostic trouble codes.
- 2. Make sure ignition switch is in the RUN position.
- Follow instructions on the NGS screen. Choose correct vehicle and model year, go to "Diagnostic Data Link" menu item, choose ABS Module, choose "Function Tests", and then choose "Service Bleed".
- 4. The NGS will prompt you to apply the brake pedal. Make sure you push hard on the brake pedal. You will need to hold down the brake pedal for approximately 5 seconds while the NGS opens the outlet valves in the brake pressure control valve block. When the outlet valves are opened, you should immediately feel the pedal drop. Make sure you push the pedal all the way to the floor (very important). The NGS will then instruct you to release the brake pedal. After you release the brake pedal, the NGS will run the ABS hydraulic pump motor for approximately 15 seconds.
- 5. Repeat Step 5 to make sure all air is flushed from the ABS unit. Upon completion, the NGS will display "Service Bleed Procedure Completed".
- 6. Repeat the conventional system bleed using a manual or pressure bleed procedure as described.



Frank M. Ligon
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July 2005

Customer Satisfaction Program 04B26

Mr. John Sample 123 Main Street Anywhere, USA 12345

Your Vehicle Identification Number: 12345678901234567

At Ford Motor Company, it has been our goal for more than 100 years to provide customers with high-quality, dependable products. In order to maintain these standards, Ford Motor Company is providing a no-charge Customer Satisfaction Program (Program Number 04B26), to owners of certain 1997 model year Ford Crown Victoria and Mercury Grand Marquis vehicles with Electronic Traction Control.

What is the issue?

The rear brake tube may abrade and eventually leak beneath the vehicle in the area under the front seats. The brake system is divided into two circuits, front and rear. A leak in the rear brake circuit will be observable through a soft feel in the brake pedal and/or fluid leakage onto the ground. If a leak is unrepaired it may result in an increase in stopping distance.

What will Ford and your dealer do?

In the interest of customer satisfaction, Ford Motor Company and your dealer will repair your vehicle free of charge under the terms of this program. Your dealer will install revised brake tube clips to prevent this condition. Also, the brake tubes in this location will be inspected for leakage and repaired if necessary.

This Customer Satisfaction Program will be in effect until July 31, 2006, regardless of mileage. Coverage is automatically transferred to subsequent owners.

How long will it take?

The time needed for this repair is less than one-half day. However, due to service scheduling requirements, your dealer may need your vehicle for a longer period of time. In addition, your vehicle will require inspection prior to determining if parts need to be ordered.

What are we asking you to do?

Please call your dealer without delay and request a service date for Customer Satisfaction Program 04B26. Provide the dealer with the Vehicle Identification Number (VIN) of your vehicle. The VIN is printed near your name at the beginning of this letter. If you do not already have a servicing dealer, you can access http://www.genuineflmservice.com for dealer addresses, maps, and driving instructions.

Have you previously paid for this repair?

If you paid to have this service performed before the date of this letter, you may be eligible for a refund. To initiate a refund request, please give your paid original receipt to your dealer. To avoid delays, do not send receipts to Ford Motor Company. Owners who have previously paid for this repair are still eligible to have the service described in this letter performed.

Have you changed your address or sold the vehicle?

If you have, please fill out the enclosed prepaid postcard and mail it to us so we can update our records. If you have sold the vehicle, the information you provide on the postcard will be used to notify the new owner about this program.

Can we assist you further?

If you have difficulty getting your vehicle repaired promptly and without charge, please contact your dealership's Service Manager for assistance.

If you still have concerns, please contact the Ford Motor Company Customer Relationship Center and one of our representatives will be happy to assist you.

Call 1-800-392-3673. For the hearing impaired call 1-800-232-5952 *(TDD)*.

Office Hours are Monday through Friday 8AM – 5PM (Eastern Time Zone)

If you wish to contact us through the Internet, our address is: www.ownerconnection.com

Thank you for your attention to this important matter.

Frank M. Ligar

Frank M. Ligon Director

Service Engineering Operations