

DTCS P0505, P0506 AND/OR ENGINE IDLE RPM FLUCTUATION—HARD START

TSB 12-8-1

FORD:

- 2003-2005 Thunderbird
- 2005-2006 Mustang
- 2006-2008 Fusion
- 2004-2005 Explorer
- 2005-2006 Expedition
- 2005-2007 F-150

LINCOLN:

- 2003-2006 Lincoln LS
- 2006 Zephyr
- 2005-2006 Navigator

MERCURY:

- 2006-2008 Milan

ISSUE

Various vehicles may exhibit Diagnostic Trouble Codes (DTC) P0505, P0506 and/or engine idle RPM fluctuation and hard starts. Some vehicles may also exhibit DTCs P2111 and P2112 after a keep alive memory (KAM) clear, battery disconnect or dead battery. On vehicles with over 10,000 miles, the issue may be caused by sludge buildup in the throttle body leading to less than desired airflow.

ACTION

Follow the Service Procedure steps to correct the condition.

SERVICE PROCEDURE

1. Verify vehicle is listed in the vehicle application chart.

Vehicle Line Application			
Vehicle	Model Year Start	Model Year End	Engine
Expedition/Navigator	2005	2006	5.4L 3V SOHC
Mustang	2005	2006	4.6L 3V SOHC
Explorer	2004	2005	4.6L EFI
Thunderbird	2003	2005	3.9L DOHC EFI
Lincoln LS	2003	2005	3.0L
Lincoln LS	2003	2006	3.9L DOHC EFI
F-150	2005	2007	4.2L EFI
Fusion/Milan	2006	2008	2.3L
Fusion/Milan	2006	2008	3.0L
Zephyr	2006	2006	3.0L

2. With the vehicle in park or neutral and the A/C off, start the engine and allow it to reach normal operating temperature 77 °C (170 °F).

3. Using Integrated Diagnostic System (IDS) scan tool or equivalent, monitor the PID values of IACTRIM and IACKAM2 while the engine is running. The sum of IACTRIM and IACKAM2 is the total IAC. Is the total IAC greater than 0.5 lb/min?
 - a. Yes - proceed to Step 4.
 - b. No - this article does not apply. Refer to Powertrain Control/Emissions Diagnosis (PC/ED) manual for normal diagnostics.
4. Remove the throttle body. Refer to Workshop Manual (WSM), Section 303-04.
5. Using Motorcraft® Choke and Linkage Cleaner or equivalent, spray the throttle body plate and bore. Using a small, soft, solvent-resistant brush, clean the edges of the throttle plate and the mating surface of the throttle bore to remove all engine deposits. (Figures 1-2)

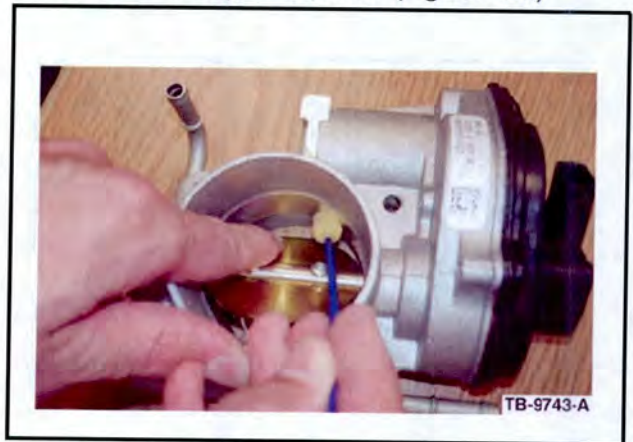


Figure 1 - Article 12-8-1

NOTE: The information in Technical Service Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by "do-it-yourselfers". Do not assume that a condition described affects your car or truck. Contact a Ford or Lincoln dealership to determine whether the Bulletin applies to your vehicle. Warranty Policy and Extended Service Plan documentation determine Warranty and/or Extended Service Plan coverage unless stated otherwise in the TSB article. The information in this Technical Service Bulletin (TSB) was current at the time of printing. Ford Motor Company reserves the right to supersede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.

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Figure 2 - Article 12-8-1

NOTE

AVOID SPRAYING CLEANER DIRECTLY INTO THROTTLE PLATE PIVOT SHAFT BORE.

6. Install the throttle body. Refer to WSM, Section 303-04.

PART NUMBER	PART NAME
PM-14	Motorcraft® Choke And Linkage Cleaner

WARRANTY STATUS: Information Only - Not Warrantable

DEALER CODING

BASIC PART NO.
9F991

CONDITION
CODE
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