



97-10, *Publication Date: MAY 12, 1997*

<ul style="list-style-type: none">• Vibration - Shudder Or Vibration Under Light To Moderate Acceleration Above 56 Km/H (35 MPH) While In 3rd Or 4th Gear - Vehicles Equipped With AODE Or 4R70W Transmission• Transmission - AODE - 4R70W - Shudder Or Vibration Under Light To Moderate Acceleration Above 56 Km/H (35 MPH) While In 3rd Or 4th Gear	Article No. 97-10-6
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FORD:

1996-97 CROWN VICTORIA, THUNDERBIRD

LINCOLN-MERCURY:

1996-97 COUGAR, GRAND MARQUIS, TOWN CAR

This TSB article is being republished in its entirety to include Powertrain Control Module (PCM) part information and remove Mark VIII and Mustang.

ISSUE:

Vehicles equipped with an AODE or 4R70W transmission may experience a torque converter clutch shudder or vibration. This occurs under light to moderate acceleration above 56 km/h (35 mph) while in 3rd or 4th gear. This may be due to either transmission fluid breakdown and/or the Powertrain Control Module (PCM) calibration.

ACTION:

Perform normal diagnostics and refer to the following Service Procedure for required service.

NOTE:

IF QUESTIONS STILL ARISE AFTER REVIEWING THIS TSB ARTICLE, CALL THE LIVONIA TRANSMISSION HOTLINE AT (800) 551-0692.

NOTE:

TESTING HAS SHOWN THAT 1996-97 CALIBRATIONS AND FRESH TRANSMISSION FLUID WILL PERFORM FOR THE LIFE OF THE PRODUCT. PREVIOUS TSB ARTICLES HAVE INSTRUCTED THE DEALER TO CHANGE FLUID ONLY WHEN THE FAILURE IS LESS THAN 11,250 km (7,000 MILES) OR GREATER THAN 32,000 km (20,000 MILES) (FLUID FAILURE), AND TO CHANGE THE TORQUE CONVERTER AND FLUID IF VEHICLE WAS BETWEEN 11,250-32,000 km (7,000-20,000 MILES) (HARDWARE FAILURE). ALL 1996-97 TORQUE CONVERTERS HAVE THE LATEST HARDWARE AND SHOULD NOT BE REPLACED FOR THE SHUDDER PROBLEM.

SERVICE PROCEDURE

NOTE:

RESIDUAL FLUID IN THE SYSTEM (CONVERTER COOLERS AND LINES) WILL CAUSE SHUDDER TO RETURN.

1. Drain all transmission fluid including the torque converter. Completely drain the cooler and cooler lines. Refer to the appropriate model/year Service Manual, Section 07-01, for more details.
2. Remove the transmission pan and clean the pan and magnet.
3. Inspect the transmission gasket and filter. Reuse the pan gasket and filter if they are not damaged.
4. Reinstall the transmission filter, pan gasket, and pan.

NOTE:

DO NOT USE MERCON® V.

5. Verify that bulk fluid does not have moisture contamination. If suspected, use quart containers of MERCON®. Refill transmission with the proper amount of Motorcraft MERCON® Multi-Purpose Automatic Transmission Fluid (ATF) (XT-2-QDX).

NOTE:

REGIONAL APPROVAL MUST BE OBTAINED WHEN IT IS NECESSARY TO REPLACE THE PCM.

6. Check emissions decal to verify vehicle has the latest calibration. If it does not, reprogram the PCM to new calibration level using Service Bay Diagnostic System (SBDS) or New Generation Star (NGS) Tester with May 1997 CD-ROM or later. Refer to the PCM Calibration Chart found at the end of this article for proper application.

NOTE:

VEHICLES SHOULD BE DRIVEN A MINIMUM OF 480 km (300 MILES) TO WORK THE NEW FLUID INTO FRICTION MATERIAL.

PCM CALIBRATION CHART				
Application	Old Calibration	Old Part Number (-12A650-)	New Calibration	New Part Number (-12A650-)
1996 Crown Victoria/Grand Marquis				
49S/Canada/High Altitude	6-18F-R05/R11	F6AF-AE	6-18F-R11	F6PZ-DJA
49S/Canada/High Altitude	6-18H-R05/R11	F6AF-BE	6-18H-R11	F6PZ-DKA
Mexico	6-18H-R05/R11	F6AF-KE	6-18H-R11	F6PZ-DMA
Police	6-18I-R05/R12	F6AF-CF	6-18I-R12	F6PZ-DLA
California	6-18M-R05/R11	F6AF-DE	6-18M-R11	F6PZ-DNA
California	6-18N-R05/R11	F6AF-EE	6-18N-R11	F6PZ-DPA
1997 Crown Victoria/Grand Marquis				
49S/Canada/High Altitude	7-18F-R10	F7AF-BD	7-18F-R11	F7AZ-BE
49S/Canada/High Altitude	7-18H-R10	F7AF-CD	7-18H-R11	F7AZ-CE
Mexico	7-18H-R10	F7AF-DD	7-18H-R11	F7AZ-DE
Police	7-18I-R10/R11	F7AF-EF	7-18I-R11	F7AZ-EF
California	7-18M-R10	F7AF-FD	7-18M-R11	F7AZ-FE
California	7-18N-R10	F7AF-GD	7-18N-R11	F7AZ-GE
1996 Town Car				
49S/Canada/High Altitude	6-18J-R05/R11	F6VF-BE	6-18J-R11	F6PZ-DEA
49S/Canada/Mexico/High Altitude	6-18E-R05/R11	F6VF-AE	6-18E-R11	F6PZ-DFA
California	6-18Q-R05/R11	F6VF-CE	6-18Q-R11	F6PZ-DGA
California	6-18S-R05/R11	F6VF-DE	6-18S-R11	F6PZ-DHA
1997 Town Car				
49S/Canada/High Altitude	7-18J-R10	F7VF-AD	7-18J-R11	F7VZ-AE
49S/Canada/Mexico/High Altitude	7-18E-R10	F7VF-BD	7-18E-R11	F7VZ-BE
California	7-18Q-R10	F7VF-CD	7-18Q-R11	F7VZ-CE
California	7-18S-R10	F7VF-DD	7-18S-R11	F7VZ-DE
1996 3.8L Thunderbird/Cougar				
49S/Canada/Mexico/High Altitude	6-16F-R05/R10	F6SF-AE	6-16F-R10	F6SZ-AF
California	6-16T-R05/R10	F6SF-BE	6-16T-R10	F6SZ-BF
1997 3.8L Thunderbird/Cougar				
49S/Canada/Mexico/High Altitude	6-16F-R05/R10	F6SF-AE	7-16F-R10	F6SZ-AF
California	6-16T-R05/R10	F6SF-BE	7-16T-R10	F6SZ-BF
1996 4.6L Thunderbird/Cougar				
49S/Canada/Mexico/High Altitude	6-18B-R05/R11	F6SF-CC	6-18B-R11	F7SZ-AB
California	6-18P-R05/R11	F6SF-DC	6-18P-R11	F7SZ-BB
1997 4.6L Thunderbird/Cougar				
49S/Canada/Mexico/High Altitude	7-18B-R05 through R10	F7SF-AA	7-18B-R11	F7SZ-AB
California	7-18P-R05 through R10	F7SF-BA	7-18P-R11	F7SZ-BB

Obtain an Authorized Modifications Decal (FPS 8262 - orderable through DOES II, 25/pkg) and list the date, dealer number, and summary of alterations performed. Select a prominent place adjacent to the Vehicle Emission Control Information Decal suitable for installing the Authorized Modifications Decal. Clean the area, install the decal, and cover it with a clear plastic decal shield.



AUTHORIZED MODIFICATIONS

THE FOLLOWING MODIFICATIONS HAVE BEEN MADE:

REPROGRAMMED POWERTRAIN CONTROL MODULE

(PCM) PER TSB 97-10-6

THESE MODIFICATIONS HAVE BEEN APPROVED,
AS APPROPRIATE, BY EPA AND CARB.

DEALER NUMBER:

DATE:

CHANGE AUTHORITY:

FPS 8262 9/78 FORD MOTOR COMPANY PRINTED IN U.S.A.

PART NUMBER	PART NAME
XT-2-QDX	Motorcraft MERCON® Multi-Purpose Automatic Transmission Fluid (ATF)
F6PZ-12A650-DEA	Powertrain Control Module (PCM)
F6PZ-12A650-DFA	Powertrain Control Module (PCM)
F6PZ-12A650-DGA	Powertrain Control Module (PCM)
F6PZ-12A650-DHA	Powertrain Control Module (PCM)
F6PZ-12A650-DJA	Powertrain Control Module (PCM)
F6PZ-12A650-DKA	Powertrain Control Module (PCM)
F6PZ-12A650-DLA	Powertrain Control Module (PCM)
F6PZ-12A650-DMA	Powertrain Control Module (PCM)
F6PZ-12A650-DNA	Powertrain Control Module (PCM)
F6PZ-12A650-DPA	Powertrain Control Module (PCM)
F7AZ-12A650-BE	Powertrain Control Module (PCM)
F7AZ-12A650-CE	Powertrain Control Module (PCM)
F7AZ-12A650-DE	Powertrain Control Module (PCM)
F7AZ-12A650-EF	Powertrain Control Module (PCM)
F7AZ-12A650-FE	Powertrain Control Module (PCM)
F7AZ-12A650-GE	Powertrain Control Module (PCM)
F7VZ-12A650-AE	Powertrain Control Module (PCM)
F7VZ-12A650-BE	Powertrain Control Module (PCM)
F7VZ-12A650-CE	Powertrain Control Module (PCM)
F7VZ-12A650-DE	Powertrain Control Module (PCM)
F6SZ-12A650-AF	Powertrain Control Module (PCM)
F6SZ-12A650-BF	Powertrain Control Module (PCM)
F7SZ-12A650-AB	Powertrain Control Module (PCM)
F7SZ-12A650-BB	Powertrain Control Module (PCM)

OTHER APPLICABLE ARTICLES:

➔ **95-23-4**

➔ **96-25-17**

SUPERSEDES: 97-9-10

WARRANTY STATUS: Eligible Under The Provisions Of Bumper To Bumper Warranty Coverage

LABOR ALLOWANCE

OPERATION	DESCRIPTION	TIME
971006A	Remove And Install Pan To Change Transmission Fluid	Refer To SLTS Manual
971006B	Additional Time To Drain Torque Converter And/Or Drain Cooler Lines	0.2 Hr.
971006C	Additional Time If Catalytic Converter Must Be Removed - Not To Be Used With Operation A	Refer To SLTS Manual
971006D	Reprogram Powertrain Control Module (PCM)	0.2 Hr.

DEALER CODING

BASIC PART NO.	CONDITION CODE
7902	D9

OASIS CODES: 501000, 502000, 504000, 610000, 703000, 703200, 703300
