

A/T - CD4E Harsh and Delayed Upshifts/DTC's Stored

[Notes](#)

Article No.
02-2-4

02/04/02

TRANSAXLE - CD4E - HARSH AND DELAYED 1-2/2-3
UPSHIFTS - AFTER TRANSAXLE OR TURBINE SHAFT
SPEED SENSOR (TSS) REPLACEMENT - POSSIBLE
DIAGNOSTIC TROUBLE CODES (DTC) 628, 642, 645,
646, 647, 648, P0731, P0732, P0734, P0741, AND
P1744

FORD:
1994-1997 PROBE
1995-2000 CONTOUR
2001-2002 ESCAPE

MERCURY:
1995-2000 MYSTIQUE
1999-2002 COUGAR

ISSUE

Some vehicles equipped with the CD4E transaxle may exhibit harsh and delayed 1-2/2-3 upshifts along with DTCs for gear ratio errors after the Transaxle or [Turbine Shaft Speed sensor](#) (TSS) have been replaced. DTCs may include OBD1 codes 628, 642, 645, 646, 647, 648, or OBD II codes P0731, P0732, P0734, P0741, and P1744

ACTION

If the condition occurred after servicing the Transaxle or TSS, refer to the following TSS Selection Chart and select the correct TSS for the vehicle application. Note that each TSS has the Ford engineering part number on it. Also note that there is a TSS kit that includes an instruction sheet, TSS sensor and correct bolt.

SERVICE PROCEDURE



TURBINE SHAFT SPEED (TSS) SENSOR SELECTION CHART					
Part Number Stamped On TSS	Part Description	Vehicle Application	Resistance	Bolt	Kit Part Number
		Original Equipment			
F7RP-7M101-AA	Part Vendor is Delphi All black with steel bracket	OEM TSS used for all CD4E vehicle applications 1994 to May, 2000	140-290 ohms	N605770-S36 M6x1x12 mm	No Kit Number
XS7P-7M101-AA	Part Vendor is HiStat Thick white plastic bracket with black connector	OEM TSS used for all CD4E vehicle applications since May, 2000	625-1150 ohms	W500213-S309 M6x1x16 mm	No Kit Number
		Service Replacement			
XS7P-7M101-AB	Part Vendor is HiStat Thick white plastic bracket with black connector Used on Production CD4E beginning November, 2001	Service Replacement for All Contour/Mystique All Escape and Cougar 1995 & newer	625-1150 ohms	W500213-S309 M6x1x16 mm	1S7Z-7M101-KA
F7RP-7M101-AB	Part Vendor is HiStat Thick white plastic bracket with green connector	Service Replacement for 1994-1997 Probe	550-950 ohms	W500213-S309 M6x1x16 mm	F7RZ-7M101-KA

Zoom

Sized for Print

If the condition occurred after replacing the Transaxle or TSS, use the TSS Selection Chart and determine the correct sensor for the vehicle.

1. Remove the existing TSS from the CD4E pump body.
2. Reinstall the original TSS sensor, if available, or install the correct TSS as indicated in the Selection Chart.
3. Clear all codes and verify repair.
4. If the condition still exists, follow normal diagnostics as listed in the appropriate model year Workshop Manual.

OTHER APPLICABLE ARTICLES: NONE
 WARRANTY STATUS: INFORMATION ONLY
 OASIS CODES: 501000, 502000, 503000, 504000