

- **TRANSMISSION—4R70W—ERRATIC OR PROLONGED 1-2 SHIFT**
- **TRANSMISSION—AODE—ERRATIC OR PROLONGED 1-2 SHIFT**

**Article No.
97-11-11**

FORD: 1992-1997 CROWN VICTORIA
1994-1997 MUSTANG, THUNDERBIRD, ECONOLINE, F-150
1996-1997 EXPLORER
1997 EXPEDITION

LINCOLN: 1992-1997 TOWN CAR
1993-1997 MARK VIII

MERCURY: 1992-1997 GRAND MARQUIS
1994-1997 COUGAR
1997 MOUNTAINEER

ISSUE

Some vehicles may exhibit an erratic or prolonged 1-2 shift. This may be caused by early Accumulator Seal wear which may occur during repeated 1-2, 2-1 shift cycling. The Accumulator side loads in the Case Accumulator Bore and causes the Case Bore to become scuffed. Bore scuffing leads to premature seal wear and eventual intermediate clutch pressure loss, which leads to the loss in 1-2 shift.

ACTION

Replace the cast aluminum piston with the one-piece stamped steel piston with bonded lip seals and replace the top Accumulator Spring. These revised parts allow for increased durability. Refer to the following Service Procedure for details.

SERVICE PROCEDURE

NOTE

TRANSMISSION CASE REPLACEMENT IS NOT REQUIRED DUE TO 1-2 SHIFT ACCUMULATOR BORE SCUFFING. THE REVISED PISTON ASSEMBLY CAN BE USED WITH SCUFFED SEAL BORE.

1. With the vehicle on a hoist, remove the transmission pan and gasket. Using the Snap Ring Removal Tool, remove the 1-2 Accumulator Piston Retainer. At this time, the spring load will pop the cover and bottom Accumulator Spring out of the bore.

2. Remove the piston and top Accumulator Spring.
3. Replace the piston and top Accumulator Spring with the new bonded Piston (F7AZ-7F251-AA) and spring (refer to Figure 1 for applications). If not damaged, reinstall the bottom Accumulator Spring and cover.
4. Reinstall the retaining ring.

NOTE

DO NOT REUSE THE TRANSMISSION PAN GASKET IF IT IS DAMAGED.

5. Install the transmission pan and gasket.

PART NUMBER	PART NAME
F7AZ-7F251-AA	Piston/Seal Assembly
F3LY-7F284-A	Accumulator Spring - Bottom
F4UZ-7F284-A	Accumulator Spring - Bottom
F7AZ-7F284-BA	Accumulator Spring - Bottom
F7AZ-7F284-AA	Accumulator Spring - Top
F7AZ-7F284-CA	Accumulator Spring - Top
F75Z-7F284-AA	Accumulator Spring - Top
F75Z-7F284-BA	Accumulator Spring - Top

Article No. 97-11-11 Cont'd.

OTHER APPLICABLE ARTICLES: NONE
WARRANTY STATUS: Eligible Under The Provisions Of Bumper To Bumper Warranty Coverage

OPERATION	DESCRIPTION	TIME
971111A	Replace 1-2 Accumulator Components As Required (Includes Pan Removal And Installation) - All Vehicles	0.9 Hr.

971111B	Add Time To Clean, Inspect And Reuse Pan Gasket	0.1 Hr.
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971111C	Post Repair Road Test	0.3 Hr.
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DEALER CODING

BASIC PART NO.	CONDITION CODE
7F249	70
OASIS CODES: 501000, 502000, 503000, 504000, 590000	

**4R70W/AOD-E TRANSMISSION 1-2 ACCUMULATOR USAGE
BASE SPRING PART NUMBER -7F284-**

		1992	1993	1994	1995	1996	1997
Crown Victoria 4.6L / Grand Marquis 4.6L	Top	None	None	F7AZ-CA (Dk. Blue)	F7AZ-AA (White)	F7AZ-AA (White)	F7AZ-AA (White)
	Bottom	F7AZ-BA (Violet)	F7AZ-BA (Violet)	F7AZ-BA (Violet)	F3LY-A (Purple)	F3LY-A (Purple)	F3LY-A (Purple)
Mark VIII 4.6L 4V	Top	NA	F75Z-AA (Lt. Blue)	F75Z-AA (Lt. Blue)	F75Z-AA (Lt. Blue)	F75Z-AA (Lt. Blue)	F75Z-AA (Lt. Blue)
	Bottom	NA	F3LY-A (Purple)	F3LY-A (Purple)	F3LY-A (Purple)	F3LY-A (Purple)	F4UZ-A (Pink)
Mustang 3.8L	Top	NA	NA	None	None	F7AZ-AA (White)	F7AZ-AA (White)
	Bottom	NA	NA	F3LY-A (Purple)	F3LY-A (Purple)	F4UZ-A (Pink)	F4UZ-A (Pink)
Mustang 4.6L	Top	NA	NA	None	None	F75Z-AA (Lt. Blue)	F75Z-AA (Lt. Blue)
	Bottom	NA	NA	F3LY-A (Purple)	F3LY-A (Purple)	F3LY-A (Purple)	F3LY-A (Purple)
Mustang 5.0L	Top	NA	NA	None	None	NA	NA
	Bottom	NA	NA	F3LY-A (Purple)	F3LY-A (Purple)	NA	NA
Thunderbird 3.8L / Cougar 3.8L	Top	NA	NA	None	None	F7AZ-AA (White)	F7AZ-AA (White)
	Bottom	NA	NA	F3LY-A (Purple)	F3LY-A (Purple)	F4UZ-A (Pink)	F4UZ-A (Pink)
Thunderbird 4.6L / Cougar 4.6L	Top	NA	NA	None	None	F75Z-AA (Lt. Blue)	F75Z-AA (Lt. Blue)
	Bottom	NA	NA	F3LY-A (Purple)	F3LY-A (Purple)	F3LY-A (Purple)	F3LY-A (Purple)
Town Car 4.6L	Top	None	None	F7AZ-CA (Dk. Blue)	F7AZ-AA (White)	F7AZ-AA (White)	F7AZ-AA (White)
	Bottom	F7AZ-BA (Violet)	F7AZ-BA (Violet)	F7AZ-BA (Violet)	F3LY-A (Purple)	F3LY-A (Purple)	F3LY-A (Purple)
Econoline 4.2L and 4.6L	Top	NA	NA	NA	NA	NA	F75Z-BA (Brown)
	Bottom	NA	NA	NA	NA	NA	F4UZ-A (Pink)
Econoline 5.0L	Top	NA	NA	F7AZ-AA (White)	F7AZ-AA (White)	F7AZ-AA (White)	NA
	Bottom	NA	NA	F4UZ-A (Pink)	F4UZ-A (Pink)	F4UZ-A (Pink)	NA
Expedition 4.6L	Top	NA	NA	NA	NA	NA	F75Z-AA (Lt. Blue)
	Bottom	NA	NA	NA	NA	NA	F4UZ-A (Pink)
Explorer 5.0L / Mountaineer	Top	NA	NA	NA	NA	F7AZ-AA (White)	F7AZ-AA (White)
	Bottom	NA	NA	NA	NA	F4UZ-A (Pink)	F4UZ-A (Pink)
F-150 4.2L	Top	NA	NA	NA	NA	F7AZ-AA (White)	F7AZ-AA (White)
	Bottom	NA	NA	NA	NA	F4UZ-A (Pink)	F4UZ-A (Pink)
F-150 4.6L	Top	NA	NA	NA	NA	F75Z-AA (Lt. Blue)	F75Z-AA (Lt. Blue)
	Bottom	NA	NA	NA	NA	F4UZ-A (Pink)	F4UZ-A (Pink)
F-150 5.0L	Top	NA	NA	F7AZ-AA (White)	F7AZ-AA (White)	F7AZ-AA (White)	NA
	Bottom	NA	NA	F4UZ-A (Pink)	F4UZ-A (Pink)	F4UZ-A (Pink)	NA
F-250 LD 4.6L	Top	NA	NA	NA	NA	NA	F75Z-BA (Brown)
	Bottom	NA	NA	NA	NA	NA	F4UZ-A (Pink)

NOTES:

- The base part number for the spring is -7F284-. For example, the part number for the pink spring is F4UZ-7F284-A.
- When referencing spring location, bottom refers to the bottom of the transmission as it sits in the vehicle (pan side).
- NA means 4R70W/AOD-E was not used in that model for that model year.

Figure 1 - Article 97-11-11