

- **COOLING SYSTEM—3.8L—UNDETERMINED LOSS OF COOLANT**
- **COOLING SYSTEM—4.2L—UNDETERMINED LOSS OF COOLANT**
- **ENGINE—3.8L—ENGINE OIL CONTAMINATED WITH COOLANT**
- **ENGINE—4.2L—ENGINE OIL CONTAMINATED WITH COOLANT**

**Article No.
99-20-7**

FORD: 1996-1997 THUNDERBIRD
1996-1998 MUSTANG, WINDSTAR
1997-1998 E-150, E-250, F-150

MERCURY: 1996-1997 COUGAR

This TSB article is being republished in its entirety to correct the front cover/water pump bolt torque values and the Front Cover Gasket Part Number.

ISSUE

Engine coolant may be leaking into the engine oil on some vehicles. The internal coolant leak may be difficult to identify. This may be caused by the lower intake manifold side gaskets and/or front cover gaskets allowing coolant to pass into the cylinders and/or the crankcase.

ACTION

Revised lower intake manifold side and front cover gaskets have been released for service. Refer to the following text and Application Chart for details.

SERVICE PROCEDURE

NOTE

ONLY REMOVE ENOUGH ENGINE OIL TO DETERMINE COOLANT CONTAMINATION (THE REST WILL BE DRAINED AFTER THE FRONT COVER REMOVAL/INSTALLATION TO FLUSH OUT ANY DEBRIS FROM THE FRONT COVER GASKET REMOVAL).

If coolant is found in the engine oil or coolant usage without a noted external leak, proceed with the gasket installation procedures. Check the Gasket Application Chart in this TSB article for vehicle/engine build dates. Engines built after May, 1997 only require side gaskets.

FRONT COVER SERVICE

Follow the removal/installation instructions found in the Service Manuals for the applicable model, year, and engine combination. (Refer to the engine built information in the Gasket Application Chart in this TSB.)

NOTE

EXTREME CARE MUST BE EXERCISED WHEN REMOVING THE OLD GASKET MATERIAL. COVER THE OIL PAN TO KEEP OUT SCRAPED GASKET MATERIAL.

NOTE

DO NOT TIGHTEN THE FRONT COVER BOLTS TO THE TORQUE VALUE LISTED IN THE SERVICE MANUAL. THE BOLT TORQUE SEQUENCE HAS REMAINED THE SAME BUT THE TORQUE VALUE HAS CHANGED. THE NEW VALUE FOR THE FRONT COVER AND WATER PUMP BOLTS, STUD-BOLTS AND NUTS IS 28 N•m (20 LB-FT). THE SOCKET HEAD CAP SCREW LOCATED IN THE LOWER PART OF THE FRONT COVER IS THE ONLY FASTENER THAT HAS A DIFFERENT TORQUE VALUE, WHICH IS 22 N•m (16 LB-FT). TIGHTENING THE BOLTS TO A HIGHER TORQUE VALUE COULD CRACK THE WATER PUMP HOUSING.

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LOWER INTAKE MANIFOLD SERVICE

Follow the removal/installation instructions found in the Service Manuals for the applicable model, year, and engine combination. (Refer to the Gasket Application Chart in this TSB.)

NOTE

BE SURE THAT THE EGR ORIFICES PRESSED INTO EACH PRIMARY PORT ARE CLEAN.

NOTE

FOR 4.2L UPPER INTAKE MANIFOLD (ONLY): DO NOT TIGHTEN THE BOLTS TO THE TORQUE VALUE LISTED IN THE SERVICE MANUAL. THE BOLT TORQUE SEQUENCE HAS REMAINED THE SAME BUT THE TORQUE VALUE HAS CHANGED TO 8 N•m (71 LB-IN) AND THEN TIGHTEN ALL THE BOLTS AN ADDITIONAL 90 DEGREES.

NOTE

DUE TO SLIGHTLY THICKER SIDE GASKET BEAD MATERIAL, THE CENTER BOLTS (#3 AND

#4, FIGURE 1) IN THE LOWER INTAKE MANIFOLD MUST FIRST BE INSTALLED (HAND-TIGHTENED) AND FASTENED. DRAWING DOWN THESE BOLTS FIRST, WILL FACILITATE INSTALLATION OF THE OTHER BOLTS.

CAUTION

CHANGE OIL AND FILTER AFTER GASKET INSTALLATION AND BEFORE RUNNING ENGINE. FAILURE TO DO SO MAY RESULT IN ENGINE FAILURE.

CAUTION

CHECK ALL SIDE GASKET KITS BEFORE INSTALLATION FOR THE CORRECT LEVEL SIDE GASKETS (ENGINEERING PART NUMBERS XU2E-9439-AA, XU2E-9441-AA MOLDED ON THE GASKET). ALSO: THE MUSTANG AND THUNDERBIRD/COUGAR SIDE GASKET BEAD MATERIAL MUST BE A BLUE COLOR; ALL OTHER COLOR MATERIAL SHOULD NOT BE USED.

GASKET APPLICATION				
Vehicle	Engine Build Dates	Service Part Number	Engineering Part Number	Part Description
F-150 1997-1998 4.2L SPI	9/25/1995 Through 1/15/1998	XU2Z-9439-AA	XU2E-9439-AA	Lower Intake Side Gasket - RH
		XU2Z-9439-BA	XU2E-9441-AA	Lower Intake Side Gasket - LH In Gasket Kit F85Z-9433-CA For engines built before 7/31/1997 In Gasket Kit F65Z-9433-B For engines built after 7/30/1997
E-150/250 1997-1998 4.2L SPI	7/8/1996 Through 1/15/1998	XU2Z-9439-AA	XU2E-9439-AA	Lower Intake Side Gasket - RH
		XU2Z-9439-BA	XU2E-9441-AA	Lower Intake Side Gasket - LH In Gasket Kit F85Z-9433-CA For engines built before 7/31/1997 In Gasket Kit F65Z-9433-B For engines built after 7/30/1997
Windstar 1996-1998 3.8L SPI	6/26/1995 Through 1/15/1998	XU2Z-9439-AA	XU2E-9439-AA	Lower Intake Side Gasket - RH
		XU2Z-9439-BA	XU2E-9441-AA	Lower Intake Side Gasket - LH In Gasket Kit F68Z-9433-B
F-150 1997 4.2L SPI	9/25/1995 Through 5/1/1997	YF2Z-6020-AA	YF2E-6020-AA	Front Cover Gasket
E-150/250 1997 4.2L SPI	7/8/1996 Through 5/1/1997	YF2Z-6020-AA	YF2E-6020-AA	Front Cover Gasket
Windstar 1996-1997 3.8L SPI	6/26/1995 Through 5/1/1997	YF2Z-6020-AA	YF2E-6020-AA	Front Cover Gasket
Mustang 1996-1998 3.8L	6/26/1995 Through 4/24/1998	F6ZZ-9439-AD	F6ZE-9439-AD	Lower Intake Side Gasket - RH And LH (In Gasket Kit F6ZZ-9433-AA)
Thunderbird/Cougar 1996-1997 3.8L	6/26/1995 Through 3/3/1997 End of Production	F6ZZ-9439-AD	F6ZE-9439-AD	Lower Intake Side Gasket - RH And LH (In Gasket Kit F6ZZ-9433-AA)
Mustang 1996-1997 3.8L	6/26/1995 Through 5/1/1997	YF2Z-6020-AA	YF2E-6020-AA	Front Cover Gasket
Thunderbird/Cougar 1996-1997 3.8L	6/26/1995 Through 5/1/1997	YF2Z-6020-AA	YF2E-6020-AA	Front Cover Gasket

OTHER APPLICABLE ARTICLES: NONE
SUPERSEDES: 99-13-1
WARRANTY STATUS: Eligible Under The Provisions Of Bumper To

Bumper Warranty Coverage
 And Emissions Warranty
 Coverage

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DEALER CODING

BASIC PART NO.

9439

OASIS CODES: 401000, 402000, 403000, 497000,

499000

CONDITION

CODE

42

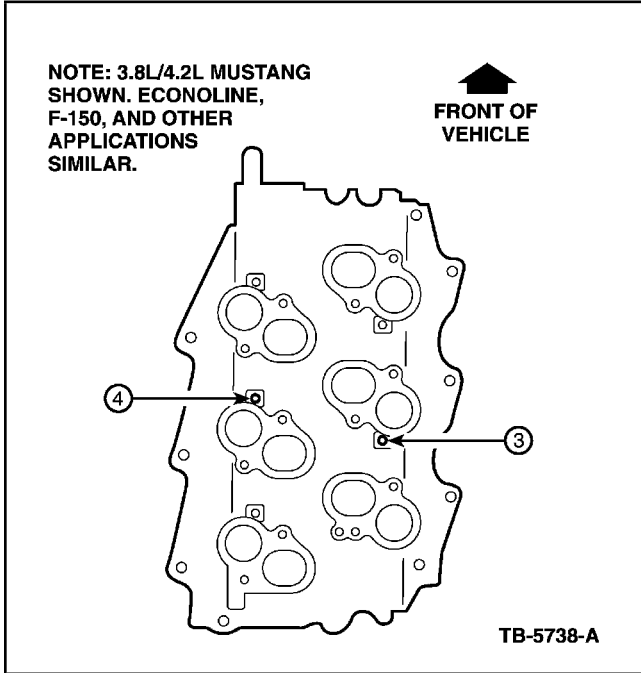


Figure 1 - Article 99-20-7