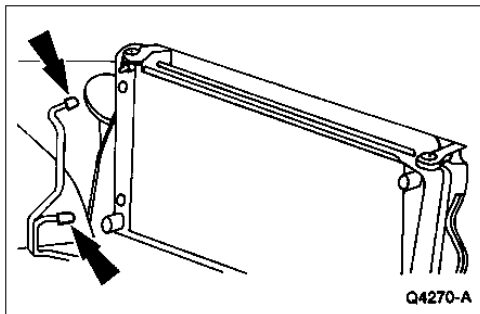
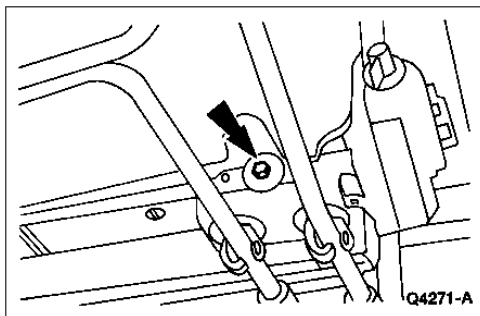


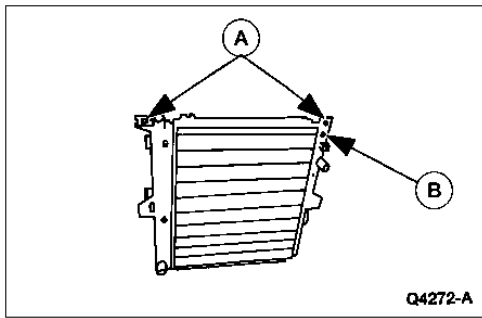
7. Disconnect the two transmission cooling lines.



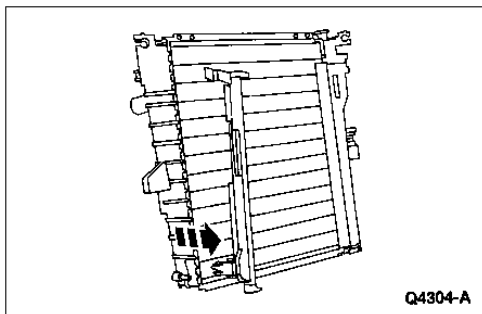
8. Remove the transmission cooler lines bracket bolt.



9. Remove the (A) screws and the (B) bolt.

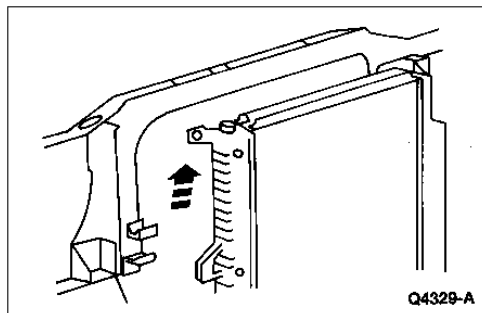


10. Unclip the A/C condenser core retainer from the right side of the radiator.



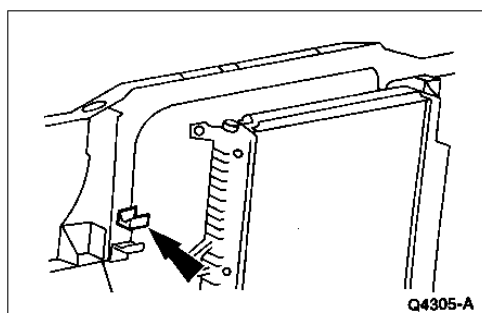
11. Separate the radiator from the A/C condenser core (19712) and remove the radiator.

a. Check the radiator hoses and replace if needed; refer to the procedure in this section.



12. Remove the lower radiator support rubber insulators.

a. Inspect the rubber insulators and replace if needed.

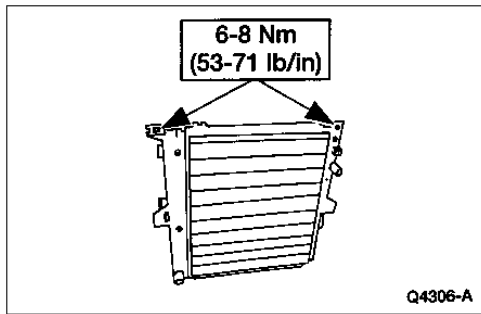


Installation

⚠ WARNING: DO NOT STAND NEAR OR IN LINE WITH ENGINE COOLING FAN BLADE WHEN REVVING ENGINE (6007).

NOTE: Confirm that the A/C condenser core is fully secured to the radiator.

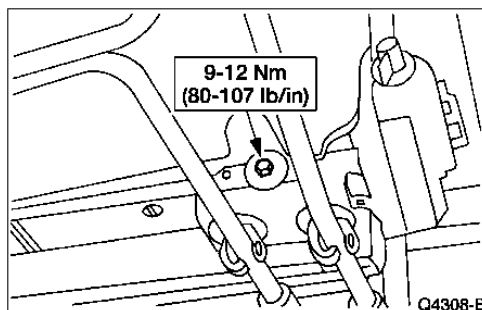
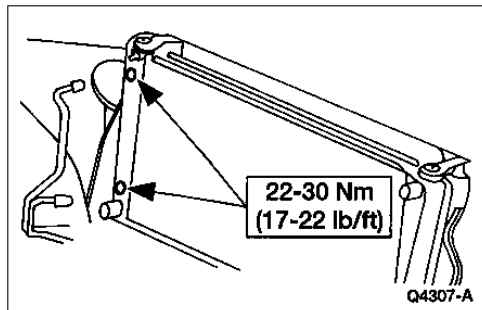
1. Install the radiator and condenser core assembly.



2. Refill the cooling system; refer to the procedure in this section.

3. Install the transmission cooler lines.

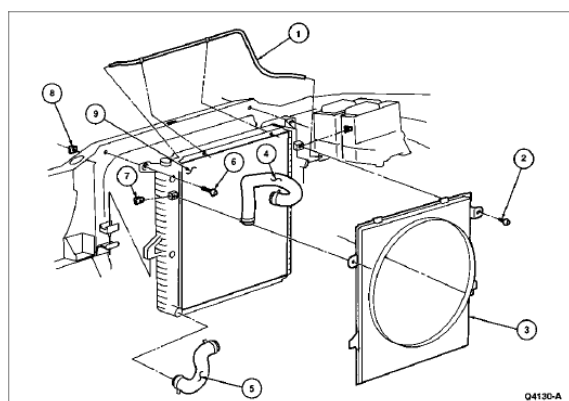
- a. Operate the engine for several minutes and check all connections for leaks.



Radiator Explorer 5.0L**Aluminum Core, Crossflow**

SPECIAL SERVICE TOOL(S) REQUIRED

Description	Tool Number
Fan Clutch Wrench	T96T-6312-A
Fan Hub Wrench	T96T-6312-B

System Exploded View Radiator

Item	Part Number	Description
1	8075	Radiator Overflow Hose
2	^	Screw & Washer ^ M61.0X16
3	8146	Fan Shroud
4	8260	Upper Radiator Hose
5	8286	Lower Radiator Hose
6	^	Screw & Washer ^ M81.25X375
7	^	U-Nut M6
8	^	U-Nut M8
9	8005	Radiator

Removal

1. Drain the cooling system by removing the radiator cap (8100) and attaching a 9.5mm (3/8-inch) inside diameter hose to the draincock nipple, located at the lower rear corner of the radiator. Then open the radiator draincock (8115) and allow the coolant to flow through the hose into a suitable container.
2. Remove the air cleaner outlet tube (9B659).
3. Remove the rubber radiator overflow hose (8075) from the radiator (8005) and store it out of the way.

1996 Aerostar/Ranger/Explorer

4. Use Fan Clutch Wrench T96T-6312-A and Fan Hub Wrench T96T-6312-B to remove the fan clutch (8A616) from the water pump pulley (8509).
5. Remove the two upper screws of the fan shroud (8146) or finger guard. Lift the fan shroud out of the lower retaining clips. Remove the fan shroud and fan blade (8600).
6. Loosen upper and lower hose clamps at the radiator and remove upper radiator hose (8260) and lower radiator hose (8286) from the radiator connectors.
7. For vehicles with automatic transmission (7003):
 - a. Disconnect the two transmission cooling lines from the oil cooler fittings on the radiator.
 - b. Disconnect the transmission cooler tube support bracket from the bottom flange of the radiator by removing the screw.
8. Unclip the A/C condenser core (19712) from the radiator.
9. Remove the A/C condenser-to-radiator bolt.
10. Remove the two radiator upper screws.
11. Separate the radiator from the A/C condenser core and remove.
12. If either upper radiator hose or lower radiator hose is to be replaced, loosen clamp at the engine end and slip the hose off the connections with a twisting motion.
13. Remove the radiator lower support rubber insulators.

Installation

⚠ WARNING: DO NOT STAND IN LINE WITH OR NEAR ENGINE COOLING FAN BLADE WHEN REVVING ENGINE.

To install, reverse the removal procedure.

Refer to [Torque Specifications](#) chart.

NOTE: Confirm that A/C condenser core is fully snapped onto the radiator.

Refill the cooling system. Refer to the procedure in this section.

Operate the engine (6007) for several minutes and check all connections for leaks.

Radiator Coolant Recovery Reservoir

Removal

1. Drain the coolant from the radiator coolant recovery reservoir (8A080) by disconnecting the overflow line at the radiator filler neck overflow nipple and allowing it to siphon into a suitable container.
2. Remove the radiator coolant recovery reservoir attachments and remove the combination radiator coolant recovery reservoir.

Installation

⚠ WARNING: DO NOT STAND IN LINE WITH OR NEAR THE ENGINE COOLING FAN BLADE (8600) WHEN THE ENGINE (6007) IS RUNNING.

1. Position the radiator coolant recovery reservoir in the vehicle and install attaching screws. Tighten to 6-8 Nm (52-71 lb-in).
 2. Connect the overflow tube to the radiator (8005).
 3. Fill and bleed the cooling system. Check for coolant leaks and proper coolant level after the engine reaches normal operating temperature.
-

Radiator Coolant Recovery Reservoir Â Explorer 5.0L**Removal**

1. Loosen the clamps, remove the electrical connector and remove the air cleaner outlet tube (9B659).
2. Remove the engine air cleaner (ACL) (9600).
3. Remove the engine compartment lamp switch bolt and position the switch assembly out of the way.
4. Remove the speed control servo (9C735) bolt and position the servo out of the way.
5. Disconnect the washer hose at the firewall and coil it up on the radiator coolant recovery reservoir.
6. Disconnect the radiator overflow hose (8075) and coil it up on the radiator coolant recovery reservoir.
7. Remove the two reservoir-to-wheel housing nuts and the two reservoir-to-inner fender bolts and the reservoir.

Installation

⚠ WARNING: DO NOT STAND IN LINE WITH OR NEAR THE ENGINE COOLING FAN BLADE WHEN THE ENGINE IS RUNNING.

To install, reverse the removal procedure.

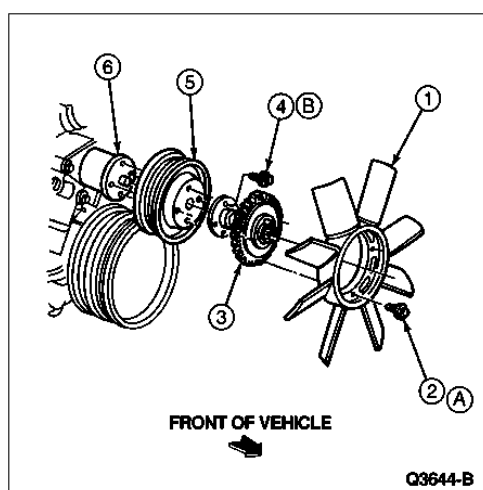
Refer to Torque Specifications .

Check and adjust radiator coolant level as needed.

Check for leaks.

Cooling Fan Blade and Fan Clutch, Mechanical**2.3L****Removal**

1. Loosen four screws holding fan clutch (8A616) to water pump pulley (8509).
2. Loosen belt tension. Remove four screws retaining fan clutch and fan blade (8600) to water pump pulley. Remove assembly from vehicle.
3. If equipped with fan shroud (8146), remove two screws, disconnect overflow tube and remove from vehicle. Lift fan shroud off lower retaining clips. Place fan shroud behind fan in order to access fan bolts.
4. Remove four screws retaining fan to fan clutch and separate.



Item	Part Number	Description
1	8600	Fan Blade
2	N602527-S2	Screw and Washer Assembly, M6-1.0 x 14
3	8A616	Fan Clutch
4	N806863-S2	Screw and Washer Assembly, M8-1.25 x 25
5	8509	Water Pump Pulley
6	8501	Water Pump
A	Â	Tighten to 6-8 Nm (53-71 Lb-In)
B	Â	Tighten to 16-24 Nm (12-17 Lb-Ft)

Installation

1. Position fan to fan clutch and secure with four screws. Tighten to 6-8 Nm (53-70 lb-in).
2. Install fan shroud to radiator (8005). Tighten screws to 6-8 Nm (53-71 lb-in). Connect the overflow tube.
3. Position fan and fan clutch to water pump pulley and secure with four screws. Tighten to 16-24 Nm (12-17 lb-ft).

3.0L and 4.0L

SPECIAL SERVICE TOOLS DESIRED

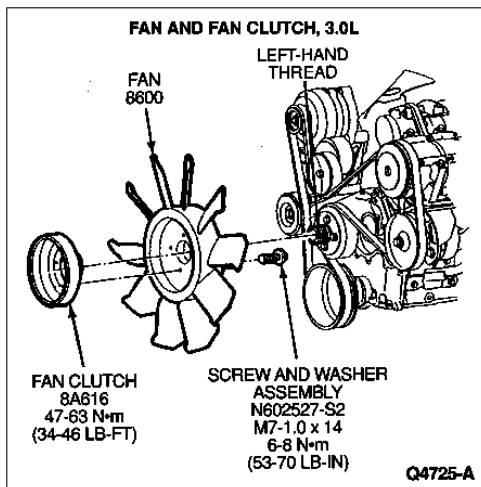
Tool Number	Description
T84T-6312-C	Fan Clutch Holding Tool
T84T-6312-D	Fan Clutch Nut Wrench

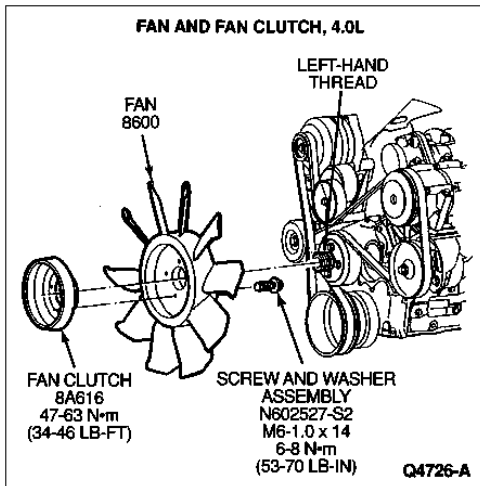
Removal

1. Remove the fan shroud as outlined in Removal and Installation, Radiator in this section.
2. **⚠ CAUTION: On 3.0L engines only, the large nut which attaches fan clutch to the hub of the water pump shaft has a left-hand thread and must be rotated clockwise for removal.**

Remove the nut using Fan Clutch Holding Tool T84T-6312-C and Fan Clutch Nut Wrench T84T-6312-D.

3. Remove the fan and fan clutch as an assembly.
4. Remove the bolts attaching the fan to the fan clutch, if necessary.

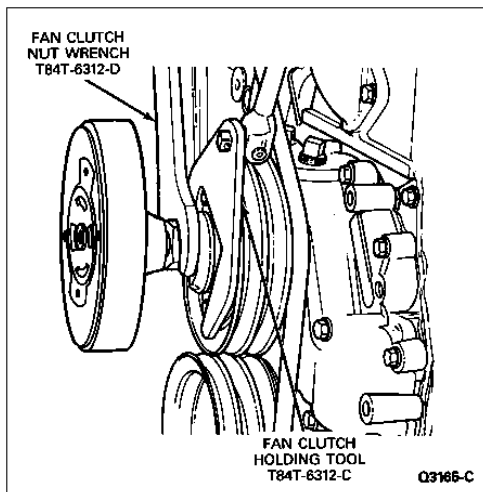


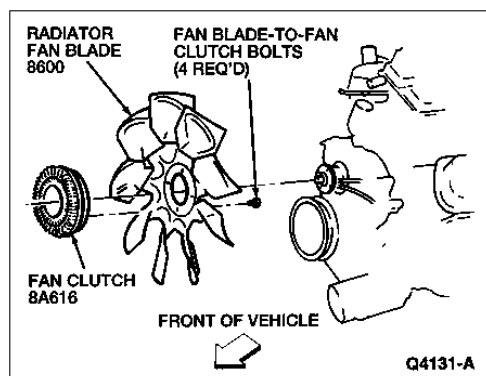


Installation

⚠ CAUTION: On 3.0L engines only, the fan clutch nut has a left-hand thread and must be rotated counterclockwise for tightening.

For installation, follow removal steps in reverse order. Tighten the fan-to-clutch bolts to 6-8 Nm (53-71 lb-in). Tighten the fan clutch assembly nut to 47-63 Nm (34-46 lb-ft).



Cooling Fan Blade and Fan Clutch, Mechanical**SPECIAL SERVICE TOOL(S) REQUIRED**

Description	Tool Number
Fan Clutch Wrench	T96T-6312-A
Fan Hub Wrench	T96T-6312-B

Removal

1. Remove the air cleaner outlet tube (9B659). Refer to [Section 03-12](#) .
2. Use Fan Clutch Wrench T96T-6312-A and Fan Hub Wrench T96T-6312-B to loosen and remove the fan clutch (8A616) from the water pump pulley (8509).
3. Remove the two fan shroud bolts.
4. Remove the fan shroud (8146) along with the fan blade (8600) and fan clutch.
5. Remove the four fan blade bolts and separate the fan blade from the fan clutch.

Installation

To install, reverse the removal procedure.

Tighten the four fan blade bolts to 19-26 Nm (14-19 lb-ft).

Tighten the fan shroud bolts 6-8 Nm (53-71 lb-in).

Tighten the fan clutch to the water pump pulley 46-63 Nm (34-46 lb-ft).