2002 AUTOMATIC TRANSMISSION' 'Transmission Cooling - Explorer & Mountaineer

#### 2002 AUTOMATIC TRANSMISSION

#### **Transmission Cooling - Explorer & Mountaineer**

#### SPECIFICATIONS

#### **General Specifications**

Item	Specification
MERCON® V Automatic Transmission Fluid XT-5-QM—Transmission	MERCON® V or equivalent

G00378655

Fig. 1: General Specifications
Courtesy of FORD MOTOR CO.

#### **Torque Specifications**

Description	Nm	lb-ft	lb-in
Transmission fluid cooler tube nut to case fitting	30	22	_
Cooling fan nut to water pump	55	41	
Upper fan shroud bolts	7	_	62
Lower fan shroud bolts	7	-	62
Transmission fluid cooler to cooling module assembly bolts	10		89
AC condenser brackets to cooling module assembly bolts	10		89
Cooling module assembly to body bolts	12	9	
Transmission fluid cooler lines bracket to engine nut	10		89

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Fig. 2: Torque Specifications
Courtesy of FORD MOTOR CO.

#### **DESCRIPTION & OPERATION**

Vehicles equipped with automatic transmissions have a transmission auxiliary fluid cooler which is mounted in between the radiator and the AC condenser. In operation, transmission fluid travels from the transmission to the auxiliary transmission fluid cooler then back to the transmission. The transmission auxiliary fluid cooler transfers heat from the transmission fluid to the outside air.

For transmission fluid cooler flow test, refer to **TRANSMISSION FLUID COOLER FLOW TEST**.

For transmission fluid cooler backflushing and cleaning, refer to TRANSMISSION FLUID COOLER -

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#### **BACKFLUSHING & CLEANING**.

### **DIAGNOSIS & TESTING**

#### **INSPECTION & VERIFICATION**

Check for fluid leakage. If fluid leakage is found at any of the transmission fluid cooling components, a new component must be installed.

#### **SYMPTOM CHART**

#### **SYMPTOM CHART**

Condition	Possible Sources	Action
<ul> <li>Transmission overheating</li> </ul>	Damaged radiator.	REPLACE radiator as necessary.
	<ul> <li>Plugged auxiliary fluid cooler</li> </ul>	<ul> <li>INSPECT auxiliary fluid cooler for blockage. INSTALL new if required. REFER to <u>Auxiliary</u> <u>Transmission Fluid Cooler</u>.</li> </ul>
	System leaks.	<ul> <li>INSPECT for leaks. REPAIR as required.</li> </ul>
·	System leaks.	<ul> <li>INSPECT transmission fluid cooler and tubes for leaks. REPAIR as required.</li> </ul>
	<ul> <li>Incorrect fluid level.</li> </ul>	<ul> <li>ADJUST to correct level.</li> </ul>
	<ul> <li>Fluid condition.</li> </ul>	<ul> <li>INSPECT fluid level &amp; condition.</li> </ul>
	<ul> <li>Damaged, blocked, reversed, leaking or restricted cooler lines or cooler tubes.</li> </ul>	<ul> <li>INSPECT cooler lines and tubes. REPAIR or FLUSH as necessary.</li> </ul>
_	<ul> <li>Engine concerns causing transmission to overheat.</li> </ul>	INSPECT engine cooling system.
	<ul> <li>Excessive towing loads.</li> </ul>	CHECK gross vehicle weight.
	<ul> <li>Incorrect idle or driveability concerns.</li> </ul>	<ul> <li>REFER to Engine Performance- Fault Isolation, Troubleshooting- No Codes article.</li> </ul>

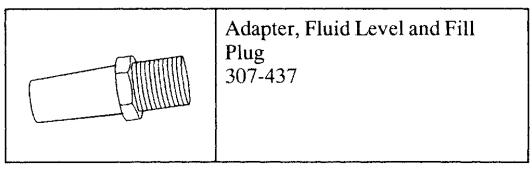
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Fig. 3: Symptom Chart Courtesy of FORD MOTOR CO.

#### TRANSMISSION FLUID COOLER FLOW TEST

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# Special Tool(s)



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Fig. 4: Identifying Special Tool Courtesy of FORD MOTOR CO.

#### NOTE:

The engine idle, transmission linkage/cable adjustment, fluid level and line pressure must be within specification before carrying out this test. For additional information on transmission linkage/cable adjustment, refer to <a href="SHIFT">SHIFT</a> CABLE . For additional information on engine idle diagnosis, refer to <a href="IDLE">IDLE</a> SPEED . For additional information on fluid level check, refer to <a href="CHECKING">CHECKING</a> FLUID LEVEL .

- 1. Place the transmission range selector lever into PARK.
- 2. Raise the vehicle on a hoist and place suitable safety stands under the vehicle.
- 3. Prior to carrying out the Transmission Fluid Cooler Flow Test check to see if the vehicle is equipped with a in-line fluid filter. If the vehicle is equipped with an filter, remove and discard the in-line fluid filter prior to carrying out the Transmission Fluid Cooler Flow Test and system flushing.
- 4. Using a 3/16 inch Allen key, hold the large drain plug with a wrench and remove the small (center) fluid level indicating plug.

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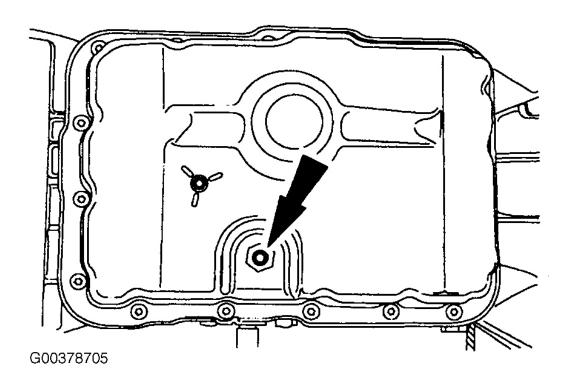
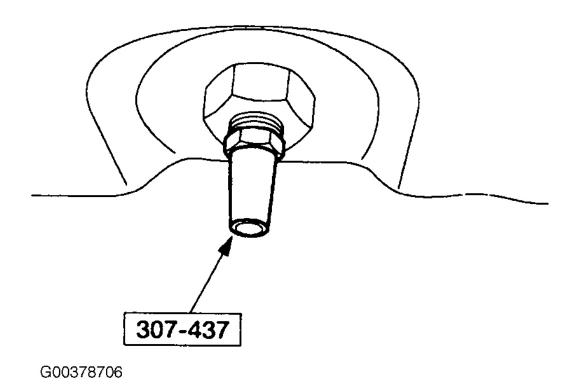


Fig. 5: Identifying Small (Center) Fluid Level Indicating Plug Courtesy of FORD MOTOR CO.

5. Install the special tool into the pan.

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<u>Fig. 6: Installing Special Tool Into Pan</u> Courtesy of FORD MOTOR CO.

6. Remove the cooler return line (upper line) from the fitting on the transmission case.

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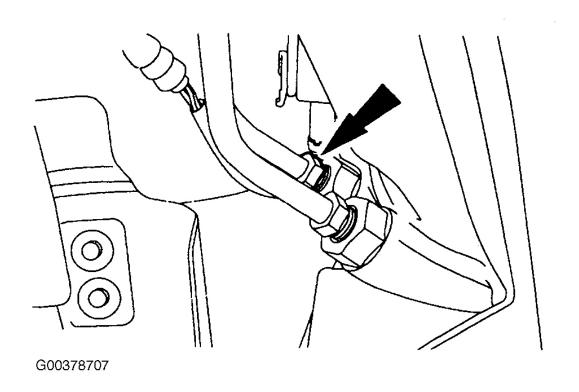
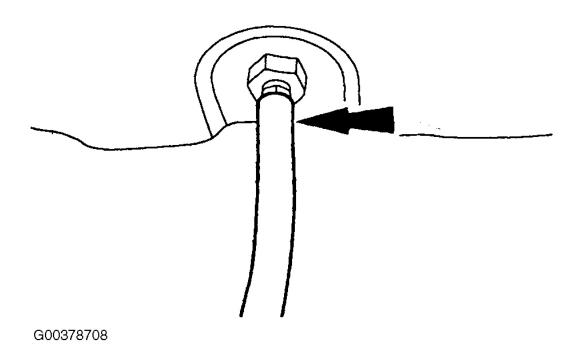


Fig. 7: Identifying Cooler Return Line Courtesy of FORD MOTOR CO.

7. Connect one end of a clear hose to the cooler return line and route the other end of the hose to the special tool in the pan.

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<u>Fig. 8: Connecting Clear Hose To Special Tool</u> Courtesy of FORD MOTOR CO.

- 8. Remove the safety stands and lower the vehicle.
- 9. Start the engine and run it at idle.
- 10. With the engine running, raise the vehicle on a hoist and place suitable safety stands under the vehicle.
- 11. Once a steady flow of fluid (without air bubbles) is observed, remove the hose from the special tool and place the hose in a measuring container for 15 seconds. After 15 seconds, place the hose back onto the special tool. Lower the vehicle and turn the engine off. Measure the amount of fluid in the container. If adequate flow is observed, approximately 237 ml (8 oz) will be in the measuring container. The test is now complete. Reconnect the cooler line and install the fluid fill plug.

NOTE: If the vehicle was not equipped with a fluid filter, install a fluid filter kit and follow the instructions supplied in the kit. If the vehicle was equipped with a fluid filter install a new filter.

- 12. Once an adequate flow has been established, install a new in-line transmission fluid filter kit or filter.
- 13. Once the fluid filter has been installed, check that fluid will flow out of the filter.
- 14. If the flow is not liberal, disconnect the hose from the cooler return line and connect the hose to the cooler inlet (lower fitting) on the transmission case. Reconnect the cooler return line to the case (upper fitting).

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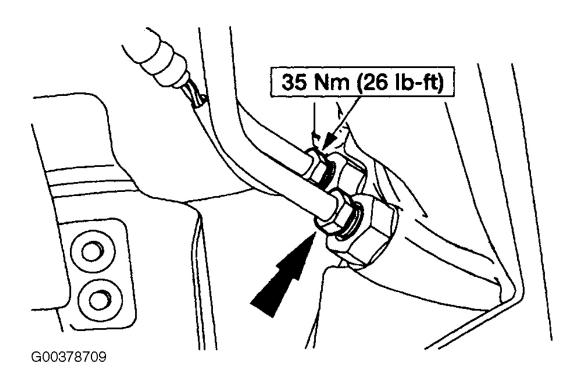


Fig. 9: Tightening Cooler Return Line Courtesy of FORD MOTOR CO.

15. Repeat Steps 8-10. If the flow is now approximately 237 ml (8 oz) in 15 seconds, the cooler lines and auxiliary cooler must be cleaned. For additional information, refer to **TRANSMISSION FLUID COOLER - BACKFLUSHING & CLEANING**. Carry out this entire test after carrying out the backflushing and cleaning procedure. If the flow is still not adequate after carrying out the backflushing and cleaning procedure, install new cooler lines and/or an auxiliary cooler. If the flow from the case is still not adequate after the installation of new cooler lines and/or an auxiliary cooler (237 ml [8 oz] in 15 seconds) the pump and/or torque converter may be at fault. Carry out the appropriate procedures for diagnosis and repair in this section.

#### TRANSMISSION FLUID COOLER - BACKFLUSHING & CLEANING

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ltem	Specification
MERCON® V Automatic Transmission Fluid	MERCON® V

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Fig. 10: Identifying Transmission Fluid Courtesy of FORD MOTOR CO.

CAUTION: Whenever a transmission has been disassembled to install new parts or a new or remanufactured transmission has been installed, a new transmission fluid cooler, either in-tank, auxiliary or oil to air (OTA), if equipped will need to be installed. Using a suitable torque converter/fluid cooler cleaner, clean and backflush the transmission fluid cooler tubes.

CAUTION: Use only clean automatic transmission fluid specified for this transmission. Do not use supplemental fluid additives, treatments or cleaning agent. The use of these materials may affect transmission operation and result in internal damage to the transmission.

When internal wear or damage has occurred in the transmission, metal particles, clutch plate material or band material may have been carried into the transmission fluid cooler. These contaminants are a major cause of recurring transmission concerns and must be removed from the system before the transmission is put back in use.

# NOTE: Do not use any solvents while carrying out this procedure. Only use clean automatic transmission fluid.

- 1. Conduct backflushing with a suitable torque converter/transmission fluid cooler cleaner. Test the equipment to make sure that a vigorous fluid flow is present before proceeding. Install a new system filter if flow is weak or contaminated.
- 2. Remove and discard the in-line transmission fluid filter, if equipped.
- 3. To aid in attaching the cleaner to the transmission steel cooler lines, connect 2 additional rubber hoses to the transmission end of the steel transmission cooler lines as described.
  - Connect the cleaner tank pressure line to the steel transmission cooler return line (longest line).
  - Connect a tank return hose to the steel transmission cooler pressure line (shorter line). Place the outlet end of this hose in the solvent tank reservoir.
- 4. Turn on the pump and allow the transmission fluid to circulate a minimum of 5 minutes (cycling switch on and off will help dislodge contaminants in the cooler system).

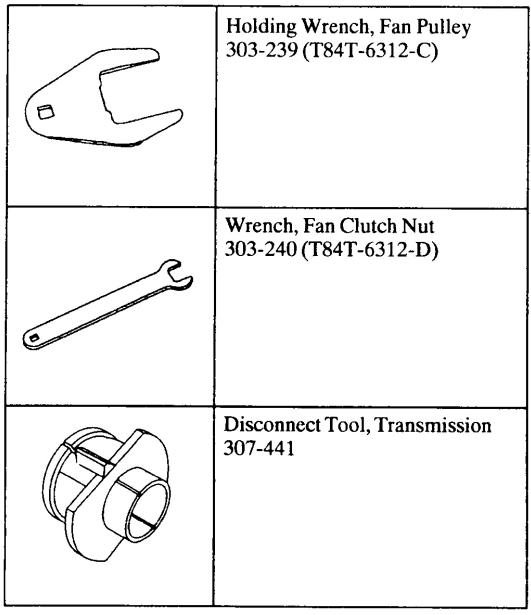
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- 5. Switch off the pump and disconnect the pressure hose from the transmission cooler return line.
- 6. Use compressed air to blow out the cooler(s) and lines (blow air into the transmission cooler return line) until all the fluid is removed.
- 7. Remove the rubber return hose from the remaining steel cooler line.

### **REMOVAL & INSTALLATION**

**AUXILIARY TRANSMISSION FLUID COOLER** 

# Special Tool(s)



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Fig. 11: Identifying Special Tools Courtesy of FORD MOTOR CO.

#### Removal

1. Disconnect the battery cables. Remove the upper air deflector.

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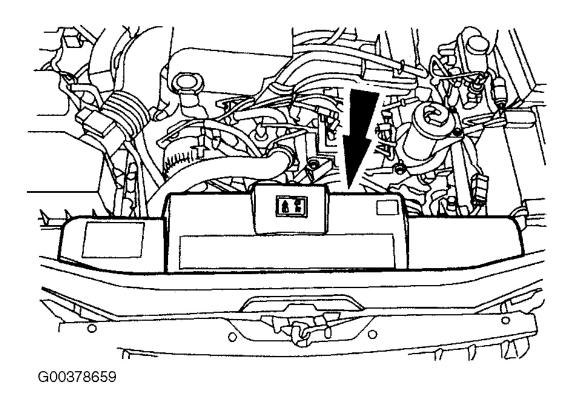


Fig. 12: Identifying Upper Air Deflector Courtesy of FORD MOTOR CO.

2. Remove the inner air deflector

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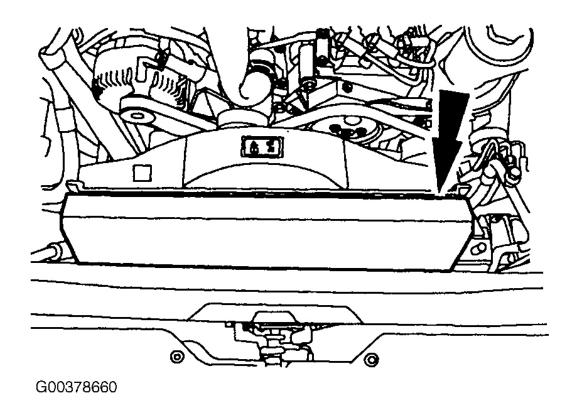


Fig. 13: Identifying Inner Air Deflector Courtesy of FORD MOTOR CO.

3. Remove the degas bottle cap.

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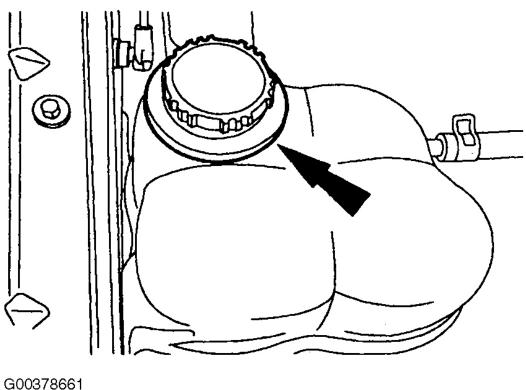
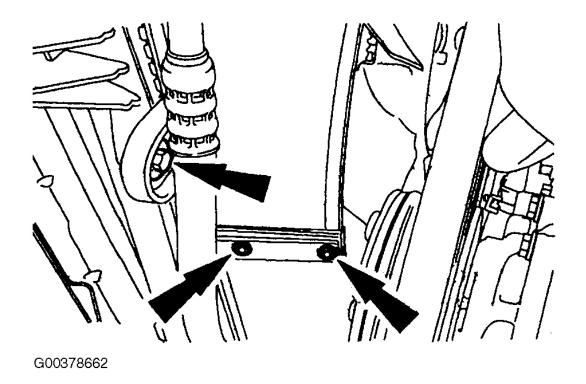


Fig. 14: Identifying Degas Bottle Cap Courtesy of FORD MOTOR CO.

4. Remove and discard the screws. Remove the bolt from the left side of the fan shroud.

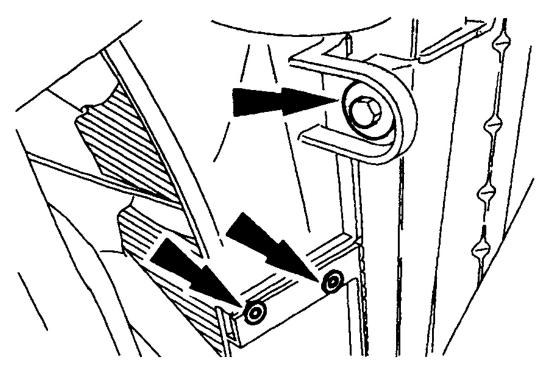
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<u>Fig. 15: Identifying Left Side Fan Shroud Bolts</u> Courtesy of FORD MOTOR CO.

5. Remove and discard the screws. Remove the bolt from the right side of the fan shroud.

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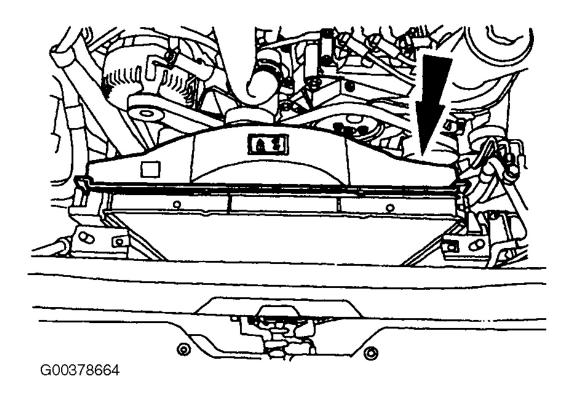


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<u>Fig. 16: Identifying Right Side Fan Shroud Bolt</u> Courtesy of FORD MOTOR CO.

6. Remove the upper radiator fan shroud.

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<u>Fig. 17: Identifying Upper Radiator Fan Shroud</u> Courtesy of FORD MOTOR CO.

7. Using the special tools, remove the cooling fan.

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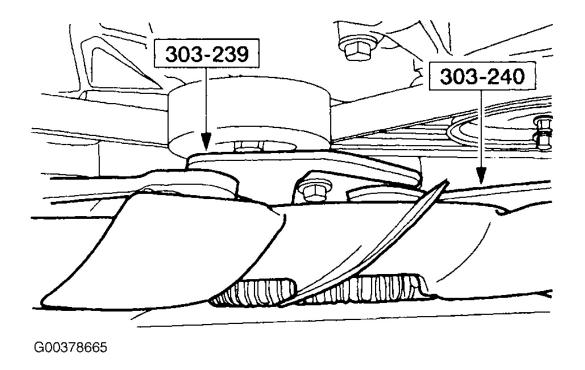


Fig. 18: Removing Cooling Fan Courtesy of FORD MOTOR CO.

- 8. With the vehicle in NEUTRAL, position the vehicle on a hoist.
- 9. Drain the engine coolant.

NOTE: If equipped, remove the safety retainer from the connector.

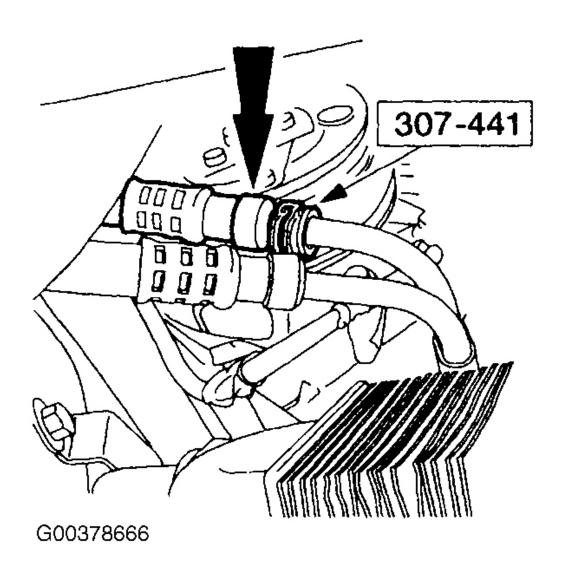
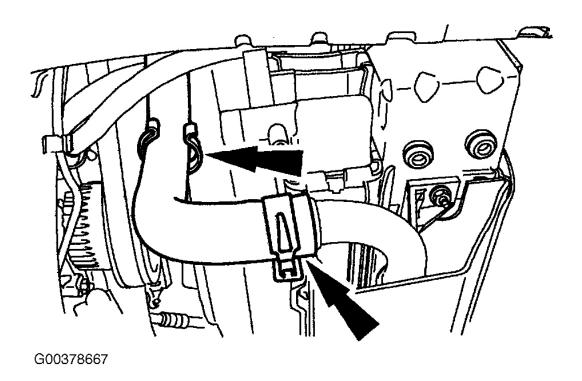


Fig. 19: Disconnecting Cooler Line Courtesy of FORD MOTOR CO.

- 10. Disconnect the cooler line.
  - If equipped, use the special tool to disconnect the quick coupler.
  - If equipped, loosen and remove the screw clamp from the hose.
- 11. Remove the right lower radiator hose from the radiator, remove the hose from the retainer and position it aside

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<u>Fig. 20: Removing Right Lower Radiator Hose</u> Courtesy of FORD MOTOR CO.

12. Remove the left lower radiator hose from the radiator and position it aside.

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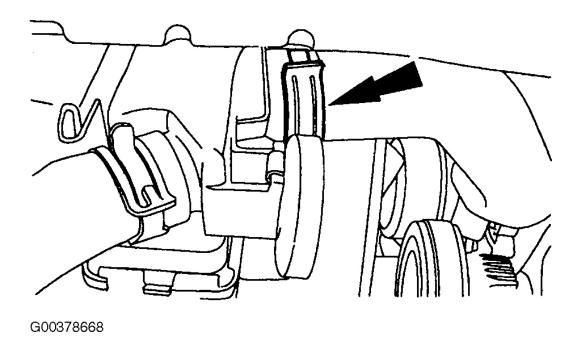
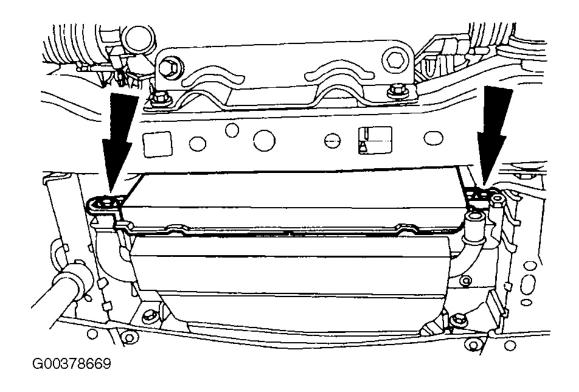


Fig. 21: Removing Left Lower Radiator Hose Courtesy of FORD MOTOR CO.

13. Remove the bolts and the lower fan shroud.

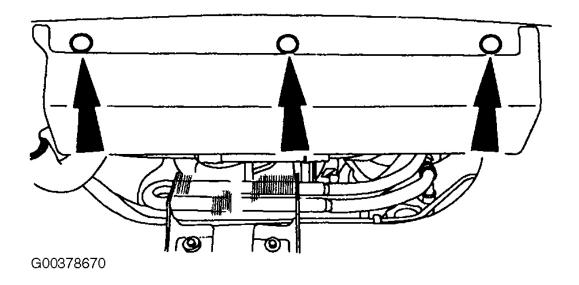
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<u>Fig. 22: Removing Lower Fan Shroud Bolts</u> Courtesy of FORD MOTOR CO.

14. Disconnect the lower air dam pushpins.

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<u>Fig. 23: Identifying Lower Air Dam Pushpins</u> Courtesy of FORD MOTOR CO.

- 15. Position the vehicle.
- 16. Remove the degas bottle hose and upper radiator hose.

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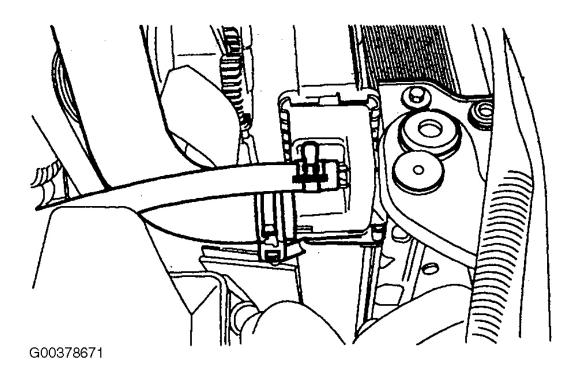
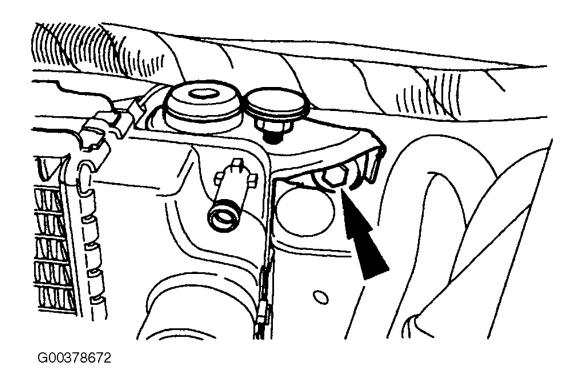


Fig. 24: Identifying Degas Bottle Hose & Upper Radiator Hose Courtesy of FORD MOTOR CO.

17. Remove the right radiator support bracket.

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<u>Fig. 25: Identifying Right Radiator Support Bracket</u> Courtesy of FORD MOTOR CO.

18. Remove the AC line retainer clip.

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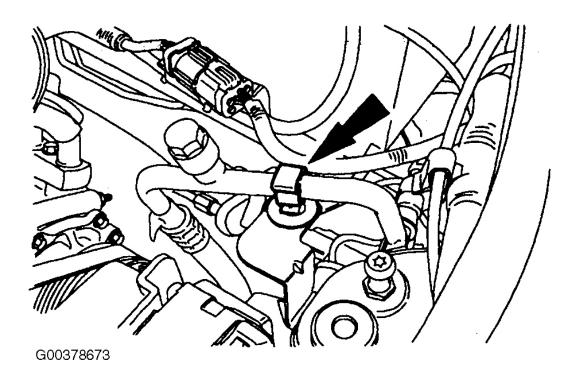
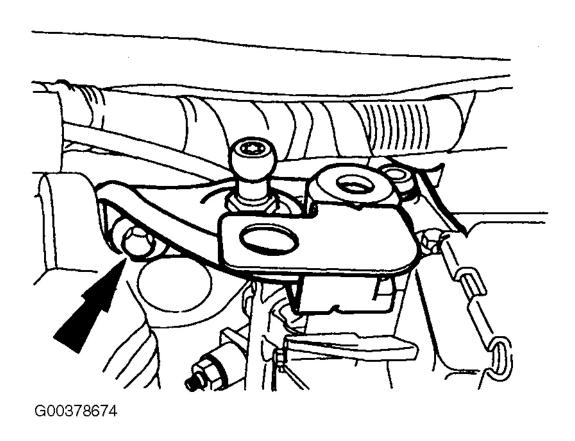


Fig. 26: Identifying A/C Line Retaining Clip Courtesy of FORD MOTOR CO.

19. Remove the left radiator support bracket.

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<u>Fig. 27: Identifying Left Radiator Support Bracket</u> Courtesy of FORD MOTOR CO.

20. Remove the right AC condenser support bracket.

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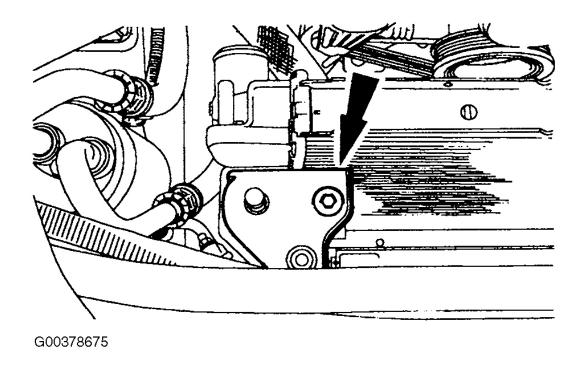
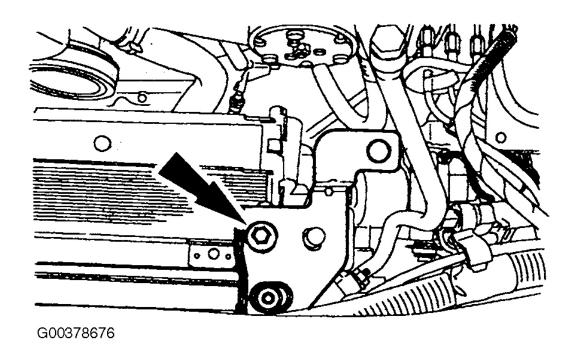


Fig. 28: Identifying Right A/C Condenser Support Bracket Courtesy of FORD MOTOR CO.

21. Remove the left AC condenser support bracket.

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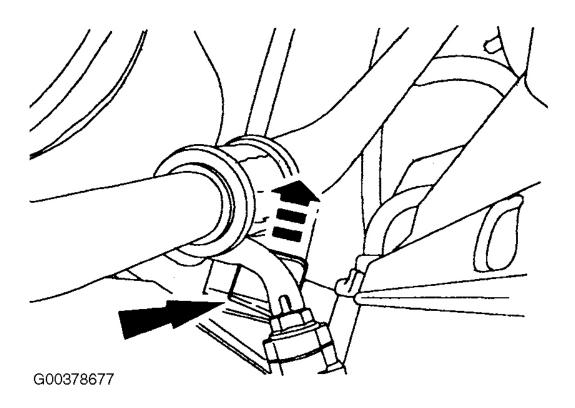


<u>Fig. 29: Identifying Left A/C Condenser Support Bracket Courtesy of FORD MOTOR CO.</u>

NOTE:

It will be necessary to lift the radiator assembly up off the mounts and set it on the frame in order to separate the AC condenser from the radiator. Right is shown; left side is similar.

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<u>Fig. 30: Lifting Radiator To Separate Condenser From Radiator</u> Courtesy of FORD MOTOR CO.

- 22. Remove the radiator up off the mount and set it on the frame.
- 23. Remove the left inner air deflector from the AC condenser.

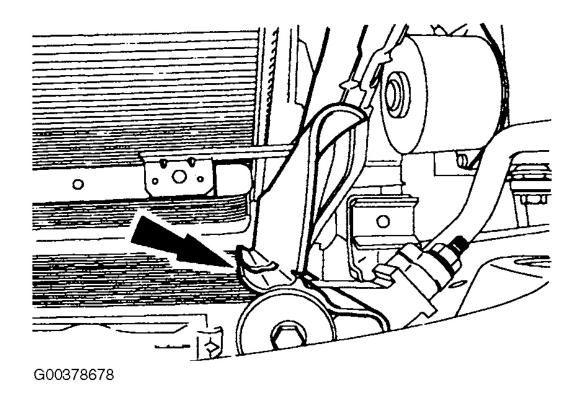
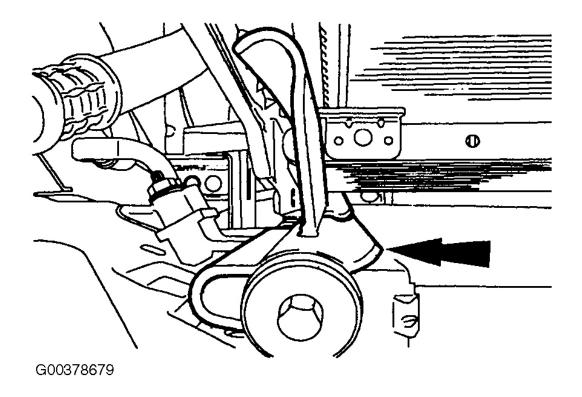


Fig. 31: Identifying Left Inner Air Deflector From Condenser **Courtesy of FORD MOTOR CO.** 

24. Remove the right inner air deflector from the AC condenser.

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<u>Fig. 32: Identifying Right Inner Air Deflector From Condenser</u> Courtesy of FORD MOTOR CO.

NOTE: It is not necessary to evacuate the AC system, the AC condenser can

remain in the vehicle.

NOTE: It will be necessary to lift the AC condenser up off the lower support. Move

the AC condenser toward the front of the vehicle.

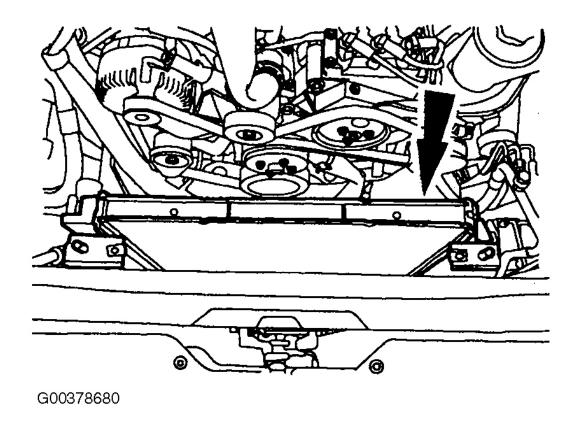


Fig. 33: Identifying Radiator & Transmission Cooler Assembly **Courtesy of FORD MOTOR CO.** 

25. Remove the radiator and transmission cooler as an assembly and place it on a bench.

CAUTION: Do not allow the AC condenser to hang freely or damage to the AC lines could occur.

- 26. Using mechanics wire support the AC condenser to the frame.
- 27. Remove the bolts and the transmission cooler. Remove the transmission cooler lines.

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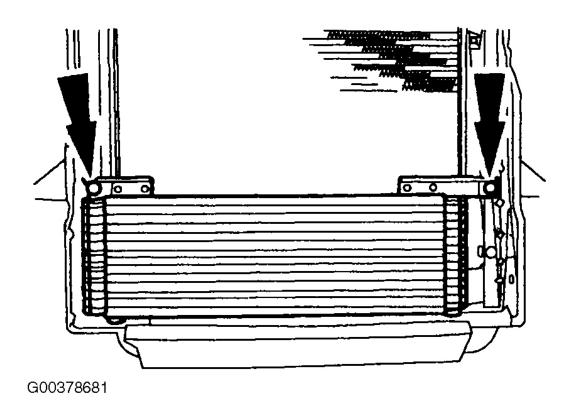
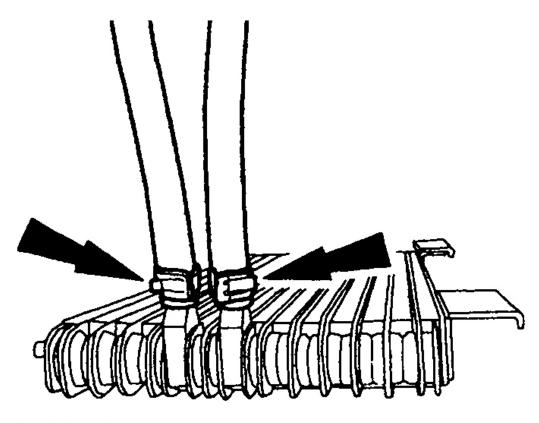


Fig. 34: Identifying Transmission Cooler Bolts Courtesy of FORD MOTOR CO.

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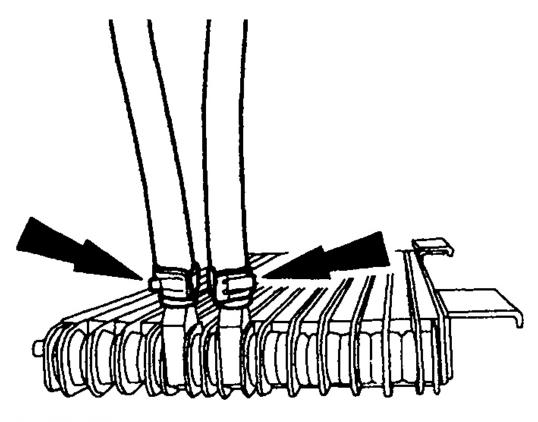
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Fig. 35: Identifying Cooler Lines Courtesy of FORD MOTOR CO.

#### Installation

1. Install the transmission cooler lines.

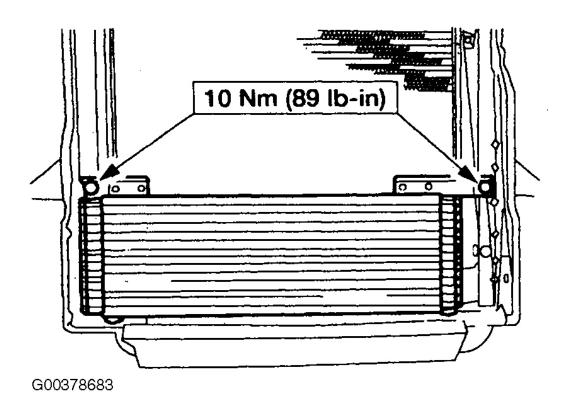
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<u>Fig. 36: Identifying Cooler Lines</u> Courtesy of FORD MOTOR CO.

2. Install the transmission cooler and bolts.



<u>Fig. 37: Tightening Transmission Cooler Bolts</u> Courtesy of FORD MOTOR CO.

NOTE: Remove the mechanics wire from the AC condenser.

NOTE: Do not set the radiator assembly in the mounts at this time. Set the

radiator assembly on the frame.

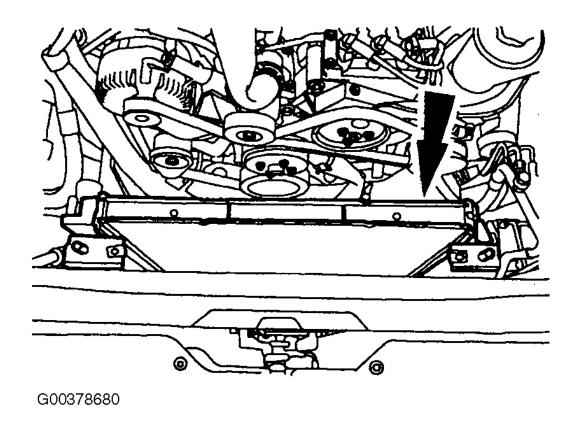
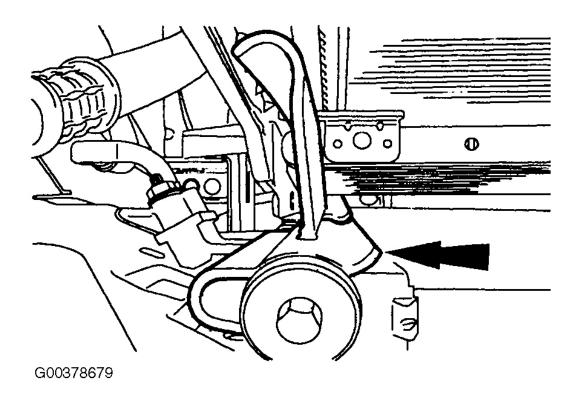


Fig. 38: Identifying Radiator & Transmission Cooler Assembly Courtesy of FORD MOTOR CO.

- 3. Install the radiator and transmission cooler as an assembly back into the vehicle.
- 4. Set the lower AC condenser mounts into the radiator assembly.
- 5. Install the right inner AC air deflector shield.

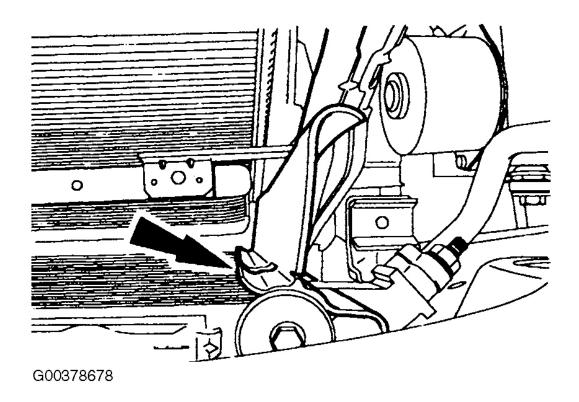
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<u>Fig. 39: Identifying Right Inner Air Deflector From Condenser</u> Courtesy of FORD MOTOR CO.

6. Install the left inner AC air deflector shield.

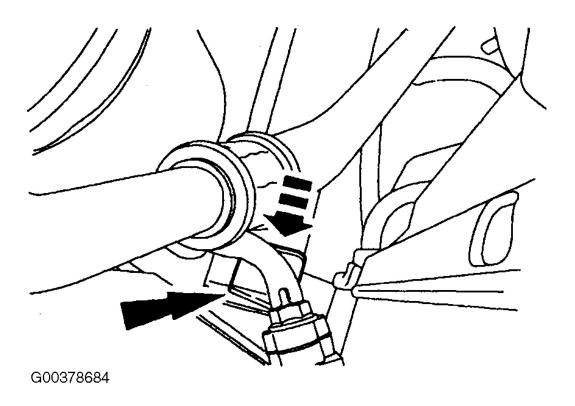
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<u>Fig. 40: Identifying Left Inner Air Deflector From Condenser</u> Courtesy of FORD MOTOR CO.

7. Set the radiator assembly onto the support mounts.

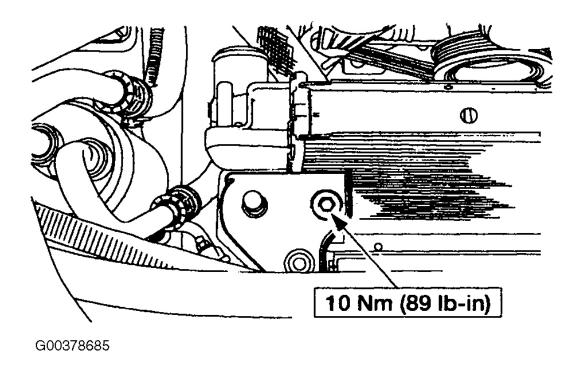
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<u>Fig. 41: Lowering Radiator Onto Support Mounts</u> Courtesy of FORD MOTOR CO.

8. Install the right AC condenser mounting bracket.

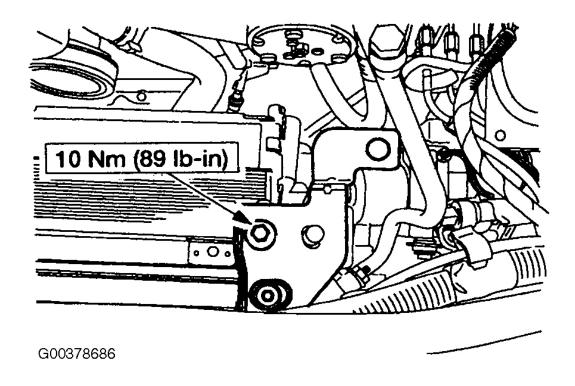
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<u>Fig. 42: Tightening Right Condenser Mounting Bracket Bolt Courtesy of FORD MOTOR CO.</u>

9. Install the left AC condenser mounting bracket.

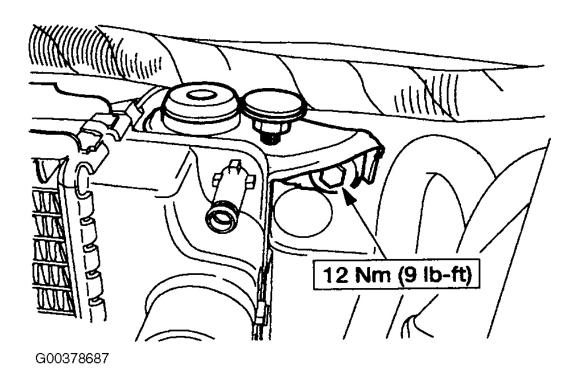
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<u>Fig. 43: Tightening Left Condenser Mounting Bracket Bolt</u> Courtesy of FORD MOTOR CO.

10. Install the right radiator support bracket and bolt.

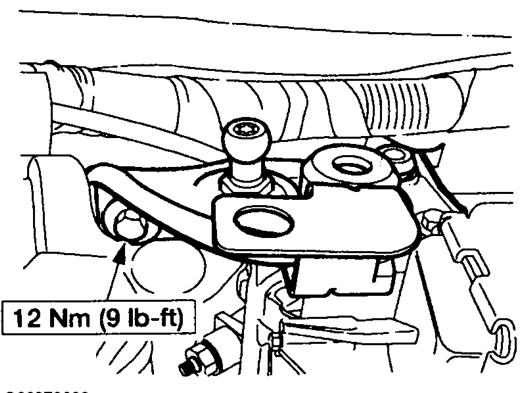
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<u>Fig. 44: Tightening Right Radiator Support Bracket Bolt</u> Courtesy of FORD MOTOR CO.

11. Install the left radiator support bracket and bolt.

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G00378688

<u>Fig. 45: Tightening Left Radiator Support Bracket Bolt</u> Courtesy of FORD MOTOR CO.

12. Install the AC line retainer.

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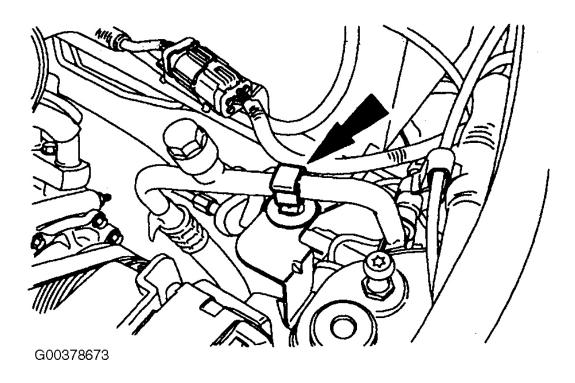


Fig. 46: Identifying A/C Line Retaining Clip Courtesy of FORD MOTOR CO.

- 13. With the range selector in NEUTRAL, position the vehicle on a hoist.
- 14. Install the lower front air dam pushpins.

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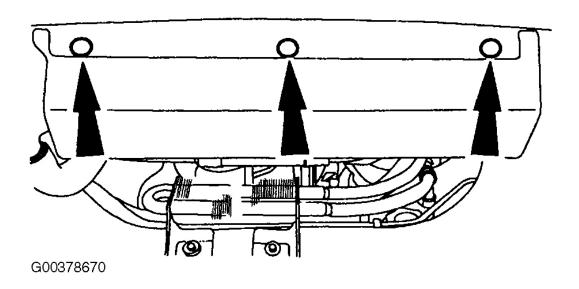


Fig. 47: Identifying Lower Air Dam Pushpins Courtesy of FORD MOTOR CO.

15. Install the lower fan shroud and bolts.

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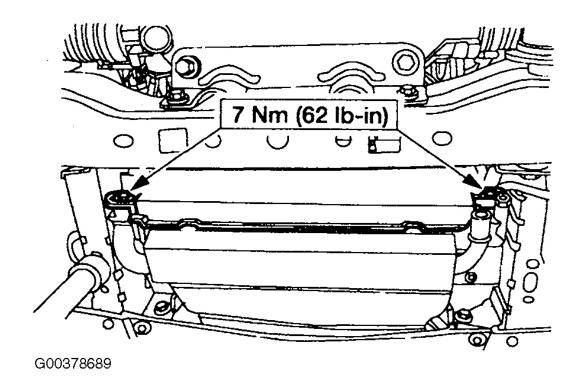
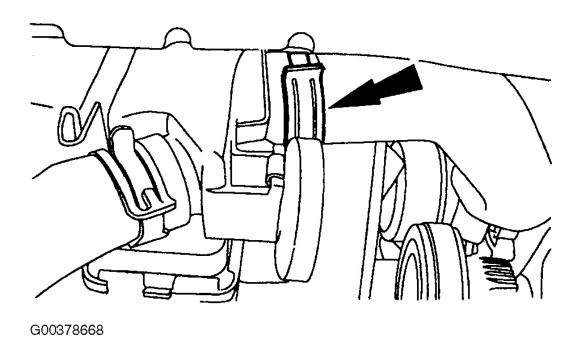


Fig. 48: Tightening Lower Fan Shroud Bolts Courtesy of FORD MOTOR CO.

16. Connect the left lower radiator hose.

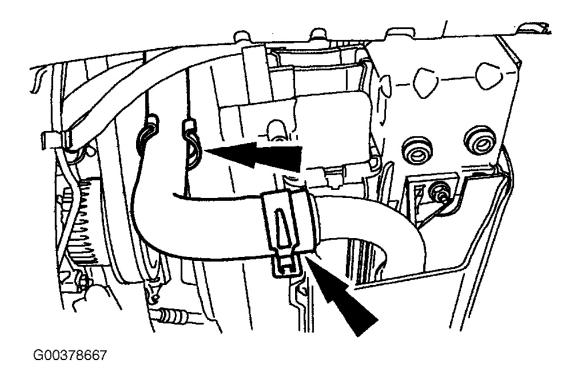
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<u>Fig. 49: Installing Left Lower Radiator Hose</u> Courtesy of FORD MOTOR CO.

17. Connect the right lower radiator hose to the radiator and position it into the retainer.

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<u>Fig. 50: Installing Right Lower Radiator Hose</u> Courtesy of FORD MOTOR CO.

- 18. Connect the transmission cooler lines.
  - If equipped, install the safety retainer on the connector.
  - If equipped, install the screw clamp on the hose.

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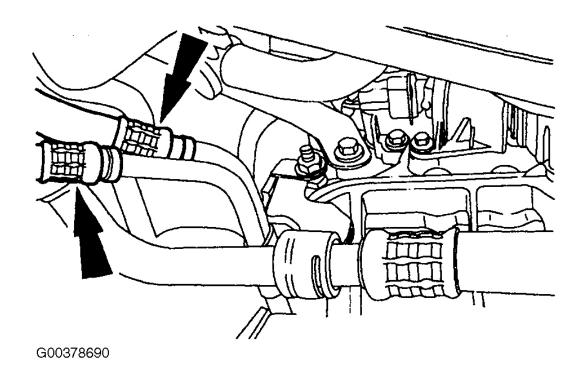


Fig. 51: Connecting Transmission Cooler Lines Courtesy of FORD MOTOR CO.

- 19. Position the vehicle.
- 20. Using the special tools, install the fan.

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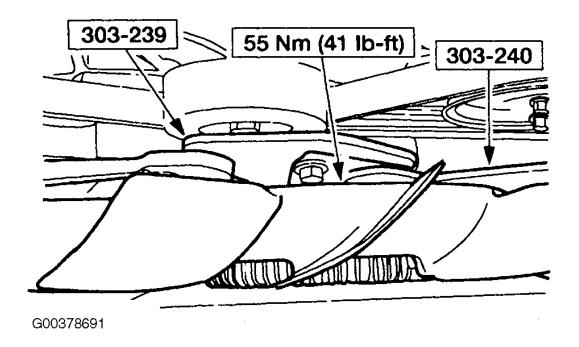
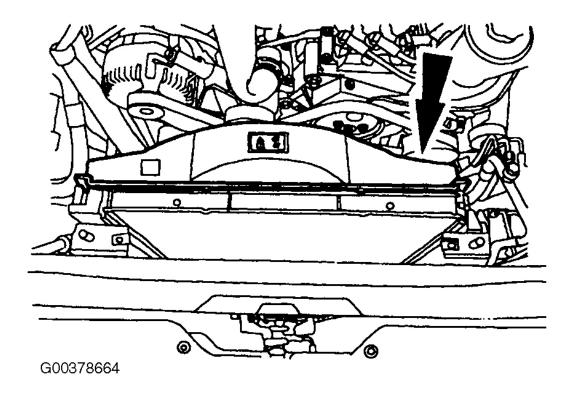


Fig. 52: Installing Fan Assembly Courtesy of FORD MOTOR CO.

21. Install the upper fan shroud.

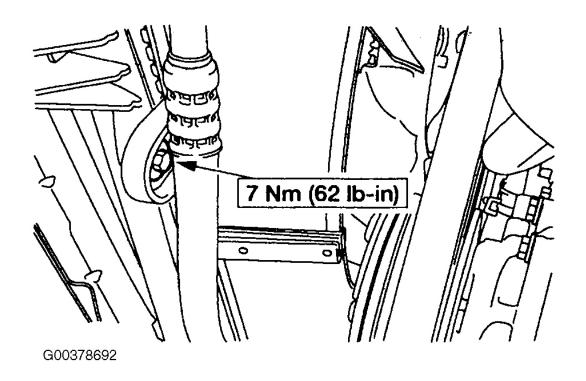
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<u>Fig. 53: Identifying Upper Radiator Fan Shroud</u> Courtesy of FORD MOTOR CO.

22. Install the bolt on the left side of the fan shroud.

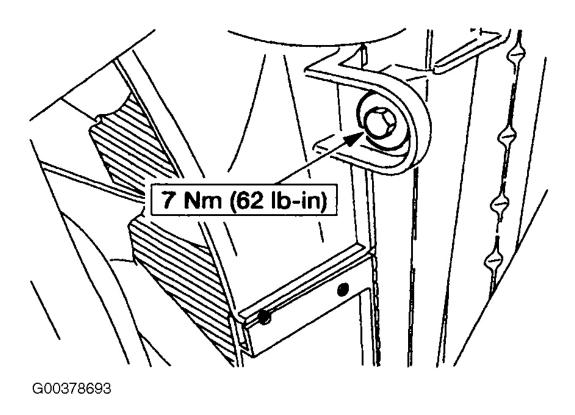
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<u>Fig. 54: Tightening Left Side Fan Shroud Bolt</u> Courtesy of FORD MOTOR CO.

23. Install the bolt on the right side of the fan shroud.

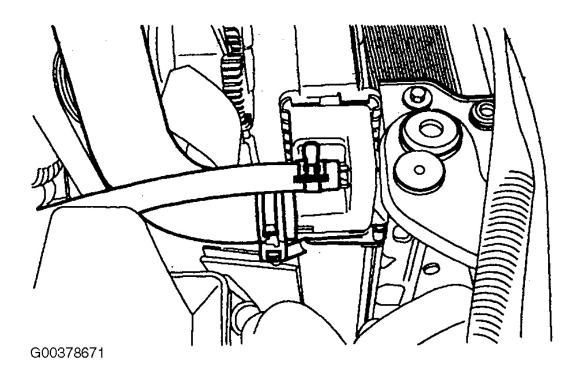
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<u>Fig. 55: Tightening Right Side Fan Shroud Bolt</u> Courtesy of FORD MOTOR CO.

24. Connect the upper radiator hose and the degas bottle hose.

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<u>Fig. 56: Identifying Degas Bottle Hose & Upper Radiator Hose</u> Courtesy of FORD MOTOR CO.

25. Install the inner air deflector.

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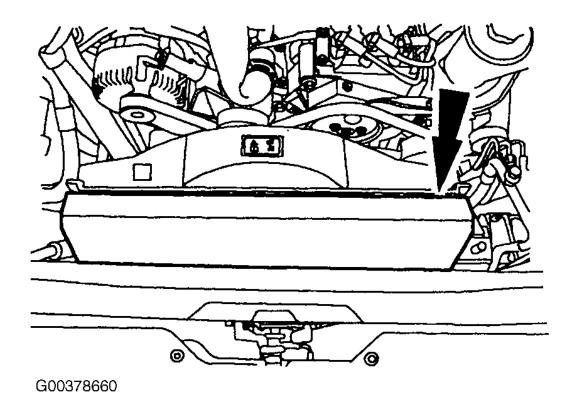


Fig. 57: Identifying Inner Air Deflector Courtesy of FORD MOTOR CO.

26. Install the upper air deflector.

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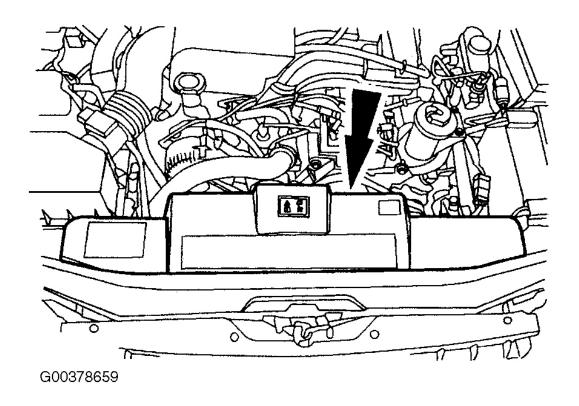


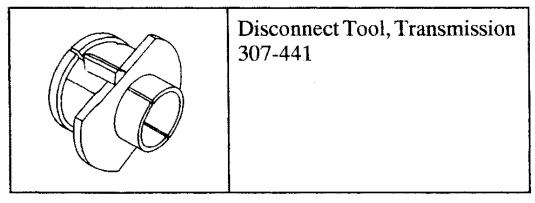
Fig. 58: Identifying Upper Air Deflector Courtesy of FORD MOTOR CO.

- 27. Connect the battery ground cable.
- 28. Fill the cooling system.
- 29. Fill and check the transmission fluid. For additional information, refer to **LUBRICATION**.

#### TRANSMISSION FLUID COOLER TUBES

2002 AUTOMATIC TRANSMISSION' 'Transmission Cooling - Explorer & Mountaineer

# Special Tool(s)



G00378695

Fig. 59: Identifying Special Tool Courtesy of FORD MOTOR CO.

#### Removal

- 1. With the vehicle in NEUTRAL, position the vehicle on a hoist.
- 2. Using a backup wrench, hold the case fitting secure. Disconnect the fluid cooler fittings.

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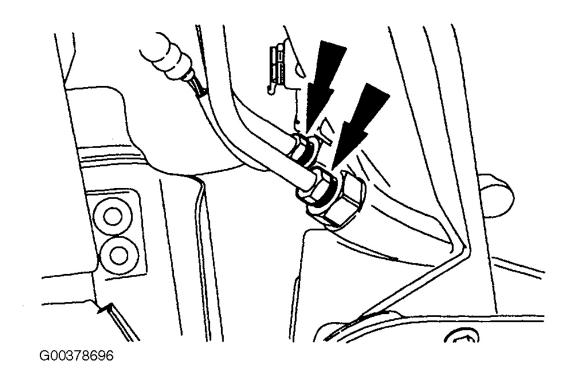


Fig. 60: Disconnecting Fluid Cooler Lines Courtesy of FORD MOTOR CO.

NOTE: If equipped, remove the safety retainer from the connector.

- 3. Disconnect the cooler line.
  - If equipped, use the special tool to disconnect the quick coupler.
  - If equipped, loosen and remove the screw clamp from the hose.

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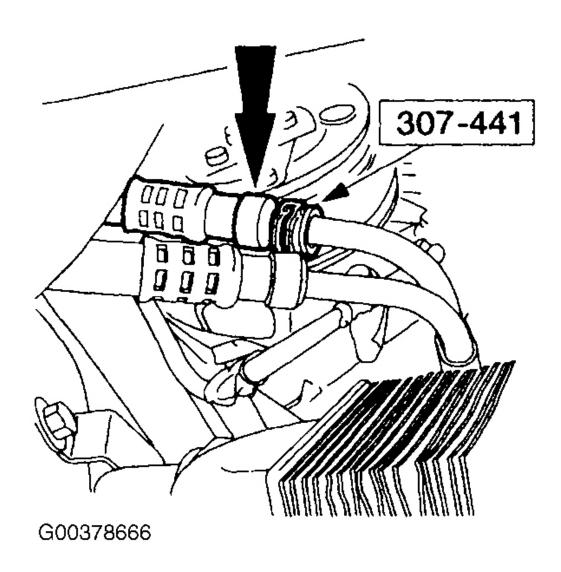
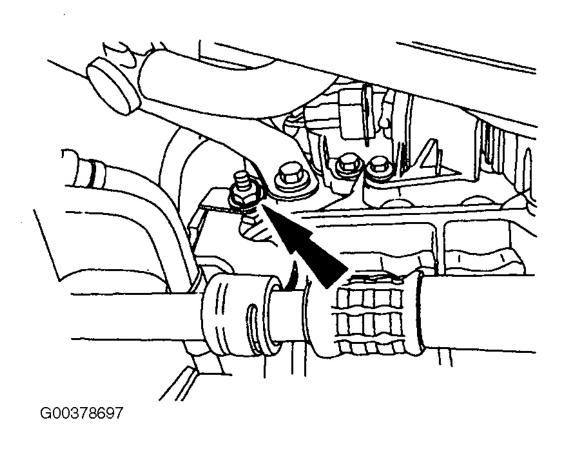


Fig. 61: Disconnecting Cooler Line Courtesy of FORD MOTOR CO.

4. Remove the transmission cooler line bracket nut.

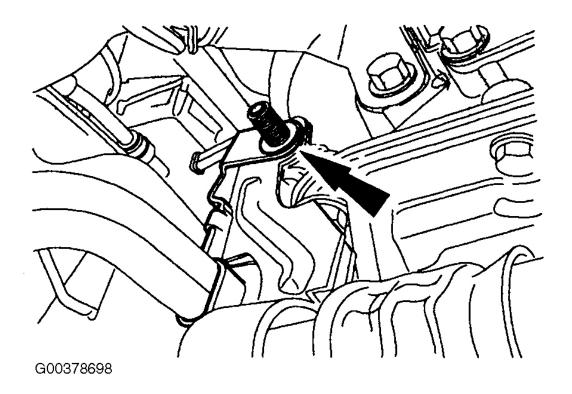
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<u>Fig. 62: Identifying Cooler Line Bracket Nut</u> Courtesy of FORD MOTOR CO.

5. Remove the transmission cooler line bracket from the stud.

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<u>Fig. 63: Identifying Cooler Line Bracket Stud</u> Courtesy of FORD MOTOR CO.

NOTE: 4x4 vehicle shown; 4x2 vehicle is similar.

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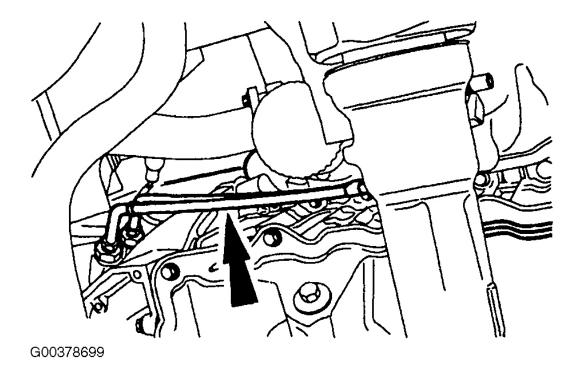
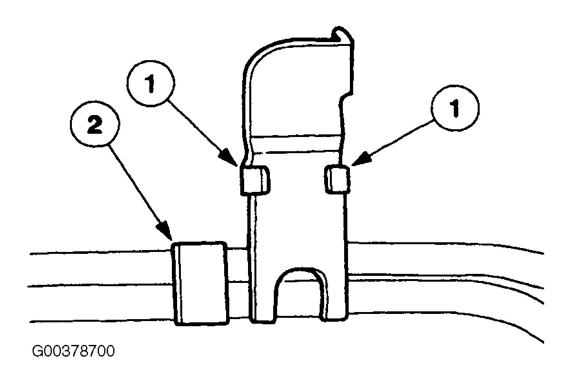


Fig. 64: Identifying Cooler Lines Courtesy of FORD MOTOR CO.

- 6. Remove both transmission cooler lines from the vehicle.
- 7. Remove the fluid cooler tube brackets.
  - 1. Bend the tabs open to remove the bracket.
  - 2. Remove the bracket.

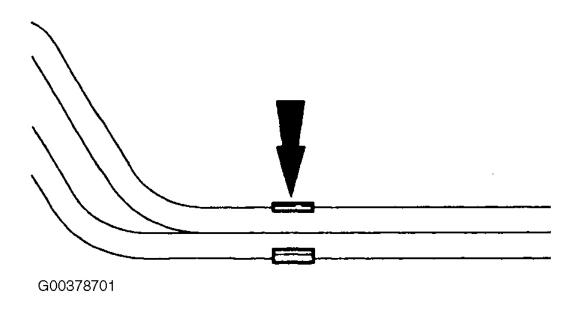
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<u>Fig. 65: Removing Cooler Tube Brackets</u> Courtesy of FORD MOTOR CO.

8. Remove the fluid cooler tube bracket.

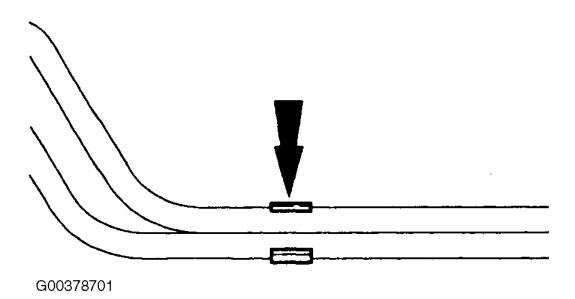
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<u>Fig. 66: Identifying Fluid Cooler Tube Bracket</u> Courtesy of FORD MOTOR CO.

#### Installation

1. Install the fluid cooler tube bracket.



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# Fig. 67: Identifying Fluid Cooler Tube Bracket Courtesy of FORD MOTOR CO.

- 2. Install the fluid cooler tube brackets.
  - 1. Install the bracket, bend the tabs closed.
  - 2. Install the bracket.

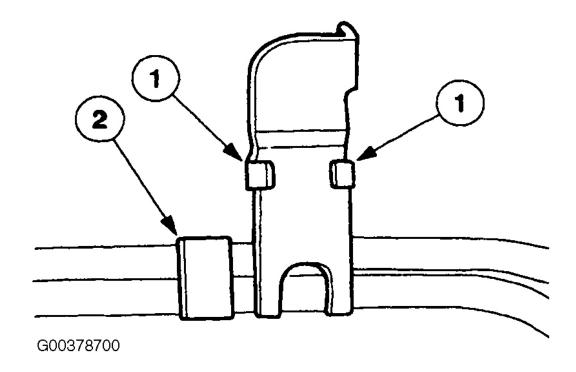


Fig. 68: Installing Cooler Tube Brackets Courtesy of FORD MOTOR CO.

NOTE: 4x4 vehicle shown; 4x2 vehicle is similar.

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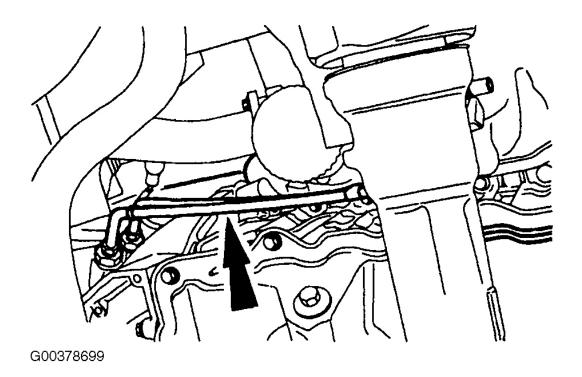
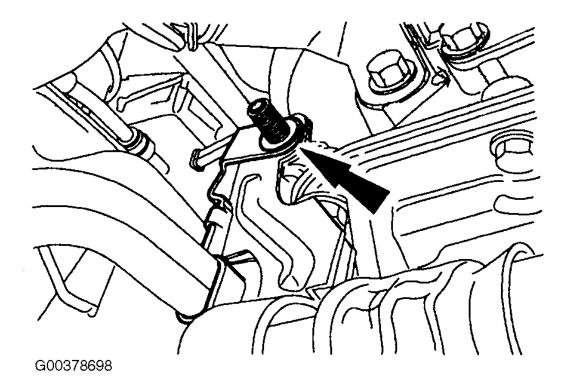


Fig. 69: Identifying Cooler Lines Courtesy of FORD MOTOR CO.

- 3. Install the transmission fluid cooler tubes into the vehicle.
- 4. Install the transmission cooler line bracket.

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<u>Fig. 70: Identifying Cooler Line Bracket Stud</u> Courtesy of FORD MOTOR CO.

- 5. Install the transmission cooler lines.
  - 1. Install the cooler line hoses.
  - 2. Install the nut.
    - If equipped, install the safety retainer on the connector.

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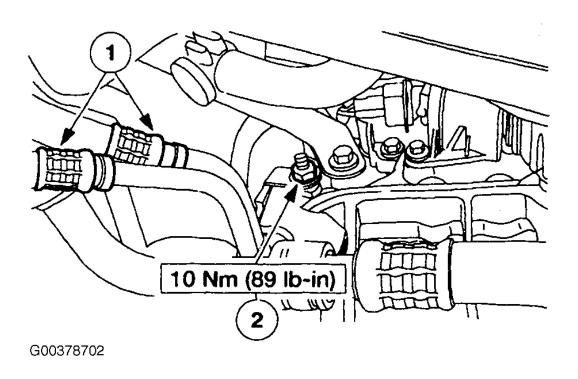
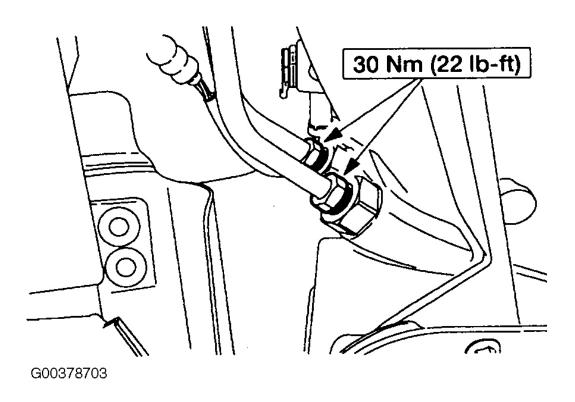


Fig. 71: Tightening Cooler Line Bracket Nut Courtesy of FORD MOTOR CO.

CAUTION: To prevent cross threading, all tube nuts must be hand started before being torqued to specification.

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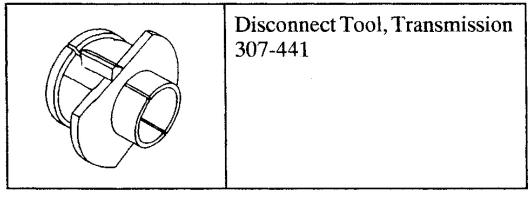
<u>Fig. 72: Tightening Transmission Fluid Cooler Tubes</u> Courtesy of FORD MOTOR CO.

- 6. Using a backup wrench to hold the case fittings secure, install the transmission fluid cooler tubes.
- 7. Position the vehicle.
- 8. Fill transmission fluid to the correct level using clean automatic transmission fluid and inspect for leaks. For additional information, refer to **CHECKING FLUID LEVEL**.

#### TRANSMISSION FLUID COOLER HOSES

2002 AUTOMATIC TRANSMISSION' 'Transmission Cooling - Explorer & Mountaineer

# Special Tool(s)



G00378695

Fig. 73: Identifying Special Tool Courtesy of FORD MOTOR CO.

#### Removal

1. With the vehicle in NEUTRAL, position the vehicle on a hoist.

NOTE: If equipped, remove the safety retainer from the connector.

- 2. Disconnect the cooler line.
  - If equipped, use the special tool to disconnect the quick coupler.
  - If equipped, loosen and remove the screw clamp from the hose.

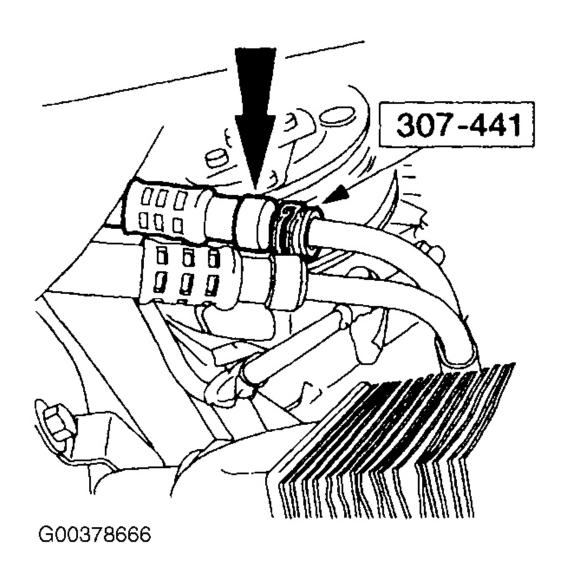


Fig. 74: Disconnecting Cooler Line **Courtesy of FORD MOTOR CO.** 

NOTE: Use side cutter pliers to cut the hose clamps.

3. Remove the fluid cooler hoses from the fluid cooler.

#### Installation

- 1. Install new fluid cooler hoses to the fluid cooler. Install new screw clamps to secure the hoses to the fluid
- 2. Connect the transmission cooler hoses to the cooler tubes.

#### 2002 AUTOMATIC TRANSMISSION' 'Transmission Cooling - Explorer & Mountaineer

- 3. If equipped, install the safety retainer on the connector.
- 4. Position the vehicle.
- 5. Fill transmission fluid to the correct level using clean automatic transmission fluid and inspect for leaks.