

**FORD:** 1995-1996 ECONOLINE, F SUPER DUTY, F-250, F-350

### **ISSUE**

Some changes and updates have been incorporated into the 1996 model year 7.3L DIT engine.

### **ACTION**

Refer to the following Part Application Chart and the text for change description and correct part usage when servicing the subject engines.

### **HIGHLIGHTS**

To Reduce Engine Noise Levels:

- New piston struts which control piston expansion and higher tension rings provide better seal and tighter clearances. Figure 1.
- New laminated steel valve covers with a middle layer of insulating polymer.
- New California injector for rate shaped injection for cleaner, quieter burn.

### **NOTE**

**INJECTOR SOLENOIDS ARE NOW WHITE INSTEAD OF BLACK. THERE ARE NO DIFFERENCES IN THE FUNCTIONALITY AND THEY MAY REPLACE ONE ANOTHER FOR SERVICE.**

To Reduce Draindown of the High Pressure Pump Reservoir:

- Drain check valve deleted in high pressure pump. Figure 2.
- Integral edge filter incorporated into high pressure pump (starting with #187100). Figure 2.
- IPR valve deleted edge filter (starting with #187100). Figure 2.

### **NOTE**

**THE 1994 IPR CANNOT BE USED IN THE 1995-96 NEW HIGH PRESSURE PUMP. WHEN REPLACING HIGH PRESSURE PUMP OR IPR FOR ANY REASON, BE SURE TO CHECK THE PART IDENTIFICATION NUMBER TO ENSURE COMPATIBILITY.**

- New reservoir includes anti-drainback standpipe and new straight thread, O-ring sealed oil pressure sensor and inspection plug. Figures 3 and 4.
- New high pressure pump gasket to seal the standpipe chamber between the front cover and the pump. Figure 5.
- New reservoir-to-front cover gasket which replaces RTV. Figure 6.
- New front cover modified to accommodate reservoir gasket and passages have been cast and drilled to incorporate the standpipe.
- A new de-aeration device added to the front cover includes a check ball which allows air to escape from the oil. It is mounted between the lube oil pump and oil cooler on the inside of the front cover. Figure 7.

### **NOTE**

**NO INTERCHANGEABILITY IS ALLOWED FOR ANY OF THESE PARTS.**

To Improve Cooling:

- Water pump bypass seat lowered to improve thermostat bypass flow and decrease pressure below the thermostat. Figure 8.
- Heater return fitting is now straight thread and O-ring sealed. Figure 9.
- New thermostat is longer and opens at a lower coolant temperature (89°C instead of 95°C/192°F instead of 203°F) to allow engine to operate at lower temperatures. Figure 10.

Miscellaneous:

- Plastic cup on fuel filter pressure regulator has been deleted. Figure 11.
- New turbo inlet manifold hoses have deleted the hump. Figure 12.
- Automatic transmission flywheel thickness is increased for strength.
- Deleted wear sleeve on crankshaft rear seal (production only, service parts still use wear sleeve).
- Powertrain Control Module (PCM) software to improve idle performance and enhanced cylinder contribution test (test is longer in duration).

**Article No. 96-11-13 Cont'd.**

<b>PART APPLICATION CHART</b>			
<b>Part Description</b>	<b>1996 Engine Serial Numbers 201681 And Up</b>	<b>1995 Engine Serial Numbers 187100 To 201680</b>	<b>1994-95 Engine Serial Numbers 500 To 187099</b>
Piston, Pin and Ring Package	F5TZ-6102-A	F4TZ-6102-A	F4TZ-6102-A
Water Pump	F6TZ-8501-AA	F5TZ-8501-A	F5TZ-8501-A
Thermostat	F6TZ-8575-AAA	F4TZ-8575-A	F4TZ-8575-A
Flywheel - A/T	F6TZ-6375-AA	F5TZ-6375-AA	F5TZ-6375-AA
Right Valve Cover - All	F6TZ-6582-AA	F4TZ-6582-B	F4TZ-6582-B
Left Valve Cover - F-Series	F6TZ-6582-BB	F4TZ-6582-A	F4TZ-6582-A
Left Valve Cover - Econoline	F6TZ-6582-CC	F5TZ-6582-A	F5TZ-6582-A
Injector - Federal Emissions	F4TZ-9E527-A	F4TZ-9E527-A	F4TZ-9E527-A
Injector - California Emissions	F6TZ-9E527-A	N/A	N/A
High Pressure Pump	F6TZ-9A543-AA	F5TZ-9A543-AA	F5TZ-9A543-A
IPR Valve	F5TZ-9C968-A	F5TZ-9C968-A	F4TZ-9C968-C
High Pressure Pump Gasket	F6TZ-9417-AA	F4TZ-9417-A	F4TZ-9417-A
Front Cover	F6TZ-6019-AA	F4TZ-6019-A	F4TZ-6019-A
Reservoir	F6TZ-6658-AA	F4TZ-6658-A	F4TZ-6658-A
Reservoir Gasket	F6TZ-6619-AA	F4TZ-6619-A	F4TZ-6619-A
EOP Sensor	F6TZ-9278-AA	F4TZ-9278-A	F4TZ-9278-A
Fuel Filter Assembly	F6TZ-9155-A	F4TZ-9155-B	F4TZ-9155-B
Intake Hoses	F6TZ-6C640-A	F4TZ-6C640-A	F4TZ-6C640-A

**OTHER APPLICABLE ARTICLES:** NONE  
**WARRANTY STATUS:** INFORMATION ONLY  
**OASIS CODES:** 400000, 600000

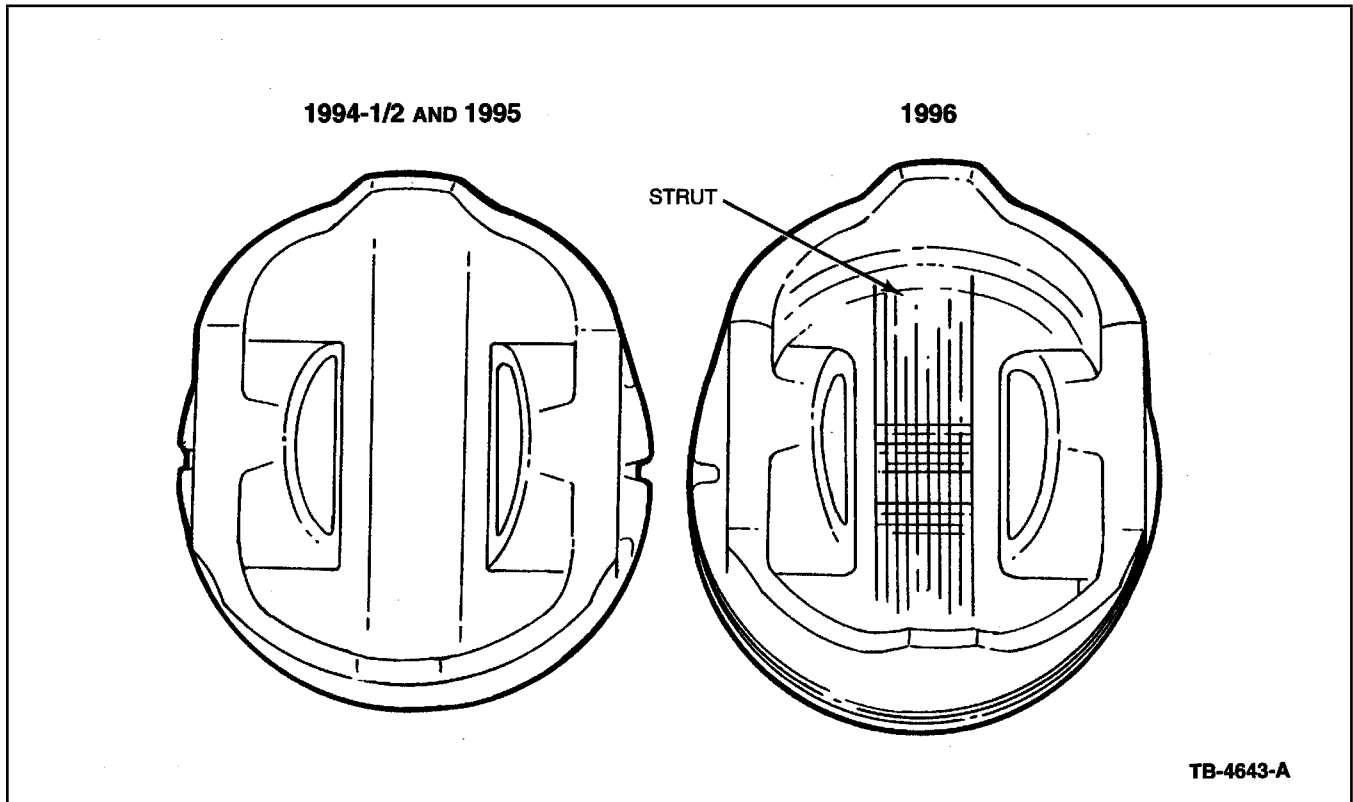


Figure 1 - Article 96-11-13

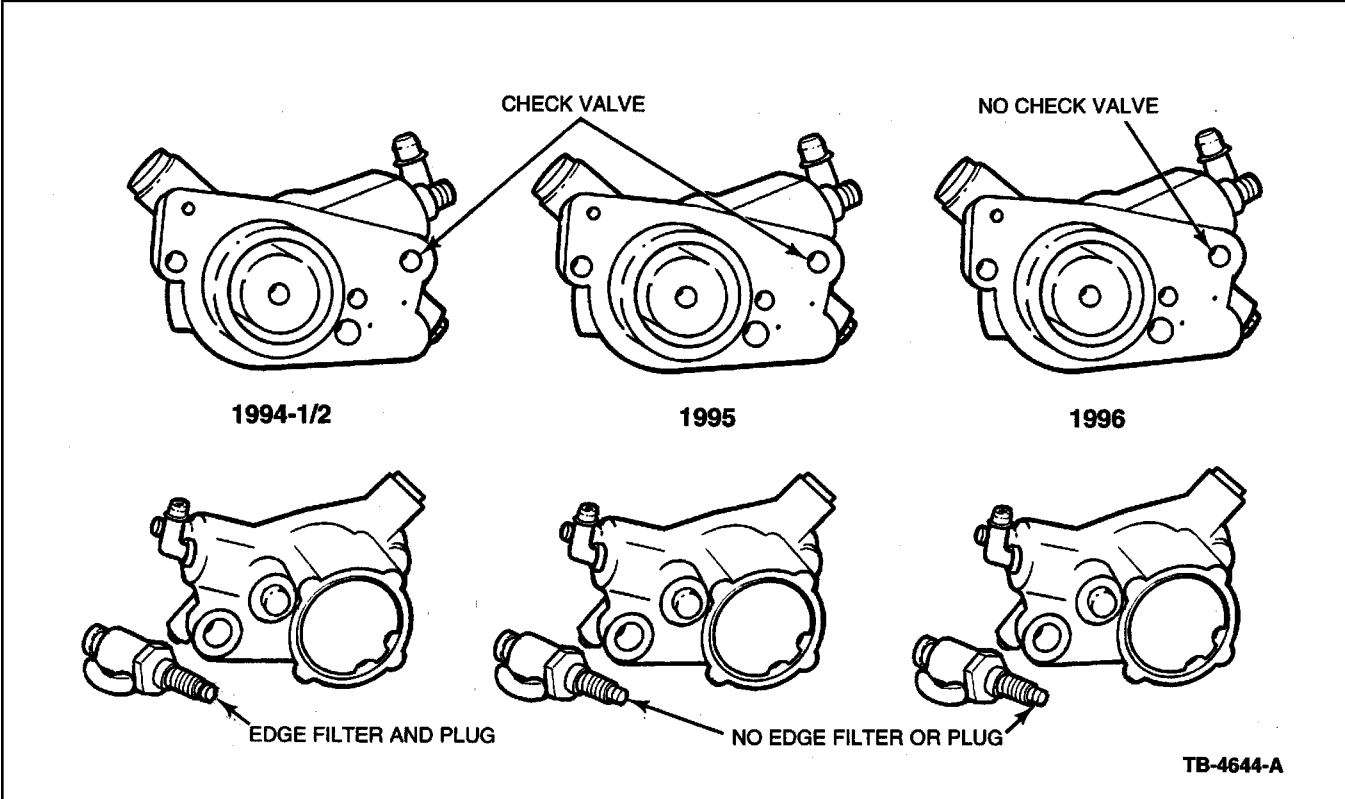


Figure 2 - Article 96-11-13

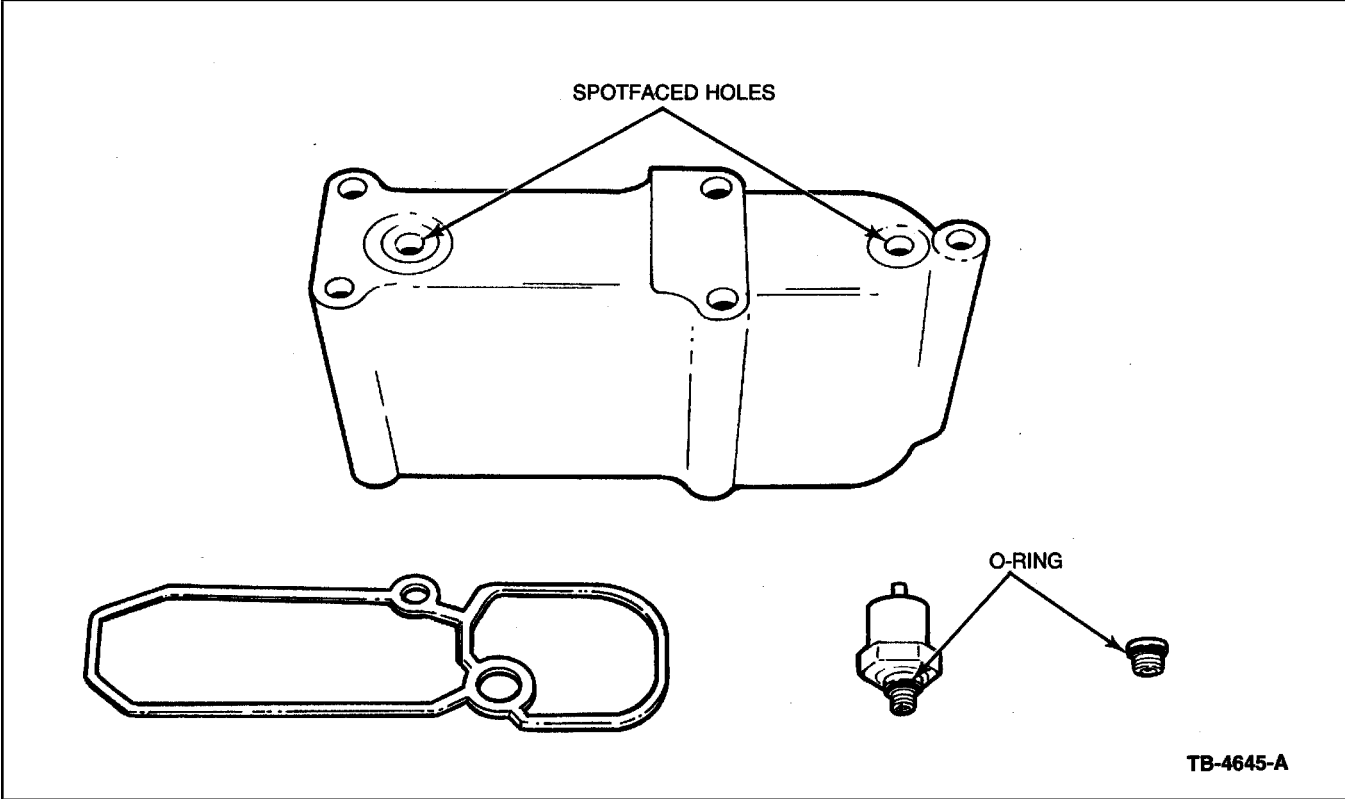


Figure 3 - Article 96-11-13

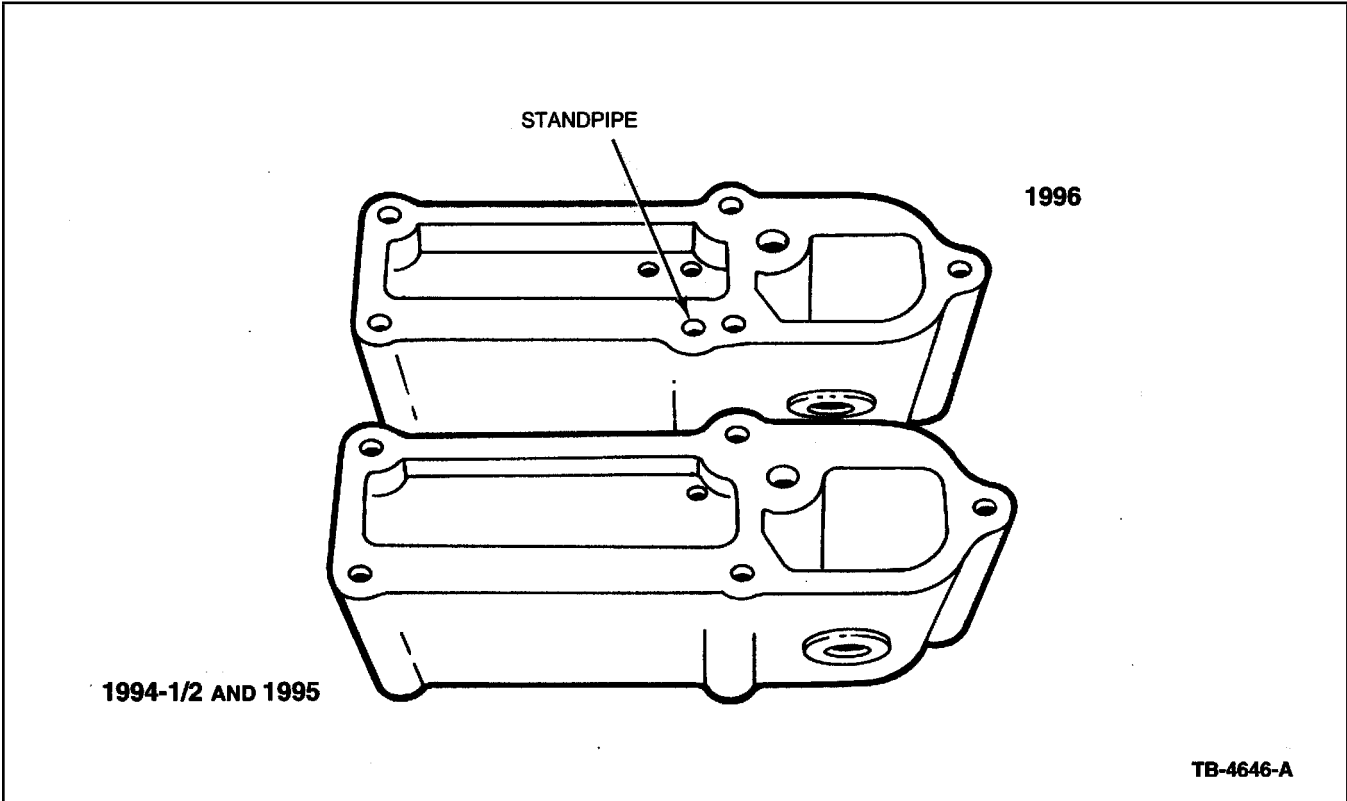


Figure 4 - Article 96-11-13

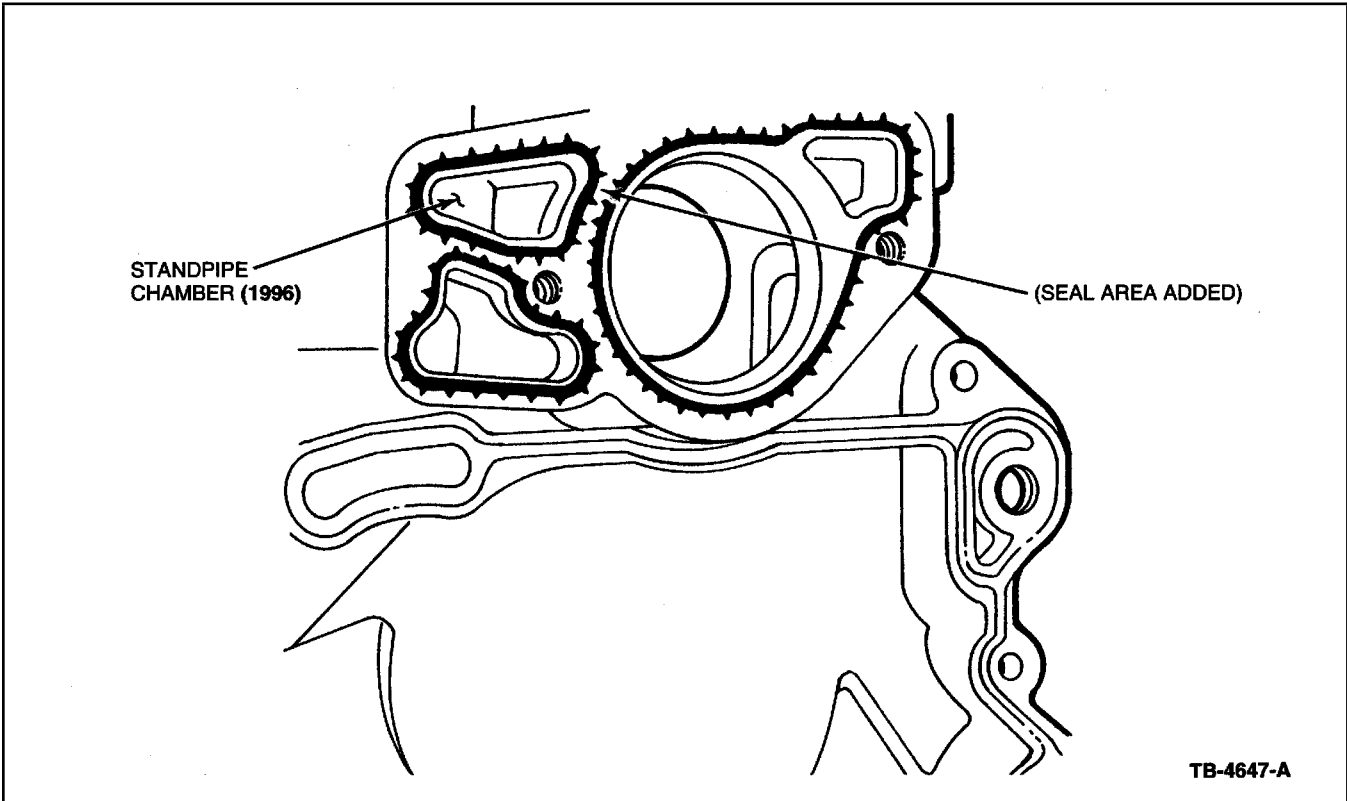


Figure 5 - Article 96-11-13

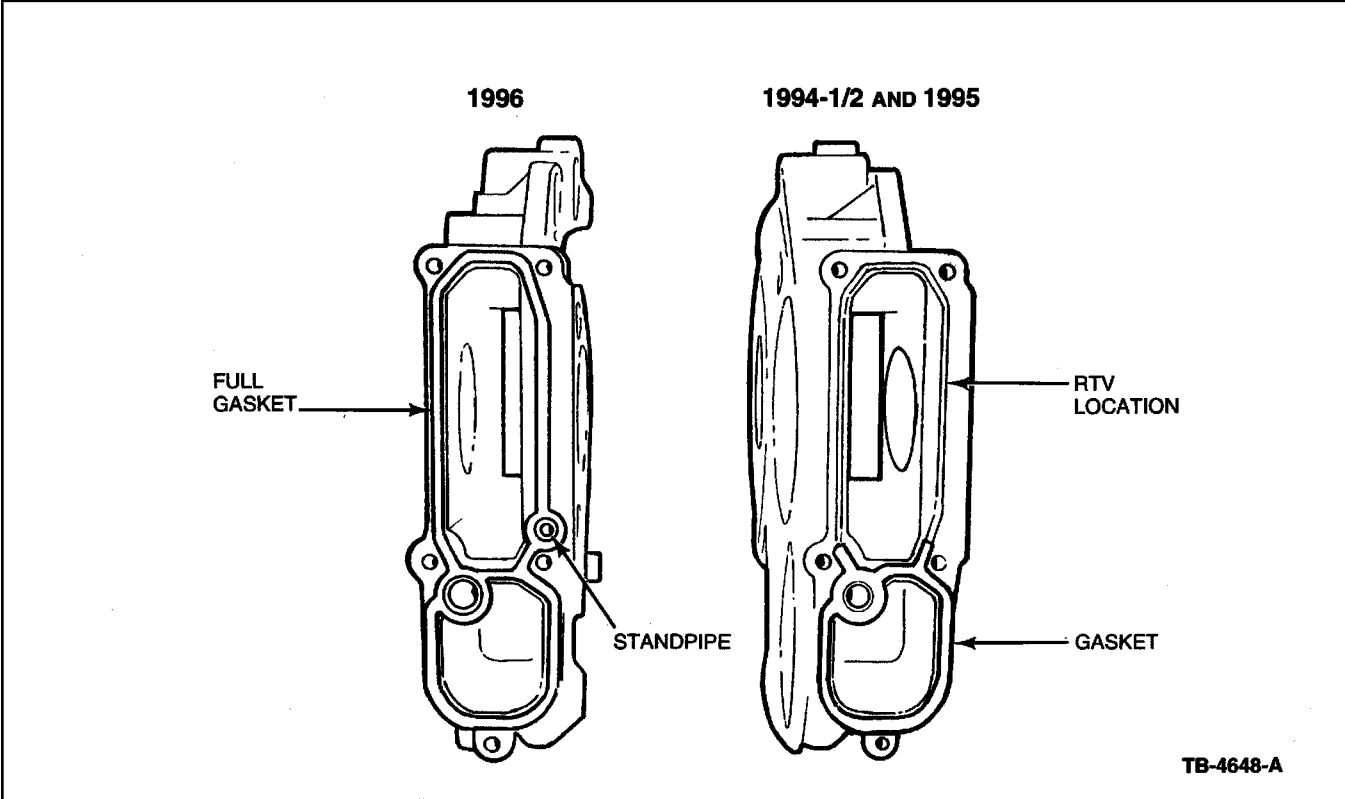


Figure 6 - Article 96-11-13

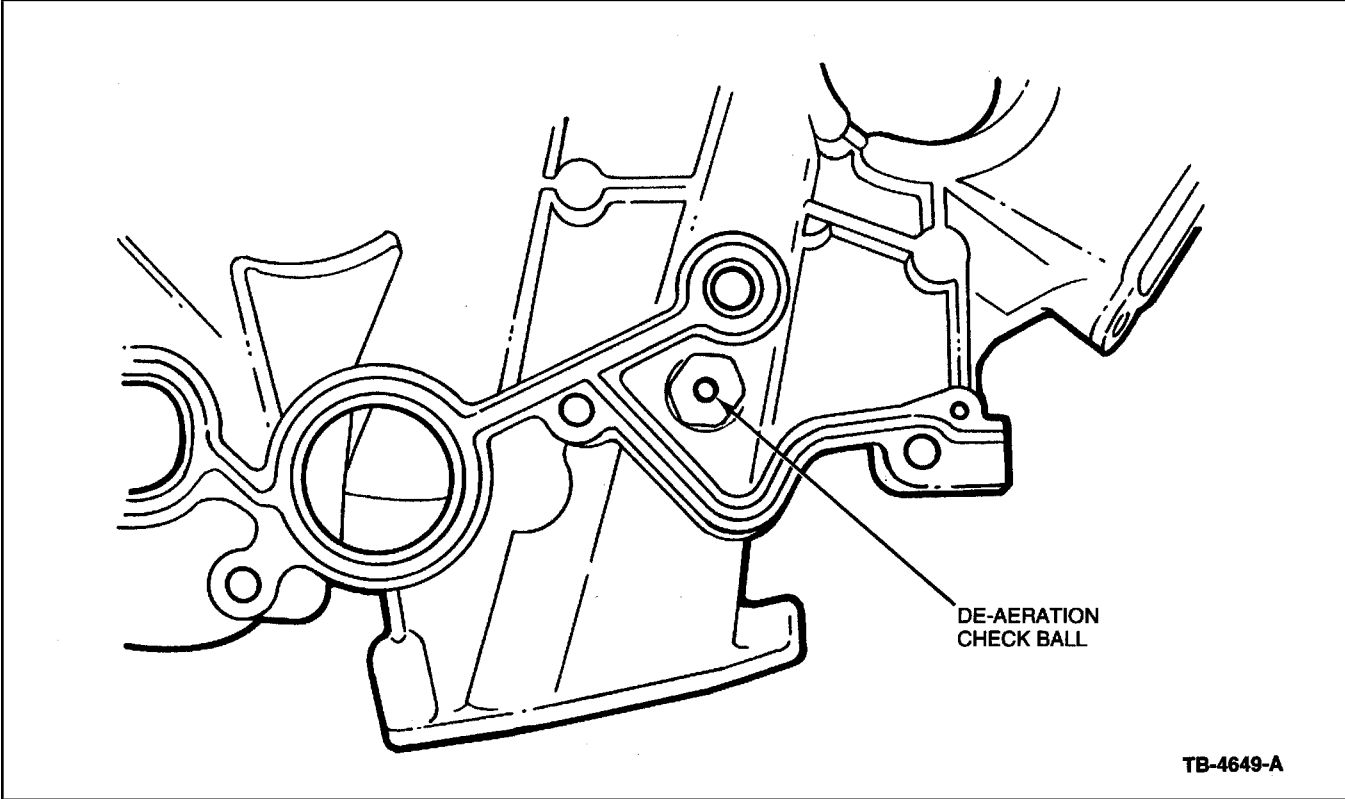
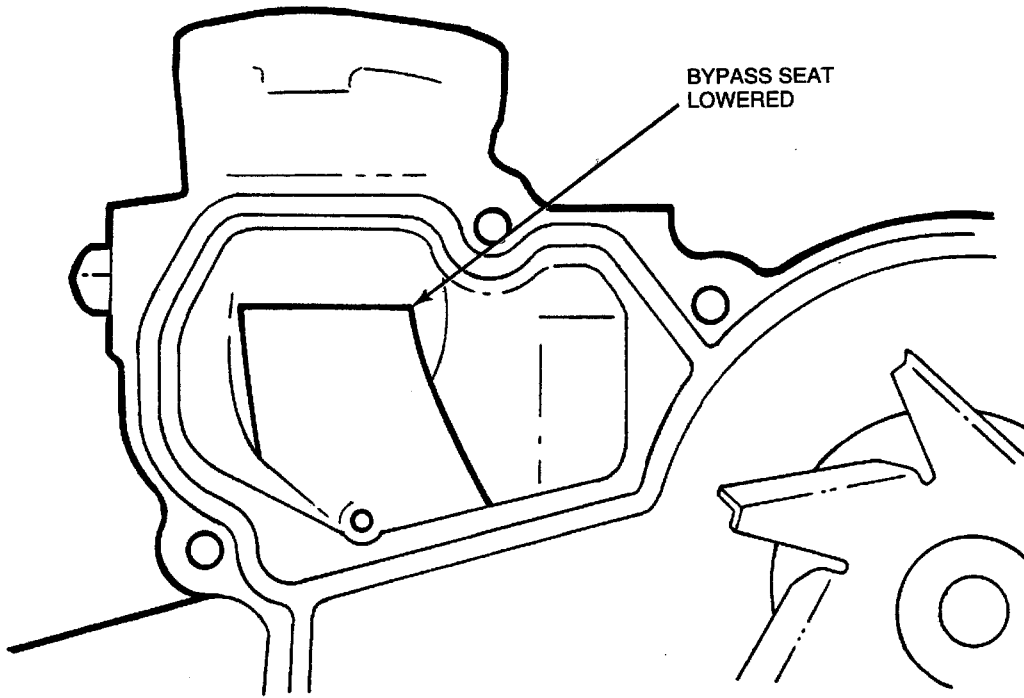
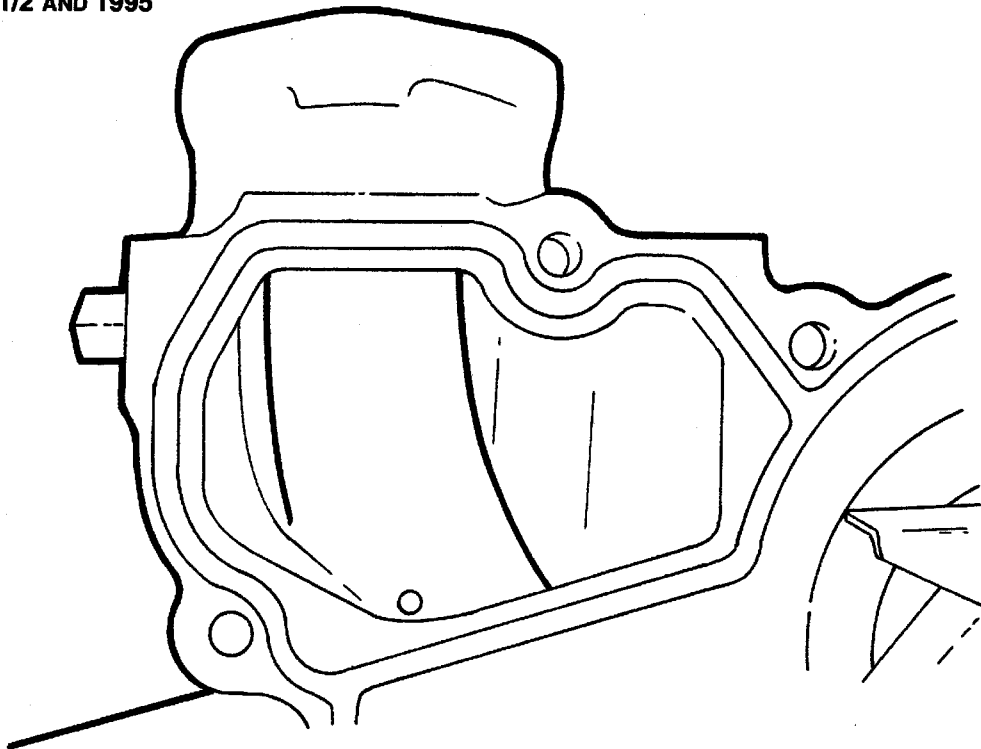


Figure 7 - Article 96-11-13

1996



1994-1/2 AND 1995



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Figure 8 - Article 96-11-13

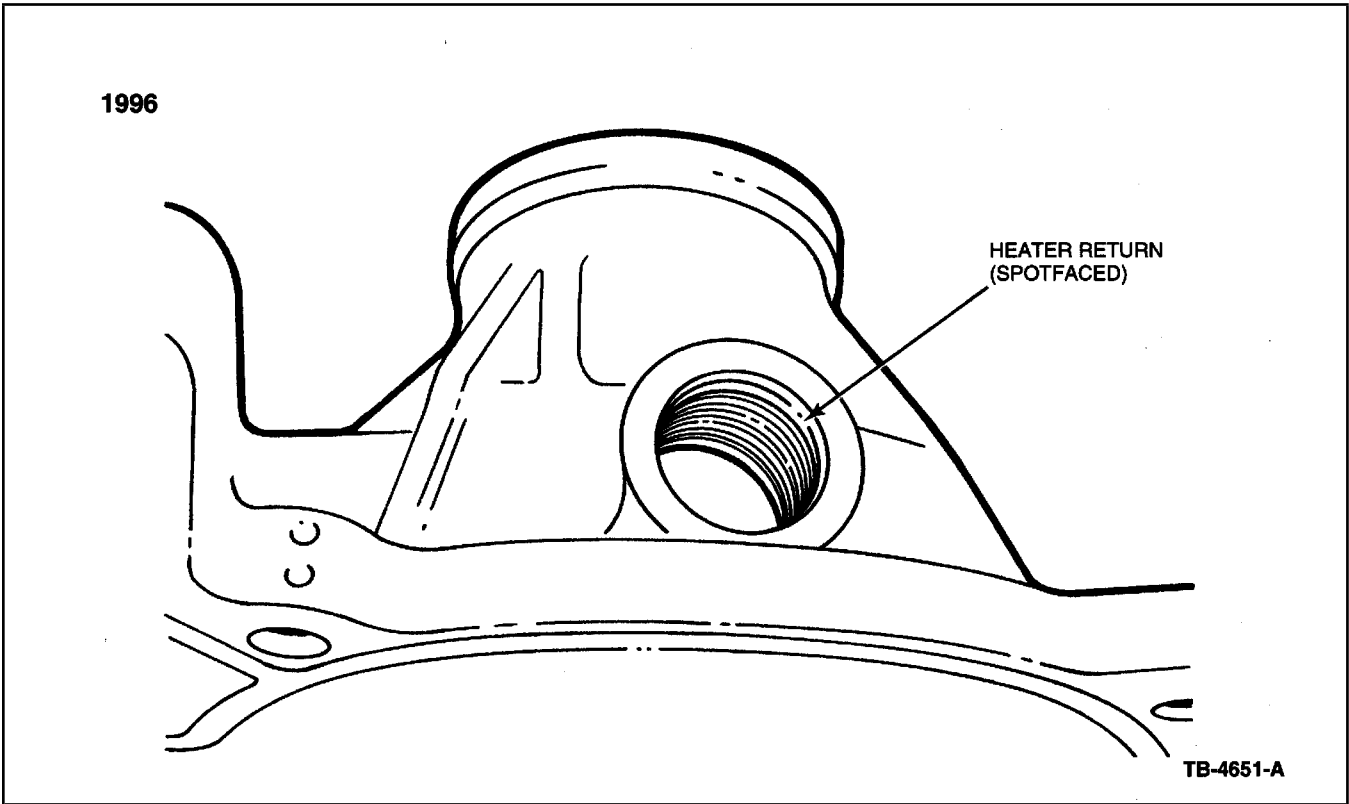


Figure 9 - Article 96-11-13

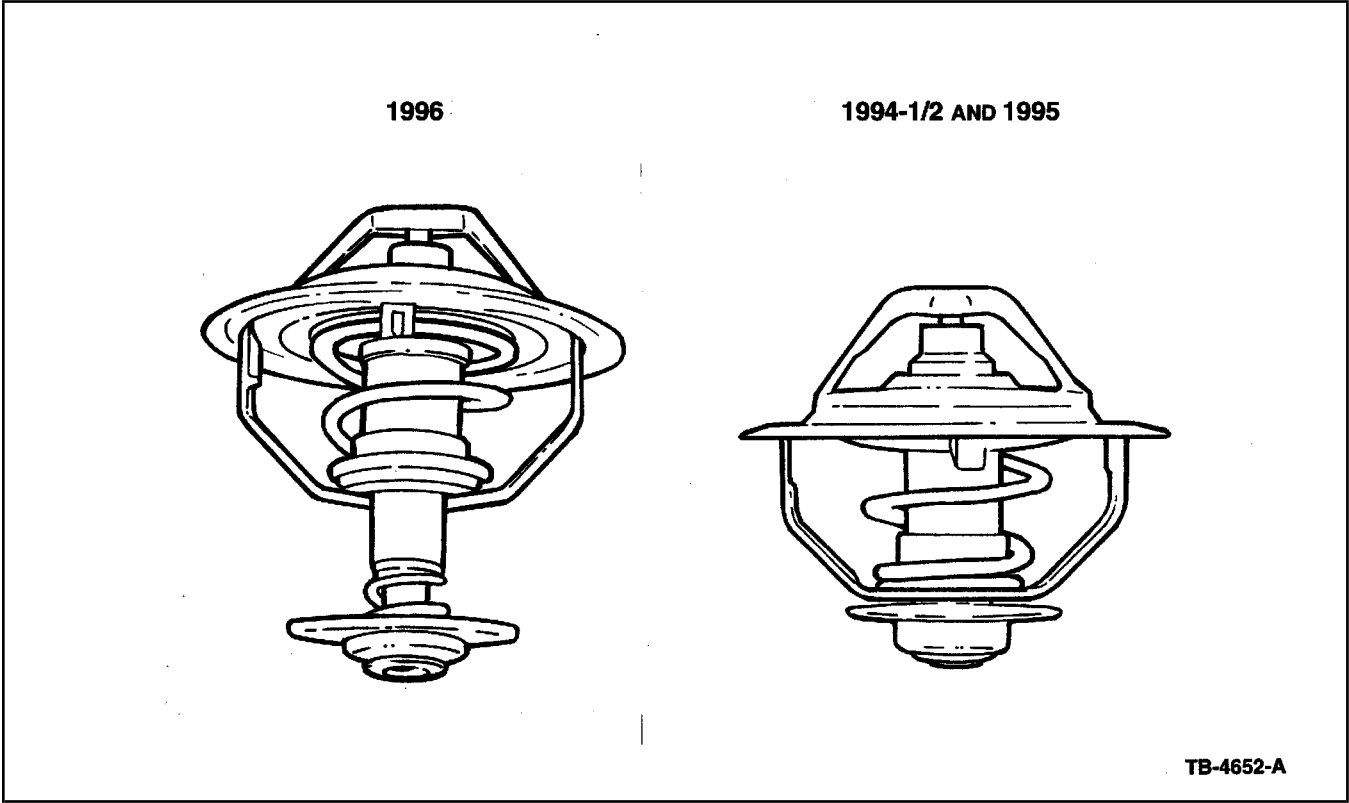
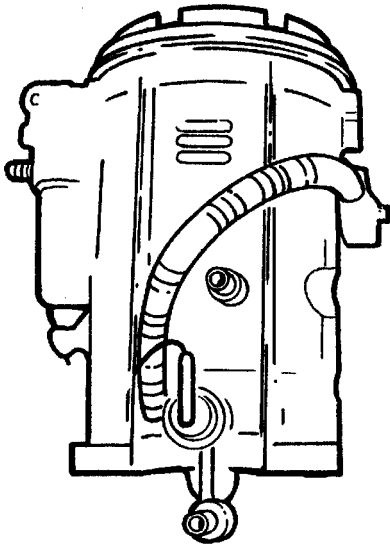
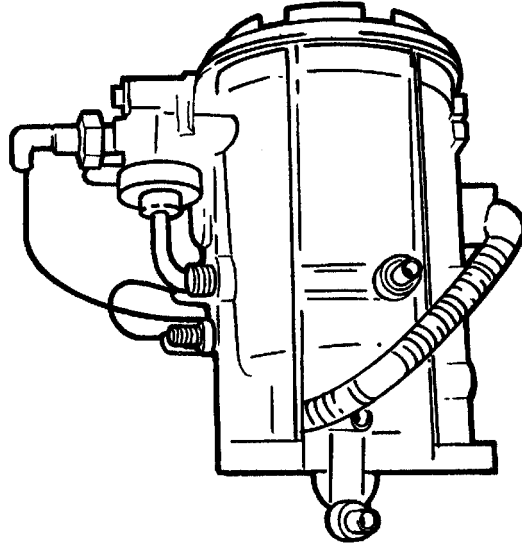


Figure 10 - Article 96-11-13

1994-1/2 AND 1995



1996



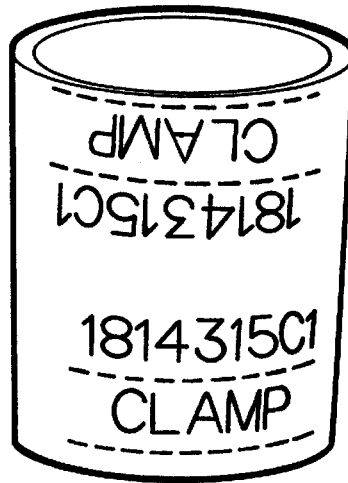
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Figure 11 - Article 96-11-13

1994-1/2 AND 1995



1996



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Figure 12 - Article 96-11-13