

Installation

All vehicles

CAUTION: Install new D-ring seals on the crankcase-to-head tube. It requires several hours after installation for the D-ring seals to relax back to their original size. If the tube assembly is installed before the D-ring seals have relaxed, damage to the D-ring seals can occur.

NOTE: Late build shown, early build similar.

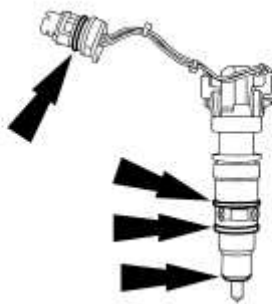


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Fig. 10: Installing New D-Ring Seals On Crankcase-To-Head Tube Assembly
Courtesy of FORD MOTOR CO.

1. Install new D-ring seals on the crankcase-to-head tube assemblies.

CAUTION: If the fuel injector oil inlet D-shaped O-ring is damaged, a new fuel injector must be installed.



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Fig. 11: Identifying Fuel Injector O Rings And Electrical Connector
Courtesy of FORD MOTOR CO.

2. Install new O-ring seals and copper washer on the fuel injector. Lubricate the fuel injector and O-ring seals liberally with clean engine oil.

CAUTION: Failure to tighten the injector correctly can lead to engine failure.

CAUTION: To prevent engine damage, do not use air tools to install the fuel injectors. The snap ring that extracts the injector can dislodge and fall into the oil drain hole.

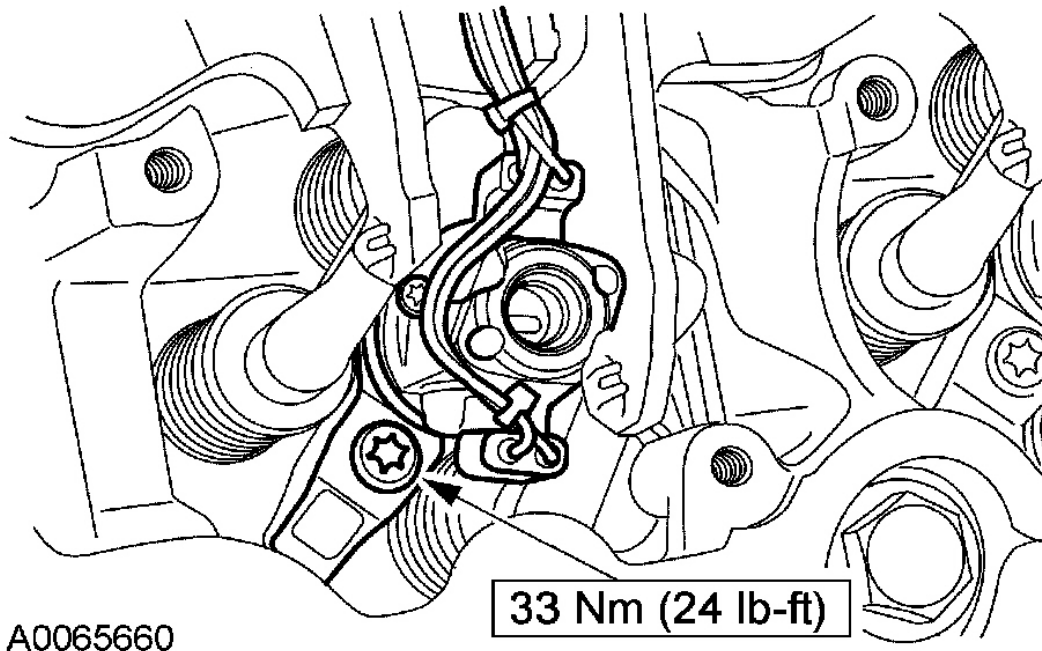


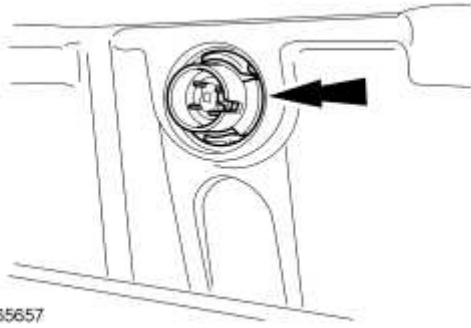
Fig. 12: Installing Fuel Injector Hold-Down Clamp Bolt - With Torque Specification
Courtesy of FORD MOTOR CO.

3. Install the fuel injector, fuel injector hold-down clamp and bolt.

NOTE: If a snap ring or piece of a snap ring is missing from the injector hold-down assembly, it must be located prior to removing the shop towels.

4. Remove the shop towels.

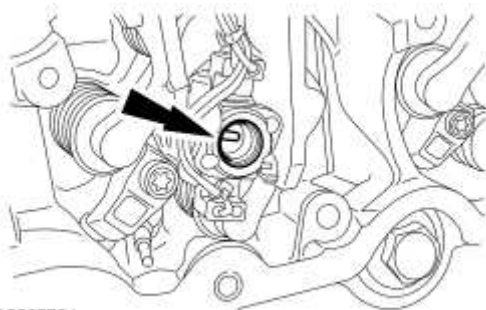
CAUTION: Make sure the injector wiring is clear of all moving parts or engine damage can occur.



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Fig. 13: Identifying Fuel Injector Electrical Connector At Rocker Carrier
Courtesy of FORD MOTOR CO.

5. Install the fuel injector electrical connector into the rocker carrier.
6. Apply engine oil to the top fuel injector O-ring seals.



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Fig. 14: Locating Top Fuel Injector O-Ring Seals
Courtesy of FORD MOTOR CO.

Early build vehicles

CAUTION: To prevent engine damage, check that the crankcase-to-head tube assemblies bottom out in the branch tube assembly. The oil rail, crankcase-to-head tube and the fuel injectors will not function correctly if the tubes are not bottomed out.

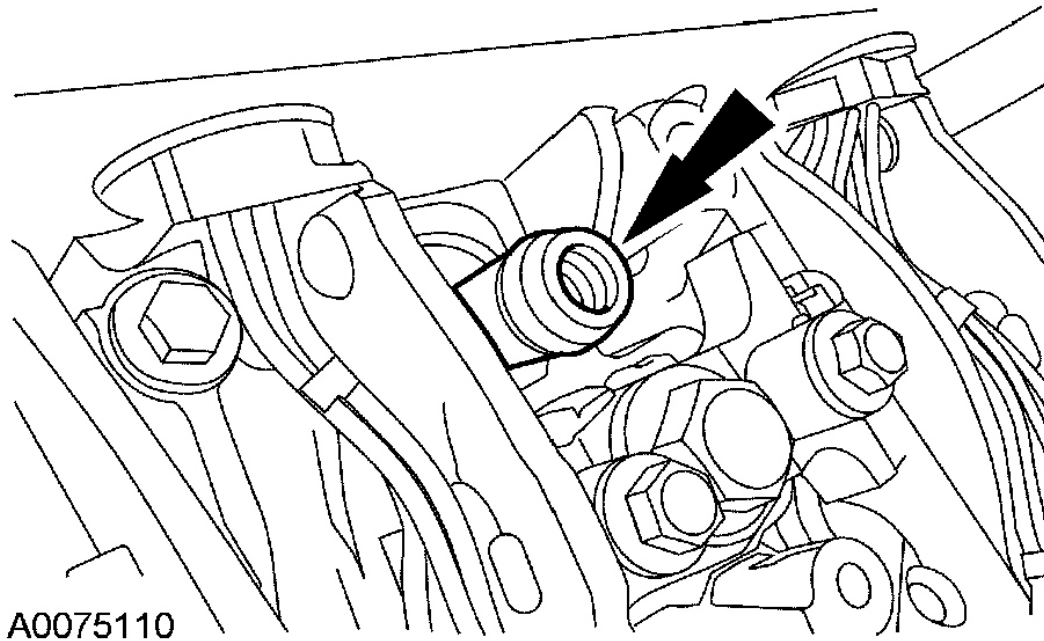


Fig. 15: Identifying Crankcase-To-Head Tube
Courtesy of FORD MOTOR CO.

7. Apply clean engine oil on the crankcase-to-head tube D-ring seals and install the tubes.

All vehicles

NOTE: Apply clean engine oil on the tubes prior to installing the high-pressure oil rail.

8. Position the oil rail on the fuel injectors.
 - Place the oil rail on top of the carrier so that the four single ball tubes are engaging the injector lead angle.
 - Insert three guide bolts, two on the ends of the straight side of the oil rail and one in the middle of the wavy side of the rail. Install the guide studs six to seven turns.
 - Press the oil rail into the fuel injectors.
 - Make sure that the oil rail mounting feet are flat against the mounting surface.
 - Loosely install the six bolts.

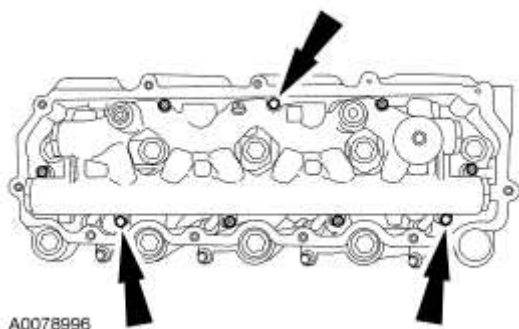


Fig. 16: Positioning High-Pressure Oil Rail On Injector
 Courtesy of FORD MOTOR CO.

9. Install the oil rail retaining bolts.
 - Remove the three guide bolts.
 - Loosely install three remaining bolts.
 - Tighten the nine bolts in the sequence shown.

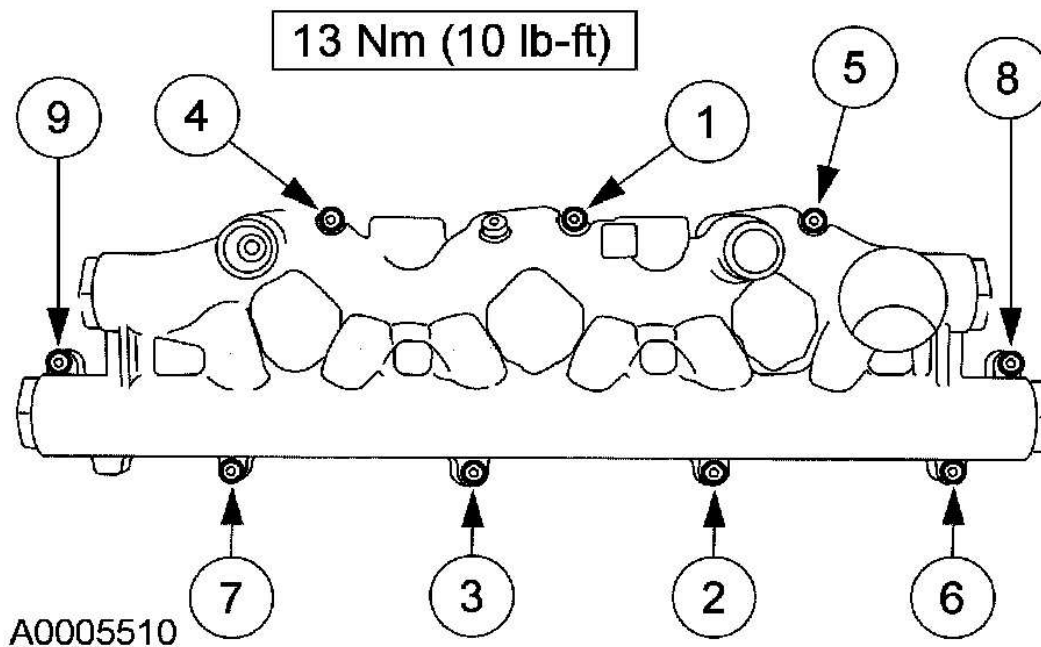


Fig. 17: Installing Oil Rail Retaining Bolts In Sequence - With Torque Specifications
 Courtesy of FORD MOTOR CO.

Late build vehicles

NOTE: Apply clean engine oil to the crankcase-to-head tube prior to installation.

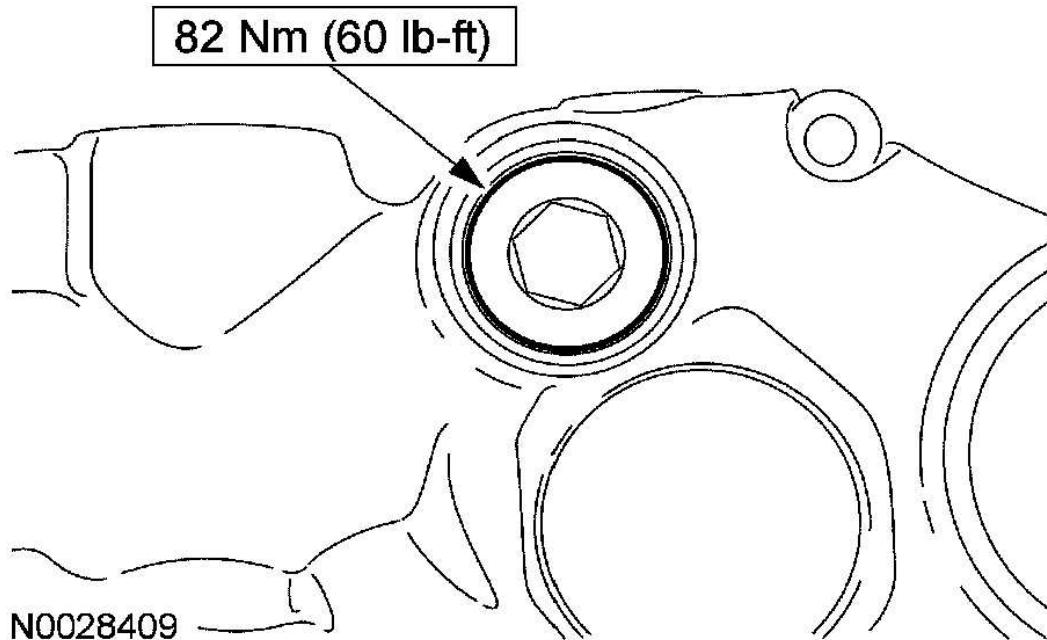


Fig. 18: Identifying Crankcase-To-Head Tube - With Torque Specification
Courtesy of FORD MOTOR CO.

10. Install the crankcase-to-head tube assembly.

All vehicles

11. Connect the fuel injector electrical connector.

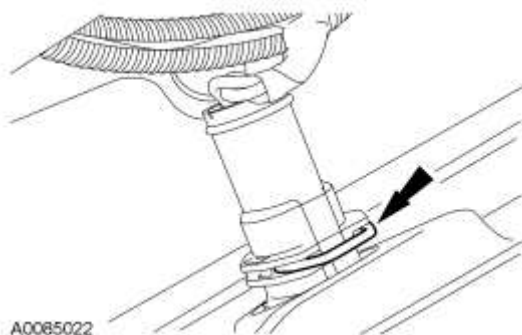


Fig. 19: Identifying Fuel Injector Electrical Connector & Retainer Clip
Courtesy of FORD MOTOR CO.

12. Install the valve covers. For additional information, refer to **ENGINE - 6.0L DIESEL** .

FUEL PRESSURE REGULATOR

Removal and Installation

1. Remove the secondary fuel filter and remove all fuel from the fuel filter housing.

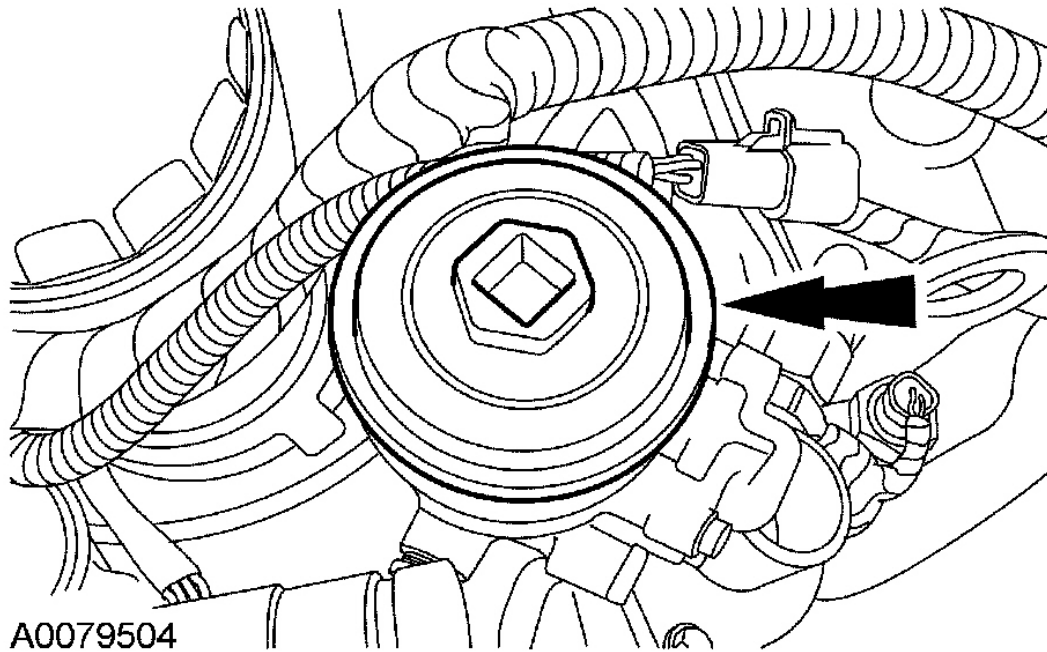


Fig. 20: Removing Secondary Fuel Filter
Courtesy of FORD MOTOR CO.

2. Disconnect the fuel return tube from the regulator cover.

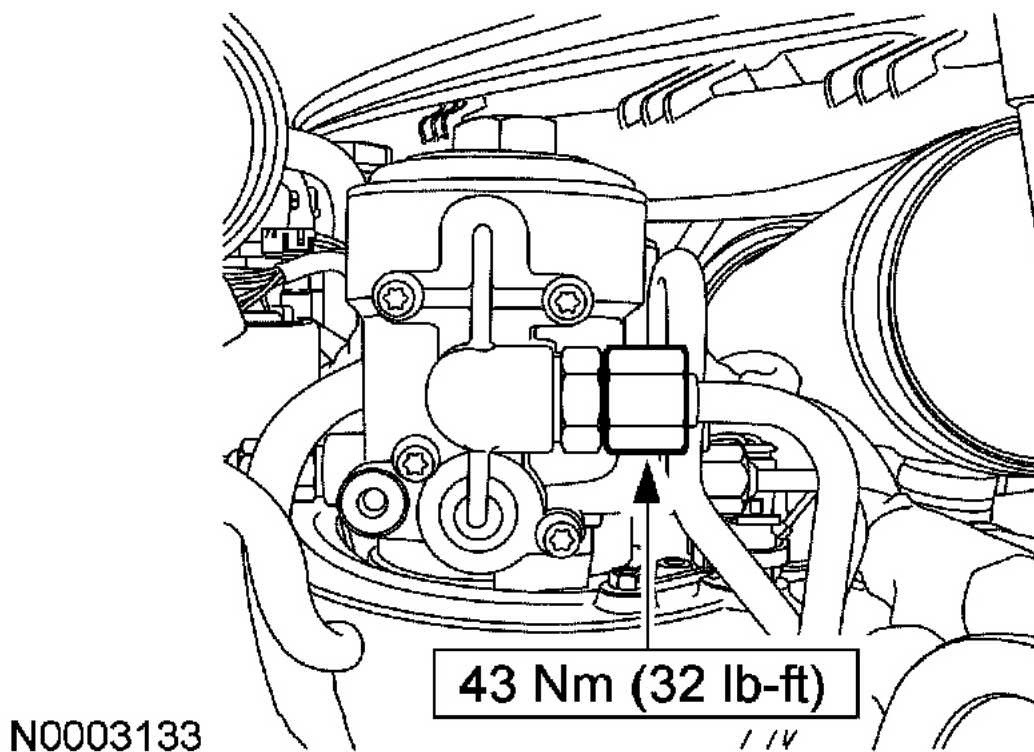
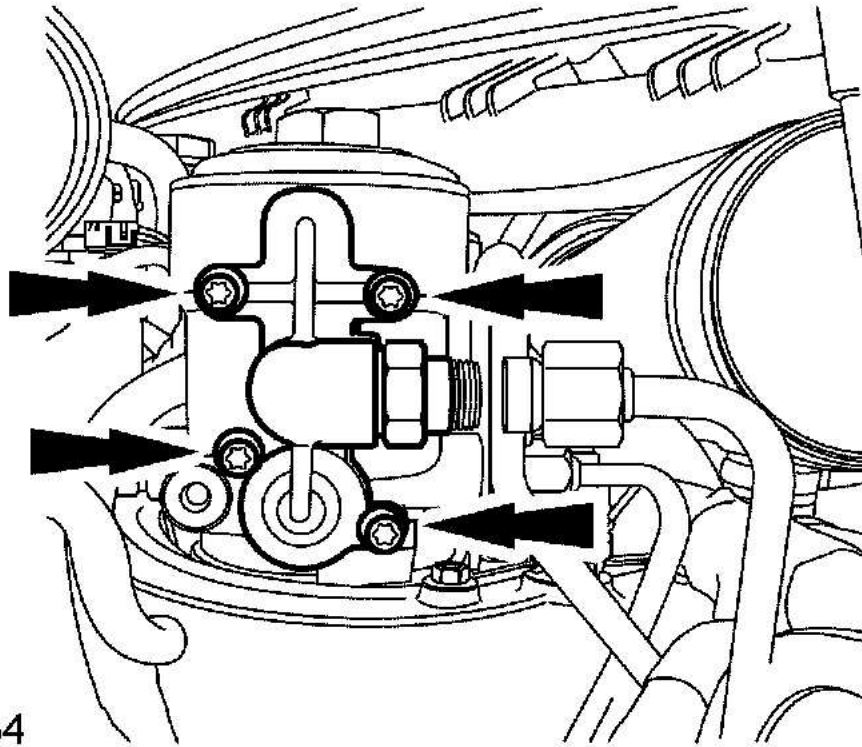


Fig. 21: Disconnecting Fuel Return Tube From Regulator Cover
Courtesy of FORD MOTOR CO.

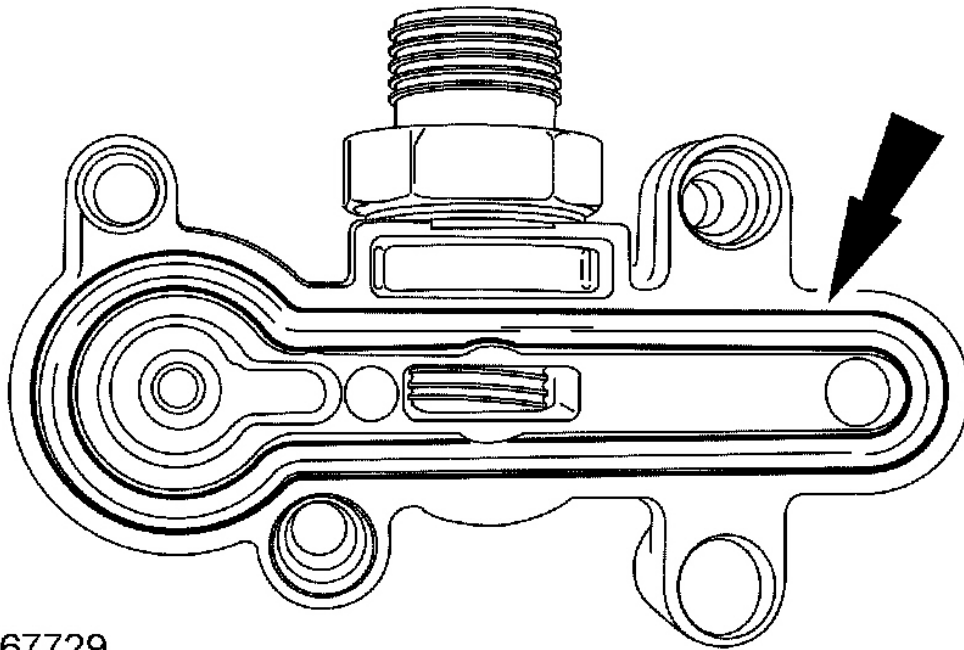
WARNING: Clean all fuel residue from the engine compartment. Failure to follow these instructions may result in personal injury.



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Fig. 22: Removing Screws And Fuel Pressure Regulator Cover
Courtesy of FORD MOTOR CO.

3. Remove the screws and the fuel pressure regulator cover.
4. Remove and discard the fuel pressure regulator cover O-ring seal.



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Fig. 23: Removing Fuel Pressure Regulator Cover O-Ring Seal
Courtesy of FORD MOTOR CO.

5. Remove the restrictor, spring and poppet valve.

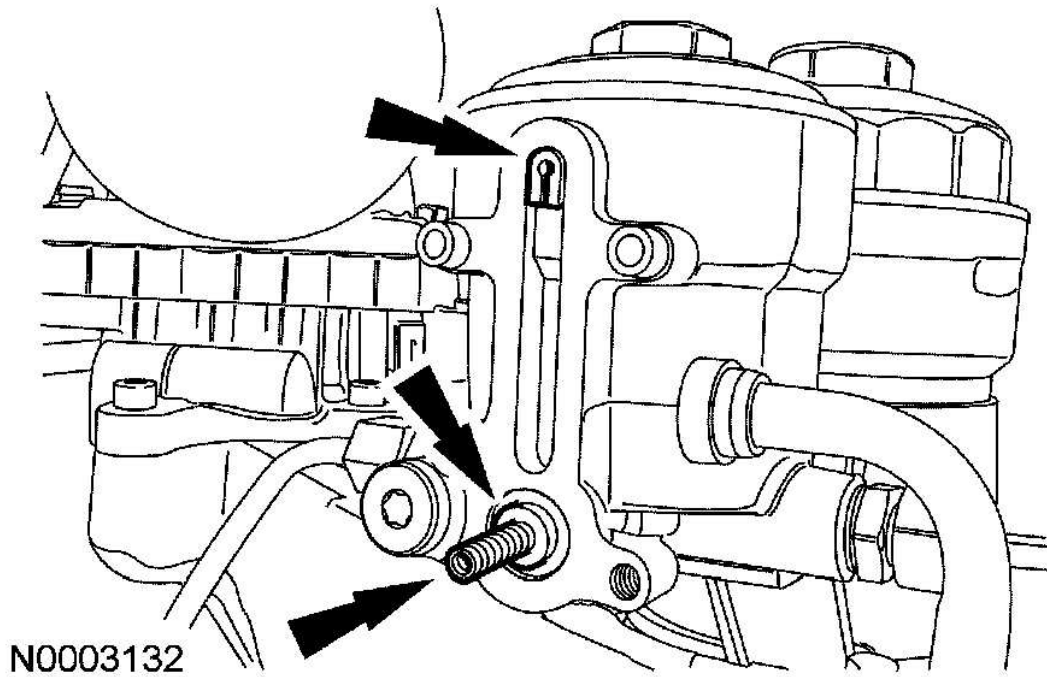


Fig. 24: Removing Restrictor, Spring And Poppet Valve
Courtesy of FORD MOTOR CO.

6. Clean the fuel pressure regulator bore in the fuel filter housing.
7. To install, reverse the removal procedure.