






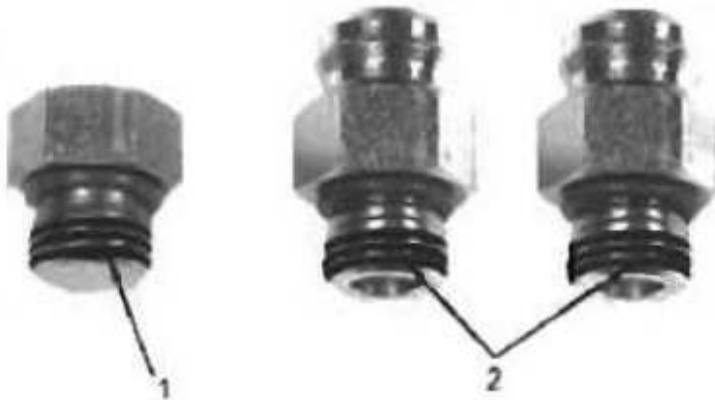
***Ford 7.3L Powerstroke High Pressure Pump Seal Kit  
Installation Instructions  
1994 – 2003***

**⚠ WARNING:** To avoid serious personal injury, possible death, or damage to the engine or vehicle, read all safety instructions in the foreword of the corresponding model year service manual.

**KIT CONTENTS:**

<p>O-ring for <b>inside</b> the HPOP hose fitting – Located in package of 4 o-rings - Durometer 90 – Quantity (2) <b>WARNING: Do not mix the o-rings in the two packages as these o-rings are the same size as the fill plug o-ring but is a different hardness.</b></p>	
<p>O-ring for seal of HPOP hose fitting and HPOP body – Located in package of 4 o-rings - Durometer 90 – Quantity (2)</p>	
<p>O-ring for plug on rear of HPOP body – Located in package of 3 o-rings - Durometer 90 – Quantity (1)</p>	
<p>O-ring for the IPR sensor on rear of HPOP. – Located in package of 3 o-rings - Durometer 90 – Quantity (1)</p>	
<p>O-ring for HPOP reservoir fill plug – Located in package of 3 o-rings - Durometer 75 – Quantity (1) <b>WARNING: Do not mix the o-rings in the two packages as this o-ring is the same size as the internal hose fitting o-rings but is a different hardness.</b></p>	

## Description



**Fig 1 End Plug and Discharge Fittings**

1. End plug fitting
2. Discharge fittings (2)

The figure above shows (1) end plug and (2) discharge fittings with the first three threads with Loctite® 680 Retaining Compound.

**NOTE:** This kit is intended for on vehicle repair with the exception of the “non-serviceable” plug. It contains 7 o-rings and a capsule of Loctite® 680 to be added to only the first three threads.

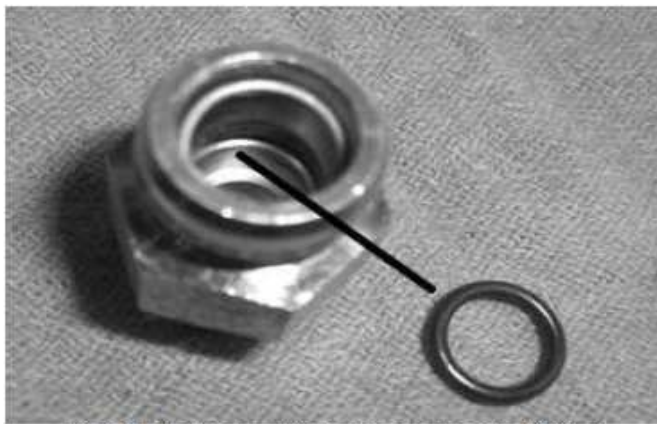
## Removal

- ⚠ WARNING:** To avoid serious personal injury, possible death, or damage to the engine or vehicle, make sure the transmission is in neutral, parking brake is set, and wheels are blocked before doing diagnostic or service procedures on engine or vehicle.



**Fig 3 Installing spring and discharge fitting**

1. Poppet end
2. Recess seat in fitting



**Fig 4 Internal o-ring on Discharge fitting**

1. Install internal o-ring in discharge fittings using care not to nick or score the o-rings or discharge fittings. **NOTE: The o-ring is located about half way down the fitting. Sitting above the o-ring is a white nylon spacer. Be careful that you do not remove or damage this nylon space when removing the o-ring.**
2. Install new o-rings on the threaded end of both discharge fittings and end plug
3. Apply Loctite® 680 Retaining Compound to only the first three threads on both discharge fittings and end plug.
4. Install both discharge fittings to the pump housing and torque to 34 N-m (25 lb-ft)
5. Install both high pressure hoses.

**NOTE: Wipe oil from port immediately preceding installation of the plug.**

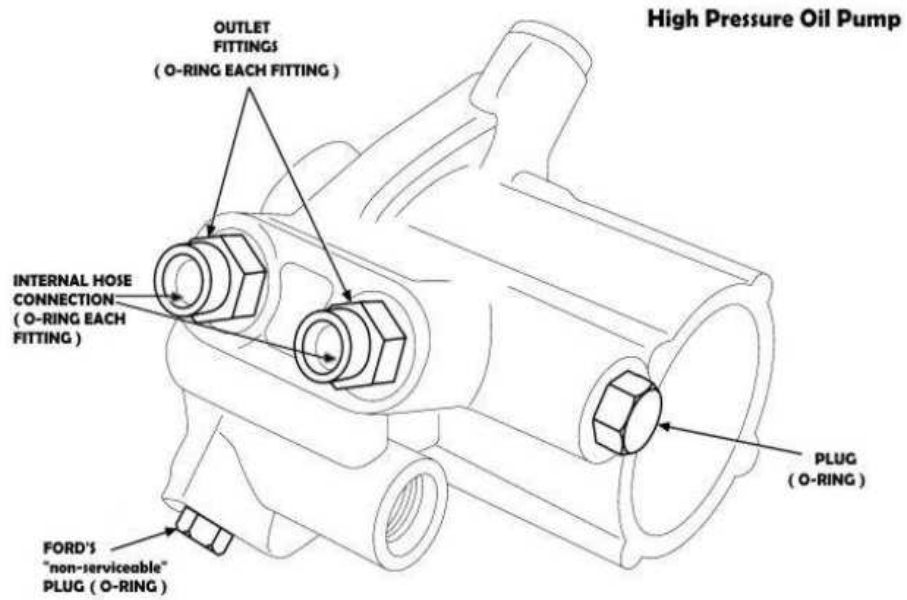
6. Install end plug and torque to 34 N-m (25 lb-ft).
7. Install new o-ring of reservoir plug and install.
8. Recommended cure time for the Loctite® 680 retaining compound is a **minimum of two hours** before starting the engine.
9. After allowing the Loctite to cure, start engine and check for oil leaks.
10. Check and correct the engine oil and reservoir

11. levels as necessary. Reservoir level should be within  $\frac{3}{4}$  inch from the top.

### IPR O-ring

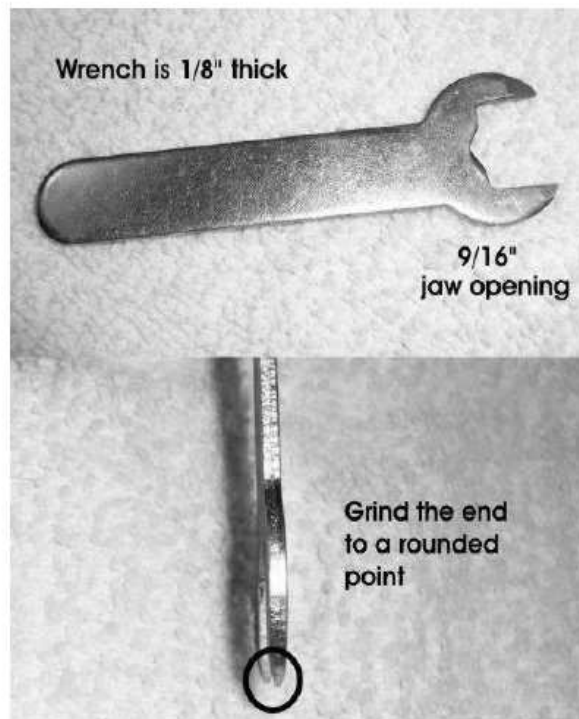
This kit includes a new o-ring to re-seal the IPR valve to the HPOP.

1. Remove the old o-ring from the IPR threads and install the new o-rings.
2. Torque the IPR to the HPOP to 53 lb-in.

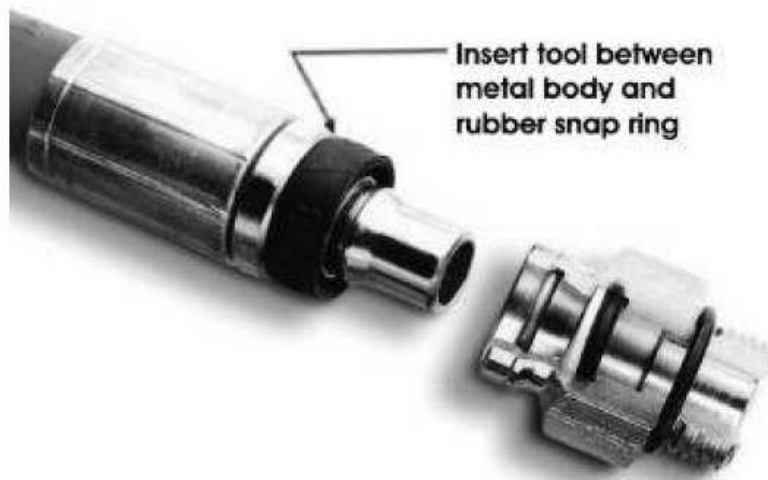


### How to make a "special tool" to release the HPOP lines from the pump.

By using an old motorcycle, bicycle or die grinder wrench, you can make a tool to release the quick-release fittings on the HPOP pump and cylinder head fittings. With a little more work, you can even make this tool from a piece of flat stock metal.



How to release the HPOP Quick Release hoses



Insert tool between  
metal body and  
rubber snap ring

**To release the line from the fitting:**

While firmly pushing the line straight into the fitting with one hand,  
insert the tool behind the black release sleeve and gently pull on the line.

**To connect the line to the fitting:**

Push the line into the fitting until you hear/feel the snap ring “grab” the line.  
Insure connection by pulling on the line.

**Note:** Whenever the high pressure system is opened, air enters the system and the  
Vehicle needs to be driven to remove the air.