

Warren Diesel Injection 55% Over CP4 Pump Kit Install Instructions

Before Installing Kit:

CP4 pump must be removed from engine to install 55% over barrels & plungers.

It is very important during removal and installing of these parts that no dirt or debris gets into any fuel lines. Clean the pump thoroughly before removing OEM barrels and plungers.

Step 1:

Fasten pump in a vice with the shaft facing you. *Please note:* there is a right and left side barrel.

Start on the right side barrel.

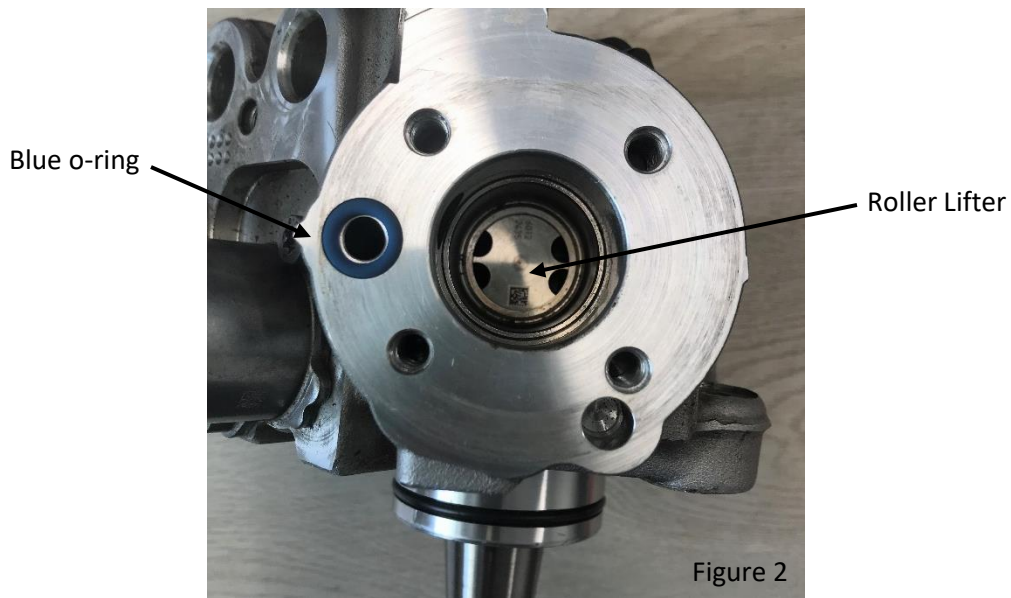
Remove the four T30 bolts from the top of the barrel hat (refer to Figure 1). Then carefully remove the entire barrel and plunger assembly.



Figure 1

Once the barrel and plunger assembly are removed you will be able to see the roller lifter that runs on the cam as in photo below (Figure 2).

It is very important that this roller DOES NOT turn at all! If roller turns it will not straighten back out on the cam and can damage your pump.



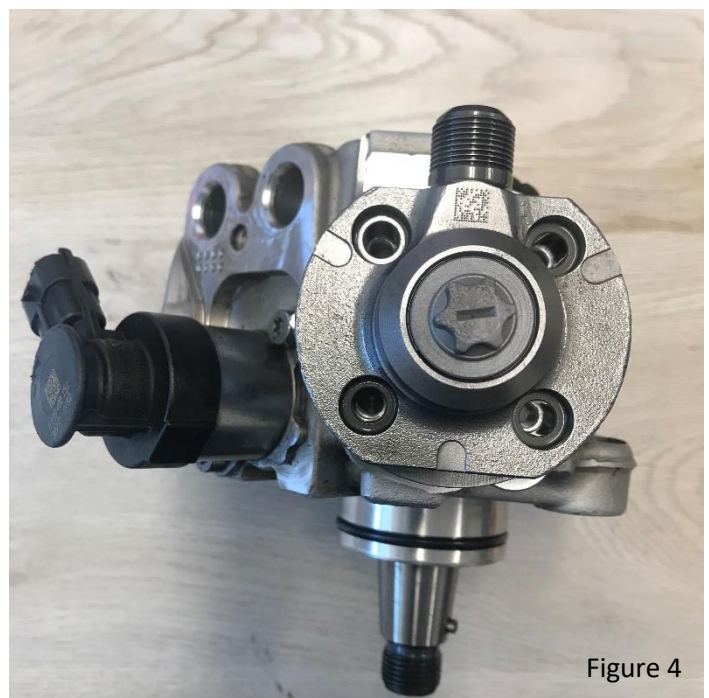
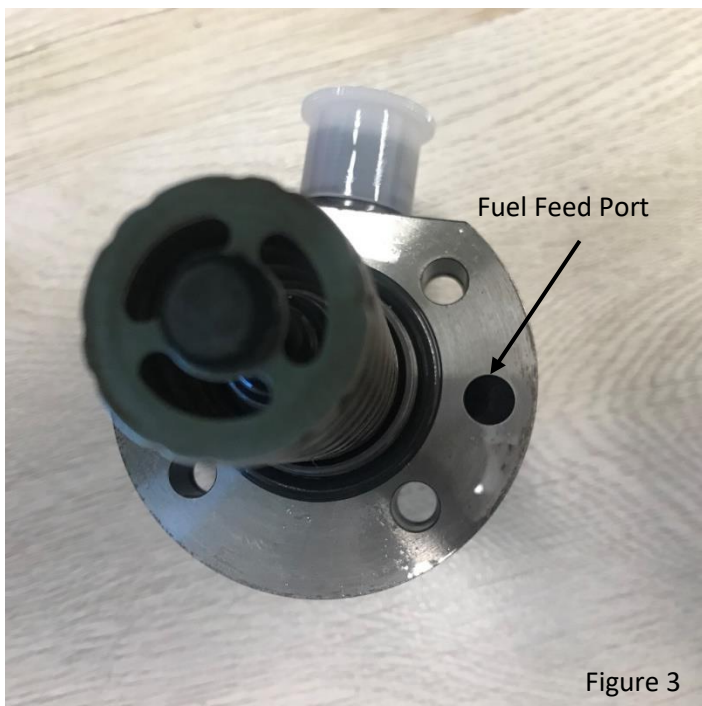
Step 2:

Remove and replace the small blue o-ring with the new one provided (Required O-ring bag). As seen in the picture above (Figure 2).

Step 3:

You are now ready to install the new barrel and plunger.

Be sure to use the barrel and plunger labeled "**right side**" when replacing the "**right side**". Ensure that the fuel feed port (as seen in the picture below – Figure 3), lines up with the small blue o-ring.



Step 4:

Once the barrel and plunger assembly are in, verify all o-rings are in place, use the palm of your hand to compress the spring down a little to get the T30 bolts started.

Once all 4 bolts are started, work them evenly in together to prevent binding the barrel to the pump. As seen in photo below (Figure 5).

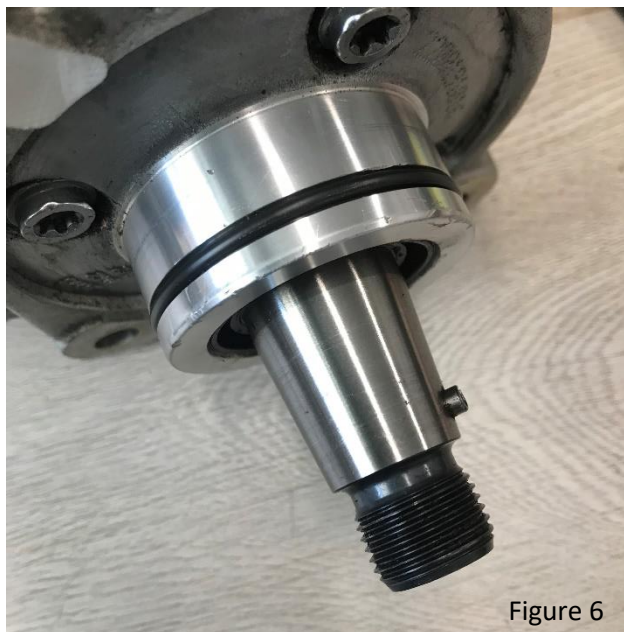


Slowly bring the barrel hat down by running the bolts in evenly together, once bolts are in, we recommend torquing bolts to 108 inch/lbs or 9ft/lbs.

Step 5:

Repeat steps 1-4 for the opposite (left side).

Once both sides are back on and torqued to spec, it's time to replace the black pump shaft o-ring. As seen in the picture below (Figure 6).



Once all o-rings and barrel and plunger assemblies are installed you are ready to re-install the pump.

Note

*Pump has a roll pin in shaft and the pump gear has timing marks. **These pumps do require to be timed.** **Ensure timing marks line up on reinstallation.***

**“Optional Replacement Parts” bag:*

Includes all o-rings for the pump itself. They are not required for this install. They have been included for those that want to replace them before re-installing the pump.

DISCLAIMER/WARRANTY:

Warren Diesel Injection, LLC. will not be held liable for any CP4 fuel pump, injector, or fuel system damage due to improper installation or fuel contamination. Warren Diesel Injection, LLC. will not be responsible for any labor or damage as a result of improper installation or fuel contamination. Warren Diesel Injection LLC recommends that an experience diesel technician installs this upgrade. 6 month Warranty from the date of purchase covers the barrel and plunger only.