

# Oil Change and Fumoto Drain Valve Install

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I decided to install a Fumoto drain valve in my 2008 Ram 2500 to assist with oil changes. The Fumoto valve replaces the oil drain plug with a lever operated ball valve. It allows for less mess when doing oil changes, no oil on your hands, and an easy way to take samples. The process can only be done during an oil change so I did a full oil change/Fumoto install article. Here are the details.

## Materials Required

- 3 Gallons of Valvoline Premium Blue 15w-40 diesel engine oil, (Recommended by Cummins) \$12.99 ea at Autozone
- Oil Filter, Fleetguard LF3972, \$7.03 ea at Cummins
- Fumoto F-104 Drain Valve, \$22.50 from Geno's
- 5/8" Wire Style Hose Clamp, \$0.55 (optional)
- 93mm-15 Flute End Cap Oil Filter Wrench, \$7.90 at NAPA (Not required but highly recommended)
- 3/8" Drive Ratchet (Drain Plug and End Cap Wrench)
- 3/8" Drive Extensions (Enough to make approximately 12-14 inches)
- 3/4" Wrench (To install Fumoto valve)
- Funnel
- Catch Can/Oil Drain Bucket (3 gallons minimum size)



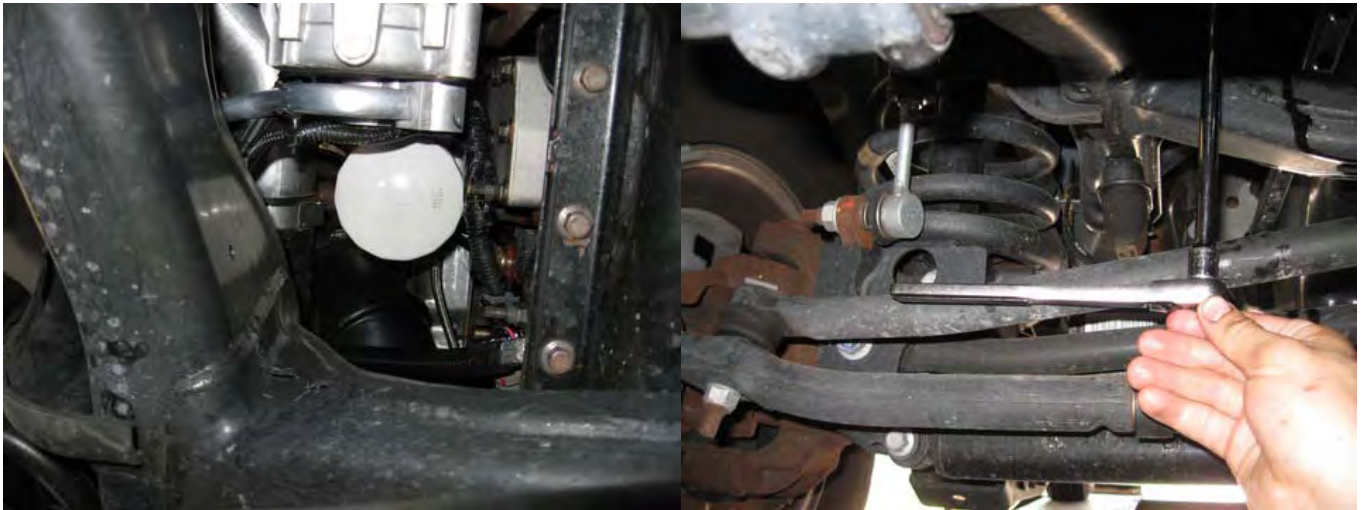
## Step 1

Climb under the truck; place the bucket under the drain plug, insert 3/8" ratchet into drain plug and remove plug. The oil may be hot if truck was recently driven and may splatter while draining. Use caution when removing plug and wear protective eye glasses.



## Step 2

Remove old oil filter. The oil filter is located on the passenger side of the engine towards the front of the truck. There is almost no room to get a strap-style oil filter wrench on it, so I highly recommend purchasing an end-cap oil filter wrench. You need one that is 93mm-15 flutes to fit the Fleetguard filter. Connect that to your ratchet via about 14" of extensions to put the ratchet down in a clear area. Slide the filter wrench onto the end of the filter and twist it loose. Once it's loose, remove the wrench and grab the filter with your hand, twist slowly until it releases and gently lower it out of its location. It is filled with oil and will spill all over you if you dump it on its side. Wear protective eye glasses while removing the oil filter to reduce the chance of eye injury from oil splatter.



### **Step 3**

Hold your new filter in your hand and fill it with oil before installing. It will hold approximately 1 qt. This decreases the amount of time your engine runs with no oil pressure on first start while it re-pressurizes the system. Lubricate the rubber seal on the oil filter with new engine oil before you install it. It helps to ensure a good seal. Carefully raise the filter back up the same location you pulled the old one out of, being extra careful not to knock any dirt into it from the engine. Screw on the filter to the point where the rubber seal just barely touches the mount. Then tighten the filter down 3/4 of a turn.



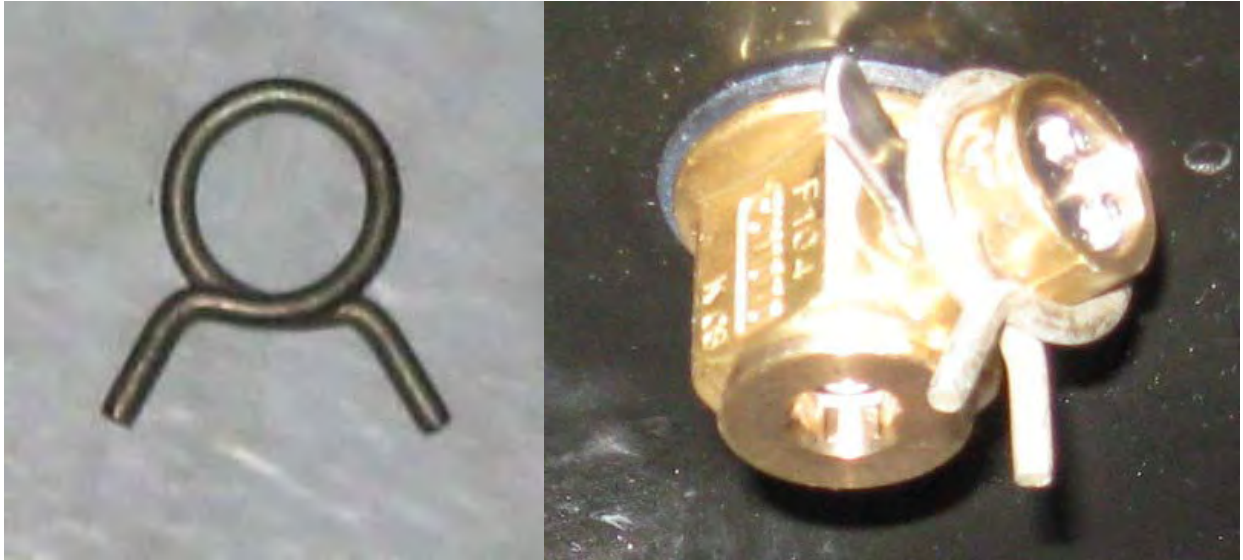
### **Step 4**

Install the Fumoto drain valve into the hole the drain plug came out of and tighten it down with a 3/4" wrench. If you're not installing the Fumoto valve, re-install your drain plug.



### **Step 5 (Optional)**

If you wish, you can install a 5/8" wire style hose clamp around the Fumoto valve. This hose clamp will sit in the groove that the lever on the valve travels in, therefore not letting the valve open even if it came out of its built-in lock. It's a little extra security to ensure it doesn't open while driving.



### **Step 6**

Refill the truck with oil. It will hold almost exactly 3 gallons. You must let it sit for at least 30 minutes before you check it, because the Cummins engine holds oil in top of the head and it takes it a long time to drain down. If you check right after you pour it will read low and you will overfill the engine. I pour in everything except for about 2 inches in one jug, let it sit for a bit, and then check the level. If it's on the stick at all I call it good and drive it around. I re-check the oil first thing in the morning before the truck has been started and add more oil if needed. Usually it takes whatever I have left in the jug.



## **Resetting the overhead oil change indicator**

You will need to reset the computer after an oil change or you will continue to get the “Oil Change Required, See Dealer” message on the overhead display panel. To reset the “Oil Change Required” indicator do the following:

1. Turn the ignition switch to the ON position (Do not start engine).
2. Fully depress the accelerator pedal slowly three times within 10 seconds.
3. Turn the ignition switch to the OFF/LOCK position.

This procedure might need to be performed a few times until you get timing right. If you start the truck and the overhead message is still there, shut it down and repeat. I personally run through the process 3 times after ever oil change to ensure I got it right.

## **Installed Pictures**

