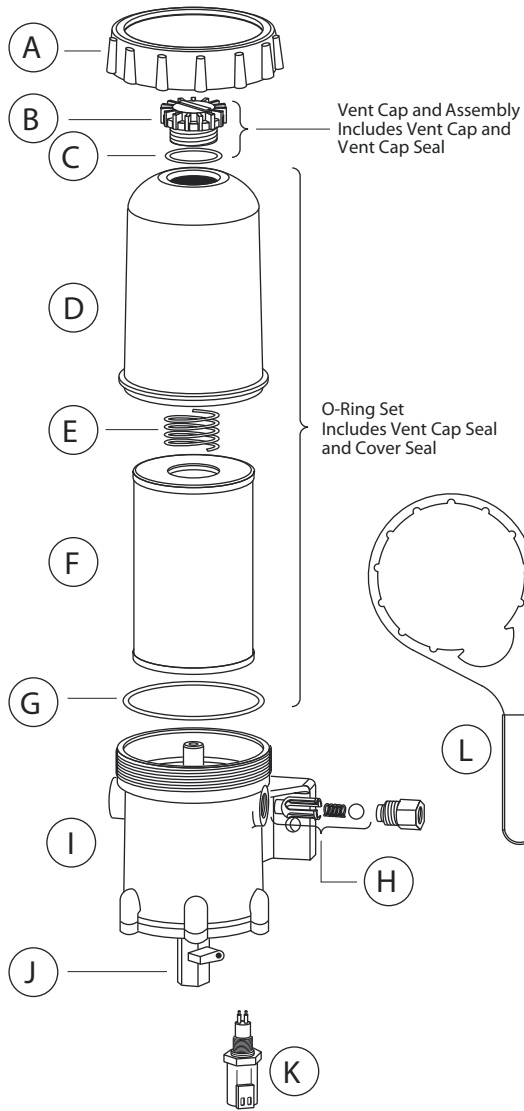


Cummins Fuel Water Separator Service Instructions



Part	Description
A	Collar
B	Vent Cap
C	O-Ring
D	Cover
E	Holddown Spring
F	Filter Element (Includes Grommet and O-Rings)
G	O-Ring Pack - included with each replacement element
H	Check Valve Service Kit
I	Fuel Pro, Unheated
J	Drain Valve
K	Water-In-Fuel (WIF) Sensor
L	Collar Wrench, Metal
Not Shown	WIF Wiring Harness
	WIF LED

Figure 1 Fuel/Water Separator Assembly

Installing the WIF (Water In Fuel) Probe

1. Install the WIF Probe into the bottom of the Fuel Pro (see Figure 2). Torque to 20-25 in-lbs (2.3-2.8 N·m).
2. Install the WIF wiring harness on WIF Probe. The harness has the following connections: 12" (304.8 mm) black ground lead with a 3/8" (9.53 mm) diameter loop end and a 72" (1828.80 mm) green WIF wire.

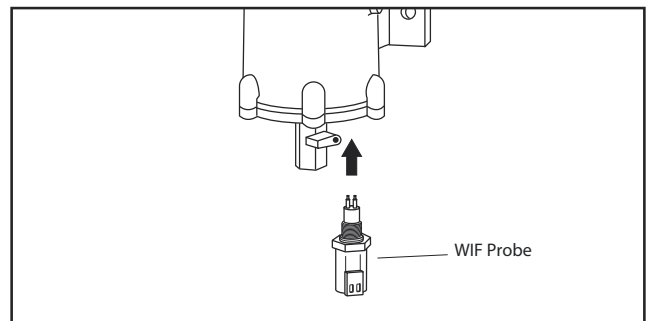


Figure 2 WIF Probe Installation

3. Drill 1/2" (12.70 mm) hole in the dash or control panel where the WIF LED is to be located.
 - a. Installation must have 1.5" (38.10 mm) of clearance behind dash or control panel.
 - b. Use caution not to damage nearby components when drilling.
4. Install WIF LED by pressing firmly into the drilled hole.
5. Connect the 4" (101.60 mm) black ground wire on WIF LED to a ground source. Attach additional black wire as needed.
6. Connect the 12" (304.8 mm) black ground lead with a 3/8" (9.53 mm) diameter loop end on the WIF wiring harness to ground source near Fuel Processor (if applicable).
7. Connect 72" (1828.80 mm) green signal wire on WIF wiring harness to 4" (101.60 mm) green signal wire on WIF LED. Use additional green wire as needed.
8. Locate 12 VDC or 24 VDC power source. Run red wire from power source to 4" (101.60 mm) red wire on WIF LED. Add a 1 A in-line fuse (not included). (See Figure 3)

NOTE: Use appropriate connectors to attach the wires. To test the WIF indicator, pour water into the body of the fuel processor until it covers the WIF probe. The WIF LED should illuminate. For unheated fluid, the volume of fluid necessary to turn the WIF indicator on is 6.15 oz ± .07 oz (182 mL ± 2 mL), for heated fluid the volume necessary is 3.08 oz ± .07 oz (91 mL ± 2 mL).

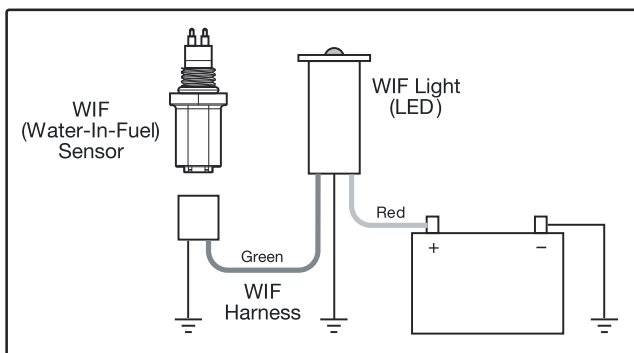


Figure 3 WIF Wiring

Filter Change Procedure

1. Turn off the engine. Loosen the vent cap to break the air lock in the filter.
2. Open the drain valve and drain the fuel level below the collar, then close the drain valve. Dispose of the fuel in an environmentally responsible manner, according to state and/or federal (EPA) or national recommendations.
3. Using the Collar/Vent Cap Wrench, remove the clear cover from the fuel processor by removing the collar. Discard the o-ring from the base of the cover. (A new o-ring seal is supplied with the new filter.) Gasket color is green and **MUST** be changed with every filter change. Remove the filter element from the Fuel Pro by pulling upward and twisting slightly. Be sure the sealing grommet is removed from the center stud.

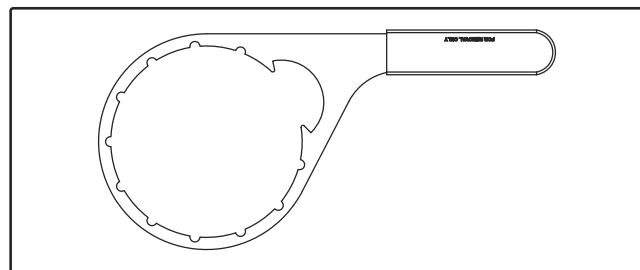


Figure 4 Collar/Vent Cap Wrench

4. Install the new filter element (supplied with a Sealing Grommet already inserted into the element) on the processor center stud by pushing down and twisting slightly. After checking to make sure the new o-ring seal (supplied with the filter) at the base of the cover is in place, install the cover and collar. Hand tighten the collar until seated. Do not use tools to tighten.
5. Remove the vent cap from the top of the clear cover by turning the vent cap counterclockwise. Fill the clear cover with enough clean fuel to cover the bottom half of the filter element. Make sure the new o-ring (supplied with the filter) is installed on the vent cap. Reinstall the vent cap and tighten by hand only.
6. Start the engine. When the lubrication system reaches its normal operating pressure, increase engine RPM for one minute.

Note: The clear filter cover will not fill completely during engine operation. It will gradually fill over time as the filter becomes clogged. The filter element does not need to be changed until the fuel level has risen to the top of the filter element.

Priming the System

1. Check to make sure the drain valve at the base of the Fuel Pro® is closed.
2. Remove the vent cap from the top of the clear cover. Fill the Fuel Pro full of clean fuel. Reinstall the vent cap and tighten by hand only.
3. Start the engine. When the lubrication system reaches its normal operating pressure, increase engine speed to high idle for one to two minutes. After the air is purged, loosen the vent cap until the fuel level lowers to just above the top of the collar. Tighten the vent cap by hand only.

Note: The clear filter cover will not fill completely during engine operation. It will gradually fill over time and the fuel level will rise as the filter becomes clogged.

4. Hand tighten the collar again while the engine is running. To avoid damage, do not use tools to tighten the collar.



CAUTION

To avoid damaging the aluminum fuel processor body, do not overtighten fuel lines or fuel line fittings.

Emergency Temporary Filter Replacement

1. Follow Steps 1 through 3 of the “Filter Change Procedure” on page 2.
2. If there is a filter grommet on the filter stud, remove it.
3. Install an engine spin-on filter on the threaded stud.
4. Install the cover, spring, seal and collar over the filter for later reuse and to guard against loss.
5. Start the engine. Raise the RPM for one minute to purge the air from the system.

Draining Contaminants

1. Turn off the engine and open the filter vent.
2. Place a cup under the drain valve at the base of the Fuel Pro and open the drain valve.
3. Water will flow into the cup. When fuel begins to flow out of the drain, close the drain valve. (Drain the minimum amount of fuel possible.)
4. Close the filter vent.
5. Start the engine. Raise the RPM for one minute to purge the air from the system.



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