



CNG CONVERSION SYSTEM MAINTENANCE MANUAL

COALESCING FILTER CHANGE

2011- 2018 FORD F-SERIES



IMPORTANT INFORMATION:

- All owner information supplied by Ford must remain with the unit. The incomplete vehicle manual is not owner information and is excluded from this requirement.
- Compressed natural gas is a combustible fuel and is flammable and highly explosive.
- CNG is stored under high pressure (maximum of 3,600psi) at 70°F (21°C).
- Tampering with or improperly maintaining the high pressure fuel system can result in voiding the warranty, personal injury, or damage to the alternative fuel system.
- Never attempt to modify the fuel system and always have the fuel system maintenance performed at an authorized dealership by qualified technicians.
- Exercise extreme caution and follow all related safety guidelines.

**Ensure that you are in a well ventilated area. Exercise extreme caution, the gases are flammable!
Follow all instructions!**

Required Tools:

- Torque wrench (in ft-lb's)
- Parker Lube & Seal or other higher grade lubricant
- 3/16" Allen wrench
- Filter socket (Not included. Available for purchase from Altech-Eco corp. #FSS STEEL)
- Bubble soap or a high grade methane detector (recommended model: TPI 721)

Coalescing filter: CURRENT - #KIT-AFF-FILTER, 2011-2013 model year - #FILTER-O

FILTER CHANGE - CURRENT

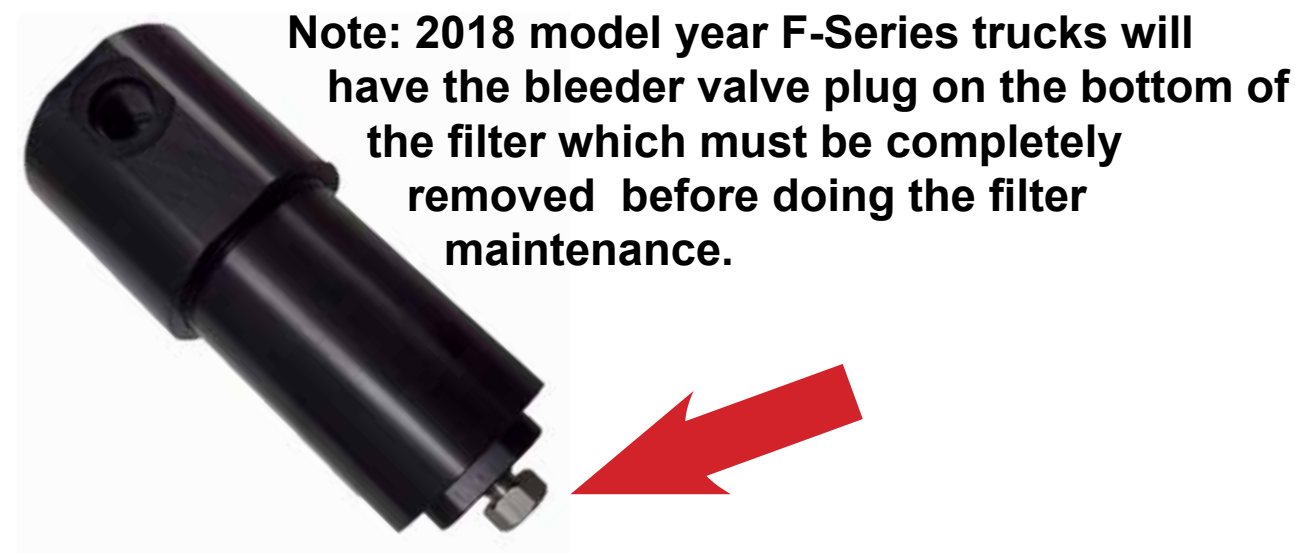
1. Remove cylinder cover.
Toolbox cover - Remove skirt.
(The cover type and location may vary)
2. Close valve(s) manually.
3. Run the vehicle on CNG until the vehicle switches over to gasoline.
DEDICATED - Run until vehicle stalls.



OR

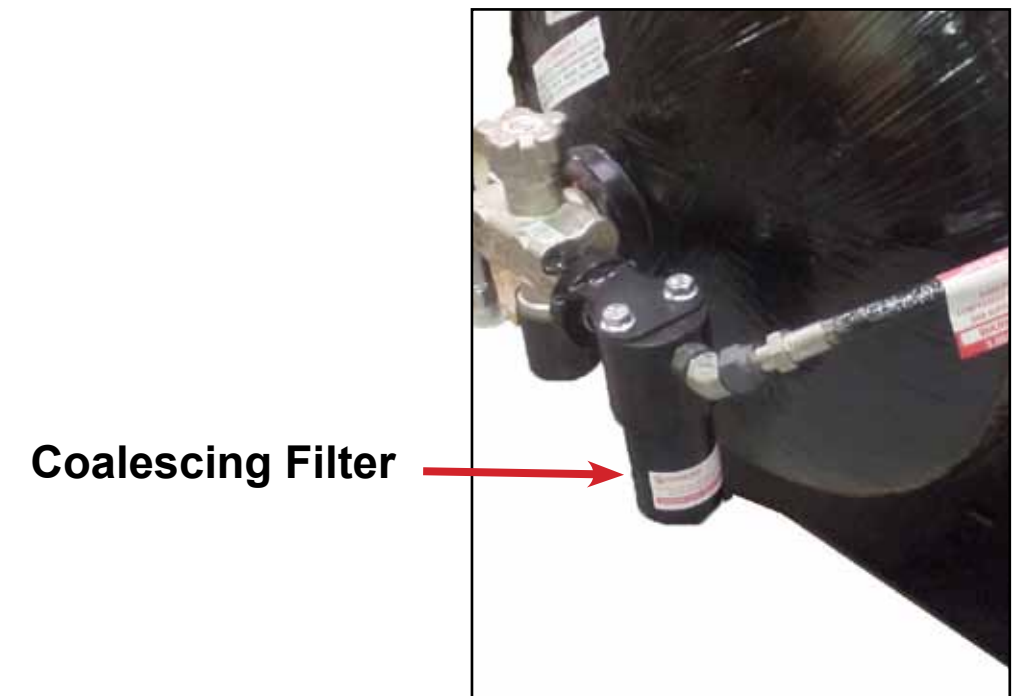


Cylinder valve



FILTER CHANGE - CURRENT

- 4. Locate the bleed valve/bleeder valve plug and release any access CNG.
(Location of bleed valve may vary per each cylinder package)
- 5. Locate the coalescing filter next to the valve.



2018 F-Series Models

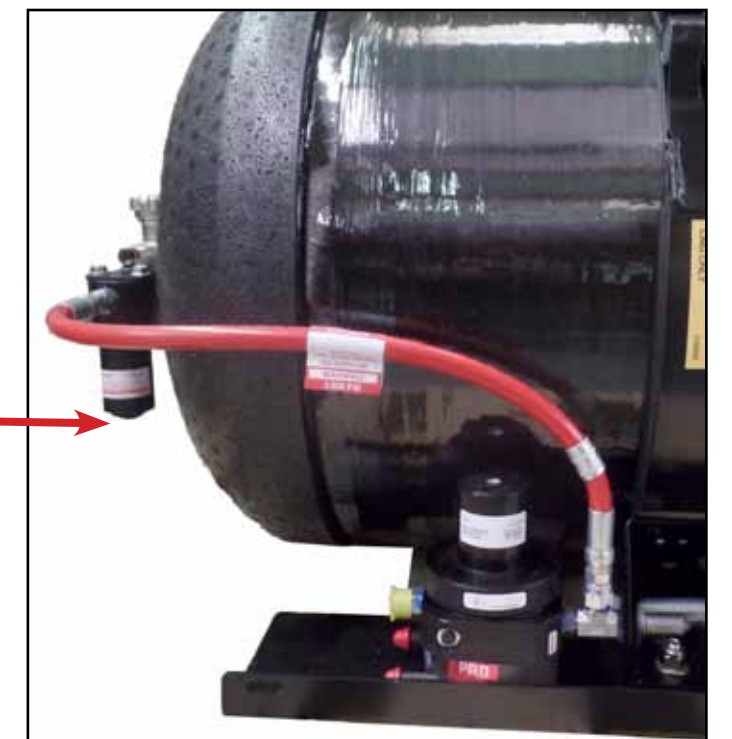
Bleed valve



Bleed valve



Bleeder valve plug
(Located at the bottom of coalescing filter)



FILTER CHANGE - CURRENT

6. Remove ONLY the bottom half of the filter housing using the filter socket.
7. Remove the old O-ring from the filter housing.
Clean and remove any excess oil or debris inside the filter housing.
8. Install new O-ring. Generously apply lube and ensure entire O-ring is coated.
Attach the coalescing filter inside the top housing half.
Ensure that filter is snug and not loose.
9. Re-install filter bottom half of the filter housing and tighten to 45 ft-lbs.

2018 model year F-Series ONLY:

Re-install bleeder valve plug.
Hand tighten first then add 1 or 1 1/2 flat. DO NOT OVER TIGHTEN, doing so will damage the threading.

10. Open valve(s).
11. Cycle the ignition 3 times to repressurize the system and start the vehicle.
12. Perform a leak test.
13. Re-install cylinder cover or toolbox skirt.



2018 F-Series Models



FILTER CHANGE - 2011-2013

1. Remove cylinder cover.
Toolbox cover - Remove skirt.
2. Close valve(s) manually. Using a 3/16" allen wrench.
3. Run the vehicle on CNG until the vehicle switches over to gasoline.
DEDICATED - Run until vehicle stalls.
4. Disconnect the vehicle battery.

Required Tools:

- Torque wrench (in ft-lb's)
- Parker Lube & Seal or other higher grade lubricant
- 7/8" or 22mm open end wrench x2
- 3/16" Allen wrench
- Filter socket (Not included. Available for purchase from Altech-Eco corp. #FSS-STEEL)
- Bubble soap or a high grade methane detector (recommended model: TPI 721)



COVER



OR



FILTER CHANGE - 2011-2013

5. Using 2 wrenches (7/8" or 22mm and a 3/4" to hold down 90° or 45° fitting), depressurize the fuel line. Fuel line is also known as the low pressure line and can be located by looking for the yellow "up to 150psi" sticker. Do not fully detach the line. Depressurization may take up to 15 seconds or more.
6. Locate the coalescing filter. Using the filter socket, remove the bottom half of the filter housing.
7. Remove the used filter.
Remove the old O-ring.
Remove the old O-ring from the filter housing.
Clean and remove any excess oil or debris inside the filter housing.
8. Install new O-ring onto filter housing and apply lube generously.
Apply lube and seal to the top of the filter as well.
Install new coalescing filter.



Parker or higher grade lubricant



FILTER CHANGE - 2011-2013

9. Re-install filter housing. Tighten to 45 ft-lbs.
10. Tighten fuel line using 2 wrenches (7/8" or 22mm and a 3/4" to hold down the fitting).
Tighten connection to 35-40 ft-lbs.
11. Open valve(s) 100% then close back by a 1/4 turn.
12. Reconnect the vehicle battery.
13. Cycle the ignition 3 times to repressurize the system and start the vehicle.
14. Perform a leak test.
15. Re-install cylinder cover or toolbox skirt.

