



Supplemental Fuel Pump Kit 2007-09 GM SUV 4.8L, 5.3L, 6.0L & 6.2L Non Flex-Fuel Installation Instructions

PLEASE study these installation instructions carefully before beginning the installation. The Supplemental Fuel Pump Kit installation is complex but can be accomplished with common tools and automotive service procedures. However, it is recommended to have a strong familiarity with working on automotive fuel systems before attempting this installation. If you do not feel comfortable performing this installation or have never worked with automotive fuel systems before, it is highly recommended to have the installation completed by a qualified mechanic with access to a service lift and a strong familiarity with automotive service procedures. If you have any questions, please call our **Technical Hotline at: 1-800-416-8628**, Monday - Friday, 7:00 am - 5:00 pm, Pacific Standard Time.

WARNING: Proper installation is the responsibility of the installer. Improper installation will void the manufacturer's warranty and may result in poor performance and engine or vehicle damage.

- **DESCRIPTION:** These supplemental fuel kits contain replacement fuel pumps, fuel level senders, fuel pressure control modules and injectors (#15671, 15672 Only). These upgrade kits are required for some GM SUV utilizing the #1564 and #1567 E-Force supercharger systems. These system are not needed and will not work on Flex- Fuel models. Flex-Fuel models come standard with adequate fuel systems that properly operate the E-Force Supercharger system.

15642 - GM SUV 1500, '07-'09, 4.8L/5.3L Non-Flex Fuel, Short Wheel Base

15643 - GM SUV 1500, '07-'09, 4.8L/5.3L Non-Flex Fuel, Long Wheel Base

15671 - GM SUV 1500, '07-'09, 6.0/6.2L Non-Flex Fuel, Short Wheel Base

15672 - GM SUV 1500, '07-'09, 6.0/6.2L Non-Flex Fuel, Long Wheel Base

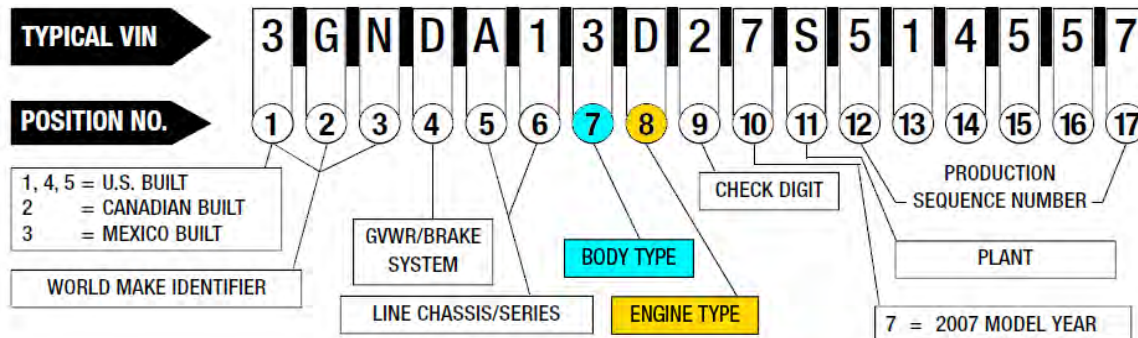
Kit includes the following:

- ☐ 1 - Fuel Pump
- ☐ 1 - Fuel Level Sending Unit
- ☐ 1 - Fuel Pressure Control Module
- ☐ 8 - Injectors (P/N 15671 / 15672 ONLY)
- ☐ 8 - Injectors O-rings (P/N 15671 / 15672 ONLY)

Please refer to the vehicle break down below to determine if your vehicle requires a supplemental fuel pump kit.

Locate your Vehicle Identification Number (VIN). Using the guide below, verify that VIN digit 8 is a C or J for vehicles with 4.8/5.3L engines or a Y or 8 for vehicles with 6.0/6.2L. If a C, J, Y or 8 is present, your vehicle will require a supplemental fuel system. Please use the chart below to identify the supplemental fuel pump kit needed for your vehicle.

Supplemental Fuel Pump Kit	Engine Type - VIN Digit 8	Body Type - VIN Digit 7
P/N 15642	C or J	2
P/N 15643	C or J	6
P/N 15671	Y or 8	2
P/N 15672	Y or 8	6



INSTALLATION PROCEDURE

It is critical to install the supplemental fuel pump on a vehicle that is able to start once the installation is complete. Once the supplemental fuel pump is installed, you must start the vehicle to check for leaks and Diagnostic Trouble Codes. This process can be completed prior or after the supercharger installation. If performed after the supercharger installation, DO NOT DRIVE the vehicle until the supplemental fuel pump kit is installed.

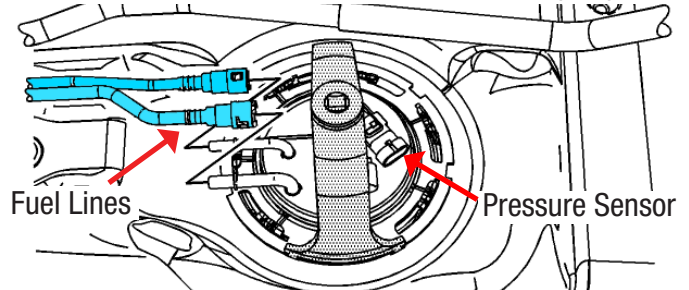
Tools Required:

- | | |
|---|--|
| ☐ GM J 45722 Fuel Sender Lock Ring Wrench
OR Equivalent | ☐ Torx T-30 |
| ☐ Long Breaker Bar | ☐ Service Lift OR Equivalent |
| ☐ Ratchet 1/2", 3/8", Extensions | ☐ Compressed Air |
| | ☐ Feeler Gage: .41 mm (.016 in) |
- The procedures for installing the supplemental fuel pump are identical to the OE procedure. It is recommended that you refer to the vehicle's service manual on specific details on how to remove and install the new fuel pump module.
 - Prior to starting this installation, make sure that the fuel level in the tank is below an 1/8 tank. This will reduce the risk of toxic vapors, spillage, as well as make the fuel tank easier to remove.

Always work in a well-ventilated area when working with gasoline as the vapors are toxic and highly flammable. Be aware of any sources of heat or sparks, such as drop lights or space heaters. Do not smoke and do not allow those around you to smoke during this installation.

1. Verify fuel tank is below 1/8 of a tank. If not, run the vehicle until fuel level is below 1/8 of a tank.
2. Disconnect the Negative (-) terminal from the battery.
3. Raise vehicle using a service lift or equivalent.
4. Clean the area surrounding the fuel line connections to avoid possible system contamination prior to removing.
5. Disconnect the fuel tank feed tube, vent line and the chassis EVAP line from the fuel tank line. Cap the fuel and EVAP lines to prevent possible system contamination.
6. Using an adjustable jack, support the fuel tank and remove the fuel tank strap bolts.
7. Remove the fuel tank straps and carefully lower the rear of the fuel tank.
8. Slide the front of the tank away from the frame and lower the fuel tank slightly until the chassis wiring harness electrical connectors can be accessed.
9. Disconnect the chassis wiring harness electrical connectors from the module and the fuel pressure sensor and lower the fuel tank.
10. Using compressed air, clean the area around the fuel lines and the fuel pump lock ring.

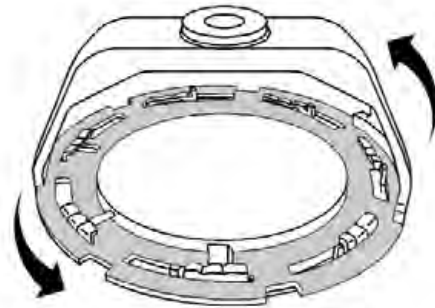
11. Disconnect the fuel and EVAP lines from the fuel pump.



12. Install a J 45722 fuel pump lock ring tool or equivalent to the pump's lock ring.

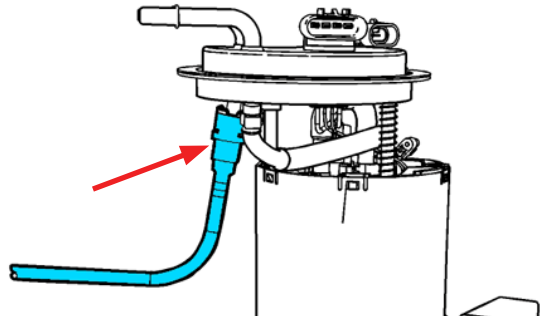
CAUTION: DO NOT damage the lock ring. DO NOT use any impact tools. DO NOT use a hammer and screwdriver to remove the lock ring as they will damage the lock ring. Significant force will be required to release the lock ring. Using a long breaker bar is highly recommended.

13. Using the J 45722 and a long breaker bar, rotate the lock ring clockwise to unlock the fuel pump lock ring.



14. Remove the J 45722 and the lock ring.

15. Slowly lift up the pump and disengage the vent tube.

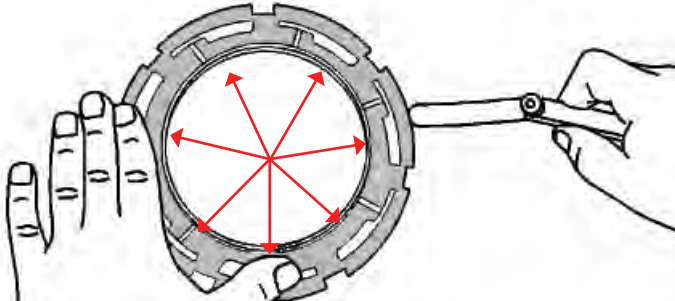


16. Remove and discard the fuel pump O-ring seal as a new one is provided in this kit.

NOTE: Some lock rings were manufactured with “DO NOT REUSE” stamped into them. **These lock rings may be reused if they are not damaged or warped.**

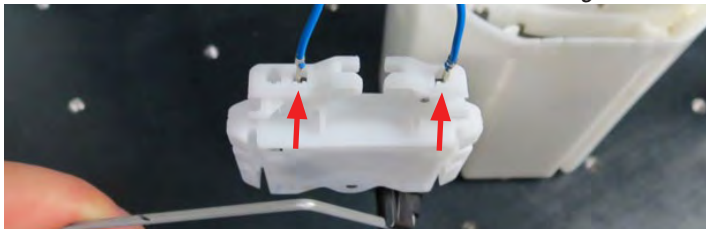
17. Inspect the lock ring for damage due to improper removal. If damage is found, install a NEW lock ring.

18. Check the lock ring for flatness. Place a lock ring on the flat surface and measure the clearance between the lock ring and the flat surface using a feeler gage at all 7 points.

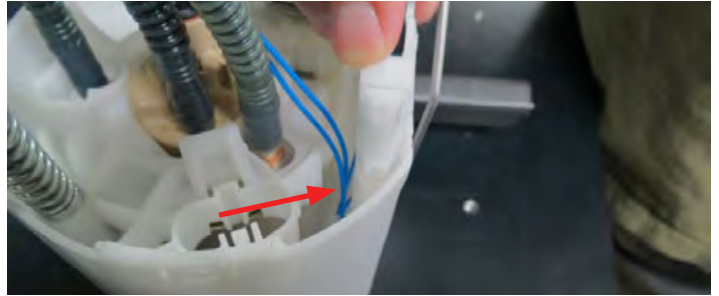


19. If warpage is less than .41 mm (.016 in), the lock ring does not require replacement. If warpage is greater, the lock ring must be replaced.

20. Insert the sending unit leads from the fuel pump module into the provided sending unit until the leads lock into place. **NOTE:** Leads can be connected to either side. Make sure to use the inner connector location on the left side of the sending unit.



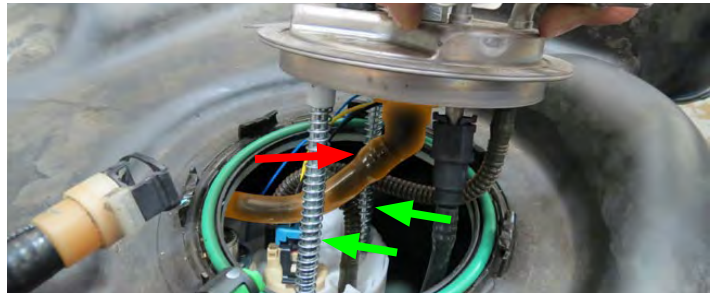
21. Install the sending unit onto the fuel pump module. Make sure the sending unit wires do not get pinched between the sending unit and the fuel pump module.



22. Lower pump into the tank and reconnect the vent tube.

23. Reverse the disassembly procedure to securely install the new fuel pump.

WARNING: 2007 vehicles using P/N 15642 and P/N 15671 need to route the vent tube in between the two fuel pump guide posts (green arrows). This will allow for an accurate fuel level reading. All other models route vent tube identical to stock.



NOTE: If the factory fuel tank pressure sensor connector does not fit onto the new fuel tank pressure sensor, remove the sensor from the old fuel pump and install it onto the new fuel pump.

24. Remove the fuel pressure control module cover by disengaging two (2) cover retainers from the frame.



25. Unplug the chassis harness from the fuel pressure control module.

26. Using a Torx T-30, remove three (3) bolts securing the fuel pressure control module.

27. Slide module over towards passenger side of the vehicle to remove.

28. Install provided control module reversing Steps 24-27.
29. Reverse fuel tank removal process to reinstall the fuel tank.
30. Reinstall the Negative (-) terminal on the battery and start the vehicle. Check for fuel leaks and repair if any are present. Check for Diagnostic Trouble Codes, if present.



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