



BULLET PROOF DIESEL®
.COM

INSTALLATION MANUAL

**BULLET PROOF DIESEL
6.4L OIL BYPASS KIT
2008-2010
F-SERIES**

**NEAL TECHNOLOGIES, INC.
UPDATED 5/8/2014**

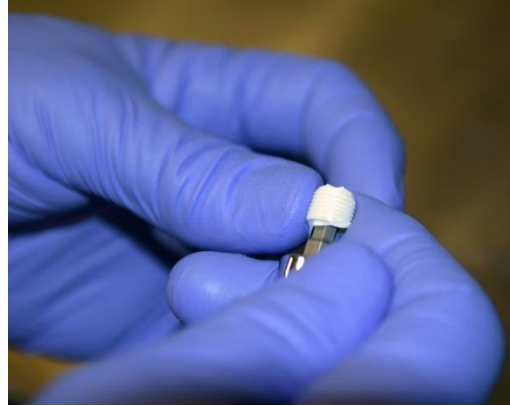
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These are the parts included in your kit. Please locate and identify each part prior to starting the installation process. There is an exploded view in the back of this manual that can aid you in identifying the proper pieces.

Part Number	Description	Quantity
6400028	#4 JIC to 1/8" MPT	2
6400056	#4 JIC to 1/8" MPT Swivel	2
6200016	5/16" Washer	4
6200014	5/16" x 1.25" Bolt	3
6000017	Bypass Oil Filter	1
6502074	Bypass Oil Filter Adapter	1
6200013	5/16" Lock Nut	3
90165022	Oil Fill Cap	1
90106521	Oil filter Cap	1
6400055	1/8" Brass Pipe Plug	2
6502214	6.4L Oil Bypass Bracket	1
90100070	Oil in hose 57.5 inches	1
90100070	Oil out hose 57.5 inches	1

Installation Stage 1: Assembling the Bypass Oil Filter Bracket

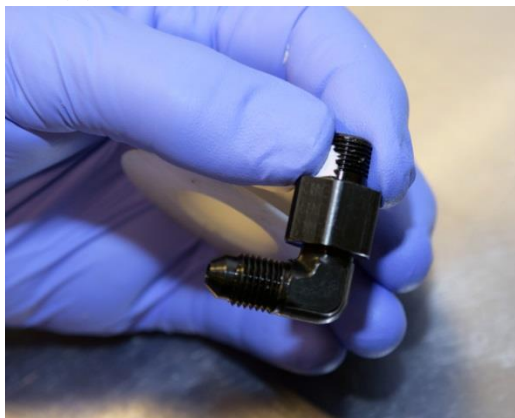
1. Apply pipe-sealing tape to:
 - a. Two (2) 1/8" brass pipe plugs.



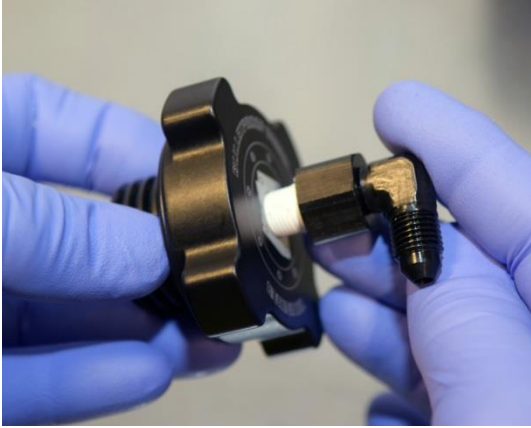
- b. Two (2) #4 JIC to 1/8" MPT fittings.



- c. One (1) #4 JIC to 1/8" MPT 90° swivel fitting.



2. Install one (1) 90° swivel fitting into the Bullet Proof Diesel oil fill cap.



3. Install one (1) 90° swivel fitting into the Bullet Proof Diesel oil filter cap.



4. Assemble the oil bypass filter adapter and bracket kit.

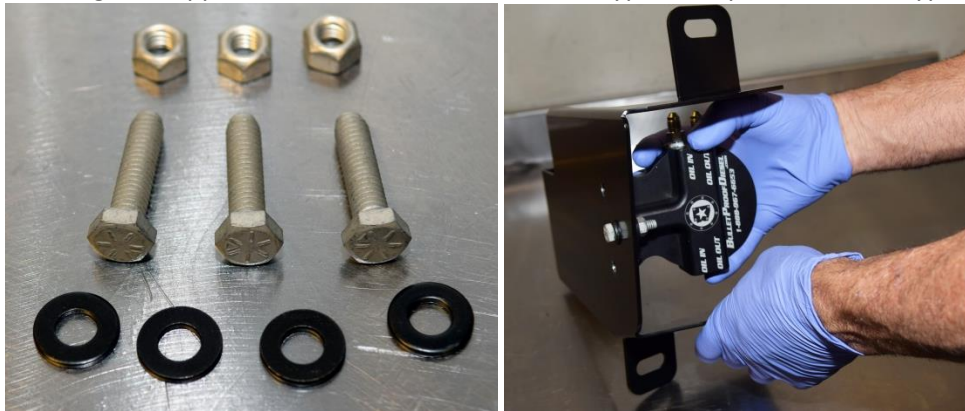
- a. Install the two (2) 1/8" brass pipe plugs.



- b. Install the two (2) #4 JIC to 1/8" MPT fittings.



- c. Using the supplied hardware, assemble the oil bypass adapter to the oil bypass bracket.

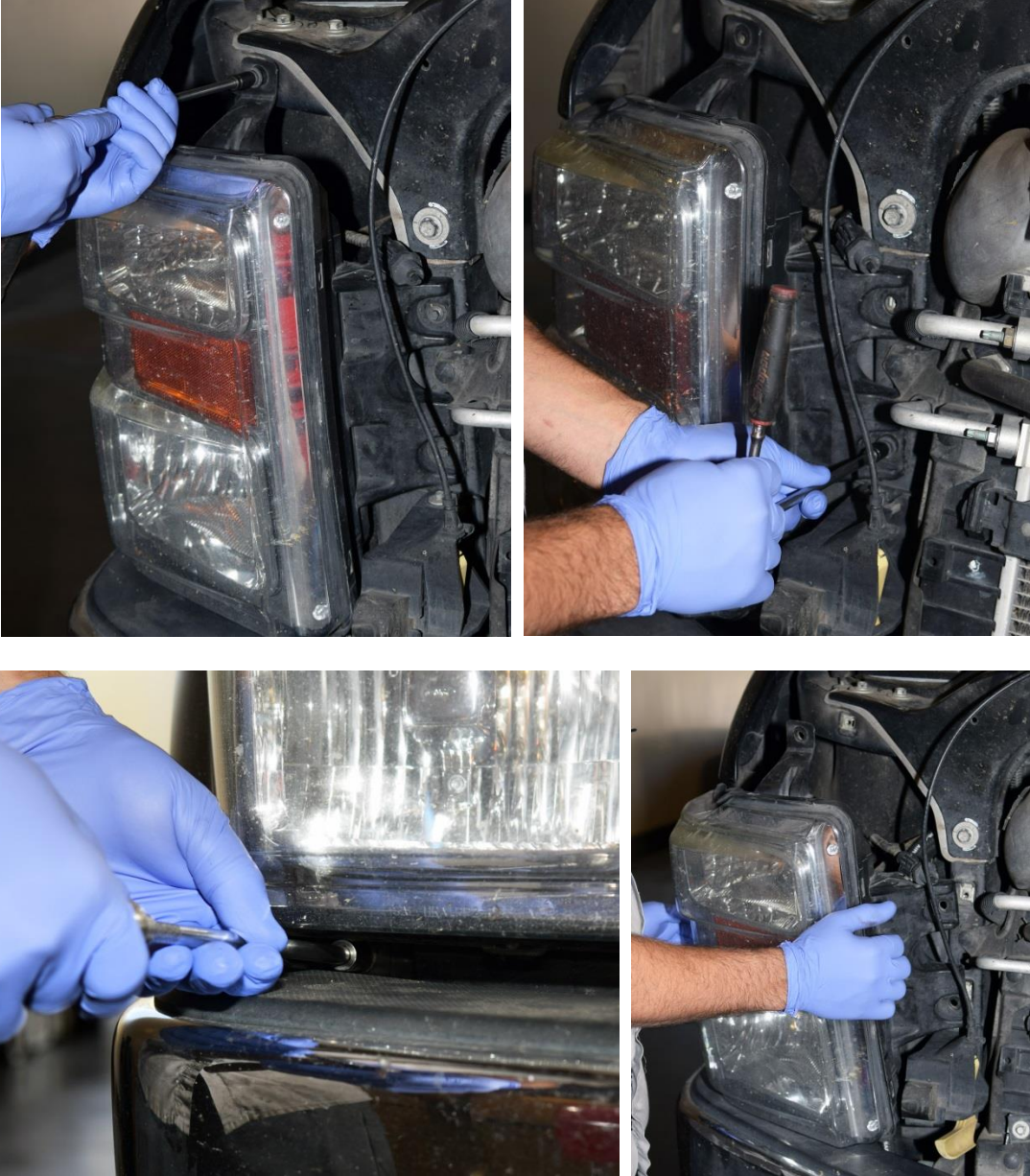


- d. Install the “oil in” hose (57.5 inches) to the “oil in” port.
- e. Install the “oil out” hose (57.5 inches) to the “oil out” port.
- f. Install the bypass filter to the oil bypass filter adapter.



Installation Stage 2: Preparing for Installation

5. Remove the passenger side headlight assembly.



NOTE: Please remove ALL four (4) screws before attempting to remove headlight assembly. Failure to do so can result in damage to the headlight and assembly.

6. Temporarily install the entire bracket and oil bypass assembly in to the truck. Check for fitment.



NOTE: DO NOT tighten down oil bypass assembly at this time.

7. Remove the stock OE oil fill cap and the stock OE oil filter cap.
8. Install the Bullet Proof Diesel oil fill cap with 90° swivel fitting pre-installed.



9. Install the Bullet Proof Diesel oil filter cap with 90° swivel fitting pre-installed.



Installation Stage 3: Routing the Oil Hoses

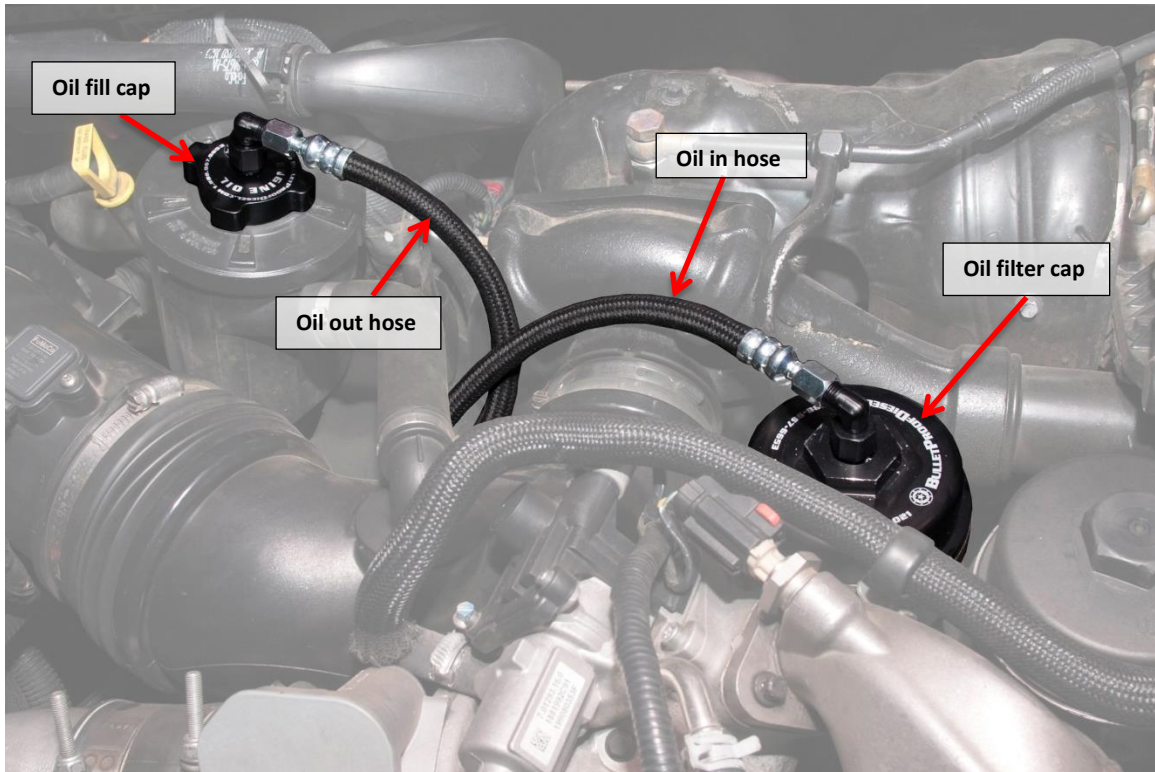
Route both the “oil in” and the “oil out” hoses from the bypass assembly, in between the radiator and hood latch release.



10. Route the “oil in” hose. This is the hose furthest from the truck bumper.
- a. Following the outside of the A/C high side line, route the hose past the radiator to the inside of the engine compartment.
11. Route the “oil out” hose. This is the hose closest to the truck bumper.
- a. Following the outside of the A/C high side line, route the hose past the radiator to the inside of the engine compartment.

NOTE: This is important to avoid contact and interference with the alternator.

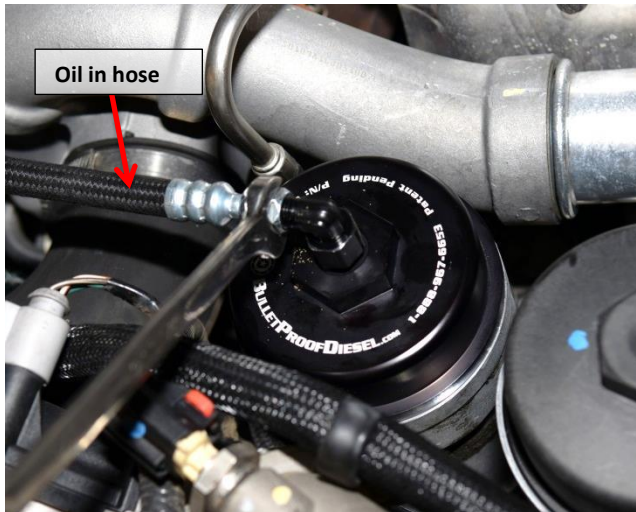
- b. Staying on the outside of the A/C high side line, route the “oil in” and “oil out” hoses between the A/C high side line, and the battery box.
- c. Bring both hoses under the air cleaner inlet.



12. Securely install the “oil out” hose to the Bullet Proof Diesel oil fill cap.



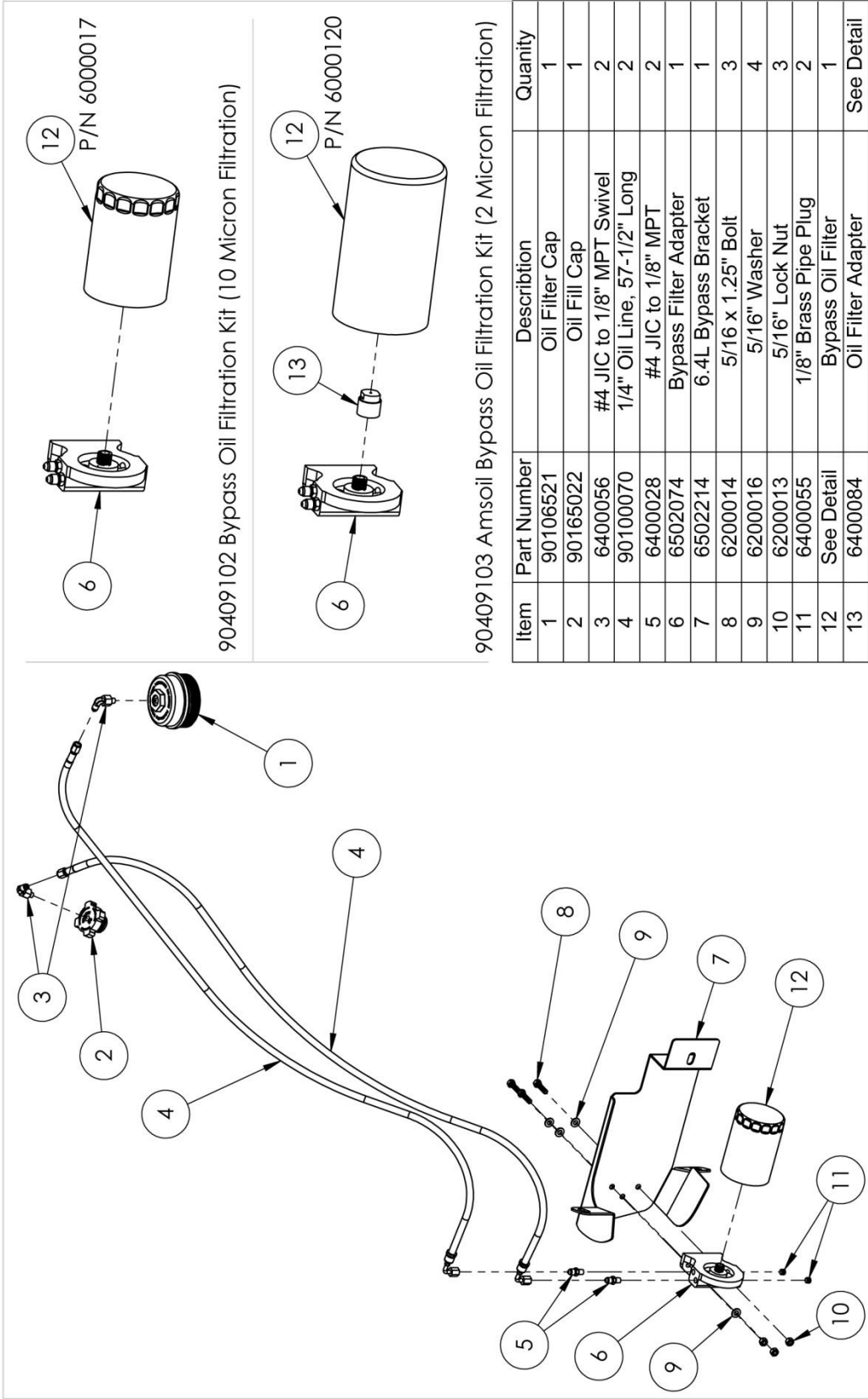
13. Securely install the “oil in” hose to the Bullet Proof Diesel oil filter cap.



14. Ensure oil bypass bracket assembly is properly tightened down, then start the engine and check for leaks.

15. Reinstall the passenger side headlight assembly.





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COMMENTS:

6.4 Bypass Oil Filtration Kit;
OEM Oil Cooler

6.4L F-Series

SIZE	DWG. NO.	REV
A	90409102/9103	1
DRAWN: CUNNINGHAM		SHEET 1 OF 1