



BULLETPROOFDIESEL®
.COM

INSTALLATION MANUAL

BULLET PROOF OIL BYPASS KIT WITH OEM OIL COOLER 2003-2007 F-Series

NEAL TECHNOLOGIES, INC.
UPDATED 6/6/2014

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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 are some drawings 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
6400055	1/8" Brass Pipe Plug	2
6200016	5/16" Washer	4
6200014	5/16" x 1.25" Bolt	3
6000017	Bypass Oil Filter	1
6502074	Bypass Filter Adapter	1
6200013	5/16" Lock Nut	3
6400056	#4 JIC to 1/8" MPT 90° Swivel	2
6502022	Oil Fill Cap	1
6502021	Oil Filter Cap	1
6000075	5" standpipe	1
Misc.	Hoses with Fittings Attached (per Hose Routing Diagram)	2
Unique Parts for 2003-2004 Installation:		
6502035	03-04 Bypass Oil Filter Bracket	1
6502027	03-04 Bypass Rock Shield	1
Unique Parts for 2005-2007 Installation:		
6502038	05-07 Bypass Oil Filter Bracket	1
6502026	05-07 Bypass Rock Shield	1
Optional Parts		
6400084	Threaded Adapter	1
6000120	Amsoil Filter	1

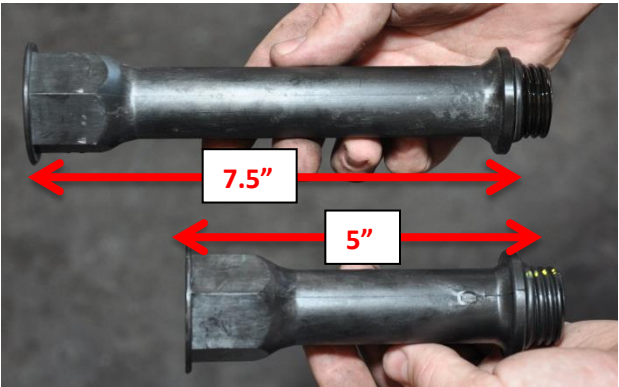
Installation Stage 1: Removing the stock parts

1. Remove the OEM oil filter cap.



2. Remove the OEM oil fill cap.

***NOTE:** Some trucks have a 7.5" standpipe. This needs to be replaced with the provided 5" standpipe.

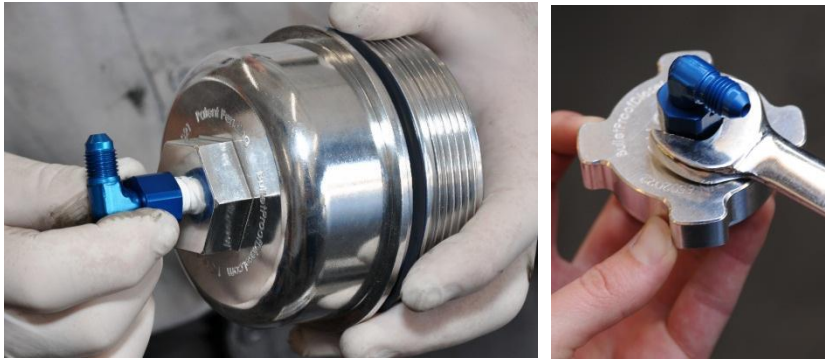


Installation Stage 2: Installing Bullet Proof Diesel Caps

1. Apply the Teflon pipe-sealing tape to both swivel fittings.

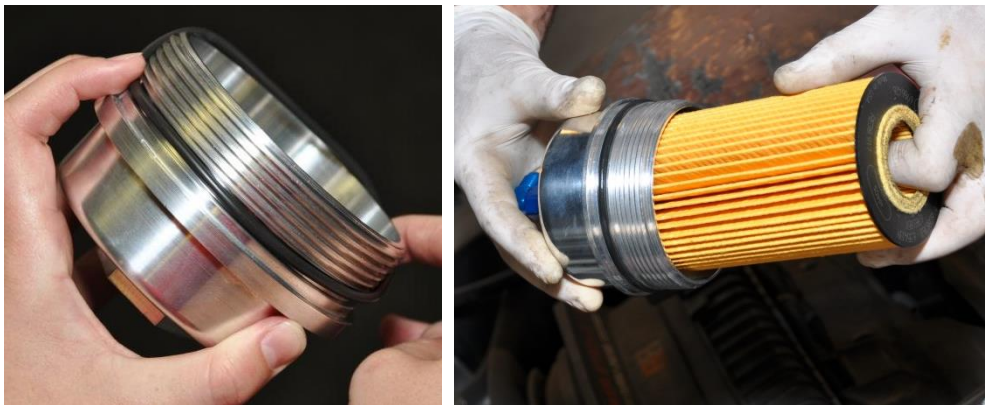


2. Install the swivel fitting into Bullet Proof Diesel Oil Filter Cap and Bullet Proof Diesel Oil Fill Cap.



3. Install the O-ring and Oil Filter into the Bullet Proof Diesel Oil Filter Cap.

***NOTE: Only use with OEM oil filters. Ford P/N: FL2016**



4. Install the Bullet Proof Diesel Oil Filter Cap.

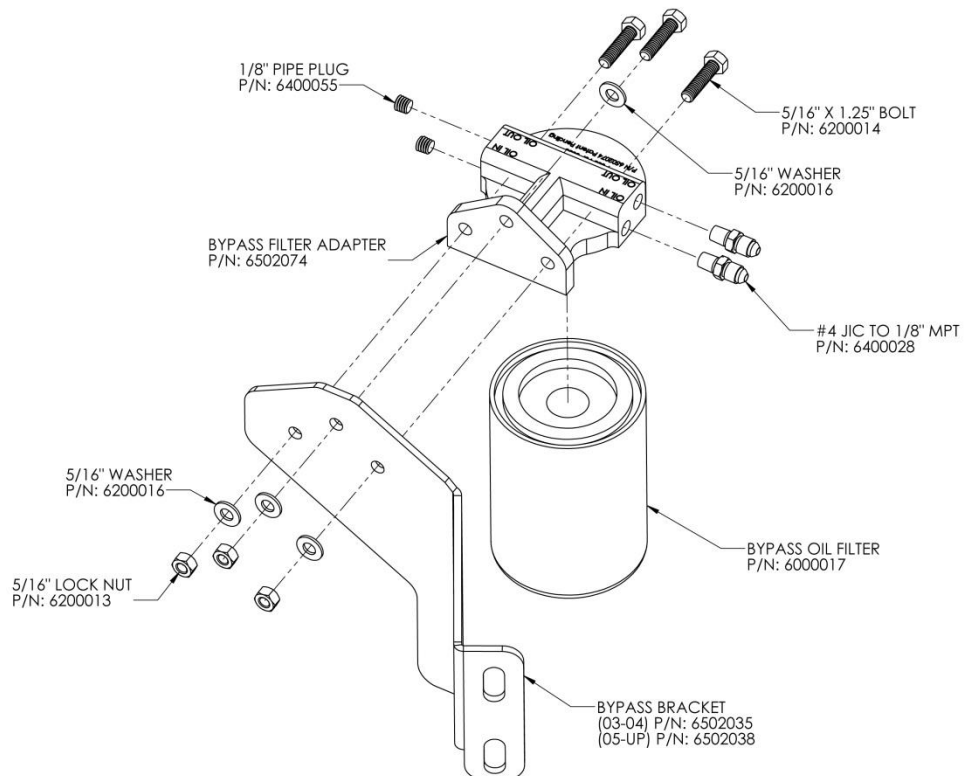


5. Install the Bullet Proof Diesel Oil Fill Cap on the standpipe.

***NOTE: Make sure the O-ring on the bottom of the Oil Fill Cap is in place before installation.**



Installation Stage 3: Assembling the Bypass Oil Filter Bracket



1. Apply Teflon pipe-sealing tape to all of the fittings; two 1/8" brass pipe plugs and two #4 JIC to 1/8" MPT.

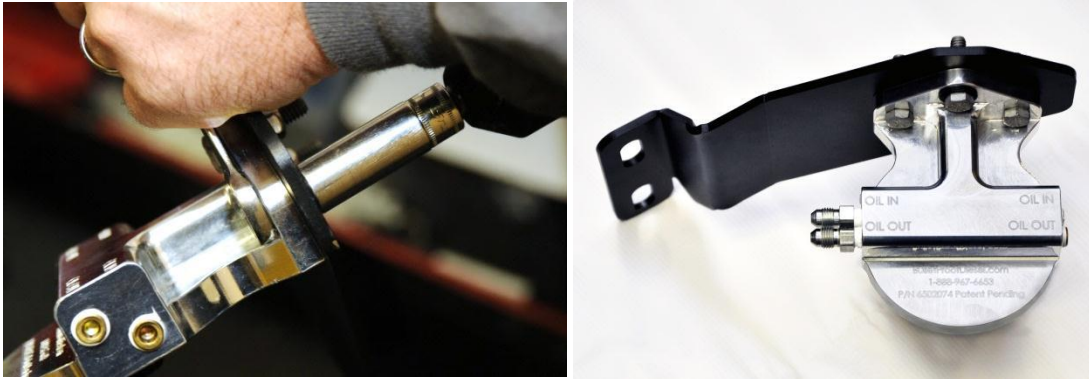


2. Install both #4 JIC to 1/8" MPT fittings on the same side as shown:



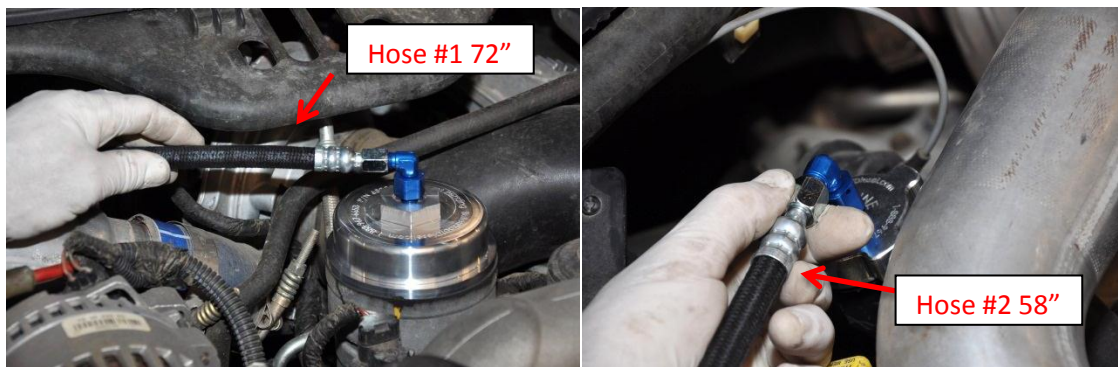
3. Install both 1/8" brass pipe plugs on the other side of Oil Filter Adapter.

4. Mount the Oil Filter Adapter onto the bracket with provided hardware.

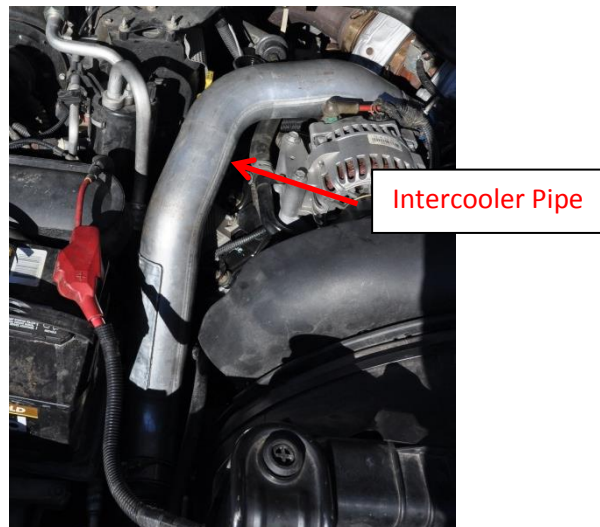


Installation Stage 4: Routing the Oil Hoses

1. Connect oil Hose #1 (72 inches) to Bullet Proof Diesel Oil Filter Cap, and Hose #2 (58 inches) to Bullet Proof Diesel Oil Fill Cap.

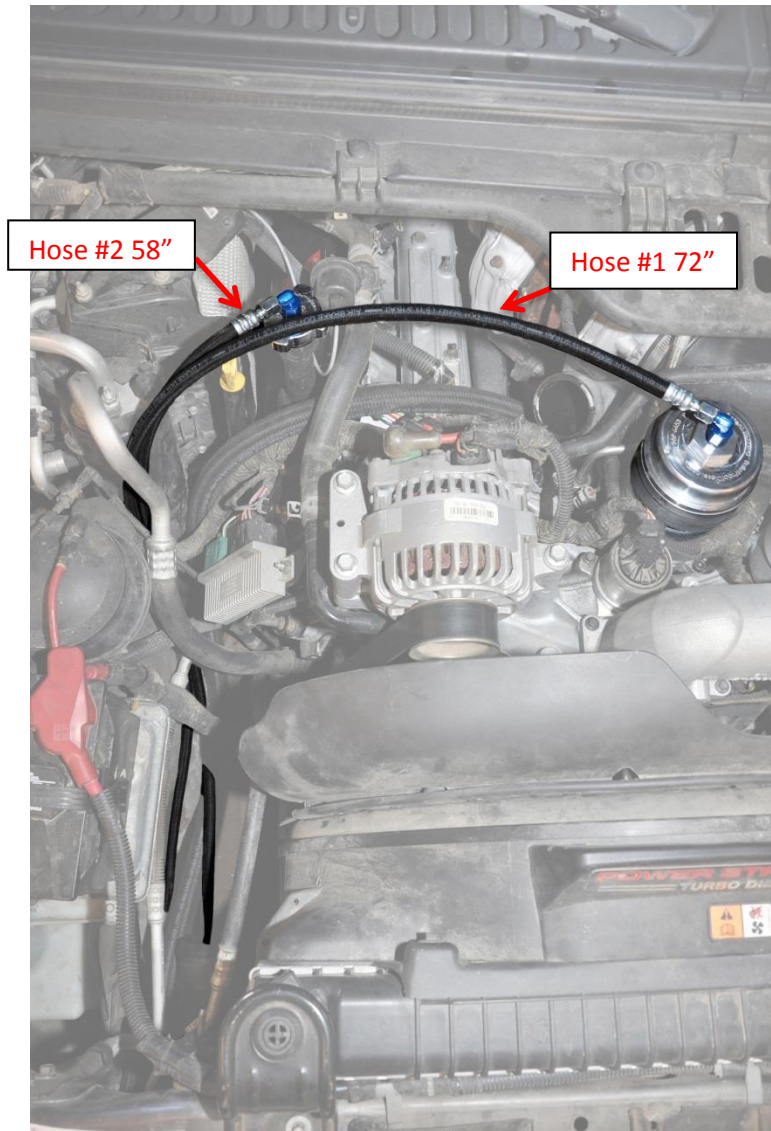


2. Remove the intercooler pipe.

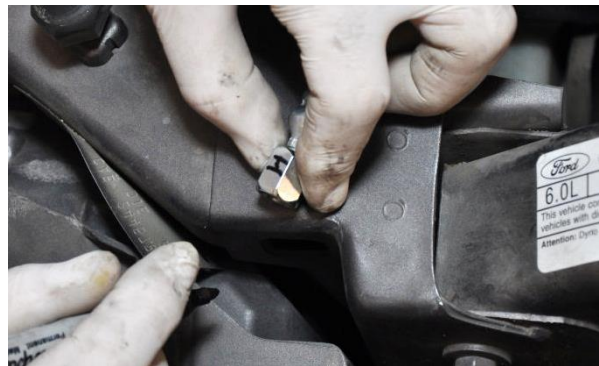


3. Route oil Hoses #1 and #2 as shown below*:

***NOTE:** For clarification, see assembly diagram on page 12 or 13 depending on model year.



4. Before pushing the fittings through the rubber barrier and down to the bypass filter, Hose #1 should be marked to make sure it is connected to the OIL IN port.



5. Push both hoses through the rubber barrier and down towards the bypass filter.



Installation Stage 5: Installing the ByPass Filter Assembly

1. Remove the bumper mounting bolts on the passenger side.

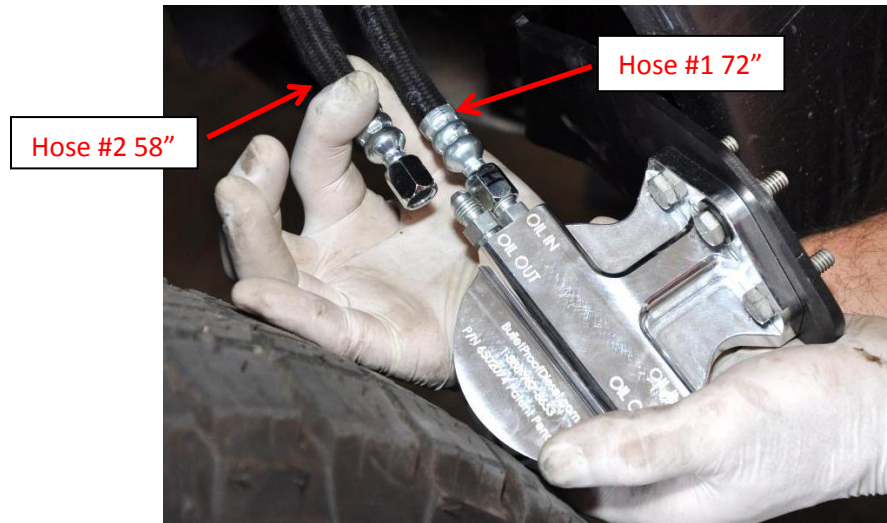


2. Remove the stock bumper support bracket. This will be replaced with a new rock shield.

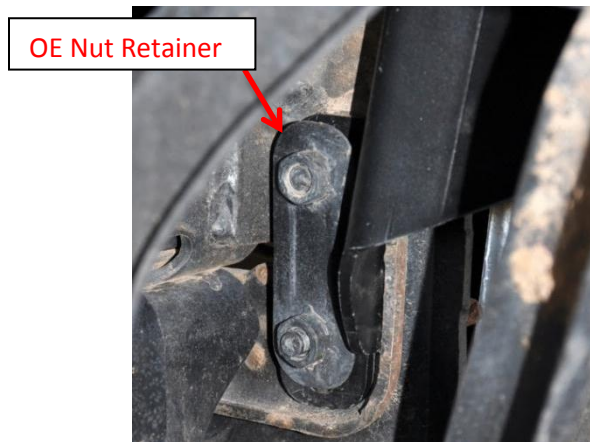


***NOTE: 03-early 04 bracket looks slightly different than the above.**

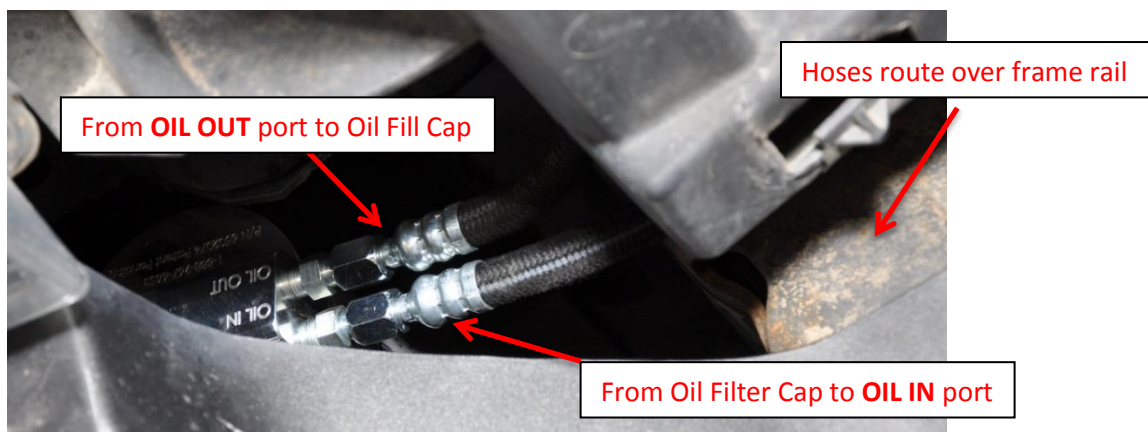
3. Attach the hoses from the oil filter cap and oil fill cap to the oil filter adapter.



4. Place the assembly behind the bumper mount. Make sure to place the bracket between the backside of the bumper mounting bracket and stock nut retainer as shown below:



***NOTE:** Make sure the hoses are connected to the oil filter adapter correctly.



5. Install the Bypass Filter.



Installation Stage 6: Rock panel

1. After all the hardware is tight and the hoses are connected, install the rock guard.



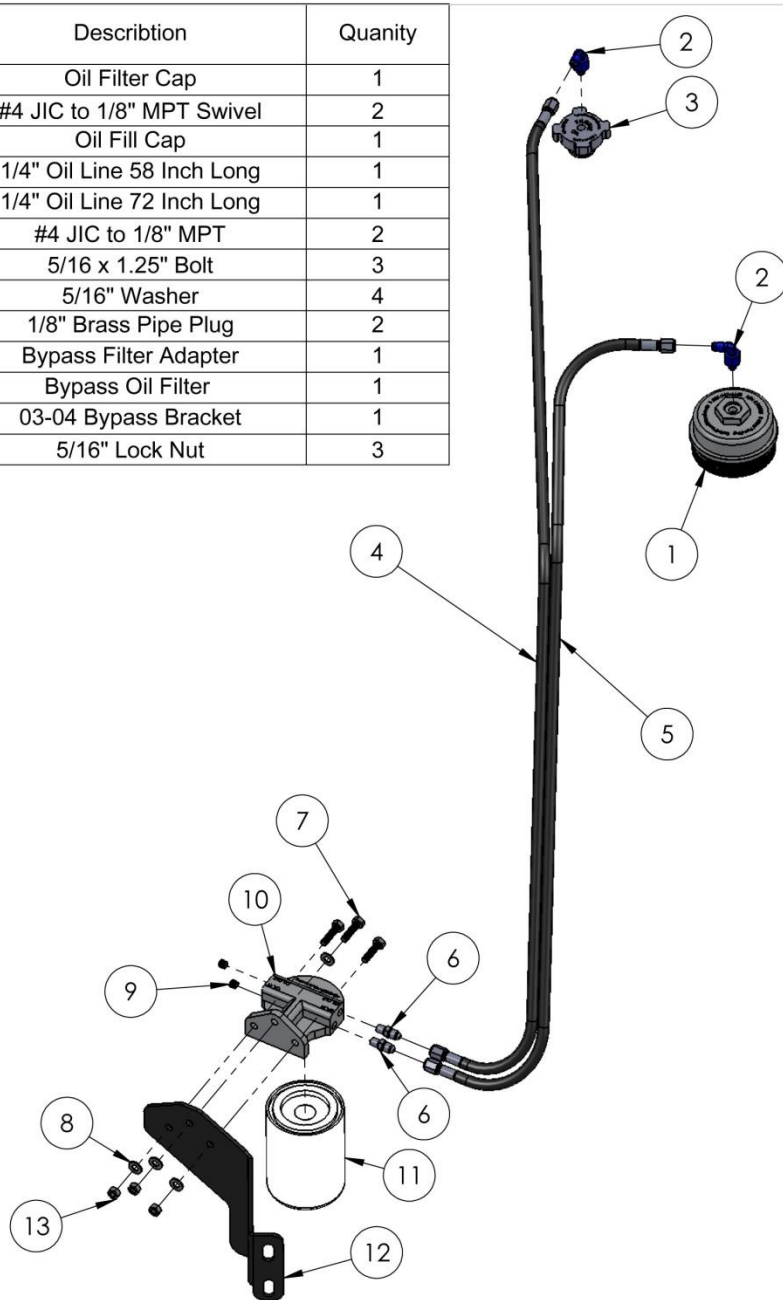
***NOTE:** 03-early 04 versions have a rock panel, too. It serves a similar purpose but looks and fits a bit differently.

OPTIONAL AMSOIL UPGRADE



Assembly Diagram

Item	Part Number	Description	Quantity
1	6502021	Oil Filter Cap	1
2	6400056	#4 JIC to 1/8" MPT Swivel	2
3	6502022	Oil Fill Cap	1
4		1/4" Oil Line 58 Inch Long	1
5		1/4" Oil Line 72 Inch Long	1
6	6400028	#4 JIC to 1/8" MPT	2
7	6200014	5/16 x 1.25" Bolt	3
8	6200016	5/16" Washer	4
9	6400055	1/8" Brass Pipe Plug	2
10	6502074	Bypass Filter Adapter	1
11	6000017	Bypass Oil Filter	1
12	6502035	03-04 Bypass Bracket	1
13	6200013	5/16" Lock Nut	3



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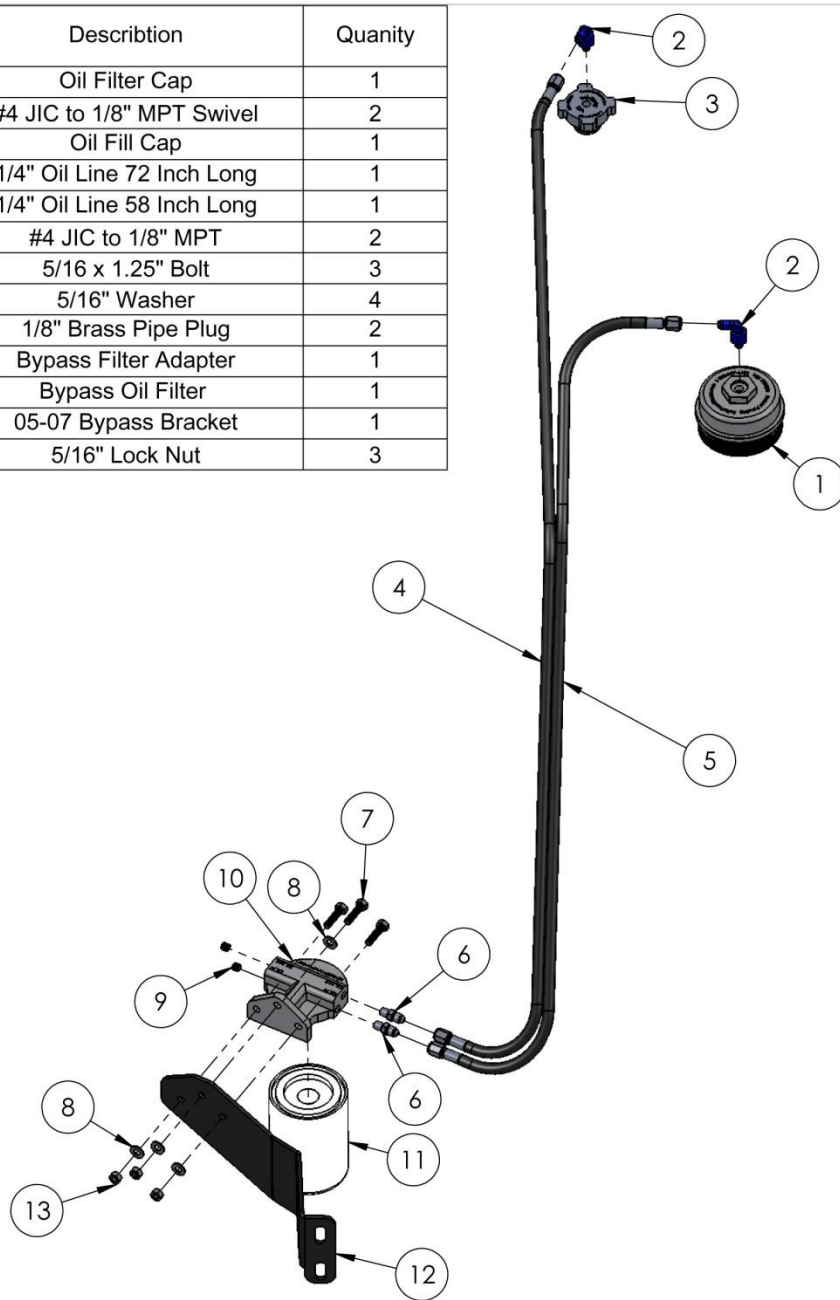
**Bullet Proof Diesel
Bypass Kit**

03-04 F-Series

SIZE	PART NO.	REV
A	90201042	2
DRAWN: PERKINS		SHEET 1 OF 1

***NOTE:** Hose length is measured by the cut of the hose, not including fittings.

Item	Part Number	Description	Quantity
1	6502021	Oil Filter Cap	1
2	6400056	#4 JIC to 1/8" MPT Swivel	2
3	6502022	Oil Fill Cap	1
4		1/4" Oil Line 72 Inch Long	1
5		1/4" Oil Line 58 Inch Long	1
6	6400028	#4 JIC to 1/8" MPT	2
7	6200014	5/16 x 1.25" Bolt	3
8	6200016	5/16" Washer	4
9	6400055	1/8" Brass Pipe Plug	2
10	6502074	Bypass Filter Adapter	1
11	6000017	Bypass Oil Filter	1
12	6502038	05-07 Bypass Bracket	1
13	6200013	5/16" Lock Nut	3



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Bullet Proof Diesel Bypass Kit

05-07 F-Series

SIZE	PART NO.	REV
A	90201043	2
DRAWN: PERKINS		SHEET 1 OF 1

***NOTE: Hose length is measured by the cut of the hose, not including fittings.**

Hose Routing Diagram

