



***BULLET PROOF DIESEL***®  
***.COM***

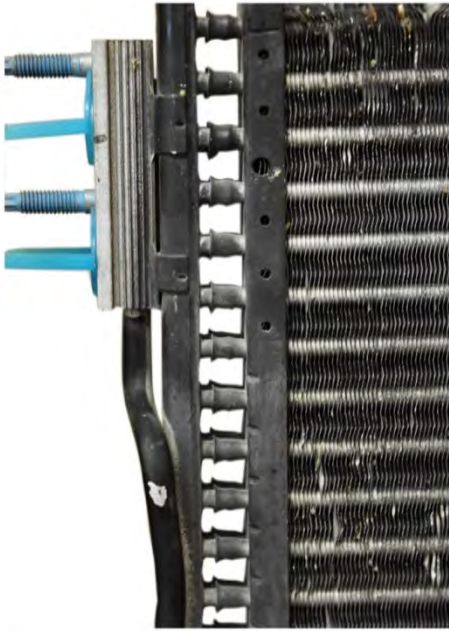
## **INSTALLATION MANUAL**

**BULLETPROOF OIL COOLER KIT  
2003-2007  
F-SERIES**

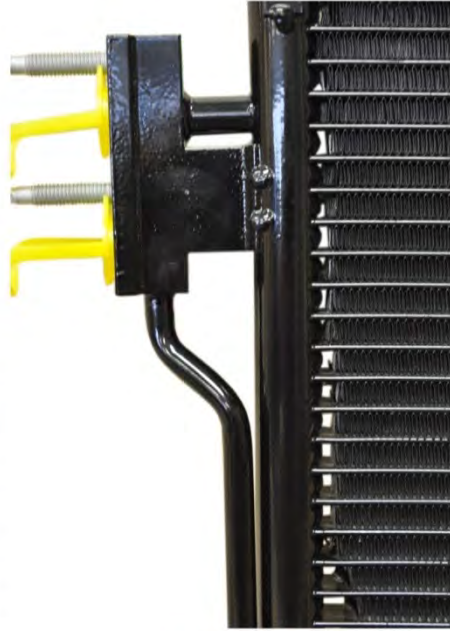
NEAL TECHNOLOGIES, INC.  
U.S. PATENT 8,375,917; 8,505,512 and OTHER PATENTS PENDING  
UPDATED 7/21/2020

## BEFORE You Begin Installation

### *Important note on A/C Condensers:*



**Original OEM**  
Compatible with original bracket



**Updated OEM / Aftermarket**  
(Needs additional bracket)

### **Please Note:**

**The Ford OEM  
A/C condenser  
has changed.**

### Bullet Proof Diesel offers [a Non-Traditional A/C Condenser Mounting Bracket:](#)

This bracket is required for mounting the Bullet Proof Diesel Air-to-Oil Cooler if you have a non-traditional style 6.0L condenser.



Non-Traditional A/C Condenser Mounting Bracket  
P/N: 90100059

## BEFORE You Begin Installation

### ***Important note on Power Steering Coolers:***

In mid 2006 Ford made a mounting location change to the power steering cooler. The power steering cooler on 2003- early 2006 models is in the lower position, at/near the bottom of the radiator. In the late 2006-2007 models, the power steering cooler has been located up near the hood latch, near the top of the radiator.

Here you can see the power steering cooler in the lower position, near the bottom of the radiator.



If you have the high-mounted power steering cooler, the condenser mounted BPD Engine Oil Cooler will require you to relocate your power steering cooler to the lower position.

To do this you will need a power steering cooler relocation kit. These parts are listed on [BulletProofDiesel.com](http://BulletProofDiesel.com) and are shown here:



Power Steering Cooler Relocation Kit:  
P/N: 90100024

## BEFORE You Begin Installation

### ***Note on Turbo Oil Feed Lines:***

On a few, very early 2003 6.0L diesel trucks, Ford used a thread-in style turbo oil feed tube. This threaded turbo feed tube is extremely rare and is only present on some 2003 models. The threaded style of oil feed tube applies to all Ford 6.0L's with the production date of 3/18/2003 and earlier.

This threaded oil feed tube is not compatible with the oil transfer block from Bullet Proof Diesel. The Bullet Proof Diesel block requires the slip-fit O-ring style connection.

If you find that your turbo oil feed tube is the threaded style, you will need to purchase a new turbo oil feed tube from Bullet Proof Diesel or Ford.

Ford Part Number is: 3C3Z-9T516-BA

Bullet Proof Diesel Part number: 6000082



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
90100077	EGR Cooler Gasket Set and Turbo Hardware	1
6502039	Bullet Proof Diesel Oil Filter Mount	1
6000015	High Capacity Engine Oil Cooler	1
6000013	Diesel Oil Filter, 85832	1
6200002	Constant Tension Spring Clamp	2
6200004	Allen Head, Black, Metric 35mm	2
6200005	Allen Head, Black, Metric 40mm	2
6200011	¼-20 Lock Nut	4
6200015	¼" Flat Washer	4
6200013	5/16-18 Lock Nut	1
6200014	5/16-18 x 1 ¼ Hex Head Bolt	1
6200076	5/16-18 x ¾" Hex Head Bolt	2
6200016	5/16" Flat Washer	4
6400004	Silicone Hose,(6 inches)	1
6400008	#12 90° Elbow Fitting	2
6400038	#12 O-Ring Hex Plug	2
6400007	#12 JIC Straight Fitting	2
6400002	¼" Counter Sunk Hex Plug	1
90201009	Hoses with Fittings Attached (per Hose Routing Diagram)	3
90201000	6.0L Adapter Manifold Block, Assembled	1
<b>Unique Parts for 2003-2004 Installation:</b>		
6502032	03-04 Oil Filter Bracket, Driver's Side	1
6502028	03-04 Rock Panel, Driver's Side	1
<b>Unique Parts for 2005-2007 Installation:</b>		
6502033	05-07 Oil Filter Bracket, Driver's Side	1
6502034	05-07 Rock Panel, Driver's Side	1
<b>With Condenser Bracket Mounting:</b>		
6502044	Condenser Mounting Bracket	1
6200083	Hex Head Sheet Metal Screw	6
6200084	Aluminum Spacer	6
6502049	Left hand transmission cooler lowering bracket	1
6502050	Right hand transmission cooler lowering bracket	1
6200043	Rivets	8
6200063	Washers	8

# BEFORE You Begin Installation

## Installation Overview

Installing the Bullet Proof Diesel Oil Cooler Kit is no more difficult than replacing the OEM oil cooler. That being said, it is important to remember that this is major surgery. Cleanliness and taking the time to do the job correctly are essential for a perfect installation.

There are two major stages to the installation:

1. Replacement of the OE EGR cooler and oil cooler with the Bullet Proof Diesel (BPD) Oil and EGR coolers. This is performed the same as OE repair procedures with only a few deviations and includes removal of the turbo and intake manifold.
2. Installation of the air cooled engine oil cooler and oil lines. This stage will also entail the removal of the air conditioning condenser. Please make sure that you have the equipment to do that according to the established EPA regulations.

*Please Note: There are some slight differences between different model years you should check on and be aware of. Please see the pages 14-17 regarding transmission coolers, turbo oil supply lines and power steering coolers.*

## Extra Help: Step-By-Step Instructions for Removal of the Intake Manifold

Detailed installation and removal instructions for the EGR Cooler and Engine Oil Cooler can be purchased online. Please go to [BulletProofDiesel.com](http://BulletProofDiesel.com). Click on “Questions? We have answers”. Click on “Do-It-Yourself” and find the link to purchase the information from [eAutoRepair.net](http://eAutoRepair.net) for your particular make and model. Once purchased, please proceed to the section:

**Repair → Type “INTAKE MANIFOLD” → Search**

**Engine → Click on “MECHANICAL”**

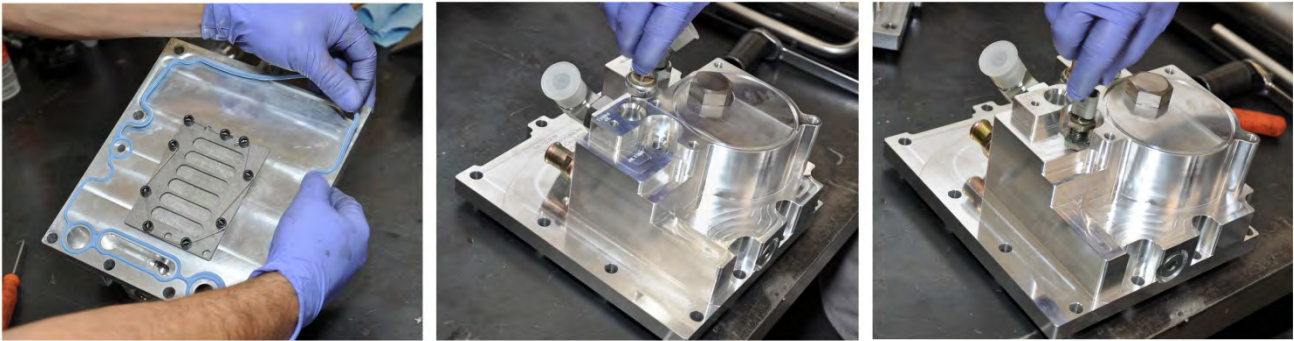
**Click on “ENGINE – 6.0 DIESEL” —F250-F550 PICKUPS’**

**Click on “HEADINGS”**

Search for the “**IN-VEHICLE REPAIR**” category, which includes removal and replacement instructions for the intake manifold.

## Installation Stage 1: The Oil Transfer Block

1. Follow the OE oil cooler replacement procedures (which include removal of the intake manifold and turbo).
2. Install the OE oil cooler gasket into the Bullet Proof Diesel (BPD) Oil Transfer Block.



3. Remove the oil pressure sender and oil temperature sensor from the OE oil cooler housing.
4. Gently clean and install the oil temperature sensor and the oil pressure sender into the oil transfer block.
5. When the OE oil cooler is completely removed, remove all of the oil and debris from the HPOP reservoir.



**TIP:**  
Plug the oil port  
with a lint free  
cloth to keep  
debris out  
of the system  
while cleaning.

6. Remove and discard the HPOP filter. The BPD Oil Transfer Block has an integral HPOP screen, made from stainless steel, which operates in place of the OE HPOP filter.
7. Use the OE bolts and torque specifications to install the BPD Oil Transfer Block.

8. Discard the OE silicone coolant hose. This is replaced by the silicone hose and spring clamps supplied in the kit. We recommend using the spring clamps over regular hose clamps due to the location and the difficulty involved with tightening regular hose clamps after the installation is complete. Spring clamps, by design, will tighten as the silicone rubber relaxes.
9. Continue following the OE installation procedure. Once the intake manifold is installed, but prior to the turbo being installed, the “in” oil hose (hose #3) should be installed.
10. Install the oil/fuel filter housing using the bolts supplied in the kit. There are two long and two short bolts. Install the bolts into the corresponding long and short holes on the oil filter housing. Use OE torque specifications to tighten the bolts.
11. Discard the OE oil filter element, but retain the element cover, as this will still be used to cover the void in the non-functional OE oil filter housing.
12. Complete the installation procedures except for installing the air filter assembly and intercooler air hoses.

NOTE: THERE ARE NUMEROUS UPGRADES AND UPDATES THAT CAN AND SHOULD BE INSTALLED DURING THIS PHASE. YOU CAN PURCHASE THE APPROPRIATE UPDATE KIT FROM [BULLETPROOFDIESEL.COM](http://BULLETPROOFDIESEL.COM) SEARCH KEYWORD: “PROFESSIONAL”



## Installation Stage 2: The Oil Cooler, Oil Filter, and Condenser Mount

### Remove the Condenser:

1. Mark hood latch position with a Sharpie marker or other.



2. Remove plastic condenser cover/upper radiator air deflector.

3. Remove hood latch mechanism.



4. Recover A/C refrigerant per EPA regulations.

NOTE: IF YOU ARE INSTALLING A COLD WEATHER PACKAGE PLEASE REFER TO PAGE 32 FOR FURTHER INSTRUCTION.

5. Remove “L” brackets that hold the condenser in place.

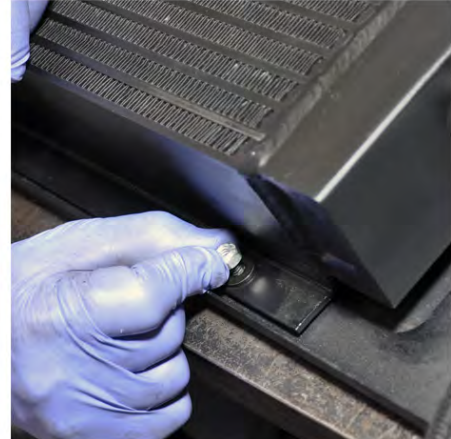


6. Disconnect the A/C lines from condenser AFTER the refrigerant is properly recovered.

## Mounting the Oil Cooler to the Bracket:

NOTE: PLEASE SEE COLD WEATHER KIT SECTION ON PAGE 31 IF APPLICABLE PRIOR TO THIS STEP.

7. Use the mounting studs on the condenser bracket along with the supplied hardware to secure the air cooler in place.



NOTE: THE INLET INTO THE OIL COOLER SHOULD BE ON THE DRIVER'S SIDE OF THE BRACKET. THE INLET IS POSITIONED IN THE MIDDLE OF THE COOLER, WHILE THE OUTLET IS NEAR THE TOP OF THE COOLER. THIS IS IMPORTANT SO THAT AIR WILL NOT BECOME TRAPPED WITHIN THE COOLER.



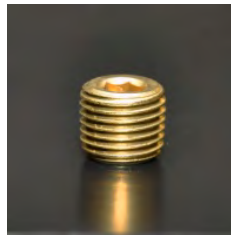
On the BPD oil cooler, there are three ports. The two large ports are for oil in and oil out. The small port can be used for any of the following:

- Supply line for a by-pass oil filtration system.
- Port for engine oil temperature or engine oil pressure gauge.
- Other uses such as oil supply for a secondary turbo, etc.

This port should be blocked off if you do not intend to use it for any of the above.

**To block this port off properly, follow these steps PRIOR to installation of the air cooler:**

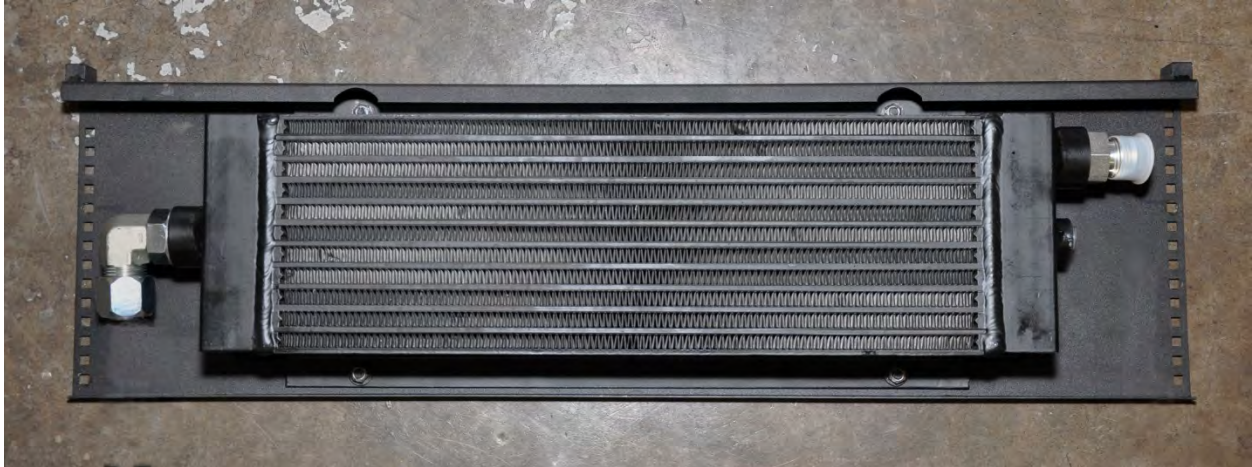
8. Identify the  $\frac{1}{4}$  pipe-plug brass insert that fits this port (provided with kit).



9. Wrap the brass plug with Teflon pipe-sealing tape and install into the cooler. **DO NOT OVER TIGHTEN.**

10. After installation of the oil cooler system, check for oil leaks with the engine running.





NOTE: ORIENT THE OIL COOLER AS SHOWN, CAREFUL TO NOTE INLET AND OUTLET POSITIONS (OUTLET IS HIGHER THAN INLET TO AVOID TRAPPING AIR IN THE COOLER).

## Mounting the Bracket to the Condenser:

11. Place condenser on working surface (see picture)



12. Identify the holes in the condenser.

NOTE: IF YOUR CONDENSER IS DIFFERENT THAN WHAT IS SHOWN, YOU MAY HAVE AN AFTERMARKET CONDENSER OR A NEWER OEM CONDENSER. PLEASE REFER TO PAGE 2 FOR MORE DETAILS.



13. Position the oil cooler and bracket on the condenser.



Supplied mounting hardware.

14. Align the square slots/holes in the bracket with the holes in the condenser. Be sure to allow for the condenser bracket to align with the top of the condenser when finished.

15. IF NO HOLE IS AVAILABLE for the mounting hardware (this is a rare occurrence) you can drill a hole through the edge of the condenser.

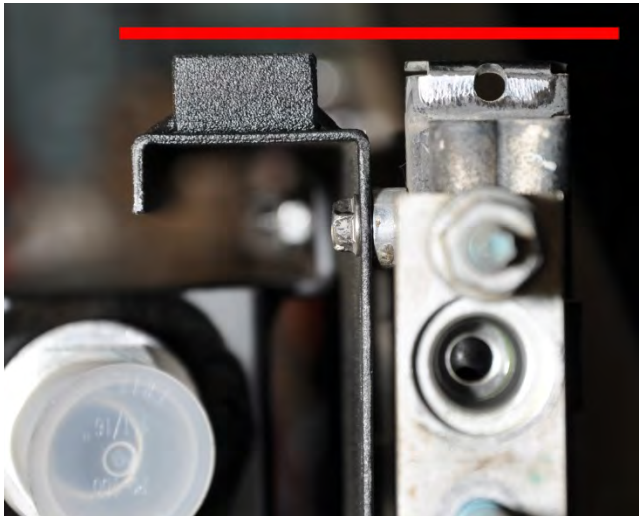
NOTE: USE A 1/8" (.125) DIAMETER DRILL BIT AND CAREFULLY ALIGN THE HOLE POSITION SO THAT IT AND THE INSTALLED SCREW WILL NOT DAMAGE THE TUBES AT THE END OF THE CONDENSER.

NOTE: MAKE SURE YOU USE THE 4 ALUMINUM SPACERS AS SHOWN IN THE NEXT PICTURE. THIS CREATES AN IMPORTANT AIR GAP BETWEEN THE OIL COOLER AND THE A/C CONDENSER.



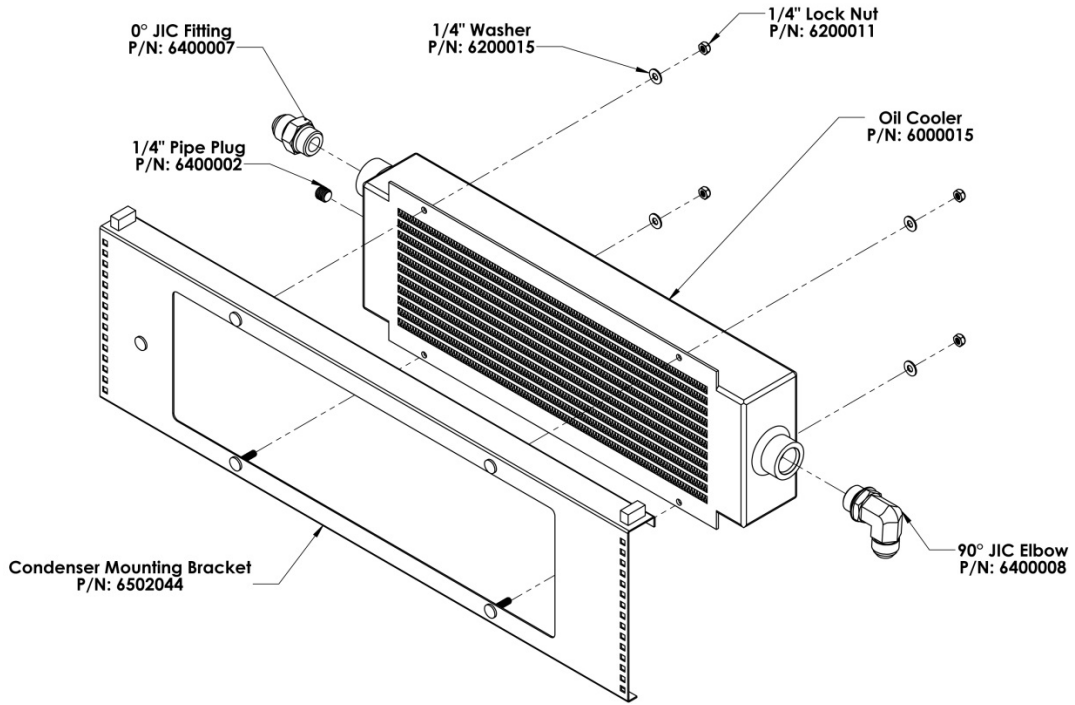


16. Mount the bracket to the condenser using the hardware provided. Drill only if necessary.
17. Secure the bracket to the condenser with all four screws, making final adjustments such that the top level of the bracket aligns with the top level of the condenser.



Be sure that the cooler bracket crowns are aligned with the condenser crowns.

18. Mount the oil hoses, (#2 and #3) provided on the condenser at this time – be sure to tighten the hoses now, as this is the easiest time to do so.





### ***Note on Transmission Coolers:***

Most F-Series trucks are equipped with a transmission cooler. This cooler is located behind the condenser, underneath the hood latch. While most of these coolers are 14 inches tall, some heavy-duty transmission coolers are 17 inches tall. The 17 inch transmission coolers will need to be lowered to allow for enough room to clear the BulletProof Engine Oil Cooler.



If you have the 17 inch tall cooler, you will need the transmission cooler lowering brackets, included with the kit.



The picture above shows the transmission cooler before modifications.

**NOTE: VERIFY THAT YOUR TRANSMISSION FLUID LINES ARE NOT KINKED OR PINCHED AFTER LOWERING THE TRANSMISSION COOLER.**



This shows the necessary modification to the mounting stems at the bottom of the transmission cooler, it should lower it by 2.5 inches. Some drilling and cutting will be necessary.

**NOTE: VERIFY THAT YOUR TRANSMISSION FLUID LINES ARE NOT KINKED OR PINCHED AFTER LOWERING THE TRANSMISSION COOLER.**

## Installing the Condenser with the Oil Cooler Attached:

19. Install the condenser loosely in the truck. Check to make sure that the orientation of the cooler is as shown and that nothing is going to hit, rub or interfere with it. Two people definitely make this part of the installation much easier.
20. Install the condenser "L" brackets on the newly installed cooler bracket crowns.



**NOTE: PRE-FILLING THE ENGINE OIL COOLER WITH OIL IS BOTH NECESSARY AND PARAMOUNT!**

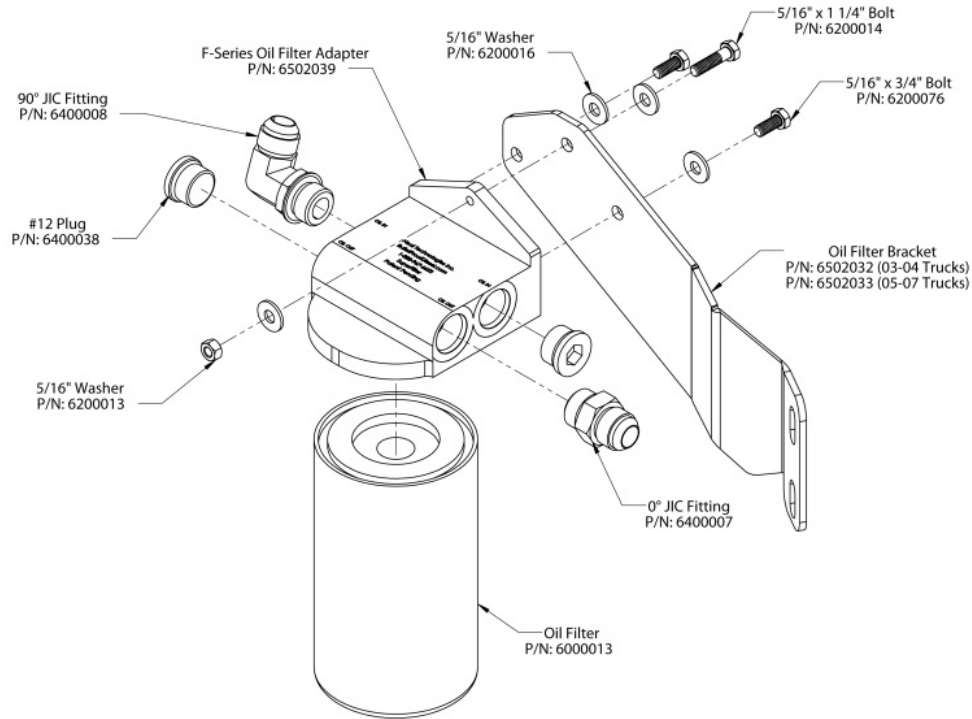
21. Install the A/C hoses.
22. Recharge the A/C system as a last step just in case you have an oil leak.
23. Reinstall the hood latch (using the marks as a guide) and the condenser cover/upper radiator air deflector.

24. Bolt the oil filter adapter to the oil filter mounting bracket using the supplied 5/16" hardware



25 Install the hose fittings into the oil filter housing exactly as shown above.

**NOTE: SEE APPROPRIATE HOSE ROUTING DIAGRAM FOR FITTING PLACEMENT AND ORIENTATION**



**NOTE: VERIFY THAT THE HOSE FITTINGS ARE IN THE PROPER PORTS. ONE OIL IN AND ONE OIL OUT MUST BE USED IN ORDER TO PREVENT ENGINE DAMAGE. MAKE SURE THAT HOSE #1 FROM THE ENGINE TO THE OIL FILTER IS ATTACHED TO AN “OIL IN” PORT, AND THAT HOSE #2 EXITING THE OIL FILTER TO THE COOLER IS “OIL OUT”**

26. Mount the oil filter bracket to the backside of the bumper frame rail on the drivers’ side using the OE bumper mounting bolts and hardware to secure the oil filter bracket. It is generally easier to connect both hoses to the oil filter adapter before mounting the oil filter assembly to the vehicle frame.

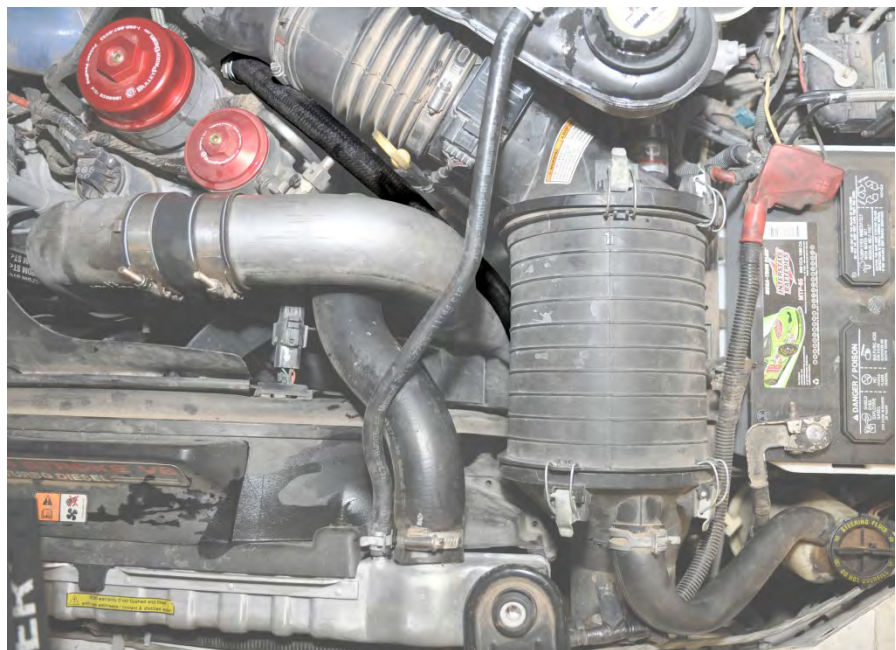
**NOTE: ON SOME MODELS, THE FRONT LEAF SPRING BOLT MAY NEED TO BE TRIMMED FOR CLEARANCE OF THE OIL FILTER.**

## Oil Hose Routing

1. Route oil hose #1 (Oil Out from Engine on Driver's Side) from transfer block down and under the air cleaner. In this picture, the air cleaner has been removed.



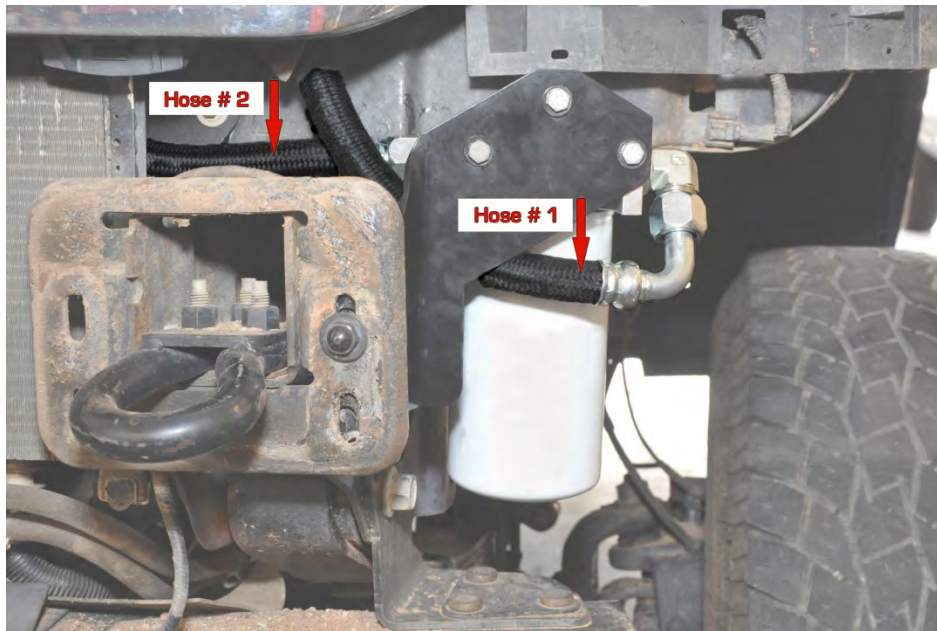
2. This view shows the hose running from under the air cleaner element along the intercooler line and towards the front of the truck. Make sure to secure the oil hose away from the intercooler.





3. Hose #1 is routed out and down towards the engine oil filter assembly.

4. Route hose #1 down and under the engine oil assembly as shown. Secure the hose to prevent rubbing or chaffing.



NOTE: THE 56" HOSE MAY SEEM SHORT BUT HAS BEEN THOROUGHLY TESTED AND PROVES TO WORK BEST IN THIS PATH.

5. To make installation of the #2 hose easier, make sure the oil filter assembly is firmly mocked up in place. Once the hose #1 from the engine is connected to the oil filter assembly, install hose #2
6. Install hose #3 to the cooler if you haven't already done so. Route the hose through the core support where the A/C hoses and intercooler come through.



NOTE: TAKE CARE TO INSURE THE OIL HOSE AND A/C HOSES DO NOT RUB. THIS COULD LEAD TO THE EVENTUAL FAILURE OF THE A/C HOSES.

## Tech Tips for Weatherizing Your Oil Lines and Fittings



Some of our customers live in areas/climates where salt or chemicals are used for deicing the roads in the winter months. These substances can cause premature deterioration of the fittings and hoses.

Instead of replacing these parts as they wear from the attack of chemicals, a simple rubberized undercoating (pictured) can help ensure that your fittings are protected against the elements, so you can enjoy your Bullet Proof Diesel products for years to come.



## Installation Wrap-Up

1. Adjust oil filter assembly placement to clearance the bumper support brackets and tighten hardware. Install the previously removed bumper support brackets and install the rock panel bracket. If there is interference with the oil filter assembly, re-adjust the oil filter bracket until the oil filter assembly has proper clearance.
2. Once the above steps are complete, prime the oil cooler and filter with oil. This can be accomplished by pumping oil from a bulk oil dispenser through the oil supply hose or by filling the oil cooler and filter with oil at the time of installation.

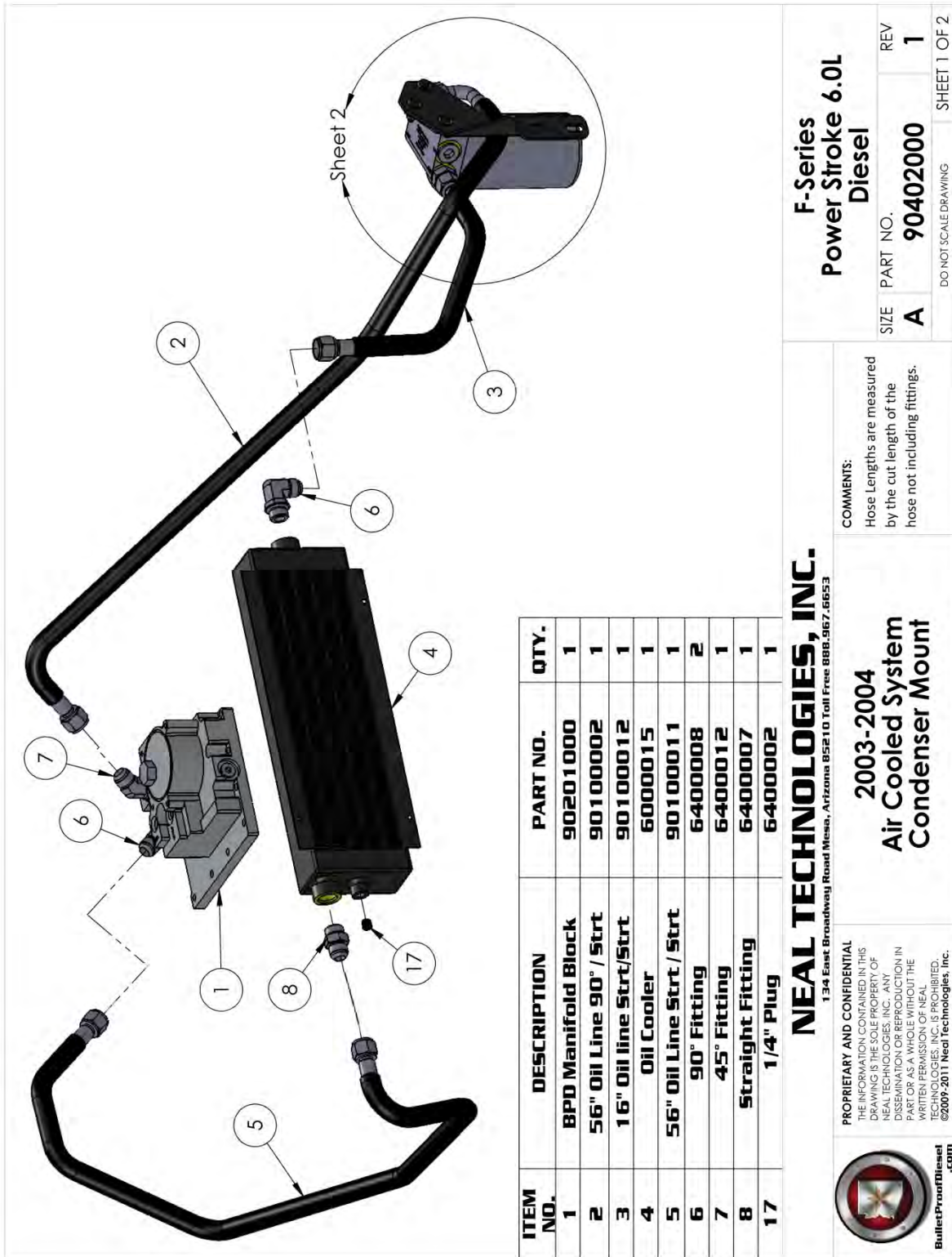


3. Finish the OE oil cooler installation procedure. Make sure all connections are tight.

ON THE 2005-2007 INSTALLATION: INSTALL THE ROCK PANEL AS SHOWN IN PLACE OF THE BUMPER BRACKET.

THE 2003-2004 VERSION HAS A ROCK PANEL, TOO. IT SERVES A SIMILAR PURPOSE BUT LOOKS AND FITS A BIT DIFFERENTLY.

# Hose Routing Diagrams



**F-Series  
Power Stroke 6.0L  
Diesel**

SIZE	PART NO.	REV
<b>A</b>	<b>90402000</b>	<b>1</b>
DO NOT SCALE DRAWING		SHEET 1 OF 2

**COMMENTS:**  
Hose Lengths are measured  
by the cut length of the  
hose not including fittings.

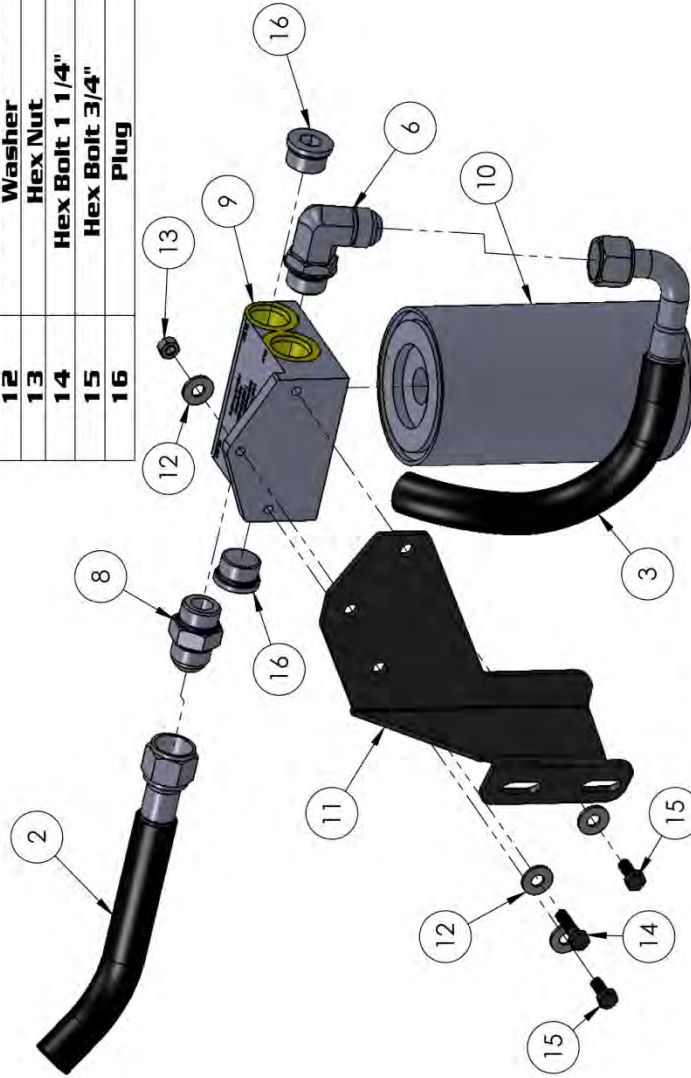
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**2003-2004  
Air Cooled System  
Condenser Mount**



1 2 3 4 5

ITEM NO.	DESCRIPTION	PART NO.	QTY.
2	16" Oil Line Strt/5str	90100012	1
3	56" Oil Line 90°/5str	90100002	1
6	90° Fitting	64000008	1
8	Straight Fitting	64000007	1
9	BPD Oil Filter Adapter	6502039	1
10	Oil Filter	6000013	1
11	BPD Oil Filter Bracket	6502032	1
12	Washer	6200016	4
13	Hex Nut	6200013	1
14	Hex Bolt 1 1/4"	6200014	1
15	Hex Bolt 3/4"	6200076	2
16	Plug	6400038	2



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### 2003-2004 Air Cooled System Condenser Mount

**COMMENTS:**  
 Hose Lengths are measured  
 by the cut length of the  
 hose not including fittings.

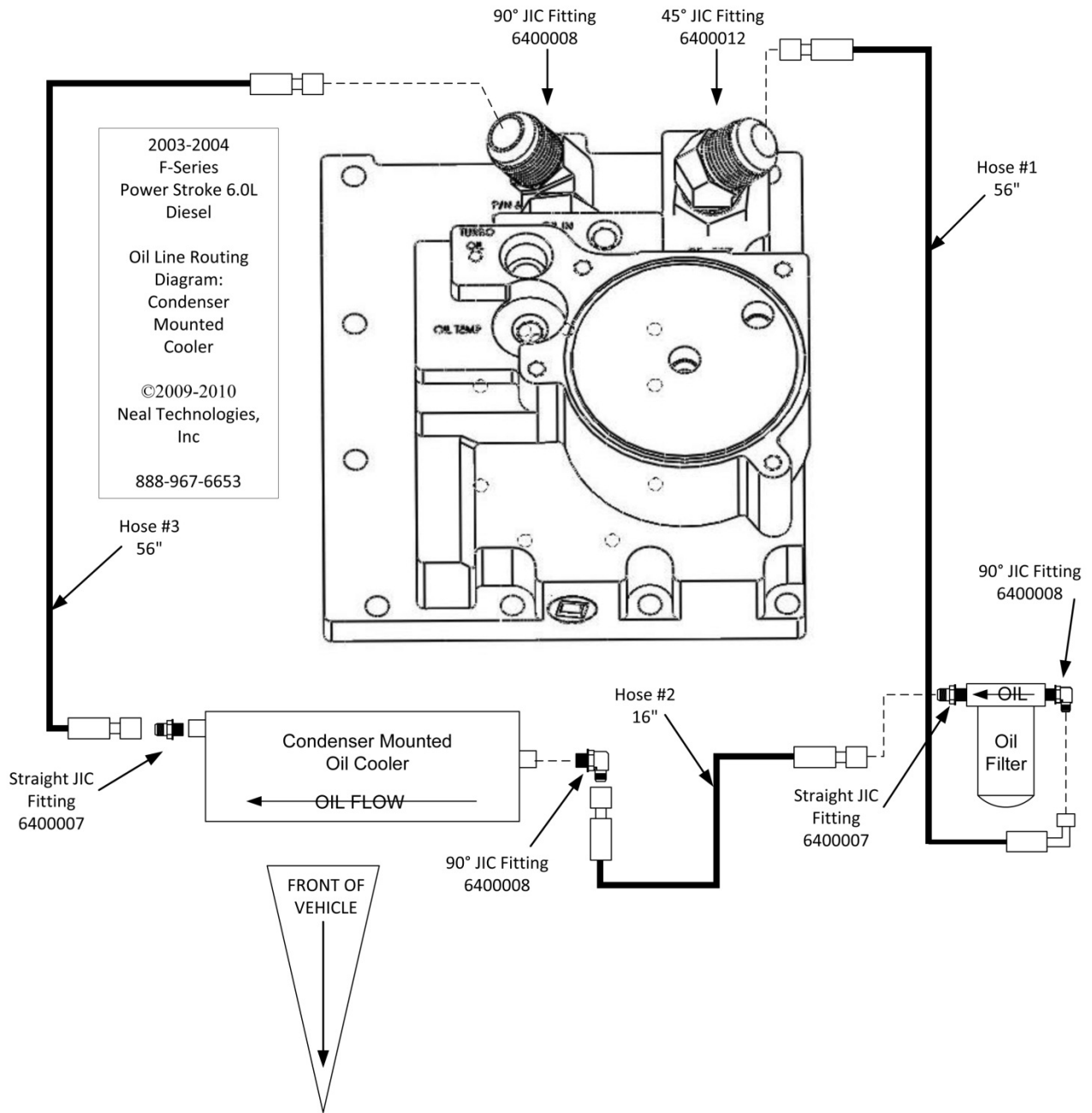
### F-Series Power Stroke 6.0L Diesel

SIZE **A** PART NO. **90402000** REV **1**

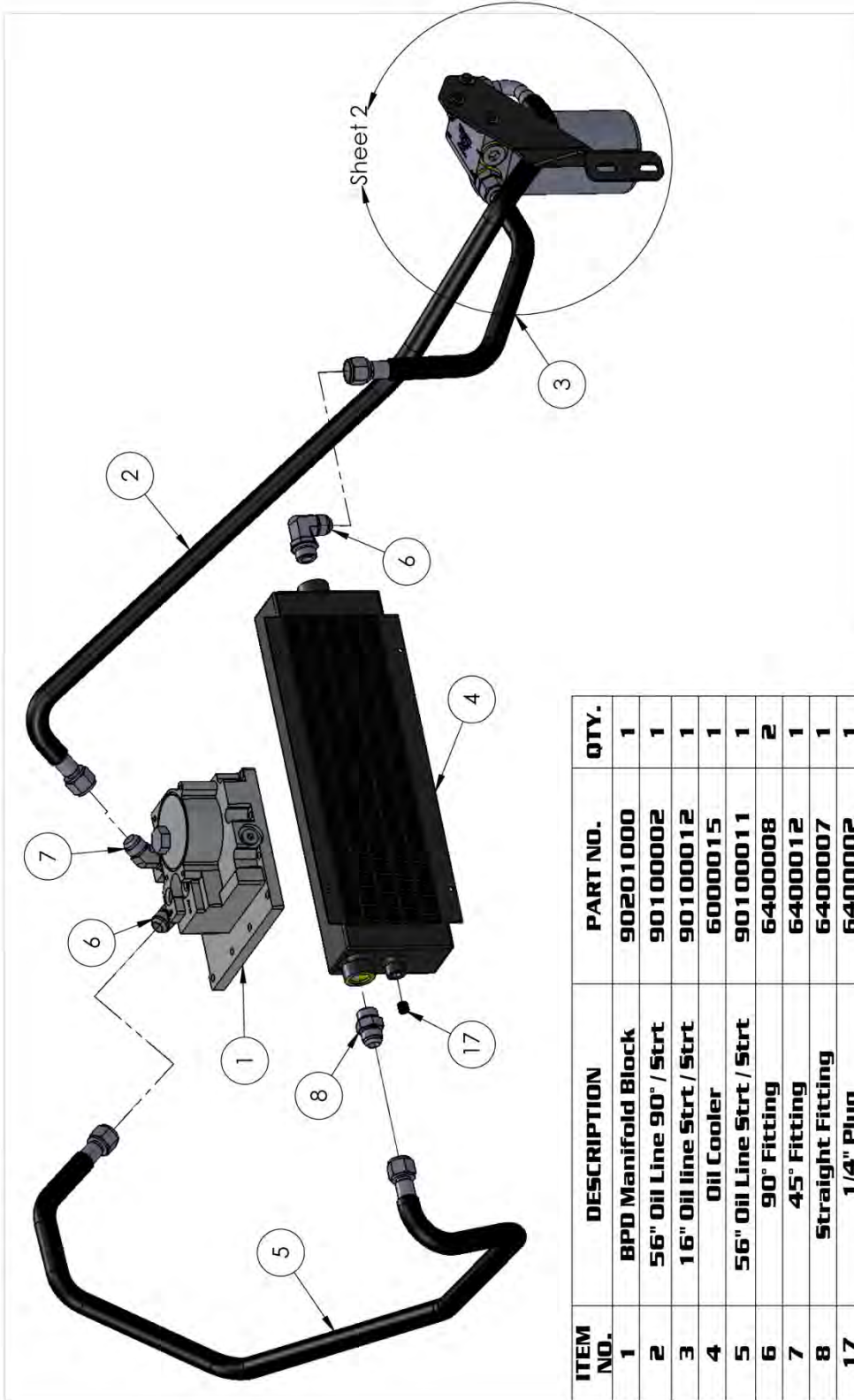
DO NOT SCALE DRAWING SHEET 2 OF 2

1 2 3 4 5

## Hose Routing Diagram: 2003-2004 F-Series, Condenser Mounted



NOTE: HOSE LENGTH IS MEASURED BY THE CUT LENGTH OF THE HOSE NOT INCLUDING FITTINGS.



ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	BPD Manifold Block	90201000	1
2	56" Oil Line 90° / Strt	90100002	1
3	16" Oil line Strt / Strt	90100012	1
4	Oil Cooler	6000015	1
5	56" Oil Line Strt / Strt	90100011	1
6	90° Fitting	6400008	2
7	45° Fitting	6400012	1
8	Straight Fitting	6400007	1
17	1/4" Plug	6400002	1

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**2005-2007  
 Air Cooled System  
 Condenser Mount**

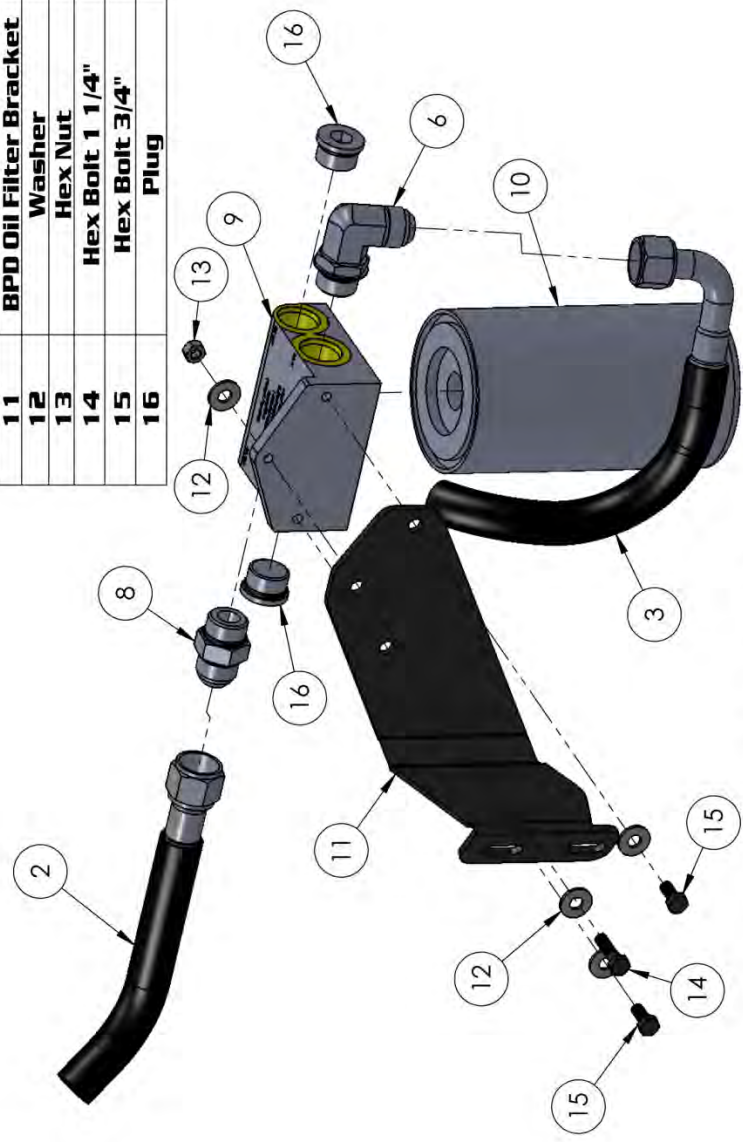
**COMMENTS:**  
 Hose Lengths are measured by the cut length of the hose not including fittings.

**F-Series  
 Power Stroke 6.0L  
 Diesel**

SIZE	PART NO.	REV
<b>A</b>	<b>90404000</b>	<b>1</b>

DO NOT SCALE DRAWING SHEET 1 OF 2

ITEM NO.	DESCRIPTION	PART NO.	QTY.
2	16" Oil Line Strt / Strt	90100012	1
3	56" Oil Line 90° / Strt	90100002	1
6	90° Fitting	6400008	1
8	Straight Fitting	6400007	1
9	BPD Oil Filter Adapter	6502039	1
10	Oil Filter	6000013	1
11	BPD Oil Filter Bracket	6502033	1
12	Washer	6200016	4
13	Hex Nut	6200013	1
14	Hex Bolt 1 1/4"	6200014	1
15	Hex Bolt 3/4"	6200076	2
16	Plug	6400038	2



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2005-2007  
**Air Cooled System  
 Condenser Mount**

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**F-Series  
 Power Stroke 6.0L  
 Diesel**

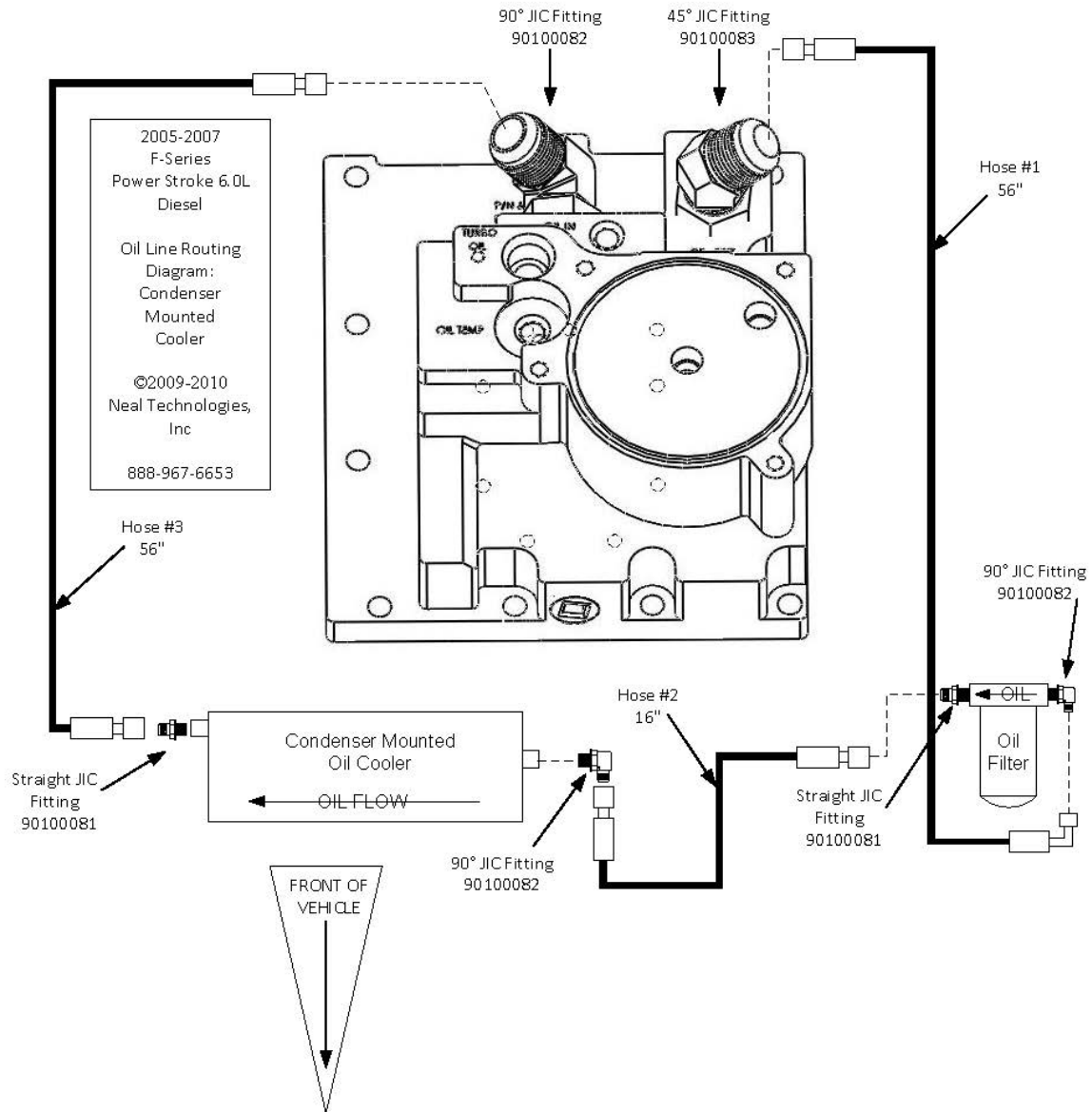
SIZE **A** PART NO. **90404000** REV **1**

DO NOT SCALE DRAWING SHEET 2 OF 2

**COMMENTS:**  
 Hose Lengths are measured by the cut length of the hose not including fittings.

1 2 3 4 5

## Hose Routing Diagram: 2005-2007 F-Series, Condenser Mounted



NOTE: HOSE LENGTH IS MEASURED BY THE CUT LENGTH OF THE HOSE NOT INCLUDING FITTINGS.



**BULLETPROOFDIESEL**  
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## BULLETPROOF COLD WEATHER KIT

Neal Technologies, Inc.  
(Patent pending)

Updated 8/26/2020





The purpose of the cold weather kit is to allow operation of 6.0L Powerstroke diesel engines in cold climates where ambient air temperatures are low enough to cause concern when using an air-to-liquid cooler.

The kit consists of an oil thermostat and the necessary hardware and hoses to install the thermostat.

### **THE COLD WEATHER KIT FUNCTIONS AS FOLLOWS:**

Oil from the engine is pumped through the BulletProof Oil Cooler System by the OEM low pressure oil pump. After being filtered the oil then heads to the cooler. If the oil has not reached the desired operating temperature, it is allowed to bypass the engine oil cooler and return to the engine. Once the desired engine oil temperature has been reached, the thermostat closes and eliminates the path by which oil can circumvent the oil cooler. Oil will follow the path of least resistance. When cold, the oil cooler offers greater resistance to flow than the oil cooler thermostatic bypass circuit. At no time is the oil cooler blocked or made to be static. A path of less resistance is opened or blocked depending on oil temperature.

A pressure bypass valve is also incorporated into the thermostat assembly. This will allow a portion of the oil to bypass the oil cooler in the event a pressure differential greater than 18PSI exists between the inlet and outlet of the engine oil cooler. This ensures a constant flow of oil to the engine under extreme operating conditions such as racing or subfreezing climates.



**TO INSTALL THE COLD WEATHER KIT:**

1. Make sure all components are CLEAN.
2. Remove the A/C condenser. Be sure to follow the Factory guidelines for this procedure.
3. *If you are retrofitting the cold weather kit to an existing installation of the BulletProof Oil Cooler Kit, you will need to remove the oil cooler from the condenser mount and remove the oil cooler mount from the condenser.*
4. Install the 90° fitting to the cooler.



5. Wrap the 1/4" brass pipe plug with sealing tape and install.



6. Install the thermostat to the cooler.



7. Set the assembly onto the bracket, then remove the plastic plug and install the 45° fitting to the thermostat hand tight.



8. Line up hard line and hand tighten nuts. \*Be sure to align the fittings as shown in the first image.

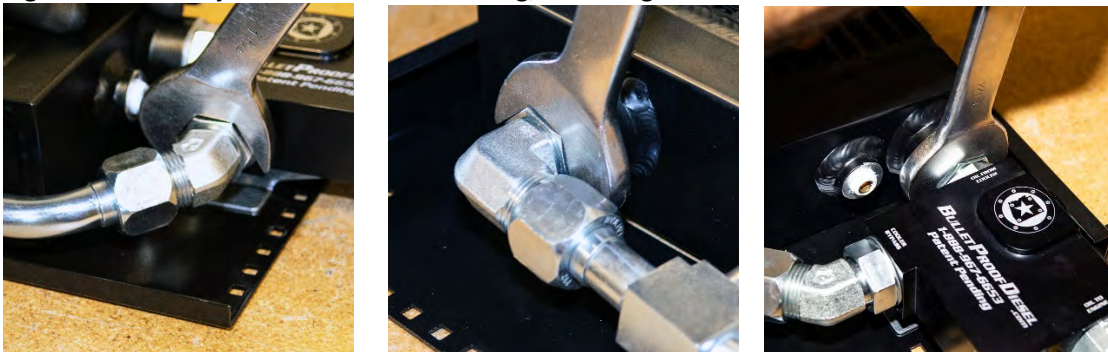


↓ HOW **NOT** TO LINE UP THE HARD LINE ↓

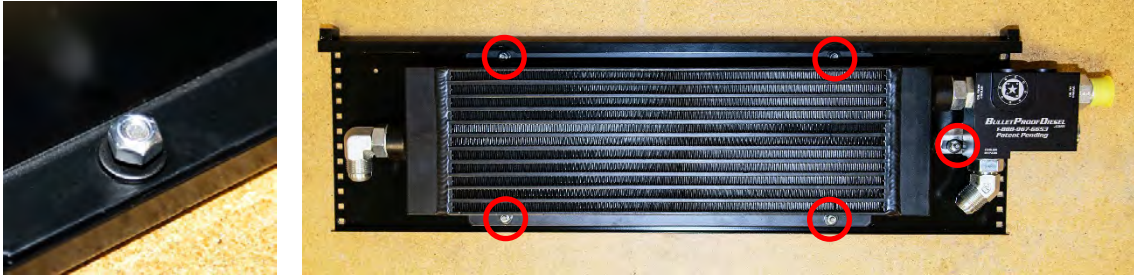


**NOTE:** If the tube does not line up properly, the 90° fitting can be turned out to increase the distance between the two fittings.

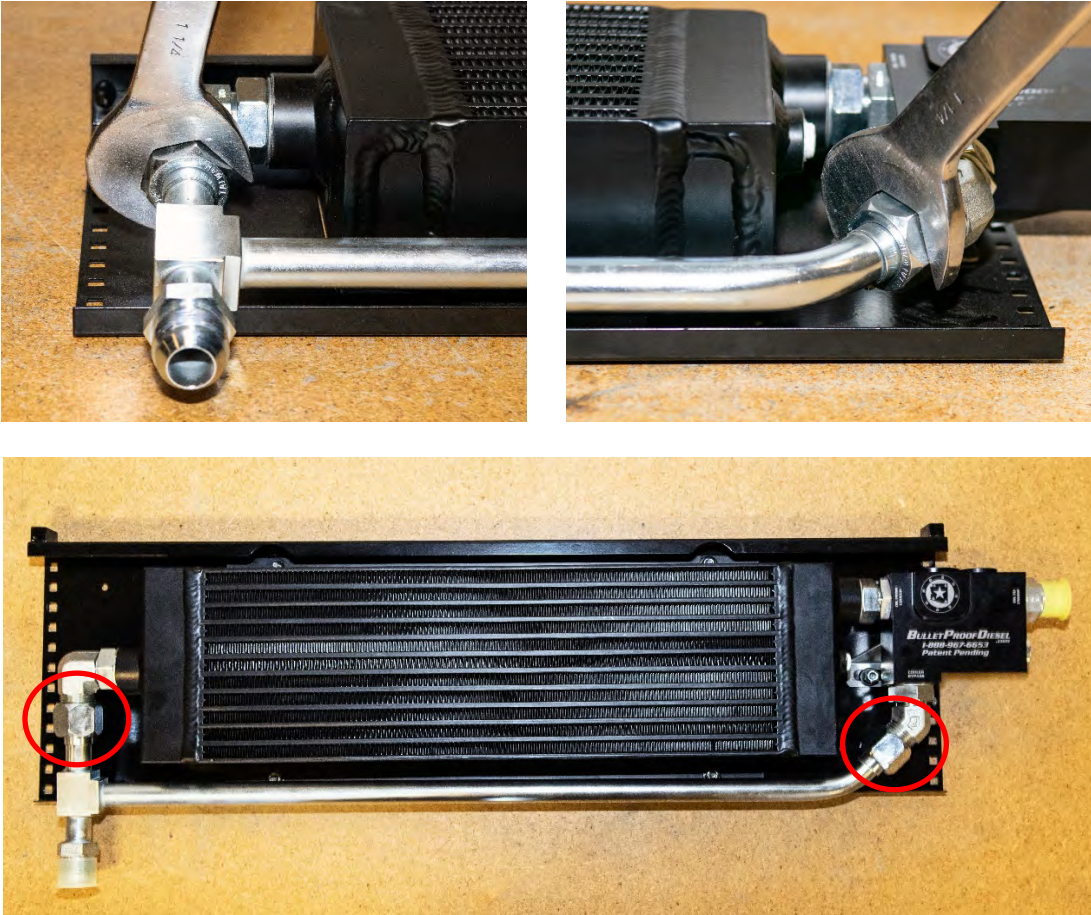
9. Tighten the three jam nuts on the 45° fitting, 90° fitting and the thermostat.



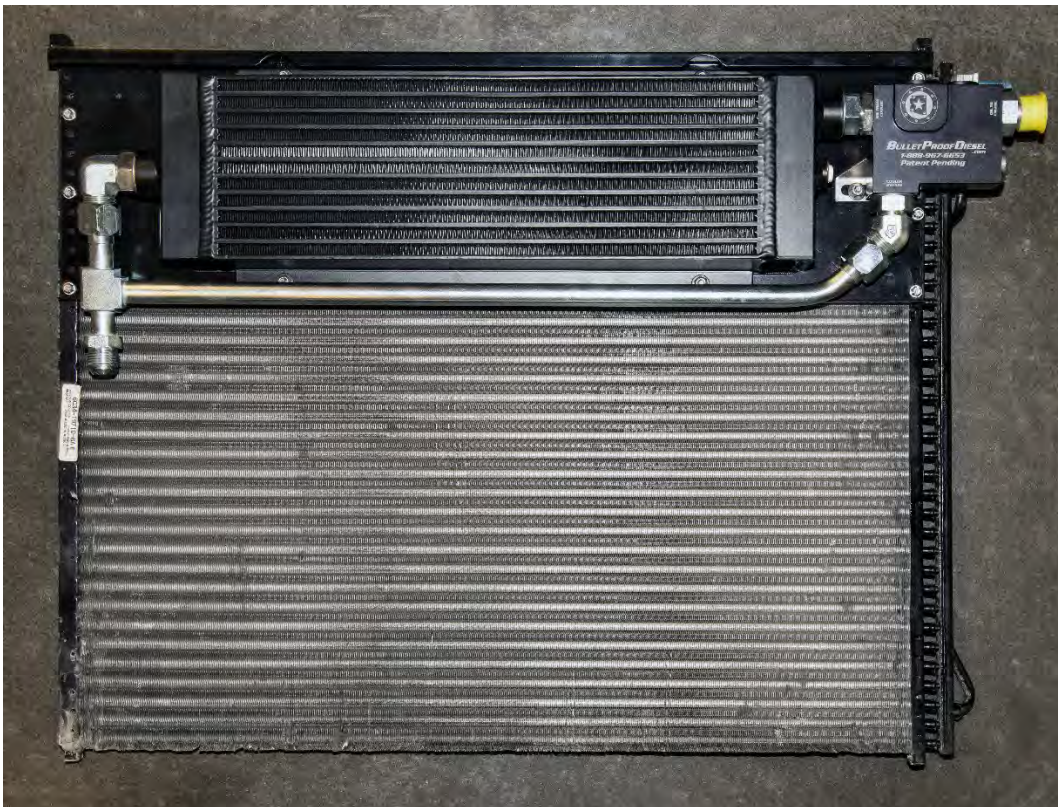
10. Remove the hard line, install all 5 washers and tighten all 5 nuts onto the bracket.



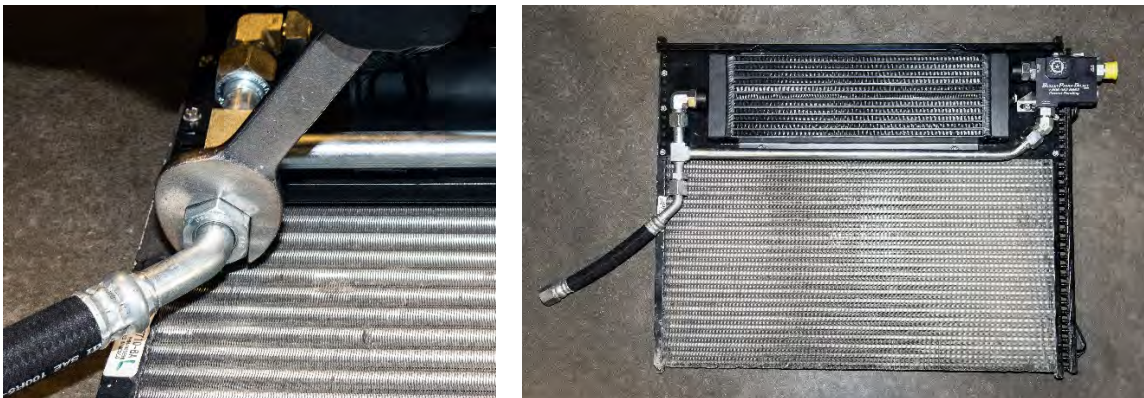
11. Put the hardline back into position and tighten into place.



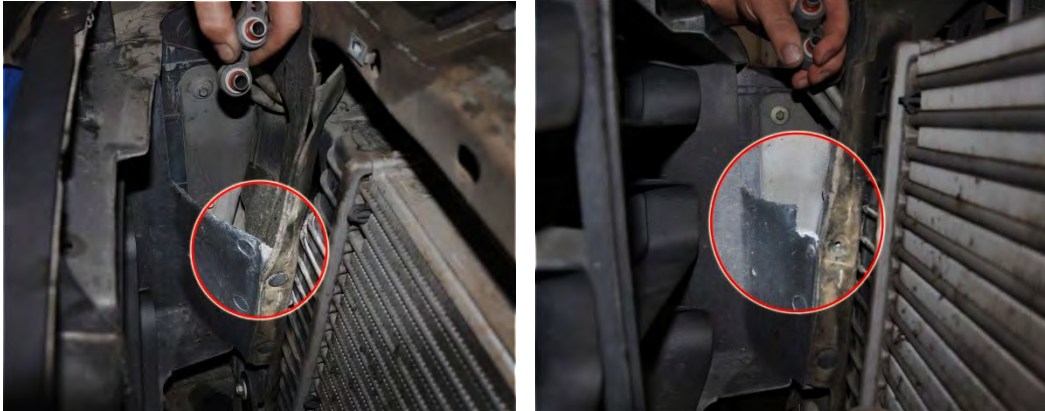
12. Install the oil cooler assembly onto the condenser as shown using the supplied hardware.



13. Install the short hose onto the hardline as shown below.

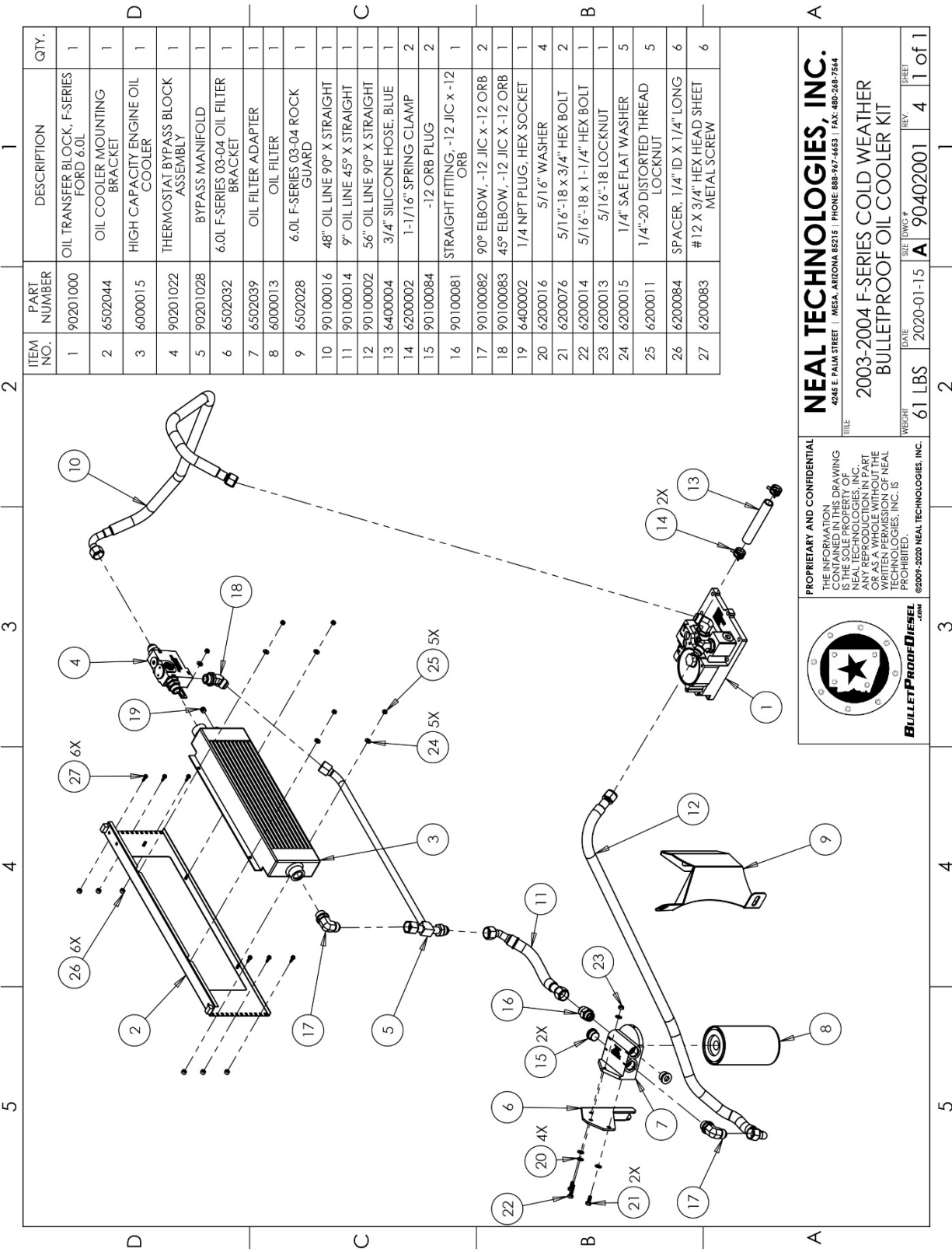


14. With the condenser removed cut out the marked area with a hacksaw or other suitable tool.



15. Re-install the condenser and ensure adequate clearance of both the transmission cooler and the headlamp support bracket.
16. Refer back the Bullet Proof Diesel Engine Oil Cooler installation manual for additional instructions if you need to continue installing the Oil Cooler Kit.

**NOTE: REMEMBER TO PRIME TO OIL SYSTEM BEFORE STARTING THE ENGINE. FAILURE TO DO SO CAN RESULT IN SEVERE ENGINE DAMAGE.**



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	90201000	OIL TRANSFER BLOCK, F-SERIES FORD 6.0L	1
2	6502044	OIL COOLER MOUNTING BRACKET	1
3	6000015	HIGH CAPACITY ENGINE OIL COOLER	1
4	90201022	THERMOSTAT BYPASS BLOCK ASSEMBLY	1
5	90201028	BYPASS MANIFOLD	1
6	6502032	6.0L F-SERIES 03-04 OIL FILTER BRACKET	1
7	6502039	OIL FILTER ADAPTER	1
8	6000013	OIL FILTER	1
9	6502028	6.0L F-SERIES 03-04 ROCK GUARD	1
10	90100016	48" OIL LINE 90° X STRAIGHT	1
11	90100014	9" OIL LINE 45° X STRAIGHT	1
12	90100002	56" OIL LINE 90° X STRAIGHT	1
13	6400004	3/4" SILICONE HOSE, BLUE	1
14	6200002	1-1/16" SPRING CLAMP	2
15	90100084	-12 ORB PLUG	2
16	90100081	STRAIGHT FITTING, -12 JIC X -12 ORB	1
17	90100082	90° ELBOW, -12 JIC X -12 ORB	2
18	90100083	45° ELBOW, -12 JIC X -12 ORB	1
19	6400002	1/4 NPT PLUG, HEX SOCKET	1
20	6200016	5/16" WASHER	4
21	6200076	5/16"-18 X 3/4" HEX BOLT	2
22	6200014	5/16"-18 X 1-1/4" HEX BOLT	1
23	6200013	5/16"-18 LOCKNUT	1
24	6200015	1/4" SAE FLAT WASHER	5
25	6200011	1/4"-20 DISTORTED THREAD LOCKNUT	5
26	6200084	SPACER, 1/4" ID X 1/4" LONG	6
27	6200083	#12 X 3/4" HEX HEAD SHEET METAL SCREW	6

**NEAL TECHNOLOGIES, INC.**  
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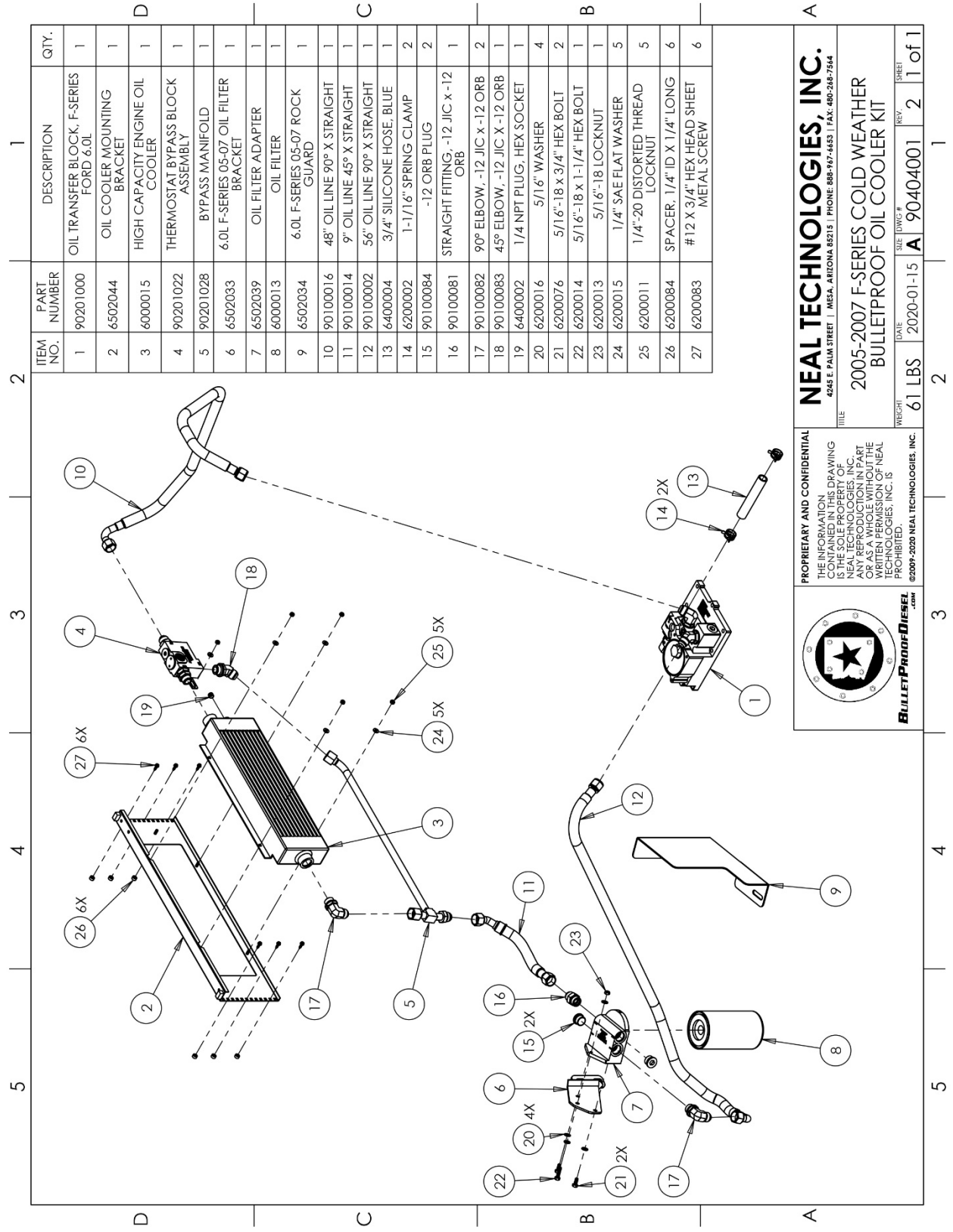
TITLE: 2003-2004 F-SERIES COLD WEATHER BULLETPROOF OIL COOLER KIT

WEIGHT: 61 LBS    SIZE/DWG #: A 90402001    SHEET: 4 of 1

DATE: 2020-01-15    REV.:

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ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	90201000	OIL TRANSFER BLOCK, F-SERIES FORD 6.0L	1
2	6502044	OIL COOLER MOUNTING BRACKET	1
3	6000015	HIGH CAPACITY ENGINE OIL COOLER	1
4	90201022	THERMOSTAT BYPASS BLOCK ASSEMBLY	1
5	90201028	BYPASS MANIFOLD	1
6	6502033	6.0L F-SERIES 05-07 OIL FILTER BRACKET	1
7	6502039	OIL FILTER ADAPTER	1
8	6000013	OIL FILTER	1
9	6502034	6.0L F-SERIES 05-07 ROCK GUARD	1
10	90100016	48" OIL LINE 90° X STRAIGHT	1
11	90100014	9" OIL LINE 45° X STRAIGHT	1
12	90100002	56" OIL LINE 90° X STRAIGHT	1
13	6400004	3/4" SILICONE HOSE, BLUE	1
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15	90100084	-12 ORB PLUG	2
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26	6200084	SPACER, 1/4" ID X 1/4" LONG	6
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 4245 E. PALM STREET | MESA, ARIZONA 85215 | PHONE 888-767-6453 | FAX: 480-249-7544

TITLE: 2005-2007 F-SERIES COLD WEATHER BULLETPROOF OIL COOLER KIT

WEIGHT: 61 LBS    SIZE: DWG # A 90404001    REV: 2    1 of 1

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