

INSTALLATION GUIDE

2011+ FORD 6.7L POWERSTROKE PERFORMANCE OIL COOLER KIT | SKU: MMOC-F2D-11K



SCAN CODE OR CLICK HERE TO WATCH THE INSTALLATION TIPS

TABLE OF CONTENTS

- Pg 1 RESOURCES & CONTACT INFORMATION
- Pg 2 EXPLODED DIAGRAM & PARTS BREAKDOWN
- Pg 3 IMPORTANT SAFETY INFORMATION **TOOLS NEEDED INSTALLATION TIME INSTALLATION DIFFICULTY** INSTALLATION INSTRUCTIONS
- **Pg 11 CARE & MAINTENANCE DISPOSAL INSTRUCTIONS WARRANTY INFORMATION**

RESOURCES & CONTACT



CALL 1-877-GOMISHI

CUSTOMER SERVICE HOURS: MON-FRI 8:30AM-5:00PM EST



MISHIMOTO



GOMISHIMOTO



MISHIMOTO



WEBSITE

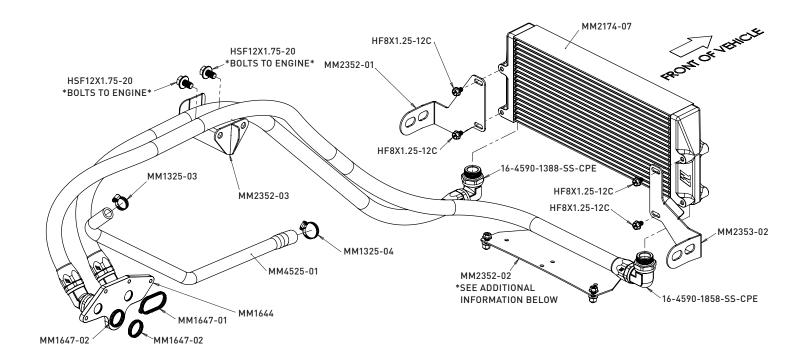
WWW.MISHIMOTO.COM



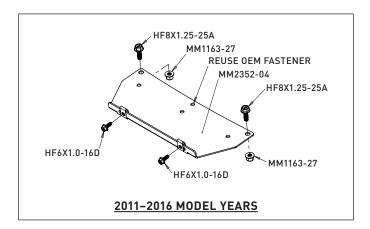
ENGINEERING BLOG

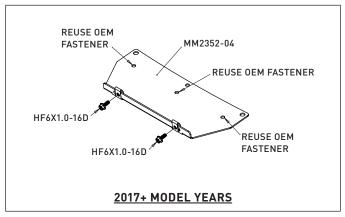
WWW.MISHIMOTO.COM/ENGINEERING





PARTS BREAKDOWN		
PART NUMBER	DESCRIPTION	QUANTITY
MM2174-07	OIL COOLER	1
MM2352-01	BRACKET 1	1
MM2352-02	BRACKET 2	1
MM2352-03	BRACKET 3	1
MM2352-04	BRACKET 4	1
MM1644	ADAPTER	1
MM1163-27	LOCKING NUT	2
HF6X1.0-16D	BOLT	2
HF8X1.25-12C	BOLT	4
HSF12X1.75-20	BOLT	2
HF8X1.25-25A	BOLT	2
MM4524-01	HOSE	1
MM1325-3	CLAMP	1
MM1325-4	CLAMP	1
MM1647-01	OVAL O-RING	1
MM1647-02	ROUND O-RING	2
16-4590-1388-SS-CPE	HOSE	1
16-4590-1858-SS-CPE	HOSE	1







IMPORTANT SAFETY INFORMATION

- > Mishimoto recommends you use safety glasses and protective gloves during the install of their products
- > Raise vehicle only on jack stands or on a vehicle lift
- > Allow vehicle to cool completely prior to attempting installation
- > Do not run the engine or drive the vehicle while overheating; serious damage can occur
- > Please dispose of any liquids properly
- > Mishimoto is not responsible for any vehicle damage or personal injury due to installation errors, misuse, or removal of Mishimoto products
- > If you need any assistance while installing our products, reach out to our Customer Service Team at 1-877-GOMISHI

TOOLS NEEDED

5.5MM SOCKET 10MM WRENCH

7MM SOCKET 13MM WRENCH

8MM SOCKET 18MM WRENCH

10MM SOCKET 1-1/2" WRENCH

15MM SOCKET **NEEDLE NOSE PLIERS**

18MM SOCKET FLAT HEAD SCREWDRIVER

T30 TORX BIT PANEL TOOL

1/4" RATCHET AND EXTENSION PICK TOOL

1/4" TORQUE WRENCH PRY BAR

3/8" RATCHET **FUNNEL**

8MM WRENCH DRAIN PAN

INSTALLATION TIME 6 HOURS









INSTALLATION INSTRUCTIONS

- 01. Drain the coolant from primary radiator.
 - **If you are installing this kit on a 2011-2016 model year, please skip to Step 9.**
- **02.** Remove the front license plate from the license plate bracket. (2x screws)
- 03. Remove the license plate bracket. (2x plastic pop clips)





04. Remove the fasteners from the bumper ducting. (4x tree clips, 6x 8mm bolts)





- **05.** Remove the transmission oil cooler from the front cross member and let it hang down from the vehicle. (2x 10mm nuts, 2x studs, 1x line retainer tree clip)
 - Tip Push the transmission cooler towards the driver side of the vehicle and then pull downward to allow it to hang down below the cross member.



06. Remove the nuts and bolts securing the front cross member in place then push up and rotate forward to remove it from the vehicle. (4x 15mm nuts, 2x stud brackets)



- 07. Remove the bumper ducting through the rear of the bumper.
- **08.** Reinstall the front cross member. (4x 15mm nuts, 2x stud brackets)
- **09.** Remove the nuts located at the inside front end of the frame. (4x 18mm nuts)

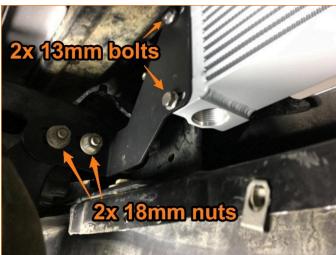


2011+ FORD 6.7L POWERSTROKE OIL COOLER KIT

INSTALLATION GUIDE

10. Install the passenger-side bracket to the frame, slide the oil cooler into place behind the bumper, then install the driver-side bracket to the frame. Leave the nuts loose. (4x 18mm nuts)

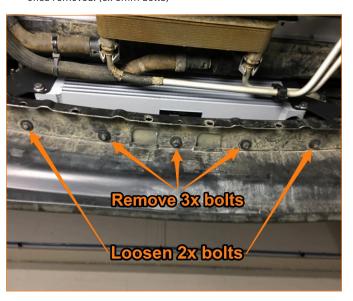




Bolt the oil cooler to the brackets using the provided hardware.
 Leave the bolts loose. (4x 13mm bolts)

- 12. Adjust the brackets and oil cooler until the oil cooler is not contacting any other metal brackets or other components. Once it is properly adjusted, first tighten the brackets to the vehicle frame and then tighten the oil cooler to the brackets. Once all hardware is tight, recheck that clearances have not changed around the oil cooler during the tightening process.

 [4x 18mm nuts, 4x 13mm bolts]
 - **If you are installing this kit on a 2011-2016 model year, please skip to Step 18 and review the exploded view diagram on sheet 1 of this install guide.**
- 13. Reattach the transmission oil cooler to the front cross member (2x 10mm nuts, 2x studs, 1x line retainer tree clip)
- 14. Remove the center 3 bolts fastening the front air dam to the bumper then loosen the next outer bolt on both sides of the ones removed. (5x 8mm bolts)





15. Insert the license plate relocation bracket between the front air dam and bumper. Reinstall previously removed hardware. (5x 8mm bolts)

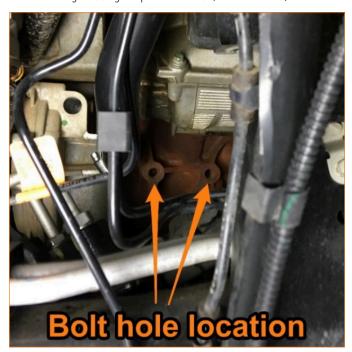


16. Fasten the stock license plate bracket to the license plate relocation bracket using the provided bolts. Note the orientation of the stock license plate bracket. (2x 10mm bolts)



- Reattach the front license plate to the license plate bracket.
 (2x screws)
- **18.** Remove the driver-side fender liner. (1x tree clip, 1x toothed washer, 6x 5.5mm screws, 3x T30 Torx bolts)

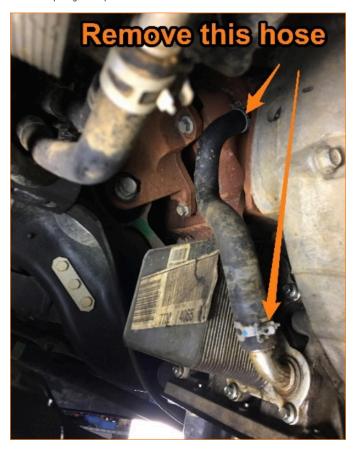
19. Attach the provided line routing bracket to the driver's side of the engine using the provided bolts. (2x 18mm bolts)







- 20. Reinstall the driver-side fender liner. (1x tree clip, 1x toothed washer, 6x 5.5mm screws, 3x T30 Torx bolts)
- 21. Remove the coolant hoses that are attached to the stock liquid-to-liquid oil cooler. Remove the hoses from the vehicle. (4x spring clamps and 2x hoses)







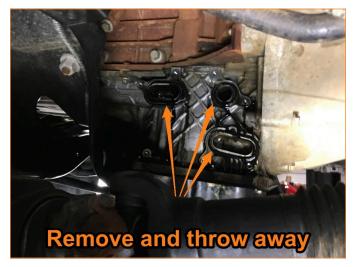
CONTINUED ON FOLLOWING PAGE



22. Remove the stock liquid-to-liquid oil cooler from the vehicle. [7x 8mm bolts]



23. Remove the o-rings from the side of the engine block and throw them away. DO NOT REUSE THE STOCK O-RINGS!



24. Clean the side of the engine block and install the provided o-rings.

There will be one or two o-rings not used due to the design of the oil adapter plate and model-year of the vehicle.

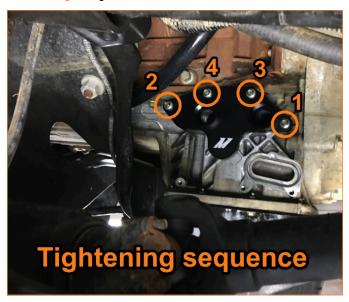


25. Install the oil adapter plate. Tighten the bolts in the sequence shown below. (4x 8mm bolts)

Stage 1: Hand tighten

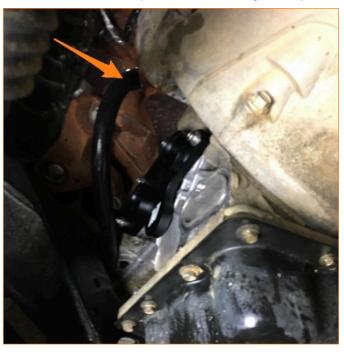
Stage 2: Tighten to 2 Nm (18 lb-in)

Stage 3: Tighten to 10 Nm (89 lb-in)





26. Install the replacement coolant hose in place of the two hoses that were removed in step 20. (1x hose, 2x worm gear clamps)





27. Feed the -16AN oil lines into the engine bay (45° bends first) from the front of the truck, making sure that they route over the oil line routing bracket that was previously installed. Once the lines have made their way back to the oil adapter plate, continue to pull them through the engine bay until the 90° fittings can clear the front cross member. Feed the 90° fitting ends of the lines over the front cross member and line them up with the inlet and outlet of the oil cooler.

Tip – Leave the plastic protective covers on the fitting ends while routing the lines through the engine bay. Doing so will reduce the risk of dirt and debris entering the lines.





CONTINUED ON FOLLOWING PAGE



2011+ FORD 6.7L POWERSTROKE OIL COOLER KIT

INSTALLATION GUIDE

28. Attach the oil lines to the oil adapter plate and oil cooler. (4x fittings)





- 29. Refill the primary cooling system.
- **30.** Adjust the engine oil level as needed. (Kit adds 4 quarts to the engines oil capacity at the first startup)
 - **The low oil pressure indicator light may turn on briefly during the first start up with this kit installed. This is normal and turn off once the oil cooler and lines fill with oil.**
- 31. Start the engine and check for leaks.

Congratulations! You have finished installing the Mishimoto 2011+ Ford 6.7L Powerstroke Oil Cooler Kit.

*For Care & Maintenance, Disposal Instructions, and Warranty Information continue to the following page.



CARE & MAINTENANCE, DISPOSAL INSTRUCTIONS, AND WARRANTY INFORMATION

CARE & MAINTENANCE

- This oil cooler kit adds an additional 4 quarts to the engines oil capacity.
- To properly check the engine oil level, start the vehicle and let it idle for approximately 30 seconds. Once the vehicle has idled for 30 seconds, turn it off and check the oil level.
- > Check for leaks at every oil change interval.
- > Check to make sure all fittings are tight at every oil change interval.

DISPOSAL INSTRUCTIONS

- Do not dispose of any product as unsorted municipal waste.
 Use separate collection facilities. Contact your local authority for information regarding the collection systems available.
- > Never improperly dispose of any coolant, oil, or other chemicals.

WARRANTY INFORMATION



- All claims must be accompanied with a picture of the Mishimoto product showing the issue for which the claim is being submitted.
- Mishimoto asks that the customer inspect their purchased item for any damage immediately upon arrival.
- Any product deemed dead on arrival (DOA) must be claimed within 14 business days of delivery. Claims outside of this time frame will not be covered under the Mishimoto Lifetime Warranty.
- This warranty does not include payment and/or reimbursement of the cost of labor in connection with the removal of any product returned pursuant to the warranty policy or in connection with the installation of any replacement items provided under the warranty policy.

- > Mishimoto has the right to refuse a claim at any time.
- When Mishimoto accepts a claim, Mishimoto retains full discretion to choose if it will: (i) repair or replace purchaser's original Mishimoto product; (ii) replace purchaser's original Mishimoto product with the most current available model; or (iii) provide the purchaser with a gift card redeemable on Mishimoto.com in the amount of the original purchase price of the original Mishimoto product. The provision of a replacement of a Mishimoto product is subject to availability and Mishimoto retains the right to substitute any warranty claim item with a comparable item or credit at any time.
- If Mishimoto determines that it will provide a replacement item in connection with a claim under this warranty policy, and such item is out of stock, Mishimoto will place the customer on backorder and ship the replacement product to the purchaser once it becomes available.
- Mishimoto is not liable for incorrect shipments in connection with a claim if a claim form is completed incorrectly, or if a model number is not included in a claim.
- If you have a vehicle equipped with an automatic transmission, please make sure to specify this within the text box on the claim form. Mishimoto is not responsible for incorrect replacement shipments if transmission type is not indicated.



This product can expose you to chemicals which are known to the state of California to cause cancer. For more information visit: www.p65warnings.ca.gov