



2017 - 2019 FORD 6.7L POWERSTROKE
COOLER UPGRADE KIT

USER MANUAL

Warning Regarding Emission Laws

Not legal for sale or use on pollution-controlled motor vehicles anywhere in the United States. Legal ONLY for off-road competition racing vehicles and cannot be used on vehicles that are operated on public streets, roads, or highways.

Disclaimer

- By installing this product onto your vehicle, you assume all risk and liability associated with its use.
- It is your responsibility to make sure your vehicle complies with all federal, state, and local emissions laws. Federal and many state and local laws prohibit the removal, modification or rendering inoperative of any part of the design affecting emissions or safety on motor vehicles used on a public street or highway. Violation may result in a fine of up to \$32,500 per vehicle (or possibly higher depending on changes in the law). All civil penalties and fines for removing your vehicle's emissions equipment are the sole responsibility of the end user.
- Due to its high performance nature, this product may void vehicle manufacturer's warranty.
- Pure Fabrication LLC, is not responsible for misuse of its products. By installing this product, you release Pure Fabrication LLC of any and all liability associated with its use.
- Depending on where you live, restrictions may apply. Check all applicable laws before installing or using!
- The purchaser and end user releases, indemnifies, discharges and holds harmless Pure Fabrication LLC, from any and all claims, damages, causes of action, injuries, or expenses resulting from or relating to the use or installation of this product that is in violation of the terms and conditions on this page, the product disclaimer, and/or the product installation instructions. Pure Fabrication LLC, will not be liable for any direct, indirect, consequential, exemplary, punitive, statutory, or incidental damages or fines caused by the use or installation of this product.

Caution

Never work on a hot vehicle. Serious injury in the form of burns can result if the vehicle has been in use. Allow vehicle to cool prior to installation. Always wear eye protection when working on or under any vehicle.

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ABRICATION

Step 1

Disconnect both batteries.

Step 2

Drain coolant from hot and cold side of the radiator.



Step 3

Unplug the MAF (mass air flow) sensor that is located on the intake. Release the red tab to unlock the plug for removal.



Step 4

Using an 8mm wrench remove the two bolts holding the intake box and reservoir chamber in place.

Step 5

Loosen the two clamps on the intake coupling that attaches the intake box to the manifold.

Step 6

Pull up on the intake box to remove it from the rubber mounts that hold it in place.

Step 7

Pull the three coolant lines from the clips on the remaining intake tube. Then remove the remaining intake tube.

Step 8

Disconnect the quick connect coolant line from the driver side of the EGR cooler.



Step 9

Disconnect the EGR temperature sensor. Zip-tie the vehicle side of the plug and harness out of the way from hot or moving parts.



Step 10

Unplug the PCM harness from the firewall on the passenger side. Secure it out of the way for installation.



Step 11

Unplug the harness on top of the EGR cooler. The harness contains three plugs, an orange plug with a yellow locking tab, a grey plug and black plug with a metal clip. Be sure to replace the clip after unplugging it so that it is not lost.



Step 12

Unplug the vacuum line on top of the EGR system, pull the hard plastic line from the rubber 90 degree fitting, and cap the line with the supplied rubber cap.



Step 13

Unplug the butterfly valve located next to the fan shroud.



Step 14

Remove the two bolts securing the wiring harness to the EGR cooler.



Step 15

Remove the two clips on the heat shield located on the passenger side under the EGR cooler.



Step 16

Remove the short EGR pipe secured by four bolts. Be sure to keep all hardware and gaskets for future use.



Step 17

Remove the longer EGR pipe secured in place by five bolts. Two bolts are on each flange and one is on the support bracket. Be sure to keep all hardware and gaskets for future use.



Step 18

Remove the seven bolts holding the EGR cooler in place.



Step 19

Also remove the nut securing the hard pressure line to the back of the EGR cooler near the firewall.



Step 20

Pull the EGR system up and towards the front of the truck. You may need to twist it slightly to get it past some of the intake components. Once the Cooler has been pulled forward a ways, remove the wiring harness clipped to the back of the cooler. Double check and remove any clips or harnesses that may be attached to the cooler, then remove the cooler from the vehicle.



Step 21

Install the supplied exhaust block off plate, using factory hardware and gaskets saved from disassembly.



Step 22

Install the coolant block off plate with the remaining supplied Allen head bolts.
NOTE: image shows previous plate design, which is now black.



Step 23

Reconnect the PCM harness. Make sure that the harness plugs are properly connected.



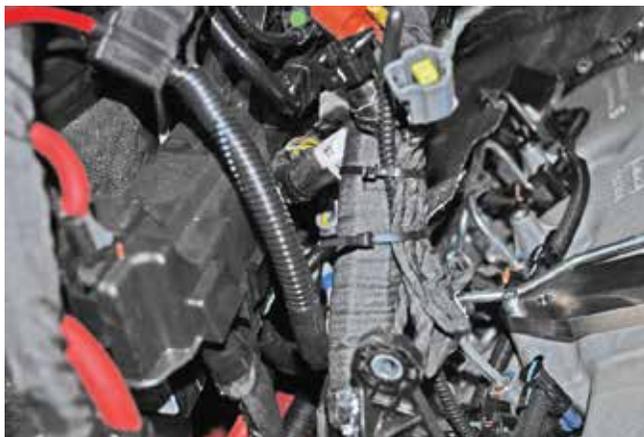
Step 24

Reconnect the quick connect coolant line. Be sure it is securely in place.



Step 25

Zip tie the EGR wires and vacuum line to the PCM harness.



Step 26

Install the Intake block off plate with the O-ring on it, using the provided Allen head bolts. You will not need to use the factory gasket for this block off plate.

NOTE: image shows previous plate design, which is now black.



Step 27

Install the supplied mounting bracket and hardware to secure the hard pressure line that was bolted to the back of the EGR cooler. The bolt on the engine is located on the top passenger rear, where the black plastic intake manifold meets the cast aluminum intake manifold.



Step 28

Re-install ALL intake components.

Step 29

Refill the coolant, following factory specifications. Run the engine and check for leaks. After engine has reached operating temperature check coolant level and top off as needed.