



INTERCOOLER PIPE UPGRADE KIT (OEM REPLACEMENT)

2017-2022 6.7L FORD POWER STROKE | 122017

INSTALLATION GUIDE

HS-MOTORSPORTS.COM

Rev: 09.26.23

INTERCOOLER PIPE UPGRADE KIT

2017-2022 6.7L FORD POWER STROKE



TROUBLESHOOTING

Please read and understand all installation instructions before proceeding with the installation. If you have questions during the installation of this product, please contact H&S Motorsports support at tech@hs-motorsports.com or (855) 623-4450.

INCLUDED PARTS

- 1 - HSM Throttle Body Adapter Assembly
- 1 - Straight Silicone Boot
- 1 - Pack of Installation Hardware
- 1 - Stainless Steel Tubing
- 1 - 90 Deg. Silicone Boot

POWER THAT *WORKS.*

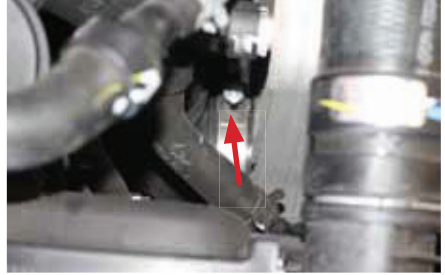
STEP 1

Disconnect Batteries. Remove intake air temperature sensor connector and clip from back side of factory intercooler pipe. Remove clip holding intake air temperature sensor wiring to fan shroud.



STEP 2

Remove factory power steering reservoir bolt at fan shroud and set aside. Lift power steering reservoir out of retainer guide on fan shroud and set to the side. Loosen t-bolt clamp at factory intercooler connection.



STEP 3

Remove the large locking C-Ring from the factory cold side intercooler pipe at the throttle body assembly. Be careful not to damage the ring as it will be re-used later. With everything disconnected, carefully remove the entire cold-side intercooler pipe assembly from the vehicle.



STEP 4

Using a small flat-head screwdriver or other small tool, gently pry up on the factory intake air temperature sensor locking tab to release it while twisting the sensor counter-clockwise to remove it from the factory intercooler pipe. Install the sensor into the supplied HSM throttle adapter by pressing sensor into the hole and twisting clockwise until fully locked as shown.



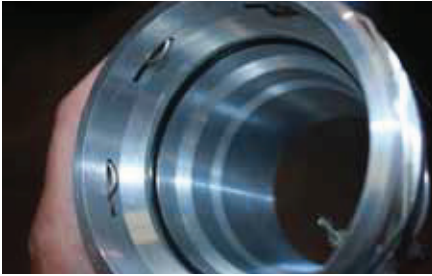
STEP 5

With a pick or other small-ended tool, carefully remove the O-Ring from the inside of the factory intercooler pipe. Clean the O-Ring of any oil or debris and apply a small amount of Vaseline or Assembly Lube/Grease to the O-Ring. Install the O-Ring to the groove inside the HSM throttle adapter by starting on one side and working all the way around, ensuring it is fully seated in the groove.



STEP 6

Install previously removed large locking C-Ring onto HSM throttle adapter. Find the previously unplugged harness belonging to the intake air temperature sensor and route the wiring behind the power-steering reservoir as shown. Plug connector back into the intake air temperature sensor.



STEP 7

With the HSM logo on top and the intake air temperature sensor facing the front of the vehicle, carefully install the HSM throttle adapter to the factory throttle body assembly by applying pressure while slightly twisting the HSM throttle adapter back and forth until the C-Ring is locked into place. Keep in mind that these parts are a tight fit to ensure proper sealing, so some force may be required for installation. Be careful not to damage the sealing O-Ring, intake air temperature sensor, or harness during this step!



STEP 8

Using brake cleaner or another similar cleaning media, clean the factory intercooler boot sealing surface on the intercooler (failure to clean the intercooler may result in the boot blowing off due to oil residue or other contaminants on the sealing surface).

STEP 9

Fully loosen (without removing nuts) and slide the two supplied T-Bolt clamps onto the supplied 90 degree silicone coupler as shown. Slide the supplied 90 degree silicone coupler onto the longer leg of the supplied intercooler pipe as shown (applying a small amount of glass cleaner to the outside of the pipe and/or inside of the couplers may help with adjustments during installation). Install the supplied straight coupler onto the shorter leg of the supplied intercooler pipe. Clamps for the straight coupler will be installed at a later time.



Note: Make sure when installing the clamp on the intercooler end of all boots to be sure the clamp is pushed up close against the intercooler outlet as shown, so the intercooler outlet does not cut the boot if the clamp is tightened too far out.

STEP 10

Install the new intercooler pipe assembly to the vehicle by sliding the 90 degree silicone coupler onto the intercooler and then working the straight coupler onto the HSM throttle adapter. Adjust the pipe and couplers to ensure that everything is lined up properly and that there is adequate room for clamps on all clamp locations. Work long leg of intercooler pipe up out of the 90 degree boot so there is approximately 1/2 of clearance between the coupler and pipe as shown. Slide straight 3x3" boot into place, adjust so it is even on the HSM coupler and the pipe.



STEP 11

While holding the lower 90 degree coupler and T-Bolt clamp tight against the intercooler, tighten the clamp to **90 inch lbs.** Make any necessary adjustments and then also tighten the other T-Bolt clamp on the 90 degree coupler to **90 inch lbs.**

STEP 12

Locate the supplied T-Bolt clamps and completely remove the nuts. Open clamps and install them around clamp locations on the straight coupler. After ensuring proper fit and alignment, tighten these clamps to **90 inch lbs.**



STEP 13

Using supplied HSM power-steering reservoir relocation bracket and 1/4" hardware, loosely install the bracket to the reservoir. Using factory reservoir bolt, install the other end of the bracket to the factory location. Adjust the reservoir so it is not binding or contacting other components and tighten all hardware.



STEP 14

Zip-tie the intake air temperature wiring to the nearby coolant line. Reconnect batteries and double-check all installed items for proper fitment. Test drive vehicle to ensure all parts were installed correctly.

STEP 15

PLEASE make sure to check the level of the coolant in the secondary cooling system. Failure to do so may cause overheating of the intercooler system and premature boot failure.

STEP 16

Kit installed.



C.A.R.B. E.O. NOTICE

E.O. identification label is required in passing the Smog Check inspection.

The E.O. identification label must be placed on or near the device in the engine compartment so that smog check technicians can verify the E.O. number.





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