

# 2003-2007 FORD 6.0L POWERSTROKE INTERCOOLER KIT

## PARTS LIST AND INSTALLATION GUIDE

### PARTS LIST

MISHIMOTO INTERCOOLER

**2PC** | MISHIMOTO INTERCOOLER PIPES

**1PC** | MISHIMOTO 3" TO 2.5" TRANSITION ANGLED SILICONE COUPLER WITH DURACORE™ TECHNOLOGY

**1PC** | MISHIMOTO 3.25" TO 3" 45° TRANSITION SILICONE COUPLER WITH DURACORE™ TECHNOLOGY

**1PC** | MISHIMOTO 3" STRAIGHT SILICONE COUPLER WITH DURACORE™ TECHNOLOGY

**1PC** | MISHIMOTO 3" HUMP HOSE SILICONE COUPLER WITH DURACORE™ TECHNOLOGY

**1PC** | 3.5" MISHIMOTO CONSTANT-TENSION T-BOLT CLAMP

**6PC** | 3.25" MISHIMOTO CONSTANT-TENSION T-BOLT CLAMPS

**1PC** | 2.75" MISHIMOTO CONSTANT-TENSION T-BOLT CLAMP

### TOOLS NEEDED

PICK TOOL	RATCHET
13MM WRENCH	RATCHET EXTENSION
LONG FLATHEAD SCREWDRIVER	8MM SOCKET
SHORT FLATHEAD SCREWDRIVER	10MM SOCKET
PHILLIPS SCREWDRIVER	11MM SOCKET
LINEMAN'S PLIERS	13MM SOCKET
POP-CLIP PLIERS	9/32" SOCKET

### DISCLAIMER

- Please dispose of any liquids properly.
- Allow vehicle to cool completely prior to attempting installation.
- Mishimoto Performance (MP) is not responsible for any vehicle damage or personal injury due to installation errors, misuse, or removal of MP products.
- MP always suggests that a trained professional install all MP products.
- Do not run the engine or drive the vehicle while overheating. Serious damage may occur.
- Raise vehicle only on jack stands or on a vehicle lift.

### INSTALLATION INSTRUCTIONS

#### 01 | REMOVING THE FACTORY INTERCOOLER

1. First disconnect the negative terminal on the battery using a ratchet and 10mm socket.
2. Remove the air intake box and intake tube. Be sure to disconnect the mass airflow sensor.



3. Remove the nine pop clips that hold the upper fan shroud to the grill and radiator support. Once the pop clips have been removed, the upper shroud can be detached.
4. Remove the four 8mm bolts that secure the upper radiator stays to the radiator support. Detach the radiator stays from the vehicle.
5. Remove the two 10mm bolts that secure the intercooler to the upper radiator support.
6. Remove the three pop clips that secure the wiring harness to the upper radiator support.



7. Remove the two 8mm bolts that secure the AC condenser brackets to the upper radiator support.
8. Remove the pop clips that secure the air duct flaps to the side of the radiator support.
9. Loosen the clamps on both the hot- and cold-side intercooler boots.

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# 01

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10. Remove the radiator support beam, which is secured in place with eight 13mm bolts.



11. Remove the upper radiator support beam. Slide the beam to one side and lift the opposite end upward to detach it from the lower radiator support. The hood latch cable will still be attached to this component, so place the beam carefully on top of the engine and out of the way.

12. Pull the intercooler away from the radiator, separating the boots from the cooler. Once this is complete lift the intercooler up and remove it from the vehicle.

## 02 | REMOVING THE FACTORY INTERCOOLER PIPES

1. Loosen and disconnect the factory clamp connecting the cold-side intercooler pipe to the intake manifold.



2. Remove the coolant overflow hose from the reservoir and place it to the side to allow for clearance when removing the pipe.

3. Remove the factory cold-side intercooler pipe from the vehicle. Pull upward and turn the pipe to route it around the engine and accessories.

4. Loosen the clamps securing the hot-side intercooler pipe to the turbocharger.

5. Completely remove the factory hot-side pipe from the vehicle.

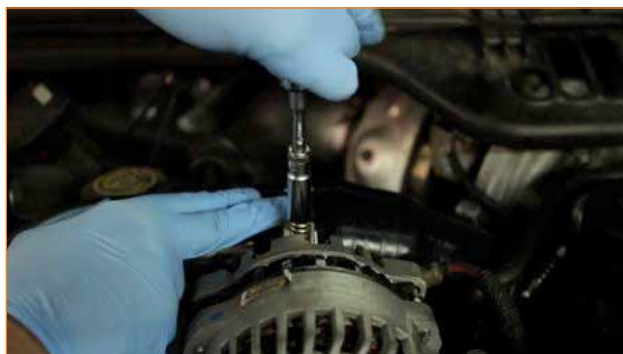
## 03 | INSTALLING THE MISHIMOTO INTERCOOLER PIPE AND BOOT KIT

1. Install the 3" to 2.5" coupler to the turbocharger end of the hot-side pipe. This coupler is secured to the pipe with a 3.25" constant-tension T-bolt clamp. Do not fully tighten the clamp at this time.

2. Install the hot-side pipe into the coupler on the turbocharger.

3. Attach the Mishimoto 3.25" to 3" 45° coupler to the hot-side intercooler pipe. Place the 3.5" constant-tension T-bolt clamp on the intercooler side of the boot, and place a 3.25" clamp on the pipe portion. Keep both clamps loose at this time.

4. Be sure that the pipe is not making contact with any engine components and that the turbocharger coupler is properly seated. Once the proper position is achieved, tighten the clamps connecting the hot-side pipe to the turbocharger.



5. Install the couplers on the cold-side pipe. The 3" to 3" straight coupler is used on the upper portion of the pipe connecting to the engine. The 3" to 3" hump hose coupler is placed on the connection between the pipe and the intercooler. These couplers are secured with 3.25" constant-tension T-bolt clamps.

6. Once the pipe is in the proper position and the couplers are seated properly, tighten the constant-tension T-bolt clamps connecting the pipe to the intake manifold.

7. Reattach the coolant overflow hose to the reservoir.

## 04 | PREPARING THE MISHIMOTO INTERCOOLER

1. Transfer the upper mounting grommets from the factory intercooler to the Mishimoto. First remove the metal bushing and then pry the rubber grommet from the cooler. Installation on the Mishimoto will be the reverse of removal.

2. Transfer the lower mounting grommets from the factory intercooler to the Mishimoto intercooler.

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# 02

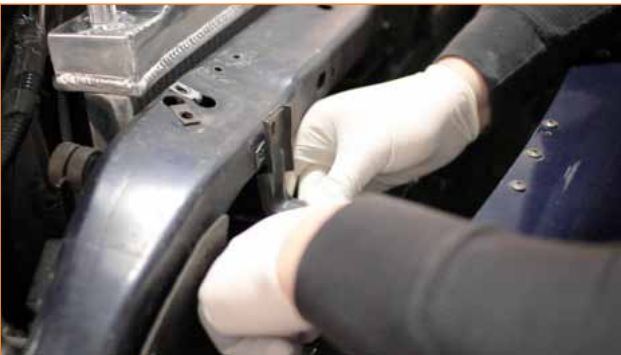
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## 05 | INSTALLING THE MISHIMOTO INTERCOOLER

1. Place the Mishimoto intercooler into position in the radiator support.
2. Reconnect the intercooler pipe couplers to the intercooler and tighten the clamps.
3. Reinstall the upper radiator support beam.



4. Loosely install the eight 13mm bolts for the upper radiator support beam until the beam is lined up in the factory location. Make sure the bolt heads line up with the paint marks from the factory installation. Once everything is lined up, fully tighten the upper radiator support bolts.
5. Reinstall the two 10mm bolts that hold the intercooler to the radiator support.
6. Reinstall the AC condenser brackets to the radiator support. The brackets are secured with two 8mm bolts.



7. Reinstall the three pop clips securing the wire harness to the top of the radiator support.
8. Reinstall both upper radiator stays, which are each secured by two 8mm bolts.
9. Reinstall the pop clips that secure the rubber air duct gaskets to the radiator support.
10. Reinstall the upper radiator shroud, which is secured with eight pop clips.

11. Reconnect the mass airflow sensor.



12. Reinstall the airbox and intake hose.



13. Start the vehicle and check for any leaks in the charge-air system.



14. You have now successfully installed the Mishimoto Ford 6.0L Powerstroke Intercooler Kit. Enjoy!