## 2003-2007 DODGE 5.9L CUMMINS INTERCOOLER KIT

PARTS LIST AND INSTALL ATION GUIDE

### **PARTS LIST**

1PC | MISHIMOTO INTERCOOLER

2PC | 3.5" TO 3" SILICONE TRANSITION BOOTS WITH DURACORE™ TECHNOLOGY

1PC | SILICONE 2.75" TO 3.5" TRANSITION BOOT WITH DURACORE™ TECHNOLOGY

1PC | SILICONE 3" TO 3.5" TRANSITION BOOT WITH DURACORE™ TECHNOLOGY

1PC | 3" CONSTANT-TENSION T-BOLT CLAMP

2PC | 4" CONSTANT-TENSION T-BOLT CLAMPS

1PC | 3.25" CONSTANT-TENSION T-BOLT CLAMP

4PC | M6 X 1.0MM X 16MM FLANGE HEAD BOLTS

#### **TOOLS NEEDED**

10MM WRENCH T30 TORX SOCKET

10MM SOCKET RATCHET

11MM SOCKET RATCHET EXTENSION
13MM SOCKET FLAT HEAD SCREWDRIVER

T20 TORX SOCKET PICK TOOL

#### **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 AND PIPING

- 1. Disconnect the negative terminal on both batteries.
- 2. Disconnect the mass airflow connector located on the intake pipe.
- **3.** Loosen the clamp connecting the airbox to the turbocharger and remove the airbox assembly from the vehicle.
- **4.** Disconnect the hot-side intercooler pipe from both the turbo charger and the intercooler. Use a 10mm socket to loosen the clamps.

**5.** Remove the hot-side pipe, most easily done by pulling upwards while rotating the pipe counterclockwise.



- **6.** Using a 10mm socket or wrench, remove the 10mm bolt and the clamp that secures the cold-side intercooler pipe to the intercooler.
- **7.** Again, using a 10mm socket or wrench, remove the 10mm bolt and clamp. Disconnect the cold-side pipe from the intake manifold.
- **8.** Remove the cold-side intercooler pipe. Starting at the connection point on the intake manifold, push the pipe downwards to clear the intake. Next, push the pipe backwards towards the throttle body. You will now be able to lift the pipe upwards and out of the engine bay.
- **9.** Unbolt the four 14mm bolts that secure the AC condenser to the intercooler.



- **10.** Remove the two T30 Torx bolts that secure the top of the intercooler to the radiator support.
- 11. The AC condenser should now be free from the vehicle. Carefully swing the assembly to the side, being sure not to damage the condenser or lines.
- 12. Lift upwards and remove the factory intercooler from the radiator support.

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01

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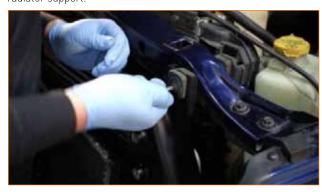
**NSTALLATION GUIDE** 

# 02 INSTALLING THE MISHIMOTO INTERCOOLER AND PIPING

1. Transfer the upper mounting grommets from the stock intercooler to the Mishimoto intercooler. Pry the metal insert out first and then pull up on the grommet to remove it. Installation of the Mishimoto intercooler is the reverse of removal.



- 2. Transfer the lower mounting grommets from the factory intercooler to the Mishimoto intercooler.
- **3.** Place the Mishimoto intercooler into position. Be sure the grommets seat properly in the cross bar that supports the radiator.
- 4. Reposition the AC condenser in front of the intercooler.
- ${\bf 5.}$  Reinstall the two T30 Torx bolts that secure the intercooler to the radiator support.



- **6.** Relocate the lower driver's side AC condenser mounting bracket. This bracket is secured by two T20 Torx bolts. Remove the bolts, slide the bracket down one peg, and reinstall the bolts.
- **7.** Relocate the lower passenger's side AC condenser mounting bracket. This bracket is secured by three T20 Torx bolts. Remove the bolts, slide the bracket down one peg, and reinstall the bolts.
- **8.** Use the four 10mm bolts supplied with the kit to secure the AC condenser to the intercooler.

**9.** Install the Mishimoto cold-side intercooler pipe. Use one of the supplied  $3.5^{\prime\prime}$  silicone straight boots on the connection between the intercooler and pipe. Position two 4" constant-tension T-bolt clamps on the boot. Snug these clamps to prevent movement but do not fully tighten at this time.



- **10.** Install the silicone boot that connects the Mishimoto cold-side intercooler pipe to the intake manifold. This 3.5" to 3" silicone transition boot is secured by a 3.25" clamp on the intake side and a 4" clamp on the piping side.
- 11. Once the pipe is in position, check for any rubbing on engine components or accessories. Tighten the constant-tension T-bolt clamps that secure the cold-side intercooler pipe to both the intercooler and intake manifolds.
- **12.** Install the Mishimoto hot-side intercooler pipe. Place a 3.5" silicone straight boot on the outlet of the intercooler. Secure the boot to the intercooler with a 4" constant-tension T-bolt clamp.
- 13. Insert the Mishimoto hot-side intercooler pipe into the boot on the intercooler. Once in position, slide a 4" constant-tension T-bolt clamp over the pipe and onto the boot. Tighten the clamp to secure this pipe.
- **14.** Install the second coupler that secures the Mishimoto hot-side intercooler pipe. This boot features a 2.75" to 3.5" transition and connects the intercooler pipe to the turbocharger. Use a 3" constant-tension T-bolt clamp on the turbo side of the boot and a 4" clamp on the pipe side. After positioning, tighten the clamps.
- **15.** Reinstall the intake box and intake tube. Installation will be the reverse of removal.
- 16. Reconnect the mass airflow sensor.
- 17. Reconnect the negative terminals on both batteries.
- **18.** You have now successfully installed the Mishimoto Dodge Cummins 5.9L Intercooler Kit. Enjoy!