

INSTALLATION INSTRUCTIONS

MAKE: BMW

MODEL: 335i (E90/E92/E93)

YEAR: 2007-2010 **ENGINE:** L6-3.0L (tt) N54

Intercooler W/Tube 46-20152-B (Black)



Parts Included:

- Intercooler Tube (x1)
- Couplings (x2)
- Clamps (x6)
- 0-Ring (x1)
- Screws (x2)
- Intercooler (x1)
- Silicone Hose (x1)
- Plugs (x2)

Tools Needed:

- 6mm, 7mm & 8mm sockets
- Ratchet
- T20 Torx Socket
- T30 Torx Socket
- Flat head screw driver
- Grease
- T25 Torx Socket
- Allen Wrench Set

CAUTION: Allow time for your vehicle to cool down prior to installation. When working on or under your vehicle proceed with caution. Exhaust systems reach high temperatures and may cause serious burns. Wear protective safety equipment; eye goggles and gloves to ensure a safe installation, afe recommends professional installation on our products.

- **1.** Park vehicle on level ground and engage parking brake.
- 2. Disconnect the three (3) rubber grommets from the back of the air box that hold the wire loom.
- **3.** Loosen the clamps that connect the intake to the turbo inlet tubes, using a 7mm socket or nut driver. Both clamps are on the drivers' side, one is under the cowl next to the grommets from the previous step and the other clamp is next to the power steering reservoir.
- 4. Disconnect the vacuum line at the front of the air box by depressing both sides and pulling up and unclip it from
- 5. Remove the two (2) screws that attach the air scoop to the radiator support using a T20 Torx bit or nut driver.
- 6. Unclip the rest of the scoop from the air box and remove the air scoop assembly from the vehicle.7. Now you can remove the air box from the vehicle by pulling straight up on it. There will be three (3) rubber mounting grommets on the bottom of the air box.
- 8. Disconnect the bypass valves from the intercooler tube by twisting the grey locking mechanism clockwise and lifting the valve off of the tube and set them to the side.
- **9.** Unscrew the mounting bolt on the intercooler tube to the engine, using a T30 Torx bit or driver.
- 10. Loosen the clamp between the upper and lower intercooler tubes using a 7mm socket or nut driver.
- 11. Unplug the sensor from the intercooler tube and remove the clip securing the tube to the throttle body using a screwdriver.
- **12.** Now you can remove intercooler tube from the vehicle.
- **13.** Remove the sensor from the tube using a T20 Torx bit or driver.
- 14. Install the supplied O-ring into the groove on the inside of the aluminum adapter on the aFe intercooler tube and the factory sensor from the previous step with the supplied bolts.

Note: Use a small amount of grease on the O-rings to prevent them from tearing and for ease of installation.

- **15.** Remove the belly pan from underneath the front of the vehicle using an 8mm socket.
- **16.** Disconnect the intercooler tube on the driver and passenger sides by using a screwdriver to remove the clips securing both intercooler tubes to the intercooler.
- **17.** Now you can disconnect intercooler tubes from the intercooler.
- 18. Remove the two (2) mounting screws on each side of the intercooler, using a T25 Torx socket.
- 19. You can now remove the intercooler from the vehicle by unhooking it from the plastic mounts and pulling it down.
- **20.** Remove the lower half of the driver side intercooler tube from the bottom.
- 21. Install the plugs supplied into the auxiliary sensor ports on the aFe intercooler, using an Allen wrench.

Note: Seal the threads using teflon tape or some type of thread sealant.

- 22. Install the aFe intercooler the same way the factory intercooler was using the factory T25 Torx screws and tighten.
- 23. Reconnect the factory hot side intercooler hose to the aFe intercooler and install the factory retaining clip.

Note: Use a small amount of grease on the factory seal and O-ring to prevent it from tearing and for ease of installation.

- 24. Install aFe silicone hose with one (1) clamp from the top and connect it to the intercooler outlet on the driver side.
- 25. Install the aFe intercooler tube into the vehicle with one (1) clamp, reconnect the sensor, do not tighten clamps at this time.
- 26. Ensure the tube is not touching any metal surfaces then tighten the clamps from steps 24 & 25 with an 8mm socket or nut driver.
- 27. Install the two (2) 1" couplings onto the intercooler tube with two (2) clamps on each coupling.
- 28. Reinstall the bypass valve and push them all the way down until they bottom out on the couplings and tighten all four (4) clamps.
- **29.** Reinstall the vacuum line, air box, and air scoop from steps 4, 6, & 7.
- **30.** Reconnect turbo inlet tubes to air box and tighten both clamps.
- **31.** Reconnect the rubber grommets to air box from step 2.