



## INSTALLATION INSTRUCTIONS

MAKE: BMW  
MODEL: 320i/328i (F30)  
YEAR: 2013-2016  
ENGINE: L4-2.0L (t) N20/N26

**Cold Side**  
**Intercooler Tubes**  
**46-20229-B (Black)**  
**46-20229-R (Red)**



### Parts Included:

- Intercooler Tubes (x2)
- Coupling (x1)
- Clamps (x2)
- Screws (x2)
- O-Rings (x2)
- Plugs (x2)

### Tools Needed:

- 8mm Sockets
- T20 Torx Socket
- T25 Torx Socket
- 3/16" Allen Wrench
- Flathead Screwdriver
- Grease

**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. Open the hood and remove the engine cover from the engine.
3. Remove the plastic cover on the driver side of the engine that covers electrical connections using a T20 Torx socket, this helps with the removal of the intercooler tube.
4. Disconnect the sensor on the intercooler tube.
5. Disconnect the vacuum line connected to the intercooler tube by depressing both sides and pulling off of the tube.
6. Remove the clip securing the intercooler tube to the throttle body and disconnect the intercooler tube from the engine.
7. Remove the belly pan underneath the front of the vehicle using an 8mm socket.
8. Disconnect the intercooler tube on the driver side by using a screwdriver to lift the clip up on both sides to disconnect it from the intercooler.
9. Now you can remove intercooler tube from the vehicle from the top.
10. Remove the sensor from the tube using a T20 Torx socket.
11. Looking down into the stock intercooler tube at the intercooler connection side you will need to pull the black plastic housing upwards where it goes through the metal portion of the tube to remove it from the tube. The clip will be reused with the aFe intercooler tube.
12. Install the supplied O-rings into the groove on the inside of each aluminum adapter of the aFe intercooler tubes and the factory sensor from Step 10 with the supplied bolts.  
**Note: Use a small amount of grease on all of the O-rings to prevent them from tearing and for ease of installation.**
13. Install the plugs supplied into the auxiliary sensor ports on the aFe intercooler tube, using a 3/16" Allen wrench.  
**Note: Seal the threads using teflon tape or some type of thread sealant.**
14. Install the clip from Step 11 onto the smaller intercooler tube with the open portion of it at the notch, then install the intercooler tube into the vehicle from the top.  
**Note: Be sure that the slot on the adapter lines up with the guide on the intercooler.**
15. Install one (1) clamp and the coupling onto second portion of the intercooler tube, and the last clamp onto the lower tube from the previous Step.
16. Install the upper tube into the vehicle, connect it to the lower tube and to the throttle body.
17. Install the clip to secure it to the throttle body, do not tighten the clamps at this time.
18. Reconnect the sensor and the vacuum line to the aFe intercooler tube.
19. Ensure the tube is not touching any metal surfaces then tighten the clamps from Step 15 from underneath the vehicle with an 8mm socket.
20. Install belly pan from Step 7.
21. Install plastic cover from Step 3.

Installation is now complete. Enjoy and thank you for choosing aFe Power!