## INSTALLATION INSTRUCTIONS



MAKE: Ford

**MODEL:** F-250 / F-350 **YEAR:** 2011-2016

**ENGINE:** V8-6.7L (td) Power Stroke

Cold Side Intercooler Tube 46-20149-B

	Parts Included:	Qty.
	Intercooler Tube, Cold Side	1
	Coupling; 3-1/2"ID x 4"L	1
	Coupling; 3"ID x 90°	1
	Clamp; Spring-Loaded T-Bolt 3-1/4"	2
	Clamp; Spring-Loaded T-Bolt 3-3/4"	2
	O-Ring; 82mm ID	1
	Plug; 1/8" NPT	1
	Billet Adaptor	1
	Bracket; Power Steering	1
ern.	Screw; M6 x 1.0	1
	Washer; M6	1

**CAUTION:** Allow time for your vehicle to cool down prior to installation. When working on your vehicle proceed with caution. Wear protective safety equipment; eye goggles and gloves to ensure a safe installation. **aFe recommends professional installation on this product. Thoroughly inspect the aFe product to make sure there is no damage from shipping (if damage is noted, immediately contact aFe customer service).** 

- 1. Park the vehicle on level ground and engage the parking brake.
- 2. Disconnect the negative battery cables.
- 3. Remove the screw securing the coolant over-flow hose to the fan shroud.
- 4. Loosen clamp securing the cold side intercooler tube to the plastic throttle valve adaptor.
- 5. Remove the retaining clip securing the plastic adaptor to the engine, set aside for reuse with the supplied aFe cold side intercooler tube.
- 6. Remove the plastic adaptor from the vehicle.
- 7. Loosen the clamp securing the cold side intercooler tube to the intercooler, then disconnect the tube from the intercooler.
- 8. Disconnect the electrical connector and wire harness from the cold side intercooler tube and remove the tube from the vehicle.
- 9. Remove the temperature sensor from the cold side intercooler tube by lifting the tab gently and twisting the sensor counterclockwise 1/4 turn then pull sensor out of the tube.

## Note: Be sure to lubricate the O-rings with grease to prevent them from tearing during installation.

- 10. Install the sensor from the previous step into the aFe cold side intercooler tube and twist clockwise until the small tab locks into place.
- 11. Install the supplied 82mm ID O-ring into the groove on the inside of the supplied billet adaptor.
- 12. Install the factory retaining clip, from Step 5, into the billet adaptor then install the adaptor onto the engine inlet, making sure the retaining clip is clipped in all the way around.
- 13. Remove the screw securing the power steering reservoir to the fan shroud, then pull the reservoir out of its saddle and place it to the side.

## Note: Be sure to use thread sealant on the plug or sensor to prevent any leaking.

- 14. If you are not using any aftermarket sensors, install the supplied 1/8" NPT plug into the threaded fitting on the aFe cold side intercooler tube.
- 15. Install one (1) of the supplied 3-1/4" spring-loaded T-Bolt clamps onto the intercooler outlet.
- 16. Install the other 3-1/4" spring-loaded T-Bolt clamp and the longer side of the 3"ID x 90° coupling onto the aFe cold side intercooler tube.
- 17. Install one (1) of the supplied 3-3/4" spring-loaded T-Bolt clamps onto the billet adaptor.
- 18. Install the other 3-3/4" spring-loaded T-Bolt clamp onto the larger opening of the aFe cold side intercooler tube along with the supplied 3-1/2"ID x 4"L coupling.
- 19. Plug the electrical connector from Step 8 into the sensor from Step 10, then install the aFe cold side intercooler tube into the vehicle.
- 20. Ensure the bead on the inside of the coupling is resting in the groove on the outlet of the intercooler and connect the coupling from Step 18 onto the billet adaptor from Step 12 (do not tighten any clamps yet).

21. Install the supplied power steering reservoir bracket into the factory mounting location of the power steering reservoir using the factory hardware.

Note: The factory clamp on the power steering hose may need to be rotated to clear the aFe cold side intercooler tube.

- 22. Install power steering reservoir onto the aFe power steering bracket and secure using the supplied M6 x 1.0 screw and M6 washer.
- 23. Rotate the intercooler tube clamps into place and tighten.
- 24. Secure the coolant over-flow hose from Step 3.
- 25. Reconnect the negative battery cables. Install is now complete!

Note: Be sure to check all connection after 50-100 miles