

INSTALLATION INSTRUCTIONS

MAKE: Ford

MODEL: F-150 EcoBoost **YEAR:** 2015-2020

ENGINE: V6-2.7L/3.5L (tt)

Intercooler 46-20201

aFe recommends professional installation on our products



Parts Included:

- Intercooler (x1)
- Spacer (x2)
- Plug, Hex (x2)
- Washer, M6 (x1)
- Vent, Breather 1/8" (x1)
- Screw, M6 x 1 x 12 (x1)
- Screw, M8 x 1.25 x 50 (x2)

Tools Needed:

- Ratchet
- 8mm, 10mm, 7mm & 13mm socket
- Flat head screw driver
- Panel popper
- 13mm Wrench

CAUTION: Allow time for your vehicle to cool down prior to installation. When working on or under your vehicle proceed with caution. Engine bays 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.

- **Step 1:** Park vehicle on level ground and engage parking brake.
- **Step 2:** Disconnect battery.
- **Step 3:** Remove the (x2) 13mm nuts holding the plastic shield underneath the vehicle.
- **Step 4:** Loosen all of the clamps on the passenger side of the intercooler between the intercooler and intercooler tubes, using an 7mm socket or flat blade screw driver, then remove the couplings from the vehicle.
- **Step 5:** Disconnect the plastic tube from recirculation canister and unplug the electrical connector for the pressure relief valve located around the front of the intercooler.
- **Step 6:** Remove c-clip holding driver side intercooler tube onto the intercooler then disconnect the tube from intercooler.
- **Step 7:** While supporting the intercooler support bracket, remove the (x2) 13mm bolts to drop the intercooler and support bracket out from the bottom of the vehicle.
- **Step 8:** Once the intercooler is out of the vehicle, remove the recirculation canister and pressure relief valve assembly by removing the top screw, using an 8mm socket, and then twisting the entire assembly counter-clockwise.
- **Step 9:** Reinstall the recirculation canister and pressure relief valve assembly onto the aFe intercooler and secure with the supplied M6 washer and M6 x 12mm bolt, using a 10mm socket.
- **Step 10:** Install the supplied plugs onto the bottom support pegs. It is recommended to drain the fluid build-up after every oil change.
- (Note: There is a breather fitting is equipped with this intercooler because testing has shown the stock intercooler to have condensation build up in the bottom of the intercooler on some vehicles. The breather fitting will prevent this issue from happening with no side effects. You can install the breather fitting in the driver side end tank of the intercooler instead of the plug.)
- **Step 11:** Remove the (x2) bolts that secure the top support bracket and install the supplied 3/4" spacers between the frame rail and the intercooler bracket on each side, using an13mm wrench, then install the supplied (x2) M8 x 1.25 x 50mm screws.
- **Step 12:** Install all four rubber grommets and bottom support bracket onto the aFe intercooler then install into vehicle.
- (**Note:** Use a small amount of WD-40 on outside of grommets for ease of installation.)
- **Step 13:** Install the (x2) 13mm lower bracket bolts, removed from **Step 7.**
- **Step 14:** Re-nstall the passenger side couplings, and clamps, onto the aFe intercooler and tubes then tighten all of the clamps, using an 7mm socket from **Step 4**.
- **Step 15:** Reinstall the driver side tube with c-clip onto the aFe intercooler.
- Step 16: Reconnect the plastic tube and electrical connector onto the recirculation canister from Step 5.
- **Step 17:** Reinstall all parts removed in **Step 3**, using a 13mm socket.
- **Step 18:** Reconnect battery.
- Step 19: Installation is now complete. Enjoy and thank you for choosing aFe Power!

Note: legal in California only for racing vehicles which may never be used upon a highway.



INSTALLATION INSTRUCTIONS

MAKE: Ford

MODEL: F-150 Ecoboost

YEAR: 2015-2017 **ENGINE:** V6-2.7L (tt)

Cold Side Intercooler Tubes 46-20209-B (Black)



Parts Included:

- •Intercooler Tube (x1)
- Couplings (x2)
- •Clamps (x4)
- Adaptor (x1)
- •Screw (x1)
- 0 Ring (x1)

Tools Needed:

- •7mm, 8mm & 10mm sockets or nut driver
- Allen Wrench Set
- Torx Wrench Set
- Pick
- •Flat head screw driver

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- **Step 1:** Park vehicle on level ground and engage parking brake.
- **Step 2:** Remove the engine cover along with the intake Y-pipe, by removing the two (2) 10mm nuts on the engine cover, loosening the three (3) clamps for the y-pipe using a 7mm nut driver and disconnecting the sensor.
- **Step 3:** Disconnect the vent tube on the stock cold side intercooler tube by squeezing the retaining clip and pushing it through to release it, then gently pull it off of the intercooler tube.
- **Step 4:** Disconnect the wire harness from the sensor and the factory intercooler tube.
- **Step 5:** Remove the sensor for reuse in your new aFe intercooler tube, using a Torx socket.
- **Step 6:** Loosen the clamp at the throttle body connection, using a 7mm nut driver and separate the coupling from the throttle body.
- **Step 7:** Under the vehicle disconnect the pressure relief valve tube on the driver side of the vehicle right above the cold side intercooler tube connection by twisting it a ¼ turn counter-clock wise, then gently pulling it back to separate it from the canister and twisting the entire tube out of the way.
- **Step 8:** Use a small screwdriver to remove the wire retaining clip at the lower intercooler tube connection on the driver side of the vehicle.
- **Step 9:** Disconnect the lower tube connection from the intercooler and remove the tube from the bottom of the vehicle.
- **Step 10:** Place the small silicone coupler over the throttle body and secure it with one of the smaller supplied clamps, using an 8mm nut driver.
- **Step 11:** Place the large 45° silicone coupling over the large end of the intercooler tube along with one of the larger clamps, but do not tighten at this time.
- Step 12: Install the factory retaining clip and O-ring onto the aFe aluminum adapter, then install the adapter onto the intercooler. (Note: use a amall amount of grease on the o-ring when installing the adapter onto the intercooler.)
- **Step 13:** Install the sensor removed from **step 5** with the small screw provided, using an allen wrench.
- **Step 14:** Place the 2nd large clamp onto the coupling from **step 11** and the last clamp onto the throttle body, then install the intercooler tube from the bottom of the vehicle. (**Note: Insert into the throttle body first then onto the adapter on the intercooler.)**
- **Step 15:** Ensure tube is not resting on any metal surfaces then tighten all clamps.
- **Step 16:** Reinstall the relief valve tube from **step 7.**
- **Step 17:** Up top, reconnect the vent tube and click it into place from **step 3.**
- **Step 18:** Reconnect the sensor from **step 4.**
- Step 19: Reinstall all parts from step 2.
- **Step 20:** Reconnect the sensor in the intake tube.
- Step 21: Install is now complete.
- **Step 22:** Enjoy and thank you for choosing aFe Power!

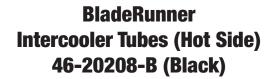


INSTALLATION INSTRUCTIONS

MAKE: Ford

MODEL: F-150 Ecoboost **YEAR:** 2015-2017

ENGINE: V6-2.7L (tt)





Parts Included:

- •Intercooler Tubes (x3)
- Coupling (x3)
- Clamp (x6)
- •Fitting (x1)

Tools Needed:

- •7mm, 8mm & 10mm sockets
- Pick
- Flat head screw driver
- Ratchet
- •WD-40

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- **Step 1:** Park vehicle on level ground and engage parking brake.
- **Step 2:** Loosen the clamps and remove the couplings that connect both of the hot side intercooler tubes to the intercooler, using a 7mm socket. (**Note: You may need to use a pick to loosen the coupling from the intercooler.)**
- **Step 3:** Up top, remove the engine cover along with the intake Y-pipe, by removing the (x2) 10mm nuts on the engine cover, loosening the (x3) clamps for the y-pipe using a 7mm nut driver, and disconnecting the sensor.
- **Step 4:** Unclip the air box cover and remove from the vehicle.
- **Step 5:** Loosen the clamp holding the passenger side intercooler tube onto the turbo using a 7mm nut driver, then remove the tube from the vehicle.(**Note: You may need to use a pick to loosen the coupling from the turbo.**)
- **Step 6:** Disconnect the vacuume line that is connected to the turbo air inlet tube that runs over the intercooler tube on the drivers side so the intercooler tube can be removed.
- **Step 7:** Loosen the clamp holding the driver side intercooler tube onto the turbo using a 7mm nut driver, then remove the tube from the vehicle.
- **Step 8:** Install the supplied short 2" straight coupling with (x2) of the small clamps and install the passenger side aFe intercooler tube into vehicle. (**Note: Use a small amount of WD-40 on the grommet for ease of installation.**)
- **Step 9:** Install the 2nd supplied short 2" straight coupling with the other (x2) small clamps and 2.5" hump coupling onto the aFe intercooler tube then install the upper half of the drivers side aFe intercooler tube into vehicle.
 - (Note: Use a small amount of WD-40 on the grommet for ease of installation.)
- **Step 10:** Install stock hump coupling and clamps onto the final intercooler tube on the shorter end of tube, do not tighten clamps.
- **Step 11:** Install tube from previous step into vehicle, connect the long end to the coupling installed in step 9 then install the stock coupling onto the intercooler.
- **Step 12:** Ensure tubes are not resting on any metal then tighten all clamps on all aFe Intercooler Tubes, using an 8mm nut driver.
- **Step 13:** Reconnect the vacuum line disconnected from **Step 6.**
- Step 14: Reinstall all parts removed and disconnected from Steps 3 & 4.
- **Step 15:** Installation is now complete.
- **Step 16:** Enjoy and thank you for choosing aFe Power!