INSTALL INSTRUCTIONS FOR 83-1012

PRINT

BEFORE YOU START

VEHICLE FITMENT: 2017-2024 6.7L Powerstroke, Ford, F250/F350/F450

PRODUCT NAME: INTERCOOLER PIPE

When removing any turbocharger air intake system components, make sure to cover any open ports to prevent any debris from entering the system. All components need to be inspected and cleaned (if necessary) prior to assembly and installation.

- Charge air cooler T-Bolt Hose Clamps making sure they are tight and secure.
- All electrical connections and wire harnesses moved during the installation of the charge air cooler pipe/hose and making sure they are secure and away from any hot or moving components.
- Check for any signs of abrasion or wear and tear on the charge air cooler hose, coolant hoses, power steering reservoir, power steering hoses, and electrical harnesses near the charge air cooler pipe/hose and repair/replace as necessary.

REQUIRED TOOLS

- 7mm, 10mm, Socket and Wrench
- 11mm Deep Socket
- 10” Socket Extension or 4” + 6” Socket Extensions
- Panel Popper
- Pick
- Small Flat Blade Screwdriver
- Wire Cutters
- Torque Wrench, 75 in-lb setting
- Disconnect tool 22930 Lisle 3/8″ to uninstall OE quick connect

Note: Approximate Install Time: 1 Hr 00 Mins for Kit Installation.

Hi. Need any help?

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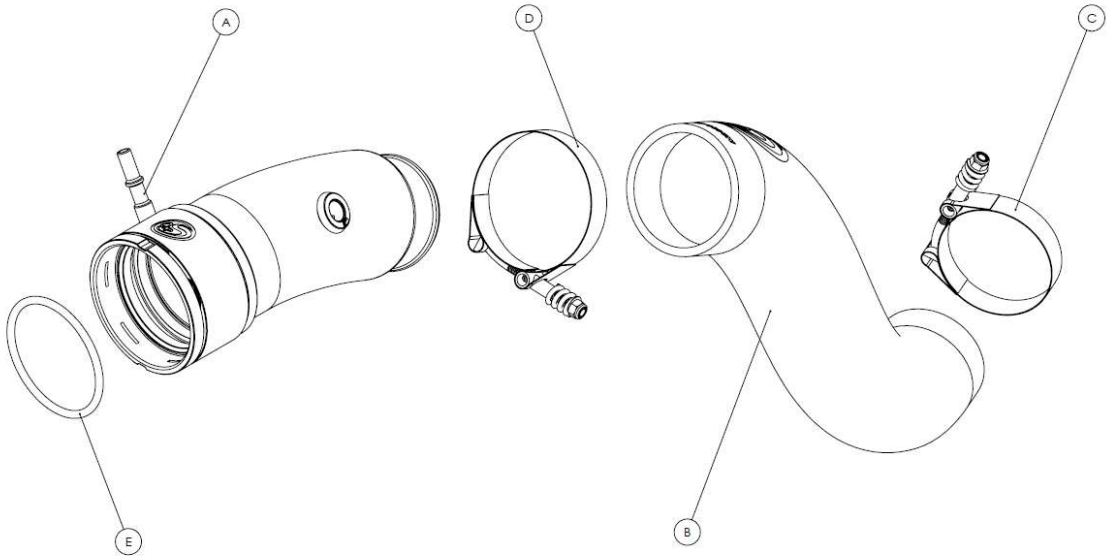
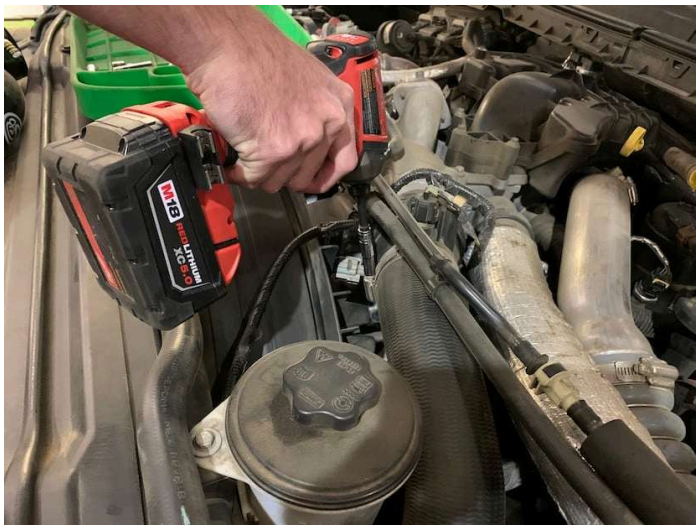
BOM Table			
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
A	AL3018-00	CAC Outlet, Hard Pipe	1
B	AI2489-00	CAC Outlet, Reinforced Silicone Hose	1
C	AG1043-00	T-Bolt Hose Clamp	1
D	AG1042-00	T-Bolt Hose Clamp	1
E	AI2492-01	O-Ring	1



STEP 1A

Loosen the upper hose clamp of the Charge Air Cooler (CAC) outlet hose.



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STEP 1B

Use disconnect tool 22930 Lisle 3/8" to uninstall OE quick connect fitting prior to uninstalling the stock tube.

STEP 2

Loosen the lower hose clamp of the CAC outlet hose.

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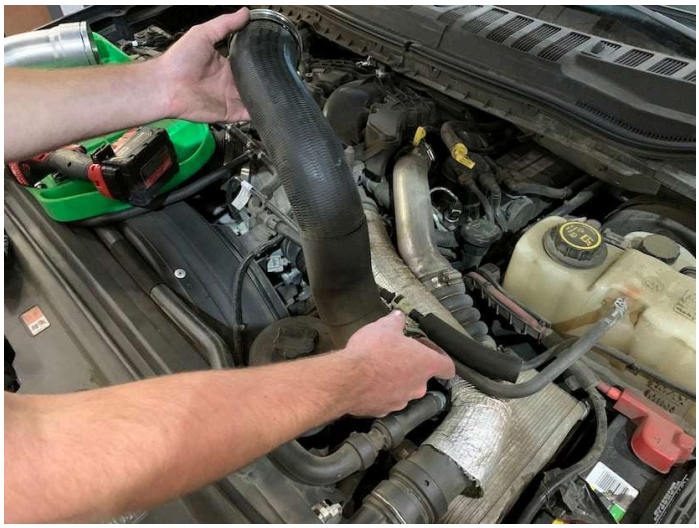
STEP 3

Slide the hose off the upper hose barb and the intercooler outlet and remove from the vehicle.



STEP 4

Depress the locking clip and remove the electrical connector from the air temperature sensor.

STEP 5

Remove the temp sensor harness retainer from the upper hose barb.

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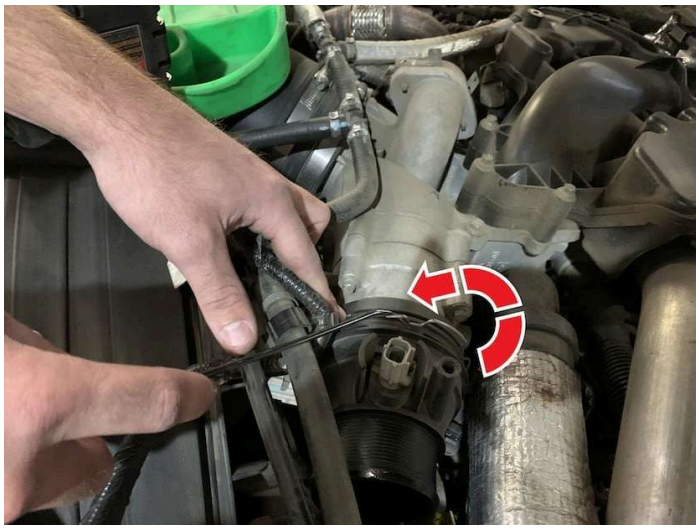
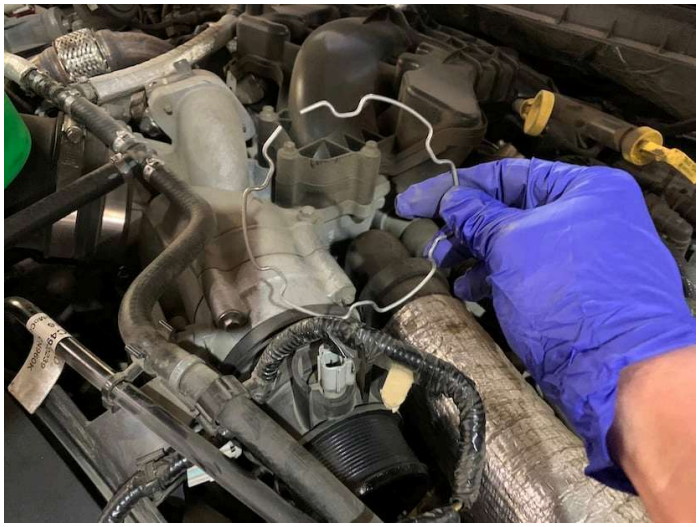
STEP 6

Using a Pick, carefully remove the Spring Clip from the plastic upper hose barb and set it behind the hose barb on the throttle assembly.



STEP 7

Remove the Spring Clip from the throttle assembly being careful not to over stretch or bend it. Save the Spring Clip for use in Step 12.



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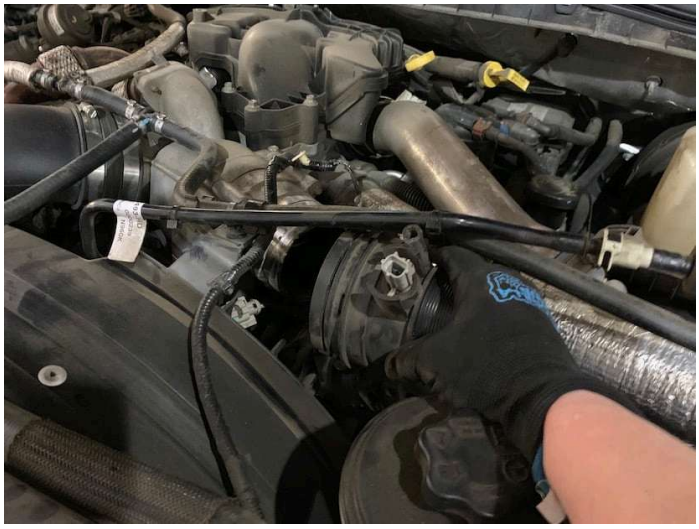

STEP 8

Remove the upper hose barb from the throttle assembly.

STEP 9

Using a Small Flat Head Screwdriver, gently lift the Temp Sensor tab above the locking ramp, then twist (counter clockwise) and pull out the Temp Sensor.

STEP 10

Insert the Temp Sensor into the CAC Hard Pipe (A) with the Temp Sensor tab resting on top of the boss and in front of the locking ramp as shown below.

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STEP 11

Twist the Temp Sensor clockwise until the tab goes over and is locked by the locking ramp.

STEP 12

Install the Spring Clip from Step 7 into the clip groove on the CAC Hard Pipe (A).

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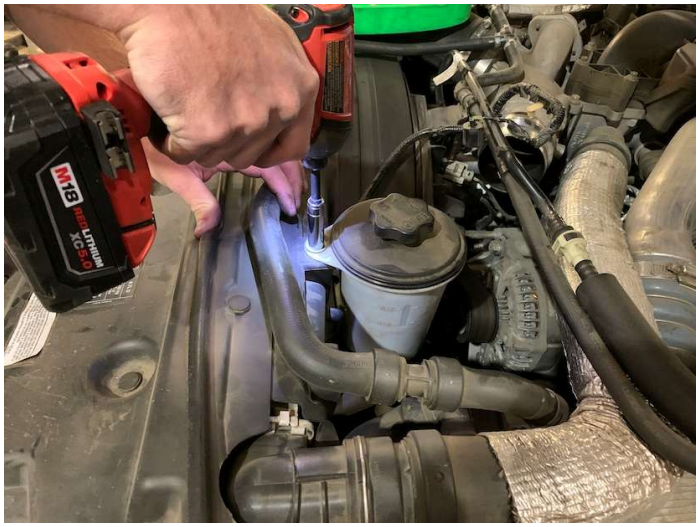
STEP 12 (IMAGE 2)

STEP 13

Remove the screw holding the power steering reservoir and set the screw aside.



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STEP 14

Lift the power steering reservoir from the support slot and carefully leave it off to the side while keeping it upright. This will give you more room when you install the CAC Silicone Hose (C).

STEP 15

Install the smaller T-Bolt Hose Clamp (E) onto the smaller end of the CAC Silicone Hose (C) with the spring and nut pointed up towards you as shown below. Install the larger T-bolt Hose Clamp (D) on the other end (where the S&B Logo is located) of the CAC Silicone Hose with the spring and nut underneath and pointed towards you as shown below. Leave both T-Bolt Hose Clamps loose for now.

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STEP 16

Clean and remove any residual oil on the Intercooler outlet and install the CAC Silicone Hose (C) with the T-Bolt Hose Clamps into the vehicle with the small end attaching to the Intercooler outlet. Leave the T-Bolt Hose Clamps loose at this time.

STEP 17

The lower T-Bolt Hose Clamp (E) should be positioned so that the spring and nut are pointed towards you and accessible from above as shown below.

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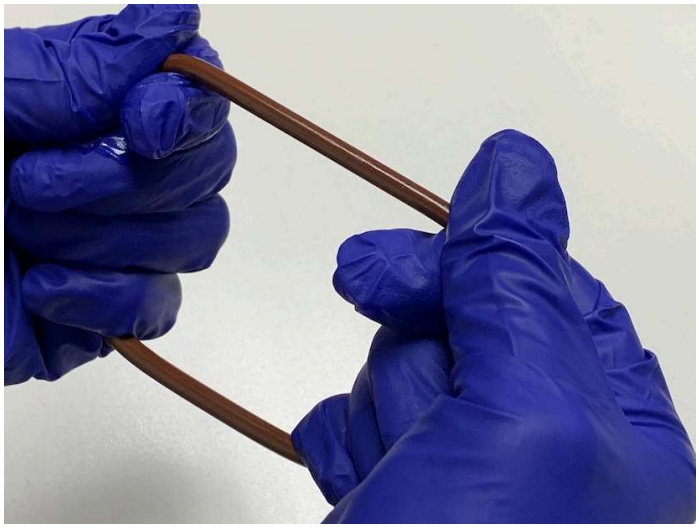
The upper T-Bolt Hose Clamp (D), should be positioned so that the spring and nut are underneath the CAC Silicone Hose, and pointed towards the front of the vehicle as shown below.

STEP 19

Stretch the O-Ring (B) by hand while adding a thin coat of clean diesel engine oil to the O-Ring. Work your way around the entire O-Ring, gently stretching and oiling it as you go. After stretching, verify that the outside diameter of the O-Ring touches all around the inside of the o-ring groove of the CAC Hard Pipe (A) as shown below. If the outside diameter of the O-Ring feels loose in the o-ring groove, gently stretch the O-Ring by hand again.



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STEP 19 (IMAGE 2)

STEP 20

Add a thin coat of clean diesel engine oil all around the outside diameter of the throttle assembly.

STEP 21

Install the CAC Hard Pipe (A) onto the throttle assembly until the Spring Clip snaps into place on the throttle assembly. Rotate the CAC Outlet Hard Pipe so that the hose end is pointed upwards as shown.

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STEP 22A

Rotate the CAC Hard Pipe (A) and pull the CAC Silicone Hose (C) onto the end of the Hard Pipe. As you continue to rotate the Hard Pipe, the Silicone Hose will slip over the Hard Pipe into position as shown. Snap into the grommet.

STEP 22 (IMAGE 2)

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STEP 22 (IMAGE 3)

STEP 23

Reconnect the electrical harness to the Temp Sensor.

STEP 24

Temporarily put the power steering reservoir back in its support slot and check for clearances all around the CAC Hard Pipe (A) and CAC Silicone Hose (C). Rotate the CAC Hard Pipe to adjust the clearances making sure the CAC Hard Pipe and Silicone Hose are far enough away from the power steering

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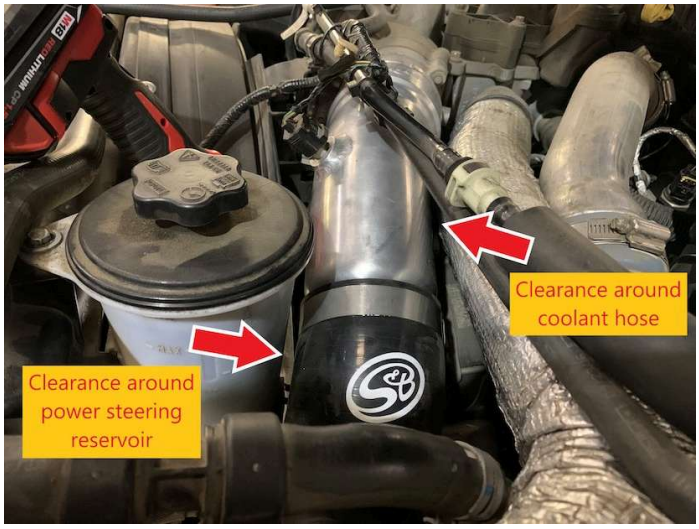
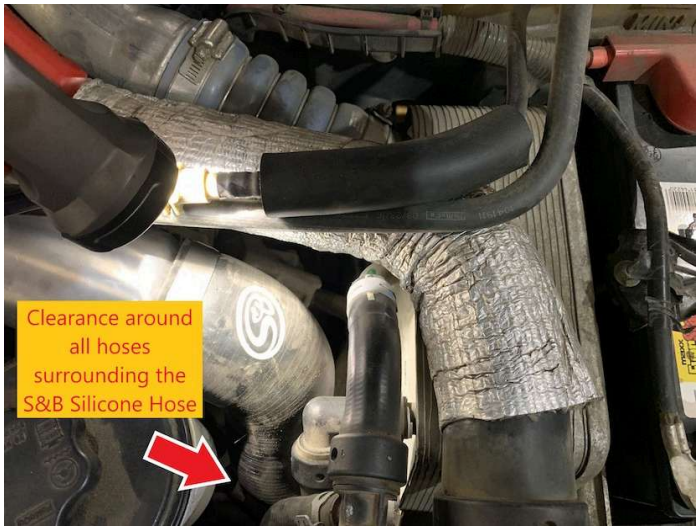
reservoir and other surrounding lines and hoses.

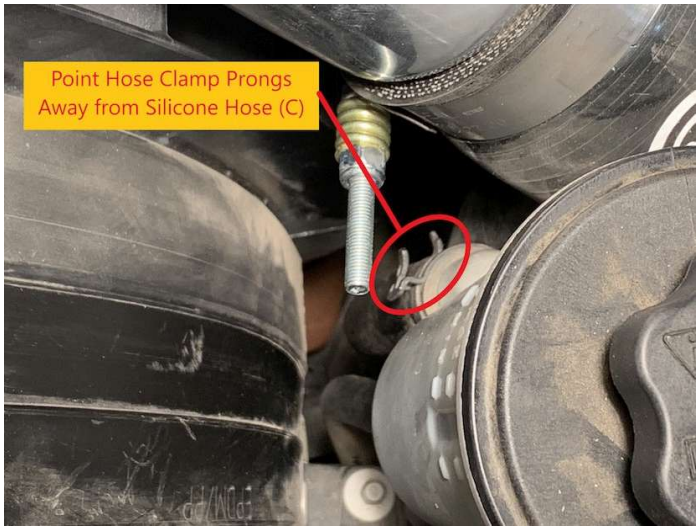


STEP 24 (IMAGE 2)



STEP 25

Rotate the power steering reservoir spring band hose clamp so that the prongs are pointing away from the Silicone Hose (C).



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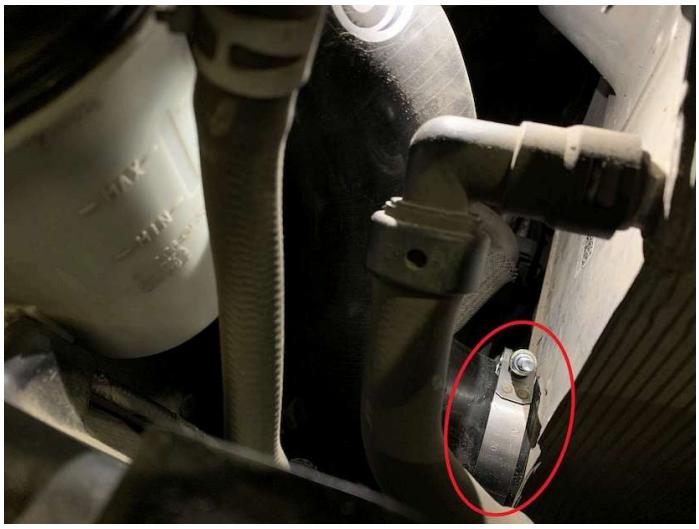
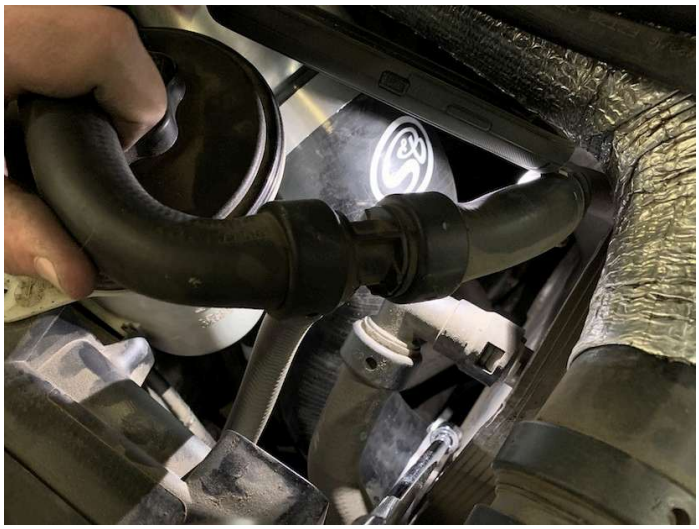
STEP 26

Verify that the CAC Silicone Hose (C) is up against the intercooler, with the intercooler outlet fully inserted, and the T-Bolt Hose Clamp (E) about 1/ 8” from the end of the Silicone Hose as shown below.



STEP 27

Once you have everything positioned properly, tighten and torque the T-Bolt Hose Clamp to 75 in-lb.



STEP 28

Once you have everything positioned properly, tighten and torque the T-Bolt Hose

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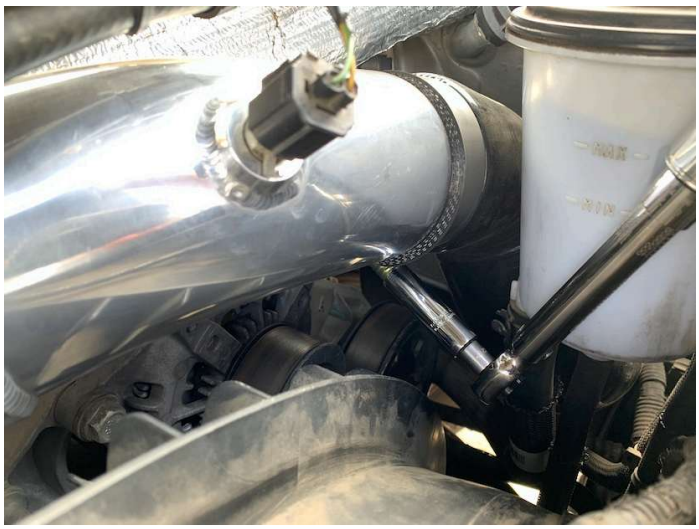
erify that the CAC Hard Pipe (A) is fully inserted

into CAC Silicone Hose (C) and the T-Bolt Hose Clamp (D) about 1/ 8” from the end of the Silicone Hose as shown below75 in-lb.

STEP 29

Make sure that the T-Bolt Hose Clamp (D) is positioned so that the T-Bolt, spring, and nut are away from touching anything. Tighten and torque the T-Bolt Hose Clamp to 75 in-lb.



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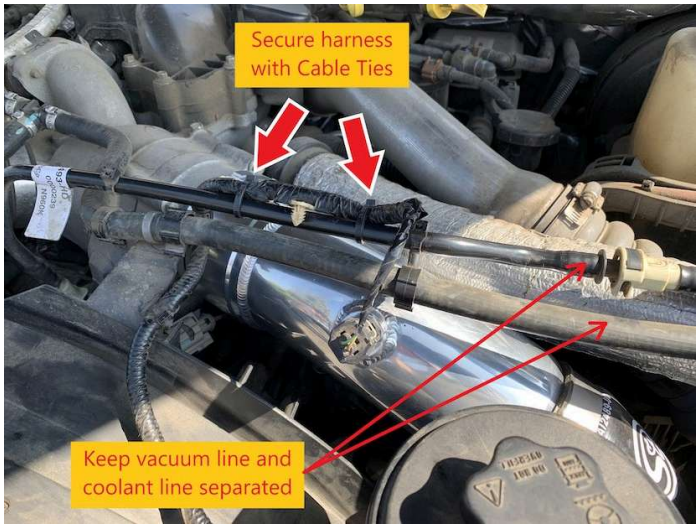
STEP 30

Place the power steering reservoir back in the support slot and tighten the screw.

STEP 31

Secure the loose Temp Sensor harness with Cable Ties (F) to the plastic vacuum line as shown below. Cut off the excess cable tie with a Wire Cutter. Make sure to keep the plastic vacuum line and rubber coolant lines separated as it was from the factory to prevent them from rubbing on each other.



STEP 32

Inspect your installation, [illegible] the kit is properly positioned with clearances

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around all the parts to prevent wear or damage to any parts during vehicle operation, movement, and vibration. Verify both T-Bolt Hose Clamps are tight and secured. Keep all stock parts in case you ever need to reinstall the stock intake assembly. Affix the ID label somewhere visible and near the CAC Outlet Kit. If you are an installer, give the owner the QR code for the Installation Instructions so that he/she is aware of the Maintenance and Operation procedures given in the beginning of the Instructions. Clean a flat visible surface under the hood and affix the enclosed CARB EO sticker for SMOG purposes. The installation is now complete.

CARB EO LABEL

Please affix the included CARB-approved EO label in an area under the hood. We recommend placing it on the radiator shroud, or the underside of the vehicle's hood near the S&B product.

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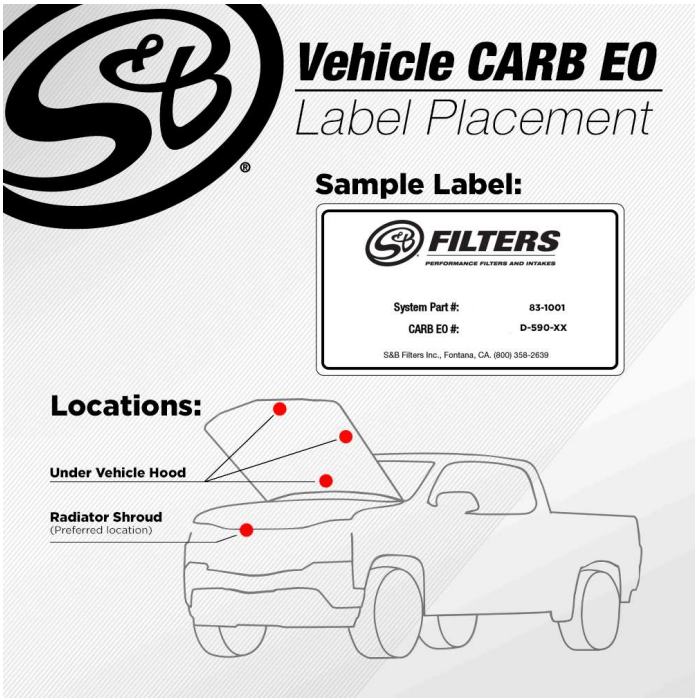

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