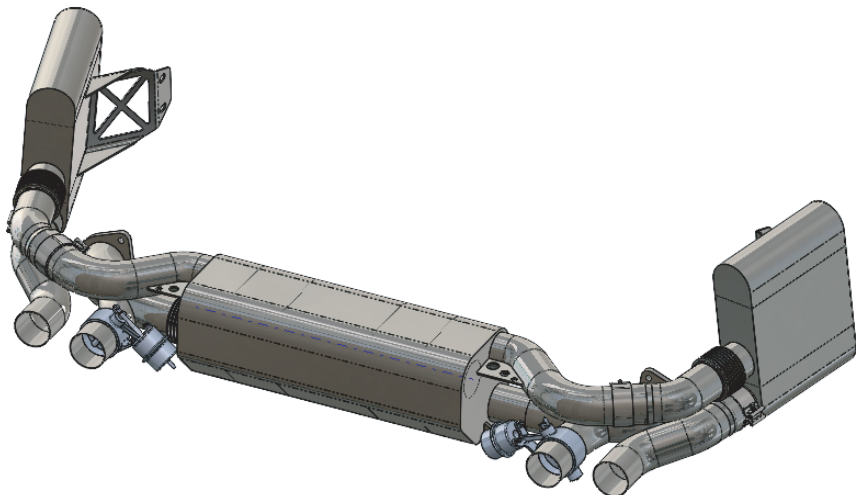
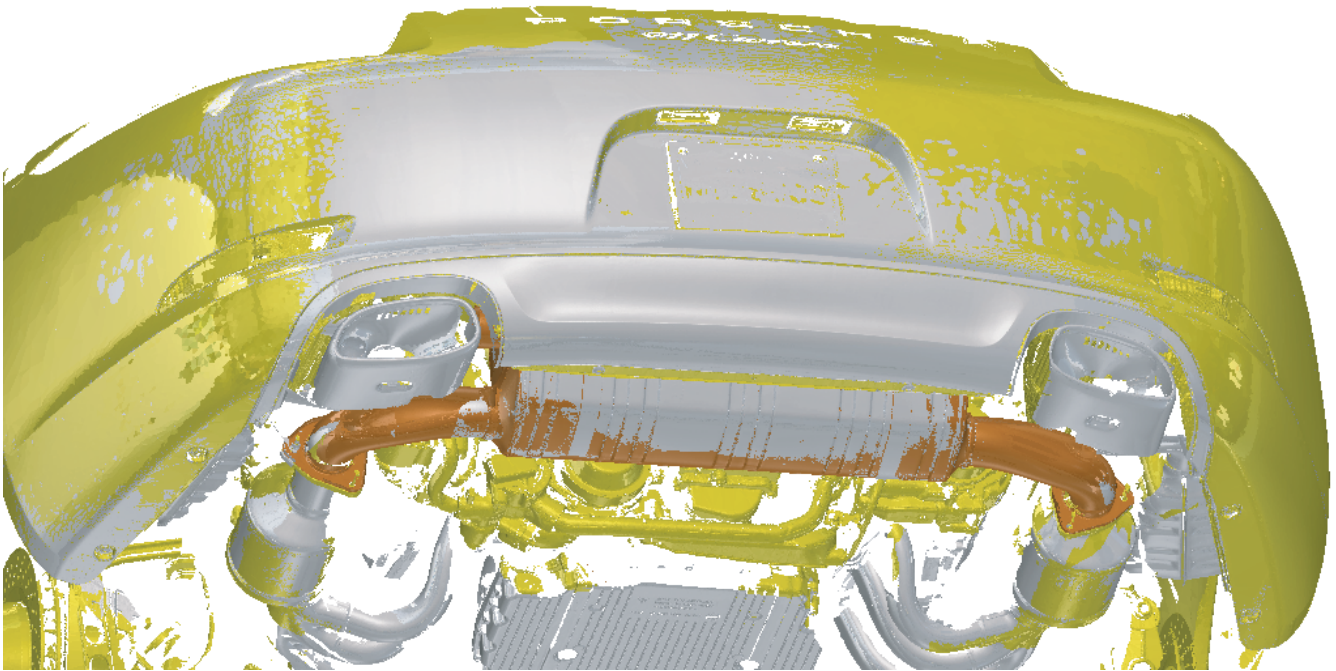


Step 1 - Remove the OE Exhaust

Start this install by removing your exhaust system from the Catalytic Converter. You will need to remove the bumper cover to install the valve actuator controller so removal early would make this installation easier.

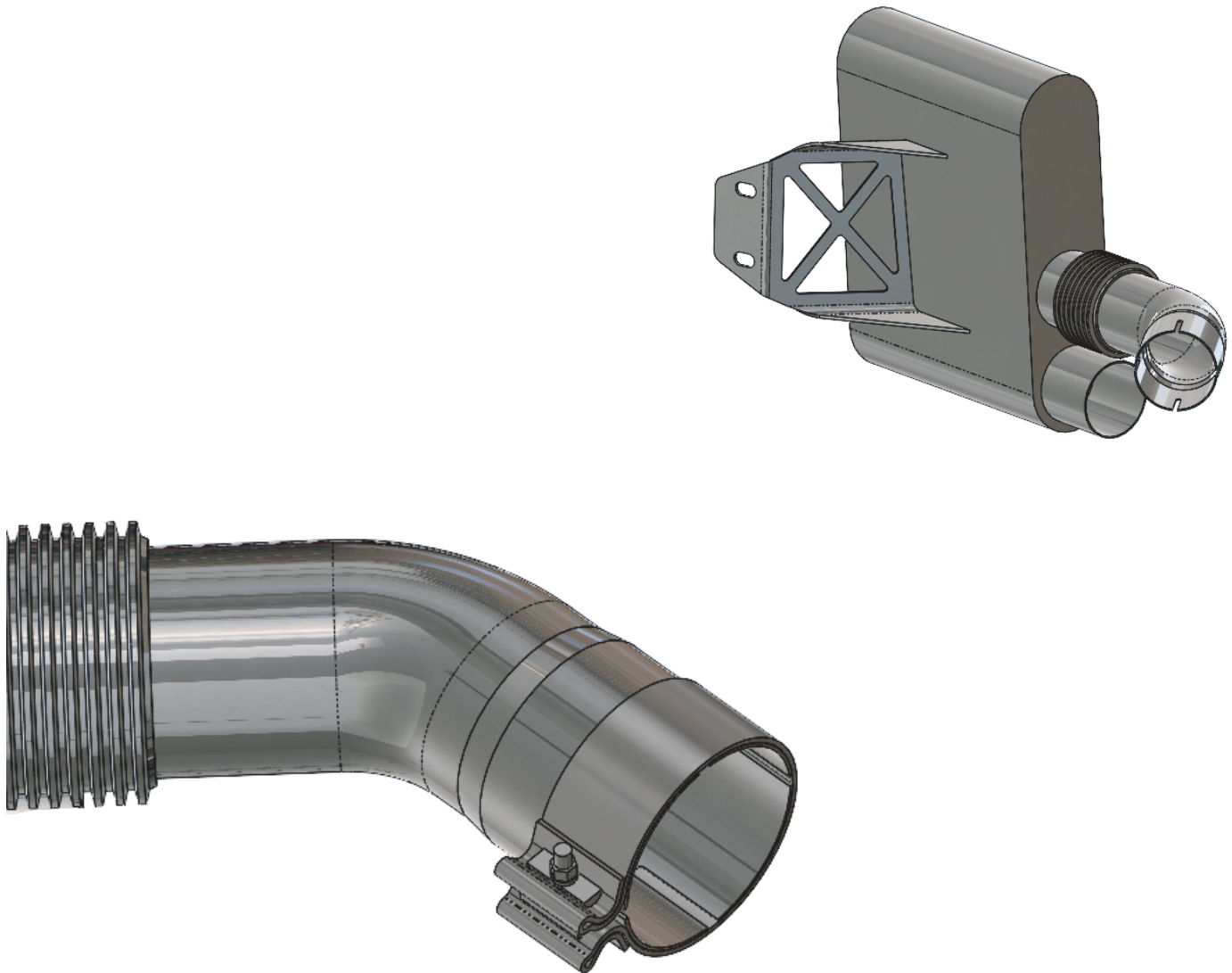


Step 2 - Install the Suitcase Mufflers

The suitcase side mufflers are best installed first as they can be moved easily and are used to support the center muffler during installation. These mufflers mount in the same orientation and share the OE bolt locations. These holes are slotted to allow adjustment to ensure perfect fitment.

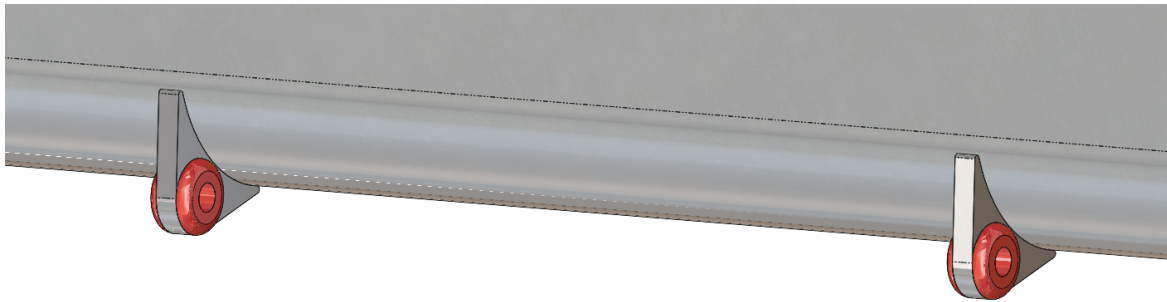
Do not tighten the side mufflers until the end to allow that adjust-ability.

Place provided Accuseal clamps over the split portion of the ends as they will be difficult later.



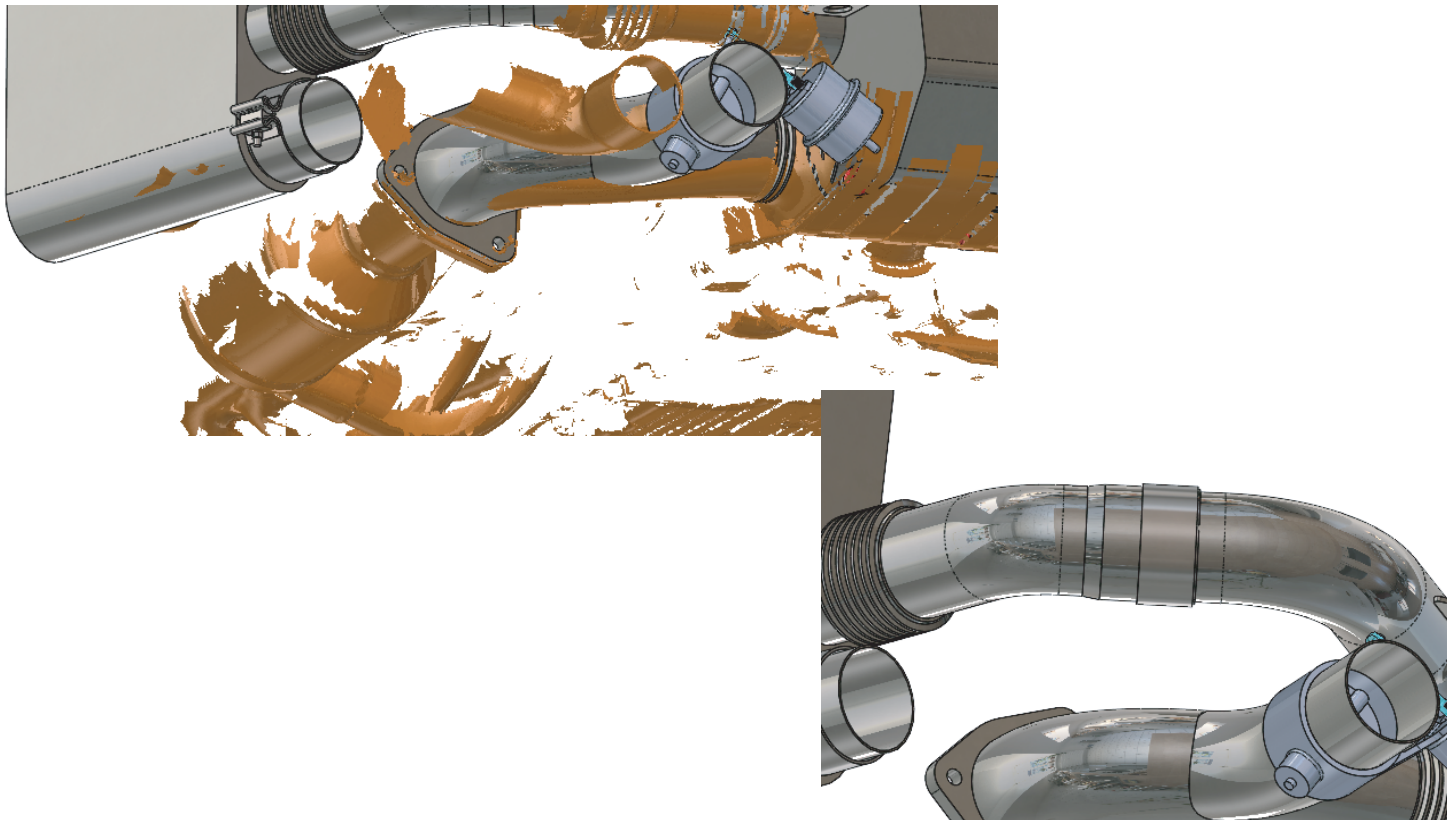
Step 3 - Install the Center Muffler

Begin by installing the High Temp grommets for the vacuum lines on the tabs located on the body. There are 5 locations.



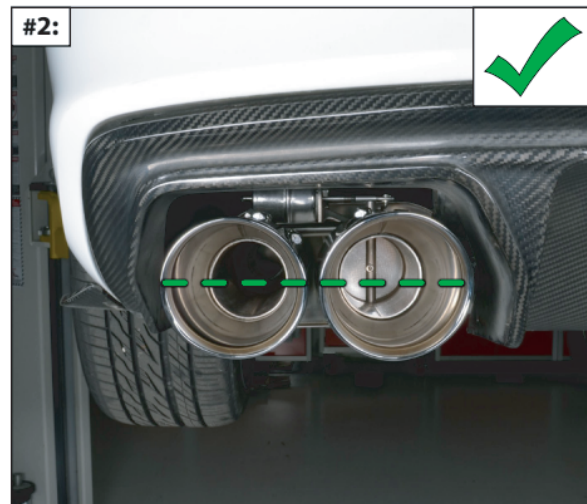
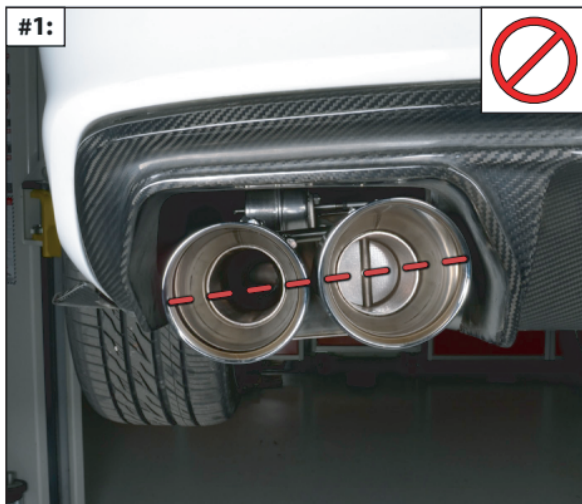
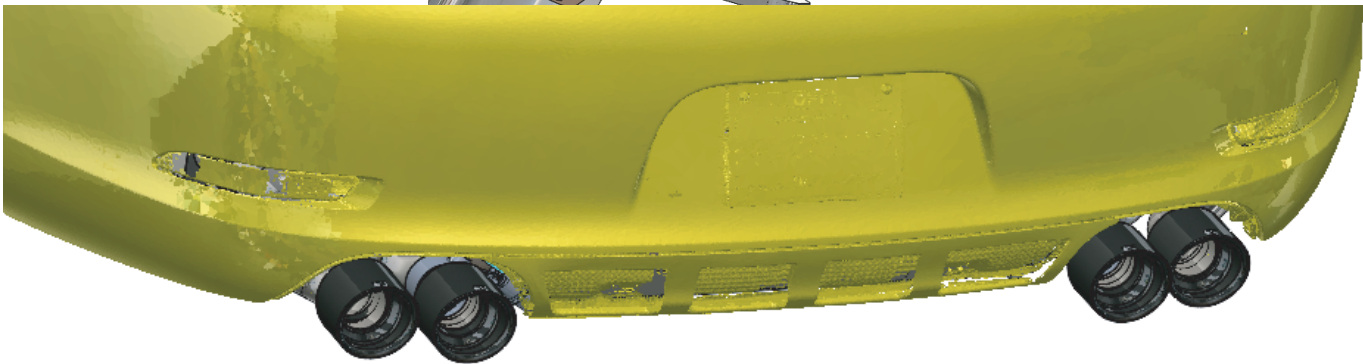
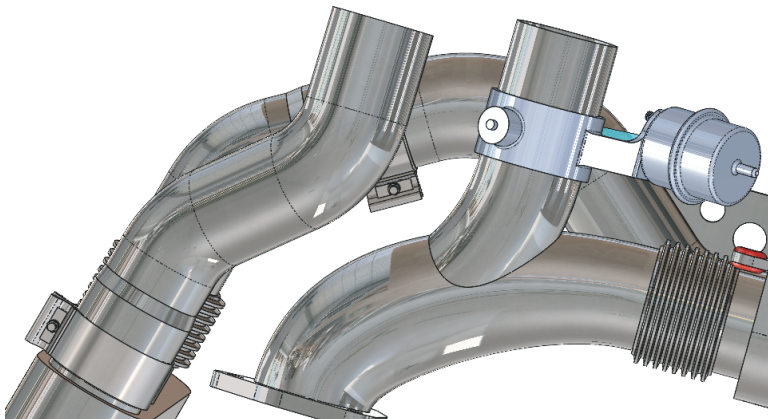
Replace or reinstall the exhaust gasket to the car side of the flange.
 Lift the muffler body in to place. This can be tight; lifting the flange side in to the muffler pocket first to get the body to rotate in to the space works best.
 Rotate the end flanges on to the exhaust studs.
 Tighten exhaust nuts to hold the center section to the car.

While still supporting the center muffler, slide the side mufflers clamps over the top tube. Do not tighten the Accuseal clamp as the adjustment is needed for the final fit up.



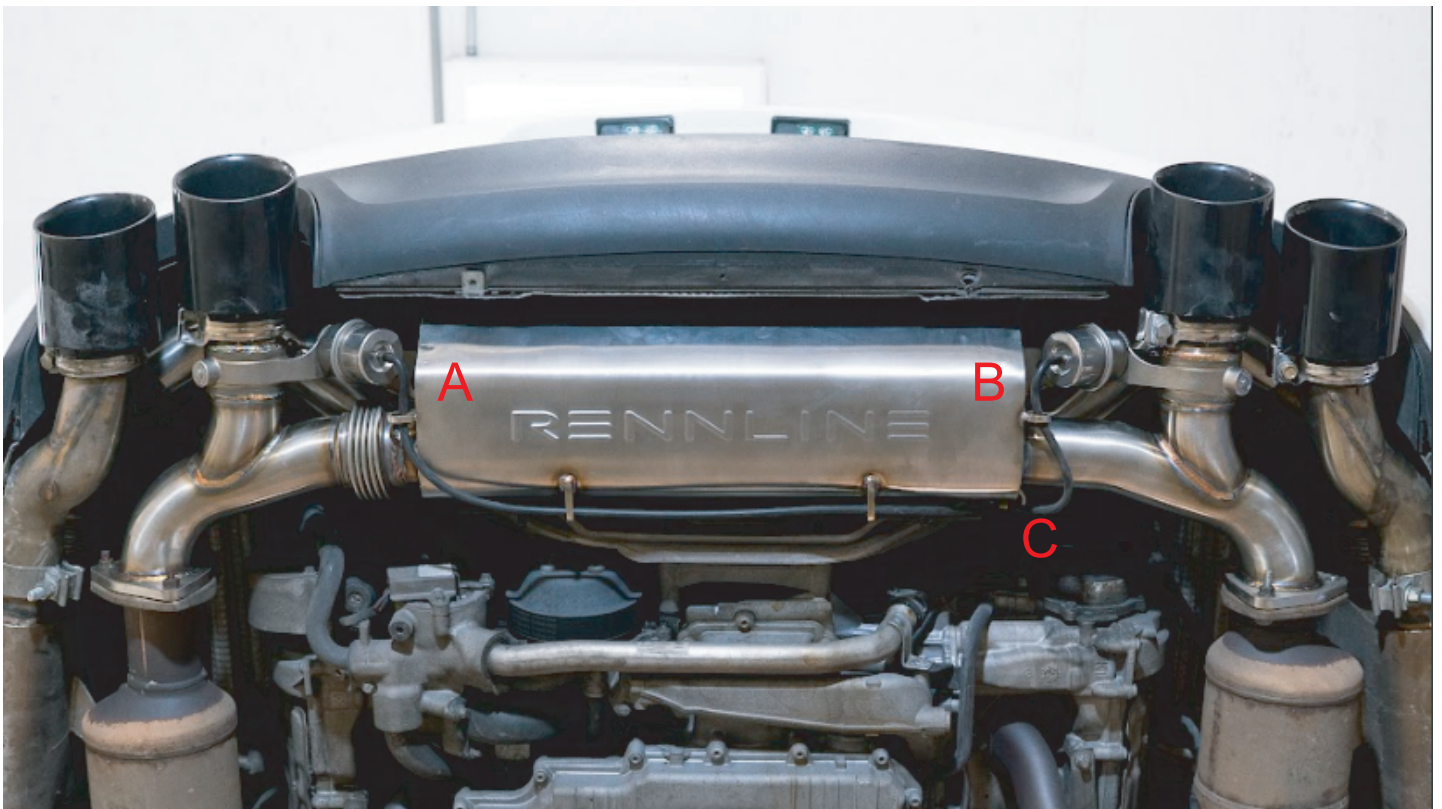
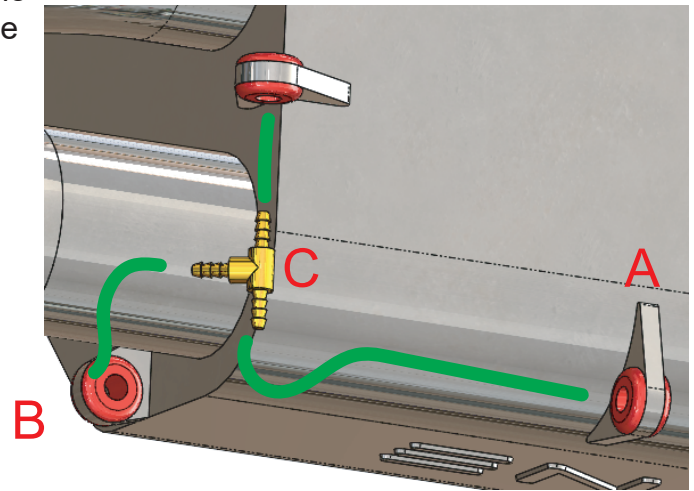
Step 4 - Install the Side Tubes

Place the Accuseal clamps over the side tube and install them on to the side mufflers. These exits are staggered and should be clamped with the exhaust tips attached. Adjustments can be made by sliding the tube forward and backwards on the side muffler. All clamps can be tightened when the bumper is fully installed and exhaust tip locations are set. Set the exhaust tips to lie parallel to the ground. The exhaust tips have a swivel aspect which allows better control of the orientation.



Step 5 -Route Vacuum Lines

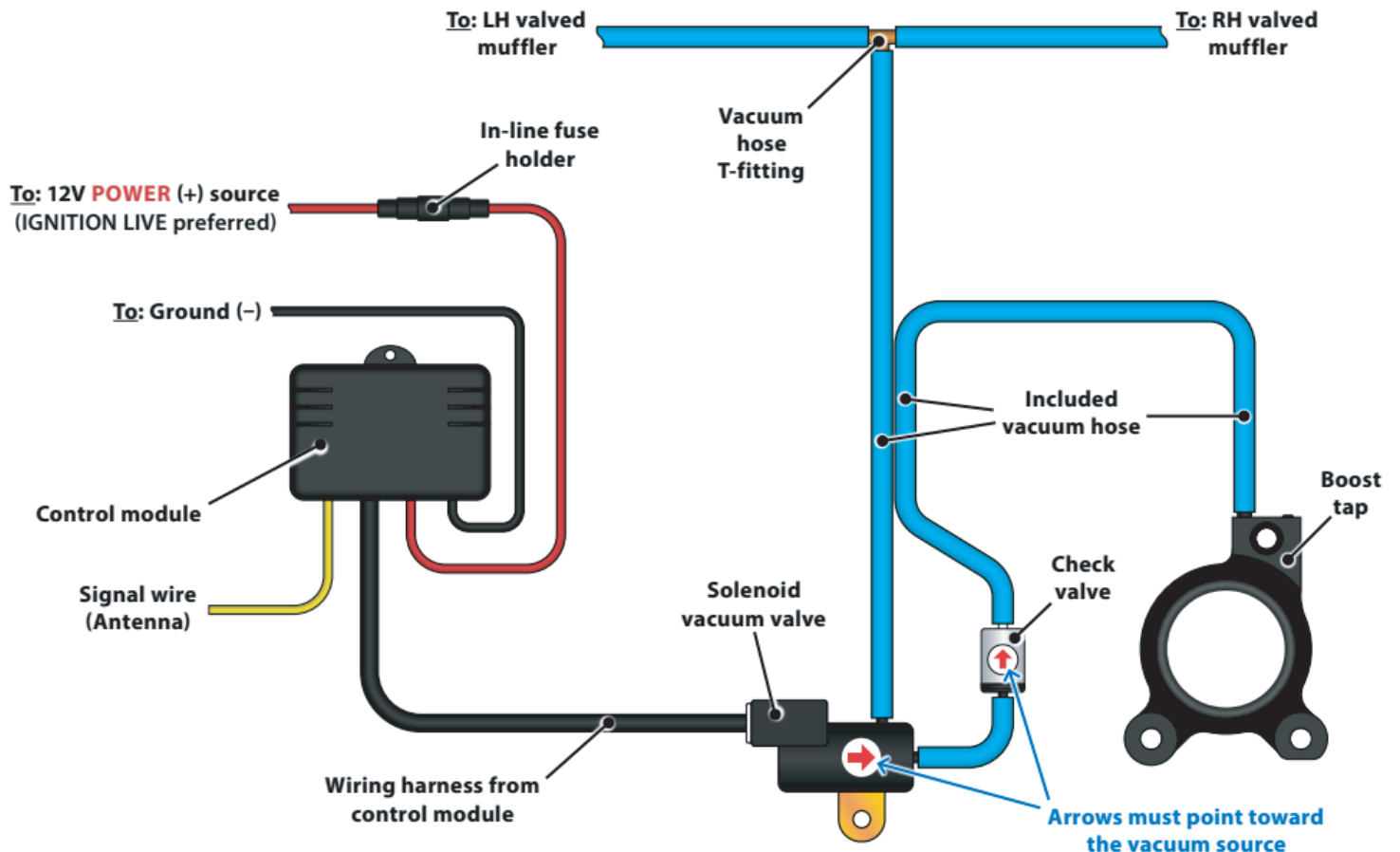
Provided is our EX23, a vacuum actuated control kit. In this kit is a roll of vacuum tubing and a brass TEE that will be used on this step. Refer to the photo below for the next section. Attach one end of the vacuum tubing to the valve and route the vacuum tubing from location **A** to **C** through the grommets. Cut the valve with adequate slack and use another section on valve **B** to **C**. Cut the tubing so the tubing routes in this orientation. Route tubing through the engine bay to the top side of the motor, near the intake.



Step 6 -Installing the Valve Controller

The control module and solenoid can be installed almost anywhere on the vehicle. For this example we will install them under the deck lid. We recommend using an Add-A-Circuit Fuse Holder to power the control module by tapping into an IGNITION LIVE wire. We want this system to be active only under ignition power. There are several locations to pull ignition power from, refer to a wiring diagram or use a multimeter to determine what location is best for you. We typically pull power from a lead on the tail light (which has one ignition powered leg). In our testing the RED wire with BLACK stripe has ignition power. Confirm this on your car. Connect the ground wire to a nearby chassis ground.

Refer to the below diagram for the vacuum actuator.



Step 7 - Tapping the Vacuum Source

Through our testing we found a great vacuum source on the drivers side hose near the intake. There is a “purge” line behind the throttle body. Un-clip this part of the hose shown below and cut the tubing on the most straight section.

In the EX27 Box you will receive a unique 8mm x 8mm x 4mm TEE that is used in this location. Place two hose clamps on either side of tube in preparation for the TEE.

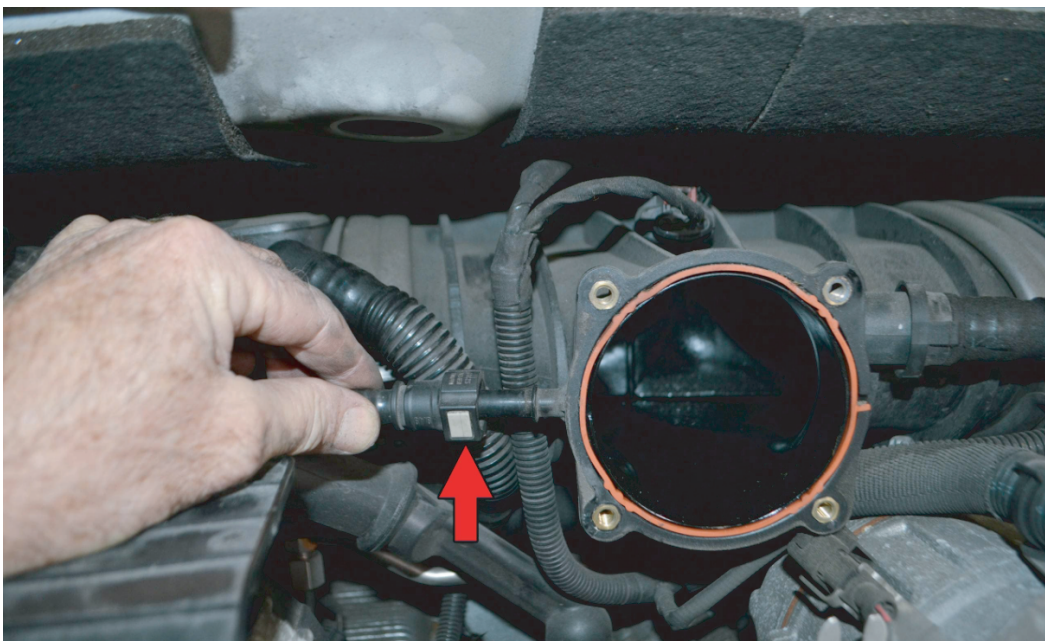
Use a lighter or a heat gun to soften each side of the tubing to install one leg of the TEE. You need to use heat otherwise you will damage this hose.

Install both legs of the TEE on to the OE hose and route your silicone tubing neatly to the 3rd, smaller leg of the TEE. The 3rd leg doesn't need a hose clamp.

Tighten hose clamps when everything is in place and reattach to the car.



Note: Disassembly only for photo purposes. You do not need to disassemble anything.



Step 8 - Mounting the Solenoid

For mounting the solenoid we chose a location in the engine bay on the passenger side. There are several locations that can be used with pre-existing hardware.

The remote valve controller can be attached in the same location. One wire off the control module has a signal wire. Do not cut or modify.

It is recommended that you test the actuation of the valve before putting the bumper back to complete. An issue like having the check valve in backwards can cause the system not to work correctly.

Your remote will come preprogrammed and will work right out of the box.

The valve is **normally closed**, the **UNLOCK** button will **OPEN** the valve, and the **LOCK** button will **CLOSE** the valve.

If everything is working correctly, reinstall the bumpers and engine plastics and you are all set.



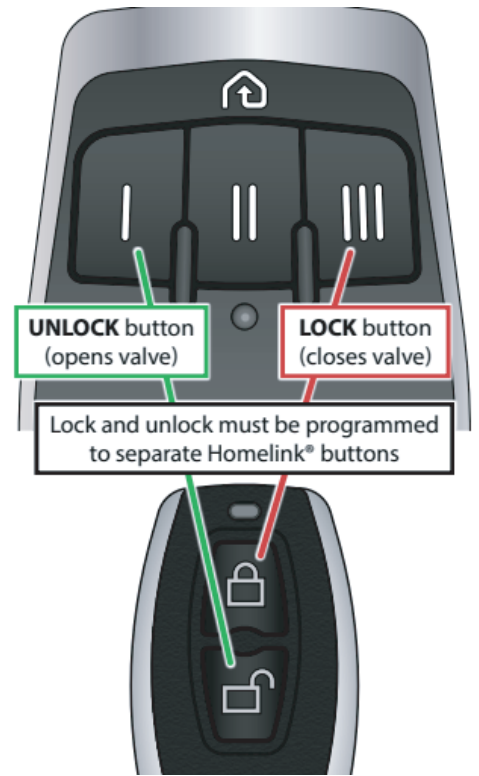
Step 9 - Additional Programming of the Remote

It is possible to program the Homelink® buttons inside your vehicle and use them to open and close the exhaust system valves. Since the valve in the muffler is normally closed, the UNLOCK button will OPEN the valve, and the LOCK button will CLOSE the valve. We recommend you check your owner's manual programming information, or you can visit the Homelink® website for their vehicle specific instructions:

- <https://homelink.com/program/watchvideo>

Here are a few notes to help you along the way:

1. You will need to program ANY TWO of your Homelink® buttons to control the exhaust system valves: one button will be used to open the valve, the second button will close it.
2. Pay close attention to where the manufacturer suggests pointing the remote during pairing. Some systems are very sensitive to location.
3. Depending on the method used to program the Homelink® system, it is possible that any previously programmed remotes will be deleted and will need to be reprogrammed.
4. If you have difficulty programming your Homelink® buttons, it might help to try the following:
 - Start the programming procedure over again.
 - Check your remote batteries.
 - Review the troubleshooting tips in your owner's manual.



Your Rennline Exhaust System installation is complete!