



## Audi B9 A4 (Pre-Facelift) ECS Valved Exhaust System Installation Instructions - [Click HERE to Shop](#)



**Skill Level  
2 - Moderate**  
**Some Experience  
Recommended**

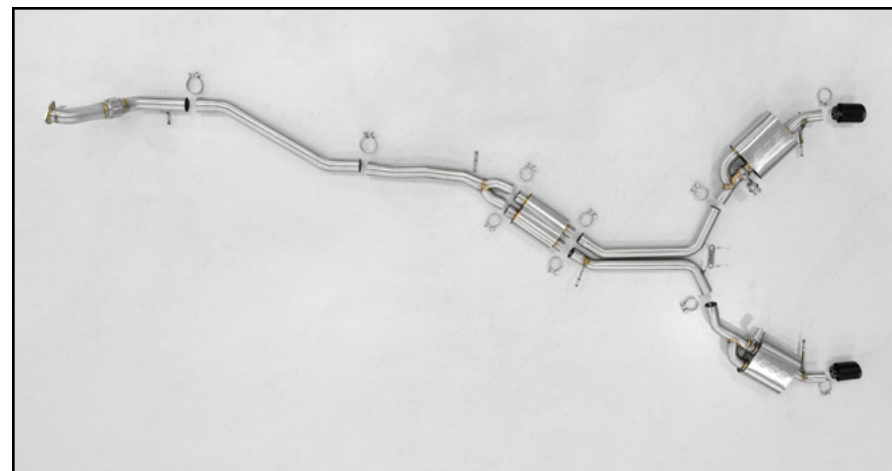


Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times to eliminate the possibility of personal injury or improper service which could damage the vehicle or compromise its safety.

## INTRODUCTION

Upgrading the exhaust on your Pre-Facelift Audi B9 A4 is a very rewarding project that an experienced technician will be able to complete in a single day, plan accordingly based on your experience level. The ECS valved cat-back exhaust system will fit like the stock system, but will completely change the character of your car. This system allows you to control the volume of the exhaust with a key fob remote which is included in the kit. This gives you the ability to start the car quietly in the morning (without angering your neighbors), then open the valves on the highway and let it **RIP!**

Before you begin, read and familiarize yourself with these instructions and make sure you have all the required tools on hand. Thank you for looking to ECS Tuning for all your performance and repair needs, we appreciate your business!

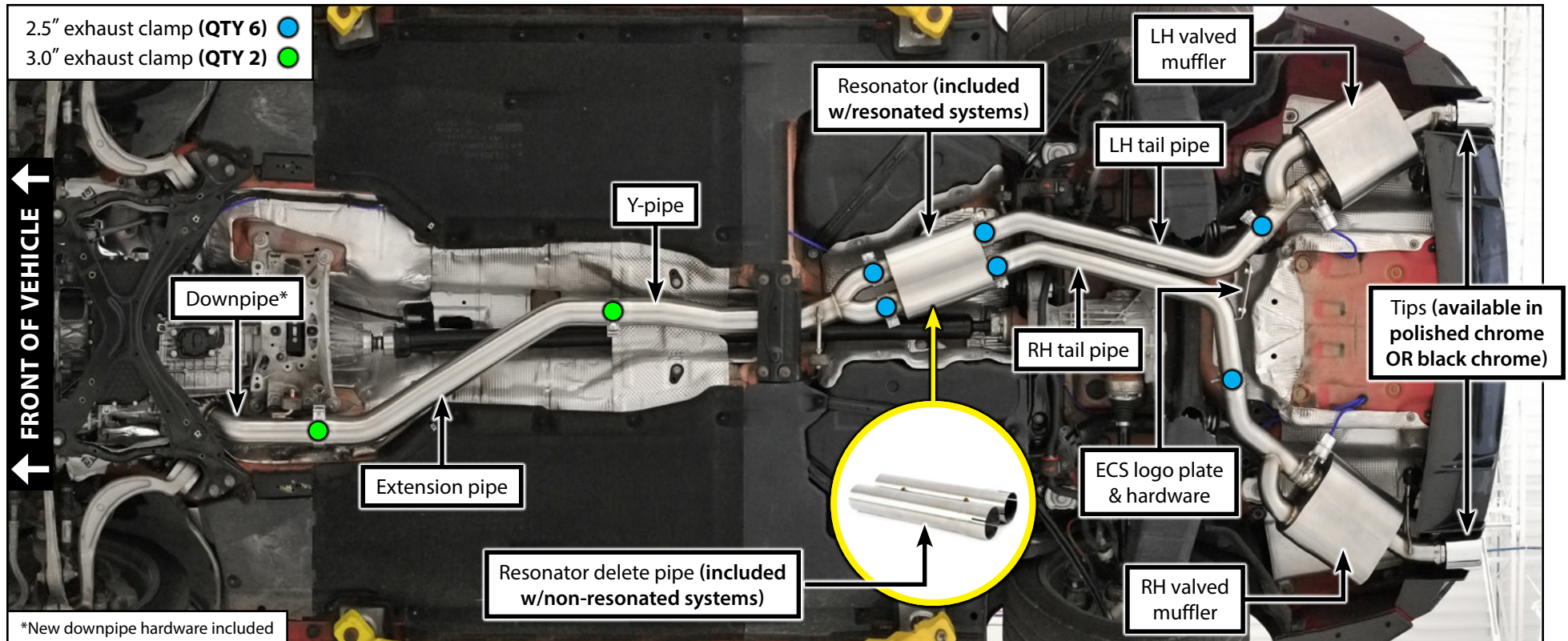


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## VALVED EXHAUST SYSTEM KIT CONTENTS



Kits are available resonated or non-resonated, with chrome or black tips. Resonated systems utilize a resonator mounted in the center of the center of the system to reduce resonant frequencies from entering the cabin (commonly referred to as "drone"). Our ECS exhaust tips feature swivel adjustment to fine tuning their fit.

See [Page 10](#) for the remote exhaust valve controller kit contents.

## REQUIRED TOOLS

Note: The tools required for each step will be listed by the step number throughout these instructions.

### Standard Automotive Tools

- Protecta-Sockets (for lug nuts) ..... [ES#2221243](#)
- **3/8" Drive Ratchet** ..... [ES#2765902](#)
- **3/8" Drive Torque Wrench** ..... [ES#2221245](#)
- **3/8" Drive Deep and Shallow Sockets** ..... [ES#2763772](#)
- **3/8" Drive Extensions** ..... [ES#2804822](#)
- **Hydraulic Floor Jack** ..... [ES#2834951](#)
- **Torx Drivers and Sockets** ..... [ES#11417/8](#)
- **1/2" Drive Deep and Shallow Sockets** ..... [ES#2839106](#)
- 1/2" Drive Ratchet
- 1/2" Drive Extensions
- 1/2" Drive Torque Wrench ..... [ES#2221244](#)
- **1/2" Drive Breaker Bar** ..... [ES#2776653](#)
- Bench Mounted Vise
- Crows Foot Wrenches
- Hook and Pick Tool Set ..... [ES#2778980](#)

### Required For This Install

- **1/4" Drive Ratchet** ..... [ES#2823235](#)
- **1/4" Drive Deep and Shallow Sockets** ..... [ES#2823235](#)
- **1/4" Drive Extensions** ..... [ES#2823235](#)
- Plier and Cutter Set ..... [ES#2804496](#)
- Flat and Phillips Screwdrivers ..... [ES#2225921](#)
- **Jack Stands** ..... [ES#2763355](#)
- **Ball Pein Hammers**
- Pry Bar Set ..... [ES#1899378](#)
- Electric/Cordless Drill
- **Wire Strippers/Crimpers**
- Drill Bits
- Punch and Chisel Set
- Hex Bit (Allen) Wrenches and Sockets ..... [ES#11420](#)
- Thread Repair Tools ..... [ES#1306824](#)
- **Open/Boxed End Wrench Set** ..... [ES#2765907](#)

### Available On Our Website

### Specialty Tools

- **Exhaust Hanger Removal Pliers** ..... [ES#2784927](#)
- **Triple Square Socket Set** ..... [ES#9011](#)

## INSTALLATION NOTES

- **RH** refers to the *passenger side* of the vehicle.
- **LH** refers to the *driver side* of the vehicle.
- Always use the proper torque specifications.
- If applicable to this installation, torque specifications will be listed throughout the document and at the end as well.
- Please read all of these instructions and familiarize yourself with the complete process **BEFORE** you begin.

## GENERAL PREPARATION AND SAFETY INFORMATION

ECS Tuning cares about your health and safety, please read the following safety information. This information pertains to automotive service in general, and while it may not pertain to every job you do, please remember and share these important safety tips.

- Park your car in a safe, well lit, level area.
- Shut the engine off and remove the key from the ignition switch.
- Make sure any remote start devices are properly disabled.
- **ALWAYS** wear safety glasses.
- Make sure the parking brake is applied until the vehicle is safely lifted and supported.
- Whether lifting a vehicle using an automotive lift or a hydraulic jack, be sure and utilize the factory specified lift points.
- Lifting a vehicle in an incorrect location can cause damage to the suspension/running gear.
- **ALWAYS** support the vehicle with jack stands.
- **ALWAYS** read and follow all safety information and warnings for the equipment you are using.

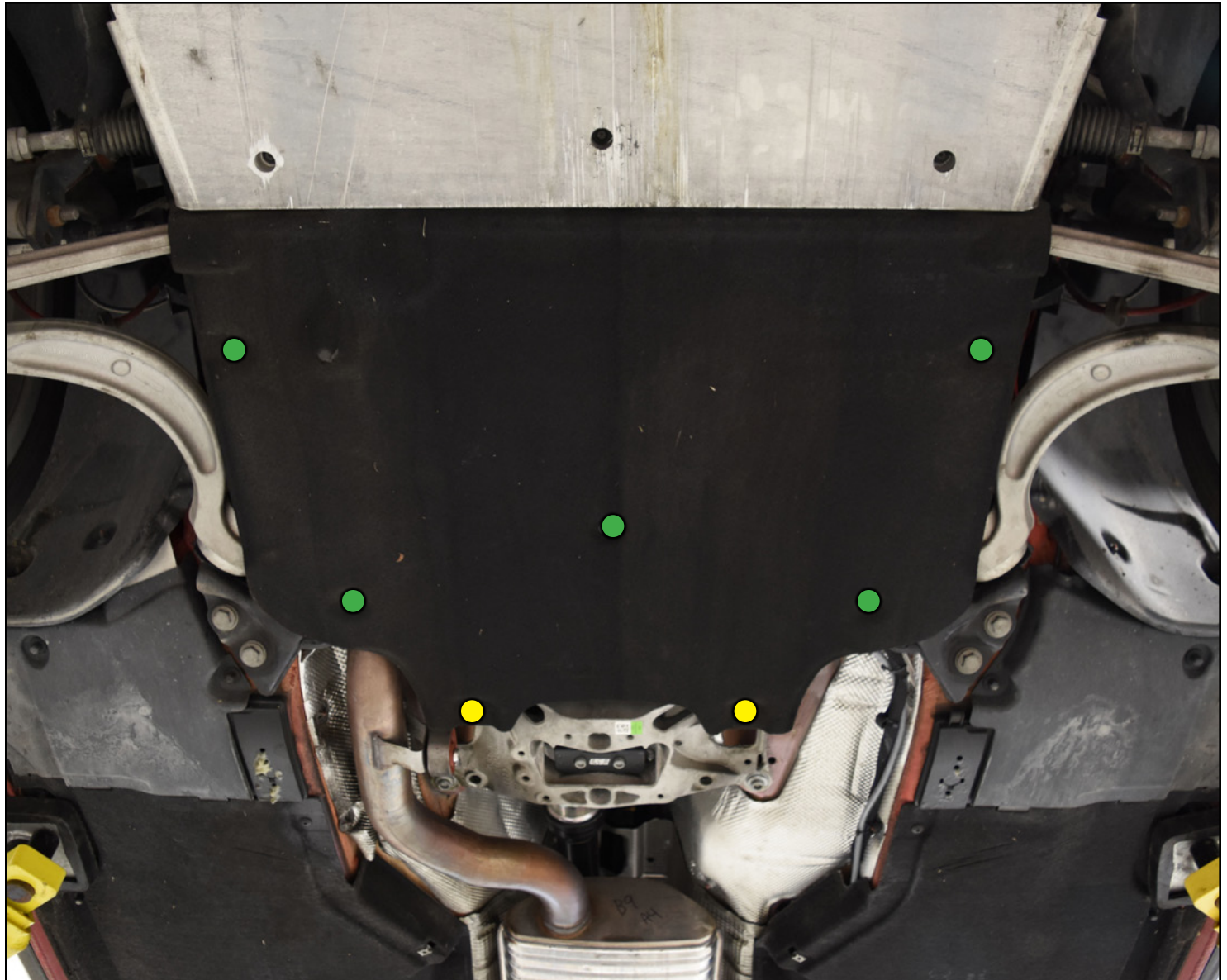


**NEVER** get underneath a vehicle that is supported only by a jack, and **ALWAYS** make sure that the vehicle is securely supported on jack stands.

## REMOVING THE STOCK EXHAUST SYSTEM

### Step 1:

Safely lift and support the vehicle. Remove the transmission insulation panel by removing the T25 Torx screws (highlighted in **GREEN**) and the plastic push rivets (highlighted in **YELLOW**) which secure it to the vehicle.





## REMOVING THE STOCK EXHAUST SYSTEM

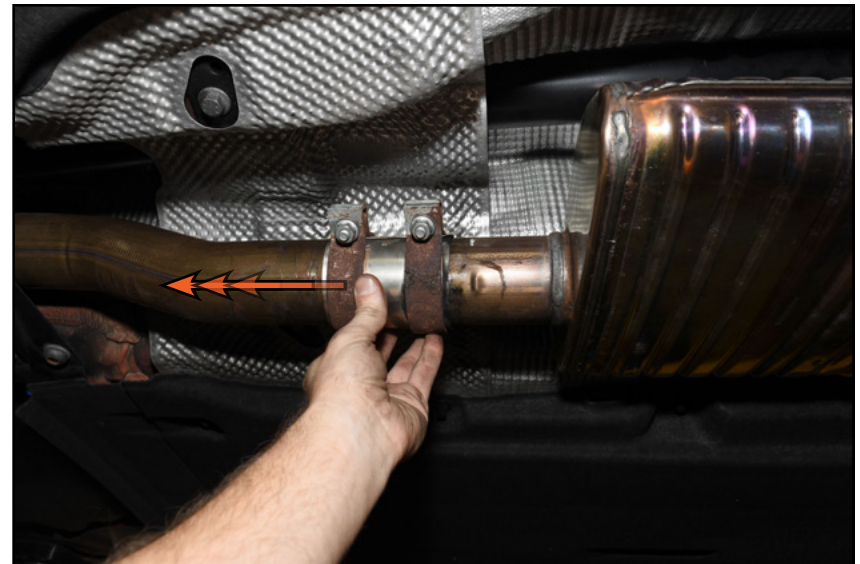
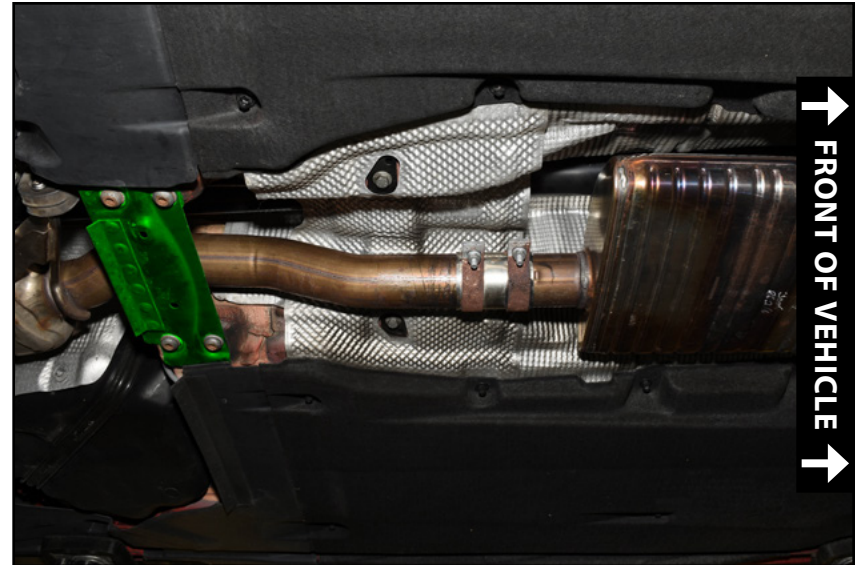
### Step 2: T25 Torx, Flat Blade Screwdriver

Now is the perfect time to spray all of the fasteners with penetrating oil. This includes the sleeve clamp behind the resonator (shown in the photo), as well as the nuts which secure the downpipe to the cat (not shown).

**Optional:** You can remove the chassis cross brace (highlighted in **GREEN**) for extra room to work, but this install can be completed without removing it.

### Step 3: 13mm Socket & Ratchet

Support the downpipe from below. Loosen the bolts on the sleeve clamp behind the resonator, then slide the clamp rearward to release the downpipe from the rest of the exhaust system (shown in the photo).



## REMOVING THE STOCK EXHAUST SYSTEM

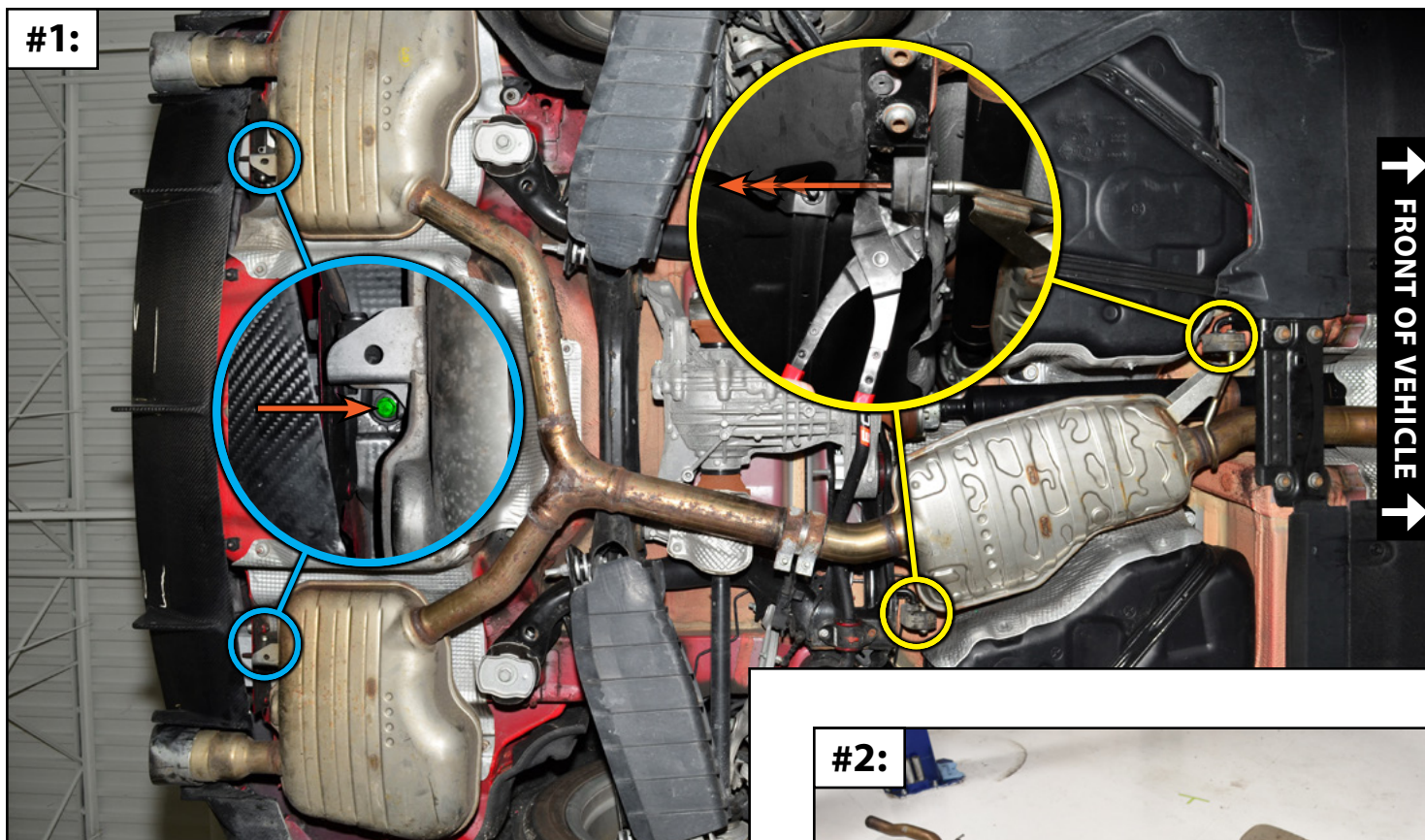
### Step 4:

Support the rest of the exhaust system from below.

Release the two forward hangers from the exhaust system (see the **YELLOW** highlights in **Photo #1**). Exhaust hanger removal pliers work very well here!

Space is tight around the two muffler hangers. You may find it easier to remove the 13mm bolts from the hangers and leave them on the mufflers while you pull the exhaust system out (see the **BLUE** highlights in **Photo #1**).

Carefully lower the entire system to the ground and set it aside (**Photo #2**).



**CAUTION:** The stock exhaust system is very heavy. We strongly recommend you enlist the help of a friend (or even two) to help you with lowering the system.



## REMOVING THE STOCK EXHAUST SYSTEM

### Step 5:



**If you purchased a kit WITH a new high flow catalytic converter and/or downpipe:**

- Please reference the instructions on [ES#3624402](#) under the "Installation" tab.

**If you purchased a kit WITHOUT a new high flow catalytic converter and/or downpipe:**

- Please proceed to the next step.



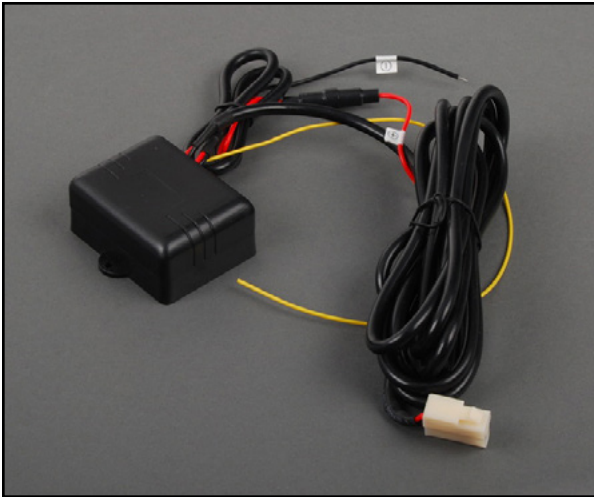
### Step 6:



Proceed to the next page for the installation of the remote valve controller system. The best time to install this system is now with the exhaust system completely removed from the vehicle.



## REMOTE EXHAUST VALVE CONTROLLER KIT CONTENTS



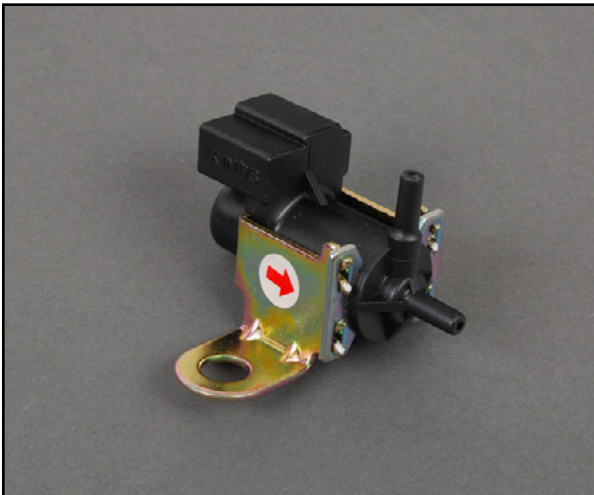
Control Module with Wiring Harness **(QTY 1)**



Vacuum Hose **(1x long, 1x short)**



Remote Controllers **(QTY 2)**



Solenoid Vacuum Valve **(QTY 1)**



Check Valve **(QTY 1)**



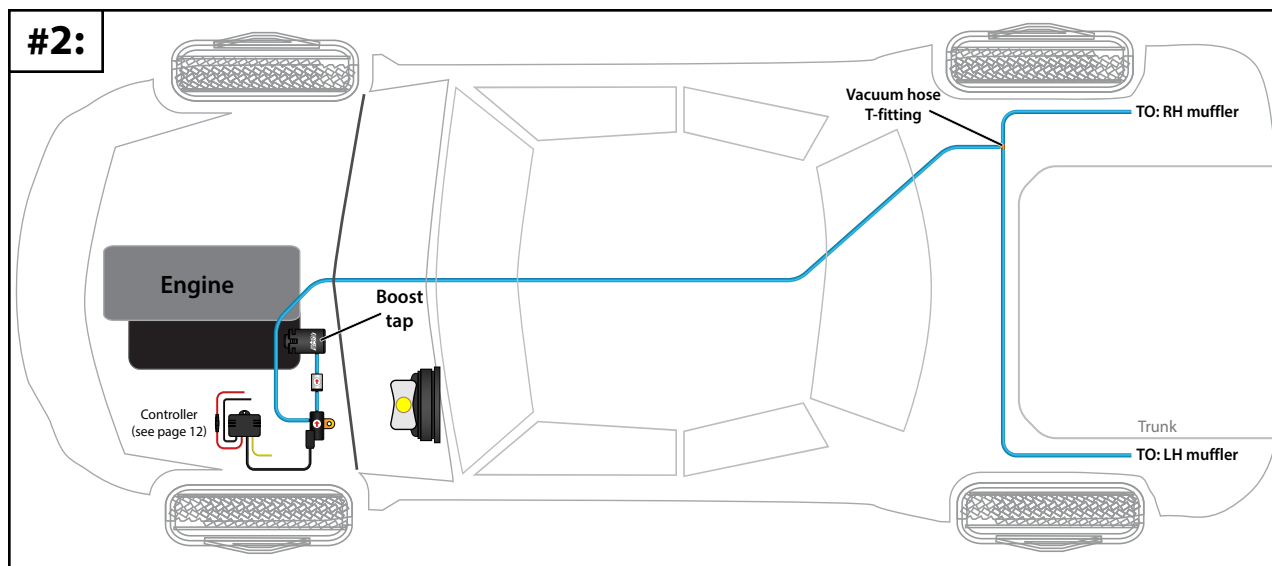
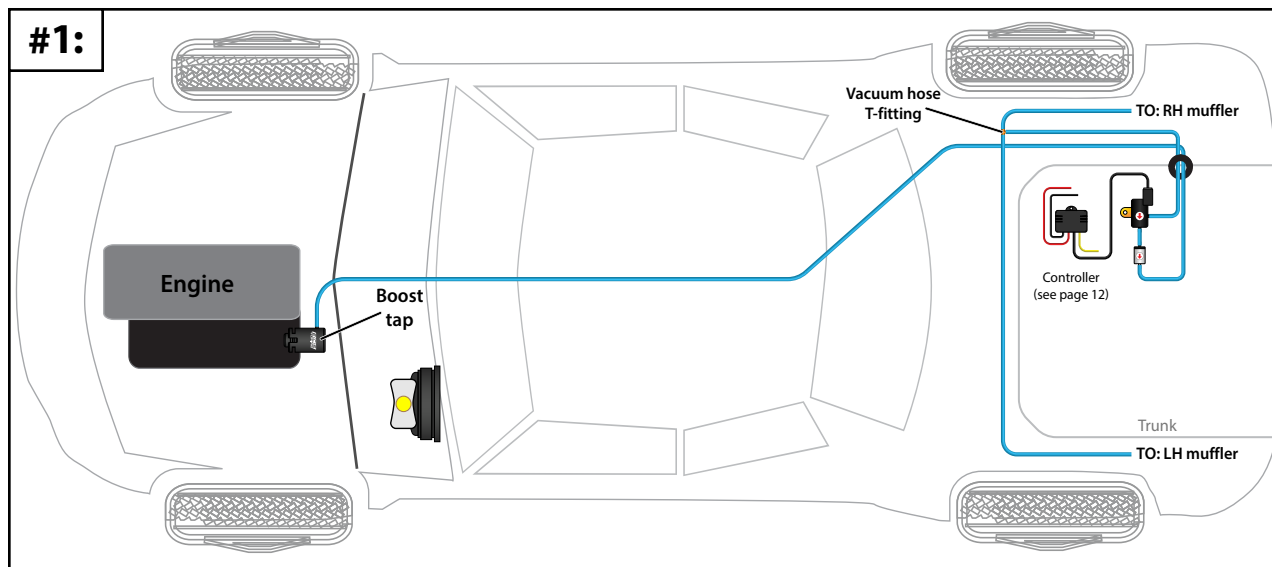
Vacuum Hose T-Fitting **(QTY 2)**

## REMOTE EXHAUST VALVE CONTROLLER SYSTEM DIAGRAM

The control module and solenoid can be installed almost anywhere on the vehicle. You could install them in the trunk next to the battery (**Photo #1**), or under the hood (**Photo #2**). The grommet in the trunk floor is a good place to feed the hose inside (**Photo #1**). If you were to mount the control module under the hood you would need to find a suitable power source nearby (**Photo #2**).

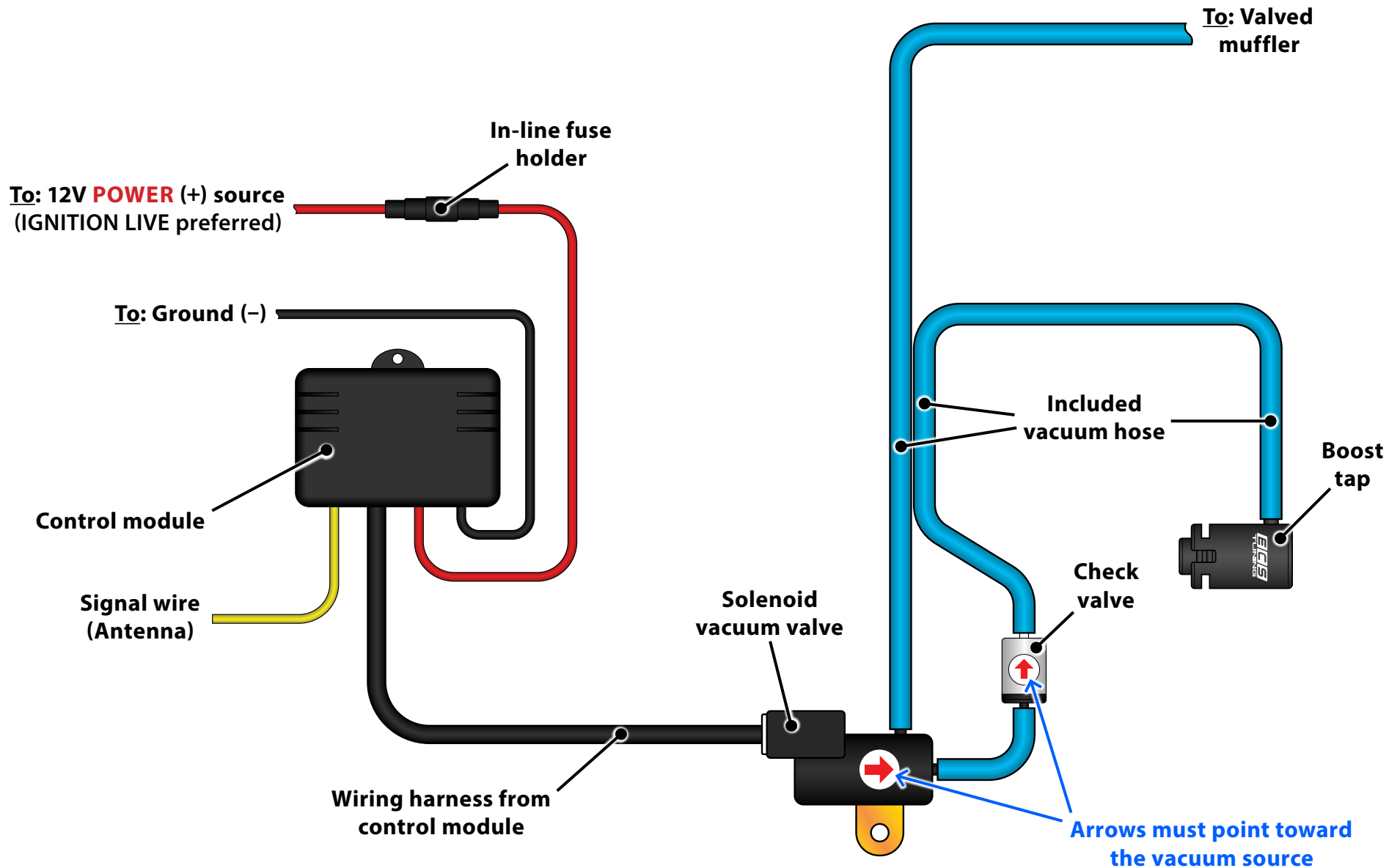
We recommend using an [Add-A-Circuit Fuse Holder](#) to power the control module by tapping into an **IGNITION LIVE** fuse. This means that the control module will not be powered unless the key is turned **ON**. For more information on this please see the PDF which is located under the "Installation" tab on [ES#1906431](#) or [ES#3209653](#). Connect the ground wire to a nearby chassis ground.

Proceed to the next page for a detailed diagram of the entire valve controller system.





## REMOTE EXHAUST VALVE CONTROLLER SYSTEM DIAGRAM

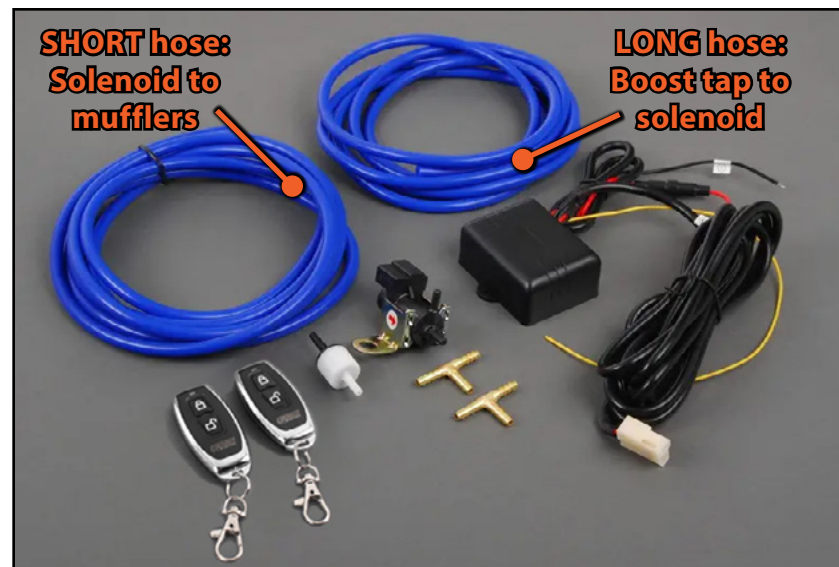


## INSTALLING THE REMOTE EXHAUST VALVE CONTROLLER

### Step 1:

The Remote Exhaust Valve Controller allows the user to open and close the exhaust valves with the push of a button. It utilizes a vacuum valve which uses the vehicles vacuum system, and is activated by the included remote control switch.

Please familiarize yourself with the Kit Contents on Page 10, and the System Diagrams on Page 11 & 12 before proceeding to the next step.

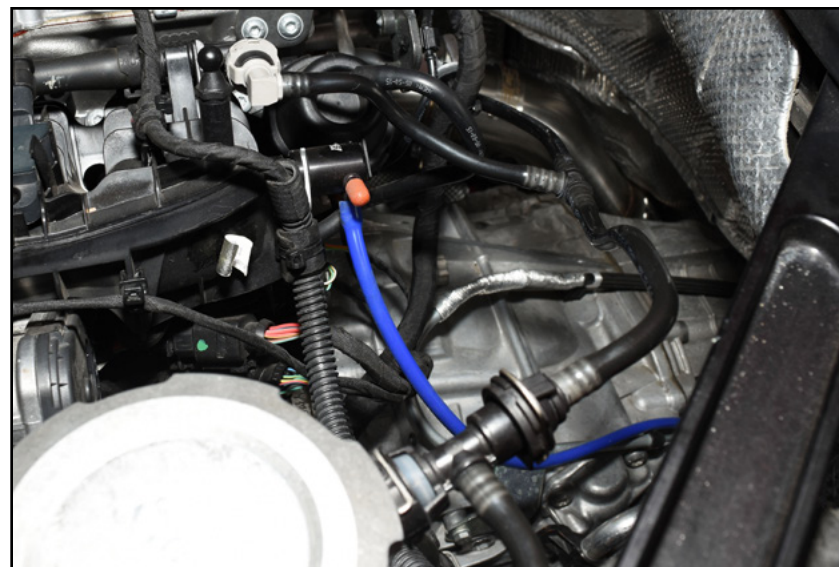


### Step 2:

In order to install this vacuum control valve you **MUST** already have a boost tap installed on the vehicle (or some other appropriate vacuum source). If you do not currently have a boost tap installed on your engine, the ECS Tuning 2.0T boost tap can be found by clicking one of the links listed below:

- Intake Manifold Port Boost Tap Kit: [ES3136138](#)
- Throttle Body Boost Tap Kit: [ES3136139](#)

If you already have a boost tap installed, connect the **LONG** vacuum hose to one of the vacuum ports. This hose needs to route all the way back to the trunk, so **DO NOT** cut it to length yet!



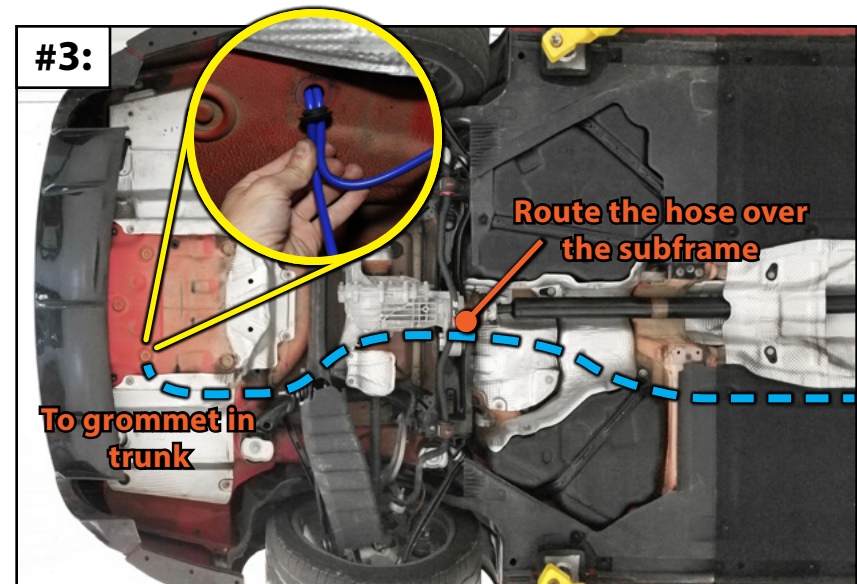
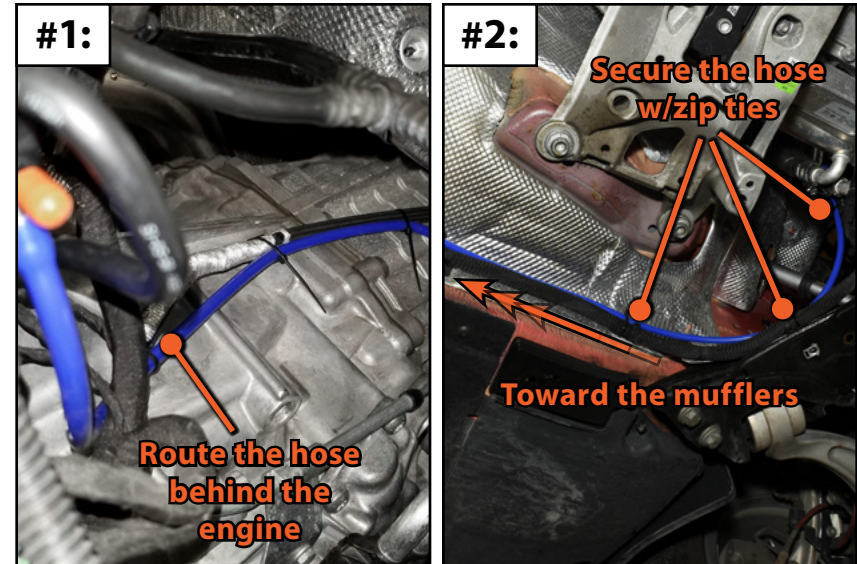
## INSTALLING THE REMOTE EXHAUST VALVE CONTROLLER

### Step 3:

Route the **LONG** vacuum hose down away from any moving or hot components and out through the bottom of the vehicle (**Photo #1**).

Pull the vacuum hose down past the subframe, ensuring that the hose is clear of any moving or hot parts, including suspension, engine and exhaust components (**Photo #2**).

Remove the fasteners on the left underbody panels and swing them downward to gain access. Route the vacuum hose over the panels (shown with the **BLUE** dotted line in **Photo #3**) securing it with zip ties as required. Route the vacuum hose into the trunk through one of the grommets in the floor (**YELLOW** inset photo). Reinstall the panels after the hose has been routed.





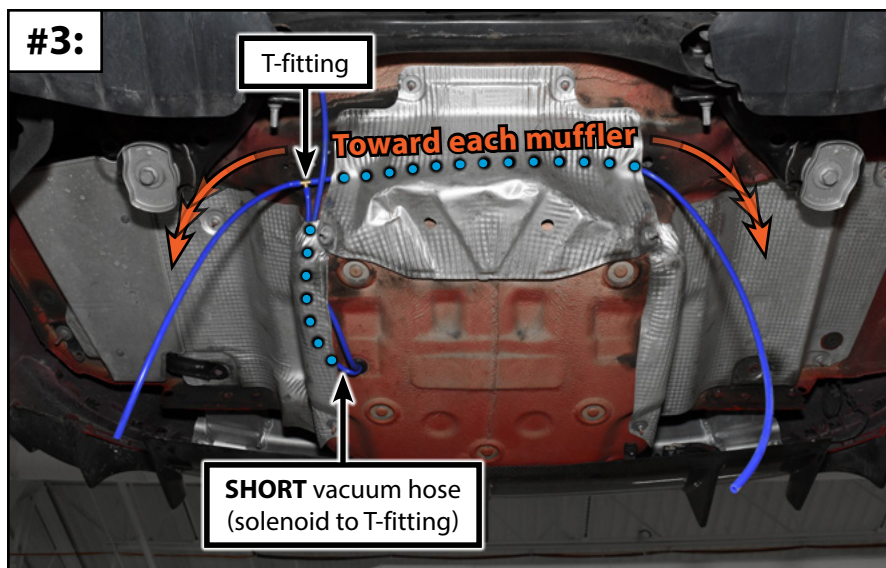
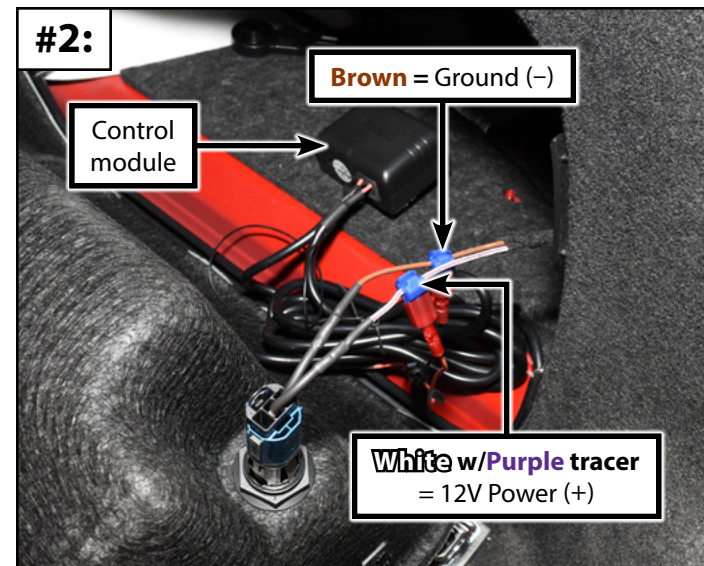
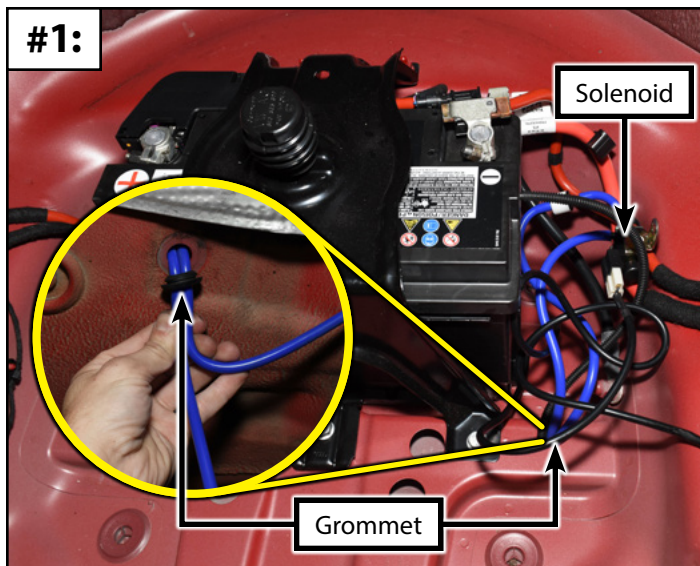
## INSTALLING THE REMOTE EXHAUST VALVE CONTROLLER

### Step 4:

Now it's time to mount the solenoid vacuum valve and the electronic control module. We mounted our solenoid to the trunk floor next to the battery with a self-tapping screw (**Photo #1**). We mounted our module behind the RH trunk panel (**Photo #2**).

Next, connect the control module to suitable power (+) and ground (-) sources. We wired it to the 12V outlet behind the RH trunk panel (**Photo #2**). T-taps work very nicely for this since the connections are inside the trunk and will be protected from moisture. Secure any extra wiring with zip ties as needed.

Moving underneath the vehicle, it's time to finish routing the **SHORT** vacuum hose. This hose needs to go toward the valve on each muffler, note the routing we chose for our install (**Photo #3**). Be sure to add the vacuum hose T-fitting to split the hose between the two mufflers.

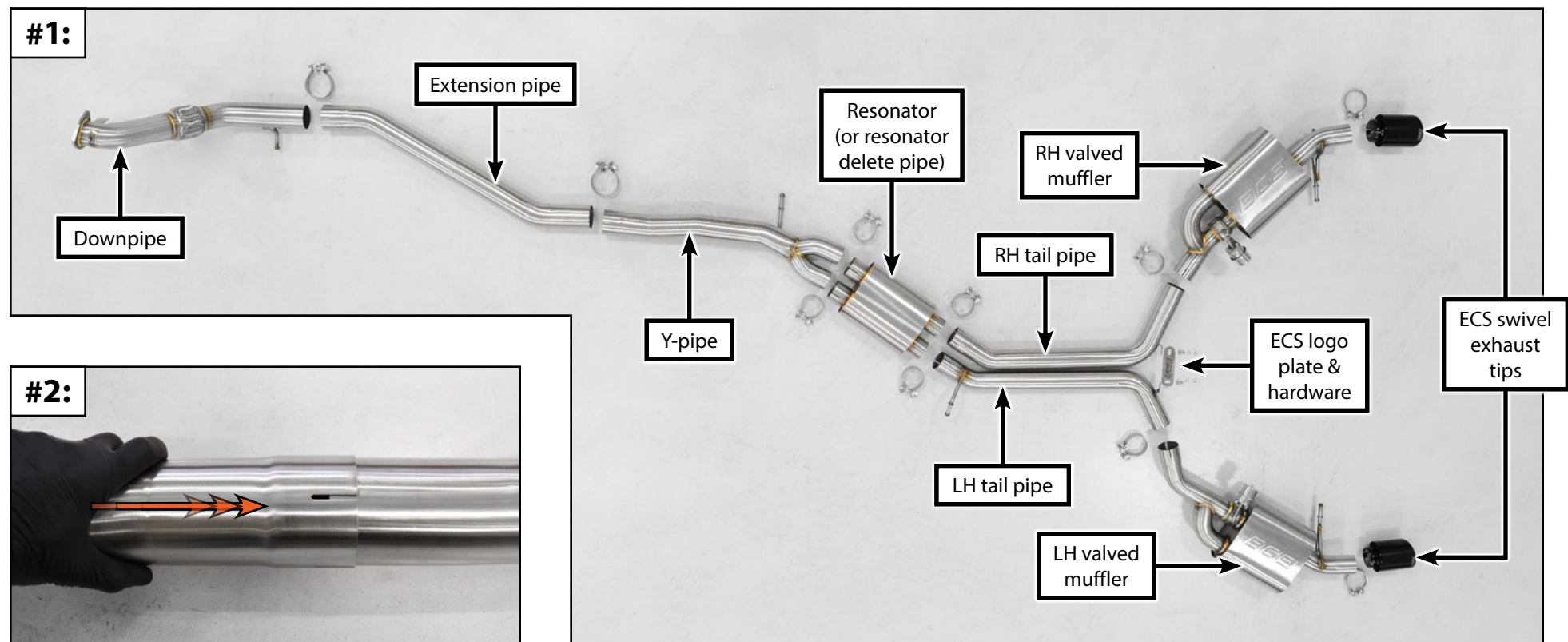


## INSTALLING THE NEW VALVED EXHAUST SYSTEM

### Step 1: Ball Pein Hammer

Before we begin it's a good idea to unpack your new exhaust system and carefully lay it out on the floor (**Photo #1**). Inspect all of the slip joints for any signs of damage during shipping. Test fit the pipes together at every slip joint to make sure they slide together easily (**Photo #2**). If they do not slide together easily, gently tap on the ends of the pipes with a ball pein hammer to straighten them, then recheck fitment. Confirm that the jam nut is tight on each muffler valve (not shown).

Please note that during this installation, you will be installing the exhaust from front to back **WITHOUT** tightening any of the clamps. Once the system is installed, we will then show you how to position the system properly and you will tighten the clamps **AFTER** that is complete. Proceed to the next page once all of the slip joints slide together easily.





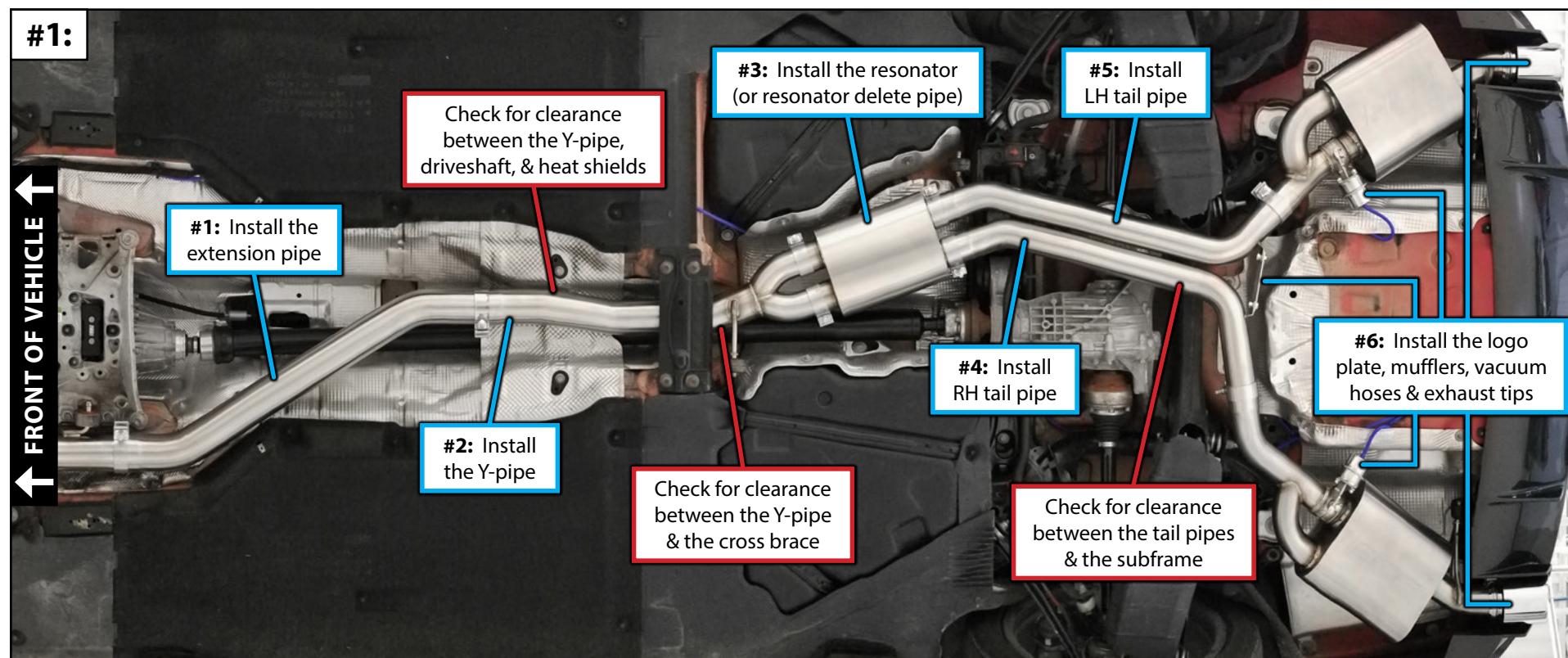
## INSTALLING THE NEW VALVED EXHAUST SYSTEM

**Step 2:** 12mm Wrench, 13mm Socket & Torque Wrench, 15mm Socket & Ratchet

Install the downpipe onto the catalytic converter using the provided gasket and hardware, torque the bolts to 25 Nm (18 ft-lbs). Remove the rearmost exhaust hangers from the stock mufflers and transfer them to the new ones (being sure to orient them exactly as they were before). Install the rest of the exhaust system in the order shown in **Photo #1** below.

Next, we'll need to adjust the exhaust system for proper fitment. The key to proper adjustment is patience, take your time and **DO NOT** fully tighten any of the clamps until **AFTER** you've performed all of the steps up through Page 19.

Closely inspect the exhaust system from front to back, we need to check for clearance between the pipes and nearby chassis components.





## INSTALLING THE NEW VALVED EXHAUST SYSTEM

### Step 3: 13mm & 15mm Sockets, Ratchet

Check the hangers on the mufflers and the tail pipes to ensure that they are sitting level side-to-side (**Photos #1 & #2 below**).

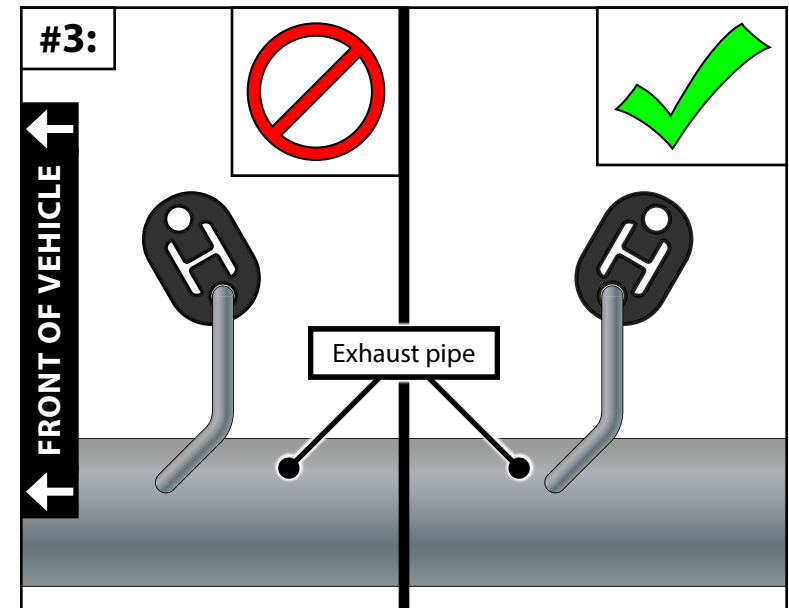
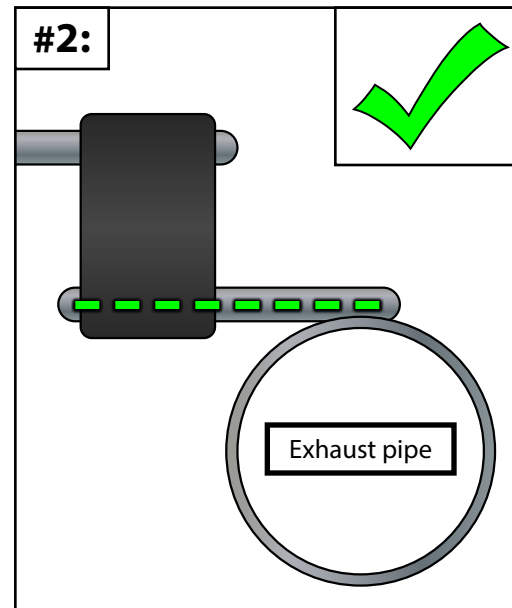
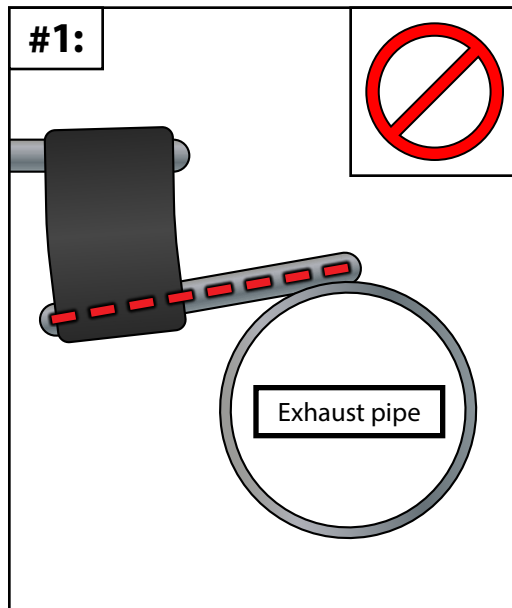
Finally, we want to ensure that the exhaust hangers are rotated at least slightly toward the front of the vehicle (**Photo #3 below**). The exhaust hangers should be inclined toward the front of the vehicle so that lower hole is approximately 10-15mm forward of the upper hole, this will allow the hangers to pivot backwards as the system heats up and expands.



Due to differences in manufacturing, as well as variations from one car to another, you might not be able to get all of your hangers to pitch forward. This is acceptable as long as they are at least close to vertical.



**CAUTION:** You can tighten the exhaust clamps until they are “snug”, but **DO NOT USE AN IMPACT WRENCH** and do not fully tighten them yet!



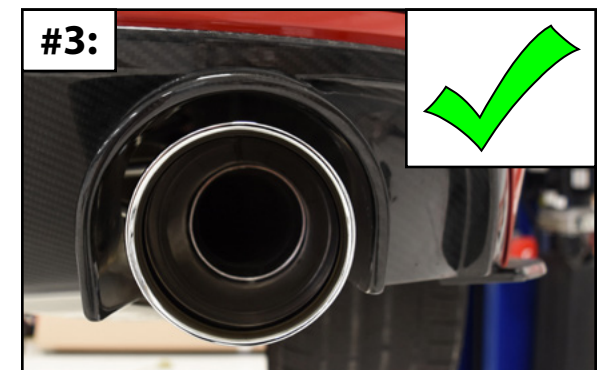
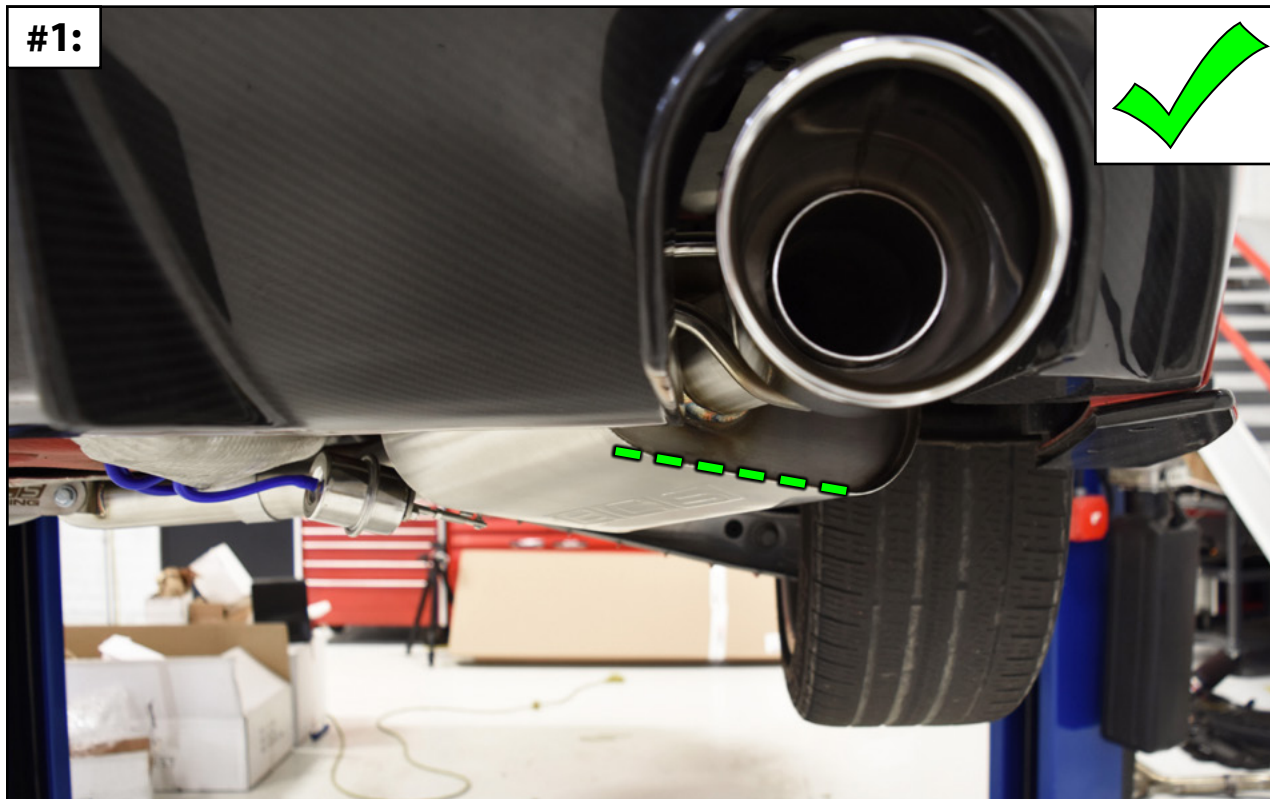
## INSTALLING THE NEW VALVED EXHAUST SYSTEM

### Step 4: 13mm & 15mm Sockets, Ratchet

Inspect both mufflers and ensure that they are properly oriented (they will be at a slight angle, see **Photo #1** below). Center and level the mufflers and exhaust tips inside the bumper cut outs (**Photos #2 & #3 below**).



**CAUTION:** You can tighten the exhaust clamps until they are “snug”, but **DO NOT USE AN IMPACT WRENCH** and do not fully tighten them yet!



## INSTALLING THE NEW VALVED EXHAUST SYSTEM

### Step 5:

Once the system is all adjusted, it's time to fully tighten down the clamps. Starting at the front and moving rearward, push upward on the exhaust system as you fully tighten each clamp (**Photo #1**), then let go and allow the exhaust to settle. Tighten the clamps on the exhaust tips to 19 Nm (14 Ft-lbs).

Install the ECS logo plate, tighten the bolts until snug.

Connect the vacuum hoses to the muffler valves (**Photo #2**).

Wipe any oil, grease, or fingerprints from the exhaust system.

Reinstall the belly pans and chassis cross brace (if removed).

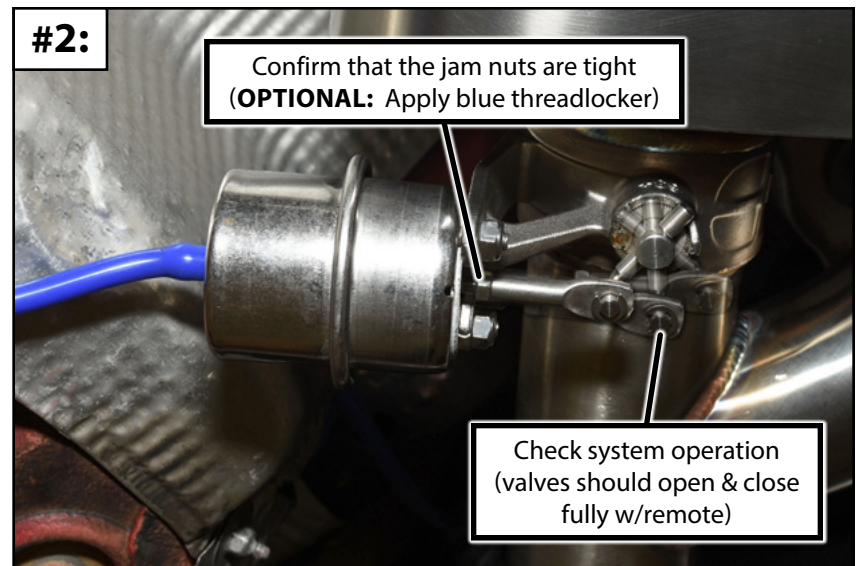
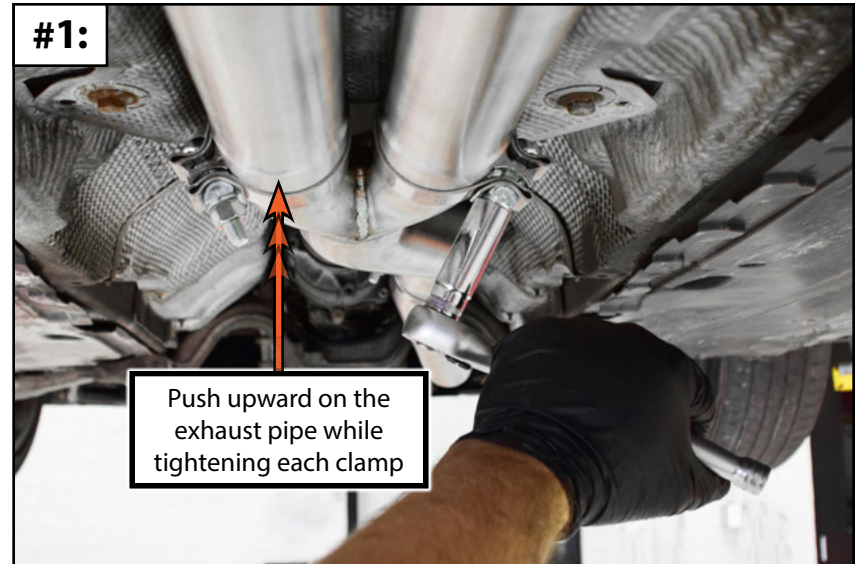
Perform a system check by performing the following steps:

- Start the engine.
- Press the "unlock" button on the remote to open the valves.
- Press the "lock" button to close the valves.
  - You should be able to hear a difference in both exhaust tone and volume when the valves are opened or closed.
  - Looking under the vehicle you should be able to see the valve cycle back and forth (not shown).

Recheck all fasteners after the vehicle has been driven 500 miles.



We have found that in some cases while the engine is making boost there won't be enough vacuum present in the system to operate the exhaust valves. This system will operate best when you are off throttle.





## PROGRAMMING THE HOMELINK® BUTTONS

### Step 1:

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.

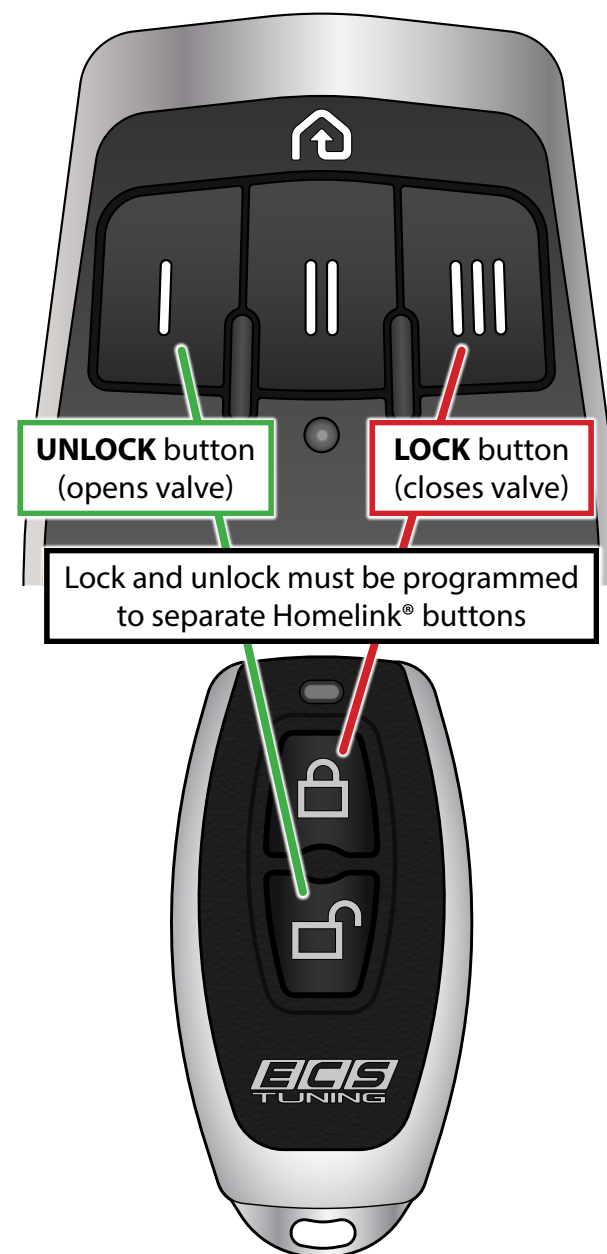
We recommend you check your owner's manual programming information, or you can visit the Homelink® website for their vehicle specific instructions:

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

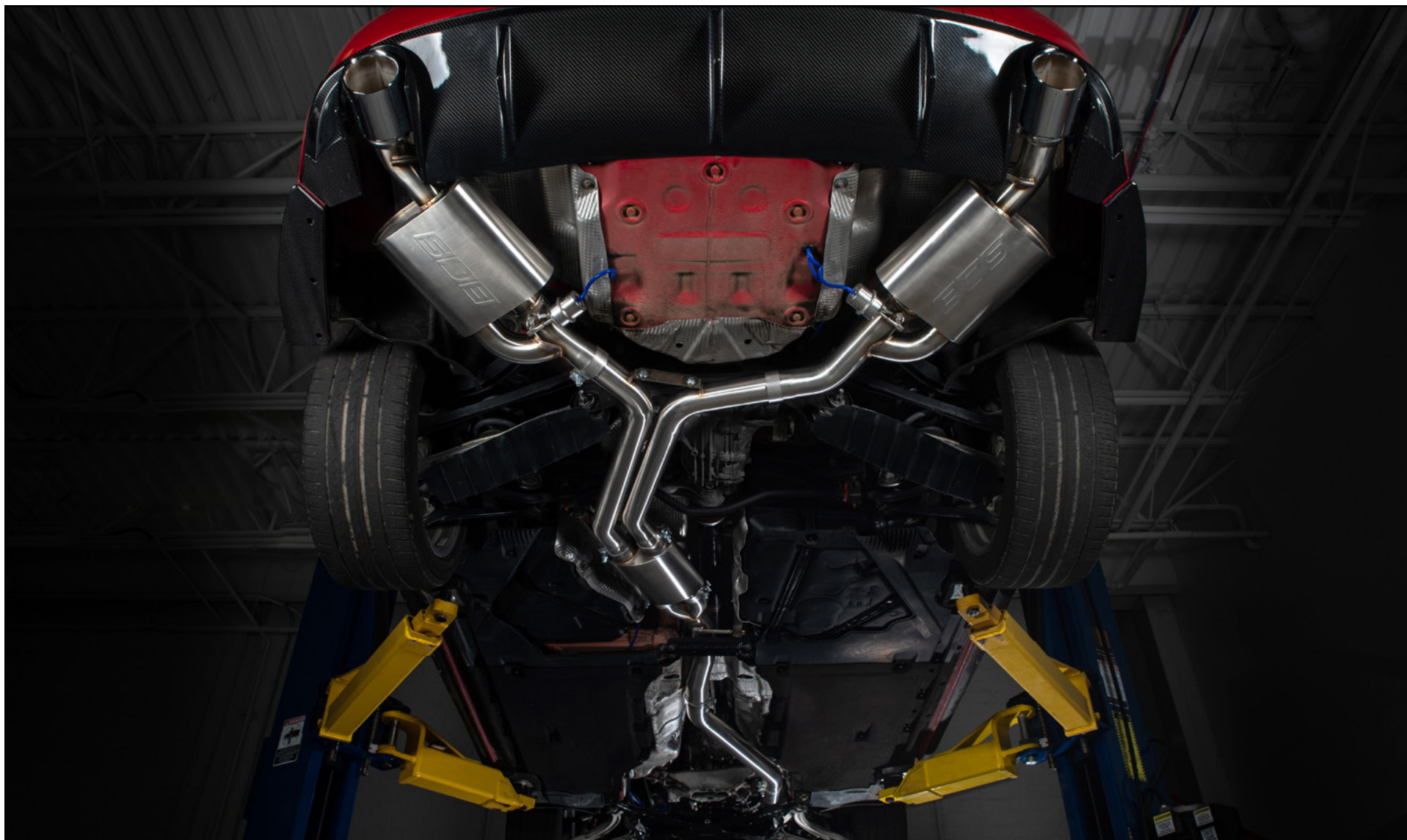
Here are a few notes to help you along the way:

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 ECS Exhaust System installation is complete!***



## Your ECS Valved Exhaust System installation is complete!



### **These instructions are provided as a courtesy by ECS Tuning**

Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times to eliminate the possibility of personal injury or improper service which could damage the vehicle or compromise its safety.

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