

INSTALLATION INSTRUCTIONS

American Racing Headers Pure Thunder Cat Back Install (15-16 Mustang GT)

Installation Time: 2.5 Hours

Parts List

QTY	Item Description
1	H-pipe
1	Mid-pipe labeled "R"
1	Mid-pipe labeled "L"
1	Tail pipe muffler assembly labeled "R"
1	Tail pipe muffler assembly labeled "L"
2	4 ½ polished exhaust tips
4	2 ½ inch exhaust clamps
2	3 inch exhaust clamps

Tools Needed

Floor jack, jack stands, car ramps, car lift. (Get your car off the ground so it can be worked on.)

Safety glasses

15 mm deep socket 3/8 or 1/2

13mm deep socket 3/8 or 1/2

Ratchet 3/8 or 1/2

Flat head screw driver

6 or 8 inch ratchet drive extension

Optional Tools

Impact driver/wrench (Cuts down install time considerably)

Tape measure

Dish Soap

Pre-Installation Instructions:

1. Inventory the parts in the box before you lift your vehicle.
2. Dry fit all of the new exhaust pieces on the ground and make sure they fit before trying to put them on the car. Use a tape measure to verify the tip of the inlet on the H-pipe to the exit pipe on the back of the mufflers are roughly the same length on the L/R sides. Ours were within ½ in. when assembled correctly but it's easy to get the sides mixed up. The H-pipe outlets are different lengths, and not marked (at least ours weren't.) The entire exhaust can be assembled with the H-pipe flipped over and you won't know until you connect everything under the car.
3. Get a second pair of hands the factory exhaust is very bulky and heavy.

Factory Exhaust Removal

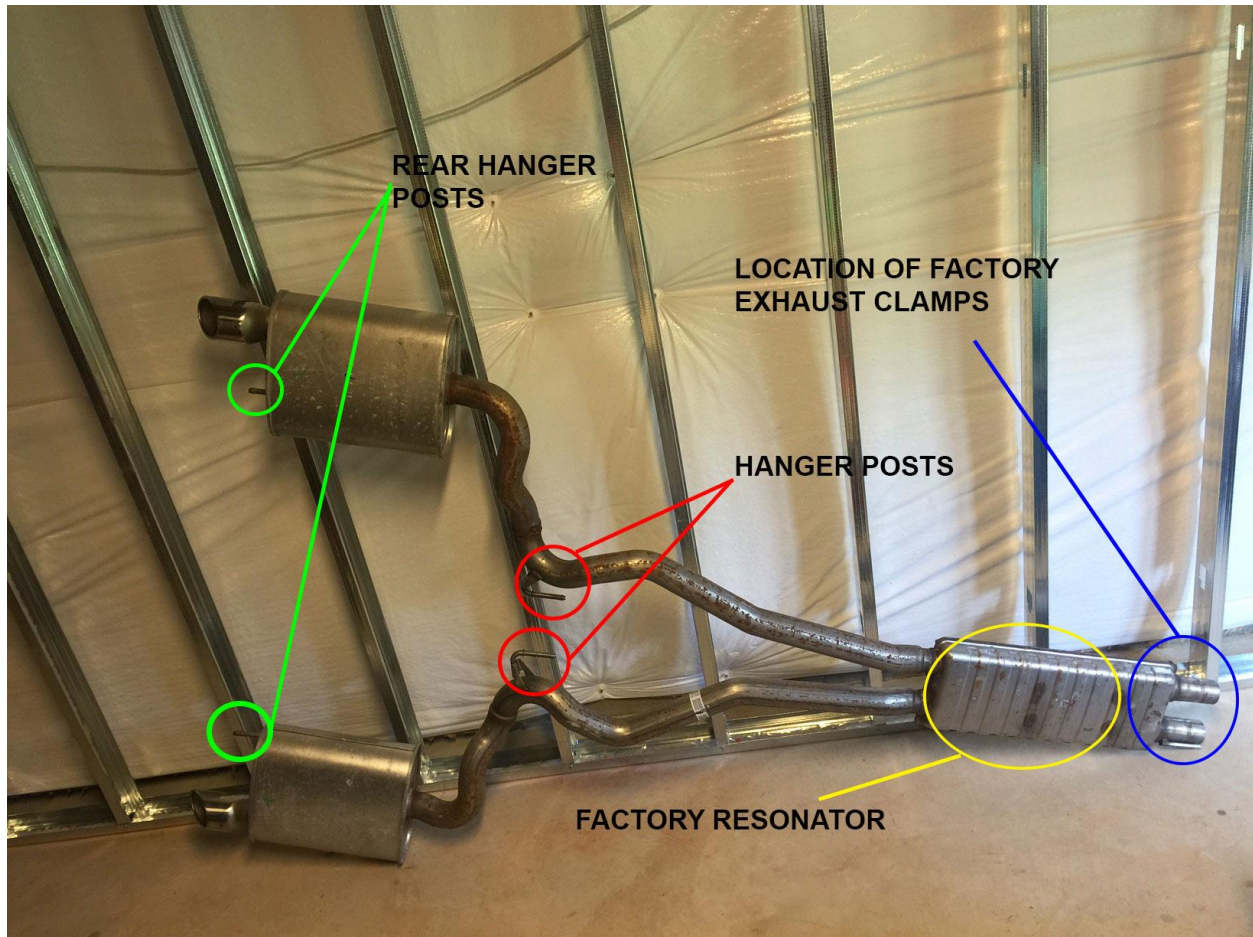


Figure 1A Factory Exhaust

1. Raise the vehicle off the ground using your preferred method. Floor jack, jacks stands/car/lift/ramps.
2. Locate the resonator (See Figure 1A) and start by backing off the four 15mm nuts located on the two clamps (See Figure 1b) just before it connects to the catalytic converter pipes. Don't take the nuts all the way off but just enough to be able to move the clamps. Do this on both sides.



Figure 1b Factory exhaust clamp

3. Use a flat head screw driver to lift up on the locking tab (See figure 1b) at the same time you attempt to slide the clamp forward until it's no longer connected to the resonator. Do this on both sides.
4. Work your way to the back of car just behind the rear differential you will see where the factory exhaust hangers are mounted to a bulkhead/frame. Remove the two 13mm bolts holding the hangers and set them to the side.

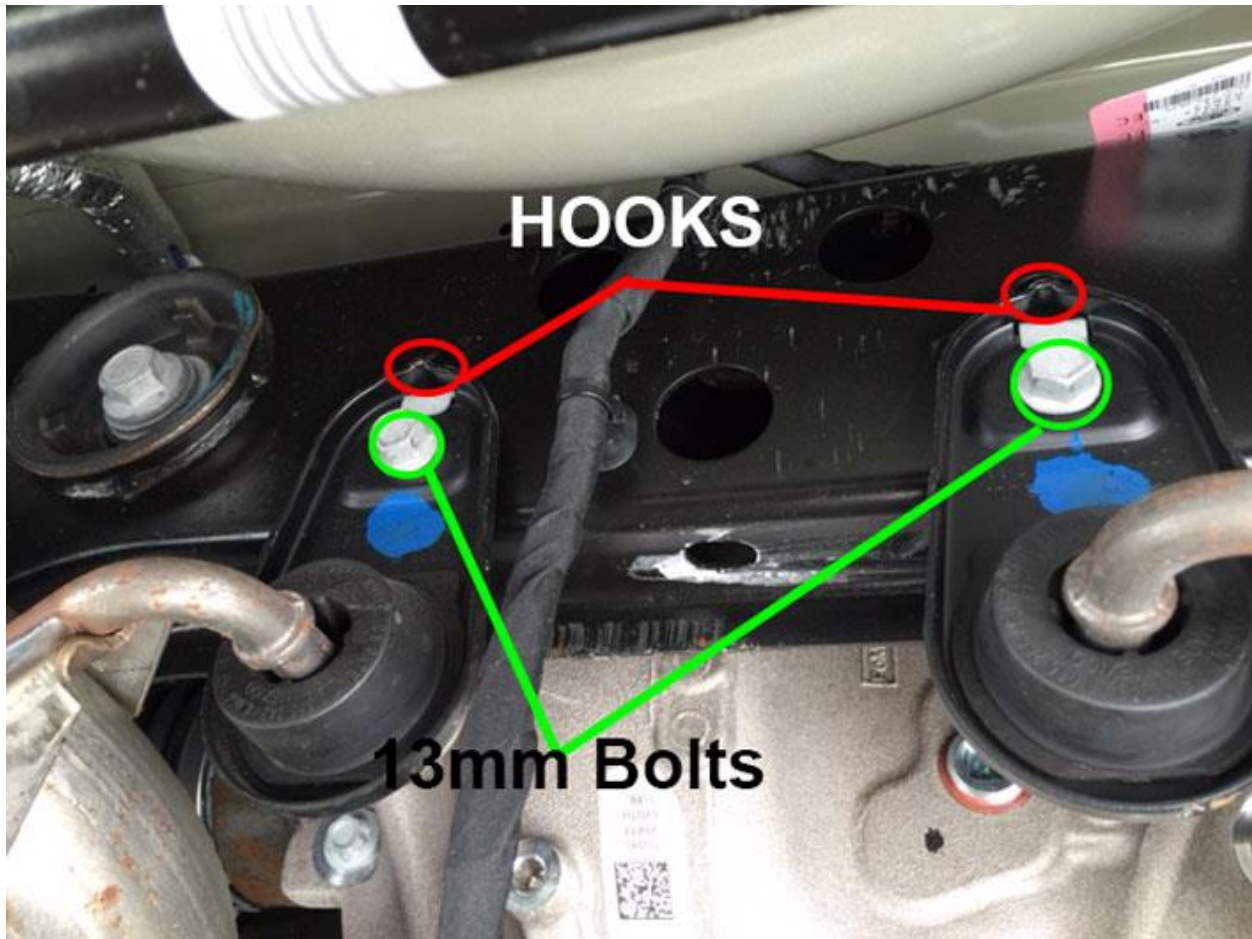


Figure 1c Exhaust hooks attached to bulkhead/frame

5. Be prepared to support the weight of the exhaust. Lift up on the factory exhaust pipes near the hangers you just removed the bolts from to get the hooks out of the bulkhead.
6. Lower and support the exhaust while pulling towards the front of the car sliding the system out of the two rear hangers located behind the mufflers.

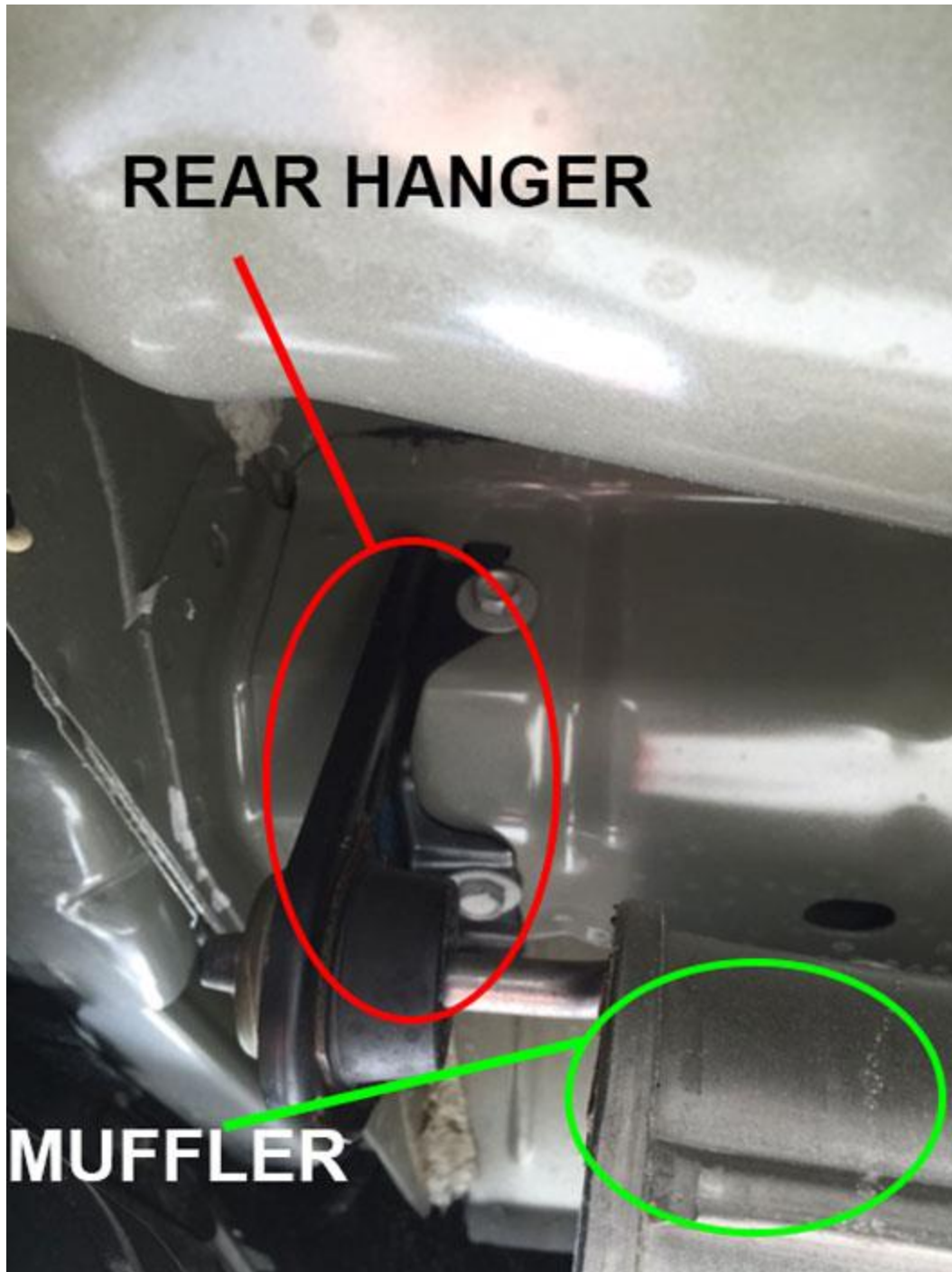


Figure 1d Rear exhaust hanger located behind rear bumper.

7. Slide the two hangers you un-bolted from the rear bulkhead in step 4 off of the factory exhaust and place them to the side. You will need to install them later on the aftermarket exhaust.
8. Set the factory system to the side out of the way.

Installing American Racing Headers (ARH) Cat Back system

1. Slide the ARH H-pipe (longer of the two sides on the driver's side) into the factory exhaust clamps that are still attached to the pipes exiting the catalytic converters and slide the clamps over the H-pipe towards the back of the car. **(See figure 2a.)**

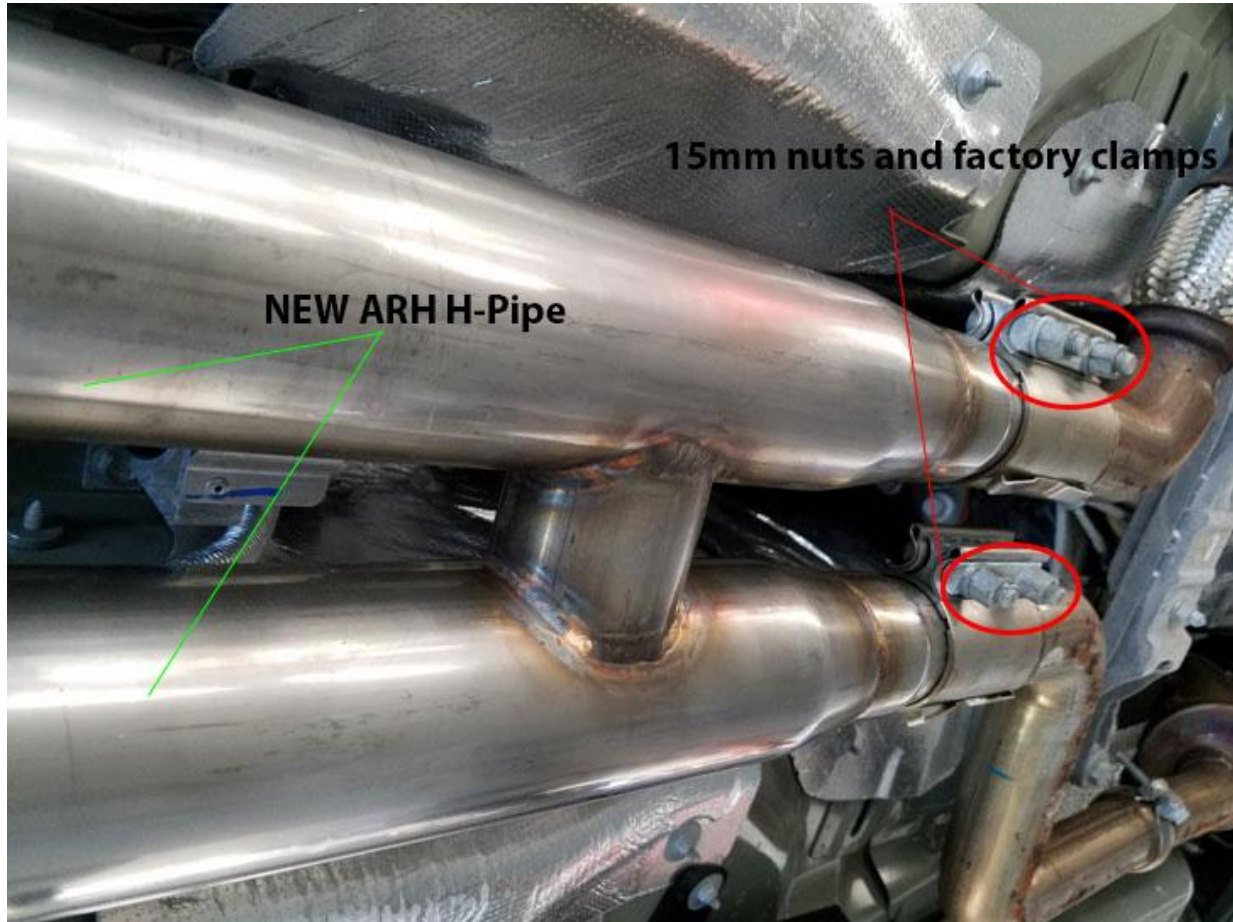


Figure 2a New ARH H-Pipe connected to factory catalytic converters using existing clamps.

2. Snug the 15mm nuts that are part of the clamps just enough that the H-pipe stays in place (See Figure 2a) but you can still move it if needed.
3. Place the one 3 inch clamps on the larger end of each mid-pipe labeled "R" and "L." Make sure the clamps are oriented with the nuts on the outside and facing down so they can be tightened. **(See figure 2b.)**

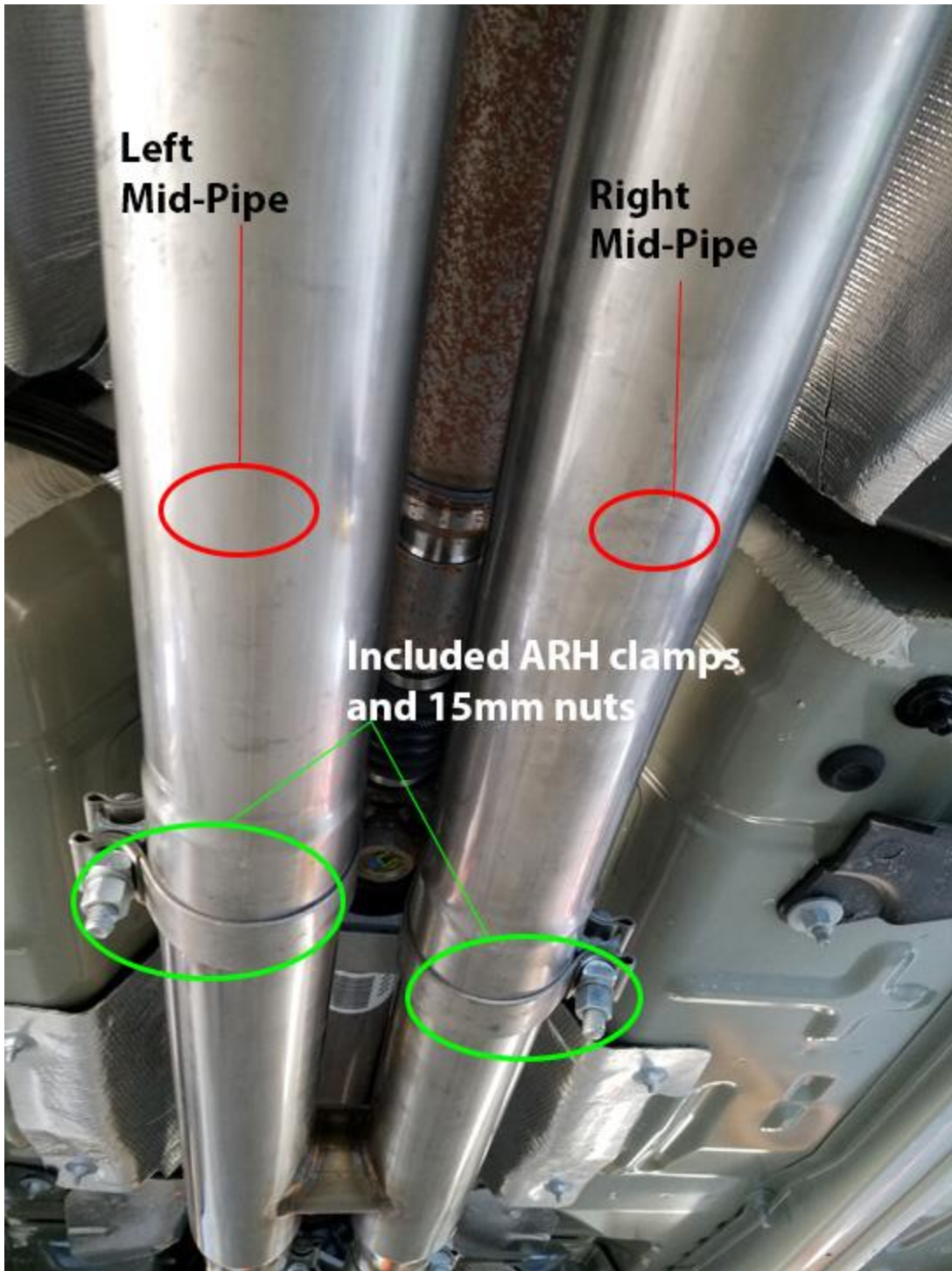


Figure 2b ARH Mid-Pipes attached to ARH H-Pipe

4. Fit the larger diameter end of the mid-pipe with the clamp labeled "R" on the passenger side over the H-pipe. Repeat on the left side. **(See Figure 2b.)**
5. Snug the nuts on both mid-pipe clamps but not too tight they cannot be moved.

6. Attach the hangers you took off in Step 7 of the “Factory Exhaust Removal” (make sure the hook on the top of the hanger faces the front of the car see figure 2c) to the posts on both ARH tailpipes that are the furthest away from the mufflers.
7. Rub a small amount of dish soap on each rear hanger post (closest to the muffler) of the ARH tail pipe. This will allow for easier movement in the rubber bushing when trying to position the pipes before clamping.
8. Start with the tail pipe marked “R.” Put a 2 ½ inch exhaust clamp over the end away from the muffler making sure the nut you will need to tighten is facing the ground.
9. Place the rear hanger post (closest to the muffler) into the rear hanger rubber bushing that is just behind the back bumper and slide it back far enough that you can connect it to mid-pipe on the right side (passenger side) of the car. **(See figure 1d for reference.)**
10. Connect the tail pipe to the mid-pipe and snug the clamp but leave it loose enough the pipe can still be moved.

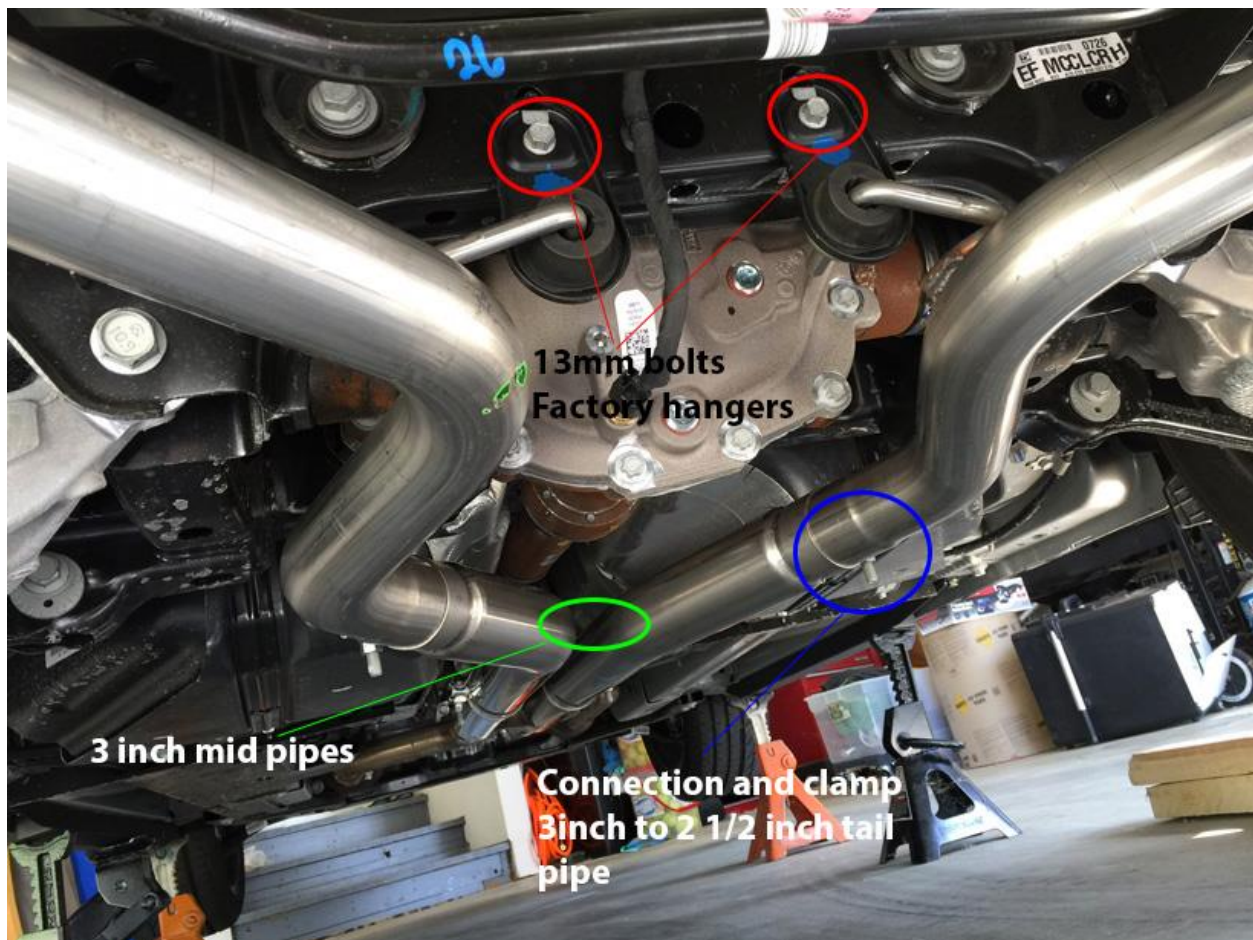


Figure 2c Assembled ARH tail pipes to mid-pipes

11. Make sure the hook on the factory hanger is “hooked” on the bulkhead and secure with the 13mm bolt removed in step 4 of the removal phase. **(See figure 2c)**
12. Repeat steps 8, 9, 10, and 11 for the left side (driver’s side) of the car.
13. Start by tightening the front clamps to 40-45ft-lbs that are just after the catalytic converters after making sure the H-pipe is all the way in. Do this for both sides.

14. Work your way back to the mid-pipes and then the tail pipes. Slide each segment of pipes forward as needed to ensure a good fit and push up on the pipes when you tighten the clamps 40-45ft-lbs so they don't hang down. Your goal here should be to make the tail pipes even where they exit the rear of the muffler while ensuring a good fit where the segments connect. Do this for both sides.
15. Attach the exhaust tips to both mufflers and adjust to personal preference before tightening the exhaust clamp.
16. After putting 25 miles or so on the new exhaust you may want to re-torque the clamps on the entire system.



Figure 2d Completed ARH system installed showing ARH muffler and tail pipe.

