

#### Please take time to read and understand these installation instructions.

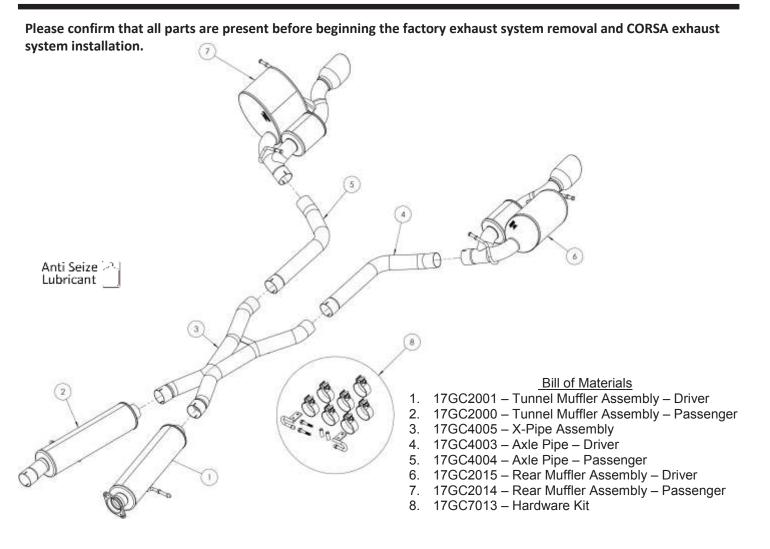
CORSA recommends that the installation of this system be performed by a qualified service center or professional muffler installer who has the necessary equipment, tools and experienced personnel. However, if you decide to perform this install, the use of a hoist and an additional person will be required.

**CAUTION:** Never work on a hot exhaust system. Allow time for the vehicle to cool. Always wear eye protection when working under a vehicle.

#### **Recommended Tools:**

- 3/8" drive ratchet
- 3/8" drive 13mm deep socket
- 3/8" drive 15mm deep socket
- 3/8" drive 15mm shallow socket
- 13mm wrench

- Grommet pullers
- Soap and water solution
- Torque Wrench
- Penetrating lubricant spray
- Safety glasses





#### **Factory Exhaust System Removal:**

- 1. Using the ratchet and 15mm deep socket, loosen the clamp in front of the passenger side flange joint. (Fig. A)
- 2. Using the 13mm wrench, loosen the two nuts on the driver side flange. (Fig. B) Keep these nuts and springs for use during the Corsa system installation.
- 3. Using the ratchet and 13mm deep socket, remove the two bolts from each hanger bracket on the tunnel muffler. (Fig. C) Keep these four bolts for use during the Corsa system installation.
- 4. Using grommet pullers or a similar device, remove the front hanger grommets from both rear mufflers. (Fig. D) **NOTE:** The use of a soap and water solution may aid in the removal of hanger grommets.
- 5. Using the ratchet and 15mm deep socket, loosen the clamp on the inlet pipe to the driver side rear muffler. (Fig. E) Remove the driver side rear muffler from the axle pipe.(Fig. F)
  NOTE: The use of penetrating lubricant spray on the pipe joint may aid in removal.
- 6. Remove the factory driver side muffler from the vehicle by pulling the rear hanger out of the rubber grommet.
- 7. The rest of the factory system will come out in one piece. Pull the rear hanger on the passenger side rear muffler out of the rubber grommet and slide the entire system towards the rear of the vehicle to remove it.

  NOTE: The use of penetrating lubricant spray on the pipe joint may aid in removal.
- 8. With the factory system removed from the vehicle, use grommet pullers or a similar device to remove the rubber grommets and brackets from the factory tunnel muffler. (Figs. G & H) Remove the rubber grommet from the brackets. (Figs. I & J) Keep the factory rubber grommets for use during the Corsa system installation.

  NOTE: The use of a soap and water solution may aid in the removal of hanger grommets.



# **Factory Exhaust System Removal Pictures:**



Fig. A

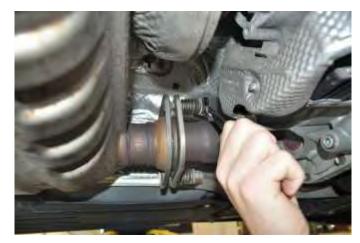


Fig. B

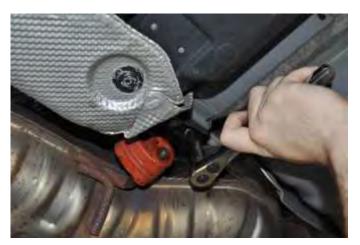


Fig. C

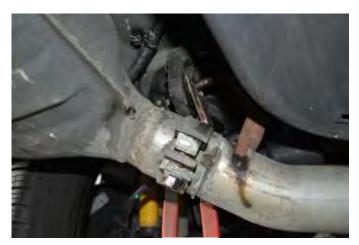


Fig. D

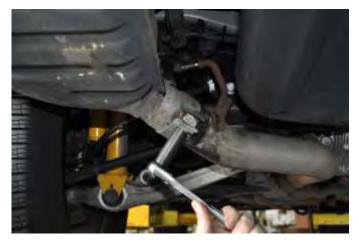


Fig. E

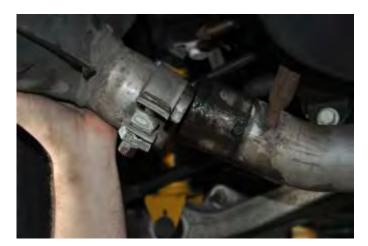


Fig. F



# **Factory Exhaust System Removal Pictures:**



Fig. G



Fig. H



Fig. I



Fig. J

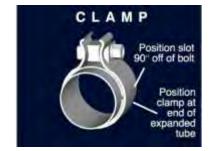


## **Installation of CORSA Exhaust System:**

NOTE: Apply the anti-seize lubricant (supplied) to the threads ONLY of all the clamps and flange bolts. Failure to follow this procedure can cause nuts to seize on clamps and potentially destroy threads. After applying anti-seize lubricant, be sure to thoroughly clean your hands, as lubricant will tarnish stainless steel. All clamps should be

tightened using a properly calibrated Torque Wrench. Using an air impact gun will damage the clamp and reduce its ability to effectively seal the joint. It may also cause the joint to separate, thereby causing damage to your exhaust system and to your vehicle.

**NOTE:** Align all clamps so that the center of the clamp bolt is 90 degrees from the notch in the pipe. (See Fig. CLAMP)



- 1. Remove all exhaust system components from the shipping boxes, including clamps and hardware.
- 2. Locate the hanger assemblies provided in the hardware kit, the four bolts removed during step #3 of the removal process and the two rubber grommets retained during step #8 of the removal process. (Fig. L) Using a ratchet and 13mm deep socket, install the driver side hanger assembly with two of the bolts. (Fig. M) Slide one of the rubber grommets onto the hanger. (Fig. N and P) Repeat process to install hanger assembly on passenger side.

**NOTE:** The use of a soap and water solution may make it easier to install hangers.

3. Locate the driver side tunnel muffler, the two M10-1.5X60mm bolts and two spacers from the hardware kit, and the two springs retained in step #2 of the removal process. (Fig. Q) Insert the bolts through the spacers. (Fig. R) Insert the tunnel muffler hanger into the rubber grommet. (Fig. S) Insert the bolt with spacer from the rear through the tunnel muffler flange first, then the stock flange. (Fig. T) Start threading the spring nut assemblies onto the bolts by hand. (Fig. U) Using a ratchet with 15mm shallow socket and 13mm wrench, tighten the bolts. (Fig. V)

**NOTE:** Tighten both bolts evenly, ensuring that the spacers go through both flanges and are seated against the bolt heads. Ensure the bolt head is against the rear face of the muffler flange.

**NOTE:** The use of a soap and water solution may make it easier to install hangers.



4. Locate the passenger tunnel muffler assembly and one of the 2.75" clamps. Insert the tunnel muffler hanger into the rubber grommet. (Fig. W and X) Install the clamp on the tunnel muffler so that the bolt is vertical with the nut towards the ground and the bolt is towards the inside of the vehicle. (Fig. Y) Slide Tunnel muffler inlet over factory outlet and tighten the clamp using the ratchet and 15mm deep socket until the tunnel muffler inlet pipe is snug on the factory exhaust pipe. (Fig. Z)

**NOTE:** Ensure the tunnel muffler hanger is horizontal while tightening the clamp.

**NOTE:** The use of a soap and water solution will make it easier to install hangers.

- 5. Locate the x-pipe assembly and two of the 2.75" clamps. The x-pipe is installed with the reinforcement brace towards the ground and towards the rear of the vehicle. Install the clamps on the x-pipe so that the bolts are vertical with the nut towards the ground and the bolts are towards the inside of the car. (Fig. AA) Place x-pipe on both tunnel muffler outlet pipes before tightening the clamps. Tighten the clamps using the ratchet and 15mm deep socket until the x-pipe is snug on the tunnel muffler outlets. (Fig. BB)
- Locate the passenger rear muffler assembly. (Fig. CC) Insert the rear hanger into the rubber grommet. (Fig. DD)
   Insert the front hanger into its corresponding rubber grommet. (Fig. EE)
   NOTE: The use of a soap and water solution will make it easier to install hangers.
- 7. Repeat step #6 on the driver side of the vehicle.
- 8. Locate the passenger side axle pipe and two 2.75" clamps. (Fig. FF) Install one clamp on the front end of the axle pipe so the bolt is vertical with the nut towards the ground and the bolt is towards the outside of the vehicle. (Fig. GG) Install the second clamp on the rear muffler inlet pipe so the bolt is vertical with the nut towards the ground and the bolt towards the outside of the vehicle. (Fig. HH) Slide axle pipe over x-pipe outlet and rear muffler inlet and tighten both clamps until snug. (Fig. II and JJ)
- 9. Repeat Step #8 on the driver side of the vehicle.
- 10. Adjust the system accordingly so that the tips are centered in the bumper valence. At this time, tighten all clamps to 45ft-lbs using the torque wrench and 15mm socket.

**NOTE:** During cold weather start-ups, you may experience an exhaust sound that is deeper and louder in tone than usual. This is temporary and will diminish to normal levels once your engine has reached its normal operating temperature.

**NOTE:** Immediately following the installation of your exhaust system, you may experience a trace of smoke after initial start-up. DO NOT be alarmed. The smoke is caused by the burning of a small amount of forming oil residue used in the manufacturing process.





Fig. L

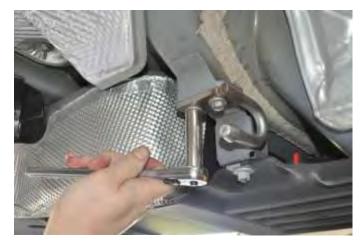


Fig. M

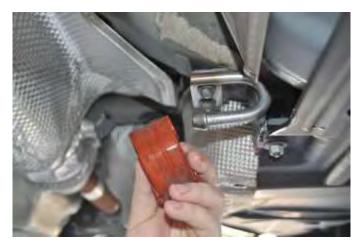


Fig. N

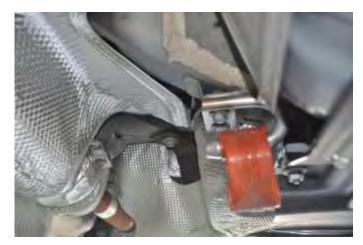


Fig. P

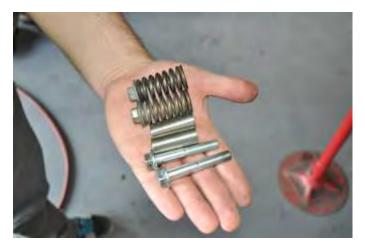


Fig. Q



Fig. R



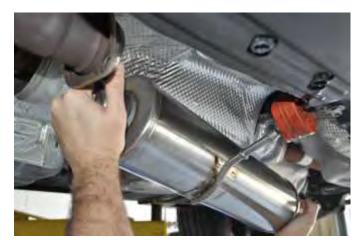


Fig. S



Fig. U



Fig. W



Fig. T



Fig. V



Fig. X





Fig. Y



Fig. AA



Fig. CC



Fig. Z



Fig. BB



Fig. DD



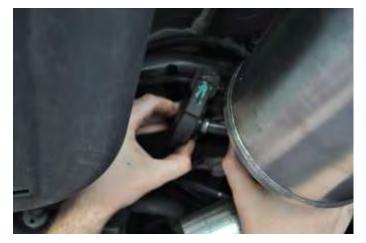


Fig. EE



Fig. FF



Fig. GG

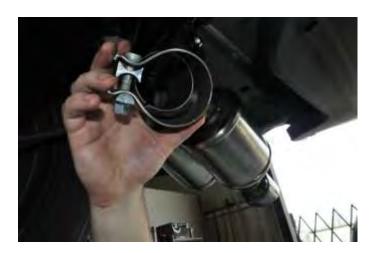


Fig. HH

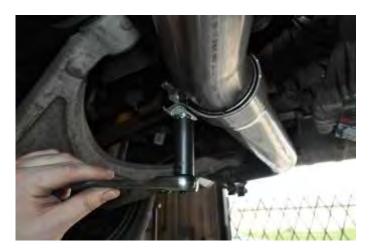


Fig. II

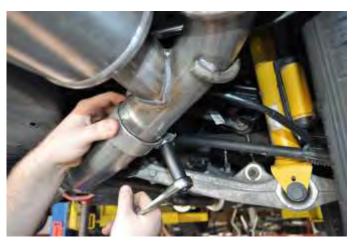


Fig. JJ



#### **Back Pressure Sensor Restrictor Pill Installation**

- 1. Locate the exhaust back pressure sensor line on the passenger side of the exhaust system. It is on the stock piping upstream of the tunnel muffler. (Fig. KK)
- 2. Using pliers, release the clamp from the tubing and carefully pull the tubing off of the sensor's barb.(Fig. LL and MM) Leave the clamp on the stock tubing.
- 3. Insert the white barb fitting into the stock tubing. Using the pliers again, slide the clamp onto the joint to secure the stock tubing onto the barb. (Fig. NN)
- 4. Slide the new tubing over the back pressure sensor's barb. The fit will be tighter than the stock tubing so no clamp should be needed.



Fig. KK

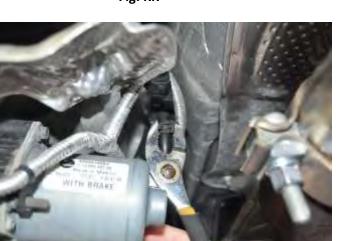


Fig. MM



Fig. LL

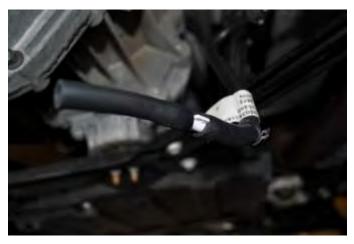


Fig. NN