

Please take time to read and understand these installation instructions.

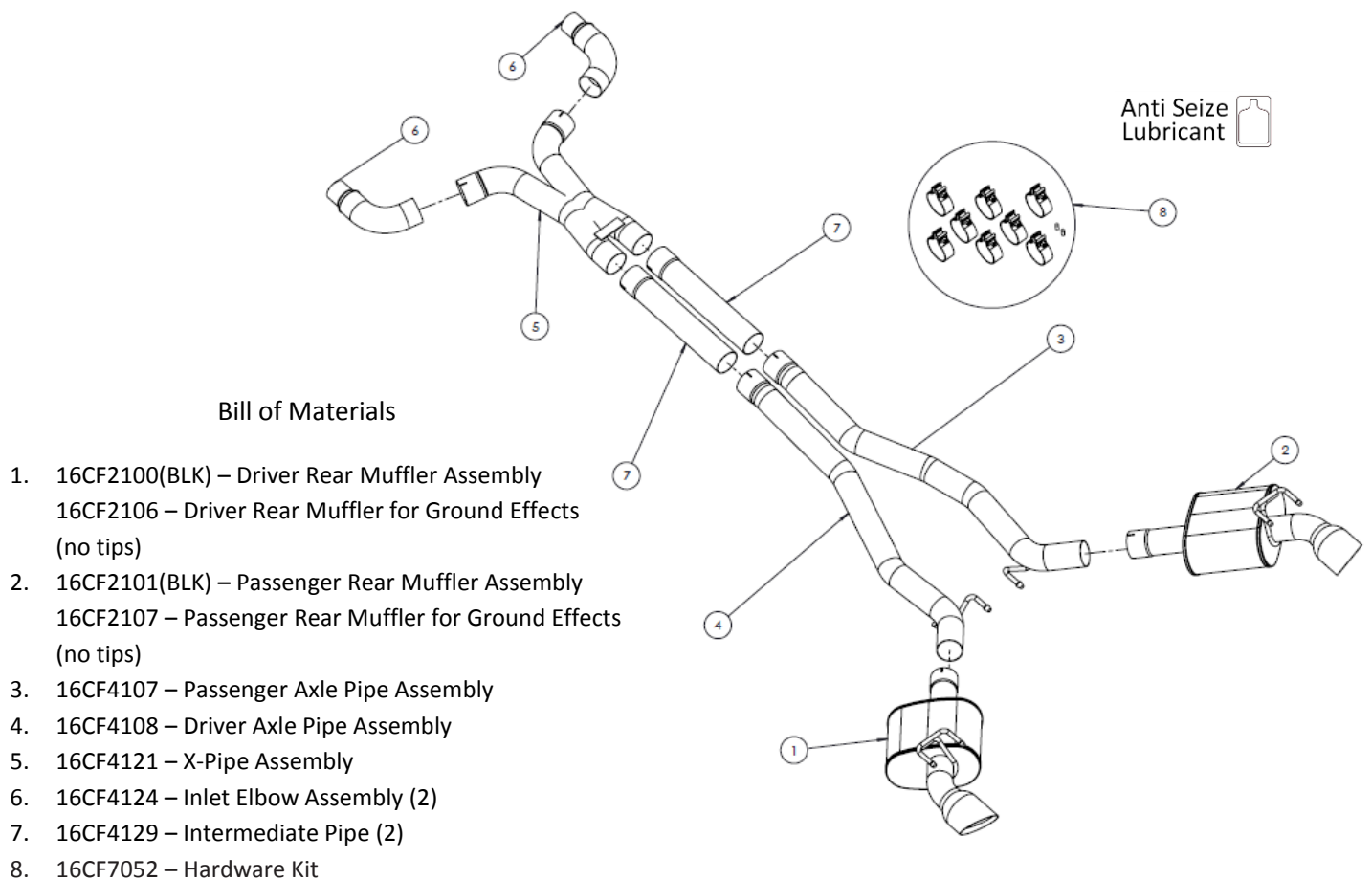
CORSA recommends that the installation of this system be performed by a qualified service center or professional muffler installer who has the necessary equipment, tools and experienced personnel. However, if you decide to perform this install, the use of a hoist and an additional person will be required.

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 15mm deep socket
- 10" 3/8" ratchet extension
- Small flathead screwdriver
- Soap and water solution
- Torque Wrench
- Grommet pullers
- Safety glasses

Please confirm that all parts are present according to the bill of materials before beginning the installation.



Factory Exhaust System Removal:

1. Remove the cross brace from the vehicle using a 15mm socket and ratchet. **(See Fig. A)** Set aside the 4 bolts and the cross brace to be reinstalled during the installation process.
2. Loosen the sleeve clamp on each of the factory catalytic converter pipes using a 15mm socket and ratchet. Pry away the retaining clip on the driver side pipe using a small flathead screwdriver. **(See Fig. B & C)**
3. Remove the rear hanger mount above each of the rear mufflers using grommet pullers or a similar device. **(See Fig. D)** It may be easiest to remove the double grommet from both the muffler and chassis hangers simultaneously. Set aside both of the double hanger grommets to be reused during the installation process.

Note: The use of a soapy water solution may aid in the removal and later installation of the hangers in the rubber isolators.

4. Remove both of the axle pipe hangers from the rubber isolators on the hanger mounts using a grommet puller or a similar device. **(See Fig. E)** Carefully move the stock exhaust system down and rearward to free it from the vehicle. **(See Fig. F & G)** The removal of the factory system is now complete.

Factory Exhaust Removal Pictures



Fig. A



Fig. B



Fig. C

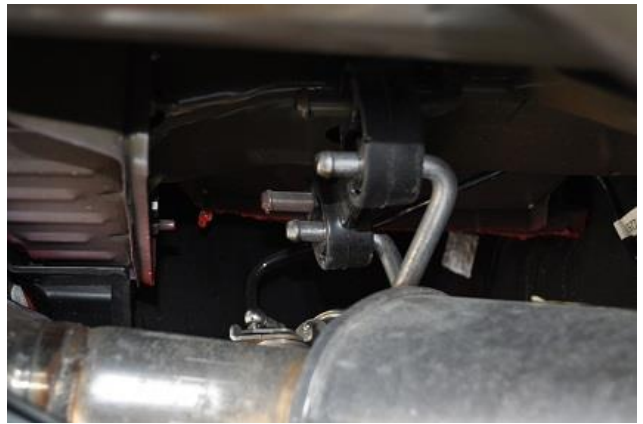


Fig. D



Fig. E



Fig. F

Factory Exhaust Removal Pictures



Fig. G

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)

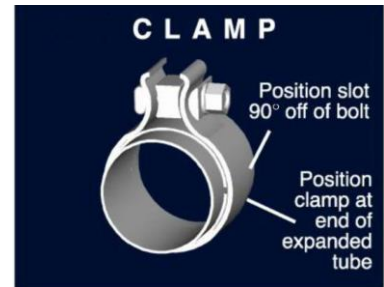


FIG. CLAMP

1. Remove all exhaust system components from the shipping carton, including the eight 3" clamps (for this system you do not need the 2 vacuum line caps provided in the hardware kit).
2. Locate the two inlet elbow assemblies. Insert each of the elbow assemblies into the sleeve clamps on the factory catalytic converter pipes. Loosely snug the sleeve clamp bolts using a 15mm socket and ratchet, leaving them loose enough that the pipes can still rotate in the clamps. (See Fig. A & B) Inspect the amount of gap between the transmission cradle and the inside of each elbow assembly. (See Fig. C) There should be around a $\frac{1}{2}$ " to $\frac{3}{4}$ " gap at the closest clearance point on each side.
NOTE: If the amount of clearance between the elbow pipe and the transmission cradle is either too small or too large, follow step 3. If the clearance amount is within spec on both sides, then skip to step 4.
3. Each factory catalytic converter pipe can be rotated at the two-bolt flange connection with the stock exhaust manifold by around 3 to 4 degrees. This results in around an inch or so of allowable side to side adjustment at the outlet location. (See Fig. D & E) To adjust, loosen the two nuts at the flange connection (from the top) using a 15mm socket and ratchet, and a long extension. (See Fig. F) Rotate the catalytic converter pipe outlet as needed until it is in the right position to achieve the clearance specified in step 2. While holding or bracing the catalytic converter pipe in place, retighten the two nuts, and torque to factory specifications. Repeat for the other side pipe if necessary.
4. Locate the X-pipe assembly, and two of the 3" clamps. Place the two clamps over the inlet side of the X-pipe assembly as shown. Make sure the assembly is installed with the weld brace positioned on top, closest to the bottom of the vehicle. (See Fig. G) Slide each of the elbow assemblies into the expansions on the X-pipe inlet, and then snug both clamps using a 15mm socket and ratchet, leaving them loose enough for later adjustment. (See Fig. H & I)
5. Locate the two intermediate pipes, and two more 3" clamps. Properly align the clamp on the intermediate pipe inlet, and slide it onto the X-pipe outlet as shown. (See Fig. J) Repeat for the opposite side pipe, and then snug both clamps using a 15mm socket and ratchet. (See Fig. K)

6. Replace the factory tunnel brace in its original location. Using a torque wrench, torque the 15mm bolts to 18 ft-lbs. **(See Fig. L)** Using a spacer block, create a ½" inch clearance between the intermediate pipes and the factory tunnel brace. This gap will be maintained when all clamps are tightened in step 12.
7. Locate both axle pipe assemblies and two more 3" clamps. Place a clamp over the inlet of the passenger side axle pipe assembly as shown, and then slide it onto the outlet of the passenger side intermediate pipe. **(See Fig. M)** Insert the axle pipe hanger into the grommet near the differential. **(See Fig. N)**
8. Repeat step 7 for the driver side axle pipe. Snug both axle pipe clamps using a 15mm socket and ratchet, leaving them loose enough for later adjustment. **(See Fig. O)**
9. Locate the passenger side rear muffler assembly and a 3" clamp. Slide the rear muffler hangers into the double hanger grommet as shown. **(See Fig. P)** Place the clamp over the inlet side of the muffler, then slide the pipe onto the end of the axle pipe assembly. **(See Fig. Q)** Repeat for driver side rear muffler.
10. Adjust the position and rotation of the both rear mufflers onto the axle pipes, until the exhaust tips look properly centered in the bumper opening, and then snug the clamp using a 15mm socket and ratchet, leaving it loose enough for later adjustment. **(See Fig. R)** The minimum amount of pipe overlap should be just enough to prevent any gap from showing through at the base of the notch in the inlet pipe. For the ground effects version (14976), the muffler outlet pipes should be centered in the corresponding rear bumper bezels.
11. Visually inspect the exhaust system position, tip alignment, clamp orientation, and exhaust pipe clearance. Check that the clamps at the X-pipe inlet location have at least a ½" gap to the chassis. The passenger side axle pipe should have around a ½" gap or more on each side in the tight area between the rear differential and the chassis. The rear muffler cases should have at least a ½" gap or larger to both the spare tire well and the rear sway bar chassis mounts. Make any necessary adjustments at the slip joints.
12. With the tips centered in the bumper cutout (or muffler outlet pipes centered in bezel for ground effects), start at the front of the vehicle and tighten the nuts on the clamps. Torque nuts to 45 ft-lbs. Remove the spacer block from step 6.
13. It is **STRONGLY SUGGESTED** that all clamps be checked and re-tightened (if necessary) to the recommended torque after initial road testing of the vehicle, as thermal cycling has occurred on the system. Please wait until system has fully cooled to perform this step.

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.

CORSA Exhaust Installation Pictures



Fig. A



Fig. B



Fig. C



Fig. D



Fig. E



Fig. F

CORSA Exhaust Installation Pictures:



Fig. G



Fig. H



Fig. I

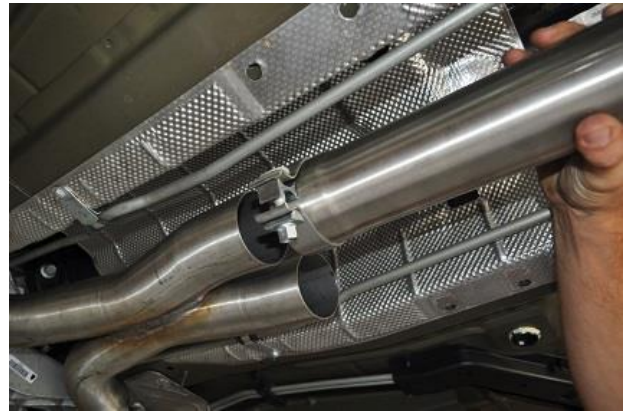


Fig. J



Fig. K



Fig. L

CORSA Exhaust Installation Pictures:



Fig. M



Fig. N



Fig. O



Fig. P

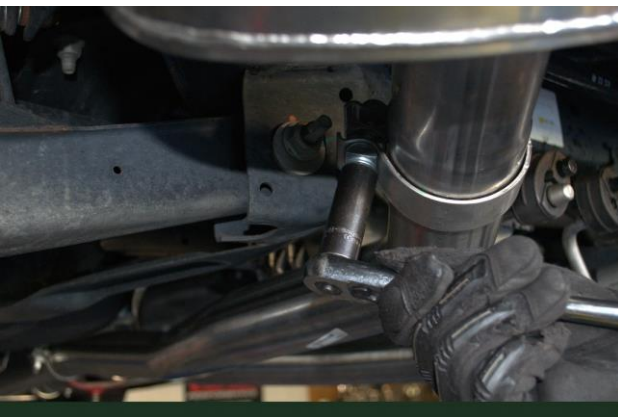


Fig. Q



Fig. R