

#### 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.

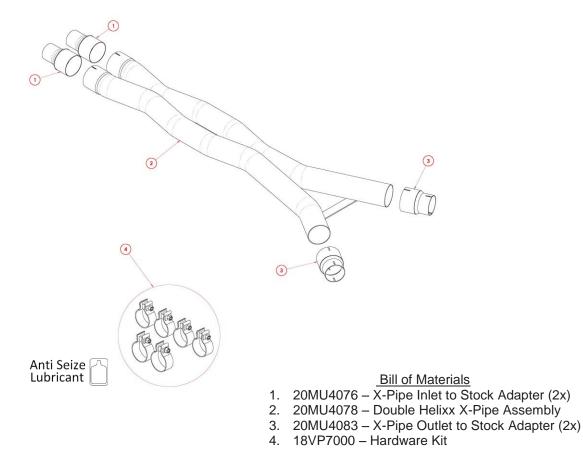
**CAUTION:** Never work on a hot exhaust system. Allow time for the vehicle to cool. Always wear eye protection when working under a vehicle.

#### **Recommended Tools:**

- 3/8" drive ratchet
- 3/8" drive torque wrench
- 3/8" drive 13mm socket
- 3/8" drive 15mm deep socket
- Tape measure & Marker
- Saw or chain-style pipe cutter

- File or sanding device for de-burring
- Soap and water solution
- Torque Wrench
- Penetrating lubricant spray
- Safety glasses

Please confirm that all parts are present before beginning the factory exhaust system removal and CORSA exhaust system installation.





#### Factory Exhaust System Removal:

- Starting on the driver side, measure 22½" away from the flange on the stock resonator, following the outside profile of the exhaust pipe. (Fig. A) The tape measure should follow the bend profile of the pipe. (Fig. B) Next, on the passenger side, measure 23" away from the flange on the stock resonator following the outside profile of the exhaust pipe. Again, the tape measure should follow the bend profile of the pipe. (Fig. C) Using a chain cutter or similar device, cut both the driver and passenger side exhaust pipes at the marked locations. (Fig. D) Place an adjustable stand or similar device under the stock tunnel section of the exhaust for support. Once the axle pipes are cut, there are no additional stock hangers supporting the tunnel section.
- 2. Using a 3/8" drive ratchet and 13mm socket, remove the bolt holding down the driver side hanger grommet assembly. (Fig. E) Once the bolt is removed, push up slightly on the exhaust and slide the hanger grommet assembly rearward to free it from the rear suspension sub-frame. Rotate the hanger grommet assembly a minimum of 90° so that it will not interfere with the rear suspension sub-frame. (Fig. F) Place the bolt in a safe location as it will be reused during the installation of the Corsa X-Pipe.
- 3. Lower the cut end of the driver side muffler assembly just enough to create clearance between the pipe and any suspension components. Slide the whole muffler assembly forward to remove the rear muffler hanger from the hanger grommet. (Fig. G) The muffler assembly will now be free from the vehicle.

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

- 4. The repeat steps #2 and #3 for the passenger side. (Fig. H)
- 5. Using a 3/8" drive ratchet and 15mm deep socket, loosen the two sleeve clamps at the cat-back connection point. Both nuts must be loosened in order for the clamp to fully disengage. (Fig. I) Slide the stock tunnel muffler assembly rearward to free it from the two sleeve clamps and remove it from the vehicle. (Fig. J)
- 6. **IMPORTANT:** Carefully and thoroughly de-burr the stock driver and passenger muffler inlet pipes from any burrs and sharp edges. This is important as any burrs will prevent the x-pipe outlet to stock adapters from sliding over the stock exhaust pipes. This concludes the factory exhaust system removal.



## 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

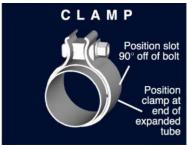


# Installation of CORSA Exhaust System:

**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 two x-pipe inlet adapters. Slide the adapters into the factory sleeve clamps, and tighten the clamps using the ratchet and 15mm deep socket, until the adapters are snug in the clamps. (Fig. K)
- 3. Locate the double helixx x-pipe and two 3" clamps. Install the clamps on the driver and passenger inlets so that the bolts are vertical with the nut towards the ground and the bolts towards the outside of the vehicle. (Fig. L) Slide the x-pipe inlets over the x-pipe adapter outlets. (Fig. M) Position the x-pipe so that the x-pipe cross brace located at the rear of the x-pipe is facing down and is parallel with the ground, and the x-pipe outlets are centered around the differential. Tighten the clamps using a ratchet and 15mm deep socket, until the x-pipe is snug on the adapters. (Fig. N) Place a jack stand or similar device under the x-pipe for support.
- 4. Locate the two x-pipe outlet adapters, and two 3" clamps. Install the clamps on the adapter so that the bolts are vertical with the nuts towards the ground and both bolts are towards the inside of the vehicle when the adapters are installed over the x-pipe outlets. (Fig. O) Tighten the clamps using a ratchet and 15mm deep socket, until the adapters are snug on the pipes.
- 5. Locate two 2½" clamps. Install the clamps on the adapter outlet pipes so that the bolts are vertical with the nuts towards the ground and the bolts towards the outside of the vehicle. (Fig. P) Do NOT tighten the clamps at this step, as the stock axle pipes will then not be able to fit inside the adapters.



6. Locate the stock driver side muffler assembly. Slide the rear hanger into the rear hanger grommet located on the vehicle above and just inside of the passenger side tip cut out. (Fig. Q) Next, slide the muffler inlet pipe into the driver side adapter outlet. (Fig. R)

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

- Locate the 13mm bolt removed during step #2 of the stock exhaust removal process. Install the front passenger hanger grommet assembly onto the rear suspension sub-frame, and tighten it down with the 13mm bolt, 3/8" ratchet, and 13mm socket. (Fig. S)
- 8. Tighten the clamp connecting the passenger muffler inlet pipe to the x-pipe outlet adapter using the ratchet and 15mm deep socket, until muffler assembly is snug on the adapter.
- 9. Repeat steps #6 #8 on the passenger side of the vehicle. (Fig. T) Once the exhaust system is secure, it is safe to remove the jack stand from beneath the x-pipe.
- 10. Adjust the system accordingly, including the adapter overlap on the stock exhaust, the rear muffler depth and rotation. Verify the exhaust tips are centered in the bumper valence. (Fig. U) Check clearances between the system components and chassis. 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.



## **CORSA Installation Pictures**



Fig. K



Fig. L



Fig. M

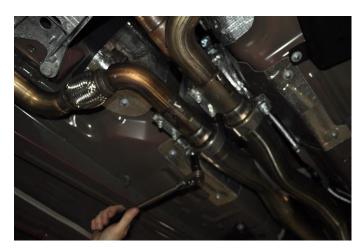


Fig. N



Fig. O



Fig. P



#### **CORSA Installation Pictures**

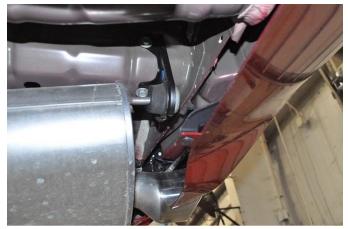


Fig. Q



Fig. R



Fig. S



Fig. T



