

Please take time to read and understand these installation instructions.

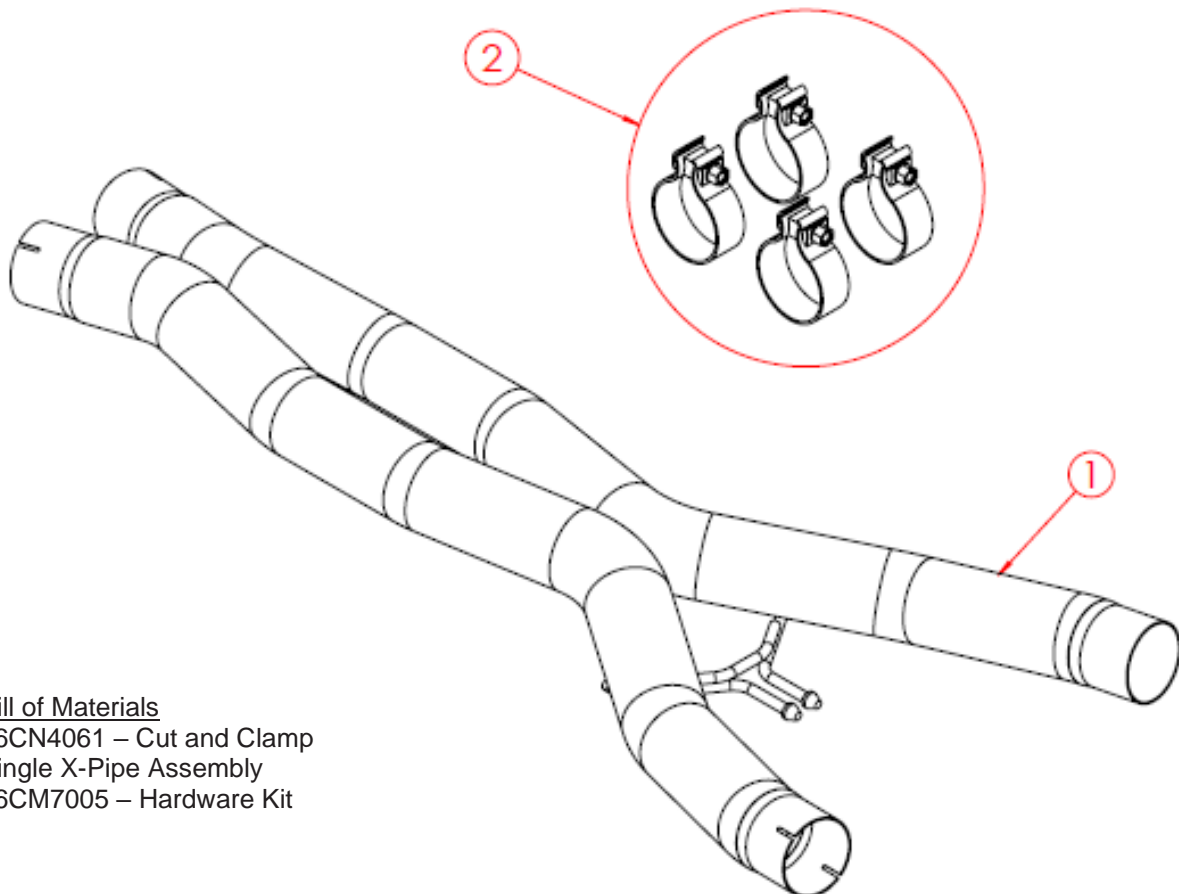
CORSA recommends that the installation of this system be performed by a qualified service center or professional muffler installer who has the necessary equipment, tools and experienced personnel. However, if you decide to perform this install, the use of a hoist and an additional person will be required.

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 and short extension (3")
- 3/8" drive 18mm deep socket
- 3/8" drive 15mm deep socket
- 3/8" drive 13mm shallow and deep sockets
- Tape measure & Marker
- Saw or chain-style pipe cutter
- File or sanding device for de-burring
- 15mm wrench
- Grommet pullers
- Soap and water solution
- Torque Wrench
- Safety glasses

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



Bill of Materials

1. 16CN4061 – Cut and Clamp Single X-Pipe Assembly
2. 16CM7005 – Hardware Kit

Factory Exhaust System Removal:

1. Remove the factory tunnel under shield. The shield is secured in place by 24 bolts, including two larger bolts near the front of the shield. Use an 18mm socket and 3/8" ratchet to remove the two larger bolts, followed by a 13mm socket and ratchet to remove the remaining 22 bolts. **(Fig. A, B, & C)**
2. Remove the four nuts that secure the factory x-pipe inlet flanges using a 15mm socket and 3/8" ratchet. **(Fig. D)**
3. Remove the two bolts securing the X-pipe hanger grommet with a 13mm socket, a 3/8" ratchet, and a small extension. This will allow the factory x-pipe section to droop. Set aside these bolts to be reused during the installation process. **(Fig. E (Auto) or Fig. F (Manual))**
4. Loosen the clamp bolts at the x-pipe outlet using a 15mm socket and a 3/8" ratchet. **(Fig. G)**
5. CAREFULLY pivot the stock x-pipe section down at the inlet flanges and then forwards to free it from the vehicle. **(Fig. H)**
6. Remove the hanger grommet from the two hangers using grommet pullers or similar device. Set aside the grommet to be reused during the installation process. **(Fig. I)**

Note: The use of a soap and water solution may make working with rubber grommets easier.

7. Using a tape measure and a marker, measure 4.0 inches rearward off the top inner edge of the factory catalyst heat shield and mark the pipe on both the driver and passenger side x-pipe legs. Scribe the pipe perpendicular to the center of the pipe flow through both measured points to create your **CUT LINES**. **(Fig. J & K)**
8. Using a chain cutter or similar device, cut both stock x-pipe legs at the marked locations. Carefully deburr the cut edge using a file or sanding device, as the two factory catalysts will be reused during this installation. This is important, as any burrs will prevent the CORSA double X-pipes from sliding over the outlet of the stock catalysts. This concludes the factory exhaust system removal. **(Fig. L)**

REMOVAL PICTURES ON NEXT PAGE 

Factory Exhaust Removal Pictures



Fig. A

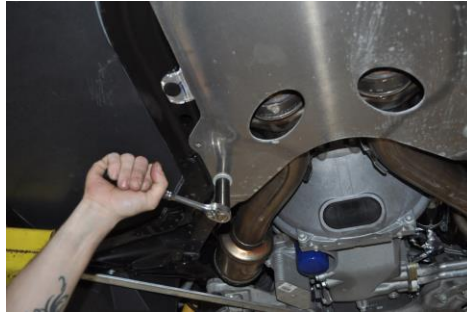


Fig. B

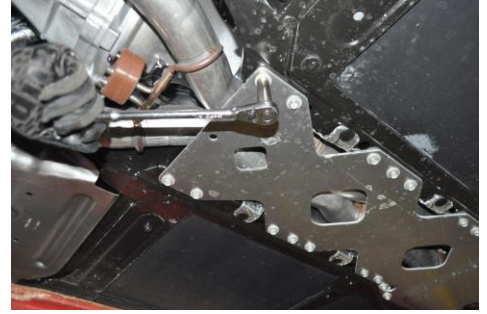


Fig. C

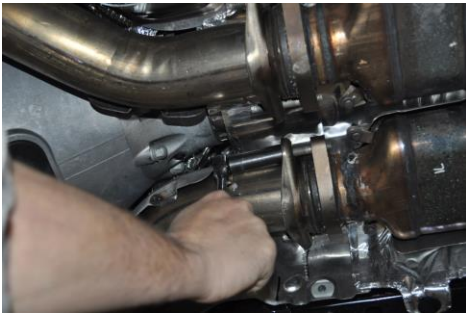


Fig. D



Fig. E



Fig. F



Fig. G



Fig. H



Fig. I



Fig. J



Fig. K

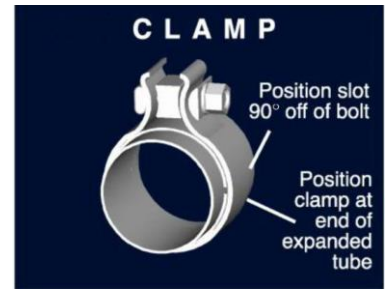


Fig. L

Installation of CORSA Exhaust System:

NOTE: Apply the anti-seize lubricant (supplied) to the threads **ONLY** of all the clamps. 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. Locate the CORSA cut and clamp double Helix X-Pipe assembly and supplied hardware, along with the factory catalyst sections retained from the last step in the removal process.
2. Insert the X-pipe hangers into the factory rubber grommet as shown. The mounting bracket on the grommet must be oriented as shown, with the mounting holes facing forwards and favoring the top of the assembly. **(Fig. M)**
NOTE: The use of a soap and water solution may make working with rubber grommets easier.
3. Locate two 2.75" clamps. Slide the clamps onto the X-Pipe inlet as shown, until the clamp edges are flush with the edge of the expansions, and the clamp bolts are on the outside and facing downwards. Position both factory catalysts in front of the double X-pipe inlet as shown, so that the catalyst outlet bends run uphill as they go rearward. Make sure the CORSA double x-pipe is oriented properly to the catalysts, such that the rear hanger wrap point is down and the inlet bends of the x-pipe align to the outlet of the factory catalyst pipes. **(Fig. N & O)**
4. Slide the catalyst outlet pipes into the x-pipe as shown. Snugly tighten the clamps using a 15mm socket and 3/8" ratchet just enough to keep the catalyst pipes from falling out of the x-pipe inlet, leaving the connections loose enough for further adjustment. **(Fig. P)**
5. Locate the two 2.75" clamps; place them over the outlets of the X-pipe assembly, with the clamp bolts on the outside facing downwards. Slide the outlet end of the X-pipe onto the axle pipes, then align the factory catalysts with the stock mounting flanges. Support the assembly with a jack stand or similar device. **(Fig. Q & R)**
6. Locate the flange mounting hardware. Align the stock flanges, and install the hardware, with the factory nuts on the upstream side of the connection. Leave the hardware loose at this point.
7. Install the two bolts to mount the X-pipe hanger grommet. Make sure the mounting bracket is centered, then secure with a 13mm socket and 3/8" ratchet. **(Fig. S (Auto) or Fig. T (Manual))**

INSTALL CONTINUES ON NEXT PAGE; INSTALL PICTURES ON PAGE 6 

8. Rotate the factory catalysts at the flange connection until the bottom of each catalyst is parallel to the ground. Tighten the four M10 nuts to secure the factory x-pipe inlet flanges using a 15mm socket and 3/8" ratchet. Alternately tighten each side to keep the x-pipe assembly centered in the cavity. Verify that the assembly is centered by checking the clearances to the transmission and the X-pipe outlet. There should be at least a fingertip worth of clearance on both sides (at the closest points to the transmission and the chassis). Torque fasteners to 31 Ft-Lbs. **(Fig. U)**
9. Remove any under support(s) at this time. Tighten the clamp bolts at the x-pipe inlet using a 15mm socket and 3/8" ratchet, followed by tightening the clamp bolts at the x-pipe outlet using a 15mm socket and a 3/8" ratchet. Torque all clamp bolts to 45 Ft-Lbs. **(Fig. V)**
10. Reinstall the factory tunnel under shield. Secure in place with the 24 bolts set aside in the removal process. Use an 18mm socket and 3/8" ratchet to tighten the two larger bolts, followed by a 13mm socket and ratchet to tighten the remaining 22 bolts. Torque under shield bolts to factory specs. **(Fig. W & X)**

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. M



Fig. N



Fig. O



Fig. P



Fig. Q



Fig. R

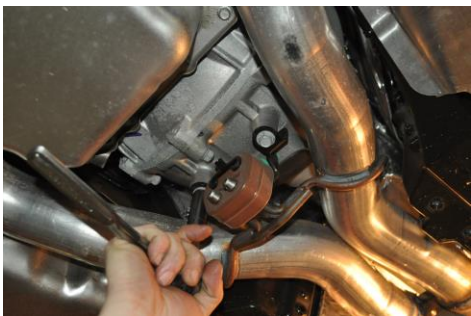


Fig. S

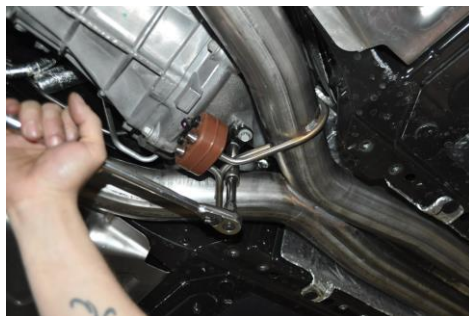


Fig. T



Fig. U



Fig. V



Fig. W



Fig. X