

11-14 FORD MUSTANG GT

CORSA[®]
PERFORMANCE



IMPORTANT! WARRANTY AND INSTALLATION INSTRUCTIONS

Please Forward All Information to Consumer

Be sure to review the enclosed instructions prior to beginning the installation process. If you have any questions about the enclosed parts or instructions, or if you encounter a problem during installation:

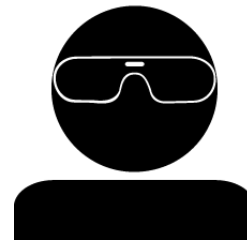
CALL TECHNICAL SUPPORT: 440.891.0999 or 800.486.0999

**TO ACTIVATE YOUR WARRANTY GO TO:
CORSAPERFORMANCE.COM/WARRANTY**

COLOR INSTRUCTIONS ARE AVAILABLE BY PART NUMBER ON: **CORSAPERFORMANCE.COM**



NEVER work on a hot exhaust system.
Allow time for the vehicle to cool.



**Always wear eye protection
when working under a vehicle.**

INSTALL DIFFICULTY

RECOMMENDED TOOLS & SUPPLIES

- 3/8" drive ratchet
- 3/8" drive torque wrench
- 3/8" drive metric normal and deep socket sets
- 3/8" drive ratchet extensions – 3", 6", & 12"
- 3/8" drive 1/2" socket
- 1/2" box wrench
- 1/4" drive ratchet
- 1/4" socket set with 3" extension & swivel joint
- T40 Torx bit socket
- E8 external Torx socket
- O2 sensor socket or 22mm wrench
- Metric box wrench set (ratcheting preferred)
- Device to lift and safely support engine
- Flathead screw driver
- Nut driver set
- Pliers

2011-2014 FORD MUSTANG GT 5.0L V8

Long Tube Headers: 1.875" Primary, 3.0" Collector
Part #: 16016, 16116



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 installer who has; experience installing off-road products, the necessary equipment, tools, and experienced personnel. In order to increase the vehicle's performance this system was engineered differently from the vehicle's stock headers. Take particular care to ensure proper clearance of all lines, hoses, and cables.

WARNING: Do not allow anything to touch or be in close proximity to this system. Never work on a hot exhaust system. Allow time for the vehicle to cool. Always wear eye protection when working under a vehicle.

CORSA Performance makes no representation or warranty, expressed or implied that its downpipe or header products and or components there-in comply with federal, state or local emission levels, noise levels, labeling laws, safety standards, or that any of their parts conform with the racing vehicles exemption, unless otherwise noted. The purchaser assumes all responsibility for such use and compliance.

This warranty does not extend to damaged or defect in the finish of a product or to any product, that in the opinion of CORSA Performance, has been misused, damaged by accident or negligence, altered or modified in any way, faulty installation or installed contrary to CORSA installation instructions, or repaired by an unauthorized service facility.

Full warranty available on www.corsaperformance.com

WARNING: CORSA Performance Headers are intended for off-road use only. Products are not legal for sale or use in the state of California, or in states that adopt California Air Resources Board emission standards.

NOTE: This instruction sheet assumes that the CORSA Performance X-Pipe (CORSA Part # 14370 or 14421) and CORSA Exhaust Connection Pipes (CORSA Part # 16018) are installed in conjunction with the CORSA Long Tube Headers. May fit to other systems with modifications. **CORSA X-Pipe Part # 14318 DOES NOT directly bolt up to the CORSA Connection Pipes (Part # 16018), and will require modification.**

NOTE: Individual vehicle variations and stock header differences can impact the order of installation. The directions provided will assist in removal and CORSA installation. Please contact a CORSA representative with any concerns.

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

If something is missing call Tech Support at 440.891.099 or Toll Free: 1.800.486.0999

[BILL OF MATERIALS LOCATED ON NEXT PAGE]

2011-2014 FORD MUSTANG GT 5.0L V8

Long Tube Headers: 1.875" Primary, 3.0" Collector

Part #: 16016, 16116



HEADER BILL OF MATERIALS

PART # 16016 (2011-2014)

Long Tube Header (<i>Driver</i>)	1	Long Tube Header (<i>Passenger</i>)	1
Cable Ties	3	O2 Extension Cables (<i>Front</i>)	2
Header Bolts 10mm (<i>Fine & Coarse</i>)	32	Graphite Donut 3.0" Gaskets Kit 8 Top Lock Hex Nuts (5/16" x 18) 8 Allen Head Cap Screws (5/16" x 18 x 1 3/4")	

CONNECTION PIPES BILL OF MATERIALS

PART # 16018



Flanged Connection Pipe with O2 (QTY 2)

HEADERS + CONNECTION PIPES

PART # 16116



Item 1: Long Tube Catless Headers Part Number: 16016

Item 2: CORSA Connection Pipes Part Number: 16018

2011-2014 FORD MUSTANG GT 5.0L V8

Long Tube Headers: 1.875" Primary, 3.0" Collector

Part #: 16016, 16116

CORSA
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NOTE: This system was designed to connect to CORSA X-Pipe PN: 14370 or 14421 (NOT 14318), CORSA Connection Pipes PN: 16018, and CORSA Axle-Back Part #: 14317 and 14316. Tip color does not affect fitment. The need for additional modification and fabrication may arise. The vehicle owner assumes all responsibility for subsequent fitment issues.

CAUTION: Never work on a hot exhaust system. Allow the vehicle to cool for at least an hour and a half. Always wear eye protection when working under a vehicle. It is recommended to use cotton gloves in order to protect the stainless steel surface of the header from permanent grease and oil stains.

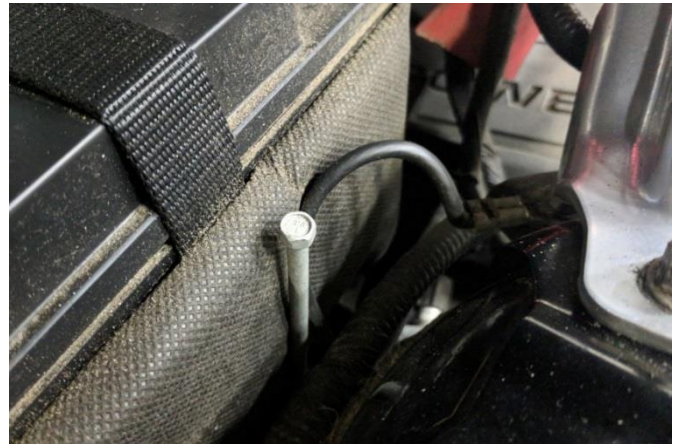
NOTE: Lift the vehicle using a hydraulic lift or jack and jack stands. A lift is strongly recommended because three (3) feet or more is needed to install the driver side header from the underside.

REMOVAL INSTRUCTIONS

FACTORY MANIFOLD



1. Remove the black negative battery cable using an 8mm wrench.



2. Remove the battery blanket insulation. Loosen and remove the bolt securing the battery to the tray using an 8mm socket and 1/4" ratchet. **Save for reinstallation** (Install Step 27).

NOTE: The bolt is captive with part of the retention mechanism. Once the bolt is fully unthreaded, the battery can be lifted.



3. Remove battery from the vehicle. Remove the battery tray from the vehicle by removing the three 8mm bolts using a ratchet, long extension, and 8mm socket. **Save for reinstallation** (Install Step 27).



4. Remove the strut tower bar, if present, using a 15mm socket and 3/8" ratchet. **Save for reinstallation** (Install Step 26).

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REMOVAL INSTRUCTIONS

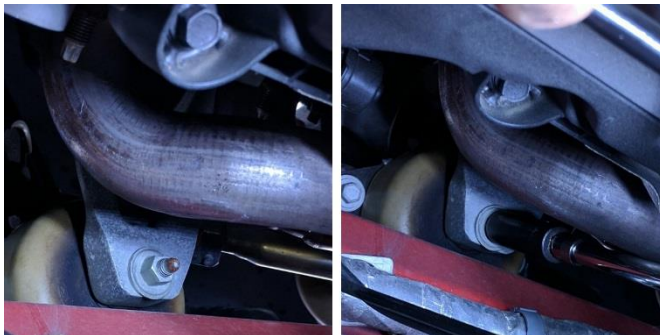
FACTORY MANIFOLD



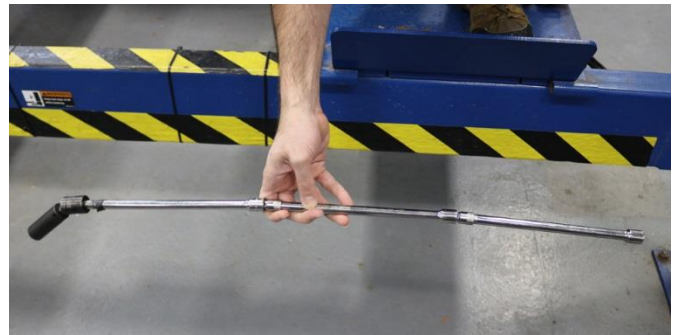
5. Locate the harness connector for the mass air flow sensor on the driver side and release the red security clip by pulling it toward the wires. Disconnect the wires from the sensor.



6. Disconnect the breather hoses in the bend of the intake duct by using pliers to loosen the hose spring clamps. Loosen the band clamp around the air inlet tube using a flathead screwdriver or nut driver. Remove the single 10mm bolt securing the box and remove the intake assembly from the vehicle. **Save for reinstallation** (Install Step 25).



7. Locate the single nut for the driver side engine mount. Use a 15mm socket, extensions, and 3/8" ratchet to remove the nut. Remove the passenger side nut. **Save for reinstallation** (Install Step 24).



8. Locate the flange connecting the passenger catalytic converter to the manifold. Remove the top nut using three 12" long 3/8" extensions, 3/8" impact swivel, and deep 15mm socket.



9. Disconnect the driver front O2 sensor connector. Disconnect the passenger front O2 sensor connector. *(Automatic Transmission Only)*.
Lift the vehicle and safely secure it.
Disconnect the passenger front O2 sensor connector. *(Manual Transmission Only)*.
Disconnect the driver and passenger rear O2 sensor connectors. **PRO TIP:** Disconnect the rear sensor connector from its mount in the transmission to remove it.

Continued on Next Page ...

REMOVAL INSTRUCTIONS

FACTORY MANIFOLD



- 10.** Remove the rear O2 sensors and label their positions using a 22mm wrench or O2 sensor socket and 3/8" ratchet. **PRO TIP:** Label on the connector or the sensor body itself. **EXAMPLE:** DR for Driver Rear. PF for Passenger Front.



- 11.** Locate the flange connecting the driver catalytic converter to the manifold. Use a 15mm socket and 3/8" ratchet to remove the last nut. Repeat on passenger side.
WARNING: The front section of the exhaust could drop down. Support it using a jack stand, screw jack, or similar device.



- 12.** Support the factory axle pipes and the driver catalytic converter with a jack stand or similar device. **DO NOT** let the exhaust droop as it may damage the rear bumper cutouts.



- 13.** Loosen the spherical joint clamp on both the catalytic converters using a 13mm wrench.



- 14.** Push the entire exhaust system rearward in the vehicle to gain enough space to remove the catalytic converters.
Repeat **Steps 11** on passenger side.



- 15.** Use a flathead screwdriver or similar pry device to release the factory sleeve clamp locking clip.

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REMOVAL INSTRUCTIONS

FACTORY MANIFOLD



- 16.** Loosen the sleeve clamps near the factory intermediate pipe using a 15mm socket and 3/8" ratchet, then remove from the vehicle.



- 17. Driver Side:** Remove and **save the two bolts** (save for Install Step 9) securing the steering shaft to the universal joint using a ratchet and a T40 Torx bit socket.

Slide the shaft up and out of the universal joint, then remove the universal joint from the steering rack.

The shaft can be pushed upward and rest on the frame rail out of the way. **WARNING:** Be careful not to rotate the shaft or universal joint while they are not connected. It may create problems with the steering column, horn, S.I.R. and/or alignment. **PRO TIP:** Label the correct rotation before removing.



- 18. Passenger Side:** Remove the starter wires using a 1/4" ratchet, a 10mm socket, and a 13mm socket.

Remove the **three starter mounting bolts** (save for Install Step 8) using a 1/4" ratchet and 10mm socket. **PRO TIP:** A 3" extension and swivel will make the top bolt easier to access.

- 19.** Safely lift the engine within the vehicle. **There are several ways to complete this step:** We suggestion the use of a transmission jack or an engine hoist from the top side of the engine bay.

CORSA Performance defers the decision to the installer and their preference.

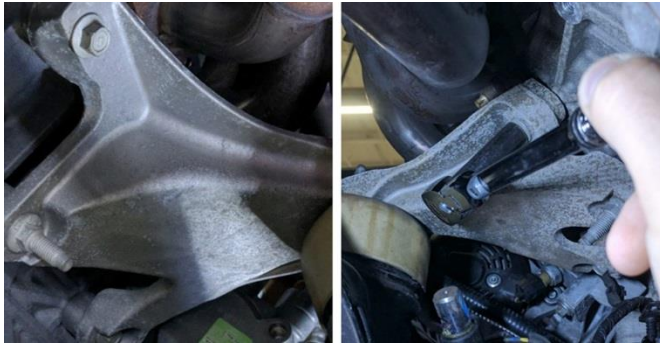
The engine needs to be lifted at least an inch but more is better. The transmission housing will contact the tunnel and firewall preventing the engine from being lifted too high. **NOTE:** This instruction sheet assumes the engine is lifted straight and equally on both sides. If necessary, it is possible to complete the install on one side at a time.

Alternatively, a solid lifting point for a screw jack, or similar device, is located near where the transmission meets the engine block to either side of the oil pan. If this area is used it will rock the engine side to side, making it possible to: remove the factory manifold from one side, install the header, lower the engine, and repeat on the opposite side

Continued on Next Page ...

REMOVAL INSTRUCTIONS

FACTORY MANIFOLD



- 20.** Remove the engine mounts from both sides of the engine using a 3/8" drive ratchet (3" extension if needed), 13mm deep and shallow sockets. One bolt on the passenger side is "blind" and has a 15mm nut on it to secure a ground strap to the stud. **Save bolt and 15mm nut for reinstallation (Install Step 7).**

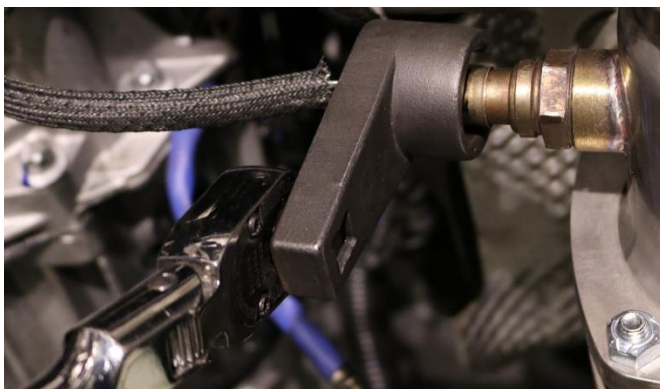
- 21. AUTO ONLY:** Lower the engine within the vehicle to gain access to the passenger side front O2 sensor connector on top of the transmission and disconnect the sensor. Raise engine when done.



- 22.** Using a 12mm socket and 3/8" ratchet or ratcheting wrench, remove 8 nuts on each side securing the factory manifolds to the heads. (Save nuts to return vehicle to stock). **WARNING: Take care when removing the factory manifolds from the vehicle. The O2 sensors are still in place and can be easily damaged.** Remove both gaskets from the engine head.



- 23.** Remove the 8 studs on each side of the head using the E8 Torx socket and ratchet. Save one stud for **Install Step 3. WARNING: Take care when removing them as the heads are aluminum and the studs are steel.** One stud on the passenger side in the front may require the use of a 6mm ratcheting wrench to remove. **WARNING: This is not ideal as it could easily round off the Torx pattern on the end of the stud. We recommend a "jam nut" process.** Thread two nuts onto the stud with the flat flanges facing each other. Loosen the stud by turning only the nut closest to the head as it will lock/stop against the nut near the end of the stud.



- 24.** Remove the O2 sensors from the factory manifolds and catalytic converters using an O2 sensor socket and ratchet or 22mm wrench. **PRO TIP:** Label the location of each sensor so they can be installed into the same location within the CORSA Performance headers.

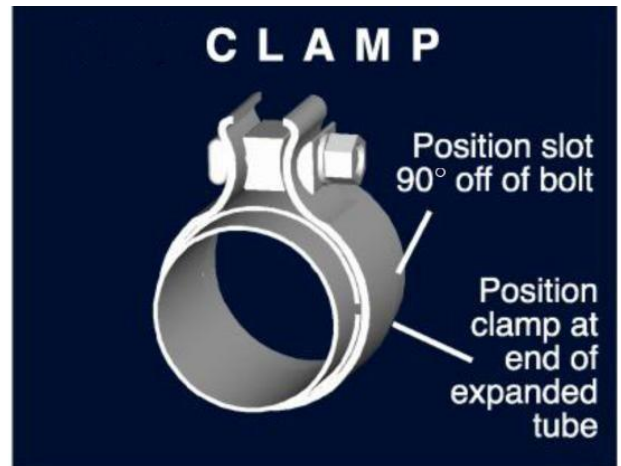
This concludes the removal of the factory exhaust manifolds.

WARNING! DO NOT SKIP THIS STEP!

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.

WARNING: CORSA Performance Headers are intended for off-road use only. Products are not legal for sale or use in the state of California, or in states that adopt California Air Resources Board emission standards.

NOTE: This instruction sheet assumes that the **CORSA Performance X-Pipe** (CORSA Part # 14370 or 14421) and **CORSA Connection Pipes** (CORSA Part # 16018) are installed in conjunction with the CORSA long tube headers. May fit to other systems with modifications. **CORSA X-Pipe Part # 14318 DOES NOT directly bolt up to the CORSA Connection Pipes (Part # 16018), and will require modification.**

CORSA's warranty does not extend to damage or defect in the finish of a product or to any product that in the opinion of CORSA Performance, has been misused, damaged by accident or negligence, **altered** or **modified** in any way, faulty installation or installed contrary to CORSA Performance installation instructions, or repaired by an unauthorized service facility. Full warranty available on www.corsaperformance.com

NOTE: Individual vehicle variations and stock header differences can impact the order of installation. The directions provided will assist in removal and CORSA installation. Please contact a CORSA representative with any concerns.

NOTE: This system was designed to connect to CORSA X-Pipe PN: 14370 or 14421 (NOT 14318), CORSA Connection Pipes PN: 16018, and CORSA Axle-Back Part #: 14317 and 14316. Tip color does not affect fitment. The need for additional modification and fabrication may arise. The vehicle owner assumes all responsibility for subsequent fitment issues.

CAUTION: Never work on a hot exhaust system. Allow the vehicle to cool for at least an hour and a half. Always wear eye protection when working under a vehicle. It is recommended to use cotton gloves in order to protect the stainless steel surface of the header from permanent grease and oil stains.

NOTE: Lift the vehicle using a hydraulic lift or jack and jack stands. A lift is strongly recommended because three (3) feet or more is needed to install the driver side header from the underside.

INSTALLATION INSTRUCTIONS

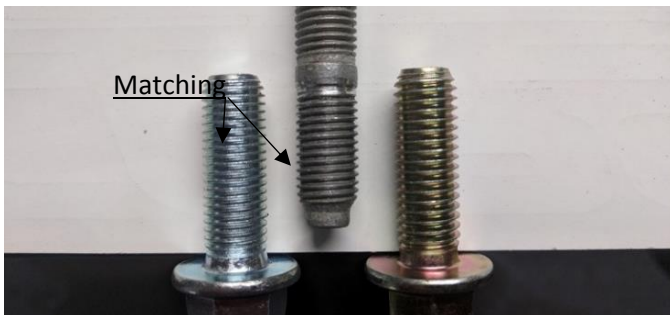
CORSA EXHAUST



1. Remove all exhaust system components from the shipping boxes, including clamps and hardware.



2. Install the passenger front O2 sensor extension wire. **PRO TIP:** Route it around the bellhousing at the rear of the engine. This keeps it tucked away from the header once installed.



3. Locate one of the studs from **Removal Step 23** along with both bags of bolts provided in the hardware kit. Compare the **SHORT** end threads on the stud to both sets of bolts. **Pay close attention to how well they match:** One set of bolts is for newer vehicles with coarse threads. The bolts with a fine thread are typically for older vehicles. **WARNING: Ensure the threads on the stud match the bolts otherwise serious damage can be done to the engine head.**
NOTE: Check that the bolts in engine are finger tightened only.



4. Prepare the ends of the correct matching bolts with a small amount of anti-seize lubricant. Locate the multi-layer steel header gaskets in the hardware kit.

Notice how the triangular shaped holes at the ends align with the top row of holes on the engine head at the front and rear. Insert **two** prepared bolts through the triangular corners of the gasket and begin threading them into the front and rear holes. **WARNING: Only thread the bolts into the holes enough to ensure they are not cross-threaded.**

Thread in **two** more bolts for a total of 4 along the top of the gasket.

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INSTALLATION INSTRUCTIONS

CORSA EXHAUST



- 5.** Lift one of the headers up and slide the 4 top bolts into the header flange to align to the engine. **(This step is much easier with the help of another person).** Start the bolt along the bottom of the flange to hold it in place. **Start the remaining header bolts by hand to ensure they are not cross-threaded.**

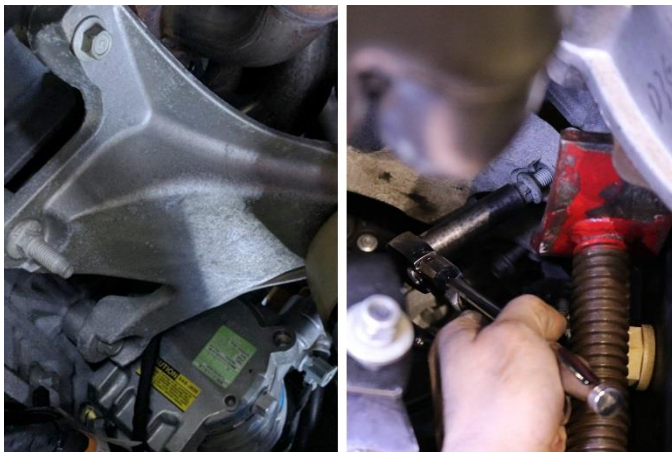
Do not fully tighten any of the bolts at this point as you may not have enough space to get a tool on some of the bottom bolts because they will hit the primary tubes.



- 6.** Gradually tighten the bolts half way, then more until they are all nearly tight. Once all the bolts are snug, tighten them to 20ft-lb, working in a cross pattern starting in the middle at working outward.

PRO TIP: Tighten all bottom 4 bolts and the 1 top most rearward bolt from below the vehicle. Tighten the remaining top 3 bolts from above.

Repeat **Install Steps 4-6** on the opposite side of the engine.



- 7.** Reinstall the factory engine mount brackets using a ratchet and 13mm and 15mm socket. **Passenger Side:** Ensure the top bolt in the front has a threaded stud on the hex end. Reinstall the ground strap and secure with the 15mm nut removed during **Removal Step 20**. Lower the engine back onto the engine mounts.



- 8.** Reinstall the starter, secure it with the three 10mm bolts from **Removal Step 18** using a 1/4" drive ratchet and 10mm socket with 3" extension and swivel. Connect the starter wires using the ratchet with the 10mm and 13mm nuts.

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INSTALLATION INSTRUCTIONS

CORSA EXHAUST



- 9.** Reinstall the steering shaft from **Removal Step 17** to the universal joint using a ratchet and a T40 Torx bit socket.



- 10.** Install the provided donut gaskets on the collector outlets.



- 11.** Install a CORSA Connection Pipe (Included in Part # 16018) on the passenger side with the O2 bung facing towards inside of the vehicle at a slight upwards angle.



- 12.** Insert the 4 provided bolts from the donut gasket kit with the head of the bolt facing forward in the vehicle. The nuts have a locking thread design so they are not able to be finger tightened. Tighten the nuts only enough to snug the flared adapter onto the gasket and still allow some movement. Repeat **Steps 11 & 12** on driver side.



- 13.** Pre assemble the CORSA X-Pipe (Part # 14370 or 14421). Snug two of the 2.75" clamps with the nut towards the ground and the bolt toward the outside of the vehicle. Slide the other two 2.75" clamps onto the inlet pipes before raising the X-Pipe assembly up. **NOTE:** Install and align clamps according to **WARNING** box on page 9.



- 14.** Install the X-Pipe inlets into the Connection Pipe outlets and X-Pipe outlets into the stock sleeve clamps.

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INSTALLATION INSTRUCTIONS

CORSA EXHAUST



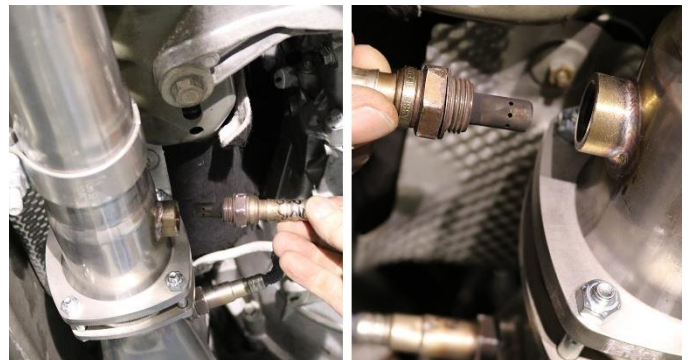
- 15.** Tighten the stock sleeve clamp bolts using a 15mm socket and 3/8" ratchet.



- 16.** Tighten the Connection Pipe flange bolts, using a 1/2" wrench and 1/2" socket and ratchet. Torque bolts down evenly and continue sequence until connection is full sealed and no bolts rattle.



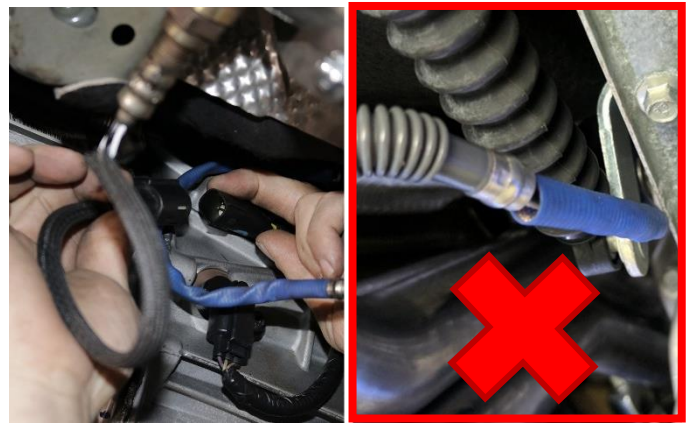
- 17.** Slide the 2.75" X-Pipe clamp forward and tighten using a 15mm wrench with the nut towards the ground and the bolt toward the outside of the vehicle.



- 18.** Reinstall the rear driver and passenger O2 sensors, into the CORSA Connection Pipes.



- 19.** Tighten O2 sensors using an O2 sensor socket and ratchet or a 22mm wrench.



- 20.** Connect the rear O2 sensors into the vehicle wiring harnesses. **WARNING:** Be careful not to loop wire around Auto transmission lever.

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INSTALLATION INSTRUCTIONS

CORSA EXHAUST



21. Begin the final alignment process by snugging all clamp bolts using a ratchet and 15mm socket. The pipe overlap between all slip fit joints should be slightly more than 1.5". With the system snugged, adjust pipe overlaps and check all clearances to heat shields, wiring harnesses, and chassis components.

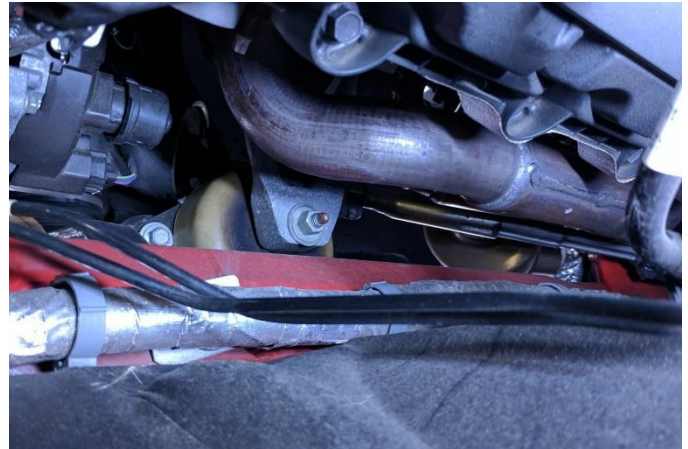


22. The help of a second person is required for this step. Ensure the exhaust tips are properly centered within the rear bumper valence. Tighten all clamps to 45ft-lb. Tighten the spherical flange nuts and bolts to 15ft-lb or 180in-lb using a 1/2" socket, extensions (as necessary), a torque wrench, and 1/2" box wrench.



23. Perform one final check for exhaust system clearances to any heat shields or chassis components. Ensure no wires are contacting the headers.

This concludes the work done under the vehicle. Lower the vehicle to the ground.



24. Secure the top of the engine mounts with the nuts removed during **Removal Step 7**, using extensions, a ratchet, and a 15mm socket.

PRO TIP: "Wobble" extensions make this step easier but a normal swivel section can be used. Also, it is possible to do this from the bottom with a "stubby" wrench.

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INSTALLATION INSTRUCTIONS

CORSA EXHAUST

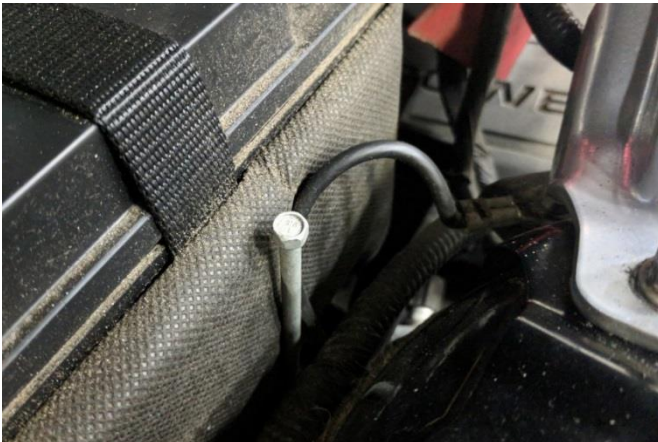


25. In the engine bay, reinstall the air intake box and secure it with the bolt from **Removal Step 6**. Tighten the hose clamp with a flathead screw driver or nut driver. Connect the airflow sensor cable and lock in place with the red tab. Connect the breather hoses to the intake duct.



26. Reinstall the engine cover and press into place.

Reinstall the strut tower bar, if present, (from **Removal Step 4** and secure with the shock mount nuts, 15mm socket and ratchet



27. Reinstall battery, battery tray, and the battery blanket insulation from **Removal Steps 2 & 3**.



28. Reconnect the negative battery cable.

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.

NOTE: It is strongly suggested that all clamps be checked and tightened after road testing the vehicle once the system has cooled.