

05-13 CORVETTE C6·Z06·ZR1

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:

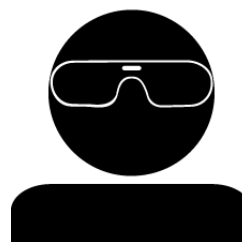
CALL TECHNICAL SUPPORT: 440.891.0999 or 800.486.0999

**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"
- O2 Sensor Socket or 22mm Wrench
- Spark Plug Socket
- Metric Box & Open-end Wrench Set
- Small Pick or Similar Tool
- Soap and Water Solution
- Safety Glasses

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 Double X-Pipe (CORSA Part # 14352, 14353, 14354, or 14355) and CORSA Exhaust Connection Pipes (CORSA Part # 16021) are installed in conjunction with the CORSA Long Tube Headers. May fit to other systems with modifications.

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]

2005-2013 CORVETTE C6, Z06, ZR1

Long Tube Headers: 1.875" Primary, 3.0" Collector

Part #: 16003, 16103, 16021



HEADER BILL OF MATERIALS

PART # 16003 (2005-2013)

Long Tube Header (<i>Driver</i>)	1	Long Tube Header (<i>Passenger</i>)	1
O2 Extension Cables (<i>Front</i>)	2	Header Bolts 8mm	12
5/16" x 18 Bolt	1	Clutch Line Bracket	1
Stainless Steel Header Gaskets	2	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 # 16021



Flanged Connection Pipe with O2 (QTY 2)

Hardware Kit:

- O2 Block Off Bolts (QTY 2)
- O2 Extension Cables (Rear QTY 2)

HEADERS + CONNECTION PIPES

PART # 16103



Item 1: Long Tube Catless Headers Part Number: 16003

Item 2: CORSA Connection Pipes Part Number: 16021

2005-2013 CORVETTE C6, Z06, ZR1

Long Tube Headers: 1.875" Primary, 3.0" Collector
Part #: 16003, 16103, 16021

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NOTE: This system was designed to connect to CORSA Double X-Pipe Part # 14352, 14353, 14354, or 14355 (NOT 14330, 14163, 14127), CORSA Connection Pipes Part # 16021, and CORSA C6 Axle-Backs. 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. Disconnect the black, negative battery cable using a 10mm wrench. **NOTE:** This installation was done on a C6 Z06 and the battery box is located in the trunk. LS2 and LS3 battery boxes are located in the engine bay, passenger side.

3. LS2 and LS3 Models: Loosen and remove the bolt securing the oil dipstick tube to the head. Remove the dipstick tube from the engine. Save the bolt for **Install Step 23**.



2. Carefully remove both plastic fuel rail covers. Remove the oil filler cap before the passenger side cover. Replace the oil filler cap once the cover is removed.

4. LS2 and LS3 Models: Carefully remove the blue pin and disconnect the front O2 sensor wires running over the valve covers.
LS7 Z06 Models: The O2 sensor wires are more easily accessed from underneath the vehicle, refer to **Removal Step 7**.



5. Carefully remove the passenger and driver spark plug wires. Remove the spark plugs on both sides using a 3/8" ratchet, 3" extension, and spark plug socket. **NOTE:** Be careful not to break the white ceramic spark plug insulators.



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REMOVAL INSTRUCTIONS

FACTORY MANIFOLD



- 6.** Remove the two bolts securing the alternator to the bracket using a 15mm socket and ratchet. **CAREFULLY** rotate the alternator up and rest it on top of the intake. Save for **Install Step 18**.

Carefully lift and properly secure the vehicle. We recommend the use of a hydraulic hoist but a jack and jack stands may be used. Note that roughly (3) feet will be needed to install the headers from the underside.



- 7. LS7 Z06 Models:** O2 sensor wires are most easily accessed from the bottom. Remove the blue locking pin and disconnect the sensor connectors.

- 8.** Loosen the clamps at the rear of the X-Pipe using a 15mm socket and ratchet.



- 9.** Loosen and remove the nuts securing the X-Pipe to the stock catalytic converter using a 15mm socket and ratchet.

- 10.** Loosen and remove the nuts securing the X-Pipe to the spring hanger near the rear differential using a 13mm socket, extension, and ratchet. Carefully remove the factory X-pipe from the vehicle. **NOTE: DO NOT** let the exhaust droop as it may damage the rear bumper. Save nuts for **Install Step 11**.

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REMOVAL INSTRUCTIONS

FACTORY MANIFOLD



- 11.** Remove the nuts and/or bolts securing the passenger catalytic converter to the exhaust manifold, using a 15mm socket, ratchet, and extensions as necessary. Carefully remove the catalytic converter from the vehicle. **NOTE:** Take care as the O2 sensors are still in place.



- 12.** Remove the six bolts securing the driver side manifold to the head using a 14mm socket and ratchet, or a 14mm wrench. Carefully remove it from the bottom of the vehicle.



- 13.** Repeat **Removal Steps 11 and 12** on the driver side.



- 14.** Remove the O2 sensors using a 22mm wrench or an O2 sensor socket and ratchet. Label each sensor. Example: "DF" for "driver front" or "PR" for "passenger rear".

NOTE: Take care with the O2 sensors, they are fragile and sensitive to contamination.

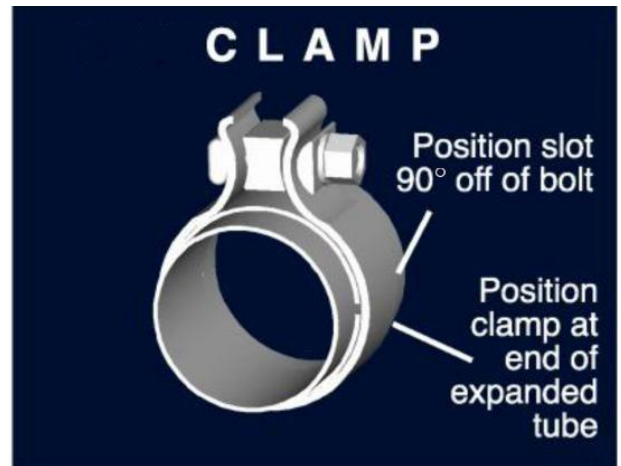
This concludes the removal of the factory exhaust manifolds.

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.

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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.

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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. Automatic Transmission: Skip to **Install Step 2**
Manual Transmission ONLY: A clutch line clamp needs to be installed to prevent the clutch line from resting on the headers. Find the bracket and the self-tapping 5/16" bolt in the hardware kit and locate the empty hole on the driver side of the vehicle, above the brake lines, near the firewall. Install the bolt through the bracket and gently push the clutch line up and out of the way, securing with the bracket. **PRO TIP:** Use a 5/16-18 tap if available and tap the hole to make installation of the bolt easier.



2. LS2 6.0L and LS3 6.2L Models: Skip to **Install Step 3**.
LS7 Z06 Models ONLY: It might be necessary to loosen or remove the starter to get the passenger side header into position. Loosen starter bolts using a 15mm socket. The starter should remain in place without hanging from the wires. Route the header up into position making sure there is enough space. Before bolting the header in place, reinstall and tighten the starter bolts.

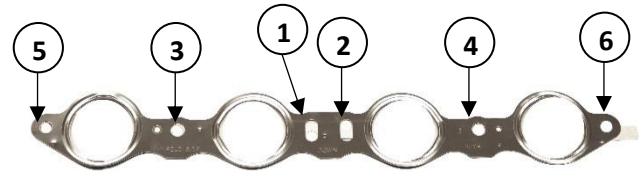


3. Locate six of the header bolts, one of the header gaskets, and the passenger side header assembly. Lightly apply anti-seize to the end of the threads. Examine the header gasket, the markings describe which side faces the engine and which is up.

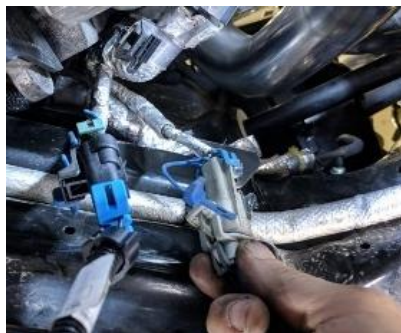
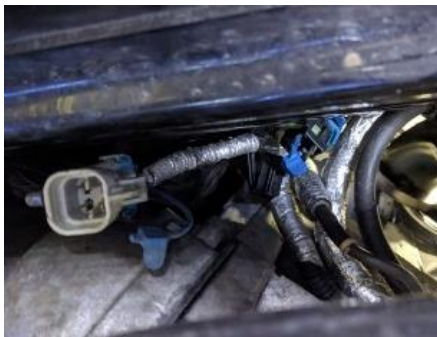
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INSTALLATION INSTRUCTIONS

CORSA EXHAUST



- 4.** This step is made easier with the help of a second person. Lift the header up into the vehicle with the gasket between the header and the engine head. Start the header bolts by hand, ensuring not to cross thread them. Loosely snug the bolts using a 12mm socket and ratchet or 12mm wrench. Repeat **Install Steps 3 and 4** on the driver side of the vehicle.
- 5.** First tighten all header bolts to 7.5ft-lb (90in-lb) using a torque wrench and 12mm socket. Start in the center and work outwards in an alternating pattern. Once all bolts are tightened to 7.5ft-lb, tighten all bolts to 15ft-lb (180in-lb) using the same middle to the outside tightening pattern.



- 6.** Connect the provided front O2 sensor extensions to the wiring harness at the top of the engine; route them down under the vehicle, keeping them away from the headers or anything that could melt them. **NOTE:** Installation photos are of a C6 Z06 with LS7 engine. The LS7's O2 sensor connectors are located at the rear of the engine. LS2 and LS3 engines' sensor connectors are located at the top of the valve covers.
- 7.** Install the front O2 sensors into their corresponding header collectors, labeled during **Removal Step 14**. Tighten the sensors using an O2 sensor socket and ratchet or a 22mm wrench. Connect the O2 sensor wires to the O2 sensor extension wires. **NOTE:** The front and rear sensor connectors are different colors and shapes. This prevents the rear sensor from being plugged into the front extension.



- 8.** Install the graphite "donut" gaskets onto the header collector outlets with the flat face toward the backing ring on the collector.

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INSTALLATION INSTRUCTIONS

CORSA EXHAUST



9. The CORSA adapter pipes are identical and not side specific. Slide the provided 3.0" clamps onto the inlet side of the CORSA X-Pipe so the clamp bolts face the outside of the vehicle and the nuts are toward the ground. After installing the clamps, slip the adapter pipes into the X-Pipe so the O2 bung faces the outside of the vehicle. **[See Double X-Pipe instructions for more specific install details]**



10. **This step is easier with the help of a second person.** Carefully align the X-Pipe adapters to graphite gaskets. **NOTE: The graphite donut gaskets are easily damaged if mating flare pieces are not properly lined up.** Lift the X-Pipe into position and adjust the spread/spacing of the slip fit adapters so the flared pipes align with the donut gaskets on the outlet of the header collectors.
11. Hold the X-Pipe in position on the header collectors and insert the spring hanger studs through the mounting bracket at the rear of the X-Pipe. Thread the nuts from **Removal Step 10** onto the studs. Tighten the nuts using a ratchet, appropriate extension, and 13mm deep socket.
12. At the front of the X-Pipe, install the nuts and bolts through both flanges to secure it to the header collectors. **NOTE: The nuts have a triangular shaped deformed thread and function as lock nuts. They can only be partially threaded on by hand. Evenly snug the nuts and bolts using a 1/2" wrench, 1/2" socket, and ratchet. Align the X-Pipe so it is centered in the tunnel without contacting the sides or any heat shields. Once snugged, swap the ratchet for a torque wrench and tighten all nuts and bolts evenly in a cross-wise pattern to 15ft-lb or 180in-lb.**



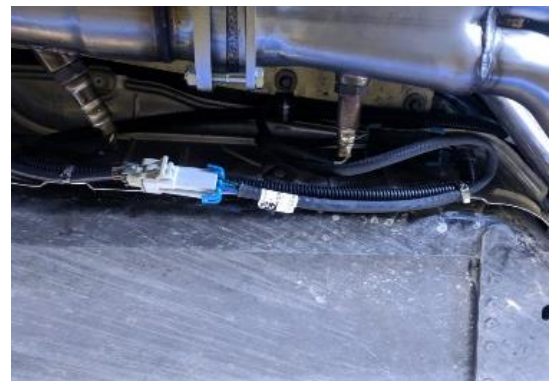
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INSTALLATION INSTRUCTIONS

CORSA EXHAUST



- 13.** Install the rear O2 sensors into the bungs on the X-Pipe adapter elbows. **NOTE:** The sensors are fragile and sensitive to contamination. Tighten the sensors using an O2 sensor socket and ratchet or 22mm wrench. Plug the sensors in to the appropriate harness extensions.



- 14.** Use the cushioned "Adel" clamps and metal cable ties included in the hardware kit to secure the loose O2 extension wires up and away from the exhaust. **PRO TIP:** It is easier to remove a bolt or two from the heat shield above the X-Pipe, install the clamp with wire onto the bolt, and then reinstall the bolt.



Slide a clamp onto each outlet of the X-Pipe, followed by the appropriate side connection pipe.

- 15. LS7 Models:** Must use 3.0" Clamps
LS2 and LS3 Models: Must use 2.5" Clamps



- 16.** Insert the muffler axle pipes into the connection pipes. Snug all clamps using a 15mm socket and ratchet, just enough to hold the system in place but still allow them to be adjusted.

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INSTALLATION INSTRUCTIONS

CORSA EXHAUST

- 17. This step requires the help of a second person.** One person will align and hold the muffler tips within the rear valence; the other person will start at the front of the vehicle and snug all exhaust clamps using a 15mm socket and ratchet to hold parts in place. Double check all clearances to heat shields, suspension components, body, transmission, differential, etc. Final tighten the clamps using the 15mm socket and torque wrench to 45ft-lb. This concludes the work underneath the vehicle. Remove all tools and stock exhaust components from beneath the car and safely lower the car to the ground.



- 18.** Reassembling the components in the engine bay. Begin by replacing the alternator in place and securing with the two bolts from **Removal Step 6**. Tighten bolts using a ratchet and 15mm socket.
- 19.** Replace the serpentine belt over the alternator. Check that the belt is properly routed through all other pulleys. **NOTE:** Refer to owner's manual for belt routing. Ensure the grooves and ridges are properly seated in other pulleys and rollers.



- 20.** Using a 15mm socket and ratchet, rotate the belt tensioner to give room to slip the belt onto the pulley.
- 21.** Use a spark plug socket, appropriate extension, and ratchet to install spark plugs on both sides of the engine. You may reinstall the spark plugs from **Removal Step 5**, but we recommend installing properly gapped, new spark plugs.
- 22.** Reinstall the spark plug wires between the spark plugs and ignition coils.
- 23.** Reinstall the oil dipstick tube, making sure it's properly seated in the engine. Secure with bolt from **Removal Step 3**.
- 24.** Perform a final check of the engine. Ensure no wires contact exhaust components and connectors are properly seated. Ensure no plug wires are loose and properly seated on spark plugs and ignition coils. Reinstall plastic fuel rail covers on both sides of the engine. Oil filler cap must be removed on passenger side before cover can be installed. Replace the oil filler cap. Reconnect the negative battery cable with a 10mm wrench.

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.