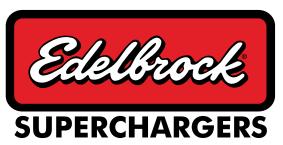


Edelbrock Supercharger

2015-19 CORVETTE Z06 LT4 6.2L 2017-20 CHEVY CAMARO ZL1 LT4 6.2L Part# 157340, 155923







WARNING!

The supercharger bypass valve is factory installed and adjusted intended to be vacuum operated only. DO NOT move the solenoid actuator lever by hand or adjust the stop point. Moving the lever manually will damage the solenoid and the system will not function properly. Damage to the bypass assembly from manual movement will not be covered under manufacture warranty.



INTRODUCTION

Thank you for purchasing the Edelbrock Supercharger for the Chevy Corvette/Camaro Gen V LT4. This Edelbrock Supercharger System utilizes Eaton's Gen VI R2650 TVS Supercharger rotors housed inside a redesigned supercharger manifold. The manifold is Edelbrock's most advanced supercharger design to date. The supercharger retains an inverted orientation which expels air upward through the intercooler core. Air pressure then builds in the plenum before being forced down through the intercooler resulting in incredibly low IATs to support more power.

The supercharger includes a 3-year 36,000 mile warranty when applicable

ZL1 and Z06 hoods will require modification to clear the supercharger.

Installation time: Approximately 7 hours.

TOOLS AND SUPPLIES REQUIRED

- Ratchet and Socket Set including but not limited to: 7mm, 8mm, 10mm (standard, deep and swivel), 11mm, 12mm, 13mm, 15mm, 18mm, 21mm, 24mm
- Wrench Set including but not limited to: 8mm, 10mm, 15mm, 11/16"
- Breaker Bar: 1/2"
- Power Drill
- Torx Drives: T15, T30
- Panel PullerRazor Blade
- Flat Blade & Phillips Screwdrivers

- Coolant Drain Bucket
- 50/50 Coolant Mixture
- Side Cutters
- 3/8" Fuel Line Removal Tools
- Torque Wrench
- Pliers OR Hose Clamp Removal Tool
- Blue, Green and Red Thread Retaining Compound
- 0-ring Lube
- Masking Tape
- Shop Rags
- Wire Ties



IMPORTANT WARNINGS

Before beginning the installation, use the enclosed checklist to verify that all components are present in the box. Then inspect each component for damage that may have occurred in transit. If any parts are missing or damaged, contact Edelbrock Technical Support (800-416-8628), not your parts distributor.



WARNING: Installation of this supercharger will result in a significant change to the performance characteristics of your vehicle. It is highly recommended that you take some time to familiarize yourself with the added power and how it's delivered. This must be done in a controlled environment. Take extra care on wet and slippery roads as the rear tires will be more likely to lose traction with the added power. It is never recommended to turn off your vehicles traction control system.

Proper installation is the responsibility of the installer. Improper installation will void all manufacture's standard warranties and may result in poor performance and engine or vehicle damage. Inspect all components for damage that may have occurred in transit before beginning installation. If any parts are missing or damaged, contact Edelbrock Technical Support, not your parts distributor.

Due to the complexity of the Edelbrock Supercharging system, it is recommended that this system only be installed by a qualified professional with access to a service lift, pneumatic tools, and a strong familiarity with automotive service procedures. To qualify for the drivetrain warranty, it is necessary to have this system installed by a Certified ASE Technician at a licensed business, GM Dealership, or an Authorized Edelbrock Installer. Failure to do so will void and/or disqualify any and all optional supplemental warranties offered with this system. Please contact the Edelbrock Technical Support department if you have any questions regarding this system and/or how your installer of choice will affect any warranty coverage for which your vehicle may qualify.

Any previously installed aftermarket tuning equipment must be removed and the vehicle returned to an as-stock condition before installing the supercharger.

Any equipment that directly modifies the fuel mixture or ignition timing of the engine can cause severe engine damage if used in conjunction with the Edelbrock Supercharger System. This includes, but is not limited to: OBDII programmers, MAF sensors, adapters and any other device that modifies signals to and/or from the ECU. Aftermarket bolt-on equipment such as underdrive pulleys or air intake kits will also conflict with the operation of the supercharger and must be removed prior to installation. Use of any of these products with the Supercharger could result in severe engine damage.

IMPORTANT WARNINGS CONT'D

MINIMUM OCTANE RATING
(R + M) / 2 METHOD

91 octane or higher gasoline is required at all times. If your vehicle has been filled with anything less, it must be run until almost dry and refilled with 91 or higher octane gasoline twice prior to installation.

Any failures associated with not using premium 91 octane gasoline or higher, will be ineligible for warranty repairs.

It is recommended that you check the Edelbrock Tech Center Website for any updates to this installation manual. Please refer to the lower right hand corner to verify that you have the latest revision of this installation manual before beginning the installation.

Tech Center: http://www.edelbrock.com/automotive new/misc/tech center/install/index.php



WARNING: Installation of this supercharger and charge air cooler may require removal and replacement of front grille, front bumpers, or other pieces which may be equipped with Advanced Driver Assistance Systems (ADAS). ADAS Systems include, without limitation:

- Forward Collision Warning
- Auto braking
- Lane Departure Warning
- Lane Keeping Assist
- Blind Spot Warning
- Rear Cross Traffic
- Rearview Camera
- And various other OEM ADAS Equipment

It is the responsibility of the installer to ensure that all necessary ADAS systems that require post-repair calibrations/targeting/aiming is performed by qualified repair facilities. Edelbrock assumes no liability whatsoever with respect to any damages or losses with respect to any ADAS systems.

Edelbrock Authorized Installer Disclaimer

Authorized installers of Edelbrock products are independent companies over which Edelbrock has no right of control. Edelbrock LLC makes no claims regarding the abilities, expertise or competency of individual employees of any authorized installer. Each authorized installer is an independent company and makes its own independent judgments. Edelbrock LLC specifically disclaims any responsibility to any party including third parties for the actions, or the failure to act, of individuals, agents or a company authorized in the installation of Edelbrock LLC products.

INSTALLATION HARDWARE IDENTIFICATION GUIDE

(Parts Are Not To Scale)

	BAG	#3 - M	ANIFOLD / RUNNER HARDWA	ARE
Item	P/N	QTY.	Description	Torque Spec
1	36-4053	14	Bolt, Hex Flange, M6 x 40mm	8 ft-lbs

P/N QTY. Description Torque Spec 36-4053 3 Bolt, Hex Flange, M6 x 40mm N/A
36-4053 3 Bolt, Hex Flange, M6 x 40mm N/A
1 , 1 31,
36-1533 1 Bolt, Hex Flange, M6 x 35mm N/A

			HOSE
Item	P/N	QTY.	Description
1	56-1564	1'	Hose, Vacuum, 3/16" ID



1. **CORVETTE:** Remove trunk liner and access the battery located on the passenger (right) side of the trunk towards the rear. Using a 10mm, disconnect the neg.(-) terminal.

2. **CAMARO:** Open the trunk and access the battery via the door on the passenger side trunk liner. Using a 10mm socket, disconnect the negative battery terminal.



3. Using a small flathead screwdriver, remove the locking clip securing the cap from the water crossover. Using a coolant exchange machine, remove the coolant from the supercharger cooling system.



4. Using a small flathead screwdriver, remove the locking clips securing the coolant hoses to the water crossover and remove. Place lines into a small container to prevent coolant leakage.



5. Using a panel puller, remove the harness retaining tree clips from both sides of the supercharger housing. *TIP:* The retaining tree clips can be removed altogether if preferred.



6. Using a flathead screwdriver, loosen two worm clamps securing the air inlet tube to the throttle body and air box. Remove the air inlet tube.



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7. Using a 15mm wrench, rotate the drive belt tensioner counterclockwise to release the tension from the drive belt and remove.



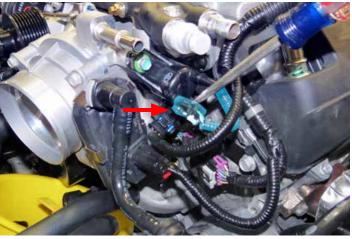
Disconnect the actuator solenoid connector.



9. Using a panel puller, remove the harness retaining tree clip from the actuator solenoid bracket.



10. Disconnect the EVAP solenoid connector.



11. Disconnect the connector from the MAP sensor located under the EVAP solenoid.

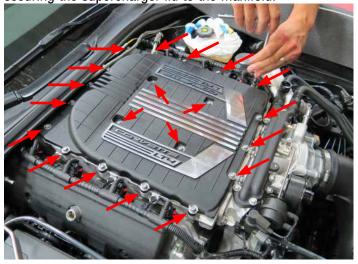


12. Release the blue locking clip on the electronic throttle body connector and remove the connector from the throttle body.





13. Using a 10mm socket, remove twenty (20) bolts securing the supercharger lid to the manifold.



14. With all the bolts removed, carefully lift up the supercharger lid and remove.



15. Using a 10mm socket, remove ten (10) bolts securing the supercharger manifold to the cylinder heads.



16. Carefully position the supercharger manifold forward to access the TMAP sensor. Disconnect the TMAP sensor connector.



17. With the help from an assistant, carefully remove the supercharger manifold and set aside.



18. Cover the ports with protective tape to keep out debris. Remove the black foam insulator from the valley and set aside.





19. CAMARO ONLY: Remove the retaining clip on the fuel feed line. Using a 3/8" fuel line tool, disconnect the fuel line from the fuel line extension and from the factory hardline. Install the supplied fuel line as shown. *CAUTION: Place a shop rag around the fuel line to prevent fuel from spraying.*



22. Using a pry tool with smooth edges, remove the factory PCV seal from the bottom of the factory supercharger. TIP: It's best to pry the seal on the metal base as to not tear the upper rubber portion. NOTE: In the event this PCV Seal is missing or damaged contact Edelbrock Tech Support @ 800-416-8628 to purchase a replacement seal P/N 51-4301.





20. Check for clearance on the foam insulator. This may need trimming to clear the larger supercharger housing.



23. Using a hammer and a socket that is roughly the same diameter as the PCV seal, gently tap in the seal into the supercharger until the seal is flush with the housing.





21. Reinstall the foam valley insulator onto the valley making sure it is seated properly.



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24. Remove the factory 0-ring gaskets from the intake manifold.





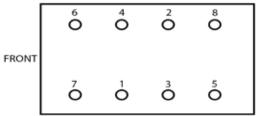
25. Clean and inspect the O-ring gaskets. Replace torn or damage O-rings as needed. Using a razor blade remove the tips off all eight (8) factory O-ring gaskets.



26. Install eight (8) modified 0-ring gaskets onto the runners.



- 27. Remove the protective tape from the cylinder head ports. With help from an assistant, carefully lower the supercharger onto the car.
- 28. Apply Blue thread locker to the eight (8) M6 x 40mm hex flange bolts from Bag #3. Using a 10mm socket, secure the manifold to the engine using the torque sequence below. Torque bolts to 4 ft-lbs. and then to 8 ft-lbs.



29. Using a 10mm socket, remove the actuator solenoid and the bracket from the factory supercharger.



30. Remove the solenoid from the solenoid bracket. Using a Q size drill bit, open up the mounting hole on the solenoid bracket. Deburr the bracket as needed.





31. Using the M8 x 30mm bolt and the 3/8" CAD washer from the hardware bag, secure the actuator bracket to the front of the passenger side cylinder head. Location is

adjacent to the thermostat housing.



32. Reconnect the actuator solenoid connector and reattach the solenoid to the solenoid bracket.



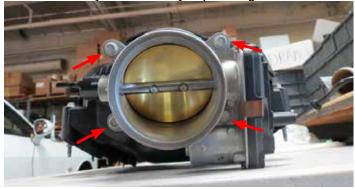




33. Using a 10mm socket, remove the EVAP solenoid from the factory supercharger.



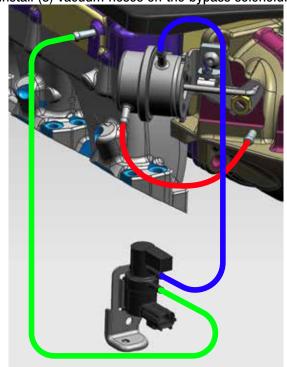
34. Using a 10mm socket, remove four (4) bolts securing the throttle body to the factory supercharger.



35. Using the supplied gasket and four (4) M6 x 40mm hex flange bolts from Bag #3, secure the throttle body to the supercharger inlet. Reconnect the electronic throttle body connector to the throttle body.



36. Install (3) vacuum hoses on the bypass solenoid.



37. Using a T30 Torx screwdriver, remove the MAP sensors from the front of the factory supercharger and the TMAP sensor from the rear of the supercharger.





38. Using a Torx T30 screwdriver, install the MAP sensor to the supercharger nose using the factory bolt.



Brochure #63-155923 Rev. 7/1/20 - TB



39. Install the TMAP on the driver's side of the manifold. Plug the harness into both the TMAP and MAP sensors. NOTE: Driver's side TMAP lead may need to be extended.



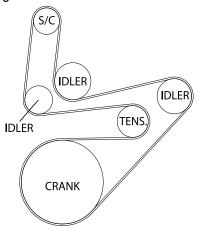
40. Apply O-ring lube to the O-ring on the EVAP solenoid and install onto the supercharger manifold using the factory EVAP solenoid bolt.



41. Connect the quick connector on the factory brake booster hose to the supercharger.



42. Using a breaker bar, rotate the tensioner counterclockwise and install the supercharger belt using the routing diagram below.



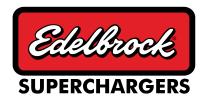
43. Reconnect the MAF connector to the MAF sensor.



- 44. Using the supplied worm clamps, secure the inlet elbow to the throttle body and the air intake box.
- 45. Using a razor blade or equivalent, remove the 90° fitting from the factory air inlet PCV hose. Connect the fitting to the supplied air inlet PCV and attach the straight quick connect to the air inlet and the 90° quick connect to the center PCV junction.v



Brochure #63-155923 Rev. 7/1/20 - TB



46. Connect the factory coolant hoses to the fittings on the water crossover.



47. CAMARO ONLY: Install the driver and passenger side coil covers over the hoses using three (3) M6 x 40mm bolts and one (1) M6 x 35mm bolt from hardare bag 4. Oil fill cap will need to be removed before placing the driver side cover.



48. Verify no hoses were pinched during installation of the coil covers. Re-position as needed.

49. Reinstall passenger side factory PCV hose.



50. Connect driver side pcv hose through the hole in the coil cover.



51. Install the supplied bypass hose onto the fitting on the bottom of the actuator then over the cover to the manifold as shown.



52. Fill with coolant according to factory specifications.

Reconnect the battery and switch ignition to the ON position, **DO NOT START**. With the ignition switch on, check for any coolant or fuel leaks. Repair all leaks before proceeding.

Congratulations on the successful installation of your new Edelbrock Supercharger System. If you have any questions, please call our Technical Support hotline at 800-416-8628 and one of our technicians will be happy to assist you.

CAUTION: Check ADAS sensors as described under the "Important Warning" section in the beginning of this document.

For Z06 hood modifications, continue to next page.



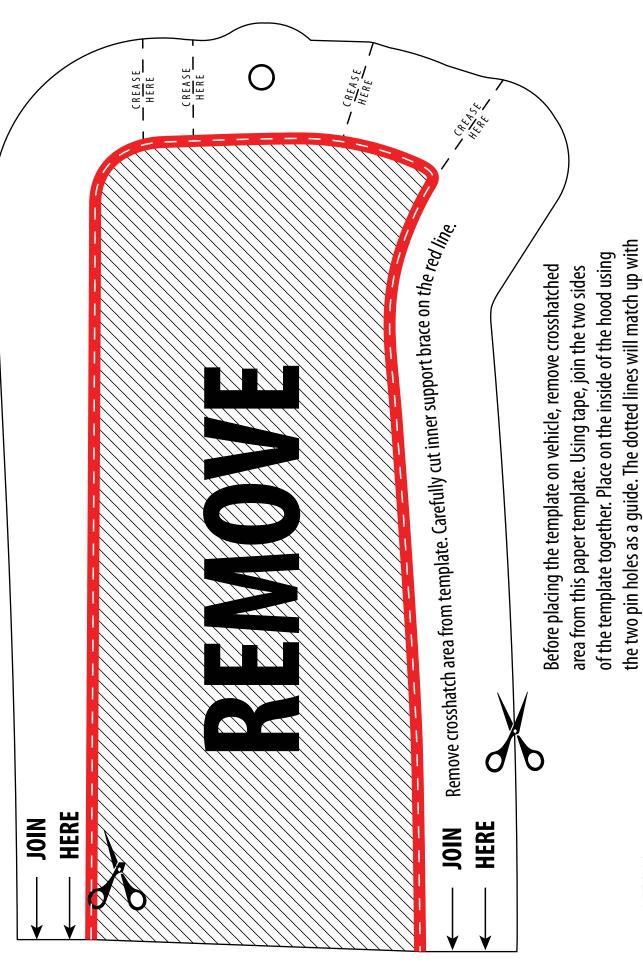
Z06 HOOD MODIFICATION PROCEDURE

The Z06 hood design differs from the standard C7 hood. Due to this, the inner hood support will need to be cut and modified with the included carbon fiber patch panel to make room for the larger Edelbrock Supercharger. This modification will not compromise the hood in any way.

- 1. On the next two pages, remove the templates from the binder and carefully trim to the edges. The crosshatch area will also need to be removed.
- Join the two templates together using tape. Crease the template on the dotted lines to help contour with the inner hood brace.
- 3. Using masking tape or similar, align the template with the inner hood liner holes.
- The template will follow the factory edge of the brace. Be sure everything parallels these lines to ensure a proper fit.
- 5. Using a small cut-off wheel, <u>carefully trim the inner support beam</u>, taking care not to cut through the hood skin.
- 6. Once completed, test fit the carbon-fiber piece. Clearance the opening as needed using a file or equivalent.
- 7. It is recommended to use an epoxy adhesive, such as 3MTM Sotch-Weld DP420.

206 Patch Panel Template

PASSENGER SIDE (RIGHT)

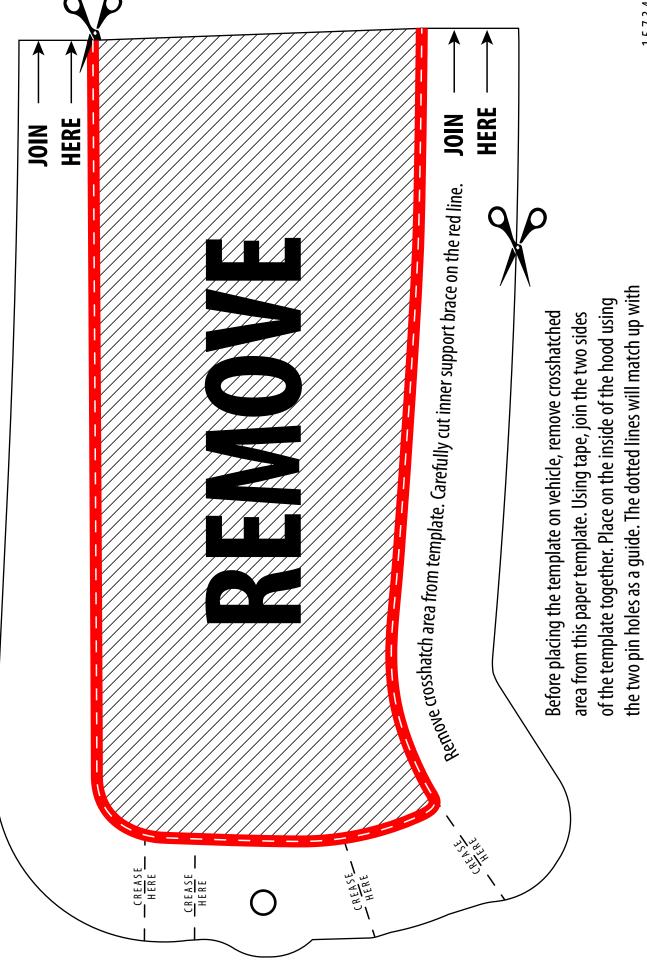


157340 5/20-TB

the inner-hood contours. Crease the template to match.

DRIVER SIDE (LEFT)





157340 5/20-TB

the inner-hood contours. Crease the template to match.