

HEADER INSTALLATION INSTRUCTIONS

PART NUMBER: D318

Application: 1978-87 Buick Century, Regal, & Wagons 1978-87 Chevrolet Monte Carlo, Chevelle, Malibu, El Camino, & Wagons 1978-87 Pontiac Grand Prix, Le Mans, Grand Am (78-81), Grand Le Mans With Chevrolet 396-502 Big Block Engines

WARNING: These headers are legal for Off Highway use (except in California or states that have adopted California emission standards) or Racing use (which may never be used on a Highway), or for use on pre emission controlled motor vehicles/motor vehicle engines (pre 1966 domestic vehicles certified to California standards, pre 1968 domestic vehicles certified to Federal standards and all pre 1968 Foreign vehicles) Only.

NOTE: This is a swap header and is designed to be used with the original Small block motor mounts and stands. Use of alternative mounts could cause fitment problems.

PerTronix[©] thanks you for choosing **DOUG'S HEADERS**, the best fitting, highest quality header on the market. In order to realize the full potential of our good fit, please read and understand these instructions completely prior to starting work.

Check to make sure you received the proper parts for your application. The header number will be stamped on the engine flange. If you are unsure you have received the proper parts call before you start work.

Be sure to work safe! Whenever you work under the vehicle be sure that it is located on level, solid ground and is supported by adequate safety stands! <u>Remember: Hot asphalt will not support most jack stands!</u>

Many factors affect the installation of headers, some of which are broken or aftermarket motor mounts, accidents that impact the configuration of the frame, and/or the installation of different engines or aftermarket cylinder heads.

Attention Customers breaking in new engines: Due to the extreme heat generated during the break-in process, the appearance of the ceramic coating may be altered in certain areas. The protection characteristics and thermal barrier properties of the coating is never compromised. It is recommended that a cast iron manifold or old set of headers be used for this process.

Notice: The coating of these headers can be marred or scratched during installation. If the header needs to be returned and is damaged, you will be charged for recoat.

DISASSEMBLY

- 1. Disconnect the negative battery cable from the battery.
- 2. If a car lift is not available, raise the vehicle 3 feet or higher and support with adequate safety stands. Make sure the vehicle is on a flat solid surface and is stable.
- 3. Remove the Spark Plugs and Wires, Oil filter, Oil Dipstick Tube, Starter, Air Conditioning compressor, and Power Steering Pump if mounted to exhaust manifold.
- 4. Remove the headpipes and catalytic convertors from the stock manifolds and push the pipes out of the way.
- 5. Remove the 8 manifold bolts from each manifold and remove the manifolds.



6. Remove the gaskets and any gasket material or any carbon deposits that remain on the head surface. The use of a gasket removal agent will ease the removal of any gasket material. Use care not to get debris into ports or spark plug holes.

INSTALLATION

- 1. These headers have one tube on the left side and two tubes on the right that are removable and are a slip fit. They come with the flange not cut completely to help protect the header during shipping. The flange needs to be cut with a hack saw or cut off wheel to remove the tubes before attempting installation.
- 2. Place a jack under the oil pan, with a block of wood to prevent damage to the pan. Loosen the rear transmission mount bolts. Remove the Driver's side motor mount bolt and nut. Raise the motor approximately 2".
- 3. Remove the motor mount and modify as shown in Illustration A, then replace the motor mount.
- 4. With the motor still raised, starting on the driver's side from below, work the header up into position with the #3 tube removed.
- 5. Slip the gasket into position and start 2 of the supplied header bolts and special lock washers to hold the header in place, leaving them loose.
- 6. From above, slip the #3 tube into position around the steering shaft, sliding the end into the main header and then starting the header bolts. High temp silicone can be used in the slip joint to reduce leaks.
- 7. Lower the motor back into position and reinstall the motor mount bolt and tighten.
- 8. Reinstall the oil filer.
- 9. Tighten all the header bolts evenly, starting from the center outward to a final torque of 35 ft. lbs. on iron heads
- 10. On Air conditioned models you may have to modify the A/C bracket. Since this is a swap header it will depend on the bracket you are using.
- 11. Cut the Passenger Side Upper A Arm bolt as shown in Illustration B.
- 12. Starting from below, work the passenger side header into position with the #3 & #4 header tubes removed.
- 13. From above, slip the #4 tube into position, sliding the end into the main header. Then slip the #3 tube in to the main header. High temp silicone can be used in the slip joint to reduce leaks.
- 14. With the header still loose, re install the starter motor.
- 15. Slip the gasket between the header and the cylinder head and start all the supplied header bolts and special lock washers. Tighten evenly starting from the center and working outwards to a final torque of 35 ft. lbs. for iron heads.
- 16. Reinstall the Spark plugs and wires, the oil dipstick tube, and power steering pump.
- 17. Connect the negative battery cable.
- 18. Cut the headpipes to match the reducers if the original exhaust is to be used.
- 19. Reducers with Oxygen Sensor Bungs are available if needed, part #H7232



IMPORTANT CHECK LIST

- Be sure that all brake lines and fuel lines are clear of headers and/or connector pipes.
- All spark plug wires, battery cables, or other electrical components should be clear of headers and/or connector pipes.
- If dipstick tube was removed, make sure it is installed properly and that the dipstick has been replaced. Re Check Oil Level.
- Double-check the tightness of all bolts including brackets and accessories.

STARTING THE ENGINE

Start the engine and allow it to warm up to operating temperature. Check for any unusual noises or exhaust leaks. If every thing is OK, stop the engine and tighten all bolts while the engine is still warm.

NOTE: Check the bolts periodically to make sure they have not loosened. Re-tighten after the first 500 miles and then again at 1000 miles.

PARTS LIST

- Description Qtv 1
- Left Side Header
- 1 Right Side Header
- 2 Header Gaskets 2 3 ¹/₂" Reducers
- 2 3 1/2" Reducer Gaskets
- 16 3/8-16 X 1" Header Bolts
- 22 3/8" Internal Lock-Washer
- 3/8-16 X1 1/4 " Collector Hex Head Bolts 6
- 3/8-16 Hex Nuts 6
- 2 **Doug's Stickers**





Illustration A: Drivers Side Motor Mount Modification



Illustration B: Passenger Side Upper A Arm Bolt Modification

