

HEADER INSTALLATION INSTRUCTIONS

Part # D322

Application: Chevrolet 396-502 Big Block (Std. Deck Height)

1970-72 Camaro ~ 1964-74 Chevelle/EI Camino

1970-74 Monte Carlo ~ 1971-74 Full Size Car & Wagon



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: Vehicles MUST have Original Style Big Block motor stands and motor mounts for Headers to fit properly. They are no longer available from G.M., but reproductions are available from most of the Classic Chevrolet specialty suppliers. Camaro & 66-67 Chevelle/EI Camino MUST have Big Block Motor Mounts and Stands (frame brackets). Small block and universal aftermarket will NOT work as they put the motor in the wrong position and you will notice possible steering box and Idler Arm fit problems among others. 68-74 Chevelle/EI Camino must use 350/Big Block motor mounts and stands, L6 or 307 motor mounts and stands will NOT work.

NOTE: Will not fit on Manual transmission Monte Carlo and Full Size Car & Wagon

NOTE: Will not fit Camaro's with Column shift.

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! **Remember: Hot asphalt will not support most jack stands!**

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. Most installations require some welding. If you are uncomfortable with welding operations, we recommend that you contact a professional exhaust system specialist to install your new headers.

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 it with adequate safety stands. Make sure the vehicle is on a flat solid surface and is stable.
3. Apply penetrating oil to all nuts and bolts to be removed.
4. Remove and mark all spark plug wires and then remove all spark plugs.
5. Remove the Alternator, Air conditioning Compressor, and Power Steering Pump if mounted to the exhaust manifold.
6. Remove the Clutch Linkage on stick shift cars.
7. Remove the Oil Dipstick Tube and the Oil Filter.
8. If your car has bolt on frame stiffeners on the bottom of the frame, remove them also.
9. Disconnect the head pipes from the exhaust manifolds
10. Remove the stock exhaust manifolds.
11. Remove the gaskets and any gasket material or any carbon deposits that remain on the head surface. The use of a gasket removal agent or scraper will ease the removal of any gasket material. Use care not to get debris into ports or spark plug holes.
12. At this point it may be necessary to cut the head pipes to allow room to install the headers. If you are installing a new exhaust system you may cut the head pipes any where you choose, but if you are using the existing exhaust you need to cut the head pipes in the proper location so that they will be able to be welded to the reducers supplied with your headers.

INSTALLATION

1. On the passenger side, it may be necessary to trim the rear upper control arm bolt flush with the nut for clearance. See Illustration A below.
2. Starting from below, work the passenger side header up through the chassis into position.
3. Check for clearance on the #2 tube to the frame. If necessary, remove the header and slightly dent the tube as shown in Illustration B. This is normally only a problem on late 72-74 cars.
4. When you are happy with the clearance, slip the gasket into position and start all the supplied header bolts and lock washers. Tighten the header bolts evenly starting from the center to a final torque of 35 ft lbs.
5. Place a floor jack under the oil pan with a flat board for support. Loosen the transmission mount bolts.
6. Remove the driver's side motor mount bolt and raise the motor approx 2".
7. On late 72-74 (Except Camaro) remove the motor mount and modify as shown in Illustration C.
8. From below, work the driver's side header up into position and loosely install 2 bolts.
9. If removed, replace the motor mount and lower the motor back into position. Reinstall the motor mount bolt and tighten the transmission mount.
10. Check for clearance between the brake line distribution block and the header, it may be necessary to move the block to the top of the frame for sufficient clearance.
11. Slip the gasket into position and start all the supplied header bolts and lock washers.
12. 68 Power Steering cars, use the spacer supplied as shown in Illustration D. Air Conditioned cars may require modification to the Compressor bracket; see illustrations E through H below.
13. Tighten the header bolts evenly starting from the center to a final torque of 35 ft lbs.
14. Install the reducers and determine the connection to the exhaust system.
15. Reinstall alternator, oil filter, oil dipstick tube, and Clutch Linkage.
16. Weld the reducers to the exhaust system and install them onto the headers utilizing the gaskets and bolts supplied.
17. If you had to remove the frame stiffeners modify as shown in Illustration I to fit.
18. Install the spark plugs and connect the wires to the proper plug. Check to make sure that all the wiring, brake lines, hoses, etc. are clear of the headers or any exhaust component.
19. Check the Oil level.
20. Connect the battery cables.

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.
- Double-check the tightness of all bolts including brackets and accessories.

START 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

Qty	Description
1	Left Side Header
1	Right Side Header
2	Header Gaskets
2	3" Reducers
2	3" Collector Gaskets
16	3/8"-16 X 1" Header Bolts
6	3/8"-16 X 1 1/4" Hex Head Cap Screws
6	3/8"-16 Hex Nut
22	3/8" Lock-Washers
1	3/4" Power Steering Spacer
2	3/8" Spacers
2	Doug's Sticker

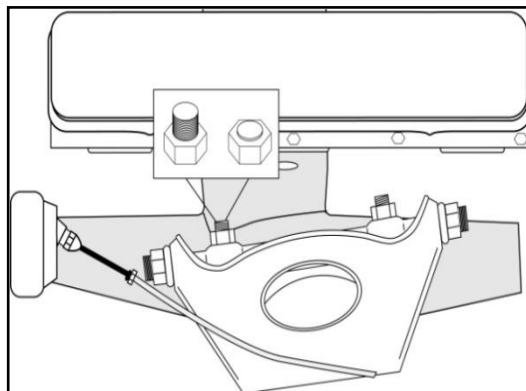


Illustration A

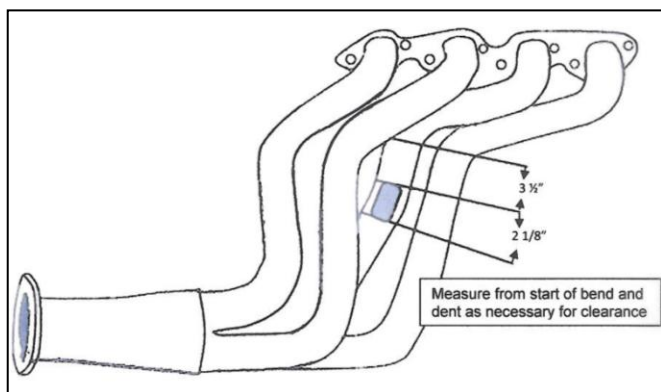


Illustration B (Header clearance if necessary)

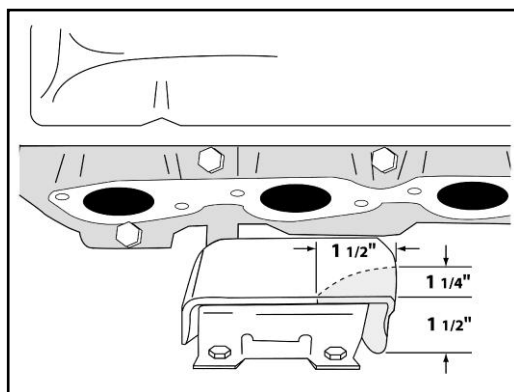


Illustration C (72-74 Motor Mount)

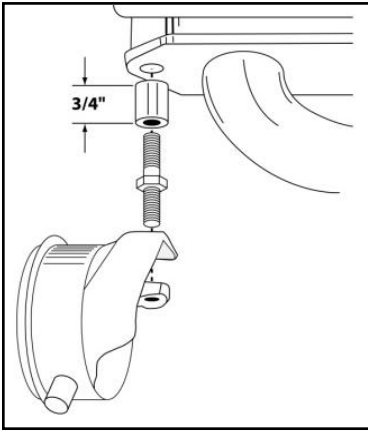


Illustration D (68 Power Steering)

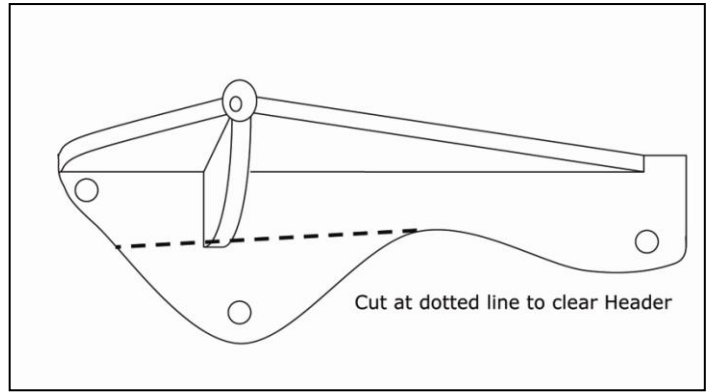


Illustration E (64-72 Left Side A/C Mount)

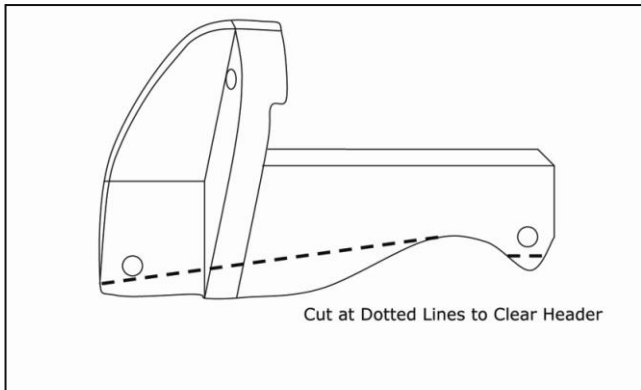


Illustration F (73-74 Left Side A/C Mount)

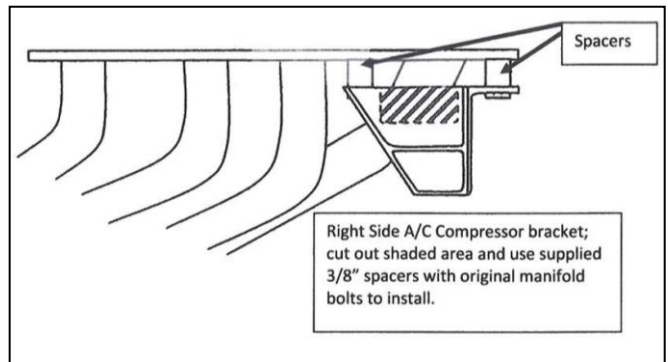


Illustration G (69-74 Right Side A/C Mount)

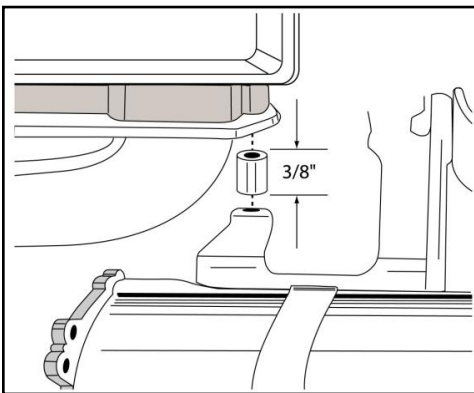


Illustration H (68 Right Side A/C Mount)

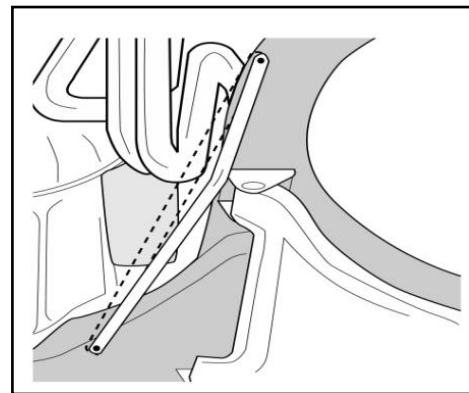


Illustration I (72-74 Frame Stiffeners)