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# HEADER INSTALLATION INSTRUCTIONS Part #D306 Application:

1967-81 Camaro, 1968-79 Nova, 1970-77 Monte Carlo 1966-77 Chevelle/El Camino, 1965-74 Impala/Caprice/Wagons Also fits Street Rods with 67-81 Camaro Clip and Detroit Speed & Engineering Sub Frame with R & P Steering 396-502 Big Block (Std. Deck Height)



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: MUST Use a short oil filter, Fram PH30 or equivalent.

NOTE: Camaro, Nova & 66-67 Chevelle/El Camino MUST have <u>Big Block</u> Motor Mounts and Stands (frame brackets). Small block and universal aftermarket will NOT work as they put the motor in the wrong position. 68-77 Chevelle/El Camino must use 350/Big Block motor mounts and stands, L6 or 307 motor mounts and stands will NOT work.

NOTE: Will NOT fit with 825 Saginaw Power Steering box (will work with 625 box)

**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 2 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 spark plugs and wires. Remove the oil dipstick.
- 5. Remove the alternator, Power Steering Pump, and Air Conditioning Compressor if they are mounted at the exhaust manifolds.
- 6. Disconnect the head pipes from the exhaust manifolds and remove the manifolds.
- 7. Remove 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. We recommend the use of a sharp gasket scraper to remove the bulk of material and to finish the operation with a sanding block to provide a clean flat sealing surface.
- 8. 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.

#### **ASSEMBLY**

- 1. Starting from below on the driver's side, slide the header up into position. Install one bolt at each end to hold it on place.
- 2. Remove the bolts and while holding the header in place slip the gasket into position and start all the bolts.
- 3. Tighten all of the bolts starting from the center and working outwards. Torque to 35ft. lbs. on iron heads.
- 4. The passenger side should drop in from above. When you get the header into position, slip the gasket in place and install the bolts.
- 5. Tighten all of the bolts starting from the center and working outwards. Torque to 35ft. lbs. on iron heads.
- 6. Re install the spark plugs, wires, and dipstick.
- 7. Because this header fits many various years and models, it is difficult to list all the combinations of brackets and modifications for the accessories that mount to the cylinder head exhaust bolts. Below we have included Illustrations for the most common problems that might be incurred.
- 8. Install the reducers and determine the connection to the exhaust system.
- 9. Weld the reducers to the exhaust system and install them onto the headers utilizing the gaskets and bolts supplied.
- 10. Check to make sure that all the wiring, brake lines, hoses, etc. are clear of the headers or any exhaust component.
- 11. Connect the battery cables.

## 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

## 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.

### **PARTS LIST**

Qty	Description
1	Left Side Header
1	Right Side Header
2	Header Gaskets
2	3" Reducers
2	3", 3 Bolt Collector Gaskets
16	3/8"-16 X 1" Header Bolts
22	3/8" Header Star Washers
6	3/8"-16 X 1 1/4" Hex Head Cap Screws
6	3/8"-16 Hex Nut
1	3/4" Long Power Steering Spacer
2	3/8" Long A/C Spacer
2	Doug's Stickers

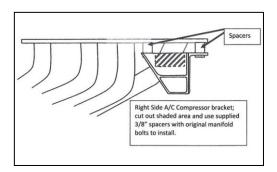
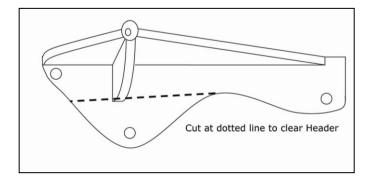


Illustration A (Right Side mounted A/C Compressor)



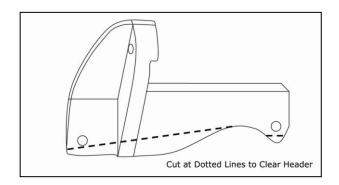
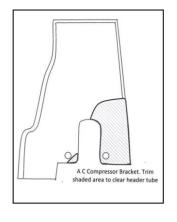
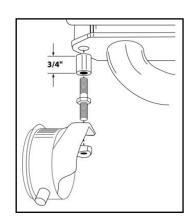


Illustration B (68-72 Left Side A/C Bracket)

Illustration C (73-74 Left Side A/C Bracket)





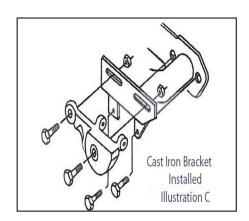
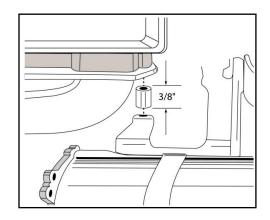


Illustration D (78-87 A/C Bracket) Illustration E (68 Power Steering Spacer) Illustration F (Alt Bracket)



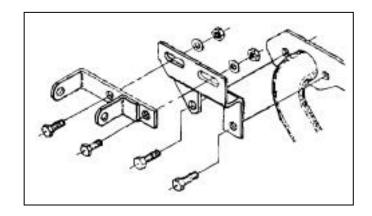


Illustration G (68 Chevelle/El Camino A/C)

Illustration H (Multi Year Alternator Bracket with Doug's/Patriot Bracket #H7606 & H7607)