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HEADER INSTALLATION INSTRUCTIONS

Part #'s H8012, H8012-1, H8013, H8013-1 396-502 Big Block 67-81 Camaro, 68-77 Nova, 68-77 Chevelle, Malibu, El Camino, 70-77 Monte Carlo, 65-74 Full Size Passenger Car & Wagon - Floor Shift Only Also fits Street Rods with Camaro Clip and

Detroit Speed & Engineering Sub frames with Rack & Pinion Steering

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 a reproduction is available from Classic Industries under P/N K702. If the motor is mounted on Small Block frame mounts, you will notice possible steering box and Idler Arm fit problems.

These headers will <u>not</u> fit a Saginaw 825 close-ratio power steering box without modification due to the increased size of this power steering unit.

When installing an H8012 or H8013 a short oil filter, Fram Part # PH30 or equivalent, must be used.



This product is Legal for use on 1974 and older non catalyst equipped vehicles and is considered a "replacement part" per California Air Resources Board regulations, as long as ALL emissions sensitive components are retained, including A.I.R., EGR, Heat Risers etc. Failure to retain any of these components, or use on any 1975 or newer catalytic converter equipped car would render this product Illegal for Street or Off Highway Use in California, or in states that have adopted California Emissions regulations and may only be used for Closed Course Competition.

PerTronix[®] thanks you for choosing **PATRIOT Exhaust Products**, the best value for the dollar of any brand in the industry. Please read and understand these instructions completely prior to starting work.

Check to make sure you received the proper parts for your application. 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. 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 and mark all spark plug wires and then remove all spark plugs.
 - **NOTE:** Grasp the spark plug boot, not the wire, and use a twisting motion while pulling the wire from the plug.

- 5. Disconnect the head pipes from the exhaust manifolds and remove the manifolds. Depending on the application, you may be required to remove the alternator, dipstick, clutch linkage, and/or oil filter. In some cases it may be necessary to remove the starter and power steering unit. Only remove what is necessary to allow the removal of the manifolds or the installation of the headers.
- 6. Replace spark plugs finger tight so debris will not get into cylinders during the cleaning operation.
- 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. After cleaning is complete remove the spark plugs again.
- 9. 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. Install the headers (Driver side from the bottom of the vehicle, passenger side from above). Slide the headers into place and install a bolt at either end of the header to hold them in place. This will allow you to determine proper fit.
- Once you have determined proper fitment, install the gaskets. Install the gaskets using a <u>THIN</u> film of Ultra Copper Hi-Temp Sensor-Safe Silicone Sealer on both sides of the gasket. Install all of the header bolts supplied and hand tighten. Tighten all the bolts evenly to a torque of approximately 25 ft. lbs. on 5/16" & M8 bolts and 35 ft. lbs. on 3/8" bolts in iron heads.
- 3. Install any accessories that were removed during the header installation.

NOTE: Some accessories require different brackets than stock and some require the addition of spacers between the bracket and header flange. An example would be on some Chevy applications the driver's side front bolt must use the original (factory) bolt and use the supplied spacer between the flange and the accessory bracket.

- 4. Install the reducers and determine the connection to the exhaust system.
- 5. Weld the reducers to the exhaust system and install them onto the headers utilizing the gaskets and bolts supplied.
- 6. Install the spark plugs and connect the wires to the proper plug. If the spark plugs have a lot of miles on them, now would be a good time to replace them with PerTronix Flame Thrower Wires. When you install the spark plugs, apply a small amount of anti-seize to the threads.
- 7. Check to make sure that all the wiring, brake lines, hoses, etc. are clear of the headers or any exhaust component.
- 8. Re-connect the battery cable.

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