



HEADER INSTALLATION INSTRUCTIONS

Corporate Office: PerTronix Inc. 440 E. Arrow Highway, San Dimas, California 91773 * Phone 909.599.5955 * FAX 909.599.6424 * www.patriotexhaust.com

Part # H8101 & H8101-1
1965-75 Oldsmobile Cutlass/442
1971-75 Delta 88 / 1971-74 Vista Cruiser
400-455 Motors



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 Headers**, 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. 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.

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.

NOTE: It is imperative that you have New motor Mounts of the proper type and in perfect condition. Many worn and inferior quality mounts will position the motor in such a position that the headers will hit the center crossmember.

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 with adequate safety stands. Make sure the vehicle is on a flat solid surface and is stable.
3. Unbolt the head pipes from the manifolds and push the head pipes out of the way.
4. Remove clutch linkage on stick shift car or auto trans shift rod and key lock rod on automatic cars.
5. Remove starter, starter brace, frame/fender brace, dipstick tube, oil filter and oil filter adaptor, and vacuum canister for the heat riser.
6. **Cars with the brake pressure valve and warning light switch mounted to the inside of the driver's side frame will need to be relocated to the top of the frame.**
7. Remove the manifold bolts from each manifold and remove the manifolds from the car.

8. 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. Be careful not to get any material into the exhaust ports.

INSTALLATION

1. If your car has motor mount heat shields they will need to be discarded or modified for maximum header clearance.
2. Slip the driver's side header into position from below.
3. If you cannot get the header into position, Place a floor jack with a wide piece of wood under the oil pan. Remove the driver's side motor mount center bolt and raise the engine approximately 1". This is Not usually necessary on the driver's side, but may make it easier.
4. Lower the motor back into position and replace the center bolt on the motor mount.
5. With the header still loose in position slip the clutch linkage between the 3rd and 4th tubes.
6. Replace the starter motor and reroute the battery cable as necessary for maximum clearance around the headers.
7. Slip the gasket into position and start the bolts. The 1" long bolts with flat washers will go in the ends of the flanges where the slots are. Doug's recommends using a light coat of High Temp Ultra Silicone on both sides of the gasket around the ports.
8. Tighten all bolts evenly to 35 ft lbs torque.
9. Replace the dipstick tube and the vacuum canister.
10. Modify the Auto trans linkage rods as seen in the Illustrations, or similar for clearance.
11. Place a floor jack with a wide piece of wood under the oil pan. Remove the passenger's side motor mount center bolt and raise the engine approximately 1". This is necessary on the Passenger side
12. If your car has motor mount heat shields they will need to be discarded or modified for maximum header clearance.
13. Slip the passenger's side header into position from below. Lower the motor back into position and replace the center bolt on the motor mount. Check clearance at the rear upper A Arm pivot, it MAY be necessary to grind a little material off the side closest the header for clearance.
14. Slip the gasket into position and start the bolts. The 1" long bolts with flat washers will go in the ends of the flanges where the slots are. Doug's recommends using a light coat of High Temp Ultra Silicone on both sides of the gasket around the ports.
15. Tighten all bolts evenly to 35 ft lbs torque.
16. Replace the Oil filter adaptor and oil filter.
17. On automatic trans cars make sure there is adequate clearance between the header and the trans cooler lines. Re route as necessary.
18. If you are reusing the original head pipes, cut and weld as necessary to hook up to the Doug's header reducers.
19. Connect the negative battery cable and check your oil level.

IMPORTANT CHECK LIST

- Be sure that all brake lines and fuel lines are clear of headers and/or connector pipes. See Illustrations on next page.
- 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. Check Oil after replacing filter.
- Double-check the tightness of all bolts including brackets and accessories.

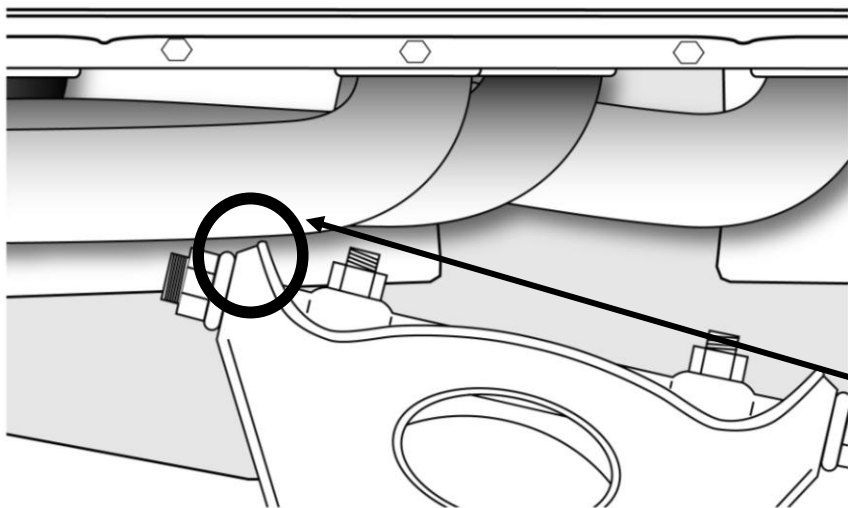
STARTING THE ENGINE

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

Qty	Description
1	Left Side Header
1	Right Side Header
2	Header Gaskets
2	Collector Reducers
4	3/8-16 X 1" Header Bolts
6	3/8-16 X 3/4" Header Bolts
6	3/8-16 X 1" Collector Hex Head Bolts
6	3/8-16 Hex Nuts
6	3/8" Lock Washers



Passenger side: #3 tube may contact A Arm depending on Model, Alignment, Sloppy or worn motor mounts etc. If so trim as shown in Illustration.

Trim here if necessary

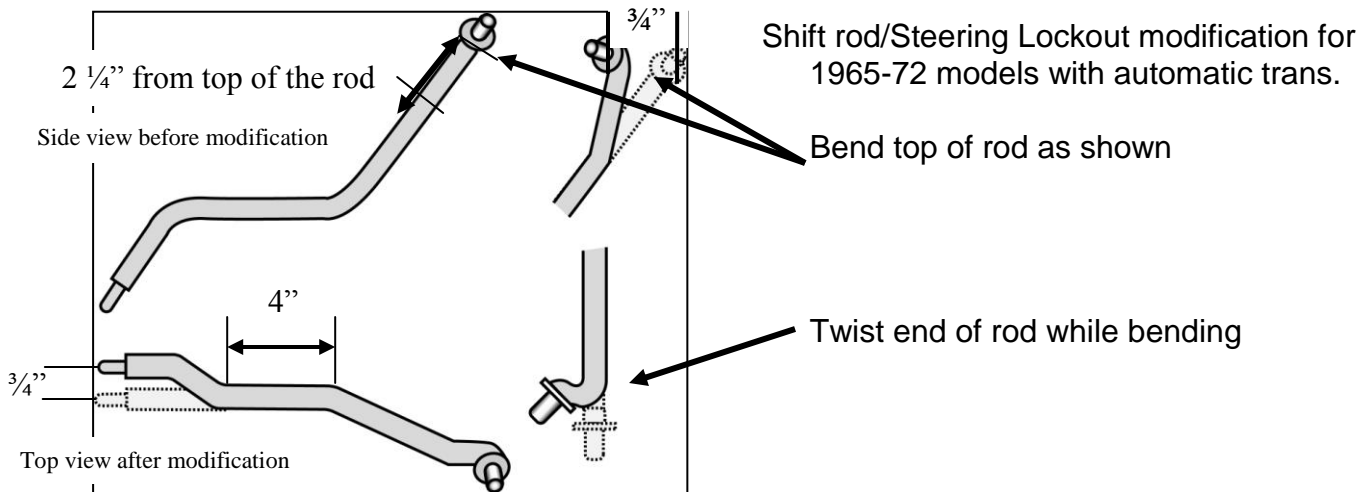


Illustration "A"

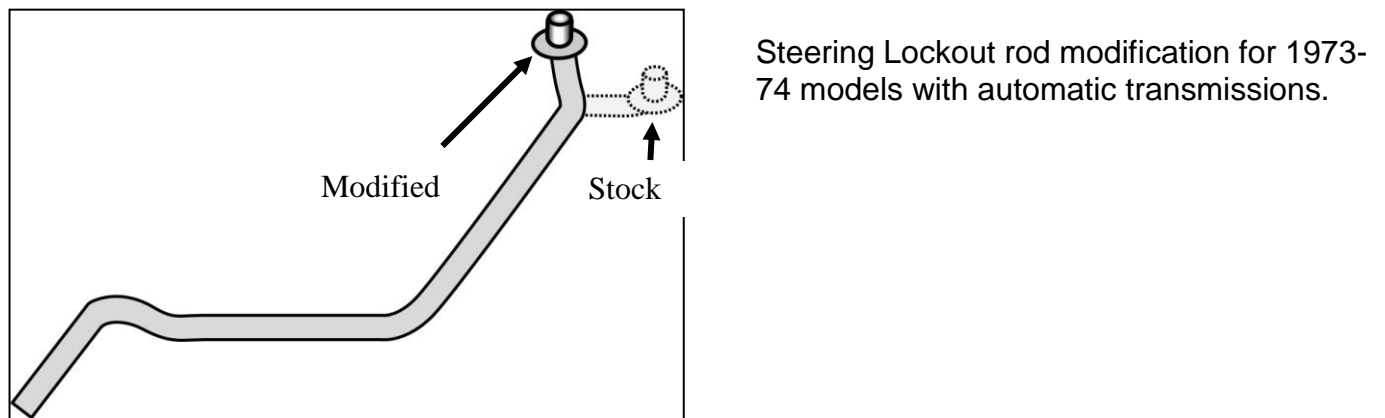


Illustration "B"

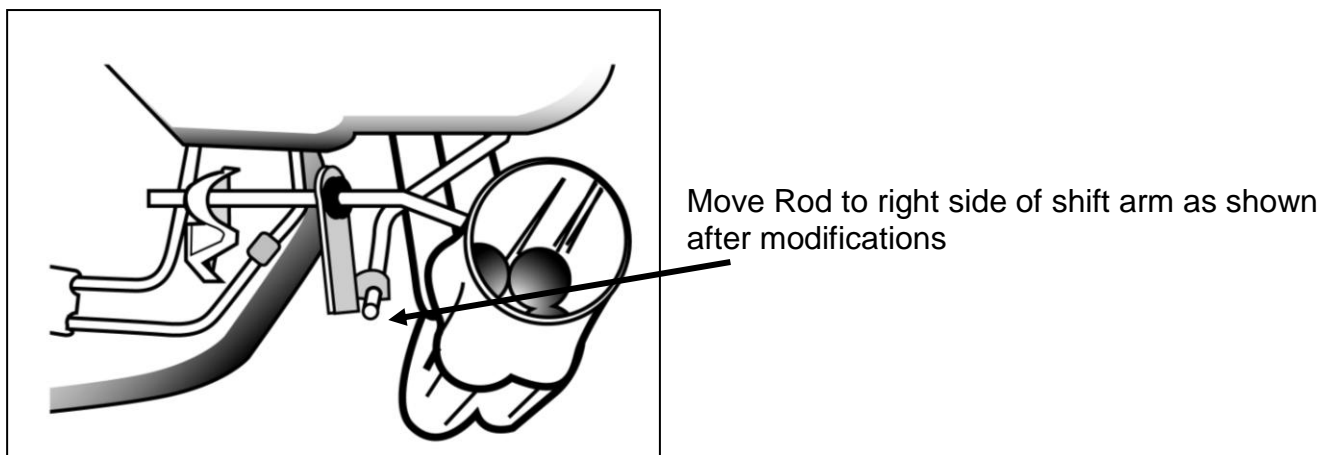


Illustration "C"