# Installation Instructions for 300141 Coated Header

For: 1967-74 Passenger Car/Wagon (B & E Bodies)

1970-74 Challenger/Barracuda 1975 Chrysler Cordoba 400

Note: Will NOT fit cars equipped with Air Injection Pump without modification

Note: Will fit Aftermarket B-S heads but May require header modification to fit in Chassis

Note: Will NOT fit B-1 Heads dues to angle plugs

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! **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.

## **DISASSEMBLY**

1. Disconnect the negative battery cable from the battery.

**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 1974 domestic vehicles certified to California standards, pre 1974 domestic vehicles certified to Federal standards) Only.

- 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. Drain Coolant/Water from Radiator as some exhaust studs go into the water jackets.
- 5. 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.
- 6. Disconnect the head pipes from the exhaust manifolds.
- 7. Remove front and rear studs from head.
- 8. Remove the remaining bolts and remove the manifolds.
- 9. Remove studs from heads.
- 10. Remove clutch linkage (if manual transmission). Remove shift linkage (if automatic column shift) kickdown and transmission/key interlock linkage.
- 11. Remove the center drag link from the pitman arm and idler arm.
- 12. Disconnect and remove starter.
- 13. Remove engine to bellhousing brace (if so equipped).



- 14. Replace the spark plugs finger tight so debris will not get into the cylinders during the cleaning operation.
- 15. 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 gasket remover for final cleanup.
- 16. After cleaning is complete remove the spark plugs again.

## **ASSEMBLY**

- 1. Starting on the Driver's Side; Place a board between the oil pan and a floor jack and remove tension from the motor mounts. Remove the driver's side motor mount center bolt.
- 2. Raise the engine approximately 2".
- 3. From below, slide the driver's side header into position and hang from the front stud. You will have to move the stock head pipes out of the way if you haven't already done so.
- 4. Slip the header gasket in place and start the front and rear bolts. Leave loose.
- 5. To prevent coolant leaks, apply a small amount of sealant (Teflon Thread Sealant) to the header bolts supplied with the headers for all bolts that go into the water jackets.
- 6. Lower engine and replace motor mount bolt.
- 7. With the header still loose, replace the starter, clutch linkage (manual trans cars) and shift linkage (auto trans cars, linkage will need to be modified per Illustration A). Replace the kickdown linkage and transmission/key interlock linkage.
- 8. Tighten all header bolts evenly to a final torque of approximately 35 ft. lbs. on iron heads
- 9. Slide the passenger side header into place from below and work it up through the chassis into position. You will have to move the stock head pipes out of the way if you haven't already done so. Position the gasket in place and start header bolts. To prevent coolant leaks, apply a small amount of sealant (Teflon Thread Sealant) to the header bolts supplied with the headers for all bolts that go into the water jackets.
- 10. Tighten all header bolts evenly to a final torque of approximately 35 ft. lbs. on iron heads
- 11. Replace center drag link and double check that all steering linkage is in place and tightened properly.
- 12. Replace the spark plugs and spark plug wires.
- 13. Make sure coolant drain is closed and refill the radiator.
- 14. Use the supplied reducers and modify your stock exhaust system as necessary to connect to the collectors.
- 15. Connect the negative battery cable.
- 16. Check over the installation to make sure that all wires, lines, hoses. etc. are connected and have adequate clearance to protect them from the heat generated by the headers.

## START THE ENGINE

Start the engine and allow it to warm up to operating temperature. Check for any unusual noises, liquid leaks or exhaust leaks. If everything 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

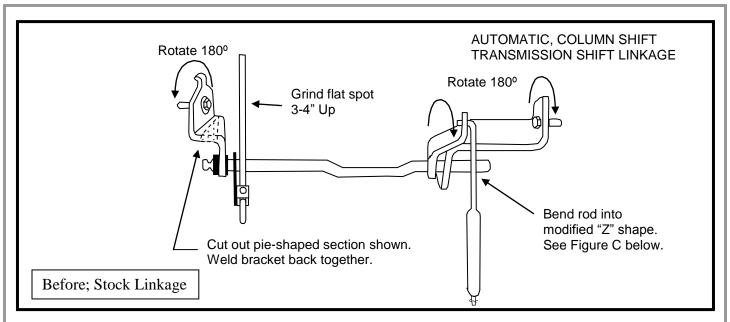
- Be sure that all brake lines and fuel lines are clear of headers and/or connector pipes.
- All spark plug wires, battery cables, or other electrical components should be clear of headers and/or connector pipes.
- Double-check the tightness of all bolts including brackets and accessories.

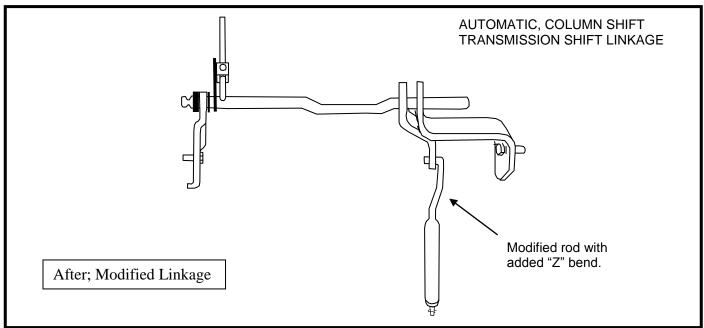
#### **PARTS LIST**

# **Qty Description**

- 1 Left side header
- 1 Right side header
- 2 Collector Reducers
- 2 Header gaskets
- 2 3" Collector gaskets
- 12 3/8-16X1" header bolts
- 6 3/8"-16 x 1" hex head cap screws
- 6 3/8"-16 hex nuts
- 6 3/8" Lock Washers







**Illustration A** 

