

## HEADER INSTALLATION INSTRUCTIONS D451 & D452

1962-1972 Dodge Coronet, Plymouth Belvedere, Plymouth Fury  
1966-1972 Dodge Charger, Plymouth GTX  
1968-1972 Dodge Super Bee, Road Runner  
1970- 1974 Plymouth Barracuda

**NOTE: Designed for B/RB Original Heads casting # 905 or 915  
1975 and later heads may require flange modification  
Must use Mopar mini Starter # P5007860AB or equivalent**

**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.

	<p><b>WARNING:</b> 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) <b>Only</b>.</p>
---	---

## 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. Drain the radiator and save the anti-freeze.
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.

## DRIVER SIDE

1. Remove dipstick tube and dipstick.

2. Remove head pipe and exhaust manifold. (Caution, small amounts of anti-freeze can be retained in the engine block. It may drain from the bolt holes that go into the water jackets as the manifolds are removed when the studs loosen or are removed).
3. Remove the starter.
4. Remove nut from ball and socket end of pitman arm. Separate the center link from the pitman arm and allow it to drop out of the way.
5. Remove the motor mount bolt (this is necessary to be able to lift the engine on this side to install the header).

### **PASSENGER SIDE**

1. Remove head pipe and exhaust manifold.
2. Remove idler arm bolt from frame and allow center link to drop.
3. Remove the motor mount bolt (this is necessary to be able to lift the engine on this side to install the header).

### **ADDITIONAL DISASSEMBLY AND CLEANING**

1. We recommend removing all of the exhaust studs with a stud removal tool and using the supplied header bolts on reassembly.
2. Chase the threads with a tap, however, do not force the tap as it may break. Work slowly and use thread cutting oil. Clean the oil from the threads when done.
3. Replace the spark plugs finger tight (so debris will not get into the cylinders during the cleaning operation).
4. 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 the material and to finish the operation with a sanding block to provide a clean flat sealing surface.
5. After cleaning is complete, remove the spark plugs again.
6. 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**

### **DRIVER SIDE**

1. Lift engine approximately 1-2 inches.
2. Apply a **THIN** film of Ultra Copper Hi-Temp Sensor-Safe Silicone Sealer to each side of the header flange gasket. Allow the silicone to setup for 5 minutes or so.
3. Apply a small amount of the same Silicone Sealer to the header bolt threads (to help prevent anti-freeze leaking past the threads).
4. Place header into position:

**Note 1:** It will be necessary to install the starter simultaneously when putting the header into place. Insert the gasket and start all of the bolts. Bolt in the starter then let the engine down carefully. Be sure not to crush the header while letting the engine down.

**Note 2:** Due to variations of these vehicles, you may be required to shorten the bolt that goes through the steering shaft if there is an interference problem. After the header is in position, install two bolts to hold the header in place, then let the engine down. Once the engine is in position, turn the steering wheel around a couple of times while having someone look to make sure that the steering shaft bolt does not hit the header tube. Cut off the excess bolt material that sticks beyond the nut as necessary.

5. Install the motor mount bolt and tighten securely.
6. Re-assemble the steering linkage.

## PASSENGER SIDE

1. Apply a **THIN** film of Ultra Copper Hi-Temp Sensor-Safe Silicone Sealer to each side of the header flange gasket. Allow the silicone to setup for 5 minutes or so.
2. As on the driver side, lift the engine as needed to put the header into position then let the engine back down.
3. Re-install the idler arm and put the motor mount bolt back in and tighten securely.
4. Once engine is sitting completely down, replace and tighten the motor mount bolt.
5. Insert the gasket and start all of the bolts. NOTE: Start the fourth-bolt-from-the-front on the engine first. Once all the bolts are started, tighten them down evenly.
6. Replace the oil filter adaptor and filter.
7. Replace the dip stick tube and dipstick.
8. Install reducers and attach to the rest of the exhaust system.
9. Refill the radiator with the saved anti-freeze.
10. Reattach the negative battery cable at the battery.

## 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

<u>Qty</u>	<u>Description (D451)</u>	<u>Qty</u>	<u>Description (D452)</u>
1	Left side header	1	Left side header
1	Right side header	1	Right side header
2	Header gaskets	2	Header gaskets
2	3" reducers	2	3 1/2" reducers
2	3", 3 bolt collector gaskets	2	3 1/2", 3 bolt collector gaskets
12	3/8"-16 x 1" header bolts	12	3/8"-16 x 1" header bolts
6	3/8"-16 x 1 1/4" hex head cap screws	6	3/8"-16 x 1 1/4" hex head cap screws
6	3/8"-16 hex nuts	6	3/8"-16 hex nuts
18	3/8" lock-washers	18	3/8" lock-washers