



Corporate Office: PerTronix Inc. 440 E. Arrow Highway, San Dimas, California 91773 \* Phone 909.599.5955 \* FAX 909.599.6424 \* [www.doughsheaders.com](http://www.doughsheaders.com)

## HEADER INSTALLATION INSTRUCTIONS

### D6683

#### 2005-2010 FORD MUSTANG, 4.6L, 3V

**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.



**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 1:** Remove the O<sup>2</sup> sensors from the factory H-pipe and label each one for correct positioning later)

**Note 2:** The aluminized X-pipe kit (D924) is a direct slip on component, designed to fit with the D6683 header. The D6683 header is also designed to allow for re-use of the factory H-pipe by cutting the H-pipe 4" in front of the hanger bracket and having a muffler shop expand it to slip over the header.

# DISASSEMBLY / ASSEMBLY

## LEFT SIDE:

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 the factory H-pipe.
5. Remove the left side stock manifold and all studs.  
Very Important: Use a 5mm hex socket for the studs.
6. With the wheels straight and steering column in the locked position, remove the upper bolt on the steering shaft at the rack and pinion (**See Photo A**).
7. Using a small amount of force, pull the shaft up about ½" and back to disengage it from the steering shaft universal joint.
8. Clean the head surface of any carbon deposits or other foreign material.
9. Apply a **THIN** film of Ultra Copper Hi-Temp Sensor-Safe Silicone Sealer to the header side of the supplied gasket and glue it to the header. Masking tape can be used to help stick the gasket to the manifold.
10. Apply a **THIN** film of Ultra Copper Hi-Temp Sensor-Safe Silicone Sealer to the header side of the gasket.
11. Apply anti-seize to the stock header bolts.
12. Insert the left side header into the engine bay from below. Install the bolts.
13. Tighten all bolts evenly to ensure a proper gasket seal to the head.
14. Re-install the O<sup>2</sup> sensors in the correct position as removed (O<sup>2</sup> extension harnesses supplied).
15. Re-install the steering shaft into the coupler. Slide the shaft down into the socket and tighten the bolt.

## RIGHT SIDE:

1. Remove the right side stock manifold and all studs.  
Very Important: Use a 5mm hex socket for the studs.
2. Clean the head surface of any carbon deposits or other foreign material.
3. Apply a **THIN** film of Ultra Copper Hi-Temp Sensor-Safe Silicone Sealer to the header side of the supplied gasket and glue it to the header. Masking tape can be used to help stick the gasket to the manifold.
4. Apply a **THIN** film of Ultra Copper Hi-Temp Sensor-Safe Silicone Sealer to the header side of the gasket.
5. Apply anti-seize to the stock header bolts.
6. Insert the right side header into the engine bay from below. Rotate the header so the flange surface is up and the tail of the header is down to insert into the engine bay.
7. Install the bolts.
8. Tighten all bolts evenly to ensure a proper gasket seal to the head.
9. Connect to exhaust system.
10. Re-install the O<sup>2</sup> sensors in the correct position as removed (O<sup>2</sup> extension harnesses supplied).
11. Connect the negative battery cable.

## START THE ENGINE

Start the engine and allow it to warm up to operating temperature. Check for any unusual noises 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.
- 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</u>
1	Left side header
1	Right side header
4	Header gasket (1 set per side)
16	Bolt, header, flanged, (8mm, 1.25mm x 25mm)
16	Lock-washer, 3/8"
2	O <sup>2</sup> sensor extension cables

PHOTO A

