

## GP231S-C CERAMIC HEADER

# FORD MUSTANG 4.0L V-6 2WD AUTOMATIC, DRIVERSIDE EGR



#### **GIBSON HEADERS ARE 50 STATE SMOG LEGAL**

Thank you very much for purchasing our Gibson headers for your vehicle.

If you need further assistance, please do not hesitate to call our Technical Department at (800) 528-3044 Monday through Friday 8:00 a.m. to 5:00 p.m. PST.

1270 WEBB CIRCLE CORONA, CA 92879

WHEN THESE INSTRUCTIONS ARE FOLLOWED PRECISELY, YOU WILL FIND THE INSTALLATION OF YOUR EXHAUST SYSTEM TO BE RELATIVELY SIMPLE. WE CANNOT OVER EMPHASIZE THE IMPORTANCE OF ADHERING STRICTLY TO THIS PROVEN APPROACH, AS IT WILL VIRTUALLY ELIMINATE ANY DIFFICULTIES, WHICH YOU MIGHT OTHERWISE ENCOUNTER.

DUE TO RESTRICTED ROOM IN THE ENGINE COMPARTMENT, YOUR HEADERS MAY COME CLOSE TO CERTAIN BODY AND CHASSIS COMPONENTS. THIS IS A NORMAL CONDITION FOR AN INSTALLATION OF THIS TYPE. MAKE CERTAIN YOU HAVE ENOUGH CLEARANCE AROUND BRAKE, FUEL, AND ELECTRICAL LINES, ETC. IN SOME CASES, IT MAY BE NECESSARY TO RELOCATE ITEMS WHICH MIGHT BE ADVERSELY AFFECTED BY EXHAUST HEAT.

**WARNING:** INSTALLATION OF ANY TYPE OF "WRAPPING" MATERIAL ONTO THE HEADERS WILL DESTROY THE HEAT DISSISPATION PROPERTIES OF THE TUBING, CAUSING PREMATURE DETERIORATION OF THE METAL AND SUBSEQUENT FAILURE. USE OF ANY "WRAPPING" WILL VOID THE WARRANTY

**LEGAL STATUS:** INSTALLATION OF HEADERS ON VEHICLES WITH CATALYTIC CONVERTERS AND/ OR OTHER EMISSION CONTROL EQUIPMENT MUST BE ACCOMPLISHED IN ACCORDANCE WITH ALL GOVERNMENT REGULATIONS PERTAINING TO SUCH EMISSIONS STANDARDS. THESE HEADERS ARE SMOG LEGAL.

#### **E.O. STICKER INFORMATION**

PLACE THE STICKER IN AN AREA THAT IS PROTECTED FROM HIGH WEAR OR FREQUENT EXPOSURE TO DIRT, WATER, ETC. MAKE SURE THE AREA IS CLEAN BEFORE APPLYING. E.O. ARE USUALLY UPDATED ANNUALLY, YOUR E.O. STICKER DOES NOT NEED TO BE REPLACED TO REFLECT CHANGES THAT ARE MADE. SMOG INSPECTION STATIONS ARE UPDATED REGULARLY.

### **SUGGESTED TOOLS**

7/16" COMBINATION WRENCH
7/16" SOCKETS (ONE SHALLOW/ONE DEEP)
1/2" COMBINATION WRENCH
9/16" COMBINATION WRENCH
9/16" SOCKETS (ONE SHALLOW/ONE DEEP)
7/8" COMBINATION WRENCH
12MM SOCKET (ONE SHALLOW/ONE DEEP)
12MM COMBINATION WRENCH
13MM SOCKET (ONE SHALLOW/ONE DEEP)
13MM COMBINATION WRENCH
15MM SOCKET (ONE SHALLOW/ONE DEEP)
15MM COMBINATION WRENCH
3", 6", AND 12" EXTENTIONS FOR SOCKETS
GOOD RUST PENETRANT
JACK STAND, FLOOR JACK

## **PARTS LIST**

QUANTITY	DESCRIPTION
1	DRIVER SIDE HEADER ASSEMBLY
1	PASSENGER SIDE HEADER ASSEMBLY
2	HEADER GASKET
1	BOLT KIT

## **HEADER INSTRUCTIONS #GP231**

**CAUTION!** Gloves or other protection should be worn to protect installer from burns due to hot exhaust components! **COSMETIC TIP:** Skin oils from your hands and engine compartment grime causes ugly "yellow" spots to appear on the chrome as it "blues" from the exposure to exhaust heat.

Start by placing the vehicle on a level surface using jack stands and a floor jack. **DO NOT use** a **bumper jack!** Also, you will need to remove the negative cable from the battery.

- 1. Place vehicle in a location where the floor is solid and flat with adequate lighting. Do not attempt to work on a hot engine. Heat causes metal to expand and makes removal of fasteners difficult at best. Disconnect the battery cable from the battery. Raise the front of the vehicle to obtain adequate access to the bottom exhaust manifold flanges. Use large-based jack stands to support the vehicle. Do not rely on the jack. Block the tires to prevent the vehicle from rolling off the jack stands.
- 2. Begin with the driver's side by removing the dipstick and EGR tube using 5/16 socket and ratchet. Spray WD-40 or some type of penetrating oil on all accessible fasteners and fittings before attempting to remove them (for easier removal of the manifold and installing the header.) Starting on the bottom side, remove the bottom flange nuts (where the manifold connects to the exhaust system). Then remove the stock manifold from the head using 13mm socket and ratchet. Now disconnect the manifold from the Y-pipe. Make sure to clean head surface of all debris before installation of GIBSON header. Apply as much torque as necessary to remove the bolts. If the nuts are frozen on, apply heat to the bolt with an acetylene torch. Try again to remove the nuts.



**3.** Now install driver side GIBSON header and gasket using stock hardware to the head and torque the header to 30-35 ft/lb. Now re-install dipstick and EGR tube back to there original locations on the vehicle.

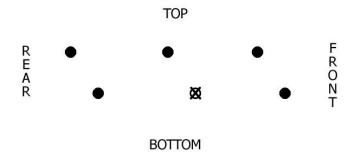


**4.** For passenger side manifold removal, spray WD-40 or some type of penetrating oil on all accessible fasteners and fittings before attempting to remove them (for easier removal of the manifold and installing the header.) Starting on the bottom side, remove the bottom flange nuts (where the manifold connects to the exhaust system). Then remove stock manifold using 13mm socket and ratchet. Now disconnect the manifold from the Y-pipe. Make sure to clean head surface of all debris before installation of header. Apply as much torque as necessary to remove the nuts. If the nuts are frozen on, apply heat to the bolt with an acetylene torch. Try again to remove the bolts.



## **HEADER INSTRUCTIONS #GP231**

**5.** Remove the stock stud (X) from the head after the manifold has been removed. See illustration below. The stud will be replaced with the 8mm bolt and lock washer that are supplied.



 $\pmb{6}$ . Now install passenger side GIBSON header, gasket, stock hardware, the supplied 8mm bolt and washer to the head and torque the header to 30-35 ft/lb.



**7.** Re-install Y-pipe assembly to the GIBSON headers and torque to 30-35 ft/lb.





#### 8. RE-CHECK EVERYTHING!!

- **9.** Start the engine and let it warm up. Check for leaks. Shut engine off and let it cool down. Check to make sure all fasteners are tight.
- **10.** Periodically check and retighten the header bolts.

NOTE: IT IS NOT UNUSUAL WHEN INSTALLING HEADERS TO GET A BURNING SMELL. THIS IS NORMAL AND IT WILL GO AWAY!

IT IS CRITICAL that all bolts be re-tightened HOT after about 20 minutes of operation to prevent gasket failure.

NOTE: HEADERS ARE NOT MEANT TO SERVE AS "EXHAUST SYSTEM SUPPORT HANGERS". Additional hangers may need to be added at the time of the installation of the headers so that THE EXHAUST SYSTEM SUPPORTS ITSELF when the collector bolts are removed. HEADERS THAT HAVE "SAGGED" DUE TO THE LACK OF SUFFICIENT EXHAUST SYSTEM SUPPORT WILL NOT BE REPLACED UNDER WARRANTY!

**NOTE:** Header bolts should be inspected for tightness from time to time to ensure optimum gasket life. The bolts will **STRETCH** some at first due to the exhaust heat, so they'll loosen **WITHOUT TURNING** until they "take a set". (Bolts hard enough not to stretch would BREAK!) We've experimented with the various "locking devices" on the market, which prevent from turning. They **DON'T WORK** on **HEADER BOLTS**, and they greatly complicate the process of re-tightening the bolts when it's necessary.

#### What "WORKS":

Go over the bolts again after the first DAY of driving (or about 100 miles- whichever comes first), then after the first WEEK, after the first MONTH, and then EVERY 6 MONTHS. Our exclusive gaskets are specially made so that the cylinder head SHOULD begin to melt before the gaskets can burn up. About the only way to kill these gaskets is to let the headers get loose and then keep driving with a leak.

Due to varying conditions between geographical locations and usage, we strongly recommend having the engine re-tune at a reputable tune-up shop after the installation of the headers. Doing so will ensure that you get the maximum benefit from the installation of the headers.

GIBSON PERFORMANCE strives to deliver the highest quality materials, workmanship, and service. Please so not hesitate to call our technical line if you have a question or experience a problem.

**WE TRULY WISH TO HAVE ONLY SATISFIED CUSTOMERS!**