

# GP106S STAINLESS HEADER WITH STAINLESS Y-PIPE

# HAS AIR FITTING AT THE FRONT OF EACH MANIFOLD FOR CHEVROLET/GMC PICKUP 7.4L 2/4WD SUBURBAN 7.4L 2/4WD

# GIBSON HEADERS ARE 50 STATE SMOG LEGAL

Thank you very much for purchasing our Gibson header 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

#### **Installation Instructions**

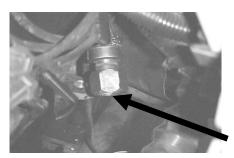
NOTE: Installation of these headers requires an adequate workspace, general mechanic's tools, general mechanical "know-how" and a few special tools. However, you should carefully read these instructions before attempting to install headers. If in doubt, consult a professional mechanic.

- 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 cables from the battery. Raise the front of the vehicle to obtain adequate access to the bottom exhaust manifold flanges. Use large-base 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. Spray WD-40 or some type of penetrating oil on all accessible fasteners and fittings before attempting to remove them. From the bottom side, unbolt the spring-loaded bottom flange nuts (where the manifold connects to the exhaust system. The stock nuts are intentionally deformed to prevent them from prematurely loosening. This also makes removal difficult. Apply as much torque as necessary to remove the nuts. The nuts may not turn and the stud may begin to unthread from the manifold. This is a problem because the studs have shoulders which will not pull through the exhaust flange. If the stud comes loose, reverse your wrench and tighten the stud back into the manifold solidly. Try again to remove the nuts. If the nuts are still jammed on, apply heat to the nut with an acetylene torch. Try again to remove the nuts. If all else fails cut the nuts off. The Headers are supplied with new bolts and nuts for reinstallation.



- 3. On the topside: Disconnect the spark plug wires by grasping and gently twisting the spark plug wire boots. Do not pull on the wires. Set the wires and looms up out of the way. Brush or blow away any debris which may have collected around the manifolds and spark plugs. This will help prevent foreign matter from entering the combustion chambers when the manifolds are removed. Removal of the spark plugs is necessary to avoid accidental spark plug breakage.
- 4. Remove Egr hose from the rear of manifold. Use an open-end wrench or 1 7/16 wrench (loosen top first)(**REFER TO PIC. #4A**). Remove air rack using a 7/8 wrench. Mark the point where the stearing shaft bolts together near the firewall, use a ½" socket to disconnect. Remove bolts and studs (use a ¼ 12 point socket or wrench for studs). Remove nut first and remove spark plug shields, then loosen nut on stud, now studs will come out.

Now remove manifold.(**REFER TO PIC.** # 4B) Using a wire brush, remove any carbon deposits from head surface. Use solvent or cleaner to thoroughly clean surface.





#4A

5. Now Repeat #'s 2-3-4 on passenger side. (Note: There is not an Egr hose to remove). You should remove air box so you have room to work, unbolt dipstick tube and gently pull upward.





6. Remove O2 sensors cut head pipes. Driver side, cut 11 ½" forward from weld on front side of converter. Passenger side cut 19 ¾" forward of flange. Use hacksaw or power saw, 18 tooth blade is best, (use eye protection) file inside so no burs will interfere with new head pipe.





7. Prepare the header bolts by applying anti-seize to the threads. Apply a thin coat of high temp sealant to both sides of the header gasket. Permatex ultra copper high-temp sealant is recommended. Do not use a sealant that is not designed to be used with O2 sensors. (Also Note: That if excessive sealant is applied, clumps may fall into the exhaust system and clog the converters. We supply you with all new header bolts and star washers, you can use them, but you will not be able to reinstall spark plug shields. To reuse spark plug shields install new header bolts 3/8 x 1" in lower holes on header flange ( use star washers). Install original studs in upper holes in flange. Use star washer first, then 2 3/8 flat washers. Then stock nut. Tighten all bolts from center out to approx. 30-35 ft. lbs. Now install dip stick tube and spark plugs. Reinstall spark plug shields over studs and nut. Now put second nut on and tighten (This will be like original from factory. Some shields you may have to bend tab a little for best fit). Reinstall air racks, Egr hose and spark plug wires.



8. To install connector pipes take your time to line up for proper clearanc and angles. It is best to install passenger side first. Pull exhaust system back a little. Slip passenger side connector pipe in. Use 3-3/8 x 2" bolts, nuts, lock washers. Do not tighten to much at this time. Install driver side connector pipes. (Do not tighten) Now shim up stock exhaust system for best clearance and proper angles like original setting. Install 3-3" clamps rotate for best clearance and tighten down head pipe bolts. Install O2 sensors.



- On suburbans there is an extra set of coolant lines passing by the headers on the passenger side. Take care to keep these back away from the headers so there is no contact with the tubes.
- 10. Recheck everything, reinstall air box.
- 11. Start the engine. Let it warm up. Check for leaks. Shut engine off. Recheck all Bolts and nuts. Connector pipes may need clamps re-tightened to get good seal (If you tow heavy loads you may want to tack weld joints on connector pipes).
- 12. Check all bolts and nuts after the first 200 miles.
- 13. Periodically check and re-tighten all bolts and nuts if needed (oil changes are a good time to check).

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

### YOU MUST RE-TORQUE YOUR HEADER BOLTS APPROX. 100 MILES, IF THIS IS NOT DONE GASKET COULD CREATE A LEAK AND NOT COVERED BY WARRANTY.

#### **Parts List**

(1) Driver's Side Header Assembly

(16) 3/8 flat washers

(6) Collector Bolts, Nuts, washers locks

(1) Passenger's Side Header Assembly

(3) 3" clamps

(2) Header gaskets (Header to Head flange)

(16) 3/8" x 1" header bolts & star washers

(1) passenger side connector pipe (1) 2 piece driver side connector pipes

## TOOLS SUGGESTED

1/4" ALLEN WRENCH
3/8" BOX END WRENCH AND/OR 3/8" DEEP SOCKET
7/16" SOCKETS (ONE SHALLOW/ONE DEEP)
1/2" COMBINATION WRENCH
1/2" SOCKET
9/16" COMBINATION WRENCHES
9/16" LINE WRENCH
5/8" THIN WALL SPARK PLUG SOCKET
15MM DEEP SOCKET
22MM OPEN PLIERS
1/4" BOLT AT LEAST 1" LONG
HEATING TORCH AND SELECTION OF HAMMERS
HIGH TEMP SILICONE SEALER (RATED 600 DEGREES OR MORE)
MIG WELDER
EXHAUST JACK STAND

OPEN END WRENCH

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.

WARNING: 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 DISSIPATION PROPERTIES OF THE TUBING, CAUSING PREMATURE DETERIORATION OF THE METAL AND SUBSEQUENT FAILURE. USE OF ANY "WRAPPING" MATERIAL 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 ROM 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.

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

<u>CAUTION!</u> Gloves or other protection should be worn to protect installer from burns due to hot exhaust components during these final steps!

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!

<u>NOTE:</u> 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 DOES work is this:

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.

WARNING! – Do not rely on bumper jacks or chassis jacks for support during header installation. The subject vehicle should be raised and supported with jacking equipment and jack stands or ramps intended for undercarriage auto maintenance. It is extremely dangerous to work under an improperly raised and/or supported vehicle.

WARNING! - Make certain there is ample clearance around components such as brake lines, brake proportioning valves, fuel lines, hoses and pumps, and electrical components and wires. In some cases it may be necessary to relocate items that may be adversely affected by exhaust system heat.