

# GP102S-C CERAMIC COATED HEADER

NO AIR INJECTION, WITH EGR FOR CHEVROLET/GMC PICKUP 5.0L, 5.7L YUKON/TAHOE 5.7L SUBURBAN 5.0L, 5.7L CADILLAC ESCALADE 5.7L 2/4 WD

### 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

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 PROTECTEDF 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.

#### TOOLS SUGGESTED

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7/16" SOCKETS (ONE SHALLOW/ONE DEEP)

13MM SOCKET

15MM SOCKET

9/16" COMBINATION WRENCHES

9/16" LINE WRENCH

5/8" THIN WALL SPARK PLUG SOCKET

HIGH TEMP SILICONE SEALER (RATED 600 DEGREES OR MORE)

JACK STAND

#### **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 these headers. If in doubt, consult a professional mechanic.

## DO NOT INSTALL THESE HEADERS OVER THE TOP OF THE FACTORY SPARK PLUG WIRE HOLDERS WHICH ARE BOLTED TO THE HEAD. OTHERWISE THE HEADERS WILL NOT SEAL!!!!

- 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: Unbolt the spark plug wire looms from the cylinder heads. **Do not skip this step.** Otherwise the spark plug looms will hold the head flange out, away from the head, preventing the headers from sealing. 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 not necessary, but it may avoid accidental spark plug breakage.
- 4. Remove the EGR hose from the rear of the Manifold. (Use an open-end wrench.) Remove the 4 bolts and 2 studs holding the manifold to the head. Using a small wire brush or other instrument, remove any carbon deposits left on the exhaust flange mating surface of the head. Thoroughly clean the surface with solvent or a other cleaner. Remove the doughnut-shaped gasket from the lower flange (where the manifold bolts to the exhaust system). The headers use a steel dome in place of the gasket. Remove any excess carbon deposits from the lower flange.
- 5. Optional: Prepare the header bolts by applying anti-seize to the threads. Small head 3/8" x 1" bolts & lock-washers included. Apply a thin coat of high temp sealant to both sides of the header gasket (Gasket included). Permatex Ultra-Copper High-Temp Sealant is recommended. DO NOT use a sealant that is not designed to be used with 02 sensors. (Also note that if excessive sealant is applied, clumps may fall into the exhaust system and clog the Catalytic Converter.) Apply a thin coating of sealant to the supplied bolts and lock washers. Torque all 6 fasteners to approximately 30-35ft. lbs. Re-install EGR hose.

- 6. Using the supplied fasteners, bolt the Header to the bottom flange. The nuts are jam nuts. Therefore, they will not spin freely. This is normal. Torque to 30-35ft. lbs.
- 7. To reinstall the spark plug wire looms, use the supplied ½" tubular spacer and ¼" bolt. The spark plug wire loom will now sit outward of the header flange rather than against the head.
- 8. The Passenger Side: Unbolt the manifold from the exhaust system from under the vehicle as on the driver's side. Remove the dipstick. Disconnect the spark plug wires from the spark plugs. Unbolt the Spark Plug wire looms and put them up out of the way. The dip stick tube is bolted to the head via the forward spark plug loom bolt. With the bolt removed, the dip stick tube can be removed by gently wiggling the tube while pulling upward. (The bottom of the tube is pressed into a receptacle in the engine.) Unbolt the manifold from the head and remove. As with the driver's side, clean the head flange and lower flange where the header attaches to the exhaust system. Remember to remove the doughnut-shaped gasket.
- 9. As with the driver's side, apply anti-seize to the bolts, apply silicone to he Head flange Gasket and dome flange, and bolt the headers to the head and the exhaust system. Reattach the spark plug looms in the same manner as the driver's side.
- 10. On Chevy Suburbans: The rear seat heater has an extra set of coolant hoses passing by the headers on the passenger side. Take care to keep these hoses back away from the headers. Use nylon ties, or some other method of preventing the heater hoses from contacting the hot header tubes.
- 11. Recheck everything!
- 12. 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.
- 13. Retorque headers after the first 200 miles.
- 14. 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!

#### **Parts List:**

- (1) STAINLESS Driver's Side Header Assembly
- (1) STAINLESS Passenger's Side Header Assembly
- (12) 3/8" x 1" header bolts & lock washers
- (2) Header gaskets (Header to Head flange)
- (6) Collector Bolts, Nuts
- (4)  $\frac{1}{4}$ " I.D. x  $\frac{1}{2}$ " long tubular spacer for the spark plug looms
- (4) 1/4" x 1" bolts for the spark plug looms

**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.

<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.