



# GP120S-C CERAMIC COATED HEADER

**HAS AIR INJECTION, WITH O2 SENSOR  
CHEVY 1500 TRUCK 4.3L 2/4WD  
MINIMUM WELDING REQUIRED**

**GIBSON HEADERS ARE 50 STATE SMOG LEGAL**

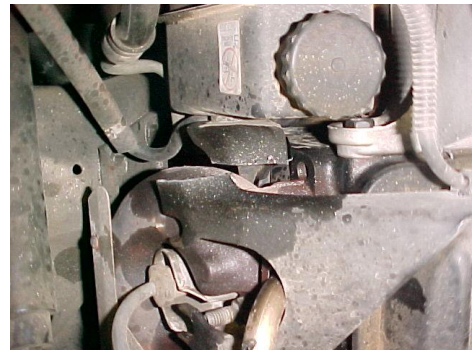
*Thank you very much for purchasing our Gibson header  
for your vehicle.*

*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 FOR HEADERS

1. Place vehicle in a location where the floor is solid and flat. Do not work on a hot engine. Heat causes metal to expand and makes removal of fasteners difficult. Disconnect the battery cable from the battery. Raise the front of the vehicle to obtain adequate access to the bottom exhaust manifold flanges. Use jack stands to support the vehicle. Block the tires to prevent the vehicle from rolling off the jack stands.
2. Start with the driver's side. For easier removal of the manifold and installing the header. Spray WD-40 or penetrating oil on all fasteners and fittings before removing them. The power steering/alternator bracket must be removed from the number one exhaust port before the drivers side manifold can be removed. The steel bracket is attached to the number one exhaust port. There are two ways to remove this bracket. The first way requires minor welding when re- installing bracket.



The first way to remove the bracket is to cut the bracket between the power steering pump and the manifold.(as shown in picture). After cutting the bracket then go ahead and unscrew it from the alternator and the manifold. This will require you to weld the bracket back together when done with the install. The second way is to remove the top half of the fan shroud. Remove the serpentine belt. Using a pulley remover, remove power steering pump pulley. The three bolts on the front of the power steering pump may now be removed. Remove the bolt going from the black steel bracket into the back of the alternator. Remove the nuts holding the black steel bracket to the head on both sides of the number one exhaust port. The bracket is still attached to the back of the power steering pump. The pump assembly should be loose enough to wiggle outward from the engine such that the remaining two nuts holding the bracket to the pump can be removed. The bracket should be free now. After removing the steel bracket, you need to modify it now. The bracket must be cut into halves. This can be accomplished by using a hacksaw, bandsaw or an abrasive cut off wheel. You will want to keep the part without the curve. After cutting the bracket, file edges to remove any metal burrs and repaint.

Starting on the bottom side, unbolt the bottom flange nuts (where the manifold connects to the exhaust system). The stock nuts are intentionally deformed to prevent them from premature 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.

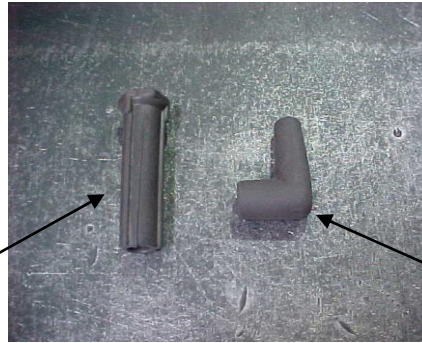
3. **DO NOT SKIP THIS STEP!** On the top side: Unbolt the spark plug wire looms from the cylinder heads. Otherwise the spark plug looms will hold the head flange out away from the head, preventing the heads from sealing. Disconnect the spark plug wires by gently twisting the spark plug wire boots. Do not pull on the wires. Brush or blow away any debris that 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. Before you remove the manifold, disconnect the temperature sensor plug in the side of the head. For easier removal of the manifold (**NOTE: REMOVAL OF THE SPARK PLUGS WILL MAKE INSTALLATION EASIER!**) Disconnect the air tube from the manifold. We have supplied you with a O2 sensor plug if needed on non-equipped vehicles with no air + O2 sensor plug. Remove bolts attaching manifold to the head, and then remove manifold.
4. Using a small wire brush or other instrument, remove any carbon deposits left on the exhaust flange mating surface of the dry head. Thoroughly clean the surface with solvent or another 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 this gasket. Remove any excess carbon deposits from the lower flange.
5. On the driver's side use the 3/8"X 1" bolts supplied. Apply a thin coating of sealant to the collector dome, where it mates to the lower flange. Permatex Ultra-Copper High Temp Sealant is recommended. **USE A SEALANT THAT IS 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 Catalytic Converter). Bolt the header to the head. Torque all 6 fasteners to factory specifications (30-35 ft./lbs.) Re-attach the air tube to the header.



6. Using the supplied fasteners, bolt the Header to the bottom flange but do not tighten at this time. The nuts are jam nuts. Therefore they will not spin freely. This is normal. Torque to 30-35 ft/lbs after both headers are installed.
7. On spark plug wires # 1(driverside front) & #6(passengerside rear) you will need to cut the straight boots off making sure you do not cut the spark plug wire. Use a razor blade or sharp knife, be careful not to cut wire or yourself. Then spray some sort of lubricant on the wire where you removed the stock boots and then install the 90 degree boots on spark plug wires #1 & 6. Now you can re-install the spark plug wires. Also install the supplied heat-wrap on spark plug wires that are close to header tubes. Zip tie some of the wires to keep from laying on the header.

WHEN INSTALLING HEADER,  
SPARK PLUG WIRES #1 & 6 NEED TO  
BE SWITCHED FROM THE STOCK  
BOOT TO THE 90 DEGREE BOOT  
THAT IS SUPPLIED BY GIBSON

STOCK BOOT



GIBSON 90 DEGREE  
BOOT

8. The Passenger Side: Unbolt the manifold from the exhaust system from under the vehicle as on the driver's side. Disconnect the spark plug wires from the spark plugs. Unbolt the spark plug looms and put them up out of the way. Also remove the spark plugs for easier removal of the manifold and installation of the headers. Disconnect the air tube from the manifold. The dip stick tube is bolted to the head via the forward spark plug wire loom bolt. With the bolt removed the dip stick tube can be removed by wiggling the tube while pulling upward. (The bottom of the tube is pressed into a hole 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 will attach to the exhaust system. Remember to remove the doughnut-shaped gasket. As with the driver's side, apply silicone to the dome flange and bolt the header to the head and exhaust system. Re-install the dip stick. Re-install the spark plugs and install #6 spark plug wire. Make sure the spark plug wires have clearance. Install spark plug wires and bracket using supplied 1/2" spacer and 1/4"x1" bolts to space spark plug bracket from cylinder head. Install the supplied heat-wrap over spark plug wires that are closest to the tubes.



9. RE-CHECK EVERYTHING!!
  10. 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.
  11. 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) DRIVER'S SIDE HEADER ASSEMBLY                                 | (1) PASSENGER'S SIDE HEADER ASSEMBLY         |
| (12) 3/8"X 1" HEADER BOLTS AND LOCK WASHERS                       | (2) HEADER GASKETS                           |
| (4) 1/4" I.D. X 1/2" LONG TUBULAR SPACER FOR THE SPARK PLUG LOOMS | (4) 1/4" X 1" BOLTS FOR THE SPARK PLUG LOOMS |
| (1) 2" LONG SPARK PLUG WIRE HEAT-WRAP PIECES                      | (4) Z-TIES                                   |
| (6) 3/8"x2" BOLTS   | (6) 3/8" NUTS                                |
| (12) 3/8" LOCK WASHERS  | (12) 3/8" FLAT WASHERS                       |
| (2) 90 DEGREE SPARK PLUG BOOTS                                    | (1) 18MM PIPE PLUG                           |

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.

**NOTE:** 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

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.

## SUGGESTED TOOLS

7/16" WRENCHES (VARIOUS LENGTHS)

7/16" SOCKETS (SHALLOW AND DEEP)

1/2" WRENCHES (VARIOUS LENGTHS)

9/16" SOCKETS (SHALLOW AND DEEP)

5/8" SPARK PLUG SOCKET

7/8 OPEN END WRENCH

15MM DEEP SOCKET

15MM BOX END WRENCH

31MM OPEN END WRENCH (A LINE WRENCH)

3", 6", AND 12" EXTENTIONS FOR SOCKETS

SCREWDRIVERS AND/OR NUT DRIVERS (FOR HOSE CLAMPS)

SAWZALL (HAND -HELD POWER HACK SAW)

LUG NUT WRENCH

HIGH TEMP SILICONE (UNTRA COPPER BY PERMATEX)

GOOD RUST PENETRANT

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 BOLTS 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 THE 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 DO NOT HESITATE TO CALL OUR TECHNICAL LINE IF YOU HAVE A QUESTION OR EXPERIENCE A PROBLEM.**