

# GP100S STAINLESS HEADER

NO AIR INJECTION YUKON/YUKON DENALI/TAHOE 2/4WD SUBURBAN, BLAZER 5.0L, 5.7L 2/4WD CK PICKUP 5.0L, 5.7L 2/4WD WILL NOT FIT IF VEHICLE HAS DUAL AIR FITTING WILL NOT FIT ON OLD BODY STYLE

## **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.

### **TOOLS SUGGESTED**

12MM BOX END WRENCH AND/OR 12MM DEEP SOCKET

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

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.

NOTE: These procedures are documented on factory standard-equipped vehicles with original configuration compliance. Any modification of the subject vehicle may dictate modification to these procedures.

#### 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.

<u>NOTE:</u> 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 <u>WILL NOT</u> 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!)

#### 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.

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.

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.

#### NOTE:

INSTALLATION OF THESE HEADERS REQUIRES AN ADEQUATE WORKSPACE, GENERAL MECHANICS, TOOLS, GENERAL MECHANICAL "KNOW HOW" AND A FEW SPECIAL TOOLS

#### WE STRONGLY SUGGEST THAT YOU THOROUGHLY READ THOUGH THESE INSTRUCTION BEFORE ATTEMPTINIG TO INSTALL THE 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 CANNOT SEAL!!!

1) PLACE VEHICLE IN A LOCATION WHERE THE FLOOR IS SOLID ,FLAT,AND HAS ADEQUATE LIGHTING.<u>DO NOT WORK ON A HOT MOTOR!!!</u> HEAT CAUSES METAL TO EXPAND AND MAKES REMOVAL OF FASTENERS DIFFICULT. DISCONNECT THE BATTERY CABLES FROM THE BATTERY. RAISE THE FRONT OF THE VEHICLE TO OBTAIN ENOUGH WORKING SPACE TO REACH THE BOTTOM OF THE EXHAUST MANIFOLDS.USE LARGE BASED JACKSTANDS TO SUPPORT THE VEHICLE. <u>DO NOT RELY ON THE</u> JACKSTANDS. BLOCK THE REAR TIRES TO PREVENT VEHICLE FROM ROLLING OF THE STANDS.

2) BEGIN WITH THE DRIVERS SIDE. SPRAY WD-40 OR SOME TYPE OF PENETRATING OIL ON ALL ACCESSIBLE FASTENERS AND FITTINGS BEFORE ATTEMPING TO REMOVE THEM.FROM THE BOTTOM SIDE UNBOLT THE SPRING LOADED BOTTOM FLANGE NUTS.(WHERE THE MANFOLDS MEET THE STOCK EXHAUST)THE STOCK NUTS ARE DEFORMED TO PREVENT THEM FROM LOOSENING.THIS MAKES REMOVAL DIFFICULT.IF THE STUD LOOSENS THEN JUST TIGHTEN IT BACK AND CUT THE STUDS OFF.THE KIT PROVIDES NEW NUTS AND BOLTS FOR REINSTALLATION.

3) ON THE TOPSIDE: UNBOLT THE SPARK PLUG WIRE LOOMS FROM THE CYLINDER HEADS. DO NOT SKIP THIS STEP! OTHER WISE THE SPARK PLUG LOOMS WILL HOLD THE HEAD FLANGE OUT, AWAY FROM THE HEAD, PREVENTING THE HEADERS FROM SEALING. GENTLY DISCONNECT SPARK PLUG WIRES FROM THE SPARK PLUGS. DO NOT PULL ON PLUG WIRES, ROTATE AND PULL PLUG BOOT!! BUSH OR BLOW AWAY ANY DEBRIS THAT MAY HAVE COLLECTED AROUND THE MANIFOLDS AND PLUGS.THIS WILL PREVENT ANY DIRT FROM GETTING INTO THE COMBUSTION CHAMBERS WHEN YOU REMOVE THE MANIFOLDS. REMOVAL OF SPARK PLUGS IS NOT NECESSARY BUT RECOMMENDED TO PREVENT ACCIDENTAL SPARK PLUG BREAKAGE.

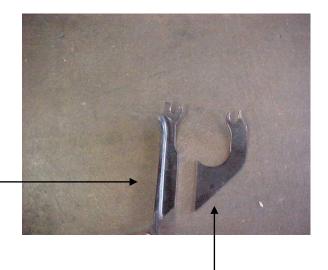
4) THE POWER STEERING/ALTERNATOR BRACKET MUST BE REMOVED FROM THE NUMBER ONE EXHAUST PORT BEFORE THE DRIVERS SIDE MANIFOLD CAN BE REMOVED. THE STEEL BRACKET IS ATTACHED TO THE NUMBER ONE EXHAUST PORT. THERE IS TWO WAYS TO REMOVE THIS BRACKET. THE FIRST WAY REQUIRES MINOR WELDING WHEN REINSTALLING BRACKET. 5) 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, REMOVETHE 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 THE ALTERNATOR. REMOVE THE NUTS HOLDIND THE BLACK STEEL BACKET TO THE HEAD ON BOTH SIDES OF THE NUMBER ONE EXHAUST PORT. THE BACKET 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.

6) 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. (AS SHOWN IN THE PICTURE) AFTER CUTTING THE BRACKET, FILE EDGES TO REMOVE ANY METAL BURRS AND REPAINT.

THIS PICTURE SHOWS WHERE TO CUT THE BRACKET. THIS IS THE PIECE YOU'RE REINSTALLING



CUT POWER STEERING BRACKET HERE ! YOU WILL NEED TO WELD THIS BACK TOGETHER WHEN FINISHED WITH INSTALL

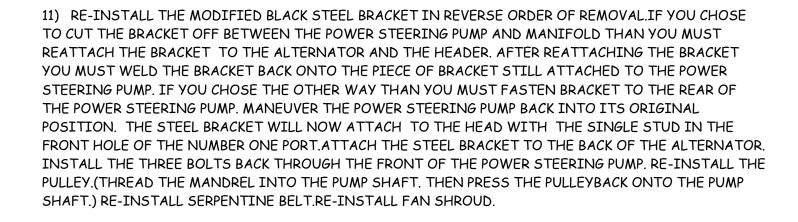


THROW THIS PIECE AWAY

7) IF EQUIPPED, REMOVE O2 SENSER FROM REAR OF THE MANIFOLD.(USE AN OPEN-END WRENCH OR SPECIAL O2 SENSER SOCKET). REMOVE THE 4 BOLTS 2 STUDS HOLDING THE MANIFOLD TO THE HEAD. SAVE ONE OF THE STUDS FASTENING THE MANIFOLD TO #1 EXHAUST PORT.USING A SMALL WIRE BRUSH, REMOVE ANY CARBON DEPOSITS LEFT ON EXHAUST FLANGE THAT METS THE SURFACE OF THE HEAD. REMOVE THE DOUGHNUT SHAPED GASKET FROM THE LOWER GASKET. (WHERE THE MANIFOLD METS THE EXHAUST) THE GIBSON HEADER USES A STEEL DOME TO REPLACE THAT GASKET. 8) IF YOUR VEHICLE DOES NOT HAVE AN O2 SENSOR IN THE REAR OF THE MANIFOLD, USE THE SUPPLIED PLUG TO SEAL THE O2 SENSOR FITTING IN THE COLLECTOR OF THE DRIVER SIDE GIBSON HEADER. PREPARE HEADER BOLTS BY APPLYING ANTISEIZETO THE THREADS. ON DRIVERS SIDE USE (5) 3/8" X 1" BOLTS AND LOCK WASHERS SUPPLIED. REUSE ONE OF THE STUDS IN THE FRONT HOLE OF THE #1 PORT. APPLY A THIN COAT OF SEALANT TO THE COLLECTOR DOME WHERE IT MEETS THE LOWER FLANGE. (WE SUGGEST PERMATEX ULTRA-COPPER HIGH TEMP SEALANT.) BOLT HEADER TO THE HEAD USE THE SUPPLIED BOLTS AND WASHERS ON THE REAR 5 HOLES. DO NOT USE A BOLT ON THE FRONT HOLE OF THE #1 PORT. THIS IS WHERE THE STUD GOES. USE SUPPLIED 1" TUBULAR SPACER BETWEEN THE HEADER FLANGE AND THE STUD SHOULDER ON THE FRONT HOLE. TORQUE ALL 6 BOLTS TO APPROXIMATELY 30-35 LBS.

9) USING THE SUPPLIED FASTENERS, BOLT THE HEADER TO THE BOTTOM FLANGE AT THE COLLECTOR. THE NUTS ARE JAM NUTS; THEREFORE THEY WILL NOT SPIN FREELY. THIS IS NORMAL. TORQUE TO APPROXIMATELY 30-35 LBS.

10) TO REINSTALL WIRELOOMS, USE SUPPLIED  $\frac{1}{2}$ " TUBULAR SPACE AND  $\frac{1}{4}$ " BOLT. THE SPARK PLUG LOOM WILL NOW SIT OUTWARD OF THE HEADER FLANGE RATHER THAN AGAINST THE HEAD. IF EQUIPPED , RE-INSTALL THE O2 SENSER. (REFER TO PICTURE ABOVE FOR A VISUAL OF WHERE THE WIRELOOM INSTALLS AT.)





FLANGE SPACER

STUD/W WIRELOOM



THIS IS A VIEW OF THE MODIFIED BLACK STEEL BRACKET INSTALLED.

12) THE PASSANGER SIDE: UNBOLT THE MANIFOLD FROM STOCK EXHAUST SYSTEM FROM UNDER THE VEHICLE . REMOVE DIPSTICK BY GENTLY PULLING OUT. DISCONNECT SPARK PLUG WIRES FROM SPARK PLUGS. GENTLY PULL SPARK PLUG BOOT <u>DO NOT PULL ON SPARK PLUG WIRES!</u> UNBOLT WIRELOOMS AND PUT THEM OUT OF THE WAY. THE DIPSTICK TUBEIS BOLTED TO THE HEAD BY THE FORWARD SPARK PLUG LOOM BOLT. WITH THE BOLT REMOVED, THE DIPSTICK TUBE CAN BE REMOVED BY GENTLY PULLING OUT AND TWISTING.REMOVE THE FLEXIBLE HOT AIR TUBE ATTACHED TO THE SHEET METAL HEAT STOVE. UNBOLT THE MANIFOLD AND REMOVE. LIKE WITH THE DRIVERS SIDE, CLEAN OFF ANY DEBRIS FROM THE HEAD.DON'T FORGET TO REMOVE THE DOUGHNUT SHAPED GASKET AT THE COLLECTOR.

13) APPLY ANTI-SEIZE TO THE BOLTS . APPLY SMALL AMOUNT OF HIGH-TEMP GASKET SEALER ON THE GASKET AND THE COLLECTOR DOME. NOW BOLT HEADERS TO THE HEAD AND THE EXHAUST SYSTEM.REINSTALL SPARK PLUG LOOMS THE SAME WAY YOU DID ON THE DRIVERS SIDE.

14) IF RETAINING THE HEAT RISER, CLAMP THE SUPPLIED HEAT RISER ADAPTER TO THE HEADER USING THE SUPPLIED HOSE CLAMP.SHORTEN HEAT RISER TUBE TO FIT. DO NOT CUT THE TUBE TOO SHORT.

15) ON **CHEVY SUBURBAN** 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 AWAY FROM THE HOT HEADER TUBES. USE NYLON TIES OR SOME OTHER METHOD TO KEEP THESE HOSES FROM CONTACTING THE HEADER.

16) **RECHECK EVERYTHING.** MAKE SURE EVERYTHING IS TIGHT AND REATTACHED!!

17) START ENGINE AND LET WARM UP. CHECK FOR LEAKS! SHUT ENGINE OFF. LET ENGINE COOL DOWN. CHECK TO MAKE SURE ALL FASTENERS ARE TIGHT. RETORQUE HEADER BOLTS AFTER ABOUT 200-300 MILES. ATFER THE 200-300 MILE RETORQUE, YOU SHOULD CHECK THEM PERIODICALLY. A GOOD IDEA WOULD BE TO CHECK THEM EVERYTIME YOU CHANGE YOUR OIL. THIS WILL ENSURE THAT YOUR GIBSON HEADERS WILL LAST A LONG TIME.

#### 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 SIDE HEADER ASSEMBLY
- (11) 3/8" X 1" HEADER BOLTS AND LOCK WASHERS
- (2) HEADER GASKETS (HEADER TO HEAD FLANGE)
- (6) COLLECTOR BOLTS
- (3)  $\frac{1}{4}$ " I.D. X  $\frac{1}{2}$ " LONG TUBULAR SPACERS FOR SPARK PLUG LOOMS
- (4)  $\frac{1}{4}$ " X 1" BOLTS FOR THE SPARK PLUG LOOMS
- (1) 3/8" I.D. X 1" LONG TUBULAR SPACER FOR STEEL POWER STEERING PUMP BRACKET
- (1) PLUG FOR O2 SENSER FITTING
- (1) HEAT RISER TUBE ADAPTER
- (1) 1-1/2" HOSE CLAMP