

# GP400S-C CERAMIC HEADER

JEEP WRANGLER YJ 4.0L 4WD JEEP WRANGLER TJ 4.0L 4WD JEEP CHEROKEE 4.0L 2/4WD JEEP GRAND CHEROKEE 4.0L 2/4WD

## GIBSON HEADERS ARE 50 STATE SMOG LEGAL

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

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

9/16" WRENCHES (VARIOUS LENGTHS)

9/16" SOCKETS (SHALLOW AND DEEP)

13MM DEEP SOCKET

15MM BOX END WRENCH

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

SCREWDRIVERS AND/OR NUT DRIVERS (FOR HOSE CLAMPS)

LUG NUT WRENCH

HIGHT TEMP SILICONE (ULTRA COPPER BY PERMATEX)

GOOD RUST PENETRANT

JACK STANDS

JACK

IT IS <u>CRITICAL</u> 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 BOKTS 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 RETIGHTENING 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.

### **HEADER INSTRUCTIONS**

NOTE: 4WD MODELS REMOVE THE FRONT DRIVE SHAFT FOR EASIER REMOVAL OF THE MANIFOLD AND INSTALLATION OF HEADERS!

- DISCONNECT POSITVE BATTERY CABLE TO AVOID DAMAGE TO ELECTRICAL SYSTEM.
- 2. REMOVE AIR CLEANER ASSEMBLY. ALSO LOOSEN POWER STEERING BELT TENSIONER. THEN REMOVE BELT AND UNBOLT POWER STEERING BRACKET FROM WATER PUMP.
- 3. THEN START REMOVING UPPER INTAKE MANIFOLD BOLTS. NEXT JACK VEHCILE UP, DO NOT USE BUMPER JACKS. SUPPORT VEHICLE WITH JACK STANDS OR A RACK FOR SAFETY.

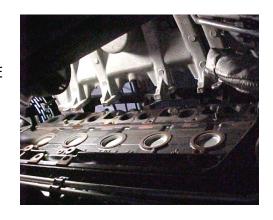


4. DISCONNECT THE O2 SENSOR PLUG FROM BRACKET NEXT TO THE OIL PAN. THEN DISCONNECT STOCK HEADPIPE FROM MANIFOLD. THEN REMOVE DRIVERSIDE MOTOR MOUNT ON ENGINE (ONLY ON CHEROKEE MODELS. WRANGLER DO NOT) TO HELP AID IN REMOVAL OF MANIFOLD AND INSTALLATION OF HEADER. "NOTE: USE FLOOR JACK TO SUPPORT THE WEIGHT OF THE ENGINE ON CHEROKEE MODELS ONLY!"





5. THEN FINISH REMOVING ALL INTAKE MANIFOLD BOLTS AND NUTS. AND ALL EXHAUST MANIFOLD NUTS AND BOLTS. SUPPORT THE INTAKE MANIFOLD AWAY FROM THE ENGINE WITH TIE DOWNS OR ROPE. NEXT, REMOVE THE MANIFOLD THRU THE BOTTOM. AFTER YOU ARE FINISHED WITH THAT, SCRAPE ENGINE WITH WIRE BRUSH TO CLEAN ALL DEBRIS ON ENGINE HEAD FOR COMPLETE SEAL FOR NEW HEADER ASSEMBLY. ALSO MAKE SURE TO REMOVE ANY DEBRIS FROM THE INTAKE MANIFOLDS.



6. INSTALL GIBSON HEADER WITH SUPPLIED GASKET. AFTER HEADER IS BOLTED UP ON BOTH ENDS OF HEAD. INSTALL INTAKE MANIFOLD BACK ON, TORQUING ALL FASTENERS TO 35 - 35 FTS.



7. RE-INSTALL MOTOR MOUNT. **(ONLY ON CHEROKEE MODELS)** PLUG IN O2 SENSOR, INSTALL NEW SUPPLIED DONUT GASKET FOR HEADPIPE CONNECTION. THEN ATTACH HEADPIPE TO HEADER WITH NEW SUPPLIED EXHAUST DONUT.TORQUE HEADPIPE TO 30-35 FTS.



8. GO BACK TO TOP OF ENGINE COMPARTMENT AND RE-INSTALL ALL INTAKE MANIFOLD HARDWARE AND RETORQUE TO 30-35 FTS. AFTER ALL EXHAUST AND INTAKE BOLTS AND NUTS ARE TIGHT. INSTALL POWER STEERING BRACKET AND BELT BACK ON. RE-ADJUST BELT ON VEHICLE. INSTALL AIR CLEANER ASSEMBLY AND BATTERY.

9. AFTER ALL FASTENERS ARE TIGHT, START VEHICLE AND LET RUN ABOUT 30 TO 45 MINS LET COOL AND RE-TORQUE ALL FASTENERS TO ENSURE NO LEAKS. ALSO ABOUT 200 TO 300 MILES RE-TORQUE ONCE AGAIN AND PERIODICALLY CHECK.



# **PARTS LIST**

- (1) HEAD GASKET
- (2) LOCK WASHER
- (2) FLAT WASHER

- (2) 3/8" NUT
- (2) 3/8" x 3" BOLT
- (1) EXHAUST DONUT

GIBSON PERFORMANCE EXHAUSTS EXHAUST SYSTEMS