



**GP220S-C
CERAMIC HEADER
WITH EGR FITTING**

**2004 FORD EXPEDITION 5.4L 2/4WD
TRITON V-8**

NEW BODY STYLE ONLY

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
0205*

TOOLS SUGGESTED

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

5/16" SOCKETS (SHALLOW)

13MM SOCKET, 5MM SOCKET

15MM SOCKET

9/16" COMBINATION WRENCHES, SOCKET

HIGH TEMP SILICONE SEALER (RATED 600 DEGREES OR MORE)

JACK STANDS

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!

CAUTION! 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!

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!**)

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 do 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.

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.

INSTALLATION INSTRUCTIONS

NOTE: INSTALLATION OF THESE HEADERS REQUIRES AN ADEQUATE WORK SPACE, GENERAL MECHANIC'S TOOLS, GENERAL MECHANIC "KNOW-HOW" AND A REASONABLE DEGREE OF EXPERIENCE.

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. 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-BASED 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. THEN UNBOLT AND REMOVE THE FRONT WHEELS.
2. SPRAY WD-40 OR SOME TYPE OF PENETRATING OIL ON ALL ACCESSIBLE FASTENERS AND FITTINGS BEFORE ATTEMPTING TO REMOVE THEM.
3. FROM UNDERNEATH THE VEHICLE, LOOSEN THE BOLTS CONNECTING THE EXHAUST SYSTEM TO THE EXHAUST MANIFOLD. (ON 4X4 MODELS, DISCONNECT THE FRONT DRIVESHAFT BY REMOVING THE 4 BOLTS ON THE FLANGE, AND LET THE DRIVESHAFT HANG OUT OF THE WAY.) PRY THE EXHAUST SYSTEM BACK ABOUT 1/2" TO GAIN WORK SPACE.
4. IT IS NOT NECESSARY TO REMOVE THE INNER FENDERWELLS, BUT IT MAKES THE INSTALL EASIER. TO REMOVE THE FENDERWELLS SIMPLY UNSCREW ALL THE SHEET METAL SCREWS AND FASTENERS ATTACHING IT TO THE FENDER AND FRAME AND THE FENDERWELL WILL DROP OUT.
5. WORKING THROUGH THE WHEELWELL, ON THE DRIVER'S SIDE, LOOSEN THE EGR TUBE FROM THE MANIFOLD. THEN REMOVE THE NUTS ATTACHING THE MANIFOLD TO THE HEAD. REMOVE THE MANIFOLD. YOU MUST ALSO REMOVE THE MANIFOLD ATTACHING STUDS FROM THE HEAD. THE STUDS HAVE A 5mm HEX END ON THEM, A 1/4" DRIVE RATCHET AND A 5mm SOCKET WORK WELL FOR REMOVING THE STUDS.



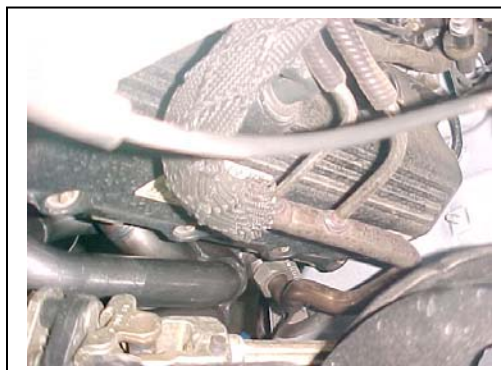
6. THE DIPSTICK MUST NOW BE REMOVED. IT HAS A SEPARATE MOUNTING BOLT ON THE HEAD AND USES AN O-RING SEAL AT THE BOTTOM. USE CARE TO PROTECT THE O-RING.
7. ON THE PASSENGER SIDE, AGAIN WORKING THROUGH THE WHEELWELL, REMOVE THE NUTS ATTACHING THE MANIFOLD TO THE HEAD THEN REMOVE THE MANIFOLD. REMOVE THE MANIFOLDS ATTACHING STUDS.



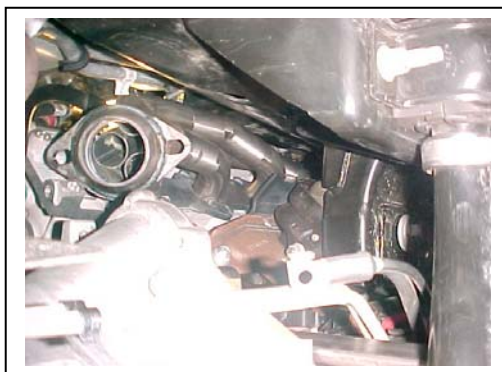
8. USING A SCRAPER REMOVE THE OIL SPOTS FROM HEAD SURFACE, USE CARE NOT TO

REMOVE THE OIL SPOTS FROM HEAD

9. USE SUPPLIED EGR FITTING AND INSTALL IT ON THE NEW HEADER.
10. NOTICE ON THE DRIVERS SIDE HEADER THE UPPER BOLT HOLES ARE SLOTTED. INSTALL THE GASKET WITH THE HEADER BOLTS LEAVING AT LEAST 3/8 OF INCH GAP. BEFORE INSTALLING THE HEADER.
11. APPLY A SMALL AMOUNT OF HI-TEMP SEALER TO THE EXHAUST PIPE FLARE THEN INSTALL THE DRIVER SIDE HEADER FROM UNDERNEATH THE VEHICLE. SOME TWISTING AND WIGGLING OF THE HEADER IS NECESSARY. LOOSEN EGR TUBE AT TOP OF ENGINE TO HELP INSTALL ON THE GIBSON HEADER.
12. BEFORE INSTALLING THE PASSENGER SIDE HEADER. TO AID IN REMOVAL MANIFOLD AND INSTALLATION OF HEADER ITS RECOMMENDED TO LOOSEN PASSENGER SIDE MOTOR MOUNT AND JACK MOTOR UP TO 1 TO 1 1/2" INCHES FOR INSTALL. REMOVE STARTER FOR REMOVAL OF STOCK MANIFOLD AND INSTALLATION OF GIBSON HEADER NOTICE ON PASSENGER SIDE HEADER, THERE ARE SLOTTED BOLT HOLES ON THE FLANGE. INSTALL NEW BOLTS WITH THE GASKET LEAVING AT LEAST 3/8 OF INCH GAP THEN INSTALL THE HEADER. THEN LOWER AND TIGHTEN MOTOR MOUNT.



13. APPLY A SMALL AMOUNT OF HI-TEMP SEALER TO THE EXHAUST PIPE FLARE, THEN INSTALL THE PASSENGER SIDE HEADER THROUGH THE WHEELWELL. ATTACH USING THE SUPPLIED BOLTS AND GASKETS. APPLY A SMALL AMOUNT OF ANTI-SEIZE TO THE THREADS OF THE BOLTS BEFORE TIGHTENING.



14. RE-CONNECT THE EXHAUST SYSTEM TO THE NEW HEADERS USING THE HARDWARE PROVIDED. (RE-CONNECT DRIVE SHAFT WHERE APPLICABLE)
15. RE-INSTALL THE INNER WHEELWELLS (IF REMOVED). CHECK TO ENSURE THAT THERE ADEQUATE CLEARANCE ON ALL BRAKE LINES, WIRE LOOMS, A/C LINES, ETC. IT IS RECOMMENDED THAT YOU REMOVE THE PASSENGER SIDE WHEELWELL FLAP.
16. RE-INSTALL THE FRONT WHEELS AND TORQUE TO FACTORY SPECS. (SEE OWNER'S MANUAL) .
17. RECONNECT THE BATTERY.
18. RE-CHECK EVERYTHING!
19. START THE ENGINE, CHECK FOR LEAKS AND TEST DRIVE. THEN LET THE ENGINE COOL AND THEN RE-TORQUE THE HEADER BOLTS.

20. PERIODICALLY CHECK AND RETIGHTEN THE HEADER BOLTS.

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PARTS LIST

HEADER ASSEMBLY

HEAD GASKET

BOLT KIT



