

# **GP126S-1** 5.4L STAINLESS HEADER

HAS NO EGR FITTING

## FORD EXCURSION 5.4L 2/4WD FORD SUPERDUTY TRUCK F250HD/F350HD 5.4L 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.

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)

<sup>1</sup>/<sub>2</sub>" 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 (ULTRA COPPER BY PERMATEX)

GOOD RUST PENETRANT

#### INSTALLATION INSTRUCTIONS

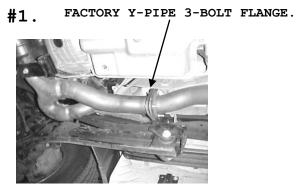
**NOTE:** INSTALLATION OF THESE HEADERS REQUIRES AN ADEQUATE WORK SPACE, GENERAL MECHANIC'S TOOLS, GENERAL MECHANIC "KNOW-HOW" AND A REASONABLE DEGREE OF EXPERIENCE.

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.) REMOVE THE NUTS CONNECTING THE FACTORY Y-PIPE TO THE MANIFOLDS. UN-BOLT THE THREE BOLT FLANGE LOCATED IN FRONT OF THE CONVERTER. BE CAREFULL NOT TO DAMAGE THE FACTORY GASKET BECAUSE YOU WILL RE-USE IT. **SEE PICTURE #1 & #6** 

#6.



FACTORY FLANGE CONNECTION. DISCONNECTING POINT.



**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.

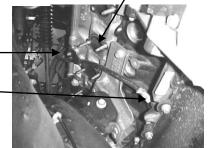
**5.** WORKING THROUGH THE WHEELWELL, ON THE DRIVER'S SIDE, LOOSEN THE EGR TUBE FROM THE MANIFOLD. **SEE PICTURE #4.** THEN REMOVE THE NUTS ATTACHING THE MANIFOLD TO THE HEAD. REMOVE THE MANIFOLD. YOU MUST ALSO REMOVE THE MANIFOLD ATTACHING STUDS FROM THE HEAD. THE STUDS HAVE A 5mm HEX END ON THEM, A 1/4" DRIVE RATCHET AND A 5mm SOCKET WORK WELL FOR REMOVING THE STUDS. **SEE** 



REMOVE THE DIP STICK AT THIS POINT. BE CARFULL OF

O-RING

#2. FACTORY STUDS MUST BE REMOVED.

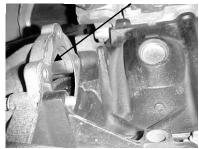


**6.** THE DIPSTICK MUST NOW BE REMOVED. IT HAS A SEPARATE MOUNTING BOLT ON THE HEAD AND USES AN O-RING SEAL AT THE BOTTOM. USE CARE TO PROTECT THE O-RING. **SEE PICTURE #2 ALSO.** 

**7.** FOR AN EASIER REMOVAL AND INSTALLATION OF THE GIBSON HEADERS REMOVE THE THREE BOLTS HOLDING THE STARTER TO THE BELL HOUSING AND REMOVE THE STARTER. THEN LOOSEN THE PASSENGER SIDE MOTOR MOUNT AND ROTATE IT DOWN TO GAIN CLEARANCE TO REMOVE THE MANIFOLD. **SEE PICTURE #5** 

#5.

STARTER SUPPORT ON THE BELL HOUSING



**8.** 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.

**9.** USING A SCRAPER REMOVE ALL CARBON DEPOSITS AND HIGH SPOTS FROM HEAD SURFACE, USE CARE NOT TO GOUGE THE ALUMINUM HEADS.

**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.IT MAKES FOR AN EASIER INSTALLATION. **SEE PICTURE #3** 



GASKET WITH BOTTOM BOLTS INSTALLED.

**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. TIGHTEN THE HEADER BOLTS FROM THE CENTER OUT.

**12.** BEFORE INSTALLING THE PASSENGER SIDE 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. IT MAKES FOR AN EASIER INSTALLATION. **SEE PICTURE #3** 

**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. TIGHTEN THE HEADER BOLTS FROM THE CENTER OUT.

**14.** RE-INSTALL THE FACTORY Y-PIPE. APPLY A SMALL AMOUNT OF HI TEMP GASKET SEALER TO THE FACTORY GASKET AND THREE BOLT FLANGE. THEN CONNECT AND TIGHTEN. **SEE PICTURE #1.** CONNECT THE EGR TUBE TO THE GIBSON HEADER.

**15.** RE-CONNECT THE EXHAUST SYSTEM TO THE NEW HEADERS USING THE HARDWARE PROVIDED.(RE-CONNECT DRIVE SHAFT WHERE APPLICABLE)ON 4 WHEEL DRIVE MODELS.

**16.** 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.

17. RE-INSTALL THE FRONT WHEELS AND TORQUE TO FACTORY SPECS. (SEE OWNER'S MANUAL)18. RECONNECT THE BATTERY.19. RE-CHECK EVERYTHING!20. START THE ENGINE, CHECK FOR LEAKS AND TEST DRIVE. THEN LET THE ENGINE COOL AND THEN RE-TORQUE THE HEADER BOLTS.

**21.** IT IS RECOMMENDED AFTER THE INITIAL INSTALLATION THAT YOU RE-TOURQE THE HEADERS AT ABOUT 200 MILES. THEN 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
- (2) HEADER GASKETS (HEADER TO HEAD FLANGE)
- (4) COLLECTOR BOLTS AND NUTS, WASHERS
- (16) 8mm X 1.25mm BOLTS WITH STAR WASHERS

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.

<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 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 SO NOT HESITATE TO CALL OUR TECHNICAL LINE IF YOU HAVE A QUESTION OR EXPERIENCE A PROBLEM.

WE TRULY WISH TO HAVE ONLY SATISFIED CUSTOMERS