

PART # 89420, 89426 & 89428 W/O A.I.R. PART # 89421, 86421 & 81428 W/ A.I.R. INSTRUCTION SHEET FORD F150 & BRONCO 5.8L 2 & 4WD

AUTION

This is a custom designed <u>exhaust header system</u>, designed for this particular application (s). Do not bend, bang, cut, dent, drill or heat any portion of this header! Any alteration other than those suggested in this instruction sheet will void the Hedman Lifetime Guarantee!

To prevent leaks, install your headers using Hedman Hedders exhaust gaskets <u>ONLY</u> and a spray copper gasket sealant.

## **BEFORE STARTING INSTALLATION:**

It is necessary to raise the vehicle at least 36 inches from the ground. A floor hoist is recommended, if not available, use a hydraulic floor jack with jack stands. <u>DO NOT USE A BUMPER JACK!</u>

**WARNING!** Breaking in an engine with ceramic-coated headers WILL result in damage to the coating and will VOID all warranties. Ceramic-coated headers require several heat cycles to fully cure before they will withstand extreme heat. Hedman Hedders recommends using a cast-iron exhaust manifold or an old header to break in new engines to avoid coating damage.

## INSTALLATION INSTRUCTIONS:

- 1. Disconnect ground cable from battery.
- Use penetrating oil on all nuts and bolts to be removed. This will prevent the possibility of broken or stripped nuts and bolts.
- Removal of spark plugs is recommended to avoid breakage during disassembly and installation.
- 4. Un-bolt exhaust pipes from both exhaust manifolds.
- 5. Un-clamp and remove diverter valve and related plumbing.
- Remove E.G.R. tube in front of right side exhaust manifold & valve.
- For vehicles with AIR pump only: Using penetrating oil on each
  of the eight air injection fittings, carefully remove air injection
  log from right and left stock exhaust manifolds and set aside.
- Unbolt and remove both exhaust manifolds.
- 9. Clean and inspect all sealing surfaces before assembly.
- **10.** It may be necessary to unbolt vacuum canister and set aside. When installation is complete, rebolt in original position.

### **LEFT SIDE:**

- With gasket in place, slide the left side header into position with dipstick extending up between exhaust ports #3 and #4. Start rear manifold bolt at this time. Do not tighten.
- Start bolts #1, 2, 3, 4 and 7 (counting from front of engine). Do not tighten.
- Re-attach dipstick bracket to the 6th bolt hole back using a 1-1/8" tube spacer provided, and stock exhaust manifold bolt.
- Re-attach additional bracket to the 5th hole back using a 1-1/8" tube spacer provided, and stock stud bolt.
- For vehicles with AIR pump only: Carefully install the air injection into fittings on the left side of the header. Caution! There may be some minor realignment needed. Make sure all

- fittings are started before tightening.
- Tighten all bolts evenly at this time.
- 7. Replace spark plugs and wires.
- 8. Brake lines may be close. If so, loosen bracket bolt that holds brake line distribution block in place and push line away from left header then tighten.

#### **RIGHT SIDE:**

- With gasket in place, slide the right side header in place and start rear bolt.
- 2. Start balance of bolts (except for the 3rd bolt back) and tighten.
- 3. Replace spark plugs and wires.
- 4. Install original E.G.R. tube into header. Use Vise-grips or large pliers to support the manifold fitting to eliminate possible damage.
- Replace E.G.R. tube and valve at this time.
- 6. In the 3rd bolt hole back, replace A.I.R. diverter valve, plumbing and intake manifold support bracket, using stock manifold bolt and 1-1/8" spacer provided and tighten.
- 7. For Vehicles with AIR pump only: Carefully install the air injection log into right header, as instructed for the left header, Make sure that all smog hoses, valves and brackets are secure. This will complete the air system hook-up.
- Re-attach stock exhaust exhaust system to header using 3/8-16x2-1/2" bolts and nuts provided.
- 9. Make sure all brake and fuel lines have adequate clearance.
- 10. Reconnect all parts including battery.
- 11. Start engine, test drive vehicle, allowing engine to gain normal operating temperature. Check for leaks and new or unusual noises. After test drive, re-tighten all header nuts and bolts.

## ENJOY YOUR HEADERS WHILE COMBINING INCREASED FUEL ECONOMY WITH BETTER PERFORMANCE.

#### **SPECIAL INSTRUCTIONS!**

After installing your headers it is very important that your exhaust system be suspended properly. As indicated in the drawing below you must place hangers as close to the header collector as possible. Rubber hangers should be used to allow the front of the system to flex with the engine torque. A hanger is needed before and after the muffler (s). When your exhaust system is unbolted from the header collector, it should remain suspended all by itself. Your Headers Are Not designed to support your exhaust system. Failure to follow these instructions will most likely result in cracks around the area where your primary tubes and collector are welded together, and will nullify your "Lifetime Guarantee".

# **DO NOT WRAP YOUR NEW HEADERS!**

The use of thermal wraps will drastically shorten the life of your Headers, and will void the Hedman "Lifetime Guarantee".

Affix E.O. Sticker Next to Engine Specification Sticker Located on Firewall, Radiator Support, Air Cleaner, or Fender Panel in Engine Compartment.

Collector Reducer Metal Hanger Metal Hanger Muffler

**WARNING:** Removal of catalytic converters and other factory air pollution control devices is illegal. We recommend you adhere to your state's local laws. Our testing indicates performance is not significantly affected by these devices.