

# P/N 4109HKR (painted) & 4109-1HKR (ceramic coated) SUPER COMPETITION PONTIAC HEADERS 1970-81 Firebird/Trans Am (326-455)

Thank you for making HOOKER HEADERS your choice in a <u>high-performance exhaust system</u>. Extensive dyno/track testing has enabled HOOKER to offer the most advanced design in exhaust systems. The installation, while not complex, will take a certain

enabled HOOKER to offer the most advanced design in exhaust systems. The installation, while not complex, will take a certain amount of time. However, the additional horsepower and improved performance will more than justify your efforts. Proper installation and maintenance will ensure long life and maximum performance from your Hooker exhaust system.

- **NOTE:** Exhaust systems can also be fabricated using; Hooker Super Competition Aero Chamber mufflers, Maximum Flow mufflers, Competition turbo mufflers, or header type Hooker mufflers.
- **NOTE:** Some factory engines do not have provisions for bolts to secure the front and rear runners of the stock cast iron exhaust manifolds to the cylinder heads. If your engine is one of these, holes must be located, drilled, and tapped for your Hooker Headers to seal properly.
- 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. HOOKER recommends using a cast-iron exhaust manifold or an old header to break in new engines to avoid coating damage.

### **BEFORE STARTING**

Your vehicle must be raised a minimum of 36 inches. A floor hoist is ideal. If no hoist is available, we strongly urge the use of axle stands as a safety measure. **CAUTION!** YOUR CAR SHOULD NOT BE SUPPORTED ON A BUMPER JACK.

## INSTALLATION PROCEDURE – PLEASE READ CAREFULLY

### LEFT SIDE:

- 1. Disconnect the battery cable to prevent damage to the electrical systems.
- 2. Unbolt the headpipes from the stock exhaust manifolds and remove.
- 3. Remove the exhaust manifold, starter motor, clutch cross shaft, and reverse lockout rod from the transmission.

**NOTE:** On 1979 models, the brace between the lower "A" arm bracket and the subframe must be modified to clear the header tube. See **Figure A**.

- 4. Position the flange gasket and start the rear bolt on the center port.
- 5. Starting from below, work the header up through the chassis into position. Start the front header bolt.
- 6. Replace the clutch cross shaft and starter. It may be necessary to re-route the starter wires to ensure adequate clearance of the header tubes.
- 7. Replace the reverse lockout rod. If the rod is too close to the headers, bend it upward slightly for increased clearance (Figure B). Late models may require modifying the position of the lockout rod. See Figure C.

NOTE: On 1979 models with manual transmission, the reverse interlock rod must be modified for header clearance.

- 8. To retain the stock heat stove assembly, modify according to Figure D and reinstall.
- 9. To retain the vacuum operated heat riser (butterfly) valve, it will be necessary to fabricate an adapter section. Cut the last 4" off of the exhaust manifold end of the stock headpipes. Sandwich the heat riser valve (with gaskets) between the pieces of the stock headpipe, making sure the flanges are oriented to match the surface configuration of the valve assembly and bolt together. Trim the reducer the proper length (so its diameter equals the headpipes). Weld one headpipe stub to the reducer and bolt the reducer to the collector. Fabricate a piece to connect the rear headpipe stub to the stock exhaust system. See Figure E.

## **RIGHT SIDE:**

- 1. Remove the stock exhaust manifold. Remove the entire oil filter assembly from the block.
- 2. Position the flange gasket and start the rear bolt on the center port.
- 3. Starting from below, work the header up into position. Replace the oil filter mount onto the block while the header is still loose.
- 4. Place the slotted hole in the flange over the bolt in the head, slide back into position, and start all bolts.
- 5. Replace the oil filters.
- 6. To connect the collectors to your stock exhaust system, purchase Hooker Reducer kit (P/N 11030HKR). Bolt the reducers (with gasket) to the collectors. Line up the headpipes, cut to the correct length, and weld to the reducers.
- 7. Connect the battery, start the engine, and check for leaks. Be sure all brake lines, fuel lines, and electrical wires have sufficient clearance. Reroute, as necessary.
- 8. When finished, give your vehicle a test drive, checking carefully for any new noises. After several days of driving, retighten all bolts.

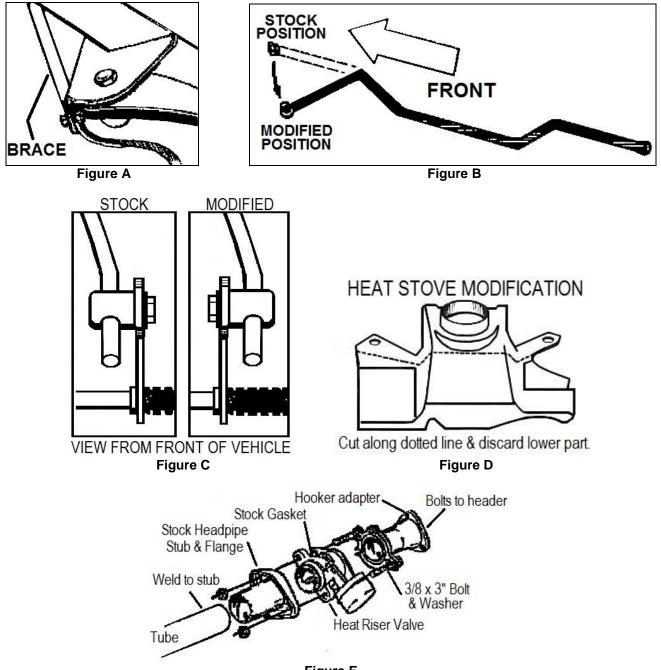


Figure E