

## Installation Instructions #70-3221 01/04 Mustang 3.8L V6 Long Tube Headers with EGR

## Before beginning installation, read and make sure you understand all instructions, and have necessary equipment at hand.

## WARNING:

Before working on the vehicle, make sure that it is well supported by jack stands or ramps of sufficient load capacity for the weight of the vehicle. NEVER work on any vehicle which is supported only by its service jack.

- 1. Disconnect battery. Raise vehicle on lift (preferred), or on jack stands or ramps.
- 2. Remove rubber air intake tube. Remove EGR pipe.
- 3. Disconnect all four O2 sensors. Unbolt Y-pipe from exhaust system, slide exhaust to rear. Unbolt Y-pipe from exhaust manifolds and remove. Disconnect steering shaft from steering rack and swing down and out of the way.
- 4. Support engine and remove left motor mount and motor mount bracket. Remove only the lower nut from right motor mount. Remove exhaust manifolds and manifold studs. Clean manifold gasket surfaces of cylinder heads. Reinstall an original stud into the forward top hole of each head. Install to full depth but do not tighten.
- 5. Raise left side of engine and remove dipstick tube. Do not bend dipstick tube. If the dipstick tube does not have the correct bend at the lower end, it will hit the crankshaft.
- 6. With engine in this position, slide left header into place and install dipstick tube through header and into block. Temporarily hook header on the forward stud. Swing steering shaft back into position, but do not install on steering rack yet. Return engine to level support and reinstall motor mount and bracket to block. Do not install lower nut yet.

Apply a high temperature, O2 sensor safe gasket sealer such as Permatex Ultra-Copper on one header gasket and bolt up left header. Remove temporary stud and replace with header bolt, but *do not tighten header bolts yet*.

- 7. Remove bolts from transmission mount to transmission and slide trans to the left and slide right header into position. Apply the high temperature gasket sealer to the remaining header gasket and install gasket and header onto the temporary stud. Install the remaining header bolts, remove the temporary stud and replace with a header bolt. *Do not tighten the bolts yet.*
- 8. Reinstall motor mount lower nuts and transmission mount bolts. Bolt steering shaft to steering rack.
- 9. Confirm alignment of collectors and snug header bolts. Torque header bolts from center out. Final torque should be 18 ft.lbs.
- 10. Loosely install O2 sensors in fittings in collectors and measure amount of wire extension necessary. Remove O2 sensors and extend wires per enclosed instructions. Install O2 sensors. Re-install EGR pipe.
- 11. Reinstall rubber air intake tube.

Header installation is complete, ready for Y-pipe/exhaust system. Remove jack stands and lower vehicle. Re-connect battery and start engine. Check for exhaust leaks, rattles, clearance problems. Correct if necessary.

## NOTE:

There may be some lubricant left in the tubes from the mandrel bending process. You may smell this lubricant burning off for the first few days of using your new headers. This is normal and will cause no harm and will disappear. After a few days of operation, check all fasteners. Retorque as necessary.