

# **INSTALLATION GUIDE** 68140, 68143, 68146

LS ENGINE INTO 1968-72 Chevelle, El Camino, Cutlass, Skylark GTO, & Related GM A-Body Cars MID-LENGTH ENGINE SWAP HEADERS

This is a custom designed exhaust header for the applications listed above. Do not bend, bang, cut, dent, drill or heat any portion of this header! Any alteration other than those noted in this instruction sheet will void the Hedman Lifetime Guarantee! To prevent leaks, install your headers using Hedman Hedders exhaust gaskets ONLY, coated with a quality copper gasket sealant spray.

### **BEFORE STARTING INSTALLATION:**

These headers are designed to work with Trans-Dapt Performance Products \*4600 (for 4L60/70E) or \*4601 (for TH350/700R4) Engine Swap Mounts designed specifically for installing an LS into a 1968-72 GM A-Body. While competitive products may work, Hedman Hedders cannot ensure a successful installation of these headers when attempting to install with any other engine mount kit. Fit issues or an incorrect driveline angle may result if components are mixed.

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. **DO NOT USE A BUMPER JACK!** 

## **INSTALLATION GUIDE:**

Since this project involves a non-factory engine transplant, we are unaware if the LS is currently on an engine stand, engine hoist or bolted to the chassis. This installation guide has been prepared as though the LS engine is already bolted to the vehicle, and has been prepared to receive the new LS swap headers. There are many steps that must be performed to properly install an LS into your 68-72 A-Body, and this installation guide is limited to the installation of the headers only. Please refer to an engine swap guide, or seek the assistance of a qualified auto mechanic regarding any other aspect of your engine swap project.

- 1. Read all the accompanying literature in this header's hardware packet. Carefully read and follow the coated header break-in instructions.
- 2. If connected, disconnect the battery and any wiring that may interfere with installation.
- 3. Remove all spark plugs wires from the spark plugs. To provide additional clearance, spark plugs may also be removed.
- 4. Remove engine oil dipstick and tube.
- 5. Raise the front of the vehicle and support it with jackstands.

#### DRIVER SIDE:

- 6. Remove the driver side engine mount connecting bolt and raise the driver's side of the engine with a hoist or floor jack.
- 7. Position the driver side header from below and insert the front and rear header bolts only (just a few threads).
- 8. Pull the header flange away from the head and hang a header gasket between the head and header flange using the two bolt hooks built into the Hedman gaskets.
- 9. Lower the engine back down, then reinstall and tighten the engine mount connector bolt to specification.
- 10. Install the remaining driver side header bolts and tighten all bolts, working from the inner to outermost bolts.

#### PASSENGER SIDE:

- 11. Lift the passenger side header into position from below, and loosely insert the front and rear header bolts only (just a few threads). Pull the header flange away from the head and hang a header gasket between the head and header flange using the two bolt hooks built into the header gaskets.
- 12. Install the remaining passenger side header bolts. Tighten all bolts, working from the inner to outermost bolts.

## CONNECTING HEADERS TO EXHAUST SYSTEM:

- 13. Bolt the socket end of the 45° bend header reducers, included with these headers, to the ball collectors on the headers. These reducers (collector adapters) will need to be welded to your vehicle's exhaust system.
- 14. Once the exhaust system is complete, reconnect the battery and all other parts previously removed or disconnected (i.e. dipstick/tube). Closely inspect headers and system to ensure there is proper clearance for all fuel lines, brake lines, wiring, steering components and shift linkage.
- 15. Start engine and allow it to reach normal operating temperature. Check for leaks. Test drive vehicle and listen for any new or unusual noises. After test drive allow engine to cool then re-torque all header bolts. If you are installing 68140 uncoated headers without first removing the temporary protective black paint, the coating will begin to smoke when the engine heats up. The coating is non-flammable and the smoke will stop after a few minutes, once the coating burns off.

IMPORTANT: Refer to your local state or county emission laws regarding engine swaps before performing this installation.

## 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".

## PROPER SUSPENSION OF YOUR ENTIRE EXHAUST SYSTEM IS EXTREMELY IMPORTANT!

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".

Collector Reducer Metal Hanger Metal Hanger Muffler Muffler

website: www.hedman.com • email: techsupport@hedman.com