

A PerTronix Performance Brand ~ <u>www.pertronixbrands.com</u> ~ 909 599-5955 Installation Instructions & Warranty Information D3349 ~ 1964-67 GM S-Body, LS Engine Swap Long Tube Headers





This product is designed for swapping a non-original engine into a vehicle that did not offer it. Laws vary by state regarding emissions regulations for engine swaps. This product is illegal for Street or Off Highway use on any 1975 or newer vehicle originally equipped with a catalytic converter and may further be illegal depending on state or federal engine swap emissions laws regardless of vehicle year and would therefore only be legal for Closed Course Competition use.

#### **WARNING**:

This product can expose you to chemicals including Lead, Nickel, Cadmium and Chromium which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

## PLEASE READ BEFORE PROCEEDING

PerTronix<sup>©</sup> thanks you for choosing a Doug's Headers Product. To realize the potential of Doug's Headers engineering and excellent fit, Please Read and Understand these instructions completely prior to starting the installation.

Check that you received all the parts listed on the parts list, if you have any concerns, please contact PerTronix before continuing. Headers will have the part number stamped in the flange.

Many factors affect he installation of exhaust headers, including worn or aftermarket motor mounts, previous accident damage, aftermarket cylinder heads that may have relocated port or spark plug locations, suspension and steering changes, sagging of original unibody structures due to age.

Coating Notes: Coatings can be marred during installation if you are not careful. If you are breaking in a new motor, the extreme heat can alter the appearance of the coating and this is not a warranty issue. We recommend breaking in new motors with stock manifolds or an old set of headers.

We use sealing beads on all our headers. The raised bead creates a better seal virtually eliminating leaks if installed properly. It is important to install all header bolts lightly snug and then tighten to factory torque specs starting in the center and working outward.

Before starting, allow the vehicle to cool, disconnect the battery, and spray a penetrating oil on all hardware and fittings that will need to be removed. Once you remove your manifold, clean the sealing surface on the head of any old gasket debris or carbon build up.

Work Smart – Work Safe! Most Header and Exhaust Installation are best performed on a lift. If a lift is not available, raise the vehicle and support on quality Jack Stands on level ground. Do not rely on a jack!

### NOTES:

- 1. These headers are designed specifically to work with Doug's Engine Swap motor mount brackets #SK103. We cannot guaranty fit with any other brand.
- 2. Will not work with factory column shifters. If using a column shift automatic you will need to fabricate linkage or use a cable conversion kit. If using a manual trans we recommend a floor shifter and hydraulic clutch conversion.
- 3. Doug's D3349 are designed to be used with most GM automatic transmissions as well as T56 and T56 Magnum stick shift. See Doug's transmission crossmember #SKC1021 for more information. Minor trimming of bellhousing May be required for the 4L80/4L85 transmission.
- 4. Doug's offers a bolt on 3" Exhaust system for this header application, part #DES103.
- 5. Angle Boot Spark Plug wires are required with these headers. We recommend PerTronix #808224HT or 828224HT.

## DISASSEMBLY

- 1. We recommend that the Doug's motor mounts and trans crossmember installation are finished before attempting to install the header. Disconnect the negative battery cable from the battery.
- 2. If a car lift is not available, raise the vehicle 2 feet or higher and support it with ad equate safety stands. Make sure the vehicle is on a flat solid surface and is stable.
- 3. Remove the spark plug wires and plugs, then the Oil dipstick and tube.
- 4. If the motor has existing manifolds, remove them, and clean the mating surface on the cylinder heads.

#### INSTALLATION

- 1. If using a 4L80/4L85 transmission you will need to trim the sides of the bellhousing to match the profile of the engine block to clear the headers.
- 2. It may be necessary to relocate the brake proportioning valve. GM used at least 3 versions and it may interfere with the headers.
- 3. Apply a dab of anti-seize to the supplied header bolts.
- 4. Starting with passenger side, slip the header in place working from below and hold in place with 1 header bolt.
- 5. From above slip the header gasket in place and then start the remainder if the header bolts and lock washers.
- 6. Tighten all header bolts evenly working from the center out.
- 7. Slip the Driver's side header into place from below. As with the passenger side, install the gasket and all the header bolts, tightening from the center out.
- 8. Reinstall the dip stick tube, spark plugs and wires.
- 9. Install your 02-sensor, use a dab of Anti Seize being careful to not get any on the 02-sensor probe.
- 10. Install the Doug's Exhaust system to complete the installation.

### IMPORTANT CHECK LIST

- Be sure that all brake lines, transmission lines, and fuel lines are clear of headers and/or connector pipes.
- All spark plug wires, battery cables, or other electrical components should be clear of headers and/or connector pipes.
- If dipstick tube was removed, make sure it is installed properly and that the dipstick has been replaced.
- > Double-check the tightness of all bolts including brackets and accessories.

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#### START THE ENGINE

Start the engine and allow it to warm up to operating temperature. Check for any unusual noises or exhaust leaks. If everything is OK, stop the engine and tighten all bolts while the engine is still warm. **NOTE:** Check the bolts periodically to make sure they have not loosened. Re-tighten after the first 500 miles and then again at 1000 miles

PARTS LIST:

- 1 Left side header
- 2 Header gasket

12 Lock washer, 3/8"

Right side header

Header bolts M8-1.25 x 25MM (1" long)

# **DOUG'S HEADERS LIMITED WARRANTY**

All Doug's Headers and Exhaust products are guaranteed, to the original purchaser, to be free of defects in material and workmanship for one year from date of purchase. This warranty covers the replacement or repair of the product and does not cover the cost of removal and installation, customer applied coatings, or Any discoloration or corrosion of finished surfaces.

Damage or product failure resulting from collision, improper installation, off road use, road hazards, the use of exhaust insulating wrap, or rust occurring after installation is not covered by the warranty. This warranty extends only to the original purchaser.

Should a part be deemed defective, it should be returned to the original selling retailer and must be accompanied by the sales receipt. If there is no retailer in your area, contact PerTronix direct for a return authorization and return the part prepaid to the factory for inspection. PerTronix reserves the right to replace or repair the alleged defective part and return the part freight collect.