

HEADER INSTALLATION INSTRUCTIONS

D3321

APPLICATION

1982-1992 CAMARO

265-400 Small Block



WARNING: These headers are legal for Off Highway use (except in California or states that have adopted California emission standards) or Racing use (which may never be used on a Highway), or for use on pre emission controlled motor vehicles/motor vehicle engines (pre 1966 domestic vehicles certified to California standards, pre 1968 domestic vehicles certified to Federal standards and all pre 1968 Foreign vehicles) **Only**.

PerTronix® thanks you for choosing **DOUG'S HEADERS**, the best fitting, highest quality header on the market. In order to realize the full potential of our good fit, please read and understand these instructions completely prior to starting work.

CHECK TO MAKE SURE YOU RECEIVED THE PROPER PARTS FOR YOUR APPLICATION. THE HEADER NUMBER WILL BE STAMPED ON THE ENGINE FLANGE. IF YOU ARE UNSURE YOU HAVE RECEIVED THE PROPER PARTS CALL BEFORE YOU START WORK.

BE SURE TO WORK SAFE! WHENEVER YOU WORK UNDER THE VEHICLE BE SURE THAT IT IS LOCATED ON LEVEL, SOLID GROUND AND IS SUPPORTED BY ADEQUATE SAFETY STANDS!

REMEMBER: HOT ASPHALT WILL NOT SUPPORT MOST JACK STANDS!

Many factors affect the installation of headers, some of which are broken or aftermarket motor mounts, accidents that impact the configuration of the frame, and/or the installation of different engines or aftermarket cylinder heads. Most installations require some welding. If you are uncomfortable with welding operations, we recommend that you contact a professional exhaust system specialist to install your new headers.

Attention Customers breaking in new engines: Due to the extreme heat generated during the break-in process, the appearance of the ceramic coating may be altered in certain areas. The protection characteristics and thermal barrier properties of the coating is never compromised. It is recommended that a cast iron manifold or old set of headers be used for this process.

Notice: The coating of these headers can be marred or scratched during installation. If the header needs to be returned and is damaged, you will be charged for recoat.

DISASSEMBLY

1. 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 adequate safety stands. Make sure the vehicle is on a flat solid surface and is stable.
3. Remove oil dipstick tube, alternator and its brace (on early cars, A/C pump and brace on later models). Remove the starter. clutch linkage and fan shroud bolts.
4. Unbolt stock head pipes from the exhaust manifolds and push aside.
5. Note the spark plug wire locations and remove them from the spark plugs. Use a twisting motion while pulling the spark plug boot off of the spark plug. Be very careful not to damage the spark plug boot and do not pull on the wire itself.
6. Remove the spark plug wire looms and any brackets attached to the exhaust manifolds. Remove the spark plugs.
7. Remove the exhaust manifold bolts and remove the exhaust manifolds.

8. Replace the spark plugs finger tight so debris will not get into the cylinders while cleaning the head surface. We recommend the use of a gasket scraper, wire brush, and sanding block to adequately clean the surface.
9. After cleaning is complete remove the spark plugs again.
10. Modify the A/C bracket as shown in Figure 1, Page 3.
11. Remove the temperature sensor and reinstall using a 45° fitting to point it downward.
12. Note: For adequate clearance it may be necessary to trim ear off of starter.

ASSEMBLY

1. Apply a **THIN** film of Ultra Copper Hi-Temp Sensor-Safe Silicone Sealer to each side of the header gaskets and stick the gaskets to the header flanges. Masking tape can be used to help hold the gasket to the header.
2. Remove left side motor mount bolt and jack motor up approximately 1-1/2" – 3".
CAUTION: Be sure to place a board between the oil pan and the jack.
3. Starting from below, work header up through chassis into position but do not install any bolts yet.
4. Lower the motor and check for header clearance. Replace motor mount bolt.
5. Using the supplied header bolts and lock-washers, apply a small amount of anti-seize to the bolts and start the most restrictive bolts first. Tighten to a final torque of 35 ft. lbs.
6. Install the spark plugs and attach the appropriate wire to the spark plug and reattach the spark plug wire looms. It may be necessary to reroute wires to clear the headers.
7. Remove right side motor mount bolt and jack motor up approximately 1-1/2" – 3".
CAUTION: Be sure to place a board between the oil pan and the jack.
8. Starting from below, work header (without R-4 headpipe) up through chassis into position but do not install any bolts yet.
9. Lower the motor and check for header clearance.
10. Apply a small amount of anti-seize to 2 stock bolts. Install them in the front 2 bolt holes with the furnished spacers to hold brackets in the stock location.
11. In the remaining bolt holes, use the supplied header bolts and lock-washers. Apply a small amount of anti-seize to the bolts and start the most restrictive bolts first but do not tighten.
12. Replace motor mount bolt and fan shroud bolts.
13. Reinstall the starter and install the R-4 headpipe in slip tube on main body of header.
14. Tighten header bolts to a final torque of 35 ft. lbs.
15. Reinstall the dipstick tube, clutch linkage and the alternator.
16. Install the spark plugs and attach the appropriate wire to the spark plug and reattach the spark plug wire looms. It may be necessary to reroute wires to clear the headers.
17. Connect the negative battery cable.

Note 1: To retain oxygen sensor, purchase Doug's Reducer Part No. H7233.

START THE ENGINE

Start the engine and allow it to warm up to operating temperature. Check for any unusual noises or exhaust leaks. If every thing 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.

IMPORTANT CHECK LIST

- Be sure that all brake 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.

PARTS LIST

<u>Qty</u>	<u>Description</u>
1	Left side header
1	Right side header
2	Header gaskets
2	Collector gaskets
2	Reducers
12	3/8"-16 x 1" header bolts
18	3/8" lock-washers
6	Nut, hex, 3/8"-16
6	Screw, cap, hex head, 3/8"-16 x 1-1/4"
2	1-1/4" Spacer

