

Southwest Speed Header Installation Instructions (# 440-2222)

Ceramic Hot Coated

For: 1965-89 Chevrolet Passenger Car & Wagon

1967-81 Camaro

1964-87 Chevelle, El Camino

1970-87 Monte Carlo

1968-79 Nova

Please read and understand these instructions completely prior to starting work.

CHECK TO MAKE SURE YOU RECEIVED THE PROPER PARTS FOR YOUR APPLICATION. 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. Please use the ceramic header installation kit that is included with this kit. This will reduce the possibility of getting scratches, nicks or discoloration of the headers while installing them.

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. Apply penetrating oil to all nuts and bolts to be removed.
4. Remove and mark all spark plug wires and then remove all spark plugs.
NOTE: Grasp spark plug boot, not the wire, and use a twisting motion while pulling the wire from the plug.
5. Disconnect the head pipes from the exhaust manifolds and remove the manifolds.
6. Remove the alternator, dipstick, dipstick tube, clutch linkage, and oil filter. Remove the starter if needed. On late model cars, remove the power steering bracket.
7. On cars equipped with air conditioning, unbolt the compressor and lay aside.
8. Some models may require the floor board heat shield removal for adequate clearance.
9. **Note: These headers require removal or modification of locking steering column – if equipped.**
10. Early models will require a conversion screw-on type filter.
11. The clutch linkage will need to be modified as in **Illustration A.**
12. Models with generator/alternator on the left side may need to purchase different mounting brackets, see **Illustration B.**
13. On some year models, it will be necessary to remove the two struts that bolt to the sub-frame.
14. Replace the spark plugs finger tight so debris will not get into the cylinders during the cleaning operation.
15. Remove any gasket material or any carbon deposits that remain on the head surface. The use of a gasket removal agent will ease the removal of any gasket material. We recommend the use of a sharp gasket scraper to remove the bulk of material and to finish the operation with a sanding block to provide a clean flat sealing surface.
16. After cleaning is complete remove the spark plugs again.

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. Note: Some year models may require the engine to be raised slightly by removing the motor mount bolt on either side. Use a board between the pan and jack.
3. Install the headers from the bottom of the vehicle. Slide the headers into place and install a bolt at either end of the header to hold them in place.
4. Lower the motor, replace the motor mount bolts and check for header clearance.
5. Using the supplied header bolts, 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. Replace the clutch linkage, oil filter, dipstick tube and dipstick and alternator.
7. On late model cars with power steering, use the spacer provided and the long bolt from the stock exhaust manifold to remount the power steering. **See Illustration C.**
8. Replace the starter and connect the wires. Reroute the wires as needed for clearance.
9. Install the reducers and determine the connection to the exhaust system.
10. Weld the reducers to the exhaust system and install them onto the headers utilizing the gaskets and bolts supplied.
11. If the spark plugs have a lot of miles on them, now would be a good time to replace them. When you install the spark plugs, apply a **small** amount of anti-seize to the threads.
12. Install the spark plugs and connect the wires to the proper plug. It may be necessary to reroute wires to clear the headers.
13. Check to make sure that all the wiring, brake lines, hoses, etc. are clear of the headers or any exhaust component.
14. Make sure all necessary brackets and accessories have been replaced and secured.
15. Connect the battery cable.

START THE ENGINE

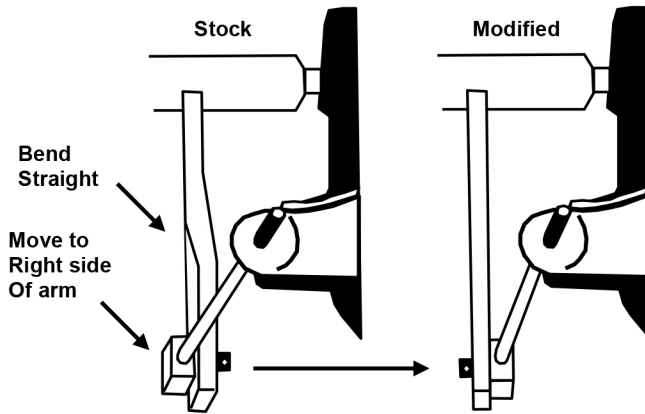
Start the engine and allow it to warm up to operating temperature. Check for any unusual noises or exhaust leaks. If every thing is OK, stop the engine and tighten all bolts while the engine is still warm. **NOTE:** Check the bolts periodically to make sure they have not loosened. Re-tighten after the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

IMPORTANT CHECK LIST

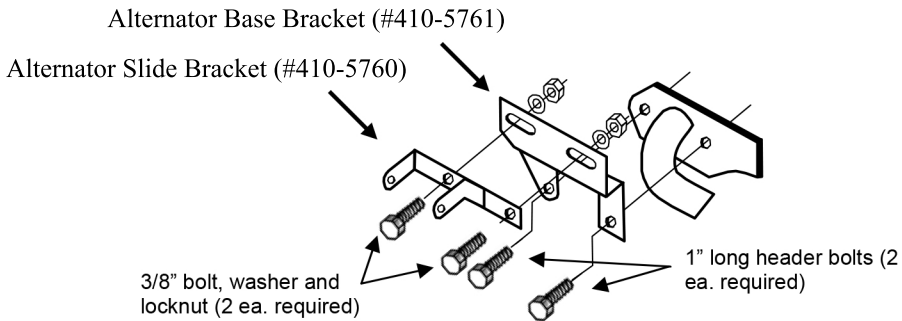
- **Be sure that all brake lines and fuel lines are clear of headers and/or connector pipes.**
- **All spark plug wires, battery cables, or other electrical components should be clear of headers and/or connector pipes.**
- **If dipstick tube was removed, make sure it is installed properly and that the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

PARTS LIST

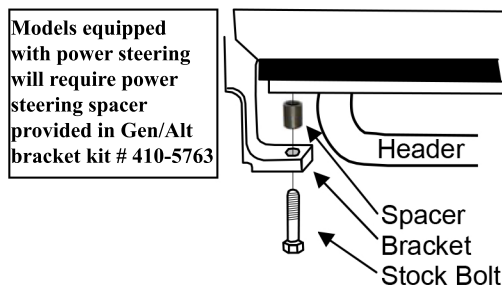
Qty	Description
1	Left side header
1	Right side header
2	Header gaskets
2	3" reducers
2	3", 3 bolt collector gaskets
12	3/8"-16 x 3/4" header bolts
6	3/8"-16 x 1" hex head cap screws
6	3/8"-16 hex nut



**Illustration A:
Clutch Linkage Modification**



**Illustration B:
Gen/Alt Bracket Kit
(SWS # 410-5763)**



**Illustration C:
Power Steering Bracket**