



LSX Conversion in a 1967-1969 Camaro 1968-1972 Nova

These parts are designed for use with Detroit Speed Motor Mount Kit # DSE-060401 and Bowler Performance Transmissions cross member for a 4L60 Transmission # BPT-1002

Part Number

715-11410 & 715-21410 (1 7/8" Primaries)

(Lit 1010)

Dynatech highly recommends hiring a professional installer, one that is familiar with the installation of off-road exhaust products. Headers are designed to increase the performance of your vehicle, and as such are designed differently than your stock exhaust system. Extra care must be taken to ensure that hoses, cables, electrical lines, fuel lines, hydraulic lines, or any other objects are not in contact with, or located too close to your installed system. (Nothing should be allowed to touch or be located close to the header/exhaust system.)

Dynatech competition exhaust products are not covered under any warranty either expressed or implied.

The Dynatech Team takes pride in providing the utmost in quality and performance. Should you have a concern about the product you receive, please contact Dynatech Customer Service.

Dynatech is not responsible for any exhaust product that has been improperly installed, crashed, welded to, or modified in any way. Dynatech does not cover damage to any related components. Neither the seller nor Dynatech will be responsible or liable for any loss, damage, or injury resulting from the direct or indirect use of this product or inability by the purchaser to determine proper use or application of this product.

Installation Instructions

Congratulations on your purchase of the Dynatech / MuscleMaXX system for the 67-69 Camaro/68-72 Nova LS-1 Conversion. We believe, and think you will agree that this system is second to none in quality, performance, and ease of installation. Please read and understand each of the steps involved with the installation of your new header system prior to getting started. While slight variations in either the header or the vehicle may cause minor differences in the exact order of steps or the exact positions of components listed in this document, the following narrative information should guide you during the installation process to a completely satisfactory install of your new header system.

What's in your new header kit?

Your exhaust system should contain all of the following parts. Please inventory each part prior to proceeding with the installation.

Parts Inventory List:

- 1 ea. Left (driver side) Header
- 1 ea. Right (passenger side) Header
- 1 ea. Header Gasket / Header Bolts Skin Card
 - 2 ea. Premium Stainless Steel OEM Style Multi-Layer Gaskets
 - 12 ea. 8mm x 1.5 Header Bolts
 - 2 ea. Decals
- 1 ea O2 Sensor Bung Plug Skin Card
 - 2 ea. O2 Sensor Bung Plugs
 - 2 ea. Copper Gaskets
- 1 ea. Instruction Booklet
- 2 ea. Stainless Steel Reducer Cones
 - 1 ea Donut Gasket Skin Card **(60-00842)**
 - 2 ea Donut Gaskets
 - 8 ea 5/16 x 1 ¾ Bolts
 - 8 ea. 5/16 Top Lock Nuts
 - 2 ea. 4 Bolt Clamping Flange w/ Ball Taper **(52-30801)**

Additional Recommended Parts to Complete your “Head to Tip” System Purchase: (optional)

- 1 ea. 2.5” Stainless Steel Dual System **(930-911250)**
- 1 ea 3.0” Stainless Steel Dual System **(930-911300)**

Choose 1 of the Stainless Steel Dual Systems listed above.

Safety Notes:

For your safety, please allow the engine to cool for a minimum of 90 minutes before starting the removal of your current exhaust manifolds/system and beginning the installation process.

The use of safety goggles is strongly recommended, as debris may be dislodged from beneath your vehicle while removing or installing parts.

While not required, the use of work gloves is recommended to protect not only your hands from sharp objects under the hood and chassis of your vehicle but also keeps the oils and grease off the header's surface possibly preventing permanent stains on the header themselves.

Required and Optional Tools:

Miscellaneous hand tools are required for proper installation of these headers. We have listed a few of the required and optional tools to help with your installation.

- Assorted sockets and wrenches (10mm for the header bolts)
- Ratchet and extensions
- Floor jack and safety stands or a hydraulic lift
- Safety glasses or goggles
- Small bottle of Anti-seize
- Work Gloves (optional)

Before You Get Started:

- Take inventory of all the parts in your new system.
- Look at the tool and supply list to make sure you have all the needed tools and supplies.
- **This header set was designed using the parts listed below and as such may or not fit as designed using other products. Use the listed products or their equivalent for best results. Some additional fabrication may be required if using other parts and would be the sole responsibility of the end user.**
 - **Motor mount kit # DSE – 060401**
 - **Transmission Cross Member # BPT – 1002**
 - **Aftermarket Sparkplug Wire Set** (the OEM wire set will not work with some of the sparkplugs.) **One kit that worked for us during development was by MSD (Universal Fit) # 32079. Available from Jegs or Summit.**

Installation Procedures:

These procedures will take you through the steps needed to install your new headers in your vehicle. It is assumed that you have already removed whatever manifolds that were currently installed in preparation for the new MuscleMaXX headers and that you will be using a vehicle lift during the installation.

Begin the installation process by disconnecting the negative terminal of the battery. This will prevent electrical system damage or personal injury should you accidentally touch the starter hot lead or other hot wire during the installation process.

One feature of the new MuscleMaXX headers is that the engine does not need to be raised or moved to install the headers. Likewise the starter does not need to be removed. The left (driver side) is a tight fit and as such must have at least the rear three sparkplugs removed (removal of all 4 sparkplugs is recommended) prior to header installation.

Note: The design of this header allows the use of either the stock OEM steering box (manual or power) as well as the newer Saginaw steering box, however the header installation requires that the steering box be completely removed from the frame during installation. Once the headers are installed the steering box can be easily re-installed.

On the right (passenger side) you must remove the dipstick and dipstick tube. Care should be taken not to get dirt and debris in the hole in the block left by the removal of the dipstick tube. Although the sparkplugs do not have to be removed, it is highly recommended.

Although it makes no difference which header is installed on which engine bank first, for the purpose of these instructions we will begin with the right (passenger side) header first. Make sure that the bolt holes have clean threads to make insertion of the new bolts easier.

Prepare six of the provided bolts with a small amount of anti-seize. The header is installed from beneath the vehicle. Slide it up past the starter and the sparkplugs if they were not removed into approximate position. From the top of the engine, slip the gasket into position and install a header bolt through the header and the gasket. Turn the bolt in by hand several turns to prevent cross-threading (this is especially important on aluminum heads). Duplicate the procedure for each of the remaining five (5) bolts. Once all six (6) bolts have been started, snug them up equally then securely tighten them beginning with the center bolts and work your way outward by alternating either side of center until all the bolts are secure.

Reinstall the sparkplugs on the right (passenger side) engine bank if they were removed. Then re-install the oil dipstick tube and dipstick. Next install the sparkplug wires on each of the coil packs and plugs. Inspect all fuel line, brake line, suspension, and steering parts for adequate clearance. Rotate the steering through the entire range of movement checking for any interference between it and the header.

The left (driver side) header is much a much tighter fit. As stated earlier, the sparkplugs must be removed to install the header as well as the steering box.

Note: This header will not fit with the OEM clutch activation mechanism or the reverse lock-out mechanism in place.

Prepare one of the provided bolts with a small amount of anti-seize. The header is installed from beneath the vehicle. Slide it up into approximate position. From the top of the engine, slip the gasket into position and install a header bolt through the header and the gasket. Turn the bolt in by hand several turns to prevent cross-threading (this is especially important on aluminum heads). Duplicate the procedure for each of the remaining five (5) bolts.

Once all the bolts including the front bolt have been started, snug them up equally then securely tighten them beginning with the center bolts and work your way outward by alternating either side of center until all the bolts are secure.

Reinstall the steering box by installing the bolts removed earlier. Re-attach the steering shaft to the steering box and finally attach the pitman arm. Securely tighten all fasteners.

Reinstall the sparkplugs on the left (driver side) engine bank. Then install the sparkplug wires on each of the coil packs and sparkplugs. Inspect all brake line, suspension, and steering parts for adequate clearance. Rotate the steering through the entire range of movement checking for any interference between it and the header.

Install the O2 sensor plugs provided if using a carbureted version of the LS-1 engine.

Reconnect the negative battery terminal and securely tighten the terminal clamp.

This completes the header installation. Proceed to **“Finishing up the Installation”**.

Finishing up the installation:

Final Checks:

- Check the engine bay. Remove any rags, tools, lights, etc that shouldn't be there.
- Start the engine.
- Listen for any exhaust leak "ticking" sounds. Check gasketed joint for leaks. If any are found, check to see that the gasket is properly installed and the joint is tightened properly.

All bolts and connections should be retightened as necessary after the system has gone through several thermal cycles and as needed thereafter.



975 Hyrock Blvd • P.O. Box 608 • Boonville, IN 47601

Phone: (800) 848-5850 • Fax: 812-897-6264

www.DynatechHeaders.com

We make every effort to build our products to the highest standards of workmanship and materials possible. This also applies to our documentation. We have tried to make the installation of the new system as clear and concise as possible. If, however, you find points in our instruction manual that you feel need to be clarified or changed, please e-mail us your constructive comments. We will use them to correct and enhance our documentation to the benefit of all customers.