



## 1970-1981 Camaro

Chevrolet V-8 Small Block Engine with Standard 23 Degree head w/6 Bolt Flange

**LSX based engine, these parts were set up using a SBC engine mount bracket and Speedway SBC motor mounts part # 910-18012, do not use BBC engine mount brackets they are approximately 1/4" narrower and will lower the engine down further than the SBC brackets causing clearance issues with the steering box and ground clearance issues at the collectors.**

### Part Number

**740-19210** (1 5/8" stepped to 1 3/4", 2.5" reducer)

**740-29210** (1 5/8" stepped to 1 3/4", 3.0" reducer)

**740-19310** (1 3/4" stepped to 1 7/8", 2.5" reducer)

**740-29310** (1 3/4" stepped to 1 7/8", 3.0" reducer)

**715-19410** (straight 1-7/8", 2.5" reducer)

**715-29410** (straight 1-7/8", 3.0" reducer)

(Lit 1001)

### Installation Instructions

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 will repair or replace any products found upon our inspection to be defective in workmanship or material within 12 months from date of purchase for the original purchaser.

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 at [dynatechcs@dynatechheaders.com](mailto:dynatechcs@dynatechheaders.com).

**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.**

Congratulations on your purchase of the Dynatech / MuscleMa**XX** system for the 70-81 Camaro. We 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 system 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. Reducer Cone Kit
- 1 ea. Header Gasket / Header Bolts Skin Card
  - 2 ea. Premium Fiber Gaskets
  - 12 ea. 3/8"-16 x 1 Header Bolts or 12 ea. M10-1.5 X 40MM Header Bolts For LSX Engines
  - 2 ea. Decals
- 1 ea. Power Steering/Alternator Bracket Spacer & Bolt Kit / *Not included in 715-19410 & 715- 29410*
- 1 ea. Instruction Booklet

### **Additional Recommended Parts to Complete your "Head to Tip" System Purchase: (optional)**

- 1 ea. 2.5" Stainless Steel Dual System (793-909250)
- 1 ea. 2.5" Premium Exhaust Tips (2 pack) (794-93026)

#### **SBC Only**

*If your vehicle utilizes the OEM A/C compressor, you may want to purchase an AC compressor rear mount that attaches between cylinder #1 and #3.*

**Part # 794-03006**

## **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 cotton 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 (3/8 – 3/4)
- Ratchet and extensions
- 1/4" Allen Wrench
- Torque wrench
- Rubber Mallet or Dead Blow Hammer
- Floor jack and safety stands or a hydraulic lift
- Safety glasses or goggles
- Small bottle of Anti-seize
- Penetrating Fluid (optional)
- Cotton Gloves (optional)

## **Before You Get Started:**

- Take inventory of all the parts in your new system. Make sure each piece is accounted for prior to taking your vehicle out of service.
- Look at the tool and supply list to make sure you have all the needed tools and supplies before you don't have an operating vehicle to run to the store in.
- For SBC header install refer to page 4
- For LSX header install refer to page 7

### SBC Only

**Note: The design of these headers require the use of 90 degree boots on the sparkplug wires at the sparkplugs.**

## Small Block Chevy Header Install

### Pre install steps:

1. Disconnect the negative battery 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.
2. Removal of the spark plugs is recommended, for easier install and to prevent damage to the plugs.
3. Removal of the oil dipstick tube from the block may be required depending on the dipstick location. Care should be taken not to get debris in the dipstick hole.
4. Inspect the header bolt holes and if needed, clean out the holes with a tap. Be careful not to cross thread any of the threads during the process.
5. Prepare the provided header bolts with a small amount of anti-seize.

### Drivers Side Header Install:

1. If this header is being installed on a vehicle with a manual transmission with an OEM clutch cross shaft, the clutch actuator cross shaft must be removed or pulled off the pivot ball that is attached to the block. This allows the header flange room to slide up into position. The cross shaft will be reinstalled during a later step.
2. Slide the header from beneath the vehicle and up into place.
3. From the top of the engine position the header gasket into place.
4. Install a header bolt through the header flange, gasket and into the head. Do not tighten, simply screw it in partially to hold the header into place. Use caution with aluminum heads. It is easier to cross thread the bolts in the softer material  
**NOTE: Do not install a bolt in the front header bolt hole at this time. A bolt will be installed later during the installation of the alternator bracket.**
5. Install all of the remaining header bolts, except the front one.
6. Install the supplied alternator bracket, by preparing the 2" by 3/8"-16 bolt, with a small amount of anti-seize.
7. Slip the bolt through the alternator bracket, then into the spacer, then into the flange.
8. Thread the bolt partially into the head.
9. Once all bolts have been partially installed, tighten each bolt in the order in Fig. 1

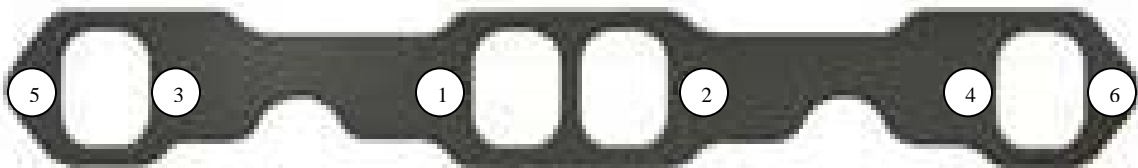


Fig. 1

10. If applicable, reinstall the clutch cross shaft by reversing the order in which it was removed. You may need to re-adjust the clutch using procedures prescribed in the owner's maintenance manual.
11. Reinstall the spark plugs.
12. Reinstall the dipstick tube (if applicable)
13. Rotate the steering through the entire range of movement, checking for any interference between it and the header.

### **Passenger Side Header Install:**

1. Slide the Passenger Side header in from beneath the vehicle and position it into place.
2. From the top of the engine position the header gasket into place.
3. Install a header bolt through the header flange, gasket and into the head. Do not tighten the bolt. Simply thread the bolt partially into the head to hold the header into place. Use caution with aluminum heads. It is easier to cross thread the bolts in the softer material. **NOTE: IF USING THE FACTORY OEM DELCO AIR COMPRESSOR...do not install the two bolts between cylinders 2 and 4 at this time. These bolts will be installed later during the installation of the Air Conditioner bracket.**
4. (If Applicable) Install the air conditioner bracket utilizing the two bolt holes between cylinders 2 and 4.
5. Tighten the bolts just enough so that the bracket can be moved for adjustment.
6. Install the A/C compressor onto the bracket leaving the bolts loose enough so the compressor can be aligned as needed.
7. Align the compressor pulley with the mating pulleys.
8. Once you are satisfied with the alignment, completely tighten the bolts holding the bracket and compressor.
9. Tighten the remaining bolts in the order shown in Fig. 1.
10. Reinstall the spark plugs.

**NOTE: If you are immediately going to install the MuscleMAXX Exhaust Muffler System, do not install the reducer cones and proceed to the "Final Steps and Checks" on the next page.**

### **Reducer Cone Install:**

1. Install the donut gaskets onto the header.



2. Slip the four bolt flange onto the reducer cone and bolt the reducer cone assembly to four bolt flange on the header.



3. Snug each bolt until the proper outlet angle is achieved and tighten accordingly.

### **Final Steps & Checks:**

1. Reconnect the negative battery terminal. **Note: If you are also installing a Dynatech Exhaust System do not reconnect the negative battery terminal at this time.**
2. Inspect all areas around the header for sufficient clearance between all fuel and brake lines, suspension and steering parts.
3. Make sure the dipstick tube has been reinstalled.

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

**Your Dynatech Header Install is now complete. If you have purchased a Dynatech Exhaust System, please proceed to page 9 for your Exhaust System Install.**

We make every effort to build our products to the highest standards of workmanship and materials possible. This also applies to our documentation. If you find points in our instruction manual that you feel need to be clarified or changed, please e-mail us your comments at [dynatechcs@dynatechheaders.com](mailto:dynatechcs@dynatechheaders.com). We will use them to enhance our documentation.

# LSX Conversion Header Install

## Pre install steps:

1. Disconnect the negative battery 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.
2. Removal of the spark plugs is recommended, for easier install and to prevent damage to the plugs.
3. Removal of the oil dipstick tube from the block may be required depending on the dipstick location. Care should be taken not to get debris in the dipstick hole.
4. Inspect the header bolt holes and if needed, clean out the holes with a tap. Be careful not to cross thread any of the threads during the process.
5. Prepare the provided header bolts with a small amount of anti-seize.

## Drivers Side Header Install:

1. Slide the header from beneath the vehicle and up into place.
2. From the top of the engine position the header gasket into place.
3. Install a header bolt through the header flange, gasket and into the head. Do not tighten, simply screw it in partially to hold the header into place. Use caution with aluminum heads. It is easier to cross thread the bolts in the softer material
4. Install all of the remaining header bolts.
5. Once all bolts have been partially installed, tighten each bolt in the order shown in Fig. 2:



**Fig. 2**

6. Reinstall the spark plugs.
7. Reinstall the dipstick tube (if applicable)
8. Rotate the steering through the entire range of movement, checking for any interference between it and the header.

## Passenger Side Header Install:

1. Slide the Passenger Side header in from beneath the vehicle and position it into place.
2. From the top of the engine position the header gasket into place.
3. Install a header bolt through the header flange, gasket and into the head. Do not tighten the bolt. Simply thread the bolt partially into the head to hold the header into place. Use caution with aluminum heads. It is easier to cross thread the bolts in the softer material.
4. Duplicate the procedure for the remaining bolts.

5. Once all bolts have been partially installed, tighten each bolt in the order shown in Fig. 2
6. Reinstall the spark plugs.

**NOTE: If you are immediately going to install the MuscleMAXX Exhaust Muffler System, do not install the reducer cones and proceed the “Final Steps and Checks” below.**

### **Reducer Cone Install:**

4. Install the donut gaskets onto the header.



5. Slip the four bolt flange onto the reducer cone and bolt the reducer cone assembly to four bolt flange on the header.



6. Snug each bolt until the proper outlet location is achieved
7. Tighten each bolt accordingly.

### **Final Steps & Checks:**

1. Reconnect the negative battery terminal. **Note: If you are also installing a Dynatech Exhaust System do not reconnect the negative battery terminal at this time.**
2. Inspect all areas around the header for sufficient clearance between all fuel and brake lines, suspension and steering parts.
3. Make sure the dipstick tube has been reinstalled.

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

**Your Dynatech Header Install is now complete. If you have purchased a Dynatech Exhaust System, please proceed to page 9 for your Exhaust System Install**



# Stainless Steel Camaro Dual Exhaust Kit 793-90925 (2.5")

*Fits*

**1970 – 1981 Camaro with Chevy Small Block/Std Port  
Heads/LSX and Dynatech MuscleMaXX Headers (740-19210,  
740-29210, 740-19310, 740-29310, 715-19410, 715-29410 )**

## What's in Your Kit?

The parts listed in the kit below may vary from those depicted in the picture on the following page. Each part, if it varies from the picture shown is the functional equivalent and will work as indicated in the installation instruction portion of this manual. For your convenience the current part descriptions are listed below.

### 730-90925

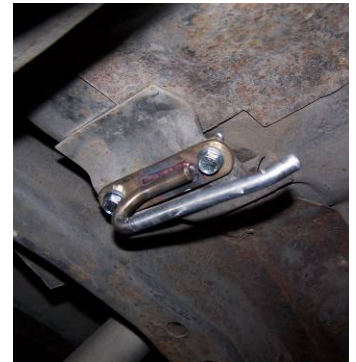
- 2 ea. Interim Tubes (2.5" dia)
- 1 ea. X-Pipe Assembly (2.5" dia)
- 2 ea. Hi Performance SS Muffler (2.5" dia)
- 1 ea. Left Side Tail-Pipe "A" (2.5" dia)
- 1 ea. Right Side Tail-Pipe "A" (2.5" dia)
- 2 ea. Tail-Pipes "B" (2.5" dia)
- 6 ea. 2.5" Stainless Band Clamps
- 4 ea. 2.5" Single Bolt Band Clamps
  
- 1 ea. Misc Hardware Kit w/the following parts
  - 2 ea. Muffler Hanger Brackets
  - 2 ea. Blue Split Grommets
  - 2 ea. Black Rubber Muffler Hangers
  - 4 ea. 5/16-18 Muffler Hanger Bolts
  - 2 ea. 3/8-16 Carriage Bolts
  - 2 ea. 3/8-16 Lock Nuts
  - 2 ea. Offset Tabs
  - 2 ea. 5/16-12 x 1" Tail-Pipe Hanger Screws
  - 2 ea. Tail-Pipe Brackets Straps



The installation instructions for the kit pictured above assume that the old system has been removed and that either set of MuscleMaxx headers have been installed. **Note: This system is designed to work with the MuscleMaxx header listed above in the specific model/year vehicle. If another manufacture's headers are used, additional fabrication may be required and the owner would assume all responsibility for any fitment issues encountered.**

The entire system will be loosely installed in order to insure the proper position of the tailpipes and muffler hanger brackets. An extra set of hands or mechanical supports will aid in this operation. The loose installation is done to insure that there is adequate clearance between the rear end axle tube and tailpipe as it exits the muffler before any tightening is done.

Begin the installation by installing two of the supplied bolt-in hanger brackets. Do this by locating the two stock OEM transverse muffler mounting points. There should be 2 ea 5/16-18 holes in each mount. Clean these holes by running a 5/16-18 tap or a self tapping 5/16-18 bolt through each hole. With the holes prepared, select one of the "hook and plate" brackets and attach it securely with two of the serrated 5/16-18 bolts provided in the hardware kit. Make sure that the point of the hook is facing the center of the vehicle. If for some reason the holes are stripped out, place a 5/16-18 nut (not included in the kit) on the back side of the OEM mount and securely tighten. Install the other "hook and plate" bracket to the other side of the vehicle in a like manner.



Next apply a thin coating of oil or light grease to the hooks that were just installed. Likewise apply a light coating of the same grease to the hanger bracket on the left (driver side) tailpipe part. Slip the tailpipe over the rear axle tube and slide one of the black rubber grommets over the hanger bracket welded to the tailpipe tube and then over the "hook and plate" bracket. Repeat the preceding steps on the right (passenger side) with the right side tailpipe tube.



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7/25/12

Locate two of the single bolt band clamps in the hardware kit. Slip one of these clamps over inlet (expanded) end on each of the tailpipes. Make sure the clamp is aligned so that the nut is facing down and to the outside of the joint. Install one of the mufflers so that the outlet (centered on the end of the muffler) is facing to the rear of the vehicle and the inlet (off-set to one side of the muffler) is toward the centerline of the vehicle. Make sure that the muffler is fully inserted into the tailpipe and tighten the clamp tight enough to hold the muffler to the tailpipe but not so tight that the muffler cant be aligned later. Repeat the steps on the opposite side.



To continue, make sure that the mufflers are turned in the tailpipe inlet so that they are close to being level side to side when viewed from the rear of the vehicle. Support the mufflers with a 2x4 or rope so that the mufflers are more or less level in the vehicle front to rear. Install the X-pipe by sliding the outlets (wide end of the x-pipe) over the emergency brake cable. Slip the respective x-pipe outlets into the muffler inlets, and then support the front of the x-pipe so that the tailpipes, mufflers, and x-pipe are supported approximately level under the vehicle. **Note: The emergency brake cable may rub on the x-pipe. This will not affect the operation of either the emergency brake system or the exhaust system. If it causes an annoying rattle, insulate the brake cable with a heat resistant buffer material where the cable touches the x-pipe.**



Next place 1 ea of the donut gaskets over the end of the collector in preparation for the hook-up between the collectors and the reducers. Install the two interim tubes and the reducers by slipping the inlets (the short end of the tube) of the interim tubes into the outlets of the reducers. Slide the outlet (the long end of the tube) of the interim tubes into the inlets of the x-pipe. Rotate these tube/reducer assemblies up and forward to engage the donut gaskets. Install and loosely tighten the 4 bolts evenly around the clamp and donut intersection.



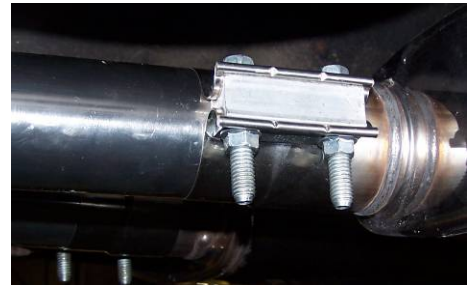
**Note: The inlet and/or outlet of the interim tubes or the outlets of the x-pipe may be shortened if necessary to provide approximately .75" to 1.0" clearance between the tailpipe tube and the floor pan where the tailpipe raises up and over the rear axle. (The black rubber hanger should be nearly vertical when installed correctly.) It is recommended that each of the clamped joints have from .75" to 2.0" of tube inserted into the adjoining expansion. This gives considerable leeway for adjustment.**



When you are satisfied with all of the clearances, begin installing the 6 stainless steel "stepped" band clamps. Loosen and remove the nuts and back-up plate from each of the clamps. Open the clamp carefully and slide it over the tube joint. Be sure to observe the "step" in the clamp during installation. **If you want the clamps to be oriented symmetrically side to side, you must pull the bolts out of some of the clamps and turn them around. This**

**reverses the relationship between the "step" and the bolt orientation.**

With all of the “stepped” stainless band clamps in position, begin the tightening sequence. Make sure that the system is more or less parallel or level with the ground along the centerline of the vehicle as well as level side to side. Use wedges or supports to maintain the alignment until the system is fully tightened. Begin by tightening the four bolts on each of the donut gasket clamps. Tighten them evenly so that the clamp faces remain relatively parallel to one another and perpendicular to the centerline axis of the collector. Do not crush the donut gasket by over tightening. Next, tighten the band clamps. Slide the clamp over the joint, up to the “step” and tighten fully. The clamp works by stretching the metal around the tube and as such must be fully tightened to work correctly.



At this time turn your attention to the rear portion of the system. If the OEM rear exhaust hanger mounts are still in place, loosen and remove the two 5/16-12 screws holding the hanger mount to the frame. Remove the hanger mount. Do this operation on both sides of the vehicle. Install one of the provided carriage bolts into one of the off-set tabs and bolt this tab to the frame using one of the 5/16-12 screws provided. Either of the two holes left by removing the OEM hanger mount can be used. The front hole is recommended unless there are circumstances requiring the use of the rear hole. Perform this procedure to both sides of the vehicle.



Select one of the tailpipe tips and slide one of the remaining “single bolt” band clamps over the expanded end of the tube. Orient the clamp so that the bolt is to the bottom of the vehicle and the nut is toward the center of the vehicle. Slip the tube on to the end of tube attached to the muffler. Orient the tailpipe between the body panel and the leaf spring to your satisfaction and tighten the band clamp enough to hold the tube in position. Tighten the bolt and nut on the clamp at the rear of the muffler. Similarly, perform the same operations on the opposite side of the vehicle. (Note: Changing the orientation of the tailpipe and tip provides some latitude in the final positioning of the tip relationship between the body and the spring.)



Attach the blue rubber grommet through the hole of one of the provided stainless steel straps. Install the grommet with washer toward the outside of the vehicle over the carriage bolt on one side of the vehicle and attach with one of the self locking nuts provided. Align the tailpipe between the frame and body panel. You should also set the height at this time. Hold the tailpipe in position with small wooden wedges. Form the strap to hold the tailpipe tip in the desired position. Cut away any excess strap length then weld the strap to the tube. Tighten the nut on each side of the vehicle. Be careful not to crush the blue grommet. It only needs to be tight enough to hold the strap in position. Perform the same steps on the opposite side of the vehicle. Then go back and fully tighten all of the single bolt clamp nuts (4 ea.).



This should complete the installation of your system. Go back over all the connections to check tightness, tube clearances, and brackets before starting the vehicle. Once you are satisfied that the system is correctly aligned and tightened, start the engine and check for leaks. If any are found, retighten the fasteners around the clamp at issue. All fasteners should be rechecked after the system has gone through several thermal cycles.

We make every effort to build our products to the highest standards of workmanship and materials possible. This also applies to our documentation. If you find points in our instruction manual that you feel need to be clarified or changed, please e-mail us your comments at [dynatechcs@dynatechheaders.com](mailto:dynatechcs@dynatechheaders.com). We will use them to enhance our documentation.

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