

# **Dynatech**<sup>®</sup>

Competition Exhaust Systems

## **INSTALLATION INSTRUCTIONS**

LIT-1029, REV 1



## **CADILLAC CTS-V**

**STAINLESS STEEL HEADERS**

Note: We do our best to make sure the instructions in the box are the latest version. However in some cases where the system does not change for a new model year, inventory on the shelf may not have the latest version of the instruction manual. If you do not see your model or application listed above, please feel free to visit [www.dynatechheaders.com](http://www.dynatechheaders.com) or contact us at 800-848-5850 or [sales@dynatechheaders.com](mailto:sales@dynatechheaders.com) for an updated instruction manual. We assure you the parts in the box are correct. The instructions may have added notes for a specific model year update.

**'09 - '15**  
**6.2 LITER V-8 ENGINE**

### **PART NUMBERS**

**715-75010**

**715-75020**

**715-75030**

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These products are intended for racing and off-road applications. Not legal for sale or use in the state of California, nor in states which have adopted California emission standards.

Congratulations on your purchase of the Dynatech system for the 09-15 Cadillac CTS-V. This system is second to none in quality, performance, and ease of installation. Please read and understand each of the steps involved with the removal of your old system and 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 and pictorial information should guide you during the removal and installation process to a completely satisfactory install of your new header system.

## 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).

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## What's in your new header system kit?

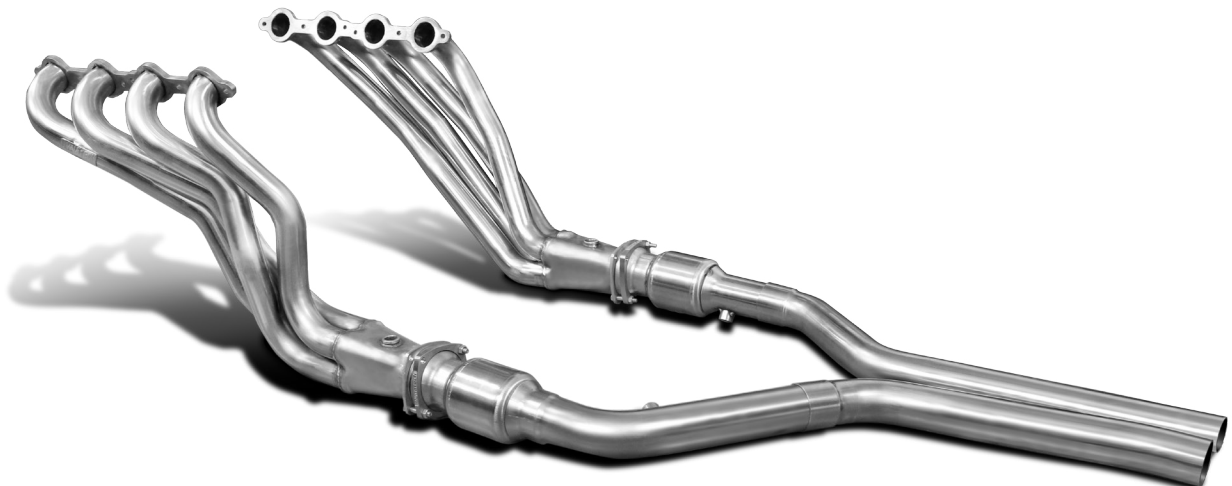
Your exhaust system should contain all of the following parts.  
Please inventory each part prior to proceeding with the installation.

### Header Parts Inventory List:

- 1 ea. Left (driver side ) Header.
- 1 ea. Right (passenger side) Header.
- 2 ea. O2 sensor extension cables.
- 4 ea. Cable Ties.
- 1 ea. Header Gasket / Header Bolts Skin Card.
  - 2 ea. OEM Style Stainless Steel Header Gaskets.
  - 12 ea. M8X 1.25mm Header Bolts.
- 2 ea. Adel cushion clamps.
- 1 ea. Install LIT.

### Intermediate Section Parts Inventory List:

- 2 ea. 2-1/2" stepped band clamps.
- 2 ea. O2 sensor extension cables.
- 2 ea. 2-1/2" Butt Joint Clamps.
- 1 ea. Left Interim Tube.
- 1 ea. Right Interim Tube.
- 4 ea. Wire ties.
- 2 ea. PowerCATs - Hi-Flow Catalytic Converter Assemblies.
- 1 ea. Donut Gasket Skin Card.
  - 2 ea. 3" Graphite Donut Gaskets.
  - 8 ea. 5/16" x 18 x 1 3/4" Allen Head Cap Screws.
  - 8 ea. 5/16" x 18 Top Lock Hex Nuts.
- 1 ea. Install LIT.



## **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 headers 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.

- 7/8" open end wrench or O<sub>2</sub> Sensor Socket
- Assorted metric sockets and wrenches (5mm – 16mm)
- Ratchet and extensions
- 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 (sensor safe)
- Penetrating Fluid (optional)
- Cotton Gloves (optional)
- Fender pads (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.

# Stock System Removal

1. Unhook negative battery cable.



Figure 01



Figure 02

2. Remove Engine covers



Figure 03



Figure 04

3. Remove the spark plug wires on both sides of the engine.
4. To make accessing and removing the manifold bolts, spark plugs and installing the headers, it is beneficial to remove the 1st few coil packs on each side of the engine. Note: You can remove all the coil packs if you prefer.



Figure 05



Figure 06

5. Remove the spark plugs on both sides.
6. Unplug the front and rear O<sub>2</sub> sensors. They are accessed easiest from the top, behind the engine and the firewall above the bell housing of the transmission.

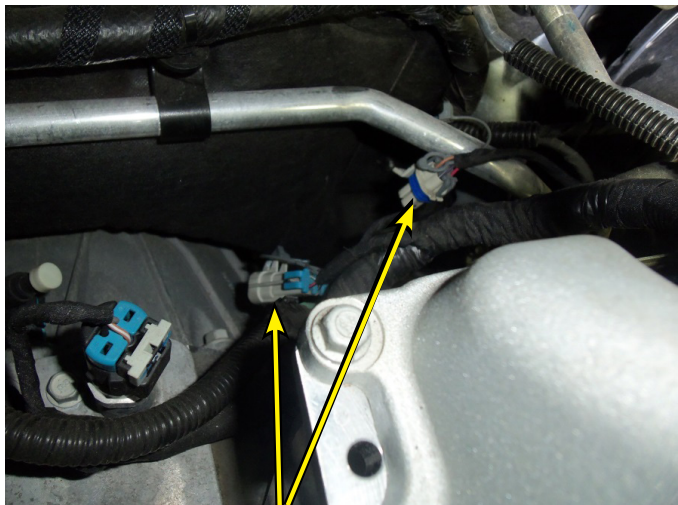


Figure 07

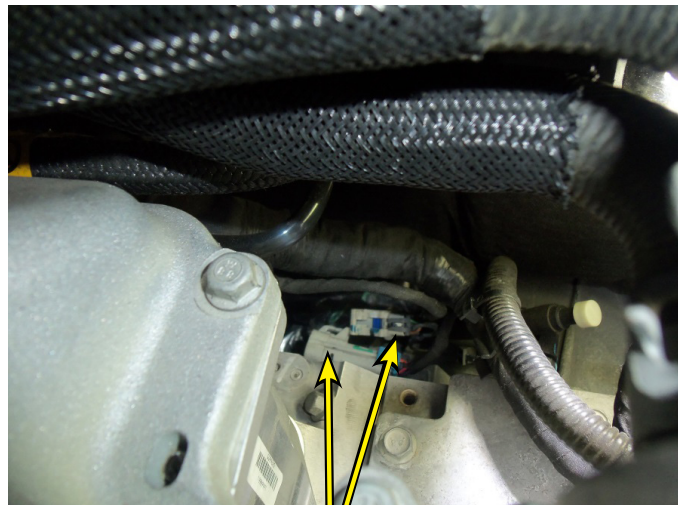


Figure 08

The use of penetrating oil is recommended to aid in the removal of stubborn bolts and nuts.

**Do not use penetrating oil on any of the sensors throughout the system particularly the O2 sensors.**

*Note: O2 sensors are delicate electronic components and should be handled very carefully. Take extra care in not contaminating the sensing end with shop towel lint, finger prints, oil, etc.*

7. Remove the oil dipstick and dipstick tube.
8. Unbolt the front of the exhaust from the manifolds.



Figure 09

9. The installation of the intermediate tubes will require the exhaust to be cut. Start by making an initial cut on both tubes behind the factory converters. You will make the final cut to length in a later step. Leaving it longer than needed at this point will ensure it will not be too short for final installation of the intermediate tubes. Make the initial cuts where the arrow shows in the picture below



Figure 10

10. Unbolt the steering shaft and move it out of the way and remove the left and right exhaust manifolds.

**Note:** There is no need to remove the converters from the manifolds they are removed as a unit.

11. Remove the front and rear O<sub>2</sub> sensors from the factory manifolds, mark their location before removing.



## Header installation

12. Plug in the front and the rear O<sub>2</sub> sensor extensions for both sides.



Figure 11

13. Check the wiring running along the starter; you may need to tie it up closer towards the bell housing to keep it away from the header.

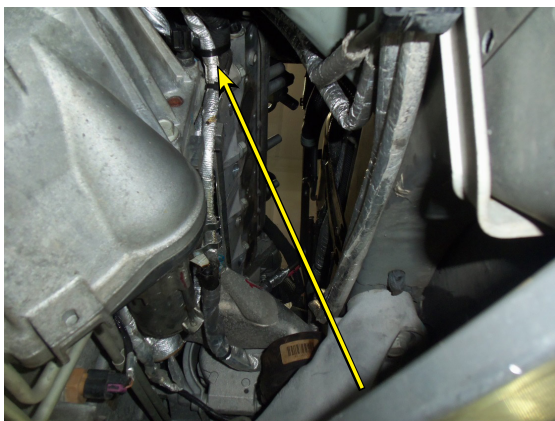


Figure 12



14. It may be necessary to secure the fuel lines closer to the inner fender well for clearance. We have provided a few Adel clamps for this if more clearance is needed between any part of the header and the fuel lines.

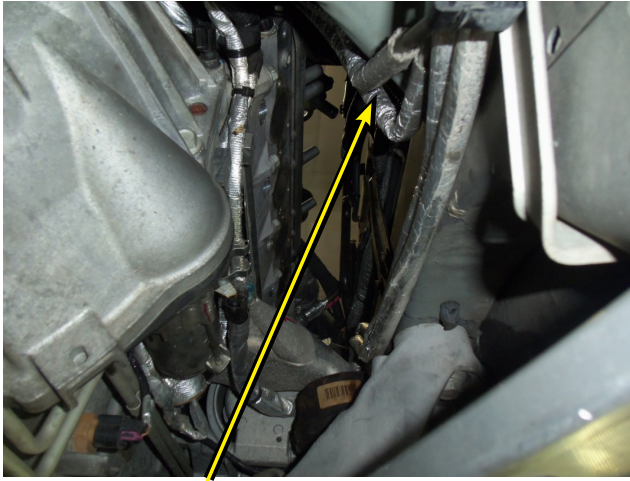


Figure 13

**Prepare each of the 12 header bolts with a small amount of anti-seize on the thread surfaces.**



15. Install the left and right headers and donut gaskets.



Figure 14

16. Install the left and right front O<sub>2</sub> sensors. Make sure that the wiring for both sensors are wire tied up securely and away from the headers.
17. Reinstall the steering shaft and torque back to factory specifications.
18. Install the stainless spacers between the cross brace and factory exhaust.



Figure 15

20. Next preassemble the left and right convertors in the intermediate tubes so the factory exhaust can be marked and cut to length so the convertors and intermediate tubes can be installed.



Figure 16

21. Temporally bolt the left and right converter assembly to headers.
22. Hold the left and right intermediate tubes up to the factory exhaust and mark the factory exhaust where it will be cut flush to the intermediate tubes. Remove the converter assembly on each side if needed. Cut the factory exhaust at this time.



Figure 17

23. Loosely install the 2-1/2" butt joint clamps onto the factory exhaust just behind where it was cut.



Figure 18

24. Install the left and right converter assemblies to the factory exhaust system at this time. Snug the converters to the headers and snug the band clamps but do not fully tighten.



Figure 19



Figure 20

25. Check all clearances on the converters, intermediate tubes and factory exhaust. Fully tighten the system starting from the front working your way toward the back. Once fully tightened double check all clearances of the exhaust, adjust the system if needed and retighten
26. Install the rear O<sub>2</sub> sensors in and plug them into the extensions and wire tie the wires out of the way of any part of the exhaust.
27. Reinstall the spark plugs on both sides.
28. Reinstall any of the coil pack on both sides that were removed.
29. Reinstall the spark plug wires.
30. Reinstall the oil dipstick tube and oil dipstick.
31. Reinstall the engines covers.
32. Tighten the negative battery cable up.

## Final Steps & Checks:

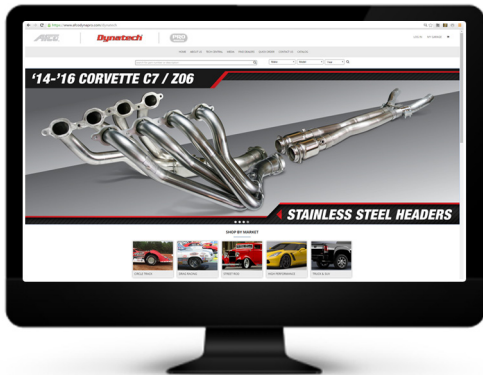
- Once again, verify that all hoses, cables, electrical lines, fuel lines, hydraulic lines, or any other objects are not in contact with, or located too closely to your installed system. (Nothing should be allowed to touch or be located close to the header/exhaust system.)
- Listen for any exhaust leak “ticking” sounds. Check around each clamp and gasket joint for leaks. If any are found, check to see that the gasket is properly installed and the joint or clamp is tightened properly.

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

*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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