

# 2016+ Camaro SS Header & Connection Installation Instructions



Do not attempt this installation if proper safety equipment isn't available to you. Seek the assistance of a professional installer.

Read and understand all instructions before beginning.

To install this system, the following tools are suggested:

- -Vehicle Lift or Jack and 4 Jack Stands
- -Ratchet Set (1/4" & 3/8" Drive)
- -Metric Socket Set (1/4" & 3/8" Drive)
- -Extensions (1/4" & 3/8" Drive)
- Pry Bar Set -7/8" O2

Socket (7/8" Wrench) -Gasket

Scraper

-Metric Wrench Set

- Exhaust Tubing Cutter or Saw
- -Standard Screwdriver Set
- -Safety Glasses
- -Paint Pen or Marker
- -PB Blaster (Penetrating Oil)
- -Anti-seize
- -Zip Ties



#### **VEHICLE PREPARATION**

\*\*Raise and Support Vehicle (Refer to Owner's Manual for specified jacking points)\*\*

\*Always disconnect the negative battery terminal before performing this type of work on any vehicle\*

### STOCK MANIFOLD AND CATALYTIC CONVERTER REMOVAL PROCESS

It is a good idea to spray WD-40 or PB Blaster on any rusted hardware before you start to help loosen them. While the lube is doing its job, you can start the install.

#### STEP 1. Battery

• Disconnect the negative and positive battery terminal.

#### **STEP 2.** Spark Plugs and Spark Plug Wires

- Remove the engine cover, if so equipped.
- Disconnect spark plug wires.
- We recommend removing the spark plugs for better clearance.

#### STEP 3. O2 Sensors

- Note and mark the position of each O2 sensor.
- Disconnect all O2 sensors from wiring harness.
- Remove O2 sensors ( $\frac{7}{8}$ " wrench or O2 socket).

#### STEP 4. Bottom Aluminum Shear Plate

• Remove the plate to allow access to bottom of the engine

#### STEP 5. Dip Stick Tube

- Note the routing and orientation of the dip stick tube before removal.
- Remove dip stick tube.

### **STEP 6.** Factory Catalytic Convertors

- Carefully cut the exhaust piping just behind the catalytic convertors.
- Cut approximately 2" after the cat on the Driver side and 2 ¾" after the cat on the Passenger side.
   See Figure A.
- Remove the factory catalytic convertor bracket. (This will not be reused.)
- Unbolt Factory Clamps connecting convertors to factory manifolds Slide pipes apart and separate them

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### STEP 7. Starter

- Remove the starter heat shield.
- Remove starter wire connections.
- Remove the starter.

### STEP 8. Steering Shaft

• Remove the lower steering shaft.

#### STEP 9. Exhaust Manifolds

- Remove factory exhaust manifold heat shields.
- Remove factory exhaust manifolds.

### **KOOKS HEADER AND CONNECTION PIPE INSTALLATION PROCESS**

\*\*All hardware should be tightened to factory specifications\*\*

### **Header Gasket Alignment**

The header gaskets for the LT1/LT4 engines are directional.

Use the three holes in the center to align the gasket to the header flange.

If the end holes do not line up properly, flip the gasket to align the holes properly.

#### INCORRECT ALIGNMENT



# **CORRECT ALIGNMENT**



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# STEP 1. Cleaning.

• Before installing your new Kooks Headers, make sure all gasket surfaces are clean and oil free.

### STEP 2. Kooks Header (Drivers Side)

- Install headers from the bottom of the engine compartment
- Align one bolt through the header and supplied gasket and start in the cylinder head.
- Align header and gasket, then start remaining header bolts.
- Tighten header to factory exhaust manifold torque specs using factory torque spec sequence.

### STEP 3. Kooks Header (Passenger Side)

- Install headers from the bottom of the engine compartment.
- Align one bolt through the header and supplied gasket and start in the cylinder head.
- Align header and gasket, then start remaining header bolts. Do Not Tighten.
- Wrap black harness with supplied heat-resistant tape and zip tie out of the way.

#### STEP 4. Starter

- Reinstall starter.
- Reinstall starter wire connections.
- Reinstall starter heat shield
- Carefully check wire clearance, routing it for maximum clearance around the header. Use zip ties if needed to hold wires.

# STEP 5. Kooks Header (Passenger Side)

• Tighten header to factory exhaust manifold torque specs using factory torque spec sequence.

### STEP 6. Dip Stick Tube

• Reinstall dip stick tube.

### STEP 7. Steering Shaft

- Install the lower steering shaft.
- Cover with supplied heat blanket.

# STEP 8. Kooks Connection Pipes

- Loosely install connection pipes on vehicle using supplied barrel clamps and supplied Swivel Seal clamps on headers
- Align system for maximum clearance.
- Tighten system from rear to front of the vehicle.

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#### STEP 9. O2 Sensors

- Apply anti seize to the threads of all O2 sensors.
- Install O2 sensors noting their original location.
- Install supplied O2 extensions on Drivers Side Front & Rear O2 sensors

### STEP 10. Bottom Aluminum Shear Plate

• Reinstall the bottom plate

#### STEP 11. Spark Plugs and Spark Plug Wires

- Reinstall spark plugs.
- Reinstall spark plug wires.
- Reinstall the engine cover, if so equipped.

### STEP 12. Battery

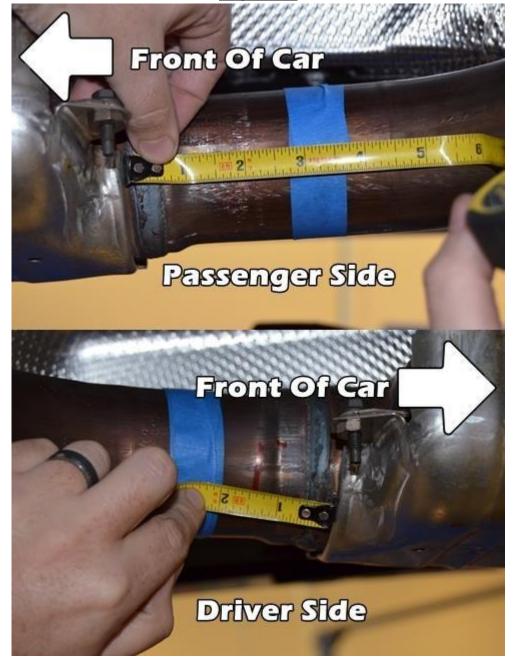
- Ensure all above steps have been completed.
- Reconnect the positive then the negative battery terminal.

### STEP 13. Inspection

- Start engine and check for any exhaust leaks.
- Allow vehicle to complete one heat cycle (Heat to temp and allow for cooling).
- Re-torque header bolts and header hardware.



# Figure A



Thank you for your purchase, we appreciate your business. If additional assistance is needed, please contact Kooks Headers and Exhaust Toll free at 1-866-586-KOOK or contact your local dealer.

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