



Dodge Magnum, Chrysler 300C, Charger, & Challenger
'05 through '09
w/ 6.1 liter Hemi SRT-8
Stainless Steel Header Exhaust System
Part # 728-73310, 728-73320 and 728-73330
(LIT 999⁹)

Dynatech highly recommends hiring a professional installer, one that is familiar with the installation of off-road exhaust products. This particular header system probably rates a 4 to 5 on a scale of 1 to 5 for installation difficulty. Several of the manifold bolts are extremely difficult to get to for both the removal of the stock manifolds and installation of the new headers. 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.

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. Dynatech competition exhaust products are built for off-highway use only and are not intended for use on street legal, pollution controlled vehicles.

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.

Installation Instructions

Congratulations on your purchase of the Dynatech / SuperMaXX system for the Dodge Magnum, Chrysler 300C, and Charger with the SRT-8 engine option. 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 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.

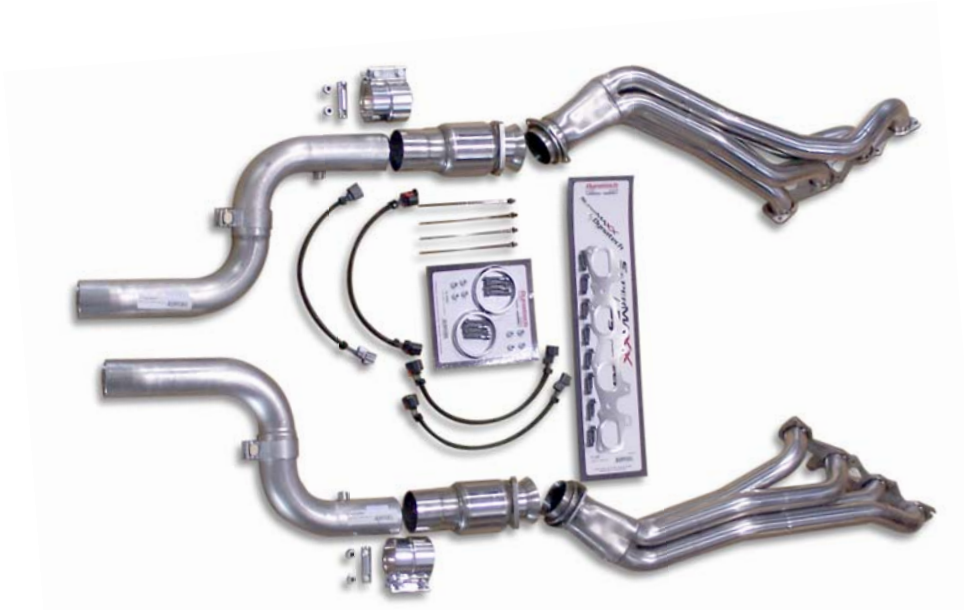
Note: These products are intended for racing and off-road applications. Not legal for sale or use in the State of California, nor in states which have adopted California emission standards.

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 Side (driver side) Header
- 1 ea. Right Side (passenger side) Header
- 2 ea. **PowerCATs** - Hi-Flow Catalytic Converters
- 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. Header Gasket / Header Bolts Skin Card
 - 2 ea. OEM Style Stainless Steel Header Gaskets
 - 16 ea. 8mm Header Bolts
 - 2 ea. Dynatech Decals
- 1 ea. Left (driver side) Tail Pipe Section consisting of 2 individual parts. "A & B"
- 1 ea. Right (passenger side) Tail Pipe Section consisting of 2 individual parts. "A & B"
- 2 ea. 2 3/4" Stainless Steel Band Clamps
- 4 ea. O2 Extension Cables
- 4 ea. Cable Ties



Safety Notes:

For your safety, please allow the engine to cool for a minimum of 90 minutes before starting the removal/ installation steps.

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 stainless steel 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.

- 7/8" open end wrench or O2 Sensor Socket.
- Assorted metric sockets and wrenches (10mm – 15mm)
- 9/16" Combination Wrench and Socket
- Ratchet and extensions 1/4" and 3/8" drive
- Torque wrench
- Rubber Mallet or Dead Blow Hammer
- Hydraulic lift – Installation may be possible from the ground but is not recommended
- Safety glasses or goggles
- Small bottle of Anti-seize (sensor safe)
- Penetrating Fluid (optional)
- Thread Locker (Loc-Tite) (optional)
- Cotton Gloves (optional)
- Hand operated tailpipe expander capable of expanding tubes to slide over 2.75" stock. These are available at stores such as AutoZone and other parts stores for rent or purchase.

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: (Dodge Magnum, Chrysler 300C, and Charger)

The Dodge Magnum, Chrysler 300C, and Charger stock system removal is similar between models. These instructions may differentiate between the three models with notes. Please read the instructions carefully.

These instructions assume that you will be using a hydraulic lift to provide access to the bottom of the vehicle.

- For safety and to protect your vehicle's electrical system, remove the ground cable from the negative battery terminal. **Note: Do not close the rear hatch after the battery has been disconnected – the latch is electric and will not function with the battery disconnected.**
- Lift the rear floor mat and the false floor up into the stowed position to allow access to the spare tire and battery compartment.



- Loosen the lug nuts on both front wheels while the vehicle is on the ground and remove the wheels when the vehicle is raised off the ground. Although this isn't 100 % necessary, it provides a little more room and light into the working area.

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.

- Unplug all four (4) of the O2 sensors from their respective connections.



- Remove each of the two rear O2 sensors and mark them right and left rear as necessary and set them aside for reinstallation later.



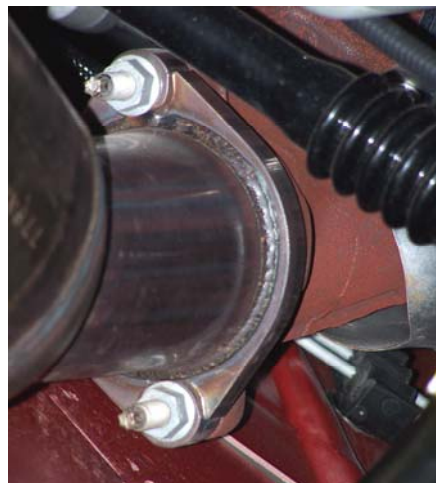
- Remove the plastic bottom engine cover.



- Spray the muffler inlet tube clamp bolts with penetrating fluid and let soak. Loosen the two nuts.



- Spray the two down tube nuts on the left (driver) side with penetrating fluid and let soak. Remove the two nuts.



- Pull the stock catalytic converter down and off the cast manifold studs while twisting the unit in the muffler inlet tubes joint. As the unit clears the studs pull the converter assembly forward and out of the muffler inlet tube joint. Remove from beneath the vehicle and store for reinstallation should you ever desire put the stock system back on your car.



- Spray the down tube nuts on the right (passenger) side with penetrating fluid and let soak. Remove the nuts.

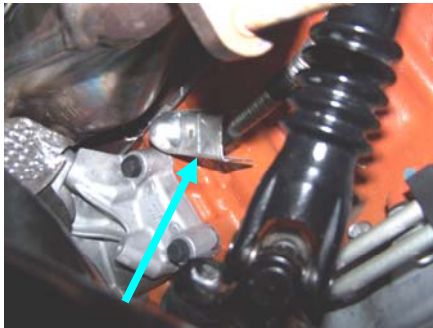


- Pull the stock catalytic converter down and off the cast manifold studs while twisting the unit in the muffler inlet tubes joint. As the unit clears the studs pull the converter assembly forward and out of the muffler inlet tube joint. Remove from beneath the vehicle and store for reinstallation should you ever desire put the stock system back on your car.



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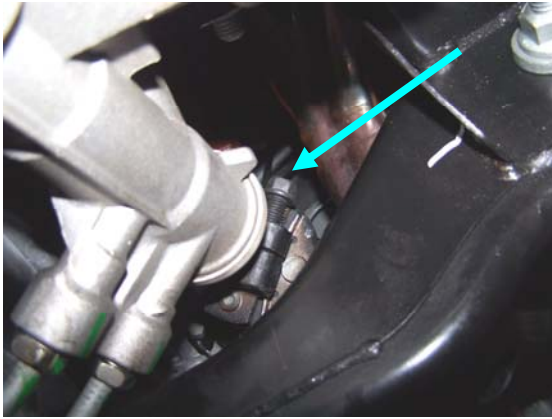
- When both catalytic converter assemblies are off the vehicle Loosen and remove the O2 sensor from both the left and right catalytic converter tube assembly. Make sure to mark each one appropriately so that they may be replaced in the correct side during reinstallation.
- Begin removal of the left (driver) side manifold by removing the “anti-knock sensor shield and sensor from the side of the block. This will help provide better access to the manifold bolts during the removal steps later in these instructions.



- Place the wheels in the straight forward position then loosen and remove the bolt holding the two parts of the steering shaft together.



- Next remove the bolt that holds the steering universal joint to the input shaft of the rack and pinion steering. Slip the joint off of the rack input shaft and separate the universal section from the upper steering shaft section. **Be careful not to move the wheels or steering wheel or you will have re-time the steering wheel position relative to the wheel position.**



- Loosen and remove all of the manifold bolts on the left side and lower the manifold and gasket out the bottom of the engine bay. This is easier said than done. The lower rear three bolts are fairly straightforward. Loosen and remove the center two bolts on the left (driver side) engine bank. Loosen and remove the top rear bolt. The top forward bolts present more of a problem. Follow the steps below to get to them.



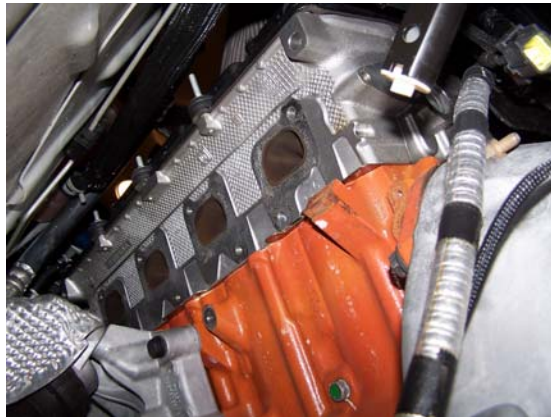
- Loosen and remove the bolt securing the cold air box baffle. Loosen any clamps and rotate the air intake up, out of the way.



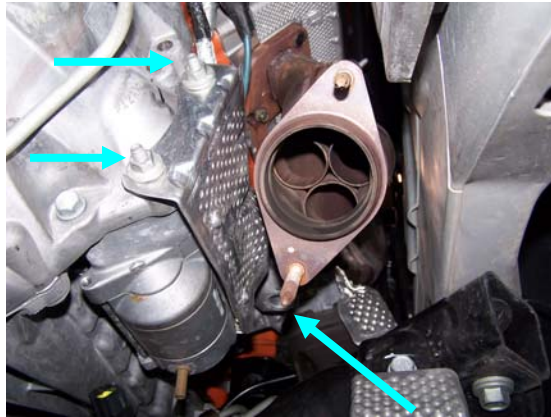
- Deflect the small plastic tab on the coolant reservoir and pull the power steering oil tank upward to disengage it from the coolant tank. Then remove the two bolts holding the coolant tank to the inner fender and push the tank toward the windshield. From this point you can reach the remainder of the upper manifold bolts by slipping your hand and wrench between the head and the inner fender.



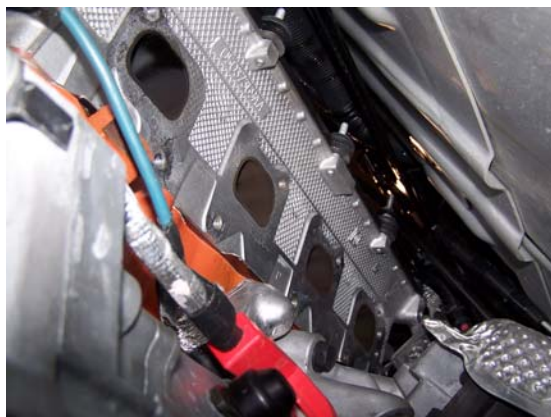
- When all bolts are removed the manifold can be removed from the bottom of the vehicle.



- Remove the three nuts (two at the rear and one in the front) of the starter heat shield and remove the shield.



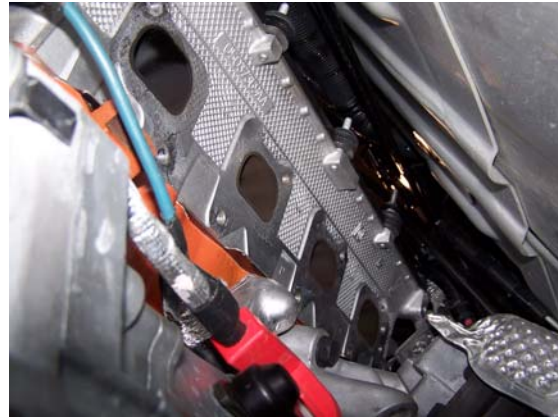
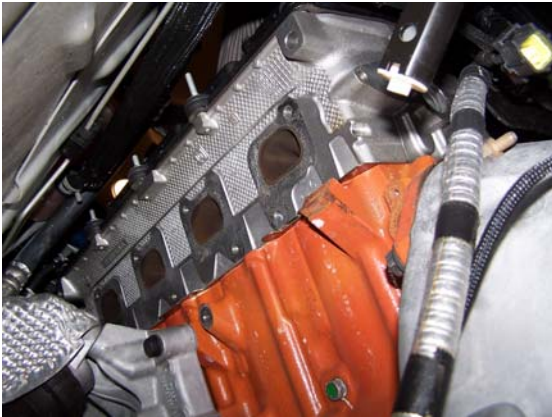
- Loosen and remove all of the manifold bolts on the right side. As with the left side, the right side manifold bolts are difficult to get to. The top center two bolts are particularly contrary. They must be removed by feel. All the others are at least partially visible. When all the bolts have been removed, lower the manifold out of the engine bay from beneath the vehicle.



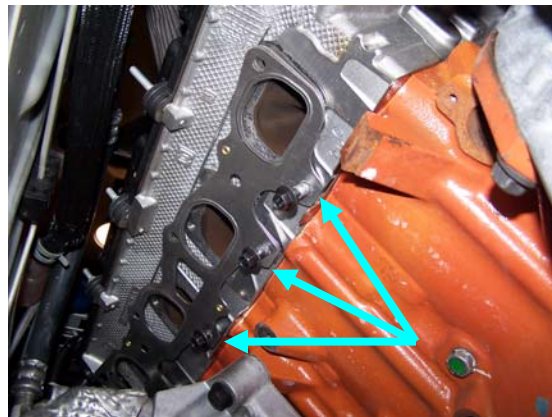
This completes the removal of the stock system.

Installing your new SuperMaXX Header System.

The engine bay as viewed from beneath the vehicle should look similar to the pictures below on both engine banks. If it does not, go back and review the above instructions to make sure something was not overlooked.



- Begin the left (driver) side header installation by finding and preparing eight of the supplied header bolts by putting a small amount of anti-seize on each of the eight (8) bolts required for the left side. Slip a bolt through the lower holes in the OEM style stainless steel gasket as shown below. Make sure that you hand start each bolt to prevent cross threading during installation.



- Slide the left (driver) side header up from the bottom of the vehicle and slip the slotted holes on the bottom of the header flange over the bolts previously installed.

- Install the balance of the prepared bolts in the left side header. Be sure not to cross thread any bolt. Snug each bolt up and torque to approximately 20 ft/lbs. before moving to the right (passenger) side. *The top bolts on both sides are very difficult to get to but it can be done. Use procedures similar to the removal process to reinstall the bolts.*



- After you've completed the header bolt installation on the top left side of the vehicle, re-install the two bolts in the coolant over-flow tank. With the tank in position and bolted down, re-install the power steering reservoir tank by slipping it back into the channel recesses on the coolant over-flow tank and make sure the small plastic tab snaps back in place to hold the reservoir securely.
- Slip the cold air intake filter and tube along with the baffle back into position and re-install the bolt that holds the baffle to the engine bay framework. Position the clamps on the air inlet tube and re-tighten.



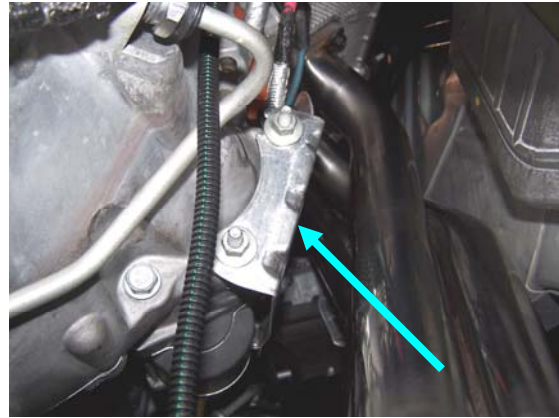


- Before moving to the right side installation, re-install the anti-knock sensor to the side of the block and install the heat shield once the bolt has been installed in the sensor.

- Before reinstalling the steering shaft, make sure that the tires and wheels are straight ahead and that the steering wheel is aligned straight, then carefully proceed to the next step without moving either the wheels or steering wheel.
- Re-install the steering shaft; slip the two shaft pieces together then slip the universal joint over the input shaft of the rack and pinion. Install the bolt holding the two shaft parts together and tighten. Re-insert the bolt into the universal joint, through the notch in the input shaft and tighten. The use of a small amount of thread locker (Loc-Tite) on both bolts is recommended.



- Proceed with the right (passenger) side header installation by finding and preparing eight of the supplied header bolts by putting a small amount of anti-seize on each of the eight (8) supplied bolts. Slip the header bolts through the lower holes in the OEM style stainless steel gasket as shown below. Make sure that you hand start each bolt to prevent cross threading during installation. Install and snug each of the eight (8) bolts. Torque the bolts to approximately 20 ft/lbs. Once again, primarily the top two (2) center bolts will cause some difficulties but it can be done.



- Re-install the starter heat shield by replacing the three (3) nuts that were removed during the removal of the stock system.

This completes the installation of the headers.

- Next install the donut gaskets on the ends of the collectors. *The right side collector is shown.*



- Identify the individual “A” section parts of the interim tubes by a simple measurement. The left side “A” tube should measure approximately 5” from the end of the tube to the center of the O2 sensor bung. The right side “A” tube should measure approximately 4” between the end of the tube and the center of the O2 sensor bung. After installation the O2 sensor will point slightly toward the ground.

- Slip a 2 3/4” band clamp over the inlet end of the right (passenger) side tail pipe par “A” section and slip the assembly onto the outlet of one of the supplied PowerCATs.



- Apply a small amount of anti-seize to each of the four (4) allen head bolts and start but do not tighten the accompanying nuts clamping the two rings together. They will be tightened fully at a later step.

- Slip a 2 3/4” band clamp over the inlet end of the left (driver) side tail pipe section “A” and slip the assembly onto the other supplied PowerCAT

- Apply a small amount of anti-seize to each of the four (4) allen head bolts and start but do not tighten the accompanying nuts clamping the two rings together. They will be tightened fully at a later step.



- Slip the “B” section of the right (passenger) side interim tube into the passenger side inlet tube of the stock muffler. It may be necessary to enlarge the tube slightly because it has already been clamped. This can be easily done with a hand tailpipe expander available for sale or rent at AutoZone stores or similar parts outlets.

- Rotate the part into position aligned with the “A” section and slide the two parts together.

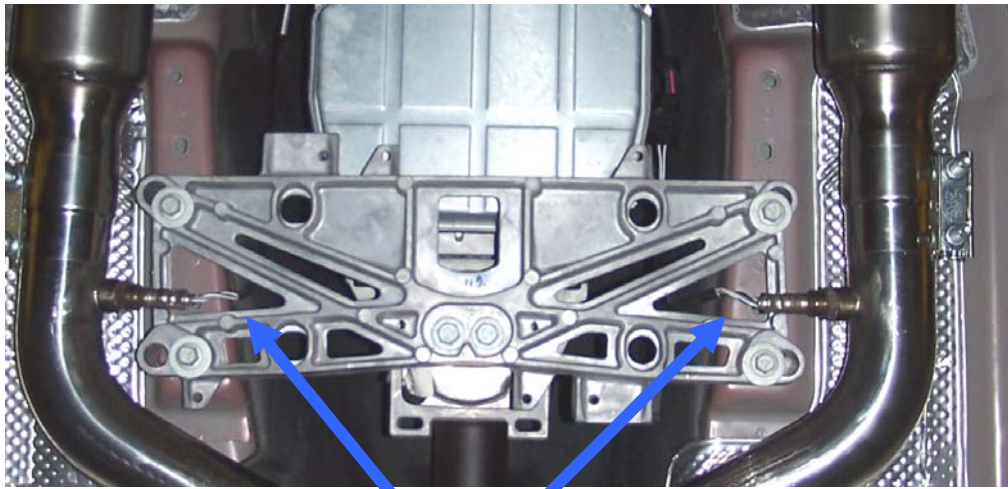


- Repeat the above steps with the left side “B” section.
- All parts should be connected at this point. Now you can begin the tightening and aligning steps.
- To start the tightening sequence, begin by checking the tail pipe clearance all the way at the back of the car. **Check for adequate clearance between the body and the tail pipe tips as they exit from beneath the vehicle. Check both the driver and passenger sides.**
- With adequate clearance assured, rotate the previously installed tubes so that they are more or less level in the vehicle and begin tightening the clamps beginning at the muffler inlets. In order to maintain adequate clearance between the muffler inlet tubes and the body cross brace, place a small spacer between the tubes and the brace until all connections have been fully tightened then remove.
- Next, push the “A” and “B” sections together and fully tighten the clamps on both the right and left sides.
- Moving forward, tighten the stainless steel band clamps at the outlet ends of each of the PowerCATs, left and right. Make sure the clamps are fully tightened. The stretching action of the clamp around the tube is what creates the seal.
- Finish the tightening sequence by equally tightening each of the four bolts and nuts clamping the PowerCATs and the collectors. Tighten up enough to adequately seal the joint between the PowerCATs, the donut gaskets, and the collectors. **Do not over tighten.**
- To finish the installation, plug in each of the four (4) O2 extension cables supplied with your kit into the connections on the main wiring harness. There are three (3) different sensor extensions. The front sensor extensions are identical. The two (2) rear extensions are different from each other as well as the front extensions. Keys in the plugs differentiate the individual parts.



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.

- Install each of the O2 sensors. Make sure that they are reinstalled into the same position that they came out of during disassembly. A small amount of anti-seize on the threads will help prevent galling during installation or removal. Make sure to keep the anti-seize off of the sensing surface. **(use sensor safe anti-seize only)**
- Tie the extension cables away from moving parts or where heat from the exhaust system could cause damage that might impair the operation or performance.



Rear sensors cable routing

- Survey the entire bottom of the vehicle for oil leaks loose wires/hoses, stray rags or tools, etc.
- Reinstall the front wheels if removed earlier, and lower the vehicle off of the lift.
- Reconnect the negative battery cable.



Finishing up the installation:

Final Checks:

- **Check your work. No wiring, fluid lines, sensors, steering components, etc should come in contact with any part of the header or with any area that may cause heat damage or mechanical damage.**
- Start the engine. Observe the "Check Engine Light". It **should not** come on.

Note: In some instances you may experience a check engine light. We have found some models to record a slow heat response or temperature error which in turn sets off the check engine light. This has no adverse effect on the performance or operation of the engine but can be annoying. Dealers and tuner shops have equipment software that can read the codes and provide diagnostics

- Listen for any exhaust leak "ticking" sounds. Check around each clamp and gasketed 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 retightened as necessary after the system has gone through several thermal cycles and as needed thereafter.

Congratulations! You now have the highest quality, best performing exhaust system available installed on your vehicle.

Now you've got a real HEMI!



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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 removal of the stock system and 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.