





2011-12 Ford Mustang GT & 2012 Boss 302 w/5.0 liter V-8

Stainless Steel Header Exhaust System Part # 722-74310/722-74320/722-74330 (GT) Part # 722-74310/722-94320/722-94330 (Boss 302)

(Lit 1023)

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 / application listed above, please feel free to visit www.dynatechheaders.com or contact us at 800-848-5850 or sales@dynatechheaders.com for an updated instruction manual. We assure you the parts in the box are correct. The instructions however may have added notes for a specific model year update.

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.

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.

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.

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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.

Installation Instructions

Congratulations on your purchase of the Dynatech / SuperMaXX system for the Ford Mustang GT/ BOSS 302. 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. These instructions also include the additional steps required when installing a Boss 302 Supermaxx system. The difference between the Gt system and the Boss 302 system is the Boss 302 has side pipe mounts for the quad exhaust on the X-pipe. Gt models can be converted to a quad exhaust by using the Boss 302 X-pipe and purchasing factory Boss 302 side pipes.

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 Converter Assemblies
- 1 ea. Donut Gasket Skin Card
 - o 2 ea. 3" Graphite Donut Gaskets
 - o 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
 - o 2 ea. OEM Style Stainless Steel Header Gaskets
 - o 32 ea. 10 mm Header Bolts, (16 fine thread, 16 coarse thread)
 - o 2 ea. Dynatech Decals
- 1 ea. X Pipe
- 2 ea. 3" Stainless Steel Band Clamps

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2012 Boss 302 System

While this installation can be done on the floor with the use of jack stands we strongly recommend that this job be completed utilizing a hydraulic lift or have the system installed by a professional mechanic. You will need 24 to 30 inches of ground clearance to slip the header into position from the bottom of the vehicle.

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 headers.

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 (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
- 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 before you don't have an operating vehicle to run to the store in.

Stock System Removal:

Under the Hood

Begin the removal process by removing the battery terminals. Always
disconnect the Negative terminal first and the Positive terminal last. When
reinstalling – reverse this procedure – Positive first and Negative last





 Remove wiring harness from battery tray before removing the battery tray



 Removal of the battery and tray provides more room to get to the manifold bolts during a later step. Remove the battery cover and tie-down, the battery, and finally remove the battery tray by removing the 3 bolts holding the tray in position.







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Remove the Monte Carlo bar



Remove the engine cover (not applicable on the Boss 302)



 Slide the red retainer clip out on the MAF (Mass Air Flow) sensor and disconnect the harness.





 Loosen the band clamp around the air inlet tube and remove the air cleaner box that is held in by one bolt.





 While the vehicle is still on the ground, remove unplug the front O2 sensors located between the rear of the engine and firewall above the transmission bell housing. Install left front O2 sensor extension at this time.



 Remove the outside nuts holding the cats to the manifolds on both sides





Remove the nuts on top of the engine mounts on both sides

 Raise the vehicle off the ground using a floor jack and jack stands or use a hydraulic lift. (We strongly recommend the use of a hydraulic lift)

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.

- Begin the under vehicle procedures,` mark their location and disconnect the 2 rear O2 sensor wires located on the lower transmission
- Loosen and remove the 2 rear O2 sensors from the "H"-pipe. Be sure to mark the sensors so that can be put back in the same relative positions in the new system.







(On Boss 302 Models only) Unbolt the side pipes from the factory h-pipe. Gt owners please proceed to the next steps.





- Next loosen the band clamps securing the "H"-pipe to the tail pipes. Do not remove the clamps at this time. Also loosen both ball and socket joints holding the H-pipe to the catalytic converters.
- Push the exhaust system towards the rear of the car allowing the front of the H-pipe to drop down below the catalytic convertors.
- Release the rear tailpipe couplers that were loosened in an earlier step by
 inserting the flat of a screwdriver under the spring tab and twisting to
 release while sliding the couplers forward. Be sure to save these
 couplers, they will be reused during the installation of the new
 system.
- Take a rubber mallet and tap on the H-pipe in the center tapping towards the front of the car and remove H-pipe.



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Next remove the catalytic convertors from the manifolds









 Next unbolt the plastic oil change access cover under the front of the engine. It is made to be loosened in the front and swings down and hangs in place.

Removing the Stock Manifolds

Removal of the bolts may be more accessible from either the top or bottom of the vehicle. We will leave that determination to the consumer. Depending on the type of tools being used as well as the consumer's ability it may be just as easy to remove the necessary bolts and nuts from one position as another.

Loosen steering shaft and slide upwards to separate it from it joint.





 Remove the red plastic cap protecting the starter terminals and disconnect the wiring from the terminals



 Loosen and remove the bolts holding the starter in position. Remove the starter. Two of the bolts are visible; the third bolt is a blind bolt. All three must be removed to get the starter off of the vehicle.





 Next lift the front of the engine up as far as it will go; the bell housing of the transmission will hit the firewall preventing you from lifting the engine

too high.



· Remove both the left and right engine mount



Remove the stock manifolds





- Remove O2 sensors from manifolds
- Remove manifold studs from heads





- Proceed to Installing Your New Header System
- Make sure to hold all sensor cables, clutch lines, dipstick tubes, etc. away from moving parts, heat sources, and parts that may create vibration ware points during the installation of your new system.

CAUTION: Before preparing your header bolts for installation you must first determine which bolts your engine requires. It will either be a 10mm fine thread or a 10mm coarse thread. Both sets of bolts are included in your kit. Failure to use the correct bolt may cause damage to the head. This can be done by simply holding your stud next to the bolts included to see which set of bolts will be needed. See picture below

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 Use a solvent cleaner to clean the exhaust face of the left and right cylinder heads. Take care not to get excess solvent or debris of any type in the cylinder ports.



 Prepare each of the 16 header bolts with a small amount of antiseize on the thread surfaces.

- On the left (driver side), Start all the top bolts by hand through the gasket. Screw the bolts in just far enough to make sure they are not cross-threaded.
- On the right (passenger side), Start all the top bolts by hand through the gasket. Screw the bolts in just far enough to make sure they are not crossthreaded.
- From beneath the vehicle, slip each header into place and start one bottom bolt to hold the header in position. With the header in place, start all the remaining bolts, a few turns by hand to prevent cross-threading. Tighten all bolts from underneath that can be reached before re-installing the engine mounts. Torque all bolts to approximately 20 ft/lbs





- Re-install the left and right engine mount at this time and lower engine back into position.
- Re-install the steering shaft universal joint bolt and torque to 18 ft/lbs.
- Re-install the starter (three bolts), attach the starter cables, and replace the protective red terminal cap.



Prepare the front O2 sensor threads only with a small amount of anti-seize.
 Be careful not to get any anti-seize on the sensor tip. Install the sensors in the header system in same relative location as they were removed.



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Installing the X-pipe

 Clean the collector end of the headers and install the 3.00" donut gaskets on each collector by gently tapping the gasket on with a block and hammer.
 Clean the inside of the collector to prevent loose debris from clogging the cats or contacting the O2 sensors upon engine start-up.





Reinstall the saved OEM band clamps over the stock tailpipe, raise the rear of
the x-pipe assembly and slide the clamps over the x-pipe outlets. Make sure
that the joint where the x-pipe outlets and the tails are joined, that the tubes
are butted up as close as possible to one another by moving the x-pipe
assembly back to meet the tailpipes and fully tighten OEM band clamps to the
x-pipe. Slip each supplied band clamp over the other end of the x-pipe
assembly and support in the middle with a jack.







- Install both catalytic converters with elbows into the x-pipe assembly and tighten up the band clamps snug but do not fully tighten.
- Prepare the collector/catalytic converter clamp bolts by putting a small amount of anti-seize on the threads of each of the 8 bolts.

Bolt the cat/x-pipe assembly to the collectors and snug all 8 bolts evenly but

do not fully tighten.



(**On Boss 302 Models**) Connect and snug up the bolts connecting the side pipes to the x-pipe.



• Start the alignment process at the rear of the vehicle. Twist and align the exhaust outlet to center-up the tip in the body opening. Work your way forward aligning and tightening each of the band clamps to maintain the exhaust tip position in the body opening. Upon reaching the header/catalytic converter joint, tighten the bolts equally to compress the donut gasket slightly to form a leak proof seal.

- Prepare the rear O2 sensor threads only with a small amount of anti-seize.
 Be careful not to get any anti-seize on the sensor tip. Install the sensors in the header system in same relative location as they were removed.
- Use the supplied wire ties to tie up the front and rear O2 sensors to keep them from coming in contact with any part of the exhaust system.





 Make one more check of all the connections and bolt tightness etc. before going back under the hood to complete the installation.

Finishing up

- Tighten up the remainder of the header bolts from the top on both sides and torque to approximately 18 ft/lbs
- Re-install the nuts for the engine mounts on both sides and tighten.
- Install the battery tray with the 3 bolts removed during disassembly. Be sure to re-attach the wiring harness to the battery tray.
- Place the battery in the tray and install the tie-down and tighten.
- Install the battery cover.
- Reattach the battery cables and tighten. Positive first and Negative last.







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- Install the air cleaner box assembly over the locating pin and secure with 1 bolt.
- Connect the air inlet joint and fasten with the OEM clamp.
- Reconnect the MAF (Mass Air Flow) sensor connector. Be sure to push in the red retainer clip in to secure the sensor properly.







 Check all work for completeness, bolts tightened, connectors connected, and lines replaced and clamped etc. Check that no wires or lines are close to the headers where heat damage could occur or near moving parts where they could be pinched or cut. Check for misplaced tools and rags and check for oil leaks etc.

Final 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.)
- Start the engine. Observe the "Check Engine Light".

Note: In some instances you may experience a check engine light after the installation of an aftermarket exhaust system. If this occurs please contact Dynatech at 1-800-848-5850 and ask for customer service or e-mail dynatechcs@dynatechheaders.com.

• 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! That wasn't so bad, and now you have the highest quality, best performing exhaust system available installed on your vehicle. And you did it yourself!



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

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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 at dynatechheaders.com. We will use them to correct and enhance our documentation to the benefit of all customers.