



** American Made **
POWER & SOUND
StainlessWorks.net | toll-free 800.878.3635

2015+ MUSTANG GT LONG TUBE HEADERS

INSTALLATION INSTRUCTIONS & INFORMATION



INCLUDES INSTALLATION INSTRUCTIONS: 21901, 22111, 22112

EXHAUST CONNECTION

Finish your custom build with our Stainless Works performance exhaust systems. They come in three configurations: Factory, Performance & Aftermarket Connection points.

FACTORY CONNECT NECK-DOWN 2¾"

EASY BOLT-ON UPGRADE



FACTORY CONNECT

allows our headers or exhaust to easily bolt to the factory exhaust or manifolds respectively. They connect to the factory location which is necked-down to accommodate fitment.

PERFORMANCE CONNECT FULL 3"

MAXIMUM POWER & FLOW AVAILABLE



PERFORMANCE CONNECT

is designed to take advantage of performance gains not possible with the standard factory connection point.

Both SW headers and SW exhaust are used in this configuration. In most cases we develop true-dual systems which don't neck-down or crimp like the factory exhaust.

AFTERMARKET CONNECT FULL 3"

CUTTING REQUIRED FOR CUSTOM FIT



AFTERMARKET CONNECT

is designed to fit to SW headers and also able to attach to most other aftermarket systems. This includes pipes that don't neck down and can have additional crossovers or lead pipes.

For specific applications of customized systems giving you the most available options.

MAKE & WARRANTY

Stainless Works + Stainless Power: What's the Difference?

Stainless Works headers are built from corrosion resistant 304 stainless steel, and TIG welded for strength and durability at our state-of-the-art facility in Streetsboro, Ohio. We stand by our products with a lifetime warranty on material and craftsmanship, and as always, our products are proudly made in the USA.

Stainless Power headers are an affordable performance line of headers. They offer the same design, function and power of Stainless Works long tube headers for a fraction of the price. Stainless Power Header Kits are built from corrosion resistant 304 stainless steel, and TIG welded for strength and durability. They come with a 2 year warranty on material and craftsmanship.

STAINLESS
WORKS

VS

STAINLESS
POWER

2015+ FORD MUSTANG GT WHEN BEGINNING INSTALLATION

Thanks for purchasing a Stainless Works Header system for your 2015+ Ford Mustang. Our team has worked to ensure that this product is the premium in performance, quality, and fitment. We are proud to say that this system will unleash the true character of your vehicle. We encourage you to read through the following steps, and check the included Bill of Materials before beginning. Please follow these steps to ensure that your installation goes as planned.

- a. Stainless Works recommends the use of Hi-Temp RTV sensor safe silicone gasket maker as an option or in conjunction with the use of factory gaskets. The recommended Oxygen Sensor Safe RTV is either Valco All-in-One Aluminum or Permatex Copper P/N 101BR available at NAPA, Autozone and other retailers.
- b. Disconnect the battery before starting to work on the exhaust system for your vehicle. Reconnect the battery when the job is completed.
- c. Your exhaust system can be installed by a weekend warrior, but the use of a lift is recommended for ease of installation. If using a jack, the vehicle must be placed on a hard level surface. Jack stands are required for safety.
- d. You will assemble the components together as specified below, but only snug the clamps as you move along from front to back. After aligning all the components in the vehicle, you will tighten all the clamps working from front to back of the vehicle.



Detail a.

PROCEED TO YOUR VEHICLE FITMENT:

**2024+
Mustang GT 5.0L**

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**2018-2023
Mustang GT 5.0L**

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**2015-2017
Mustang GT**

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2024+ FORD MUSTANG GT 5.0L HEADER INSTALLATION INSTRUCTIONS



DISASSEMBLY

1. Remove the battery box cover - 3 push clips.
2. Disconnect the battery.
3. Remove the 6mm battery hold down bolt and remove the battery.
4. Remove (3) 6mm bolts holding the battery box in and remove the battery box.
5. Starting from the right side of the car, remove (6) push clips holding the windshield wiper cowl down.
6. Remove the inner battery box panel - (8) 6mm bolts and (2) 8mm bolts.
7. Raise and support vehicle.
8. Remove the lower engine service cover - (15) screws. (4) push clips
9. Mark and remove the steering shaft from the rack by removing the 8mm Torx bolt from the top side of the swivel joint.
10. Remove the wires from the starter - (2) 8mm nut, (1) 6mm nut. Then remove the starter - (2) 8mm bolts.
11. Disconnect O2 sensors. The sensors can either be removed now or after removing the pipes.
12. Remove left and right motor mounts from the frame mounts by removing the 15mm nut at each side.
13. Raise the motor slightly.
14. Remove the right side motor mount from the motor by removing the (4) 13mm bolts.
15. Remove (16) 15mm nuts, (8) per side, from the manifolds.
16. Remove (16) E8 Torx studs, (8) per side, from the cylinder heads.
17. Undo the wide band clamps in front of the mid resonator. Remove the manifolds and catted pipe together.

ASSEMBLY

18. Run a bead of RTV sealant on the sealing surface of each header, and install from the bottom. Use either the supplied 10mm bolts or the factory studs and nuts.
19. Reinstall the motor mounts, lower the motor and tighten the nuts.

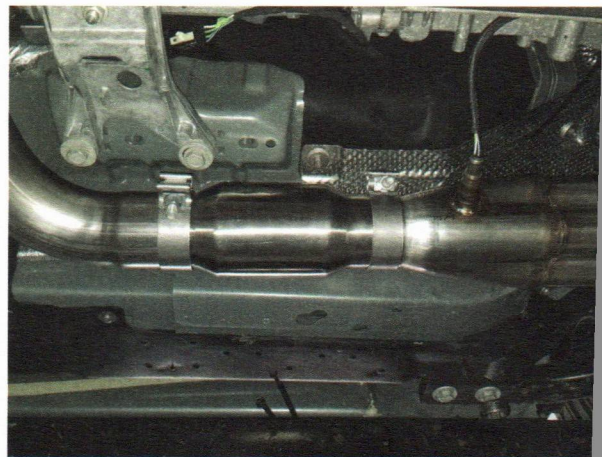


Detail 18: OEM manifold

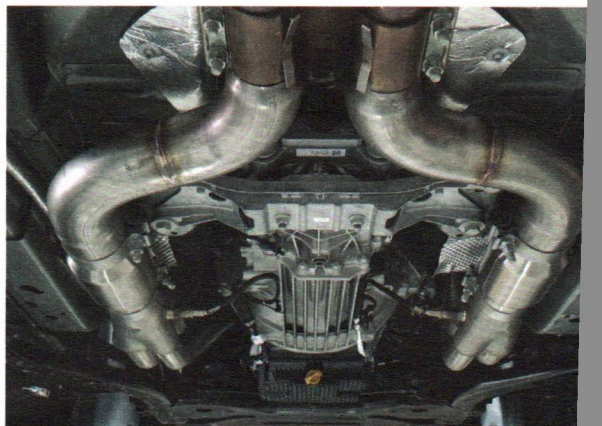
20. Put the starter back in and tighten.
21. Reconnect the steering shaft.
22. Reinstall the engine service cover.
23. Install the High Flow Catalytic Converters using (2) 3" clamps.
24. Install the lead pipes using (2) 3" clamps.
25. Install the O2 sensors using the supplied extension to the driver side front. The rear wires can be removed from the looms on the transmission to make them reach if needed.
26. Connect the lead pipes to either your Stainless Works catback using (2) 3" clamps, or use factory clamps to connect to the OEM catback.
27. Adjust all components for fitment and tighten all clamps.
28. Be sure to have adequate clearance around all wires, hoses, and lines. If anything is in contact with the exhaust system it will melt. Make sure to have at least 1/2" of clearance and wrap any suspect areas with DEI thermal barrier wrap.
29. Lower the vehicle.
30. Reinstall the air box.
31. Reinstall the battery box components and the battery.
32. After double checking for clearance and making sure all lines, wires and hoses are secured, drive the car for 10-20 miles and re-check all clamps and clearances. Your system may be tack welded at the joints/ clamps to reduce shifting of the system during heating and cooling cycles. Make certain to disconnect the battery before performing any welding.



Detail 20: OEM catback connections



Detail 28: Lead pipes and O2's installed



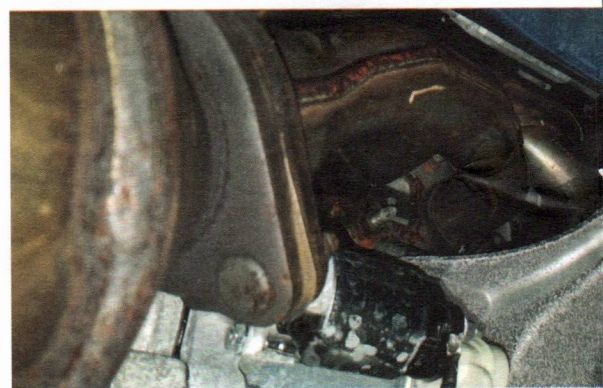
Detail 29: Catted headers installed to OEM catback connection

2018-23 FORD MUSTANG GT 5.0L HEADER INSTALLATION INSTRUCTIONS



DISASSEMBLY

1. Remove the battery box cover - 3 push clips.
2. Disconnect the battery.
3. Remove the 6mm battery hold down bolt and remove the battery.
4. Remove (3) 6mm bolts holding the battery box in and remove the battery box.
5. Starting from the right side of the car, remove (6) push clips holding the windshield wiper cowl down.
6. Remove the inner battery box panel - (8) 6mm bolts and (2) 8mm bolts.
7. Loosen the air box clamp and disconnect the wire.
8. Remove the air box cover and filter.
9. Remove the air box - (1) 6mm bolt.
10. Raise and support vehicle.
11. Remove the lower engine service cover - (6) screws.
12. Mark and remove the steering shaft from the rack by removing the 8mm Torx bolt from the top side of the swivel joint.
13. Remove the wires from the starter - (1) 8mm nut, (1) 6mm nut. Then remove the starter - (3) 8mm bolts.
14. Disconnect O2 sensors. The sensors can either be removed now or after removing the pipes.
15. Remove left and right motor mounts from the frame mounts by removing the 15mm nut at each side.
16. Raise the motor slightly.
17. Remove the right side motor mount from the motor by removing the 15mm nut that holds the ground wire and the (4) 13mm bolts.
18. Remove (16) 15mm nuts, (8) per side, from the manifolds.
19. Remove (16) E8 Torx studs, (8) per side, from the cylinder heads.
20. Undo the wide band clamps in front of the mid resonator. Remove the manifolds and catted pipe together.



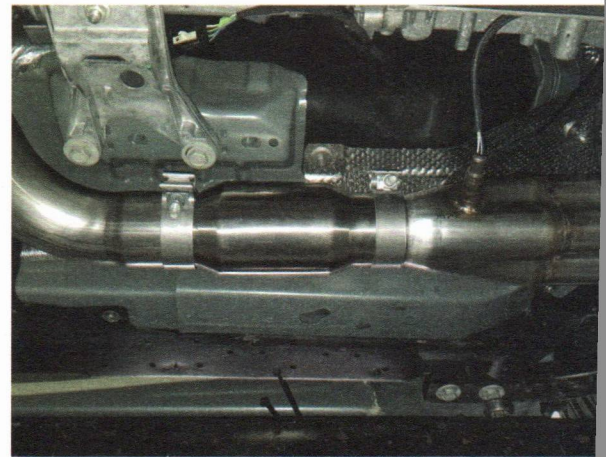
Detail 18: OEM manifold

ASSEMBLY

21. Run a bead of RTV sealant on the sealing surface of each header, and install from the bottom. Use either the supplied 10mm bolts or the factory studs and nuts.
22. Reinstall the motor mounts, lower the motor and tighten the nuts.
23. Put the starter back in and tighten.
24. Reconnect the steering shaft.
25. Reinstall the engine service cover.
26. Install the High Flow Catalytic Converters using (2) 3" clamps.
27. Install the lead pipes using (2) 3" clamps.
28. Install the O2 sensors using the supplied extension to the driver side front. The rear wires can be removed from the looms on the transmission to make them reach if needed.
29. Connect the lead pipes to either your Stainless Works catback using (2) 3" clamps, or use factory clamps to connect to the OEM catback.
30. Adjust all components for fitment and tighten all clamps.
31. Be sure to have adequate clearance around all wires, hoses, and lines. If anything is in contact with the exhaust system it will melt. Make sure to have at least 1/2" of clearance and wrap any suspect areas with DEI thermal barrier wrap.
32. Lower the vehicle.
33. Reinstall the air box.
34. Reinstall the battery box components and the battery.
35. After double checking for clearance and making sure all lines, wires and hoses are secured, drive the car for 10-20 miles and re-check all clamps and clearances. Your system may be tack welded at the joints/ clamps to reduce shifting of the system during heating and cooling cycles. Make certain to disconnect the battery before performing any welding.



Detail 20: OEM catback connections



Detail 28: Lead pipes and O2's installed



Detail 29: Catted headers installed to OEM catback connection

2015-2017 FORD MUSTANG GT

HEADER INSTALLATION INSTRUCTIONS



DISASSEMBLY

1. Remove the battery box cover - 3 push clips.
 2. Disconnect the battery.
 3. Remove 6mm battery hold down bolt and remove the battery.
 4. Remove (3) 6mm bolts holding the battery box in and remove the battery box.
 5. Starting from the right side of car remove (6) push clips holding the windshield wiper cowl down.
 6. Remove the inner battery box panel - (8) 6 mm bolts and (2) 8 mm bolts.
 7. Loosen the air box clamp and disconnect the wire.
 8. Remove the air box cover and filter.
 9. Remove the air box - (1) 6 mm bolt.
 10. Remove the lower engine service cover (2) 6 mm bolts and (4) screws.
 11. Mark and remove the steering shaft from the rack by removing 8mm Torx bolt from top side of swivel joint.
 12. Remove the wires from the starter (1) 8 mm nut, (1) 6 mm nut, then remove the starter - (3) 8 mm bolts.
 13. Remove O2 sensors from the pipes or disconnect the pipes and remove the O2 sensors after the pipes are removed from the car. Mark the sensors with the correct locations for all four: left/ front, right/front, left/rear, right/rear so these are reinstalled correctly.
 14. Raise up the motor slightly with a jack.
 15. Remove the right motor mount - (3) 10mm nuts (4) 10mm bolts.
 16. Remove (16) 10 mm nuts – (8) per side- from the manifolds and remove the manifolds and catalytic converters (all can come down all together).
 17. Remove (16) 10 mm studs from the cylinder heads.
 18. With the manifolds out, remove the left front O2 sensor wiring from its loom clips (so it will reach the longer position required for install) and remove the left rear one from the front loom clip on the side of the transmission.
- (You do not need to use the provided O2 extensions for a car with an automatic transmission - pulling the wires down from the loom clips will allow them to reach.)
- Note: manual transmission cars will utilize the provide O2 extensions – one on each side going into the header collectors (front). Install these now.

ASSEMBLY

19. **Note:** Before installing the passenger side header, check the bolt holding the bracket for the A/C line. You may need to remove this bolt and zip tie the A/C line up and out of the way.

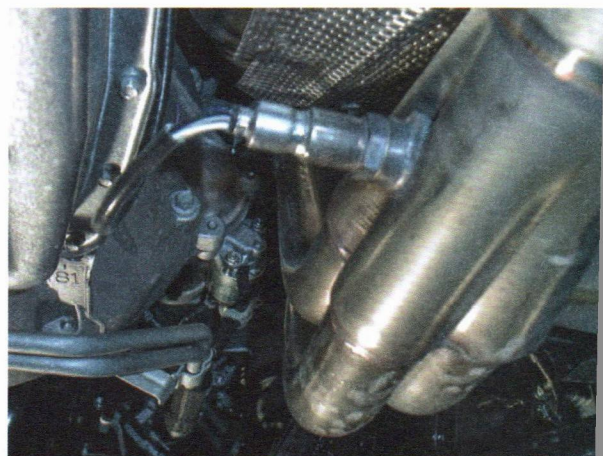
Otherwise there may be a clearance problem with this bolt and the header primary tube.

20. Seal and install headers from the bottom using either the 10mm bolts supplied or the factory studs and nuts.
21. Reinstall the motor mount and lower the motor and tighten.
22. Put the starter back in and tighten.
23. Reconnect the steering shaft.
24. Reinstall the engine service cover.
25. Install either the purchased catalytic converters or off road pipes using (2) 3" clamps.
26. Install the lead pipes using (2) 3" clamps.
27. Reinstall O2 sensors in both the collectors and the lead pipes.

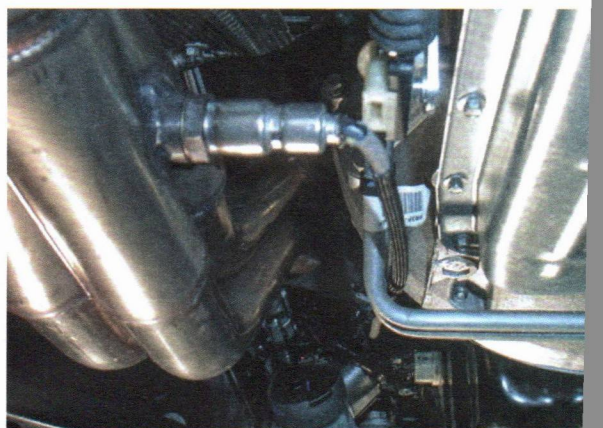
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Detail 25



Detail 27



Detail 27

28. **For Those Using Factory Connect Headers:** the lead pipes hook to the factory exhaust, necking down at the factory break point.

For those using Performance Connect headers: the leads are designed to mate to our catback for a full 3" system.

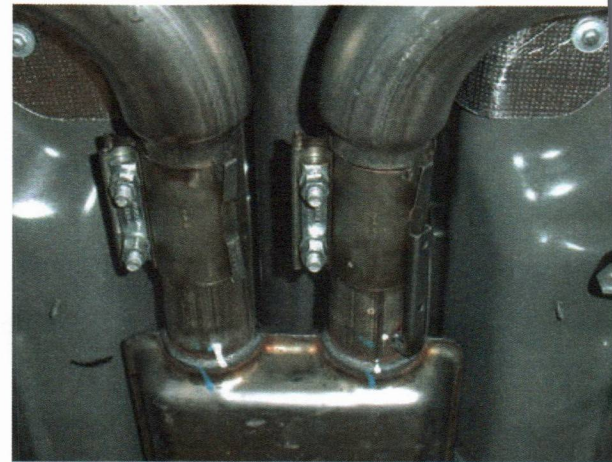
For those using Aftermarket Connect (part numbers M15H3CATLG and M15H3ORLG)

Connecting MBRP 3" Catback System: the MBRP catback system is cut at necked down point allowing the header leads to slide over making a full 3" system.

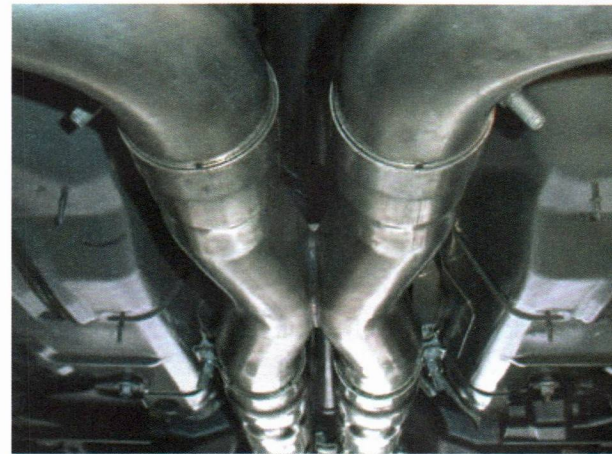
Connecting Corsa Catback system: Stainless Works header leads are cut at expansion point, and Corsa Adapters are discarded, making a full 3" system.

Convert SW Factory Connect Catback To Full System: Cut SW Catback system at necked down point which allows leads to slip over, making a full 3" system.

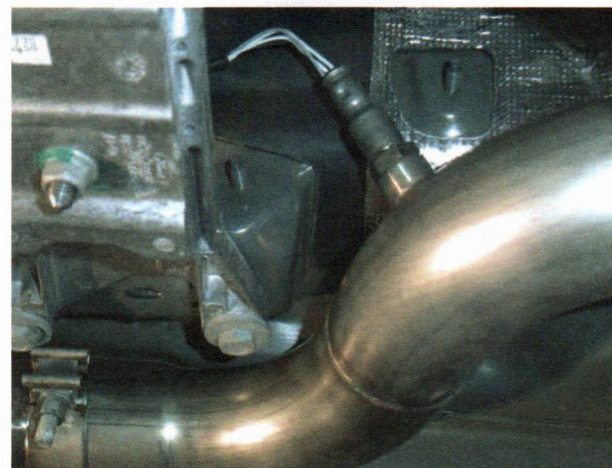
29. Adjust everything for fitment and tighten all clamps.
30. Be sure to have adequate clearance around all wires, hoses and lines. If anything is in contact with the exhaust system, it will melt. Make sure to have at least 1/2" of clearance and wrap any suspect areas with DEI thermal barrier wrap.
31. Lower the vehicle.
32. Reinstall the air box.
33. Reinstall the battery box components removed and reinstall the battery.
34. After double checking for clearance and making sure all lines, wires and hoses are secured, drive the car for 10-20 miles and re-check all clamps and clearances. Your system may be tack welded at the joints/ clamps to reduce shifting of the system during heating and cooling cycles. Make certain to disconnect the battery before performing any welding.



Detail 28: Factory Connect



Detail 28: Performance Connect



Detail 30



F-150 & RAPTOR

Why Stop at Mustang? Upgrade Your Truck!

Stainless Works & Stainless Power headers and exhaust systems for Ford F-150 and Raptor trucks improve and customize your vehicle. You know now how easy they are to install. Check out our full line of products on our website, and make the truck of your aftermarket dreams.



**AMERICAN MADE
304 STAINLESS STEEL
IMPROVE YOUR SOUND
UPGRADE YOUR HORSEPOWER**

SHOP AT STAINLESSWORKS.NET

BILL OF MATERIALS

☒ ALL SYSTEMS

ITEM	PART NUMBER	COMPONENT NAME	DESCRIPTION	QTY	IN BOX
1	Incls 21901,22111,22112	INSTALLATION INSTRUCTIONS	This Booklet	1	✓
2	RTCM	CATALYTIC CONVERTER	Metal matrix catalytic converter, 4" dia. Body with 3" Id. Inlet and 3" OD. outlet 10 3/4 long	2	
3	109255-12	O2 EXTENSION	12" Long Front O2 Extension For 2015-17 Driver Side on Manual Trans Vehicles	1	
4	109255-24	O2 EXTENSION	24" Long Front O2 Extension For 2015-17 Passenger Side on Manual Trans Vehicles	1	
5	116232	O2 EXTENSION	12" Long Front O2 Extension 2018+ Driver and Passenger Side	2	
6	BK10MM	BOLT KIT	10mm x 1.25 Header Bolt Kit (16 Pieces)	1	
7	RTVTUBE	RTV	3 OZ. Tube Of High Temp Silicone	1	

☐ M24H CAT ☐ SM24H CAT

ITEM	COMPONENT NAME	QTY	IN BOX
8	HFFORD5052-188 DRIVER SIDE HEADER	1	
9	HFFORD5052-188 PASSENGER SIDE HEADER	1	
10	M15LEADS225 DRIVER & PASSENGER SIDES	2	
11	NBC300 CLAMPS	4	

☐ M242H CAT

ITEM	COMPONENT NAME	QTY	IN BOX
8	M242H DRIVER SIDE HEADER	1	
9	M242H PASSENGER SIDE HEADER	1	
10	M15LEADS225 DRIVER & PASSENGER SIDES	2	
11	NBC300 CLAMPS	4	

☐ M24H3 CAT ☐ SM24H3 CAT

ITEM	COMPONENT NAME	QTY	IN BOX
8	HFFORD5052-188 DRIVER SIDE HEADER	1	
9	HFFORD5052-188 PASSENGER SIDE HEADER	1	
10	M15LEADS300 DRIVER & PASSENGER SIDES	2	
11	NBC300 CLAMPS	4	

☐ M242H3 CAT

ITEM	COMPONENT NAME	QTY	IN BOX
8	M242H DRIVER SIDE HEADER	1	
9	M242H PASSENGER SIDE HEADER	1	
10	M15LEADS300 DRIVER & PASSENGER SIDES	2	
11	NBC300 CLAMPS	4	

☐ M24H3 CAT LG ☐ SM24H3 CAT LG

ITEM	COMPONENT NAME	QTY	IN BOX
8	HFFORD5052-188 DRIVER SIDE HEADER	1	
9	HFFORD5052-188 PASSENGER SIDE HEADER	1	
10	M15LEADS300 LG DRIVER & PASSENGER SIDES	2	
11	NBC300 CLAMPS	6	

☐ M242H3 CAT LG

ITEM	COMPONENT NAME	QTY	IN BOX
8	M242H DRIVER SIDE HEADER	1	
9	M242H PASSENGER SIDE HEADER	1	
10	M15LEADS300 LG DRIVER & PASSENGER SIDES	2	
11	NBC300 CLAMPS	6	

