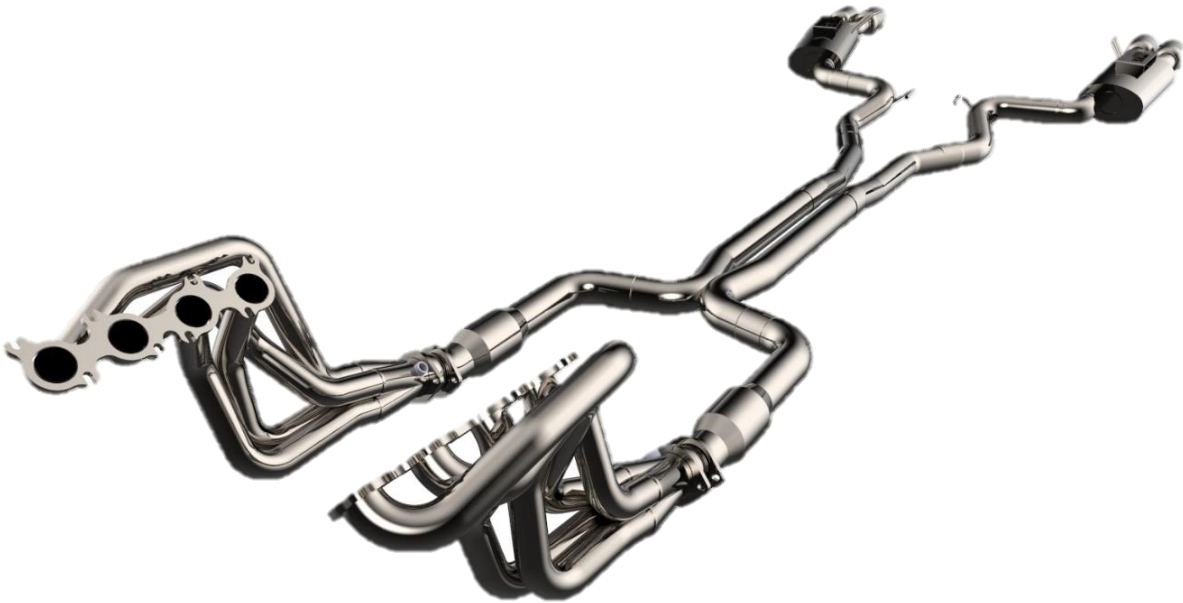
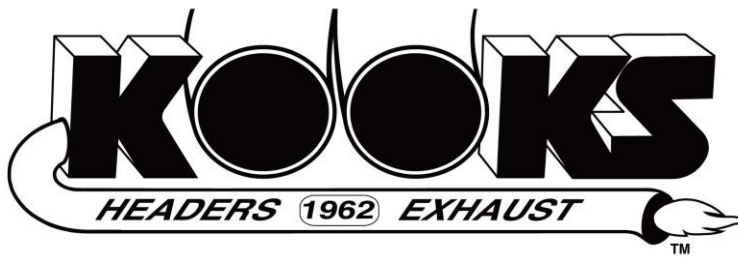


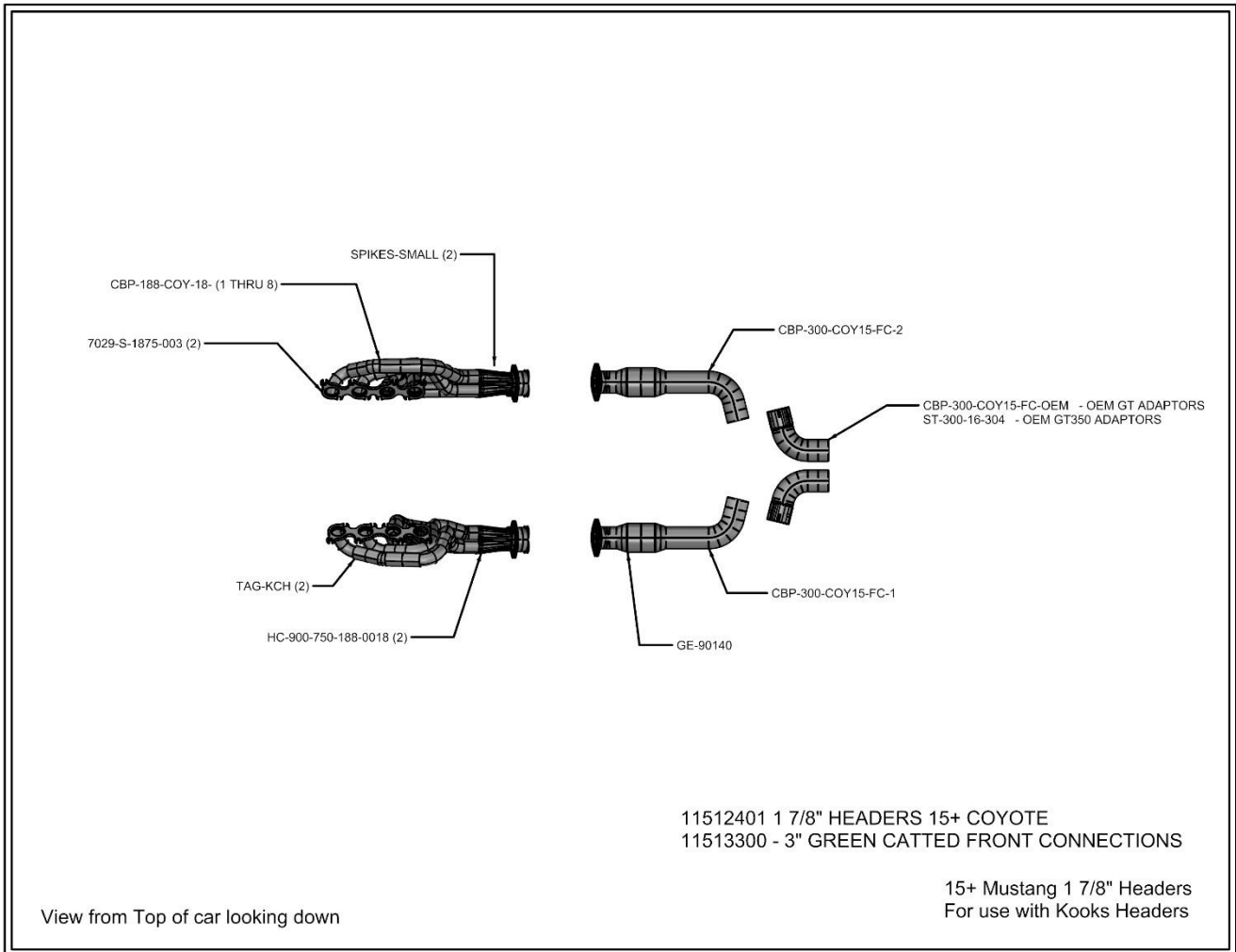
2018+ Ford Mustang Full Exhaust Installation Instructions

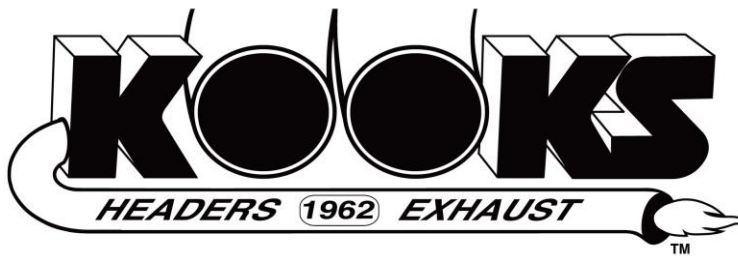


**Thank you for your purchase, we appreciate your business.
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Toll free at 1-866-586-KOOK or contact your local dealer.**

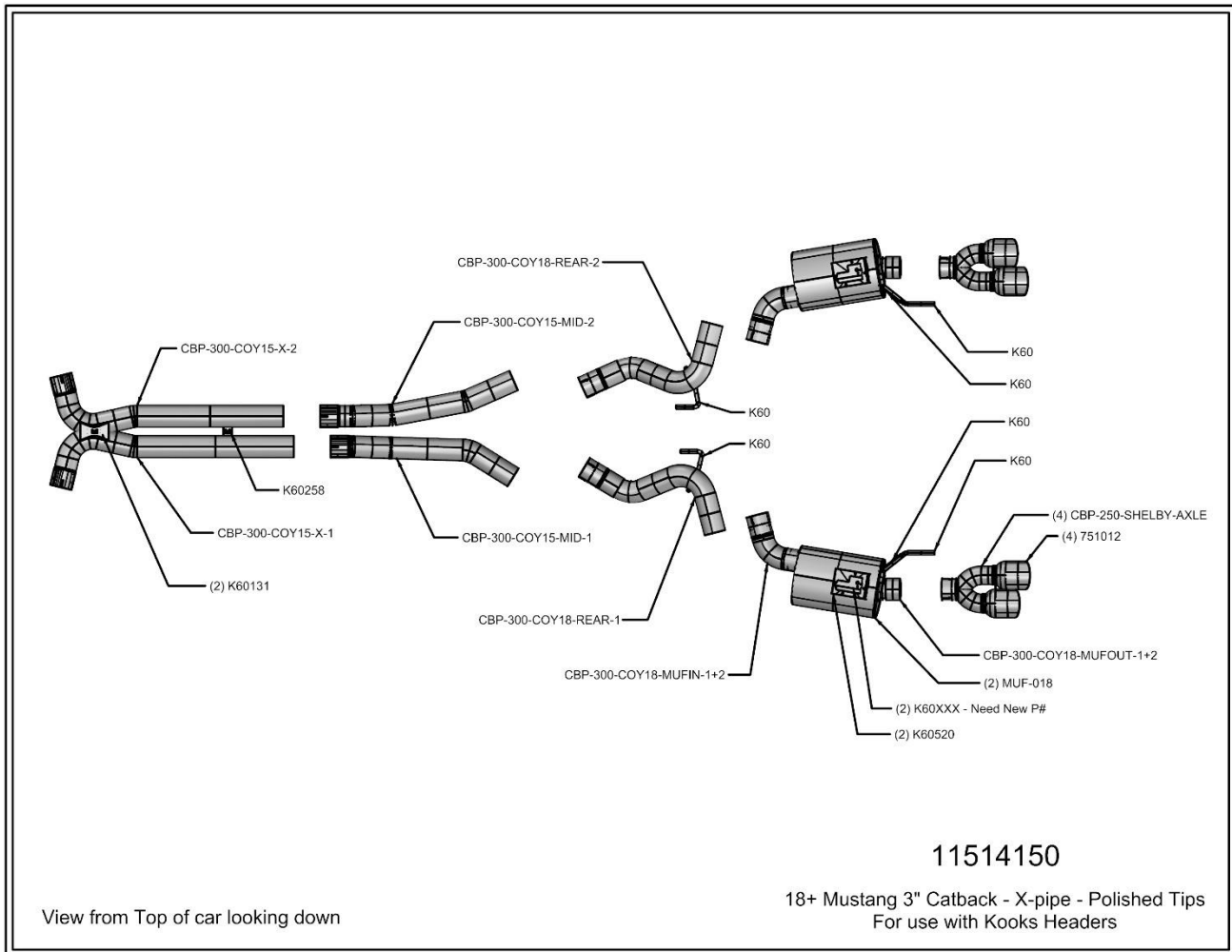


System Layout (Front)



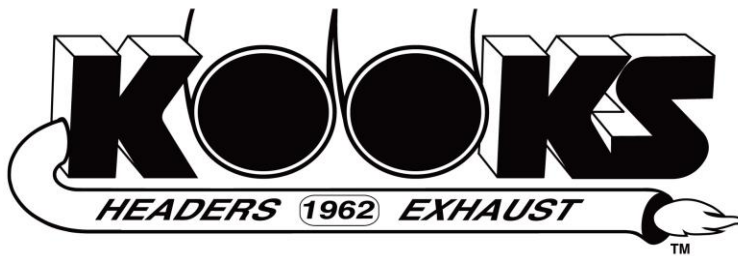


System Layout (Mid and Rear)



Do not attempt this installation if proper safety equipment is not available to you - seek the assistance of a professional installer.

Read and understand all instructions before beginning.



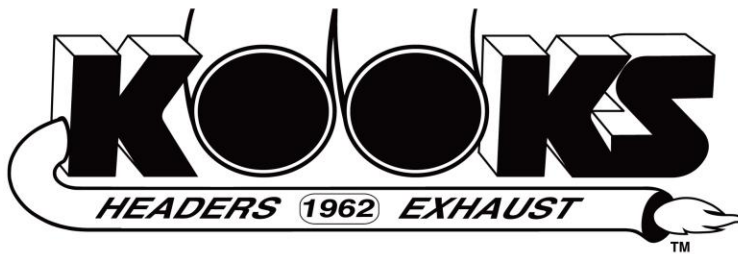
To install this system, the following tools are suggested:

- Vehicle Lift or Jack and 4 Jack Stands
- Engine Cradle
- Ratchet Set ($1/4''$ & $3/8''$ Drive)
- Metric Socket Set ($1/4''$ & $3/8''$ Drive)
- Extensions ($1/4''$ & $3/8''$ Drive)
- Pry Bar Set
- O₂ Socket (or Wrench)
- Gasket Scraper
- Metric Wrench Set
- T-40 Torx Bit
- Exhaust Hanger Pliers (groove joint pliers)
- Standard Screwdriver Set
- Safety Glasses
- Paint Pen or Marker
- Vehicle Service Manual
- Thread Locker
- Penetrating Oil
- Anti-seize
- Zip Ties

Vehicle Preparation

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

Always disconnect the battery before performing this type of work on any vehicle



FACTORY EXHAUST REMOVAL

STEP 1. Battery and Battery Tray and Inner Panel

- Disconnect the negative and positive battery terminal (10mm).
- Remove the battery tie down strap and remove the battery (8mm).
- Remove the three 8mm bolts in the Battery Tray and remove the Battery Tray.
- Remove the 10 bolts on the Inner Panel and remove it (eight 10mm & two 13mm).

Removal of OEM Exhaust

STEP 2. Exhaust Valve Actuators

- Disconnect actuator valve from wire harness.
- Be sure to not damage this system as it will be re-used later.

STEP 3. Exhaust System

- The entire OEM exhaust can be removed in (1) section from under the vehicle, starting with unbolting it in front of the catalytic converters. (If Kooks headers are already installed on the vehicle, this will already be done.)
- Unbolt the hanger assemblies located behind the rear differential (2 bolts on each side). These hangers are hooked onto the frame so they will not fall when unbolting.
- Unbolt the farthest back hanger assembly from the car (2 bolts on each side). These hangers are hooked onto the frame so they will not fall when unbolting.
- Carefully remove the complete exhaust assembly and the hanger assembly. The hanger assembly will be reused.
- Unbolt actuator motor from muffler assembly (3 nuts on each side). Leave spring connected to motor. The spring will be re-used.

Stock Manifold and Catalytic Converter Removal Process

The following steps will be performed from the topside of the engine compartment before moving to the underside of the vehicle.

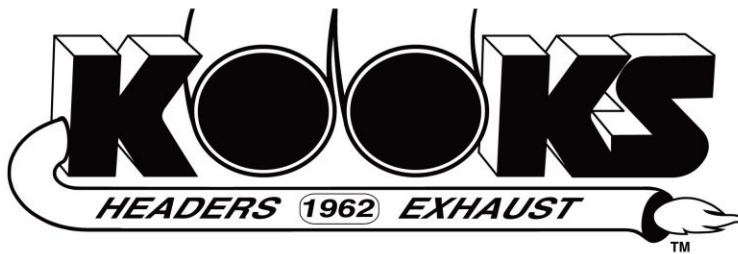
STEP 4. Engine Mount (Drivers Side and Passenger Side)

- Remove the 15mm engine mount nut.

***NOTE** – Do NOT excessively rock the engine after removing engine mount hardware*

STEP 5. Exhaust Manifolds

- Remove all 15mm exhaust manifold nuts visible from above the engine compartment. remaining exhaust manifold hardware can be removed later.



****The remaining removal steps will be from beneath the Vehicle.****

STEP 6. Starter

- Disconnect starter wires.
 - 13mm nut on the positive wire.
 - 10mm nut on the jumper wire.

****Note the location of each wire****
- Remove the three 10mm bolts from starter.
- Remove starter.

STEP 7. O₂ Sensors

- Note the position of each O₂ sensor.
- Disconnect all four O₂ sensors from wiring harness.
- Remove front and rear O₂ sensors (wrench or O₂ socket).

STEP 8. Engine

- Kooks recommend the use of an engine cradle for safety and ease of installation.
 - Raise Engine approximately 1½”.
- **DO NOT SUPPORT ENGINE BY OIL PAN****

STEP 9. Engine Mount Bracket (Drivers Side and Passenger Side)

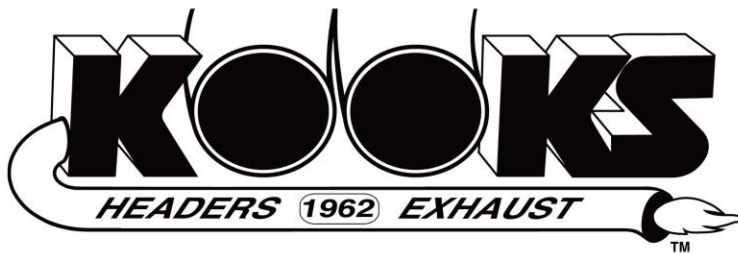
- Remove hardware attached to engine mount bracket.
 - 15mm Nut.
- Remove four 13mm bolts attaching engine mount bracket to engine.
- Remove engine mount bracket.

STEP 10. Exhaust Manifold (Drivers Side and Passenger Side)

- Remove remaining 15mm exhaust manifold nuts.
- Remove exhaust manifold.
- Remove all exhaust manifold studs.
 - **NOTE:** Exhaust manifold studs will be replaced with the supplied Kooks hardware.

STEP 11. Cylinder Head (Drivers Side and Passenger Side)

- Clean cylinder head.



KOOKS FULL EXHAUST INSTALLATION PROCESS

Kooks Header Installation Process

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

STEP 1. Kooks Headers (Drivers Side and Passenger Side)

- Install O₂ sensors into the header in their original locations using anti-seize before installation.
- Align supplied gasket and start all the top header bolts. Do not start the passenger side rear header bolt.
- Align Kooks header on top header bolts and start remaining header bolts.
- Lower engine (enough to allow for tightening of header without header interfering with vehicle floor).
- Tighten headers to factory exhaust manifold torque specs using factory torque spec sequence.

STEP 2. Engine Mount (Drivers Side and Passenger Side)

- Apply thread locker to engine mount hardware.
- Lower engine onto engine mounts.
- Center engine in vehicle.
- Tighten all engine mount hardware.

STEP 3. Starter

- Align starter and start the three starter bolts.
- Tighten starter bolts.
- Install starter wires noting original location of each. ****DO NOT over tighten****

Full Kooks Exhaust Installation

STEP 4. Kooks Front Connection Pipes and X-Pipe

- Align Kooks connection pipes with Kooks headers and Kooks x-pipe.
 - Support exhaust system in correct location.

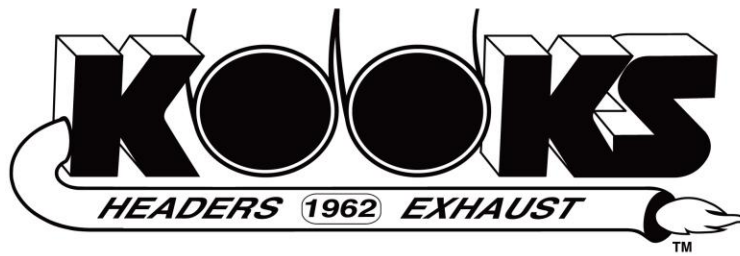
STEP 5. O₂ Sensors on Front Connections

- Apply anti-seize to the threads of all O₂ sensors.
- Install O₂ Sensors noting their original location.
- Install supplied O₂ extension on front passenger side.
 - The O₂ extensions for the 15+ are different from the 18+. All kits will have both extensions supplied. The 2018+ Mustang take the 5 pin extension.

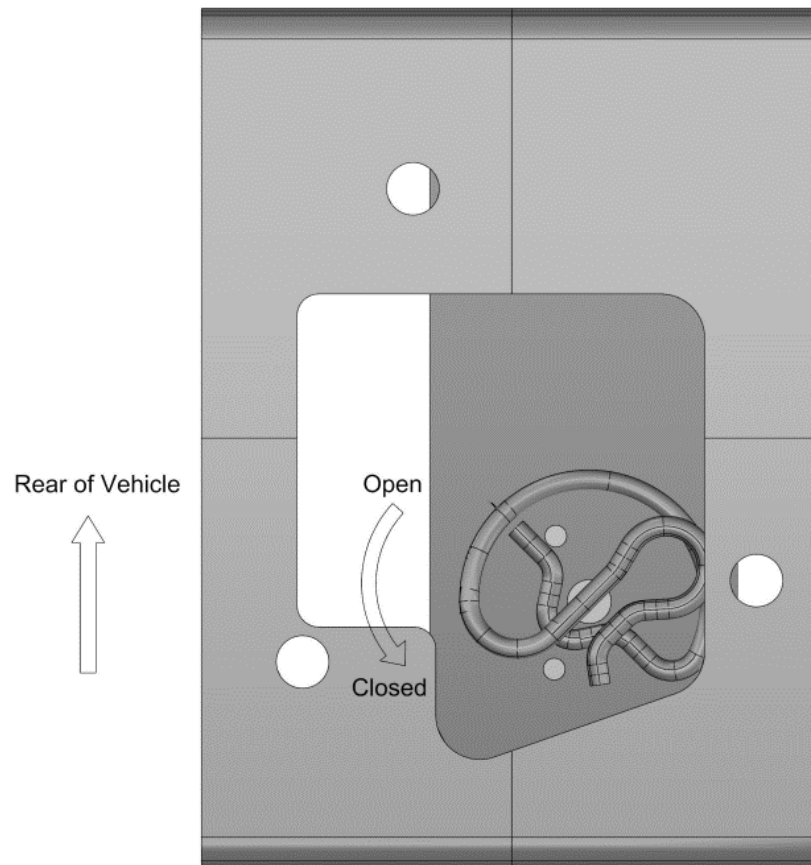
STEP 6. Exhaust Valve Installation

Kooks Custom Headers – 141 Advantage Place Statesville, NC 28677

www.KooksHeaders.com



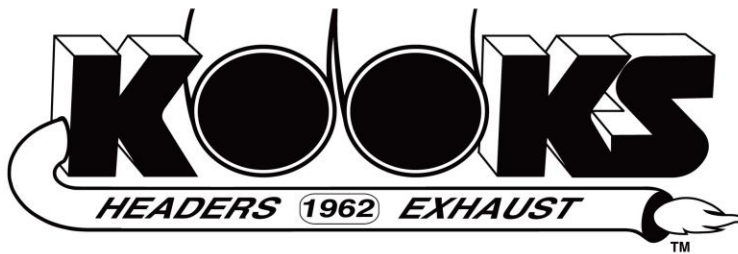
- Install hanger assembly onto axle back, note there is a left and right side.
- Bolt valve motor to bracket on muffler with supplied fasteners. See drawing below for how this is installed. Spring will go to the “Open” position.



18+ Mustang Actuator Motor Mount

STEP 7. Kooks Mid Pipes, Rear Connections and Axle Back Install

- Slip the provided band clamps over the exhaust tubes for the x-pipe, mid-pipes and rear connections/muffler section; do not tighten. See picture at beginning for layout of full system.
- Hook OEM hanger assembly into slots on car.
- Install hanger bolts (2 on each side) and torque to OEM specifications.
- Reconnect valve motor to wire harness.
- Slip on tip section with supplied 3” band clamps.



STEP 8. Exhaust Alignment

- Align the exhaust clear of all obstructions and position tips where desired.
- Tighten all clamps to specified torque.

STEP 9. Inspection

- Start Engine and check for any exhaust leaks.
- Allow vehicle to complete one heat cycle (heat to operating temperature and allow for cooling).
- Re-torque clamps.

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