

2015 + Ford Mustang Header and Connection Pipe Installation Instructions



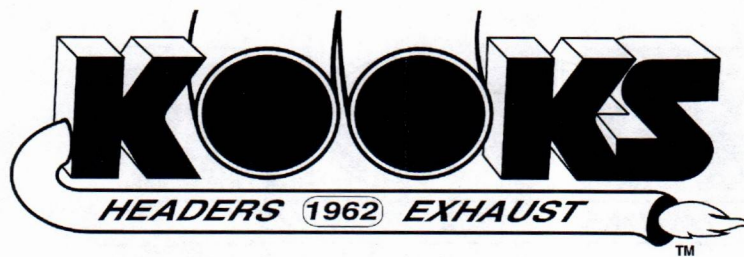
Do not attempt this installation if proper safety equipment isn't available to you.
Seek the assistance of a professional installer.

Kooks Mustang headers install from beneath the vehicle.
Raising and securing the vehicle is a must.

Read and understand all instructions before beginning.

To install this system the following tools are suggested:

- Vehicle Lift (Jack and 4 Jack Stands)
- Engine Cradle
- Ratchet Set ($\frac{1}{4}$ " & $\frac{3}{8}$ " Drive)
- Metric Socket Set ($\frac{1}{4}$ " & $\frac{3}{8}$ " Drive)
- Extensions ($\frac{1}{4}$ " & $\frac{3}{8}$ " Drive)
- Pry Bar Set
- $\frac{7}{8}$ " O² Socket ($\frac{7}{8}$ " Wrench)
- T-40 Torx Bit
- Gasket Scraper
- Metric Wrench Set (Ratchet Wrenches)
- Standard Screwdriver Set
- Safety Glasses
- Paint Pen (Marker)
- Service Manual
- Thread Locker
- Anti-seize



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

To aid in the overall speed of disassembly, the following steps will be performed from the topside of the Engine Compartment before moving to the underside.

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).

STEP 2. 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 3. Exhaust Manifolds

- Remove all 15mm Exhaust Manifold Nuts visible from above the engine compartment.
Remaining Exhaust Manifold Hardware can be removed at a later time.

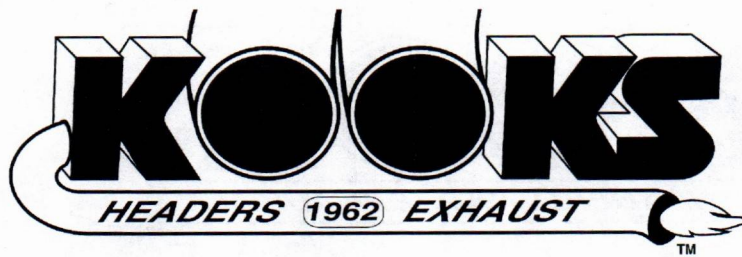
****The remaining removal steps will be from beneath the Vehicle.****

STEP 4. 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 5. O² Sensors

- Note the position of each O² Sensor.
- Disconnect all four O² Sensors from Wiring Harness.
- Remove front and rear O² Sensors (7/8" Wrench or O² Socket).



STEP 6. Factory Catalytic Converter and H-Pipe

- Loosen the 2 1/4" x 3 1/2" – 2 Bolt Clamp.
(Clamp connecting Factory Front Connection to Factory Cat Back)
- *Note** – This clamp is to be reused on OEM Exhaust Systems.

STEP 7. Engine

- Kooks recommend the use of an Engine Cradle for safety and ease of installation.
- Raise Engine approximately 1 1/2".

****DO NOT SUPPORT ENGINE ON OIL PAN****

STEP 8. 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.

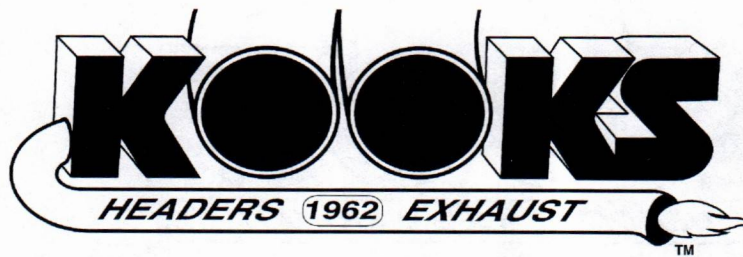
STEP 9. Exhaust Manifold (Drivers Side and Passenger Side)

- Remove remaining 15mm Exhaust Manifold Nuts.
- Remove Exhaust Manifold.
- Remove all Exhaust Manifold Studs.

Exhaust Manifold Studs will be replaced with the supplied Kooks hardware.

STEP 10. Cylinder Head (Drivers Side and Passenger Side)

- Clean Cylinder Head.



Kooks Header and Connection Pipes 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 of the Top Header Bolts. Do not start the Passenger side rear header bolt.
- Align 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

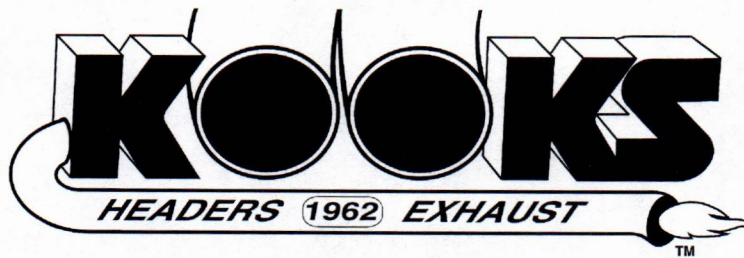
- Align Starter and start three Starter Bolts.
- Tighten Starter Bolts.
- Install Starter Wires noting original location of each. ****Do Not over tighten****

STEP 4. Kooks Connection Pipes

- Align Kooks Connection Pipes with Kooks Headers and Mid Pipes.
 - Support Exhaust System in correct location.
- Install all hardware and tighten front to rear.
 - Use supplied Hardware and Factory 2 1/4" x 3 1/2" – 2 Bolt Clamp.

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. Battery and Battery Tray

- Reinstall Inner Panel and Tighten Bolts.
- Align the Battery Tray and Tighten Bolts.
- Replace the Battery and Battery Hold Down Strap.
- Connect the Positive Battery Cable.
- Assure all steps have been completed and connect the negative Battery Cable.

STEP 7. 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.

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