

Jeep LS Swap

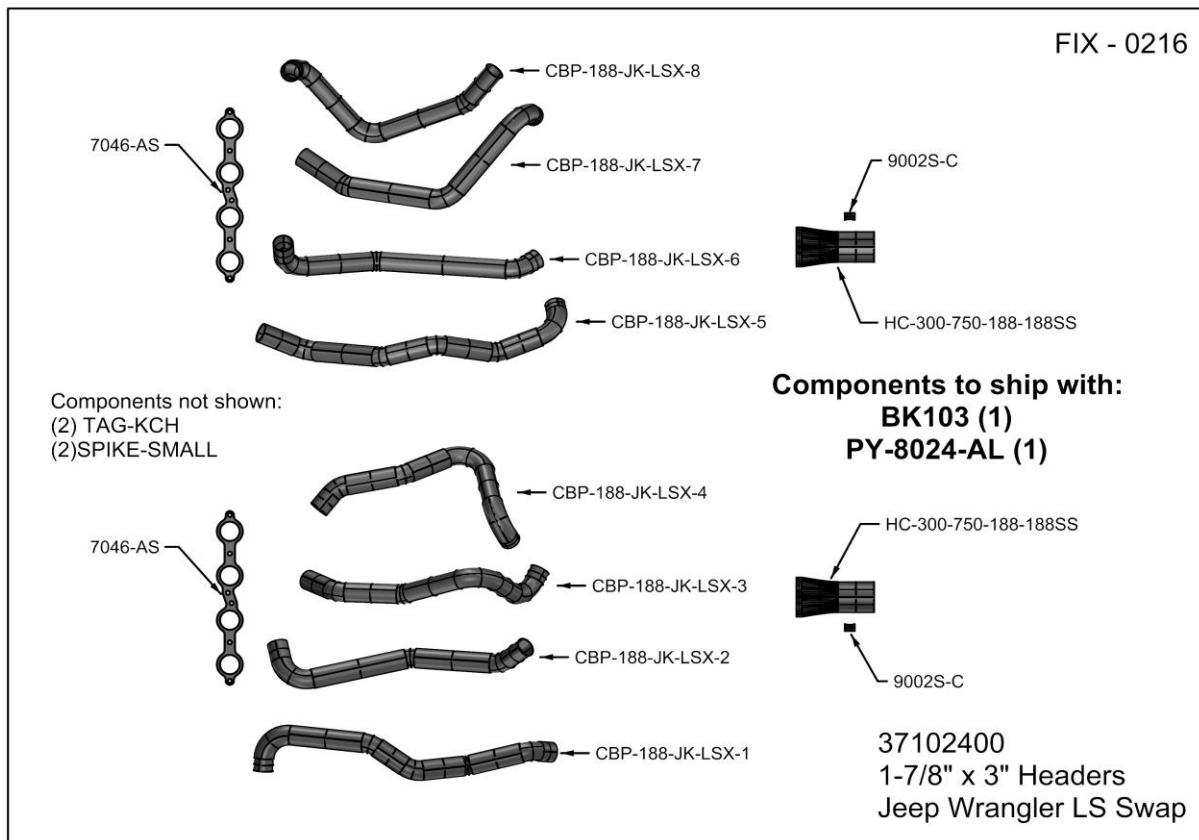
Installation Instructions

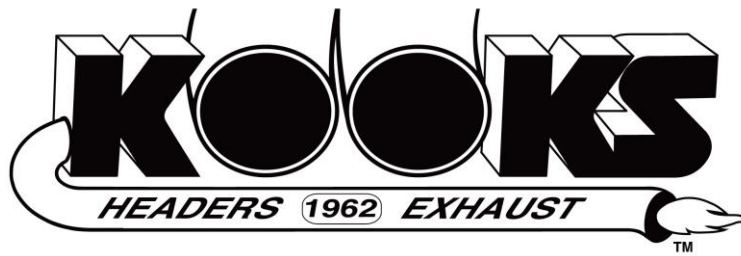
Off-Road (pictured), Catted and Green Catted

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

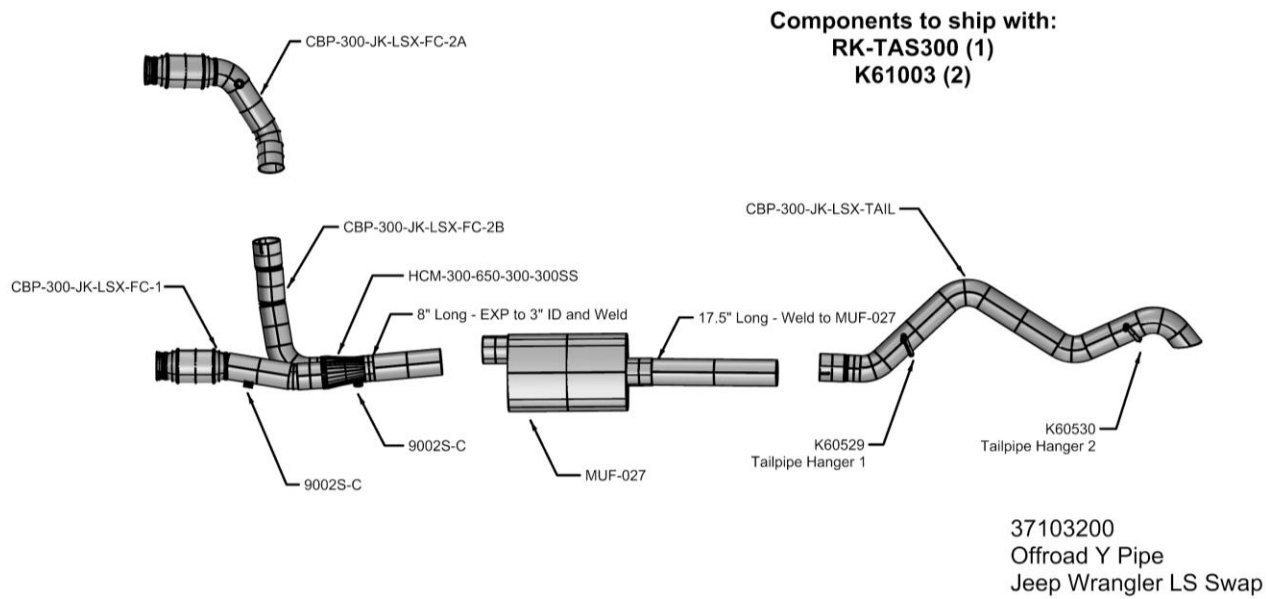
Kooks Jeep LS Swap Headers and Full Exhaust is installed from underneath the vehicle. Raising and securing the vehicle with jack stands is a must if a lift is not available.

SYSTEM LAYOUT





FIX - 0217



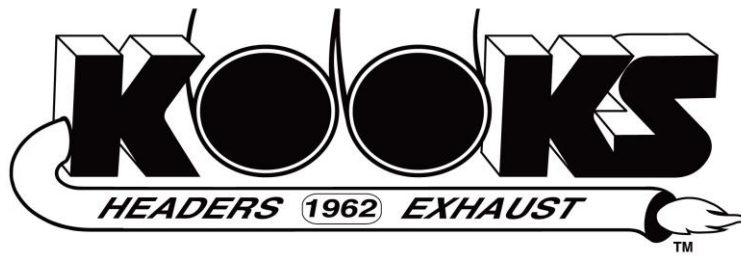
To install this system, the following tools are suggested:

- Vehicle Lift or Jack and 4 Jack Stands
- 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
- O2 Socket
- Gasket Scraper
- Metric Wrench Set
- Exhaust Tubing Cutter or Saw
- Standard Screwdriver Set
- Safety Glasses
- Paint Pen or Marker
- Vehicle Service Manual
- Thread Locker
- Penetrating Oil
- Anti-seize
- Cable Ties

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



KOOKS HEADER AND CONNECTION PIPE INSTALLATION PROCESS

It is recommended practice to spray penetrating oil on the rusted hardware before you start to help loosen them. While the lube is doing its job, you can start the install.

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

STEP 1. Battery

- Disconnect the negative and positive battery terminal.

STEP 2. Driver Side

- Remove Front Drive Shaft

STEP 3. Passenger Side

- Remove Starter
- Remove bolts on chassis side of the upper control arm (Gives additional room to install header)
- Remove bolts in motor mount (both sides)
- Remove transmission mount bolts, move transmission over to the driver's side as far as possible (pry bar may be necessary).

STEP 4. Cleaning

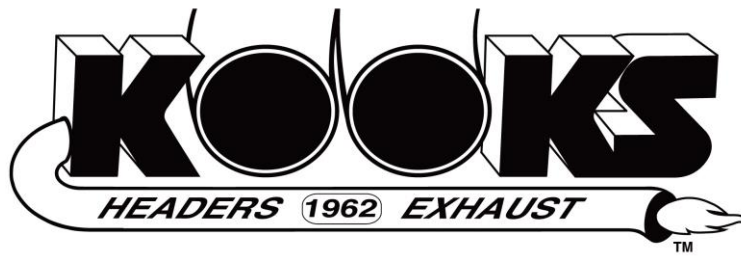
- Before installing your new Kooks Headers, make sure all gasket surfaces are clean and oil free.

STEP 5. Kooks Header (Drivers Side)

- Install headers from the bottom of the engine compartment.
- Install O2 sensors prior to header installation. NOTE: Apply anti-seize to the threads of all O2 sensors.
- Align one bolt through the header and supplied gasket and start in the cylinder head.
- Align header and gasket, then start remaining header bolts.
- Tighten header to factory exhaust manifold torque specs using factory torque spec sequence.

STEP 6. Kooks Header (Passenger Side)

- **NOTE:** This is where a pry bay may be useful to manipulate the location of the engine for header installation.
- Install headers from the bottom of the engine compartment.
- Install O2 sensors prior to header installation. NOTE: Apply anti seize to the threads of all O2 sensors.
- Align one bolt through the header and supplied gasket and start in the cylinder head.
- Align header and gasket, then start remaining header bolts. **Do Not Tighten.**



STEP 7. Starter

- Reinstall starter.
- Reinstall starter wire connections.
- Reinstall starter heat shield
- Carefully check wire clearance, routing it for maximum clearance around the header.
- Use cable ties if needed to hold wires.

STEP 8. Kooks Header (Passenger Side)

- Tighten header to factory exhaust manifold torque specs using factory torque spec sequence.

STEP 9. Re-Assembly

- Shift the driveline back into proper location.
- Re-install all fasteners for the motor mounts and transmission.
- Re-install bolts for passenger side control arm.
- Re-install front drive shaft.
- Tighten all fasteners to factory torque specifications.

STEP 10. Kooks Connection Pipes

- Loosely install connection pipes on vehicle using supplied band clamps and supplied Torca clamps on headers
- Align system for maximum clearance.
- Tighten system from rear to front of the vehicle.

STEP 11. Post- Cat O2 Sensors

- Apply anti seize to the threads of all O2 sensors.
- Install O2 sensors noting their original location.

STEP 12. Battery

- Ensure all above steps have been completed.
- Reconnect the positive then the negative battery terminal.

STEP 13. 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 Headers and Exhaust
Toll free at 1-866-586-KOOK or contact your local dealer.**