

RIPP Long Tube Header

Installation Guide; 2007-2011 Jeep Wrangler JK:

- Installing long tube headers will require access to both the top and bottom of vehicle.
- You will be re-using the factory exhaust manifold gasket.
- If working with a jack, make sure to properly place locking jack-stands to avoid mishaps.
- Use safety goggles, have penetrating oil handy and spray all hardware and hangers pertaining to the header/exhaust, including heat shields and clamps.

Beginning Notes:

You will be removing the entire exhaust manifold system including all four catalytic converters and replacing them with our equal-length long tube header system. These kits are labeled for "Off Road Use Only" and are not C.A.R.B. legal - steps have been taken to keep these environmentally friendly but they are not certified - Check with local laws before installing. **THIS INSTALL WILL REQUIER 4-5Hours to do properly**

These headers have been designed to utilize the upper-most factory heat shields covering the exhaust manifolds, re-installing the factory heat shields is absolutely essential to a proper running and installation of these headers. If you do-not reinstall the heat shields damage to the ignition system and possibly to the plastics surrounding the engine can and will occur.

End users using a RIPP supercharger system will have to remove the supercharger to access the passenger side exhaust manifold.

Steps for installation:

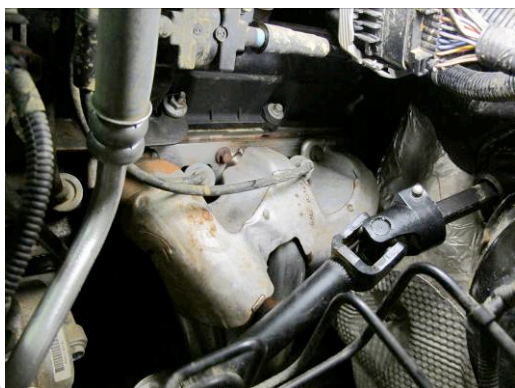
1. Lift vehicle on chassis lift and properly place jack stands
2. Remove transmission cross-member skid plate and set aside for reinstallation later
3. Remove transmission cross member and remember to support the transmission tail section to avoid over stressing of the engine mounts.
4. Once removed unplug all four O2 sensors and note location for later transfer from OEM location to headers and Y-pipe
5. Loosen all clamps starting with exhaust mid-section (merge) leading to exhaust system. It may be necessary to undo all the exhaust hangers to push back the exhaust and get it out of the way.



6. Loosen and remove the four bolts connecting the Y-pipe with the cats attached to the exhaust manifolds.
7. Remove the entire Y-pipe with cats and set aside for later steps.
8. Unplug spark-plug wires (Note factory units are sealed caution should be taken when unplugging, DO NOT just yank on the wires they will separate). Instead twist to loosen wire from sealer and then pull off spark plugs. Spark plugs do not have to be removed.
9. Remove factory exhaust manifolds with heat shields and set aside heat shields for later use.
10. Remove and clean the factory exhaust manifold gaskets - at this time a high quality high heat silicone can be applied to help with the installation process.
11. Once ready pick a side and install the long tube header (primary), using supplied hardware and gaskets. Note the driver's side will need to be slipped and twisted into place around starter - as with any long tube header it will require a bit of patience, you will not need to undo any motor mounts or remove starter to fit these into place.
12. Once both primary's are in place, remove O2 sensors from OEM Y pipe and install into header. At this time you will be installing the top most O2 sensor (closest to the OEM manifold).
13. Using the three supplied O2 Sensor harness's use two on the drivers side and one on the passenger side rear (after cat)
Note: Route away from heat and pipes and make sure to zip tie them securely into place.
14. Install the 2 piece Y pipe assembly via the ball-clamp/slip over section and supplied hardware - When pushing the slip over section into place be sure to push it all the way in until it bottoms out: Note at this point you will not tighten them down, get them snug for alignment in later step.
15. **Install second set of O2's after the cat and one remaining extension, note picture 1, the O2 extension harness is zip-tied to the heat shield; you will need to drill a hole to keep the harness safe.**
16. Slip exhaust into place to help guide alignment
17. At this point you will need to align the loosely fitted system, follow the pictures to help guide your alignment. There are 3 point that will require attention. The two ball connections are used to help align the system both horizontally and vertically.



18. Install transmission cross member using supplied hardware and aluminum shims (excluding Long Arm header Kit)
19. Check Y-pipe alignment - adjust as needed tighten system into place. Be systematic with the tightening, making sure the piping doesn't move.
20. Once your comfortable with the clearance re-install the transmission skid plate with supplied spacers and extended hardware, picture 6 also note the position of the slip over clamp.
21. Note the position of the clamp in picture 1; this is the best position for it to be in to avoid interference.
22. In picture 4 you can see a slight bit of interference with the heat shield, simply use a screw driver to push the shield back and give it clearance and avoid rattles.
23. In pictures 7 and 8 we show the risk you take with and without the heat shield in place **PUT THEM ON!**
24. **THEY** Will require slight trimming to fit them **BUT THEY DO FIT ---- PUT THEM ON -----**



PLEASE NOTE THAT AFTER SEVERAL HUNDERED MILES YOU SHOULD GO OVER YOUR BOLTS AS IT ALL SEATS IN