

INSTALLATION INSTRUCTIONS



ROCK RIPPER™ TOY HEADER

81-87, 22R/RE 4WD, 50 STATE SMOG LEGAL HEADER (180302-1-K)
81-84 22R 4WD CA ONLY 50 STATE SMOG LEGAL HEADER (180303-1-K)

KIT CONTENTS

1 ct.
Header Tube



1 ct.
Intermediate Tube



2 ct.
Flanges



2 ct.
Header Flange Gaskets



2 ct.
Exhaust Clamps



1 ct.
Header Gasket



1 ct.
CARB Decal



2 ct.
Air Injection Tube Blockoff



2 ct.
Air Injection Tube Gaskets



2 ct.
O² Sensor Gasket



2 ct.
O² Sensor Blockoff Plate



4 ct.
3/8"-16 Top Lock Nuts



4 ct.
3/8"-16 Gr5 Bolts



4 ct.
M8-1.25 Flange Nuts



4 ct.
M8x1.25 Studs



1 ct.
12mm Freeze Plug



INSTALLATION INSTRUCTIONS



KIT CONTENTS (CONTINUED)

1 ct.
5 ft. 16g Wire



2 ct.
Wire Connectors



RECOMMENDED TOOLS

Hammer

Jack

Jack Stands

3/8" Drive Ratchet

Torque Wrench

Chop Saw/Cutoff Wheel

Tape Measure

Wrenches

12mm

14mm

9/16"

Sockets

12mm

14mm

17mm

9/16"

3" Extension

10" Extension

CAUTION

1. Read all instructions completely and carefully before you begin.
2. Check to make sure the kit is complete and that no parts are missing (refer to the Kit Contents List on the first page of these instructions). If anything is missing, please contact Trail-Gear at 559.252.4950.
3. Park vehicle on a clean, dry, flat, level surface and block the tires so the vehicle can not roll in either direction.
4. Any variation from these instructions or parts will void the 50 state smog legal certification.

INSTALLATION INSTRUCTIONS



STEP 1

Remove the heat shield covering the stock header.



STEP 2

If your truck is equipped with an air injection tube, remove the nuts that attach the header to the air injection crossover tube. Remove the two bolts attached to the air injection crossover tube located on the underside of the front passenger side of the truck. Follow the air injection crossover tube to the bracket that attaches the tube to the header to find these two bolts.



STEP 3

Pry the air injection crossover tube off of the studs on the air injection tubes.



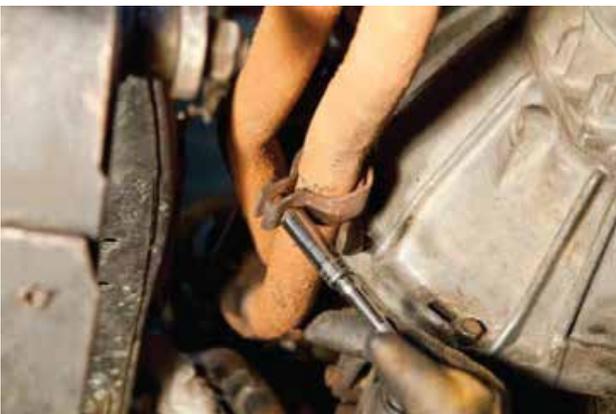
STEP 4

Disconnect the O² sensor and remove from the header.



STEP 5

Remove intermediate tube clamp and mounting bracket from the side of the bellhousing. Reinstall the two bellhousing bolts and tighten.



STEP 6

Unbolt intermediate tube (tube between header and catalytic converter).



INSTALLATION INSTRUCTIONS



STEP 7

Remove intermediate tube.



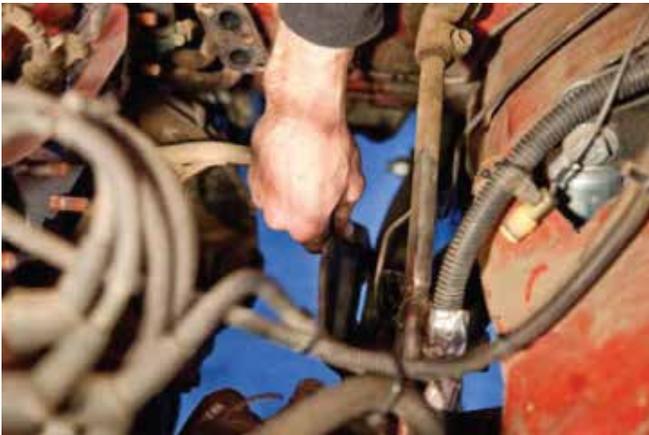
STEP 8

Unbolt and remove stock exhaust manifold (stock header).
Note: Use penetrating oil on all bolts and take extra care not to break the heads off.



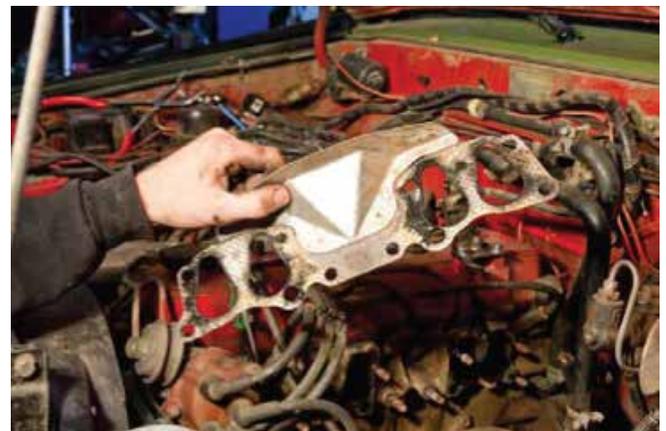
STEP 9

Remove secondary heatshield from the frame if necessary.



STEP 10

Remove the old gasket and clean gasket surface.



Now that you have removed your stock header, it's time to install your new Rock Ripper™ Header.

Note: We recommend installing new hardware with your header and using anti-seize.

STEP 11

Install supplied header gasket.
(We recommend using a copper coat gasket adhesive on both sides of the gasket.)

STEP 12

Slide header into place and over the studs.



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STEP 13

Apply anti-seize lubricant to the studs. Tighten nuts to 45ft/lbs.



STEP 14

Install the two supplied air injection tube gaskets, and then reinstall air injection tube, tightening the nuts to 45ft/lbs. **If your vehicle is equipped with an air injection tube, this must be reinstalled to be 50 state smog legal.** If your vehicle is not equipped with air injection tubes, we have supplied 2 air injection tube blockoff plates to be installed. Note: The center hole where the air injection tube would be mounted may need the provided freeze plug in order to seal the hole and prevent vacuum leak. NOTE: This step not applicable on some models.



STEP 15

After connecting the flanges, mark the intermediate tube on each side just before the flange tube tapers. Cut the intermediate tube to the marked length.



STEP 16

Slide the intermediate tube into place and insert the flange gasket between the intermediate tube and the catalytic convertor.



STEP 17

Insert and tighten bolts at the front and back of the intermediate tube.



STEP 18

Install and tighten clamps onto the front and back of the intermediate tube. If possible you may TIG weld these instead.



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STEP 19

Install O² sensor studs into the header as shown.



STEP 20

Install O² sensor with new gasket over the studs on the header. Install the provided O² sensor blockoff plate and gasket into the O² sensor flange in the intermediate tube.



STEP 21

Due to different manufacturing tolerances for the O² sensor, the slight tapping of a hammer with a socket may be necessary to install the sensor. Alternatively, some slight dremeling of the outside of the holes may be required.



STEP 22

Plug in O² sensor.



STEP 23

Before starting your truck, wipe down all polished surfaces of the header and intermediate tube with alcohol.