INSTALL INSTRUCTIONS

TRAIL-LINK THREE™ FRONT 3-LINK KIT

300273-1-KIT (ROCK ASSAULT)
300274-1-KIT (ROCK ASSAULT W/14" AIR SHOCKS)
300377-1-KIT (OEM)
300378-1-KIT (OEM W/14" AIR SHOCKS)

KIT CONTENTS

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WWW.TRAIL-GEAR.COM

RECOMMENDED TOOLS

Flathead Screwdriver
Side Cutters
Grinder
Torch
Welder
Hammer
Jack
Jack Stands
3/8" Drive Ratchet
1/2" Drive Ratchet
Torque Wrench
Tape Measure
3/4" Drill Bit
Power Steering Fluid (Royal Purple Recommended)

Wrenches	Sockets	Allens
1/2"	1/2"	7/32"
9/16"	9/16"	5/8"
3/4"	3/4"	
7/8"	1 1/8"	
11/16"	12mm	
1"	17mm	
1 1/8"	19mm	

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.

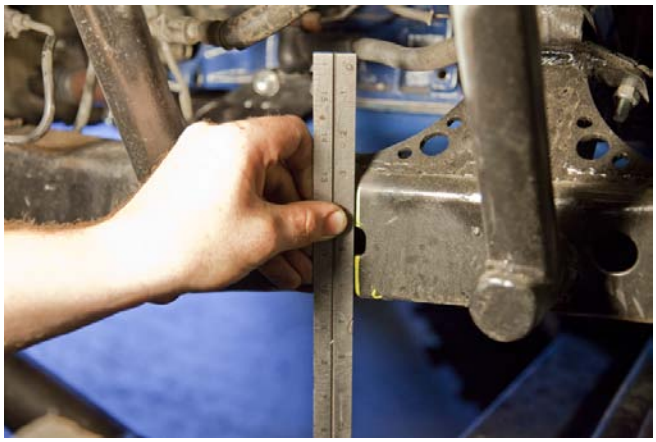
INSTALL INSTRUCTIONS (CONT'D.)

STEP 1 - PRE-INSTALL MEASUREMENTS

Before starting installation, take some measurements of your truck so that you can determine proper set up of your new 3 link kit. Take these measurements at ride height on a level surface. Measure your current wheelbase and front axle pinion angle. Record the data in the table on the last page of these instructions.

STEP 2 - PRE-INSTALL MEASUREMENTS

Mark the centerline of the front axle on each side of the frame. These marks will provide a reference when all brackets are cut off.

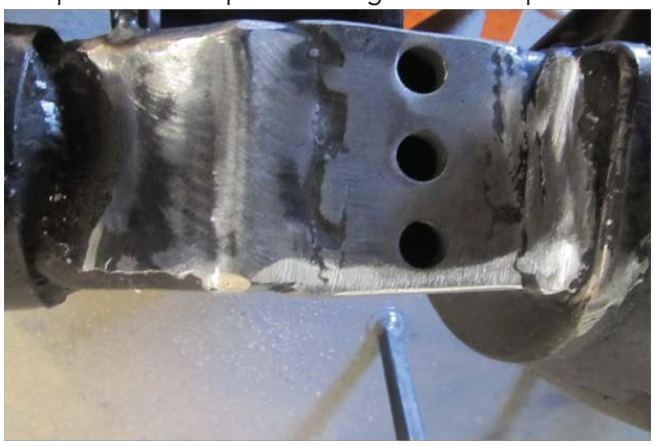


STEP 3 - REMOVE EXISTING SUSPENSION

Remove axle, cut off front suspension of the truck, and grind smooth.

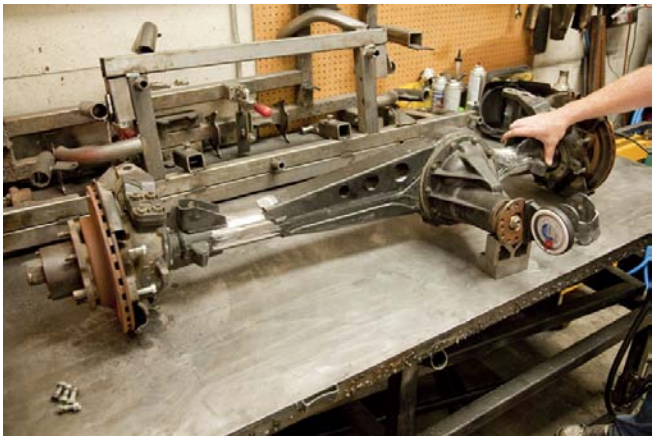
STEP 4 - AXLE PREP

If you are using a OEM housing. Cut spring perches and shock mounts off of axle and grind smooth. If you are using a Rock Assault housing with spring perches already installed, you will need to leave the short side (passenger) perch in place and cut off only the front and rear portion of the perch leaving the truss in place.



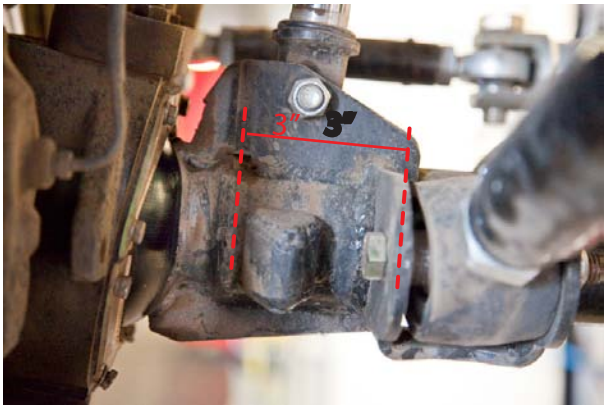
STEP 5 - AXLE BRACKET INSTALL

Position axle on bench and raise the pinion until the pinion angle matches the angle measured in step 1.



STEP 6 - LOWER LINK AXLE BRACKET INSTALL

Mark axle 3 inches in from flange on each side. Place the outside of the Lower Link bracket on the line and level them to the axle. This will place the link brackets level at ride height with the desired pinion angle. Tack weld them in place. If you are using a Rock Assault housing , place the brackets against the weld on the drop flange. Approx 3" from the knuckle ball flange.



STEP 7 - LOWER LINK FRAME BRACKET

Mount the Upper and lower link mounts to the frame. Depending on the model of truck these locations will vary.

STEP 8 - LOCATION OF UPPER LINK BRACKET

Slide the upper link bracket in place between the front cab body mount and the skid plate on the passenger side. Some grinding may be required.

STEP 9 - LOWER LINK INSTALL

Place the vehical at ride height. This will be critical if you are matching a leafspring ride height in the rear. Place the axle in the desired position(forward/aft), and center it under the truck. Measure the length needed for the lower links(should be the same). Cut the tubing and tack the bungs into place. Install the joints and bolt the links into place. Ensure the tierod and drag link are parallel.

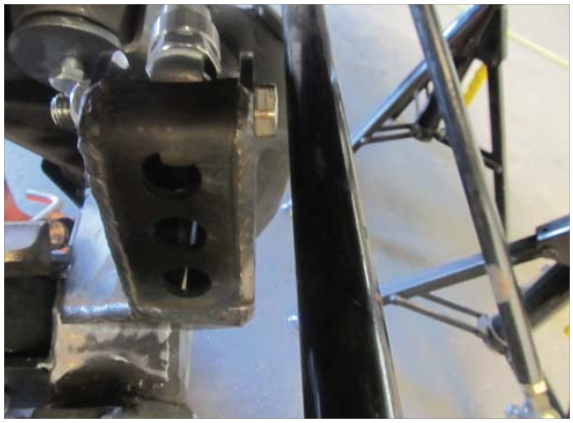
STEP 10 - UPPER LINK INSTALL

With the axle set in position forward and aft, and centered, place a jack stand under the pinion and set the previously measured pinion angle. Place the upper link bracket on top of the axle(the exact placement will vary from truck to truck). It is best to "cheat" the bracket out over the diff to allow room for the panhard bar to compress past the bracket. The link bolt should be about flush with the differential mounting surface.

INSTALL INSTRUCTIONS (CONT'D.)

STEP 11 - PANHARD INSTALL (AXLE)

With the axle completely located, Install the axle side panhard bracket. If you are using Rock Assault housing , place the bracket in top of the old spring perch and tack in place. With the tierod in place , turn the steering lock to lock to ensure the tierod does not contact the panhard bracket.



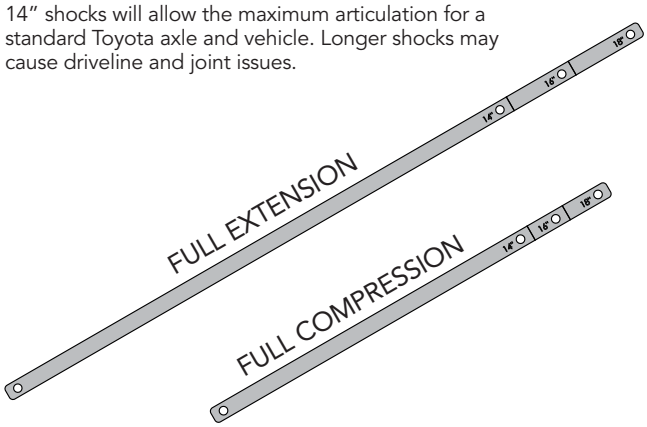
STEP 12 - PANHARD FRAME BRACKET INSTALL

Tack the bungs into the panhard tube and install rod ends. Bolt the panhard to the axle side bracket. Bolt the frame side bracket to the other end of the panhard. Now swing forward and aft until the panhard bar is parallel with the tierod, and is at the same downward angle as the drag link. Once this is set , tack the bracket into place.

STEP 13 - SHOCK STRIPS

Cut shock "mock-up" strips to the proper application length for the shock that you will use. We recommend 14" shocks for this kit. Note: These shock strips will only work with Fox 2.0 air shocks.

14" shocks will allow the maximum articulation for a standard Toyota axle and vehicle. Longer shocks may cause driveline and joint issues.



STEP 13 CONTINUED

Once all links and panhard have been installed, raise the vehicle/ lower the axle to maximum droop. The upper link will touch the bottom of the upper link bracket and or the u joint will start to bind. This will be full extention when shocks are installed. Using the shock strips as a guide, fabricate suitable shock mounts(we used a 15" hoop as an example). With the long shock strips installed (full droop) ensure that the drag link will drop bellow the steering arm and is not bound up.

STEP 13 CONTINUED

STEP 13 CONTINUED

INSTALL INSTRUCTIONS (CONT'D.)

STEP 14 - SHOCK MOUNT

Once you have set full droop, compress the axle and install the short shock strips. Ensure the panhard is not contacting the oil pan (this may not always be possible). If the panhard is contacting the oil pan you will need to limit the suspention up travel to accommodate by using bump stop's(recommended). Also , ensure that the tierod end at the pitmen arm does not contact the tierod tube when suspention is compressed.

STEP 15 - CHECK CLEARANCES

Using the shock strips, flex the suspension to full compression, full extension, full flex right and full flex left. Verify that there is no binding or metal to metal contact

STEP 16 - RECHECK CLEARANCES

Install air shocks, do not pressurize. Flex suspension again. Check for shock clearance with the frame, tires, and shock mounts. Flex to full compression, full extension, full flex left, and full flex right.

STEP 17 - WELD BRACKETS AND PAINT

Remove shocks and links. Fully weld all brackets, paint as desired and reinstall all shocks and links.

STEP 17 CONTINUED

STEP 19 - PRESSURIZE SHOCKS

Add nitrogen pressure to shocks. We recommend 3"-4" of up travel at ride height.