

INSTALL INSTRUCTIONS



3-LINK REAR SUSPENSION KIT

110050-1-KIT

300686-KIT (95-04 TACOMA)

KIT CONTENTS



INCLUDED IN TACOMA KIT ONLY





RECOMMENDED TOOLS

	Wrenches	Sockets	Allens
Flathead Screwdriver	1/2"	1/2"	7/32"
Side Cutters	9/16"	9/16"	5/8"
Grinder	3/4"	3/4"	
Torch	7/8"	1 1/8"	
Welder	1 1/16"	12mm	
Hammer	1"	17mm	
Jack	1 1/8"	19mm	
Jack Stands			
3/8" Drive Ratchet			
1/2" Drive Ratchet			
Torque Wrench			
Tape Measure			
3/4" Drill Bit			
Power Steering Fluid (Royal Purple Recommended)			

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

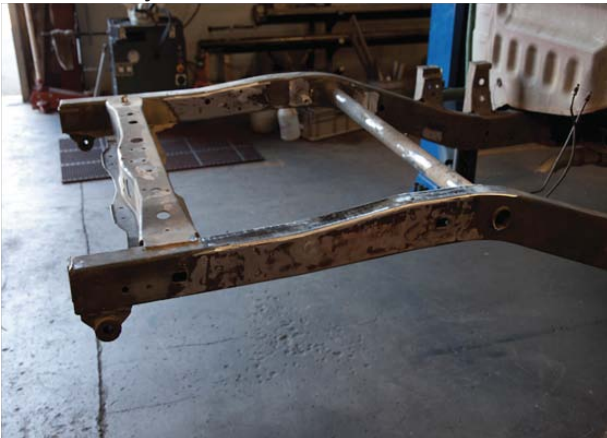
Before starting installation, take some measurements of your truck so that you can determine proper set up of your new 3 link kit. Take these measurements at ride height on a level surface. Measure your current wheelbase and pinion angle.



STEP 2 - REMOVE EXISTING SUSPENSION

Remove the axle, leaf springs, and spring hangers (Bed Optional)

Tacoma Only - remove shock mounts



STEP 3 - REMOVE TIRE CARRIER (TACOMA ONLY)

With rear bumper still in place remove spare tire Carrier.



STEP 3A - REMOVE LSV (TACOMA ONLY)

If you wish to retain your load sensing valve (LSV), wait till after installing your panhard bracket to determine an appropriate location.



STEP 4 - AXLE PREP

Remove spring perches from the axle housing.



INSTALL INSTRUCTIONS (CONT'D.)



STEP 5A - INSTALL FRAME BOX PLATES (TACOMA ONLY)

Prep frame for frame box plate by grinding all mating surfaces



STEP 5B - INSTALL FRAME BOX PLATES

Tack weld the plates to frame to insure proper fitment, then fully weld plates to frame.



STEP 6 - AXLE PREP

With the perches removed, Place the axle on jack stands and set your desired pinion angle. If this is to be driven on the road at high speeds it is recommended to set the same angle as previously measured. If not, you can point the pinion directly at the t-case. Once the pinion angle is set, you can now tack the lower link brackets to the axle housing. The bracket will be level and approx. 4 inches from the outside of the axle flange.



STEP 7 - AXLE POSITION

With the link brackets tacked on, place the axle under the truck. Position the axle in the desired location, if you want to add some wheel base now is the time. Once wheel base is set, center the axle under the truck.

STEP 8 - LOWER LINKS

Tack the bung's into the lower links and thread the creeper joints into them, making them the same length,



STEP 9 - INSTALL LOWER LINKS & BRACKETS

With the truck and the axle at ride height, bolt the lower links to the axle. Now bolt the frame side lower link brackets the end of the links.



INSTALL INSTRUCTIONS (CONT'D.)



STEP 9 CONTINUED

Swing the link up to the frame and mark where the bracket will be. Clean the frame with a grinder, your bracket will most likely land next to the factory cross member, and will need to be ground flat.



STEP 9 CONTINUED

You can now tack the link brackets to the frame.



STEP 10 - UPPER LINK INSTALL

With the axle located fore and aft, and centered, insure the pinion angle is still set properly. You can now install the upper link/panhard combo bracket. With this kit you can choose to place the upper link on either side of the truck. Standard set up is to install the upper link on the driver's side. This set up will allow complete installation of the kit without moving your gas tank. However, if you are using a front 3 link kit or are planning to install one later it is highly recommended that you install the upper link on the passenger side. This will require the gas tank to be relocated, but will provide optimum set up when combined with the front 3 link. This way both panhard bar's will be attached to the same side of the frame and will not oppose each other. Install the combo bracket approx. 1 inch to the inside of the lower link bracket, and level to the ground



STEP 10 CONTINUED

The combo bracket will be to the inside, and parallel with the frame. Next you can tack the bungs into the upper link tube tube and install the joints. Now bolt the upper link into the combo bracket. Now "dummy" the upper link bracket on the other end of the link. While holding it in position, mark the bracket location.

NOTE: TACOMA ONLY- IF YOU ARE KEEPING YOUR FACTORY WHEEL BASE THE UPPER LINK MAY NEED TO BE TRIMMED TO ALLOW UPPER LINK BRACKET TO BE PLACED BEHIND THE DRIVELINE SUPPORT BEARING CROSSMEMBER ON EXTENDED CAB MODELS.

STEP 10 CONTINUED

Remove the bracket from the link, and return to the marked location. Mark where the bolt hole is on the frame.

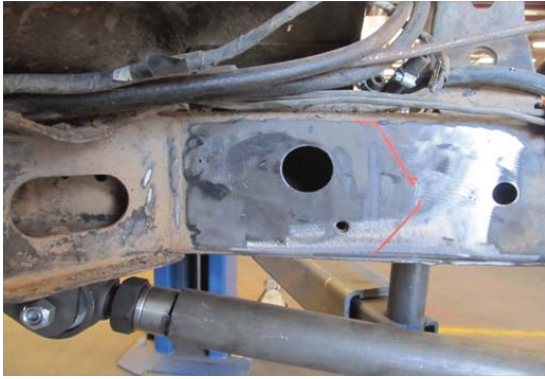


INSTALL INSTRUCTIONS (CONT'D.)



STEP 10 CONTINUED

Now drill/cut a hole in the frame to allow the bracket to set flush against the frame with a nut welded on the back side. (we used a 1.5" hole saw)



STEP 10 CONTINUED

Install the link bolt through the link bracket and weld the nut to it.

(picture shown is for passenger side set up)



STEP 10 CONTINUED

Now tack the bracket to the frame and install the upper link.



STEP 11 - PANHARD INSTALL

With the combo bracket and 3 links in place, install the panhard bracket on to the frame. Use a straight edge to align the brackets so that they are parallel.



STEP 12 - PANHARD BAR

Measure the length of the panhard needed. This can be done by measuring from bolt to bolt and subtracting the length of the creeper joint with the bung installed. Cut the tubing (if needed) and tack the bungs in. Install the creeper joints into the panhard and install it on the truck.



STEP 13 - FRAME & PANHARD SUPPORT TUBES

Measure distance between frame and trim frame support tubes accordingly. Install frame support tubes and panhard support tube.



INSTALL INSTRUCTIONS (CONT'D.)



STEP 14 - GUSSET INSTALL

You can now install the supplied gussets and finish weld. The 4 triangular gussets will be placed above the 2 lower link brackets (frame side).

NOTE: Depending on the placement of your lower link bracket you may not be able to place these on the inside of the frame, or may be offset slightly.



STEP 14 CONTINUED

The single formed gusset will be placed directly under the upper link bracket (frame side).



STEP 14 CONTINUED

The last 2 gussets will be placed on the combo bracket.



STEP 15 - SHOCK MOUNTS

Fabricate suitable shock mounts.



STEP 16 - FINISH WELD

You may now weld off all brackets, gussets, and link bungs. It is best to weld the brackets on to the housing one at a time allowing them to cool.



INSTALL INSTRUCTIONS (CONT'D.)



STEP 17 - RE-ASSEMBLE

You may now paint and re-assemble. Charge your air shocks (if applicable)

