4Wheel Underground

Front 3Link 84-04

1. There are many details to look at and work through when installing a front 3link. So the 1st rule is to slow down and be patient.

2. The 2nd rule is to never weld anything until the entire kit is mocked up correctly.

3. Tie Rod MUST be flipped to the underside of your steering arm for Toyota High Steer type arms

4. Bracing of the frame is a 100% “MUST”!!

5. Recommended frame height during installation is 30”s while on jack stands. This is so you can freely cycle the suspension without interference from the ground. You do not have to set the vehicle this high; it is only a recommendation.

(fig.1)

6. You will have to grind or cut off many brackets from your frame. Any and all IFS components must be removed as well as the factory T-Case crossmember brackets.

7. Your lower link frame side brackets go where your T-Case crossmember used to. But in order for it to fit you must bend the large frame backing plate to sit accordingly. (fig.2)

(fig.2)

8. 84-95 4WU 3link Frame brackets are to be installed in one place and one place only. Locating holes have been cut in to the bottom of these brackets to help you locate their position. The two holes in each of the lower link frame brackets should be centered or as close to centered as possible to the two factory holes in each side of the frame that used to mount the T-Case crossmember. If the holes on the brackets and frame don't line up perfectly it's not a big deal just get as close as possible. BUT DO NOT WELD IT IN YET. Use clamps or tack welds to hold it in place.

(fig.3)

(fig.4)

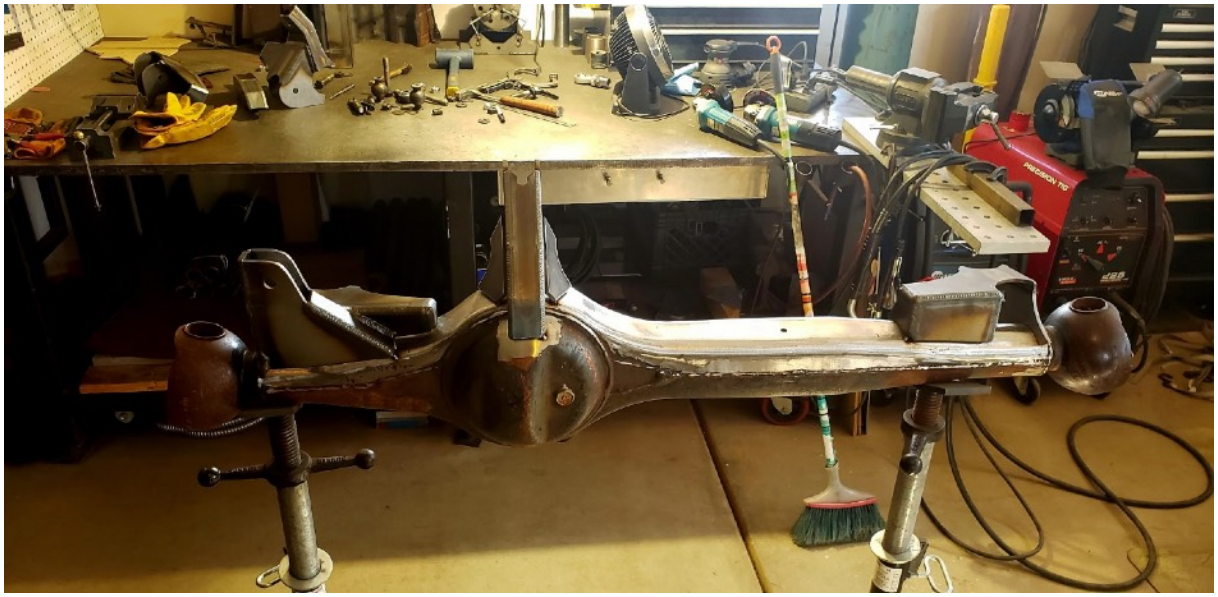
(fig.5)

9. Your upper links frame side bracket should sit roughly in this location and in this orientation. Tack-weld the piece in place for now. In fig.5 you can see the upper link is on the passenger side and should be for all 22R,22RE and 3VZ engines. Place your upper link bracket as low on the lower link bracket as possible.

(Fig 5b) Shows Driver side upper link position for 2RZ, 3RZ and 5VZ Engines. Note how the upper link is down at the lowest forward corner possible.

(Fig 6) Frame locations shown for 96-2002 4Runners and 95 1/2-2004 Tacomas Picture from between frame rails of passenger side rail.

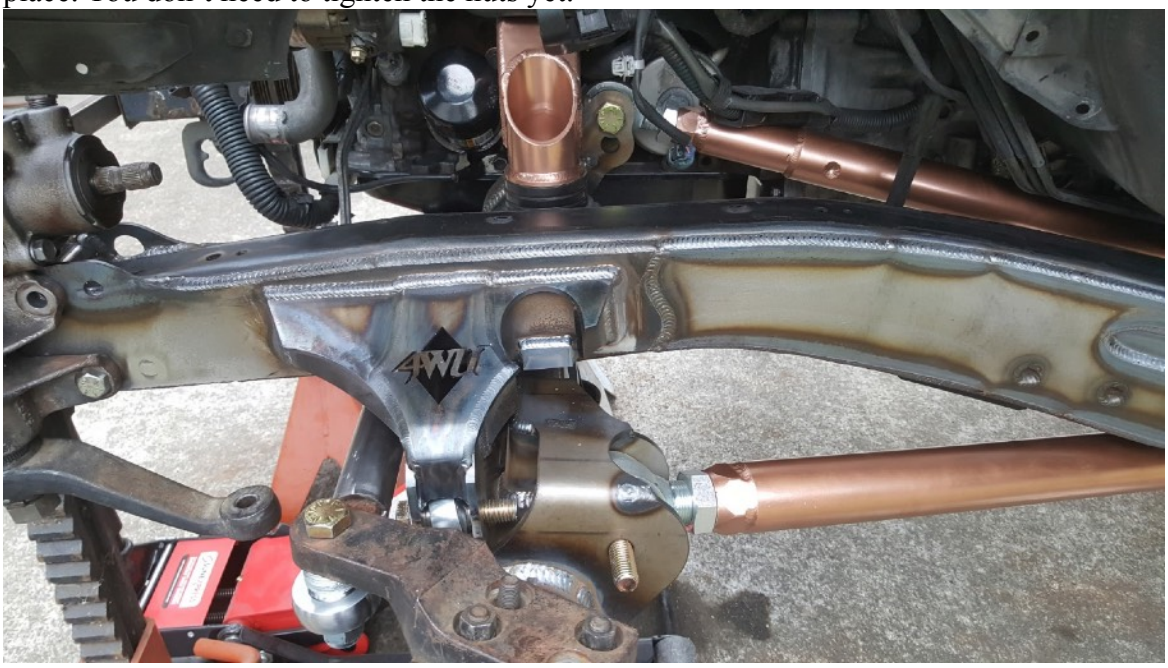
(fig.7) The Chevy axle kit is fully trussed and very hard to not fit together correctly. It keys off the passenger side spring perch whish sets all your angles and locates the lower link bracket as well as the panhard and truss over the diff. The driver side lower link bracket is part of the tube side truss. Final upper link position is set off your preference. Move it into the sweet spot for clearance purposes.



(Fig 8) FJ80 axles will use 39” Lower Joint Horizontal separation regardless of model year.

10. At this point your axle should look something like this. Remember not to weld anything yet.

11. Move the axle back under the truck and place both the lower links and the upper links in place. You don't need to tighten the nuts yet.



(Fig 9)

12. Cycle the suspension up as far as it will go with the bump stops in place. If you are using AirBumps, make sure all the Nitrogen has been discharged. Poly Bumps will compress up to half their original length. Place the panhard frame side bracket on the drive side rail. During full compression of the suspension the panhard frame side bracket should nestle down between the axle side lower link brackets as depicted in fig.19.

During this section your goal is to make sure that full steer lock to lock doesn't interfere with the tie rod and never hits the head of the bolt for your Panhard.

(Note) depending on your installation of the steering box and how far forward you move the axle, you may have to relocate your steering box further forward. You never want the tie rod and drag link to contact each other.

(fig.10)

13. Mocking up your bump stop cans with your air bumps. Both of your bump stops should be all but ¼” compressed when max compression is reached. Max compression should be just before your steering or Panhard Bar gets into your oil pan. In order to check and measure this, your air bumps must be discharged of nitrogen.

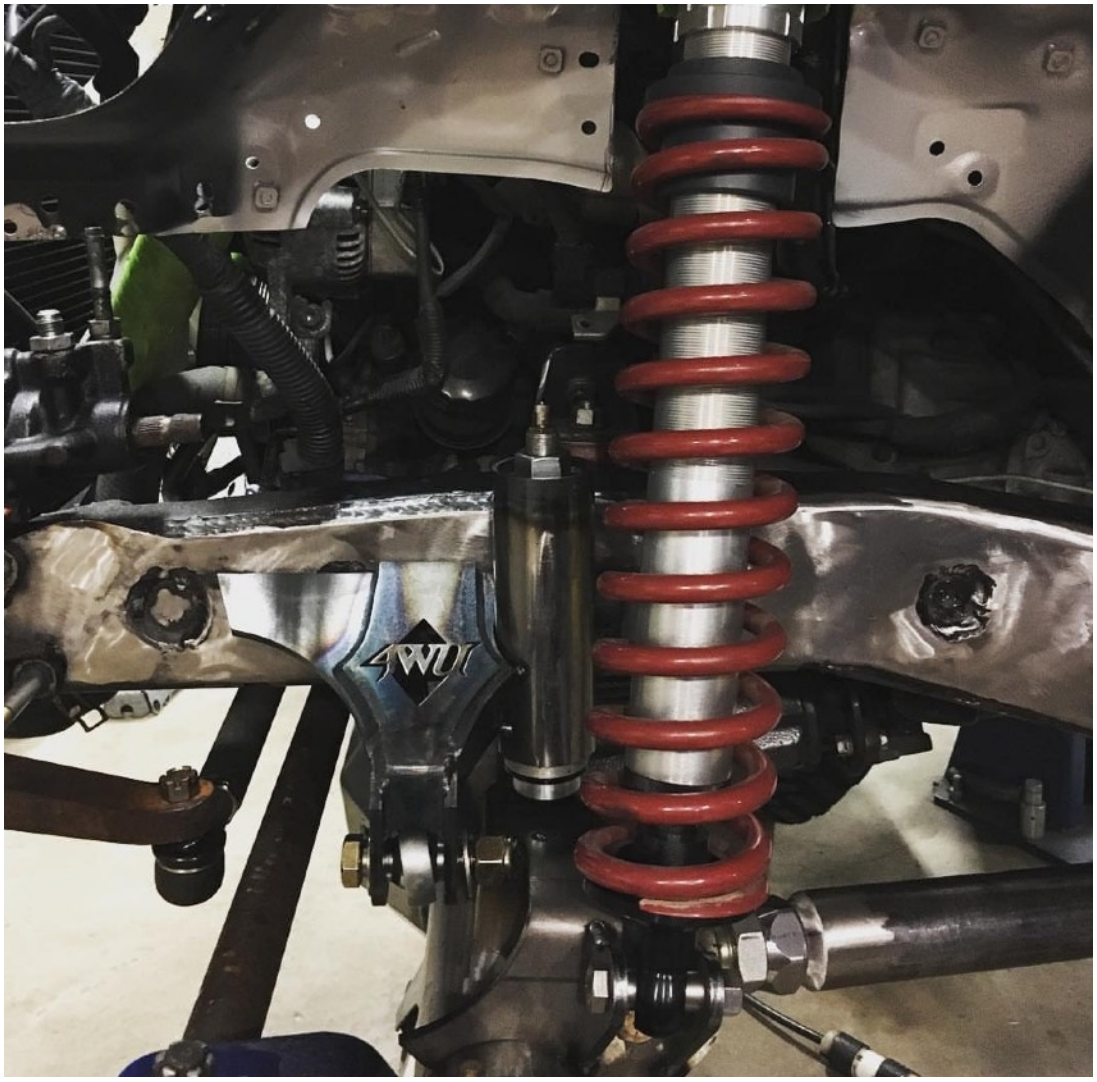
14. When viewing the front of the vehicle and at ride ht., both the Panhard and Drag-Link should be perfectly parallel to each other.

(fig.17)

15. With “A” tire on one side of the axle, cycle your suspension fully up and the other down. Stop upward travel when your tires hit the insides of your fenders or battery box. Now with your Coil-Overs discharged of nitrogen and with only “ONE” spring on, bolt them up to the axle. Do so on both sides of the axle, both the extended side and the compressed side. The tops of each shock should be the same distance from the ground as well as the inside of the engine bay front to back and side to side. Be certain the extended shock isn’t touching the frame and the compressed shock isn’t interfering with the tire. Now fully weld every bracket 100% around all possible areas.

(fig.18)
Installation of shock towers should lean out away from the engine as much as clearances allow. Check tire to coilover clearances during articulation travel for final tower location.

At full compression with all systems tacked in place your truck should be looking something like the following picture. Variations exist with different axle types and or if you've decided to use shock hoops and not towers.


4WD