INSTALLATION INSTRUCTIONS

2020-2024 JEEP GLADIATOR 4WD

3” LONG ARM COILOVER BOX KIT

FTS24251

NOTE: TO ORDER WEARABLE REPLACEMENT COMPONENTS DO NOT USE PART NUMBERS SHOWN ON THIS INSTRUCTION SHEET. GO TO FABTECH WEBSITE AND LOOK UP WEARABLE REPLACEMENT PARTS TO FIND THE PROPER PART NUMBER TO ORDER.

Fabtech Motorsports | 2213 Industrial Park Rd. Lancaster, SC 29720

Tech Line: 909-597-7800 | **Web:** www.fabtechmotorsports.com

	FTS24251	3” LONG ARM COILOVER BOX KIT
2	FT1599-2-4	SWAY BAR ENDLINK (REAR) 12.93”
2	FT50026BK	SWAY BAR ENDLINKS (FRONT) 10.34”
1	FT50617	FRONT TRACK BAR BRACKET WELD ON
2	FT50644	FRONT BUMPSTOP SPACER
2	FT50770	REAR BUMPSTOP SPACER
1	FT50806	REAR TRACK BAR BRACKET WELD ON
1	FT50808	HARDWARE SUBASSEMBLY
1	FT50804	HARDWARE KIT

	FT50808	HARDWARE SUBASSEMBLY
8	FT1004	SWAY BAR LINK HALF BUSHINGS
1	FT24251i	INSTRUCTIONS
8	FT404739	SLEEVE 12MM
1	FT50048	5/8 HOURGLASS BUSHING
2	FT50060	FRONT BUMPSTOP NUT TAB
2	FT50592	SLEEVE 1.000 X .563 X 1.400 (TRACK BAR)
1	FTAS12	STICKER FT BLUE 10X4
1	FTAS16	DRIVER WARNING DECAL
1	FTLUBE	URETHANE LUBE PACKET
1	FTREGCARD	REGISTRATION CARD
1	FT50972	HARDWARE KIT

	FT50972 - HARDWARE KIT	LOCATION
2	M14-2.0 X 70MM HEX BOLT	SWAY BAR LINKS
4	14MM FLAT WASHER	
2	M14-2.0 C-LOCK NUT	

	FT50804 - HARDWARE KIT	LOCATION
6	M12-1.50 X 70MM HEX BOLT	SWAY BAR LINKS
4	12MM USS WASHER	
6	12MM WASHER	
4	M12-1.50 C-LOCK NUT	
2	1/2-13 X 4” HEX BOLT	FRONT BUMPSTOP
2	1/2” SPLIT LOCK WASHER	
2	9/16-12 X 3” HEX HEAD	FRT/REAR TRACK BAR
4	9/16 SAE WASHER	
2	C-LOCK NUT 9/16"-12	
4	5/16-18 X 1” HEX BOLT	REAR BUMPSTOP
8	5/16 SAE WASHER	
4	5/16-18 C-LOCK NUT	
2	5/16-18 X 3/4” SELF TAP BOLT	REAR BRAKE LINE
1	THREAD LOCKING COMPOUND 1 MIL	

NOTE: REFER TO OPTIONAL KIT BOX INSTRUCTIONS PRIOR TO INSTALLATION.

- TOOL LIST -

Required Tools (Not Included)

- Basic Hand Tools
- Floor Jack
- Jack Stands
- Drill w/ Assorted drill bits
- Assorted Metric and S.A.E sockets, and Allen wrenches
- Torque Wrench
- Die Grinder w/ Cutoff Wheel or Sawzall
- Welder

THE INSTALLATION OF THIS KIT REQUIRES WELDING, AND SHOULD BE PERFORMED BY A CERTIFIED WELDER

- PRE-INSTALLATION NOTES -

For technical assistance call: **909-597-7800** or e-mail: **info@fabtechmotorsports.com**

READ THIS BEFORE YOU BEGIN INSTALLATION -

Check all parts to the parts list above before beginning installation. If any parts are missing contact Fabtech at 909-597-7800 and a replacement part will be sent to you immediately.

Read all instructions thoroughly from start to finish before beginning the installation. If these instructions are not properly followed severe frame, driveline and / or suspension damage may occur.

Check your local city and state laws prior to the installation of this system for legality. Do not install if not legal in your area.

Prior to the installation of this suspension system perform a front end alignment and record. Do not install this system if the vehicle alignment is not within factory specifications. Check for frame and suspension damage prior to installation.

The installation of this suspension system should be performed by two professional mechanics.

This suspension must be installed with Fabtech shock absorbers.

Installation of all fasteners requires the use of provided thread locking compound with proper torque values as indicated throughout the installation. Apply thread locking compound upon the final torque of the fastener.

WARNING- Installation of this system will alter the center of gravity of the vehicle and may increase roll over as compared to stock.

Vehicles that receive oversized tires should check ball joints, uniballs, tie rods ends, pitman arm and idler arm every 2500-5000 miles for wear and replace as needed.

Verify differential fluid is at manufactures recommended level prior to kit installation. Installation of the kit will reposition the differential and the fill plug hole may be in a different position. (For example, if the manufacture recommends 3 quarts of fluid, make sure the diff has 3 quarts of fluid). Check your specific manual for correct amount of fluid.

FOOTNOTES -

- Installation requires welding.
- Exhaust modification required or order AFE P/N 48-48024 (Loop Delete Pipe)
- Fits 6 CYL. models only
- For heavy offroad use, front driveshaft is required. Order FTS94057
- For heavy offroad use, rear driveshaft is required. See a quality driveline supplier to order

- INSTRUCTIONS -

FRONT SUSPENSION

NOTE: REFER TO OPTIONAL KIT BOX INSTRUCTIONS PRIOR TO INSTALLATION.

1. Disconnect the negative terminal on the battery. Jack up the front end of the vehicle and support the frame rails with jack stands. **NEVER WORK UNDER AN UNSUPPORTED VEHICLE!** Remove the front tires.

2. On both the Driver and Passenger side, unbolt the front brake line brackets from the frame and the link arm. Save all hardware. **SEE FIGURES 1-2** On the driver side unclip the differential breather hose from the upper coil spring mount. **SEE FIGURE 3**

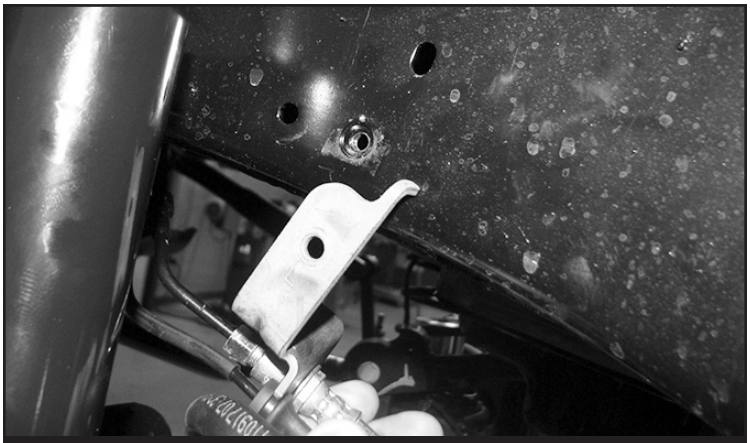

FIGURE 1 - STEP 2

FIGURE 2 - STEP 2

FIGURE 3 - STEP 2

3. Ubolt and remove both driver and passenger side brake line brackets from the axle spring perch. **SEE FIGURE 4**

FIGURE 4 - STEP 3

4. Unplug the front diff locker harnesses from the axle **(RUBICON MODELS ONLY) SEE FIGURES 5-6**

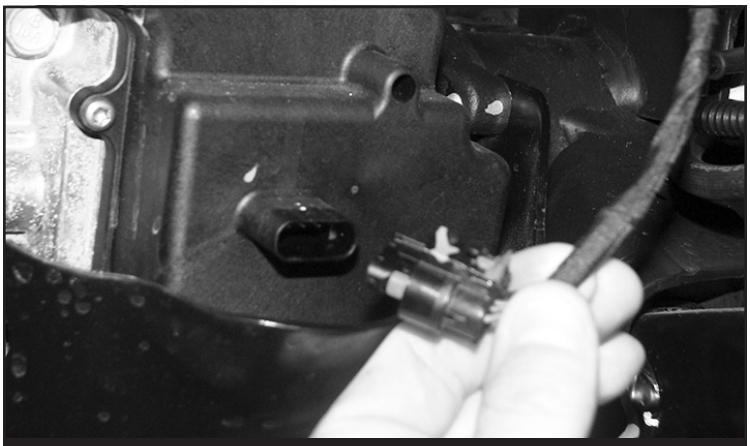

FIGURE 5 - STEP 4

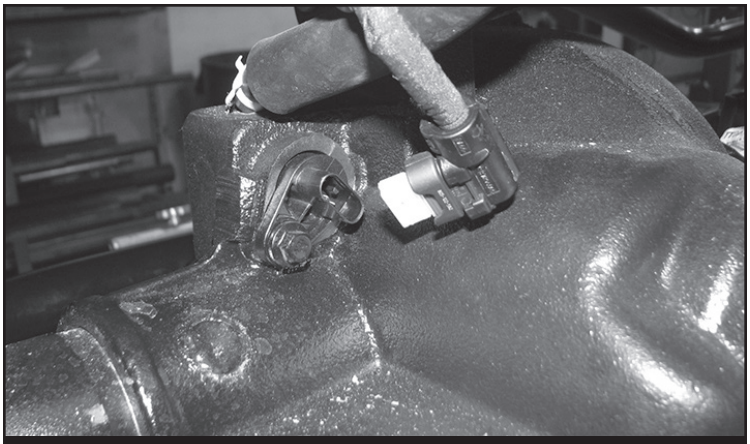

FIGURE 6 - STEP 4

5. Remove and discard the factory sway bar end links, save the hardware.

6. With the axle supported, remove the factory shocks. Save all hardware. Lower the front axle and remove the factory coil springs. Retain coil spring isolators.

7. **At this time install the FTS24224 (Long arm kit) with the instructions provided in the kit box.**

8. Disconnect the front track bar at the axle. Save hardware.

9. Install FT50617 (Front track bar bracket) to the factory mount using stock bolt. **SEE FIGURE 7.** Mark the front hole to drill using the new bracket as a guide. Remove and drill the hole to 3/8”. Sand the factory bracket down to bare metal. **SEE FIGURE 8**

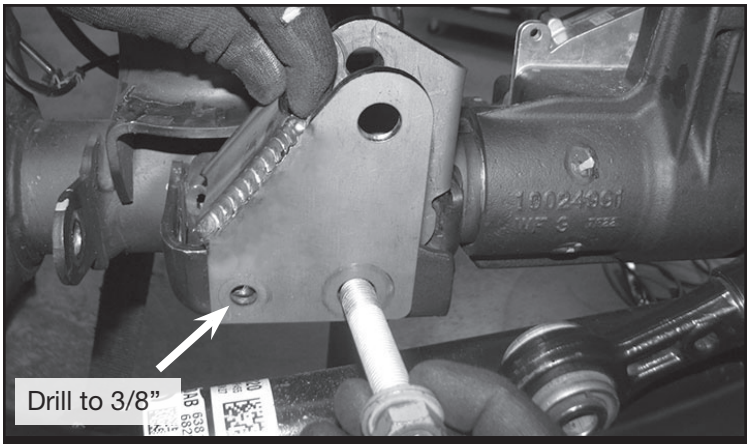

FIGURE 7 - STEP 9

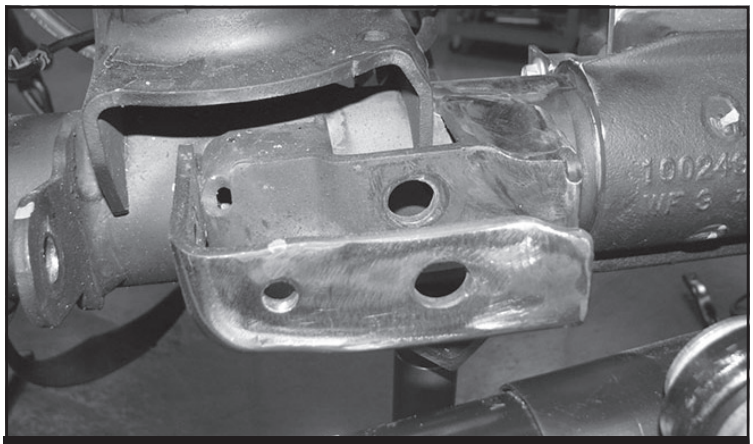

FIGURE 8 - STEP 9

10. Reinstall the bracket using the factory bolt and supplied 3/8” x 1-1/4” bolt, washer and nut. **NOTE: Install the FT50592 (Sleeve) with the factory bolt inside the new track bar bracket.** Torque factory hardware 148 ft-lbs and the 3/8 hardware to 44 ft-lbs. **SEE FIGURE 9**

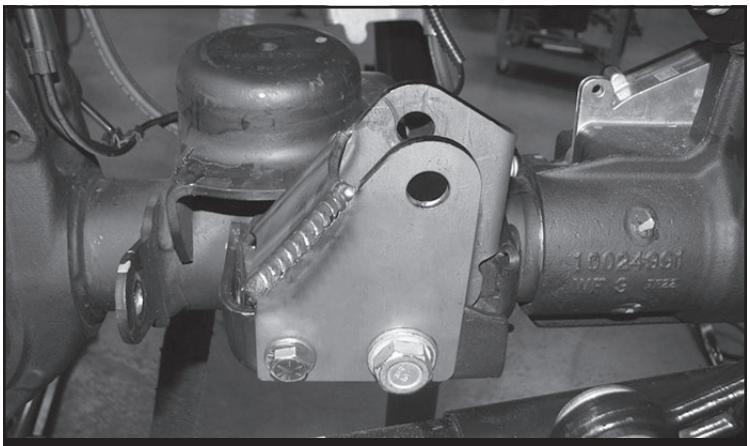

FIGURE 9 - STEP 10

11. Weld the new track bar bracket to the factory bracket like shown in **FIGURES 10-13**

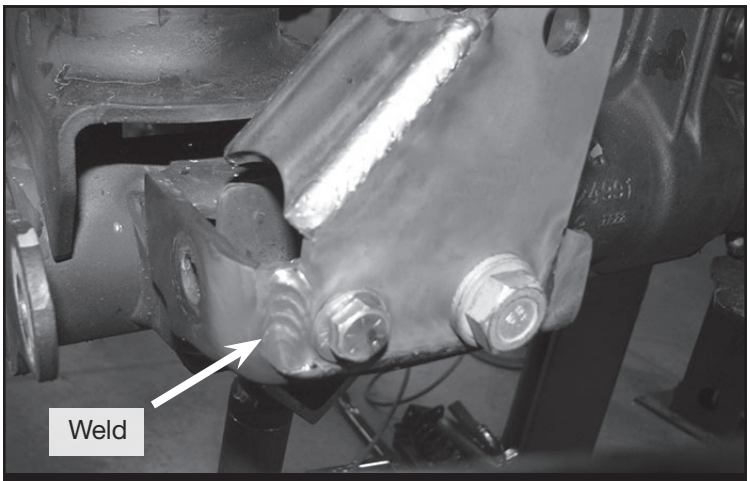

FIGURE 10 - STEP 11

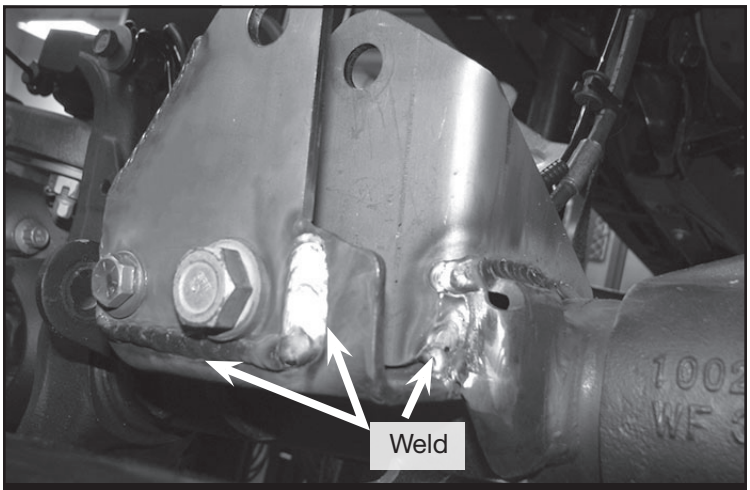

FIGURE 11 - STEP 11

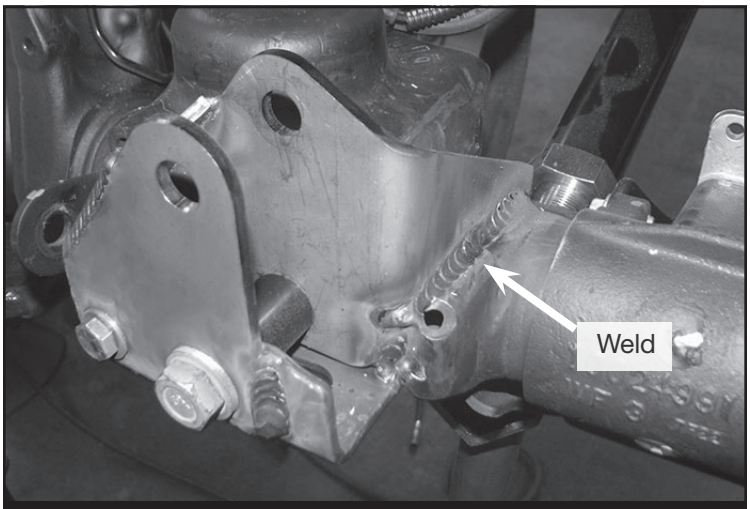

FIGURE 12 - STEP 11

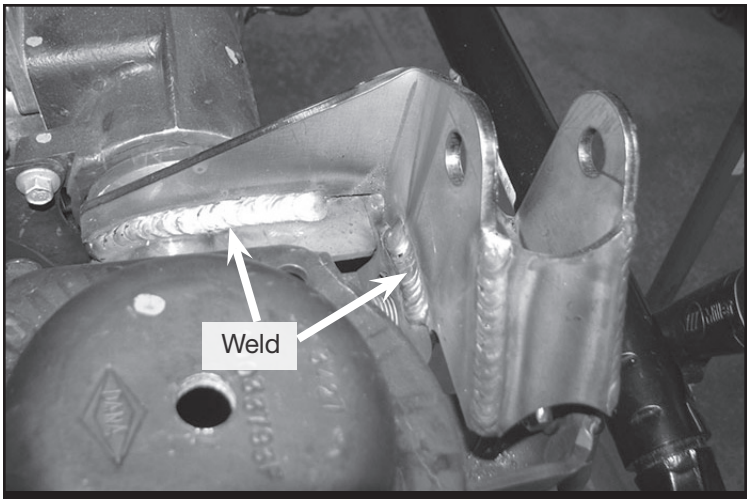

FIGURE 13 - STEP 11

12. Once cooled, paint all bare areas.

13. If installing FTS24210 Drag Link Kit, do so now with the instructions provided in the kit box.

14. Refer to FTS24268 (Coilover Mount Kit) instructions at this time.

15. Re-install the track bar using the supplied 9/16” X 3” bolt, nut and washers. Torque to 153 ft-lbs. **SEE FIGURE 14**

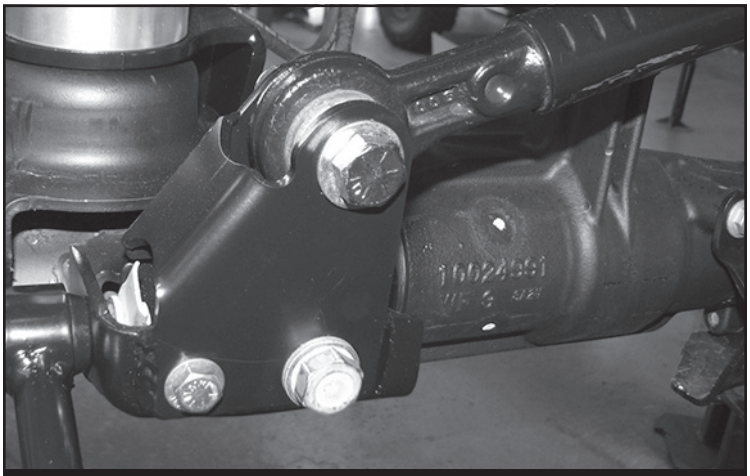

FIGURE 14 - STEP 15

16. Install FT50048 (Bushings) and FT404739 (Sleeves) into FT50026BK (Sway bar links). Then, install the links to the axle mount and sway bar using the supplied M12 x 70mm or M14 hardware (2024 Models) for the upper location and the factory for the lower. Torque to 65 ft-lbs. **SEE FIGURE 15**

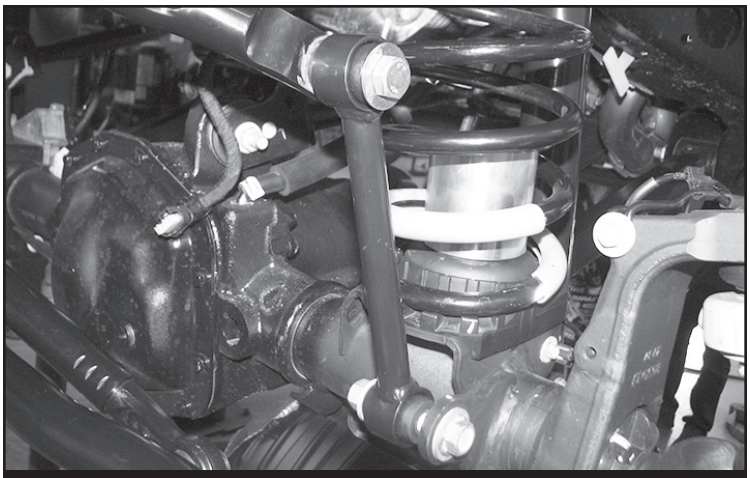

FIGURE 15 - STEP 16

17. Locate the factory brake line bracket on the front hydraulic brake line. This will need to be removed. Do so by cutting a small relief, then bend open. **NOTE: Use caution not to cut the brake line! SEE FIGURES 16-17**

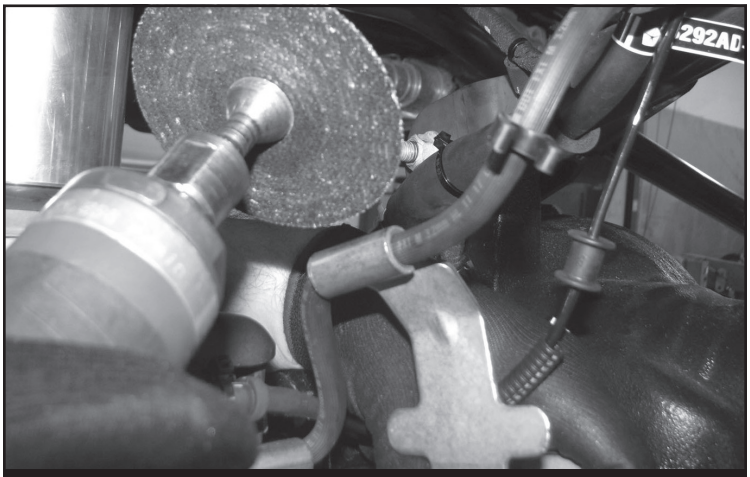

FIGURE 16 - STEP 17

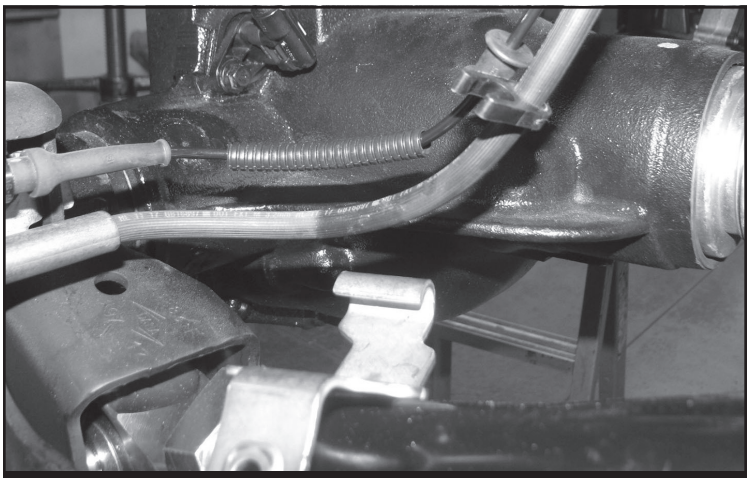

FIGURE 17 - STEP 17

18. Reinstall the diff breather hose by moving the metal clip up the hose 2” **SEE FIGURE 18** and the christmas tree fastener into the next hole down. **SEE FIGURE 19.**

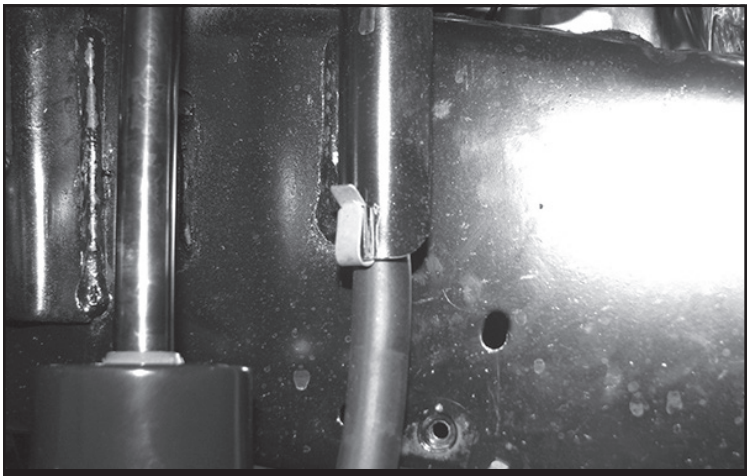

FIGURE 18 - STEP 18

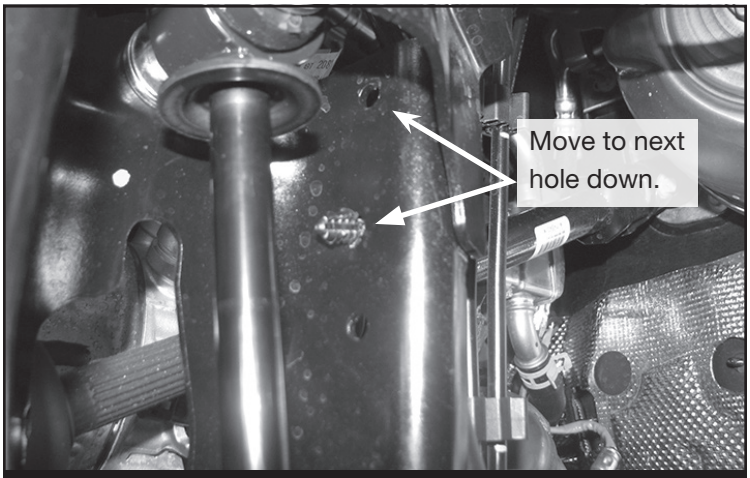

FIGURE 19 - STEP 18

19. **RUBICON MODELS ONLY: Reinstall the electrical connectors at the diff.**

- REAR SUSPENSION -

20. Jack up the rear end of the vehicle and support the frame rails with jack stands. NEVER WORK UNDER AN UNSUPPORTED VEHICLE! Remove the rear tires. Support the rear axle; do not allow axle to hang freely.

21. Remove the rear sway bar end links then remove the rear shocks and coil springs. Mark the driver and passenger coil springs for reinstallation. Save hardware. Disconnect the rear track bar from the axle bracket. Save hardware.

22. Disconnect the brake line bracket from the frame. Mark and cut off the locator tab and corner of the bracket like shown in **FIGURES 20-21**

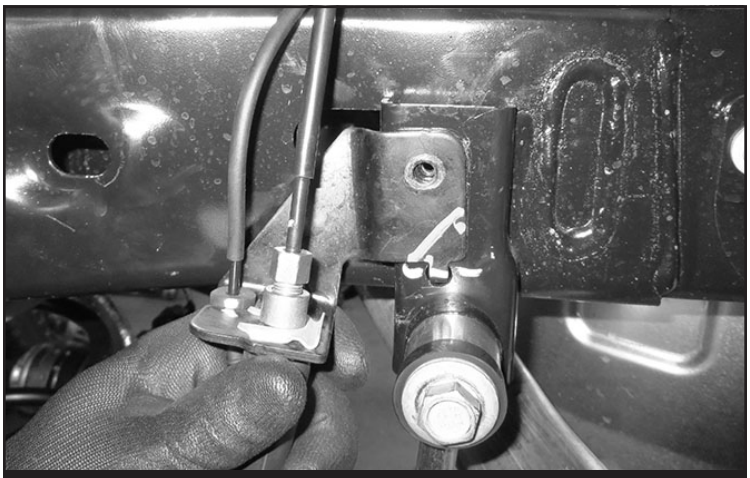

FIGURE 20 - STEP 22

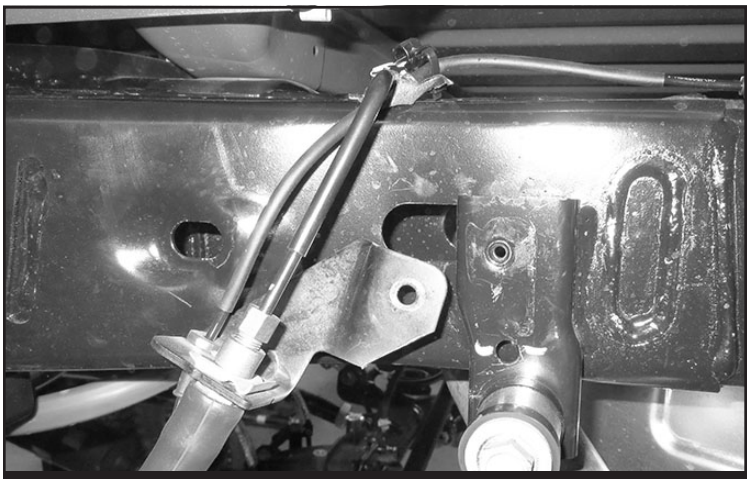

FIGURE 21 - STEP 22

23. Install the FT50770 (rear bumpstop brackets) using the supplied 5/16” x 1” hardware and the factory holes on the bumpstop pad. Torque to 17 ft-lbs. **SEE FIGURES 22-23**

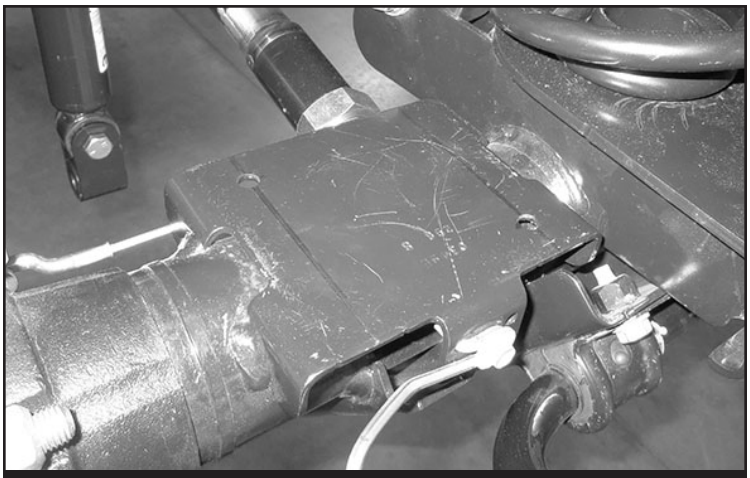

FIGURE 22 - STEP 23

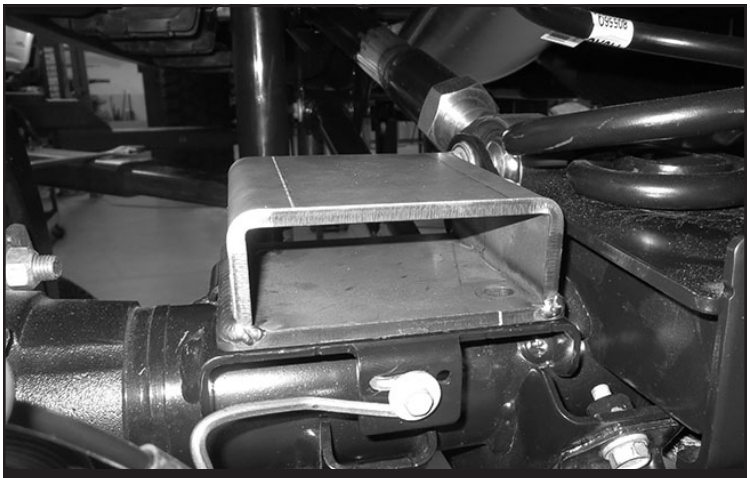

FIGURE 23 - STEP 23

24. Continue with the installation of the rear link arms at this time using the supplied instructions with that kit.

25. Locate the factory rear track bar bracket. Mark a straight line on the front and back before the 90 degree bend. Remove the track bar from the axle bracket and cut the top section off. **SEE FIGURES 24-25**

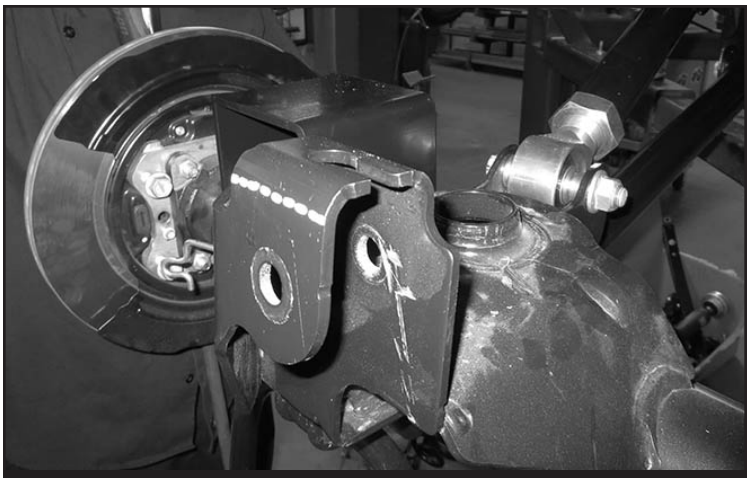

FIGURE 24 - STEP 25

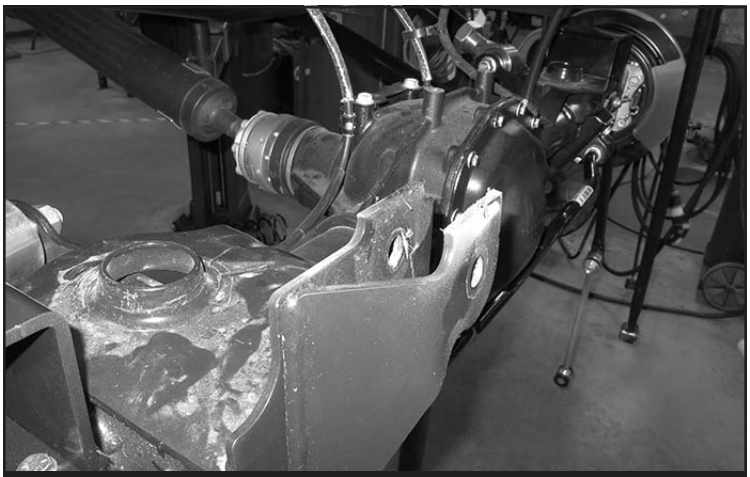

FIGURE 25 - STEP 25

26. Install the FT50794 (Rear track bar bracket) onto the factory bracket using the supplied 9/16” x 3” bolt, washers, nut and FT50592 (Sleeve). Tack weld in place then completely weld onto the factory mount. **SEE FIGURES 26-27** Allow to cool then paint.

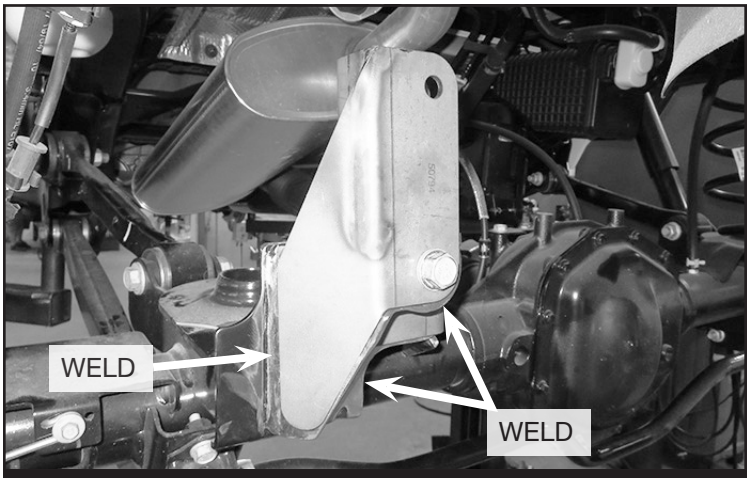

FIGURE 26 - STEP 26

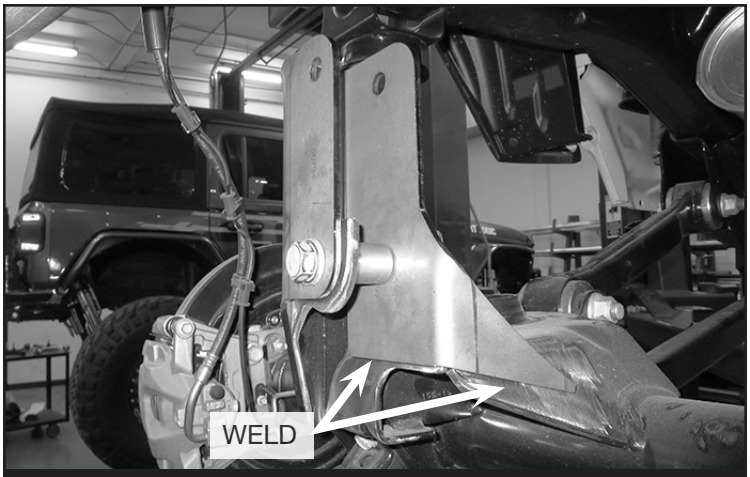

FIGURE 27 - STEP 26

27. **INSTALL THE REAR COILS USING THE INSTRUCTIONS PROVIDED IN THAT BOX KIT.**

28. Install FTS6333 (Stealth shocks) using the factory hardware. **NOTE: If installing Dirt Logic shocks do so with the provided instructions.** Torque to 100 ft-lbs.

29. Install the FT1004 (Half bushings) and FT404739 (Sleeves) into FT1599-2-4 (Rear sway bar links). Then, install the new links to the sway bar and sway bar mount on the frame using supplied M12 x 70mm bolt and large O.D. washer for the upper location and M12 x 70mm bolt regular washer, large O.D. washer and nut for the lower. Use the larger washer on the nut side. **NOTE: The new end link will need to be installed on the inside of the sway bar and axle mount.** Torque to 65 ft-lbs **SEE FIGURE 28**

FIGURE 28 - STEP 29

30. Reinstall the track bar to the new track bar bracket using the factory hardware. Torque to 148 ft-lbs.

31. Using the brake line bracket as a template pull down 1” from where the factory location. Mark and drill using a 9/32” drill bit. **NOTE: Drill through the mount as well as the frame.** Then, install the bracket using the supplied 5/16” self tapping bolt. **SEE FIGURES 29-30**

FIGURE 29 - STEP 31

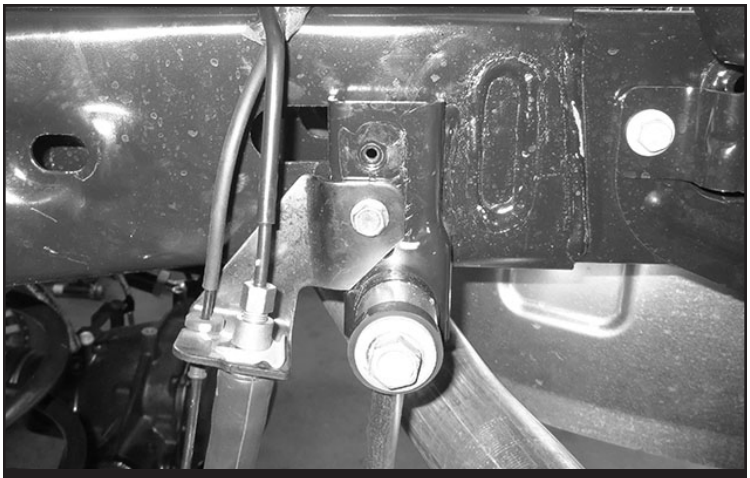

FIGURE 30 - STEP 31

32. Install tires and wheels and torque lug nuts to wheel manufacturer’s specifications. Turn front tires left to right and check for appropriate tire clearance. **Note - Some oversized tires may require trimming of the front bumper & valance.**

33. Check front end alignment and set to factory specifications. Readjust headlights.

34. Recheck all bolts for proper torque.

35. Recheck brake hoses, ABS wires and suspension parts for proper tire clearance while turning tires fully left to right.

36. Check the fluid in the front and rear differential and fill if needed with factory specification differential oil. **Note - some differentials may expel fluid after filling and driving. This can be normal in resetting the fluid level with the new position of the differential/s.**

37. Install Driver Warning Decal. Complete product registration card and mail to Fabtech in order to receive future safety and technical bulletins on this suspension.

Vehicles that will receive oversized tires should check ball joints, uniballs and all steering components every 2500-5000 miles for wear and replace as required.

RE-TORQUE ALL NUTS, BOLTS AND LUGS AFTER 50 MILES AND PERIODICALLY THEREAFTER.

For technical assistance call: **909-597-7800**

- Product Warranty and Warnings -

Fabtech provides a Limited Lifetime Warranty to the original retail purchaser who owns the vehicle, on which the product was originally installed, for defects in workmanship and materials.

The Limited Lifetime Warranty excludes the following Fabtech items; bushings, bump stops, ball joints, tie rod ends, limiting straps, cross shafts, heim joints and driveshafts. These parts are subject to wear and are not considered defective when worn. They are warranted for 60 days from the date of purchase for defects in workmanship.

Dirt Logic and Performance Coilover take apart shocks are considered a serviceable shock with a one year warranty on leakage only. Service seal kits are available separately for future maintenance. All other shocks are covered under our Limited Lifetime Warranty.

Fabtech does not warrant any product for finish, alterations, modifications and/or installation contrary to Fabtech's instructions. Alterations to the finish of the parts including but not limited to painting, powder coating, plating and/or welding will void all warranties. Some finish damage may occur to parts during shipping, which is considered normal and is not covered under warranty.

Fabtech products are not designed nor intended to be installed on vehicles used in race applications or for racing purposes or for similar activities. (A "RACE" is defined as any contest between two or more vehicles, or any contest of one or more vehicle against the clock, whether or not such contest is for a prize). This warranty does not include coverage for police or taxi vehicles, race vehicles, or vehicles used for government or commercial purposes. Also excluded from this warranty are sales outside of the United States of America.

Installation of most suspension products will raise the center of gravity of the vehicle and will cause the vehicle to handle differently than stock. It may increase the vehicle's susceptibility to a rollover, on road and off road, at all speeds. Extreme care should be taken to operate the vehicle safely at all times to prevent rollover or loss of control resulting in serious injury or death. Fabtech front end Desert Guards may impair the deployment or operation of vehicles equipped with supplemental restraining systems/air bag systems and should not be installed if the vehicle is equipped as so.

Fabtech makes every effort to ensure suspension product compatibility with all vehicles listed on the website, but due to unknown auto manufacturer's production changes and/or inconstancies by the auto manufacturer, Fabtech cannot be responsible for 100% compatibility, including the fitment of tire and wheel sizes listed. The Tire and Wheel sizes listed in Fabtech's website are only a guideline for street driving with noted fender trimming. Fabtech is not responsible for damages to the vehicle's body or tires. Fabtech is not responsible for premature wear of factory components due to the installation of oversized tires and wheels.

Fabtech's obligation under this warranty is limited to the repair or replacement, at Fabtech option, of the defective product only. All costs of removal, installation or re-installation, freight charges, incidental or consequential damages are expressly excluded from this warranty. Fabtech is not responsible for damages and/or warranty of other vehicle parts related or non related to the installed Fabtech product. This warranty is expressly in lieu of all other warranties expressed or implied. This warranty shall not apply to any product that has been subject to accident, negligence, alteration, abuse or misuse as determined by Fabtech.

Fabtech suspension components must be installed as a complete system including shocks as shown on our website. All warranties will become void if Fabtech parts are combined and/or substituted with other aftermarket suspension products. Combination and/or substitution of other aftermarket suspension parts may cause premature wear and/or product failure resulting in an accident causing injury or death. Fabtech does not warrant products not manufactured by Fabtech.

Depending on the condition of the factory suspension components retained after the installation of a Fabtech suspension not all vehicles may have the same ride stance front to rear as described in the website. The blue color of suspension components shown in all Fabtech photographs are for display purposes only. Majority of all Fabtech components will be black specifically where noted with part numbers ending in BK.

Installation of Fabtech product may void the vehicles factory warranty; it is the consumer's responsibility to check with their local vehicle's dealer for warranty disposition before the installation of the product. Some state laws may prohibit modification of suspension to a vehicle in whole or in part. It is the responsibility of the installer and consumer to consult local laws prior to the installation of any Fabtech suspension product to comply with such written laws.

It is the responsibility of the distributor and/or the retailer to review all warranties and warnings of Fabtech products with the consumer prior to purchase.

Fabtech reserves the right to super cede, discontinue, change the design, finish, part number and/or application of parts when deemed necessary without written notice. Fabtech is not responsible for misprints or typographical errors within the website or price sheet. For the most recent Product Warranty and Warnings visit our website www.fabtechmotorsports.com