



## INSTALLATION INSTRUCTIONS

<b>FTS24183</b>		<b>3" TRAIL BOX KIT</b>
1	FT50294	JK PITMAN ARM
2	FT50261BK	FRONT SWAY BAR END LINK
1	FT50533	HAREWARE SUBASSEMBLY
2	FT50492	FRONT BUMP STOP SPACER
2	FT50401BK	REAR BUMP STOP SPACER
1	FT50368	FRONT TRACK BAR BRACKET WELD ON
1	FT50296BK	REAR TRACK BAR BRACKET

<b>FT50533</b>		<b>HARDWARE SUBASSEMBLY</b>
1	FT157	SLEEVE 1.000 X .563 X 1.570
1	FT50048	SWAY BAR END LINK BUSHINGS (4 PACK)
1	FT50089	SWAY BAR END LINK SLEEVES (4 PACK)
2	FT50060	FRONT BUMP STOP NUT TAB
1	FT167	SLEEVE .875 X .563 X 1.344
1	FT50403	HARDWARE KIT
4	FT50295	BRAKE LINE DROP BRACKET
1	FT50298	E-BRAKE BRACKET
1	FT24183i	INSTRUCTIONS
1	FTLUBE	URETHANE LUBE PACKET
1	FTAS12	STICKER FT BLUE 10X4
1	FTAS16	DRIVER WARNING DECAL
1	FTREGCARD	REGISTRATION CARD

<b>FT50403 - HARDWARE KIT</b>		<b>LOCATION</b>
2	9/16-12 X 3 HEX BOLT G8 ZC	TRACK BAR
2	C-LOCK NUT 9/16"-12 CLEAR ZINC	
4	9/16 SAE WASHER G8 ZINC	
2	1/2-13 X 3-1/2 HEX BOLT G8 ZINC	FRONT BUMP STOP
2	1/2-13 X 2-3/4 HEX BOLT G8 ZINC	SWAY BAR FRT/REAR
2	1/2-20 C-LOCK NUT ZINC	
4	1/2 SAE WASHER G8 ZINC	
3	3/8-16 X 1 HEX BOLT G8 ZINC	
3	3/8-16 C-LOCK NUT ZINC	
6	3/8 SAE WASHER G8 ZINC	
4	5/16-18 X 1 HEX BOLT G8 ZINC	REAR BUMP STOP
4	5/16-18 C-LOCK NUT ZINC	
8	5/16 SAE WASHER G8 ZINC	
8	1/4-20 X 1" HEX BOLT G5 ZINC	BRAKE LINES
8	1/4-20 C-LOCK NUT ZINC	
16	1/4 SAE WASHER G5 ZINC	
1	THREAD LOCKING COMPOUND	

## 2007-16 JEEP WRANGLER (JK) 3" TRAIL BOX KIT

**FT24183i**

Fabtech Motorsports | 4331 Eucalyptus Ave. Chino, CA 91710

Tech Line: 909-597-7800 | Fax: 909-597-7185 | Web: [www.fabtechmotorsports.com](http://www.fabtechmotorsports.com)



**- TOOL LIST -**

**Required Tools (Not Included)**

- Basic Hand Tools
- Floor Jack
- Jack Stands
- Torque Wrench
- Drill w/ assorted drill bits
- Welder
- Assorted Metric and S.A.E sockets

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

**- 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.

Use the provided thread locking compound on all hardware.

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.

Fabtech replacement driveshafts are required with this system. Due to the different shafts for the 2-door and 4-door models, the driveshafts are sold separately. See chart below for proper driveshafts for your model of Jeep.

FTS94057	2007-15 Front Driveshaft 2/4 Door
FTS94051	2007-11 Rear Driveshaft 2 Door Only
FTS94052	2007-11 Rear Driveshaft 4 Door Only
FTS94058	2012 - UP Rear Driveshaft 2 Door Only
FTS94059	2012 - UP Rear Driveshaft 4 Door Only

# - INSTRUCTIONS -

## FRONT SUSPENSION

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

1. Disconnect the negative terminal on the battery. With the vehicle on level ground, set the emergency brake and block the rear tires. Jack up the front end of the truck and support the frame rails with jack stands. **NEVER WORK UNDER AN UNSUPPORTED VEHICLE!** Remove the front tires. Support the front axle. Do not allow to hang freely. Refer to coil spring instructions for disassembly of end links, coil springs and other components.
2. Working from the driver side of the truck, unbolt the front brake line bracket from the frame and save the hardware. Remove the ABS sensor wire from the C-Clips on the front knuckle. Remove and discard the sway bar end link, save the hardware. On Rubicon models only: Unplug the front diff locker harness from the axle.
3. Remove the front shock, Remove the factory coil spring and discard, you will need to allow the front axle to hang freely to remove the coil spring. Do not remove the factory upper coil isolator. Repeat on passenger side.
4. Use a pitman arm puller and remove the stock pitman arm. Discard the arm and save the nut and washer. Locate the FT50294 pitman arm and install in the same position as the stock one was with the factory hardware. **NOTE: Use thread locker.** Torque to 185 LBS **SEE FIGURE 1**



**FIGURE 1 - STEP 4**

5. With the Trac Bar removed from the Jeep, remove any and all paint, dirt, or debris from the axle housing where the new bracket is to be installed. The inside front corner of the coil spring mount will need to be cut / trimmed. From the front of the mount, cut 1 1/4" back and 3/4" in and down to the axle (This is just a starting point. Each vehicle will need to be trimmed to fit due to variances from Jeep to Jeep). **SEE FIGURES 2-3**

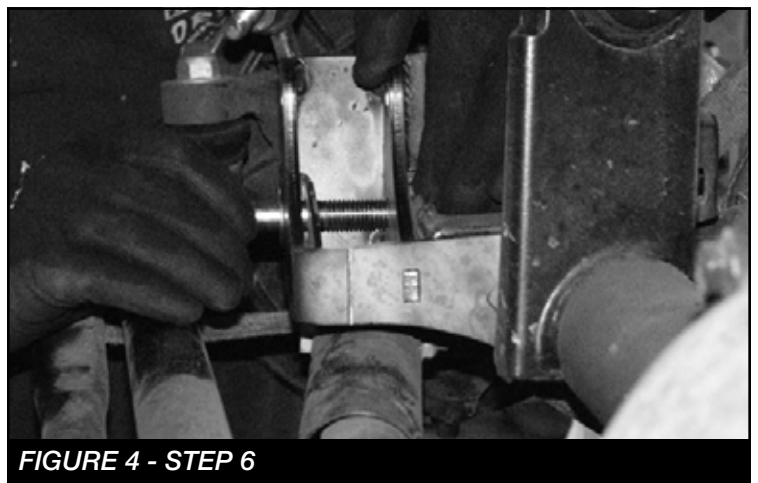


**FIGURE 2 - STEP 5**

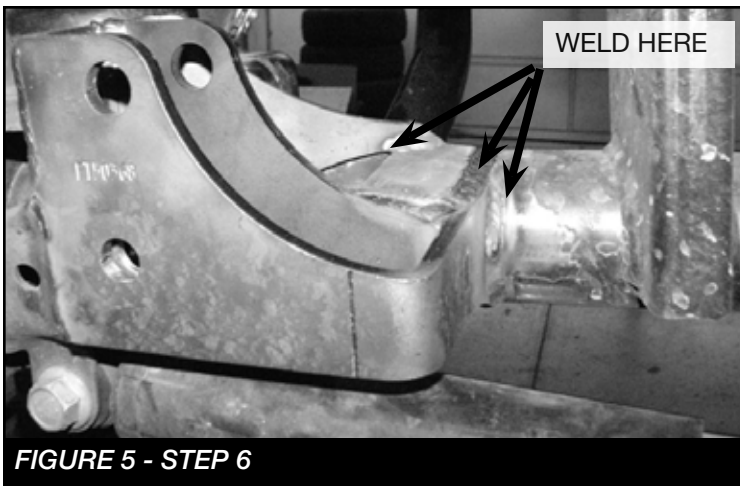


**FIGURE 3 - STEP 5**

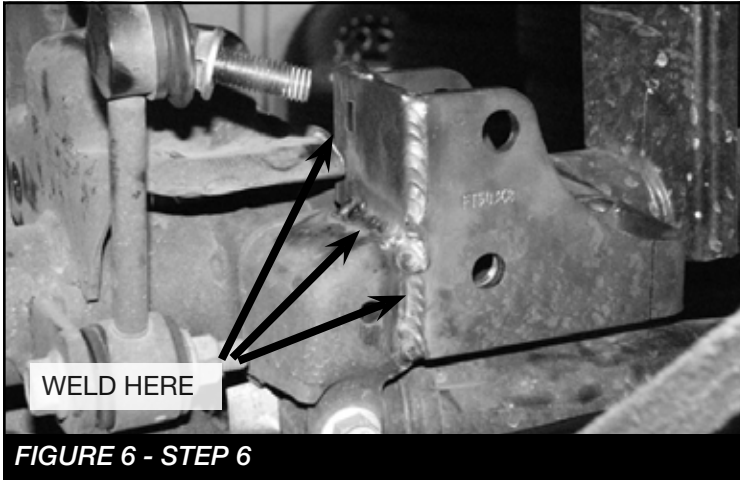
6. Locate FT50368 Trac Bar Bracket, supplied 9/16" bolt, washers, & nut, and FT167 Trac Bar Sleeve. Place a 9/16" flat washer on the outside of the bolt and put it through the new bracket and put another 9/16" flat washer on the bolt. Position the new bracket with the bolt and washers onto the top of the axle and trac bar mount. Weld the gusset as shown in the photos. **SEE FIGURES 4-6**



**FIGURE 4 - STEP 6**

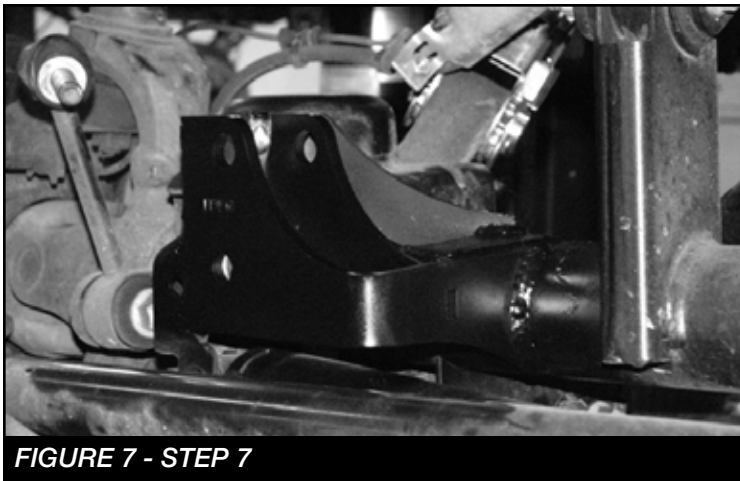


**FIGURE 5 - STEP 6**



**FIGURE 6 - STEP 6**

7. Once the bracket has completely cooled, paint all bare metal areas. **SEE FIGURE 7**



**FIGURE 7 - STEP 7**

8. Place the new FT50492 (Front bumpstop) onto the factory bumpstop pad. Using a center punch mark for drilling. **SEE FIGURE 8**



**FIGURE 8 - STEP 3**

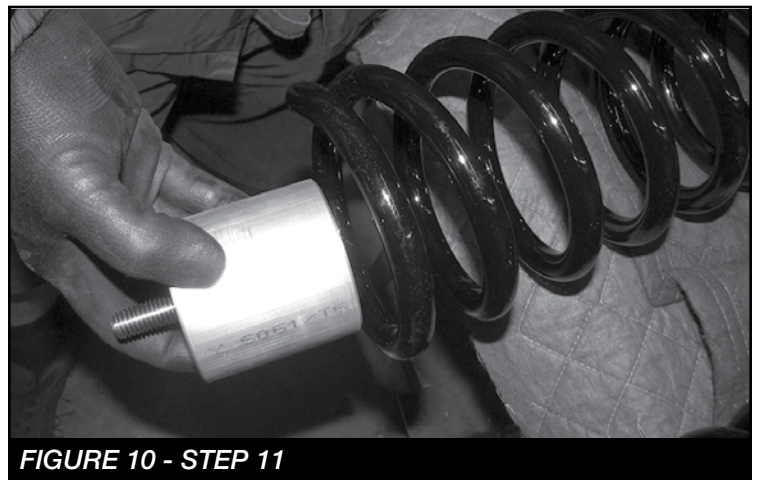
9. Drill out the bumpstop pad to 1/2" **SEE FIGURE 9**



**FIGURE 9 - STEP 9**

10. Repeat steps 8-9 on passenger side.

11. Install the new coils and bumpstops together using the supplied 1/2-13 X 3-1/2" bolts and FT50060 (Nut Tab). **SEE FIGURES 10-12** Torque to 127 ft-lbs



**FIGURE 10 - STEP 11**

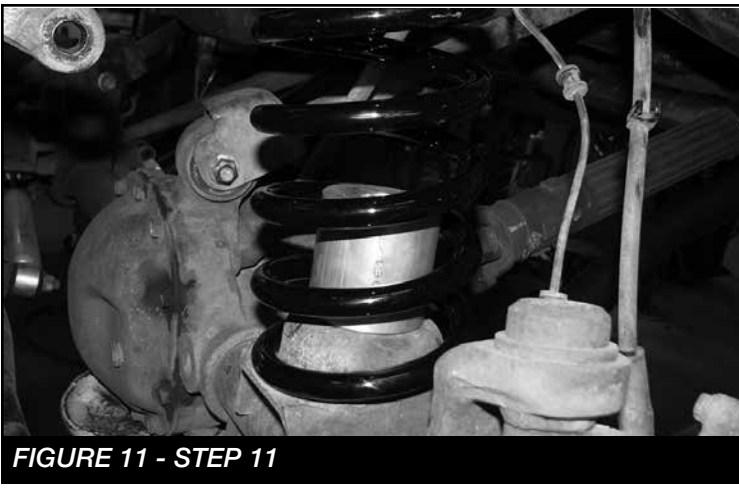


FIGURE 11 - STEP 11



FIGURE 12 - STEP 11

12. Locate and install the front shocks supplied in your kit using the supplied bushings and sleeves. Install using the factory hardware.

13. Install the bushings and sleeve into the new Fabtech sway bar endlinks. Install using the supplied 1/2-20 X 2-3/4" bolt and hardware for the upper mount and the factory hardware for the lower mount. Torque to 127 ft-lbs **SEE FIGURE 13**



FIGURE 13 - STEP 13

14. Install the track bar and torque hardware to 179 ft-lbs. Re-attach the draglink to the pitman arm and torque to 77 ft-lbs.

15. Install FT50295 (Brake Line Drop Bracket) using the factory and supplied 1/4" hardware. Torque to 14 ft-lbs. **SEE FIGURE 14**



FIGURE 14 - STEP 15

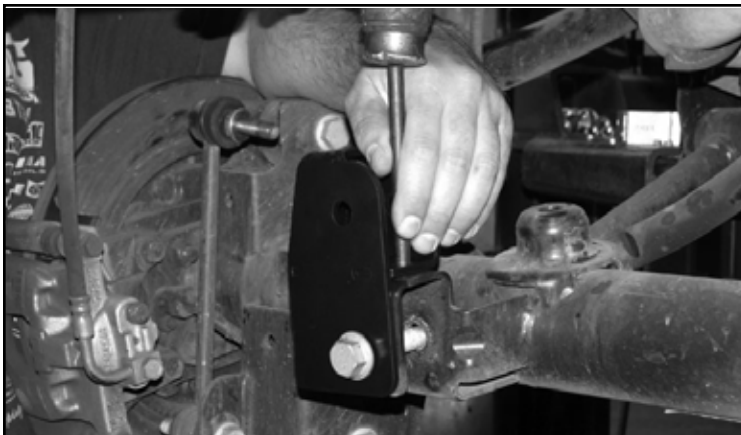
## REAR SUSPENSION

16. Jack up the rear end of the vehicle and support the frame rails just in front of the rear bumper with jack stands. **NEVER WORK UNDER AN UNSUPPORTED VEHICLE!** Remove the rear tires. Support the rear axle. Do not allow to hang freely. Remove the factory shocks and rear sway bar end links and discard. Disconnect the brake lines from the frame and save hardware. Remove the (2) nuts attaching the factory E-brake cable from the body and save.

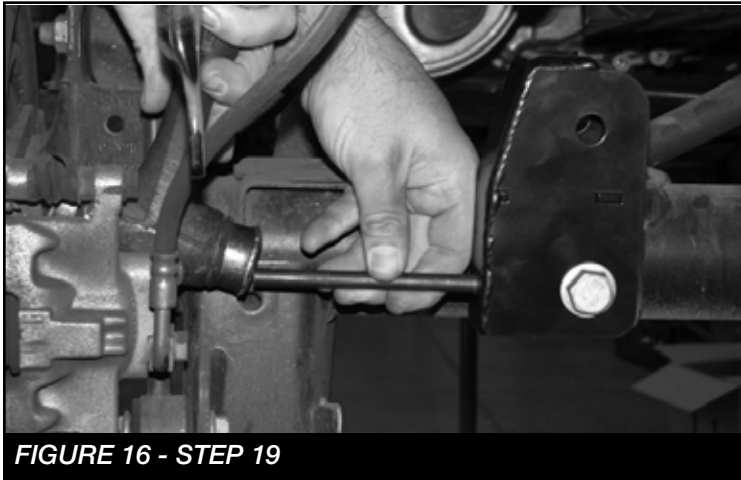
17. Remove and discard the factory coil springs and save the rubber isolators for re-installation.

18. With the rear axle supported. Disconnect the rear Track Bar from the axle.

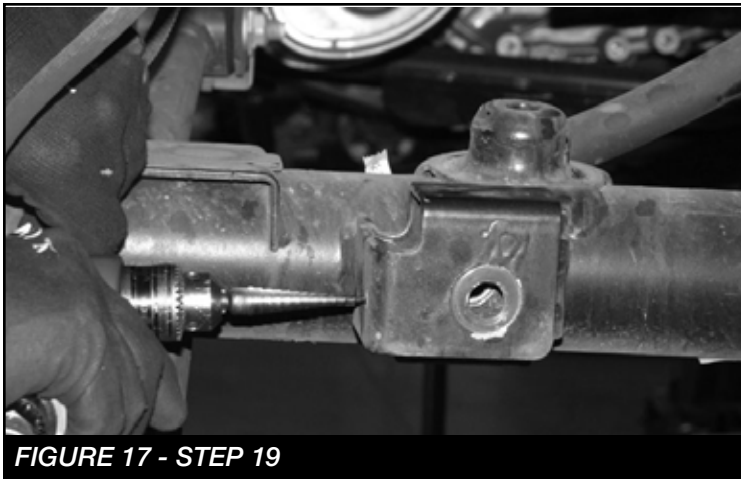
19. Locate FT50296BK (Rear Track Bar Bracket), position it onto the top of the axle and trac bar mount. Use the factory bolt to align the new bracket to the original mount. Use a punch and mark the factory mount through the two holes in the new bracket. Use a drill with a 3/8" bit and drill the two new holes. Locate and install the supplied 3/8" hardware Torque to 52 ft-lbs. Reinstall the factory track bar bolt and FT157 sleeve. Torque to 160 ft-lbs **SEE FIGURES 15-18**



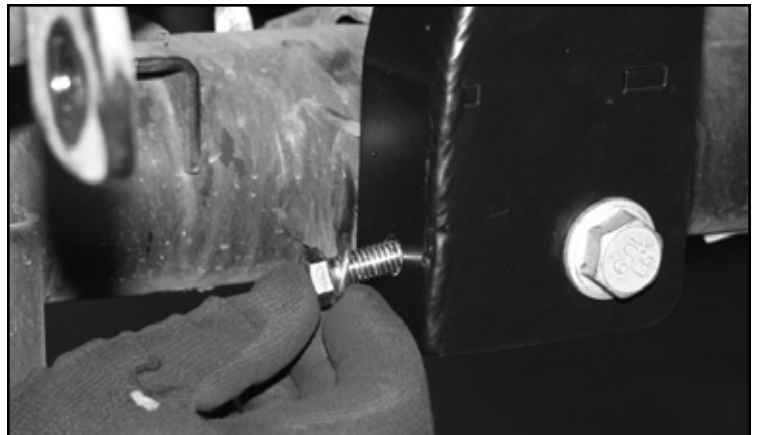
**FIGURE 15 - STEP 19**



**FIGURE 16 - STEP 19**



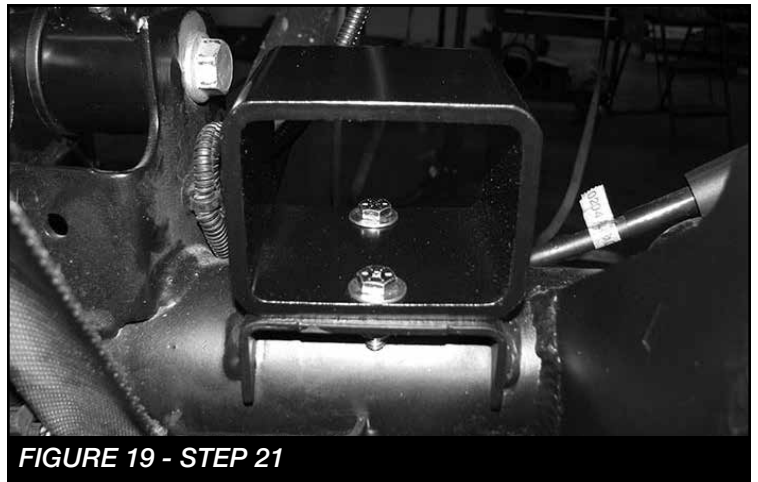
**FIGURE 17 - STEP 19**



**FIGURE 18 - STEP 19**

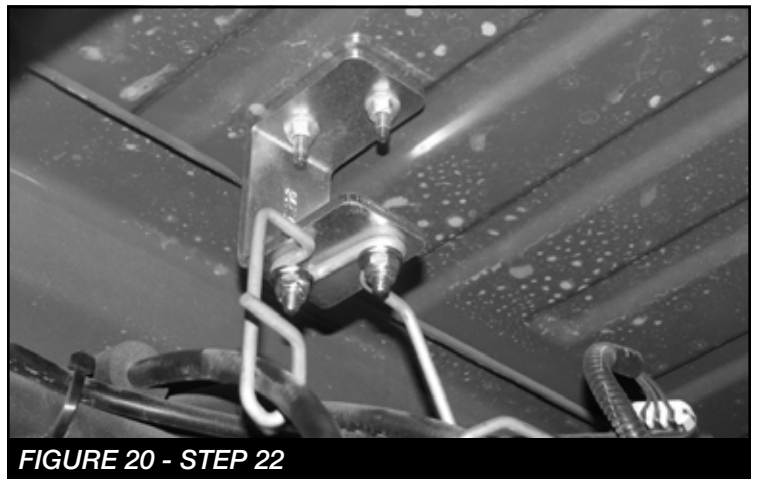
20. Reinstall the track bar using the supplied 9/16-12 X 3" bolt, FT157 sleeve and hardware.

21. Locate FT50401BK Rear Bumpstop Spacer. Position the spacer onto the factory bumpstop pad on the axle and attach with the supplied 5/16" x 1" bolts and hardware. **SEE FIGURE 19**



**FIGURE 19 - STEP 21**

22. Locate FT50298 E-Brake Bracket and supplied 1/4" hardware. Position the bracket to the factory mounting position and attach with the factory hardware. Attach the factory bracket to the new Fabtech bracket with the 1/4" hardware. Torque to 10 lbs. **SEE FIGURE 20**



**FIGURE 20 - STEP 22**

23. Locate & install new Fabtech rear coil spring with the factory isolators on the top into the upper mount first, then onto the factory coil perch on the axle. (make sure upper isolator is fully seated into the upper pocket / mount). **SEE FIGURE 21**



**FIGURE 21 - STEP 23**

24. Install the supplied Fabtech shock using the factory upper hardware to mount the bar bin and the supplied 1/2" x 2 1/2" bolt, large USS washers, and hardware. (insert one large USS washer per side inside the shock mount with the shock) Torque the upper hardware to \*\*60 ft. lbs and the lower to \*\*127lbs. **SEE FIGURE 22**



**FIGURE 22 - STEP 24**

25. Install FT50295 (Brake Line Drop Bracket) using the factory and supplied 1/4" hardware. Torque to 14 ft-lbs. **SEE FIGURE 23**



**FIGURE 23 - STEP 25**

26. 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.**
27. Check front end alignment and set to factory specifications. Readjust headlights.
28. Recheck all bolts for proper torque.
29. Recheck brake hoses, ABS wires and suspension parts for proper tire clearance while turning tires fully left to right.
30. 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.**
31. 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.**

**RETORQUE 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 inconsistencies 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](http://www.fabtechmotorsports.com)