



INSTALLATION INSTRUCTIONS

FTS24138 LONG TRAVEL COILOVER BOX KIT		
1	FT50294	JK PITMAN ARM
2	FT50261BK	FRONT SWAY BAR END LINK
1	FT50514	HARDWARE SUBASSEMBLY
2	FT50724	REAR BUMP STOP SPACER
1	FT50539	HARDWARE KIT
1	FT50368	FRONT TRACK BAR BRACKET WELD ON
1	FT50342	REAR TRACK BAR BRACKET WELD ON

FT50514 HARDWARE SUBASSEMBLY		
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)
1	FT50451	BRAKE LINE PAIR (FRONT)
1	FT50452	BRAKE LINE PAIR (REAR)
1	FT167	SLEEVE .875 X .563 X 1.344
1	FT50362	REAR TRACK BAR GUSSET
1	FT50360	SWAY BAR LINK MOUNT (DRIVER)
1	FT50361	SWAY BAR LINK MOUNT (PASSENGER)
2	FT42	SWAY BAR PIN
2	FT45	KEY RING
2	FT50359	SWAY BAR RETAINER
2	FT90036	LYNCH PIN 1/4"
1	FT50298	E-BRAKE BRACKET
1	FT24138i	INSTRUCTIONS
1	FTAS12	STICKER FT BLUE 10X4
1	FTAS16	DRIVER WARNING DECAL
1	FTREGCARD	REGISTRATION CARD

FT50539 - HARDWARE KIT		LOCATION
3	9/16-12 X 3 HEX BOLT G8 ZC	TRACK BAR
3	C-LOCK NUT 9/16"-12 CLEAR ZINC	
6	9/16 SAE WASHER G8 ZINC	
6	1/2-13 X 2-3/4 HEX BOLT G8 ZINC	SWAY BAR FRT/REAR
2	1/2-13 X 1-1/4 HEX BOLT G8 ZINC	SWAY BAR BRACKET
2	1/2-13 X 4-1/2 HEX BOLT G8 ZINC	LOWER SHOCK MOUNT
8	1/2-20 C-LOCK NUT ZINC	
16	1/2 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	
6	1/4-20 X 1" HEX BOLT G5 ZINC	BRAKE LINES
4	1/4-20 X 1-1/4" HEX BOLT	SWAY BAR
10	1/4-20 C-LOCK NUT ZINC	
24	1/4 SAE WASHER G5 ZINC	
4	CLAMP 3/8X1/2W .26THK NEOPRENE	
4	BRAKE LINE SPRING	
4	1/2" TEK SCREW	
1	7/8" LOCK WASHER	PITMAN ARM
1	THREAD LOCKING COMPOUND	

2007-18 JEEP WRANGLER (JK) LONG TRAVEL COILOVER BOX KIT

FT24138i

Fabtech Motorsports | 4331 Eucalyptus Ave. Chino, CA 91710

Tech Line: 909-597-7800 | **Fax:** 909-597-7185 | **Web:** www.fabtechmotorsports.com

- TOOL LIST -

Required Tools (Not Included)

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

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.

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

FOOTNOTES -

- 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. 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 7/8" lock washer, 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 track 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

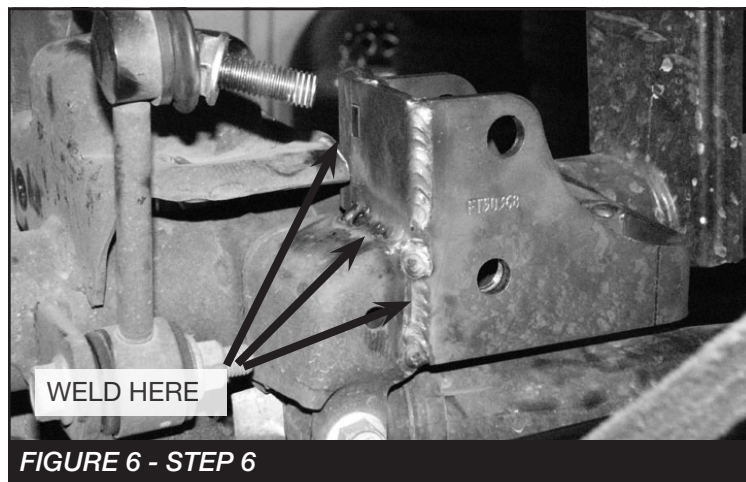


FIGURE 3 - STEP 5

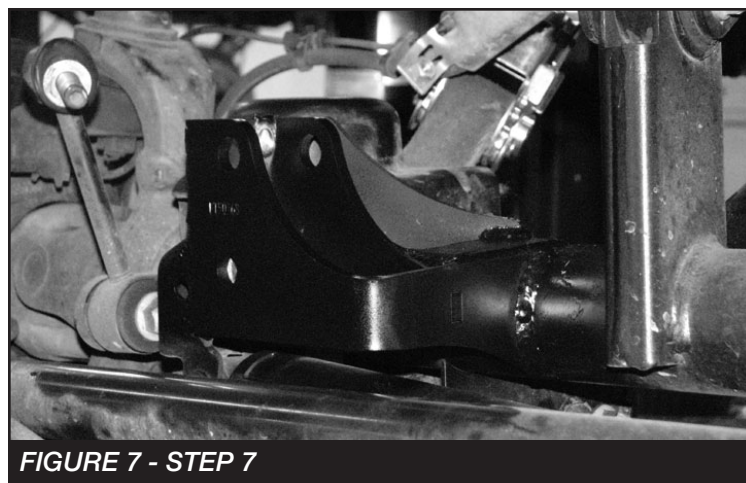
6. Locate FT50368 Trac Bar Bracket, supplied 9/16" bolt, washers, & nut, and FT167 Track Bar Sleeve. Place a 9/16" flat washer on the outside of the bolt and put it through the new bracket and put another 9/16" flat washer on the bolt. Position the new bracket with the bolt and washers onto the top of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



FIGURE 4 - STEP 6

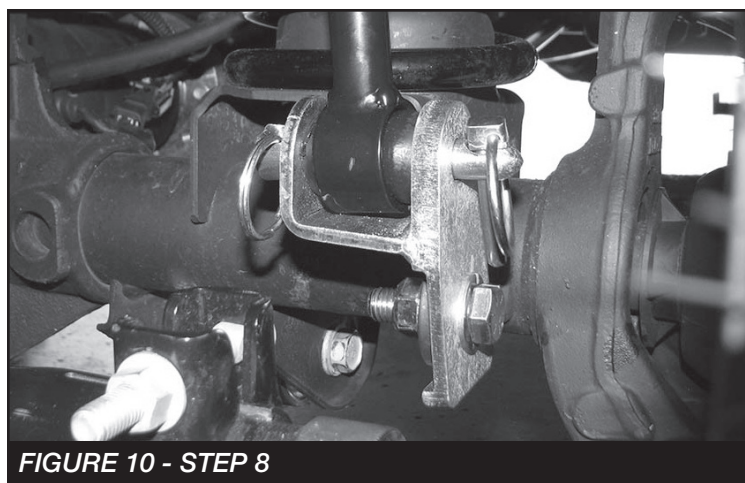
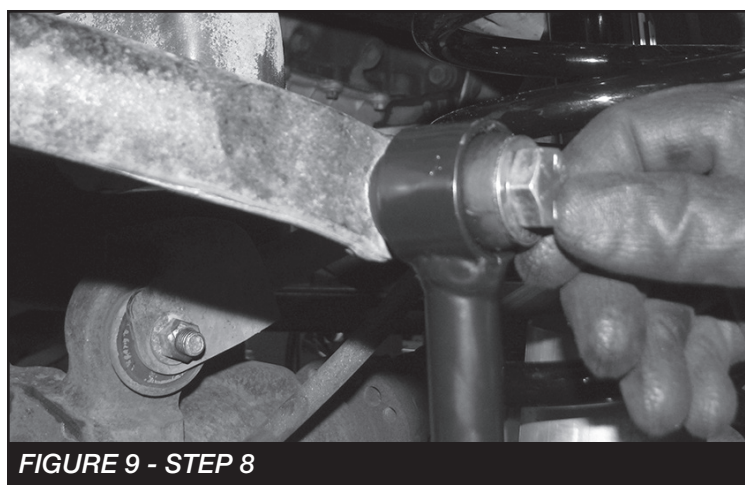
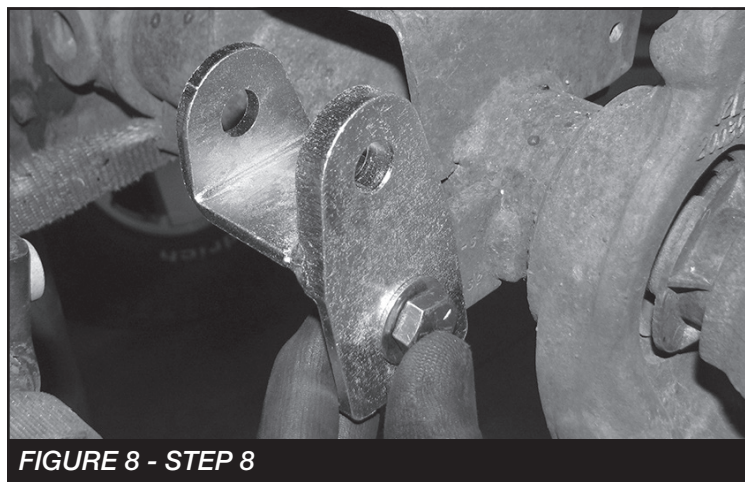


7. Once the bracket has completely cooled, paint all bare metal areas. **SEE FIGURE 7**



8. Locate FT50360 drv. & FT50361 pass. Sway Bar Link Mounts, FT50261 Front Sway Bar Endlinks, FT50048 & FT50089 bushing and sleeve kits. Press one bushing and one sleeve from the supplied bushing kit into each end of the end link. Attach the link mount brackets to the factory sway bar mount on the axle with the supplied $\frac{1}{2}$ " x $1\frac{1}{4}$ " bolts and hardware. Torque to **127 ft. lbs. With the supplied $\frac{1}{2}$ " x $2\frac{3}{4}$ " bolts & hardware, connect the new end link to the sway bar (factory hole in sway bar may need to be enlarged with a die grinder out to $\frac{1}{2}$ "). Mount the bolt with the head of the bolt facing outward towards the tire. Then, using the FT42 Sway Bar Pin, FT45 Key Ring, & FT90036 Lynch pin, connect to the new lower sway bar mount. Torque the upper hardware to **127 ft

SEE FIGURES 8-10



9. Locate FT50359 Sway Bar Retainer and the supplied $\frac{1}{4}$ "x $1\frac{1}{4}$ " hardware. Disconnect the sway bar from the lower axle mounts. Rotate the sway bar end links up toward the coil bucket and attach the retainers to the end links. Position the retainer bracket to the coil bucket and mark the bucket for the retainers. Mark the two holes from the retainer to the bucket. Lower the retainers and drill the two new holes to $\frac{1}{4}$ ". Attach the retainer to the coil bucket, then attach the end link to the new retainer with the sway bar pin & lynch pin. After test fitting, re-attach link to axle. **SEE FIGURES 11-12**

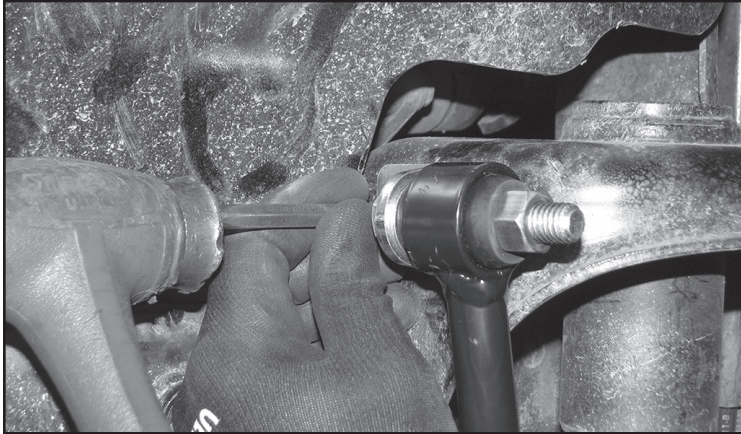


FIGURE 11 - STEP 9



FIGURE 12 - STEP 9

10. 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.

REAR SUSPENSION

11. 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 plastic clips that hold the ABS lines to the frame and at the rear upper link arm pockets. Do not damage the clips, they will be reused. Remove the (2) nuts attaching the factory E-brake cable from the body and save.
12. Remove and discard the factory coil springs and save the rubber isolators for re-installation.
13. With the rear axle supported. Remove the rear Track Bar from the Jeep. Remove any paint, dirt, or debris from the axle housing where the new gussets are to be installed.
14. Locate FT50362 Gusset, position it onto the axle and the factory track bar mount as shown in photo. Weld the gusset on the two sides. **SEE FIGURE 13**

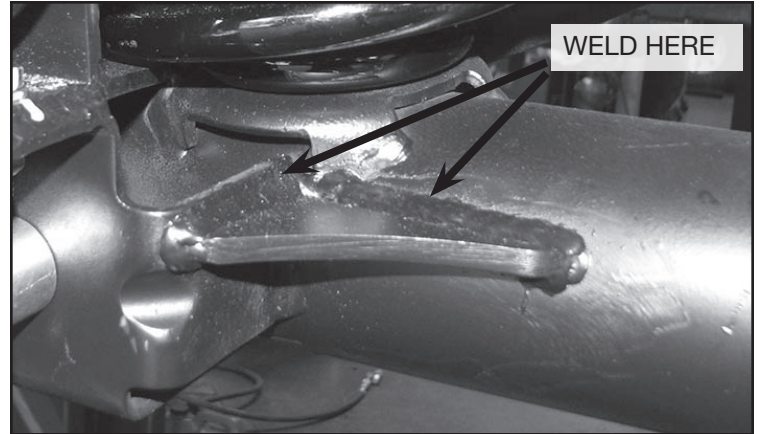


FIGURE 13 - STEP 14

15. Locate FT50342 Rear Track Bar Bracket, position it onto the top of the axle and track bar mount. Use the supplied $\frac{9}{16}$ " 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. Remove the bracket and drill out the (2) holes to $\frac{3}{8}$ ". **SEE FIGURES 14-16**

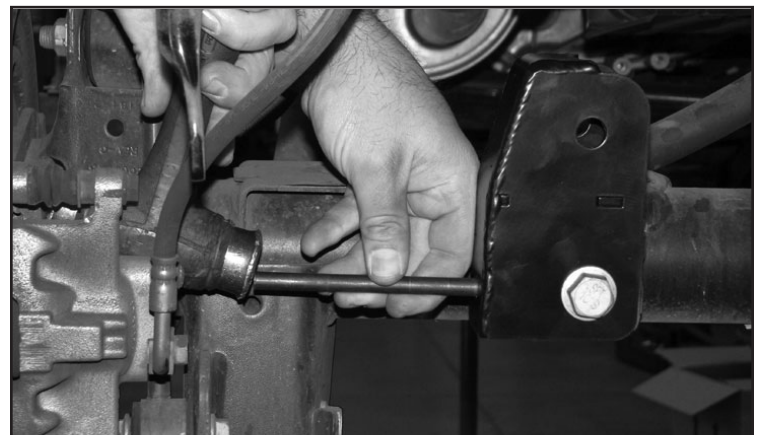


FIGURE 14 - STEP 15



FIGURE 15 - STEP 15

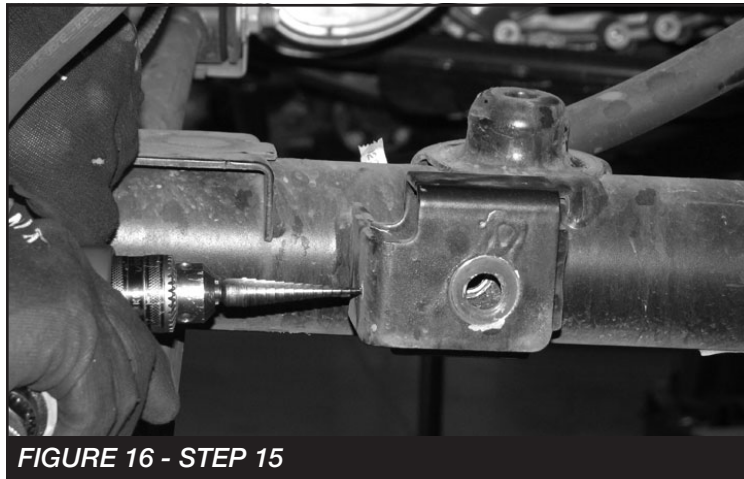


FIGURE 16 - STEP 15

16. Re-install the track bar bracket using the supplied 3/8" hardware, 9/16-12 X 3" bolt, FT157 sleeve and hardware. **SEE FIGURE 17**



FIGURE 17 - STEP 16

17. Weld the new bracket like shown in **FIGURE 18-19.**

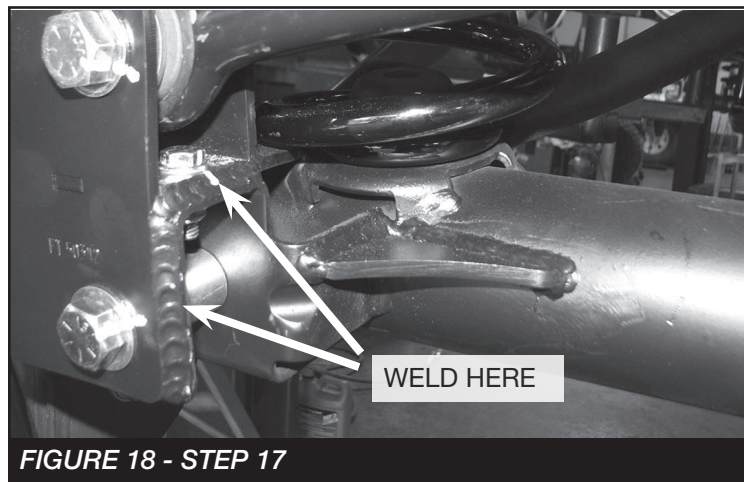


FIGURE 18 - STEP 17



FIGURE 19 - STEP 17

18. Locate FT50724 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 20**

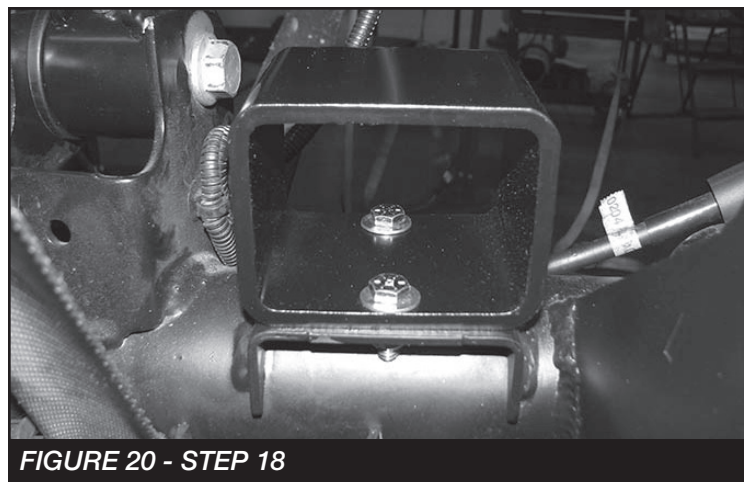


FIGURE 20 - STEP 18

19. 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 21**

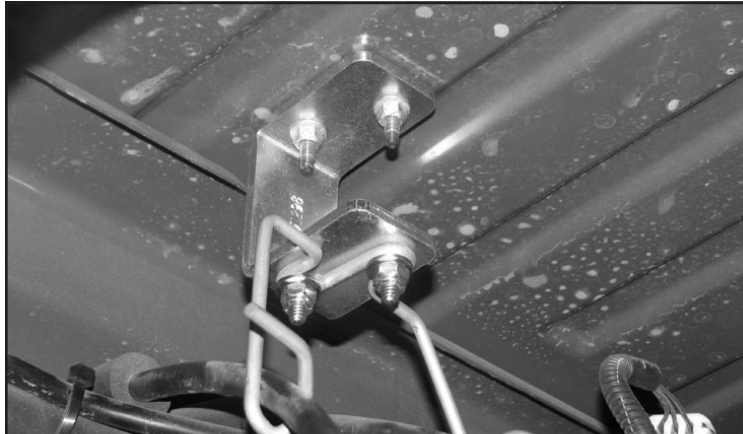


FIGURE 21 - STEP 19

20. 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 22**



FIGURE 22 - STEP 20

21. Position the track bar into the new track bar bracket and attach with the 9/16-12 X 3" hardware. Torque the 9/16" to **184 ft. lbs

22. 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 23**



FIGURE 23 - STEP 22

-BRAKE LINE INSTALLATION-

23. Remove the factory brake line at the frame and at the brake caliper. **SEE FIGURE 24-25**

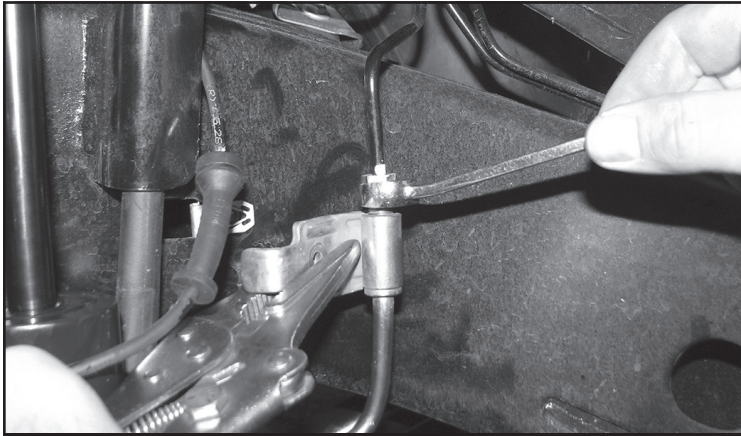


FIGURE 24 - STEP 23

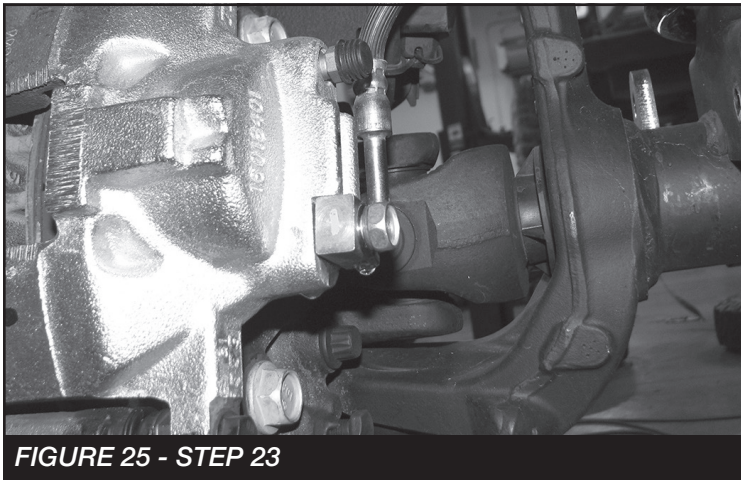


FIGURE 25 - STEP 23

24. Install the supplied brake line bracket in the factory location using the factory bolt. **SEE FIGURE 26**

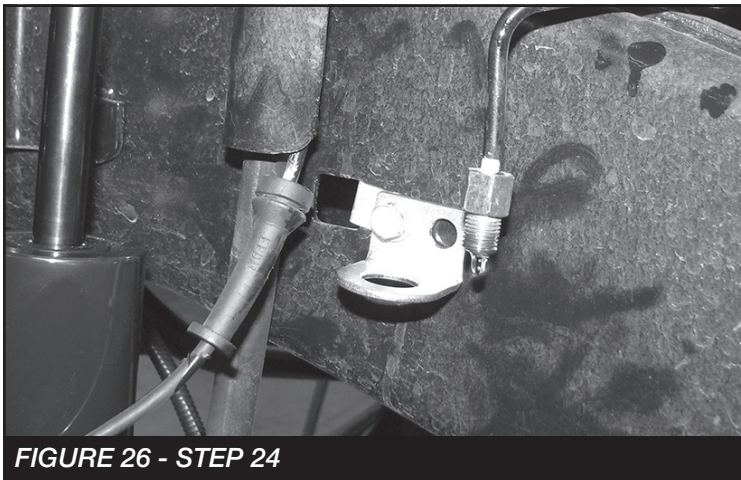


FIGURE 26 - STEP 24

25. Insert the new brake line fitting through the bracket and install onto the factory brake hardline. Next, install the supplied u-clip to secure the line to the bracket. **SEE FIGURE 27**

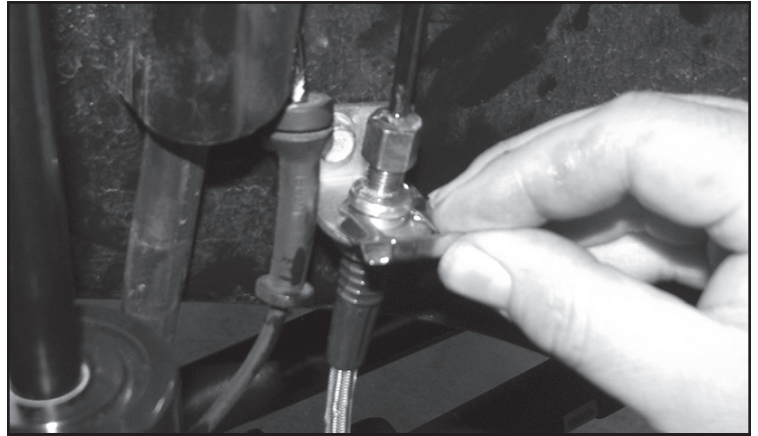


FIGURE 27 - STEP 25

26. Using the factory brake line bolt install the new supplied crush washers and install to the brake caliper. **SEE FIGURES 28-29**

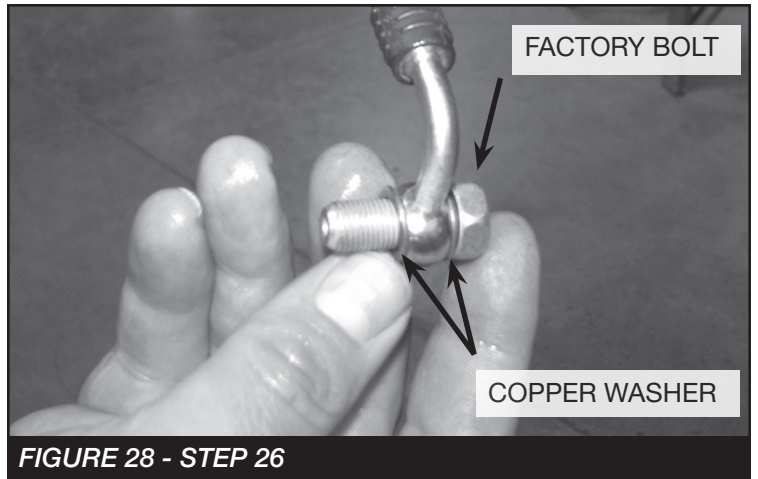


FIGURE 28 - STEP 26

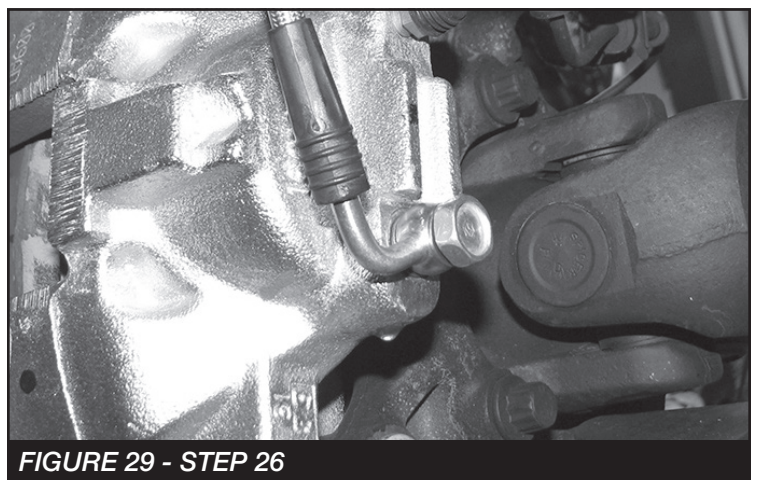


FIGURE 29 - STEP 26

27. Locate the supplied cushioned clamps, 1/4" X 1" bolts, washers, nuts, TEK screws and springs. Install the clamp around the brake using the 1/4" hardware. **NOTE: Install the eyelet of the spring between the clamp and washer. SEE FIGURE 30**



FIGURE 30 - STEP 27

28. Mount the opposite end of the spring to the frame using the supplied TEK screw and washer. **SEE FIGURE 31**

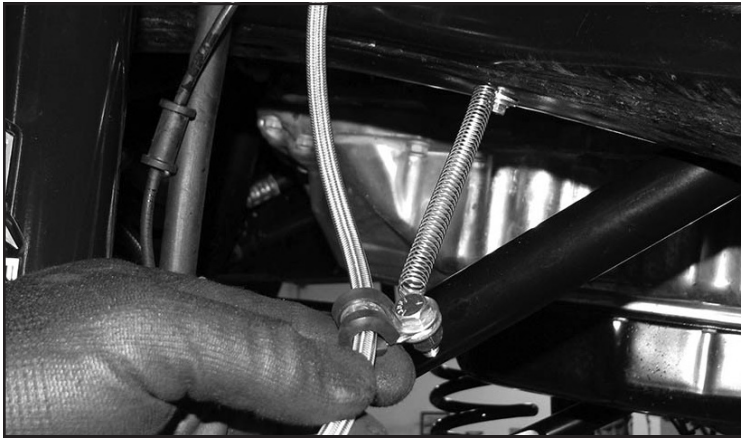


FIGURE 31 - STEP 28

29. Repeat steps 23-28 on the other (3) brake lines.
30. Bleed brakes per manufacturers specifications.
31. 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.**
32. Check front end alignment and set to factory specifications. Readjust headlights.
33. Recheck all bolts for proper torque.
34. Recheck brake hoses, ABS wires and suspension parts for proper tire clearance while turning tires fully left to right.

35. 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.**
36. 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 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