INSTALLATION INSTRUCTIONS

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

FT24131i

Fabtech Motorsports | 4331 Eucalyptus Ave. Chino, CA 91710

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

- PARTS LIST -

	FTS24131	LONG TRAVEL BOX KIT
1	FT50294	JK PITMAN ARM
2	FT50261BK	FRONT SWAY BAR END LINK
2	FT50037BK	REAR SWAY BAR END LINK
1	FT50508	HARDWARE SUBASSEMBLY
2	FT50492	FRONT BUMP STOP SPACER
2	FT50724	REAR BUMP STOP SPACER
1	FT50517	HARDWARE KIT
1	FT50368	FRONT TRACK BAR BRACKET WELD ON
1	FT50342	REAR TRACK BAR BRACKET WELD ON
1	FT50434BK	LOWER SHOCK MOUNT (DRIVER)
1	FT50435BK	LOWER SHOCK MOUNT (PASSENGER)

	FT50508	HARDWARE SUBASSEMBLY
1	FT157	SLEEVE 1.000 X .563 X 1.570
2	FT50048	SWAY BAR END LINK BUSHINGS (4 PACK)
2	FT50089	SWAY BAR END LINK SLEEVES (4 PACK)
2	FT50060	FRONT BUMP STOP NUT TAB
1	FT50451	BRAKE LINE PAIR (FRONT)
1	FT50452	BRAKE LINE PAIR (REAR)
1	FT167	SLEEVE .875 X .563 X 1.344
2	FT50443	SLEEVE 1.000 X .500 X 1.550 (SHOCK MOUNT)
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	FT24131i	INSTRUCTIONS
1	FTLUBE	URETHANE LUBE PACKET
1	FTAS12	STICKER FT BLUE 10X4
1	FTAS16	DRIVER WARNING DECAL
1	FTREGCARD	REGISTRATION CARD

	FT50517 - 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	
2	1/2-13 X 3-3/4 HEX BOLT G8 ZINC	FRONT BUMP STOP
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
10	1/2-20 C-LOCK NUT ZINC	
20	1/2 SAE WASHER G8 ZINC	
6	3/8-16 X 1 HEX BOLT G8 ZINC	
6	3/8-16 C-LOCK NUT ZINC	
12	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	
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	

- 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.

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 195 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 ¼" back and ¾" 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**

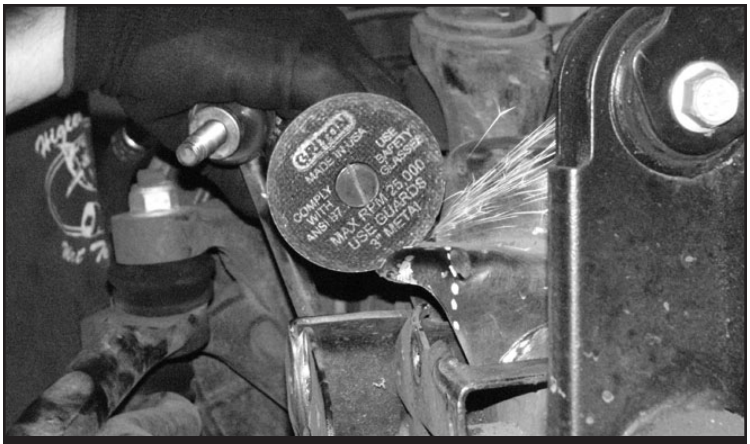


FIGURE 2 - STEP 5



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**

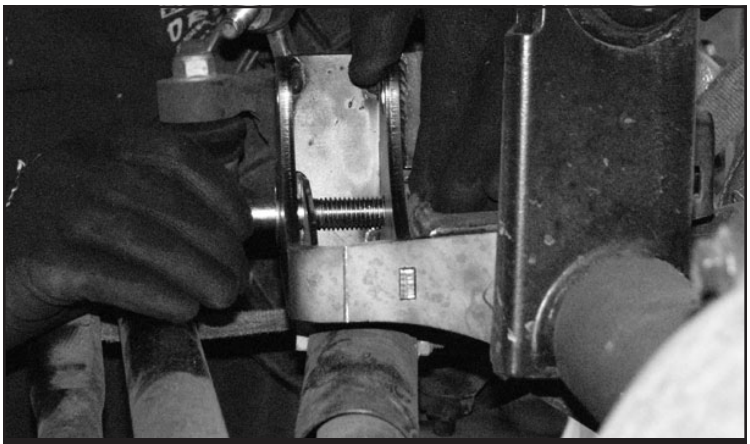


FIGURE 4 - STEP 6



FIGURE 5 - STEP 6

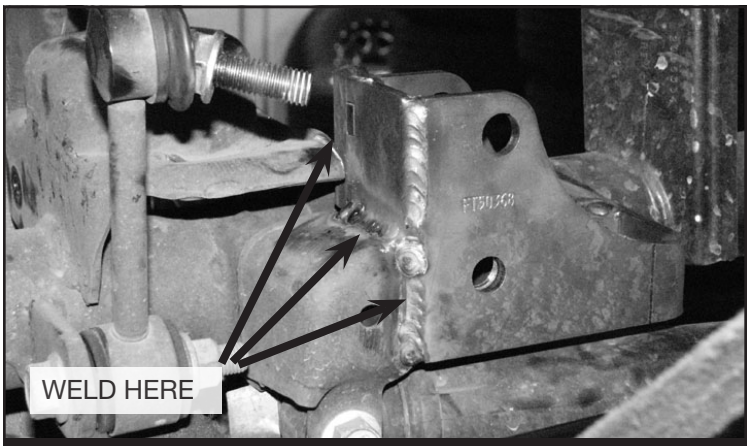


FIGURE 6 - STEP 6

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

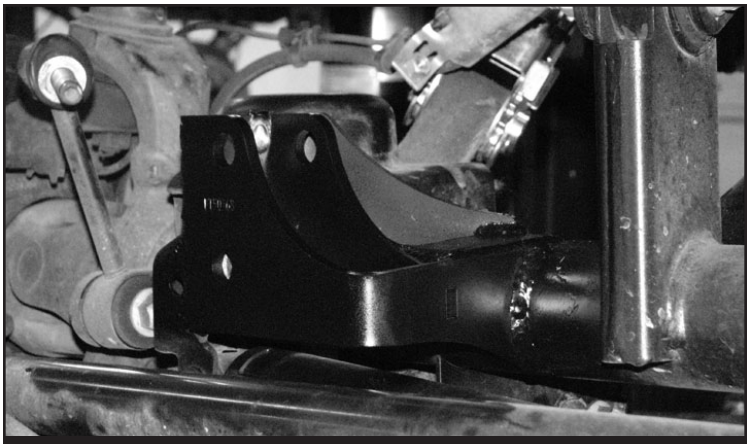


FIGURE 7 - STEP 7

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

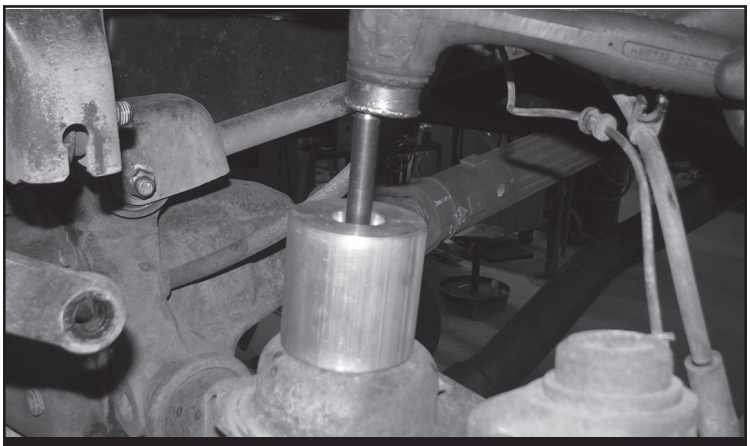


FIGURE 8 - STEP 3

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

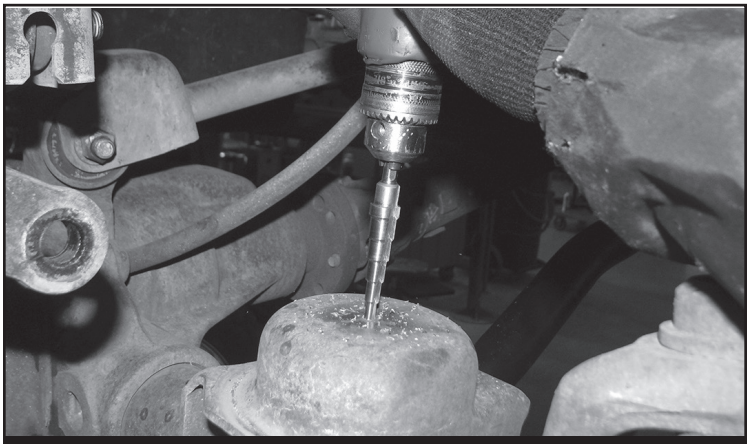


FIGURE 9 - STEP 9

10. Repeat steps 8-9 on passenger side.

11. Install the new coils and bumpstops together using the supplied 1/2-13 X 3-3/4" 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 FT50434BK (Driver Lower Shock Mount), FT50443 Sleeve, 1/2-13 X 4-1/2” bolt, 3/8-16 X 1” bolts and necessary washers/nuts. Install the bracket like shown in **FIGURES 13-16.** Install the 1/2” bolt through both the new bracket and factory shock bracket using the spacer sleeve in the old shock location. Then install (2) 3/8” bolts and hardware on the bottom of the same bracket. **NOTE: The existing hole on the side of the coil perch needs to be drilled out to 3/8”, then install the 3rd 3/8” bolt and hardware.**



FIGURE 13 - STEP 12

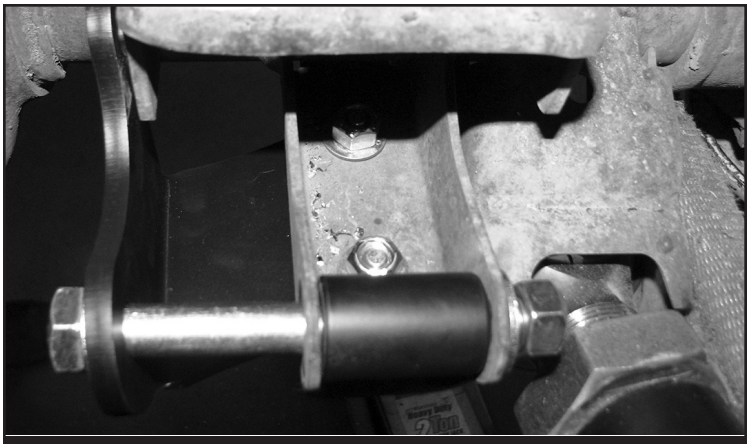


FIGURE 14 - STEP 12

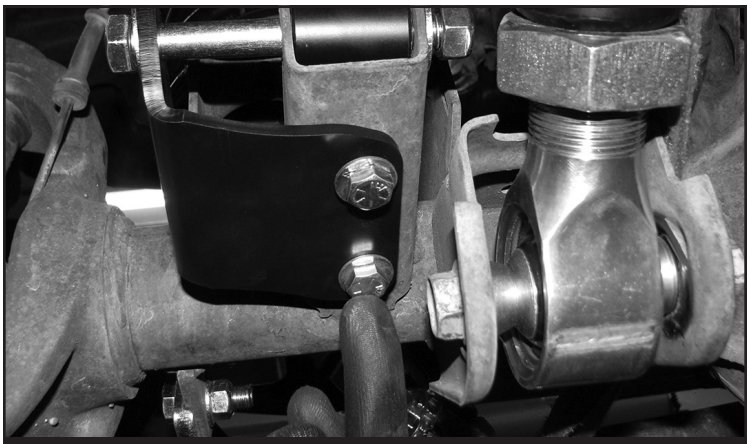


FIGURE 15 - STEP 12

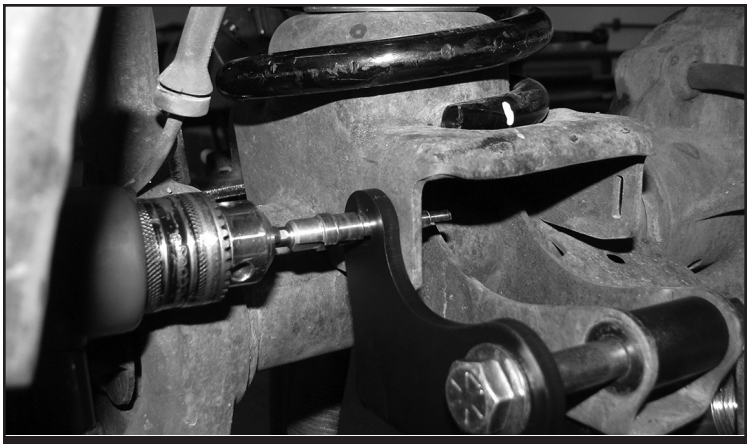


FIGURE 16 - STEP 12

13. **REPEAT STEP 12 ON THE PASSENGER SIDE. NOTE: The forward hole on the passenger side lower shock mount needs to be marked and drilled out to 3/8". SEE FIGURE 17.** Torque 3/8" hardware to 52 ft-lbs.

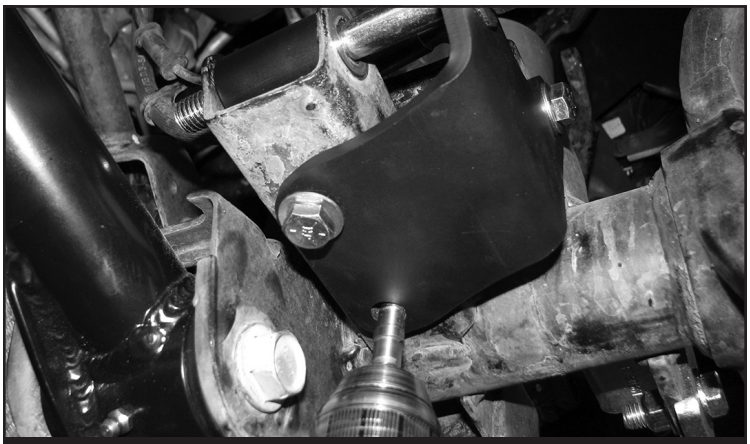


FIGURE 17 - STEP 13

14. Locate and install the front shocks supplied in your kit using the hardware included with the shock and the 1/2" bolt/ hardware that was used in the previous step. Torque 1/2" hardware to 127 ft-lbs. **SEE FIGURE 18**



FIGURE 18 - STEP 14

15. 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 ½"x 1-1/4" bolts and hardware. Torque to **127 ft. lbs. With the supplied ½" x 2 ¾" 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 ½"). 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 25 ft-lbs **SEE FIGURES 19-21**



FIGURE 19 - STEP 15

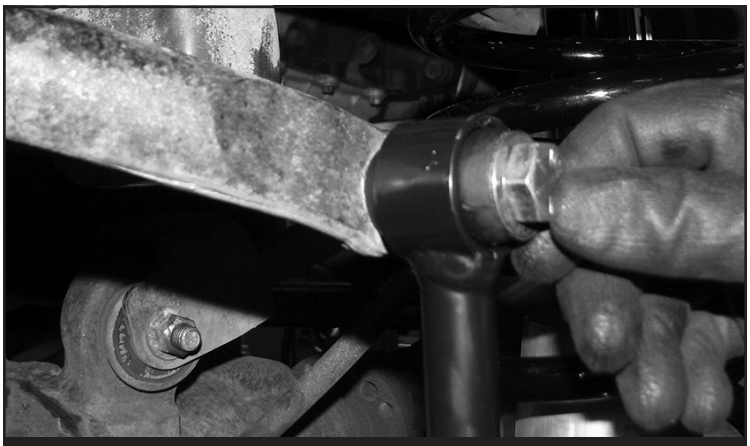


FIGURE 20 - STEP 15

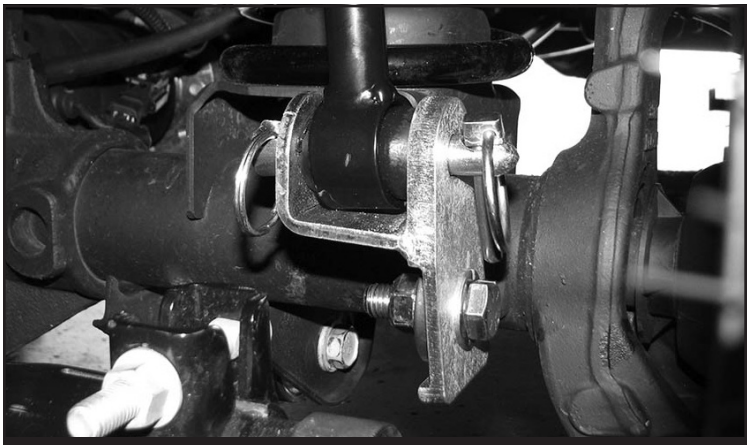


FIGURE 21 - STEP 15

16. Locate FT50359 Sway Bar Retainer and the supplied ¼"x 1¼" 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 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 22-23**



FIGURE 22 - STEP 16



FIGURE 23 - STEP 16

17. 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

18. 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.

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

20. 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.

21. 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 24**

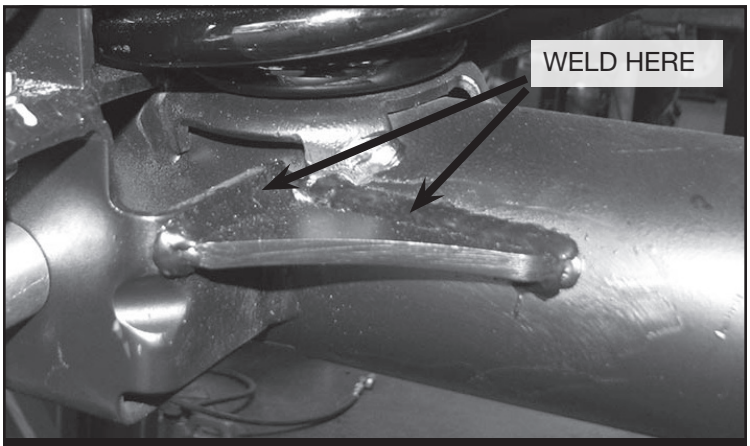


FIGURE 24 - STEP 21

22. Locate FT50342 Rear Track Bar Bracket, position it onto the top of the axle and track bar mount. Use the supplied 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 3/8". **SEE FIGURES 25-27**

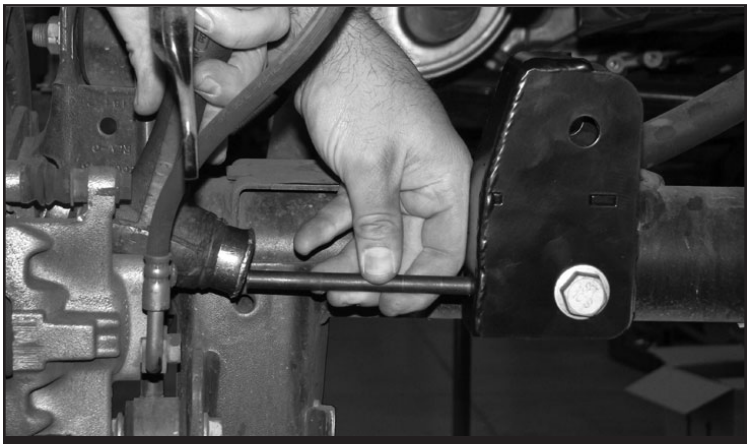


FIGURE 25 - STEP 22



FIGURE 26 - STEP 22

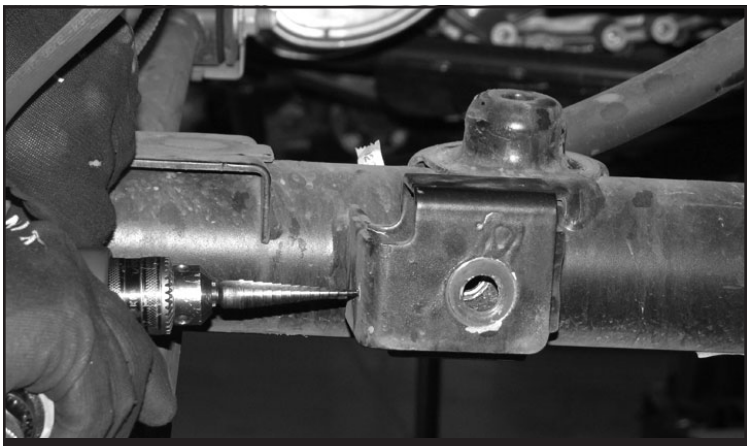


FIGURE 27 - STEP 22

23. Re-install the track bar bracket using the supplied 3/8" hardware, 9/16-12 X 3" bolt, FT157 sleeve and hardware. **SEE FIGURE 28**



FIGURE 28 - STEP 23

24. Weld the new bracket like shown in **FIGURE 29-30.**

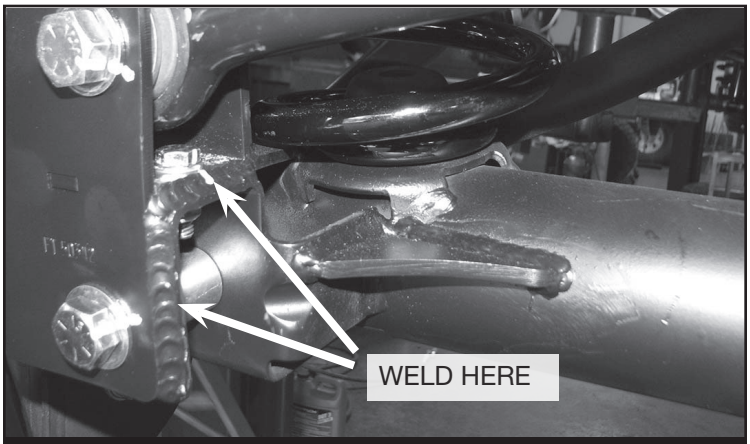


FIGURE 29 - STEP 24

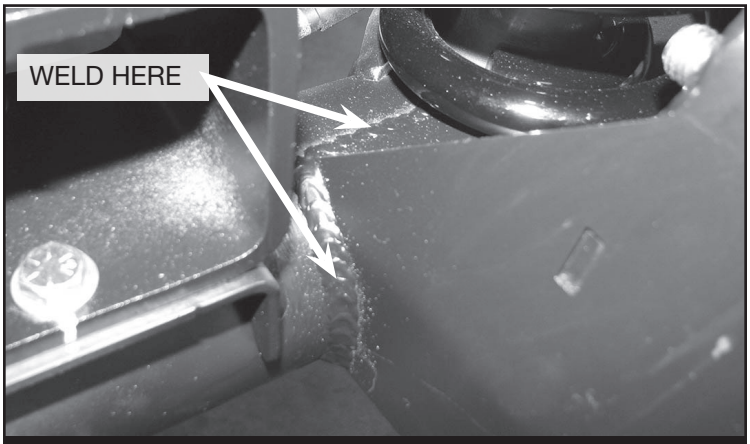


FIGURE 30 - STEP 24

25. 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 31**

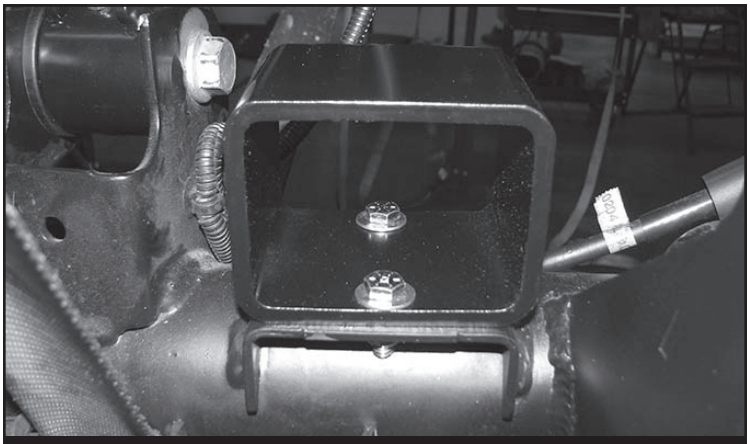


FIGURE 31 - STEP 25

26. Locate FT50298 E-Brake Bracket and supplied ¼" 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 ¼" hardware. Torque to 10 lbs. **SEE FIGURE 32**

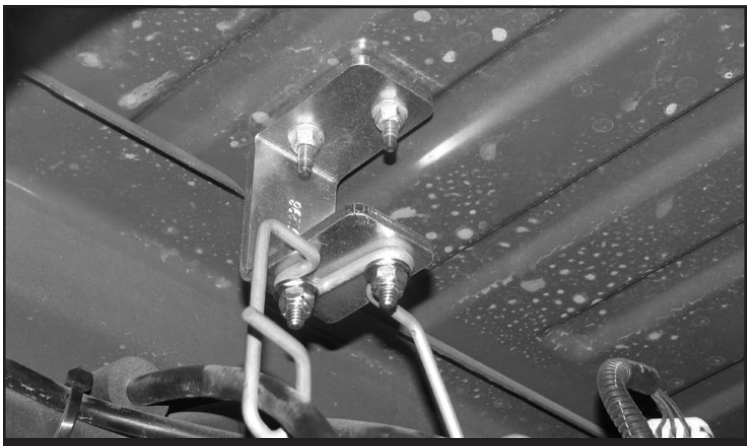


FIGURE 32 - STEP 26

27. 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 33**



FIGURE 33 - STEP 27

28. 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

29. Install the supplied Fabtech shock using the factory upper hardware to mount the bar bin and the supplied ½" x 2 ½" 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 58 ft. lbs and the lower to 65 ft-lbs. **SEE FIGURE 34**



FIGURE 34 - STEP 29

30. Locate FT50037BK (rear sway bar end links), bushings and sleeve. Install the bushings and sleeves into the new end links. Using the supplied 1/2-13 X 2-3/4" hardware, install the end links to the sway bar and axle. Torque to 25 ft-lbs. **SEE FIGURE 35-36**



FIGURE 35 - STEP 30

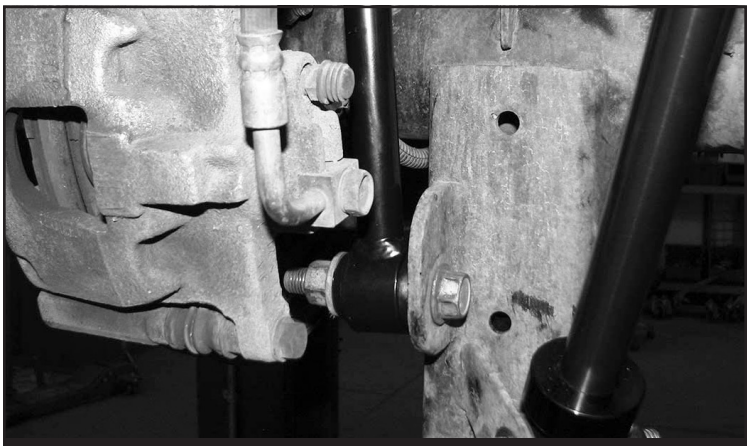


FIGURE 36 - STEP 30

-BRAKE LINE INSTALLATION-

31. Remove the factory brake line at the frame and at the brake caliper. **SEE FIGURE 37-38**

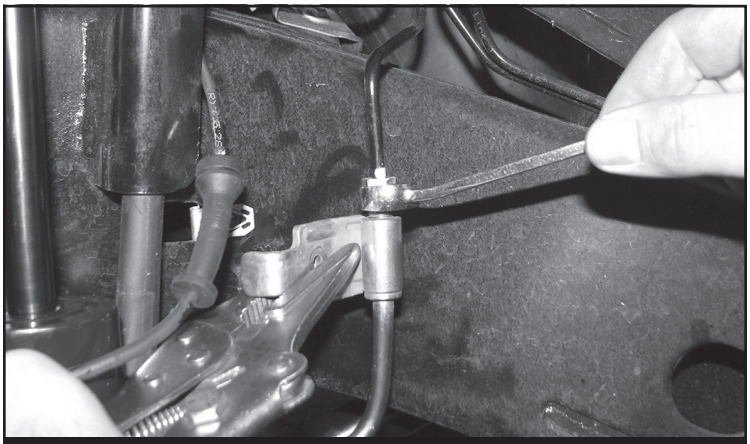


FIGURE 37 - STEP 31

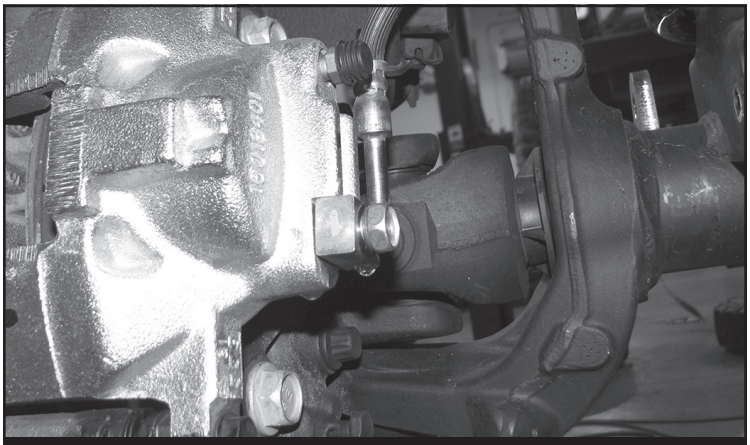


FIGURE 38 - STEP 31

32. Install the supplied brake line bracket in the factory location using the factory bolt. **SEE FIGURE 39**

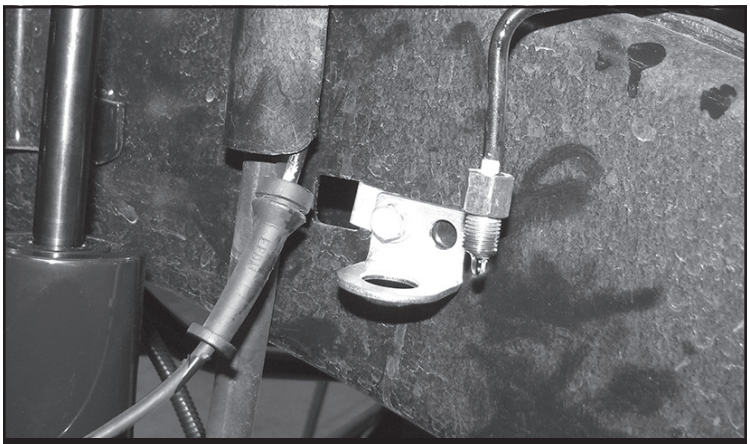


FIGURE 39 - STEP 32

33. Insert the new brake line fitting through the bracket and install onto the factory brake hard-line. Next, install the supplied u-clip to secure the line to the bracket. **SEE FIGURE 40**

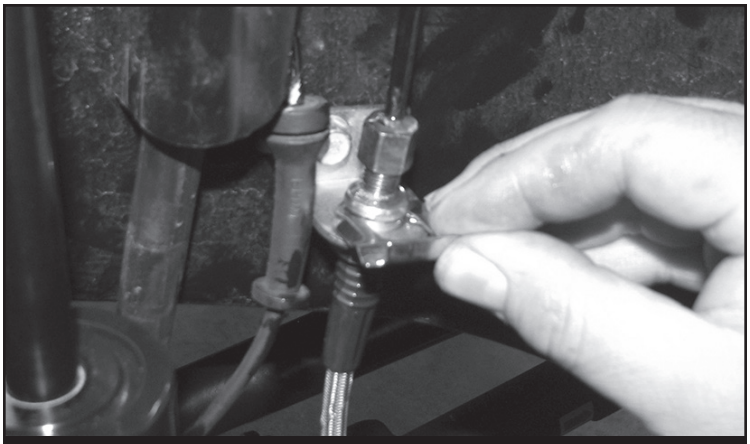


FIGURE 40 - STEP 33

34. Using the factory brake line bolt install the new supplied crush washers and install to the brake caliper. **SEE FIGURES 41-42**

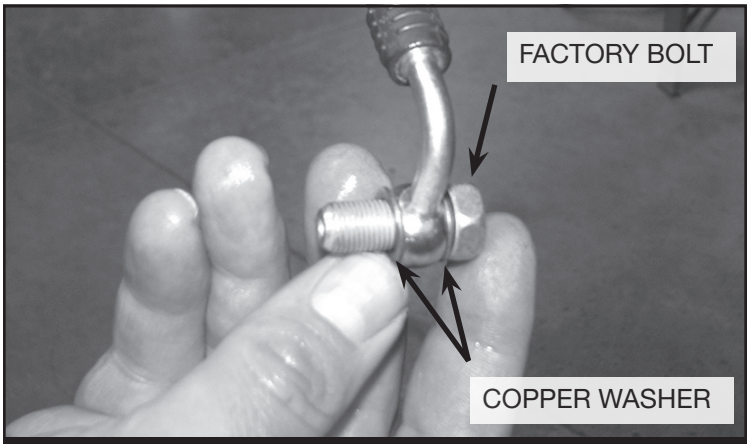


FIGURE 41 - STEP 34

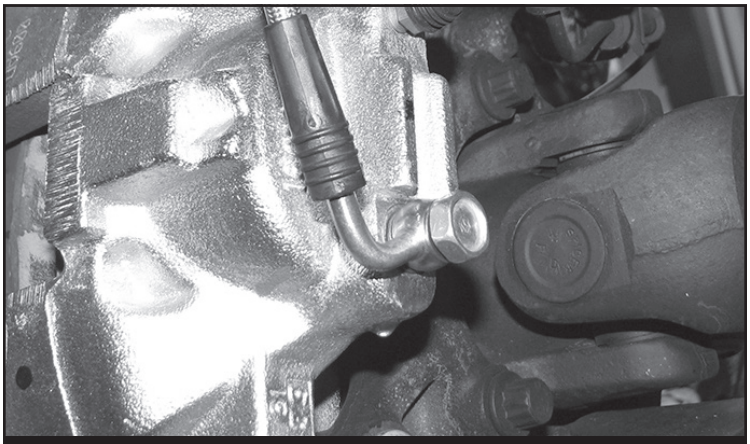


FIGURE 42 - STEP 34

35. 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 43**



FIGURE 43 - STEP 35

36. Mount the opposite end of the spring to the frame using the supplied TEK screw and washer. **SEE FIGURE 44**

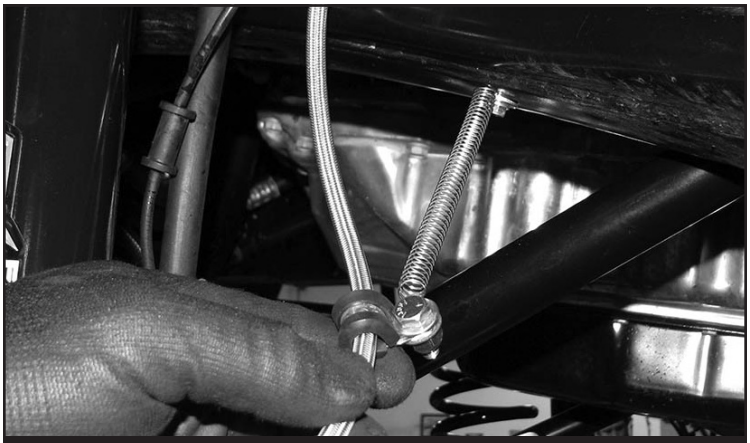


FIGURE 44 - STEP 35

37. Repeat steps 31-36 on other (3) brake lines.

38. Bleed brakes per manufacturers specifications.

39. 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.**

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

41. Recheck all bolts for proper torque.

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

43. 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.**

44. 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