INSTALLATION INSTRUCTIONS

2007-14 JEEP JK 4WD
3” TRAIL SYSTEM

KAOJKLIFT2/KAOJKLIFT4

Fabtech Motorsports | 4331 Eucalyptus Ave. Chino, CA 91710

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

- PARTS LIST -

	KA0JKLIFT2	2DR TRAIL SYSTEM W/ PERFORMANCE SHOCKS
2	FT50261BK	FRONT SWAY BAR END LINK
2	FT50401BK	REAR BUMP STOP SPACER
1	FT50296BK	REAR TRACK BAR BRACKET
2	FT50391BK	JEEP JK 3" FRONT SPRING
2	FT50392BK	JEEP JK 3" REAR 2-DOOR SPRING
1	FT50403	HARDWARE KIT
1	FT50402	HARDWARE SUBASSEMBLY
2	FT50164	FRONT BUMP STOP SPACER
1	FT50387	FRONT LOWER LINK SHORT SUB JK (DRIVER)
1	FT50388	FRONT LOWER LINK SHORT SUB JK (PASSENGER)
2	FT50389	REAR LINK SHORT SUB JK
1	FT50368	FRONT TRACK BAR BRCKET WELD ON
1	FT50294	JK PITMAN ARM
2	FTS7236	PERFORMANCE SHOCK
2	FTS7265	PERFORMANCE SHOCK

	KA0JKLIFT4	4DR TRAIL SYSTEM W/ PERFORMANCE SHOCKS
2	FT50261BK	FRONT SWAY BAR END LINK
2	FT50401BK	REAR BUMP STOP SPACER
1	FT50296BK	REAR TRACK BAR BRACKET
2	FT50391BK	JEEP JK 3" FRONT SPRING
2	FT50393BK	JEEP JK 3" REAR 4-DOOR SPRING
1	FT50403	HARDWARE KIT
1	FT50402	HARDWARE SUBASSEMBLY
2	FT50164	FRONT BUMP STOP SPACER
1	FT50387	FRONT LOWER LINK SHORT SUB JK (DRIVER)
1	FT50388	FRONT LOWER LINK SHORT SUB JK (PASSENGER)
2	FT50389	REAR LINK SHORT SUB JK
1	FT50368	FRONT TRACK BAR BRCKET WELD ON
1	FT50294	JK PITMAN ARM
2	FTS7236	PERFORMANCE SHOCK
2	FTS7265	PERFORMANCE SHOCK

	FT50402	HARDWARE SUBASSEMBLY
4	FT84	GREASE FITTING 1/4-28
1	FT157	SLEEVE 1.000 X .563 X 1.570
4	FT164	SLEEVE 1.000 X .563 X 2.645
1	FT167	SLEEVE .875 X .563 X 1.344
8	FT1007	BUSHING S10 L.T. LOWER
1	FT24101I	INSTRUCTIONS
1	FT50048	BUSHING 5/8 HOURGLASS 4 PACK
2	FT50060	FRAME TAB NUT CENTER CLEAR ZIN
1	FT50089	SLEEVE .625X.507X1.480 4 PACK
4	FT50295	REAR BRAKE LINE DROP
1	FT50298	E BRAKE BRACKET
2	FT83255	BAR PIN JEEP JK REAR
1	FTAS16	DRIVER WARNING DECAL
1	FTREGCARD	REGISTRATION CARD

	FT50403 - HARDWARE KIT	LOCATION
4	ZIP TIE 8" BLACK 40 LBS	
8	1/4-20 X 1 HEX BOLT G8 ZINC	BRAKE LINE DROP BRACKET
16	1/4 SAE WASHER G5 ZINC	
8	1/4-20 NYLOCK NUT ZINC	
4	5/16-18 X 1 HEX BOLT G8 ZINC	REAR BUMP STOP
8	5/16 SAE WASHER G8 ZINC	
4	NUT 5/16-18 STOVER G5 Z1	
3	3/8-16 X 1 HEX BOLT G8 ZINC	REAR TRACK BAR BRACKET
6	3/8 SAE WASHER G8 ZINC	
3	3/8-16 C-LOCK NUT ZINC	
2	1/2-13 X 2-3/4 HEX BOLT G8 ZNC	SWAY BAR
4	1/2 SAE WASHER G8 ZINC	
2	1/2-13 C-LOCK NUT ZINC	
2	1/2-13 X 3-1/2 HEX BOLT G8 ZNC	FRONT BUMP STOP SPACER
4	1/2 SAE WASHER G8 ZINC	
2	1/2-13 C-LOCK NUT ZINC	
2	9/16-12 X 3 HEX BOLT G8 ZINC	FRONT & REAR TRACK BAR
4	9/16 SAE WASHER G8 ZINC	
2	C-LOCK NUT 9/16"-12 CLEAR ZINC	
1	7/8” Lock Washer	Pitman Arm
1	THREAD LOCKING COMPOUND 2 MIL	

- TOOL LIST -

Required Tools (Not Included)

Basic Hand Tools
Floor Jack
Jack Stands
Assorted Metric and S.A.E sockets, and Allen wrenches
Torque Wrench
Die Grinder w/ Cutoff Wheel or Sawzall
Welder
Ball Joint Removal Tool
Pitman Arm Puller

- 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.

- INSTRUCTIONS -

FRONT SUSPENSION

1. Disconnect the negative terminal on the battery. 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.

2. Working from the driver side of the vehicle, 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 the sway bar end links from the sway bar and the axle. Discard links and save the hardware.

3. Remove the front shock, save lower mount hardware. 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 steps 2-3 on the passenger side.

4. Remove and retain the factory track bar and hardware. Remove and retain the nut on the draglink end attaching to the pitman arm at the steering box. Using the rod removal tool dislodge the draglink end and disconnect. Using a pitman arm puller remove the stock pitman arm. Discard the arm and save the factory nut and washer. **SEE FIGURES 1-5**

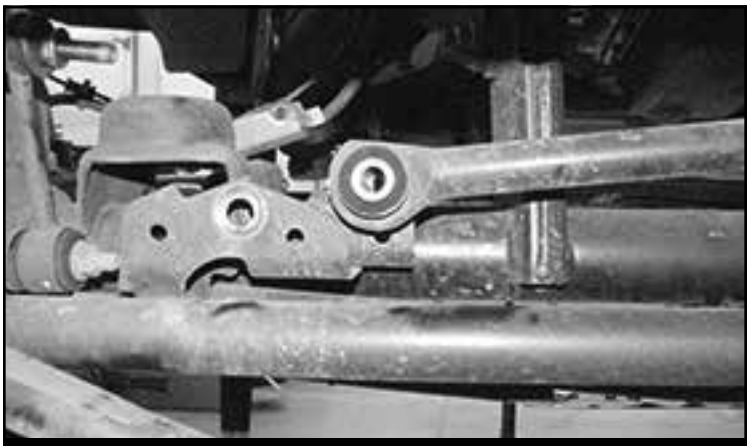

FIGURE 1 - STEP 4

FIGURE 2 - STEP 4

FIGURE 3 - STEP 4

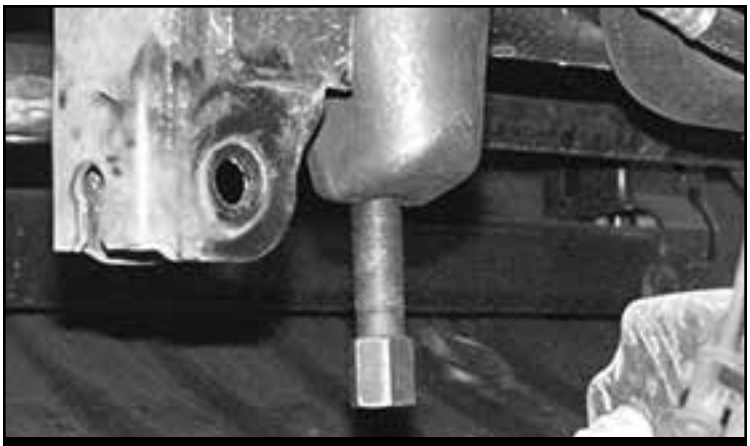

FIGURE 4 - STEP 4

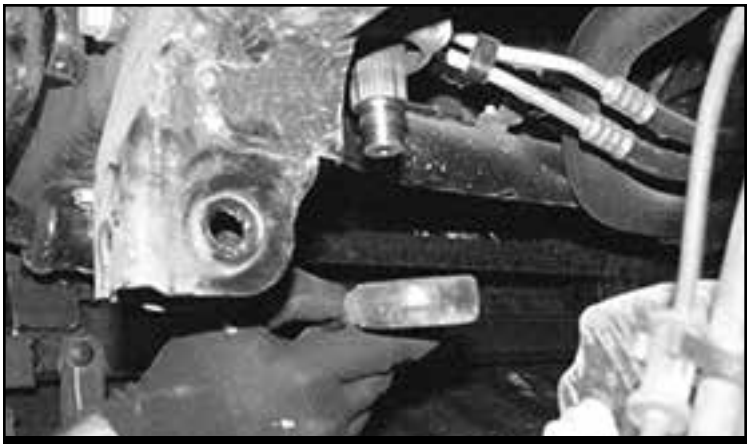

FIGURE 5 - STEP 4

5. Locate the FT50294 pitman arm and 7/8” Lock washer, install with the factory hardware. Apply thread locking compound. Torque to 185 ft-lbs. **SEE FIGURES 6-7**

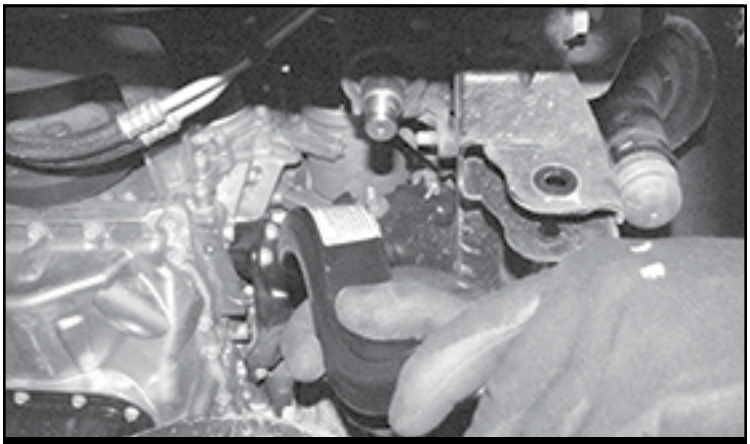

FIGURE 6 - STEP 5

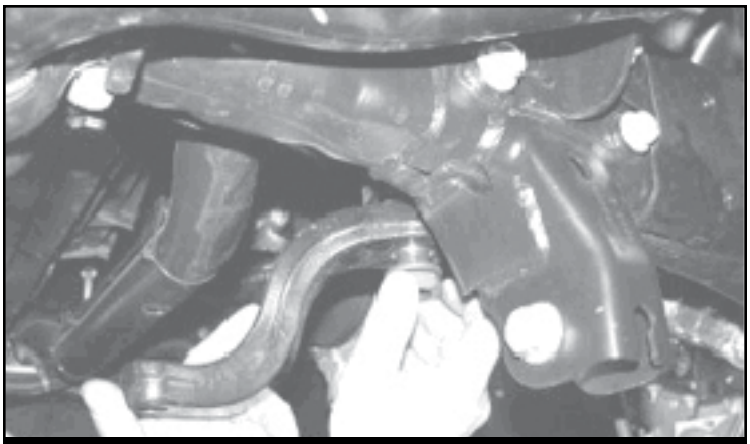

FIGURE 7 - STEP 5

6. Locate FT50164 Front Bump stop spacer position it on the center of the coil spring mount and mark with a center punch. Use a drill with a ½” bit and drill the new hole to mount the new Fabtech spacer. **(DO NOT INSTALL AT THIS TIME)** Repeat on the passenger side. **SEE FIGURES 8-9**

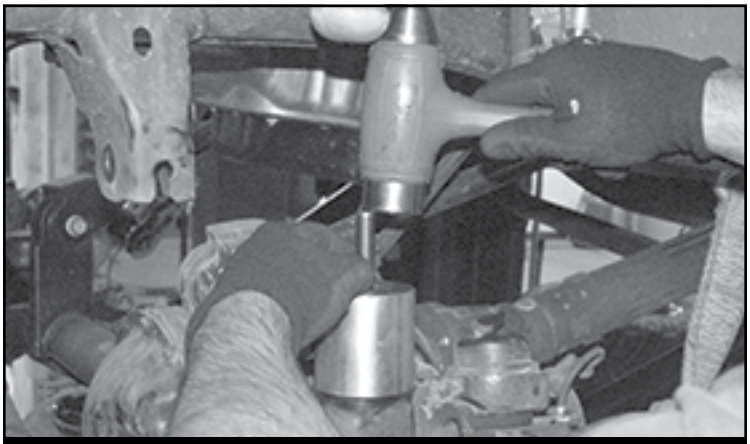

FIGURE 8 - STEP 6

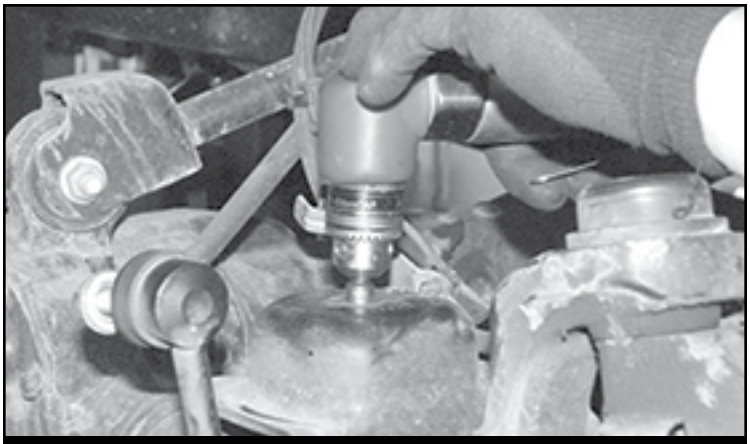

FIGURE 9 - STEP 6

7. Locate the factory track bar mount on the axle and cut the front corner of the bracket away from the axle using a cut off wheel. Cut the bracket 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). Place FT50368 Track Bar Bracket over the factory track bar bracket and mark around bracket. Remove bracket and sand area clean of paint and dirt in preparation to weld. **SEE FIGURES 10-12**

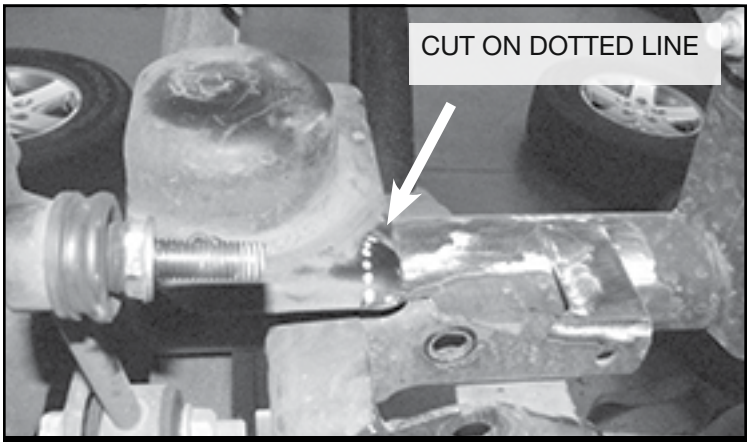

FIGURE 10 - STEP 7

FIGURE 11 - STEP 7

FIGURE 12 - STEP 7

8. Reposition FT50368 Track bar Bracket with supplied 9/16-12 x 3” bolt, washers, nut and FT167 Track Bar Sleeve onto the top of the axle and track bar mount. The sleeve will be installed between the factory track bar tabs with the bolt running through it. Tack weld the track bar bracket in place. Remove the bolt before fully welding. Weld the track bar bracket to the axle as shown in the photos. **SEE FIGURES 13-17**

FIGURE 13 - STEP 8

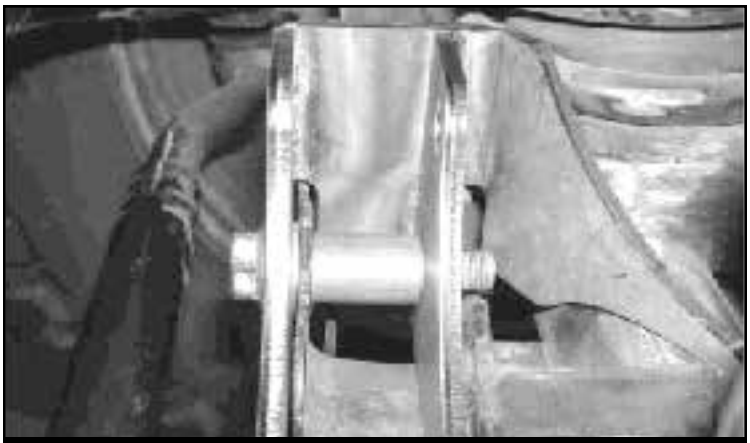

FIGURE 14 - STEP 8

FIGURE 15 - STEP 8

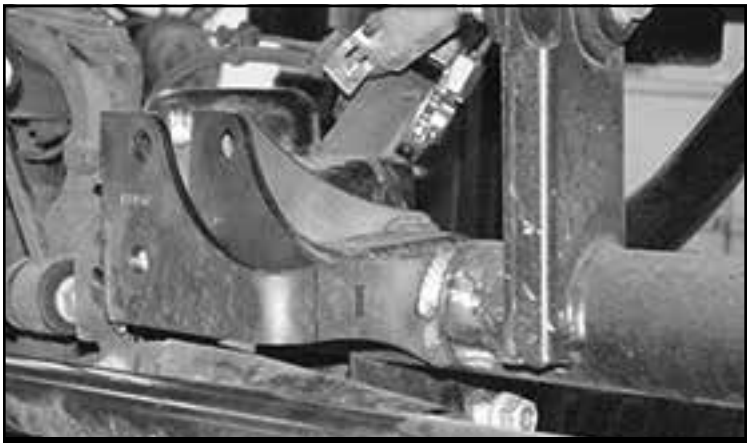

FIGURE 16 - STEP 8

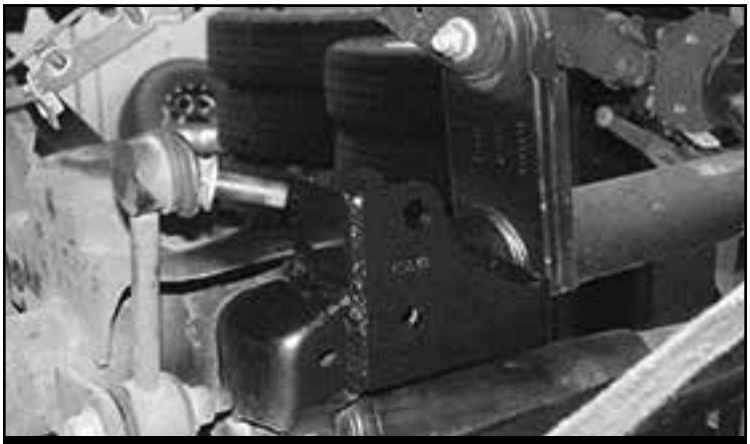

FIGURE 17 - STEP 8

9. Allow the bracket to cool and replace the bolt. Spray paint bracket and weld on axle housing. Torque to a 129 ft-lbs.

10. Working from the driver side, remove the front lower link

arm and save the factory hardware. **SEE FIGURES 18-19**

FIGURE 18 - STEP 10

FIGURE 19 - STEP 10

11. Locate FT50387BK & FT50388BK Front Lower Link Arms, four supplied FT1007 bushings, two FT164 sleeves and two zerk fittings

12. Install the zerks, bushings, and sleeves into the barrel on the lower links. **SEE FIGURES 20-22**

    Note - The link arm and rod end have been pre set per Fabtech specs. No adjustment should be needed other than in special circumstances.

FIGURE 20 - STEP 12

FIGURE 21 - STEP 12

FIGURE 22 - STEP 12

13. Install the rod end side of the link arm into the factory frame pocket with factory hardware. Install the bushing end of the link arm into the pocket on the axle with factory hardware. Torque to 100 ft-lbs. **SEE FIGURES 23-24**

FIGURE 23 - STEP 13

FIGURE 24 - STEP 13

Repeat steps 12-13 on the passenger side.

14. Grease zerk fittings on link ends.

15. Locate the front bumpstop spacer, ½"-13 x 3-½" bolt and the FT50060 nut tab. Place the bump stop into the bottom of the new front coil. Install the new coil spring into the coil bucket and then onto the spring perch on the axle. Rotate the coil spring so that the end of the coil is seated in the perch. Attach the bumpstop spacer onto the previously drilled axle mounts with the nut tab. Torque the bumpstop bolts to 90 ft-lbs. **SEE FIGURES 25-27**

FIGURE 25 - STEP 15

FIGURE 26 - STEP 15

FIGURE 27 - STEP 15

16. Locate Fabtech shock FTS7236 and the factory lower hardware. Attach the bottom of the shock to the stock lower shock mount and torque to 65 ft-lbs. Use the upper bushings provided with the shock for the upper location and torque until bushings swell. **SEE FIGURES 28-30**

FIGURE 28 - STEP 16

FIGURE 29 - STEP 16

FIGURE 30 - STEP 16

17. Reconnect the factory track bar using the factory hardware. Torque to 160 ft-lbs. **SEE FIGURES 31-32**

FIGURE 31 - STEP 17

FIGURE 32 - STEP 17

18. Reconnect the draglink end using factory hardware to the new dropped pitman arm. Torque to 45 ft-lbs. **SEE FIGURES 33-34**

FIGURE 33 - STEP 18

FIGURE 34 - STEP 18

19. Locate FT50261 front Sway bar End links and FT50048 and 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 end link to the factory sway bar mount on the axle with the supplied 1/2”-13 x 2-3/4” bolts and hardware. Attach the other end to the sway bar using factory hardware. Torque to 75 ft-lbs. **SEE FIGURES 35-38**

FIGURE 35 - STEP 19

FIGURE 36 - STEP 19

FIGURE 37 - STEP 19

FIGURE 38 - STEP 19

20. Install the FT50295 brake line drop bracket between the factory brake line bracket and the frame. Use the factory hardware to attach to the frame and two 1/4”-20 x 1” bolts, nuts and washers. Torque to 10 ft-lbs. Reattach the speed sensor to the factory mounts. **SEE FIGURE 39**

FIGURE 39 - STEP 20

21. Install front tires and wheels per manufactures lug nut torque spec and lower vehicle to ground.

REAR SUSPENSION

22. 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.

23. Disconnect the rear brake line from the frame. Save hardware.

24. Disconnect the rear sway bar links from the sway bar. Save hardware. **SEE FIGURE 40**

FIGURE 40 - STEP 24

25. Disconnect the wheel sensor from the frame. **SEE FIGURE 41**

FIGURE 41 - STEP 25

26. Remove the factory shocks. Save hardware. **SEE FIGURE 42**

FIGURE 42 - STEP 26

27. Remove the factory coil springs and discard. Allow the axle to hang freely to remove the coil springs. Remove the factory upper coil isolator and save. **SEE FIGURE 43**

FIGURE 43 - STEP 27

28. Remove the rear Track Bar from the axle housing.

29. Locate FT50296BK Rear Track Bar Bracket, position it on the top of the axle and track 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. **SEE FIGURES 44-46**

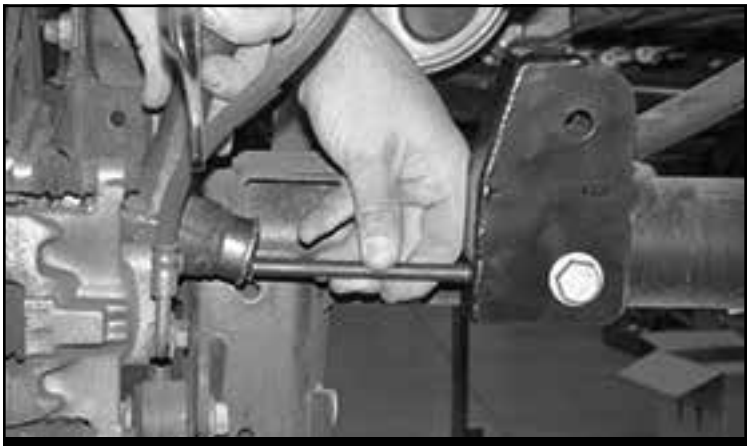

FIGURE 44 - STEP 29

FIGURE 45 - STEP 29

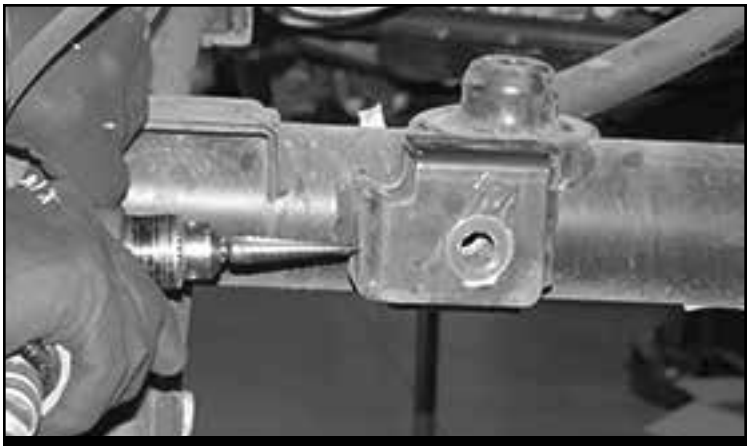

FIGURE 46 - STEP 29

30. Reposition the FT50296BK Rear Track Bar Bracket over the factory axle mount and install with the supplied 3/8”-16 x 1” bolts, nuts and washers in the new holes. Install the provided FT157 sleeve in the factory track bar mount with the original hardware. Torque the factory bolt to 100 ft-lbs. Torque the 3/8” hardware 37 ft-lbs. **SEE FIGURE 47**

FIGURE 47 - STEP 30

31. Install the track bar in the new track bracket using a 9/16”-12 x 3” bolt, nut and washers. Torque to 160 ft-lbs. **SEE FIGURES 48-49**

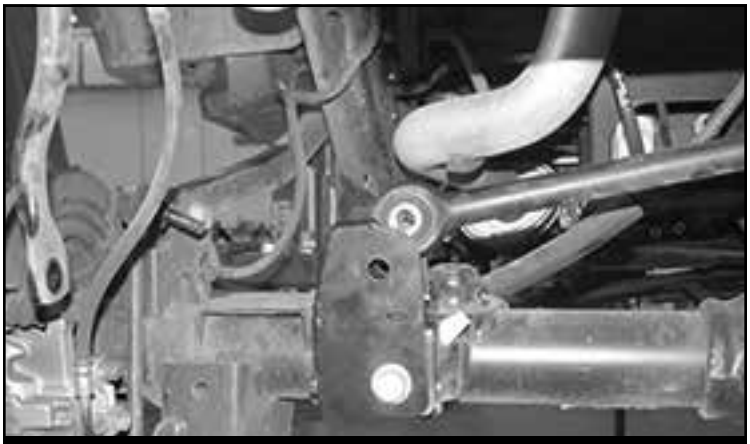

FIGURE 48 - STEP 31

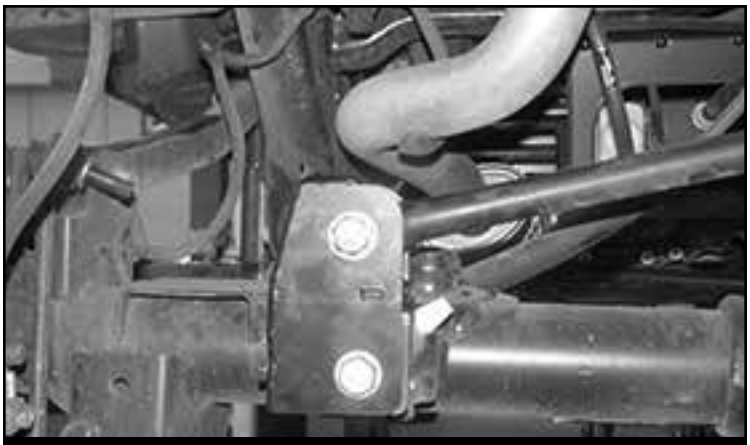

FIGURE 49 - STEP 31

32. Working from the driver side, remove the lower link arm and save the hardware. **SEE FIGURES 50-51**

FIGURE 50 - STEP 32

FIGURE 51 - STEP 32

33. Locate FT50389 Rear Lower Links, four FT1007 Bushings, two FT164 Sleeves and two zerks. Using a press and the supplied bushing lube, install the bushings into the arms and the sleeves into the bushings. Install the zerks into the barrels on the link arms.

    Note - The link arm and rod end have been pre set per Fabtech specs. No adjustment should be needed other than in special circumstances.

34. Install the new lower link arm with the Adjustable Joint in the frame pocket and the factory hardware. Install the other end of the new link arm into the axle pocket with the factory hardware. Torque to 100 ft-lbs.
SEE FIGURES 52-53

FIGURE 52 - STEP 34

FIGURE 53 - STEP 34

Repeat steps 32-34 on the passenger side.

35. Grease zerk fittings on link ends.

36. Disconnect the factory emergency brake bracket from the floor board of the Jeep above the rear diff. Install the FT50298 emergency brake drop bracket using the factory hardware and two 1/4”-20 x 1” bolts, nuts and washers.

FIGURE 54 - STEP 36

FIGURE 55 - STEP 36

Torque to 10 ft-lbs. **SEE FIGURES 54-55**

37. Locate the FT50401BK rear bump stop spacers. Position the spacer onto the factory bumpstop pads on the axle and attach with two of the supplied 5/16”-18 x 1” bolts,

FIGURE 56 - STEP 37

FIGURE 57 - STEP 37

nuts and washers. Torque to 29 ft-lbs.
SEE FIGURES 56-57

38. Locate the FT50392BK (2-door) or FT50393BK (4-door)

FIGURE 58 - STEP 38

FIGURE 59 - STEP 38

rear coil spring and install into the coil spring mounts with the factory isolator on the top of the spring. Repeat on the passenger side. **SEE FIGURES 58-59**

FIGURE 60 - STEP 39

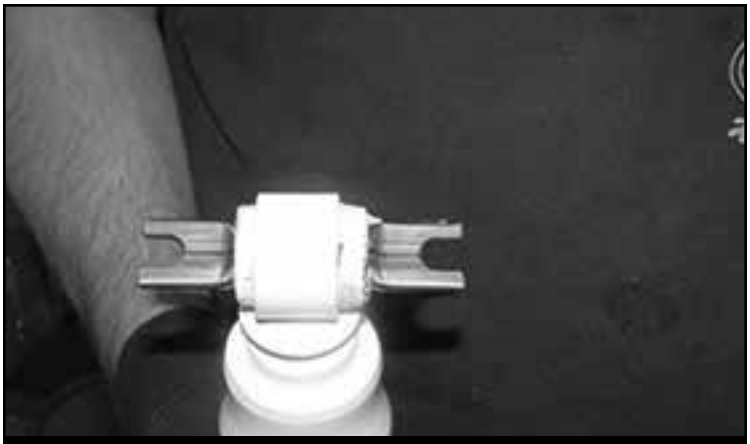

FIGURE 61 - STEP 40

FIGURE 62 - STEP 41

39. Locate the FT7265 rear shock and press in the supplied bar pin on the shaft end of the shock and the supplied sleeve on the body end. **SEE FIGURES 60-62**

FIGURE 63 - STEP 40

FIGURE 64 - STEP 40

40. Mount the shock using the factory hardware. Torque the upper mount to 21 ft-lbs and a lower mount to 65 ft-lbs. **SEE FIGURES 63-64**

41. Reconnect the rear sway bar and torque to 52 ft-lbs.

42. Install the FT50295 brake line drop bracket between the factory rear brake line bracket and the frame. Use the factory hardware to attach to the frame and two 1/4”-20 x 1” bolts, nuts and washers. Torque to 10 ft-lbs. Reattach the speed sensor to the factory mounts.

43. 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.**

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

45. Recheck all bolts for proper torque.

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

47. 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.**

48. 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 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