



## INSTALLATION INSTRUCTIONS



### 2007-18 JEEP JK 3" SPORT SYSTEM

**FTS24095 / FTS24107 / FTS24099 / FTS24103 / FTS24139 - 2-DOOR**

**FTS24097 / FTS24108 / FTS24100 / FTS24104 / FTS24140 - 4-DOOR**

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)

## - PARTS LIST -

<b>FTS24095</b>		<b>2-DR SPORT SYSTEM W/PERF SHOCKS</b>
2	FT50391BK	JEEP JK 3" FRONT SPRING
2	FT50392BK	JEEP JK 3" REAR 2-DOOR SPRING
2	FT50261BK	FRONT SWAY BAR END LINK
2	FT50724	REAR BUMP STOP SPACER
1	FT50342	REAR TRAC BAR BRACKET
2	FT83255	BAR PINS
1	FT50395	HARDWARE KIT
1	FT50396	HARDWARE SUBASSEMBLY
2	FTS7236	PERFORMANCE SHOCK
2	FTS7265 or FTS7182	PERFORMANCE SHOCK

<b>FTS24103</b>		<b>2-DR SPORT SYSTEM W/STEALTH SHOCKS</b>
2	FT50391BK	JEEP JK 3" FRONT SPRING
2	FT50392BK	JEEP JK 3" REAR 2-DOOR SPRING
2	FT50261BK	FRONT SWAY BAR END LINK
2	FT50724	REAR BUMP STOP SPACER
1	FT50342	REAR TRAC BAR BRACKET
2	FT83255	BAR PINS
1	FT50395	HARDWARE KIT
1	FT50396	HARDWARE SUBASSEMBLY
2	FTS6021	STEALTH SHOCK
2	FTS6265	STEALTH SHOCK

<b>FTS24107</b>		<b>2-DR SPORT SYSTEM W/DIRT LOGIC SHOCKS</b>
2	FT50391BK	JEEP JK 3" FRONT SPRING
2	FT50392BK	JEEP JK 3" REAR 2-DOOR SPRING
2	FT50261BK	FRONT SWAY BAR END LINK
2	FT50724	REAR BUMP STOP SPACER
1	FT50342	REAR TRAC BAR BRACKET
1	FT50395	HARDWARE KIT
1	FT50396	HARDWARE SUBASSEMBLY
2	FTS810582	DIRT LOGIC 2.25 NON RESI BLACK
2	FTS811092	DIRT LOGIC 2.0 NON RESI BLACK

<b>FTS24139</b>		<b>2-DR SPORT SYSTEM W/DIRT LOGIC RESI</b>
2	FT50391BK	JEEP JK 3" FRONT SPRING
2	FT50392BK	JEEP JK 3" REAR 2-DOOR SPRING
2	FT50261BK	FRONT SWAY BAR END LINK
2	FT50724	REAR BUMP STOP SPACER
1	FT50342	REAR TRAC BAR BRACKET
1	FT50395	HARDWARE KIT
1	FT50396	HARDWARE SUBASSEMBLY
2	FTS800582	DIRT LOGIC 2.25 RESI BLACK
2	FTS801092	DIRT LOGIC 2.25 RESI BLACK

<b>FTS24099</b>		<b>2-DOOR COIL KIT W/O SHOCKS</b>
2	FT50391BK	JEEP JK 3" FRONT SPRING
2	FT50392BK	JEEP JK 3" REAR 2-DOOR SPRING
2	FT50261BK	FRONT SWAY BAR END LINK
2	FT50724	REAR BUMP STOP SPACER
1	FT50342	REAR TRAC BAR BRACKET
1	FT50395	HARDWARE KIT
1	FT50396	HARDWARE SUBASSEMBLY

<b>FT50395 - HARDWARE KIT</b>		<b>LOCATION</b>
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	
4	5/16-18 X 1 HEX BOLT G8 ZINC	Rear bump Stop
8	5/16 SAE WASHER G8 ZINC	
4	5/16-18 C-LOCK NUT ZINC	
4	1/4-20 X 1 HEX BOLT G8 ZINC	Brake line bracket
8	1/4 SAE WASHER G8 ZINC	
4	1/4-20 NYLOCK NUT ZINC	
2	3/8-16 X 1 HEX BOLT G8 ZINC	Rear track bar bracket
4	3/8 SAE WASHER G8 ZINC	
2	3/8-16 C-LOCK NUT ZINC	
1	9/16-12 X 3 HEX BOLT G8 ZINC	
2	9/16 SAE WASHER G8 ZINC	
1	9/16-12 C-LOCK NUT ZINC	
1	THREAD LOCKING COMPOUND 1 MIL	
4	ZIP TIE 8" BLACK 40 LBS	

<b>FT50396</b>		<b>HARDWARE SUBASSEMBLY</b>
1	FT50048	BUSHING 5/8 HOURGLASS 4 PACK
1	FT50089	SLEEVE .625X.507X1.480 4 PACK
1	FT50298	E BRAKE BRACKET
2	FT50027	URETHANE BUMP STOP
1	FT157	SLEEVE 1.000 X .563 X 1.570
2	FT50295	REAR BRAKE LINE DROP
1	FTREGCARD	REGISTRATION CARD
1	FTAS16	DRIVER WARNING DECAL
1	FTAS12	STICKER FT BLUE 10X4 DIE CUT
1	FT50343	TRACK BAR WELD ON GUSSET
1	FT50344	TRACK BAR WELD ON GUSSET

## - PARTS LIST -

	<b>FTS24097</b>	<b>4-DR SPORT SYSTEM W/PERF SHOCKS</b>
2	FT50391BK	JEEP JK 3" FRONT SPRING
2	FT50393BK	JEEP JK 3" REAR 4-DOOR SPRING
2	FT50261BK	FRONT SWAY BAR END LINK
2	FT50724	REAR BUMP STOP SPACER
1	FT50342	REAR TRAC BAR BRACKET
2	FT83255	BAR PINS
1	FT50395	HARDWARE KIT
1	FT50396	HARDWARE SUBASSEMBLY
2	FTS7236	PERFORMANCE SHOCK
2	FTS7265 or FTS7182	PERFORMANCE SHOCK

	<b>FTS24108</b>	<b>4-DR SPORT SYSTEM W/DIRT LOGIC SHOCKS</b>
2	FT50391BK	JEEP JK 3" FRONT SPRING
2	FT50393BK	JEEP JK 3" REAR 4-DOOR SPRING
2	FT50261BK	FRONT SWAY BAR END LINK
2	FT50724	REAR BUMP STOP SPACER
1	FT50342	REAR TRAC BAR BRACKET
1	FT50395	HARDWARE KIT
1	FT50396	HARDWARE SUBASSEMBLY
2	FTS810582	DIRT LOGIC 2.25 NON RESI BLACK
2	FTS811092	DIRT LOGIC 2.0 NON RESI BLACK

	<b>FTS24104</b>	<b>4-DR SPORT SYSTEM W/STEALTH SHOCKS</b>
2	FT50391BK	JEEP JK 3" FRONT SPRING
2	FT50393BK	JEEP JK 3" REAR 4-DOOR SPRING
2	FT50261BK	FRONT SWAY BAR END LINK
2	FT50724	REAR BUMP STOP SPACER
1	FT50342	REAR TRAC BAR BRACKET
2	FT83255	BAR PINS
1	FT50395	HARDWARE KIT
1	FT50396	HARDWARE SUBASSEMBLY
2	FTS6021	STEALTH SHOCK
2	FTS6265	STEALTH SHOCK

	<b>FTS24140</b>	<b>4-DR SPORT SYSTEM W/DIRT LOGIC RESI</b>
2	FT50391BK	JEEP JK 3" FRONT SPRING
2	FT50393BK	JEEP JK 3" REAR 4-DOOR SPRING
2	FT50261BK	FRONT SWAY BAR END LINK
2	FT50724	REAR BUMP STOP SPACER
1	FT50342	REAR TRAC BAR BRACKET
1	FT50395	HARDWARE KIT
1	FT50396	HARDWARE SUBASSEMBLY
2	FTS800582	DIRT LOGIC 2.25 RESI BLACK
2	FTS801092	DIRT LOGIC 2.25 RESI BLACK

	<b>FTS24100</b>	<b>4-DOOR COIL KIT W/O SHOCKS</b>
2	FT50391BK	JEEP JK 3" FRONT SPRING
2	FT50393BK	JEEP JK 3" REAR 4-DOOR SPRING
2	FT50261BK	FRONT SWAY BAR END LINK
2	FT50724	REAR BUMP STOP SPACER
1	FT50342	REAR TRAC BAR BRACKET
1	FT50395	HARDWARE KIT
1	FT50396	HARDWARE SUBASSEMBLY

## - TOOL LIST -

### **Required Tools (Not Included)**

Floor Jack & Jack Stands  
Assorted Metric & S.A.E sockets & wrenches  
Torque Wrench, Drill & assorted drill bits  
Welder

## - PRE-INSTALLATION NOTES -

### ***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.

Use the provided thread locking compound on all hardware.

Do not combine this suspension system with any other lift device or parts.

This suspension must be installed with Fabtech shock absorbers.

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

For technical assistance call: 909-597-7800 or e-mail: [info@fabtechmotorsports.com](mailto:info@fabtechmotorsports.com)

**NOTE:** When lifting 2012 and newer models the driveshaft will make contact with the factory exhaust system. We prefer the use of AFE's Part #49-46230 (Y-Pipe).

### **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

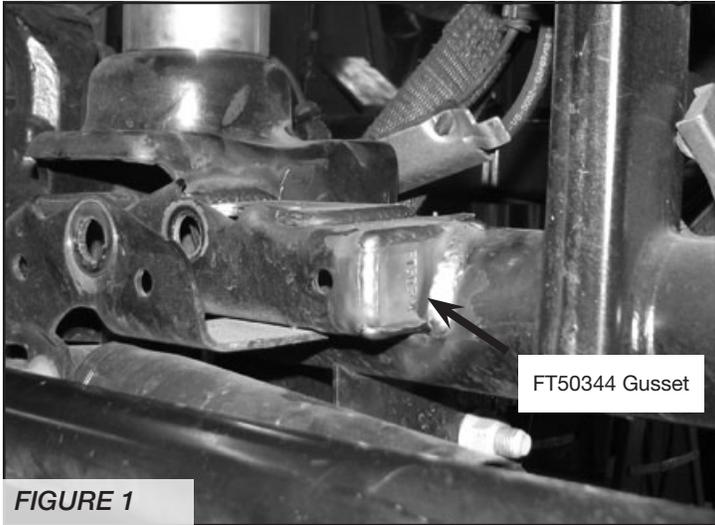
### ***Recommend Tires and Wheels:***

Use 35/12.50R17 tires w/17x8 wheels w/ 5" BS w/minor trimming  
Use 35/12.50R18 tires w/18x9 wheels w/ 5" BS w/minor trimming  
Use 295/70R18 tires w/18x9 wheels w/ 5" BS w/minor trimming  
Use 35/12.50R20 tires w/20x9 wheels w/ 5" BS w/minor trimming  
Use 295/60R20 tires w/20x9 wheels w/ 5" BS w/minor trimming

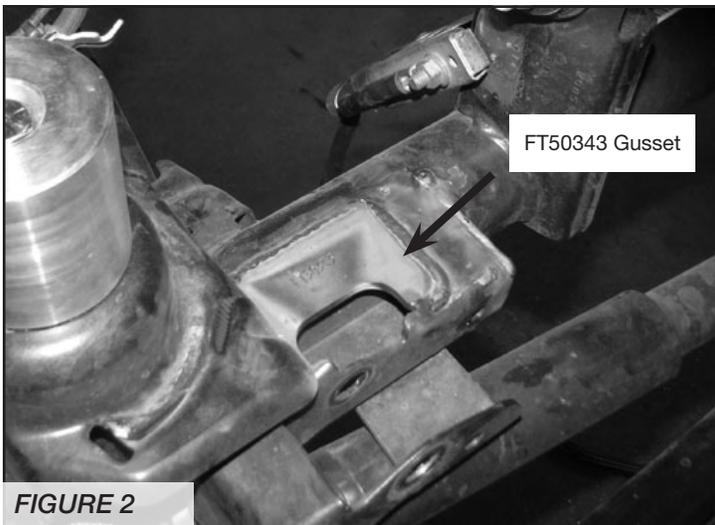
# - INSTRUCTIONS -

## FRONT SUSPENSION

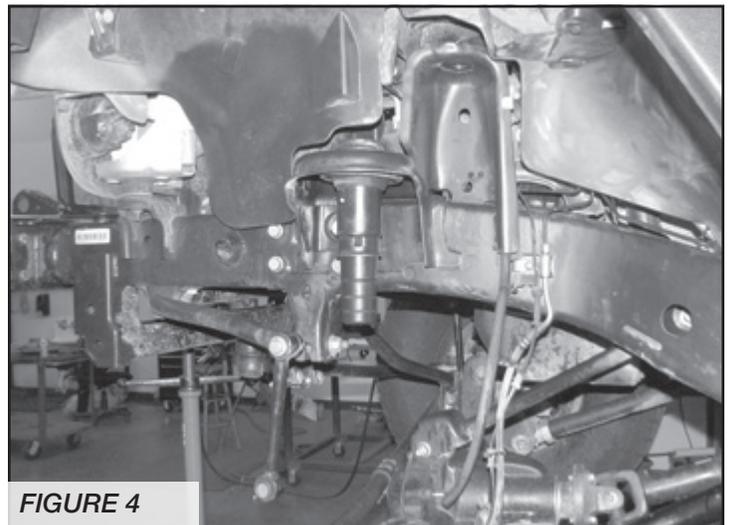
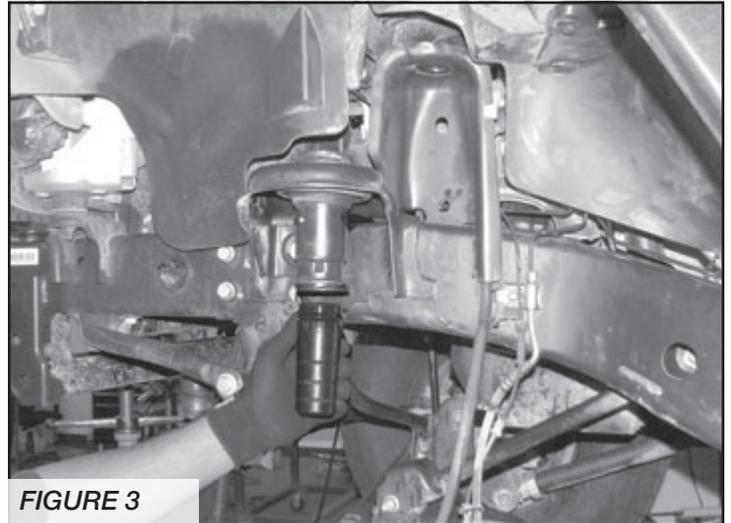
1. Disconnect the negative terminal on the battery. Jack up the front end of the truck and support the frame rails with jack stands. **NEVER WORK UNDER AN UNSUPPORTED VEHICLE!** Remove the front tires. Support the front axle.
2. Working from the driver side of the truck, unbolt the front brake line bracket from the frame and save the hardware. Remove the wheel speed sensor wire from the clips on the front knuckle. Remove and discard the sway bar end links, save the hardware. Unplug the front diff locker harness from the axle (RUBICON MODELS ONLY). Disconnect the front track bar from the axle bracket.
3. Locate FT50344 gusset; position it onto the axle and the factory trac bar mount as shown in photo. Weld the gusset on the three outward / top sides. **SEE FIGURE 1**



4. Locate FT50343 gusset, position it onto the top of the axle and trac bar mount. Weld the gusset as shown in the photo. **SEE FIGURE 2**



5. Once the gusset kit has completely cooled, paint all bare metal areas.
6. Remove the front shock, save lower mount hardware, and discard upper. Remove the factory coil spring, and discard. You will need to allow the front axle to hang freely to remove the coil spring.
7. Remove the factory bump stops.
8. Starting on the driver side, install the new FT50027 front bump stop. **SEE FIGURES 3-4**



9. Install the new FT50391BK front coil spring.  
SEE FIGURE 5

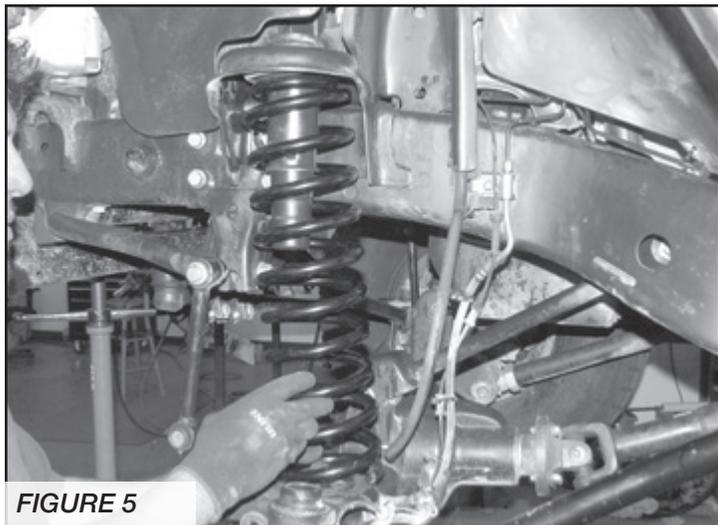


FIGURE 5

10. Install the new supplied shock using the factory lower hardware and new upper hardware. Torque the upper to 29 ft-lbs, and the lower to 100 ft-lbs. SEE FIGURES 6-7

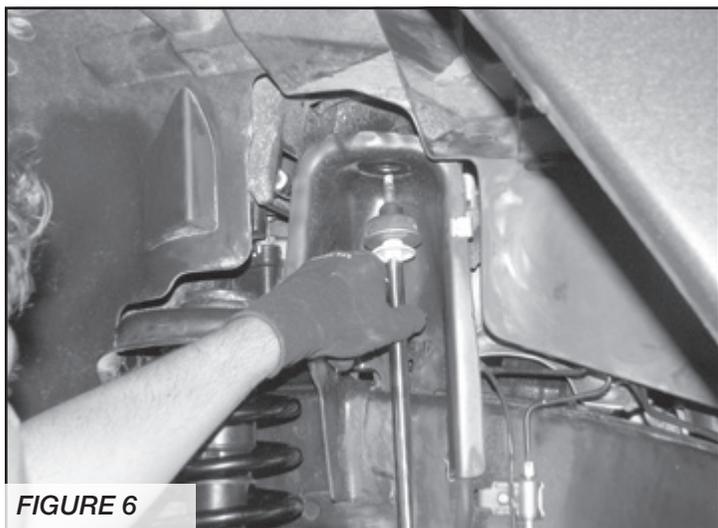


FIGURE 6

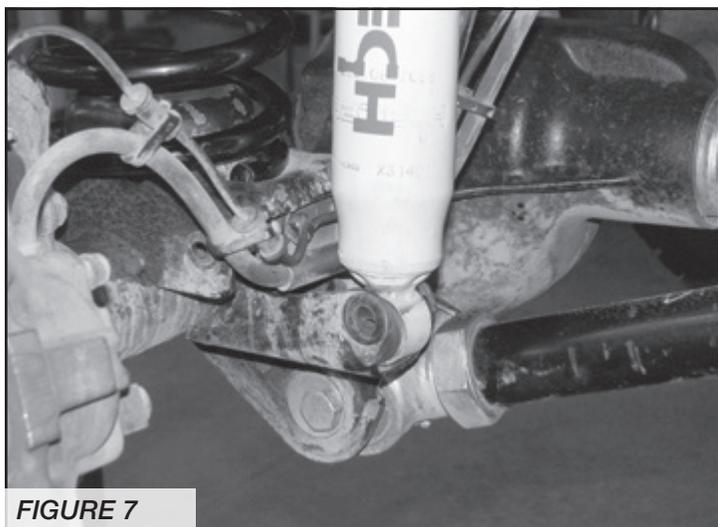


FIGURE 7

11. Locate FT50261BK Front Sway Bar End links, FT50048 & FT50089 bushing and sleeve kits. Press one bushing and one sleeve from the supplied bushing kit into each end of the end link. With the factory hardware, connect the new end link to the sway bar, then using the supplied 1/2" x 2-3/4" bolt, nut and washers, connect to the lower sway bar mount. Torque the sway bar hardware to 45 ft-lbs. SEE FIGURE 8

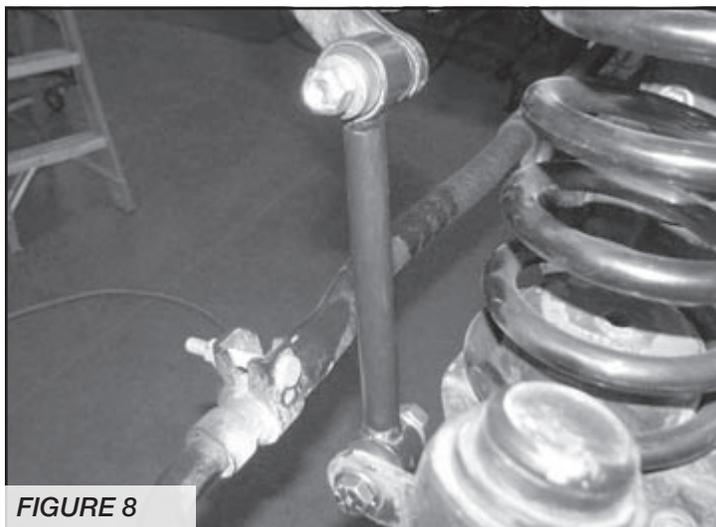
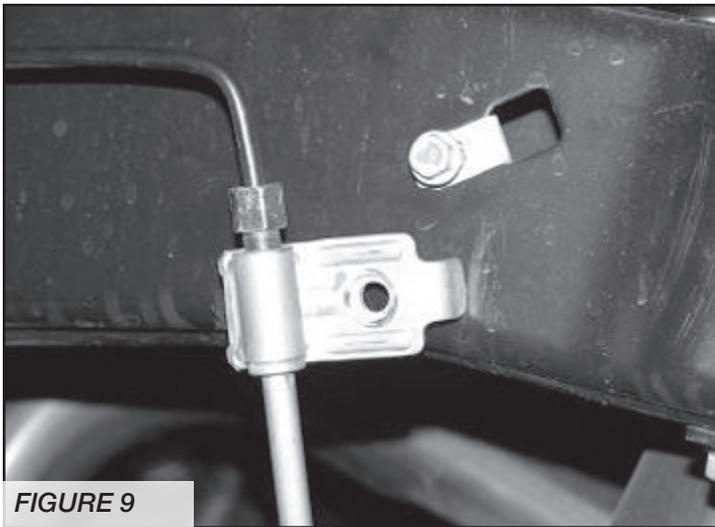


FIGURE 8

12. Reinstall factory Brake line, Wheel speed sensor and locker harness.  
13. Repeat steps 1-10 on the passenger side  
14. Install Front tires & wheels.

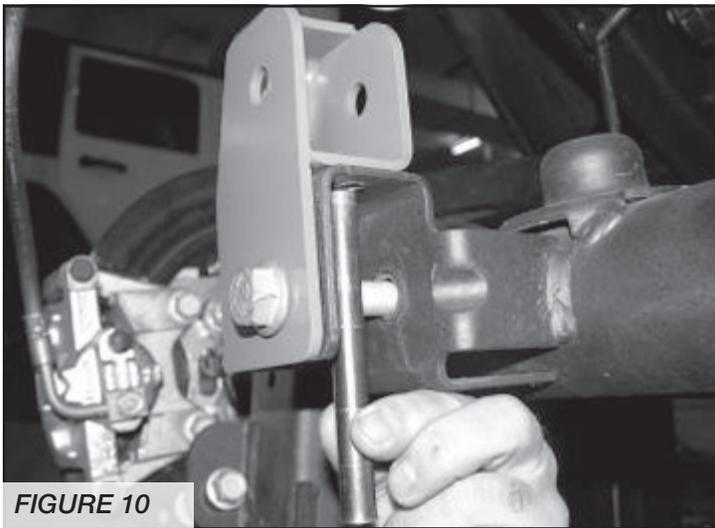
### **REAR SUSPENSION**

15. 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.  
16. Remove the factory shocks and discard, save upper mount hardware.  
17. Remove the brake line bracket from the frame and save the hardware. Remove the plastic clip that holds 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 top differential cover bolt and remove the wheel speed sensor line clamp. Save the bolt. Remove the two nuts holding the E-Brake cable to the body of the Jeep and save. SEE FIGURE 9

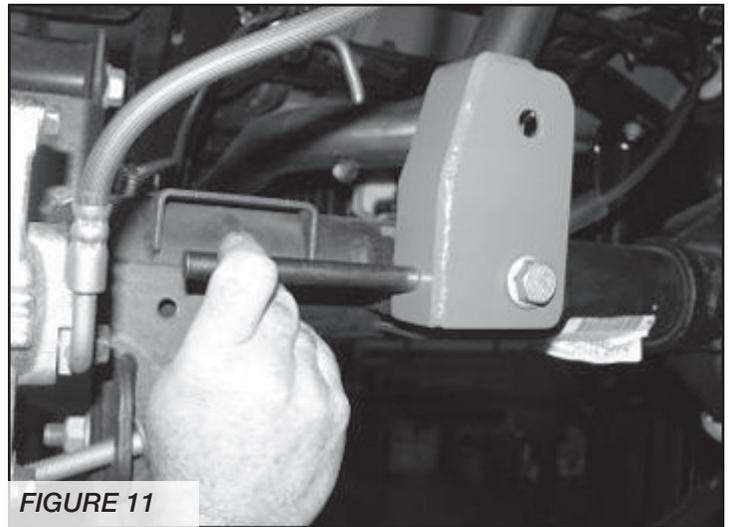


**FIGURE 9**

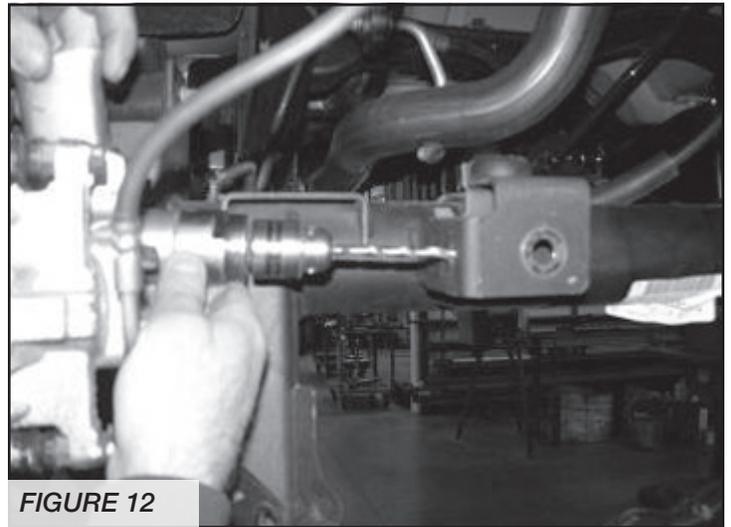
18. Remove factory rear shocks and discard.
19. Remove the factory coil springs and discard. Allow the axle to hang freely to remove the coil spring. Remove the factory upper coil isolator and save.
20. Remove the track bar from the track bar mount on the axle and save the hardware. Locate FT50342 Rear Track Bar Bracket and position it onto the factory track bar mount and insert the factory hardware to hold the new bracket in place. Use a center punch and mark the two new 3/8" holes from the bracket onto the mount. Remove the bracket from the mount and use a drill with a 3/8" bit to drill the two new holes. SEE FIGURES 10-13



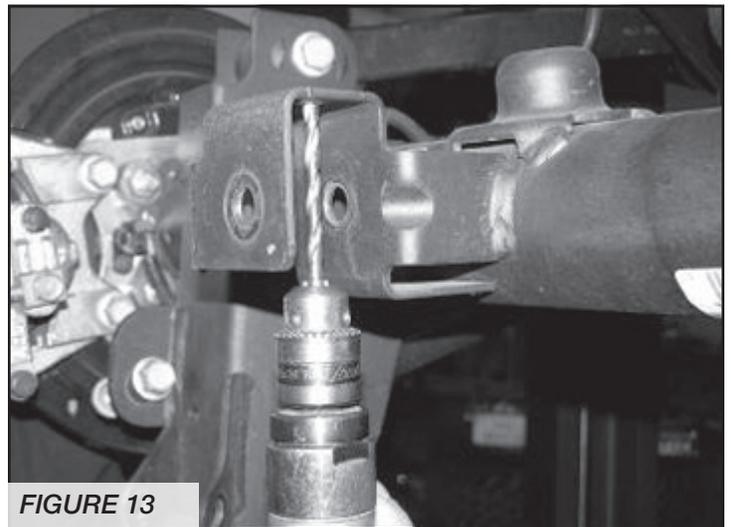
**FIGURE 10**



**FIGURE 11**



**FIGURE 12**



**FIGURE 13**

21. Position the track bar into the new track bar bracket. Attach the new bracket to the factory mount with the factory hardware and the provided FT157 Sleeve in the factory track bar mount. Using the provided 3/8" hardware, attach the new bracket to the factory mount and torque to 30 ft-lbs. Torque the factory track bar bolt to 100 ft-lbs. Attach track bar to the new mount using the provided 9/16" x 3" hardware. Torque the 9/16" bolt to 95 ft-lbs. **NOTE: Weld at the locations in the figures below. SEE FIGURES 14-15**

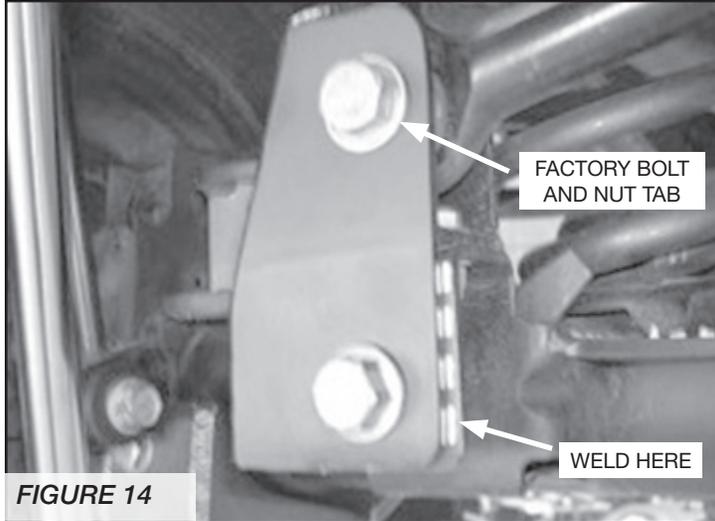


FIGURE 14

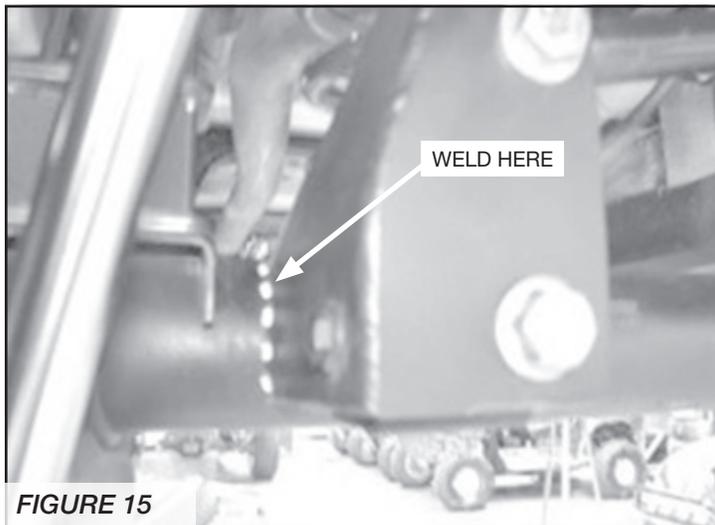


FIGURE 15

- **Paint when areas have been completely cooled.**

22. Locate FT50724 Rear Bump stop Spacer. Position the spacer onto the factory bump stop pad on the axle and attach with the supplied 5/16" x 1" bolts and hardware (mount the spacer to the axle with the offset of the spacer to the front of the Jeep). SEE FIGURE 16

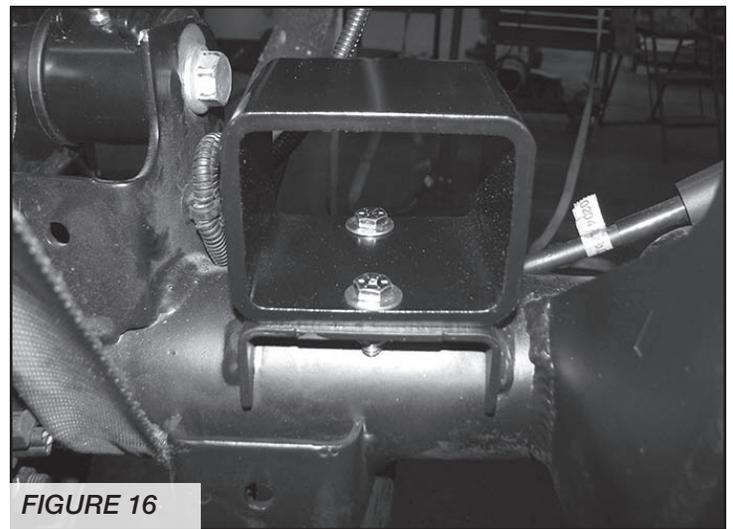


FIGURE 16

23. 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 ft -lbs. SEE FIGURE 17

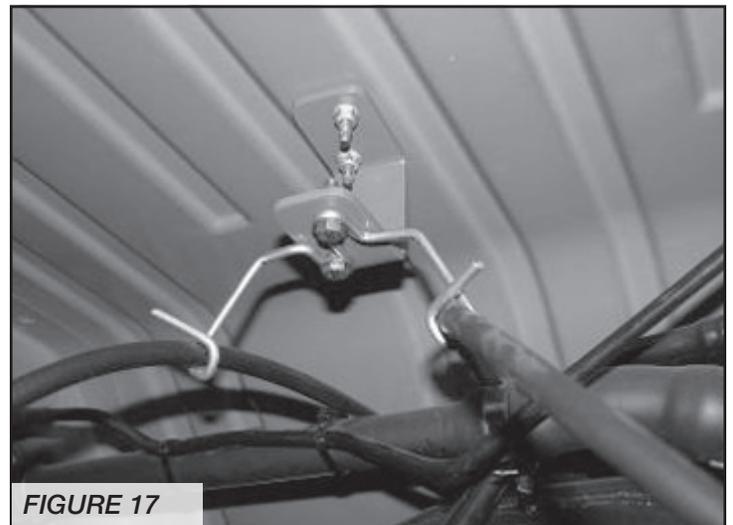


FIGURE 17

24. Locate the FT50392BK (2-Door) or FT50393BK (4-Door) rear coil springs and install using the factory isolators on the top of the spring. SEE FIGURES 18-20



FIGURE 18

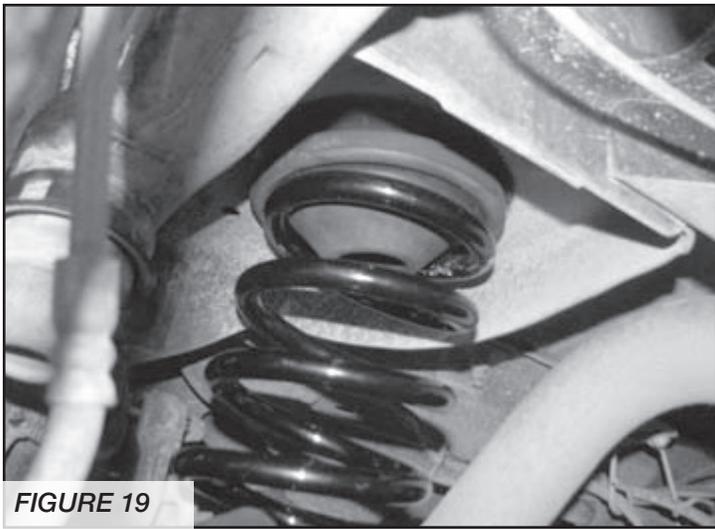


FIGURE 19

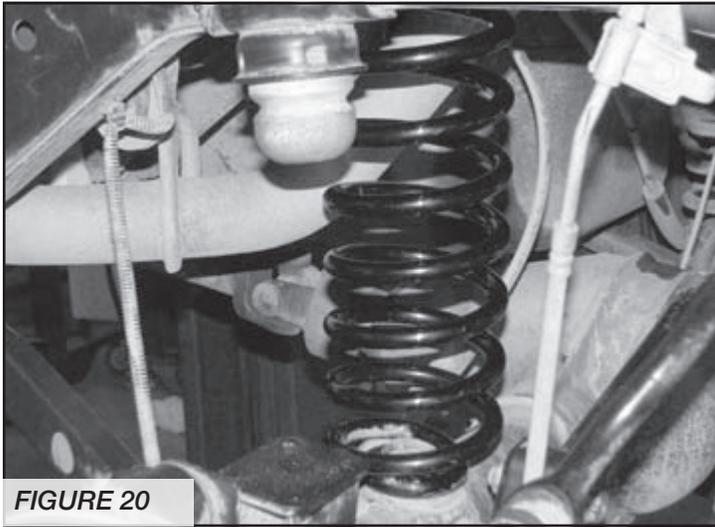


FIGURE 20

25. Install the new supplied Fabtech shocks. Use the factory upper and lower hardware to mount the shocks. Torque the upper hardware to 29 ft-lbs and the lower to 75 ft-lbs. SEE FIGURE 21

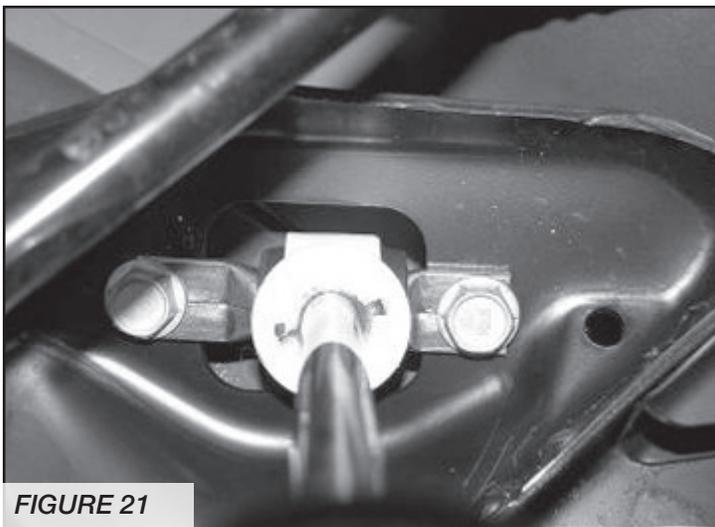


FIGURE 21

26. Locate FT50295 Rear Brake Line Drop Bracket, supplied 1/4" hardware, and factory rear brake line hardware. Attach the drop bracket to the factory mount with the factory hardware. Attach the factory brake line bracket to the new drop bracket with the 1/4" hardware. Torque to 10 ft-lbs. SEE FIGURE 22

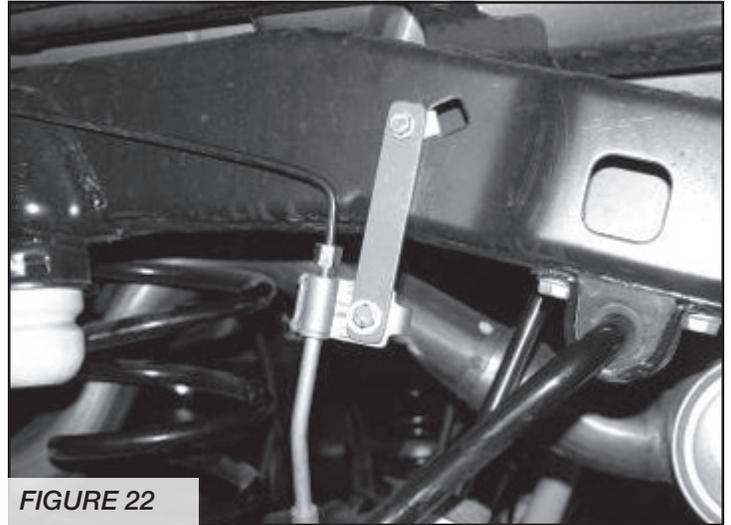


FIGURE 22

27. Reconnect the factory ABS mount to the rear differential and torque to 20 ft-lbs. Route the ABS line in the stock routing and attach the line to the upper link arm with the supplied 8" zip ties. SEE FIGURE 23

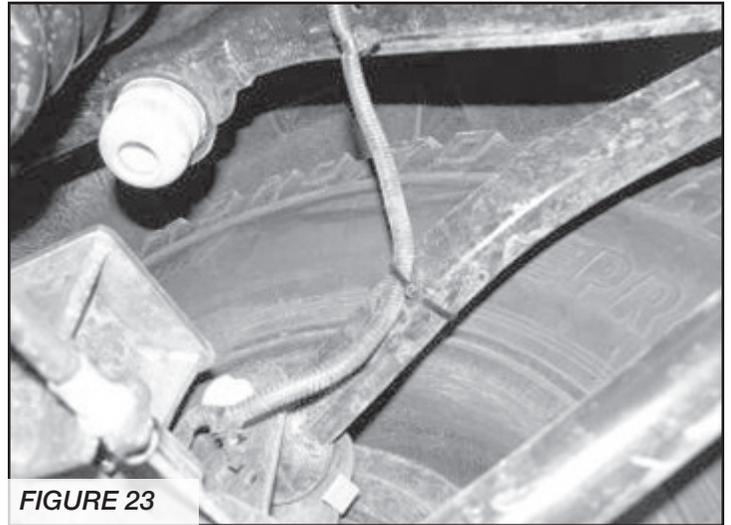


FIGURE 23

28. 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.**
29. Check front end alignment and set to factory specifications. Readjust headlights.
30. Recheck all bolts for proper torque.

31. Recheck brake hoses, ABS wires and suspension parts for proper tire clearance while turning tires fully left to right.
32. 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.**
33. Install Driver Warning Decal. Complete product registration card and mail to Fabtech in order to receive future safety and technical bulletins on this suspension.
34. Have vehicle properly aligned to factory specs.

**Vehicles that will receive oversized tires should check ball joints 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](http://www.fabtechmotorsports.com)