

# INSTALLATION INSTRUCTIONS



# 2018-2023 JEEP JL 4WD 3" SPORT SYSTEM

FTS24207 - GAS

FTS24304 - DIESEL

**NOTE:** TO ORDER WEARABLE REPLACEMENT COMPONENTS DO NOT USE PART NUMBERS SHOWN ON THIS INSTRUCTION SHEET. GO TO FABTECH WEBSITE AND LOOK UP WEARABLE REPLACEMENT PARTS TO FIND THE PROPER PART NUMBER TO ORDER.

**Fabtech Motorsports** | 12480 East End Ave. Chino, CA 91710 **Tech Line:** 909-597-7800 | **Web:** www.fabtechmotorsports.com

	FTS24207	JEEP JL SPORT SYSTEM (GAS)
2	FT50164	FRONT BUMPSTOP SPACER
2	FT50261BK	FRONT SWAY BAR LINK (7.94")
2	FT50026BK	REAR SWAY BAR LINK (10.34")
1	FT50584	REAR TRACK BAR BRACKET
1	FT50600	3" FRONT SPRING DRIVER
1	FT50601	3" FRONT SPRING PASSENGER
1	FT50602	3" REAR SPRING DRIVER
1	FT50603	3" REAR SPRING PASSENGER
1	FT50643	HARDWARE KIT
1	FT50642	HARDWARE SUBASSEMBLY
2	FT50724	REAR BUMPSTOP SPACER

	FTS24207	JEEP JL SPORT SYSTEM (DIESEL/392)
2	FT50164	FRONT BUMPSTOP SPACER
2	FT50261BK	FRONT SWAY BAR LINK (7.94")
2	FT50026BK	REAR SWAY BAR LINK (10.34")
1	FT50584	REAR TRACK BAR BRACKET
1	FT50943	3" FRONT SPRING
1	FT50602	3" REAR SPRING DRIVER
1	FT50603	3" REAR SPRING PASSENGER
1	FT50643	HARDWARE KIT
1	FT50642	HARDWARE SUBASSEMBLY
2	FT50724	REAR BUMPSTOP SPACER

	FT50642	HARDWARE SUBASSEMBLY
1	FT50592	REAR TRACK BAR SLEEVE
1	FT24194i	INSTRUCTIONS
2	FT50048	SWAY BAR BUSHING (4-PACK)
12	FT404739	SWAY BAR/ SHOCK SLEEVE
4	FT50593	SHOCK SPACER
1	FTLUBE	URETHANE LUBE
2	FT50060	FRONT BUMPSTOP NUT TAB
2	FT50585	REAR COIL SPACER NUT TAB
1	FTAS12	STICKER FT BLUE 10X4
1	FTAS16	DRIVER WARNING DECAL
1	FTREGCARD	REGISTRATION CARD

	FT50643 - HARDWARE KIT	LOCATION
4	M12-1.75 X 70MM HEX BOLT	SWAY BAR LINKS
8	12MM FLAT WASHER	
4	M12-1.75 C-LOCK NUT	
2	1/2"-13 x 3-1/2" BOLT	FRONT BUMPSTOP
2	1/2" SPLIT LOCK WASHER	
3	7/16-14 X 1" HEX BOLT	REAR TRACK BAR BRACKET
3	7/16"-14 C-LOCK NUT	
6	7/16" SAE FLAT WASHER	
1	9/16"-12 x 3" BOLT	REAR TRACK BAR BRACKET
1	9/16"-12 C-LOCK NUT	
2	9/16" SAE FLAT WASHER	
2	5/16-18 x 1" BOLT	REAR BUMPSTOP
2	5/16-18 X 3/4" BOLT	
4	5/16-18 C-LOCK NUT	
6	5/16" SAE FLAT WASHER	
1	THREAD LOCKING COMPOUND	

#### - 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
- Drill w/ Assorted Drill Bits

# - 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.

#### FOOTNOTES -

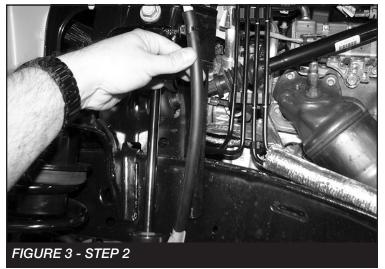
- Fits 4-door models only

### - FRONT SUSPENSION -

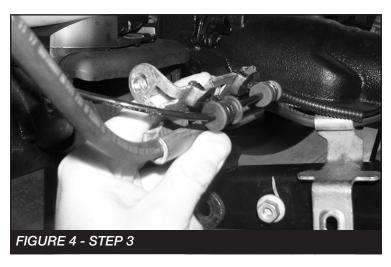
- Disconnect the negative terminal on the battery. Jack up the front end of the vehicle and support the frame rails with jack stands. NEVER WORK UNDER AN UNSUPPORTED VEHICLE! Remove the front tires.
- On both the Driver and Passenger side, unbolt the front brake line brackets from the frame and the link arm. Save all hardware. SEE FIGURES 1-2 On the driver side unclip the differential breather hose from the upper coil spring mount. SEE FIGURE 3



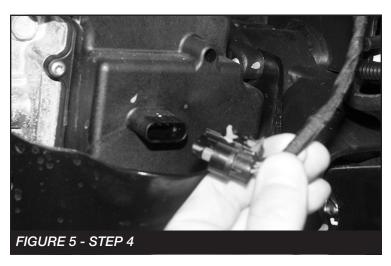




3. Ubolt and remove both driver and passenger side brake line brackets from the axle spring perch. **SEE FIGURE 4** 

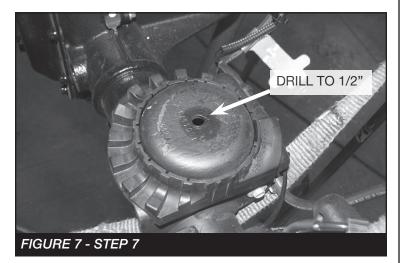


4. Unplug the front diff locker harnesses from the axle (RUBICON MODELS ONLY) SEE FIGURES 5-6

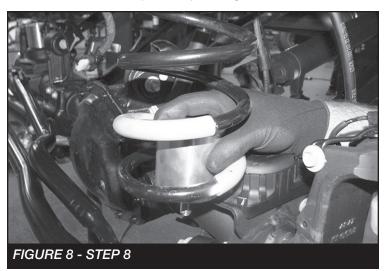


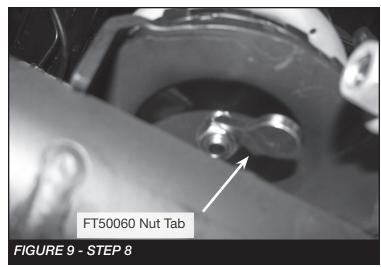


- 5. Remove and discard the factory sway bar endlinks, save the hardware.
- 6. With the axle supported, remove the factory shocks. Save all hardware. Lower the front axle and remove the factory coil springs. Retain coil spring isolators.
- On the factory coil spring perch. Use a drill with a 1/2" drill bit and drill out the existing factory hole on both driver & passenger sides. SEE FIGURE 7



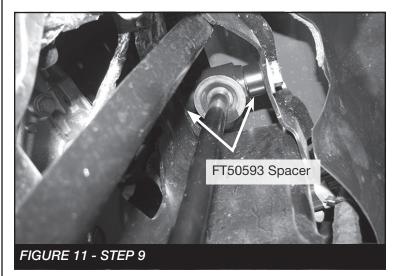
- If installing FTS24201 (Shock Extension Kit) continue with the instructions provided in the FTS24201 box kit.
- 8. DRIVER SIDE: Insert a 1/2" x 3-1/2" bolt and lock washer inside the FT50164 (Front bumpstop spacer). Place the FT50164 (Bumpstop spacer) into the bottom of FT50600 or FT50943 (Front driver spring) then install the spring into the vehicle as one unit. NOTE: The driveshaft and front trac bar may have to be disconnected to install the springs into the vehicle. Once installed insert the FT50060 (Nut tab) through the opening on the spring perch and thread the 1/2" bolt. Torque to 127 ft-lbs. SEE FIGURES 8-10 Repeat on passenger side

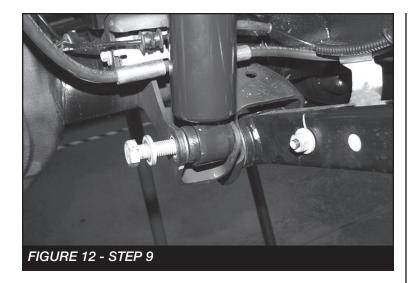




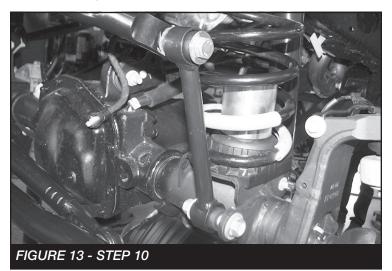


9. NOTE: If installing Dirt Logic shocks refer to the instructions supplied with the shocks. Locate FTS6349 (Stealth Shock) and install (2) FT404739 (Sleeves) into each bushing. Next, Install the shock using (2) FT50593 (Spacers) on either side of the bushing using factory hardware for the upper mount and the factory hardware for the lower mount. Torque to 100 ft-lbs. SEE FIGURES 11-12

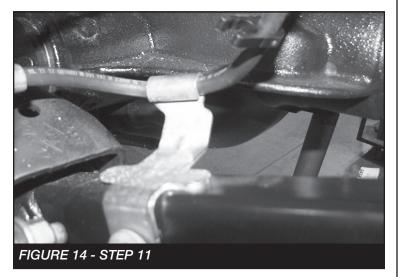




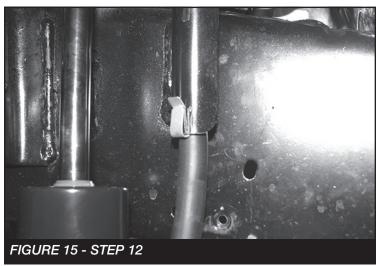
10. Install FT50048 (Bushings) and FT404739 (Sleeves) into FT50261BK (Sway bar links). Then, install the links to the axle mount and sway bar using the supplied M12 x 70mm hardware for the upper location and the factory for the lower. Torque to 65 ft-lbs. SEE FIGURE 13

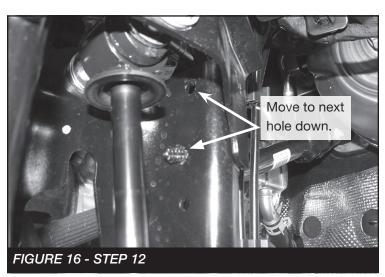


11. Reconnect all brake line brackets with the factory hardware and torque 29 ft-lbs. **NOTE: Bend the lower** link arm brake line bracket upward an inch to give the line some relief at full extension. **SEE FIGURE 14** 



12. Reinstall the diff breather hose by moving the metal clip up the hose 2" **SEE FIGURE 15** and the christmas tree fastener into the next hole down. **SEE FIGURE 16.** 

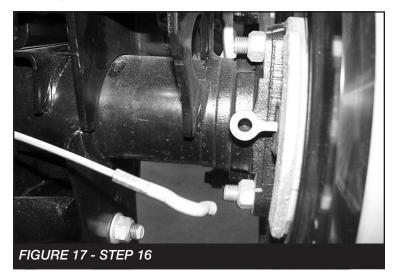




13. RUBICON MODELS ONLY: Reinstall the electrical connectors at the diff.

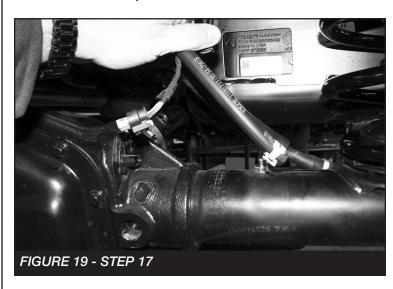
# - REAR SUSPENSION -

- 14. Jack up the rear end of the vehicle and support the frame rails with jack stands. NEVER WORK UNDER AN UNSUPPORTED VEHICLE! Remove the rear tires. Support the rear axle; do not allow axle to hang freely.
- 15. Remove the rear sway bar endlinks then remove the rear shocks and save hardware.
- Disconnect the e-brake cables behind the rotor. SEE FIGURE 17. Next, Disconnect the brake line from the axle link pocket. SEE FIGURE 18.





# 17. Unplug the locker harness from the axle (RUBICON MODELS ONLY) SEE FIGURES 19

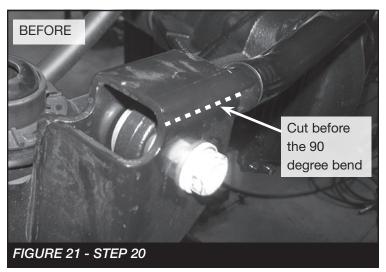


18. Disconnect the rear track bar from the axle and save hardware. Lower the rear axle and remove the factory coil springs.

19. Install the FT50724 (Rear bumpstop spacer) using the supplied 5/16" x 1" hardware. Torque to 25 ft-lbs **SEE FIGURE 20.** 

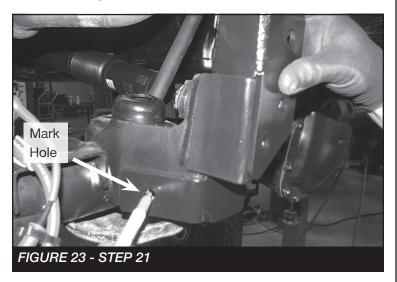


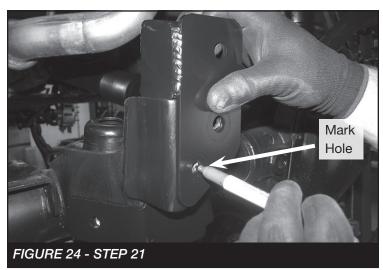
20. Locate the factory rear track bar bracket. Mark a straight line on the front and back before the 90 degree bend. Remove the track bar from the axle bracket and cut the top section off. SEE FIGURES 21-22

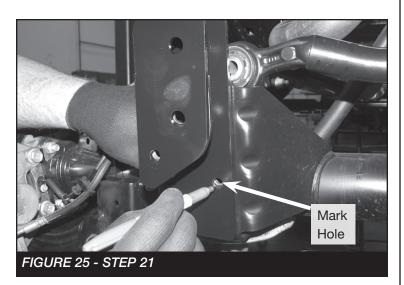




21. Install the FT50584 (Rear track bar bracket) onto the factory bracket. Mark the 3 holes using the FT50584 as a template. **SEE FIGURES 23-25.** Remove and drill the 3 holes using a 7/16" drill bit.

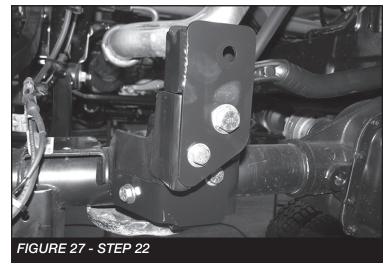




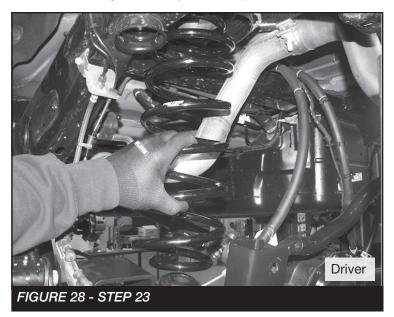


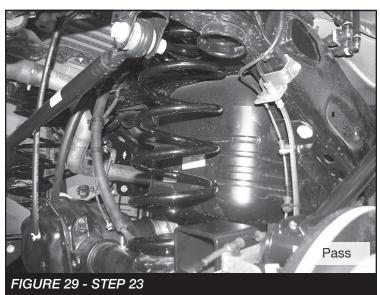
22. Reinstall the FT50584 (Track bar bracket) using the supplied 7/16" x 1" hardware. **DO NOT TIGHTEN.** Install FT50592 ( Rear track bar sleeve) using the supplied 9/16" x 3" bolt and hardware. **SEE FIGURES 26-27** Torque 7/16" hardware to 83 ft-lbs and 9/16" to 184 ft-lbs.





23. Install FT50602 (Driver rear spring) on the driver side and FT50603 (Pass rear spring) on the passenger side. **SEE FIGURES 28-29.** Then install the track bar into the new bracket using the factory bolt. Torque to 160 ft-lbs.

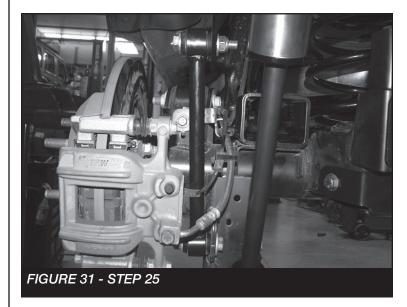




 NOTE: If installing FTS24201 (shock extension kit) please refer to instruction provided with that kit. 24. NOTE: If installing Dirt Logic shocks refer to the instructions supplied with the shocks. Install FTS6352 (Stealth shocks) using the factory hardware. Torque to 100 ft-lbs. SEE FIGURE 30



25. Install the FT50048 (Bushings) and FT404739 (Sleeves) into FT50026BK (Rear sway bar links). Then, install the new links to the sway bar and sway bar mount on the axle using supplied M12 x 70mm hardware for the upper location and the factory for the lower. Torque to 65 ft-lbs SEE FIGURE 31



- 26. Reconnect the Brake lines, E-brake line, breather hose and factory locker (if equipped).
- 27. 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.
- 28. Check front end alignment and set to factory specifications. Readjust headlights.
- 29. Recheck all bolts for proper torque.
- Recheck brake hoses, ABS wires and suspension parts for proper tire clearance while turning tires fully left to right.
- 31. 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.
- 32. 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