

## INSTALLATION INSTRUCTIONS

|   | FTS24224 | LONG ARM KIT (FRONT)           |
|---|----------|--------------------------------|
| 2 | FT50640  | FRONT UPPER LINK 5 TON         |
| 2 | FT50641  | FRONT LOWER LINK 5 TON         |
| 1 | FT50636  | UPPER 4-LINK MOUNT (DRIVER)    |
| 1 | FT50637  | UPPER 4-LINK MOUNT (PASSENGER) |
| 1 | FT50626  | FRONT SKID PLATE               |
| 1 | FT50627  | FRONT CROSSMEMBER              |
| 1 | FT50718  | HARDWARE SUBASSEMBLY           |

| FT50718   | HARDWARE SUBASSEMBLY   |
|-----------|--|
| FT24224i  | INSTRUCTIONS   |
| FT50693   | CROSSMEMBER NUT TAB (REAR)   |
| FT44152   | CROSSMEMBER NUT TAB (DRIVER FRONT)   |
| FT44153   | CROSSMEMBER NUT TAB (PASS FRONT)   |
| FT50414   | MISALIGNMENT 7/8"  |
| FT50415   | MISALIGNMENT 1" - 9/16" ID   |
| FT50594   | MISALIGNMENT 1" - 16MM ID  |
| FT50509   | LINK TWIST WASHER  |
| FT50719   | HARDWARE KIT   |
| FTAS12    | STICKER FT BLUE 10X4 DIE CUT   |
| FTAS16    | DRIVER WARNING DECAL   |
| FTREGCARD | REGISTRATION CARD  |
|           | FT24224i<br>FT50693<br>FT44152<br>FT44153<br>FT50414<br>FT50415<br>FT50594<br>FT50509<br>FT50719<br>FTAS12<br>FTAS16 |

|    | FT50719 - HARDWARE KIT        | LOCATION            |
|----|-------------------------------|---------------------|
| 6  | 7/16-14 X 1-1/4" HEX BOLT     | CROSSMEMBER POCKET  |
| 16 | 7/16" SAE WASHER              |                     |
| 8  | 7/16-14 C-LOCK NUT            |                     |
| 6  | 1/2-13 X 1-1/4" HEX BOLT      | SKID PLATE/ XMEMBER |
| 2  | 1/2-13 X 1-1/2" HEX BOLT      | CROSSMEMBER         |
| 2  | 1/2-13 C-LOCK NUT             |                     |
| 10 | 1/2 SAE WASHER                |                     |
| 2  | 7/16-14 X 3-1/4" HEX BOLT     | FRONT UPPER LINK    |
| 2  | 9/16-12 X 4 HEX BOLT          | FRONT LOWER LINK    |
| 2  | 9/16-12 C-LOCK NUT            |                     |
| 4  | 9/16" SAE WASHER              |                     |
| 1  | THREAD LOCKING COMPOUND 1 MIL |                     |

# 2018-2020 JEEP WRANGLER JL 2020 JEEP GLADIATOR JT

**CRAWLER KIT (FRONT)** 

FTS24224

Fabtech Motorsports | 4331 Eucalyptus Ave. Chino, CA 91710

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

#### - TOOL LIST -

#### Required Tools (Not Included)

- -Basic Hand Tools
- -Floor Jack

- -Torque Wrench
- -Drill w/ assorted drill bits
- -Assorted Metric and S.A.E sockets
- -Jack Stands

## - 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.

Installation of all fasteners requires the use of provided thread locking compound with proper torque values as indicated throughout the installation. Apply thread locking compound upon the final torque of the fastener.

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.

Fabtech replacement driveshafts are required with this system. Due to the different shafts for the 2-door and 4-door models, the driveshafts are sold separately. See chart below for proper driveshafts for your model of Jeep.

#### FOOTNOTES -

- Fits 4-door models only
- Exhaust modification required on all Jeep Wrangler & Gladiator models order AFE # 48-48024 (Loop delete pipe)
- Requires driveshafts. 4-door models Front (FTS94057) Rear (FTS94065)
- Fits 6 cyl. models only

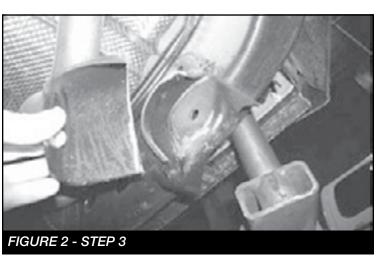
| FTS94057 | 2018-2020 JL Front Driveshaft 4-Door Only |
|----------|---|
| FTS94065 | 2018-2020 JL Rear Driveshaft 4-Door Only  |

#### - INSTRUCTIONS -

### NOTE: REFER TO OPTIONAL KIT BOX INSTRUCTIONS PRIOR TO INSTALLATION.

- 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. Remove factory cross member and save hardware. Next, remove the front driveshaft and upper and lower link arms.
- 3. Use a paint pen and mark the inside of both driver and passenger side lower link arm pockets as shown in the photos (cut flush with the outside mount, not the frame itself). Use a sawzall or die grinder with a cut off wheel and remove the inside of the pocket. Use an angle grinder with a sanding disc to sand the cut area of the pocket. Paint all bare metal areas. **SEE FIGURE 1**-2



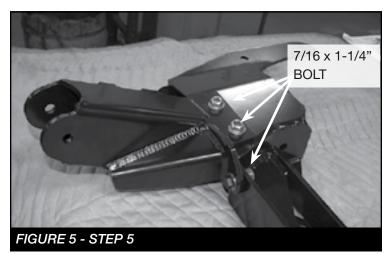


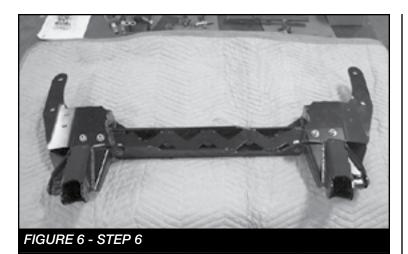
 Next, Locate the upper link pockets on both Driver and passenger sides. Mark and cut the factory bracket off of the frame. Sand to a smooth finish and paint all raw surfaces. SEE FIGURES 3-4



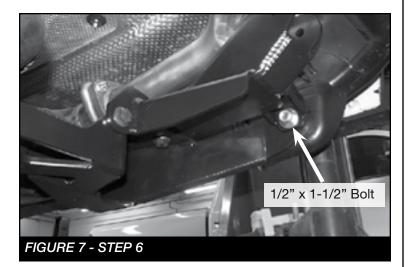


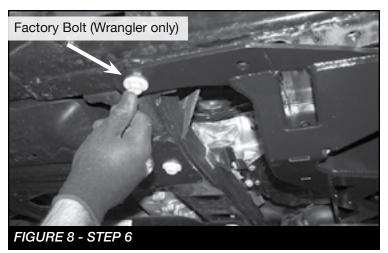
 Install FT50636 (Driver Upper Link Mount) and FT50637 (Pass Upper Link Mount) to FT50627 (Front Crossmember) using the supplied 7/16 X 1-1/4" Bolts, nuts and washers. Torque to 83 ft-lbs SEE FIGURE 5-6



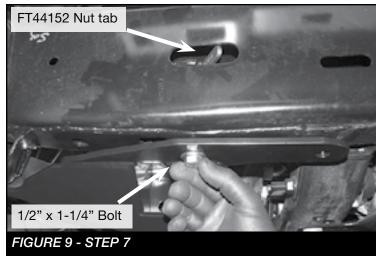


6. Using another person, mount the new Fabtech crossmember to the vehicle using the supplied 1/2" x 1-1/2" hardware at the old lower link locations and the factory bolt for the passenger rear location. Leave loose. NOTE: If installing on a Gladiator install FT50693 (Nut tab) at the passenger rear location by inserting the nut tab through the opening on the frame and use the supplied 1/2" x 1-1/4" hex bolt and washer. SEE FIGURES 7-8



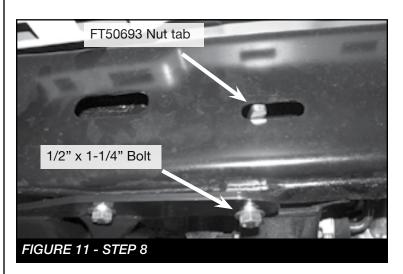


7. DRIVER SIDE - Using the supplied 1/2" x 1-1/4" bolt, washer and FT44152 (Driver Nut Tab). Install the Nut tab through the factory slot on driver side of the frame. Leave loose. SEE FIGURE 9

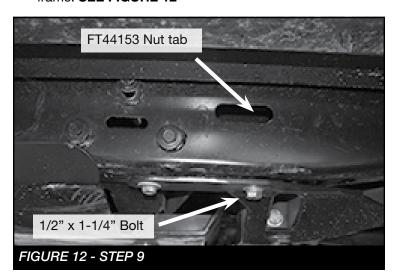


8. DRIVER SIDE - Using the new crossmember rear hole as a pilot, drill a 1/2" hole into the bottom of the frame. Then insert FT50693 (Nut tab) through the factory slot and secure using the supplied 1/2" x 1-1/4" bolt and washer. Leave loose. SEE FIGURES 10-11





9. PASSENGER SIDE - Using the supplied 1/2" x 1-1/4" bolt, washer and FT44153 (Passenger Nut Tab). Install the Nut tab through the factory slot on passenger side of the frame. SEE FIGURE 12



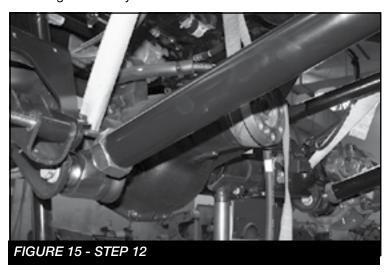
- 10. Once all hardware is installed, torque the six 1/2" bolts to 106 ft-lbs.
- 11. Locate the FT50641 (Lower Links) and install (2) FT50415 (9/16" ID, 1" OD Misalignments) into one end and (2) FT50594 (16mm ID, 1" OD Misalignments) into the other end. Next, install (1) FT50509 (Link twist washer) on the end with the FT50415 misalignments. Install the lower link end with the FT50509 (link twist washer into the new crossmember on the driver side using the supplied 9/16 x 4" bolt and hardware. SEE FIGURE 13-14 NOTE: See diagram on page 7 for misalignment identification.



FIGURE 13 - STEP 11



12. Install the other end of the lower link to the axle mount using the factory bolt. SEE FIGURE 15

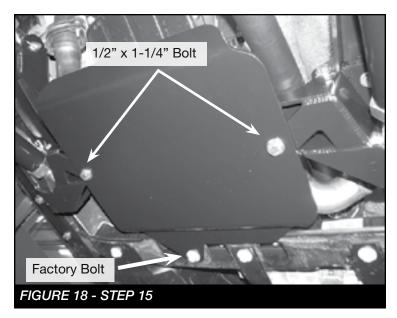


- 13. Repeat steps 11-12 on the passenger side. Torque 9/16" hardware to 153 ft-lbs and factory hardware to 161 ft-lbs.
- 14. Locate FT50640 (Front upper link) and install (2) FT50414 (Misalignments) into each rod end. Next, install the upper links to the new crossmember using the supplied 7/16 x 3-1/4" bolt and hardware. Then, install the link to the axle mount using the factory hardware. Torque both the 7/16 and factory bolts to 70 ft-lbs. SEE FIGURES 16-17





15. Install FT50626 (Skid Plate), using the supplied (2) 1/2" x 1-1/4" bolts with flat washers, and the factory skid plate bolt. Torque the 1/2" & factory hardware on the crossmember to 106 ft-lbs. **SEE FIGURE 18** 



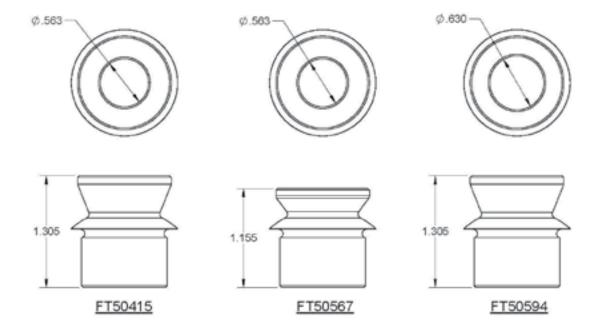
- 16. If installing other components continue with the instructions provided with those box kits.
- 17. Install tires and wheels and torque lug nuts to wheel manufacturer's specifications. Reconnect the negative battery cable. Turn front tires left to right and check for appropriate tire clearance. Note Some oversized tires may require trimming of the front bumper & valance.
- 18. Check front end alignment and set to factory specifications. Readjust headlights.
- 19. Recheck all bolts for proper torque.
- 20. Recheck brake hoses, ABS wires and suspension parts for proper tire clearance while turning tires fully left to right.
- 21. 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.
- 22. 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

## Misalignment Diagram



### - 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