

# **INSTALLATION INSTRUCTIONS**

	FTS24185	3" COILOVER HOOP KIT
1	FT50498BK	3" FRONT LOWER SHOCK MOUNT (DRIVER)
1	FT50499BK	3" FRONT LOWER SHOCK MOUNT (PASSENGER)
1	FT50496BK	COILOVER HOOP (DRIVER)
1	FT50497BK	COILOVER HOOP (PASSENGER)
1	FT50513	HARDWARE SUBASSEMBLY
2	FT50378BK	AXLE STRAP BRACKET

	FTS24136	5" COILOVER HOOP KIT
1	FT50347BK	5" FRONT LOWER SHOCK MOUNT (DRIVER)
1	FT50348BK	5" FRONT LOWER SHOCK MOUNT (PASSENGER)
1	FT50496BK	COILOVER HOOP (DRIVER)
1	FT50497BK	COILOVER HOOP (PASSENGER)
1	FT50513	HARDWARE SUBASSEMBLY
2	FT50378BK	AXLE STRAP BRACKET

	FT50513	HARDWARE SUBASSEMBLY
1	FT50538	HARDWARE KIT
2	FT83456	MISALIGNMENT SPACER
2	FT50455	COILOVER SPACER
1	FT24185i	INSTRUCTIONS
1	FTAS12	STICKER FT BLUE 10X4
1	FTAS16	DRIVER WARNING DECAL
1	FTREGCARD	REGISTRATION CARD
2	FT50376	NUT TAB

	FT50538 - HARDWARE KIT	LOCATION
2	1/2-13 X 3" HEX BOLT	
42	1/2 SAE WASHER	
20	1/2-13 C-LOCK NUT	
12	1/2-13 X 1-1/4 HEX BOLT	
8	1/2-13 X 2-3/4 HEX BOLT	
2	1/2 SPLIT LOCK WASHER	
1	THREAD LOCKING COMPOUND 1 MIL	
1	1/2-13 X 4" HEX BOLT	

	FTS24137	2.5" DLSS COILOVER W/RESI 3" JEEP FRONT		FTS24106	2.5" DLSS COILOVER W/RESI 5" JEEP FRONT
2	FT820422	2.5 DLSS COILOVER W/ RESI	2	FTS820192	2.5 DLSS COILOVER W/ RESI
2	FT86004	HARDWARE & BUSHING KIT 4	2	FT86004	HARDWARE & BUSHING KIT 4
2	FTS89904	RUBBER RESI ISOLATOR	2	FTS89904	RUBBER RESI ISOLATOR

# 2007-18 JEEP WRANGLER 2DR/4DR COILOVER HOOP KIT

# FTS24185/ FTS24136

Fabtech Motorsports|4331 Eucalyptus Ave. Chino, CA91710Tech Line:909-597-7800|Fax:909-597-7185|Web:www.fabtechmotorsports.com



### - TOOL LIST -

#### Required Tools (Not Included)

Basic Hand Tools Floor Jack Assorted Metric and S.A.E sockets, and Allen wrenches Die Grinder w/ Cutoff Wheel or Sawzall

Torque Wrench 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.

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 -

- 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

 Take an accurate measurement of the front of the Jeep. This measurement will need to be taken from the center of the front wheel hub to the center most part of the wheel well. This measurement will be needed to correctly set the height for the new Coilover shocks. DO NOT exceed 3" overstock height. If you are adding this kit to a Jeep that is already lifted, then match the current height. Record your measurements below.

Right \_\_\_\_\_ Left \_\_\_\_\_

- 2. 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.
- 3. Working from both sides of the Jeep, 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. On Rubicon models only: Unplug the front diff locker harness from the axle. Remove both driver and passenger plastic fender liners. Save hardware.
- 4. Remove the front shocks and discard
- 5. Disconnect the front sway bar from the axle mounts and save the hardware. Remove the upper and lower Fabtech sway bar end link mounts and discard. DO NOT REMOVE FACTORY LOWER SWAY BAR MOUNT.
- 6. Disconnect the front track bar from the Axle mount and save the hardware
- 7. Using a pickle fork, separate the drag link from the pitman arm and save the hardware.
- 8. Lower the floor jack supporting the front axle, to allow the coil springs to come free. USE CARE WHEN WORKING WITH COIL SPRINGS UNDER LOAD!! Remove the coil springs from the Jeep and discard. Some models may be equipped with lower coil spring retaining clips, if so remove and discard before removing the coil spring.
- 9. Remove the factory upper rubber coil isolator and discard.
- 10. Using Reciprocating Saw, remove the factory coil spring pad from the axle. Clean axle with a sanding disc. Paint bare metal areas with black paint. **SEE FIGURE 1-2**

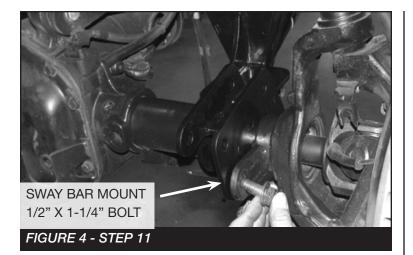


FIGURE 2 - STEP 10

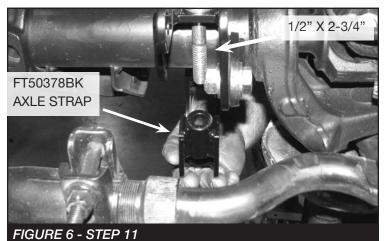
11. Working from the driver's side of the Jeep, locate FT50498BK Driver Side Lower Mount, FT50378BK Axle Strap, and supplied 1/2" hardware. Install lower Mount onto axle. **SEE FIGURES 3-6** 



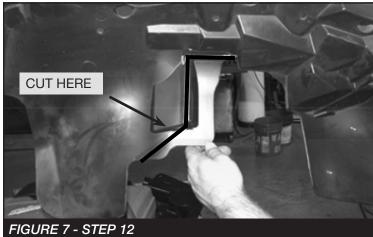
FIGURE 3 - STEP 11

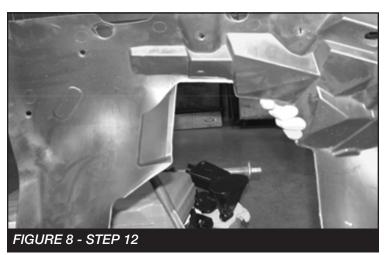






12. Locate plastic inner fender wells and mark as shown in photos. With die grinder and cutoff wheel cut along the line, smooth with a barrel sander. **SEE FIGURES 7-8** 





13. Using a reciprocating saw, remove the factory bump stop by cutting off the top of the mount. **SEE FIGURES 9-10** 





FIGURE 10 - STEP 13

14. Locate the template on last page of this instruction sheet. Place template onto the upper coil spring mount and hold in place by inserting a 1/2" bolt into the hole in the top of the upper coil spring perch. Mark with a paint pen. SEE **FIGURE 11-13** 



FIGURE 11 - STEP 14





15. Using a reciprocating saw cut along the line made on the upper coil spring perch. SEE FIGURES 14-15



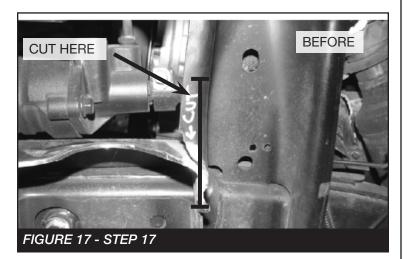
FIGURE 14 - STEP 15

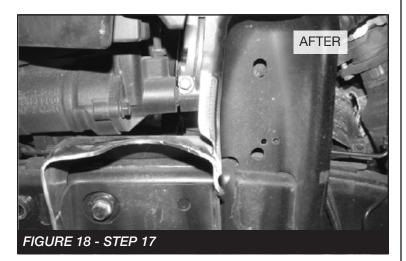


16. Sand rough edges down to a smooth finish and paint. **SEE FIGURE 16** 



17. Using a die grinder or cut off wheel, measure up 3-1/2" and cut the rounded lip off the upper shock tower. Sand to a smooth finish and paint. **SEE FIGURES 17-18** 





18. Remove the top bolt from the steering box and save. **SEE FIGURE 19** 



19. Using the hoop as a template. Mark a line around the upper shock mount on the windshield washer tank. Remove the hoop and carefully cut with a die grinder and cut off wheel. Clean edges with a barrel sander. USE CAUTION NOT TO CUT INTO THE TANK OR THE WATER LINE. **SEE FIGURES 20-22** 



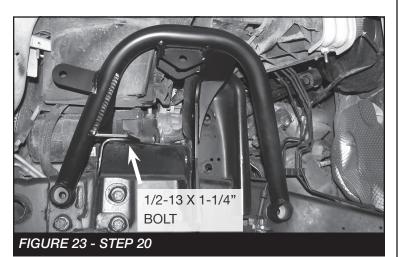


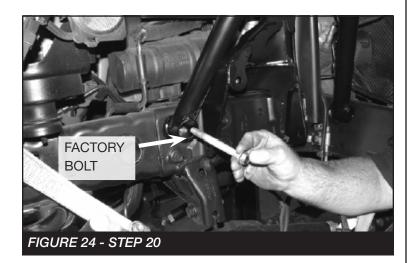
FIGURE 21 - STEP 19



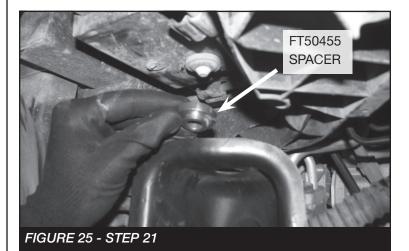
FIGURE 22 - STEP 19

20. Place the hoop back into position and insert the factory bolt into the steering box. Insert a 1/2" bolt with washer and nut into the top plate. Tighten both bolts. Due to variances from vehicle to vehicle, more trimming /cutting may be required for proper hoop clearance. Do not remove more material than necessary. SEE FIGURES 23-24





21. Insert the FT50455 (Spacer) into the factory upper shock mount hole. Next install a 1/2-13 x 1-1/4" bolt and hardware through the FT50455 (spacer) and coilover hoop. **SEE FIGURE 25-26** 





22. With a paint pen mark a total of 3 holes. Two holes on the side of the shock tower, and one in the rear leg of the shock hoop. **SEE FIGURE 27-28** 

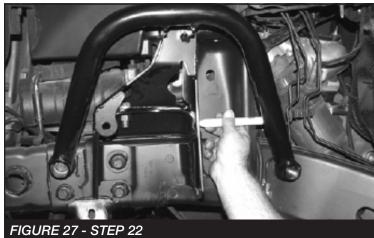




FIGURE 28 - STEP 22

- 23. Remove the hoop and drill out the marked holes to 1/2". On the rear leg only drill the outer half of the frame. When re-installing the hoop these holes will use 1/2"-13 X 1-1/4" bolts and hardware.
- 24. Re-install hoop at this time. Locate FT50376 (Nut Tab) for the rear leg of hoop and insert through the large access hole in the frame behind the rear leg of the hoop. Use the supplied 1/2"-13 X 1-1/4" bolt, lock washer and flat washer. **SEE FIGURE 29**



25. Torque all 1/2" hardware to 127 ft-lbs.

26. Repeat steps 9 through 25 on the passenger side of the Jeep. NOTE: When installing the passenger side hoop. Use FT164 (Sleeve), 1/2" x 4" bolt and hardware. Install the sleeve into the upper hole first then install the bolt through the hoop then into the sleeve and frame using a washer and nut on the back side.



FIGURE 30 - STEP 26

#### IF INSTALLING OPTIONAL FABTECH HYDRAULIC BUMPSTOP KIT FTS24089BK; DO SO AT THIS TIME

27. Install FT820422 or FTS820192 Coilover Shock, using two Mis-alignment spacers in the top and bottom bearings. NOTE: USE (1) FT83456 (Large misalignment spacer) for the top mount on the outer side of the coilover to offset towards the inside of the vehicle. (Upper hardware 1/2" X 2-3/4") - (Lower hardware 1/2" X 3") Torque to 127 ft- lbs. SEE FIGURE 31-32





FIGURE 32 - STEP 27

28. Use the supplied large clamps and poly mounts FTS89904 to attach the Reservoirs to the front of the shock hoop. **SEE FIGURE 33** 



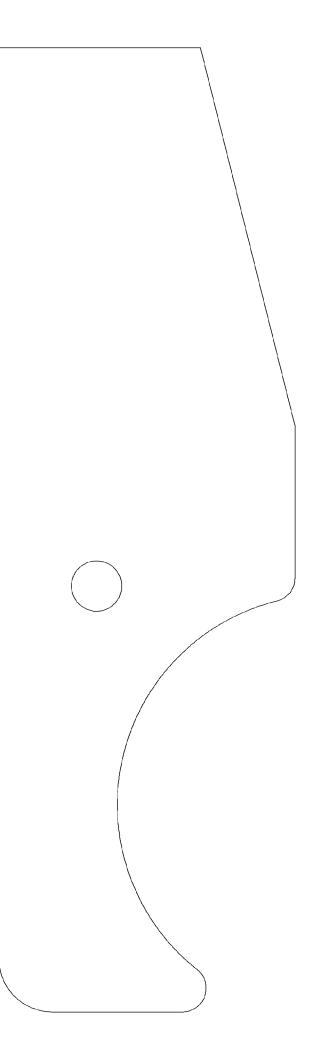
- 29. Attach Drag link to Pitman arm using factory nut, Torque to 195 ft-lbs. Reconnect the front Track bar to the axle using the original hardware. Torque to 184 ft-lbs.
- 30. Connect the front sway bar end link to the new bracket using the original hardware.
- 31. Reconnect the brake line brackets, ABS sensor wires, and front Diff. locker using factory hardware.
- 32. 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.**
- 33. Measure front height of the Jeep and compare them to the measurements that were taken at the beginning of the install.
- 34. Check front end alignment and set to factory specifications. Readjust headlights.
- 35. 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.

- 37. 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.
- 38. 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

USE THE SAME TEMPLATE FOR BOTH DRIVER AND PASSENGER SIDE OF THE VEHICLE. JUST FLIP OVER AND USE REVERSE SIDE.



### - 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