

# **INSTALLATION INSTRUCTIONS**

	FTS22343	SPACER KIT FOR NON-BILSTEIN SHOCKS
1	FT30991	REAR TRACK BAR BRACKET
2	FT31000	REAR STRUT SPACER
2	FT31006	FRONT STRUT SPACER
2	FT31008	FRONT PRELOAD SPACER
2	FT31009	REAR PRELOAD SPACER
1	FT31013	HARDWARE SUBASSEMBLY

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1	FT1599-1-5	BRAKELINE BRACKET
1	FT161	SLEEVE
1	FT22343i	INSTRUCTIONS
1	FT31012	HARDWARE KIT
1	FTAS12	STICKER FT BLUE
1	FTAS16	DRIVER WARNING DECAL
1	FTREGCARD	REGISTRATION CARD

	FT31012 - HARDWARE KIT	LOCATION
12	3/8-16 C-LOCK NUT	Strut Spacers
12	3/8" SAE WASHER	
6	M10-1.5 HEX NUT	Strut Spacers
6	M10 FLAT WASHER	
2	7/16-14 X 1-1/4" HEX BOLT	Track Bar Bracket
4	7/16 SAE WASHER	
2	7/16-14 C-LOCK NUT	
1	5/8-11 X 3-3/4" HEX BOLT	Track Bar Bracket
2	5/8" SAE WASHER	
1	5/8-11 C-LOCK NUT	
1	1/4-20 X 3/4" HEX BOLT	Brakeline
2	1/4" SAE WASHER	
1	1/4-20 C-LOCK NUT	
1	M8-1.25 X 50MM HEX BOLT	Brakeline
1	M8 SPLIT LOCK WASHER	
1	M8 FLAT WASHER	
1	THREAD LOCKING COMPOUND	

# 2021-2024 FORD BRONCO 4WD 4" SPACER KIT

## FOR USE WITH FACTORY NON-BILSTEIN SHOCKS

## FTS22343

**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 | 2213 Industrial Park Rd. Lancaster, SC 29720

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

### - TOOL LIST -

#### Required Tools (Not Included)

Basic Hand Tools Floor Jack Jack Stands Assorted Metric and S.A.E sockets, and Allen wrenches

Coil Spring Compressor Torque Wrench Die Grinder w/ Cutoff Wheel or Sawzall

### - 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.

This suspension and shocks have been designed to be installed on a stock vehicle.

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. 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.

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.

Read all warnings and warranties on the last page of these instructions before starting installation.

#### FOOTNOTES -

- Does not fit vehicles equipped with HOSS 3.0 package.

### - 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.
- 2. Disconnect the factory brake lines from the factory knuckle. Save hardware. SEE FIGURE 1



FIGURE 1 - STEP 2

3. Loosen the tie rod nut and carefully strike the knuckle with a hammer until it comes loose. Save hardware. SEE **FIGURE 2** 



FIGURE 2 - STEP 3

4. Disconnect the factory sway bar link from the lower control arm. Save Hardware. NOTE: Disconnect from the opposite side so the sway bar can move. SEE FIGURE 3



5. Remove the bolts attaching the brake caliper to the knuckle. Then secure the caliper to the frame. Do not allow it to hang freely. Remove the brake rotor and set aside. SEE FIGURES 4-5



FIGURE 4 - STEP 5



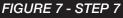
FIGURE 5 - STEP 5

6. Remove the CV axle nut and save. SEE FIGURE 6



7. Loosen the upper ball joint nut and carefully strike the knuckle with a hammer until it comes loose from the control arm. Remove and save the factory nut. SEE FIGURES 7-8







8. Remove the lower coilover nuts. Save hardware.

9. Using a paint pen. Mark the top strut cap and lower strut body to retain the correct orientation. Remove the three nuts attaching the coilover to the upper mount then remove the factory collover by pushing down on the lower control arm. SEE FIGURE 9



10. Remove and discard the locating pin from the factory strut top cap. SEE FIGURE 10



11. Using a coil spring compressor. Compress the coil enough to relieve pressure on the top mount. Remove and save the top cap nut. Then remove the top mount, coil spring and dust boot. Save all parts. SEE FIGURE 11



 Remove the plastic strut body cap. Then, remove the lower coil mount from the strut body. SEE FIGURES 12-13



FIGURE 12 - STEP 12



13. Install FT31008 (Larger preload Spacer) onto the strut. **SEE FIGURE 14** 



- 14. Reinstall the lower spring mount, strut cap, dust boot and coil spring. Install the top mount using the factory nut. NOTE: When tightening make sure the marks on the upper mount and the body are in line. Torque top nut to 25 ft-lbs.
- 15. On the top mount. Measure 5/8" from the base of the stud and using a cut off wheel, cut the excese thread off. **SEE FIGURE 15**



16. Install FT31006 (Front strut spacer) onto the top mount using the supplied M10 nuts and thread locking compound. **SEE FIGURE 16** 



FIGURE 16 - STEP 16

17. Install the strut assembly into the vehicle using the supplied 3/8" nuts and washers for the upper mount and the factory hardware for the lower mount. Torque the upper nuts to 30 ft-lbs. and the lower 65 ft-lbs. SEE **FIGURE 17** 



18. Repeat steps on the opposite side.

- IF INSTALLING NEW FABTECH UPPER CONTROL ARMS, DO SO WITH THE INSTRUCTIONS PROVIDED WITH THE KIT THEN SKIP TO STEP 20.
- 19. Re-attach the upper control arm to the knuckle. Torque the ball joint nut to 32 ft-lbs. NOTE: Make sure the CV axle is seated correctly into the hub assembly.
- 20. Install the CV axle nut using a 35mm socket. Torque to 249 ft-lbs.
- 21. Reinstall both the ABS wire & brakeline brackets to the knuckle using the factory hardware. Torque to 10 ft-lbs.
- 22. Reinstall the brake rotor and caliper. Torque caliper bolts to 148 ft-lbs.
- 23. Reinstall the tie rod into the knuckle using the factory nut. Torque to 32 ft-lbs.
- 24. Repeat steps 19-23 on the passenger side.
- 25. Reinstall the sway bar end link to the knuckle using the factory hardware. Torque to 32 ft-lbs.
- 26. Install tires and wheels and torgue lug nuts to wheel manufacturer's specifications.

#### - REAR SUSPENSION -

- 27. Jack up the rear end of the truck and support the frame rails with jack stands. NEVER WORK UNDER AN **UNSUPPORTED VEHICLE!** Remove the rear tires.
- 28. Supporting the rear axle. Disconnect the rear track bar from the axle side bracket. Save hardware. SEE FIGURE 18



- 29. Remove the rear inner fender liners to access the upper strut hardware.
- 30. Mark the upper mount and the body for disassembly. Remove and save the upper and lower rear driver side strut hardware. Lower the rear end and remove the strut from the vehicle. Remove the factory locating pin from the top of the upper strut mount.
- 31. Using a coil spring compressor. Compress the coil enough to relieve pressure on the top mount. Remove and save the top cap nut. Then remove the top mount, coil spring and dust boot. Save all parts.
- 32. Remove the plastic strut body cap. Then, remove the lower coil mount from the strut body. SEE FIGURES 19-20



FIGURE 19 - STEP 32

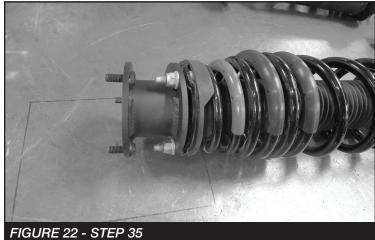


33. Install FT31009 (Smaller preload Spacer) onto the strut. **SEE FIGURE 21** 



34. Reinstall the lower spring mount, strut cap, dust boot and coil spring. Install the top mount using the factory nut. NOTE: When tightening make sure the marks on the upper mount and the body are in line. Torque top nut to 25 ft-lbs.

35. Install FT31000 (Rear strut spacer) onto the top strut mount using the factory nuts. **NOTE: The smaller side of the angle should be installed on the front side. SEE FIGURE 22** 



36. Install the strut into the vehicle using the supplied 3/8" nuts & washers for the upper mount and the factory hardware for the lower mount. Torque the upper 3/8" hardware to 35 ft-lbs and the lower factory hardware to 160 ft-lbs. **SEE FIGURE 23** 



37. Repeat steps on the passenger side.

38. Disconnect the brake line bracket from behind the factory track bar mount. Install FT1599-1-5 (Brakeline Tab) to the mount using the factory hardware then install the brakeline bracket to the new tab using the supplied 1/4" hardware. Torque to 10 ft-lbs. SEE FIGURE 24

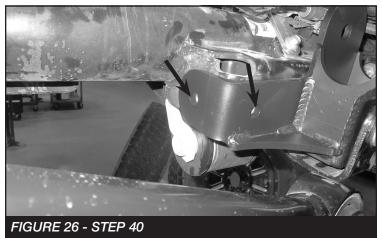


39. Disconnect the hard brakeline bracket from the passenger side link mount. Reinstall the bracket using FT161 (Sleeve) and the supplied M8 x 50mm bolt and washers. Torque to 12 ft-lbs. SEE FIGURE 23



FIGURE 25 - STEP 35

40. Install FT30991(Track bar bracket) ontot he factory axle mount using the factory bolt. Then, using the new bracket mark the two holes on the factory mount. Remove the bracket and drill the holes using a 1/2" drill bit. SEE **FIGURE 26** 



41. Reinstall the new Fabtech bracket using the factory bolt and the supplied 7/16" hardware. Torque the factory bolt to 160 ft-lbs and the 7/16" hardware to 65 ft-lbs. SEE **FIGURE 25** 



42. Install the track bar to the new Fabtech bracket using the supplied 5/8" hardware. Torque to 170 ft-lbs. SEE **FIGURE 26** 



- 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. **RE-TORQUE ALL NUTS, BOLTS AND LUGS AFTER 50 MILES AND PERIODICALLY THEREAFTER UNTIL TORQUE VALUES ARE RETAINED.**
- 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.
- Check ball joints, uniballs bearings, bushings and all steering components every 2500-5000 miles for wear and replace as required.
- 49. Install Driver Warning Decal. Complete product registration card and mail to Fabtech in order to receive future safety and technical bulletins on this suspension.
- 50. Review all included warnings and warranties with consumer

For technical assistance call: 909-597-7800

## - Product Warranty & 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, Uniball bearings, 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 take apart shocks are considered a serviceable shock with a 1-year warranty against any manufacturer's defects. If a shock fails within the initial year of ownership, the owner must ship the shock to Fabtech for inspection and service. If after examination the shock is determined to have failed due to neglect, damage caused by improper installation, or any reason other than "normal wear and tear," the owner of the shock will be responsible for all service costs. Costs include labor, parts, and shipping. 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. This warranty does not include coverage for police, taxi, first responder vehicles, race vehicles, or vehicles used for government, commercial or fleet 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.

Oversized tires and wheels may decrease the vehicle's braking capacity. Drivers should always brake early and be aware of the increased the stopping distance of the vehicle. Drivers should adjust their driving habits to the effectiveness of the braking. Adjust your driving habits to these changes.

Failure to drive safely may result in serious injury or death to driver and passengers. Driver and passengers must ALWAYS wear your seat belts, avoid quick sharp turns and other sudden maneuvers