



LEVELING KIT SUSPENSION

Assembly, Installation, Operation,
and Maintenance Instructions

PART NUMBER	F15LL3
INSTALL TIME	2 HOURS

2021-2024 FORD BRONCO 4WD

DEALER / INSTALLER	Provide a copy of these instructions to the end user of this product. These instructions provide important operating and safety information for proper usage of this product. Demonstrate the proper use of the product with the end user. Have the end user demonstrate that they understand the proper use of the product.
END USER	Read and follow all instructions included in this manual. Ask your Dealer / Installer for assistance if you do not understand the proper use of the product. Never remove any decals from the product. Failure to follow these instructions can result in injury or death.

TOOLS REQUIRED
BASIC HAND TOOLS
FLOOR JACK
JACK STANDS
ASSORTED METRIC & SAE SOCKETS
ALLEN WRENCHES
TORQUE WRENCH
DIE GRINDER W/CUTOFF WHEEL OR SAWZALL
COIL COMPRESSOR

PACKAGE CONTENTS	QTY
SHOCK SPACERS	2
3/8-16 X 1" HEX BOLTS	6
3/8" SAE WASHERS	6
3/8" SPLIT LOCK WASHERS	6
THREAD LOCKING COMPOUND	1



WARNINGS/SAFETY PRECAUTIONS



For technical assistance call: 1-866-638-4870 or email: support@TrailFX.com

READ THIS BEFORE YOU BEGIN INSTALLATION:

- Check all parts to the parts list above before beginning installation. If any parts are missing contact TrailFX tech and warranty team at 1-866-638-4870 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. Do not install this system if the vehicle alignment is not within factory specifications. Check for frame and suspension damage prior to installation.
- 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 rollover as compared to stock.
- Vehicles that run oversized tires should check ball joints, tie rod ends, pitman arm and idler arm every 2500 - 5000 miles for wear and replace as needed.

FOOTNOTES:

- This leveling kit will not work with factory air ride vehicles.
- Some models of trucks may not sit level after installation due to added accessories such as bumpers, toolboxes, cargo management, tow packages, etc.

Prior to installing this kit, with the vehicle on level ground, measure the height of your vehicle. This measurement can be recorded from the center of the wheel, straight up to the top of the inner fender lip. Record the measurements below.

LF: _____

RF: _____

LR: _____

RR: _____

INSTALLATION PROCEDURE

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. Using an 8mm & 10mm socket, remove the ABS line and brake line brackets from the knuckle. Save hardware. **(FIGURE 1).**
3. Loosen the tie rod nut and carefully strike the knuckle with a hammer until it comes loose. Save hardware. **(FIGURE 2).**

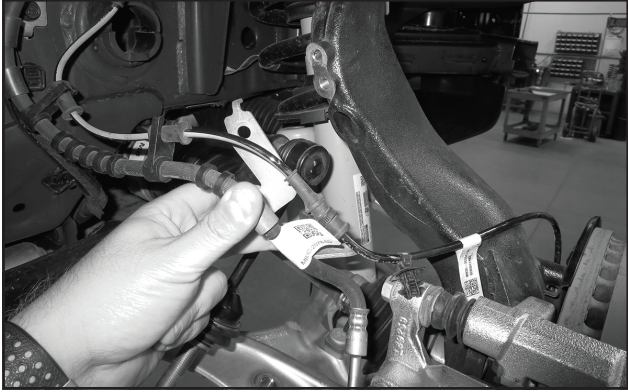


FIGURE 1 - STEP 2

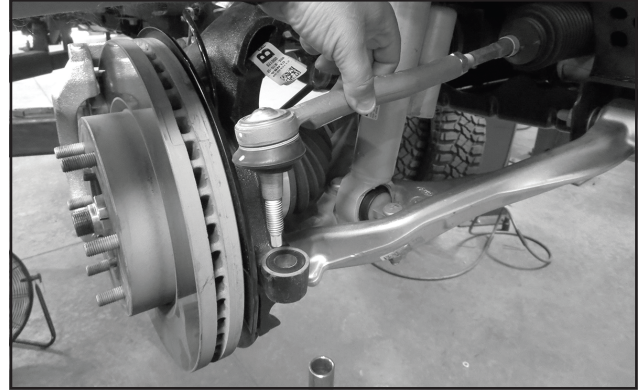


FIGURE 2 - STEP 3

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. **(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. **(FIGURES 4-5).**

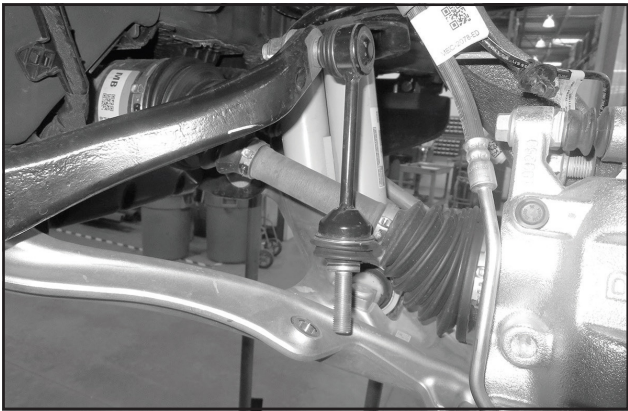


FIGURE 3 - STEP 4

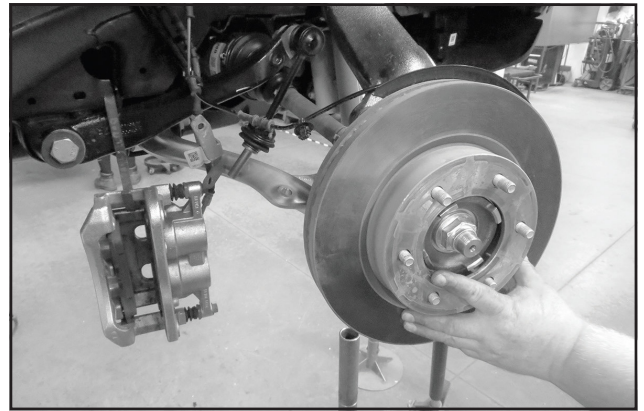


FIGURE 4 - STEP 5

6. Remove the CV axle nut and save. **(FIGURE 6).**

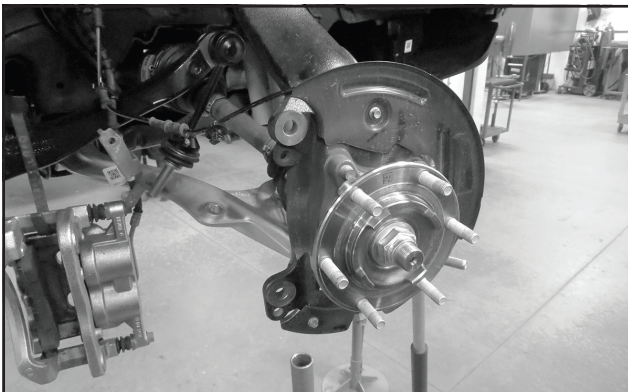


FIGURE 5 - STEP 5

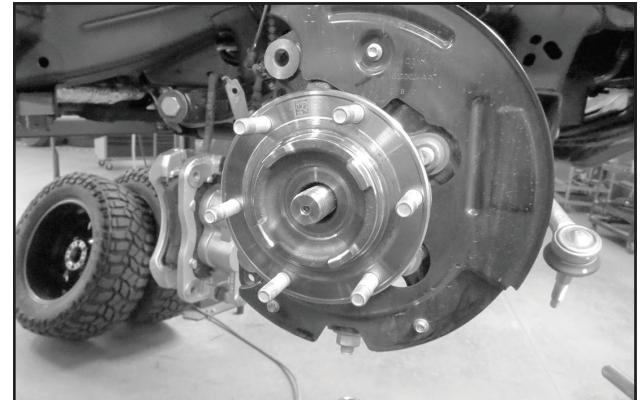


FIGURE 6 - STEP 6

INSTALLATION PROCEDURE (CONTINUED)

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. **(FIGURES 7-8).**

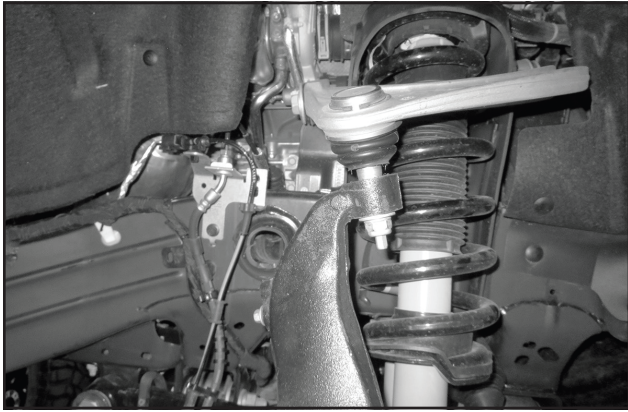


FIGURE 7 - STEP 7

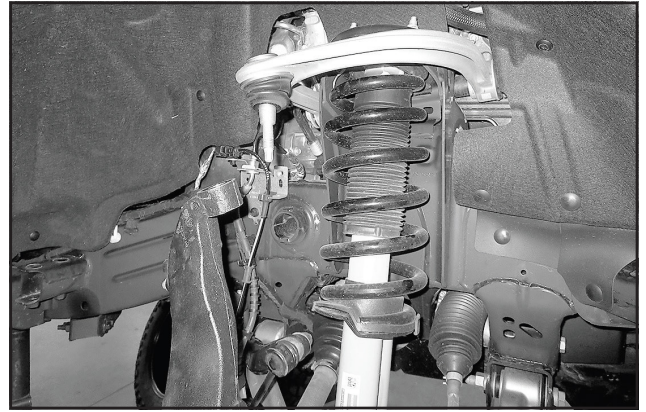


FIGURE 8 - STEP 7

8. Remove the lower coil over nuts. Save hardware.
9. Remove the three nuts attaching the coil over to the upper mount then remove the factory coil over by pushing down on the lower control arm. **(FIGURE 9).**
10. Remove and discard the locating pin from the factory strut top cap. **(FIGURE 10).**

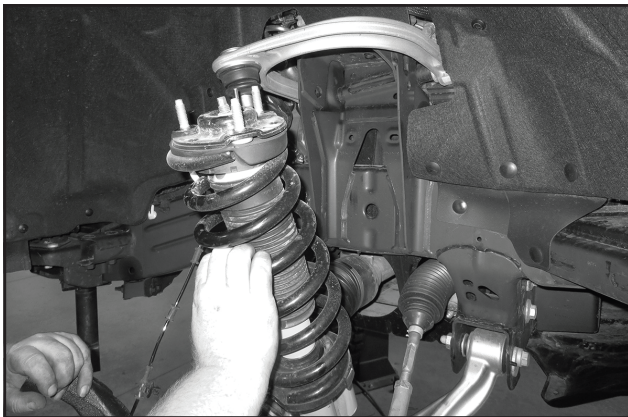


FIGURE 9 - STEP 9

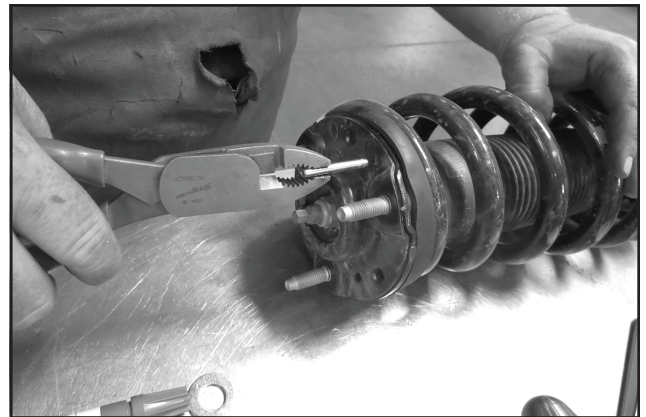


FIGURE 10 - STEP 10

11. Remove 3/8" from the end of all three upper strut assembly studs. **(FIGURE 11).**
12. Using a coil spring compressor. Compress the coil just enough to rotate the top cap 60 degrees clockwise (looking at the top of the strut). **(FIGURE 12).**

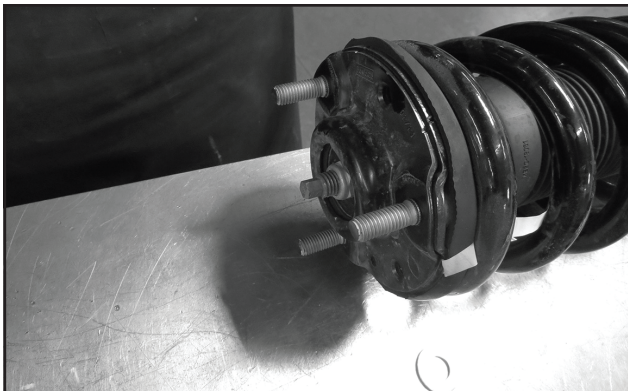


FIGURE 11 - STEP 11

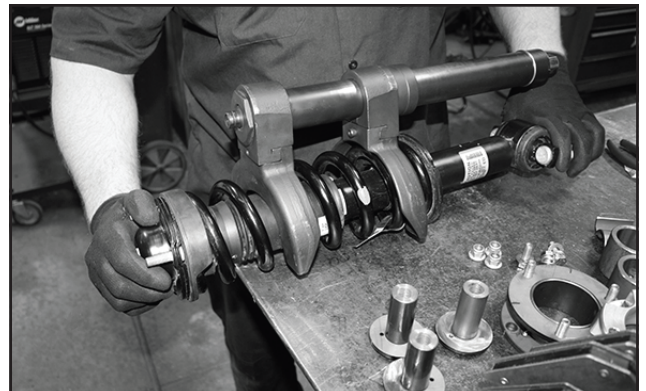


FIGURE 12 - STEP 12

INSTALLATION PROCEDURE (CONTINUED)

13. Install Spacer onto the strut using the factory hardware. Torque to 53 ft-lbs. **(FIGURE 13).**
14. Reinstall the strut assembly using the supplied 3/8" X 1" bolts, lock washers and flat washer at the upper mount and factory hardware at the lower mount. Torque the 3/8" hardware to 45 ft-lbs and the factory lower hardware to 93 ft-lbs. **(FIGURE 14).**



FIGURE 13 - STEP 13

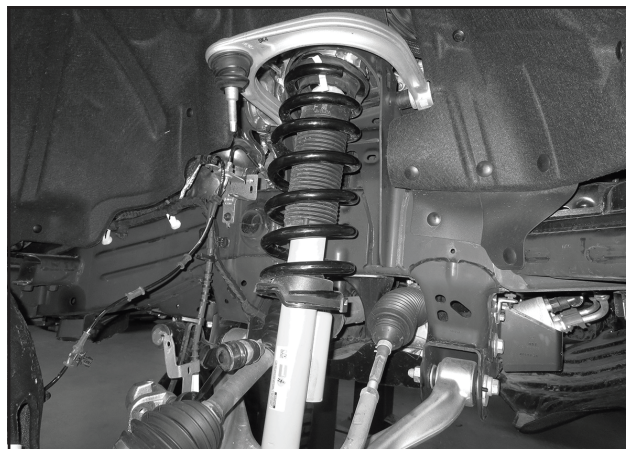


FIGURE 14 - STEP 14

15. 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.**
16. Install the CV axle nut using a 35mm socket. Torque to 249 ft-lbs.
17. Reinstall both the ABS wire & brake line brackets to the knuckle using the factory hardware. Torque to 10 ft-lbs.
18. Reinstall the brake rotor and caliper. Torque caliper bolts to 148 ft-lbs.
19. Reinstall the tie rod into the knuckle using the factory nut. Torque to 32 ft-lbs.
20. **Repeat steps 2-20 on the opposite side of the vehicle.**
21. Reinstall the sway bar end link to the knuckle using the factory hardware. Torque to 32 ft-lbs.
22. 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.
23. Check front end alignment and set to factory specifications. Readjust headlights.
24. Recheck all bolts for proper torque. **RE-TORQUE ALL NUTS, BOLTS AND LUGS AFTER 50 MILES AND PERIODICALLY THEREAFTER UNTIL TORQUE VALUES ARE RETAINED.**
25. Recheck brake hoses, ABS wires and suspension parts for proper tire clearance while turning tires fully left to right.
26. 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.**

PRODUCT CARE/MAINTENANCE

- 1.** Make sure to regularly check the vehicle suspension and steering components for any signs of wear or damage. It is important to regularly check components for any signs of wear or damage like ball joints, tie rods, links, and bushings. Replace any worn or damaged components you find on these inspections.
- 2.** Inspect tires. Lifting your truck can put additional stress on your tires, so it is important to regularly check the tire pressure, tread depth and replace the tires when necessary.
- 3.** Make sure to have your vehicle aligned post install and regularly check as making changes to the suspension will affect the alignment, which can lead to uneven tire wear and handling issues.

WARRANTY INFORMATION

Limited-Lifetime Warranty:

TrailFX and Keystone Automotive Operations Inc. make no guarantees or warranties for products not manufactured by Keystone Automotive Operations Inc. Such products are covered solely under any applicable warranty of the manufacturer. It is always recommended that the operating instructions and warranty instructions provided by the manufacturer are followed.

The Limited-Lifetime Warranty excludes the following TrailFX 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.

Keystone Automotive Operations Inc. warrants its products to be free from manufacturing and material defects to the original purchaser for the length of warranty stated above from the date of retail purchase. If any products are found to have a manufacturing or material defect, the product will be replaced or repaired at the option of TrailFX and Keystone Automotive Operations Inc. with proof of purchase by the original purchaser. The original purchaser shall pay all transportation and shipping costs associated with the return of the defective product and the defective product shall become the property of Keystone Automotive Operations Inc.

This Warranty applies to Keystone Automotive Operations Inc. products used for individual and recreational purposes. Commercial usage of the Keystone Automotive Operations Inc. products limits the warranty to 90 days from the date of purchase.

This Warranty applies only to Keystone Automotive Operations Inc. products which are found to be defective in manufacturing or material. This warranty does not apply to normal wear and tear of the finish placed on Keystone Automotive Operations Inc. products.

TrailFX and Keystone Automotive Operations Inc. are not responsible for any labor costs incurred for removal or replacement of the defective product.

TrailFX and Keystone Automotive Operations Inc. are not responsible for repair or replacement of any product under the limited warranty where the product was improperly installed, misapplied, altered, abused, neglected, overloaded, misused, or damaged as a result of an accident, including any use of the product not in accordance with all products operating and safety instructions.

Without limiting the generality of the foregoing, TrailFX and Keystone Automotive Operations Inc. shall under no circumstances be liable for any incidental or consequential loss or damage whatsoever arising out of, or in any way relating to any such breach of warranty or claimed defect in, or non-performance of the products. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply to you.

This limited warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

CONTACT US

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