

## **FORD 2022-23 F150 LIGHTNING**

## Thank you for choosing Rough Country for all your suspension needs.

Rough Country recommends a certified technician install this system. In addition to these instructions, professional knowledge of disassemble/reassembly procedures as well as post installation checks must be known. Attempts to install this system without this knowledge and expertise may jeopardize the integrity and/or operating safety of the vehicle.

Please read instructions before beginning installation. Check the kit hardware against the parts list on the next page. Be sure you have all needed parts and know where they go. Also please review tools needed list and make sure you have the needed tools.

## PRODUCT USE INFORMATION

AWARNING
As a general rule, the taller a vehicle is, the easier it will roll. Seat belts and shoulder harnesses should be worn at all times. Avoid situations where a side rollover may occur.

Generally, braking performance and capability are decreased when larger/heavier tires and wheels are used. Take this into consideration while driving. Do not add, alter, or fabricate any factory or after-market parts to increase vehicle height over the intended height of the Rough Country product purchased. Mixing component brands is not recommended.

Rough Country makes no claims regarding lifting devices and excludes any and all implied claims. We will not be responsible for any product that is altered. If questions exist we will be happy to answer any questions concerning the design, function, and correct use of our products.

This suspension system was developed using a 275/60/18 tire with factory wheels. **Note** if wider tires are used, offset wheels will be required and trimming will be required.

This vehicle will require the EPAS (Electronic Power Assist Steering) plugs to be disconnected prior to beginning installation of this kit. See installation instructions. Failure to disconnect these plugs may result in damage to the EPAS module resulting in an error message being displayed, which will require replacement of the EPAS module.

## **DEALER AND VEHICLE OWNER**

Any vehicle equipped with any Rough Country product should have a "Warning to Driver" decal instance of the windshield or on the vehicle's dash. The decal should act as a constant reminder for whoever is operating the vehicle of its unique handling characteristics.

INSTALLING DEALER - it is your responsibility to install the warning decal and forward these installation instructions on to the vehicle owner for review. These instructions should be kept in the vehicle for its service life.

Note to installer: Before installation begins we recommend that a test drive be performed. While drivuncommon sounds and/or vibrations. What you feel and hear during the test drive will only magnify once lift kit is installed. Advise you to discuss possible issues identified from drive with customer before proceeding to install this kit.



## **KIT CONTENTS**

2 - Rear Spring Seat

4 - Front Strut Shims

# HARDWARE INCLUDED 6 - 3/8" Flat Washer

6 - 10mm Lock Nut

Tools Needed 15mm Wrench 15mm Socket 17mm Wrench 29mm Socket 1 1/16" Wrench 21mm Wrench 16 mm Wrench 21 mm Wrench 3/8" mm Wrench 9/16" Wrench 9/16" Socket 17mm Socket Hammer Floor Jack Jack Stands 18mm Socket Torque Wrench

## **Torque Specs:**

Size 5/16" 3/8" 7/16" 1/2" 9/16"	Grade 5 15 ft/lbs 30 ft/lbs 45 ft/lbs 65 ft/lbs 95 ft/lbs	Grade 8 20 ft/lbs 35 ft/lbs 60 ft/lbs 90 ft/lbs 130 ft/lbs
5/8" 3/4"	135 ft/lbs 185 ft/lbs	175 ft/lbs 280 ft/lbs
	Class 8.8	Class 10.9
12MM	55ft/lbs	75ft/lbs
14MM	85ft/lbs	120ft/lbs
16MM	130ft/lbs	165ft/lbs
18MM	170ft/lbs	240ft/lbs





## FRONT INSTALLATION INSTRUCTIONS

- 1. Jack up the front of the vehicle and support the vehicle with jack stands, so that the front wheels are off the ground. Next, remove the front tires/wheels, using a 21mm deep well socket.
- 2. Using a 15mm socket remove the front skid, if the truck is equipped with a full front skid.
- 3. Remove the EPAS (Electronic Power Assist Steering) Plugs as shown located on the steering assembly by the front differential. See Photo 1 & 2. This must be done BEFORE installation is started.





- 4. Using a 21mm wrench remove the nut from the tie rod on the knuckle. Using the appropriate tool, remove the tie rod from the knuckle. Push linkage forward to make room for installation. Retain factory hardware. **See Photo 3**.
- 5. Using a 8mm socket remove the ABS bracket from the knuckle and also remove the brake line bracket with a 10mm socket. **See Photo 4.**





- 6. Next remove the caliper bolts with a 18mm socket as shown in **Photo 5** and the dust shield bolts with a 8mm socket. Remove the ABS wire from the knuckle with a 5mm Allen wrench.
- Use a pair of pliers to pull off the axle dust cap and remove the axle nut with a 34mm socket. See Photo 6.





- 8. Remove the sway bar nut using a 18mm wrench. Retain factory hardware.
- 9. Using a 21mm wrench and a 1 1/16" socket loosen the lower control arm bolts. Do not remove the bolts just loosen them so you can later swing the lower control arm down.



10. Place jack stand under the knuckle for support. Remove upper control arm nut, using a 18mm wrench. Using the appropriate tool remove the ball joint to separate from the upper control arm. Do not allow the knuckle to pull out far enough that it pulls the shaft out of the differential. \*\*Note\*\* Use caution when removing the CV axle from the knuckle. Damage to CV actuator seal will affect 4wd operation. See Photo 7.

11. Use a 18mm socket to remove the lower strut nuts from the bottom of the control arm. See Photo 8. Retain factory hardware.





- 12. Using a 17mm wrench, remove the nuts on the upper strut tower that holds the assembly in place. See Photo 9.
- 13. Lower the jack to let the lower control arm and knuckle swing down so the strut can be removed.
- 14. Push CV axle inward allowing the knuckle to pivot outward to allow for more clearance to remove the strut. Remove the strut. See Photo 10.





- 14. Place two of the supplied shims on top of the strut. See Photo 11.
- 15. Install strut using the supplied 10mm lock nuts. Tighten with a 17mm wrench. See Photo 12.
- 16. Reinstall remaining components using factory hardware in reverse order of disassembly.
- 17. Reinstall front wheels and lower vehicle to the ground.



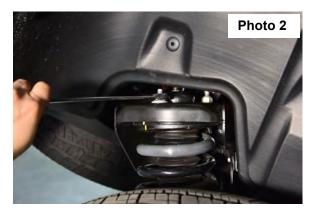




### REAR INSTALLATION INSTRUCTIONS

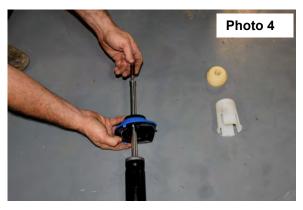
- 1. Jack up the rear of the vehicle and support the vehicle with jack stands, so that the rear wheels are off the ground. Next, remove the rear tires/wheels, using a 21mm deep well socket.
- 2. Remove lower strut bolt using a 24mm wrench and socket. Retain hardware for reuse. See Photo 1
- 3. Remove the factory upper strut nuts using a 17mm wrench. Retain hardware for reuse. See Photo 2.



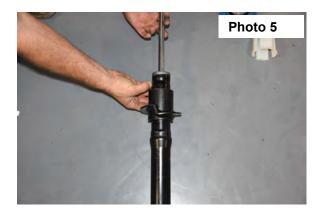


- 4. Remove rear strut from vehicle and place the strut in a spring compressor. Compress the spring and use a 15mm socket to remove the top hat nut. Retain hardware for reuse. Remove the shock from the assembly. See Photo 3.
- 5. Remove the spring isolator and factory spring seat. See Photo 4.





- Install supplied rear spring seat on the factory shock. See Photo 5.
- 7. Reassemble strut using the factory hardware. Tighten top strut hat with a 15mm socket. See Photo 6.
- 8. Reinstall strut assembly using factory hardware in reverse order of disassembly.
- 9. Reinstall strut using factory hardware in reverse order of disassembly.
- 10. Install wheels and lower vehicle.







## **POST INSTALLATION INSTRUCTIONS**

- 1. Check all fasteners for proper torque. Check to ensure there is adequate clearance between all rotating, mobile, fixed and heated members. Check steering gear for interference and proper working order. Test brake system
- 2. Perform steering sweep. Check to ensure brake hoses have sufficient slack and will not contact rotating, mobile, or fixed members, adjust lines/brackets to eliminate interference and maintain proper working order. Failure to perform inspections may result in component failure
- 3. Readjust headlights to factory settings
- 4. Have vehicle aligned by a certified alignment professional.
- 5. All components must be retightened after 500 miles, and every three thousand miles after installation



By purchasing any item sold by Rough Country, LLC, the buyer expressly warrants that he/she is in compliance with all applicable Federal, State, and Local laws and regulations regarding the purchase, ownership, and use of the item. It shall be the buyers responsibility to comply with all Federal, State and Local laws governing the sales of any items listed, illustrated or sold. The buyer expressly agrees to indemnify and hold harmless Rough Country, LLC for all claims resulting directly or indirectly from the purchase, ownership, or use of the items.