Rough Country 470.20 Installation Instructions

6-Inch Lift Kit with N3 Shocks for Ford Bronco/F-150 4WD (1980-1996)

Part number: 470.20

trailfortress.com/rough-country-6-inch-lift-kit-470-20

Scan for fitment, price and install help



80-96 F150 4”-6” LIFT KIT INSTRUCTIONS

Rough Country recommends this system be installed by a certified technician. 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 and kit content on the back page of these instructions. Be sure you have all needed parts and know where they go.

With the installation of all lift kits and larger tires it is important to check the condition of your steering stabilizer. If the stabilizer is worn or leaking it should be replaced. Steering stabilizers are designed to restrain ñbump steeringò and front end vibration, giving added life to tires, ball joints, and other steering components. A multiple stabilizer kit is recommended for vehicles equipped with a snow plow, winch, or larger tires

PRODUCT USE INFORMATION

As a general rule, the taller a vehicle is, the easier it will roll. Offset, as much as possible, what is lost in rollover resistance by increasing tire track width. In other words, go "wide" as you go "tall." Many sportsmen remove their mud tires after hunting season and install ones more appropriate for street driving; always use as wide a tire and wheel combination as possible to enhance vehicle stability.

We strongly recommend, because of rollover possibility, that the vehicle be equipped with a functional roll-bar and cage system. 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 significantly 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. Most states have some type of law limiting vehicle height. The amount of lift allowed, and how the lift may be achieved, varies greatly. It is the ownerôs responsibility to check state and local laws to ensure that their vehicle will be in compliance. The installation time for this system is approximately 8 hours.

This suspension system was developed using a 33x 12.50x 15ò tire, on an 8ò wheel with a 3 5/8ò backspacing. Before installing other combinations, please consult your local tire and wheel specialist.

The following tools and supplies are recommended for proper installation of this kit

Tools Needed

Spring Compressor	21mm Wrench	22mm Socket
21mm Socket	19mm Socket	22mm Wrench
34mm Socket	1 1/8ò Wrench	19mm Wrench
13mm Socket	12mm Socket	Pitman Arm Puller
16mm Socket	14mm Wrench	7/16ò Drill Bit

If questions exist we will be happy to answer any questions concerning the design, function, and correct use of our products.

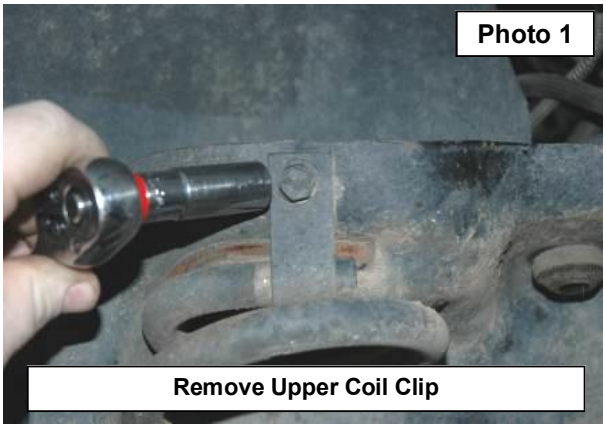
NOTICE TO DEALER AND VEHICLE OWNER

Any vehicle equipped with any Rough Country product should have a ñWarning to Driverò decal installed on the inside of the windshield or on the vehicleôs 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

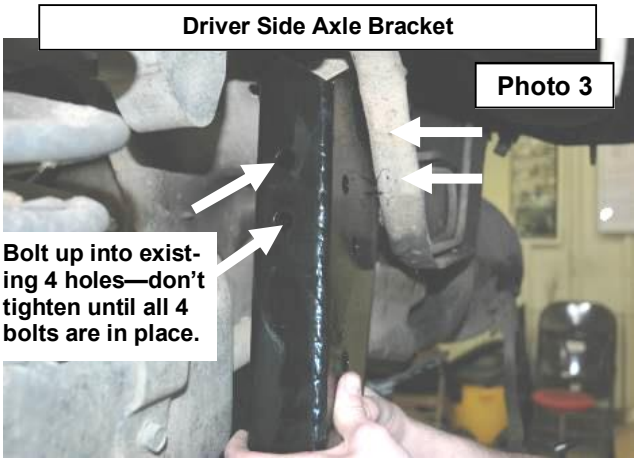
INSTALLATION INSTRUCTIONS

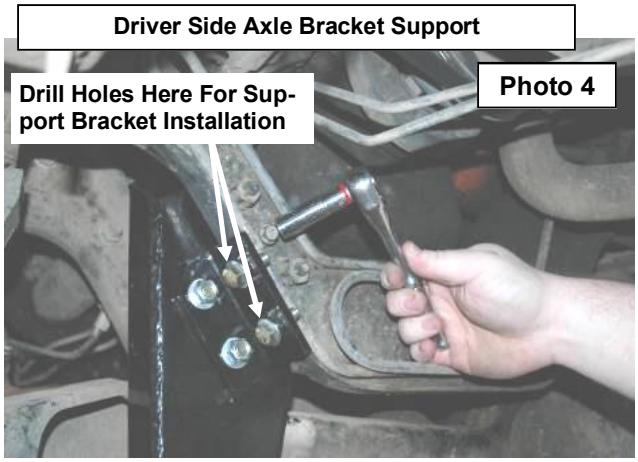
1. Place the vehicle on a level surface. Set the parking brake. Center front wheels and chock rear wheels. Place a floor jack under the outer ends of both axle halves and evenly raise vehicle approximately 12". Place jack stands under frame rails approximately 4" behind radius arm brackets. Ease vehicle down onto stands. Continue down with jacks until there is only a slight load on the coil springs.
2. If vehicle is equipped with anti-sway bar, disconnect drop-links at the attaching points. Bar relocation is performed in a later step and with separate instructions in kit #1018. (6òlifts must have a sway bar drop down bracket kit.)
3. Remove front tires and wheels.
4. Using a 14 mm wrench remove the nut from the top of the factory shock. Using a 19mm socket and wrench If longer brake hoses are being used, disconnect the stock rubber hoses where they connect to the metal lines at the frame rails. A piece of rubber tubing routed from the metal lines to a catch pan will eliminate a fluid mess. New hoses are installed in a later step. If the stock rubber units are retained, they must be in good condition; check for chafed spots, cracks and dry rot.
5. Using a 13mm wrench remove the coil clip from the top of the coil seat. Retain clip and hardware for later use. **See Photo 1.**
6. Using a 1 1/8òwrench remove the nut on the lower coil seat. **See Photo 2.** Retain nut for later use.



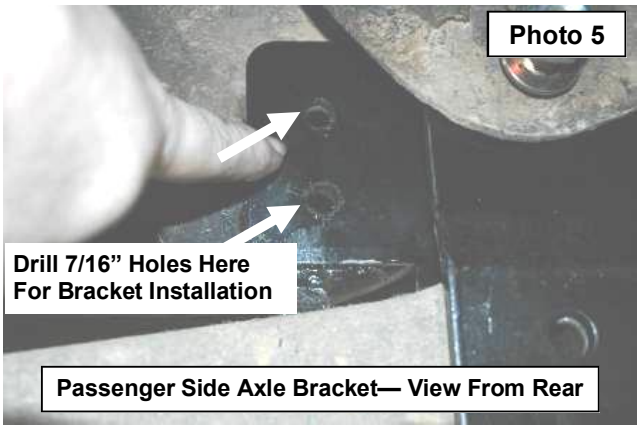


7. Install a coil spring compressor on the coil and compress enough to remove the coil spring.
8. Using a 1 1/8òwrench remove the nut from the end of the radius arm and remove stock bushings. Retain the hardware for later use.
9. Some Ford trucks come from the factory with the radius arms, and I-beam brackets riveted on. If your truck has rivets you can use an air hammer, or torch to remove the rivets. If a torch is used to remove the rivets, take care not to damage any wiring/hoses routed inside the frame rails. Supporting I beam, remove the radius arm drop brackets from the vehicle, and discard.
10. Remove both axle eye pivot bolts. Detach the pivot bracket for the driverôs side axle cross member.
11. Loosely attach the axle pivot bracket for the driverôs side axle using the supplied mounting hardware. Bolt up to the 4 existing holes before tightening. **See Photo 3**.Using a 16mm socket and a 17mm wrench torque to 60-75 ft. lbs. Attach the side support bracket with the supplied 7/16òbolts and hardware so it firmly against frame flange. Drill two 7/16òholes at existing holes in bracket, through the cross member lip. Install furnished 7/16òbolts, and locking nuts, flat washers are not required. **See Photo 4.** Reinstall stock axle bolt through appropriate hole, 4òtop hole, 6òbottom hole. Torque bolts to 60-75ft. lbs.

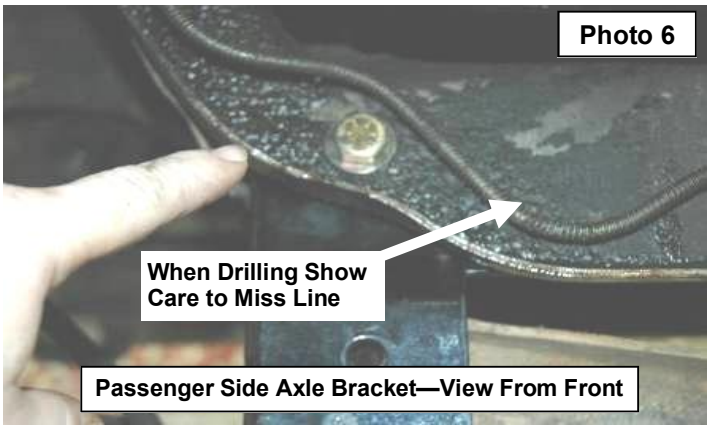




12. Detach the pivot bracket from the passengers side cross member. Using 21mm socket and 22mm wrench install the new axle pivot bracket for the passengers side. Attach bracket to cross member with furnished 9/16òx 1òbolt, washers, and locknuts. Torque to 100 ft. lbs. **IMPORTANT** Be sure that the axle pivots are vertically aligned. Drill two 7/16òholes through the cross member and the new bracket. Using a 16mm socket, and a 17mm wrench install the 7/16òbolts, washers, and lock nuts. **See Photo 5 & 6**. Reinstall the stock axle bolt through the appropriate hole 4ò for the top hole, and 6òfor the bottom hole. Torque to 60-75 ft. lbs.

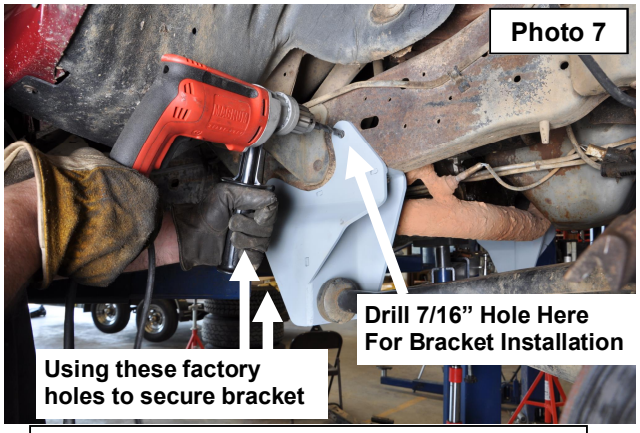


Passenger Side Axle Bracket— View From Rear

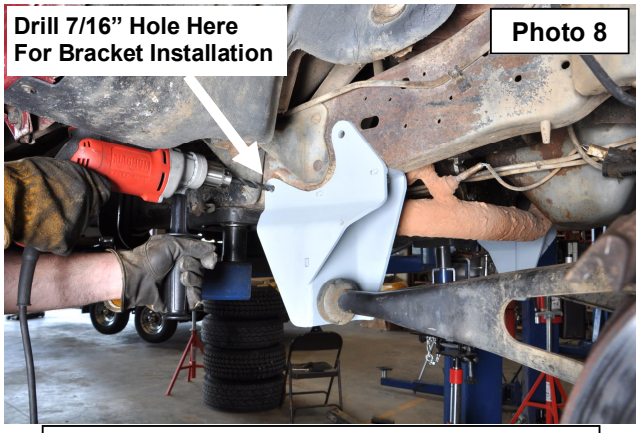


Passenger Side Axle Bracket—View From Front

13. Using a 16mm socket, and a 17mm wrench, the new radius arm lowering brackets are installed with furnished 7/16" bolts, locknuts and flat washers. The factory nylon radius arm bushing rings, mounted directly against the rear face of the stock stamped steel radius arm brackets, **are not reused**. The replacement brackets design allows you to discard these pieces that are prone to fail. On 1980 and some 1981 models, all but one bracket-to-frame hole must be drilled. Match the rear hole of the new bracket to the rear frame hole on the bottom of rail. Drill all other holes. Be wary of wiring/hoses routed inside of the frame rails. Inspect radius arm bushings for cracks, dry rot and deformities. Torque radius arm bushing nuts to 80-100 ft. lbs. **See Photo 7 & 8.**



Radius Arm Bracket Installation



Radius Arm Bracket Installation

14. Install new coil spring. When lowering the axles for spring installation, take care not to overextend the factory rubber brake hoses. Using a 13mm socket reinstall the spring clip and torque to 13-18 ft. lbs. Using a 1 1/8òwrench reinstall lower nut and torque to 50-70 ft. lbs. On some vehicles factory equipped with dual front shocks, keep the bottom of the coil pulled as far rearward as possible to gain clearance between coil and front shock.
15. Repeat procedure on passenger side
16. Install Pitman Arm per their separate instructions. Attach drag link to pitman arm nut and install cotter pin.
17. On vehicles factory equipped with front anti-sway bar, install relocating hardware (purchased separately, see SEPARATE INSTRUCTIONS). This is also a good opportunity to replace worn factory rubber bushings.
18. Reinstall wheels and tires.
19. Remove jack stands and lower vehicle to the ground. If vehicle is equipped with a front sway bar, relocation brackets are required if you are installing a 6òlift. Install these now per separate instructions.
20. Check all fasteners to be sure they are properly tightened.
21. Install warning to driver sticker on sun visor.

Note—It is not unusual to have a camber issue (the top of the tires lean outward) and a toe issue (tires pointed in) when this kit is first installed and has not been driven or aligned. When aligned a new caster/camber bushing may be needed to achieve proper caster and camber angles.

22. Have a qualified alignment center realign front end. Toe-in must be reset. Caster angle was kept intact by the radius arm lowering brackets, and is non-adjustable. Set camber angle at ¾º to 1º degree positive with preferably the driver side 1/8º to ¼º more positive than the passenger side. The extra driver side caster improves drivability, especially on high-crowned driving surfaces. When the springs settle (after 100miles or so) caster will read the preferred ¼º to ½º positive.
23. Wheels must be retightened at 50 miles.



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. Bump stops and extensions must be in place on all vehicles! Note: Allowing suspension to over extend by neglecting to install or maintain stops and extensions may cause serious damage to factory components.
4. Re torque all fasteners after 500 miles. Visually inspect components and re torque fasteners during routine vehicle service.

MAINTENANCE INFORMATION

It is the ultimate buyer's responsibility to have the bolts/nuts checked for tightness after the first 100 miles and then every 1000 miles. Wheel alignment, steering system, suspension, and driveline systems, must be inspected by a quali-