

## 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 last page. Be sure you have all needed parts and know where they go. Also please review tools needed list and make sure you have needed tools.

#### **PRODUCT USE INFORMATION**

As a general rule, the taller a vehicle is, the easier it will roll. 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 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 question exist we will be happy to answer any questions concerning the design, function, and correct use of our products.

The lift was designed as a leveling kit. It provides 2.5" of lift to the front of the vehicle, if you want to lift the rear of your Frontier contact your nearest Rough Country distributor. The largest recommended tire size when using this kit is a 285/75R 16 on stock wheels. If wider tires are desired or wheels with something other than factory offset please consult a tire and wheel expert to confirm fit.

## NOTICE TO DEALER AND VEHICLE OWNER

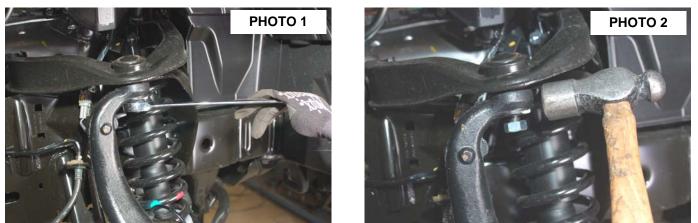
Any vehicle equipped with any Rough Country product should have a "Warning to Driver" decal installed on the inside of the windshield or on the vehicle's dash. The decal should act as a constant reminder for whoever is operating the vehicle of its unique handling characteristics.

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

Kit Contents:	Tools Needed:	Torque Specs			
		Size	Grade	5	Grade 8
2-Front Strut Extensions	19 mm Socket	5/16"	15 ft/lbs		20 ft/lbs
1-Kit Bag that includes	Needle Nose Pliers	3/8"	30 ft/lbs		35 ft/lbs
6-3/8" studs	22 mm Socket	7/16"	45 ft/lb	60 ft/lbs	
2-3/8" nuts	Hammer	1/2"	65 ft/lbs		90 ft/lbs
2-cotter pins	17 mm Wrench	9/16"	95 ft/lbs		130 ft/lbs
	14 mm Socket	5/8"	135 ft/lbs		175 ft/lbs
	19 mm Wrench	3/4"	185 ft/lbs		280 ft/lbs
		ММ	8.8	10.9	12.9
		10MM	32ft/lbs.	45ft/lb	50ft/lbs

## INSTALLATION INSTRUCTIONS

- 1. Chock the rear wheels. Jack up the front of the vehicle using a floor jack and place jack stands under the frame rails. Lower onto jack stands.
- 2. Remove the front wheels/tires.



- 3. Remove the upper ball joint cotter pin and the upper ball joint nut using a 22mm wrench. Hit knuckle as shown to release the upper ball joint, See PHOTO 1 & 2.
- Remove the 3 upper strut bolts that secure the strut to the upper mount using a 19mm wrench as shown in PHOTO
  Retain the hardware for reuse.





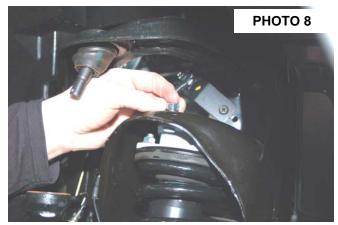
- 5. Remove the sway bar from the sway bar link using a 17mm wrench. **See PHOTO 4.**
- 6. Remove the lower strut bolt from the strut using a 19mm wrench. See PHOTO 5.
- 7. Remove the strut from the vehicle.
- 8. Locate the supplied 3/8" stud extensions. Using a 9/16" socket snug self clinching stud in the new spacer as shown in **Photo 6. The stud should clinch with about 35-45 ft/lbs of torque. Do not over torque the nut.**





- 9. Install the new spacer on the strut assembly as shown in **PHOTO 7** with factory hardware and using a 14mm wrench.
- 10. Install the strut and spacer assembly in the upper strut mount and secure with supplied 3/8" nuts and lock washers See PHOTO 8.





- Reinstall the lower strut bolt using a 19mm wrench as removed in step 6.
  Reinstall the sway bar on the sway bar links using a 17mm wench.
- 13. Reinstall the front tires/wheels.

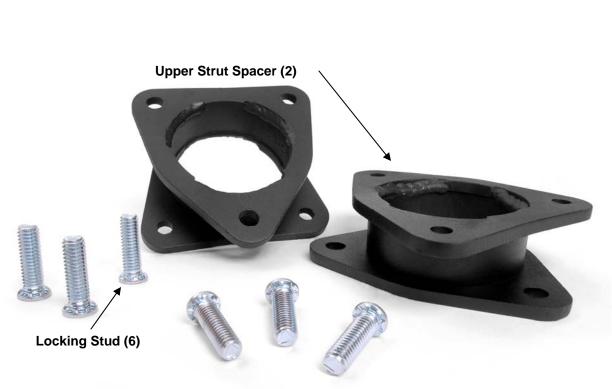


#### **POST INSTALATION**

- 1. Check all fasteners for proper torque. Check to ensure there is adequate clearance between all rotating, mobile, fixed and heated members. Check steering for interference and proper working order. Test brake system.
- Perform steering sweep. The distance between the tire sidewall and the brake hose must be checked closely. Cycle the steering from full turn to full turn to check for clearance. Failure to perform inspections may result in component failure.
- 3. Using an certified alignment professional with experience in aligning lifted vehicles, get an alignment done to factory specifications.
- 4. Re torque all fasteners after 500 miles. Visually inspect components and re torque fasteners during routine vehicle service.
- 5. Readjust headlights to proper settings.

## **MAINTENANCE INFORMATION**

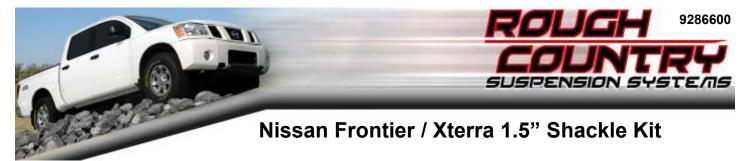
It is the ultimate buyers responsibility to have all bolts/nuts checked for tightness after the first 500 miles and then every 1000 miles. Wheel alignment steering system, suspension and driveline systems must be inspected by a qualified professional mechanic at least every 3000 miles



Locking Washer (6) Not Shown Nut (6) - Not shown



## **KIT CONTENT**



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The shackle kit was designed to provide 1.5" of lift to the rear of the vehicle.

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#### **Kit Contents:**

2-Inside shackle plates (Offset) 2-Outside shackle plates (Straight) 1-866Bag1 2-Frame Sleeves

2-Spring Sleeves 2-Spring Sleeves 2-1/2" x 4.5" Bolts 2-1/2" x 5.5 Bolts 8-1/2" Washers 4-1/2" Lock Nuts



## **Installation Instructions**

- 1. Park the vehicle on a level surface and block the front wheels for safety. Raise the rear of the vehicle and place the frame on jack stands.
- 2. Lower the rear axle until there is no pressure on the leaf springs but do not remove the jack from under the axle.
- 3. Remove the nuts shackle bolts on the driver side using a 17mm socket. Then pull the shackle out of the frame and spring eye. See Photo 1.
- 4. Lightly grease the outside of the frame and spring eye sleeve and slide them into place. Assemble the shackle with the flat plate on the outside and the offset plate on the inside. Use the supplied 1/2" x 5.5" bolt, washer and nut on the frame and use the 1/2" x 4.5" bolt, washer and nut on the spring eye. Hand tighten until the vehicle is on the ground. See Photo 2.





- 5. Repeat steps on the passenger side.
- 6. Raise the rear of the truck and remove jack stands, then lower the truck to the ground.
- 7. Tighten the shackles with a 3/4" socket and wrench.

# Post Installation

- 1. Check all fasteners for proper torque. Check to ensure there is adequate clearance between all rotating, mobile, fixed and heated members. Check steering for interference and proper working order. Test brake system.
- Perform steering sweep. The distance between the tire sidewall and the brake hose must be checked closely. Cycle the steering from full turn to full turn to check for clearance. Failure to perform inspections may result in component failure.
- 3. Re torque all fasteners after 500 miles. Visually inspect components and re torque fasteners during routine vehicle service.
- 4. Readjust headlights to proper settings.

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