

ROUGH COUNTRY

SUSPENSION SYSTEMS



83600BAG1

Nissan 2016- 2017 Titan XD 3" Suspension Kit

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. Be sure you have all needed parts and know where they go. Also please review the tool list and make sure you have the necessary tools to install the kit.

PRODUCT USE INFORMATION

▲WARNING As a general rule, the taller a vehicle is, the easier it will roll. We strongly recommend, because of roll-over possibility, that seat belts and shoulder harnesses should be worn at all times. Avoid situations where a side roll-over 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. 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 **285/55R20 or 275/65R20** tire 20x8 wheels with +18 offset.

▲NOTICE 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. 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.

▲NOTICE Note to installer : Before installation begins we recommend that a test drive be performed. While driving check for uncommon 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.

Tools Needed:

19 mm Socket
13/16" Socket
22 mm Socket
Hammer
17 mm Wrench
14 mm Socket
18mm Wrench
19 mm Wrench
Torque Wrench
Grease Gun
Grease

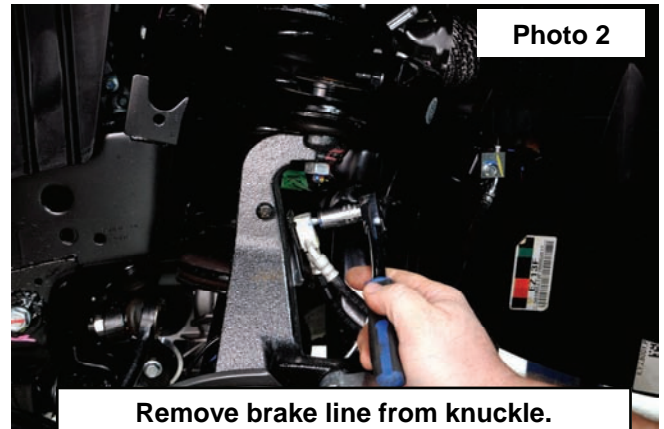
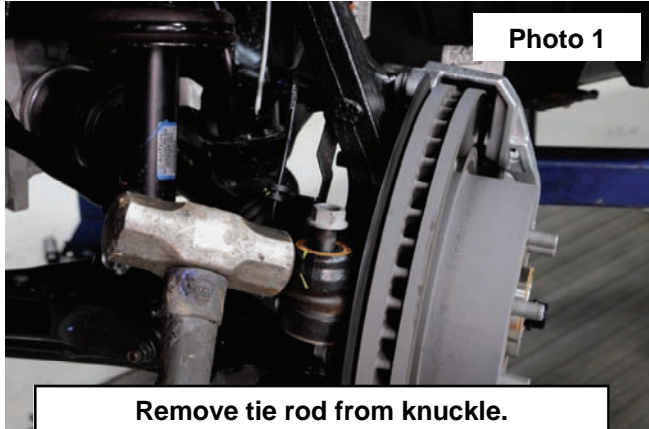
Torque Specs:

Size	Grade 5	Grade 8
5/16"	15 ft/lbs	20 ft/lbs
3/8"	30 ft/lbs	35 ft/lbs
9/16"	95 ft/lbs	130 ft/lbs
5/8"	135 ft/lbs	175 ft/lbs
3/4"	185 ft/lbs	280 ft/lbs
	Class 8.8	Class 10.9
10MM	32ft/lbs	45ft/lbs
12MM	55ft/lbs	75ft/lbs
14MM	85ft/lbs	120ft/lbs
16MM	130ft/lbs	165ft/lbs
18MM	170ft/lbs	240ft/lbs

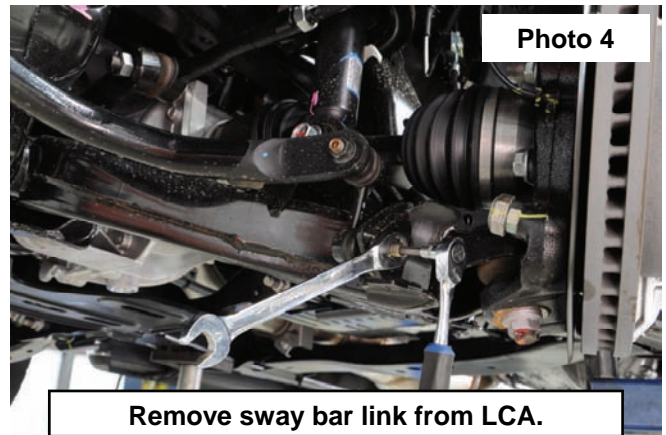
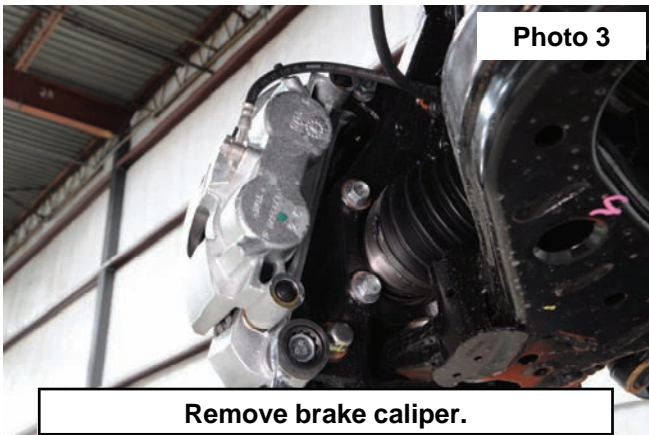


INSTALLATION INSTRUCTIONS

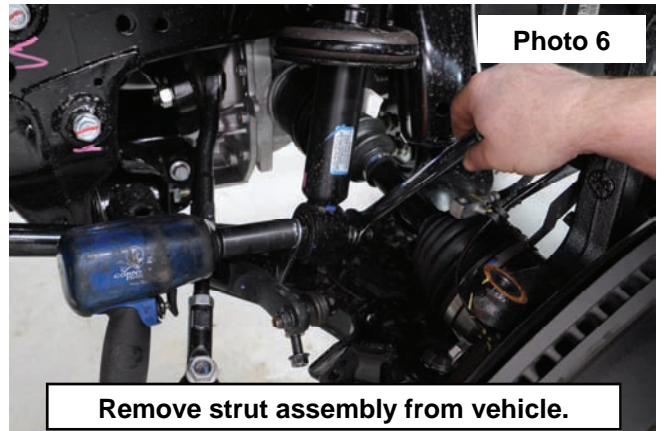
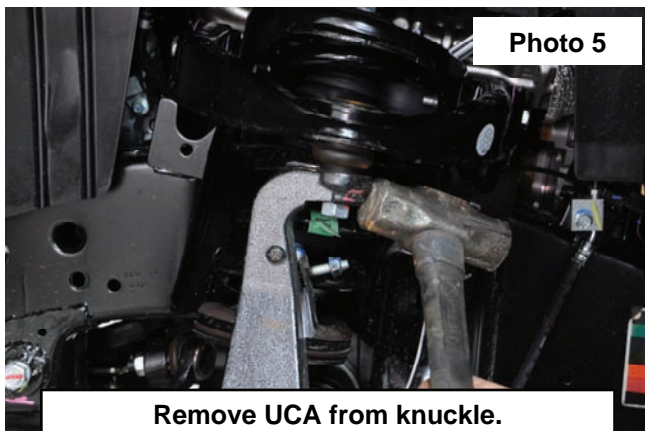
1. Jack up the front of the vehicle and support the vehicle with jack stands, so that the front wheels are off the ground
2. Using 13/16" socket remove the front tires/wheels.
3. Remove cotter pin. Then, using a 22mm wrench, remove the nut from the steering linkage. Using a hammer hit on the side of the knuckle as shown, and remove the linkage from the knuckle. Push linkage forward to make room for installation. Retain factory hardware. **See Photo 1.**
4. Using a 13mm socket, remove the nut holding the brake line bracket from the knuckle. **See Photo 2.**



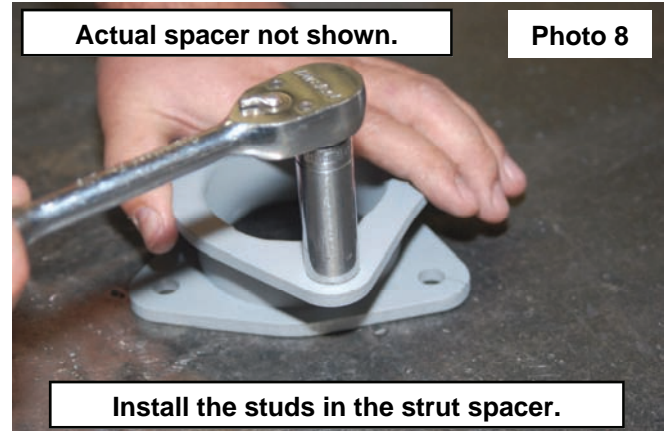
5. Using a 24mm wrench, remove the brake caliper bolts. Remove the caliper and hang out of the way. **See Photo 3.** **Never hang the brake caliper by the brake line.**
6. Using a 17mm wrench and 6mm allen, remove the sway bar link from the lower control arm. **See Photo 4.**



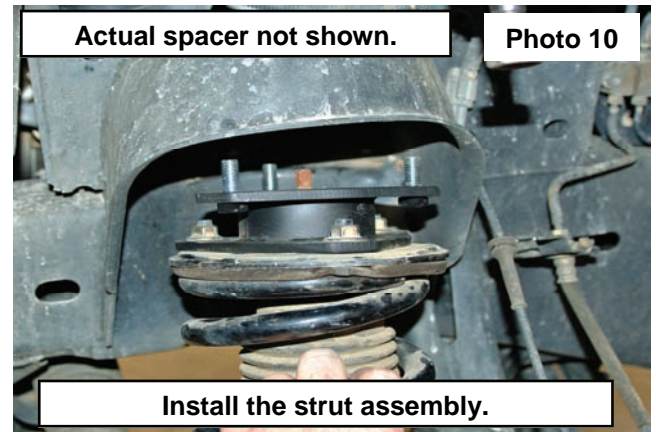
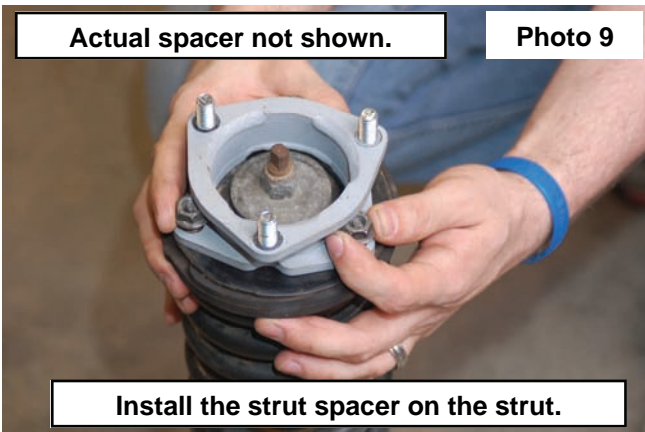
7. Remove cotter pin. Then, using a 22mm wrench, loosen the nut on the upper ball joint. Using a hammer hit on the side of the knuckle as shown, and remove the knuckle from the upper ball joint. Retain factory hardware. **See Photo 5.**
8. Using a 22mm socket and wrench, remove the lower strut bolt. **See Photo 6.**



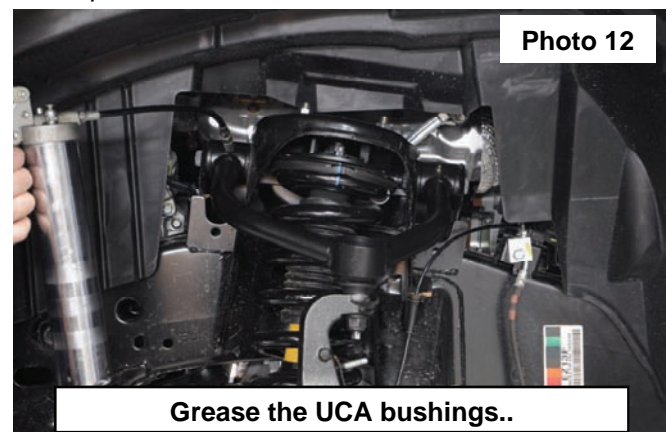
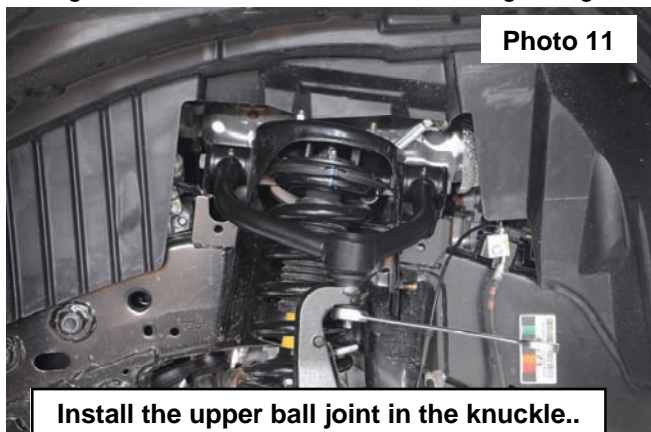
9. Assemble the upper control arm bushings, sleeves, and grease fittings (83600Bag2) into the upper control arms.
10. Install the control arms in the factory location with the factory hardware. **See Photo 7.** Do not tighten at this time.
11. Locate the supplied 10mm stud extensions (10MMSTUDBAG-1). Using a 17mm socket snug self clinching stud in the new spacer as shown in **Photo 8.**



12. Install the new strut spacer on the strut using factory hardware and a 14mm wrench. **See Photo 9.**
13. Install the strut assembly into the strut tower and secure with the supplied 10mm nuts & lock washers. Tighten using a 17mm wrench. **See Photo 10.**



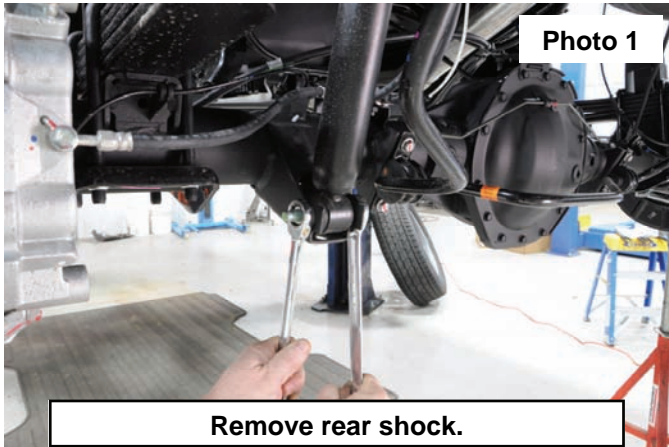
14. Install the lower strut bolt in the original position that it was removed. Torque to factory specs using a 19mm wrench.
15. Using a floor jack, raise the lower control arm to connect the ball joint on the upper control arm to the knuckle and tighten using a 22mm wrench. **See Photo 11.**
15. **Be sure to grease the upper control arm before use and check every 3000 miles. See Photo 12.**
16. Using a 22mm socket reinstall the steering linkage nut and cotter pin.



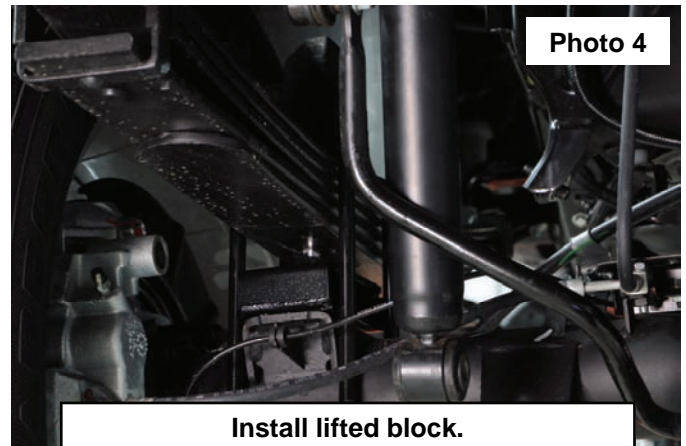
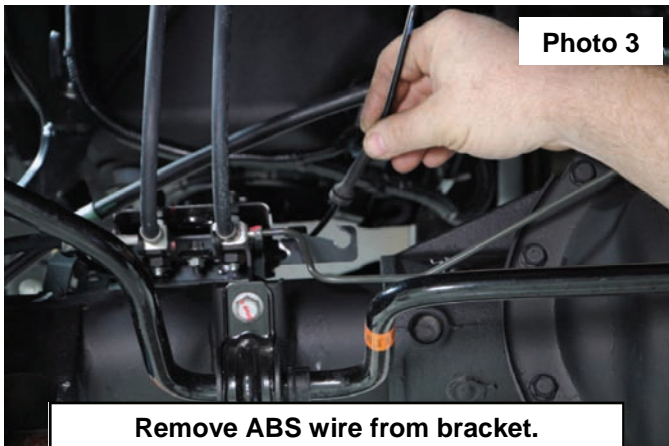
17. Repeat steps 3-16 on opposite side of vehicle.
18. Install the wheels / tires. Jack up the vehicle and remove the jack stands. Lower the vehicle to the ground and torque all bolts to factory specifications including upper control arms.

Rear Installation

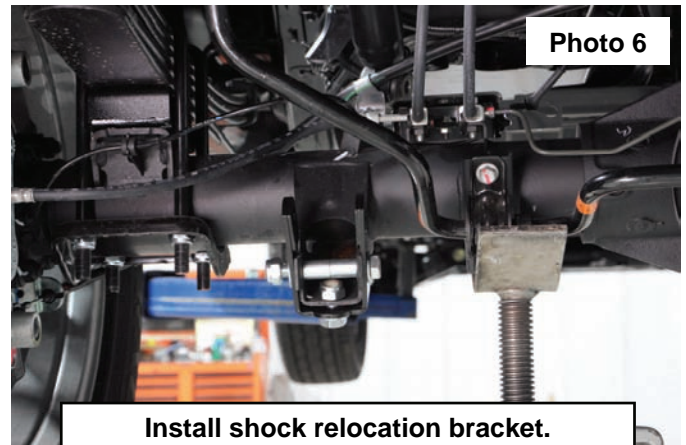
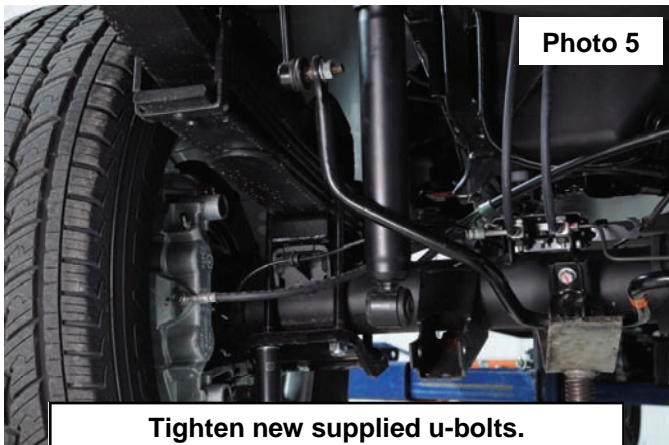
1. Chock the front wheels.
2. Jack up the rear of the vehicle and place jack stands underneath the frame rail.
3. Remove the tires and wheels.
4. Remove rear shocks using a 21mm, and 19mm wrench. Retain stock hardware for reuse. **See Photo 1.**
5. Using a 18mm wrench, remove the rear sway bar from the links. **See Photo 2.**



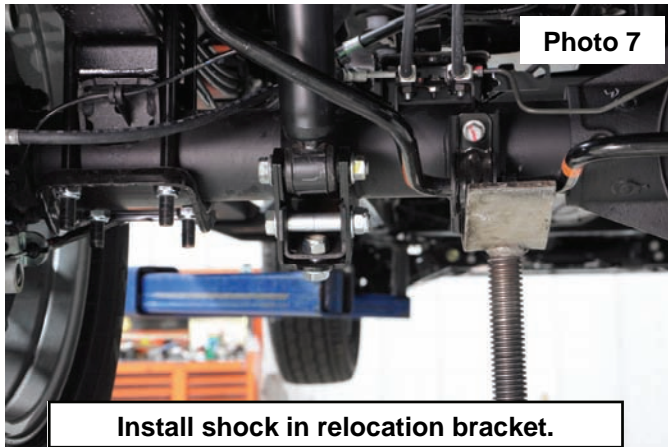
6. Support the rear axle with a jack.
7. Remove the ABS line from the bracket on the axle. **See Photo 3.**
8. Using a 19mm socket, remove the rear u-bolts.
9. Lower the axle and install the supplied 1.5" block with the center pin offset toward the front of the truck. **See Photo 4.**



10. Install supplied u-bolts and hardware. Tighten using a 7/8" socket. Torque to 90 ft-lbs. **See Photo 5.**
11. Push the supplied shock extension bracket on from the bottom. Install the supplied 14mm x 25mm bolt, nut and washer (868Bag2) into the bottom hole. Then install the sleeve into the bracket using the supplied 14mm 85mm bolt, nut and washer (868Bag2). **Do not tighten at this time. See Photo 6.**



12. Attach the rear shocks to the relocation brackets using the stock hardware. Tighten all shock and bracket hardware. **See Photos 7 & 8.**
13. Install the wheels and tires and lower the vehicle to the ground.



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.
2. 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.
5. Vehicle will have to have a front-end alignment.

KIT CONTENTS



Kit Contents:

- 2-Front Strut Extensions
- 1-Driver Side Control Arm
- 1-Pass Side Control Arm
- 1-868BAG2
- 1-10MMSTUDBAG
- 1-83600BAG2
- 1-9/16BAG
- 2-Rear Shock Extensions
- 2-Rear Blocks
- 4-Ubolts

10MMSTUDBAG:

- 6-10mm studs
- 6-10mm Nuts
- 6-10mm Lock Washers

868BAG2:

- 4-14mm x 85mm Bolts
- 4-14mm-2 Nylock Nuts
- 10-14mm Flat Washers
- 2-14mm x 25mm Bolts
- 2-14mm-1.5 Nylock Nuts
- 2-Sleeves

83600BAG2:

- 8-UCA Bushing Halves
- 4-UCA Sleeves
- 4-Grease Fittings

9/16BAG:

- 8-9/16 Nylock Nuts
- 8-9/16 Flat Washers

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.

