



## 99-06 TUNDRA 2.5" KIT

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

### 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.

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.

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

### 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:**

- 2-Front Strut Extensions
- 2-2" Rear Blocks
- 2-Rear Shock Absorbers
- 4-Rear U-bolts
- 1-Wiring Loom Bracket
- 1-Proportioning Valve Bracket
- 1-Kit Bag that includes
  - 6-3/8" studs
  - 6-3/8" nuts
  - 6-3/8" lock washers
  - 3-5/16" x 1" bolts
  - 3-lock nuts
- 1-Shock bag

#### **Tools Needed:**

- Assorted Metric wrenches
- Assorted Metric sockets
- Floor Jack
- Jack stands
- Hammer

## **INSTALLATION INSTRUCTIONS**

Completely read the instructions before beginning installation.

1. Jack up the front of the vehicle and secure the vehicle with jack stands on the frame rails. The front wheels will need to be slightly off the ground.
2. Remove the front wheels / tires.
3. Disconnect the sway bar end links on the lower control arms. Retain hardware.
4. Remove the nut and the cotter pin on the upper ball joint and separate the upper ball joint from the spindle, using the ball joint separator.
5. Remove the upper strut nuts on the strut tower (3) that holds the strut assembly to the upper frame mount. Retain hardware for reuse.
6. Remove the lower strut bolt from the lower control arm and retain hardware for reuse. Remove the strut assembly 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 1**. **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 and secure with factory hardware. **See Photo 2.**



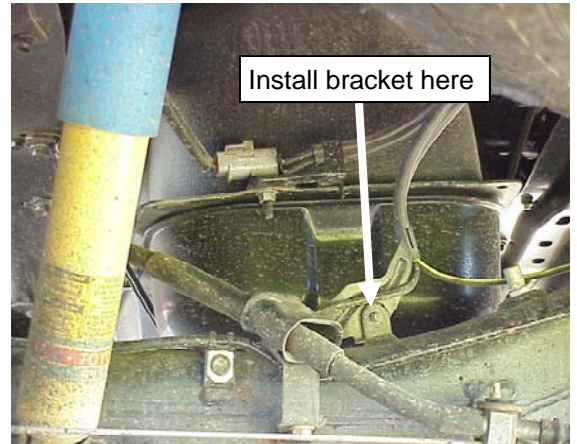
10. Align the bottom mount and reinstall the strut assembly on the vehicle using factory hardware..
11. Install the lower strut bolt in the order that it was removed.
12. Using the floor jack, raise the lower control arm and connect the upper ball joint on the upper control arm to the spindle. Tighten the ball joint nut per manufacturer specifications and install the cotter pin.
13. Repeat procedure for opposite side of the vehicle.
14. Reconnect the sway bar end links with factory hardware.
15. Install the front wheels / tires.
16. Jack up the vehicle to release the jack stands and remove the stands. Lower the vehicle to the ground and tighten the upper strut tower nuts. 3 on each side.

## **REAR INSTALLATION INSTRUCTIONS**

1. Block front tires and lift the rear of the vehicle until the wheels clear the ground approximately 3". Place jack stands under the frame rails behind the spring mount. Lower the vehicle onto jack stands while axle is supported by the floor jack.
2. Remove the lower spring bolts and remove the shock from the lower mount.
3. Remove the factory u-bolts and discard.
4. Lower the axle with the floor jack to allow enough room to install the blocks in between the axle and stock springs.
5. Install the new u-bolts supplied in the kit and tighten.
6. Do not install the wheels / tires on the vehicle at this time. Proceed to next section.

## **WIRING LOOM INSTRUCTIONS (OPTIONAL EQUIPMENT)**

1. This step is only necessary for vehicles equipped with a factory locking rear differential. If the vehicle is not equipped proceed to the next section for the brake valve bracket install.
2. Unbolt the bracket holding the wire loom for the locking differential to the axle housing. Looking from the rear of the vehicle, the loom is located to the left of the axle center-section.
3. The wire loom extension bracket is a small rectangular piece of flat plate with two holes in it. Attach one end of the bracket to the tab on the axle housing (where the loom was located) using the factory hardware.
4. Attach the wire loom to the other end of the new bracket using the supplied 5/16" x 3/4" bolt and lock nut. Tighten the bolts to 13 ft/lbs.



## **PROPORTIONING VALVE BRACKET**

1. Unbolt the brake proportioning valve assembly from the rear axle.
2. Position the proportional valve extension bracket as shown and secure to the axle using the factory hardware.
3. Attach the factory proportioning valve assembly to the extension bracket using the supplied 5/16" x 1" bolts and nyloc nuts. Torque to 13ft/lbs.
4. After install, reinstall the tires/wheels and reinstall the stock shock absorbers, unless new shocks were purchased. If so install at this time.
5. Jack up the rear and remove the jack stands and lower vehicle to the ground.



## **POST INSTALLATION INSTRUCTIONS**

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.

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.

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 OE and related components.

Visually inspect components and re torque fasteners during routine vehicle service.

## **MAINTENANCE INFORMATION**

It is the ultimate buyers responsibility to have all 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 qualified professional mechanic at least every 3000 miles.

