

#### **Installation Instructions**

For easy installation, you will need to:

- READ ALL the instructions completely before beginning.
- Have the necessary tools available

#### Tools required:

- 3/4" wrenches/sockets
- 1/2" wrenches/sockets
- 1 C-clamp

**SAFETY NOTICE**: WE RECOMMEND THAT THIS INSTALLATION BE DONE BY A PROFESSIONAL OR PERSONS WITH SOUND MECHANICAL KNOWLEDGE.

**WARNING:** These instructions are meant to be a general guide for installing SuperSprings. SuperSprings International assumes no liability for the actual installation process. Consumers should apply common automotive safety practices when raising and working on any vehicles. Do NOT put yourself in a position where if the vehicle should move unexpectedly, you may be seriously hurt. SuperSprings are designed to improve vehicle carrying capacity and road handling. Do NOT load any vehicle beyond the manufacturer's specifications.

#### Prior to installation ensure the following steps have been taken:

Vehicle must be on level solid surface.

Parking brake ON - Ignition OFF.

Place blocks in front and rear of the front tires to prevent the vehicle moving.

#### During and / or after installation

Ensure emergency brake cables are not touching the SuperSprings blade(s). Secure them out of the way with zip ties or by re-routing. Avoid all air conditioning lines, all fuel filler hoses and all brake lines or cables. Position the SuperSprings so there is sufficient clearance from any frame contact both horizontally and vertically. Also, where applicable, the ends (eye) of the SuperSprings must avoid contact with any factory overload spring perch or bracket.

## Installation Instructions 2004-Present Nissan Titan SuperSprings Model # SSA20

This kit incorporates a unique mounting kit (adaptor kit) that includes replacement Sumospring bump stops and mounting block has been created specifically for this installation.

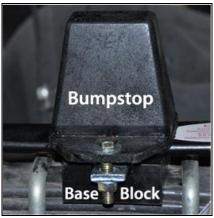
#### Mounting Kit Installation Instructions

- 1. Position the vehicle on level solid surface. Ensure emergency brake is ON, ignition is OFF.
- 2. Place blocks in front and rear of the front tires to prevent the vehicle moving.
- 3. With the vehicle still on the ground (**one side at a time**), loosen the axle u-bolts to allow removal of the factory bump-stop. Immediately retighten the factory u-bolts after removal of bump-stop referencing the "Retightening Instructions" on page 4. **Important**: After 500 miles of driving retighten u-bolts again.
- 4. Place the PSP-4 block so it straddles the top of the spring pack where the factory bump-stop was removed.
- 5. Insert the hold down cross plate into place through the steel channel atop the PSP-4
- 6. Repeat this procedure on both sides of the vehicle.
- 7. Elevate the vehicle at rear by jacking the chassis/frame until the back wheels are slightly off the ground. The factory spring pack must be at its most relaxed and unloaded position. Do not elevate the vehicle by raising the axle.

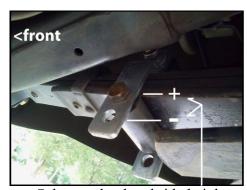
**Special Note:** Remove rear rebound clip bolt and roller to avoid contact with the SuperSprings.

#### **Spring Installation Instructions**

- 8. The SSA9 springs (check the number stamped in the underside of the springs) supplied have two different shackle systems at each end. The shackles with the squatted off shoulders go to the front and the shackles with the sloping shoulders go to the rear. (reference pictures below on page 3)
- 9. Undo the nuts on the SuperSprings roller bolts and remove all urethane (black) rollers, steel rollers and bolts from the shackles.
- 10. Place the SuperSpring directly on top of the installed PSP-4
- 11. Start at the front square shackle and reattach both the steel roller and outer black urethane roller to the shackle, under the factory spring pack. Select preload and ride height by inserting the roller into either the upper tighter position or the lower softer position.
- 12. Using a C-clamp for assistance, pull down the opposite end of the SuperSpring and attach the sloping shoulder shackle in exactly the same procedure as in the previous step 11.
- 13. Position the SuperSpring so that the rear roller has at least <sup>3</sup>/<sub>4</sub>" clearance to roll FORWARD towards the axle as the vehicle comes under load. The front roller should not move in this configuration.
- 14. Center the Sumospring bump stop on top of the spring above the PSP-4 block as in the picture below and attach it to the hold-down cross-plate in the PSP-4 using the half inch hardware supplied (bolt, washer and nut) and secure tightly.
- 15. Note SuperSprings do not have to be centered on mounting kit over axle
- 16. Recheck that no A/C lines or brake cables will be interfered with by the vertical travel of the SuperSprings.
- 17. Repeat the above steps on the opposite side of the install vehicle.



Special mounting kit incorporating Sumospring bump-stop.



Select preload and ride height



Remove rear rebound clip bolt and roller

# Nissan Titan [2004~present] Rear Spring U-Bolt retightening

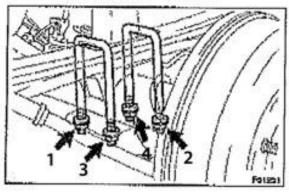
(a) With the spring seat, 2 U-Bolts, 4 washers and 4 nuts in position, follow bolt tightening sequence number pattern in the diagram.

(b) Torque: 121N-m (1230 kgf-cm, 89ft-lbf)

#### Hint:

Tighten the U-Bolts until the lengths of all U-Bolts under the spring seat are the same.

### **Nissan Titan**



## Supersprings.

Suspension Enhancement
Nissan Titan [2004 ~ present]
SuperSprings SSA20
special mounting kit included







Mounting Kit included



Remove rear clip bolt and roller on Titan models that are attached with a removable nut and bolt.

Do not remove bracket.



