

Independent tests showed SuperSprings improve driving control by 29%

# **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 <u>spring perch</u> or bracket.

## Installation Instructions

### SuperSprings Model: SSA28

Install the SuperSprings with the threaded end of the bolts on the shackles facing outward. P

**<u>Step 1</u>**: Vehicle must be on a solid, level surface. Ensure emergency brake is ON and Ignition is OFF. Place blocks in front and rear of the front tires to prevent the vehicle moving.

**<u>Step 2</u>**: Raise vehicle so that rear wheel(s) is slightly off the ground. Support vehicle with jack stands securely under the frame. You may remove the wheel for easier installation access but it is not required. **Step 3**: Where factory springs are located below the axle:

Slip SuperSpring over the wheel or slide in from behind, and position it on top of the axle directly over the factory springs. Go to Step 6.

**Step 4:** When factory springs above the axle and a mounting kit (MTKT\* or MXKT\*) is called for: Place mounting kit bracket on top of factory springs directly above axle. Attach mounting bracket to factory springs with U-bolts, cross plates, and nuts. Securely tighten hardware. After 300-500 miles check and retighten hardware as necessary. Slip SuperSpring through wheel well or slide in from behind vehicle, positioning it on top of mounting bracket. Go to step 6.

Step 5: Where factory springs are above the axle and PSP (poly spring pad) is used:

Refer to application specific pages to determine which PSP to use for your vehicle. Place PSP on top of factory spring plate so that it locates on center bolt and spring pad as shown.

# Position the SuperSprings so there is sufficient clearance from any frame contact both horizontally and vertically.

**Step 6:** Ensure all A/C lines and brake cables that might be damaged by SuperSpring blades are clear of interference. Where additional lift or more vertical clearance is required, use the shackle upper bolt hole position. In any other case use the lower bolt hole. Attach bolt on front shackle using both polypropylene (black) rollers and steel sleeve. Tighten roller bolts and nuts hand tight so hardware is snug. No heavy torque required.

**<u>Step 7:</u>** Using C-Clamp, pull down rear shackle. Some installations will not require use of clamp. Attach bolt on back shackle (as in #6 above) and tighten. Don't over-tighten nuts.

NEVER TIGHTEN TOP BOLTS ON ANY OF THE SHACKLES.

**<u>Step 8</u>**: Install Hold-down Clamp (Only use on spring above axle assembly with MTKT or MXKT). Clamp does not have to be centered on spring. Bolt one side of the clamp together. Slide crossplates over SuperSpring and under mounting bracket. Attach bolt, washer and nut to the opposite side and secure tightly with wrench.

**Step 9:** Check final alignments. Springs do not have to be centered on mounting bracket over axle. Position springs shackles to provide rear rollers with <sup>3</sup>/<sub>4</sub>" to 1" <u>forward</u> clearance from any obstacles. Front rollers only require <sup>1</sup>/<sub>4</sub>" clearance in either direction. Recheck that no A/C lines or brake cables will be interfered with by the vertical travel of the SuperSprings.

**Step 10:** Repeat the same process on the other side of vehicle.

**Step 11:** Lower the vehicle and remove jack and blocks. Where MTKT/MXKT are used, ensure u-bolt nuts are tight.

**<u>Step 12</u>**: Recheck installation to ensure that all a/c lines, brake cables and truck frame will not interfere with the vertical travel of the SuperSprings.

Step 13: NOW SECURELY RETIGHTEN ALL U-BOLT NUTS. AFTER 200-500 MILES RETIGHTEN U-BOLTS AGAIN.



### **Upturned U-bolts**



Older model F-150 spring plate

Supension Enhancement Ford F-150 [2004 ~ present] SuperSprings Part# SSA28



#### F-150 Spring Plate on Newer Models with PSP-19 installed



**Downturned U-bolts** 



**PSP-19 Placement** 

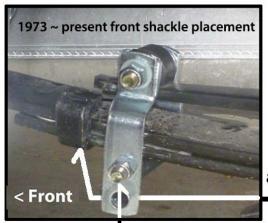
### Poly Spring Pad ~ PSP-19



Polyurethane block designed to mount between the top of the factory spring plate and bottom of the SuperSpring



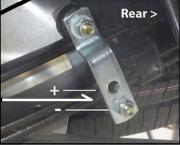
**PSP-19** installed



Install the front shackle bolts in the upper bolt position



Front shackle placement is always behind the front spring clip. Rear shackle placement varies from year to year.



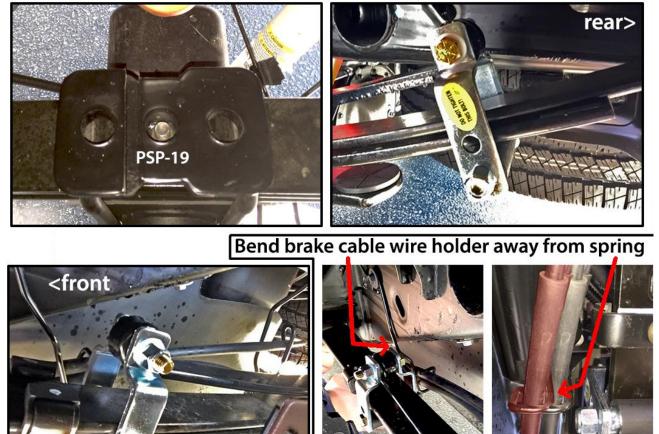


**Suspension Enhancement** 

## GM 1500 Pickup [2014 ~ present] SuperSprings Part# SSA28



PSP-19 installed on top of spring plate



Front shackle installation ~ to avoid brake cable

ginal position new position



Suspension Enhancement Nissan NV 1500 [2011~present] SuperSprings SSA28















Suspension Enhancement Nissan NV 2500/3500 [2011 ~ present] SuperSprings SSA28 with PSP-19



**Shackle Installation Positions**