

### **Installation Instructions**

For easy installation, you will need to:

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

#### Tools required:

- 1 − 1 1/16" wrench / socket
- 1 − 1 1/8" wrench / socket
- 1 Sturdy Clamp

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

**SUPERSPRINGS** are designed to work in conjunction with <u>original equipment (factory) springs only</u>. Please consult SuperSprings factory (866-898-0720) if original springs have been replaced with an after-market product.

**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.

#### LIMITED WARRANTY

See separate warranty information page.

SuperSprings International Corporation 505 Maple Avenue, Carpinteria, CA 93013 www.supersprings.com

gerry@supersprings.com

Technical Support: 866-898-0720

Email: chad@supersprings.com

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.

#### <u>Installation Instructions</u> SuperSprings Model # SSA13 & SSA16

The SSA13 & SSA16 springs have a specific left and right. Unless specified otherwise install springs with bolt threads facing outward. They also have a specific front and rear. Please check included application sheet for your vehicle front/back configuration.

http://www.supersprings.com/supersprings\_installation.asp.

**Step 1:** 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.

**Step 2:** 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:** When 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 5.

Step 4: Where factory springs are above the axle and PSP (poly spring pad) is used:

For applications with or without factory top overload leafs. 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. Place lockdown kit u-bolt in the groove of the PSP. Slip SuperSpring through wheel well or slide in from behind vehicle, positioning it on top of the PSP. Position lockdown kit u-bolt with the threads pointing up, install the clamp and nuts and tighten securely.

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

<u>Step 5:</u> 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 other cases 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.

**Step 6:** 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.

**Step 7:** Where MTKT or MXKT are used, install Hold-down Clamp to secure spring to mounting bracket. 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 8:** 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 9:** Repeat the same process on the other side of vehicle.

**Step 10:** Lower the vehicle and remove jack and blocks. Where MTKT/MXKT are used, ensure u-bolt nuts are tight.

**Step 11:** Recheck installation to ensure that all a/c lines, brake cables and truck frame will not interfere with the vertical travel of the SuperSprings.

<u>Step 12:</u> <u>NOW SECURELY RETIGHTEN ALL U-BOLT NUTS. AFTER 200-500 MILES RETIGHTEN U-BOLTS AGAIN.</u>

Supension Enhancment

### GM 2500HD Pickup [2011 ~ present]

(without top factory overload)

SuperSprings Part# SSA13 ~ SSA16 with MXKT









Position rear shackle to avoid frame support bracket & provide 1" forward roll clearance of spring roller



front & rear adjustable preload.

Supension Enhancment

# GM 3500 Savana ~ Express Cutaway [1996 ~ present] SuperSprings Part# SSA13 ~ SSA16 with PSP mounting kit





#### **Typical PSP Mounting Kit Installation**



PSP-7 with hold-down clamp assembly



Place PSP-7 on top of spring plate flat side up facing, with groove toward the front



Install the SuperSprings as pictured below, then thread the channel crossplate on to the ubolt. Tighten securely.



Square shackle to the rear



Spring preload & ride height

# Suspension Enhancement GM 3500HD Pickup (Single Rear Wheel Only) [2011 ~ present] SuperSprings SSA13 / SSA16 with PSP mounting kit



PSP-7 with hold-down clamp assembly



Place PSP-7 on top of spring plate flat side up facing, with groove toward the front



Typical PSP Mounting Kit Installation



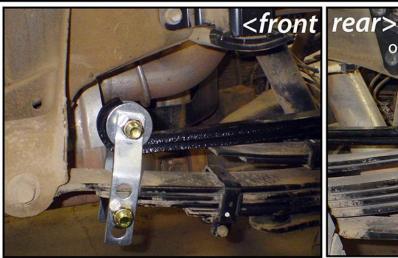
Install the SuperSprings as pictured below, then thread the channel crossplate on to the ubolt. Tighten securely.

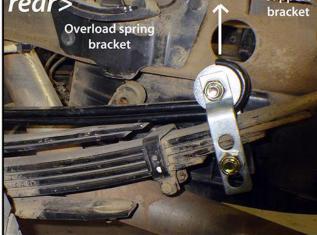


truck bed support bracket

Truck bed

SSA16 installed heavily loaded





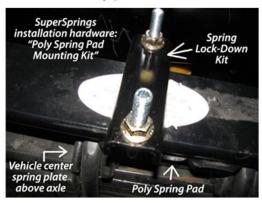
SSA13 installed

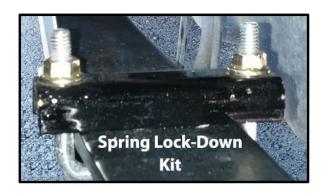
**Supension Enhancment** 

Ford F-250 ~ F-350 Super Duty [1980 ~ 2007]
with or without top factory overload
SuperSprings Part# SSA13 ~ SSA16 with PSP mounting kit



**Typical Center PSP mounting kit installation** 









Adjustable pre-load and ride height [frnt/rear]

**Suspension Enhancement** 

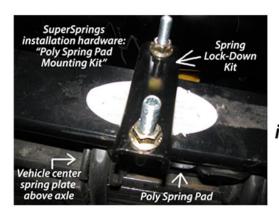
Ford F-250 F-350 Super Duty [2011 ~ 2016]
without factory top overloads
SuperSprings Part# SSA16 ~ SSA13 with PSP-7 & Spring Lock-Down Kit



OE brake cable placement 2014~present

> Modification for SuperSprings installation





Center mounting kit installation



2011~2013 brake cable holder adjusted to allow space for installation



All models install driver side front shackle spring eye bolt threads inward.

On the driver's side the gas tank shield restricts the installation.

Before installation remove the front shackle bolt.

Position the spring on top of the mounting kit.

Reinstall the shackle with the threads facing inward at the top and facing outward at the botton, to avoid the threaded ends of the bolts from conflicting with the a gas tank protective shield



Install with square shackles to the rear.
Adjust pre-load & ride height.