

Installation Instructions

For easy installation, you will need to:

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

Tools required:

- $1 1 \frac{1}{16}$ " wrench / socket
- $1 1 \frac{1}{8}$ " 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 5055 Sixth Street, Carpinteria, CA 93013 www.supersprings.com

<u>Technical Support: 866-898-0720</u> <u>7-days-a-week (7am – 5pm PST)</u>

Email: gerry@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 # SSA16 with Poly Springs Pad (PSP-7)

Ford F-250/F-350 (1980~2007) and (2011~present~optional P3KT for rough road conditions)

Step 1: Positioning the vehicle:

Vehicle must be on level solid surface. Ensure emergency brake is ON and ignition is OFF.

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

Step 2: Jacking up vehicle:

Place jack on chassis/frame member – not the axle, differential or spring pack.

Raise one or both sides of vehicle so that rear wheel(s) is slightly off the ground. Support vehicle with jack stands. You may remove the wheel for easier installation access but it is not required.

Step 3: Undo the lower nuts on the SuperSprings shackles and remove all polyurethane (black) rollers, and steel rollers from the shackles. The SSA16 has a front and back side, a three-hole square shackle and the three-hole regular shackle. For the 1980~2007 Ford the square shackle with be oriented to the front, on the 2011~present place it to the rear. (Check our website for detail images

http://www.supersprings.com/supersprings installation.asp.)

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.

Ford F-250/350 (1980~2007): Start at the front (square 3-hole shackle) and reattach both the steel roller and the outer black roller to the shackle, under the factory spring pack, using the lower bolt hole position. Capture the end of the factory overload spring within the square shackle.

Note: On all Ford F-250/F-350 (2011~2013): Start at the front (regular 3-hole shackle) making sure the top shackle nut is facing toward the frame to avoid the brake line. Place this shackle to the front side of the factory spring clip.

Bend emergency brake cable bracket marginally outward to allow room for the SuperSprings to avoid contact with the cable. (Fig.1)

Note: On all Ford F-250/F-350 (2014~present):

Bend front driver's side emergency brake cable wire holder 90 degrees outward so that the cable extends away from the frame. (Fig.2)

Note: On 4x4 F-250/350 (2011~present)

Before installation, on 4x4 models remove front shackle by removing shackle bolt

Position spring on top of spring pack. Reinstall shackle with threads facing inward at top and outward at the bottom. (See attached Ford flyer)



<u>F1g. l</u>



<u>Fig. 2</u>

Step 4: F-250/350 (2011~present) without factory top overloads requires a mounting kit (MTKT) for installation. All other F-250/350 do not require a mounting kit:

Place mounting bracket (from separate white box) on top of factory springs directly above axle. Attach mounting bracket to factory springs; securely tighten U-bolts with hardware supplied. The SuperSprings can now be installed on top of the MTKT, mounting kit. (Fig. 1)

Ford F-250/F-350 \sim page 2

Step 5: Use Poly Spring Pad PSP-7 on trucks with top Factory Overload Spring

A mounting kit is not required in this installation.

Place PSP-7 centered on U-bolt retainer plate. (Fig.3)

Factory U-bolts facing up or down has no effect on this installation.

Slip SuperSpring through wheel well or slide in from behind vehicle.

Note: Springs do not have to be centered over axle or the mounting kit Position springs shackles to provide rear rollers with ³/₄" to 1" forward

clearance from any obstacles. Front rollers only require 1/4" clearance in either direction.



 $(1980 \sim 2007)$



Fig.3

(2011~present)

Note: On F-250/350 (2011~present with factory overloads on rough roads)

Two secure the center of the SuperSprings for rough road conditions you can purchase the P3KT kit and install in between the downturned factory ubolts. To secure the spring, use the hardware provided, to clamp SuperSprings to the P3KT block. Fig. 4

Step 6: Start at the front (regular 3-hole shackle) and reattach both the steel roller and the outer black roller to the shackle, under the factory spring pack, using the lower bolt hole position.

Step 7: Using a clamp, if necessary, pull down the opposite side of the SuperSpring and attach as in step 6.

Where applicable, the factory overload spring is now "sandwiched" between the SuperSpring on top and the original factory spring pack below.

Step 8: Install Hold-down Clamp (Only use on spring above axle assembly with MTKT). Lower the vehicle to the ground to compress the springs onto the mounting bracket.

Clamp does not have to be centered on spring.

Bolt one side of the clamp together. (Use the shorter bolt found in the hardware package of the MTKT).

Slide crossplates over SuperSpring and under mounting bracket.

Attach bolt, washer and nut to the opposite side and secure tightly with wrench.

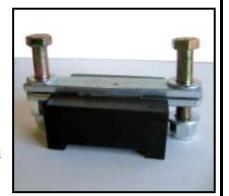


Fig. 4



Hold-down clamp assembly

Step 9: Repeat these steps on the opposite side, then lower vehicle back to the ground.

Step 10: 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 11: NOW SECURELY RETIGHTEN ALL U-BOLT NUTS. AFTER 200-500 MILES RETIGHTEN U-BOLTS AGAIN.



SuperSprings.



Suspension Enhancement

Ford F-350 Super Duty [2011 - present]
with factory overloads
SuperSprings SSA16 with PSP-7





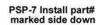
<OE brake cable placement

2014~ present

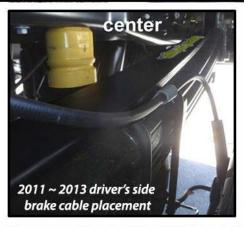
Modification > for SuperSprings installation

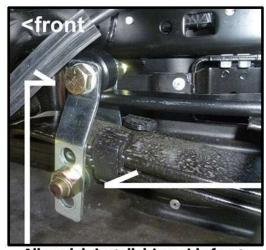












Before installation, on 4x4 models remove front shackle by removing shackle bolt. Position spring on top of spring pack. Reinstall with threads face inward at top and outward at the bottom.



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

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

Refer to SuperSprings application guide for part selection www.supersprings.com [Tech line #866-898-0720]
SuperSprings enhance load carrying capability, handling & towing. Never exceed vehicle manufacturer's GVWR rating.

Installation Instructions SuperSprings Model # SSA16 with Poly Springs Pad (PSP-7) GM 2500/3500 (1988-2000) and (2011~present)

Step 1: Positioning the vehicle:

Vehicle must be on level solid surface. Ensure emergency brake is ON and ignition is OFF. Place blocks in front and rear of the front tires to prevent the vehicle from moving.

Step 2: Jacking up vehicle:

Place jack on chassis/frame member – not the axle, differential or spring pack.

Raise one or both sides of vehicle so that rear wheel(s) is slightly off the ground. Support vehicle with jack stands. You may remove the wheel for easier installation access but it is not required.

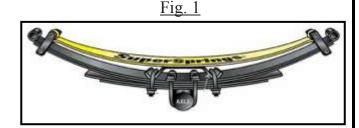
Step 3: Remove all polyurethane (black) rollers, and steel rollers from the shackles. The SSA16 has a front and back side. Position the three-hole REGULAR SHACKLE to the FRONT and the three-hole SQUARE SHACKLE to the REAR.

Step 4: <u>Chevy/GMC 2500/3500</u> without factory top overloads require a mounting kit (MXKT) for installation:

Place mounting bracket (from separate white box) on top of the factory springs directly above axle.

Attach mounting bracket to factory springs; securely tighten U-bolts with hardware supplied.

Slip SuperSpring through wheel well or slide in from behind vehicle, positioning it above MXKT (Fig. 1)



Step 5: For trucks with top Factory Overload Springs – Poly Spring Pad (PSP-7) is used:

A mounting kit is not required in this installation

Place PSP-7 centered on U-bolt retainer plate. (Fig. 2)

Factory U-bolts facing up or down has no effect on this installation. Slip SuperSpring through wheel well or slide in from behind vehicle.

Note: Springs do not have to be centered over axle or the mounting kit.

Position springs shackles to provide rear rollers with 3/4" to 1" forward clearance from any obstacles. Front rollers only require 1/4" clearance in either direction.



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.

GM 2500/3500 (1988-2000) and (2011~present) Page 2

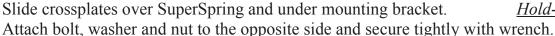
Step 6: Start at the front (regular 3-hole shackle) and reattach both the steel roller and the outer black roller to the shackle, under the factory spring pack, using the lower bolt hole position. Ensure all bolt heads are toward the frame and threads are facing toward the outside. (See attached GM flyer)

Step 7: Using a clamp, if necessary, pull down the opposite side of the SuperSpring and attach as in step 6. Where applicable, the factory overload spring is now "sandwiched" between the SuperSpring on top and the original factory spring pack below.

Step 8: Install Hold-down Clamp (Only use on spring above axle assembly with MXKT). Lower the vehicle to the ground to compress the springs onto the mounting bracket.

Clamp does not have to be centered on spring.

Bolt one side of the clamp together. (Use the shorter bolt found in the hardware package of the MXKT).





Hold-down clamp assembly

- Step 9: Repeat these steps on the opposite side, then lower vehicle back to the ground.
- Step 10: Lower the vehicle and remove jack and blocks.
- 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.

Step 12: NOW SECURELY RETIGHTEN ALL U-BOLT NUTS. AFTER 200-500 MILES RETIGHTEN U-BOLTS.

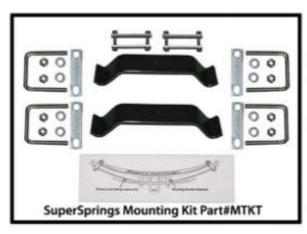


SuperSprings.



GM 2500HD [2011 - present] SuperSprings SSA-16 w/ MXKT











front & rear adjustable preload.

Refer to SuperSprings application guide for part selection www.supersprings.com [Tech line #866-898-0720] SuperSprings enhance load carrying capability, handling & towing. Never exceed vehicle manufacturer's GVWR rating.

SuperSprings.

Suspension Enhancement
GM 3500HD Pickup (Single Rear Wheel Only) [2011 ~ present]
SuperSprings SSA13 / SSA16 with PSP-7



*truck bed support bracket

Poly Spring Pad PSP-7



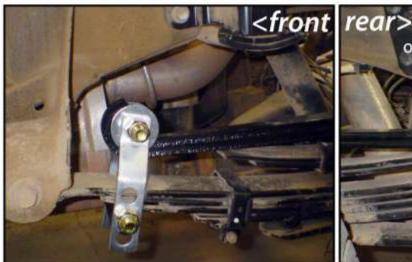
Polyurethane Mounting Base

Center



SSA16 installed heavily loaded







SSA13 installed

Refer to SumoSprings application guide for part selection www.supersprings.com [Tech line #866-898-0720]
SumoSprings enhance load carrying capability, handling & towing. Never exceed vehicle manufacturer's GVWR rating.