

## **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 SSA11 for 2500/3500 Dodge Sprinter 2003 ~ 2007

## 2500/3500 Mercedes Sprinter 2008 ~ present (special instructions at the bottom of this page)

## 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.

Jack up the vehicle and support the frame with jack stands so that the axle is hanging with tires slightly off the ground. You may remove the wheel for easier installation access but it is not required.

## Step 3: Install the mounting kit.

Place the mounting bracket (from separate white box) on top of factory springs directly above the axle. Using the U-bolts & hardware provided in the MTKT, attach the mounting bracket to the factory springs.

## Step 4: Mount the SuperSpring on top of the mounting bracket.

Both blades need to be installed with the shackle nuts facing outward toward the wheel.

Slip the SuperSpring through the wheel well or slide it in

from behind the vehicle, positioning it above the MTKT.

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



## Step 5: Attach front shackle.

Position the front beveled shackle so as to avoid contact with the frame. (**Fig. 1** image indicates shackle position for all Sprinters)

Where additional lift or more vertical clearance is required, use the shackle upper bolt hole position. In other cases use the lower bolt hole position. Ensure all A/C lines and brake cables that might be damaged by SuperSpring blades are clear. Attach bolt on front shackle using both polypropylene (black) rollers and steel rollers. Don't over-tighten nuts.

## Step 6: Attach rear shackle:

Use a C-Clamp (or installation tool) and pull down the rear of the SuperSpring and attach the square shackle using the upper bolt hole position.

Attach bolt on rear shackle using both polypropylene (black) rollers and steel rollers and nut and tighten. Don't over-tighten nuts.

NEVER TIGHTEN TOP BOLTS ON ANY OF THE SHACKLES.

(Fig. 1)

Step 7: 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).

## assembly

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.

Position springs shackles to provide rear rollers with <sup>3</sup>/<sub>4</sub>" to 1" <u>forward</u> clearance from any obstacles. (roller movement is toward the axle on loading) 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 wheel.

**Step 10**: Lower the vehicle and remove jack and blocks.

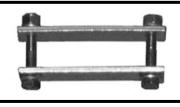
**Step 11**: Recheck installation to ensure that all a/c lines, brake cables and truck frame will not interfere with the vertical travel of the SuperSprings.

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

## SSA11 for Dodge/Mercedes Sprinter 2008 ~ present

For Sprinters (2008~ present) place the provided spacers under each leg of the MTKT to elevate the mounting bracket so as to accommodate the revised factory raised u-bolt and spring-plate assembly.

Install the modified u-bolt with the short leg to the inside at the rear to avoid the sway bar. (additional parts are supplied inside yellow box in a plastic bag) For detail images of the installation of the Sprinter (2008~ present) see included installation flyer below on page following.

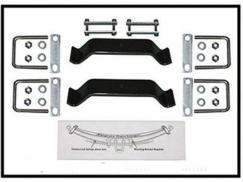


Hold-down clamp



Suspension Enhancement Dodge Sprinter 2500 [2003 - 2007] factory steel leaf models SuperSprings SSA11 w/ MTKT





SuperSprings Part # MTKT







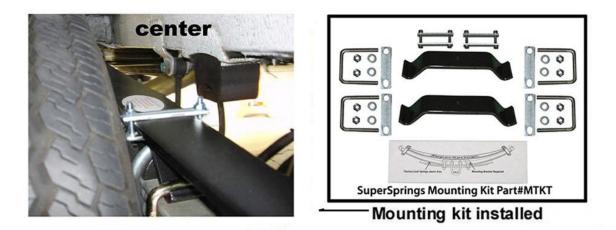
Spring pre-load & ride height



Suspension Enhancement Dodge/Freightliner Sprinter 3500 [2003 ~ 2007] SuperSprings Part# SSA11









Factory springs are 3 leaf non-parabolic steel springs



square shackle to the front



Suspension Enhancement Dodge/Mercedes/Freightliner Sprinter 2500/3500 [2008 - present] SuperSprings Part# SSA11 with MTKT [\*]



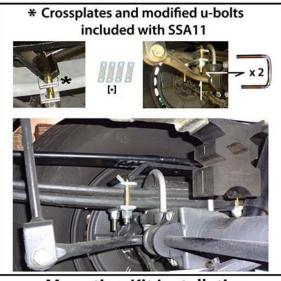


Brake cable routed between OE springs and SuperSprings



Install rear shackle in the upper bolt position





**Mounting Kit Installation** 



Position front shackle to the rear of the OE shackle enclosure

#### Installation Instructions SuperSprings Model # SSA11 For 2015-Present Dodge Promaster 1500/2500/3500

**<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.

**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:** Place PSP-12 on top of factory spring plate so that it locates between the U-bolts as shown. **Step 4:** Place the SuperSprings above the factory leaf springs and on top of the PSP-12 and center them (front to back) over the axle. Be sure they are positioned so that the threads of the bolts are facing out.

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

**Step 5:** Ensure all A/C lines and brake cables that might be damaged by SuperSpring blades are clear of interference. In most cases use the shackle lower bolt hole. Where additional lift or more vertical clearance is required, use the upper bolt hole position. 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 rear shackle (as in step 5 above) and tighten. Don't over-tighten nuts.

NEVER TIGHTEN TOP BOLTS ON ANY OF THE SHACKLES.

<u>Step 7:</u> Position springs shackles to provide rear rollers with  $\frac{3}{4}$ " to 1" <u>forward</u> clearance from any obstacles. Front rollers only require  $\frac{1}{4}$ " 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 8: Repeat the same process on the other side of vehicle.

**Step 9:** Lower the vehicle and remove jack and blocks.

<u>Step 10:</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.



**Suspension Enhancement** 

Dodge Promaster Van1500/2500/3500 SuperSprings Part# SSA11 with PSP-12











SuperSpring installed