

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:

- $1 1 \frac{1}{16}$  wrench / socket
- 1 1 1/8" wrench / socket
- 1 Sturdy Clamp or SuperSprings Installation tool (for SSA38 heavy duty installation)

**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 Technical Support: 866-898-0720 Email: tech@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> <u>SuperSprings Model # SSA45 with Poly Spring Pad & Spring Lock Down Kit</u>

<u>Step 1</u>: Use a jack on the <u>chassis</u> to raise the vehicle so that the back wheel lifts slightly off the ground. The main spring pack will then be at its most relaxed position. Do not jack the vehicle up on the differential. Support the vehicle with Jack Stands.

<u>Step 2</u>: Undo the nuts on the SuperSprings roller bolts and remove all steel rollers and bolts from the shackles. The SSA45 does not have a specific front/back or left/right, however, the spring will need to be positioned so that the threads of the shackle bolts are pointing to the outside of the vehicle (away from the frame).

<u>Step 3</u>: For installation of the polyurethane mounting kit, install the PSP pad with the grooved side up and toward the front of the vehicle, on top of factory spring-plate, between the factory ubolts. Place one of the 3/8"-16 u-bolts over the SuperSpring near the center with the ends pointing in the same direction as the spring-eyes. Next install the u-shaped cross-bar with the groove side toward the top face of the SuperSpring. Then place the self locking flange nuts on the threads and tighten three to four turns. Leave the u-bolt loose so it can be slid easily on the spring for final adjustment.

<u>Step 4</u>: Install the SuperSpring on top of the truck spring with the shackle bolts pointing toward the outside of the chassis. Slide the bottom of the u-bolt assembly into the groove of the PSP pad sitting on the spring-plate.

<u>Step 5</u>: Adjust the SuperSpring for optimum positioning for this particular application. (See attached flyer)

<u>Step 6</u>: Using a heavy C-clamp or installation tool, clamp the SuperSpring down to the factory leaf pack so the rollers and bolts can be installed on the shackles as in the pictures on the flyer. Be sure the threads of the bolts are pointing away from the frame. Adjust if necessary to obtain correct placement. Check to ensure that u-bolt is properly located into the groove in the PSP pad. Torque the u-bolt retaining nuts to 30ft.lbs.

<u>Step 7</u>: Repeat steps 1-6 for the other side of the vehicle.



<front

Polyurethane Mounting Kit Assembly

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## Freightliner M-2 106 [2001-2018] SuperSprings Part# SSA35 & SSA45 with PSP mounting kit





Place PSP-11 on top of spring plate flat side upwith groove toward the front









\*Where chassis are equipped with top helper leaf the overload perches need to be unbolted and removed \*

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.