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## SuperSprings SSF-402-54

# SuperSprings SSF-402-54 SumoSprings Front Suspension for Jeep Wrangler JK Instruction Manual

Brand: SuperSprings | Model: SSF-402-54

## 1. PRODUCT OVERVIEW

SumoSprings are a patented suspension product designed to enhance load carrying ability, stabilize sway, and improve overall driver control and ride comfort. They are maintenance-free, do not leak air, and do not require airlines or compressors. SumoSprings are manufactured from proprietary closed micro-cellular urethane, providing a smooth and progressive spring rate with superior damping properties.

This manual provides detailed instructions for the installation, operation, and maintenance of the SSF-402-54 SumoSprings Front Suspension for Jeep Wrangler JK models.

## 2. VEHICLE COMPATIBILITY

The SSF-402-54 SumoSprings Front Suspension is compatible with the following vehicles:

- 2007-2023 Jeep Wrangler 4WD
- 2020-2023 Jeep Gladiator 4WD
- 2004-2006 Sprinter 2500/3500 with 0-3" Lift

Figure 2.1: Vehicle compatibility for SSF-402-54 SumoSprings.

## 3. KEY FEATURES

- Sold as a pair (left and right).
- Maintenance-free design.
- Enhances load carrying ability with a 1400 lb capacity at 50% compression.
- Reduces and stabilizes sway for improved handling.
- Improves overall driver control and ride comfort.
- Made from proprietary and patented microcellular urethane.

- One-piece unit attached on one side, designed as a replacement/upgrade to factory bump stops.
- Progressive spring rate with superior damping properties.



Works alongside existing suspension components to provide a smoother and more controlled ride.

***SuperSprings***®

Figure 3.1: SumoSprings integrate with existing suspension for a smoother ride.



Designed for straightforward installation  
with no special tools or ongoing  
maintenance required.

***SuperSprings***®

Figure 3.2: Designed for straightforward installation without special tools.



Helps improve vehicle stability by minimizing sway, especially during turns or when carrying heavy loads.

**SuperSprings**®

Figure 3.3: SumoSprings help improve vehicle stability and reduce sway.

## 4. INSTALLATION INSTRUCTIONS

This section provides general steps for installing the SumoSprings. For a detailed visual guide, please refer to the installation video below. Professional installation is recommended.

### 4.1. Pre-Installation Steps

1. Safely lift the vehicle and support it using jack stands.
2. Remove the front wheels.
3. Disconnect the sway bar and shocks from the axle.
4. Disconnect the draglink from the pitman arm.
5. Lower the axle sufficiently to allow for removal of the coil springs.

### 4.2. Removing Factory Bump Stops

6. Locate the factory bump stop. It is typically made of rubber and is shorter than the SumoSpring.

7. Carefully remove the factory bump stop from its mounting location. This may require twisting or prying.

### 4.3. Installing SumoSprings

8. Position the SumoSpring into the factory bump stop location. The SumoSpring is designed to fit snugly.
9. Twist and push the SumoSpring firmly into place until it is fully seated.

### 4.4. Post-Installation Steps

10. Reinstall the coil springs.
11. Reattach the draglink to the pitman arm.
12. Reattach the shocks and sway bar to the axle.
13. Reinstall the front wheels.
14. Carefully lower the vehicle.
15. Torque all fasteners to manufacturer specifications.

### 4.5. Installation Video

Watch this video for a visual guide on installing SumoSprings on a Jeep JK front suspension. Note: The video features model SSF-403-54, but the installation process is highly similar for SSF-402-54.

Video 4.1: SumoSprings Front Installation for Jeep JK & JL (Model SSF-403-54 shown).

## 5. OPERATION

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Once installed, the SumoSprings work in conjunction with your vehicle's existing suspension system. They provide a progressive spring rate, meaning they engage softly initially and become firmer as compression increases. This design helps to absorb impacts, reduce bottoming out, and minimize body roll and sway, leading to a more stable and comfortable ride, especially when carrying loads or navigating uneven terrain.

## 6. MAINTENANCE

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SuperSprings SumoSprings are designed to be maintenance-free. They do not require air lines, compressors, or regular adjustments. Periodically inspect the SumoSprings for any signs of damage or wear. Ensure they are securely mounted and free from debris. Clean with mild soap and water if necessary.

## 7. TROUBLESHOOTING

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If you experience any issues after installing your SumoSprings, consider the following:

- **Unusual Noises:** Check all installation points to ensure fasteners are properly tightened and components are not rubbing.
- **Ride Quality Issues:** Verify that the correct SumoSprings model was installed for your vehicle and application. Ensure proper installation as per instructions.
- **Reduced Effectiveness:** Inspect the SumoSprings for any visible damage, cracks, or signs of degradation. Ensure the vehicle is not overloaded beyond its manufacturer's Gross Vehicle Weight Rating (GVWR).

For further assistance, please contact SuperSprings customer support.

## 8. SPECIFICATIONS

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Specification	Detail
Model Number	SSF-402-54
Material	Polyurethane
Item Diameter	2.6 Inches
Color	Yellow
Capacity (at 50% Compression)	1400 lbs
Number of Pieces	2 (Pair)
Item Weight	2.39 pounds
UPC	814699004429, 814699008045

## 9. WARRANTY AND SUPPORT

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### 9.1. Warranty Information

SuperSprings International offers a Limited Lifetime Warranty on SumoSprings products. This warranty covers defects in material and workmanship for the lifetime of the product, provided it is installed and used according to manufacturer specifications. For full warranty details and terms, please visit the official SuperSprings website or contact customer service.

### 9.2. Customer Support

For technical assistance, installation questions, or warranty claims, please contact SuperSprings International directly. You can find contact information and additional resources on their official website or through their Amazon store page.

General product overview video:

Video 9.1: SuperSprings International - Suspension for just about everyone.