## SSR-101-40-2

# **SumoSprings**®

#### **PRIMARY APPLICATION**

**FORD** 

F-250 Super Duty 4 X 2 (1999-2010)

F-250 Super Duty 4 X 4 (1999-2010)

F-350 Super Duty 4 X 2 (1999-2010)

F-350 Super Duty 4 X 4 (1999-2010)

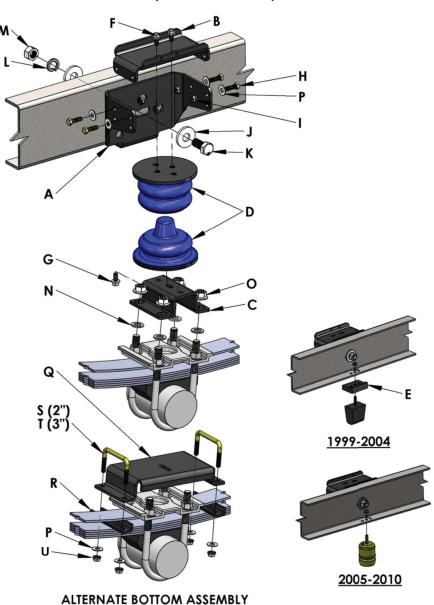
#### **TOOLS REQUIRED**

- 1 Floor Jack
- 2 Jack Stands
- 4 Wheel Blocks
- 1 15/16" wrench
- 2 9/16" wrench/socket
- 1 1-1/8" wrench
- 1 1-1/8" socket and ratchet

#### **PARTS LIST**

Item	QTY	Part#	Description
Α	2	512006	Frame bracket
В	2	512007	Upper bracket
С	2	512005	Lower bracket
D	2	511415	SumoSprings Rebel Blue -40
E	2	512100	Bump stop spacer
F/G	6	512207	3/8"-16 x 3/4" serrated flange hex bolt
Н	8	512223	3/8"-16 x 1-1/4" hex head bolt
I	8	512209	3/8"-16 flange hex nut
J	4	512204	3/4" fender washer
К	2	512203	3/4"-16 x 1-3/4" hex head bolt
L	2	512205	3/4" lock washer
М	2	512206	3/4"-16 hex nut
N	8	512202	16mm flat washer
0	8	512201	16mm serrated flange nut
Р	16	512244	5/16" USS flat washers
Q	2	512048	Ford SD alt. lower bracket
R	4	512047	Lower u-straps
S	4	512254	3/8" u-bolt 3" x 2"
Т	4	512255	3/8" u-bolt 3" x 5"
U	8	512234	3/8"-16 top lock nut

# Passengers Side (Drivers Side Similar)



#### APPROXIMATE INSTALL TIME

3.5 Hours

PART NUMBER: SSR-101-40-2 PRODUCT LINE: SumoSprings VER:20190610

PAGE 1 of 3

## SuperSprings International, Inc.

505 Maple Avenue Carpinteria, CA 93013

### **Technical Support** +1 (805) 745-5553

+1 (805) 745-5553 tech@supersprings.com

supersprings.com



Never exceed the manufacturer's Gross Vehicle Weight Rating (GVWR) located on your vehicle's identification tag.

**SAFETY NOTICE:** We recommend installation be done by a professional or persons with sound mechanical knowledge.

**WARNING:** These instructions are a general guide for installation. SuperSprings International, Inc. assumes no liability for the actual installation process. Consumers and installers should apply common automotive safety practices when raising and working on any vehicle. **Do not put yourself in a position where, if the vehicle were to move** 

**unexpectedly, you may be injured.** SuperSprings' products are designed to improve vehicle ride quality. Do not load any vehicle beyond the manufacturer's specifications.

**BEFORE INSTALLATION:** Ensure the vehicle is on a level surface, the parking brake is ON, with the ignition OFF, and place blocks in front of and behind the front tires to prevent the vehicle from moving.

**DURING AND/OR AFTER INSTALLATION:** Ensure emergency brake cables are not touching the SuperSprings. Secure any cables out of the way with zip ties or by re-routing. **Ensure all A/C lines, brake cables and frame are clear of contact or interference.** 

#### PART NO.

## SSR-101-40-2



- 1. Park vehicle on a hard, level surface. Place wheel blocks in front and behind the front wheels to prevent rolling. Observe all safety precautions and wear safety glasses.
- **2.** Raise the rear of the vehicle allowing the axle to hang free and rest the frame on the safety jack stands rated for the weight of the vehicle. Removal of the rear wheels is optional.
- **3.** Remove the factory bump stop from the underside of the frame and set aside for later re-installation.
- **4.** Remove the pre-assembled Upper Bracket Assembly from the box:

Upper Bracket (ITEM B)
Frame Bracket (ITEM A)
SumoSprings Upper (ITEM D)

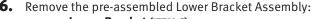
Attach the assembly to the bottom of the frame rail using the factory bump stop and nut utilizing the rear hole on the frame bracket and inserting the metal tab into the center hole. Tighten the attaching nut to 30 foot pounds of torque.

- **5.** Secure the **Frame Bracket** (**ITEM A**) through the slotted hole in the frame to the side of the chassis frame using:
  - 1 ► 3/4-16 x 1-3/4" Hex Bolt (ITEM K)
  - 2 ► 3/4" Fender Washers (ITEM J)
  - 1 ► 3/4" Lock Washer (ITEM L)
  - 1 ► 3/4" Hex Nut (ITEM M)

Tighten to 240 foot pounds of torque.

## ALTERNATE BOTTOM BRACKET ASSEMBLY (NOT TYPICALLY NEEDED)

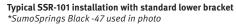
In some cases the factory u-bolts do not have sufficient length to attach to the Lower Bracket (ITEM C). If this is the case, use the alternate bottom bracket assembly. See instructions on next page.



Lower Bracket (ITEM C)
SumoSprings Lower (ITEM D)

Place one **16mm Flat Washer (ITEM N)** on to each of the upturned factory U-Bolts so they rest on top of the factory U-Bolt nuts. Then place the lower bracket assembly onto the four upturned factory u-bolts. Ensure that the taller leg of the **Lower Bracket (ITEM C)** is toward the front of the vehicle.

7. Align the upper bracket assembly with the lower bracket assembly. If they are out of alignment, loosen the 3/8-16 x 3/4" Serrated Flange Bolts (ITEM F AND/OR G) to realign the assemblies and re-tighten the bolts to 30 foot pounds.







PART NUMBER: SSR-101-40-2 PRODUCT LINE: SumoSprings VER:20190610

PAGE 2 OF 3

## SuperSprings International, Inc.

505 Maple Avenue Carpinteria, CA 93013

**Technical Support** +1 (805) 745-5553

tech@supersprings.com

supersprings.com

Never exceed the manufacturer's Gross Vehicle Weight Rating (GVWR) located on your vehicle's identification tag.

**SAFETY NOTICE:** We recommend installation be done by a professional or persons with sound mechanical knowledge.

**WARNING:** These instructions are a general guide for installation. SuperSprings International, Inc. assumes no liability for the actual installation process. Consumers and installers should apply common automotive safety practices when raising and working on any vehicle. **Do not put yourself in a position where, if the vehicle were to move** 

**unexpectedly, you may be injured.** SuperSprings' products are designed to improve vehicle ride quality. Do not load any vehicle beyond the manufacturer's specifications.

**BEFORE INSTALLATION:** Ensure the vehicle is on a level surface, the parking brake is ON, with the ignition OFF, and place blocks in front of and behind the front tires to prevent the vehicle from moving.

**DURING AND/OR AFTER INSTALLATION:** Ensure emergency brake cables are not touching the SuperSprings. Secure any cables out of the way with zip ties or by re-routing. **Ensure all A/C lines, brake cables and frame are clear of contact or interference.** 

## SSR-101-40-2



- **8.** Attach **16mm Serrated Flange Nuts (ITEM 0)** to the upturned factory U-bolts firmly attaching the lower bracket to the factory U-Bolts.
- **9.** Repeat steps 3–8 on the other side of the vehicle.
- **10.** If rear wheels were removed you can now reinstall the rear wheels and torque wheel nuts to manufacturers specifications.
- **11.** Jack up vehicle, remove safety jack stands and lower your vehicle safely.
- **12.** Remove wheel blocks from the front wheels.
- **13.** Fill out your warranty information at: <a href="mailto:supersprings.com/warranty/"><u>supersprings.com/warranty/</u></a>

#### **VEHICLE MODELS 1999 THROUGH 2004.**

Installation is the same as for vehicles 2005 through 2010 with the exception that the convoy clip must be removed between step 3 and step 4. When reinstalling the factory bump-stop in step 4 the **Bump-Stop Spacer** (ITEM E) will be incorporated to account for the removed convoy clip.

### ALTERNATE BOTTOM BRACKET ASSEMBLY (NOT TYPICALLY NEEDED)

Replace steps 6–8 with the following steps:

- **A.** Remove the **Lower Bracket (ITEM C)** from the bottom of the SumoSprings and replace it with the **Alternate Lower Bracket (ITEM Q)**. Attach it in the same way using a **3/8-16 x 3/4" Serrated Flange Hex Bolt (ITEM G)**. Once properly aligned torque the nuts to 30 foot pounds.
- **B.** If the truck is fitted with a top factory overload spring, then attach the **Alternate Lower Bracket (ITEM Q)** to the overload spring using:
  - 2 ► 3/8" x 3" x 2" Square U-Bolts (ITEM S)
  - 2 ► Lower U-Straps (ITEM R)

Secure the U-Bolts using:

- 8 ► 3/8" USS Flat Washers (ITEM P)
- 8 ► 3/8-16 Flanged Hex Nuts (ITEM I)
- **C.** If the truck is not fitted with the top factory overload spring, then attach the **Alternate Lower Bracket (ITEM Q)** to main spring-pack using the longer Square U-Bolts:
  - 2 ► 3/8" x 3" x 5" Square U-Bolts (ITEM T)
  - 2 ► Lower U-Straps (ITEM R)

Secure the U-Bolts using:

- 8 ► 3/8" USS Flat Washers (ITEM P)
- 8 ► 3/8-16 Flanged Hex Nuts (ITEM I)

#### PART NUMBER: SSR-101-40-2 PRODUCT LINE: SumoSprings VER:20190610

PAGE 3 of 3

### SuperSprings International, Inc.

505 Maple Avenue Carpinteria, CA 93013

#### **Technical Support** +1 (805) 745-5553

+1 (805) 745-5553 tech@supersprings.com

supersprings.com

Never exceed the manufacturer's Gross Vehicle Weight Rating (GVWR) located on your vehicle's identification tag.

**SAFETY NOTICE:** We recommend installation be done by a professional or persons with sound mechanical knowledge.

**WARNING:** These instructions are a general guide for installation. SuperSprings International, Inc. assumes no liability for the actual installation process. Consumers and installers should apply common automotive safety practices when raising and working on any vehicle. **Do not put yourself in a position where, if the vehicle were to move** 

**unexpectedly, you may be injured.** SuperSprings' products are designed to improve vehicle ride quality. Do not load any vehicle beyond the manufacturer's specifications.

**BEFORE INSTALLATION:** Ensure the vehicle is on a level surface, the parking brake is ON, with the ignition OFF, and place blocks in front of and behind the front tires to prevent the vehicle from moving.

**DURING AND/OR AFTER INSTALLATION:** Ensure emergency brake cables are not touching the SuperSprings. Secure any cables out of the way with zip ties or by re-routing. **Ensure all A/C lines, brake cables and frame are clear of contact or interference.**