

PART NUMBER

**TSS-106-40/47**

**Trailer SumoSprings®**

SCAN HERE: To watch a video of this installation



## BEFORE YOU BEGIN

### PRIMARY APPLICATION

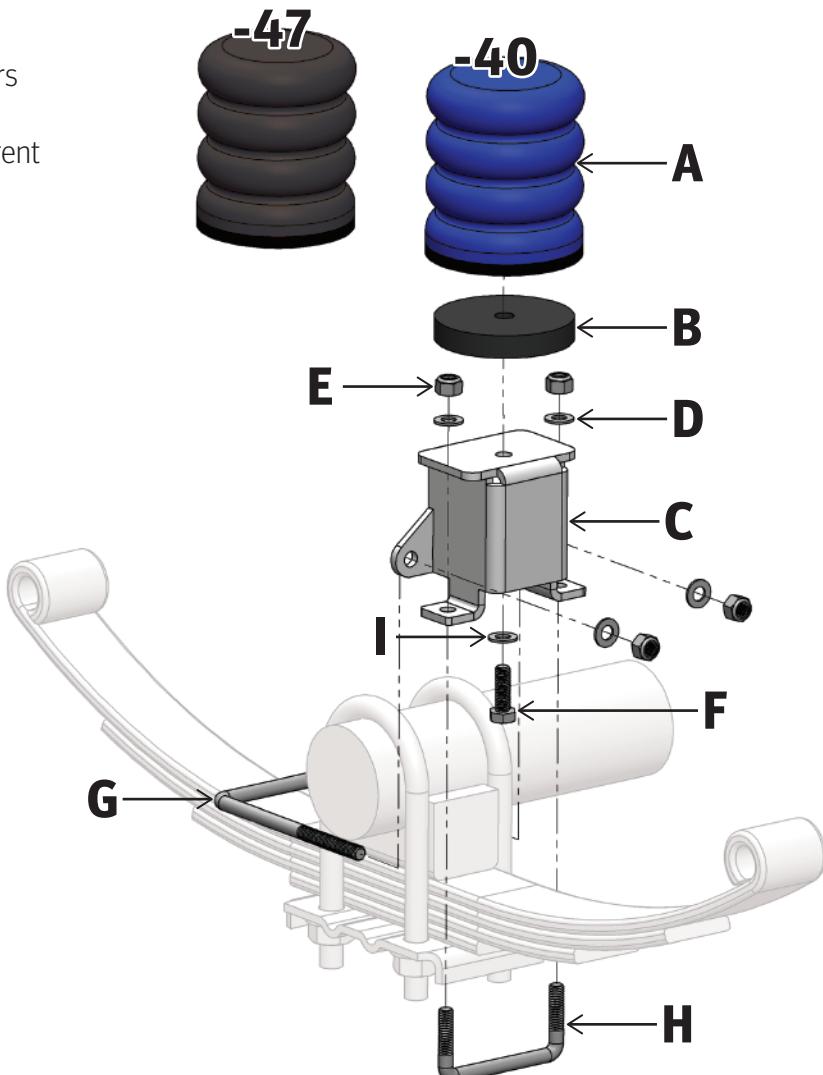
This product is designed to work on most trailers with the springs mounted below the axle. Because of the varying build designs from different trailer manufacturers, there are occasionally some models that this product will not fit.

### TOOLS REQUIRED

- > Floor Jack
- > Jack Stands
- > Wheel Chocks
- > Ratchet and Sockets
- > Torque Wrench

### PARTS LIST

Item	Part #	Description	QTY
A	511453	SumoSprings Blue -40	2
	511454	SumoSprings Black -47	
B	512116	3 x 1/2" Spacer	6
C	512128	Spring-Under Axle Bracket	2
D	112209	5/16" Flat Washer	8
E	112208	5/16" Lock Nut	8
F	512330	M8 x 30mm Hex Bolt	2
	512333	M8 x 50mm Hex Bolt	2
	512249	M8 x 55mm Hex Bolt	2
G	512339	Long U-Bolt	2
H	512338	Short U-Bolt	2
I	512215	M8 Flat Washer	2



**NOTE: ITEM H won't always fit for each application and is optional.  
ITEM G is required.**

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Questions or Concerns?

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**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 (SSI) 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.** SSI's products are designed to improve vehicle ride quality. Do not load any vehicle beyond the manufacturer's specifications.

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

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

**DURING AND/OR AFTER INSTALLATION:** Ensure emergency brake cables are not touching the SSI products. 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.

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**TSS-106-40/47****Trailer SumoSprings®****INSTALLATION**

**1.** Park the trailer on a hard, level surface so that the frame is parallel to the ground. Place chocks in front and behind wheels to prevent rolling. Observe all safety precautions and wear safety glasses.

**2.** Place the mounting bracket onto the side of the leaf spring closest to the shackle or center link connection. Measure from the top of the mounting bracket to the bottom of the frame.

**NOTE:** DO NOT RAISE THE TRAILER FOR THIS STEP.

**3.** Create a combination of the SumoSpring [ITEM A] and between 1 - 3 of the  $\frac{1}{2}$ " Spacers [ITEM B] that will stack up to a height of  $\frac{1}{4}$ " -  $\frac{1}{2}$ " taller than the measurement from step 2. This is very important as the Trailer SumoSprings provide the maximum level of vibration reduction and damping with this  $\frac{1}{4}$ " -  $\frac{1}{2}$ " preload.

**4.** Using the correct length M8 Bolt [ITEM F] and M8 Flat Washer [ITEM I] add Blue Thread Locker to the threads and connect the combination of Spacers and the SumoSpring to the Mounting Bracket [ITEM C].

**5.** Raise the trailer so that the axle is separated from the frame just enough to place the SumoSprings with the attached bracket assembly on top of the factory spring and rest the frame on safety jack stands rated for the weight of the trailer.

**6.** Install bracket with the attached SumoSpring to the factory leaf using the u-bolts [ITEMS G & H], 5/16" Flat Washers [ITEM D] and 5/16" Lock Nuts [ITEM E]. Be careful not to over tighten these to the point of bending the bracket.

**7.** Repeat steps 4 through 6 at each wheel.

**8.** Jack up vehicle, remove safety jack stands.

**9.** Carefully lower the trailer to the ground and ensure all Trailer SumoSprings are engaged.

**10.** Remove wheel chocks from the wheels.

**11.** Register the warranty for your SuperSprings International part. A warranty card can be found in the box your part came in.

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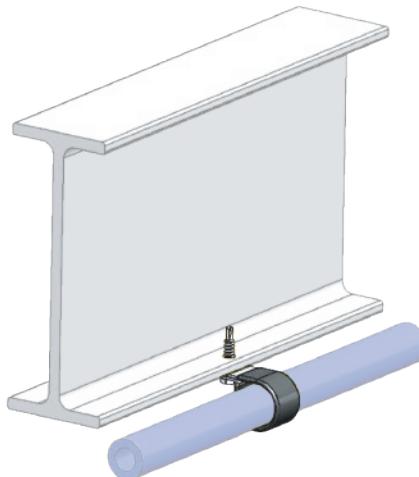
**Trailer SumoSprings®**

**GAS/UTILITY LINE RELOCATION**

On some travel trailers there may be a gas or utility line mounted to the lower portion of the frame that needs to be slightly relocated to avoid interference with the SumoSprings installation.

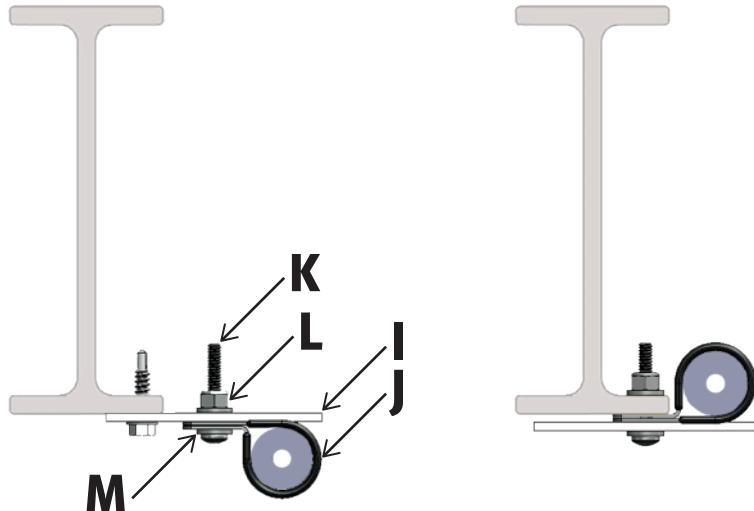
The kit includes hardware to reposition the gas/utility line if needed. One set should be used on each side of each axle to guide the line away from the SumoSprings.

Since there are multiple ways the lines are mounted to the frame, our kit is versatile so that there are multiple ways you can relocate the lines.



**PARTS LIST**

Item	Part #	Description	QTY
I	512123	Gas Line Bracket	3
J	512334	7/8" Loop Clamp	3
K	512335	10-24 x 1 1/4" Machine Screw	3
L	512336	10-24 Nyloc Nut	3
M	512337	#10 x 3/4" OD Fender Washer	6



**EXAMPLES OF THE RELOCATION KIT INSTALLED**

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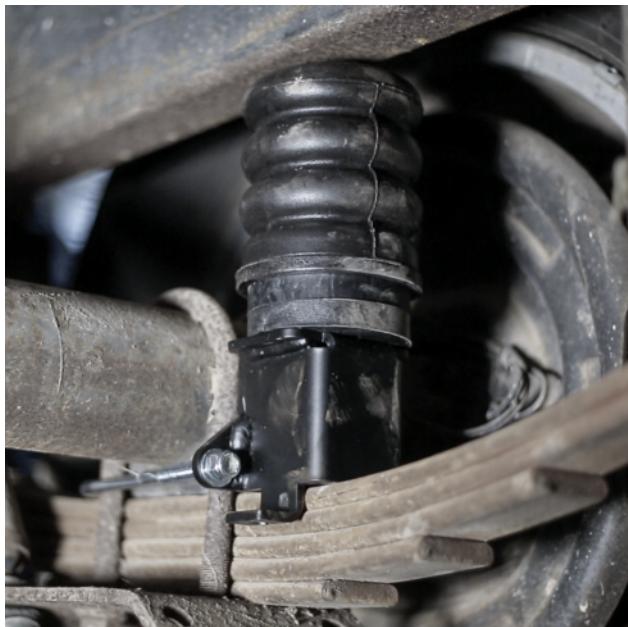
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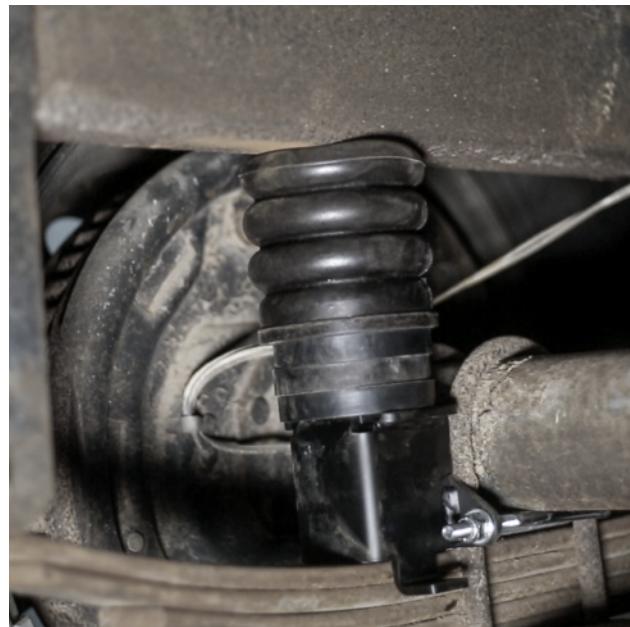
**TSS-106-40/47****Trailer SumoSprings®**

## TRAILER SUMOSPRINGS INSTALLATION IMAGES

TRAILER SUMOSPRING INSTALLED



TRAILER SUMOSPRING ENGAGED



FACTORY GAP BEFORE TRAILER SUMOSPRING INSTALLATION

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