

PART NUMBER TSS-107-40/47



SCAN HERE: To watch a video of this installation



PARTS LIST

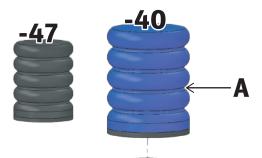
BEFORE YOU BEGIN

PRIMARY APPLICATION

This product is designed to work on most trailers with the springs mounted above the axle. The factory spring plate must not be wider than 4 ¼". Because of the varying build designs from different trailer manufacturers, there are occasionally some models that this product will not fit.

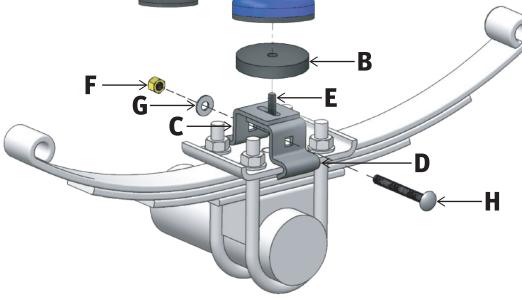
TOOLS REQUIRED

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



Item Part # Discription QTY 511453 SumoSprings Blue -40 2 511454 SumoSprings Black -47 512116 4 3 x 1/2" Spacer 512151 Top Mounting Bracket 2 2 512152 Bottom Mounting Bracket 512362 M8 x 25mm Carriage Bolt

	3.2302	mo n zamin damago bott	_
Ε	512363	M8 x 35mm Carriage Bolt	2
	512364	M8 x 45mm Carriage Bolt	2
F	512323	3/8" Nyloc Nut	2
G	512244	5/16" Flat Washer	2
Н	512211	3/8 x 3 ½" Carriage Bolt	2



Part Number: TSS-107-40/47

Product Line: TRAILER SUMOSPRINGS

Page 1

Questions or Concerns? Scan here:



or visit: superspringsinternational.com

 $\begin{tabular}{ll} \textbf{SAFETY NOTICE:} & We recommend installation be done by a professional or persons with sound mechanical knowledge. \end{tabular}$

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.



PART NUMBER
TSS-107-40/47



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.** Measure the current gap from the bottom of the frame to the top of the leaf spring plate. DO NOT RAISE THE TRAILER FOR THIS STEP.
- **3.** Set up the Top and Bottom Mounting Brackets [ITEMS C & D] together with a combination of the SumoSpring [ITEM A] and between 0 2 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.

IMPORTANT: It is critical that the Top Mounting Bracket [ITEM C] and Bottom Mounting Bracket [ITEM D] are assembled correctly. Refer to the diagram and ensure that the slotted surface of the Top Bracket is on top of the slotted surface of Bottom Bracket as seen in the diagram. Failure to do so will cause misalignment and void your warranty.

- **4.** Using the correct length M8 Carriage Bolt [ITEM E] attach the SumoSpring to the mounting brackets leaving them slightly loose at this stage. Be sure to add a drop of Blue Thread Locker to the bolt threads.
- **5.** Insert the 3/8" Carriage Bolt [ITEM H] through the Top Mounting Bracket [ITEM C] and out the Bottom Mounting Bracket [ITEM D]. Place a 5/16" Flat Washer [ITEM G] onto the carriage bolt and then thread on the 3/8" Lock Nut [ITEM F]. Leave the lock nut loose at this stage.
- **6.** 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 plate and rest the frame on the safety jack stands.
- **7.** Position the brackets between the u-bolts and squeeze them together so that the hooks locate snugly around the leaf spring plate. Tighten the 3/8" Nyloc Nut [ITEM F] until it is just touching.
- **8.** Slide the SumoSpring [ITEM A] side to side until it is centered under the frame rail and then rotate the SumoSpring clockwise by hand until it is as tight as possible. Finish tightening the 3/8" Nyloc Nut and torque to 120 in./lbs (10 ft./lbs.).
- 9. Repeat steps 4 through 8 at each wheel.
- **10.** Jack up vehicle and remove safety jack stands. Carefully lower the trailer to the ground and ensure all Trailer SumoSprings are engaged. 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.

Part Number: TSS-107-40/47

Product Line: TRAILER SUMOSPRINGS

Page 2

Questions or Concerns? Scan here:



or visit: superspringsinternational.com

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.



PART NUMBER TSS-107-40/47

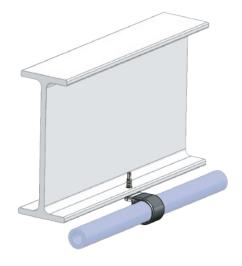


GAS/UTILITY LINE RELOCATION

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.

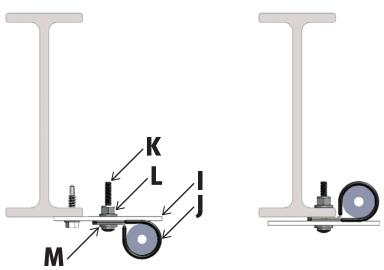
The kit includes hardware to reposition the gas/utility line if needed. One set should be used on each side of each axle to guide the line away from the SumoSprings.

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#	Discription	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

Part Number: TSS-107-40/47

Product Line: TRAILER SUMOSPRINGS

Page 3

Questions or Concerns?
Scan here:



or visit: superspringsinternational.com

 $\begin{tabular}{ll} \textbf{SAFETY NOTICE:} & We recommend installation be done by a professional or persons with sound mechanical knowledge. \end{tabular}$

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.



PART NUMBER TSS-107-40/47



TRAILER SUMOSPRINGS INSTALLATION IMAGES





FACTORY GAP BEFORE TRAILER SUMOSPRING INSTALLATION





TRAILER SUMOSPRING INSTALLED

Part Number: TSS-107-40/47

Product Line: TRAILER SUMOSPRINGS

Page 4

Questions or Concerns? Scan here



superspringsinternational.com

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