



Recall 21V-902 Spring Assist Ramp Door Assembly Repair Instructions

Index:

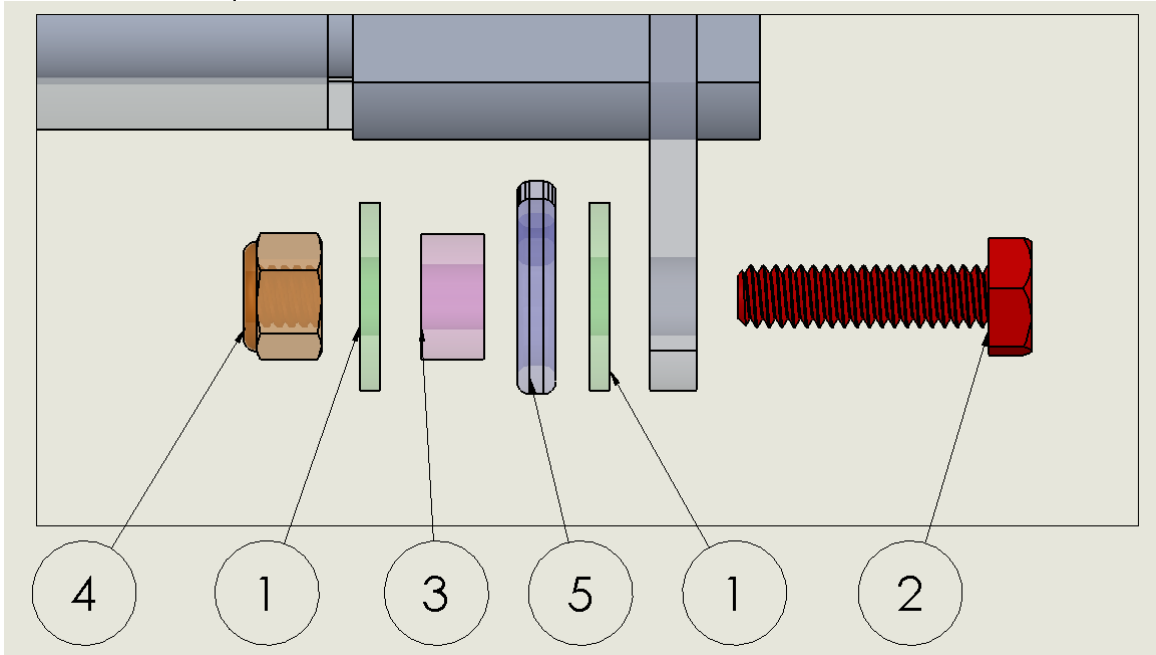
1. Items required
2. Component Identification
 - a. Nylon Bushing – Recall qualified – Proper Installation – Recall Disqualified
 - b. Nylon Bushing – Recall Qualified – Improper Installation – Recall Required
 - c. Aluminum Bushing – Recall - Disqualified
3. Location on Trailer
4. Proper Installation
 - a. BOM
 - b. Visual Identification
5. Repair Methods
 - a. With Spring Box
 - b. Without Spring Box

1. Items Required for Repair
 a. Hardware list.

#	FILE NAME	MATERIAL	PART NO	DESCRIPTION	QTY	LENGTH
1	90108A413	Steel	90108A413	Zinc-Plated Steel USS Washer	2	0.75" OD x 0.31" ID
2	91309A542	Steel	91309A542	Zinc-Plated Steel Hex Head Screw	1	0.25"-20 X 1.00"
5	Wire Rope	Steel	N/A	Wire Rope Assembly	1	N/A
3	94639A569	Nylon 6/6 Plastic	94639A569	Off-White Nylon Unthreaded Spacer	1	0.50" OD x 0.25" ID
4	95615A120	Steel	95615A120	Steel Nylon-Insert Locknut	1	0.25"-20 GR5

Note – Wire Rope Assembly already installed. On list for assembly reference only

b. Installation Sequence



c. Tools Needed

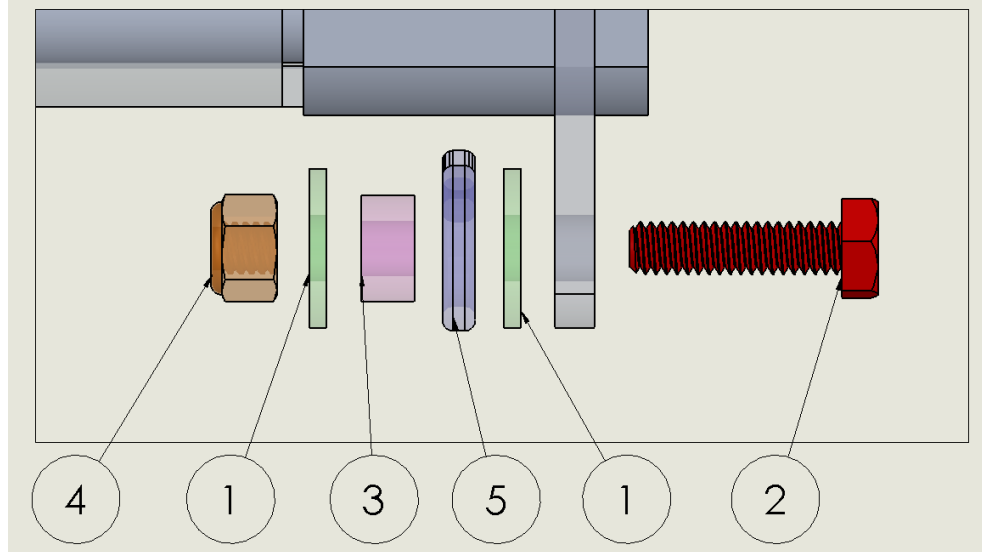
i. Reference specific repair procedure for tool list below.

2. Refer to the following component identification and Recall Qualifications:

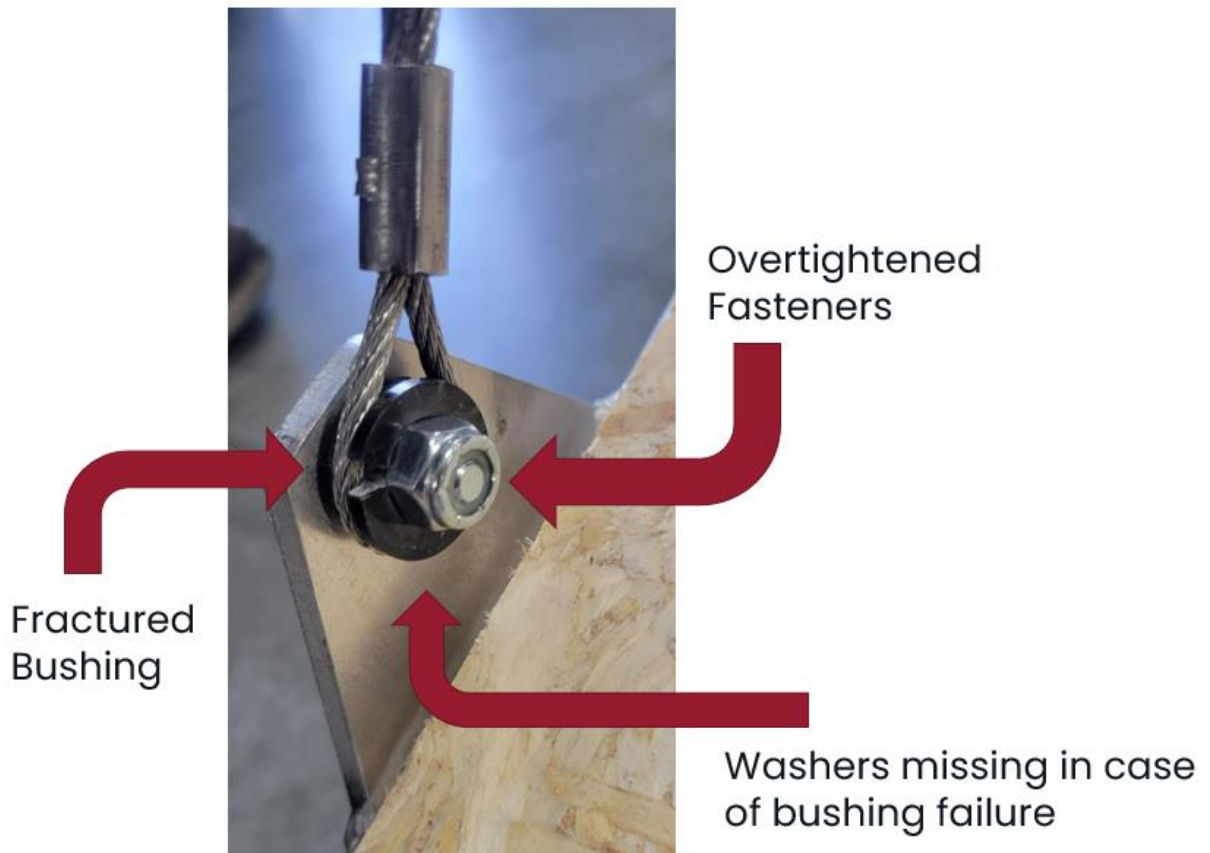
a. Nylon - Recall Qualified – Defect Free State.



- b. If Bushings are free of defect, replacement of bushing is not required. Hardware must match the following installation sequence.



- c. Nylon – Recall Qualified – Defective State



- d. Former Component – **Excluded from Recall**
 - i. Aluminum Bushing featuring Taper on one face

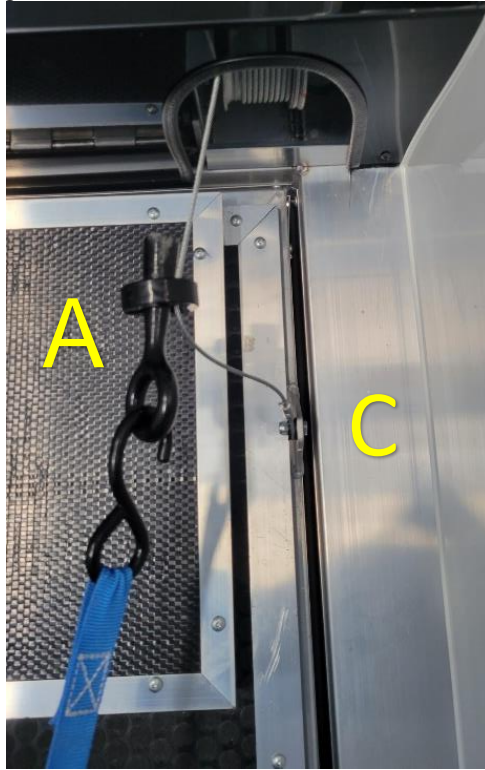


- 3. Location on Trailers:
 - a. Bushings are attached towards the rear corners of the ramp door as shown.

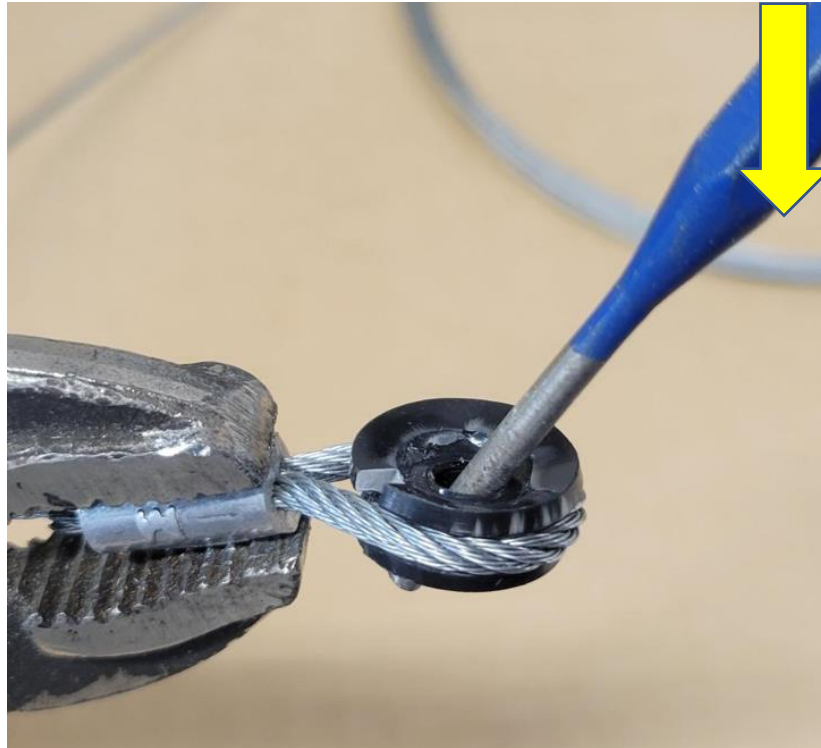


- 4. Repair: **REPAIR INVOLVING LOADED SPRING ASSIST ASSEMBLY MUST BE PERFORMED BY TRAINED OR AUTHORIZED REPAIR CENTERS ONLY.**
 - a. Tools Required
 - i. Bull Nose Wire Gripper
 - ii. 1" ratchet strap (500lb WLL)
 - iii. Vise Grips
 - iv. 3/16" or 1/4" diameter hardened bunch
 - v. 2-7/16" box end wrenches
 - vi. Tension rods for spring assist

b. Units with Spring Box



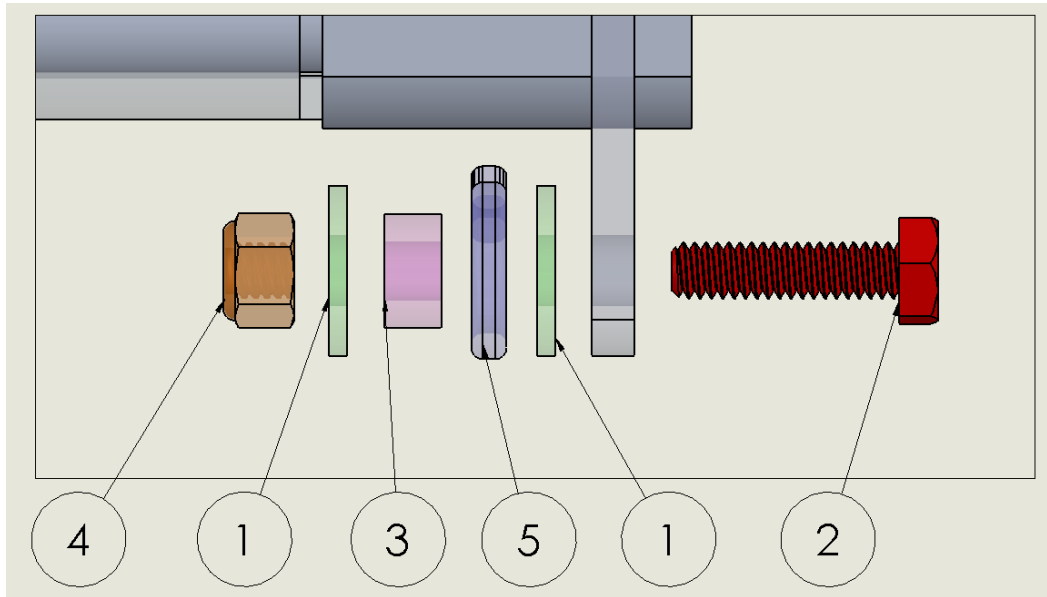
1. Repair instructions:
 - a. Close Ramp Door
 - b. Set Bull Nose wire gripper over spring assist line as shown.
 - c. Utilize Ratchet strap from wire gripper to D-Rings in floor. Ratchet to remove tension as show.
 - d. Use 7/16" wrenches to remove 1/4x20 hardware.
 - e. With Cable free of bracket, Clamp cable ferrule with cable clamping vise grips. Insert 1/8" hardened punch into center hole of bushing and apply a downward force to pry the bushing from eyelet.



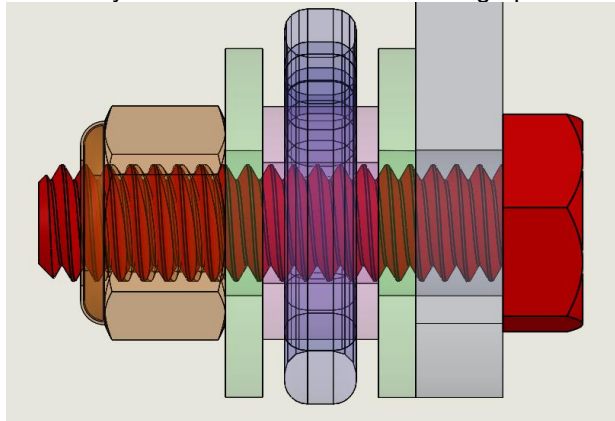
- f. Upon Bushing release, remove vise grips from ferrule.



g. reassemble in the following procedure.



h. Tighten all fasteners on assembly to resistance and apply $\frac{1}{4}$ turn to torque
 i. Hardware assembly should resemble the following upon correct installation



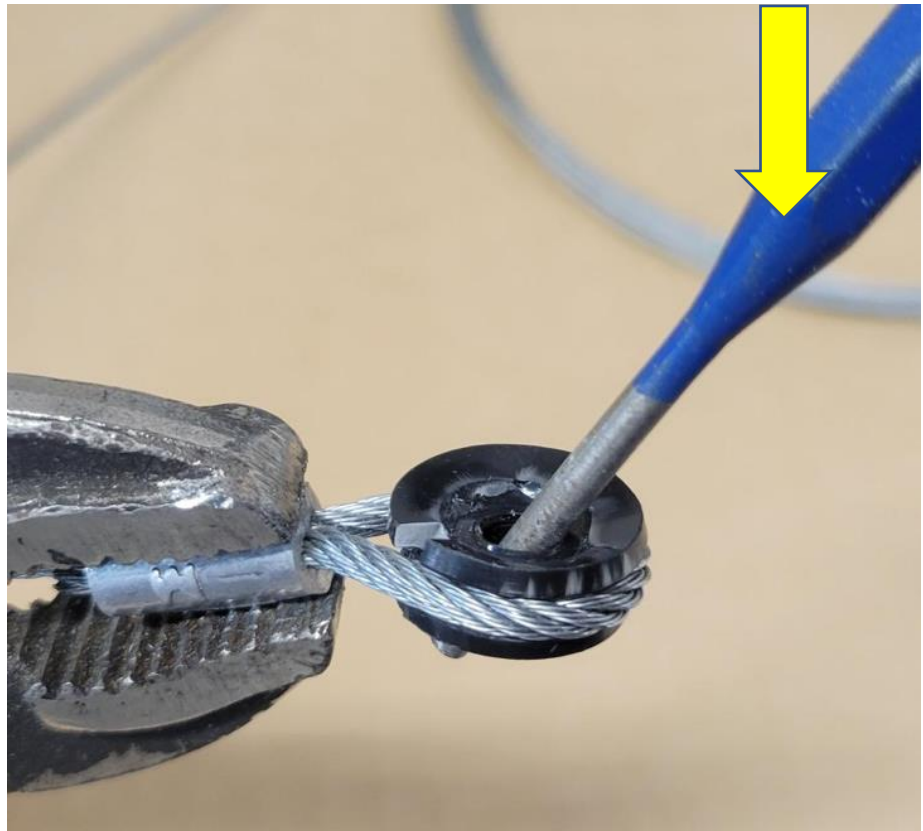
i. Remove ratchet strap per manufacturer directions.
 j. Repeat steps b,c d,e,f,g on opposite spring assembly.
 k. Repeat operation on other side.
 l. Slowly lower ramp door.
 m. Slowly raise ramp door affirming wire rope is properly coiling on spool.
 i. If wire rope does not recoil properly, repeat steps l,m.
 n. Repair complete.

c. Units without Spring Box



1. Repair instructions:

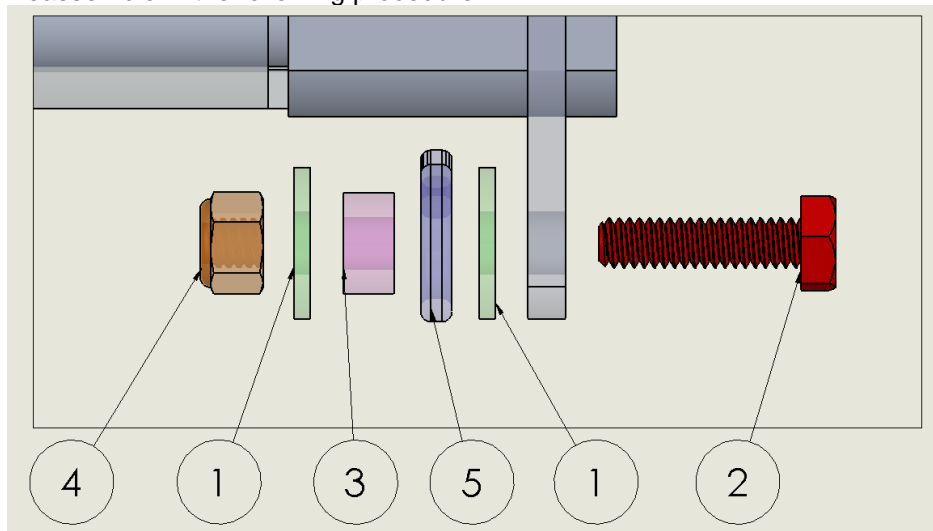
- a. Close Ramp Door
- b. Using appropriate tension rods – properly relieve tension on tension spring.
- c. Use 7/16" wrenches to remove 1/4x20 hardware.
- d. With Cable free of ramp door bracket, Clamp cable ferrule with cable clamping vise grips. Insert 3/16" or 1/4" diameter hardened punch into center hole of bushing and apply a force to pry the bushing from eyelet.



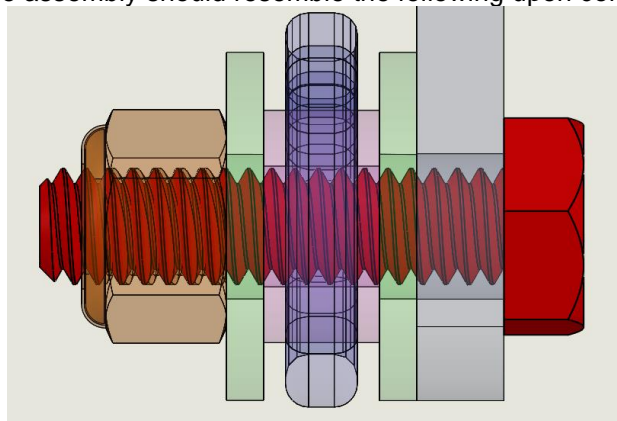
- e. Upon Bushing release, remove vise grips from ferrule.



- f. Reassemble in the following procedure.



- g. Tighten all fasteners on assembly.
i. Hardware assembly should resemble the following upon correct installation



- h. Repeat steps c,d,e,f,g, on opposite spring assembly.
i. Using appropriate tension rods – properly re-tension spring.
j. Slowly lower ramp door
k. Slowly close ramp door affirming wire rope is properly coiling on spool.
i. If wire rope does not coil properly, repeat steps g,h.
l. Repair complete.