

Shortening the SRL Cable

The SRL (Self Retracting Lanyard) is a critical safety feature of your lift. The purpose of the SRL is to detect if the lift's platform is descending too rapidly and then if it is, stop it. The SRL serves as an independent, separate safety backup system for your lift's main cable and hoist.

For some models of the SRL, we have found that when the lift platform is in the full "Up" position, there is some slack in the SRL cable, like so:



If this is the case for your lift, then you must fix this. It can be fixed easily by shortening the SRL cable. If this is not happening on your lift, then there is no need for you to take any action regarding this.

Below are the steps to fix this condition.

CAUTION - Always use gloves and care when handling cable.

Basically what you need to do is remove several feet of cable from the end of the SRL cable.

It is critical that you understand that the SRL cable and the hoist cable are almost identical in their appearance. It is equally important that we identify the SRL cable and only work on that cable in the process outlined below.

The photo below is of an SRL. Some SRLs are painted green or blue. The SRL is visible under the hoist head on the right side as you stand on the lift's platform and look up at the hoist. The cable runs out of the housing down to the gondola, where it typically runs through a pulley (on the right side of the column) and then goes back up and hooks to the same structural member that the SRL is mounted to.



The following steps are to be used to shorten the SRL cable:

- 1) Read the "Installation of Wire Rope Clamps" manual at this link:
<https://affordablewheelchairlifts.com/wp-content/uploads/2019/08/Installation-of-Wire-Rope-Clamps.pdf>
- 2) As mentioned in the instructions above, gather three cable clamps of the proper size and all necessary tools to shorten the SRL cable and install the clamps. Having an extra cable clamp will be helpful.

Determine How Much Cable to Remove

3) Move the lift platform to the ground level.

4) Remove the Safety Guard, exposing the cables and pulleys. Your Safety Guard design may vary.



5) Ensure that there is no slack in the cable between the SRL and the pulley. Mark the cable at the point where it exits the SRL pulley on the column side. This can be done with a magic marker or masking tape. This will be mark #1.

CAUTION. THE SRL CONTAINS A SPRING THAT IS INTENDED TO KEEP THE CABLE UNDER CONSTANT LIGHT TENSION. IF THE CABLE IS RELEASED WHILE EXTENDED, IT MAY RETRACT VIOLENTLY. ALWAYS MAINTAIN CONTROL OF THE CABLE.

6) Slowly so as to not engage the SRL's safety brake, pull the cable from the SRL and through the pulley until you have pulled through 72" or no more can be pulled out. Again, mark the cable where it exits the pulley. This will be mark #2.

7) Measure the inches between the two marks on the cable. Subtract 12" from this amount. This number is the "Length of Cable to Remove." If this length is less than 60", then this process

might not be effective and you should contact Affordable Wheelchair Lifts for alternate instructions. Otherwise, we wish to remove this amount of cable.

8) Allow the SRL cable to retract in a controlled manner. NEVER let it “snap” back into the housing.

Remove the Excess Cable

9) Make sure you have all of your tools and supplies with yourself on the platform. Bring an extra cable clamp and a short 2' piece of thin rope. Raise the lift platform up to a point where you can measure and mark the cable at the “Length of Cable to Remove” distance from where the cable connects to the SRL cable hook.

10) Move the lift further up so that you will be able to reach the SRL’s red cable hook.

11) Slowly pull the SRL cable out of the SRL housing and through the pulley until enough cable is through for you to cut off “Length of Cable to Remove” inches of cable. Pull out about 3 additional feet. **Tie a rope tightly around the cables going both into and from the pulley so as to prevent the cable from being retracted back into the SRL housing.**

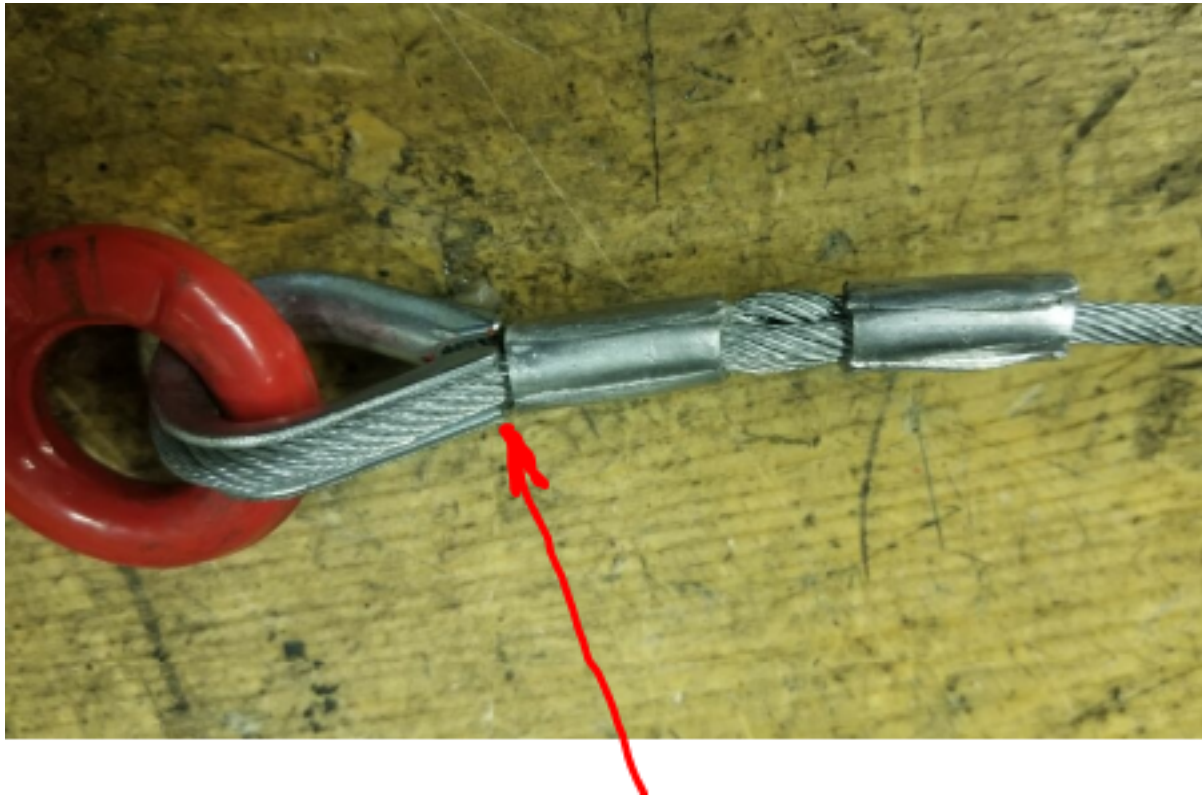
12) Reach into the hoist cover and unhook the SRL’s red safety hook. Below is a photo of the SRL and it’s red “double latch” safety hook. Note that this photo is taken from the back of the lift with the Hoist Cover removed.



Your hook may vary from the one pictured below.



13) Cut the cable at the thimble or eyelet. See the red arrow below. Do not remove the thimble from the red hook.



14) Cut the cable at “Length of Cable to Remove” inches from the freshly cut end of the cable. You will discard this cut portion.

15) Ensure that the cable is not inadvertently routed through the railing or gates or other items. Reconnect the shortened cable to the SRL’s red hook using the existing thimble and three cable clamps.

16) Ensure that the cable is not inadvertently routed through the railing or gates or other items, or knotted to itself. Reconnect the hook to the structural member where it was before and then carefully remove the rope that holds the cable at the pulley. Allow the SRL cable to slowly retract in a controlled manner.

The SRL cable should now fully retract with no slack. This is what we want.

Test The Results

17) Inspect your work. Lower the gondola to the ground. Ensure that the cable does not become tight, stopping the gondola before it reaches the ground. Reinspect your work. Reinstall the safety guard.

Move the platform all the way between the upper and lower stations at least once to insure that the cable is long enough to reach the bottom station and yet is not slack at the top station.

If you encounter any problems following the above instructions, please give us a call at 704-773-4502.