Installing a Cable Driven Retrofit Kit
September 13, 2023
V2.0

1. Congratulations!

1.1. You have an Affordable Wheelchair Lift and now you are about to install a Retrofit Kit that will bring it up to date with the latest new features. The end results will be a lift that has the following:

1.1.1. An improved Upper Limit Switch that is easier to adjust than the old stop-rod activated switch.

1.1.2. A Lower Limit Switch that will now turn off the hoist motor when the lift reaches the ground.

1.1.3. If your controller is tethered you will get an improved hand held controller that is easier to operate.

1.1.4. A new, more powerful motor that should last longer than the old one.

1.1.5. Smoother and quieter operation.

1.1.6. A longer lasting cable that will not require maintenance as often.

1.1.7. A renewal of your warranty period.

1.2. A Retrofit Kit normally arrives in a wooden crate. If you have been requested to send your old hoist back to Affordable Wheelchair Lifts, save this crate for doing so.

2. Preparation

2.1. Here is a typical wall-braced lift with an old style hoist motor. Note that this indoor lift has a Bracket Cap but does not have a Hoist Cover. It also has two pulleys on the main cable - though only one is visible here.

3. Removal of the old Hoist Assembly and parts

3.1. Clear the work area.

3.2. If you have a hoist cover, take off the hoist cover's front panel and, if accessible, the back panel also.

3.3. Bring the Platform all the way to the ground and unplug the hoist.

3.4. Take off the Safety Shield between the platform and the pulleys on the Collar.

3.5. You should now see something like this, except that part of your Hoist Cover might still be in place:

3.6. Remove the vertical Actuator Rod and the Threaded Rod it rests on (if present). These can be discarded.

3.7. Using a ladder in a safe manner do the following:

3.8. Determine if you have an SRL or you have a Safety Lock. You will have one but not both.

3.9. Here is an SRL and its cable hook, as seen from the back.

3.10. If you have an SRL, detach it and its hook from the old Hoist Assembly. You may leave its cable running through its Collar pulley.

3.11. If you have a Safety Lock (a bright orange box with the words “Safety Lock” on the side), detach its upper cable’s carabiner (see below) from the Hoist Assembly.

3.12. Remove the Hoist cable’s Pulley from the Pulley Block at the top of the Platform’s Collar, leaving the pulley block in place.

3.13. Detach the end of the Hoist's cable from the Hoist Assembly.
3.14. If there is a Bracket Cap then secure the column so it will not fall over once the Bracket Cap is unsecured from any wall bracing. Your placement of your platform at the bottom station will help achieve this.
3.15. Remove the Bracket Cap.
3.16. If you have a Hoist Cover, remove it.
3.17. Loosen the Set Screw(s) holding the Hoist Head to the Column.
3.18. Lift off the (heavy) Hoist Assembly and move it to the ground. If it is too heavy to safely lift, you may carefully unscrew the four bolts holding the hoist to the Hoist

Head and lower the Hoist to the ground. Support the Hoist while you are doing this. Then you can more easily remove the Hoist Head itself.

3.19. Any previous bracing to the wall will probably need to be repositioned for the new hoist assembly. Consider removing it now.

3.20. When you are done your lift should look something like the photo below.

4. Hoist Head

4.1. Unpack the new hoist assembly.

4.2. Make every effort to keep tension on your cable through the installation process so slack will not get into the cable system. If slack is introduced then you can remove it at the end of the installation

4.3. Prepare to place the new hoist assembly on the top of the column. The cable should run down the front of the column. Note as you prepare to move it that it has several dangling cables that might get caught. Make sure they will stay out of the way. Lifting the new hoist assembly may be easier if you remove the front and/or back panels. Just remember that you will need to put them back on later.

4.4. Place the Hoist Assembly on the top of the column and slide it down over it. Tighten the set screw.

4.5. If you removed the hoist's back panel earlier, put it back on before this next step.

4.6. If necessary, fasten the hoist assembly to the supporting structure. Use the bracket cap or the holes in the back flange a few inches lower. Or you could use a brace to connect the column to the wall at the Hoist Assembly's lower back flange. This would be below the hoist head but above where you will locate the Upper Limit Switch.

5. SRL and Safety Lock

5.1. If you have an SRL then attach the SRL and its cable to the new hoist head like it was before..

5.2. If you have a Safety Lock then attach its cable to the new hoist head like it was before.

6. Cable

6.1. Your Retrofit Kit uses a cable to raise and lower the platform.

6.2. Plug the hoist motor in.

6.3. Remove the rotating circular part of the old Pulley, replace it with the hoist's cable hook and re-attach it to the Pulley Block, like below. Note that the new hoist's cable no longer require any pulleys:

7. Upper Limit Switch

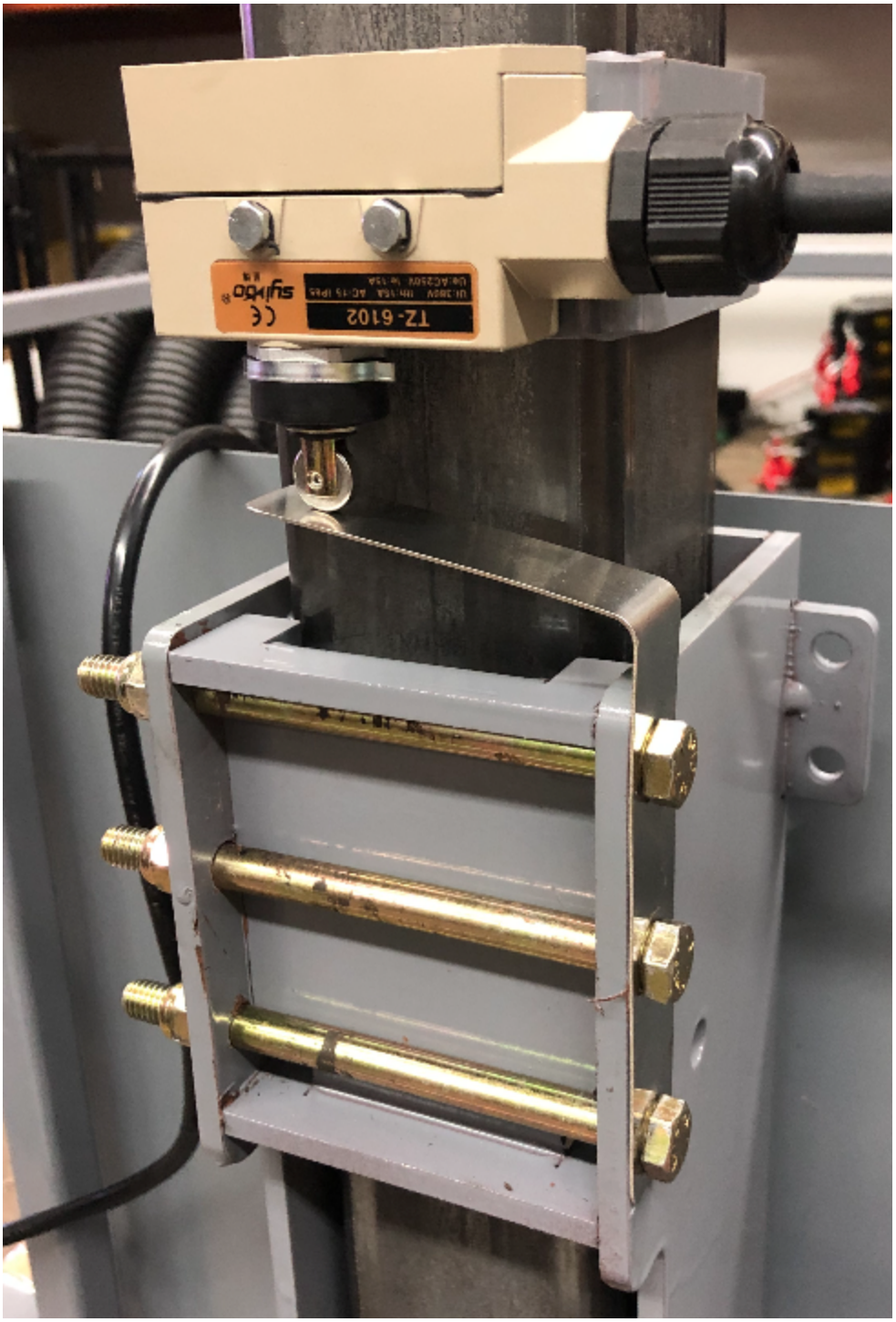
7.1. There are two pieces to the Upper Limit Switch.

7.2. Mount the shiny sheet metal Spring Actuator portion of the Upper Limit Switch to the back of the Collar using the existing bolts found there:

7.3. You may have a different looking Backing Plate beneath the bolts, but that should not matter.

7.4. Attach the Upper Limit Switch bracket to the Column with the switch facing downward on the back. Use the supplied ⅛” allen wrench to tighten the set screw on the side.

7.5. When the collar is at the Upper Limit Switch’s height you should see something like this:



7.6. You will later adjust the up and down location of the Upper Limit Switch on the column in order to make the platform stop at the desired height.

8. Lower Limit Switch

8.1. The lower limit switch is built into the hoist head and requires no adjustment. It will automatically turn off the motor when it detects any slack in the cable.

9. Cable Slack
    9.1. If slack was introduced into the cable system then now is a good time to remove it.
    9.2. Using gloved hands, apply enough downward force to override the slack detector switch. Run the hoist to unspool cable from the drum until you see that any remaining cable wraps on the drum are tight and adjacent. Under tension, feed cable back onto the drum in tight, adjacent wraps. You may have to go slow and back up several times to do this correctly.

10. Safety Guard
    10.1. Re-attach the Safety Guard to protect passengers from the cable and pulley.

11. If you removed the Hoist Cover's front panel earlier, put it back on now.

12. Testing
    12.1. Run the lift up and down. Adjust the height of the Upper Limit Switch.

13. Returns
    13.1. If you have been requested to return you old hoist to Affordable Wheelchair Lifts, please do so.