Proper Spooling (Winding) of Hoist Cable

A hoist's cable should be kept under some tension at all times. Otherwise it will become loosely wrapped around the drum - a condition that leads to "popping and snapping", unbalanced wrapping on the drum, and faster cable wear and tear.

Conditions that can result in a lack of tension for a hoist cable include 1) Pushing the "Down" button on the lift controller when the lift is already at the bottom station and 2) Failing to keep the cable under tension during installation.



Here is a photo of a properly wound, tensioned cable:

Here is a photo of a cable that has been allowed to be too loose. It is apparent that the wire rope was wound onto the drum while it was not held under tension, nor was it guided during spooling to ensure that it was layered properly:



The purpose of this document is to instruct you on how to respool the cable so that it is properly tensioned and spooled.

Each layer of wire rope on the drum uses the wire rope wound beneath it for it's foundation. If the foundation layers are loosely wound, then they will shift and the cable will (audibly) pop and snap as it seeks the lowest point possible. To correct this, the cable must be despooled to the last turn, and then held under tension and guided in as it is respooled. In doing so, the operator must ensure that each turn of wire rope is tightly against the previous turn. Doing this will ensure that subsequent layers have a smooth and continuous foundation to support them.



Note:

ALWAYS wear protective gloves when handling cable to prevent a stray strand from piercing your hand.

NEVER allow any part of your body near a pinch point created by the cable, or its attachments.

ALWAYS remain in control of the hoist control switch, and be mindful of how to react if you become entangled in the mechanism.

Unplug the hoist if you are working on it, and do not need it to be operational to do so.

Instructions:

1) Place the platform in a stable position. One way to do this is to lower it to the bottom station.

2) While keeping the cable under tension, unspool it, making sure that the cable does not get kinked or damaged. Unspool it until you have reached a point where any remaining cable is spooled properly, or all cable is off of the drum. When unspooling keep tension on the cable coming off of the drum.

3) While keeping tension on the cable and ensuring that it does not get kinked or caught, spool the cable back onto the drum. Make sure each wrap lands immediately next to the previous one and you start a new layer only when you must. You may have to stop, back up a bit and restart the spooling process several times.

If done properly this should prolong the life of your cable and make using the lift more enjoyable.

Note: If the cable is spooled in the wrong direction, the upper limit switch will not function to stop the lift at the top of its travel. This is a dangerous condition, and reflects an operator error that must be corrected. When spooled in the proper direction the cable descends downward from the drum between the drum and the lift's column. Respool the cable in the proper direction, inspecting the cable for any damage.

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