Installation Of Wire Rope (Cable) Clamps

Sometimes it may be necessary to shorten one of the cables on your Affordable Wheelchair Lift. Here are instructions on how to do this.

The wire rope used on Affordable Wheelchair Lifts standard products has a diameter of 3/16". Any clamps or hardware must be compatible with this size cable.

The lift must not be used if the wire rope is damaged or compromised.

The wire rope for the hoist must be long enough so that there is a minimum of five turns of cable left on the hoist's drum when the lift's platform is fully lowered.

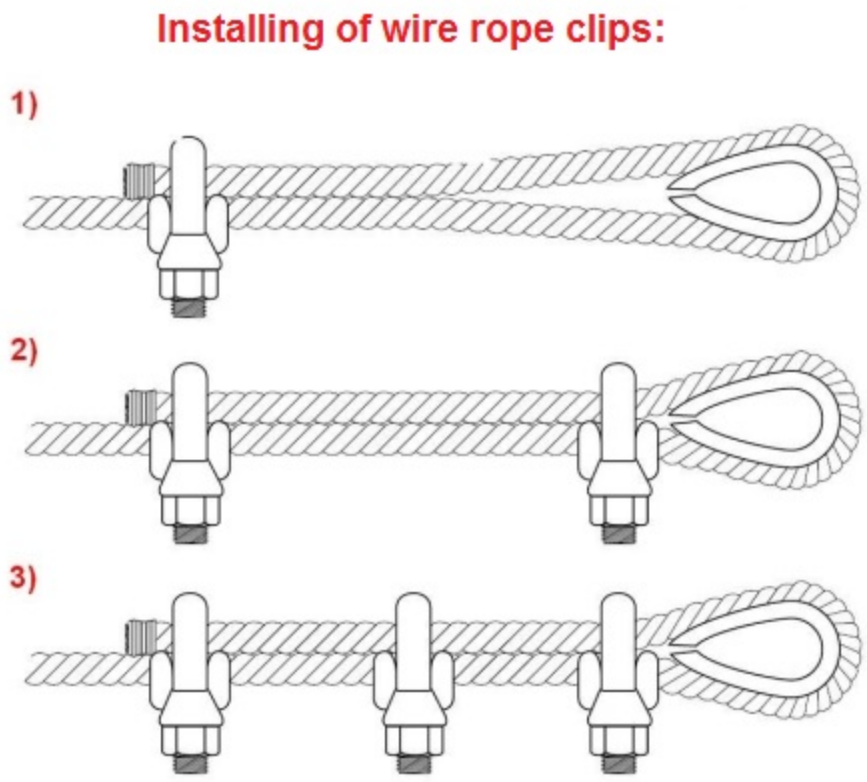
The following instructions are provided for those wishing to modify their wire rope.

The wire rope clamps are comprised of a saddle, a u-bolt, and two hex nuts that tighten around the wire. The saddle should always be on the load bearing portion of the loop. This is because the u-bolt may damage or compromise the strength of the cable. There should be three clamp assemblies on the wire rope loop where the hook is attached. If correctly installed, this will result in a joint that is more than twice as strong as the wire rope itself.

Cutting the Wire Rope

Before cutting the wire rope, it is recommended that a length of four to six inches of the wire rope be tightly wrapped with electrical or duct tape. This will prevent the wire rope from fraying during and after the cutting process.

The preferred method of cutting the wire rope is with an abrasive cutter or grinding wheel. However, a hack saw or bolt cutter can be used.



Looping Wire Rope and Thimble

When the wire rope has been looped or bent to attach to a hanging point, it creates an eyelet that needs to be reinforced. A thimble is a curved metal tool (much like the shape of a teardrop) that's placed within the eyelet of the wire rope, keeping the wire rope curved and adding extra protection from wear. The end of the wire rope is referred to as a "dead end."

Prepare the Wire Rope

When you thread the wire rope through its holding place (the hook), pull six to eight inches through to be clamped against the load bearing side. Install the eyelet inside the hook and position the wire rope into the eyelet groove. Hold the short end tightly against the rest of the wire rope and temporarily attach it with a piece of tape to keep the eyelet in place. Your loop has been made and your rope now contains an eyelet.

Prepare and Attach the Wire Rope Clamps

Install three wire rope clamps. Be sure to have the u-bolts clamping against the six to eight inch section of the wire rope. Install one clamp at the end of the non-load bearing section. Slide one clamp up as close as you can to the eyelet before tightening it. Space the other clamp between the first two. Tighten each hex nut securely. Follow the clamp manufacturer's instructions.