TECHNICAL BULLETIN 200316
RELIEF PLATE – QUICK RELEASE

To: All Operators of Magic Carpet Lifts
Subj: Relief Plate – Quick Release

The following language is in 7.2.3.4 in the B-77-2017 standard. This subject is related to Belt transition stop device.

“A belt transition stop device shall be provided. If an object continues to follow the belt past the belt transition stop device, the device shall move to relieve the pinch point and initiate the stop. As a minimum, the belt transition stop device shall have the following features:

a) the leading edge of the device shall be marked with yellow and black warning stripes;
b) the device shall be designed to limit the maximum opening size between the leading edge of the device and the belt to 2.5 inches (64 mm);
c) a stop shall be initiated by a force on the transition device not to exceed 30 pounds (133 newtons). The activating force shall be applied tangentially to the belt surface at the leading edge of the belt transition stop device);
d) the design of the device shall allow the operator to readily remove entangled objects. The conveyor shall be inoperable if the relief system is in use;”

Currently to get to the quick release pin, you would have to unscrew the socket head bolts on the right-side cover plate using an Allen wrench stored at the unload station. Some say this isn’t “readily”.

ACTION: For faster opening of the modular transition plate plastic, a pip pin is inserted to replace the bolt in the relief plate arm clevis. A pip pin has a locking feature such as a hole for a cotter pin that is used to secure them. Put a cable wire or lanyard through the pip pin and take it outside of the unit as shown below.
The cable wire or lanyard goes through the 90-degree elbow to the outside.
And then run it up a control post and just have a quick release at the end of the conveyor with a pull cord and T-Handle, like a lawn mower pull cord. We currently have this quick release pull kit ready to be ordered.

The pip pin ring can be attached with a lanyard to a pull cord with a T-Handle.

Route the lanyard through electrical conduit fittings so that the release T-Handle is out of the way, but somehow hidden from guests who may pull the handle out of curiosity.

Resetting of the relief plate will require access under the bolted door cover. The Allen wrench must be kept handy for cover bolt security.