

# Importance of Battery Compartment Maintenance

Tech Tip TT–965

Models Affected: All battery extractors and carriages

### Subject:

If not properly maintained, the condition of battery stand and forklift battery compartments can have negative effects on battery extractor or carriage operation. Compartments in poor condition increase the force required to transfer a battery leading to unnecessary stress on extractor components.

## **Description:**

In order for a battery extractor or carriage to operate at its highest efficiency, the battery stands and forklift compartments (which batteries are being transferred to and from) should be well maintained. Faulty rollers result in the batteries being dragged across them requiring substantially more force to move the battery in and out of the compartment.

Slide strip compartments by design require more force to remove and install a battery. As a slide strip wears down, the surface in contact with the battery becomes wider increasing the force required even further. Damaged slide strips with rough surfaces also increase resistance.

The additional force required to move batteries in these conditions places undue strain on extractor arms, hardware and hydraulic components. Over time the additional stresses can lead to damaged components and eventual failure. If the resistance becomes great enough, vacuum cups and magnets may pull free from the battery during extraction. This may require re-attaching multiple times to remove the battery from the compartment, increasing changeout times.

#### **Recommendation:**

Inspect roller compartments and lead rollers in slide strip compartments regularly for roller defects and failures. Replace defective rollers as needed.

Clean and lubricate slide strips often and replace worn slide strips as needed. In slide strip compartments utilizing three strips, remove the middle strip when possible. The bottom of battery cases are not perfectly flat, but rather "crown" or bow out in the center, concentrating the majority of the battery's weight on the center slide strip. Removing the center strip will often decrease resistance as the battery weight is more evenly distributed over the two outer strips.

#### **Repair:**

BHS offers a wide variety of compartment roller trays which could be used to replace an existing slide strip system in forklift battery compartments. Combination rollers and slide strip units maintain battery security in the forklift while minimizing the force required to move a battery in and out of the compartment allowing the battery extractor or carriage to operate at its highest efficiency. Contact BHS or your local BHS dealer for more information on options available for your application.

# For more information call: **1.877.BHS.4YOU** (Outside the U.S. +1 314 890 0953)





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