



Operator Aboard Battery Extractor Swing Arm Damage and Repair

Models Affected: BE-SL, DS, TS, and QS models including "N" models

Tech Tip
TT-967

Subject:

Typical swing arm damage, likely causes, and proper repair.

Description:

The Battery Extractor (BE) swing arms support the vacuum or magnet arm as it rotates between compartments. The swing arms also house the vacuum or magnet components. Under normal operation and with routine maintenance the swing arms should perform without fail. Instances where swing arm failures are experienced could be the result of improper operation. The swing arms are comprised of a formed channel with a hub welded in place which fits onto the actuator shaft providing the rotation of the arms between compartments. The typical failure of the swing arms is a shearing of the weld or tearing of the metal around the hub which disconnects the hub from the swing arm preventing arm rotation.

Swing arm failures as described above can be the result of impact from a lift truck if the arm is left extended. Rotating the arm while inside a stand or lift truck compartment or hooking the arm on the stand or truck, causes the arm to twist resulting in damage to the swing arm. Over time, repeated flex of the swing arms due to excessive force applied can lead to damage. Excessive force can be applied to the arms when transferring batteries into stands by continuing to push against the battery once it is completely in the stand. The same can occur when transferring a battery into a lift truck. When moving a battery into a truck, poor alignment of the battery with the truck compartment can result in the battery hanging up during the transfer. Continuing to push the battery without correcting the alignment can lead to swing arm flex.

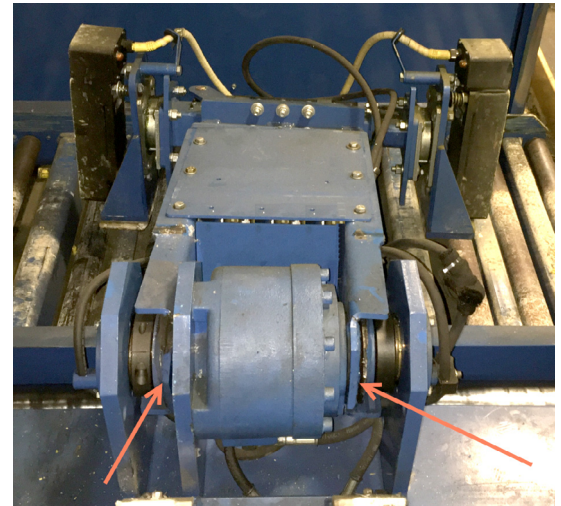
Recommendation:

The plates covering the swing arms, referred to as stiffener plates, are an integral part of the rigidity of the arm assembly and reduce swing arm flex from excessive force. The stiffener plates must be re-installed properly if removed for repair or maintenance. Refer to Tech Tip TT-909 for additional information on the stiffener plates.

With proper operation of the BE and avoiding the situations described above, regular maintenance will also decrease the chance of damage. Inspect all hardware regularly for tightness and replace missing hardware as required.

Repair:

If failure is experienced, replacement swing arms are available as well as multiple parts kits. Contact BHS or your local BHS Dealer to determine the proper parts required for your application.



Extractor arm assembly with damaged swing arms



Close-up of swing arm damage

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

