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Montgomery W-Series 5W Power Walk Pallets

All information regarding inspection instructions and criteria is based on current information as of the issue date of this product bulletin. These inspection instructions and criteria may be modified based upon ongoing inspections and evaluations.

Product Issue

Some 5W Pallets in the W-Series Auto Walks may show signs of weld cracking in two separate areas: 1. the area adjacent to the welds attaching the trail wheel through axle to the pallet side plates; and 2. the area between the pallet sides and the pallet wrapper. This bulletin helps determine when pallet replacement or repair is necessary.

On fabricated pallets used with the Montgomery W-Series Power Walks, where the chain rollers are individually flange mounted to the pallet body end plate, cracking may occur in the sheet metal body. The length of time required to develop these cracks is dependent upon the equipment operating hours, unit operating speed, loading on the equipment, environmental and building conditions, and service care provided. Therefore, regular maintenance inspections are necessary to determine if cracks have developed, and to determine if pallets should be replaced.

Action

All W-Series 5W Power Walks must be inspected for each area of cracking using the **Inspection Instructions** below, and it must be determined whether the affected pallets can be repaired or must be replaced. Replacement criteria is detailed in **Priority Levels** below and repair is detailed in **Repair Policy** below.

Inspection Instructions

Inspect 5% of the total pallets in the unit. Example: 17 pallets for a unit with 340 total pallets.

- Secure the unit to ensure safety.
- Install barricades.
- Remove lower access cover.
- Place power walk in inspection mode.
- Rotate step band to place pallet in a position with access to the three bolt flange(s).
- Unbolt the three bolt flanges and rotate the pallet out of the step band so that there is access to both sides of the trail wheel axle.
- Label the pallet with an identifying number.
- Inspect the side plate for cracks immediately adjacent to the flange.
- Inspect the pallet body for cracks in the pallet wrapper in the area of the welds joining the wrapper and the pallet side plate.

- Inspect the trail wheel thru axle for tightness in the pallet body, and for cracks in the welds joining the pallet side plate and the trail wheel thru axle.
 - *Inspecting the pallet prior to cleaning enhances the inspector's ability to see cracks. Rust/Rouge can highlight existing cracks if the pallet is dry.*
- Mark the inspection date on the pallet (day/month/year).
- Document pallet inspection information on the pallet survey form, including rotational degree of cracking.
- Provided the observed condition of the pallet is acceptable for service, rotate the pallet back to its installed position and connect the three bolt flange. If deficiencies in the pallet are identified, then determine the proper disposition as defined in **Priorities for Disposition**.
- Repeat procedures above for each pallet.
- When the inspection and necessary repairs are complete, install the lower access cover.
- Remove barricades.
- Return the unit to service.

1. WELD CRACKING IN AREA OF TRAIL WHEEL THRU AXLE

Fatigue cracks can develop adjacent to the welds which secure the trail wheel thru axle to the pallet side plate because of continued flexing of power walk pallets during operation.

The cracks may progress to the point where the welds no longer attach the trail wheel axle to the pallet side plates. See Figure 1.

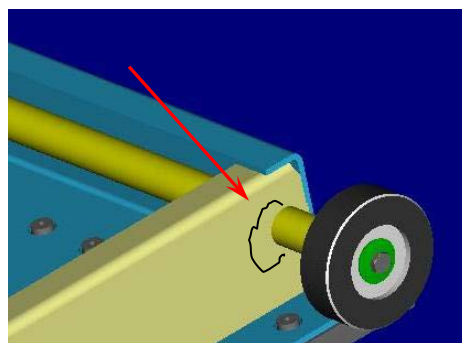


Figure 1. Cracks in the area of the trail wheel axle.

Priority Levels

Priority 1

If any of the following occur, the pallet must be replaced immediately:

1. The trail wheel thru axle is no longer captured by the pallet body; OR
2. The cracking on the side plate has reached or exceeded 270 degrees around the axle.

If the pallet cannot be replaced immediately, the unit must be removed from service.

Priority 2

If a pallet has a crack that is less than 270 degrees in the area of the welds of the through axle and side plate, it must be re-inspected in 30 days.

Priority 3

If no cracks are identified, then re-inspect the pallet at least annually.

2. WELD CRACKING BETWEEN THE PALLET SIDE AND PALLET WRAPPER

On older style pallets, the pallet wrapper is welded to the pallet end plate. The pallet body is quite rigid. The weld acts as a “stress riser”, which may eventually be relieved by forming a crack in the wrapper. The crack would typically begin at the toe of the weld due to the slight twisting of the pallet as it travels through the pallet band path. The stress concentration may also relieve itself by cracking the weld material, or the material immediately adjacent to the weld. See Figure 2.



Figure 2. Pallet showing crack in weld.

Repair Policy

Drill a 0.25 inch diameter hole centered on both the bottom edge of the side plate and the bottom edge of the pallet wrapper through both components. See Figure 3.

Install a 0.25 inch diameter steel button head rivet L= 0.5 inches drawing both components together. (Reference part number US60134001.)

DRILL $\frac{1}{4}$ IN \emptyset HOLES AT CORNERS ~CENTERED
ON FOLDED EDGE OF WRAPPER AND SIDEPLATES.
BOTH ENDS 4X

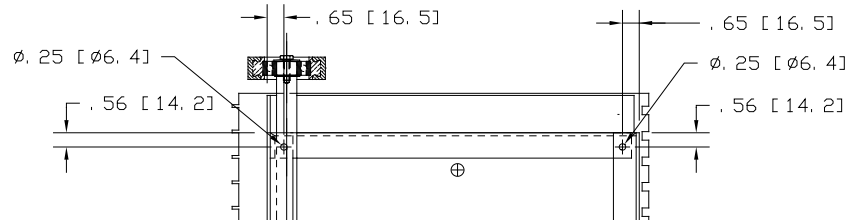


Figure 3. Layout of 0.25 inch diameter holes to be drilled.

Technical Support

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