

Cleaning Produce Washing Equipment: Root Barrel Washer Checklist

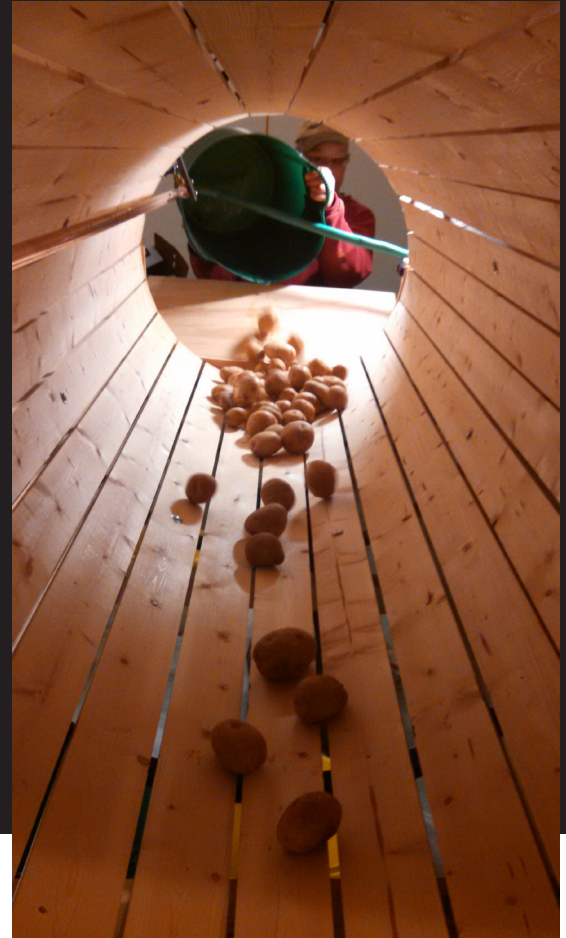


Months of research was conducted on a root barrel washer to determine the best way to clean the equipment given that it was not designed to be easily taken apart and cleaned. Hard-to-reach places were identified through the tracking of vegetable matter and debris dispersed within the barrel washer during use. An acceptable level of cleanliness completed in a reasonable amount of time was identified. The equipment cleanliness was based on visual criteria only; further investigation of the microbial level is still required. To the best of our efforts, areas of critical cleaning are identified in this checklist as well as all other sections necessary to clean.

Cleaning challenges with a root barrel washer:

- it is made of soft wood
- the barrel spins around so the debris that is on the bottom quickly goes to the top which can drop down on vegetables
- there are many small spaces for debris to get lodged in while the barrel is in operation
- reaching into the barrel requires long handled tools

Because of the wooden construction, scrubbing is essential to remove soil and debris. Rinsing after each day's use is essential for keeping soil and debris from drying and caking onto the surface and into cracks etc.



Cleaning Tools

Stiff bristle brush

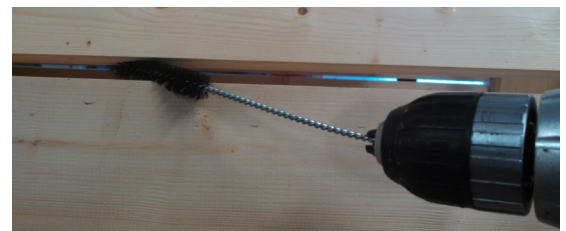
Long handle brush or pad to clean flat surface of staves

Long handle with stiff bristle bottle brush to get in between staves

Thin bottle brushes to reach in tight spaces such as under bands, stave cracks, screw heads, drive chain links

Motorized brush (brush chucked in power drill) for extra power to remove dried debris. For this activity, a small diameter (3/8") bottle brush was used. The handle end was wrapped in electrical tape tight for a thicker end piece to fit into the drill chuck.

A water hose is useful for cleaning but too much pressure will splatter debris in a wide area. For less pressure, a pump sprayer can be utilized. Fill sprayer with proper food grade detergent. Use brushes or long handle pad to scrub off debris. Rinse with potable water. Use a pump sprayer with sanitizer to complete the job. Follow sanitizer label directions.

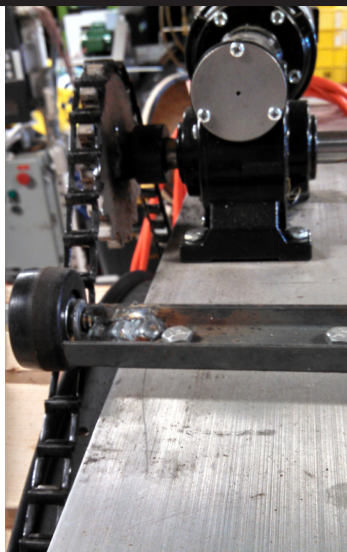


Getting Started

IMPORTANT: Unplug the equipment while cleaning it to avoid injury. It may be necessary to turn the barrel to clean all the areas. Unplug again before continuing the cleaning process.

MOTOR AREA

- Motor drive
- Drive sprocket
- Drive chain
- Chain channel
- Chain channel screw heads



BANDS*

- Screw holes*
- Screw heads*
- Space under bands*
- Wheels and brackets (both sides)*



FRAME AREA

- Area that make up the frame where uprights meets cross beam
- Cross bars and rough welds*
- External bolts
- Support pipe/open ends*
- U-bolts – threads and spaces
- Water pipe threads/cap
- Water pipe channel-bolts
- Around valve
- Hose fitting
- Barrel channels*



FEED CHUTE*

- Screw holes*
- Feed chute lumber configuration*
- Spaces between boards*
- Corners*
- End grains*
- 2x4 supports
- Wood on underside



* critical cleaning point

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- Carriage bolt heads from chain drive bolts*
- Stave screw points sticking through stave from exterior side*
- Board cracks*
- Spaces between staves*
- Water pipe*

**EXTERIOR STAVES***

- Cracks, checks, knots, splits*
- Stave end grain*
- Stave screw heads*

**SUPPORT STRUCTURE & FLOOR AREA**

- Sawhorses
- Cross boards
- Floor and surrounding area



* critical cleaning point

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