

# CLEANING PRODUCE WASH EQUIPMENT – BRUSH WASHER

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# PRODUCE BRUSH WASHER 3-SECTIONS: CONVEYOR, BRUSH WASHER, ABSORBER

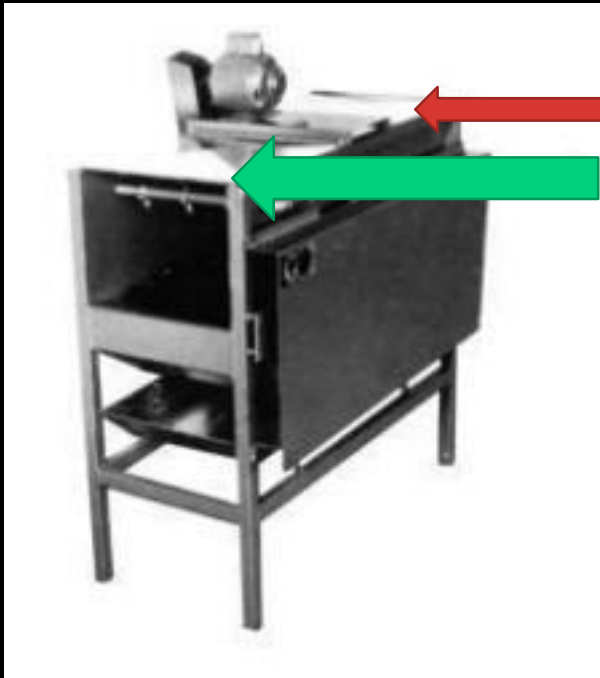


CLEANING TOOLS: VARIOUS DIAMETER  
BOTTLE BRUSHES, DRYER VENT BRUSH,  
MULTI-PURPOSE PAINT SCRAPER, LONG HANDLE  
SPONGE SCRUBBER





# ACCESS TO BRUSHES



- To clean a brush washer, must have better access to interior
- Most machines come with riveted top plates on either side of motor
- Very hard to reach in to clean
- Remove rivets and replace with machine screws or thumb screws
- This way plates can be replaced for safety after cleaning
- Flaps, brushes, interior housing, sill plates are food contact surfaces

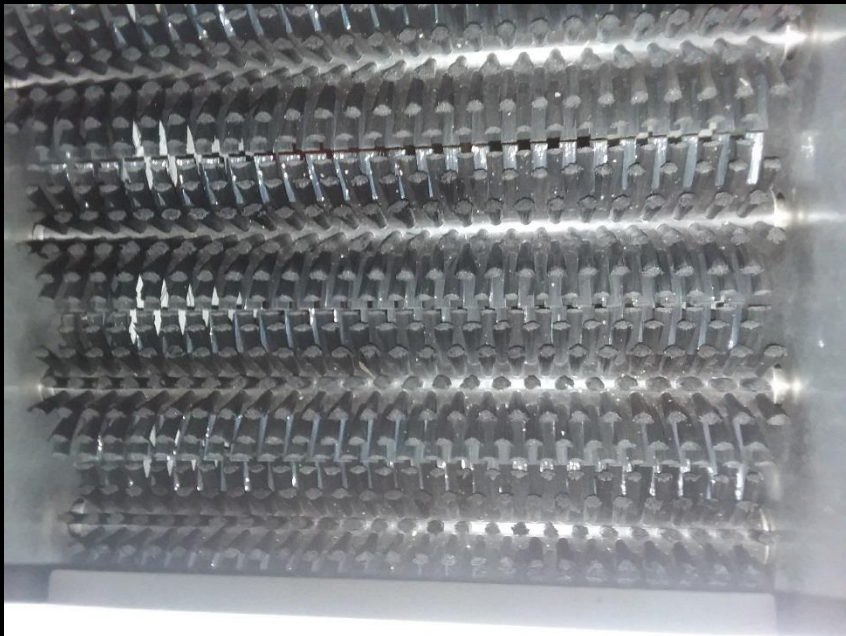
# BRUSH WASHER HAS SET OF 10 OR MORE SPINNING SOFT BRISTLE BRUSHES

- Each brush has many bundles of bristles
- Produce moves over spinning brushes
- Overhead tubes have nozzles spraying water onto produce below
- Debris gets lodged within bundles, between bundles, between brush axle and housing
- Debris spreads by nozzle spray and spinning action of brushes

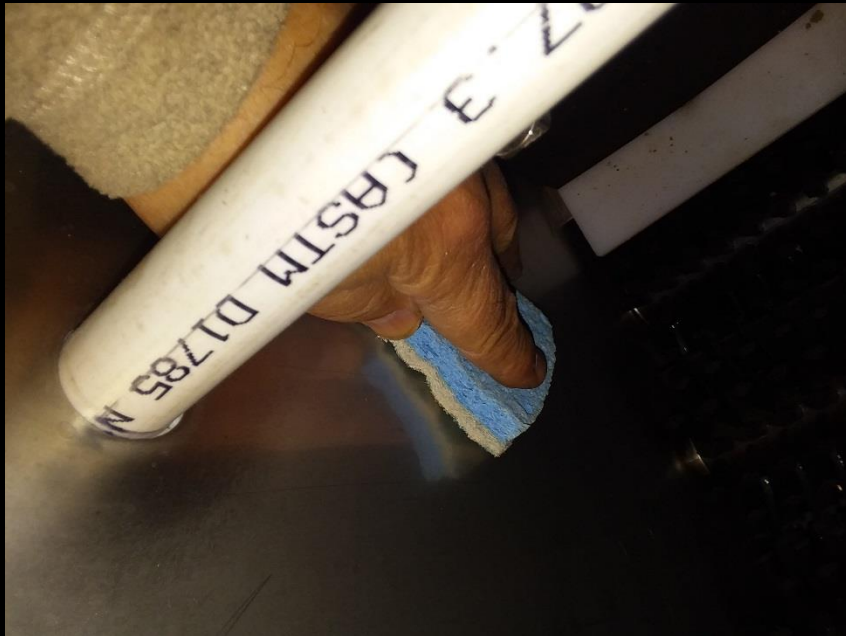


# CLEANING INTERIOR

- Best to clean before debris can dry
- Backpack sprayer for applying detergent or for just using water pressure to remove debris
- Need to turn on/off machine to get at all bristle bundles
- Not advisable to try to clean while equipment is running



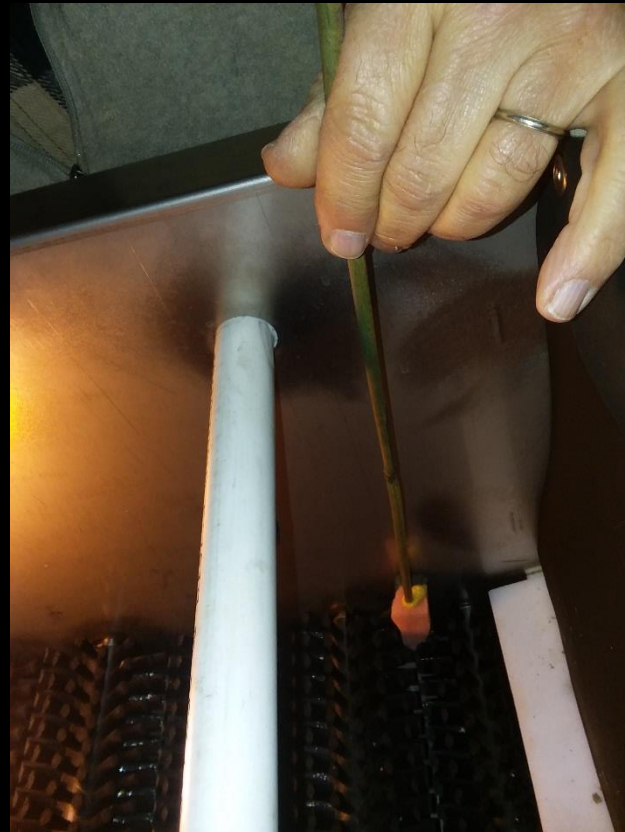
# USE SCRUBBY SPONGE FOR INTERIOR HOUSING



- Besides cleaning the interior housing walls, don't forget the underside of plate where motor sits above
- Also clean the undersides of the removed access plates



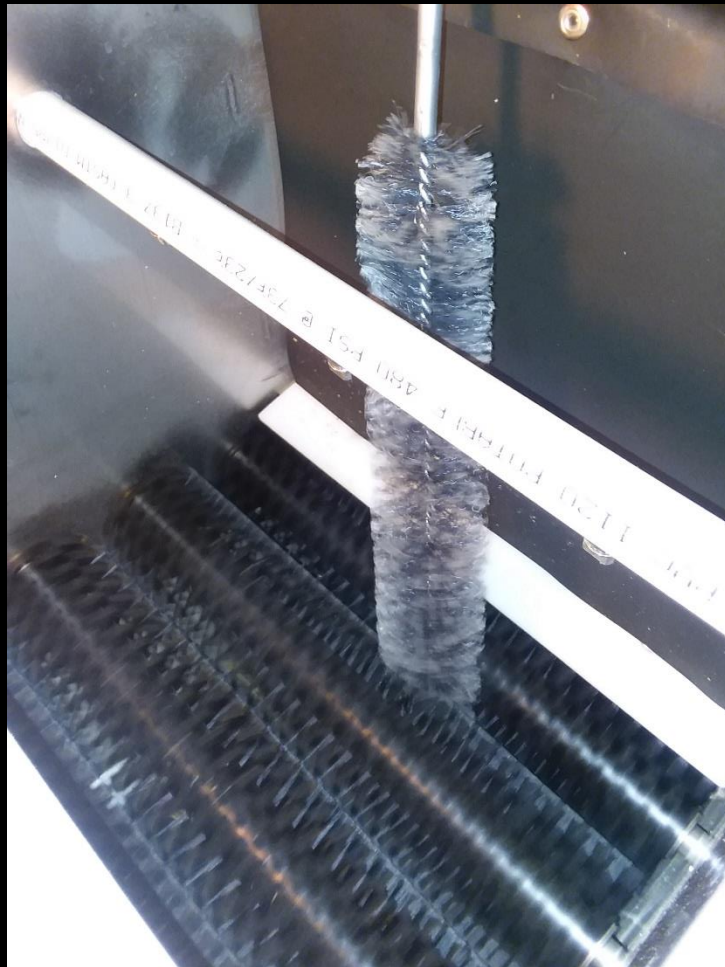
# A HAND-MADE TOOL FOR DRIED DEBRIS IN HARD TO REACH SPACE



- Custom-made scrubby on a stick
- Cut scrubby sponge in triangle shape that fits between two sets of brushes
- Wide section of triangle, make hole and glue in long dowel handle



# A DRYER VENT BRUSH WORKED WELL FOR GETTING IN BETWEEN BRUSHES AND BETWEEN BRISTLE BUNDLES





# STIFF BOTTLE BRUSH, 1/4" DIAMETER OR SMALLER TO GET INTO BUNDLES



# REACH ALL BRUSH SETS

- Requires access from either side of machine
- Motor housing panel sits above blocking clear visible access
- Need to reach in to clean as reasonable as possible
- Use food grade grease cutting detergent as needed
- Use back pack sprayer or low volume water hose to rinse of debris as you clean
- Don't forget to clean out drip pan underneath
- Clean legs, cross bars, support bars, screw heads, holes, rough welds
- Inspect for rust



# A THOROUGH CLEANING ***AT LEAST ONCE A YEAR***

- If equipment is heavily used consider deep cleaning several times a season
- Our research found the need for reaching deep into brush washer, the machine needs to be disconnected from conveyor and absorber
- Drive chain guards removed
- Drive chains disconnected and removed
- Machine stood up on end to better reach underside
- Cleaned from underneath as well as from top side

# UNDERSIDE OF BRUSH WASHER



- Clean underside
- Use flexible brush to reach into areas where housing blocks view
- Clean support rods/bars
- Avoid the use of power washers since it will blow debris all over facility
- Put wheels on for easy moving

# CLEANING TIME

- Interior housing, sides and underside 10-15 min if done daily
- Interior housing, sides and underside 30-45 min if debris is dry/caked on
- Single roller brush, 5 min **each** if done daily; 15-20min **each** if debris is dry (x10-12 sets)
- Exterior housing sides, chain guards 10-15 min if done daily
- Exterior housing sides, chain guards 30-40min if debris is dry
- Drip pan, legs, supports, top side around motor 20min if done daily
- Drip pan, legs, supports, top side around motor 30-45min if debris is dry



# DISASSEMBLE - REASSEMBLE

- Removing chain guards and chains, 20 min
- Disconnecting from conveyor and absorber (unbolting leg connections and sill plate assembly 25-30 min
- Removing upper plates 5 min
- Pick up machine and stand it on end, clean interior; sanitize 30-45min
- Dry with fan 60min+
- Reconnect to conveyor and absorber; replace plates 35min
- Reconnect chain and chain guards 30min (harder to do)

# TO ACHIEVE REASONABLE CLEANING

- Clean to some degree after daily use
- Follow 4 step cleaning regime
- Keep debris from drying on
- More efficient labor-wise to clean frequently than infrequently
- More frequent cleaning reduces establishment of bacteria
- After cleaning, dry down quickly with fan
- Routine cleaning makes deep cleaning a quicker job

## MORE RESOURCES

- To view wash equipment checklist  
[https://rvpadmin.cce.cornell.edu/uploads/doc\\_734.pdf](https://rvpadmin.cce.cornell.edu/uploads/doc_734.pdf)
- Explore more farm food safety resources at the Cornell Vegetable Program site  
[cvp.cce.cornell.edu](http://cvp.cce.cornell.edu)