

Supporting Safer Salad Spinners: Applying Hygienic Design to Washing Machine Derived Greens Spinners

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Background

An important factor in growing and selling high-quality greens is being able to efficiently wash, cool, and dry the product. Some farms find themselves stuck in the middle, where inexpensive, small-scale spinners cause a bottleneck, but it is hard to justify a more expensive industrial, stainless, restaurant-style machine. Washing machines work well for spinning greens dry but can present concerns related to food safety.

The FSMA Produce Safety Rule states that *“You must inspect, maintain, and clean and, when necessary and appropriate, sanitize all food contact surfaces of equipment and tools used in covered activities as frequently as reasonably necessary to protect against contamination of covered produce.”* [§112.123(d)(1)]

Our Work

The rule does not prohibit the use of washing machines as greens spinners, but **they must be properly managed**. We have **applied hygienic design principles** to reduce the produce safety risks to improve these machines from causing more problems than they are solving.

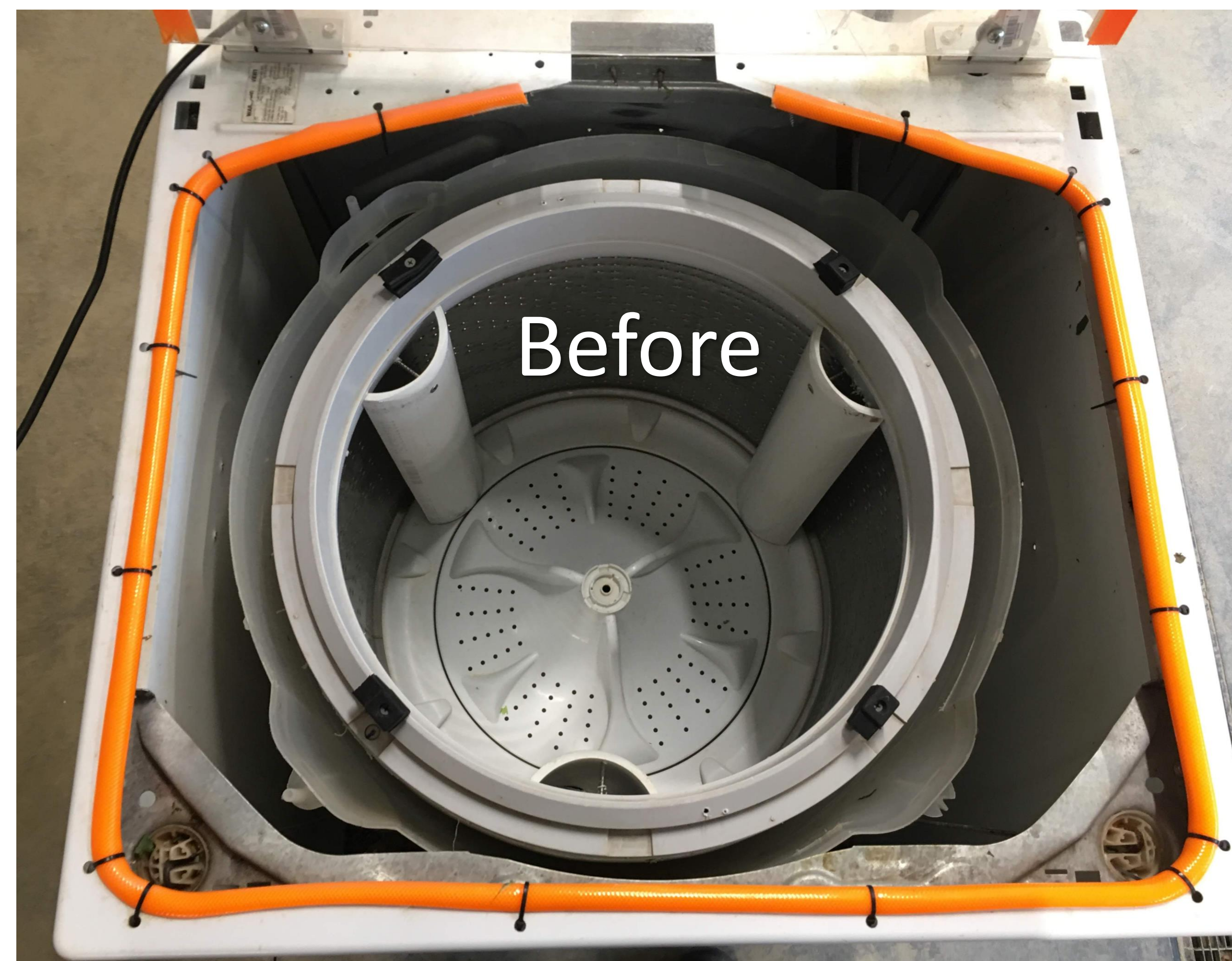
With proper management and attention to the details of hygienic design a washing machine greens spinner, like any other equipment, can meet the standards of the PSR [§112.123(a) & (c)].

Recommendations

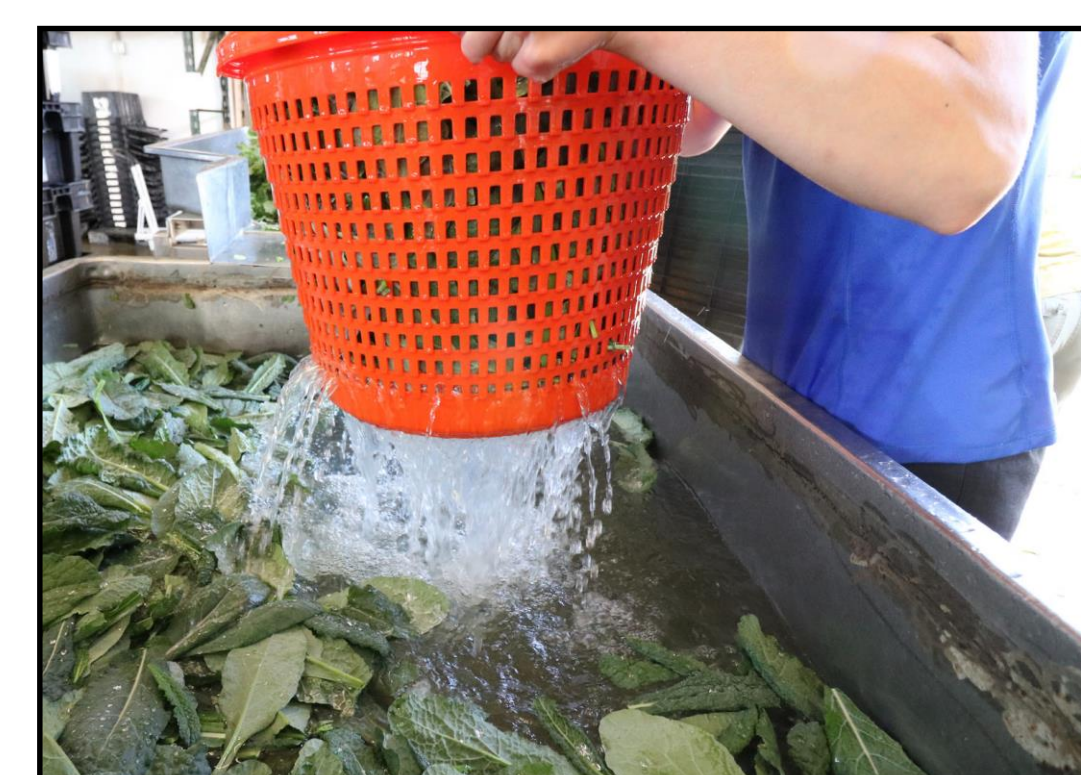
Based on our work, we recommend buying specific models of new washing machines. The right model eases conversion and minimizes the need for adding material to the machine. Use a removable basket to ease cleaning and sanitizing food contact surfaces. Remove the pump and direct the drain hose to an appropriate location. See our online resources for more information.

Key Points

- Start with a **new machine**.
- Choose a model that is easy to modify with **hygienic design**.
- Use **basket inserts** as a removable, cleanable food contact surface.
- **Avoid harborage points** by not adding material.
- **Perform routine cleaning** of equipment using an SOP.



Early approaches to washing machine conversions added material to hold baskets tight or to cover sharp edges which can result in harborage. By starting with a machine that is easier to convert these harborage points can be avoided.



Using basket inserts and removing paneling improved the cleanability of this washing machine greens spinner.



A Speed Queen washing machine like this one costs more up-front. But, it has a smooth, stainless steel drum with an easily removed agitator plate. This makes it easier to clean when used as a greens spinner. A basket insert is used to contain the greens which provides a removable, cleanable food contact surface. This model also does not require additional material to be added to hold a basket insert securely.

Resources

Greens Spinner for Farm Use – Factsheet highlighting what to look for when selecting a greens spinner of any scale.
go.uvm.edu/greensspinners

Washing Machine Greens Spinners: Shopping Advice – Blog post summarizing what to look for when selecting washing machine for conversion. Includes **links to conversion SOPs** with best practices. go.uvm.edu/shoppingtips

Videos – Videos detailing how to do a quick clean and deep clean of a washing machine greens spinner. go.uvm.edu/spinnertipsvideos

Hygienic and Sanitary Design for Produce Farms – Factsheet covering how to intentionally create or improve equipment so they can be cleaned and sanitized as appropriate.
go.uvm.edu/hygienicdesign

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