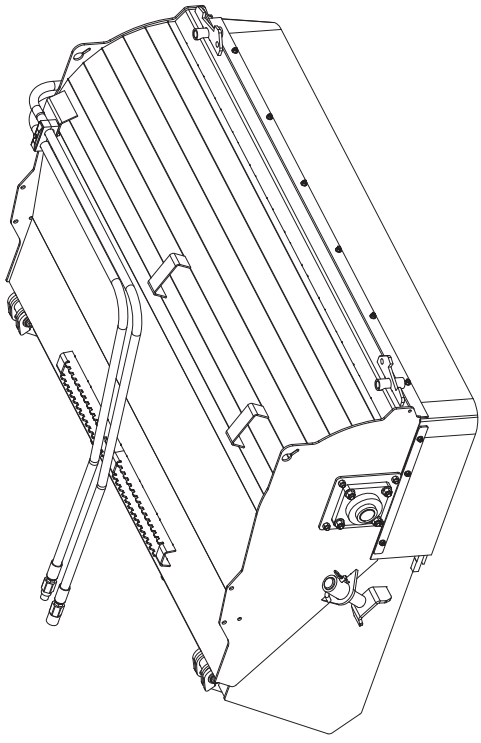


Pick-Up Broom



Model Number PUB

Serial Number

Serial Number 126800 - Current
Manufacture Date 09/19/17 - Current

Phone: 320-393-7080

2/29/12
Revised 09/19/17

PUB

Features of Virnig Mfg. Inc. Pick-Up Broom include:

- Pick-Up Broom can operate in both forward and reverse.
- Equipped with a standard 5/8" x 6" bolt on reversible wear edge.
- Hood easily adjusts to compensate for wear of wafers.
- 15-25 gpm operating flow rate range and 2000 – 3500 psi operating pressure range.
- Easy exchange of wafers, do not have to disconnect hydraulic lines to change wafer sections.
- Standard wafer package is a 26" diameter poly/wire combination.
- Direct drive design with replaceable drive components.
- Optional Gutter Brush and Water Kit are available.
- Recommended for loaders with an operating capacity greater than 1500 lb.

CAUTION: On some brands of loaders, when the boom is raised to full height and broom fully rolled back, the broom hood may separate from the bucket. The broom is designed with stops to limit amount of separation but may possibly interfere with loader boom arms or cab. Care should be taken to avoid this situation.

Initial Use

- Read and understand all warning information in this manual before operating this attachment.
- Check that quick-tach on frame fits onto loader properly. Pins must engage through 3/8" plates at bottom of quick-tach.
- Slowly roll back attachment. Make sure there is no interference between attachment and loader.
- Connect lead hoses to standard flow hydraulics. Do not connect this attachment to high flow hydraulics.
- Make sure hoses do not pinch during roll back.
- Slowly roll bucket fully forward. Check that hoses are long enough so they do not stretch or bind.
- Never exceed the maximum attachment operating pressure of 3500 psi.
- With the Pick-Up Broom off of the ground, engage the auxiliary hydraulics using the "detent" position on the machine. Check the rotation of the broom (broom should be sweeping away from the machine or clockwise when looking from the motor end.) If this rotation does not match the "detent" position of your machine, switch the couplers on the lead hoses.
- Do not store Pick-Up Broom with weight on the wafers as this may deform the bristles reducing the sweeping efficiency.

Pick-Up Broom Hydraulic Motor Assembly

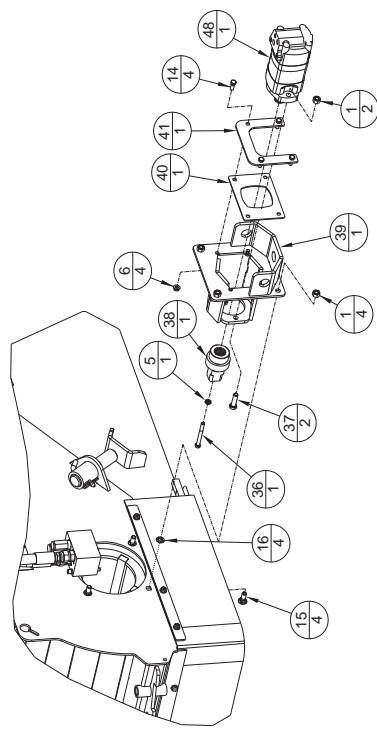
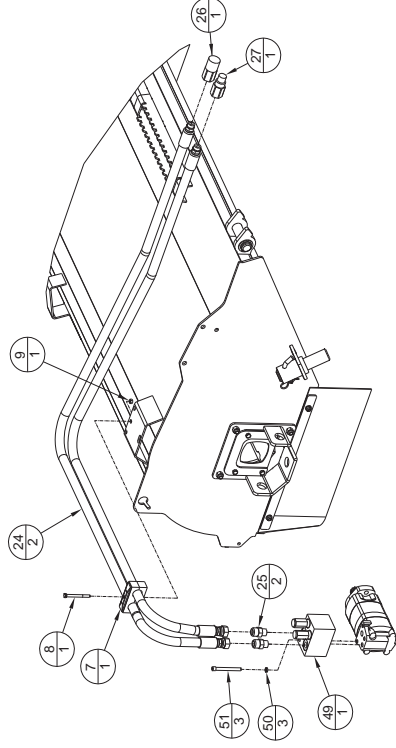


Figure 5.

Hydraulic Component Assembly



Adjusting the Brush Pattern

- No initial adjustment of the brush pattern should be required. Periodic adjustment of the Pick-Up Broom head will ensure longer water life and more efficient operation.
- To check the brush pattern of the Pick-Up Broom, start the broom rotating, lower the boom arms of the machine to the stops and roll the bucket forward until the cutting edge is approximately ½"-1" off of the ground. Run the broom for about 10 seconds and lift the broom up and back away. For a correctly adjusted broom, there should be a clean strip about 2-4" wide where the brush was sweeping. If not, an adjustment needs to be made.
- If the pattern is less than 2-4", the broom head needs to be lowered. To do this, prop up the front of the broom to take the weight off of the adjustment shafts (Item #28, see Figure 1). Remove the bent leg pin (Item #29) and move the adjustment shaft to the next lower hole location. Reinstall the bent leg pin. Repeat procedure on other side of the Pick-Up Broom.
- Make sure both sides are evenly adjusted to ensure consistent wear across the width of the broom.

Operation

- Always follow safety and operating information in this manual.
- Always follow all safety and operating instructions of the loader.
- Never remove material deflectors or warning labels.
- Never operate a Pick-Up Broom unless you have been properly trained.
- Make sure all safety labels are in place, look in this manual for their locations.
- Do not sweep toward people, buildings, etc. that may be injured or damaged by flying debris.
- Always relieve hydraulic pressure of the machine before connecting or disconnecting hydraulic hoses.
- Clean any debris from attachment. Pay special attention to any debris in quick-tach area.
- The Pick-Up Broom is designed to be operated driving in the forward direction so that the brush sweeps debris away from the operator (brush spins clockwise when looking from the motor end). The brush will spin in the opposite direction and should be when sweeping and travelling backward.
- Do not change rotation direction of the broom without allowing the broom to come to a complete stop. Doing so may cause premature failure of components. Quickly changing rotation form forward to backward to forward may cause damage to drive components and/or motor.

Figure 4.

Standard Coupler Configuration

- Connect female coupler to manifold port "A".
- Connect male coupler to manifold port "B".
- If the Standard Coupler Configuration does not match the machines "detent" position, the couplers can be switched.

Sweeping Recommendations

- Sweep with the wind whenever possible to provide more efficient operation and keep debris off of the operator.
- When driving forward, sweep in such a manner that the material being swept goes up and over the wafers and into the bucket (broom should be rotating clockwise looking from the motor end). This should be the "detent" position on the machines controls.
- When driving in reverse, sweep in such a manner that the material goes directly into the bucket (broom should be rotating counterclockwise looking from the motor end).
- When sweeping on rough terrain, reduce machine ground speed to minimize "bouncing" of broom head.
- The cutting edge of the bucket should be approximately ½"-1" off of the ground during normal operation.
- Avoid excessive weight on the broom wafers. Brooms sweep with the tips of the wafers; therefore, the sweeping contact pattern should be about 2"-4". Unnecessary weight promotes excessive wear and premature failure of wafers. Ensure the adjustment shafts are adjusted equally to provide consistent water wear.

Maintenance

- *Before each use and after every 10 hours of operation
- Grease hinge pins and bearing (3 fittings on the Pick-Up Broom).
- Check for wear on wafers. If the outside diameter of the wafers is one half of the original diameter, the wafers need to be replaced. The original diameter of the wafers for the Pick-Up Broom is 26".
- Make sure all safety labels are in place, look in this manual for locations.
- Check for loose, worn, or missing parts, repair or replace as needed.
- Remove any foreign debris such as string, wire, etc. that may have wrapped around the brush head.
- Inspect motor, valves, hydraulic fittings, and hoses for leaks and damage. Replace as needed. Make sure machine is shut off and hydraulic pressure is relieved before checking for leaks. Never use hands to check for high pressure hydraulic leaks.
- The pressure relief valves are preset and require no maintenance or adjustment. Unauthorized adjustment may cause damage to the motor. Please call Virring Mfg. Inc. with any questions or problems regarding the pressure relief valves.
- Contact your dealer for any required replacement parts.

Pick-Up Broom Core and Shaft Assembly

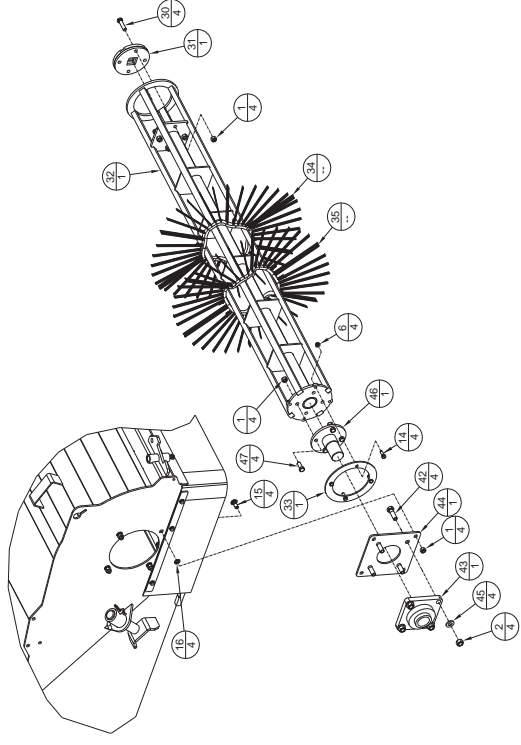


Figure 3.