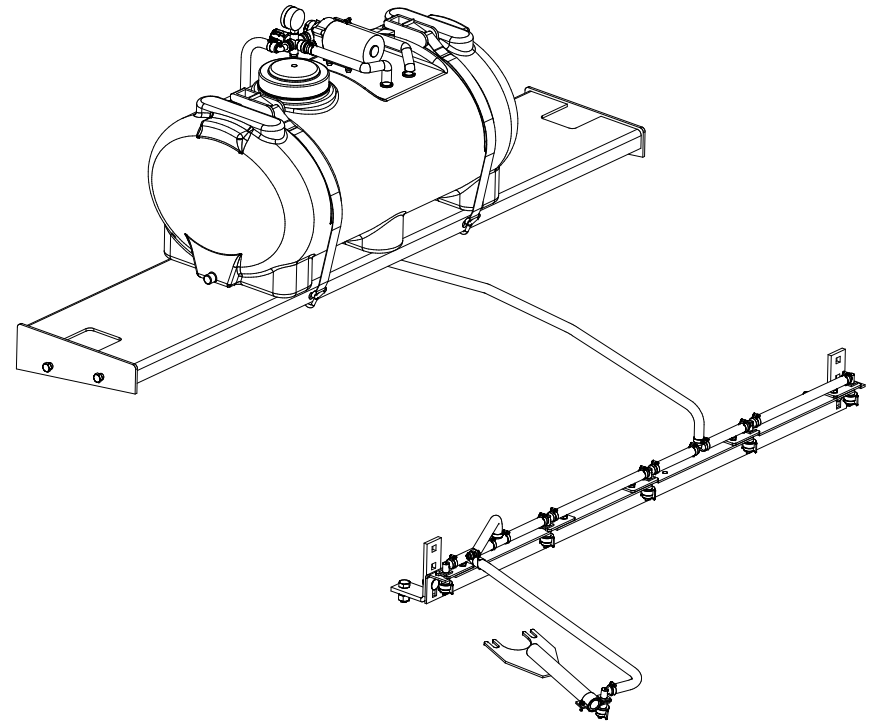


Pick Up Broom Water Kit



Model Number WK.

Serial Number _____.

Serial Number 114500 - Current
Manufacture Date 05/02/16 - Current

Phone: 320-393-7080

6/1/10
Revised 05/02/16

WK

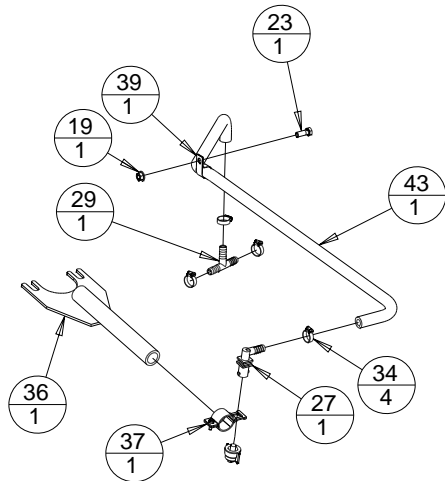
Features of Virnig Mfg. Inc. Pick Up Broom Water Kit include:

- 30 gallon polyethylene tank.
- 12 volt self priming pump with a maximum flow rate of 2.2 gpm, maximum pressure of 70 psi and maximum amperage of 8.0 amps with inline fuse protection.
- Pressure gauge with adjustable pressure settings.
- Easy installation on all Virnig Manufacturing Pick Up Brooms.
- Many common components available at Ag/Industrial supply stores.

Installation

- Pick Up Brooms with a Serial Number less than 65700 will need to make some modifications to the broom. Please contact Virnig Manufacturing for information regarding retrofit modifications. Otherwise continue as follows.
- Install pre-assembled tank to water tank mount weldment (Item #3) using the 5/16" x 3/4" bolts (Item #38) and 5/16" flat washers (Item #21). Do not overtighten as damage to tank may occur. Refer to Water Kit Main Assembly for correct orientation of tank on mount.
- Install tank and mount weldment to top of Pick Up Broom hood using the 1/2" x 1 1/4" bolts (Item #20) and 1/2" lock nuts (Item #1) provided.
- Secure tank with ratchet straps (Item #35). This is necessary to prevent the tank from shearing off when dumping the Pick Up Broom. The weight of the tank full of water is approximately 270 lb.
- Install spray bar mounting brackets (Item #25) at the front of the Pick Up Broom hood and mount with 5/8" x 1 1/2" bolts (Item #22) and 5/8" locknuts (Item #2), hardware provided. Do not completely tighten the mounting hardware at this time.
- Install the pre-assembled spray bar to the spray bar mounting brackets with the 1/2" x 1 1/4" carriage bolts (Item #24) and 1/2" flat washer and locknut (Items #18 and #1) in the lowest hole on the spray bar mounting brackets. There are 3 hole locations on the spray bar mounting bracket to provide spray nozzle height adjustments as the broom wafers wear. For the most efficient spraying pattern, the spray nozzle tips should be approximately 13" above the ground with the broom sitting on the ground. If the lower hole location is not high enough to have a running height of 13", move to the next higher hole until the correct run height is achieved.
- Once the spray bar has been installed on the spray bar mounting brackets, tighten the 5/8" hardware securing the spray bar mounting brackets.

Gutter Brush Nozzle Assembly



Installation (cont.)

- Route the hose (Item #42) below the tank mount, through the center hose guide on the hood and connect to the tee (Item #29) on the spray bar and secure with the hose clamp (Item #34) provided.
- If the Pick Up Broom is equipped with a Gutter Brush, there is a spray nozzle that can be mounted to it, if desired. The hose between the last 2 nozzles on the spray bar nearest the gutter brush will have to be cut and the provided tee (Item #29) installed and secured with hose clamps. The gutter brush spray nozzle mount weldment (Item #36) needs to be installed on the bottom side of the gutter brush motor mount. To do this, loosen the 1/2" hardware securing the gutter brush motor, slide the nozzle mount into position and retighten hardware. Secure the hose to the hole in the gutter brush arm with the 7/8" hose clip (Item #39) and 3/8" x 1" bolt and 3/8" locknut (Items #23 and #19) provided.
- The wiring harness comes in 2 pieces. Connect the short wiring harness to the terminals on the pump and route the wires along with the hydraulic lines to the loader. Secure with zip ties. The terminal ends of the longer wiring harness should be located near the machine's couplers, routed along the boom arm, securing where possible, making sure it will not be pinched when in operation and into the cab. The switch end needs to be located inside the cab and plugged into the 12 volt accessory outlet.

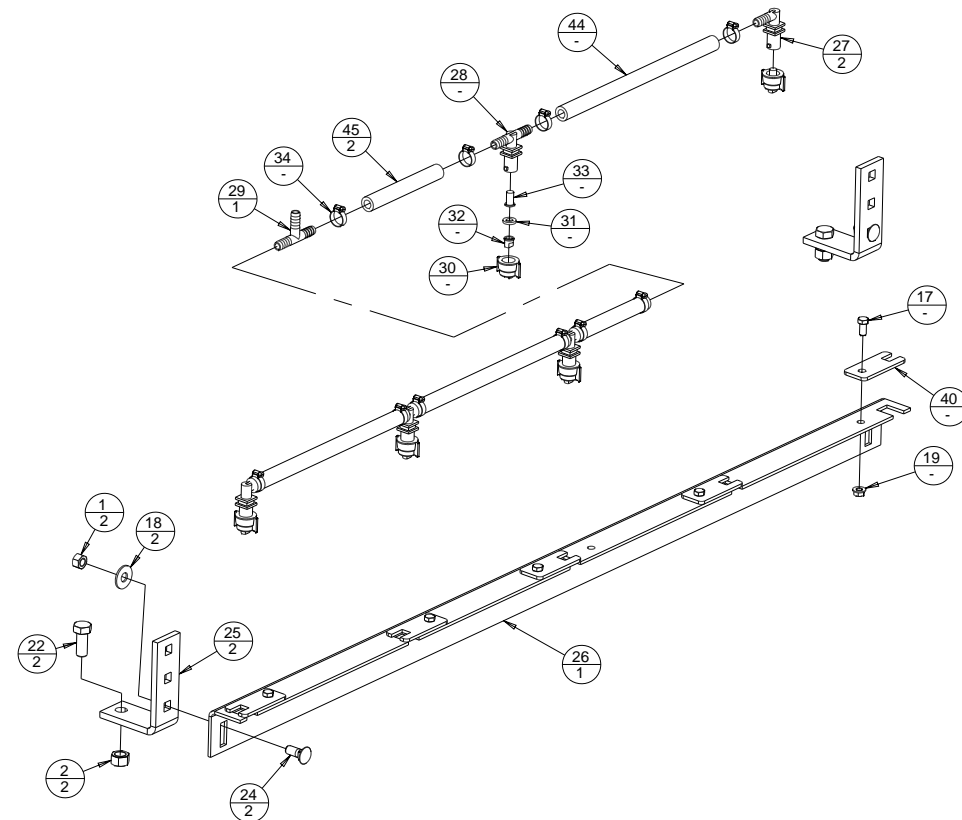
Operation

- Before operating, make sure the ratchet straps holding the tank are secure.
- Always fill the tank with the desired amount of water before turning pump "on". A full tank (30 gallons) of water will last approximately 20 minutes of continuous spraying depending on conditions and settings.
- Flow rate/pressure can be adjusted by adjusting knob on the pressure regulator to achieve desired flow.
- Make a test pass with the Pick Up Broom to verify that the spray pattern is providing complete coverage. If not, move the spray bar up, providing a wider spray pattern and make another test pass.
- As the Pick Up Broom wafers wear, the height of the spray bar may need to be adjusted to maintain complete spray coverage. This can be done by loosening the nut on the 1/2" carriage bolt and sliding the spray bar up in the slots on the spray bar or by moving the spray bar up to the next available hole in the spray bar mounting bracket. Retighten hardware after completing adjustments.

Maintenance

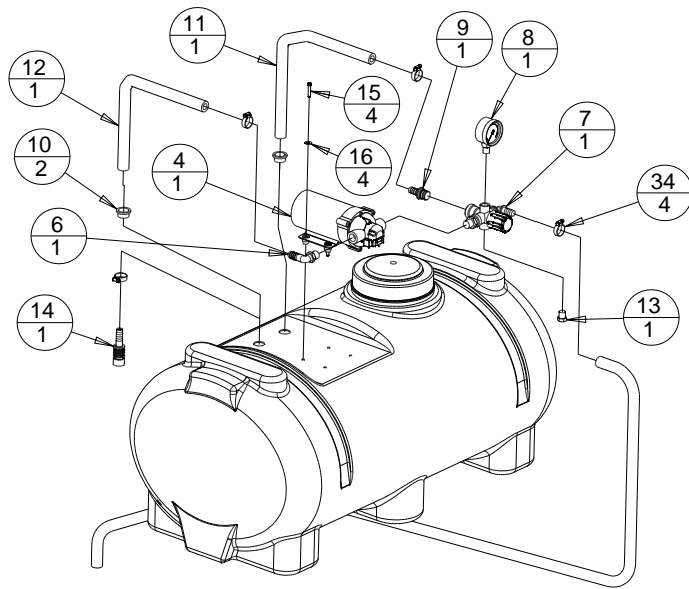
- If spray nozzles become clogged, remove the nozzle screen by removing the nozzle cap and clean. An old toothbrush works well for cleaning the screens. After cleaning, reassemble.
- The tank is equipped with a strainer located in the tank. This strainer should be checked and cleaned after every 10 hours or less of operation based on operating conditions.
- If the tank is not going to be used for an extended period of time, completely drain the entire system.
- In areas prone to freezing, make sure the tank, pump and lines are drained and the system winterized to prevent damage from freezing. Winterize the Water Kit for storage by pumping a solution of RV anti-freeze through the entire system.

Spray Bar Assembly



The Spray Bar Assembly, excluding the spray bar mount brackets (Item #25), is pre-assembled at the factory.

Water Tank Assembly



When installing the pressure gauge (Item #8), hose fitting elbow (Item #6), 1/4" Hex Plug (Item #13) and straight adapter into pump from pressure regulator (Item #7), use thread sealant to prevent leakage.

The Water Tank Assembly is pre-assembled at the factory.

Water Kit Parts List

ITEM	PART NO.	QTY	DESCRIPTION
1	1003PP	6	1/2"-13 REVERSE LOCK NUT
2	1008PP	2	5/8"-11 TOP LOCK NUT
A 3	-----	1	WATER TANK MOUNT WELDMENT
4	10435PP	1	WATER KIT PUMP
5	10436VP	1	WATER KIT TANK WITH HOLES
6	10437PP	1	1/2" 90 DEGREE HOSE FITTING
7	10438PP	1	PRESSURE REGULATOR
8	10439PP	1	2" PRESSURE GAUGE
9	10440PP	1	1/2" STRAIGHT HOSE FITTING
10	10441PP	2	1/2" HOSE GROMMET
11	10442VP	1	HOSE 1/2" VR X 24"
12	10443VP	1	HOSE 1/2" VR X 34"
13	10444PP	1	1/4" HEX PLUG
14	10445PP	1	1/2" NYLON STRAINER
15	10447PP	4	#10-24 X 1" LG MACHINE SCREW
16	10448PP	4	#10 FLAT WASHER
A 17	1116PP	-	3/8"-16 X 3/4" LG HHCS
18	5148PP	2	1/2" USS FLAT WASHER
A 19	6140PP	-	3/8"-16 TOP LOCK FLANGE NUT
20	7487PP	4	1/2"-13 X 1 1/4" LG HHCS
21	7671PP	6	5/16" FLAT WASHER
22	7778PP	2	5/8"-11 X 1 1/2" LG HHCS
23	7849PP	1	3/8"-16 X 1" LG HHCS
24	7964PP	2	1/2"-13 X 1 1/4" LG CB
25	8889VP	2	SPRAY BAR MOUNTING BRACKET
A 26	-----	1	NOZZLE MOUNTING BAR
27	8894PP	3	ELBOW SPRAY NOZZLE 1/2" BARBED
A 28	8895PP	-	TEE SPRAY NOZZLE 1/2" BARBED
29	8896PP	2	TEE 1/2" BARBED
A 30	8898PP	-	SPRAY NOZZLE CAP
A 31	8898PP	-	SPRAY NOZZLE GASKET
A 32	8901PP	-	SPRAY NOZZLE 80DEG EVEN SPRAY
A 33	8902PP	-	SPRAY NOZZLE SCREEN
A 34	8903PP	-	CLAMP HOSE WATER KIT
35	8905PP	2	RATCHET STRAP

. Cap (Item #30) and Gasket (Item #31) ordered as a set.

Water Kit Parts List (cont.)

ITEM	PART NO.	QTY	DESCRIPTION	
	36	8907VW	1	GUTTER BRUSH NOZZLE MOUNT WDT
	37	8910PP	1	CLAMP GUTTER BRUSH NOZZLE
	38	8911PP	6	5/16"-18 X 3/4" LG HHCS
	39	8913PP	1	7/8" HOSE CLIP WATER KIT
A	40	9370VP	-	WATER KIT NOZZLE RETAINER
A	41	-----	1	WIDTH LABEL
	42	9588VP	1	HOSE 1/2" AG X 96"
	43	9589VP	1	HOSE 1/2" AG X 48"
A	44	9590VP	-	HOSE 1/2" AG X 13 1/2"
	45	9591VP	2	HOSE 1/2" AG X 6 1/4"
	46	SERIALTAG	1	SERIAL NUMBER TAG
B	47	8950VA	1	WATER KIT WIRING HARNESS
B	48	9587VA	1	WATER KIT WIRING HARNESS TANK

A - See Table 1

B - Not Shown

Table 1

MODEL	WK60	WK72	WK84
3/8"-16 X 3/4" LG HHCS	4	5	6
3/8"-16 TOP LOCK FLANGE NUT	5	6	7
WATER TANK MOUNT WELDMENT	10494VW	10432VW	10497VW
NOZZLE MOUNTING BAR	8918VP	8890VP	8924VP
WATER KIT NOZZLE RETAINER	4	5	6
TEE SPRAY NOZZLE 1/2" BARB	2	3	4
SPRAY NOZZLE CAP	5	6	7
SPRAY NOZZLE GASKET	5	6	7
SPRAY NOZZLE 80DEG EVEN SPRAY	5	6	7
SPRAY NOZZLE SCREEN	5	6	7
CLAMP HOSE WATER KIT	17	19	21
WIDTH LABEL	9392PP	9397PP	9399PP
HOSE 1/2" AG X 13 1/2"	2	3	4

Water Kit Main Assembly

