



# **OPERATING MANUAL**

## **MANUAL WATER BASE GUN CLEANERS UM120W**

### **PATENTS**

USA	4,788,836
USA	5,213,117
EUROPE	0300248
SWEDEN	0300248
FRANCE	8110528.0

CANADA
ENGLAND
ITALY
GERMANY
JAPAN

**UNI-RAM CORPORATION • ONTARIO • CANADA**

# CONTENTS

INTRODUCTION .....	3
SETUP	
INSPECTION .....	3
LEVELING AND AIR SUPPLY .....	3
PAIL SETUP .....	3
OPERATION	
PRE-CLEAN WIHEN USING NON DISPOSABLE CUP SYSTEM .....	4
CLEAN SPRAY GUNS. ....	4
FILTERING DIRTY WATER .....	4
AFTER FILTERING. ....	5
DAILY MAINTENANCE .....	5
TROUBLESHOOTING CHART .....	6
TROUBLESHOOTING PROCEDURES. ....	7
FLOW DIAGRAM .....	8
REPLACEMENT PARTS .....	9
WARRANTY WARRANTY .....	10

## INTRODUCTION

Uni-ram holds many patents on designs used in its innovative products. Every machine is tested for compliance with Quality Assurance standards. Follow the directions in this manual under Setup, Operation and Maintenance in order to operate this machine safely and effectively. Not following these instructions can lead to malfunction or damage to the machine. Follow directions under the section below, Cautions and Warnings and on labels attached to the machine. Ensure that the manual is readily available to the operator at all times. If you have any questions about the operation of this machine, call your distributor or a Uni-ram Service Engineer:

**North America: Uni-ram Technical Service 1-800-417- 9133**

**Other Continents: Contact Your Supplier**

## SETUP

### INSPECTION

- Report any transport damage immediately to the carrier and your vendor. Initiate a freight claim with the carrier. The manufacturer is not responsible for freight damage.
- Accessories:
  - Manual
  - Spray Containment Chamber (102-3050)
  - COAG-KLEEN FP, flocculant powder (102-8300)
  - Trigger Clamp and Plug Kit (140-2340)

### LEVELING AND AIR SUPPLY

- Level the machine using the adjustable legs.
- Remove the cover on the "Air Input" (right side of machine) and attach an air supply adapter (not supplied).
- Replace the female quick connect on the Whip Air Line with a quick connect that will fit the male quick connect of your spray gun (if necessary).

The air supply pressure must be at least 85 PSI and the air must be free from contaminants such as water, dust, rust, tar, grease etc.

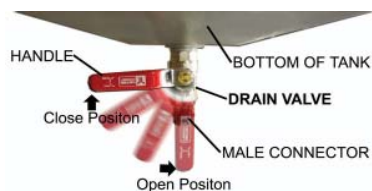
To prevent damage to the Diaphragm Pump an internal Air Pressure Regulator has been installed to limit the air pressure. Do not install a second air pressure regulator or use a pressure set below 85 PSI.

### INSTALL WASH GUN WITH SPLASH GUARD

Remove the Wash Gun with Splash Guard from the Accessory Kit bag (inside the tank) and install on the unit by inserting the black tube onto the empty hose barb on the Right Tank and the Gun onto the empty clamp.

### PAIL SETUP

- Open the door to the base cabinet
- Move the Drain Valve handle to the "closed" (horizontal) position if it is not already there. See picture below.
- Move the pail outside the unit. Remove filter. Pour water in the pail until the water reaches the bottom of the filter holder. Replace filter.
- Insert the manual wash suction tube into the pail between the Filter Holder and the wall of the pail and move the pail into the cabinet.



## OPERATION

### PRE - CLEAN WHEN USING A NON DISPOSABLE CUP SYSTEM

Skip this step if you use a disposable cup system.

- Disconnect the spray gun from the air hose. Pour paint from the cup (when present) into a 5 gallon pail (not supplied).

### CLEAN SPRAY GUNS

- Connect the whip line to the spray gun.
- Place the Spray Containment Chamber (if present) on the Work Screen in the wash tank.  
Point the cap of the spray gun into the Spray Containment Chamber as shown in photo.  
Place the nozzle of the wash gun into the paint channel (where the cup joins the spray gun) as shown in photo.  
Step on the foot pedal, squeeze the trigger of the spray gun while squeezing the trigger of the wash gun to send a pressurized flow of water through the paint channel. The Spray Containment Chamber contains the atomized spray. Allow water to flow for about 20 seconds to clean the paint channel.
- Use the brush to clean the outside of the spray gun if necessary. Step on the foot pedal to activate the flow.
- Use the blow gun to dry the outside of the spray gun, then squeeze the trigger of the spray gun to dry the paint channel.
- Ensure the the ball valve located inside the cabinet is closed so that the used water accumulates in the reservoir under the Work Screen.



Wash Gun

Spray Containment Chamber

## **FILTERING DIRTY WATER**

When no water remains in the water container under the cleaning tank it is time to recover the dirty water. There are 2 choices. Use a Uni-ram liquid recycler to recycle the dirty water or flocculate and filter the dirty water. The filtering process is described next.

- Lift the Work Screen. Sprinkle 2 full scoops\* of the flocculant, COAG-KLEEN, evenly over the dirty water. Turn the Flocculation Timer fully. When the Timer is finished wait 2 minutes and turn the timer a second time to the one minute mark.
- Open the drain valve, located under the cleaning tank to drain and filter the dirty water. The debris will collect in the filters. Clean the tank with the wash gun then close the drain valve. Clean the primary filter by removing the paint debris.
- Dispose of the filtered water or reuse it one time. Replace the Work Screen. If the filtered water is not clean, see the Trouble Shooting section in the Manual. Replace the filters as required. Ensure that the Air Agitator in the bottom of the tank lies flat.

\* Each scoop = 1 fl oz or 34g of flocculant; 2 kg = about 50-58 scoops.

## TROUBLESHOOTING CHART

SYMPTOM	REASON	CORRECTIVE ACTION
<b>WASH WATER DOES NOT FLOW AND PUMP MAKES A HISSING NOISE</b>	<ul style="list-style-type: none"> <li>• Wash pail empty</li> <li>• Paint debris in pump</li> </ul>	<p>After Each Step Below, step on the foot pedal. If water does not flow, carry out the next step.</p> <ul style="list-style-type: none"> <li>• Check wash water level.</li> <li>• Follow Procedure 1, Blocked Fluid Passage in Diaphragm Pump.</li> </ul>
<b>WASH WATER DOES NOT FLOW AND PUMP MAKES A HISSING NOISE</b>	<ul style="list-style-type: none"> <li>• Water in air line causes pump to stall</li> </ul>	<ul style="list-style-type: none"> <li>• Follow Procedure 2, Blockage in Air Passage in Diaphragm Pump</li> </ul>
<b>WASH WATER DOES NOT FLOW AND PUMP DOES NOT MAKE A NOISE</b>	<ul style="list-style-type: none"> <li>• Blockage in air passage</li> <li>• Pump leaks</li> </ul>	<ul style="list-style-type: none"> <li>• Follow Procedure 3, Blocked Passage in Air Line</li> <li>• Replace pump</li> </ul>
<b>PUMP DOES NOT STOP WHEN FOOT REMOVED FROM PEDAL</b>	<ul style="list-style-type: none"> <li>• Air valve stuck</li> </ul>	<ul style="list-style-type: none"> <li>• Replace air valve</li> </ul>
<b>WET FLOOR</b>	<ul style="list-style-type: none"> <li>• Too much water in the system</li> <li>• Filter is blocked.</li> </ul>	<ul style="list-style-type: none"> <li>• Remove Excess water (more than 19L)</li> <li>• Clean or replace filter.</li> </ul>

## TROUBLESHOOTING CHART

SYMPTOM	REASON	CORRECTIVE ACTION
<b>Filtered water is not clean.</b>	Not enough flocculant	<ul style="list-style-type: none"> <li>Do filtering procedure again. Add 1-2 extra spoonfuls of flocculant.</li> </ul>
	Not enough agitation	<ul style="list-style-type: none"> <li>Ensure that the Agitator is flat on the bottom of the tank and the air pressure to the unit is at least 40 PSI. Do filtering procedure again including adding flocculant.</li> </ul>
	Filter needs to be replaced	<ul style="list-style-type: none"> <li>Replace filter.</li> </ul>
<b>Filtered water has a "silky" feel</b>	Filtered water has been used too often	<ul style="list-style-type: none"> <li>Dispose of filtered water.</li> </ul>
	Too much flocculant has been added	<ul style="list-style-type: none"> <li>Reduce the amount of flocculant added next time.</li> </ul>

## TROUBLESHOOTING PROCEDURES

### PROCEDURE 1

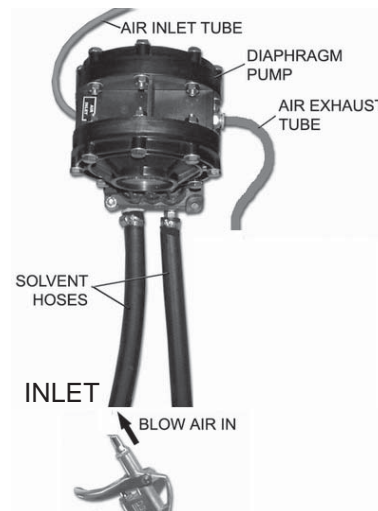
#### Blocked Fluid Passage In Diaphragm Pump

If the pump sounds like it is working but liquid does not flow, clear the fluid passage as follows:

- Remove suction tube from the pail and blow air at 85 PSI into the INLET Sovent Hose (see diagram). Step on foot pedal. This procedure may have to be repeated several times. If this procedure does not help, blow some water into the suction hose using a spray gun, wait one minute and step on foot pedal. This procedure may have to be repeated several times. If this procedure does not work, the pump must be replaced.

If you need to replace the pump call your local dealer. The warranty on the diaphragm pump is two years from date of purchase.

This procedure will also clear a blockage in the fluid line for the wash gun.

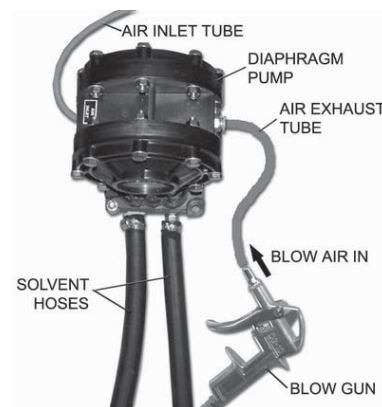


### PROCEDURE 2

#### Blocked Air Passage In Diaphragm Pump

If there is a steady hissing sound and the pump is not cycling, the spool valve has stalled due to a blocked air passage. Follow the procedure below to clear the blockage.

- Connect a blow gun to an 85 PSI source. Locate the blue hose that extends from the air exhaust port of the diaphragm pump. Use a blow gun to blow air into the open end of this hose. Turn timer. If the procedure is successful, the pump will start working. The procedure may have to be repeated several times. If this procedure does not work, replace the pump.
- Cause:** Contaminants in the air supply (water, oil, solid particles etc)
- Preventative Action:** If necessary, install an Airline (Moisture) Filter.



### PROCEDURE 3

#### Blocked Passage in Air Line

The components in the air line are the **diaphragm pump, air valve, foot pedal, 3-way ball valve and regulator**. See the **Flow Diagram** and the section: **Replacement Parts**.

To troubleshoot a component:

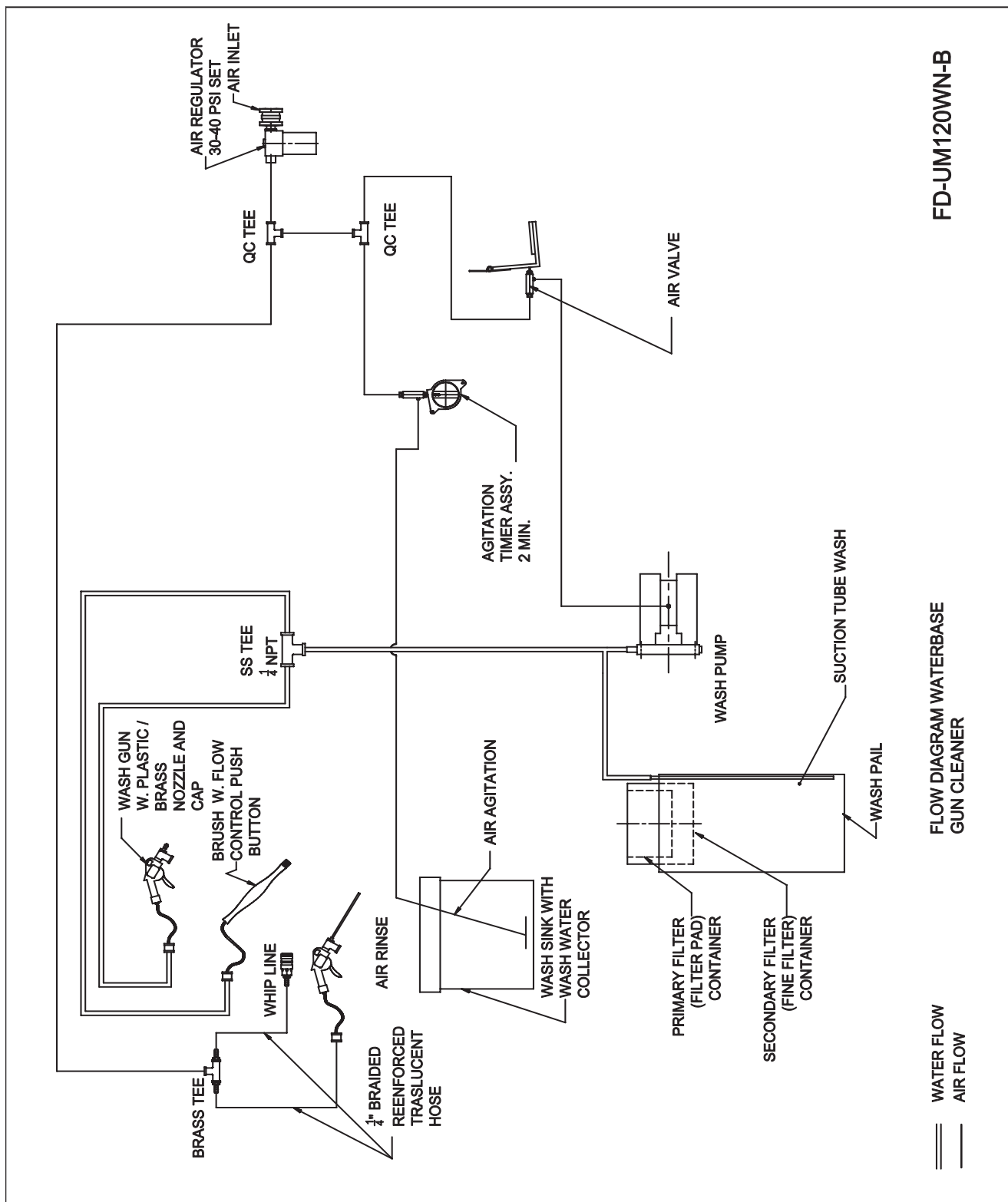
- 1) Disconnect the air line to the component using the quick disconnect.
- 2) Step on foot pedal and check for presence of positive air pressure in the air line. If there is ample positive air pressure, replace the component.

If air pressure is absent, there is a faulty component upstream. Reconnect the air line and check the operation of the next component upstream by following steps 1 and 2 above.



## FLOW DIAGRAM

Use the diagram to trace the flow of compressed air and water.



## REPLACEMENT PARTS



Filters

Primary, 400 Micron, **102-8125**

Secondary, 25 Micron, **102-8126**

Filter Holder, **102-8120**

Wash Pail, 19L, **102-8111P**



Mech. Timer Assembly, **115-200**

Diaphragm pump, **UDP4TA**  
(Not Shown)



Work Screen, **102-3030**

Air Agitator, **102-3580**

Drain Hole (Shut Off  
Valve underneath,  
not shown)

### AIR AGITATION SYSTEM



Air Blow Gun, **102-7010** and  
Wash Gun (with Splash Guard),  
**102-7020**

Whip Line (not shown), **102-3980**

**Note:** For additional replacement parts, see the list of included parts on page 3.



## Full Product Warranty

These Uni-ram products have been engineered and manufactured to high performance standards. Each unit has been subjected to detailed factory testing before shipment.

This product comes with a one-year full warranty from the date of purchase. Uni-ram Corporation reserves the right to repair or replace the unit, free of charge, to the original purchaser if a part is found to be defective in material or workmanship as determined by factory service personnel. The items listed below under "Conditions of Warranty" as consumables are not covered.

Uni-ram reserves the right to direct the customer to ship the unit collect to the Uni-ram factory or to an approved Service Center for repair using the Uni-ram Return Goods Procedure or to repair the unit on-site. To prevent damage in transport, the purchaser must ship the unit in the original packaging or use alternate adequate packaging. All units must be **shipped clean and free of solvent**.

### Diaphragm Pump:

We are pleased to advise that the warranty on the diaphragm pump, the heart of the spray gun cleaner, comes with a 2 year replacement warranty. If, in the unlikely event your diaphragm pump fails during the first two years of service, call Uni-ram Service at 1-800-417-9133. We will send you a new pump free of charge and arrange for the return of your original pump.

### Conditions of Warranty:

As Uni-ram Corporation has no control over the working conditions or circumstances under which the purchaser stores, handles or uses the product, Uni-ram makes no warranty or claim, either expressed or implied with respect to this product's fitness for any purpose or the result to be obtained from its use. This condition applies to the sale of all products and no representative or distributor of Uni-ram Corporation has the authority to waive or change these conditions.

This warranty applies only to the original purchaser and does not apply if the unit has been mis-used, overloaded, neglected, altered or used for any purpose other than those specified in the operating and installation instructions. Deterioration due to normal wear is not covered by this warranty. Damage due to accident, transportation, fire, floods or acts of God is also not covered. Units whose serial numbers have been altered or removed are not covered. The warranty is invalid if unauthorized chemicals as noted in the manual or solvents with acid content are used in this unit. Unauthorized attempts at self-repair or alterations by the owner also invalidate this warranty. Interior or exterior finishes are not covered by this warranty.

Consumable Items are not covered by this warranty (eg: gaskets, screens, bags, filters, nozzles and air jets).

This warranty replaces all other warranties expressed or implied by statute or otherwise.

**To make a claim, call Uni-ram Service at 1-800-417-9133 and quote the serial number of the unit.**