



## USER MANUAL

### UG110 SERIES SPRAY GUN CLEANERS



UG110VP

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

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## INTRODUCTION

Uni-ram holds many patents on designs used in its innovative products. Every machine is rigorously tested for compliance with stringent 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 instruction 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 for 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**

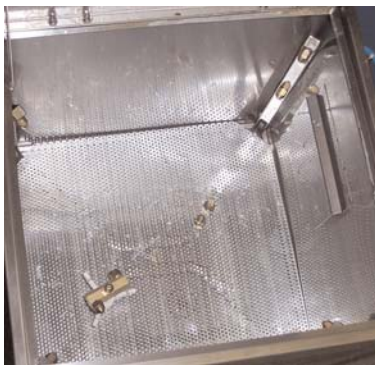
## CAUTIONS AND WARNINGS

- Always disconnect this machine from power sources before performing maintenance
- Do not smoke or use near open flames, sparks or heat.
- Ground pails and cabinet using supplied grounding wires
- Use only an air source that has been filtered to ensure that it is clean and dry

## FEATURES

- 1 gun and 1 pot capacity
- 6 swirl action jets.
- Cup holder stabilizes gun pot. Knurled plug prevents solvent from entering air passage of gun.
- Automatic lid shut off, mimimizing operator's exposure to solvents.
- Easy replacement of used solvent pail. Drain valve controls solvent flow to pail.
- Long lasting dual diaphragm pump, requires at lleast 85 PSI.
- Corrosive resistant stainless steel tank and delivery tubes.
- Solvent is reused, reducing solvent consumption.
- Fume Vent (UG110VP only)
- CE safety certification pending.
- 1 Year Warranty.

## STRUCTURE



INSIDE OF TANK SHOWING ROTATING SPRAY JET FOR CLEANING POTS (UG110VP ONLY)

## ACCESSORIES AND REPLACEMENT PARTS

Part No.	Description
110-430	NOZZLE ADAPTER,
110-430SA	NOZZLE ADAPTER, LARGER NOZZLE OPENING
100-413F	PAINT CAP HOLDER
115-200/K	MECHANICAL TIMER ASSEMBLY, 5 MINUTES
140-2341	TRIGGER CLAMP AND PLUG KIT
140-340S	ROTATING SPRAY JET
100-835	GROUND WIRE, 18G, GREEN, 4 FT
600-8901	GROUND WIRE FOR PAIL
N110-312N	TANK LID
N110-318	PULL HANDLE
N110-3631S + N110-3632S	DELIVERY TUBES
N110-332A	WORK SCREEN (FLAME RETARDANT)
N110-952F	CARTON

## SETUP

### INSPECTION AND ASSEMBLY

- Inspect the shipping carton for signs of damage. It is your responsibility to report damage to the transport company. Uni-ram Corporation does not accept responsibility for shipping damage once the machine has left our warehouse. Keep the packaging materials until you are sure the machine has not been damaged during shipping.
- Remove the machine from the carton by opening the bottom flaps and sliding the carton up over the machine.
- Make sure the following items are included in the Accessory Kit:
  - MANUAL
  - TRIGGER CLAMP AND PLUG KIT, SINGLE (Part No. 140-2340)
  - NOZZLE ADAPTORS (2 kinds): Part No. 110-430 and 110-430SA
 If any item is missing, contact your supplier.
- Attach the legs to the body with the screws provided. The two front legs have adjustable feet which are used for levelling and the two back legs do not have feet.

### GROUND WIRE INSTALLATION

- For safety, two ground wires are provided to discharge static electricity. One is already installed between the the body and the Suction Pipe. The other must be attached at one end to the outside of the body (the screw near the Air Input is recommended) and, at the other end, to an external grounded object (see page 4).

**DO NOT OPERATE THE UNIT UNLESS BOTH GROUND WIRES ARE SECURELY CONNECTED**

### LOCATION

Position in a well-ventilated area away from sparks, heat and open flames.

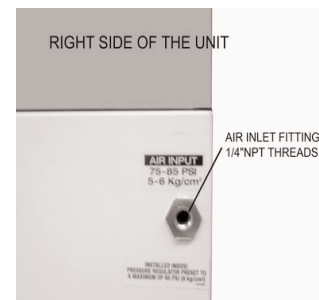
### LEVELING, MOISTURE FILTER AND AIR SUPPLY

- Level the machine using the adjustable feet.
- Remove the cover on the "Air Input" (right side of machine) and, to ensure that the air supply is clean and dry, attach an Airline Filter (not supplied).
- Attach an air supply adapter (not supplied) to the Airline Filter.

***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 to precisely 85 PSI. Do not install a second air pressure regulator or use a pressure set below 85 PSI.***

***See the section, Daily Maintenance, for proper maintenance of the Air Filter Assembly.***



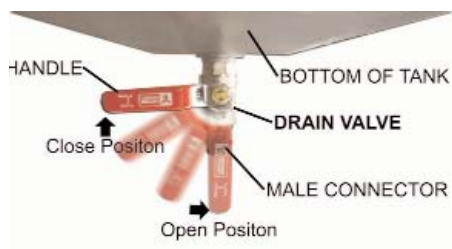
## SOLVENT SELECTION

The adhesion quality of automotive paint has dramatically improved in recent years. The choice of solvent is critical. Only use good quality solvent that is formulated for your paint and intended for use with automatic spray guns cleaners.

## SOLVENT 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 on right.
- One 5-Gal (19 L) pail of solvent is required. Place the pail in front of the machine.
- Disconnect the Suction Pipe from the Drain Valve by pushing the gray button and bring pipe outside of the cabinet.
- Move the pail into the cabinet and re-connect the Suction Pipe to the Drain Valve. Insert suction pipe into the pail.

Drain Valve



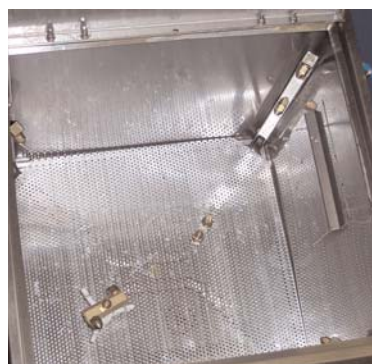
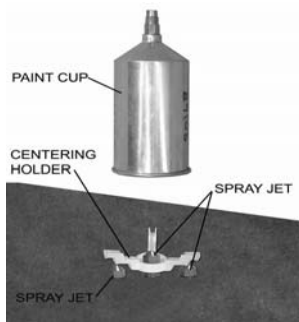
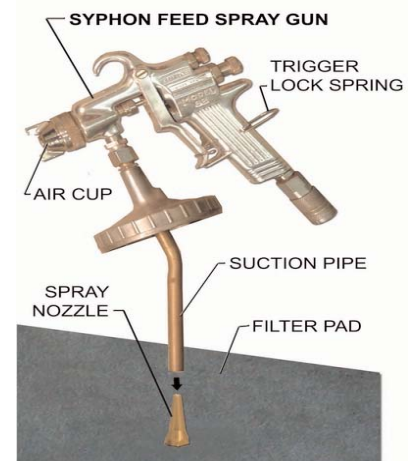
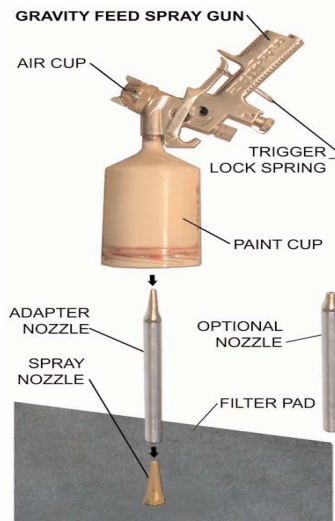
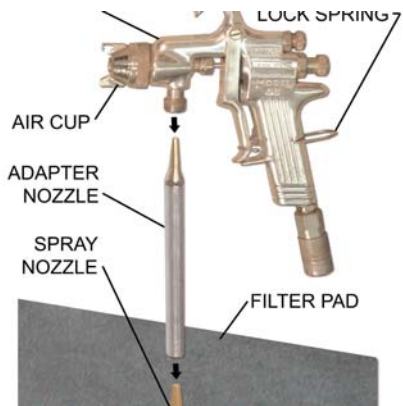
## OPERATION

### PRE - CLEAN

- Disconnect the spray gun from the air hose. Pour paint from the cup (when present) into a 5 gallon pail (not supplied).
- Rinse cup with solvent and pour into the same 5 gallon pail for later disposal or recycling.

### CLEANING SPRAY GUNS AND CUPS

- Loosen the air cap of the spray gun two full turns.
- Lock the trigger in the open position with the Trigger Lock Spring.
- Plug air inlet of spray gun with cap to prevent solvent from entering passage. Caps are supplied in the accessory kit.
- Place spray guns facing corner jets. Placement depends on **type of spray gun** (see below). Place cups onto the low spray jets and cup holders.



PLACE POT OVER ROTATING SPRAY JET (UG110VP ONLY)

**CLEANING SPRAY GUNS AND CUPS - continued**

- Close the lid and turn the "Auto Wash Timer" knob clockwise to start cleaning. The cleaning cycle takes about 60 seconds

**AFTER CLEANING**

- Remove the gun and cup from the tank and wipe them dry. Do not store spray guns in the tank.

**DAILY MAINTENANCE****SCREEN**

- Inspect the screen at the bottom of the tank and clean when necessary.
- Drain and flush the Moisture Filter, allowing air under pressure to flow through it.

**REPLACING SOLVENT**

- Disconnect the Suction Pipe from the Drain Valve and remove the pipe from the pail. Move the pail out of the cabinet and recycle or dispose of the wash solvent.
- Place a new, full-pail of clean solvent in front of the cabinet.
- Move the pail into the cabinet and re-connect the Suction Pipe to the Drain Valve.



## TROUBLESHOOTING CHART

SYMPTOM	REASON	CORRECTIVE ACTION
<b>WASH SOLVENT DOES NOT FLOW AND PUMP MAKES A PUMPING NOISE</b>	<ul style="list-style-type: none"> <li>• Drain valve closed</li> <li>• Solvent level too low</li> <li>• Paint debris in pump</li> <li>• Blockage in solvent line</li> </ul>	<p><b>After Each Step Below, Turn Timer. If solvent does not flow, carry out next step.</b></p> <ul style="list-style-type: none"> <li>• Open drain valve (put in vertical position), if not already open</li> <li>• Check wash solvent level. Add solvent if less than 1/2 full.</li> <li>• Follow Procedure 1, Blocked Fluid Passage in Diaphragm Pump.</li> <li>• Follow Procedure 4, Blocked Passage in Solvent Line</li> </ul>
<b>WASH SOLVENT 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 SOLVENT DOES NOT FLOW AND PUMP DOES NOT MAKE A NOISE</b>	<ul style="list-style-type: none"> <li>• Pump leaks</li> <li>• Blockage in air passage</li> </ul>	<ul style="list-style-type: none"> <li>• Replace pump</li> <li>• Follow Procedure 3, Blocked Passage in Air Line</li> </ul>
<b>PUMP DOES NOT STOP UNLESS TIMER IS TURNED BY HAND OR AIR IS SHUT OFF</b>	<ul style="list-style-type: none"> <li>• Defective timer</li> </ul>	<ul style="list-style-type: none"> <li>• Replace timer</li> </ul>
<b>TIMER KNOB SPINS BACK WHEN TURNED</b>	<ul style="list-style-type: none"> <li>• Defective timer</li> </ul>	<ul style="list-style-type: none"> <li>• Replace timer</li> </ul>
<b>INSIDE WALL OF TANK IS COATED WITH PAINT EVEN THOUGH OPERATOR MAINTAINS TANK</b>	<ul style="list-style-type: none"> <li>• Solvent lacks cleaning strength</li> </ul>	<ul style="list-style-type: none"> <li>• Replace solvent with solvent that is formulated for type of paint used and for use with automatic spray gun cleaning</li> </ul>

## TROUBLESHOOTING CHART

SYMPTOM	REASON	CORRECTIVE ACTION
<b>CLEANING PROBLEMS</b>		
<b>GUNS NOT CLEAN, PUMP WORKING, SOLVENT FLOW NORMAL</b>	<ul style="list-style-type: none"> <li>• Trigger not locked in open position</li> <li>• Spray gun is not properly installed onto nozzle</li> <li>• Incompatible solvent</li>   <li>• Low pressure in air supply</li> <li>• Plugged jets</li> </ul>	<p><b>After Each Step Below, Turn Timer. If guns are not clean, carry out next step.</b></p> <ul style="list-style-type: none"> <li>• Use Trigger Lock Spring</li> <li>• Re-install with proper adapter</li>   <li>• Replace incompatible solvent with solvent formulated for type of paint used and for Automatic Spray Gun Cleaners.</li>   <li>• Increase air pressure to a minimum of 85 PSI</li> <li>• Remove and clean by blowing air through the jets. If not successful, replace.</li> </ul>
<b>GUNS NOT CLEAN, WASH SOLVENT IS MILKY WHITE</b>	<ul style="list-style-type: none"> <li>• Wash solvent is contaminated with water</li> </ul>	<ul style="list-style-type: none"> <li>• Replace or recycle wash solvent</li> </ul>

## TROUBLESHOOTING PROCEDURES

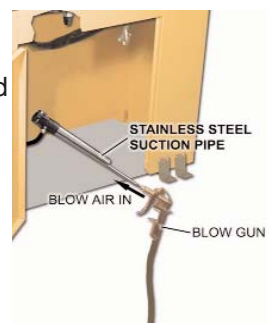
### PROCEDURE 1

#### Blocked Fluid Passage In Diaphragm Pump

If the pump sounds like it is working but solvent does not flow, follow one of the procedures below to clear the fluid passage.

- Lift the suction pipe out of the solvent pail. See diagram. Blow air at 85 PSI into the bottom of the suction pipe. Turn timer. This procedure may have to be repeated several times. If this procedure does not help, blow some solvent into the suction hose using a spray gun, wait one minute and turn timer. This procedure may have to be repeated several times. If this procedure does not work, replace the pump.
- **Cause:** The check valve is stuck due to excessively contaminated solvent.
- **Preventative Action:** Recycle or replace dirty solvent more often.

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

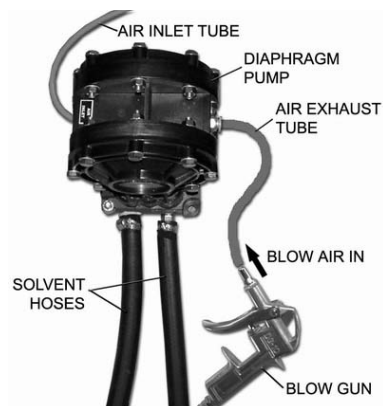


### PROCEDURE 2

#### 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 80 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:** Drain liquid from the moisture filter. Install a Air Filter if one is absent.



## TROUBLESHOOTING PROCEDURES -continued

### **PROCEDURE 3**

#### **Blocked Passage in Air Line**

The components in the air line are the **diaphragm pump, the auto wash timer, lid switch, regulator and air filter. See Flow diagram and section, Replacement Parts.**

To troubleshoot a component:

- 1) Disconnect the air line to the component using the quick disconnect.
- 2) Turn on the "Auto Wash Timer" and check for presence of positive air pressure in 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.

### **PROCEDURE 4**

#### **Blocked Passage in Solvent Line**

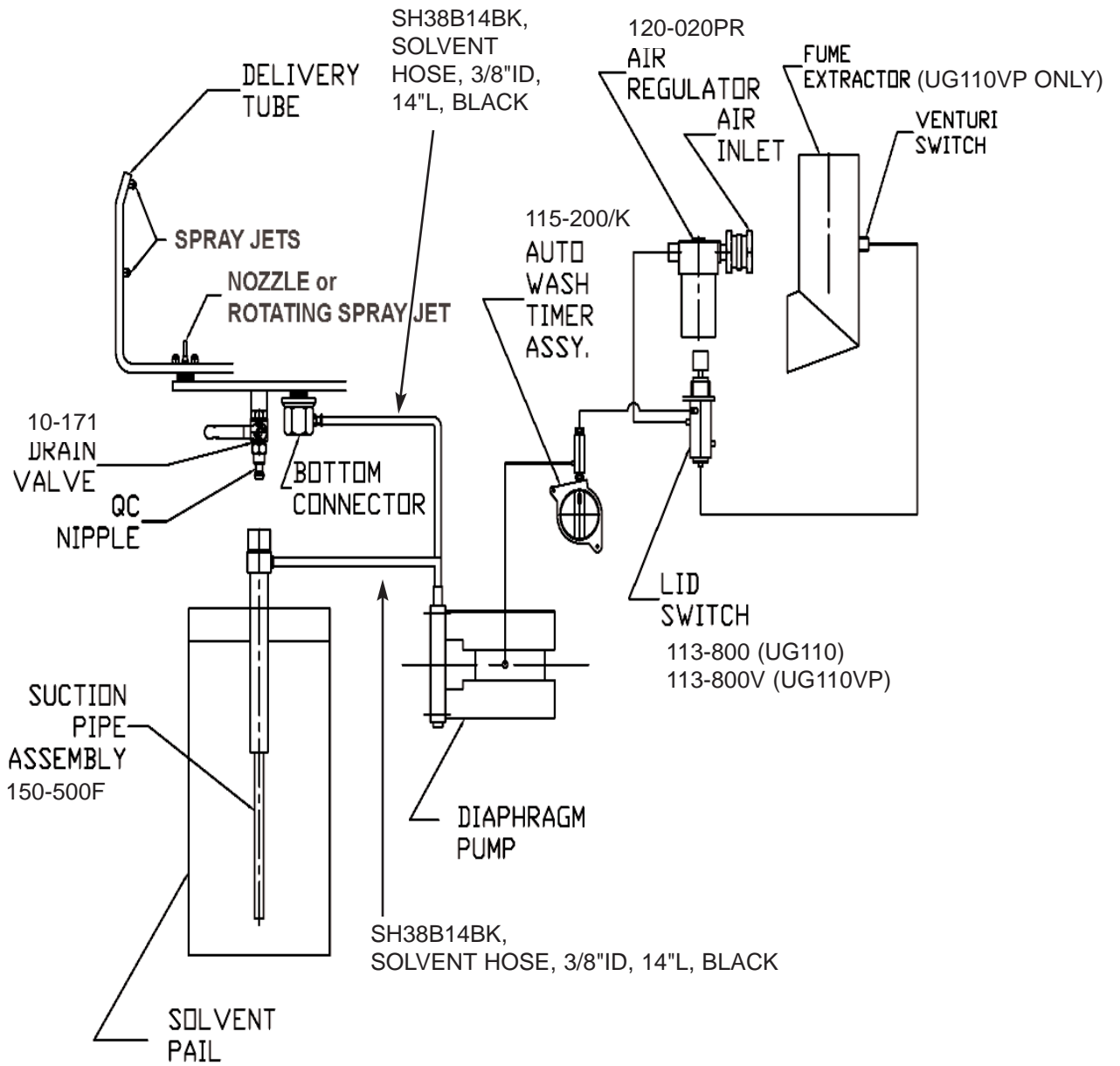
The components in the solvent line are: **suction pipe, diaphragm pump, delivery tubes, jets. See Flow diagram.**

##### **Troubleshoot Suction Pipe:**

- 1) Disconnect Suction Pipe from drain valve and lift out of solvent pail.
- 2) Turn the "Auto Wash Timer" knob and check for suction by placing finger over end of the suction pipe.
- 3) If you feel suction, suction pipe is not faulty. If you do not feel suction, disconnect the hose to the inlet port on the diaphragm pump. If you feel suction, replace the suction pipe.

**FLOW DIAGRAM**

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



## **EXTENDED WARRANTIES For North American Customers**

An extended warranty may be purchased within 3 months from the date of purchase.  
There are two types of warranty:

- 1) parts
- 2) parts and labour

The warranty period is 2, 3 or 4 years.

If you would like to purchase an extended warranty call Uni-ram at:

Canada	1-800-417-9133
USA	1-800-735-4331

## 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.**