



OPERATING MANUAL

**SOLVENT AND WATER BASE
SPRAY GUN CLEANER**

UG5000W and UG5500W

CAUTION

UM120W (RIGHT TANK) FOR WATER BORNE PAINTS ONLY

**UM120W (RIGHT TANK) SECTION IS NOT DESIGNED
FOR USE WITH SOLVENT BASED PAINT**

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 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 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

FEATURES

This unit combines a Spray Gun Cleaner for solvent-based paints on one side (left) and a Spray Gun Cleaner for water borne paints on the other (right). The left side is equivalent to either a UG4000 or a UG4500 and the right side to a UM120W. The UG4500 is a UG4000 plus hose cleaning therefore the UG5500W is equivalent to a UG4500 on the left side.

The left (solvent) side has automatic wash, automatic air flush, automatic solvent rinse, automatic fume venting with on/off control, manual rinse with Flow-through Brush and a stainless steel tank and lid. Two spray guns can be cleaned at the same time and the UG5500W can also clean hoses on the left side. The UM120W side is used to manually clean and rinse one spray gun at a time. It also has a stainless tank and lid.

The unit comes with a closed-top high density plastic pail for washing already installed on the left side and an open-top plastic pail with filters on the right side, also installed. The clean solvent pail for rinsing is not included and must be supplied by the user.

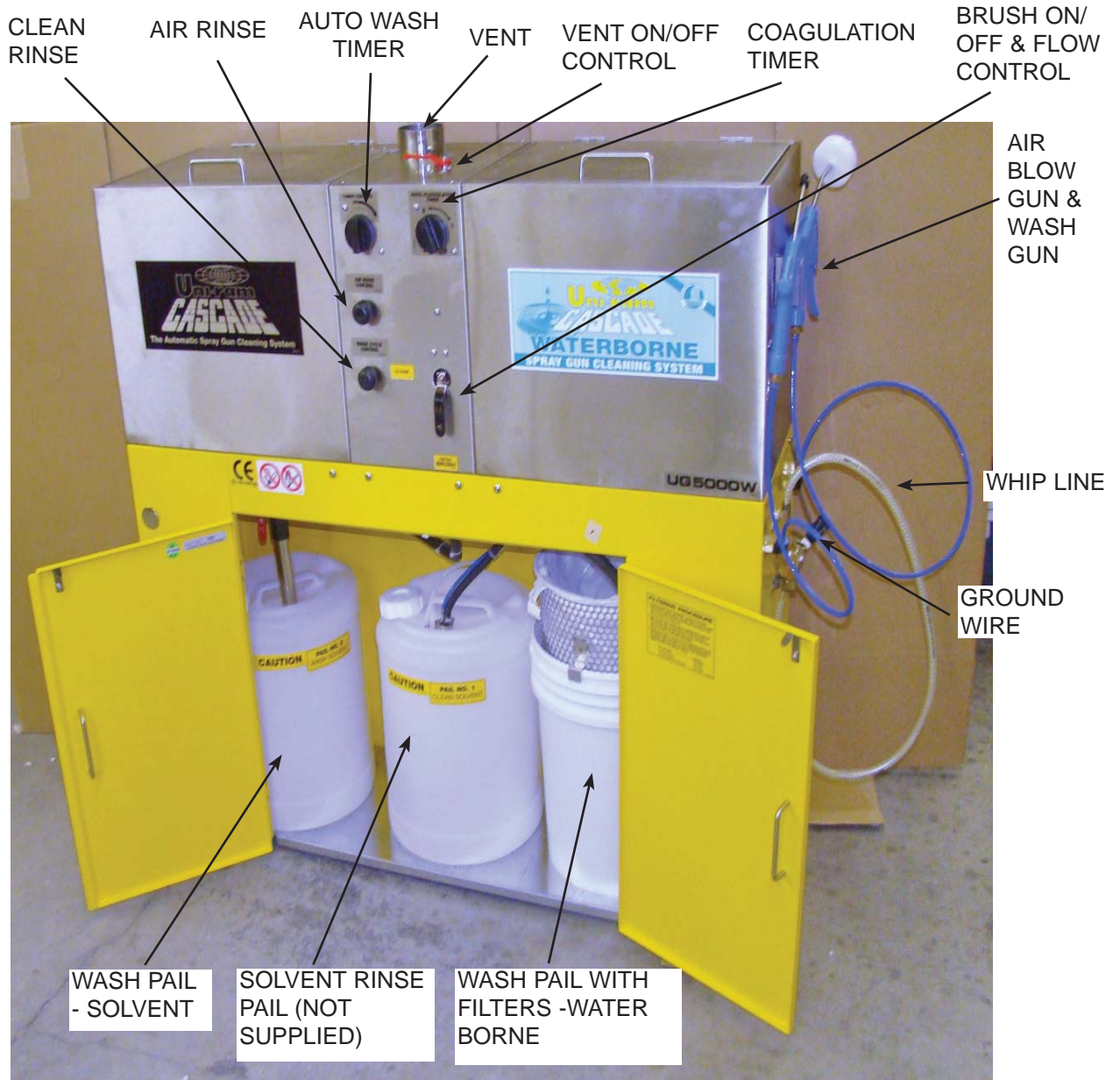
SETUP

INSPECTION

- 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 bag of accessories contains the following:
 - Manual
 - Nozzle Adapters, 1 each of 3 kinds (Part Nos. 110-430,110-430SA, 110-430PC)
 - Trigger Clamp and Plug Kit - 2 Pieces (Part No. 140-2340)
 - Air Blow Gun (Part No. 102-7010)
 - Wash Gun (Part No. 102-7020)

If any item is missing, contact your supplier.

STRUCTURE



LOCATION

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

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

CONNECT AIR BLOW GUN and WASH GUN WITH SPLASH GUARD

Remove the two Guns from the Accessories bag and connect the blue hoses to the appropriate connector on the right side of the unit, using the labels as a guide. To install the brackets for the two Guns, remove the brackets from inside the right-hand tank and attach them to the outside of the Tank using the same screws.

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.

PAIL SETUP

- Open the door to the base cabinet
- One 5-Gal (19 L) white plastic round top closed pail is provided for the left tank and one open top pail with a filter for the right tank. A full pail of clean solvent is required (not supplied).
- The Suction Pipe is already inserted in the white wash pail. If necessary, open the Drain Valve under the left tank (vertical position) and fill this pail 2/3 full (3 Gal) by pouring solvent into the tank and letting it drain into the pail. Insert the Rinse Pump and manual wash tube into a pail of clean solvent (not supplied) and place the pail inside the cabinet.

OPERATION

LEFT TANK (UG4000, SOLVENT BASE)

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 pictures below. Place cups onto the low spray jets and cup holders.
- Close the lid and turn the "Auto Wash Timer" knob clockwise to start cleaning. The cleaning cycle takes about 60 seconds
- Push and hold the "Air Rinse" button for about 3 second to air-rinse the guns.
- Push and hold the "Clean Rinse" button for about 5 seconds to rinse guns with clean solvent. This will send a pre-set amount of clean solvent (100 cc) through the jets. Wait 30 seconds for the Rinse Pump to fully recharge before repeating.

The solvent flow per clean-rinse cycle is limited to 100 cc to minimize consumption. This quantity is usually sufficient to clean the inside passages of the spray guns.

USING THE FLOW-THROUGH BRUSH

- To deliver clean solvent through the Brush for rinsing, step on the foot pedal.

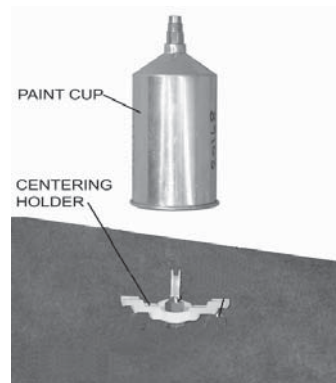
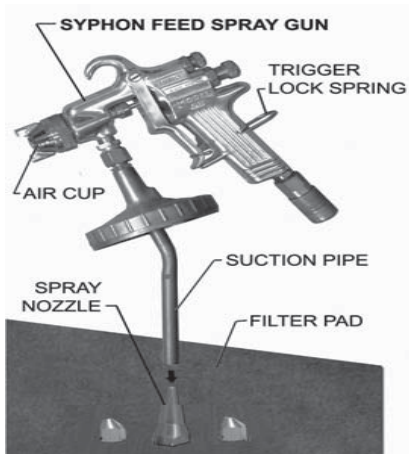
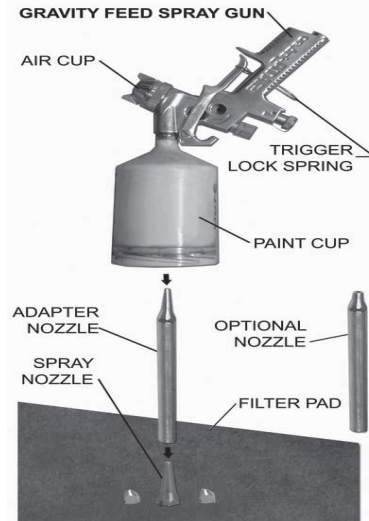
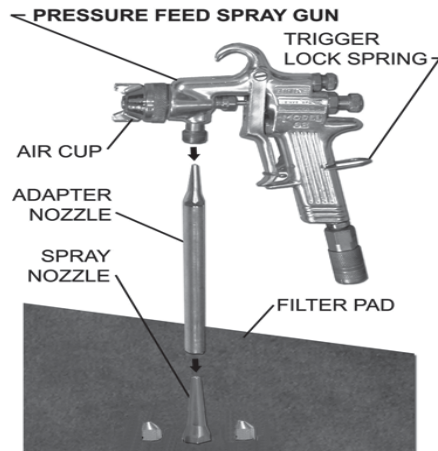
Solvent flow through the rinse brush is limited to minimize clean solvent consumption.

RIGHT TANK (UM120W, WATER BASE)

This tank is used to clean spray guns, cups and parts. There are two modes of operation - Manual Wash and Manual Rinse.

PREPARING SPRAY GUNS AND CUPS

- Disconnect the spray gun from the air hose. Empty the paint cup in to the wash tank
- Rinse the cup with water and pour the water in to the wash tank for later filtering.
- 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 water from entering passage. Caps are supplied in the accessory kit.
- Connect the Manual Cleaning Hose to the Spray Gun



NOTE: THE PICTURES ABOVE APPLY ONLY TO THE SOLVENT SIDE (LEFT TANK).

MANUALLY WASHING SPRAY GUNS OR PARTS

There are two ways to clean manually. One way is with the WASH GUN and the other is with the FLOW-THROUGH BRUSH. The Gun and Brush share recirculated water from the WASH PAIL. When using the Gun, water flow to the Brush must be turned off.

To use the Gun follow these steps:

1. Make sure the BRUSH ON/OFF & FLOW CONTROL lever is set to the CLOSE position (horizontal).
2. Step on the Foot Pedal (right side)
3. Squeeze the trigger.

To use the Brush follow these steps:

1. Make sure the BRUSH ON/OFF & FLOW CONTROL lever is set to the OPEN position (vertical).
2. Step on the Foot Pedal (right side)
3. To adjust the flow of water through the Brush, turn the lever back slightly until the desired flow is achieved.

TANK CLEANING

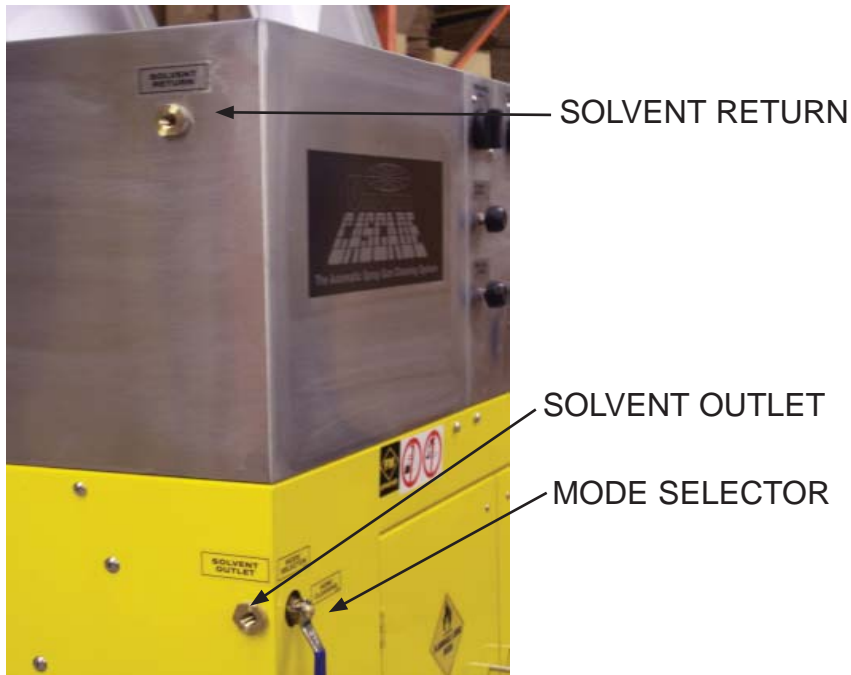
- Tank is filled with dirty water and there is no water left in the wash pail.
- Lift the wash screen and add the flocculent and put the screen back and closed the lid.
- Turn the coagulation timer. Air will agitate the water and flocculent. Let the mixture settled for 5 minutes.
- Open the drain Valve. Let the Water drain through the filter into 19L pail. The filter will collect the paint debris. If further cleaning the wash tank is required, use fresh water to flush out the tank.

AFTER CLEANING GUNS

- Remove the guns and cups from the tank and wipe them dry. Do not store spray guns in the tank.
- Close the drain valve of the water base gun cleaner tank(right side).
- Check the cloth filter of the water base gun cleaner and replace it if necessary.
- Check the condition of the filtered water. It can be reused. If necessary drain the filtered water as per law and filled the wash pail with fresh water.

HOSE CLEANING (UG5500W MODEL ONLY)

- Models with this feature can be used to clean a paint feeder hose up to 100 feet (30 m) long. Connect the hose to the two fittings on the left side (Solvent Outlet



and Solvent Return). Rotate the "Mode Selector" handle to the horizontal position and turn the Timer knob clockwise to start the automatic cleaning cycle.

- To air-rinse the hose, push and hold the "Air Rinse" button.
- To rinse the hose with clean solvent, push and hold the "Clean Rinse" button for about 5 seconds. This will use about 100 cc of clean solvent. Wait 30 seconds for the Rinse Pump to fully recharge before repeating.
- Disconnect the hose.

DAILY MAINTENANCE

FILTER PADS AND SCREEN

- Inspect the filter pad in the Left Tank (UG4000) and clean it if there is a build up of paint debris. Clean by removing the filter pad and washing away paint particles with clean solvent. Replace the filter pad when damaged or when solvent cannot drain.
- Inspect the Work Screen in the Left Tank (UG4000), under the filter pad and clean when necessary.
- Inspect the Water Base filters in the pail under the right-hand tank. Make sure the tank and work screen are clean and free from paint debris. Replace the filters if necessary.

REPLACING SOLVENT (UG4000 or UG4500)

- 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.
- Remove the Rinse Pump from the other pail, move the pail out of the cabinet and locate on left side for use with the suction pipe.
- Place a new, full-pail of clean solvent on the right side in front of the cabinet.
- Insert the Rinse Pump into the full pail on the right and the Suction Pipe into the half-full pail on the left. Models with a Manual Wash brush also have a tube to supply the brush. The tube must be inserted through the lid of the left (wash) pail. Models with a Manual Rinse feature have another tube which needs to be inserted through the lid of the right (rinse) pail.
- Move the pails into the cabinet and re-connect the Suction Pipe of the left pail to the Drain Valve.

REPLACING WATER AND CLOTH FILTERS (UM120W)

- Move the pail out of the cabinet. Remove the suction tube and filters from the pail and dispose of the cloth filters. Empty out the filtered water. Fill with fresh water
- Place new filters into the filter unit. Place the Filter unit and suction tubes into the pails and place them back into the cabinet and close the door.

TROUBLESHOOTING CHART

SYMPTOM	REASON	CORRECTIVE ACTION
WASH SOLVENT OR WATER DOES NOT FLOW AND PUMP MAKES A NORMAL PUMPING SOUND	<ul style="list-style-type: none"> • Drain valve closed • Solvent or water level too low • Paint debris in pump • Blockage in solvent line 	<p>After each step, turn the Timer Knob (Solvent) or press the Foot Pedal (Water). If liquid does not flow, carry out the next step.</p> <ul style="list-style-type: none"> • Open drain valve (UG4000) (vertical position). • Check wash solvent level. Add solvent if less than 1/2 full. • Follow Procedure 1, Blocked Fluid Passage in Diaphragm Pump. • Follow Procedure 4, Blocked Passage in Solvent Line
WASH SOLVENT OR WATER DOES NOT FLOW AND PUMP MAKES A HISSING SOUND	<ul style="list-style-type: none"> • Water in air line causes pump to stall 	<ul style="list-style-type: none"> • Follow Procedure 2, Blockage in Air Passage in Diaphragm Pump
WASH SOLVENT OR WATER DOES NOT FLOW AND PUMP DOES NOT MAKE A SOUND	<ul style="list-style-type: none"> • Pump leaks • Blockage in air passage 	<ul style="list-style-type: none"> • Replace pump • Follow Procedure 3, Blocked Passage in Air Line
PUMP DOES NOT STOP UNLESS TIMER IS TURNED BY HAND OR AIR IS SHUT OFF OR WHEN FOOT REMOVED FROM PEDAL (WATER BASE)	<ul style="list-style-type: none"> • Defective timer (UG4000) • Air Valve stuck (Water Base) 	<ul style="list-style-type: none"> • Replace timer • Replace Air Valve
TIMER KNOB SPINS BACK WHEN TURNED	<ul style="list-style-type: none"> • Defective timer 	<ul style="list-style-type: none"> • Replace timer
INSIDE WALL OF TANK IS COATED WITH PAINT EVEN THOUGH OPERATOR MAINTAINS TANK	<ul style="list-style-type: none"> • Solvent lacks cleaning strength 	<ul style="list-style-type: none"> • Replace solvent with solvent that is formulated for type of paint used and for use with automatic spray gun cleaning

TROUBLESHOOTING CHART

SYMPTOM	REASON	CORRECTIVE ACTION
CLEANING PROBLEMS		
GUNS NOT CLEAN, PUMP WORKING, SOLVENT OR WATER FLOW NORMAL	<ul style="list-style-type: none"> • Trigger not locked in open position • Spray gun is not properly installed on to nozzle • Incompatible solvent • Water too dirty(UM120W) • Low pressure in air supply • Plugged jets 	<p>After Each Step Below, Turn Timer. If guns are not clean, carry out next step.</p> <ul style="list-style-type: none"> • Use Trigger Lock Spring • Re-install with proper adapter • Replace incompatible solvent with solvent formulated for type of paint used and for Automatic Spray Gun Cleaners. • Increase air pressure to a minimum of 85 PSI • Remove and clean by blowing air through the jets. If not successful, replace.
GUNS NOT CLEAN, WASH SOLVENT IS MILKY WHITE	<ul style="list-style-type: none"> • Wash solvent is contaminated with water 	<ul style="list-style-type: none"> • Replace or recycle wash solvent
CLEAN RINSE DOES NOT WORK	<ul style="list-style-type: none"> • Not enough solvent in clean rinse pail (right side) • Rinse Pump is leaking from a crack caused by corrosion due to acidic or chlorine-contaminated solvent • Clean Rinse Air Valve is defective 	<ul style="list-style-type: none"> • See Section "REPLACING SOLVENT" • Replace rinse pump • Follow Procedure 3, "Blocked Passage in Air Line" for air rinse valve only.
CLEAN RINSE IS DIRTY	<ul style="list-style-type: none"> • Faulty Combination Valve 	<ul style="list-style-type: none"> • Replace Combination Valve.

TROUBLESHOOTING PROCEDURES

PROCEDURE 1

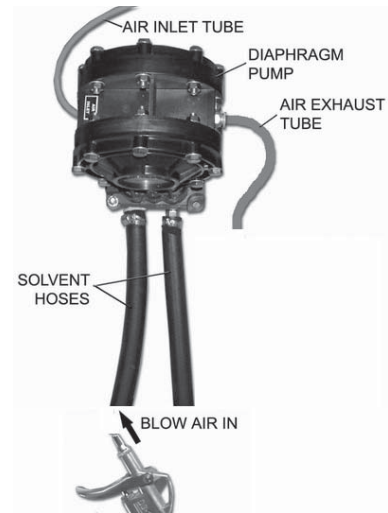
Blocked Fluid Passage In Diaphragm Pump

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.

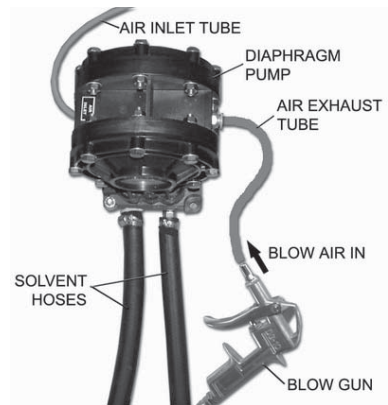


PROCEDURE 2

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**.

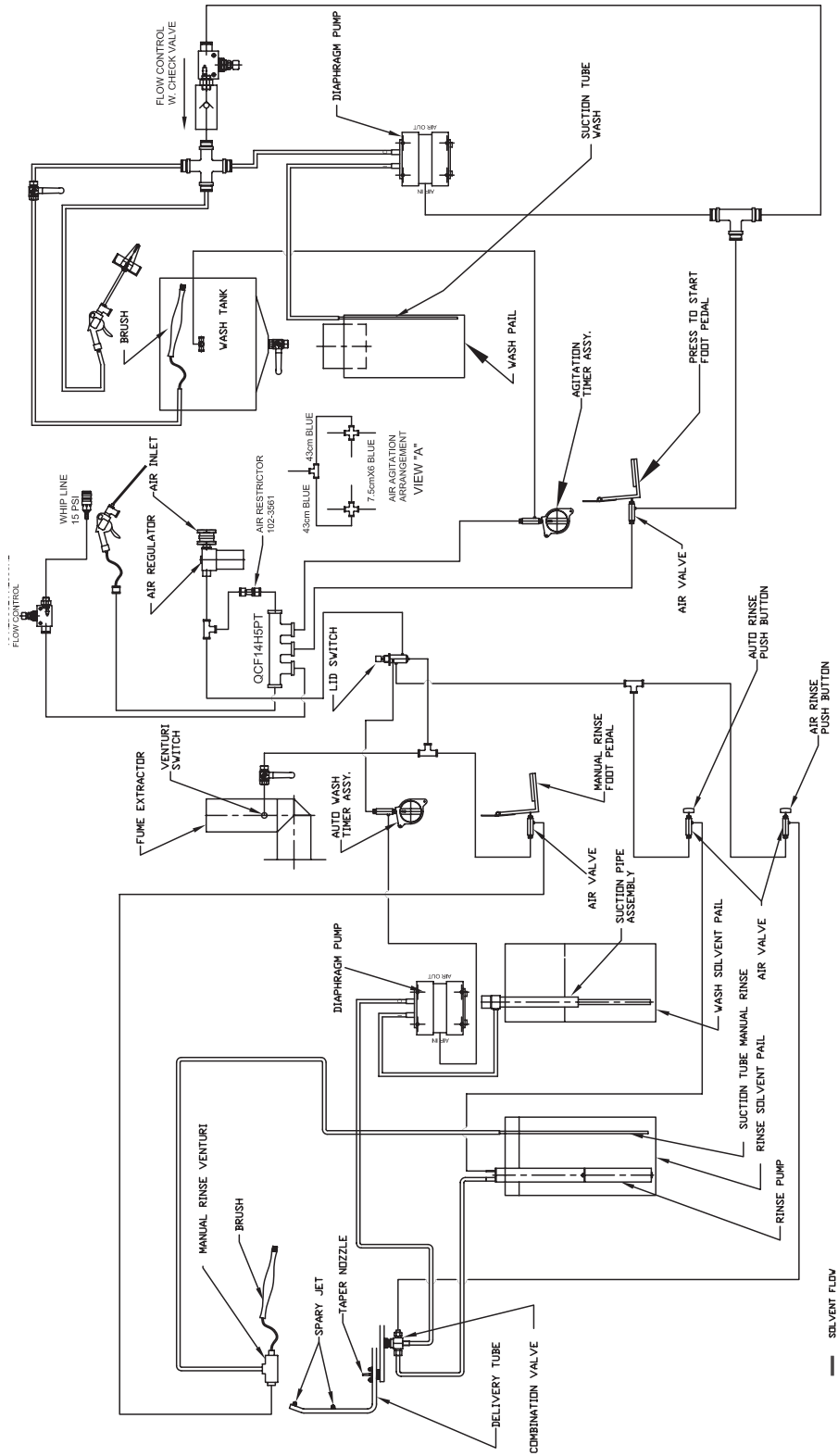
To troubleshoot a component:

- 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

Shows the flow of solvent and compressed air.



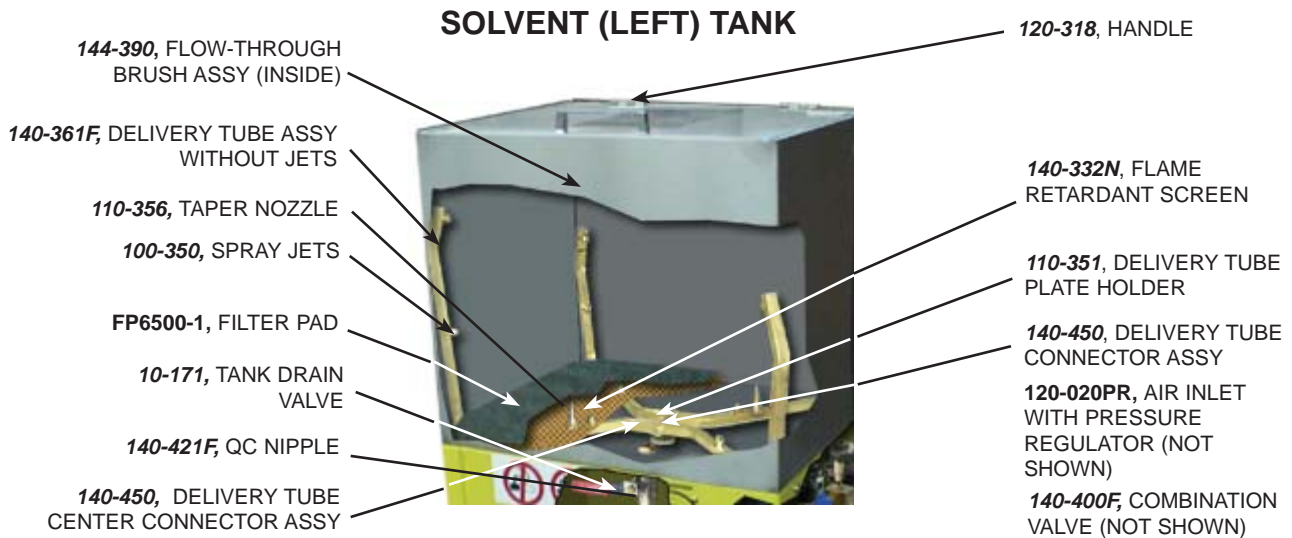
UM120W

FLOW DIAGRAM
FD-UG5000W-D

UG4000DVM

REPLACEMENT PARTS

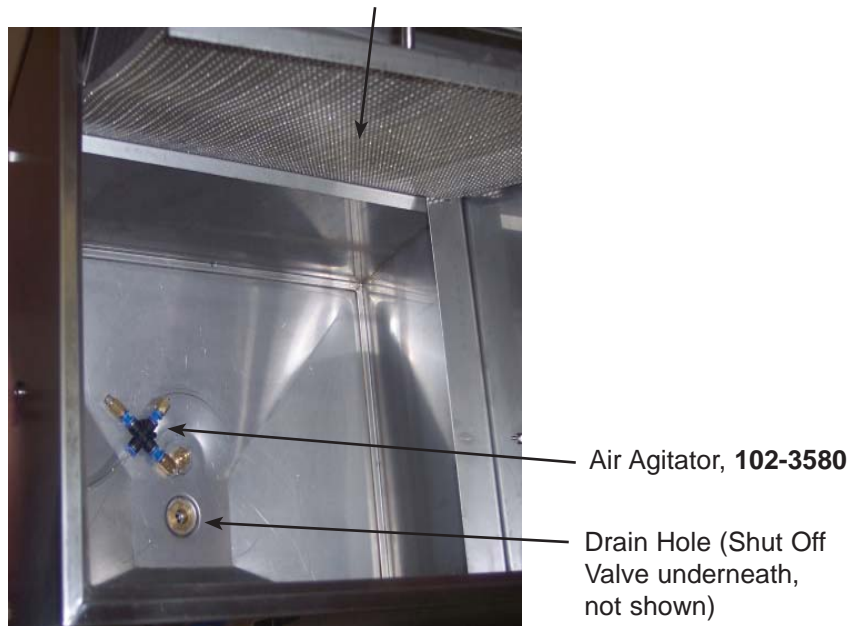
DESCRIPTION	Part Number
FLOW-THROUGH BRUSH	144-390
DIAPHRAGM PUMPUDP4TA	UDP4TA
AIR BLOW GUN	102-7010
TIMER KIT	115-200/K
VALVES (PEDAL,RINSE ETC)	115-400BF
NOZZLE EXTENSION, REGULAR	110-430
NOZZLE EXTENSION, SATA	110-430SA
TRIGGER CLAMP & PLUG KIT	140-2340
LID SWITCH	115-350F
WASH PAIL	780-811P
RINSE PAIL	780-8111P
PAIL, WATERBORNE (OPEN TOP)	102-8111P
GROUND WIRE	600-8901
WHIP LINE	102-3980



REPLACEMENT PARTS - UM120W



Work Screen, **102-3030**



AIR AGITATION SYSTEM

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

ACCESSORIES, CONSUMABLES and OPTIONAL PARTS

Part No.	Description
110-430	Nozzle Adapter, All models, Push On
110-430MJ	Nozzle Adapter, SATA, Mini Jet, Threaded
110-430MJP	Nozzle Adapter, SATA, Mini Jet, Push On
110-430L1	Nozzle Adapter, Threaded, SATA - 0.6 & 1.0 litre cups
110-430L1P	Nozzle Adapter, Push-On, SATA - 0.6 & 1.0 litre cups
100-413F	Paint Cap Holder
115-200/K	Mechanical Timer Assembly, 5 minutes
102-8124	Filter Bag.
140-340S	Rotating Spray Jet Assembly
144-390	Flow-Through Brush Assembly
144-397	Hose for Flow-Through Brush
100-835	Ground Wire for Gun Cleaner, 18G, Green, 4 FT
600-8901	Ground Wire for Pail
10-220	Airline (Moisture) Filter (Optional)
FP6500-10	Filter Pad, Regular, 13.75" x 17.5", Pkg of 10

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.