



USER MANUAL UA400W AUTOMATIC WATERBORNE SPRAY GUN CLEANER



CAUTION:
FOR CLEANING WATERBORNE SPRAY GUNS ONLY. THIS UNIT IS NOT
DESIGNED FOR CLEANING SOLVENTBORNE SPRAY GUNS.

UNI-RAM CORPORATION 381 BENTLEY ST MARKHAM ONTARIO CANADA
WWW.UNIRAM.COM 1-800-417-9133

INTRODUCTION

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 instruction can lead to malfunction or damage 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.

COMMON FEATURES

- Automatic Wash, Automatic Air Flush, Automatic Water Rinse.
- Manual Wash with Flow-through Brush including separate Brush Flow Control.
- Clean 2 Spray Guns and 2 Pots at the same time.
- 14 Cleaning Jets with swirl action.
- Shipping Size and Weight: 28" W x 17" D x 42" H, 91 LBS 41 KG.

CAUTIONS AND WARNINGS

- Always disconnect this machine from power sources before performing maintenance.
- **Do not smoke or use near open flames, sparks or heat.**
- **Make sure all ground wires are connected and that unit itself is grounded properly.**

SAFETY EQUIPMENT

- Wear safety eyewear, respiratory protection and protective clothing.
- Wear deluxe extended length neoprene gloves; SAS PN 6588 or Thicksters PN 6602-20 through 6605-20.

SETUP

DELIVERY INSPECTION

- Inspect the shipping carton for any sign of transport damage. Carefully remove the unit from the shipping carton and check the unit for damage. Report any transport damage immediately to the carrier and to your distributor. Initiate a freight claim with the carrier.

Bag of accessories contains the following:

Qty	Included Parts
1	MANUAL
1	AIR BLOW GUN
2	TRIGGER CLAMP & PLUG KIT
2	AQUA-KLEEN PGC CLEANER
1	NOZZLE EXTENSION, PART 780-3530, IS INSTALLED IN CLEANING TANK TO CLEAN FLUID PASSAGE WAY OF THE SPRAY GUN AND THE ADAPTOR.
1	NOZZLE EXTENSION, PART 110-430PPS, TO CLEAN FLUID PASSAGE WAY OF THE SPRAY GUN AND DISPOSABLE CUP ADAPTOR. MAY ALSO BE USED FOR CONVENTIONAL SYSTEMS WITH LARGER OPENINGS IN NECK OF CUP.
1	NOZZLE EXTENSION, PART 110-430, TO CLEAN FLUID PASSAGE WAY FOR CONVENTIONAL SYSTEMS ONLY WITH SMALLER OPENINGS IN NECK OF CUP.



UA400W
FIGURE 1

LOCATION

Position the unit in a well-ventilated area away from sparks, heat and open flames, at least 6 " from the back wall.

AIR SUPPLY

- Connect a male air supply adapter (not supplied) into the female Air Inlet on the unit. The male air supply adapter is 1/4" NPT.
- Connect the female air supply hose to the adapter. The air supply hose must be at least 3/8" inside diameter. **The air supply pressure must be at least 85 PSI and the supply air must be free from contaminants such as water, dust, rust, tar and grease. If the air supply is not clean and dry install a moisture filter. The operation and longevity of the pump and other components depends on clean dry supply air.**
- To prevent damage to the Diaphragm Pump an internal Air Pressure Regulator has been installed to limit the air pressure to 85 PSI. Do not install a second air pressure regulator or use a pressure set below 85 PSI.

GROUNDING

- Connect the green ground wire at the back of the unit to a ground in the building.

Note: The pump and metal tube that inserts into each pail are grounded.

Ring Terminal



PAIL SETUP

- Two rectangular pails come installed with each machine as shown on Figure 1, UA400W.



DRAIN VALVE IS OPEN
(HANDLE IN VERTICAL
POSITION).



DRAIN VALVE IS CLOSED
(HANDLE IN HORIZONTAL
POSITION).

- Close drain valve (handle in horizontal position, see photo above). Remove white cap from right pail. Remove drain hose from wash (left) pail and place in clean (right) pail. Open drain valve (handle in vertical position, see photo above). Pour 20 L pail of water into the cleaning tank to fill clean pail. vertical
- Close drain hose. Move drain hose back to wash pail on the left. Open drain valve. Pour contents of AQUA-KLEEN PGC into cleaning tank followed by (11 L) of clean water to fill left wash pail.
- After filling pails, make sure the Drain Valve is the open (handle in vertical position) and drain hose is in wash (left) pail.



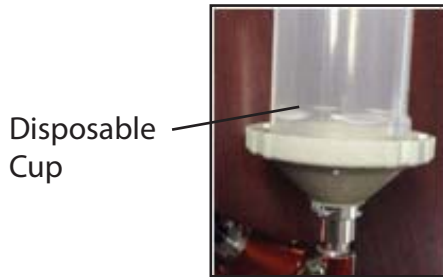
DRAIN HOSE IN
WASH (LEFT) PAIL



DRAIN HOSE MOVED TO
CLEAN (RIGHT) PAIL TO FILL
CLEAN PAIL

PRE - CLEAN

- Disconnect the spray gun from the air hose.
- Remove disposable cup shown in A.
- Squirt water into disposable cup adapter, shown in B photo.
- Pull the gun's trigger to flush the water through the fluid channel.
- Dispose of water in the waste container (not supplied).
- Do not mix water and water waste.



A



B

CLEANING SPRAY GUNS AND CUPS

- Remove digital air gauge if so equipped. A
- Loosen the air cap of the spray gun two full turns. B
- Lock the trigger in the open position with the Trigger Lock Spring. C



A



B



C

INSTALLING SPRAY GUNS



Brush

Caps points to the corner jets

Fixed Nozzle Extension

Plastic Plug

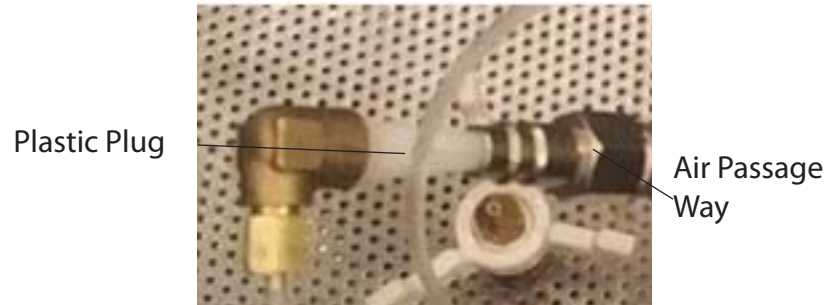
Location for Conventional Cup



Nozzle Extension for disposable cups

Prevent Water From Entering the Air Passage of Spray Gun:

Insert the plastic plug into the air fitting as shown below. Positive air will flow through the passage way during cleaning. An alternate is to connect the threaded knurled nut that is attached to the chain with the trigger lock spring to the male thread of the air passage way of the spray gun.



- Close the lid of the spray tank and turn the "Auto Wash Timer" clockwise as in photo A below to initiate cleaning. The wash cycle takes about 60 seconds.
- Push and hold the "Air Rinse" button for about 5 seconds as in B below to evacuate the wash water and air rinse the spray guns.
- Press and hold the "Clean Rinse" button for about 5 seconds to send 100 cc of clean water through the jets to rinse the the spray guns as in C below.
- Dry the spray gun with the blow gun.



A



B



C

MANUAL WASH

- Open the lid and remove brush from its holder on the back wall of the wash tank.
Step on the foot pedal. A dedicated pump delivers wash water through the brush, photo A. To control the flow of water through the Brush, adjust the Flow Control, also on the front of the unit, photo B.



A



B

MAINTENANCE

- A removable filter screen is installed at the end of the suction pipe, inside the left hand wash pail. See A photo below.
- Once each week, remove the wash pail from the cabinet, remove the suction pipe with the filter from the pail, (see B photo below) unscrew the metal filter (see C below) and clean the metal filter in a mixing cup of clean water.



A, Wash Pail



B, Remove Suction Pipe and Filter



C, Clean Filter

REPLACING Water

Replace the water when the water has lost cleaning effectiveness or after approximately 100 cleanings.

- Close the drain valve, A. Remove the drain hose, B and suction pipe, C.
- Pour wash water from wash pail into waste drum. Fill wash pail with 4 gal (11 L) of fresh water. Top up Clean Water pail to 5 gal. (19 L). See PAIL SET UP under SET UP to fill pails.



A



B



C

TROUBLE SHOOTING

PROBLEM	REASON	CORRECTIVE ACTION
WASH PUMP MAKES PUMPING SOUND BUT	Drain valve closed	Open drain valve (put in vertical position), if not already open
	Liquid level too low	Check wash liquid level. Add liquid if less than 1/2 full. Fill to 3 gal (11 L).
	Debris in pump or suction and output hose	Follow Procedure 1, "Blocked Fluid Passage in Diaphragm pump"
WASH PUMP MAKES HISSING SOUND AND SOLVENT DOES NOT FLOW	Water or contaminants are in air line of pump.	Follow Procedure 2. "Blocked Air Passage in Diaphragm Pump".
BRUSH PUMP MAKES PUMPING SOUND BUT SOLVENT DOES NOT FLOW FROM MANUAL BRUSH	Flow Control is closed.	Manual flow control is located on the control panel on the front of the machine. Loosen the locking nut and rotate control to the left to increase flow.
	Liquid level too low	Check wash liquid level. Add liquid if less than 1/2 full up to 3 gal (11 L).
	Brush is clogged with debris.	Unthread brush from hose and operate foot pedal. If free liquid flow is now seen, replace brush with PN 144-390S
	Debris in pump or lines.	Follow Procedure 1, "Blocked Fluid Passage in Diaphragm Pump"
BRUSH PUMP DOES NOT MAKE A NOISE AND SOLVENT DOES NOT FLOW WITH PEDAL DEPRESSED	Foot pedal switch not functioning	Inspect foot switch for free travel, and lubricate with gun oil. If switch will not travel freely, replace with PN 155-400BF2
BRUSH PUMP MAKES A HISSING NOISE AND	Water in air line causes pump to stall	Follow Procedure 2. "Blocked Air Passage in Diaphragm Pump".
WASH PUMP DOES NOT STOP UNLESS TIMER IS TURNED BY HAND OR AIR IS SHUT OFF. WASH PUMP DOES NOT START.	Defective Timer	Replace Timer, PN 115-200K.
TIMER KNOB SPINS BACK WHEN TURNED	Defective Timer	Replace Timer. PN 115-200K.

Trouble shooting continued		
SYMPTOM	REASON	CORRECTIVE ACTION
INSIDE WALL OF TANK IS COATED WITH PAINT EVEN THOUGH OPERATOR MAINTAINS TANK	Liquid lacks cleaning strength	Replace solvent / water and AQUA-KLEEN in pail. Consider a solvent that is formulated for type of paint used and for use with automatic spray gun cleaning.
GUNS NOT CLEAN, PUMP WORKING, SOLVENT FLOW NORMAL	Trigger not locked in open position	Use Trigger Lock Spring PN 120-350
	Spray gun is not properly installed on to nozzle	Re-install with proper adapter
	Incompatible solvent	solvent formulated for type of paint
	Low pressure in air supply	of 85 PSI
	Plugged jets	through the jets. If not successful,
SOLVENT APPEARS RED or ORANGE	Water in solvent is corroding metal pail	Replace or recycle wash solvent
GUNS NOT CLEAN, WASH SOLVENT IS MILKY WHITE	Wash solvent is contaminated with water	Replace or recycle wash solvent
CLEAN RINSE DOES NOT WORK	Not enough liquid in clean rinse pail (right side)	Add liquid
	Rinse Pump is leaking from a crack caused by corrosion due to acidic or chlorine contaminated solvent	Replace rinse pump, PN URP-100SF
CLEAN RINSE IS DIRTY	Faulty Valve	Replace Combination Valve, PN UVB-400KIT

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 Liquid Hose (see diagram). Step on foot pedal to activate pump. 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 to activate pump. 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 log-on to Service Channel and Fixxbook or call the Uni-ram Service Engineer. The warranty on the diaphragm pump is two years from date of purchase.



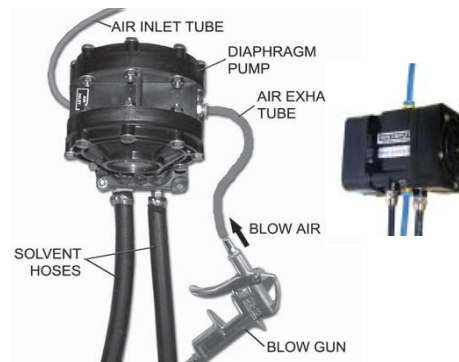
This procedure will also clear a blockage in the fluid line for the brush. Follow the same procedure to clear a blockage in the automatic nozzle except turn the timer instead of stepping on the foot pedal.

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.**

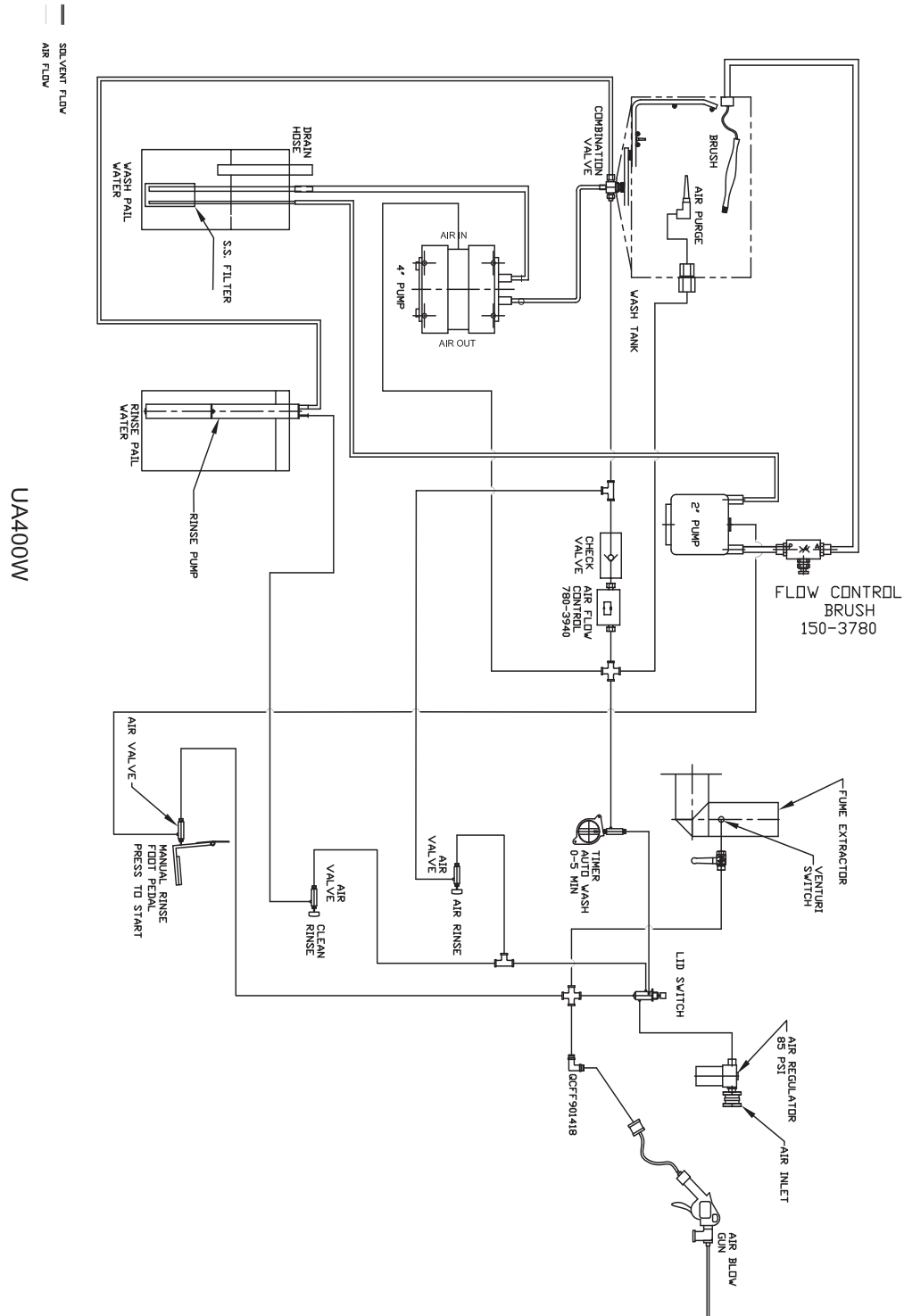
To troubleshoot a component:

- Disconnect the air line to the component using the quick disconnect.
- 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.

UA400AW FLOW DIAGRAM

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



REPLACEMENT PARTS

DESCRIPTION	Part Number
FLOW-THROUGH BRUSH	144-390W
DIAPHRAGM PUMP 4" UDP4TA	UDP4TA
DIAPHRAGM PUMP 2" UDP2TAB	UDP2TAB
AIR BLOW GUN	102-7010
TIMER KIT	115-200/K
PEDAL VALVE	115-400
PEDAL VALVE, COMPLETE ASSEMBLY	780-4300
NOZZLE EXTENSION, REGULAR, PUSH-ON	110-430
NOZZLE EXTENSION, PPS, PUSH-ON	110-430PPS
NOZZLE EXTENSION, PPS, THREADED	780-3530
TRIGGER CLAMP & PLUG KIT	140-2340
AIR PASSAGE PLUG	140-230
FLOW CONTROL	150-3780
WASH PAIL	150-8115SKS
CLEAN PAIL	150-8114RT

Full Product Warranty

These 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. The manufacturer 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.

The manufacturer reserves the right to direct the customer to ship the unit collect to the factory or to an approved Service Center for repair 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 liquid.**

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 for service. The manufacturer will send you a new pump free of charge and arrange for the return of your original pump.

Conditions of Warranty:

As the manufacturer has no control over the working conditions or circumstances under which the purchaser stores, handles or uses the product, the manufacturer 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 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 misused, 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 liquids 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 for service and quote the serial number of the unit.