



OPERATING MANUAL

**SPRAY GUN & PRESSURE POT CLEANERS
UG4000 & UG6000 SERIES, UPP6500E**

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

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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

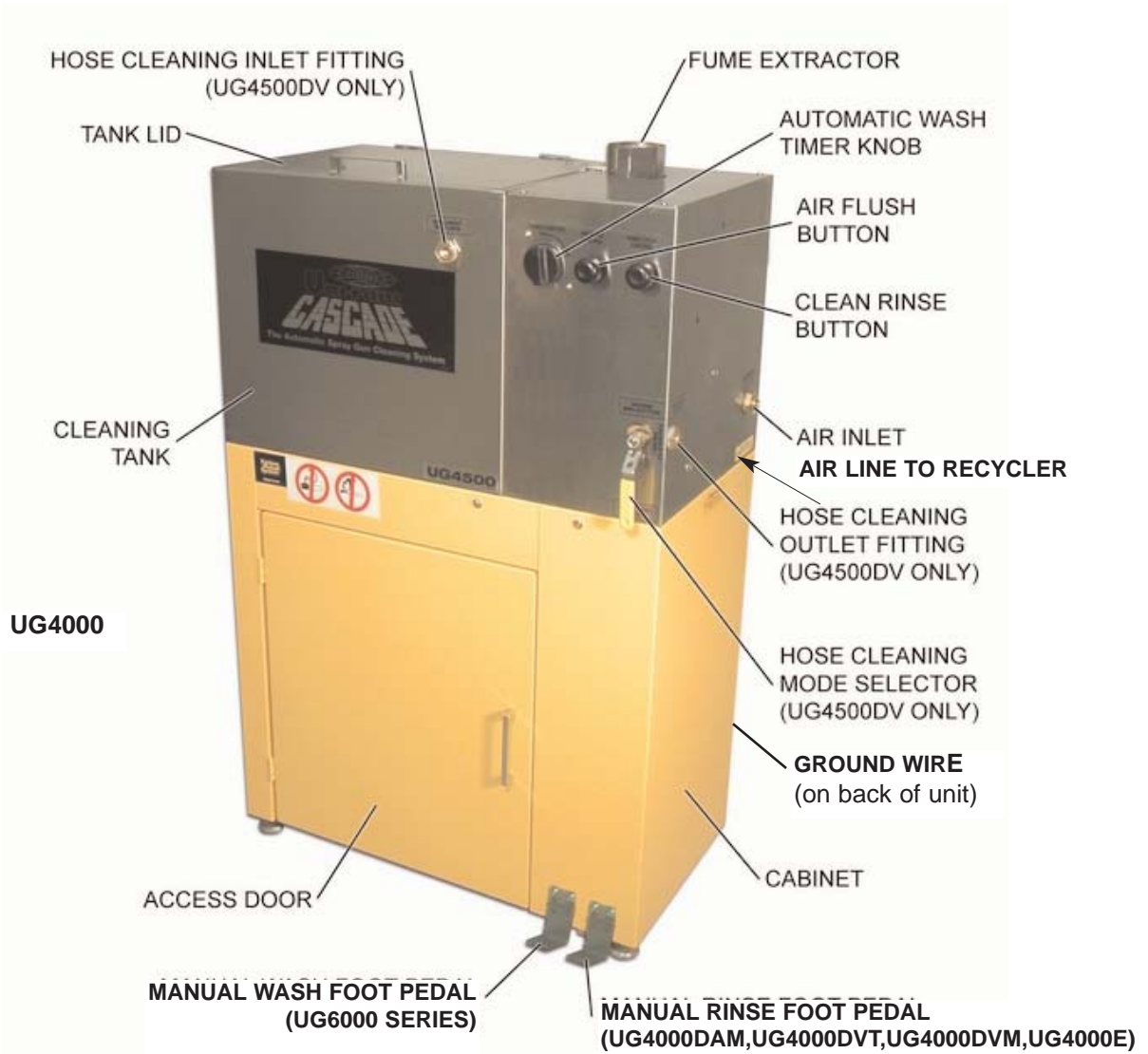
CAUTIONS AND WARNINGS

- 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

FEATURES BY MODEL

MODEL	4000DVM	4000D	4000E	4500E	4000FS	6000E	6000EH	UPP6500E
TANK SIZE (W X D H")	17.25 X 13.5 X 15					20 X 17 X 15		
AUTOMATIC WASH	●	●	●	●	●	●	●	●
AUTOMATIC AIR FLUSH	●	●	●	●	●	●	●	●
AUTOMATIC SOLVENT RINSE	●	●	●	●	●	●	●	●
AUTOMATIC FUME VENTING	●	●	●	●	●	●	●	●
FUME VENT CONTROL						●	●	●
HOSE CLEANING				●			●	●
MANUAL RINSE WITH BRUSH	●	●	●		●	●	●	●
BRUSH FLOW CONTROL					●	●	●	●
CHOICE OF MAN WASH SOLVENT						●	●	●
COMBO READY			●	●		●	●	●
INCLUDES PAILS		1	2	2		2	2	2
INCLUDES AIR LINE FOR RECYCLER			●	●		●	●	●
MANUAL WASH WITH SPIGOT					FIXED	FLEX	FLEX	FLEX
TANK MATERIAL	Stainless Steel							
LID MATERIAL	Stainless Steel							
ITEMS CLEANED	2 GUNS							POT & LID
NO. OF JETS	14							18
RINSE PUMP	Metering Pump (100cc)Metering Pump (100cc)							
SHIP WEIGHT LB/KG	77/35		90/41	80/36.4		115/48	115/48	115/48
SHIP SIZE (W x D x H")	28 x 17 x 42					30 X 20 X 45		

STRUCTURE

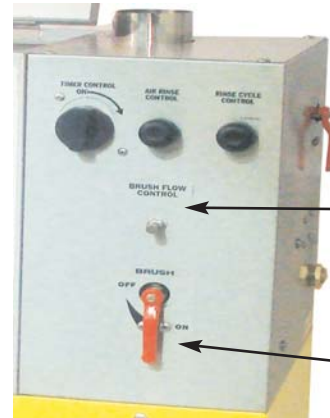


UPP6500ETANK



UG6000

- BRUSH FLOW CONTROL
- VENT CONTROL
- BRUSH SOLVENT SELECTION



UG4000FS

- BRUSH FLOW CONTROL
- BRUSH ON / OFF

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
 - Kit-Plug, Guns w. Trigger Lock Springs, 2 pieces (Part No. 140-2340)
 - Nozzle Adapters:
 - 110-430 Push-on, conventional systems only
 - 110-430PPS Push-on, disposable cup or conventional systems

Note: Adapter #780-3530 is installed for use with disposable cup system only

If any item is missing, contact your supplier.

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.
- For vented models only, attach a vent hose (not supplied) to the vent outlet on top of the machine. The duct system must not be under continuous vacuum.
- To stop or vary the rate of solvent venting from the tank upon opening, use the Vent Control Valve on the side of the unit.
- Remove the cover on the "Air Input" (right side of machine) and attach an air supply adapter (not supplied).

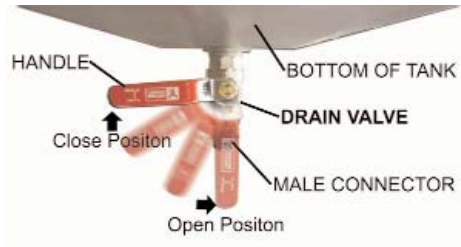
The air supply pressure must be at least 85 PSI and the air must be free from contaminants such as water, dust, rust, tar, grease etc.

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.



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.



Drain Valve

SOLVENT PAIL SETUP

For Units Where One or Both Pails are Not Included

- 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.
- Two 5-Gal (19 L) pails of solvent are required, one full and one containing 3 gal. Place the pails in front of the machine, full pail on the right and the other pail on the left.
- Inside the cabinet you will see two pipes strapped together, the Suction Pipe and the Rinse Pump. Cut the strap holding them together. Do not cut the other straps holding the black and blue tubes.
- Disconnect the Suction Pipe from the Drain Valve by pushing the gray button and bring both pipes outside of the cabinet.
- Insert the Rinse Pump into the full pail on the right and the Suction Pipe into the pail with 3 gal on the left. Models with a Manual Wash brush also have a tube to supply the brush. The tube



SOLVENT PAIL SETUP - PLASTIC PAILS

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.

For Units Where Pails are Included (see below and next page)

SOLVENT PAIL SETUP (continued)

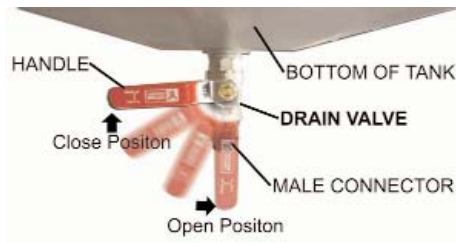
For Units Where Pails are Included (see picture on previous page)

PLASTIC PAILS

- Disconnect the Suction Pipe (if not already disconnected) from the Drain Valve (make sure it is in the closed, horizontal, position) by pressing the button and pulling down.
- Bring out PAIL NO.2 and remove the Suction Pipe (and Manual Wash Suction Tube if there is one).
- Bring out PAIL NO. 1 and remove the Caps from both pails.
- Fill PAIL NO. 2 with 3 about Gal (11 L) of clean solvent.
- Fill PAIL NO. 1 with 5 about Gal (19 L) of clean solvent (about 1" below the overflow pipe).
- Re-install the Caps onto the pails (the one with the tube goes on PAIL NO. 2).
- Put PAIL NO. 1 and the Riser back into the cabinet.
- Re-insert the Suction Pipe (and Manual Wash Suction Tube if there is one) into PAIL NO. 2
- Put PAIL NO. 2 back into the cabinet and re-insert the Overflow Pipe.
- Re-connect the Suction Pipe to the Drain Valve by pressing the button and pushing up.
- Turn the Drain Valve handle to the open position (vertical) and close the Door.

METAL PAILS - OPTIONAL (see picture below)

- Place two pails in front of the unit with the labels facing you and remove caps from both pails.
- Pour 5 Gal (19 L) of solvent into Rinse Solvent Pail and 3 Gal (11 L) into Wash Solvent Pail.
- Turn Handle of Drain Valve to closed (horizontal) position and disconnect the Suction Pipe (if not already disconnected) by pressing the button and pulling down.
- Bring Rinse Pump and, if present, Manual Wash Suction Tube to outside of Base Cabinet.
- Insert the Suction Pipe into the Wash Pail and the Rinse Pump into the Rinse Pail.
- If present, insert Manual Wash Suction Tube into the hole of Rinse Solvent Pail.



SOLVENT PAIL SETUP - METAL PAILS

- Place the Solvent Pails inside the base cabinet and re-connect the Suction Pipe to the Drain Valve by pressing the button and pushing up. Turn the handle to the open position (vertical).
- Connect Solvent Transfer Hose to the hose barb of Wash Solvent Pail and secure with Hose Clamp supplied.
- Turn Handle of Drain Valve to open (vertical) position and close Cabinet Door.

GROUND WIRE INSTALLATION

Three ground wires are provided to discharge static electricity. To work properly, all three must be installed correctly. Connect the ground wire at the back of the cabinet to an external grounded object. On some models ground wires are already connected to the rinse pump and suction pipe. On other models connect the two wires inside the cabinet to the pails, one to each.

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.
- To prevent liquid from entering the air passgae during automatic cleaning, insert the white plastic Air Passage Plug into the Spray Gun's air inlet. If the air inlet has a male threaded connector instead of a quick connect use the knurled nut attached to the Trigger Clamp (included).
- 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.



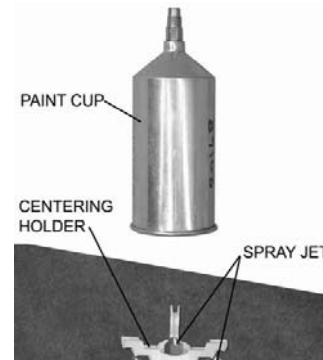
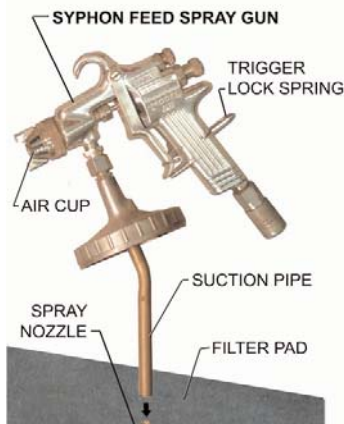
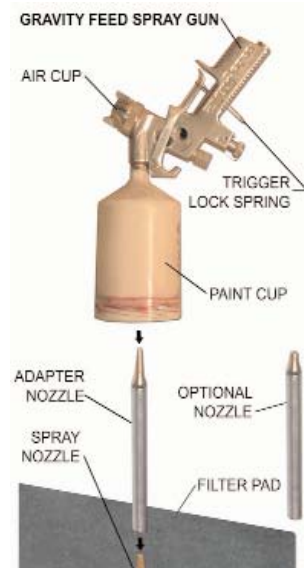
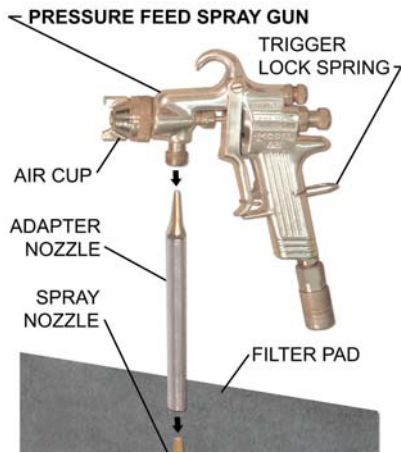
Note: Gravity Feed Spray Gun: Some customers prefer to clean the cup separate from the spray gun.

- 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.

CLEANING PRESSURE POTS AND LIDS (UPP6500E only)

- To clean the pressure pot and lid separately, place them one at a time over the extended rotating spray assembly and follow the same procedures as above.



MANUAL WASH and MANUAL CLEAN RINSE

- For models with the Manual Wash Brush, open the lid and step on the foot pedal (left pedal on two-pedal models). A dedicated pump delivers wash solvent through the brush.
- For models with the Manual Rinse feature, open the lid and step on the foot pedal (right pedal on two-pedal models). Clean solvent is delivered through the Brush or the Spigot. *Solvent flow for clean rinsing may limited to minimize clean solvent consumption.*

UG6000 SERIES

- Larger Tank size and Flexible Spigot
- For Brush cleaning, choose between wash solvent and clean solvent: use the Brush Solvent Selector on the front of the unit.
- To vary the rate of solvent flow through the Brush, use the Brush Solvent Flow Control on the side of the unit.

UG4000FS

- Brush Flow Control and a Foot pedal activated Fixed Spigot.

HOSE CLEANING

- 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, one on the front and one on the right side. 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.

AFTER CLEANING

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

DAILY MAINTENANCE

FILTER PADS AND SCREEN

- Inspect the filter pad located in the tank of the gun cleaner 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 screen, located below the filter pad and clean when necessary.

REPLACING SOLVENT

For units with customer supplied pails

- 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.

For units where pails have an overflow pipe:

- Follow instruction under SET UP for solvent pails.

TROUBLESHOOTING CHART

SYMPTOM	REASON	CORRECTIVE ACTION
<p>WASH SOLVENT DOES NOT FLOW AND PUMP MAKES A NORMAL PUMPING SOUND</p>	<ul style="list-style-type: none"> • Drain valve closed • Solvent level too low • Paint debris in pump or blockage in solvent line 	<p>After Each Step Below, Turn Timer. If solvent does not flow, carry out next step.</p> <ul style="list-style-type: none"> • Open drain valve (put in vertical position), if not already open • Check wash solvent level. Add solvent if less than 1/2 full. • Follow Procedure 1, Blocked Fluid Passage in Diaphragm Pump.
<p>WASH SOLVENT DOES NOT FLOW AND PUMP MAKES A HISSING SOUND</p>	<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
<p>WASH SOLVENT DOES NOT FLOW AND PUMP DOES NOT MAKE A SOUND</p>	<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
<p>PUMP DOES NOT STOP UNLESS TIMER IS TURNED BY HAND OR AIR IS SHUT OFF</p>	<ul style="list-style-type: none"> • Defective timer 	<ul style="list-style-type: none"> • Replace timer
<p>TIMER KNOB SPINS BACK WHEN TURNED</p>	<ul style="list-style-type: none"> • Defective timer 	<ul style="list-style-type: none"> • Replace timer
<p>INSIDE WALL OF TANK IS COATED WITH PAINT EVEN THOUGH OPERATOR MAINTAINS TANK</p>	<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 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 • 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 , Blockage 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

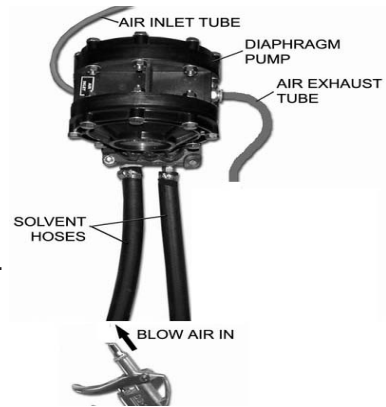
PROCEDURE 1

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 Solvent 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.



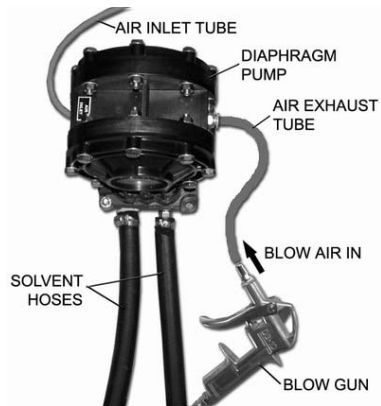
This procedure will also clear a blockage in the fluid line for the wash gun.

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:

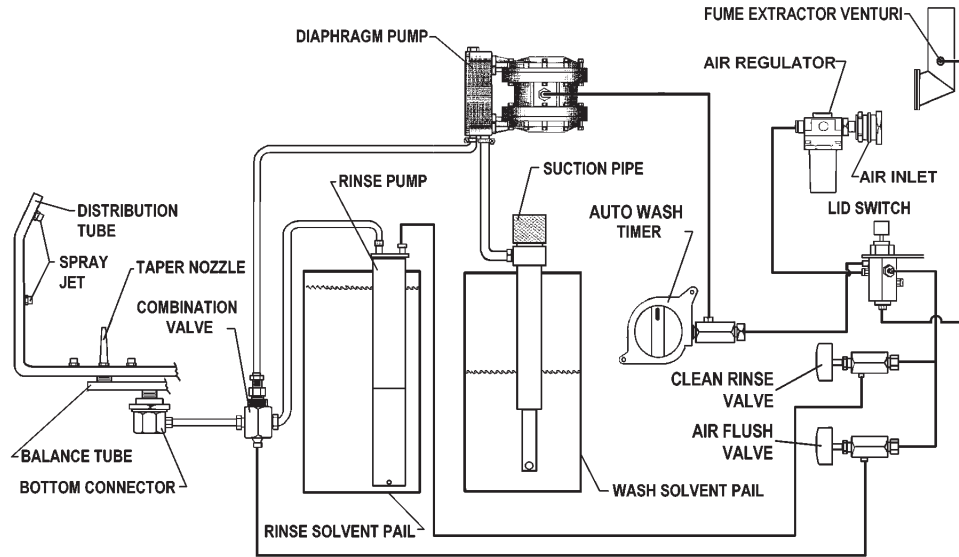
- 1) Disconnect the air line to the component using the quick disconnect.
- 2) Step on foot pedal and check for presence of positive air pressure in the air line. If there is ample positive air pressure, replace the component.

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 DIAGRAMS

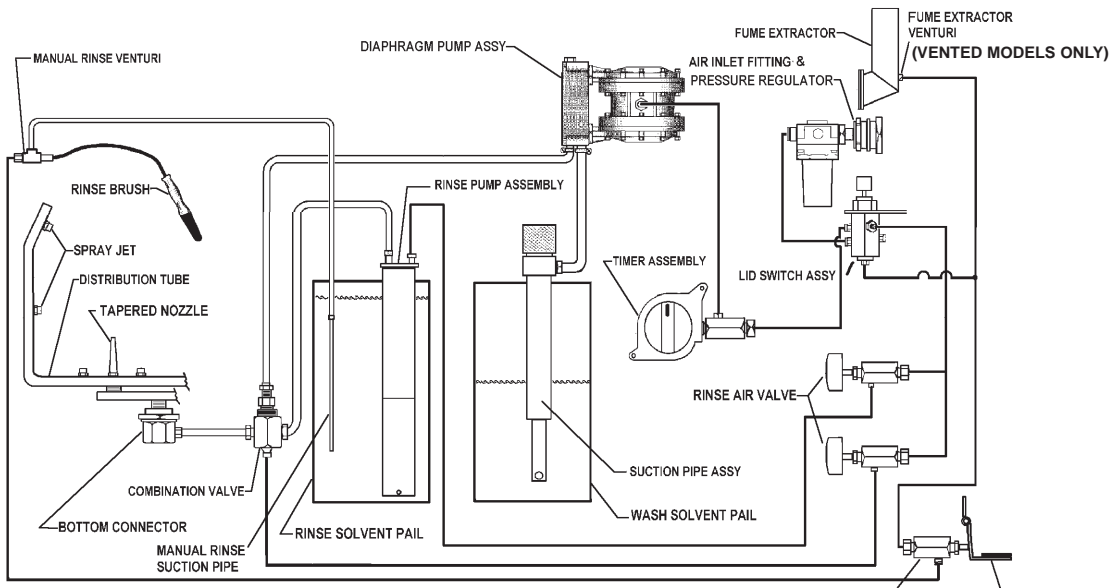
Use the diagrams to trace the flow of compressed air and solvent.

UG4000DV



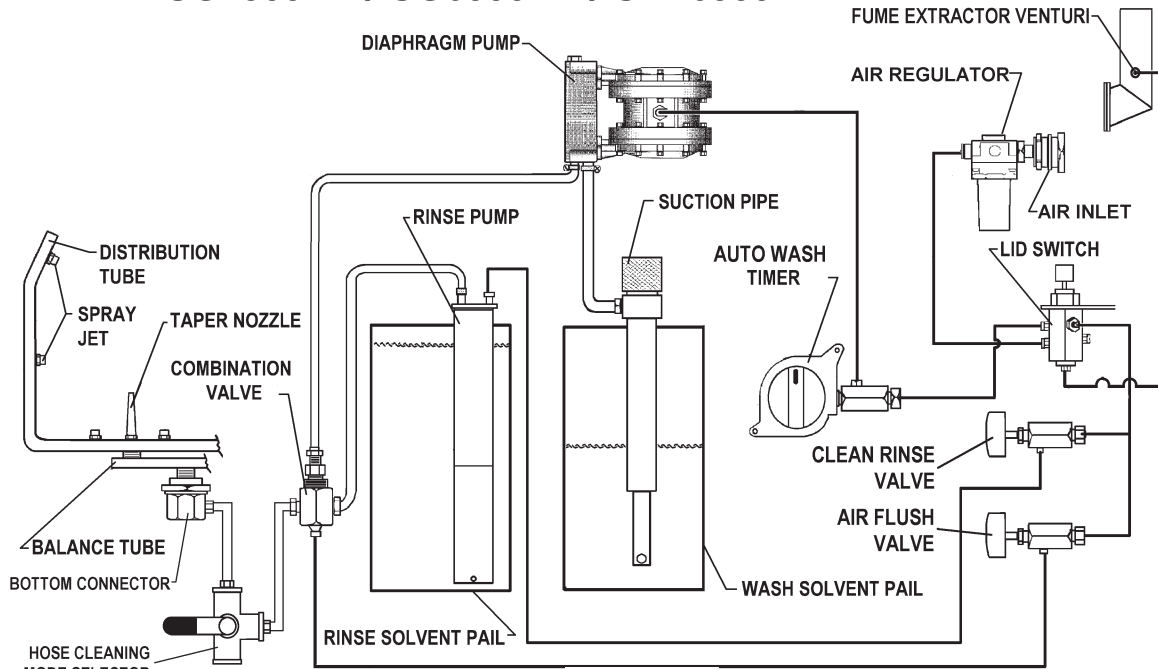
Solvent Flow ==
Air Flow —

UG4000DVM / DAM / DA / D / E



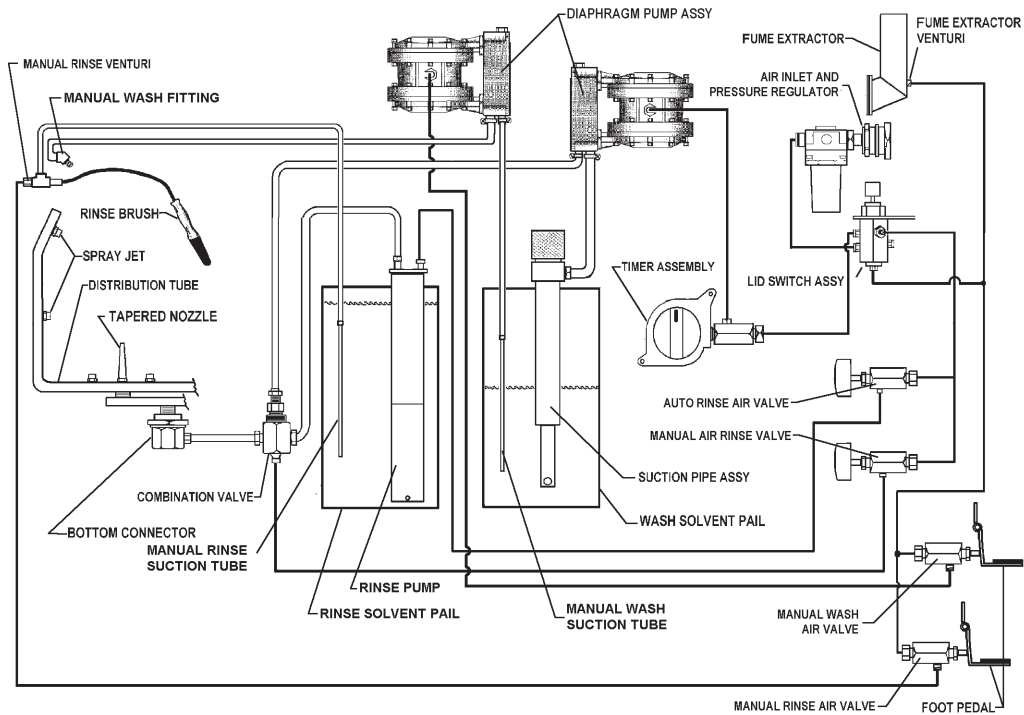
Solvent Flow ==

UG4500DV / UG6000EH / UPP6500E



Solvent Flow ==

UG6000E

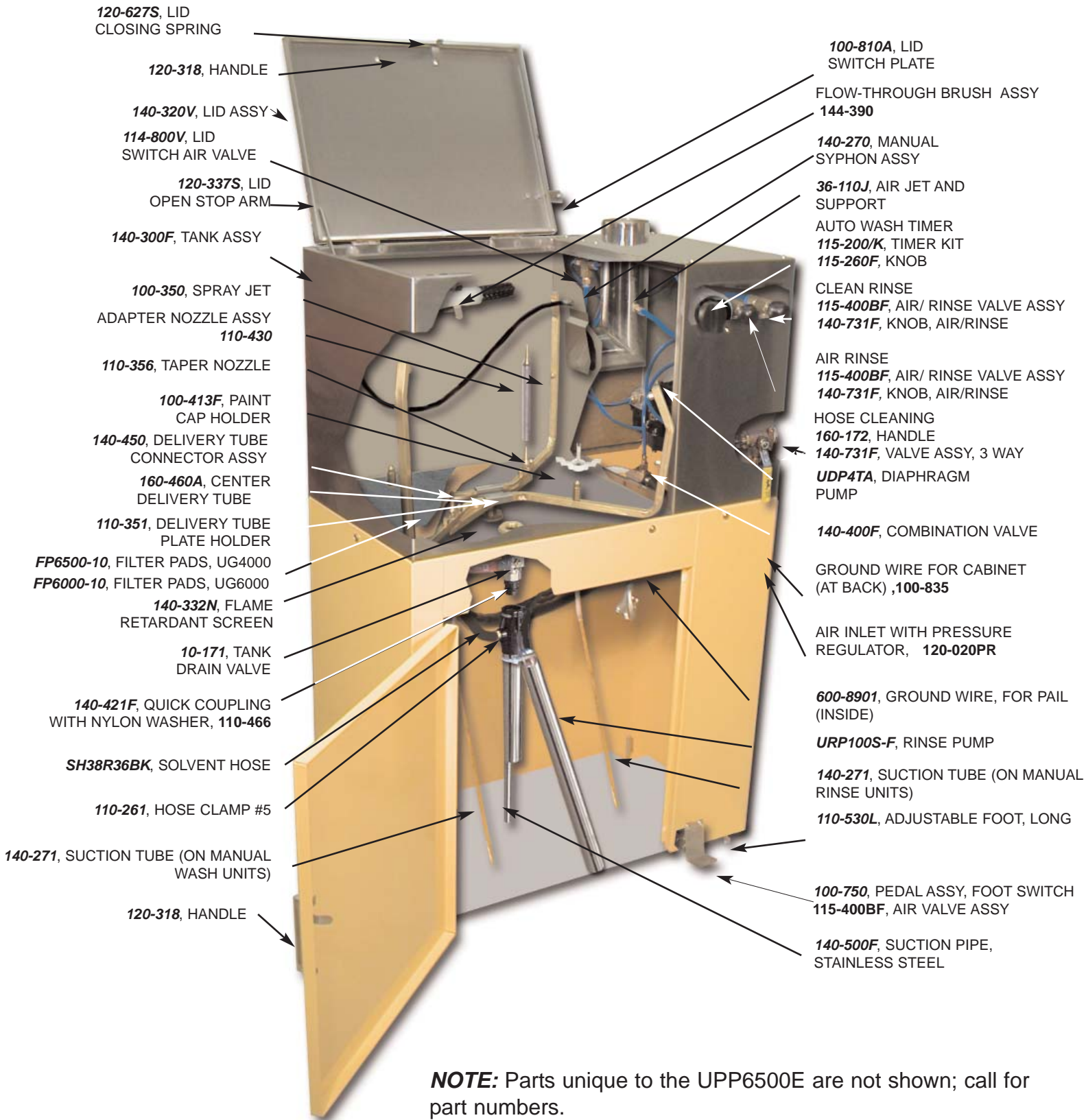


Solvent Flow ==

Air Flow —

f-UG4000DVT

REPLACEMENT PARTS



ACCESSORIES, CONSUMABLES and OPTIONAL PARTS

Part No.	Description
110-430	Nozzle Adapter, Push On, Conventional Systems Only
110-430PPS	Nozzle Adapter, Push On, Disposable and Conventional Systems
780-3530	Nozzle Adapter, Disposable Cup Systems Only
100-413F	Paint Cap Holder
115-200/K	Mechanical Timer Assembly, 5 minutes
140-230	Air Passage Plug
140-2340	Trigger Clamp & Plug Kit
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
FP6000-10	Filter Pad, UG6000, Pkg of 10
FP6500-10	Filter Pad, UG4000, Pkg of 10
KIT-MW4000	Manual Wash Kit, Upgrade DV to DVM
780-8000	2-Pail Set, Plastic, Kit, including Hoses & Fittings (for connecting to Solvent Recyclers)



Pail Set, Part No. 780-8000
(hoses come with P2
Recycler (URS500P2,
URS600P2, URS900P2)

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 labor

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 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 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.