



USER MANUAL

PARTS CLEANER, UPW400 SERIES



CORPORATION

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REV 2023-04

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 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 Uni-Ram Service Engineer at 1-800-417- 9133.

Additional Model

UPW400E: Ready for connection to a Uni-ram Solvent Recycler.

- Quick connects provided on 8 gallon reservoir tank for ease of hose connection.

COMMON FEATURES

- Solvent flows from jets located under the lid, on the bottom and sides of the cleaning tank.
- Stainless steel construction of delivery tubes and tank for long life.

- Powered by 2 Uni-ram 4” dual diaphragm pumps, 3.7 gal/min, air powered.
- Diaphragm pumps pump solvent to the jets the 8 gallon reservoir; solvent returns to the reservoir.
- Timer, maximum time of 5 minutes.
- Flow-through brush, activated by a foot pedal.

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.

UPW400



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 Uni-ram Corporation. Initiate a freight claim with the carrier. The manufacturer is not responsible for the freight damage.

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 using the ring terminal on the ground wire.

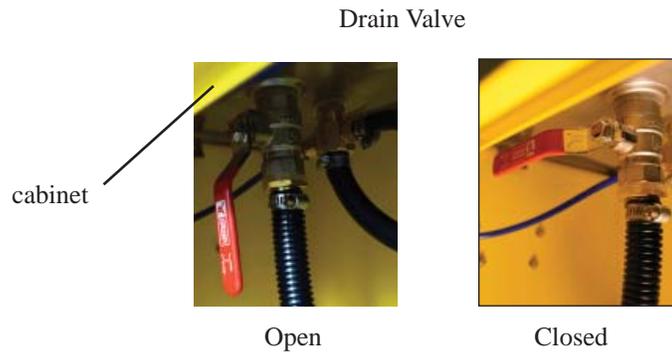
Note: The pump and metal tube that inserts into each pail are grounded.



Ring Terminal

PAIL SETUP - UPW400

- Open the cabinet door.
- The spray gun cleaner comes with one wash container. The black drain hose and suction hose are inserted into the wash container. See the photo of the unit below. The stainless steel inlet filter is located at the end of the suction hose and prevents debris from reaching the pump and wash tank. Clean the suction filter monthly. It is removable.
- Open the drain valve located inside the cabinet.
Rotate handle to the vertical position. (see photos on right) Fill wash container by pouring solvent in the wash tank.



OPERATION

- Load the parts to be cleaned into the cleaning tank in a manner where all dirty sides of the part is exposed to solvent jets.
- Close the lid securely and turn the timer up to 5 minutes.
- Press Air Rinse to purge the solvent jets.
- Use the solvent Flow-Through Brush if additional cleaning is required. Activate the brush by stepping on the foot pedal.
- Dry the parts.

MAINTENANCE

Blocked Fluid Passage In Diaphragm Pump

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



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.



Blocked Passage in Air Line

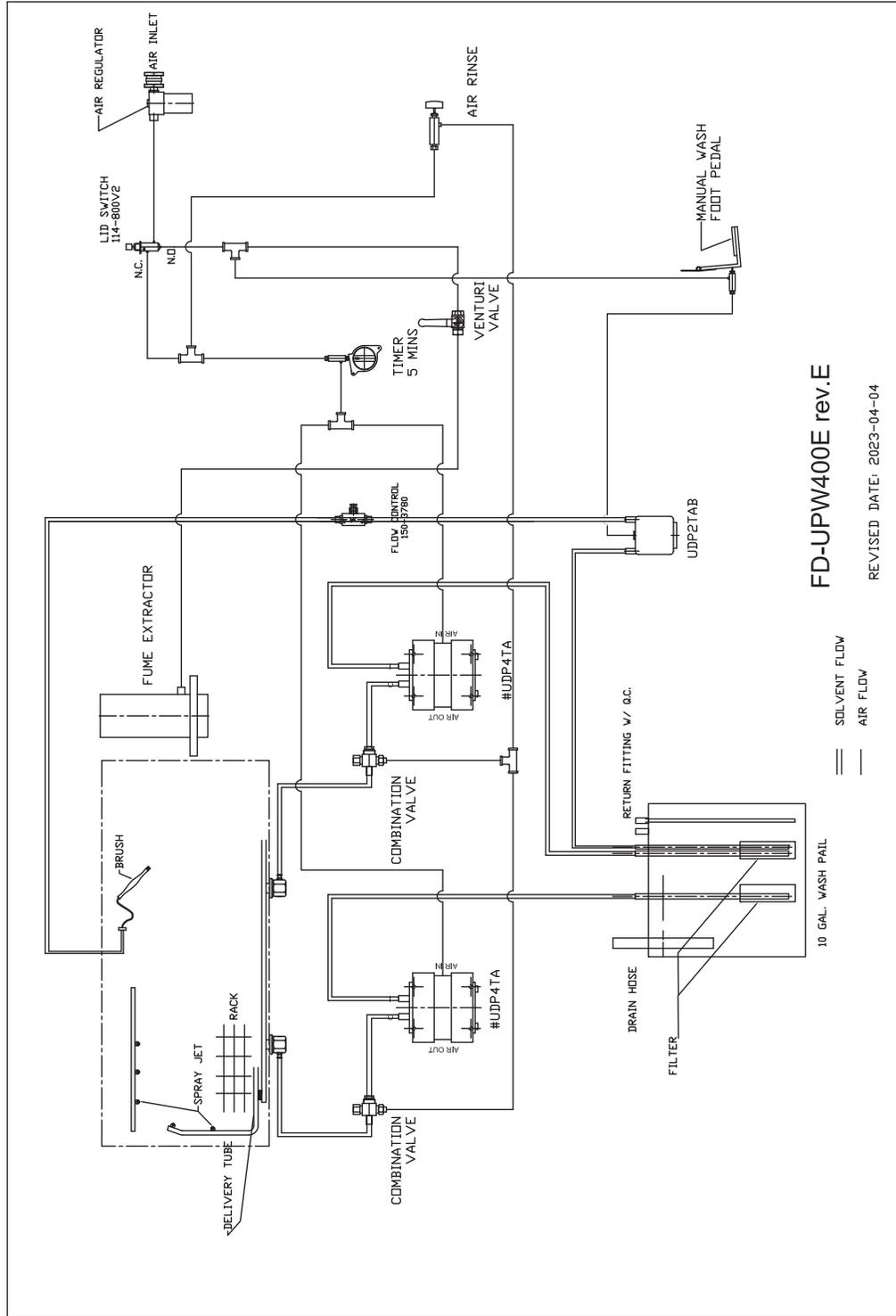
The components in the air line are the **diaphragm pump, air valve, foot pedal, 3-way ball valve and regulator. See the Flow Diagram and the section: Replacement Parts.**

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.

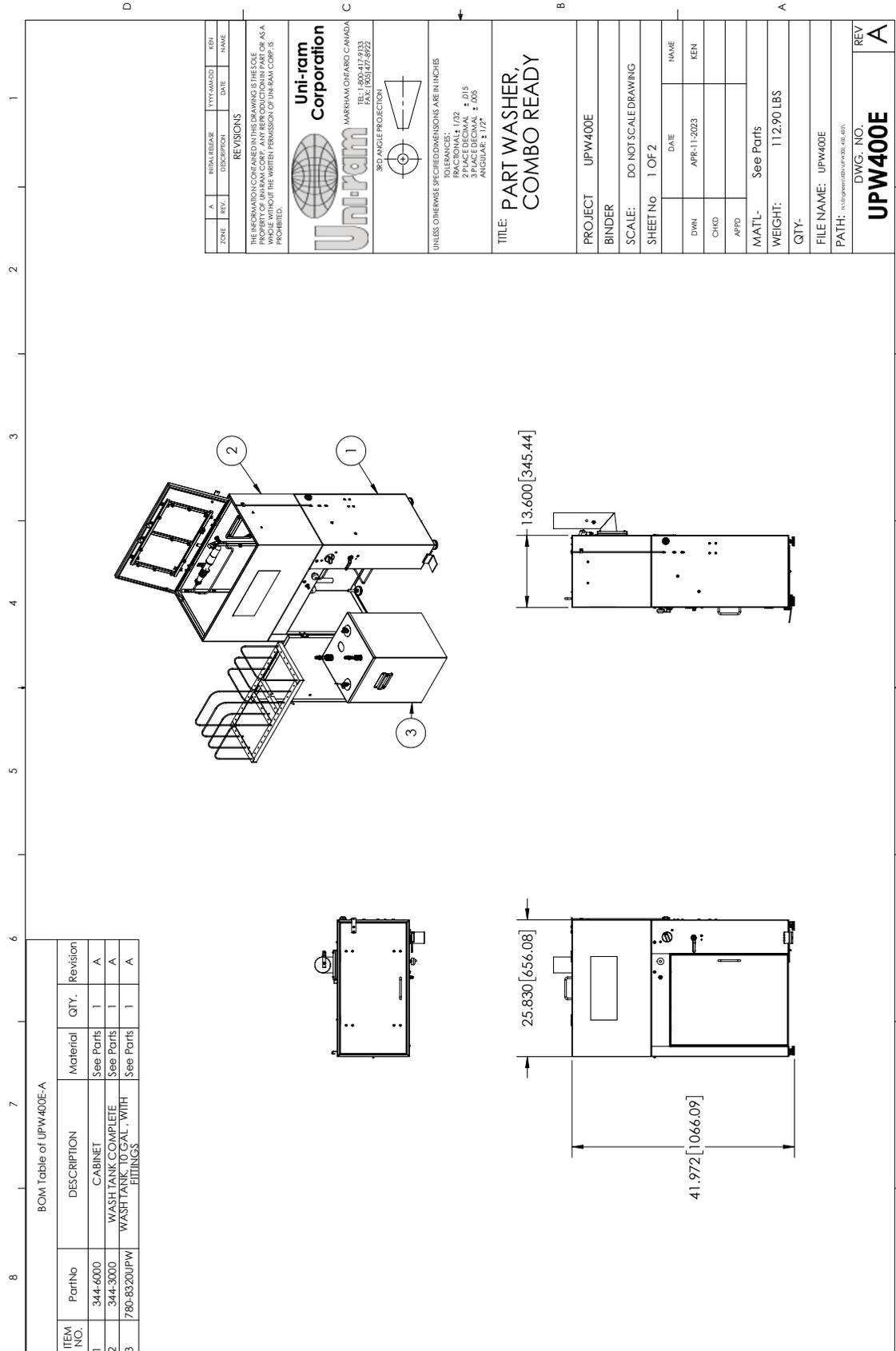
UG4000D FLOW DIAGRAM
Use the diagram to trace the flow of compressed air and solvent.



FD-UPW400E rev.E

REVISED DATE: 2023-04-04

REPLACEMENT PARTS
 For replacement parts contact Uni-ram
 Service Engineer at 1-800-417-9133.



BOM Table of UPW400E-A

ITEM NO.	PartNo	DESCRIPTION	Material	QTY.	Revision
1	344-6000	CABINET	See Parts	1	A
2	344-3000	WASH TANK COMPLETE	See Parts	1	A
3	780-8320UPW	WASH TANK, 10 GAL., WITH FITTINGS	See Parts	1	A

ZONE	A	INITIAL RELEASE	UTY/AM/SD	ENH
REV.		DESCRIPTION	DATE	NAME

REVISIONS

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF UNIRAM CORP. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF UNIRAM CORP. IS PROHIBITED.

Uni-ram Corporation
 MARKHAM ONTARIO CANADA
 TEL: 905.477.9133
 FAX: 905.477.8922

3RD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
 FRACTIONAL: 1/32
 DECIMAL: ± .015
 ANGULAR: ± 1/2°

TITLE: PART WASHER, COMBO READY

PROJECT: UPW400E
 BINDER:
 SCALE: DO NOT SCALE DRAWING
 SHEET NO: 1 OF 2

DWN	DATE	NAME
CHD	APR-11-2023	KEN
APFD		

MAT'L- See Parts
 WEIGHT: 112.90 LBS
 QTY-
 FILE NAME: UPW400E
 PATH: \\1000\ram\ram\part\upw400e.dwg
 DWG. NO. **UPW400E**
 REV **A**

ITEM NO.	PartNo	DESCRIPTION	QTY.
1	240-7510	FOOT PEDAL, HEAVY DUTY, WITH VALVE	1
2	UDP2TAB	Z-DIA PUMP, TETRON BALL, WITH HB INLET AND 6MM COUPLER WINGS	1
3	115-400	RINSE VALVE ASSY, 1/2" NPT, HEAVY DUTY, 1/2" THREAD	1
4	140-731F	PUSH BUTTOM, RINSE	1
5	140-408C	COMBINATION VALVE ASSY, 3/8" PORT	2
6	115-202K	MECH. MANUAL TIMER KIT, 5 MINS.	1
7	114-800V2	LID SWITCH WITH BRACKET, 4-W, 1 IN 2-OUT	1
8	120-020PR	AIR PRESSURE REGULATOR, SET TO 85 PSI	1
9	780-4610	BALL VALVE ASSEMBLY, 1/4", WITH BRACKET	1
10	150-3780	LIQUID FLOW CONTROL ASSEMBLY, 6MM TUBE	1
11	780-480PP	3/4" DRAIN VALVE WITH FITTINGS AND HOSE SUB-ASSY, FOR UPP7500	1
12	344-3124	RACK BASE	7
13	344-3125	RACK BRUSH	7
14	144-390S	MANUAL BRUSH WITH COMPRESS FITTING, 6MM, FOR SOLVENT	1
15	36-110J	AIR VENTURI AND SUPPORT	1
16	140-8140UPW	TRANSFER TUBE ASSY.	1
17	QC-SST-NS9H838	QC STRAIGHT THRU - HYDRAULIC PLUG, 3/8" BODY X 3/8" HOSE BARB	1
18	QC-SST-14M-VI	QUICK CONNECTOR COUPLER 1/4" BODY, 1/4" NPT MALES, WITH VITON O-RING	1
19	QC-SST-NI-4H838	QC STRAIGHT THRU HYDRAULIC NIPPLE 1/4" BODY X 3/8" HOSE BARB, S.S.	1
20	120-4200T	SINGLE INLET TUBE WITH 200 MESH FILTER	1
21	120-4200TDM	DUAL INLET TUBE WITH NUT TEETH WASHER SCREW, FOR UG-400DVMJ	1

Uni-ram Corporation
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 FAX: (905) 477-8972

30° ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
 TOLERANCES:
 1 PLACE DECIMAL ± .02
 2 PLACE DECIMAL ± .015
 3 PLACE DECIMAL ± .005
 ANGULAR ± 1/2°

TITLE: PART WASHER, COMBO READY

PROJECT: UPW400E
 BINDER:
 SCALE: DO NOT SCALE DRAWING
 SHEET NO: 2 OF 2

DATE	NAME
APR-11-2023	KEN
CHD	
APD	

MAT'L: See Parts
 WEIGHT: 112.90 LBS
 QTY:

FILE NAME: UPW400E
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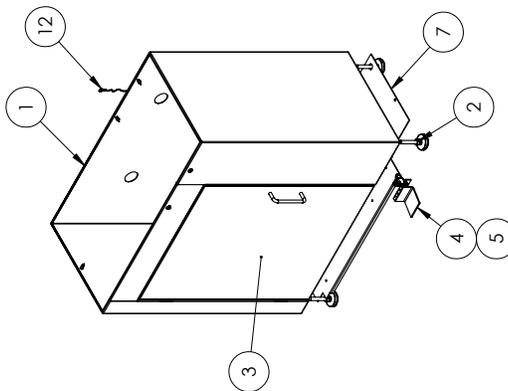
DWG. NO. **UPW400E**
 REV **A**

FIRST EDITION MACHINE VALVE USE 115-400

SERVICE PART OF UPW400E

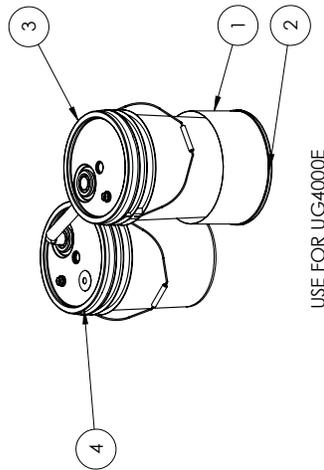
BOM Table of 140-600T-D

ITEM NO.	PartNo	DESCRIPTION	QTY.
1	140-620T	CABINET WELDMENT ASSY. UG4000	1
2	110-531L	ADJUSTABLE FOOT LONG 3/8-16x2.5'L STUD*GC*SR	4
3	150-630T	DOOR ASSEMBLY FOR UG4000	1
4	240-7510	FOOT PEDAL HEAVY DUTY WITH VALVE	1
5	240-7513	PIN RUBBER SLEEVE FOR FOOT PEDAL	1
7	140-623S	FLOOR	1
12	100-835-6	GROUND WIRE ASSY. 18GA., 1300MM GREEN, BOTH ENDS WITH 1/4" NON-INSULATED TERMINAL	1

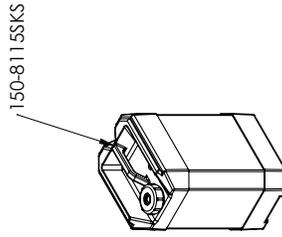


BOM Table of 140-8000

ITEM NO.	PartNo	DESCRIPTION	QTY.
1	780-8116	PAISER FOR RINSE PAIL IN EMERALD FOR RINSE	1
2	780-8106	EMERALD FOR RINSE	1
3	780-8141	5 US GAL BUCKET WITH LID SET AND OVERFLOW SET	1
4	780-8151	5 US GAL BUCKET WITH LID AND TUBING SET.	1



USE FOR UG4000E



USE FOR UG4000D

UG4000
UNI-RAM CORPORATION
 REV.C. DATE: 2018-08-22



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 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 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 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 Uni-ram Service at 1-800-417-9133 and quote the serial number of the unit.