



USER MANUAL

UG110, UG110V, UG110VP SPRAY GUN CLEANERS



UG110

CONTENTS

INTRODUCTION	4
SETUP	
INSPECTION and ASSEMBLY	4
LOCATION	4
LEVELING, MOISTURE FILTER AND AIR SUPPLY	4
SOLVENT SELECTION	5
SOLVENT PAIL SETUP	5
OPERATION	5
PRE-CLEAN	5
CLEANING SPRAY GUNS AND CUPS	5
AFTER CLEANING	6
UG110VP ONLY	6
DAILY MAINTENANCE	6
TROUBLESHOOTING CHART	7
TROUBLESHOOTING PROCEDURES	8
FLOW DIAGRAMS	9
SERVICE PARTS	10-11
REPLACEMENT PARTS	12
DECLARATION OF CONFORMITY	13
WARRANTY	14

UG110



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 to 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

SETUP

INSPECTION AND ASSEMBLY

- Report any transport damage immediately to the carrier and your vendor. Initiate a freight claim with the carrier. The manufacturer is not responsible for freight damage.
- 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
 - 110-430PPS2 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.

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

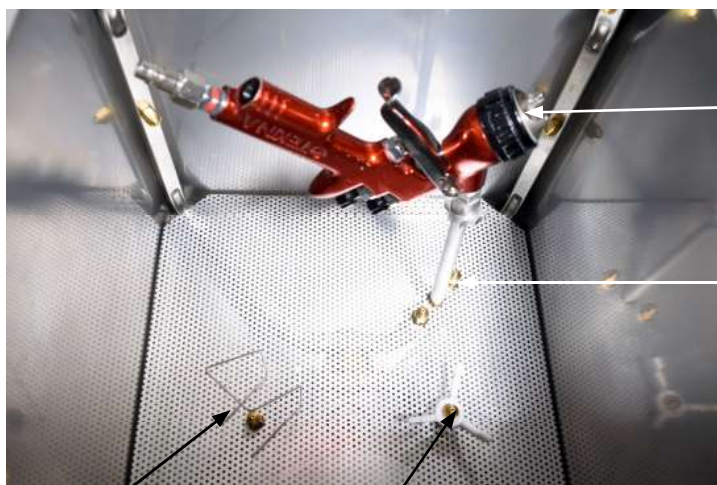
- Close the Drain Valve under the unit (handle in horizontal position) if it is not already closed.
- Place a 5-Gal (19 L) pail of solvent under the unit and insert the Suction Tube and the Drain Tube.
- Open the Drain Valve (handle in vertical position).

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

WASH TANK

Cap points to
the corner jets

Nozzle
Extension

Location for cap of
conventional cup

Location for
conventional cup



Placing Spray Gun on
Nozzle Extension

AFTER CLEANING

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

UG110VP ONLY

Place pot over rotating spray jet.

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

- Close the Drain Valve under the unit.
- Remove the Suction Tube and Drain Hose from the pail.
- Move the pail out of the cabinet and recycle or dispose of the solvent.
- Insert the Suction Tube and Drain Hose into a new, full-pail of clean solvent.
- Open the Drain Valve.

TROUBLESHOOTING CHART

SYMPTOM	REASON	ACTION
PUMP LEAKS AIR OR LIQUID	Pump is defective	Replace pump
WASH LIQUID DOES NOT FLOW AND PUMP MAKES A HISSING NOISE	Water in air line causes pump to stall	• Follow Procedure 1, Blockage in Air Passage in Diaphragm Pump
WASH LIQUID DOES NOT FLOW, PUMP DOES NOT MAKE A NOISE	Pump leaks	Replace pump
	Blockage in air passage	Follow Procedure 3, "Blocked Passage in Air Line".
PUMP DOES NOT STOP UNLESS TIMER IS TURNED BY HAND OR AIR IS SHUT OFF OR TIMER KNOB SPINS BACK WHEN TURNED	Defective timer	Replace timer.
INSIDE WALL OF TANK IS COATED WITH PAINT EVEN THOUGH OPERATOR MAINTAINS TANK	Solvent lacks cleaning strength	Replace solvent with 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	<ul style="list-style-type: none"> • Trigger not locked in open position • Spray gun is not properly installed onto 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	Wash solvent is contaminated with water	Replace or recycle wash solvent

TROUBLESHOOTING PROCEDURES

Note: Pumps shown are 4" Pumps; follow same procedures for 2" Pumps.

PROCEDURE 1

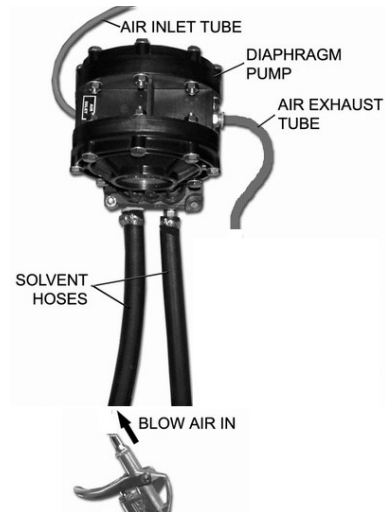
Blocked Fluid Passage In Diaphragm Pump

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 60 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.

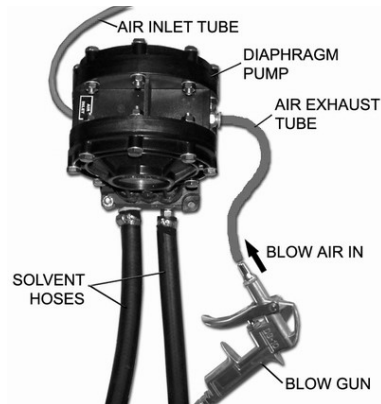


PROCEDURE 2

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 60 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

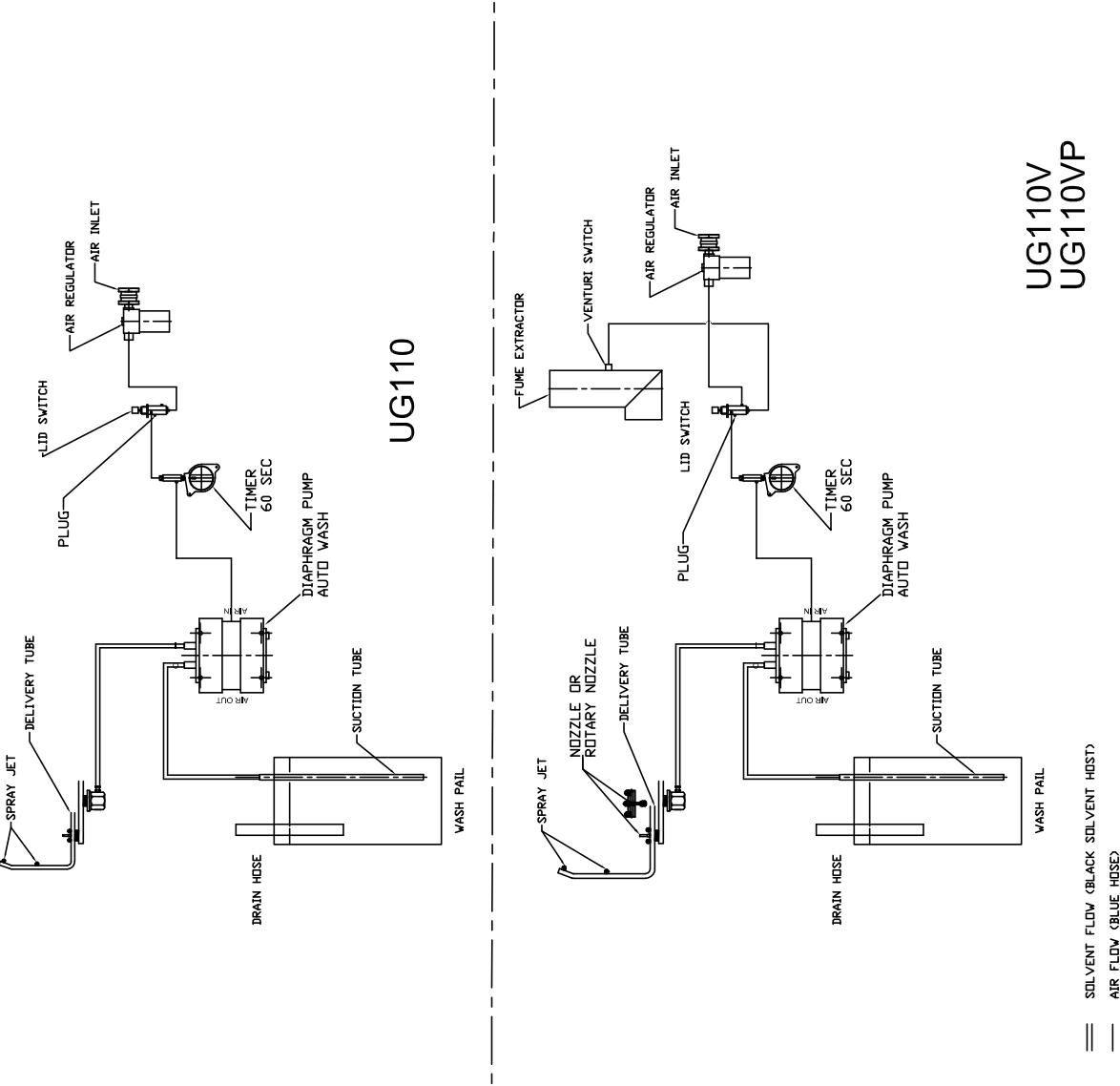
The components in the air line are the **diaphragm pump, air valve and regulator.**

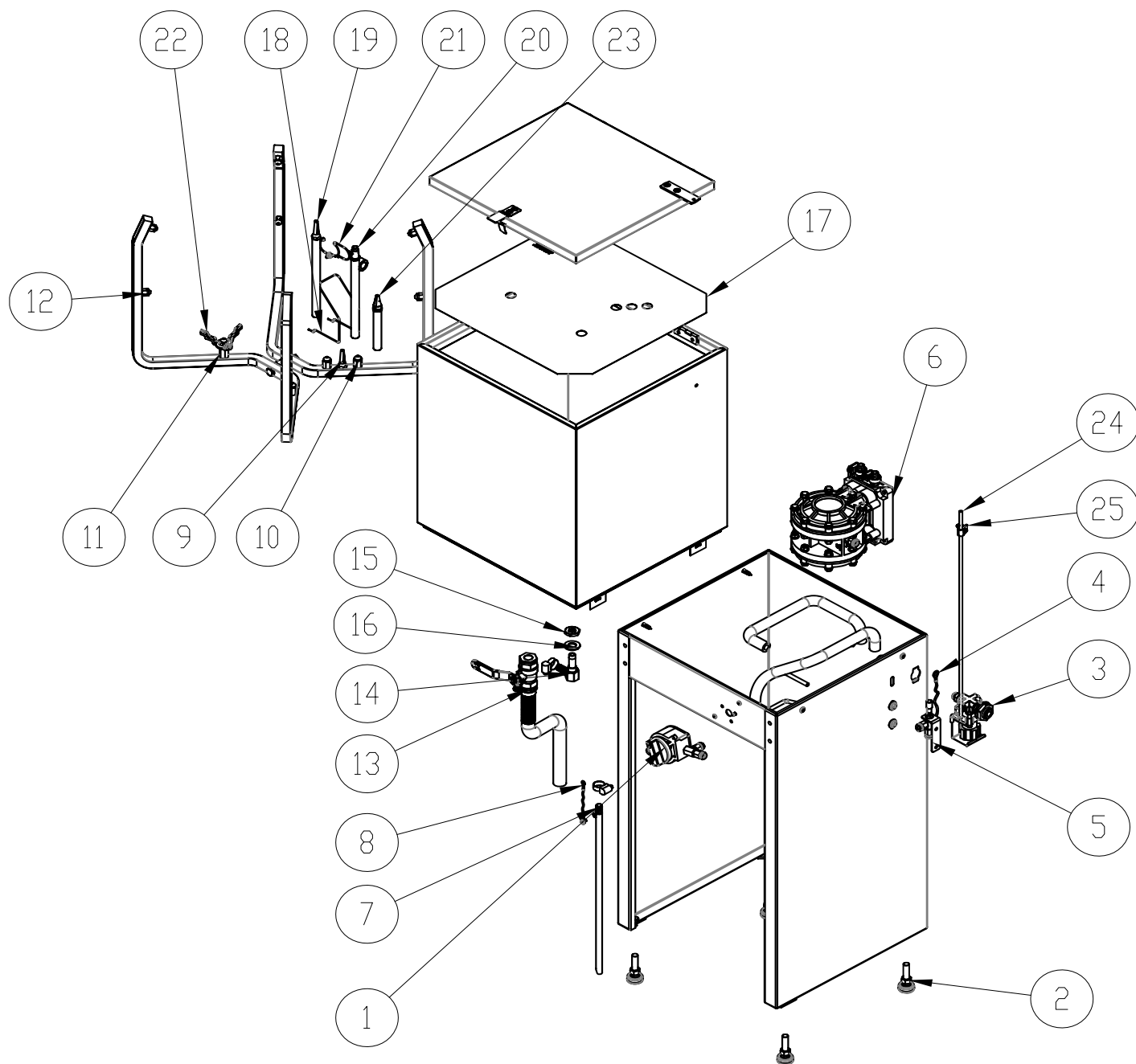
To troubleshoot a component:

- 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 to trace the flow of compressed air and water.







UG110 SERVICE PARTS

UG110 SERVICE PARTS

#	PartNo	DESCRIPTION	QTY.
1	115-200K	MECH. MANUAL TIMER KIT, 5 MINS.	1
2	110-531N	ADJ FOOT,3/8"-16 x 1.5" STUD,WHITE,WITH NUT	4
3	120-020PR	AIR PRESSURE REGULATOR, SET TO 85 PSI	1
4	100-835-6	GROUND WIRE ASSY, 18GA., 1300MM,GREEN, BOTH ENDS WITH 1/4" NON-INSULATED TIN- PLATED COPPER RING TERMINAL	1
5	113-800	LID SWITCH ASSY, FOR MODELS W/O VENT	1
6	UDP4TA	DUAL DIAPHRAGM PUMP, 4",DELRI N BODY,TEFLON DISC,B/M INCL	1
7	150-8350	SUCTION TUBE 10MM OD WELDED WITH NUT, FOR UG5000W	1
8	100-8335	GROUND WIRE ASSY, 14GA, 36"LG,GREEN,	1
9	110-356	GUN CLEANER NOZZLE,BRASS	1
10	100-350L	SPARY JET ASSY,	3
11	100-370	SPRAY JET + EXTENSION	1
12	100-350N	SPRAY JET ASSY.BRASS	8
13	140-480	DRAIN VALVE WITH FITTINGS AND HOSE SUB- ASSY	1
14	140-450	CENTRE CONNECTOR WITH FITTING	1
15	100-463	BRASS LOCKNUT, 1/4" NPS	1
16	100-465	FLAT WASHER PE, FOR 1/4" NPS ,0.531"IDX1"ODX0.09"T	1
17	N110-332A	WORK SCREEN	1
18	100-418	SMALLER PAINT CUP & CAP HOLDER,1/16" SS WIRE	1
19	110-430	TAPER NOZZLE ADAPTER, ALM. TUBE, 6.5" LG	1
20	110-430PPS	NOZZLE ADAPTER FOR PPS, ALM. TUBE, 6.5" LG	1
21	140-2341	KIT-PLUG FOR GUN	1
22	100-413F	CUP HOLDER	1
23	110-430PPS2	UNIVERSAL NOZZLE ADAPTER , ALM. TUBE, 3.25" LG	1
24	100-821F	PUSH ROD,S.S, FOR LID SWITCH	1
25	100-836	NYLON GUIDE CLIP	1

REPLACEMENT PARTS

DESCRIPTION	PART NUMBER
Nozzle Adapter, Push On, Conventional Systems Only	110-430
Nozzle Adapter, Push On, Disposable and Conventional Systems	110-430PPS
Paint Cap Holder	100-413F
Mechanical Timer Assembly, 5 minutes	115-200/K
Trigger Clamp and Plug Kit	140-2341
Rotating Spray Jet	140-340S
Ground Wire, 18G, Green, 4 FT	100-835
Ground Wire, Suction Tube	100-8335
Lid switch for UG110	113-800
Lid switch for UG110VP, UG110V	114-800V2
Tank Lid	N110-312N
Pull Handle	N110-318
Work Screen (Flame Retardant)	N110-332A
Carton	N110-952F

		(No. DC23302)
EU DECLARATION OF CONFORMITY		
Equipment Type: Spray Gun Cleaning Systems - Model UG110 SERIES		
Manufacturer: Uni-ram Corporation		
Address: 381 Bentley Street, Markham, Ontario L3R 9T2, Canada		
This declaration of conformity is issued under the sole responsibility of the manufacturer		
The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:	The following harmonised standards and other technical specifications were used in support of this declaration:	
ATEX Directive 2014/34/EU	EN ISO 80079-36:2016 EN ISO 80079-37:2016	
Notified body TÜV SÜD (number 0123) issued certificate according to Article 13(1) b) ii) of ATEX directive 2014/34/EU for equipment and protective systems intended for use in potentially explosive atmospheres (ATEX). Certificate No: EX9A 18 02 78342 002 and EX9A 078342 0003 Rev.00		
Provisions of the ATEX directive fulfilled by the equipment:	Nonelectrical devices and components Group II Category 2 Ex II 2 G Ex h IIB T4 Gb	
Declaration Reference: EX9A 18 02 78342 002 and EX9A 078342 0003 Rev.00; Risk Analysis HAR1401; HAR2001		
Signed for and on behalf of: (manufacturer) Uni-ram Corporation		
David Hilborn President (signature):		
	(place and date of issue): Markham, Ontario, Canada 1 Mar 2023	

rev.A



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 dry**.

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 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.

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.