



USER MANUAL

UG2000DM AND UG2000DMV AUTOMATIC SPRAY GUN CLEANERS



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

MODELS

MODEL	VENTING	AIR RINSE	AIR PURGE
UG2000DM	NO	NO	ONE
UG2000DMV	YES	YES	TWO

COMMON FEATURES

- Automatic Wash
- Clean 2 Spray Guns and 2 Pots at the same time.
- 14 Cleaning Jets with swirl action.
- Flow-through Brush operated by a foot pedal.
- Shipping Size and Weight: 28" W x 17" D x 42" H, 91 LBS 41 KG.

UG2000DMV has is the same features as the UG2000DM with the additional feature of venting. Raising the lid initiates the venting system and removes fumes from the cleaning tank for the health of the operator.

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

Bag of accessories contains the following:

- Push on adapter for disposable cup (110-430PPS).
- Tapered plug (kit-plug) (150-231)
- Trigger lock spring and plug package (140-2340) (2 in a package).

VENTING

If you have the UG2000DMV connect the vent pipe to the ventilation system in the facility.

UG2000DM
FIGURE 1



UG2000DMV



UG2000DMV has the same features as the UG2000DM with the additional feature of

Venting:

Raising the lid initiates the venting system and removes fumes from the cleaning tank for the health of the operator. The vent pipe is to be connected to the venting system in the facility.

Air Rinse:

To evacuate the solvent from the spray gun.

Air Purge:

Use of Air Purge prevents solvent from reaching the air passage way of the spray gun. This unit has 2 air purges.

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 " " "

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

Ring Terminal



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. **DO NOT USE CHLORINATED SOLVENT.**

PAIL SETUP

- Place the suction hose and drain hose in the solvent pail.
- Open the drain valve (vertical position).
- Pour 5 gallons of solvent in the wash tank to drain to the wash pail underneath.



DRAIN VALVE IS OPEN
(HANDLE IN VERTICAL POSITION).



DRAIN VALVE IS CLOSED
(HANDLE IN HORIZONTAL POSITION).

PRE - CLEAN

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

Disposable
Cup



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

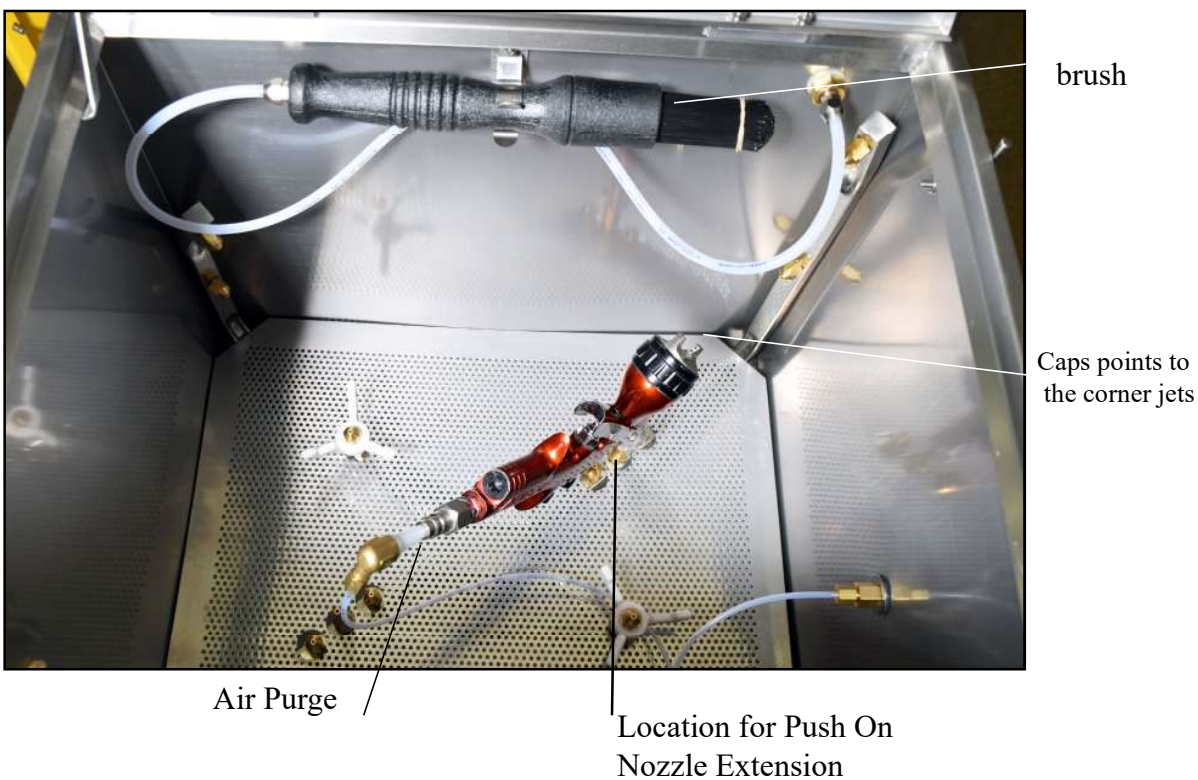


B



C

SPRAY GUN INSTALLED IN TANK

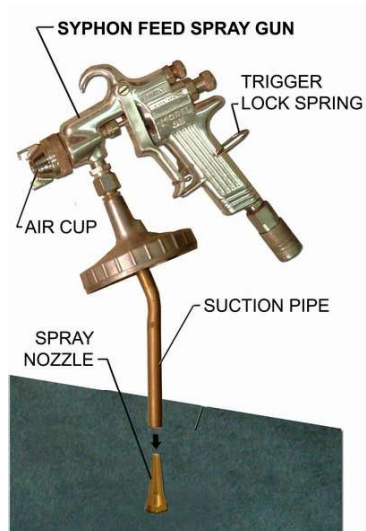
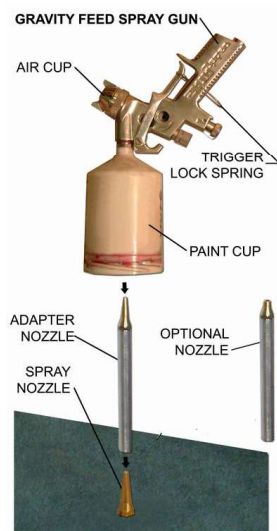
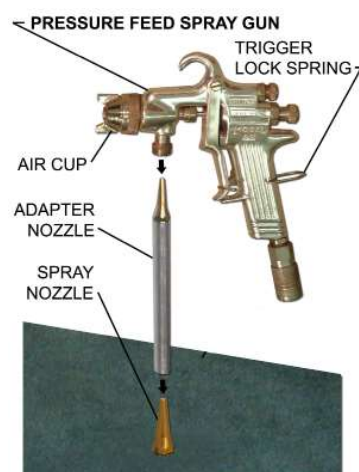
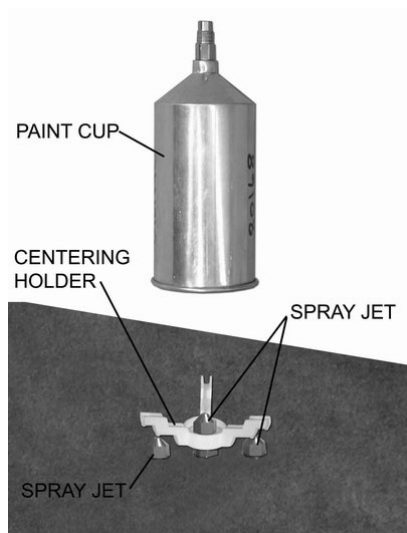


INSTALLING SPRAY GUNS IN TANK

- Place the spray gun on the nozzle with the cap facing the corner.
- Install Air Purge into the air passage way of the spray gun. (See photo above)



Nozzle Extension
for disposable cups



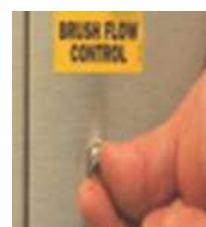
Prevent Solvent From Entering the Air Passage of Spray Gun:

insert the plastic plug into the air fitting as in the photo below. Positive air will flow through the passage way to the cap during cleaning. If the air passage way has a male fitting attach the knurled female nut to prevent solvent from entering the air passage way. This fitting is located on the chain with the trigger clamp.



Plastic Plug inserted into 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 below to initiate cleaning. The wash cycle takes about 60 seconds.
- **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 solvent through the brush, left photo below. To control the flow of solvent through the Brush, adjust the Flow Control, also on the front of the unit, right photo.
- The spray gun can be washed with the brush before or after "Auto" wash.



- Dry the spray gun thoroughly.

REPLACING SOLVENT:

- Replace the solvent when the solvent has lost its cleaning effectiveness or after approximately 100 cleanings.
- Close the drain valve (horizontal position).
- Remove the pail of used solvent. Dispose of the used solvent in a manner compliant with the laws in the municipality. Return the pail to the cabinet and install the suction hose and drain hose to the pail. Pour 5 gallons of new clean solvent into the cleaning tank to drain to the pail in the cabinet.



Drain Valve in Closed Position

MAINTENANCE

- A removable screen filter is installed at the end of the suction pipe, in the wash pail. See the photos below.
- Once each week, remove the wash pail from the cabinet, remove the suction pipe with the pail, see photos below, unscrew the metal filter (see right photo below) and clean the filter in a cup of solvent.



Wash Pail



Remove Suction Pipe and Filter



Filter

REPLACING SOLVENT

- Replace the solvent when the solvent has lost cleaning effectiveness or after approximately 100 cleanings.
- Close the drain valve, see photo below. Remove the drain hose and suction pipe.
- Pour wash solvent from wash pail into waste drum, rinse out the pail. Replace the pail in the cabinet and replace place the drain hose and suction hose. Open the drain valve. Pour 5 gallons (19 L) of fresh solvent in the cleaning tank to fill the pail in the cabinet.



Drain Valve

TROUBLE SHOOTING

PROBLEM	REASON	CORRECTIVE ACTION
WASH PUMP MAKES PUMPING SOUND BUT SOLVENT DOES NOT FLOW FROM THE JETS	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".
WASH PUMP DOES NOT STOP UNLESS TIMER IS TURNED BY HAND OR	Defective Timer	Replace Timer, PN 115-200K.
AIR IS SHUT OFF. WASH PUMP DOES NOT START.		
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

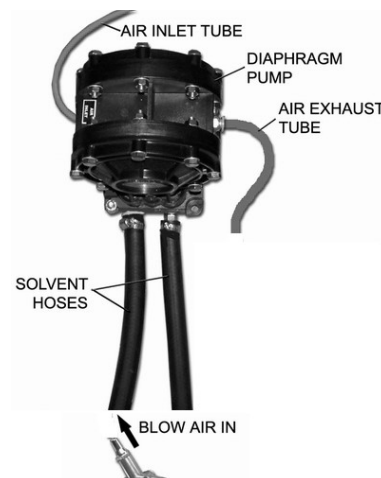
TROUBLESHOOTING PROCEDURES PROCEDURE 1

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 call the Uni-ram Service Engineer. The warranty on the diaphragm pump is two years from date of purchase.



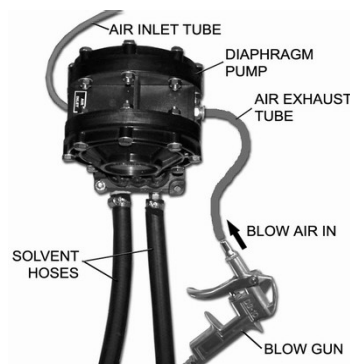
This procedure will also clear a blockage in the fluid line for the brush. Follow the same procedure to clear a blockage in the automatic nozzle except turn the timer instead of stepping on the foot pedal.

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**.

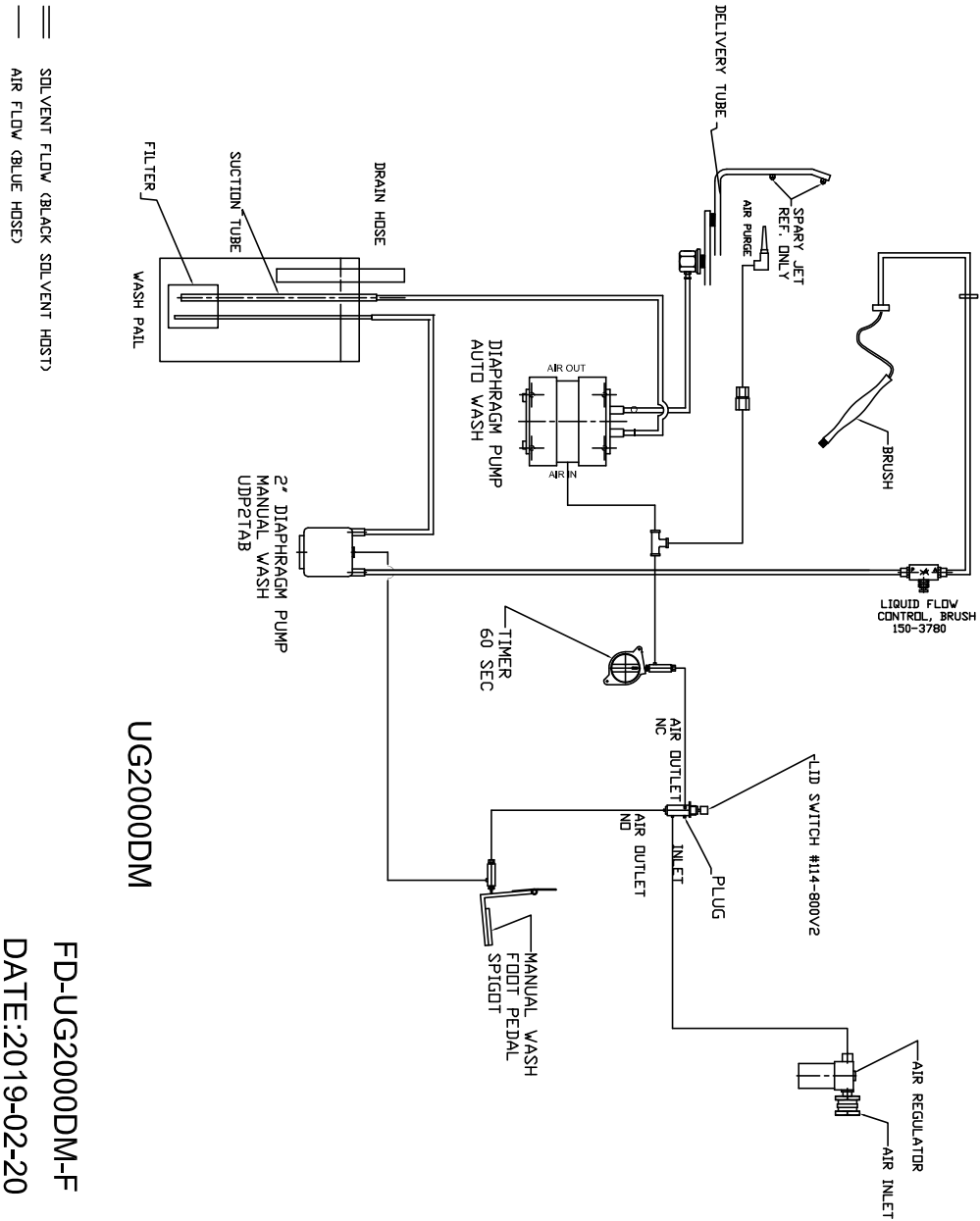
To troubleshoot a component:

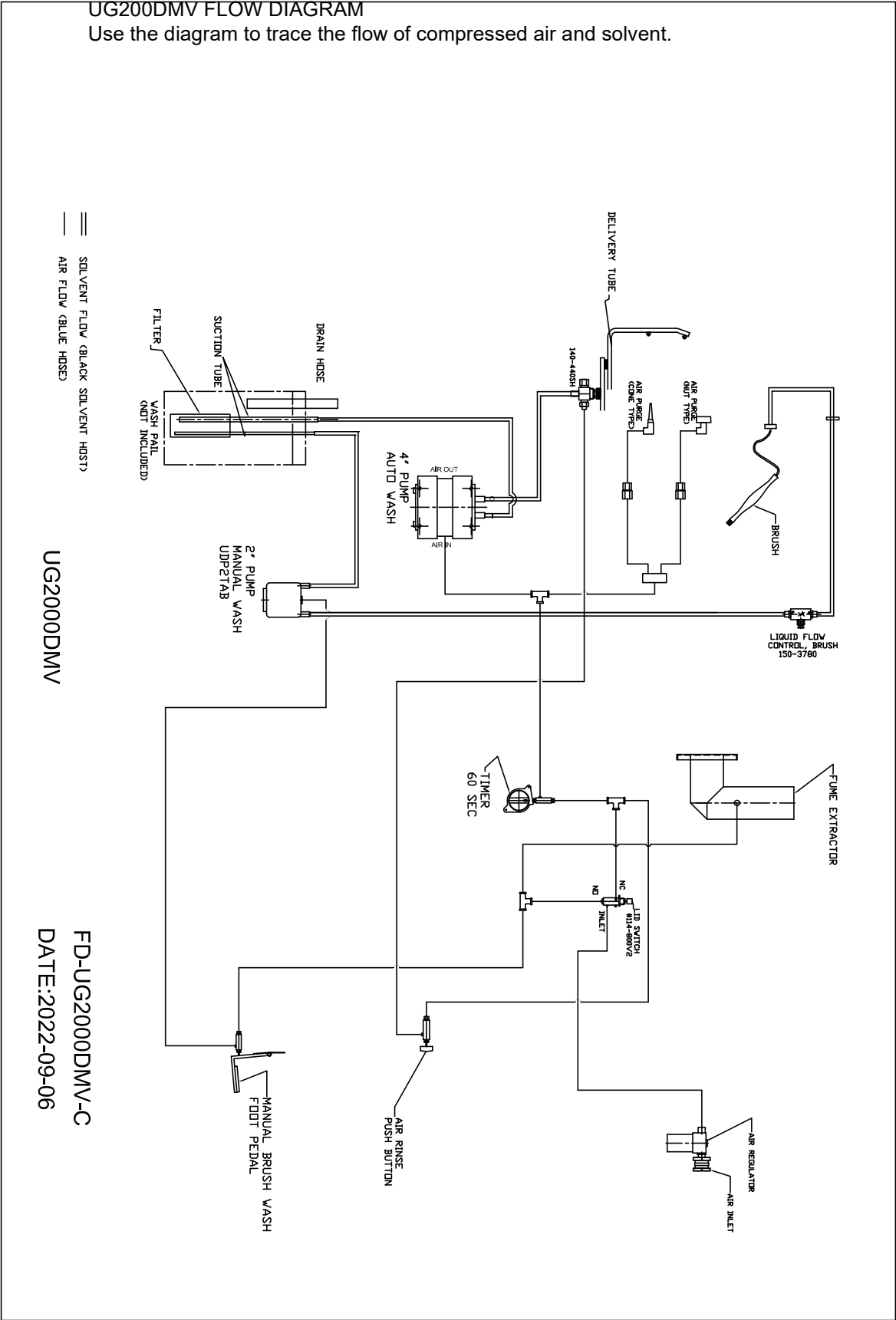
- 1) Disconnect the air line to the component using the quick disconnect.
- 2) Step on foot pedal and check for presence of positive air pressure in the air line. If there is ample positive air pressure, replace the component.

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.

UG2000DM FLOW DIAGRAM

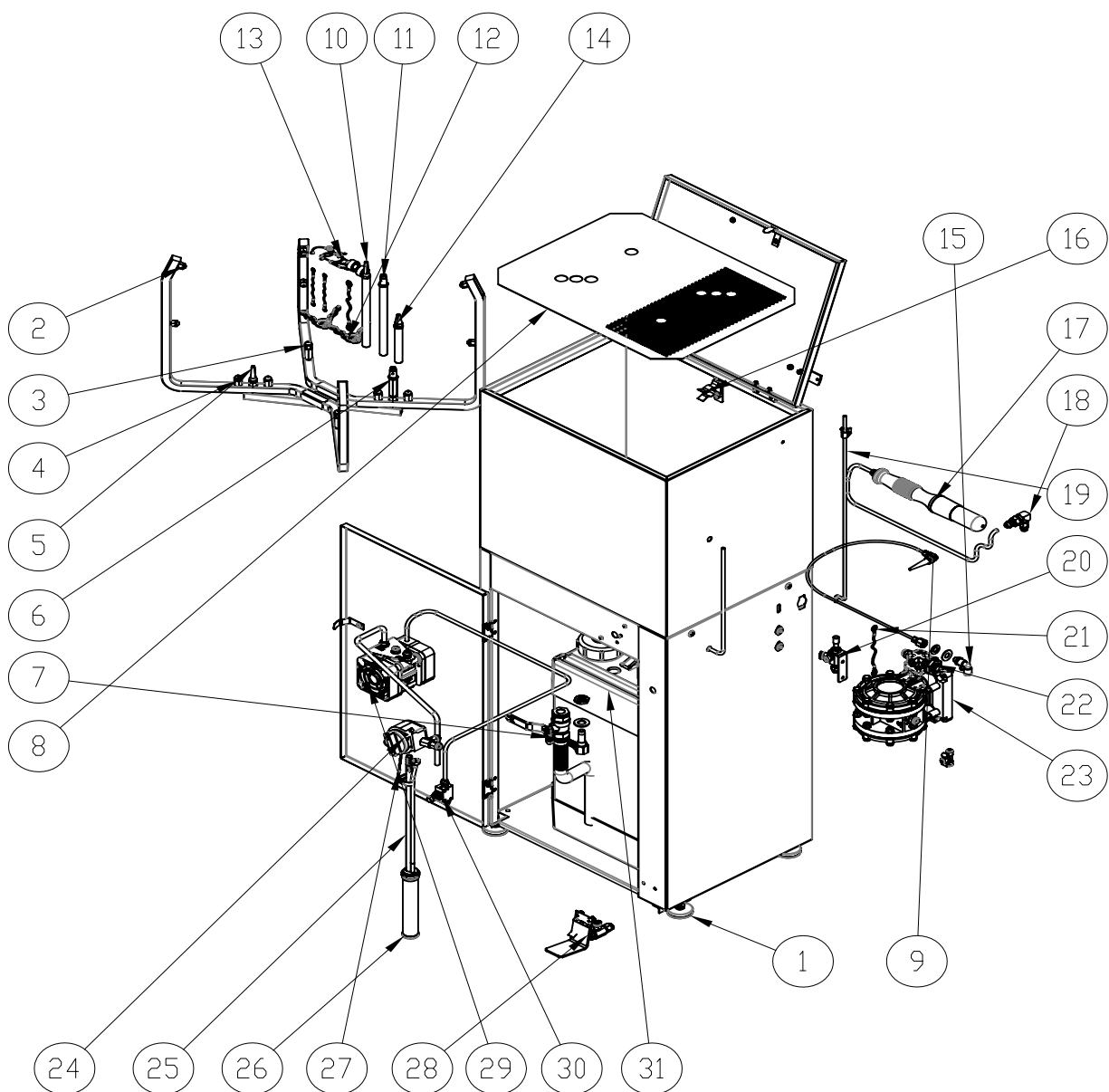
Use the diagram to trace the flow of compressed air and solvent.





REPLACEMENT 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
113-800	Flow-Through Brush Assembly
100-8335	GROUND WIRE, 14G, GREEN, 36" L
100-835	GROUND WIRE, 18AWG, GREEN, 4 FT
UDP4TA	DUAL DIAPHRAGM PUMP, 4"



UG2000DM SERVICE PARTS

SERVICE PARTS UG2000DM

ITEM	PartNo	DESCRIPTION	QTY
1	110-531L5	ADJUSTABLE FOOT	4
2	100-350N	SPRAY JET ASSY.BRASS	8
3	100-370	SPRAY JET + EXTENSION	2
4	100-350L	SPARY JET ASSY,	4
5	110-353	FITTING SET, INCLUDE 100-457& 110-356	1
6	780-3530	NOZZLE SUB ASSEMBLY, 3M PPS ADAPTOR	1
7	140-480	DRAIN VALVE WITH FITTINGS AND HOSE	1
8	100-332N	FLAME RETARDING SCREEN	1
9	140-230	AIR PURGE KIT, SPRAY GUN	1
10	110-430	TAPER NOZZLE ADAPTER, 6.5" LG	1
11	110-430PPS	NOZZLE ADAPTER FOR PPS, 6.5"	1
12	100-413F	CUP HOLDER	2
13	140-2341	KIT-PLUG FOR GUN	2
14	110-430PPS2	UNIVERSAL NOZZLE ADAPTER , 3.25"	1
15	QCF901418	QC FITTING, ELBOW, 90°	1
16	102-3022F	BRUSH HOLDER	1
17	144-390S	MANUAL BRUSH	1
18	120-471	FITTING SET FOR SOLVENT BRUSH	1
19	100-820	PUSH ROD WITH GUIDE CLIP ASSY.	1
20	114-800V2	LID SWITCH WITH BRACKET, 4-W, 1-IN 2-OUT	1
21	100-835-6	GROUND WIRE ASSY, 18GA, 1300MM, GREEN	1
22	120-020PR	AIR PRESSURE REGULATOR, SET TO 85 PSI	1
23	UDP4TA	DUAL DIAPHRAGM PUMP, 4"	1
24	115-200K	MECH. MANUAL TIMER KIT, 5 MINS.	1
25	120-4210TDM	SUCTION TUBE ASSY WITH FILTER	1
26	104-4206	FILTER W/FITTING SUB-ASSY, SS	1
27	100-8335	GROUND WIRE ASSY, 14GA, 36"LG, GREEN,	1
28	780-4300	FOOT PEDAL ASSY WITH VALVE, LIGHT DUTY	1
29	UDP2TAB	2"DIA-PUMP	1
30	150-3780	LIQUID FLOW CONTROL ASSEMBLY	1
31	150-8115SKS	SOLVENT WASH PAIL, HDPE	1

		(No. DC23301)
EU DECLARATION OF CONFORMITY		
Equipment Type: Spray Gun Cleaning Systems - Model UG2000 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 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.