

Automatic Spray Equipment Cleaning System



User's Manual

UG-45V

Smith Eastern Corporation

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Compliance • Quality • Performance • Reliability

**Please Read This Owner's Manual *BEFORE*
Using Your Automatic Spray Equipment Cleaning
System**

DO NOT OPERATE THIS EQUIPMENT WITHOUT USING PROPER PERSONAL SAFETY EQUIPMENT INCLUDING RESPIRATOR, GOGGLES AND SAFETY CLOTHING. OBSERVE ALL PRECAUTIONS RELATED TO SPRAYING.

WARNING

THIS EQUIPMENT IS OPERATED USING PRESSURIZED AIR. ALWAYS DISCONNECT THE SYSTEM FROM AIR AND FLUID HOSES AND DEPRESSURIZE SYSTEM PRIOR TO ANY MAINTENANCE OR DISASSEMBLY PROCEDURE.

WARRANTY

Smith Eastern Corporation warrants to the Purchaser that the Automatic Spray Equipment Cleaning System is free from defects in material or workmanship under normal use and service for a period of twelve (12) months from the date of purchase. Should any failure appear during this period, Smith Eastern shall, if given prompt written notice by the Purchaser, correct such nonconformity by repair or replacement of the nonconforming part, F.O.B. Smith Eastern's repair facility. Repair parts are warranted for ninety (90) days from the date of shipment, but repairs or replacements to original equipment shall not renew or extend the warranty period of such equipment. Equipment and parts furnished by Smith Eastern but manufactured by others shall be limited to the warranty offered by the manufacturer thereof.

Smith Eastern reserves the right to limit this warranty in cases of misuse or abuse. Any modifications to equipment or recommended procedures will void the warranty.

The foregoing warranty is exclusive and in lieu of other warranties of quality or performance, expressed, implied or statutory, including any warranties of merchantability or of fitness for a particular purpose.

AirVerter® Automatic Spray Equipment Cleaning System

BEFORE USING

1. Carefully inspect the shipping carton for any signs of transport damage. Damage to the transport carton often indicates damage to the unit inside. In case of damage call 1-800-937-4857 for instructions.
2. Carefully remove the equipment from the shipping carton by opening the bottom flaps and sliding the carton up over the machine.
3. Check the equipment immediately and carefully to insure that it is not damaged, particularly the adjustable legs on the bottom of the unit. Report any damage to the carrier without delay to initiate claim procedures. Smith Eastern Corporation is not responsible for damage to the equipment after it leaves our warehouse.
4. A Serial Number Label complying with applicable Marking and Labeling System Standards is permanently affixed to the inside back of the base cabinet door. Vital information, such as Serial Number, Model Number, Air Supply Specifications, etc. is clearly marked on the label.
5. Check to ensure you received the following accessories:
 - a. Operating Manual (1)
 - b. Trigger Holding Clamp (3)
 - c. Air Inlet Cap (3)
 - d. Nozzle Adapter (1)
 - e. Moisture Filter (1)

All items listed above are packaged in a sealed clear plastic bag.
6. This manual is a very important document for the safe and effective operation of this equipment. Carefully read this manual before operation. Keep this manual close at hand so that it is readily available as required.

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EQUIPMENT SET-UP

1. Position the unit in a well-ventilated area.
2. Select the installation position so that the unit is not near sparks, open flame, or a source of heat.
3. Set the Adjustable Legs to suit floor level and solvent container height.
4. Connect Ground Wire firmly to the bare surface of a grounded metal object.
5. The Air Inlet Fitting is located on the right side of the unit. Connect the air supply firmly to the Air Inlet Fitting (1/4" female threads) and ensure there is no air leakage at the connection.
6. The compressed air supply must be free of water, dust, grease, and other foreign material, and the air pressure must be at least 85 P.S.I. **Smith Eastern Corporation recommends the use of an inline moisture separator filter.** To prevent damage to the Diaphragm Pump and internal air pressure regulator had been installed to limit the air pressure to precisely
7. Maintenance – when service or maintenance is required, be sure to disconnect the air supply or release pressure at source.
8. Open the door of the Base Cabinet.
9. Check to ensure the Drain Valve Handle located under the Cleaning Tank is in the open (vertical) position.
10. Prepare two 5-gallon pails of clean, good quality gun cleaner solvent, one full and the other containing 3 gal. The full pail goes to the right in the cabinet and the other on the left. Remove Spout Caps.
11. Inside the cabinet you will see two pipes strapped together, the Suction Pipes and the Rinse Pump. Cut the straps holding them together. Do not cut the other straps holding the black and blue tubes together.
12. Disconnect the Suction Pipes from the Drain Valve by pushing the gray button and bring both pipes outside of the cabinet.
13. Insert the Rinse Pump into the full solvent pail.
14. Move the pail into the Base Cabinet on the right hand side.
15. Insert Siphon Pump Assembly into second solvent pail through top spout. 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.
16. Place second solvent pail under the Drain Valve and connect Quick Coupler of Siphon Pipe Assembly to Male Connector.

Efficient Use of Gun Cleaner

Always clean spray guns and other painting equipment after use while the paint is still wet. To keep the spray gun cleaner operating efficiently, replace contaminated solvent and clean or replace filters regularly. Dirty solvent will decrease the performance of the equipment.

OPERATING INSTRUCTIONS

1. Before cleaning, remove excess paint from spray guns, cups, paint pots, and hoses.
2. Open the lid of the cleaning tank fully.
3. Always place paint pot upside down over the center spray post and paint cups upside down over the low spray jets that protrude through the work screen.
4. Release air cap of spray gun two full turns and lock trigger in open position with a trigger lock spring.
5. Install spray gun onto appropriate cleaning nozzle with gun facing corner jets.
6. Guns can be washed with or without air cap installed. The air cap can be stored inside the cleaning cabinet.
7. The cleaning tank is not recommended for the storage of spray guns.
8. Press the Air Flush Button for no more than 2-3 seconds. Excessive use of the air flush will cause solvent loss through atomization.
9. Although the rinse function may be used repeatedly, wait 30 seconds for the Rinse Pump to fully recharge.

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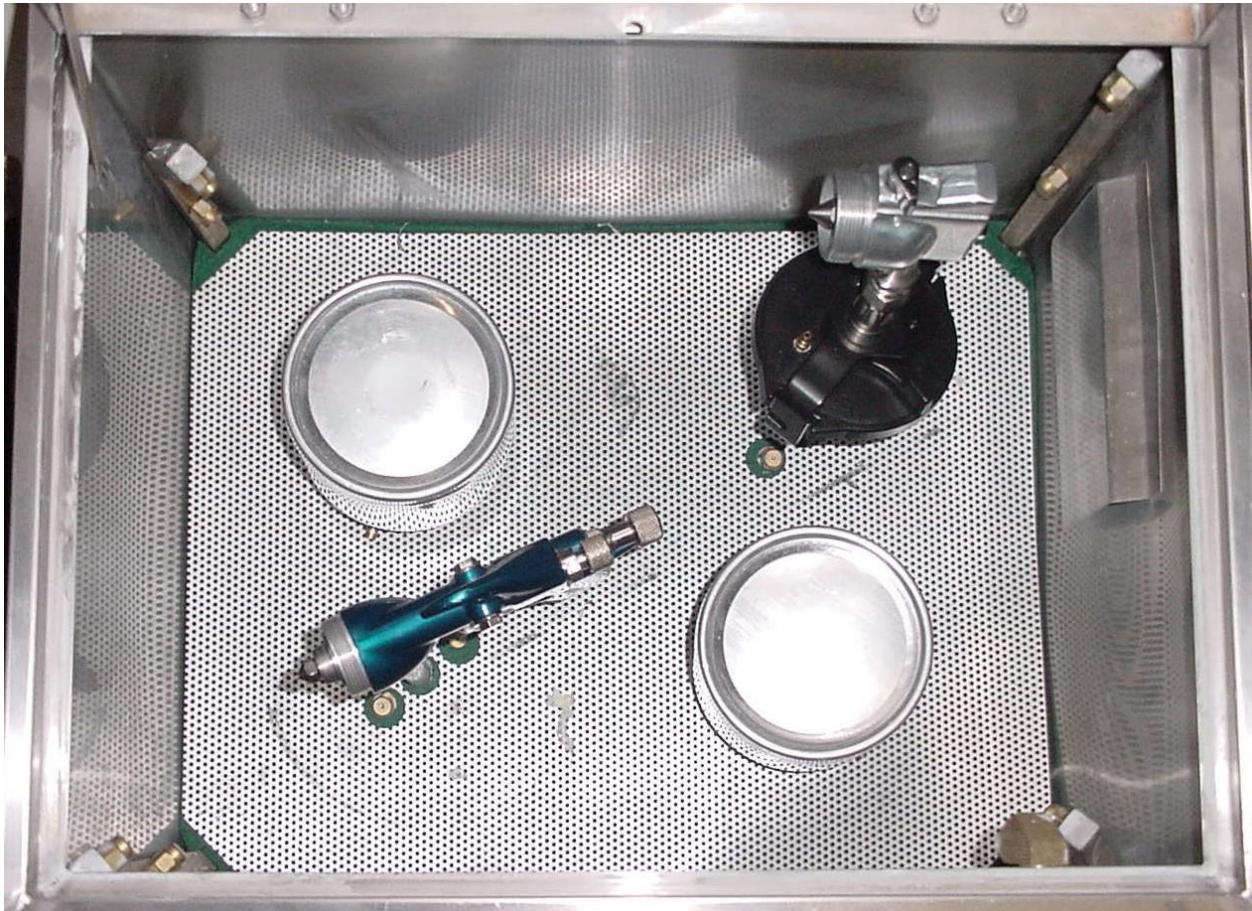
10. After the cleaning operation has been completed, remove guns and paint cups | from the cabinet, and wipe dry.

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Cleaning Spray Guns and Cups

1. Set the valve handle to “equipment” (vertical).
2. Any paint left in the gun, cup, or paint pot should be emptied into a waste paint container for proper disposal.
3. Lock trigger of paint gun in open position with the trigger lock spring provided.
4. Open lid of cleaning tank and install adapter nozzle onto taper nozzle.
5. Fit paint inlet of spray gun onto nozzle adapter.
 - a. The flexible nozzle adapter may be used to clean a spray gun by fitting a taper adapter into the paint inlet of the flexible adapter.
 - b. Paint cup of gravity or siphon type spray gun may be cleaned by placing it upside down over the taper nozzle and spray jet.
6. Close the lid and turn Timer Knob clockwise to start wash cycle. The automatic wash cycle is complete in about 45 seconds.
7. Push Air Flush Button for about 3 seconds to send air through inside passages of spray gun and to inside of paint cup. This helps flush out contaminated solvent.
8. Push Clean Rinse Button for about 5 seconds to rinse inside passages of spray gun and paint cup with about 100cc of clean solvent. The solvent is followed by a flow of air for extra cleaning.



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Cleaning Paint Feeder Hose

This equipment can clean a Paint Feeder Hose up to 100 feet long. Inlet and outlet fittings are ¼" NPT female threads. If the hose to be cleaned is fitted with a quick connector, you should install matching Male and Female Quick Connectors to the inlet and outlet fittings before starting the hose cleaning operation.

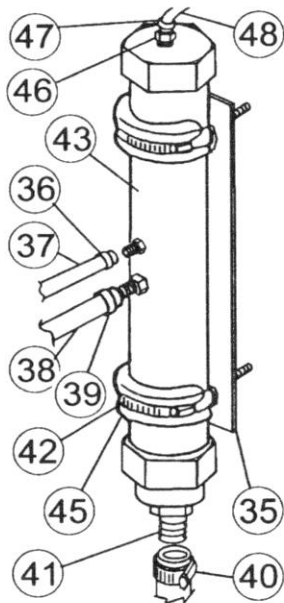
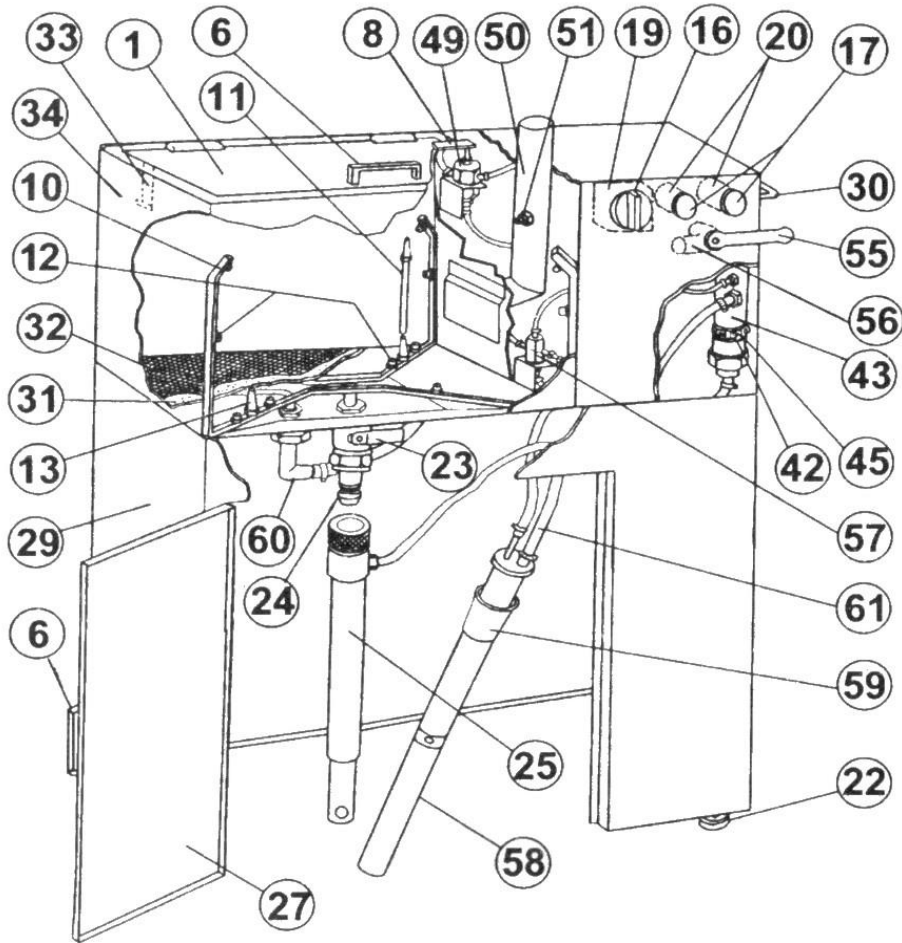
1. Set the handle to "Hose" cleaning (horizontal) position.
2. Connect one end of the hose to the outlet fitting, located at the right side of the unit.
3. Connect the other end of the hose to the inlet fitting, located at the upper front of the tank.
4. Turn Timer Knob to start wash cycle. The wash cycle stops automatically in about 45 seconds.
5. Make sure both ends of the hose are connected firmly and that no solvent is leaking at the connections.
6. Push the Air Flush Button for about 3 seconds to send air into the pot to flush out contaminated solvent.

1. Press Clean Rinse Button for about 5-7 seconds to rinse the pot with about 100cc of clean solvent. This is followed by a flow of air for extra cleaning.
2. Disconnect the hose from the inlet and outlet fittings.

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UG-45V Illustrated Parts Breakdown



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Automatic Spray Equipment Cleaning System Parts List

Part #	Description
1	Lid assembly
6	Lid / Door Handle
8	Lid Switch Plate, Adjustable
10	Delivery Tubes
11	Nozzle Adapter
12	Spray Jet Assembly
13	Gun Cleaner Taper Nozzle
16	Mechanical Timer Control Knob
17	Air Rinse Control Knob
19	Mechanical Timer Assembly
20	Air Rinse Valve Assembly
22	Adjustable Leveler Foot, Long
23	Stop Cock Valve Assembly
24	Quick Coupling Nipple (male)
25	Solvent Suction Pump Assembly
27	Door Assembly, Complete
29	Base Cabinet
30	Spray Gun Hanger Bar
31	Filter Pad (10 pack)
32	Flame Retardant Screen
33	Lid Opening Stop Arm
34	Stainless Steel Tank Assembly
35	Pump Mounting Bracket
36	Hose Clamp (7mm)

Part #	Description
37	Air Hose
38	Solvent Hose
39	Hose Clamp #4
40	Hose Clamp
41	Hose Barb, 3/8" x 1/8" NPT
42	Pump Clamp
43	Main Pump, Dual Seals
45	Rubber Cushion
46	Hose Barb 1/4"
47	Hose Clamp
48	Exhaust Silencer Tube
49	Lid Switch Valve Assembly
50	Fume Exhaust Tube Assembly
51	Toggle Switch Air Valve
55	Valve Handle
56	Three-way Valve Assembly
57	Four-way Valve Assembly
58	Rinsing Pump Assembly
59	Tapered Plug Stopper
60	Elbow Fitting
61	Solvent Tube

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WARNING

Disconnect all air and fluid hoses prior to performing any maintenance operation.

Daily Maintenance

When the unit is not in use, drain solvent from the cleaning tank into the solvent container. Then close the drain valve. Keep spray gun cleaner and surrounding area clean at all times.

Always inspect the solvent storage compartment of the unit to ensure there is no leakage from the solvent containers. Open the drain to the solvent container before operating.

Automatic Spray Equipment Cleaning System Troubleshooting Guide

Trouble	Probable Cause	Remedy
Little or no washing action	<ol style="list-style-type: none">1. Low air pressure2. Filter screen inside air inlet fitting clogged with debris3. Blocked spray jet nozzles4. Filter pad too dirty5. Drain valve is closed and solvent is not draining6. Dirty solvent7. Pump defective8. Poppet in combination valve is stuck in closed position	<ol style="list-style-type: none">1. Increase air pressure to 75-85 P.S.I.2. Disconnect air supply and clean the filter screen3. Remove and clean4. Clean or replace filter pad5. Turn drain valve to open (vertical) position6. Replace solvent7. Repair/replace pump8. Repair/replace combination valve
Inside of spray gun is not cleaned	<ol style="list-style-type: none">1. Trigger Lock Spring is not properly installed or paint valve of spray gun is closed2. Spray gun not properly installed onto cleaning nozzle	<ol style="list-style-type: none">1. Install Trigger Lock Spring/ ensure paint valve is open2. Ensure paint gun is firmly installed and not too loose on cleaning nozzle. Use suitable nozzle adapter as required
Solvent leaking around tank lid	<ol style="list-style-type: none">1. Main seals of pump worn2. Air pressure too high	<ol style="list-style-type: none">1. Repair or replace pump2. Decrease air pressure to 75-85 P.S.I.
Timer spins back to original position	<ol style="list-style-type: none">1. Timer defective	<ol style="list-style-type: none">1. Replace Timer
Timer not clicking	<ol style="list-style-type: none">1. Timer defective	<ol style="list-style-type: none">1. Replace Timer
Clean rinse does not work	<ol style="list-style-type: none">1. Rinse Pump defective2. Clean Rinse Air Valve is defective	<ol style="list-style-type: none">1. Replace Rinse Pump2. Replace Clean Rinse Air Valve

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Trouble	Probable Cause	Remedy
Dirty solvent moving into clean solvent pail	1. Combination Valve is defective and leaking	1. Repair/replace Combination Valve
Solvent leaking from air rinse valve	1. One-way check valve in the Combination Valve is defective 2. One-way Check Valve in the Check Valve Assembly is defective	1. Repair/replace Combination Valve 2. Repair/replace One-way Check Valve

Diagnostic Procedures

When the pump does not work and there is no obvious defect such as excessive air leaking out of the exhaust pipe at the top of the pump try the following:

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| <ol style="list-style-type: none"> 1. Disconnect the air hose from the pump Air Inlet (cut close to pump if necessary). Turn the timer "On". 2. If air blows out of air hose leading from the timer when the timer is turned on and stops when timer is turned off, the timer is working, but the pump may be defective. 3. Using a hand blowgun, apply air pressure to the Air Inlet of the pump. If the pump works normally, there may be a kink or blockage in the air line. 4. When the timer is working normally and the solvent pail is full, but no solvent comes out of the spray jets, either the pump is defective or the suction line before the pump is blocked. | <ol style="list-style-type: none"> 5. Disconnect Suction Pump Assembly from the bottom of the tank. Check the suction vacuum of the pump by testing the suction inlet of Suction Pipe Assembly for a vacuum. If no vacuum is present the pump is defective and must be repaired/replaced. 6. If strong vacuum is present, the pump is operating correctly and the problem may be due to a blockage in the suction hose or suction pipe. Disconnect the suction hose (black) at the suction pipe and test for vacuum by closing the end of the suction hose. 7. If no vacuum is present, the suction hose is blocked and must be cleaned or replaced. 8. If strong vacuum is present, the blockage is probably in the suction pipe assembly. Remove the blockage by blowing air into air barb of the suction pipe assembly. |
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