

# **INSTRUCTION MANUAL**

E100M Waterborne Spray Gun Cleaner Featuring Clarifier Recycling System









- ° Warranty
- ° Safety
- ° Operation
- Service Parts
- ° Troubleshooting Guide
- ° Accessory Information

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Solvent Recyclers & Paint Gun Washers

#### 24 MONTH LIMITED WARRANTY

BECCA Solvent Recyclers and Paint Gun Cleaners components are warranted to be free of defects in material or workmanship for 24 months from established purchase date to the original user or from original shipment whichever is sooner. During months 1 through 6 BECCA will repair or replace any component including labor that is found to be defective in material or workmanship as determined by BECCA factory certified service technician. For months 6 through 24 BECCA will furnish parts only (no travel, diagnostic or repair labor is provided) to replace any component that is found to be defective in material or workmanship as determined by BECCA factory certified service technician. In all cases defective parts shall be returned to BECCA for inspection and final approval.

There is no other express warranty, implied warranties, including those of merchantability and fitness for a particular purpose, are limited to one year from purchase and to the extent permitted by law any and all implied warranties are excluded. This is the exclusive remedy and liability for consequential and incidental damages under any and all warranties are excluded to the extent exclusion is permitted by law.

#### **CONDITIONS OF WARRANTY**

BECCA has no control over working conditions, solvents involved in usage and under which purchaser stores, handles or uses BECCA product. We make no warranty or condition, either expressed or implied with respects to usage or mistreatment of product. These warranties apply only to the original purchaser and do not apply if the unit has been misused, subjected to overloading, neglect, accident, altered or used for any other purpose. BECCA shall not be liable for loss, damage or delay due to, without limitation, acts of God, transportation delays, accident, fire, action of civil or military authority, adverse weather or any other causes beyond BECCA's control. This warranty does not cover transportation, interior or exterior finishes. The use of unauthorized chemicals or solvents with acid content in this unit shall render this warranty null and void. BECCA shall not be responsible or liable for any consequential or incidental damages, including without limitation, loss of production or faulty production, loss of use or loss of profit. Attempts at repair or alterations by the owner shall also constitute a violation of this warranty. Only BECCA certified personnel shall start-up, train, repair or alter BECCA equipment. Spray Gun Cleaner Brushes, Filters, and Gun Clips & Solvent Recycler Gaskets/Seals, Oil, and Bags are subject to be replaced due to normal usage, wear and tear within the warranty period and are excluded from this warranty.

These warranties replace all other warranties expressed or implied by nature or otherwise, and are not assignable or transferable from original purchaser.

Warranty is in effect after receipt of Registration information & full payment

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Revision 1/8/05

#### **SPRAY GUN CLEANER SPECIFICATIONS**

#### SPECIFICATION FOR ENVIRO 300 POWER CLEAN™ SPRAY GUN CLEANERS

SPECIFICATIONS	U.S. UNITS	METRIC UNITS
Weight	110 Lbs.	50 Kg
Height	44"	1,118 mm
Width	30"	762 mm
Length	20"	508 mm
Wash Basin Height	9"	228 mm
Wash Basin Depth	16"	406 mm
Wash Basin Width	20"	508 mm
Fluid Capacity of Container	5 Gallons	20 Liters
Air Supply Operating Pressure	75 - 85 psi.	6 – 7 Bar
Acoustic Pressure Level LpAm ISO-3746	68.4 dB(A)	68.4 dB(A)
Acoustic Power Level LpAm ISO-3746	79.2 dB(A)	79.2 dB(A)
Ball valve	Brass	Brass
Pump	Dual diaphragm	Dual diaphragm
Pump Capacity	1 Gal/min Actual	4 Liters/min Actual
Fluid containers	1 (Included)	1 (Included)
Outside Frame steel	Powder Paint	Powder Paint
Wash Basin	Stainless steel	Stainless steel
Warranty - Limited	24 months	24 months

#### **SAFETY AND WARNING**

#### **GENERAL SAFETY**

- 1. Carefully inspect the shipping carton for any signs of transport damage. The damage to the carton often indicates possibility of transport damage to the equipment inside.
- 2. Carefully remove your BECCA Spray Gun Cleaner from the shipping carton.
- 3. Check your equipment immediately to ensure that it is free of transport damage. Report any transport damage to the carrier without delay for possible claim procedures. BECCA Inc. is not responsible for damage to equipment after it leaves our warehouse.
- 4. Check the equipment list and compare it with the parts you have received. If any parts are missing, contact the supplier you purchased the equipment from.

Before operating the BECCA SPRAY GUN CLEANER, read this Instruction Manual completely. All BECCA products are engineered and manufactured to the highest performance standards and have been subjected to detail testing before shipment from the factory.

#### DANGER AND WARNING LABELS

# DANGER 1 2 3 **WARNING** 5 7

1. Presence of flammable vapors and solvents.

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- 2. No smoking or metal grinding nearby.
- 3. Keep away from open flames.
- 4. Wear Breathable Air during use.

- 5. Observe warnings at all times.
- 6. Read the Instruction Manual carefully.
- 7. Wear solvent-proof rubber gloves.
- 8. Wear protective eyewear before use.

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#### **SAFETY AND WARNING (cont'd)**

#### **WARNING**

« READ ALL INSTRUCTIONS » Failure to follow the SAFETY RULES identified by a BULLET (°) symbol listed BELOW and other safety precautions may result in serious personal injury. « SAVE THESE INSTRUCTIONS »

#### **GENERAL SAFETY RULES**

- ° KEEP WORK AREA CLEAN.
- KEEP CHILDREN AWAY. Do not let visitors come in contact with the equipment. All visitors should be kept away from the work area.

#### **PERSONAL SAFETY**

- OUARD AGAINST ELECTRIC SHOCK. Prevent body contact with grounded surfaces, for example: pipes, radiators. Solvent resisting rubber gloves and non-skid footwear is recommended where damp or wet ground may be encountered. A ground fault circuit interrupter protected power line must be used for these conditions.
- DRESS PROPERLY. Do not wear loose clothing or jewelry. They can be caught in the moving parts.
   Wear protective hair covering to contain long hair.
- USE SAFETY EQUIPMENT. WEAR SAFETY GOGGLES or glasses with side shields.
- ° **STAY ALERT. USE YOUR COMMON SENSE**. Concentrate on what you are doing. Do not operate the unit when you are tired or under the influence of drugs.
- DO NOT OVERREACH. Keep proper footing and balance at all times.
- BEFORE CONNECTING THE UNIT to an air line outlet, be sure the pressure is the same as that specified on the nameplate of the Spray Gun Cleaner. An air-line with pressure greater than that specified on the Spray Gun Cleaner can seriously injure the user as well as damage the Spray Gun Cleaner. If in doubt, DO NOT connect the unit. Using an air-line with pressure less than the pressure specified on the nameplate is harmful to the pump.

#### **SAFETY AND WARNING (cont'd)**

#### **UNIT USE AND CARE**

- DO NOT FORCE THE UNIT. It will perform better and safer at the rate for which it was designed.
- THE USE OF ANY OTHER ACCESSORIES not specified in this manual may create a hazard.
- DISCONNECT THE UNIT when not in use, before servicing.
- DO NOT ALTER OR MISUSE THE UNIT. These units are precision built. Any alteration or modification not specified is misuse and may result in a dangerous situation.

Only trained repairmen should attempt (°) ALL REPAIRS, electrical or mechanical. Contact the nearest BECCA repair service facility. Use only BECCA replacement parts, any other parts may create a hazard.

#### **SAFETY RULES**

- THE OPERATOR MUST WEAR protective solvent-proof rubber gloves to prevent contact between his hands and the products used for cleaning.
- THE OPERATOR MUST WEAR protective eyewear to prevent spatter from coming in contact with his
  eyes.
- THE SPRAY GUN CLEANER is designed exclusively to wash spray guns and small objects.
- STAY ALERT at the start of the cleaning cycle. Make sure the solvent is not «corrosive». Immediately stop washing and replace the solvent whenever you note signs of corrosion on the worktable.
- IF EYES COME IN CONTACT WITH SOLVENTS rinse thoroughly with water.
- BEFORE USING the Spray Gun Cleaner, make sure that all safety devices are in perfect operating condition.
- BECOME FAMILIAR WITH THE CONTROLS and their functions before commencing work.
- USE GROUNDABLE CONTAINERS (Containers, solvents are supplied in, are recommended) for the collection of solvents.
- BE CAREFUL when you load or unload the solvent in the unit. Make sure you do not splash or spill the contents on the workshop floor.
- THE OPERATOR MUST PERIODICALLY check the level of the dirty solvent contained in the collection pail to prevent it from overflowing.

#### **SAFETY AND WARNING (cont'd)**

- IT IS STRICTLY FORBIDDEN to place unsuitable sized object or objects that weigh more than 18 Lbs.
   / 8 Kg on the work surface of the Spray Gun Cleaner.
- CLEAN OR REPLACE the mesh filter periodically.
- O NOT USE ELECTRICAL OR PNEUMATICAL TOOLS WITH THE UNIT. AVOID GASEOUS AREAS. Do not operate portable electric tools in explosive atmospheres in the presence of flammable liquids or gases. Motors in these tools normally spark, and do not scrape or scratch the machine with metal objects; the sparks might ignite fumes.
- DO NOT ALLOW FAMILIARITY GAINED FROM FREQUENT USE OF YOUR SPRAY GUN WASHER TO BECOME COMMONPLACE. Always remember that a careless fraction of a second is sufficient to inflict severe injury.
- DO NOT ALTER OR MISUSE THE UNIT. Any alteration or modifications is a misuse and may result in serious personal injuries.
- FIRE EXTINGUISHING SYSTEMS must be installed in the same room or close to the unit in case of emergency. These appliances must be kept efficient and inspected every year by a certified person.
- THE INSTALLATION SITE MUST PERMIT PERSONNEL TO EASILY AND QUICKLY MOVE AWAY FROM DANGER ZONES IN CASE OF AN EMERGENCY.
- DO NOT USE THE UNIT TO wash or degrease objects designed to come in contact with food.
- COMPLY WITH LAWS IN THE COUNTRY where the Spray Gun Cleaner is installed regarding the use and disposal of the products used to wash clean objects.

THINK SAFETY! SAFETY IS A COMBINATION OF THE OPERATOR'S COMMON SENSE, KNOWLEDGE OF THE SAFETY AND OPERATING INSTRUCTIONS AND ALERTNESS AT ALL TIMES WHEN THE UNIT IS BEING USED.

#### **INTRODUCTION**

This Instruction Manual provides installation, operation and maintenance instructions for the E100M Spray Gun Cleaner unit, which shall be referred to as Spray Gun Cleaners in the following pages. Spray Gun Cleaners are totally pneumatic units designed for Manual & Hands-Free cleaning of spray guns and small parts.

It is very practical, time saving and economic for cleaning Spray Guns and small parts. The unit is supplied with a pneumatic pump that pulls solvent from the container below in the cabinet. The solvent that you will use will depend on the type of paint that you are using. The manufacturer of the paint will give you the information you need regarding this.

This manual is an integral part of the product. It must be properly stored, kept in good condition and available for consultation at any time during the entire working life of the Spray Gun Cleaner. Proper washer operation, economy and durability depend on common sense and compliance with the instructions given in this manual.

#### **OPERATION GUIDELINES**

Read the following sections carefully. They will help you use your Spray Gun Cleaner correctly and help you select the correct function for your task.

#### **Description of the valves**

- a: Foot Pedal
- b: Flow Brush Valve
- c: POWER CLEAN Connection
- d: POWER PISTOL

#### \Description for using the Spray Gun Cleaner unit

- The first step in learning to use the Spray Gun Cleaner is to become familiar with the unit. The cleaner basically consists of one (1) pump and one (1) container. Operations are carried out via the controls placed on the top front panel which the operator can control the use.
  - **a** The "Foot Pedal" supplies air to the pump for all fluid functions. Fluid will not flow without depressing the foot pedal.
  - The "Manual Flow Brush" valve allows you to operate the Manual Flow Brush. When engaged the pump will pull solvent from the container through the flow brush. There is also a flow control at the end of the flow brush handle to adjust the rate of fluid flow.

#### **OPERATION GUIDELINES (cont'd)**

- The "POWER CLEAN" connection is a High Flow Quick Disconnect that connects to the air-side
  of the spray gun to protect the air passageways and seals during cleaning. There is also a flow
  control next to the QD to adjust the rate of airflow through the spray gun
- POWERPISTOL<sup>TM</sup> is mounted on the side of the spray gun cleaner and is activated by pulling the trigger on the fluid gun for cleaning the hard to reach areas of the spray gun. There is also a flow control next to the POWERPISTOL<sup>TM</sup> to adjust the rate of fluid flow for cleaning.

#### **IMPORTANT:** DO NOT POUR LEFTOVER PAINT INTO THE WASH BASIN.

#### **Manual Cleaning**

- To manually wash your spray guns start by removing the cup from the spray gun, empty the cup's residues into a separate pail. Pour approximately ½ inch of used solvent by turning the "Manual Brush Wash" valve (b) to the **ON** position into cup and clean with the brush.
- This fluid is returned into the fluid container for reuse.
- A brush has been added to the unit to help clean parts and paint guns. The solvent will come out from the center of the brush.
- You can also clean parts or spray guns with POWERPISTOL<sup>™</sup>. POWERPISTOL<sup>™</sup> is mounted on the side of the spray gun cleaner and is activated by pulling the trigger on the fluid gun for cleaning the hard to reach areas of the spray gun. Be sure to connect POWER CLEAN to the spray gun before cleaning to protect the air passageways of the gun.

#### **Waterborne Cleaning**

• Spray guns washed with water require it to be demineralized and have special additives to prevent rust on the spray guns and the Spray Gun Cleaner itself.

#### **Clarification System**

The unit has a Clarification Recycling System to remove particulate from the solvent. This system filters out particulate down to 25 micron. There is a 3 container system to flocculate and filter the cleaning fluid for reuse. Some processes may require the solvent to be purged periodically due to a build up of activated type solvents.

The Filters are easily changed by a replacement kit (821600-5) that includes five 25-micron filters and 5 pre-filters.

#### **OPERATION GUIDELINES (cont'd)**

#### **OPTIONAL Filtration System**

The unit has an Optional Filtration Recycling System to remove particulate from the solvent. This system filters out particulate down to 75 micron. Some processes may require the solvent to be purged periodically due to a build up of activate type solvents.

The Filters are easily changed by a replacement kit (825258K) that includes two 75 micron filters and two seals (seals are normally useless once the housing is opened).

#### Identification of the Spray Gun Cleaner

Every spray gun washer has an identification plate that indicates:

- Manufacturer brand
- Manufacturer name and address
- Spray washer model and serial number

Information on this identification plate must always be specified when asking for service and/or spare parts.

#### Periodical check and maintenance

Please follow the rules and regulations listed below to safely maintain the Spray Gun Washer:

- Periodically make sure that safety devices are complete and efficient.
- Periodically replace the mesh filter.
- Periodically clean the working surface and the cover from any eventual deposits.
- It is strictly forbidden to remove or tamper with safety devices.
- According to the instructions given in this manual, only qualified and specialized personnel must perform maintenance on the Spray Gun Cleaner.
- Disconnect the compressed air supply when it is necessary to repair or perform maintenance on the appliance.
- Maintenance must be performed carefully, following the instructions given in this manual for replacing damaged or worn parts.
- The symbolic labels attached to the Spray Gun Cleaner give clear guidelines for preventing accidents. These labels must always be kept clean and immediately replaced if they are even partially removed or damaged. It is strictly forbidden to operate the Spray Gun Washer when even only one of these symbolic labels is missing from the point where the Manufacturer placed it.
- Always use **BECCA GENUINE REPLACEMENT PARTS** during repair and maintenance.

#### TROUBLESHOOTING GUIDE

PROBLEM	CAUSE	SOLUTION
Pump is not operating	<ul> <li>Main Air is not on.</li> <li>Air gage shows less than 40 psi.</li> <li>No sound coming from pump.</li> <li>Pump is pumping but no solvent is</li> </ul>	- Connect Main Air - Make sure air gage is operating correctly. Adjust pressure Pump should be replaced – possible broken actuator spring - Review solvent lines to assure they
	flowing.	are in the containers Make sure containers have solvent Make sure the Control Valves are operating. Look for solvent flowing through the lines. Look for airation in lines – There is a leak somewhere
Pump is very slow	- Sluggish or sporadic.	Make sure containers have solvent.     Make sure air gage is not jumping around below 40 psi.     Look for airation in lines – There is a leak somewhere.     Assure the Strainer is not clogged
Pump is very fast	- Accelerated pumping sound	Make sure containers have solvent     Check for bad connections on the     suction side of the pump

#### **ENVIROWASH TROUBLESHOOTING GUIDE**

PROBLEM	CAUSE	SOLUTION
Diminished Fluid Flow	Filters are almost loaded	Change filter(s) – either the 75 micron filter or both filters, depending on the filter change schedule (see instructions with Replacement Filter Kit)
Rapid Pump Acceleration with little to no fluid flow	Filters are loaded	Make sure containers have fluid.  Change filter(s) – either the 75 micron filter or both filters, depending on the filter change schedule (see instructions with Replacement Filter Kit)
Rapid Pump Acceleration After recent filter change	Air is getting into the fluid lines	Check the filter canisters – make sure they are screwed on snugly (hand tightened)  Check the seals in the filter canisters – make sure they are seated correctly  Make sure new seals were installed with the new filters
No fluid flow, loud air noise coming from pump	Air is by-passing to exhaust in the pump	Replace the pump
No fluid flow, no pump noise	The Pump is not Operating	Replace the pump

Troubleshooting method to isolate the system (pump) from the filters:

Remove filters from housings, re-attach empty housings and run the gun cleaner (it will take several minutes for the housings to fill up). If the system runs normally, the problem was caused by the filters. If the system does not run correctly, the problem was caused by the pump.

#### **MAINTENANCE SCHEDULE**



#### Each day

- Wipe-down the unit with solvent. The paint and decals are solvent resistant.
- Remove any contaminants from under the Splash Pad

#### Every 2 - 3 Months

- Replace Clarifiying Filter. This is the typical time frame for most operations.

#### **Semi-Annually**

- Change out "Used Solvent" Container.
- Replace filter (824588) in back panel.
- Replace Extractor/Dryer Compressed air filters (824016)
- Replace BECCA Protect™ Maintenance Coating (ECP 831004)
- Review Ground Clamp (823079)

#### **Annually**

- Replace Manual Flow Brush (824610)
- Review & Replace illegible or damaged Decals
- Acetone Flush (see instructions on Page 18)

# ENVIRO™ Waterborne Clarifier System Use Instructions

#### **Tools Required:**

Adjustable Wrench may be required

#### Includes:

Container w/ Filter Container for Clean Fluid Collection Extra Container to Clarify Dirty Fluid

#### **Process:**

This process is used to clean the dirty fluid from the Spray Gun Cleaner. The frequency is determined by the amount of cleanings performed.



The process is called "Flocculation". A Flocculating material (BECCA Clarifier Packets) is added to get the paint in the dirty fluid to collect together forming larger solid masses that can be filtered out of the fluid.

#### Procedure:

- Remove the drain from the Wash Tank. Allow it to drop onto the lid. The size of the hole will stop it from falling into the tank.
   Note: The drain tube only needs to hand tight for ease of removal.
- 2) Remove the Pick-up Tube
- 3) Remove the Lid. The Dirty Fluid requires cleaning.
- 4) For Heated Systems, remove the container and pour the Dirty Fluid contents into the supplied Clarifier Container as shown. Then replace the insulated container.



Remove Drain



**Dirty Liquid** 



Remove Container



**Heated Systems** 

5) Replace Cleaned Fluid into the Spray Gun Cleaner from previous process. Replace the container or for Heated Systems pour Cleaned Fluid into the container or Wash Basin.

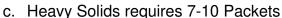


Replace under Cleaner



Or Pour Clean liquid back into the system

- 6) Drop BECCA Clarifier Packets in to Flocculate Dirty Fluid.
  - a. Light Solids requires 2-3 Packets
  - b. Medium Solids requires 4-6 **Packets**





Add Clarifier Packet

Insert Bubbler into Container

7) Add Bubbler to container. Adjust flow control to create fluid agitation. Replace Cover and allow air bubbler to agitate fluid



Replace Cover and allow air bubbler to agitate fluid

8) Allow to set for at least 30 Minutes and up to as long as needed to get full absorption of all the paint material. Put the lid in place while material is

Focculating.

9) Once the Dirty Fluid has completed the process you will see Clear Fluid and the paint solids settling at the bottom or floating on top.



Clean Liquid w/Paint residue settled at the bottom



Pour Clarifier Container thru the Filter

10) Pour the Clarifier container liquid into the Filter Container as shown. The Filter will capture the solid materials and allow the liquid to pass through.







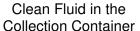
#### 11) The results will be:

- a. Clear Liquid ready to use for the next process.
- b. Paint residues captured by the filter.

**Note!:** This Filter can be reused until the paint solids build up and do not allow the liquid to flow through.

Clean Fluid drains into the Clean Collection Container







Paint Waste collected by the Filter

12) You are now ready to go through the process again!



### **Annual Acetone Flush Instructions**

- 1. Empty system of all water / cleaning fluid
- Place 3-4 gallons of acetone in fluid reservoir, place pick up tube in acetone.
- Allow system to run with acetone utilizing pumps for approximately 1 hour
- 4. During the 1 hour run time, also utilize the flow brush and/or power pistol to clean those lines as well
- 5. Remove pick up tube from container of acetone
- 6. Allow pump to run for an additional 30 minutes pulling air only to allow the acetone in the system to flash off
- 7. Remove Acetone from the gun cleaner; replace with 5-gallons of clean WaterWave™ Solution



# ENVIROWASH™ Filter Replacement Instructions





#### **FIRST FILTER CHANGE**

- 1. Important! Before removing the Filter Housing:
  - Lift the line out of the container
  - Then allow the pump to continue to run with the Wash Basin or Flow Brush in the "On" position.
  - Run the unit to remove some of the solvent from the Housing (3-5").
- 2. Turn the Filter Housing with the provided Wrench. If stuck, lightly tap housing with a rubber mallet to break the seal. Care should be taken so not to crack the housing.
- 3. Make sure to <u>replace the filter</u> and place it in the correct position
- 4. Make sure to <u>replace the seal</u> in the Filter Housing. (Note: The old seal will not work after the Filter Housing has been removed)
- 5. Make sure Filter is located in the Guide located on the threaded top before spinning housing. Tighten The Filter Housings to a snug position. (Do Not Over Tighten!!)
- 6. When Running the Spray Gun Cleaner it will take a few minutes to fill the Filter Housing before flowing out of the selected function.
- 7. Used Filters (are Hazardous until proven different) should be allowed to dry and then dispose per local jurisdiction requirements.

## You are ready to use your system!

#### **WARRANTY INFORMATION / TECHNICAL ASSISTANCE**

The Warranty of your system begins with the Certified Start-up by your local BECCA Distributor. Make sure this is completed and you receive a copy of the Certified Start-up document.

For more information, prices or technical assistance, contact your local BECCA distributor or call / fax our BECCA Care™ Numbers:



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