



*spraymastertech.com*

# 600PEW Portable Owners Manual

You have just purchased the best spray washer on the market today. It incorporates the very latest in technological advances. To assure you the best and safest performance as well as longest equipment life, please read the enclosed information.

After reading the material in this manual, should you have a service problem or need help, please call our toll free number **1-800-548-3373** or **(479) 636-5776**.

**TERMS:** All parts will be shipped with check in advance or C.O.D. Commercial accounts are allowed 15 day terms from date on invoice with approved credit.

**FREIGHT:** All freight will be paid by the customer. Special consideration will be given to items under warranty coverage.



Date Manufactured:

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## IMPORTANT DOCUMENT - DO NOT DISCARD

Model Number

Serial Number

Date Purchased

**NOTE:** Specifications found in this manual subject to change without notice.  
**FOR COMMERCIAL USE ONLY**

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## Receiving

**Damage:** Report any damage to the shipping carton or contents to the freight carrier. File a claim with the carrier within 10 days if damage is evident. The manufacturer is not responsible for damage to the equipment caused by the freight carrier.

**Package Contents:** Carefully check the contents of the shipping cartons to ensure the contents agree with the packing list. If items are missing or if you have any questions, please call our customer service department at **(800) 548-3373** or **(479) 636-5776**.

## Returned Goods Policy

Any item returned for warranty consideration or for credit must have a **RETURN AUTHORIZATION NUMBER**. Call our Customer Service Department and discuss the nature of your request. Please note that all items returned must be returned F.O.B. Rogers, Arkansas. No collect or C.O.D. shipments will be accepted unless prior arrangements with our Customer Service Department have been made. A restocking fee may be applied to items for credit that are not under warranty. To reach our Customer Service Department call **(800) 548-3373** or **(479) 636-5776**, or write to Spray Master Technologies®, 115 E. Linden St., Rogers, Arkansas 72756.

### SMT WARRANTY – LIMITED Effective May 16, 2014

#### Spray Master Technologies (SMT) - Limited Warranty

Parts – Spray Master Technologies warrants parts for wall mounted and rack mounted 600 series and 2000 series units to be free from defects in material or workmanship for a period of 2 years from the date of shipment from the factory excluding items listed below.

Spray Master Technologies warrants parts for all other units (wall mounted 1100 series and all portable units) to be free from defects in material or workmanship for a period of 1 year from the date of shipment from the factory excluding items listed below.

This warranty is limited to the original purchaser and includes repairing or replacing parts which manufacturer's investigation shows to be defective at the time of shipment from the factory. All parts subject to this warranty shall be returned F.O.B. Spray Master Technologies, Rogers, Arkansas for examination, repair, or replacement.

Excluded Items – The follow items are excluded: spray guns, wands, hoses, nozzles, Hummer Jet Sr & Jr, casters and handles. These items are covered by the above warranty for 90 days from the date of purchase for defects in materials or workmanship.

Labor and Travel – Labor and travel to repair or replace defective parts shall be covered for a period of 1 year from date of shipment (90 days on the excluded items).

Items Voiding Warranty – The following voids all warranty claims on Spray Master Technologies products: Accidental breakage; abuse; misuse; failures caused by incorrect installation (if not factory installed); failure to correctly wire the system at the electrical source; chemical or mineral buildup in the pumps and water lines caused by untreated or unfiltered tap, hard, or recaptured water; excessive hot water temperatures exceeding 120° Fahrenheit (49° Celsius); using bleach as an injected chemical; or using hydrogen peroxide as an injected chemical.

[www.spraymastertech.com](http://www.spraymastertech.com)

Phone: 479.636.5776 • Fax: 479.636.3245 • 115 E. Linden • Rogers, Arkansas 72756 USA

SMT-WARRANTY-140516

# Service Requirements

## Service Requirements

### Water:

- Flow: minimum 5 GPM at minimum 30 PSI
- Temperature: cold to 120°F

### Electric:

- 115 Volt/20 Amps Individually Branched Circuit (NEMA 5-20R)

*Note: GFCI receptacle is not required. Pump has a GFCI power cord plug.  
Nuisance tripping of GFCI may occur if plug and receptacle both have a GFCI.*

**DANGER:** Electrocution, serious injury or death. Do not remove the GFCI plug from the power cord.

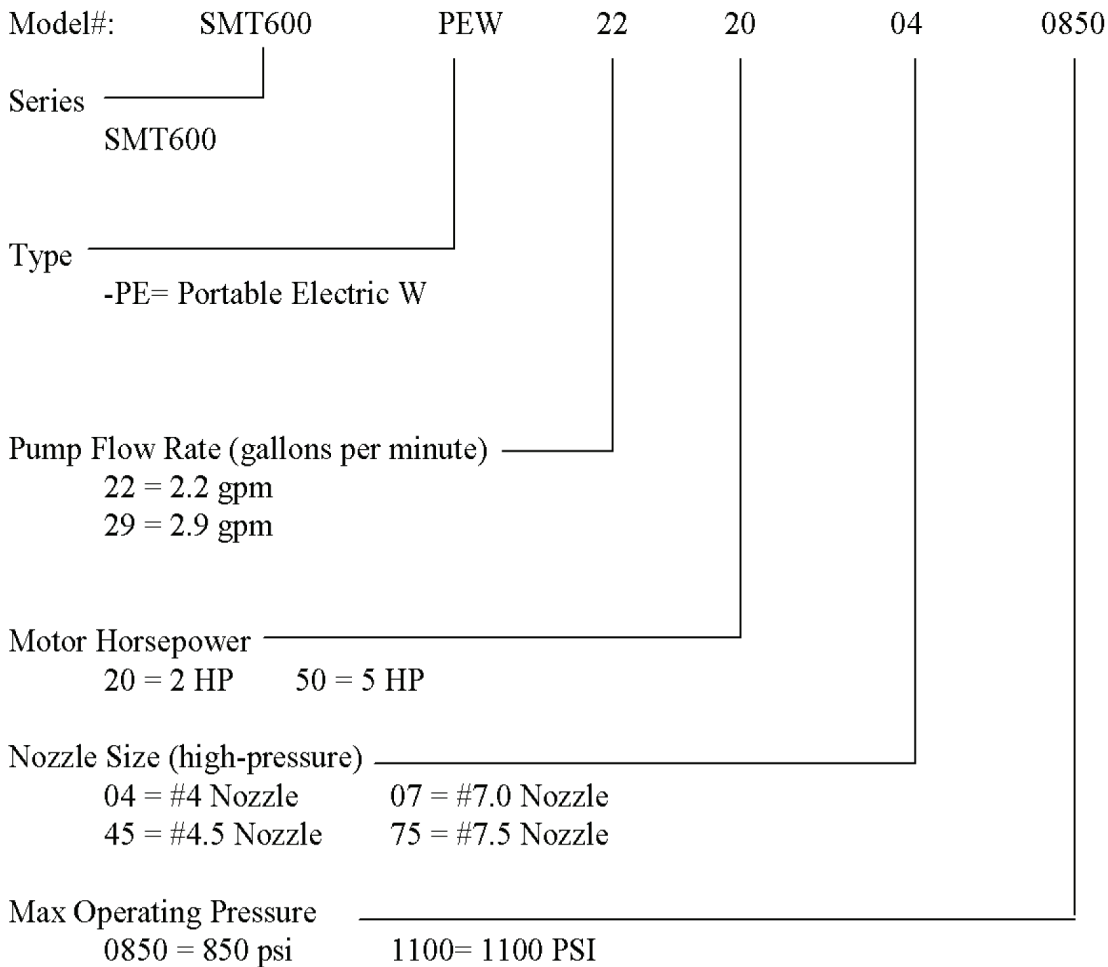
# Service

If a problem occurs, please refer to the "Diagnostic and Maintenance Chart" in the product Service Manual. Also, refer to the CAT Pumps Service Manual provided with your system. If the problem is not resolved, then please call our toll free customer service number:

**1-800-548-3373 or (479) 636-5776.**

# Model Identification

The complete model number located on the serial number label identifies the series, type and operating specifications of the system.



# Operating Instructions

## User Operated Controls

On/Off Switch



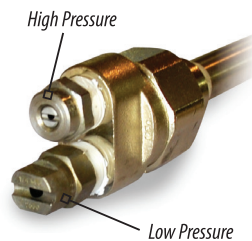
**On/off switch:** The power on/off switch is located at the upper right corner on the front of stainless steel cover. Move the red lever left and right to turn the pump off and on respectively.

Assembly



**Spray Gun Assembly:** The spray gun assembly is connected by quick connect fittings to the output end of the high-pressure hose. Operate the spray gun by squeezing the gun trigger while directing the spray nozzle toward the surface or object to be cleaned.

Dual Nozzle



**Dual Nozzle:** The dual nozzle is used to select either the low-pressure chemical injection nozzle or the high-pressure rinse nozzle. Selection of the desired nozzle must be made while the spray gun trigger is released. To select the low-pressure chemical injection nozzle, rotate the spray gun 90° counter-clockwise so that the spray gun handle is parallel to the ground with the hose connection extending to the operators right, then squeeze the spray gun trigger. To select the high pressure rinse nozzle, rotate the spray gun 90° clockwise so that the spray gun handle is parallel to the ground with the hose connection extending to the operators left, and then squeeze the spray gun trigger. Once the nozzle has been selected and the spray gun trigger held open, the spray gun can be rotated and aimed in any direction without affecting nozzle selection or operation.

Vari Nozzle



**Vari Nozzle:** The vari nozzle is used to select either low-pressure chemical injection or high pressure rinse, and to adjust the spray pattern from a fan spray to a zero degree stream. Moving the black body of the nozzle toward or away from the gun handle selects high or low pressure respectively. For high pressure, pull the black nozzle body firmly toward the spray gun handle. To select low-pressure, push the black nozzle body firmly away from the spray gun handle. To vary the spray pattern, twist the black nozzle body for the desired spray pattern.

Chemical Metering Selectors



**Chemical Metering Selectors:** This control allows the operator to select a chemical to be injected and meter it into the low-pressure spray. It also provides a means to flush the chemical injector after each use. The chemical metering selector is located on the lower left front corner of the SMT -600PEW. Turning the selector knob from the off position counter-clockwise selects and meters the chemical. The further the control knob is turned, the higher chemical concentration out the spray gun. See the chemical dilution cart and instructions on page 8 of this manual. To flush the chemical injector, turn the metering knob on one valve to off and set the other valve fully clockwise. Operate the spray gun and pump on low pressure for one minute.

Locking Casters



**Locking Casters:** The SMT600PEW is equipped with locking casters on the front of the unit to prevent the unit from moving during use or when parked on a slight incline. Lock the caster by pressing firmly on the end of the lock lever with your foot. Release the lock lever by pressing the opposite end of the lock lever until the caster rolls freely. Always keep the casters in the locked position except when moving the unit.

## Preliminary equipment check

Perform preliminary checks prior to each use to ensure safe operation and prolonged equipment life.

- Verify the oil level is to the red dot on the oil sight gauge on the front of the pump.
- Verify the ground fault circuit interrupter (GFCI) power cord is in good condition. Replace complete GFCI cord assembly if the GFCI, plug or cord is damaged, frayed or worn. Test the gfcI circuit weekly. Test by inserting the plug into a properly grounded receptacle and from the unit. Reset the GFCI after test by pressing reset button on the GFCI.
- Check hoses for breaks and damage.
- Check spray gun for damaged fittings, nozzles, and trigger.

# Operating Instructions

## Preparation for use

- Roll unit to an operating location that is level and firm.
- Connect water supply hose to water supply hose bib.
- Connect spray gun to high-pressure hose.
- Ensure on/off switch is set to "off"
- Plug GFCI power cord plug into individual branch circuit and press reset button on GFCI.

## Cleaning with the system

- Hold spray gun firmly.
- Direct spray gun away from individuals and equipment.
- Warning: never spray any energized electrical equipment that is not rated for wet locations.
- Set power on/off switch to "on"
- Direct spray gun toward the surface or equipment to be cleaned and squeeze trigger. (Use low pressure for chemical application - high-pressure for rinse)
- Apply chemical solution on low-pressure to the surface or equipment to be cleaned and let soak.
- Use high-pressure spray to rinse the surface or equipment to be cleaned. Rinse thoroughly.
- Upon completion of the cleaning job, flush the chemical injector by setting the chemical selector to flush and operating the spray gun on low pressure for one minute.
- Set on/off switch to off.
- Squeeze the spray gun trigger to release system pressure ( note: hoses and spray guns cannot be disconnected while the system is pressurized)
- Disconnect and store all equipment.

# User Maintenance

**Oil-** Add oil to the pump reservoir as necessary to keep the oil level at the center of the red dot on the oil-level sight glass. Check oil level with machine "OFF". Change initial oil fill after 50 hours running period. Thereafter, change oil every 3 months or 500 hours of operation. Use ISO-68 non-detergent hydraulic oil only. Use of any other type oil will void the warranty and may damage the pump. Oil may be purchased from Spray Master Technologies by calling **(800) 548-3373** or **(479) 636-5776**. Clean the screen washer filter on the water supply hose with each use.

**Chemical Foot Screen** - Flush the chemical foot screens and injector with warm water to remove chemical buildup that can restrict chemical flow. Remove the chemical pickup tube and foot-screen from the chemical supply and submerge it in warm water. Operate the system on low-pressure for minutes with the chemical control set to maximum

**Hard Water Deposit** - Flush the pump with a de-liming agent, such as Lime-A-Way, as often as necessary to keep the system free of mineral buildup that can adversely affect operation. Pour 8 ounces of de-liming agent into the full float tank. With the spray gun connected and closed, turn the pump ON and allow recirculation for 5 minutes. After recirculation, direct the spray gun output into a drain for several minutes to purge the de-liming agent from the system.

**Note:** All user replaceable items are available from Spray Master Technologies® by calling our customer service number at **1-800-548-3373** or **(479) 636-5776**.

## Moving & Storage

### Moving:

The SMT 600PEW is designed for use and movement on a smooth flat surface. Care should be taken when moving the unit over rough or inclined surfaces. To move the unit, release the lock levers on the front casters and roll the unit to the desired position. Immediately lock the casters to prevent the unit from moving during use or when parked on a slight incline. Never park the unit on an incline that will allow the unit to roll on its own.

### Storage:

Store SMT equipment and accessories so that they do not present a tripping or falling hazard. Protect from freezing. When storing SMT pressure cleaning units for extended periods or in freezing conditions, drain all water and winterize the system with antifreeze for use in potable water systems.

**Caution: If your system is used to clean food-processing equipment, consult your chemical supplier for antifreeze that is suitable for that application.**

### Winterize your SMT system as follows:

- Turn off the water supply and disconnect the water supply hose from the unit.
- Run the unit with the spray gun open until the tank is empty.
- Fill the tank with a suitable anti-freeze solution.
- Run the unit with the spray gun open until the tank is empty. A small amount of liquid will remain in the bottom of the tank.

**Caution: To prevent damage to the pump, do not allow the pump to run after the tank is emptied.**

## Extension Cords

Use only 3-wire extension cords that have 3-prong grounding-type plugs and 3-pole cord connectors that accept the plug from the product. Use only extension cords that are intended for outdoor use. These extension cords are identified by a marking "Acceptable for use with outdoor appliances; store indoors while not in use." Use only extension cords having an electrical rating not less than the rating of the product. Do not use damaged extension cords. Examine extension cord before using and replace if damaged. Do not abuse extension cords and do not yank on any cord to disconnect. Keep cord away from heat and sharp edges. Always disconnect the extension cord from the receptacle before disconnecting the product from the extension cord.

**WARNING - To reduce the risk of electrocution, keep all connections dry and off the ground. Do not touch the plug with wet hands.**

## Accessories

The accessories listed below are available from Spray Master Technologies for use with your SMT pressure cleaning system.

- **Hummer Jet Jr.** - Indoor floor surface cleaner
- **Trap Shooter** - Drain cleaner
- **Tornado Spray Gun** - High impact spray gun
- **Flexi-wand Spray Gun** - Flexible wand spray gun
- **Wall and Tile Brush** - 10" x 36" scrub brush
- **Water Supply Hoses** - optional lengths
- **200-RWC Hose Reel** - for high pressure hose storage



*Hummer Jet Jr.*



*Wall & Tile Brush*



*Trap Shooter*



*Flexi-wand*



*Tornado Nozzle*

## Warning Labels

These "WARNING" labels are affixed to your system for all operators to read. If they have been removed or are illegible, please call **1-800-548-3373** for replacement.

### WARNING

**READ BEFORE OPERATING**

CHEMICALS, HOT LIQUIDS, AND HIGH PRESSURE SPRAYS CAN CAUSE SERIOUS BODILY INJURY. IF INJURED, CONTACT YOUR NEAREST POISON CONTROL OR EMERGENCY CENTER.

<b>NEVER</b>	<ul style="list-style-type: none"> <li>• Never allow children or unauthorized personnel to handle equipment.</li> <li>• Never put your hand or fingers in front of gun.</li> <li>• Never point gun at your body - or anyone else.</li> <li>• Never leave gun unattended without releasing pressure and engaging trigger lock.</li> <li>• Never use mechanical means to hold trigger in open position.</li> <li>• Never spray flammable materials.</li> <li>• Never spray electrical devices.</li> <li>• Never handle electrical devices while spraying or standing in water.</li> </ul>
<b>BEFORE spraying and during spraying</b>	<b>ALWAYS</b>
<b>BEFORE removing spray tip or nozzle - or - attempting service or maintenance</b>	<b>ALWAYS</b>

\*NOTE: Also follow 1, 2, 3 and 4 when discontinuing spraying operation.

• Follow the manufacturer's recommendations for maximum, periodic cleaning, maintenance and parts replacement procedures.

• Do not operate the equipment if there are any leaks from spray gun, fittings, or hoses.

**SPRAY MASTER TECHNOLOGIES**  
Rogers, Arkansas 72756    300-4025

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## WARNING

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TO PREVENT PERSONAL INJURY FROM ELECTRICAL SHOCK **DO NOT USE IF:**

- 1) THE ELECTRICAL OUTLET IS NOT PROTECTED BY A GROUND FAULT INTERRUPTER (GFI).
- 2) THE ELECTRICAL CORD OR PLUG IS DAMAGED OR WORN -- REPLACE BEFORE USING.

"WARNING"

RISK OF ELECTROCUTION

1. Connect only to properly grounded outlet. Do not remove ground pin.
2. Inspect cord before using - Do not use if cord is damaged.
3. Keep all connections dry and off the ground.
4. Do not touch plug with wet hands.
5. For a product rated 250 volts or less, single phase: "This product is provided with a ground fault circuit interrupter built into the power cord plug. If replacement of the plug or cord is needed, use only identical replacement parts."
6. For a product rated more than single phase, or more than 250 volts: "This product shall only be connected to a power supply receptacle protected by a ground fault circuit interrupter."
7. Read instruction manual before using.

DO NOT REMOVE THIS TAG      300-2797

## Risk of Fire, Electric Shock or Personal Injury

### IMPORTANT SAFETY INSTRUCTIONS

**WARNING** - When using this product, basic precautions should always be followed, including the following:

- Read all the instructions before using the product.
- To reduce the risk of injury, close supervision is necessary when a product is used near children.
- Know how to stop the product and bleed pressures quickly. Be thoroughly familiar with the controls.
- Stay alert - watch what you are doing.
- DO NOT operate the product when fatigued or under the influence of alcohol or drugs.
- Keep operating area clear of all persons.
- DO NOT overreach or stand on unstable support. Keep good footing and balance at all times.
- Follow the maintenance instructions specified in the manual.
- NEVER look directly into a nozzle. Always release the pressure in the high pressure hose by opening the spray gun after machine is shut off.
- For a grounded product rated 250 Volts, single phase or less:

This product is provided with a Ground Fault Circuit Interrupter built into the power cord plug. If replacement of the plug or cord is needed, use only identical replacement parts." Replace complete GFCI cord assembly if either the GFCI, plug or cord is damaged, frayed or worn.

WARNING - Risk of injection or injury - **DO NOT** directly discharge stream at persons. SAVE THESE INSTRUCTIONS

## Ground Fault Circuit Interrupter (GFCI) Protection

A GFCI is a safety device that protects the operator from electrical shock hazards by disconnecting power from a circuit to a load when a potentially dangerous condition occurs.

**NEVER BYPASS A GFCI.** Find out the cause or reason why the GFCI opened the circuit. This may require the services of a qualified electrician. Do not attempt any electrical repairs yourself.

This product shall be permanently connected to a dedicated power supply circuit protected by a Ground Fault Circuit Interrupter. This product shall be connected through a service disconnect located at the pump.

## Grounding

This product must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

**DANGER** - Improper connection of the equipment-grounding conductor can result in a risk of electrocution. Check with a qualified electrician or service personnel if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the product - if it will not fit the outlet, have a proper outlet installed by a qualified electrician. Do not use any type of adaptor with this product.

Note: Labels on this page are not to scale.

# Chemical Metering Instructions

Ounces of Chemical Per Gallon of Water

		Chemical manufacturers recommended ounces per gallon (Oz/Gal)									
		1/4	1/2	1	2	3	4	5	6	7	8
Pump Flow (GPM)	2.0	1/2	1	2	4	6	8	10	12	14	16
	2.2	5/9	1 1/9	2 1/5	4 2/5	6 3/5	8 4/5	11	13 1/5	15 2/5	17 3/5
	2.9	5/7	1 4/9	2 8/9	5 4/5	8 2/3	11 3/5	14 1/2	17 2/5	20 1/3	23 1/5
	3.0	3/4	1 1/2	3	6	9	12	15	18	21	24
	3.2	4/5	1 3/5	3 1/5	6 2/5	9 3/5	12 4/5	16	19 1/5	22 2/5	25 3/5
	4.0	1	2	4	8	12	16	20	24	28	32
		Ounces of chemical to be injected in one minute (Oz/Min)									

To calculate and adjust the chemical dilution for a Spray Master Technologies cleaning system, follow the steps below.

1. Find your pump GPM rating on the left side of the chart.
2. Follow the row identified in Step 1 to the right until you find the column heading with the chemical manufacturer's recommended ounces per gallon to be injected into the water.
3. The value at the point where the row (step 1) and the column (step 2) intersect is the ounces of chemical that should be injected into the SMT system during one minute to achieve the manufacturer's recommended chemical solution strength.

**EXAMPLE:**

A 2.9 gallon per minute (GPM) pump used to apply a chemical requiring a mix ratio of 4 ounces per gallon will need to inject 11<sup>3</sup>/<sub>5</sub> ounces of chemical during a period of one minute.

4. Fill a measuring cup (graduated in ounces) with the chemical to be injected and submerge the chemical pick-up tube with foot screen into the chemical.
5. Turn the pump on and set it to inject chemical.
6. Adjust the chemical metering device so that the ounces of chemical calculated in Step 3 above is drawn from the measuring cup during a period of one minute. (The adjustment can also be made injecting half the chemical in half a minute.)

**NOTE:** CHECK CHEMICAL METERING REGULARLY TO ENSURE ACCURATE CHEMICAL DISPENSING.



**SPRAY MASTER TECHNOLOGIES®**  
A product line of Assembled Products Corporation  
115 E. Linden Street, Rogers, Arkansas 72756

**479-636-5776 • 800-548-3373**

