

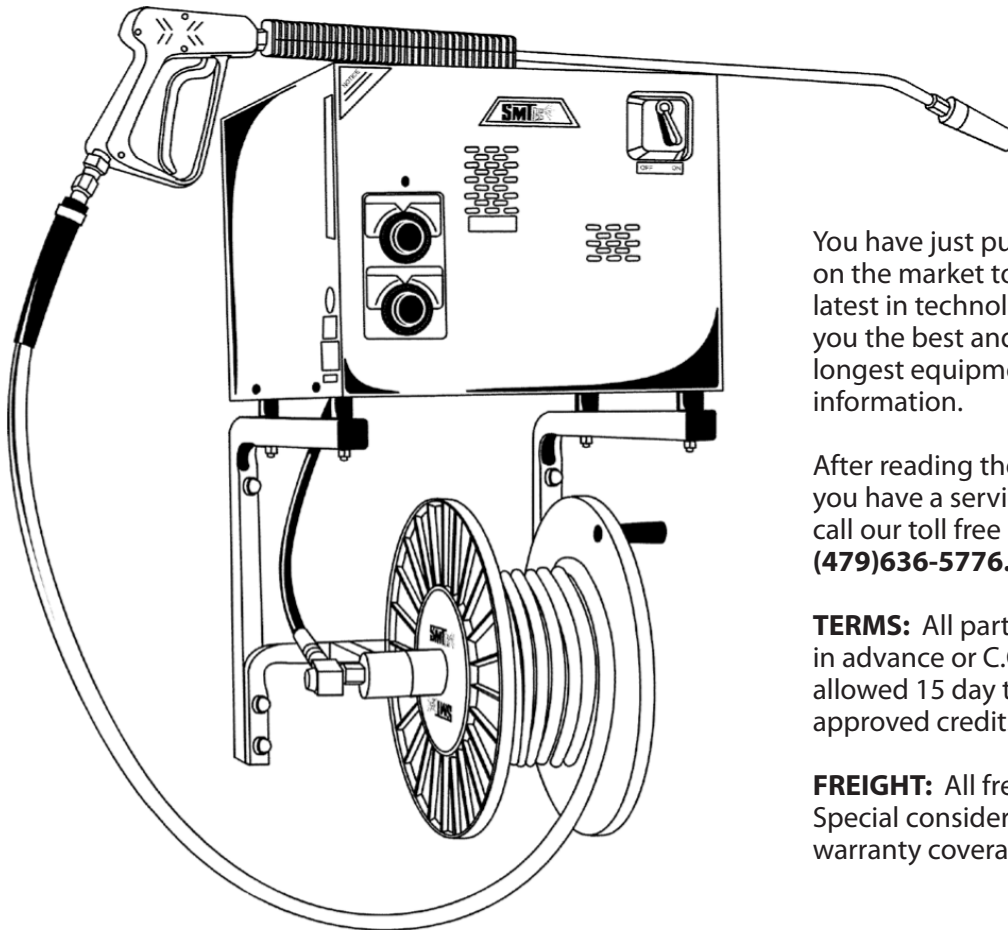


WWW.SPRAYMASTERTECH.COM

# SMT Wall Mount

## SMT-600W, SMT-1100W

# Owner's 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.

## 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**

## Table of Contents

Receiving	2
Returned Goods Policy	2
Warranty	2
Service Requirements	3
Service	3
Model Identification	3
Warnings	4
Ground Fault Circuit Interruptor Protection	5
Grounding	5
Extension Cords	5
Assembly and Installation	5, 6, 7, 8
Operation	9, 10
Accessories	10
Moving and Storage	11
Maintenance	11
Chemical Metering Instructions	12

## 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 November 1, 2008

**PARTS** -SMT warrants parts for wall mounted and rack mounted 600 series and 2000 series machine to be free from defects in material or workmanship for a period of 2 years from the date of purchase from date of shipment from factory (if proof of purchase is missing) to the original purchaser excluding items listed below.

SMT warrants parts for all other machines, wall mounted 1100 series machines and all portable machines to be free from defects in material or workmanship for a period of 1 year from the date of purchase (from date of shipment from factory if proof of purchase is missing) to the original purchaser excluding items listed below. This warranty is limited to repairing or replacing products to the original purchaser, which manufacturer's investigation shows were defective at the time of shipment by the manufacturer. All products subject to this warranty shall be returned F.O.B. Spray Master Technologies - Rogers, Arkansas for examination, repair or replacement.

The warranty set forth herein is in lieu of all other warranties, expressed or implied, including without limitation any warranties of merchantability or fitness for a particular purpose and all such warranties are hereby disclaimed and excluded by the manufacturer. The manufacturer shall not be liable for any further loss, damages, or expenses, including incidental or consequential damages, directly or indirectly arising from the sale or use of this product.

**ITEMS VOIDING WARRANTY**- This warranty is subject to the following conditions and limitations. The following voids all warranty claims on Spray Master Technologies products: Abuse, misuse, using excessive hot water temperatures - exceeding 120 degrees Fahrenheit (49 degrees Celsius), hard water conditions, using bleach as an injected chemical, failures caused by incorrect installation or failure to correctly wire the system at the electrical source.

**EXCLUDED ITEMS**- The following 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** - to repair or replace defective components shall be covered for a period of 1 year from date of purchase (90 days on excluded items), proof of purchase is required.

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

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

## Service Requirements

### Water:

- **Flow: minimum 5 GPM at 30 PSI**
- **Temperature: 40° to 120° F (maximum 125° F)**

### Electric:

- **SMT 600 & 1100 Series:**
  - **115 Volt/20 AMP Dedicated Circuit (NEMA 5-20R) or**
  - **208-230 Volt/15 AMP, Dedicated Circuit (NEMA 6-15R)**

### International:

- **See Serial Number Plate on machine**

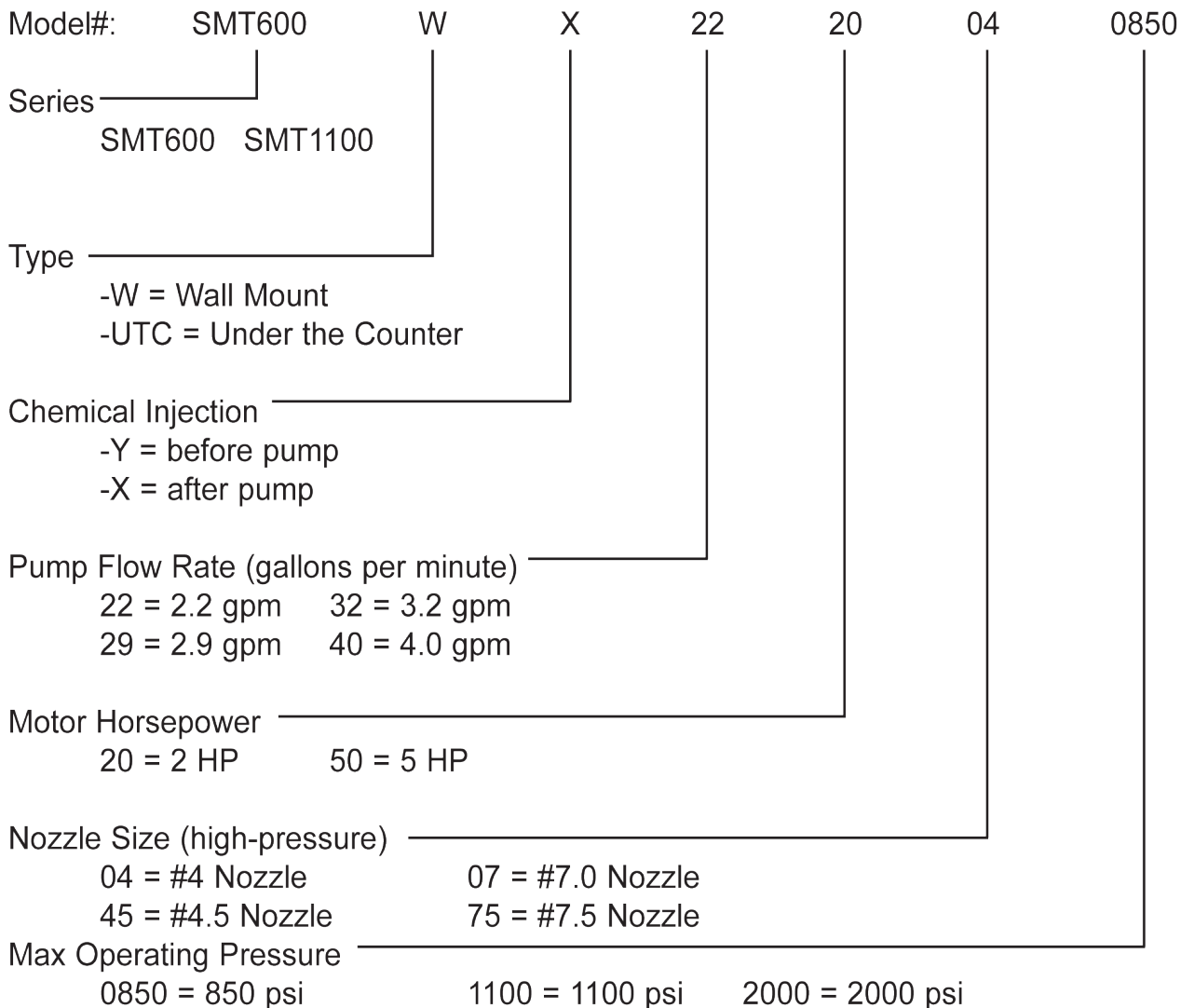
## Service

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:

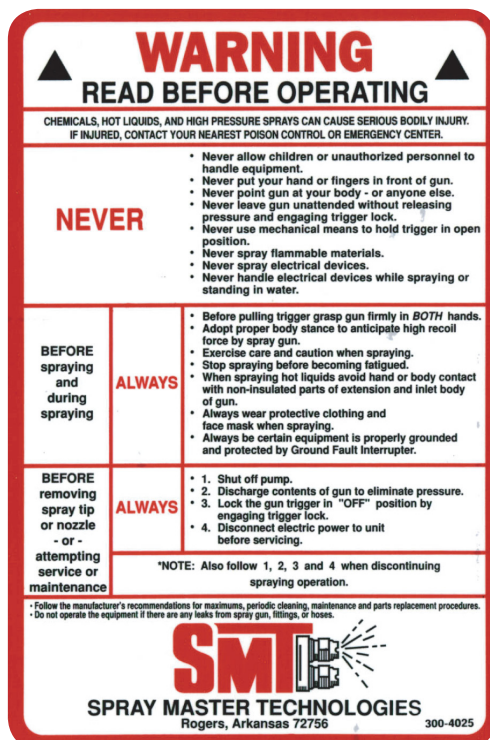
**1-800-548-3373 or (479) 636-5776.**

## Model Identification

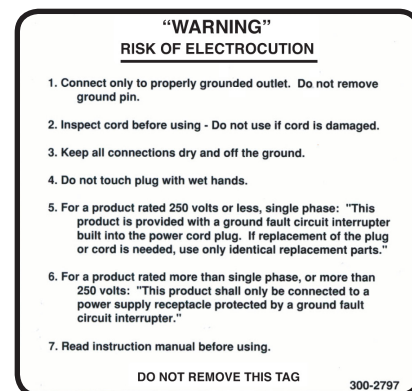
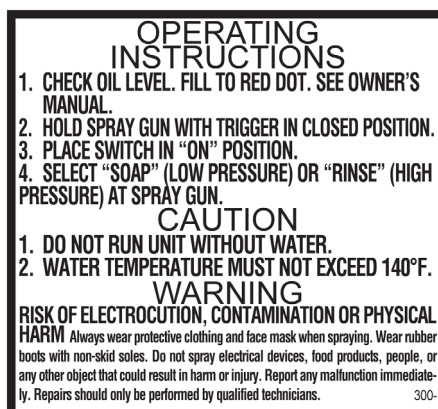
The complete model number located on the serial number label identifies the series, type and operating specifications of the system.



# Warnings



These "WARNING" labels are affixed to your system for all operators to read. If they have been removed or are unreadable, please call **(800)548-3373** or **(479) 636-5776** to order replacements.



*Note: Labels on this page are not to scale.*

## 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

This pressure washer is provided with a ground fault circuit interrupter (GFCI) built into the plug of the power supply cord. This device provides additional protection from the risk of electric shock. Should replacement of the plug or cord become necessary, use only identical replacement parts that include GFCI protection. Replace complete GFCI cord assembly if either the GFCI, plug or cord is damaged, frayed or worn.

## 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.

## 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.

# Assembly and Installation

## Planning The Installation

Prior to beginning the installation, thoroughly consider where the unit will be located, access to utilities and tool requirements for the job. These considerations will help to ensure the unit is properly installed in the best location with minimal difficulty.

**Location** - Safety and convenience during use and servicing of the equipment should be a primary concern in determining the specific location of the SMT wall-mounted cleaning system.

**Accessibility** - A readily accessible unit will ensure that the cleaning will be done regularly and with less effort. Accessibility will also provide convenience when servicing becomes necessary. Avoid installing the unit in a location that will become inaccessible.

**Clearances** - Adequate clearance overhead and on both sides is important. Fourteen-inch overhead clearance is required to remove the stainless steel cover. Ten-inch clearance is required on each side to remove the cover mounting hardware. Units equipped with a wall-mounted hose reel will require additional clearance on the right side for manually rewinding the hose.

**Structural support** - A fully assembled SMT wall-mount unit weights approximately 100 pounds. It is important for personal and equipment safety that the unit is securely fastened to a wall that will sustain this weight. Walls with metal framing should include backing for mounting the SMT unit.

**Safety** - The unit should be mounted on the wall at a height that does not present a hazard of being struck by personnel or interfering with the flow of traffic in the area in which the unit is installed.

**Electrical** - The SMT unit is equipped with a 4-foot long power cord. The unit or the power receptacle should be positioned such that the power cord can be easily connected to the receptacle with minimal strain on the cord. The power receptacle should be located above the SMT unit away from risk of exposure to water.

**Water** - The SMT unit is equipped with a 6-foot water supply hose. The unit or the hose bib should be positioned such that the supply hose can be easily connected with minimal stress on the hose.

**Noise** - As with all pressure washers, the SMT unit will make noise during operation. Avoid locating the unit in or adjoining any area that is noise sensitive.

**Chemical Supply** - The SMT unit can draw chemical from a 1-gallon bottle mounted on the wall or a 55-gallon drum. Ensure adequate chemical storage space if chemical(s) will be drawn from a large container.

## 6



# Assembly and Installation

## Installation Procedure (continued)

Refer to Figure 3 and Figure 4 for installation of the SMT-1100W. The SMT-1100W installation is similar to the installation of the SMT-600W. Differences in the installation are easily recognizable and should present little difficulty in adapting the instructions for the SMT-600W to the installation of the SMT-1100W.

## Brackets, Hose Reel & Hose Installation

**Wall-mount brackets and hose reel** - Brackets must be installed on 16-inch centers to align with the mounting holes in the frame of the pump and hose reel. Locate the mounting-holes for the brackets on the wall using the template provided as part of the shipping carton. Install the two wall-mount brackets with appropriate hardware. If a wall-mount hose reel is to be installed with the pump unit it will be attached with the same hardware that attaches the lower part of the wall-mount brackets. Attach the brackets to the wall with the top hole in the bracket, and then attach the hose reel to the lower part of the brackets. Install the hose reel and brackets together.

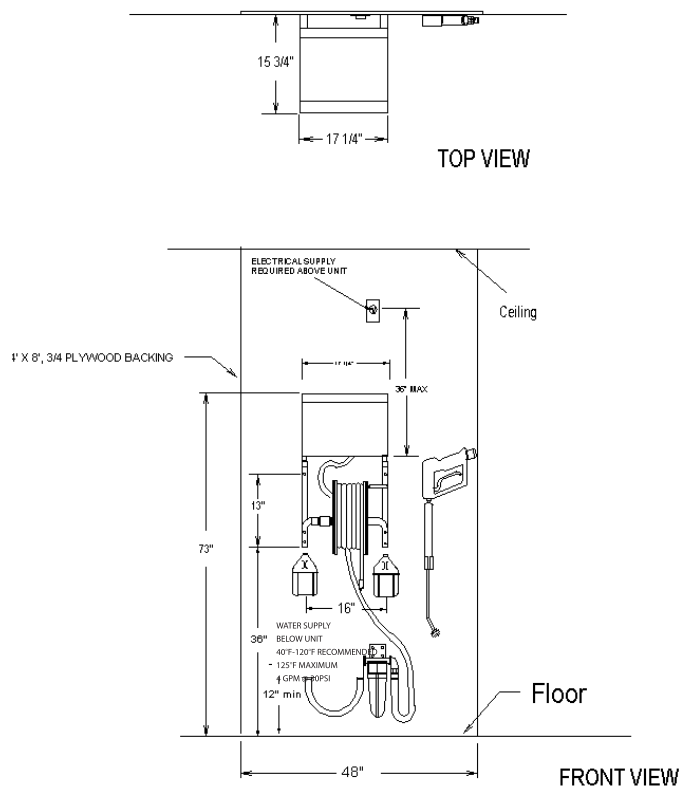


Figure 3 - SMT-1100W Front View

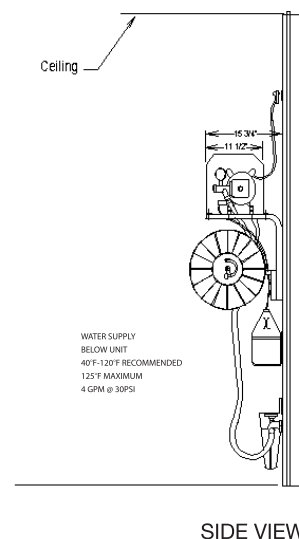


Figure 4 - SMT-1 100W Side View

**High-pressure hose** - Install the high-pressure hose on the hose reel by inserting the threaded end of the hose through the hole in the flange of the reel and tighten into the fitting on the handle side of the reel. Wrap the threads of the fitting with several wraps of Teflon tape. Secure the hose to the reel flange with the two rubber-coated clamps on the reel.

## Main Pump Installation

**Vibration/shock-mount:** Install four shock-mount pads onto the wall mount brackets following the directions in the instruction sheet provided with the hardware kit. Loosely install the nuts on the shock-mounts on the underside of the brackets. These will be wrench tightened after the pump is secured to the brackets.

**Pump:** Remove the stainless steel cover from the pump.

- Place two 2-by-4's across the two previously installed wall-mount brackets between and contacting the shock-mounts. Place the pump on the 2-by-4's, centered over the wall-mount brackets, with the blue tank to the left rear. Position the pump frame to align the holes in the bottom of the frame with the shock-mounts. Screw the shock-mounts up into the frame 1/2 turn past contact between the frame and the rubber.
- Remove the 2-by-4's and lower the weight of the pump unit onto the shock-mounts.
- Tighten the nuts on the bottom of the shock-mounts until the shock-mounts just begin to bulge, and then tighten one full turn.
- Remove the straps holding hoses and power cords during shipment. Extend hoses and power cord behind and below the pump.
- Remove the black oil fill shipping cap from the top of the pump and replace with the red vent cap attached to the pump head. Verify that the oil level in the pump is at the red dot on the oil level sight-glass. **Water supply hose:** Connect the 6-foot braided water supply hose to the float valve. Connection is made at the underside of the pump frame-plate, beneath the blue float tank, to the threaded ball-cock fitting. **DO NOT OVER-TIGHTEN.** Over-tightening will twist the float valve in the tank causing the float to bind against the side of the tank. The supply end of the water supply hose will be connected to the water filter after it is installed.

# Assembly and Installation

## Main Pump Installation (continued)

**Hose reel connection:** If equipped with a hose reel, route the high-pressure pump hose behind the unit and connect to the fitting on the hose reel swivel. Use several wraps of Teflon tape on threaded fitting.

**GFCI power cord:** Route the GFCI power cord out the back of the pump unit and connect it to the dedicated power receptacle.

## Cover installation

- Install the four cover mounting screws into the side of the frame just far enough to support the cover while the cover is positioned into place.
- Position the cover over the unit taking care not to damage the chemical metering knobs or the ON/OFF switch.
- Remove the two rear cover mount screws and lower the cover into position then replace the screws through the holes in the cover.
- Remove the two front cover mount screws and lower the cover into position then replace the screws through the holes in the cover. Ensure that the large washer inside the cover captures the top of the chemical selector mount bracket.

## Accessory Installation

**Water filter:** Install the water filter assembly on the wall within reach of the 6-foot hoses to the pump and the water supply hose bib. Connect the braided hose from the pump to the filter fitting labeled "OUT". Connect the hose supplied with the filter to the hose bib and to the filter fitting labeled "IN".

**Chemical baskets:** Install the chemical baskets below or beside the pump unit within reach of the chemical pickup tubes. Locating the chemical supply at or near pump level will enhance the chemical control function.

**Spray gun hanger:** Attach the spray gun hanger to the side of the wall-mount bracket at a convenient location using the self-drilling/self-tapping screws provided with the gun hanger.

## Functional Test

Functional test the unit upon completion of the pump installation, to ensure that it has been installed properly and that there are no leaks or malfunctions. **NOTE:** Set the ON/OFF switch to the "OFF" position before connecting the power cord to the receptacle. Ensure the water supply hose is connected to the water supply bibb and the hose bibb valve is fully open.

**Circuit Breaker (main):** Set the circuit breaker in the main panel to the on position.

**GFCI:** Connect the unit GFCI power cord to the dedicated receptacle and press the "RESET" button on the GFCI. Press the "TEST" button on the GFCI and verify that the GFCI trips to interrupt power to the unit. Press the "RESET" button and verify that the GFCI resets.

**Hoses and spray gun:** The hose may be permanently attached to the wall-mounted hose reel or connected by a quick disconnect fitting on the front underside of the pump unit. Connect the spray gun to the end of the hose. Direct the spray gun away from persons or objects and ensure the trigger is in the released position prior to turning the machine ON.

**ON/OFF:** Grasp the spray gun firmly and set the ON/OFF switch to "ON". The pump should be heard to operate. The pressure gauge will momentarily show a high-pressure spike and then drop back to near zero PSI. The pump will only show pressure on the gauge when the spray gun is in operation.

**Low/high-pressure:** Position the spray gun to operate it on low-pressure and squeeze the spray gun trigger. Note that the output is a low-pressure stream and that the pressure gauge indicates a pressure near or below 400 PSI. Position the spray gun to operate it on high-pressure and squeeze the spray gun trigger. Note that the output is a high-pressure stream and that the pressure gauge indicates a pressure approximately 50 PSI below the pressure shown on the Maximum Pressure label on the front of the pump.

**Chemical injection:** While operating the spray gun on low pressure, set the chemical selector valve to select one of the chemicals. Note that chemical is drawn up the chemical pick-up tubes and is dispensed with the low-pressure output. Several seconds may be required for the chemical to appear at the output. Repeat for the second chemical selector if so equipped. Adjust both chemical selectors to FLUSH and operate the spray gun on low pressure until the spray output is free of chemical. Set both chemical selectors to "OFF". Set the ON/OFF switch to "OFF". Squeeze the spray gun trigger to release pressure. Disconnect and store all equipment.



Wall Mount Gun with Remote



# Operation

## User Operated Controls

**ON/OFF Switch:** The Power ON/OFF switch is used to turn the pump motor on and off as necessary for operation. The ON/OFF switch is located on the upper right corner of the SMT-600-W cover. The SMT-1100-W ON/OFF switch is located just under the cover on the left side of the unit.

**Gun:** The spray gun assembly provides operator control of the flow, pressure and pattern of the high-pressure spray. The spray gun is connected to the output end of the high-pressure hose by quick-connect fittings. Squeezing the gun trigger while directing the spray nozzle toward the surface or equipment to be cleaned operates the spray gun. Your spray gun may be equipped with a dual nozzle or a vari-nozzle.

**Dual Nozzle:** The dual nozzle selector is used to select either the low-pressure "soap" 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 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 trigger. To select the high-pressure nozzle, rotate the spray gun 90° clockwise so that the spray gun handle is parallel to the ground with the hose extending to the operator's left, then squeeze the spray gun trigger. Once the nozzle has been selected and the spray gun trigger held open, the spray gun may be rotated and aimed in any direction without affecting pressure nozzle selection.

**Vari-Nozzle:** The vari-nozzle is used to select either low-pressure "soap" or high-pressure "rinse", and to adjust the spray-pattern from a wide-angle spray to a zero degree stream. Moving the black body of the nozzle toward or away from the gun handle respectively makes selection of high or low pressure. 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 of the nozzle, twist the black nozzle-body for the desired spray-pattern.

**Chemical Metering Selectors (600 series):** 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-600-W cover. This control is optional on the SMT-1100-W and is located on the upper right corner of the cover when so equipped. Turning the selector knob from the "OFF" position counter-clockwise selects and meters the chemical. The farther the control knob is turned, the higher the chemical concentration out the spray gun. See the chemical dilution chart and instructions on the back page of this manual. To flush the chemical injector, turn the metering knob fully clockwise and operate the spray gun and pump on low pressure for one minute.

**Chemical Metering Knob (SMT-1100-W):** The Chemical Metering Knob is located on the chemical injector and is used to set the chemical concentration in the spray output. The chemical metering knob has a graduated scale that is used for reference setting only. Turn the metering knob fully clockwise for NO chemical. Turn the metering knob counter-clockwise to increase the chemical concentration to the desired strength. See the chemical dilution chart on the back page of this manual.



SMT-600W

# Operation

## Preliminary Equipment Check

- Perform the preliminary checks prior to each operation to ensure safe operation and prolonged equipment life.
- Check the oil level to the red dot on the oil sight gauge on the front of the pump.
- Check to ensure the GFCI power cord is in good condition. Replace complete GFCI cord assembly if either the GFCI, plug or cord is damaged, frayed or worn. Test the GFCI circuit weekly by pressing the TEST button on the GFCI. Reset the GFCI after test by pressing the RESET button on the GFCI.
- Check hoses for breaks and damaged fittings.
- Check spray gun for damaged fittings, nozzles and trigger.

## Preparation For Use

- Verify that the surface or equipment to be cleaned can withstand the high-pressure spray.
- Wear safety goggles or other approved eye protection when cleaning with high-pressure spray washers.
- Check with your Safety Representative for other appropriate Personal Protective Equipment (PPE) that may be required for the job being performed.
- Ensure the ON/OFF switch is set to the "OFF" position.
- Connect high-pressure hose and spray gun to the pump output.
- Verify that the water supply hose is connected to the water supply and that the water supply valve is fully open.
- Verify that the GFCI power cord/plug is fully inserted into the electrical receptacle and press the RESET button on the GFCI.
- Verify there is adequate chemical and that the chemical pick-up tubes are fully submersed in the chemical.

## Cleaning With The SMT System

- Hold the spray gun firmly.
- Direct the spray gun nozzle away from individuals.
- DANGER: Electrocution: Serious injury or death. Do not spray energized electrical equipment or electrical outlets.
- Set ON/OFF switch to "ON".
- Direct the spray gun nozzle toward the surface or equipment to be cleaned and squeeze the spray gun trigger. (*Note: Use low-pressure for SOAP application – high-pressure for RINSE*).
- Apply soap 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 from 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 can not be disconnected while the system is pressurized.*)
- Disconnect and store all equipment.

## 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 (use with 600 & 1100 series systems)

**Trap Shooter** – Drain cleaner (use with 600, 1100 series systems)

**Tornado Spray Gun** – High impact spray gun (use with 600, 1100 series systems)

**Flexi-wand Spray Gun** – Flexible wand spray gun (use with 600 & 1100 series systems)

**Wall and Tile Brush** – 10" x 36" scrub brush (use with 600 & 1100 series systems)

**Model 300PHR** – Portable hose reel (use with 600 & 1100 series systems)

**Model 200WR** – Wall mount hose reel (use with 600 & 1100 series systems)

**Heavy Duty Hose Reel** – Portable hose reel (use with 600, 1100 series systems)



Trap Shooter

# Moving and Storage

**Moving:** SMT Wall-Mount units are stationary units that are installed on wall-mounted brackets. Once installed, it is impractical to move the pump for use in various locations.

Stationary units are heavy and care should be taken during installation to use proper handling techniques, including two-man lifting.

**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.**



Hummer Jet Sr.

# 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.

**Water Supply Filter:** A quality water supply filter is essential to pump life longevity. Do not operate your pump without a water supply filter. Replace the 5 micron water supply filter every 3 months or as needed to ensure an adequate supply of clean water to the pump. A dirty filter can restrict water flow and cause intermittent shutdown of the pump.

**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 2 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.

# Chemical Metering Instructions

## Chemical Dilution Chart & 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.

- Step 1** Find your pump GPM rating on the left side of the chart
- Step 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.
- Step 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 3/5 ounces of chemical during a period of one minute.**
- Step 4** Fill a measuring cup (graduated in ounces) with the chemical to be injected and submerge the chemical pick-up tube with foot screen in the chemical.
- Step 5** Turn the pump on and set it to inject chemical.
- Step 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.**



WWW.SPRAYMASTERTECH.COM

**SPRAY MASTER TECHNOLOGIES®**

*A product line of Assembled Products Corporation*

115 E. Linden Street, Rogers, Arkansas 72756

**479-636-5776 • 800-548-3373**

