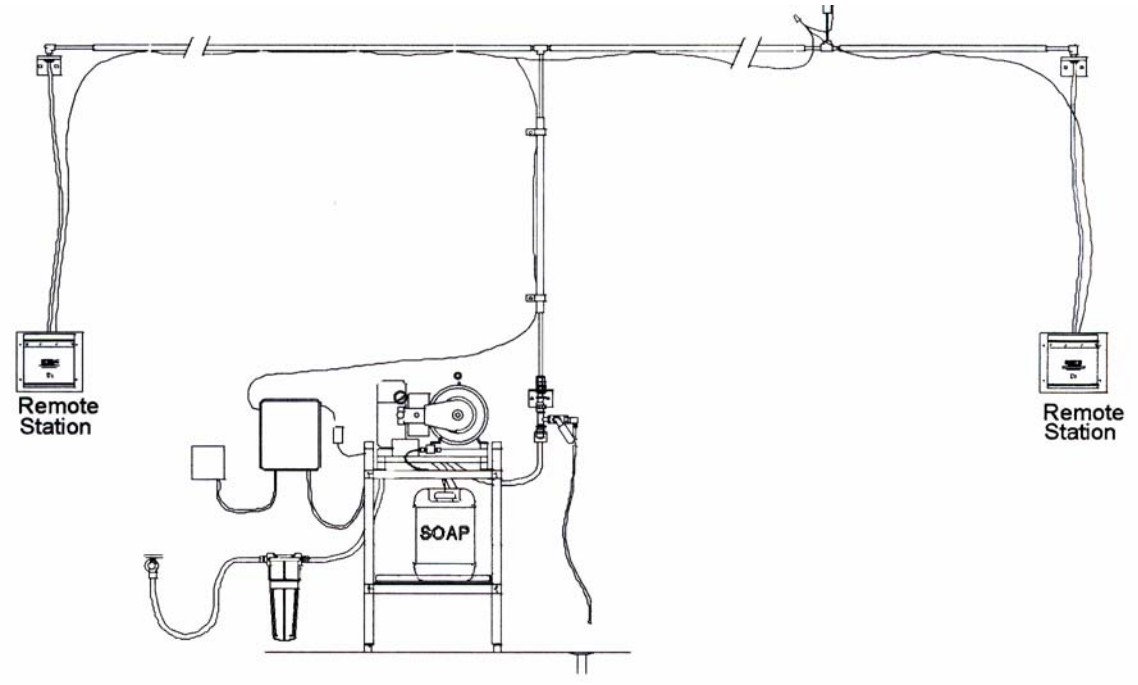
Express Service Manual
SMT Central Systems

For Models: 600REY, 600WCY, 1100WCX, 2000REY, 2000WCY



For technical assistance call:
800-548-3373 or (479) 636-5776
Fax: (479) 636-3245

Spray Master Technologies
115 E. Linden Street
Rogers, AR 72756 USA

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SMT WARRANTY - LIMITED
Effective June 19, 2003

SMT warrants this machine to be free from defects in material or workmanship for a period of 1 year from the date of purchase (or 390 days 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.

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 140 degrees Fahrenheit (60 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.

PARTS - SMT warrants this machine to be free from defects in material or workmanship for a period of 1 year from the date of purchase (or 390 days from the date of shipment from the factory if proof of purchase is missing) to the original purchaser.

The following items are excluded: SPRAY GUNS, WANDS, HOSES, NOZZLES. These items are covered by the above warranty for 30 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 (30 days on excluded items), proof of purchase required.

SPRAY MASTER TECHNOLOGIES
115 E. LINDEN
ROGERS, ARKANSAS, 72756
1-800-548-3373
LOCAL: 479-636-5776 FAX: 479-636-3245

MODEL SPECIFICATIONS

SERVICE REQUIREMENTS:

Water:

Flow: minimum 5 gallons per minute @ 30 PSI (3/4" hose bib connection)
Temperature: 40° to 140° F (maximum 125° F recommended)

Electric:

SMT 600 &1100 SERIES:

115 volt/20 amp or 208-230 Volt/15 amp Dedicated Circuit with Ground Fault Breaker (hardwired)

2000 Series:

208-230 volt/ 30 amp, Dedicated Circuit with Ground Fault Breaker (hardwired)

International: See serial plate on machine.

MODEL IDENTIFICATION:

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

Model #: SMT 600 RE Y 22 20 04 0850

Series
SMT 600 SMT 1100
SMT 2000

Type
-RE = Rack Mount System
-WC = Wall Mount System

Chemical Injection
Y = Before the Pump
X = After Pump

Pump Flow Rate (gallons per minute)
22 = 2.2 GPM 32 = 3.2 GPM
29 = 2.9 GPM 40 = 4.0 GPM

Motor Horsepower
20 = 2 HP Motor 50 = 5 HP Motor

Nozzle Size
04 = #4 Nozzle 75 = # 7.5 Nozzle 08 = #8 Nozzle

Max Operating Pressure
0850 = 850 PSI 1100 = 1100 PSI 2000 = 2000 PSI

Express Service

If you have a problem, we can solve it QUICKLY and EFFICIENTLY. Your Spray Master Technologies pressure cleaning system has been designed for rapid and easy repairs. Some, you can do, others we will do.

With the "EXPRESS SERVICE" program, your machine has been divided into six major component groups. These groups consist of:

Group #1: Pump, Unloader, Injector, In/out hoses
Group #2: Motor, Switch, and Cord Set
Group #3: Float Tank Assembly
Group #4: High Pressure Hose
Group #5: Spray Gun Assembly
Group #6: Accessories and Miscellaneous Parts

Like circuit boards on a computer, these groups can be exchanged as a complete unit. The advantage is your savings in time and money.

With a toll free call to experienced service technicians at Spray Master Technologies, the problem can usually be diagnosed to one of the six component groups by answering a few questions. The person doing the parts replacement doesn't need to have any equipment knowledge. He/she need only be able to loosen and tighten a few bolts. The "Express Service" exchange program eliminates having an inexperienced person trying to repair a complicated part.

If you do your own "GROUP" exchange, you won't be paying for those high labor rates and expensive service calls. With a few basic tools, the defective component group can be removed and replaced or sent to the factory for repair by a qualified technician with minimum downtime. To further expedite the repair, either you or your dealer can stock spare components "groups". However, with express mail services, rarely does it take more than 48 hours to receive a component. This is usually faster and less expensive than many service companies can make a service call.

The enclosed information shows all components groups and accessories. Our trained personnel are ready to help. If you need service, try our "EXPRESS SERVICE" plan. It will save you time and money.

Theory of Operation

General Principle of Pressure Washers.

Pressure in Spray Master Technologies and most other pressure washers is produced by forcing a fixed gallons per minute (GPM) volume of water through an orifice. The fixed volume of water is provided by a positive displacement pump, which will produce a specific GPM of water flow regardless of the operating pressure. The orifice is a part of the nozzle on the end of the spray gun. The volume of water and the orifice size can be varied, resulting in a corresponding change in the operating pressure of the system. The following paragraphs explain the function of system components and flow sequence in SMT pressure cleaning systems. This brief theory of operation will provide a service tech with information necessary to quickly diagnose and correct any malfunction of the system.

Water Flow

Refer to Figure 1, Simplified SMT Central Pressure Cleaning System, for the following discussion. The key plumbing components of a basic SMT Central Pressure Wash System consists of 1) water filter, 2) water supply float tank, 3) float switch, 4) pump, 5) unloader valve, 6) chemical inhibit flow switch, 7) bleeder valve, 8) interconnecting hi-pressure tubing, 9) remote stations, 10) hi-pressure hose, 11) spray gun/nozzle, 12) line pressure release valve and 13) thermal limit switch.

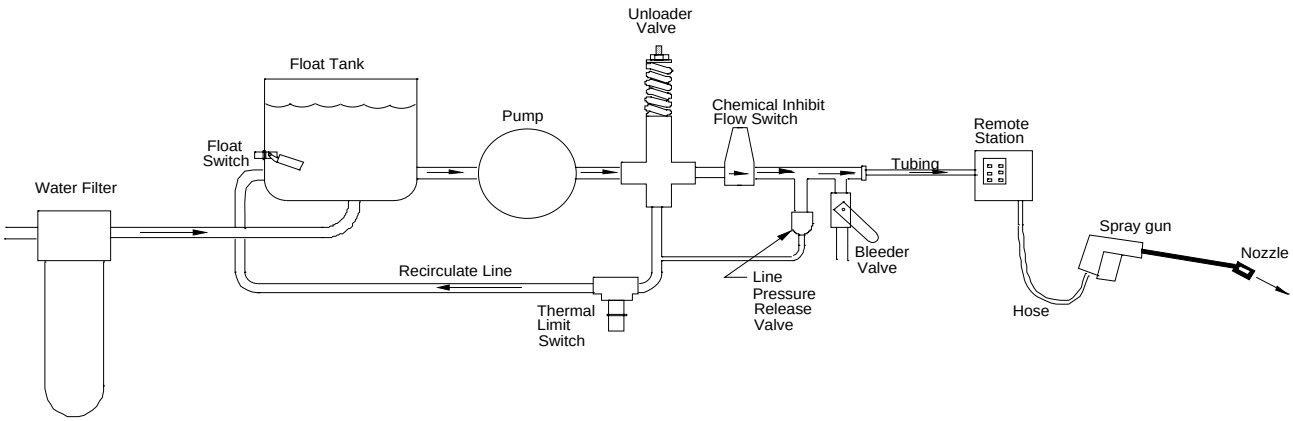


Figure 1. Simplified SMT Central Pressure Cleaning System

The water supply source to the system must provide a minimum flow of five gallons per minute at 30 PSI, and should be filtered through a high quality filter to eliminate contaminates that will cause wear and shorten the life of the pump.

The output from the filter enters the float tank through one or two float valves within the tank. The float tank maintains a minimum water source for the pump and is monitored by the float switch. If the water level falls below the float switch, the system is disabled to prevent damage that would occur from running the pump dry.

When the pump is in operation, it draws water from the float tank and pumps it out to the unloader assembly. The unloader assembly directs the water through the system to the spray gun if the spray gun is open, or it diverts the water back to the float tank, through the re-circulate path, if the spray gun is closed. In addition, the unloader is used to set the maximum operating pressure of the system.

From the high-pressure output of the unloader, the water flows through the chemical inhibit flow-switch, past the bleeder valve assembly to the interconnecting high-pressure tubing and out to all the remote stations. The pump can service up to ten remote stations. Each remote station is equipped with a quick-connect port for connection of a high-pressure hose. From the remote station, the water flows through the hose to the spray gun.

The water passes through the spray gun when the gun-trigger is activated and flows to the nozzle at the end of the lance. As the water is forced through the orifice in the nozzle, pressure builds within the system. The size of the orifice in the nozzle determines the maximum pressure that can be achieved with the flow rate provided by the pump. The smaller the orifice, the higher the pressure. Most SMT systems are equipped with a dual nozzle selector and two nozzles. The nozzle with the small orifice will produce high pressure, while the nozzle with the large orifice produces low pressure.

> **Note:** Selecting the correct nozzle size for the system is critical to the correct operation and cleaning effectiveness. A nozzle with too small an orifice will result in less water flow and reduced cleaning effectiveness and may result in too high pressure, overloading the motor. A nozzle too large will result in lower pressure and reduced cleaning effectiveness.

During operation, when the spray gun trigger is released, pressure builds in the system until it overcomes the tension on the unloader spring and activates the unloader assembly. When the unloader assembly is activated, it locks pressure into the output line to the spray gun and redirects the flow of water, at low pressure, through the recirculate line back to the system float tank. Recirculation will continue until the line pressure is reduced by re-activating the trigger on the spray gun. This unloading feature prolongs the life of the pump and motor by removing the strain on the pump and motor during periods when the spray gun is inactive.

Electrical System Theory

Electrical Requirements

The electrical requirements for the SMT Central Pressure Cleaning system depends on the SMT model installed. Regardless of model, all central systems must be powered by a dedicated circuit with a Ground Fault Circuit Interrupter (GFCI) breaker in the main breaker panel and a service disconnect at the pump. Electrical service requirements are:

- Model 2000REY/WCY: 208/230 Volt, 30 Amp
- Model 600REY/WCY: 208/230 Volt, 15 Amp
  115 Volt, 20 Amp (optional)
- Model 1100WCX: 208/230 Volt, 15 Amp
  115 Volt, 20 Amp (optional)

Line voltage to the system is supplied from the service disconnect into the SMT Master Control Panel (MCP) to the input side of contactor K3.

Motor Drive Circuit

Refer to figures 2 and 3 (schematic and wiring diagram of the SMT electrical circuits). When contactor K3 is energized by the control circuit, the line voltage is applied through the contactor to the motor. The motor starts up, drives the pump and produces water flow.

Schematic, SMT 600/2000 Series Central Systems

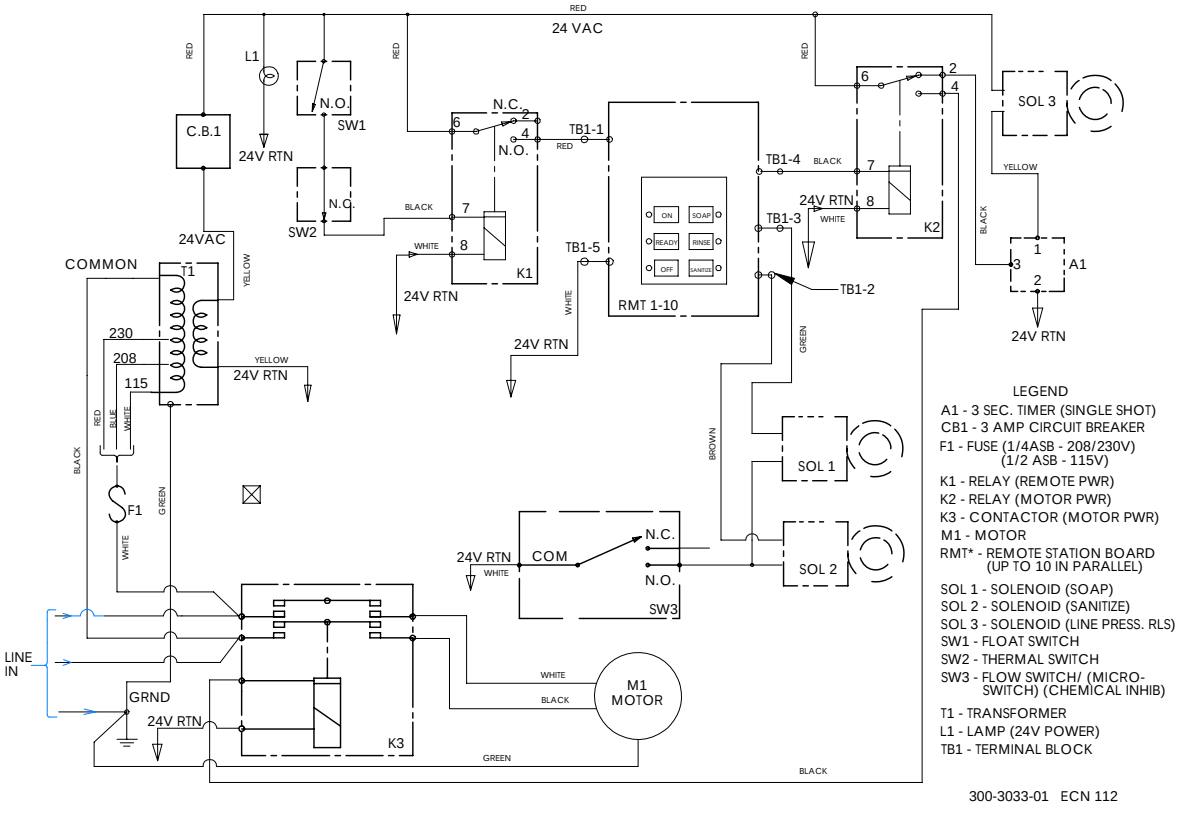


Figure 2. SMT Central System Schematic

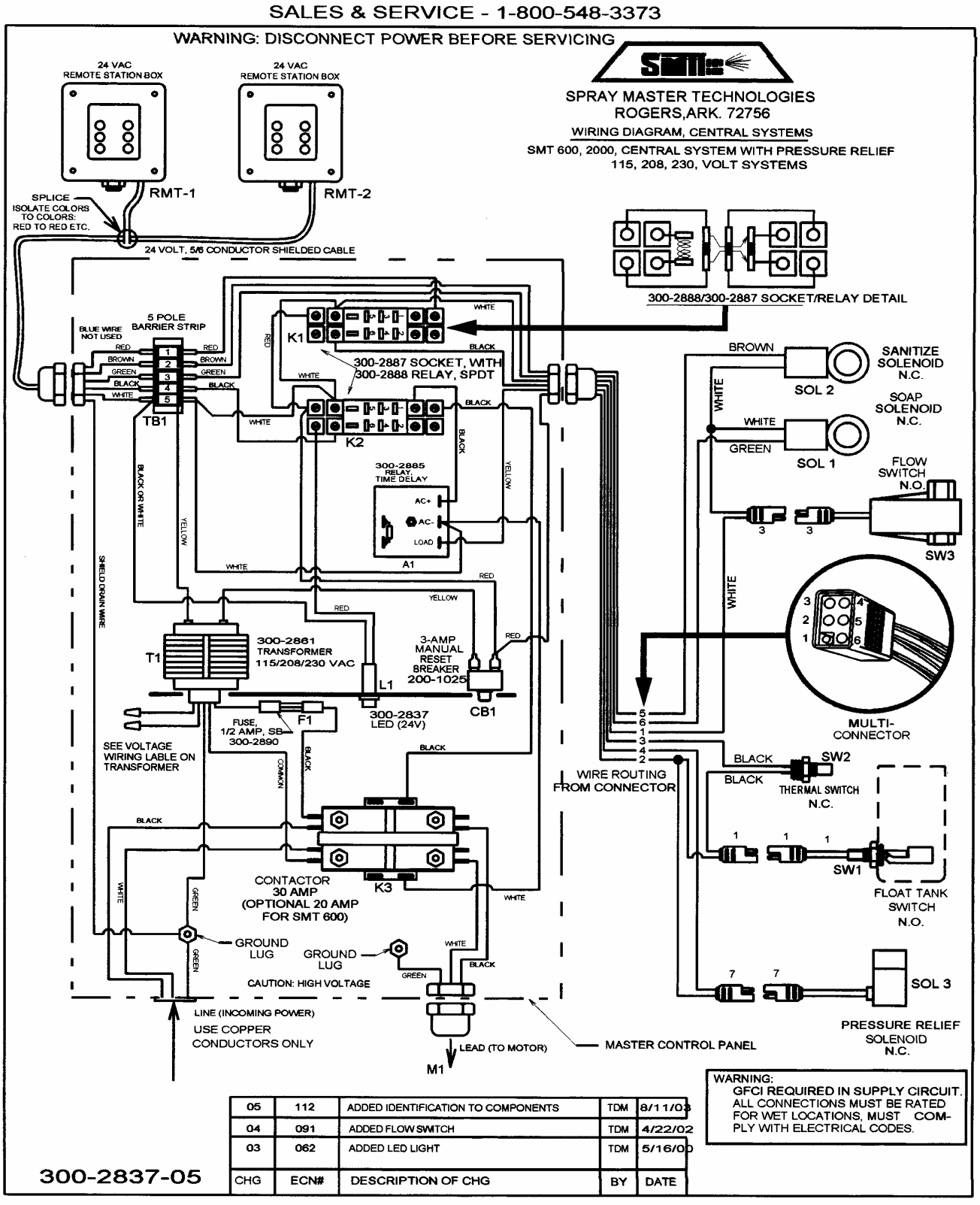


Figure 3. SMT Central System Wiring Diagram

Control Circuits

Control circuits within SMT central systems are 24 Volt AC low voltage. The control circuits include the 24V AC power circuit, water condition sensors circuit, remote stations circuit, motor control circuit, chemical control circuits and the line pressure release circuit.

24V AC power circuit provides low voltage AC for all control circuits. Line voltage to the system is picked off of the contactor line terminals and applied through fuse (FI) to the multi-tap input of the 24V transformer (T1). F1 requires a ¼ amp slow-blow fuse for 208 and 230 volt inputs, or ½ amp slow-blow fuse for 115 volt input. Voltage is applied to Transformer (T1) through one of three leads of the primary winding. The multi-tap primary leads permit system operation on 115, 208 or 230 volts AC. The 24volt output is routed through 3 amp circuit breaker (CB1) to the 24V AC Power indicator (LI) and the rest of the control circuits. Current flow through all circuits returns to the transformer through the 24V AC return line. The 24V AC is connected to Float Switch (SW1), Remote Station Power Relay (K1), Motor Drive Relay (K2), and to the Line Pressure Release Solenoid (SOL 3).

Water condition sensor circuits provide protection to the pump when adverse water conditions exist. The sensors will remove power from the remote stations when the water supply level is too low or water temperature exceeds 140° F. Float Switch (SW1) is closed when the water level in the float tank is above the minimum operating level for the pump, completing the circuit through Thermal Limit Switch (SW2) which will energize Relay (K1) and apply power to all Remote Stations (RMT-*). Thermal Limit Switch (SW2) is normally closed. When water temperature within the system exceeds 140°F, Thermal Limit Switch (SW2) will open and remove power from the remote stations.

Remote station control circuits facilitate remote operation of the pump and consists of up to ten remote stations (TB1 – TB10), five conductor shielded cable and 5-pole Terminal Block (TB1). All signals to and from the remote stations enter and exit the Master Control Panel through terminal block (TB1). Signal lines to/from the remote are:

- Red wire – 24V AC power (out to remote station)
- White wire – 24V AC return (out to remote station)
- Black wire – 24V AC motor control signal (in from remote station)
- Green wire – 24V AC soap control signal (in from remote station)
- Brown wire – 24V AC sanitizer control signal (in from remote station)

All remote stations are connected in parallel through the 5 conductor shielded cable. Each remote is spliced into the main trunk of the control cable by color matching and connecting the wires at each splice.

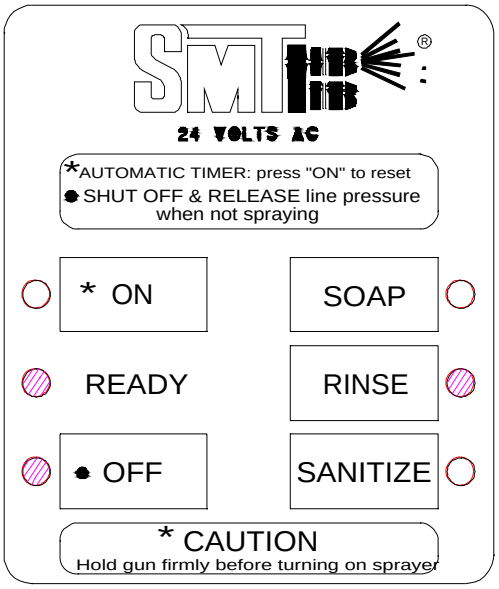


Figure 4. Remote Station Control Panel

Refer to Figure 4, Remote Station Control Panel. When power is initially applied to each remote station, the Remote Station Control Panel will power-up in the "READY" state with the indications and outputs as shown.

Touch pad-button	Lamp	Control signal	Lead/wire	Output signal
ON	off	Motor control	Black	0 volt
READY	on	n/a		
OFF	on	n/a		
SOAP	off	Soap control	Green	0 volt
RINSE	on	n/a		
SANITIZE	off	Sanitizer control	Brown	0 volt

The remote stations will remain in the "READY" state until it is operated with the touch-pad buttons on its control panel or another remote is operated. When the "ON" button is pressed, the "ON" lamp illuminates, the "READY" lamp and "OFF" lamp will extinguish, and 24V AC will be present at the motor control signal output (black wire). The motor control output must be active for either the soap or sanitize controls to be active regardless of what the soap or sanitize lamps may indicate.

> **Note:** The motor control lead (black) is both an output and input for the remote station. When any remote station is turned to "ON" the 24V AC out from that remote station is applied to the motor control circuit and to the Motor Control lead (black) of all other remote stations. The 24V AC applied by the active remote station to all other remote stations becomes an "inhibit" input signal. The inhibit signal will force the remotes out of the "READY" state and disable them.

The Motor control circuit is the signal control path from the remote station to turn on the pump. When the ON button is pressed on the remote station, the motor control signal (24V AC) is sent through the 5-conductor control cable black wire to Terminal Block (TB1) pin 4 in the Master Control Panel. From TB1-4, 24V AC is sent to the coil of Motor Control Relay (K2). When K2 closes, 24VAC power is applied through its contacts to the coil of Motor Contactor (K3) to turn on the pump motor (M1).

Chemical Control Circuits are driven by the remote station circuit boards and control the flow of chemical in the system. The chemical control circuits become functional only when the pump is ON. While the pump is running, the operator may select either Soap or Sanitizer using the Remote Station Control Panel. The Soap circuitry and the Sanitize circuitry operation is identical. When the operator selects Soap, the remote station Control Panel will send 24V AC out the green lead through the 5-conductor cable to Terminal Block (TB1) pin 3 of the Master Control Panel. From TB1-3 the 24V AC is routed to the coil of Soap Solenoid (SOL 1). SOL1 is connected in series with Chemical Inhibit Switch (SW3) to the 24V AC return. If SW3 is closed, indicating that water is flowing out to the spray gun, the Solenoid is activated and chemical is injected into the flowing water. If the spray gun is closed and the water is re-circulated to the float tank rather than through the flow switch, the flow switch SW3 is open and the chemical solenoids are disabled. Only one chemical control circuit can be enabled at a time.

The Line Pressure Release Circuit controls the Line Pressure Release Valve (SOL3) to automatically release pressure from the system, upon turning the pump off. The line pressure release circuit is driven by the normally closed output of Motor Control Relay (K2). When the pump is turned “OFF” by the control panel, Relay K2 is de-energized, sending 24V AC from the relay to solid state 3-Second Timer (A1) pin 3. Upon receiving the 24V AC signal, A1 energizes SOL3 for three seconds to open the solenoid and release any pressure that may remain in the pressurized output lines. SOL3 is de-energized and closes the Line Pressure Release Valve at the end of three seconds, or immediately upon turning the pump back “ON”.

Central System Diagnostic Chart

SMT 600REY/WCY, 1100WCX, 2000REY/WCY

Preliminary Checks: Check the following items to ensure that any problems with operation are not caused by conditions external to the SMT Central system.

1. Circuit Breaker in the main panel is reset.
2. Service disconnect at pump is ON.
3. Water supply hose bib is fully open.
4. Water supply temperature is less than 140° F.

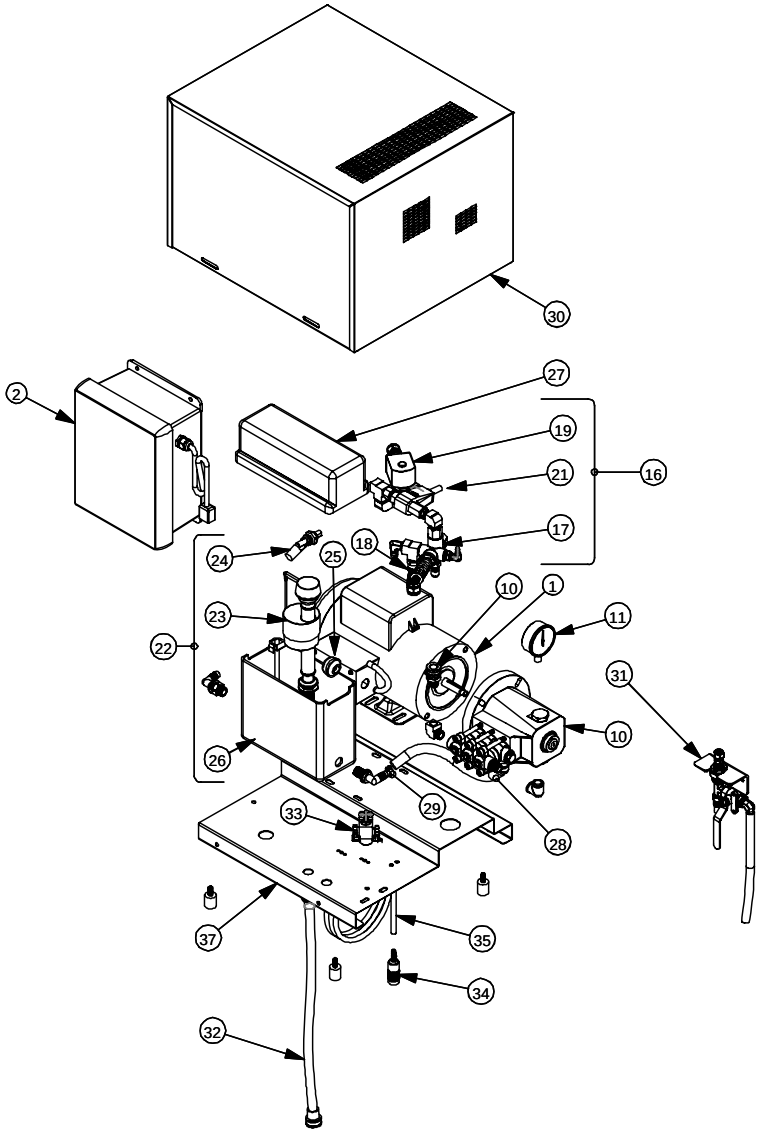
Check all wiring to ensure all connections are secure and no wires have been damaged. Verify the wiring is correct in accordance with the wiring diagram inside the cover of the Master Control Panel (MCP).

Symptom	Source	Reason	Corrective action
System Won't Operate			
System won't operate. 24VAC lamp in MCP not illuminated	Fuse F1 open in MCP	burnt (failed)	replace fuse
		faulty transformer T1	replace transformer
		faulty 3 second timer A1	replace timer
		shorted contactor coil K3	replace contactor
		faulty circuit board (RMT-*)	replace circuit board
		short circuit in 24V circuits	correct wiring problem
	3 amp circuit breaker CB1 in MCP	tripped	reset circuit breaker
	Transformer K3	open winding	replace transformer
System won't operate. 24VAC lamp in MCP is illuminated but no power to any remote stations	Float switch SW1	obstructed movement	remove obstruction in float tank
		open contact	replace float switch
	Thermal limit switch SW2	water too hot	decrease water temperature
		loose electrical connection	secure connection
		open contact	replace thermal switch
	Relay K1	open coil or burnt contact	replace relay
	Pressure switch (SMT1100 only)	open contacts	replace pressure switch
		water supply pressure too low	check water supply source

System won't operate. All remote stations have power	Remote Station circuit board RMT*	loose wires or defective board	secure wires or replace circuit board
	Relay K2	open coil or burnt contact	replace relay
	Contactor K3	open coil or burnt contact	replace contactor
	Motor M1	thermal overload switch is tripped	reset or replace thermal overload switch
		motor windings bad	replace motor
Intermittent Shut-down			
Intermittent shut-down. Shuts down after 30 minutes of operation	NORMAL OPERATION	System is designed to shut down after 30 minutes of operation	Press "ON" button on remote station touch-pad
Intermittent shut-down. Shuts down in less than 30 minutes, but can restart immediately	Water supply pressure to low	trips float switch	open water supply valve fully, clean water supply filter,
Intermittent shut-down. Shuts down in less than 30 minutes. Remote stations loose power and cannot restart for 10 to 15 minutes.	Water supply temperature above 140° F	trips thermal limit switch	reduce water supply temperature
Intermittent shut-down. Shuts down in less than 30 minutes. Remote stations have power but cannot restart for 15 to 30 minutes.	Motor M1 thermal overload switch	blocked motor fan	remove obstruction
		pressure too high	adjust unloader for lower operating pressure
		weak motor	replace motor
Low Pressure			
Low pressure (always)	Pressure gauge	defective reading	replace gauge
	Hoses	air leak at pump intake	tighten hose clamps or replace hose
	Bulb filter (inside tank)	clogged	clean and replace
	Nozzle	wrong size or worn	replace nozzle
	Unloader	maladjusted	adjust unloader for pressure gauge indication of 50PSI less than "MAX PRESSURE" indicated on pump-head
		worn	replace unloader
	Pump	worn valves and seals	rebuild pump or return to factory

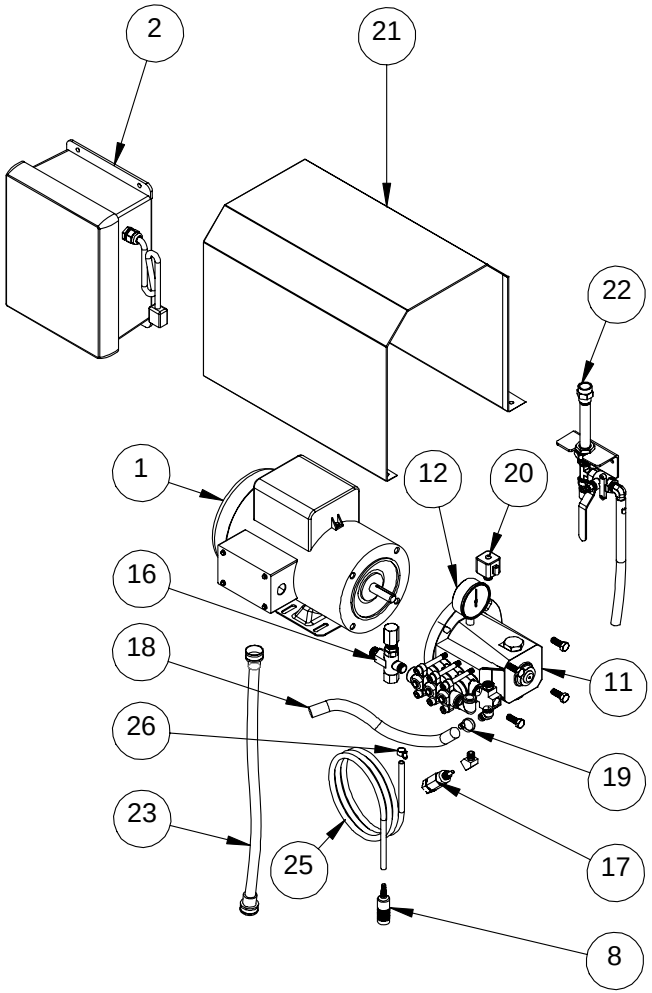
Low Pressure (when soap or sanitize selected)	Chemical supply	no chemical, sucks air	refill chemical supply
	hoses	air leak at input to chemical solenoids	tighten hose clamps or replace hose
Low Pressure when spraying (high pressure when not spraying)	Line pressure release valve	stuck open	clean Line Pressure Release solenoid valve
		damaged solenoid plunger	rebuild or replace Line Pressure Release solenoid valve
No Chemical			
No Chemical at any remote station	Chemical supply	no chemical	refill chemical supply
	Chemical control Micro-switch (older machines)	maladjusted	adjust so that micro-switch is activated when spray gun is open and deactivated when spray gun is off
	Chemical control Flow-switch	stuck	clean or replace
	Chemical pick-up tubing	air leak	tighten hose clamps or replace hose
		kinked tubing	straighten tubing
	Chemical foot-screen	clogged	flush with hot water or replace
	Chemical solenoid	loose connection	secure connections
		clogged	clean or replace
No Chemical at one remote station only	Remote station	loose wires	secure connection
		defective circuit board or touch-pad	replace circuit board and/or touch-pad
	Chemical injector (SMT1100 only)	clogged or sticking check valve	clean or replace
Excessively High Pressure			
Gauge pressure exceeds maximum listed on pump head	Pressure gauge	faulty indication	replace gauge
	Nozzle	wrong size or blocked	replace with correct size or remove obstruction
	Unloader	maladjusted	adjust unloader for pressure gauge indication of 50PSI less than "MAX PRESSURE" indicated on pump-head
	Spray gun	partially opened or clogged	clean or replace
	Quick Connect fittings	partially opened or clogged	clean or replace
	Hoses	restricted	clean or replace

Burnt Contactor			
Contactor, burnt contacts	Line voltage	too low	Check electrical power by electrician
		drops under load and stays low	Check electrical power by electrician
		Drops under initial load	Check electrical power by electrician
	Relay K1 or K2	defective relay or relay socket	replace relay or socket
	Control cable	Loose or damaged wire in control cable	repair splice or tighten connection



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	300-0040 300-0041	MOTOR ASSEMBLY, 600REY/WCY, PRE WIRED, 115V*** MOTOR ASSEMBLY, 600REY/WCY, PRE WIRED, 208-230V***	1
2	300-1885	MASTER CONTROL PANEL ASSEMBLY, 600REY/WCY***	1
3	300-2888	RELAY, ICE CUBE, (NOT SHOWN)	2
4	300-2849	FUSE, 1/4 AMP (230V) (NOT SHOWN)	1
5	300-2890	FUSE, 1/2 AMP (115V) (NOT SHOWN)	1
6	300-3790	TIMER, 3 SEC. (NOT SHOWN)	1
7	300-1919	CONTACTER, 30 AMP (NOT SHOWN)	1
8	300-2861	TRANSFORMER, 24VAC (NOT SHOWN)	1
9	200-1025	CIRCUIT BREAKER, 3 AMP (NOT SHOWN)	1
10	300-2582 300-2583	PUMP ASSEMBLY, 2.2 GPM, 600REY/WCY*** PUMP ASSEMBLY, 2.9 GPM, 600REY/WCY***	1
11	300-0166	GAUGE, 2000 PSI	1
12	300-3543	OIL, ISO 68, 21 OZ. BOTTLE, (NOT SHOWN)	1
13	300-3603	SEAL KIT, REBUILD, 2SF (NOT SHOWN)	1
14	300-3599	VALVE KIT, REBUILD, 2SF	1
15	000-0242	QUICK CONNECT SOCKET, F-T, 3/8 MPT	1
16	300-1733	UNLOADER ASSEMBLY, 600REY/WCY***	1
17	300-2116	UNLOADER, WHITE SPRING	1
18	300-2947	THERMAL LIMIT SWITCH 140° F	1
19	300-1539	LINE PRESSURE RELEASE SOLINOID	1
20	300-3598	KIT, LINE PRESSURE RELEASE, SOLINOID, REBUILD,	1
21	300-0384	FLOW SWITCH, CHEMICAL ENABLE	1
22	300-0403	FLOAT TANK ASSEMBLY, 600REY/WCY***	1
23	300-0219	FLOAT VALVE	1
24	300-1538	FLOAT SWITCH, LIQUID LEVEL	1
25	300-3620	FILTER BULB	1
26	300-2682	TANK BOTTOM, 10"	1
27	300-2683	COVER, TANK, 10"	1
28	300-3110	HOSE, 1/2" CLEAR, NYLEX, (BY THE FOOT)	3'
29	300-1290	CLAMP, HOSE, 5/16" - 7/8"	1
30	300-2761	COVER, STAINLESS STEEL, 600 WCY	1
31	300-1967	BLEEDER VALVE ASSEMBLY	1
32	300-3808	HOSE, WATER SUPPLY, 6', FGH X BALL COCK	1
33	300-3280	SOLENOID, CHEMICAL CONTROL	2
34	300-0162	FOOT SCREEN, CHEMICAL PICK-UP	2
35	300-3120	TUBING, 1/4, CLEAR NYLEX, (BY THE FOOT)	6'
36	300-1304	CLAMP, TUBING, 5/16" - 1/2"	3
37	300-2756	FRAME PLATE	1

Figure 5. Exploded View, SMT 600REY/WCY

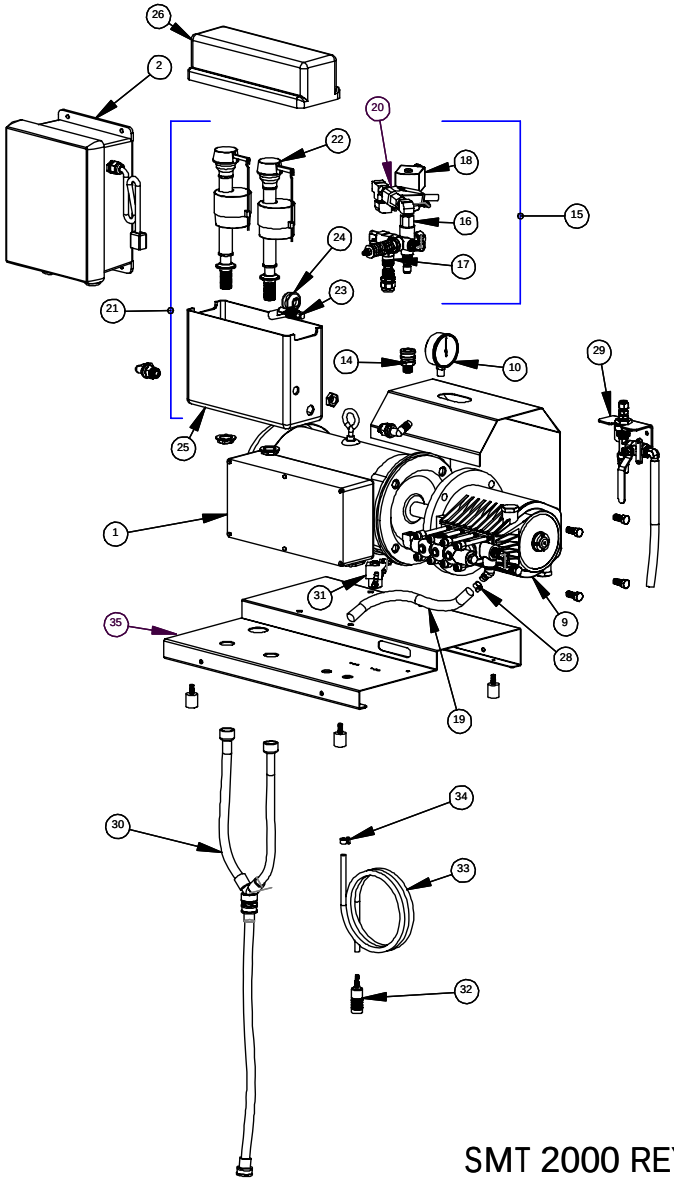


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	300-0038 300-0039	MOTOR ASSEMBLY, 1100WCX, PRE-WIRED, 115V*** MOTOR ASSEMBLY, 1100WCX, PRE-WIRED, 208-230V***	1
2	300-1896	MASTER CONTROL PANEL ASSEMBLY, 1100WCX***	1
3	300-2888	RELAY, ICE CUBE, (NOT SHOWN)	2
4	300-2849	FUSE, 1/4 AMP (230V) (NOT SHOWN)	1
5	300-2890	FUSE, 1/2 AMP, (115V) (NOT SHOWN)	1
6	300-3789	TIMER, 30 MINUTE (NOT SHOWN)	1
7	300-3799	TIMER, 15 MINUTE (NOT SHOWN)	1
8	300-1919	CONTACTOR, 2-POLE, 30 AMP (NOT SHOWN)	1
9	300-2861	TRANSFORMER, 24 VAC (NOT SHOWN)	1
10	200-1025	CIRCUIT BREAKER, 3 AMP (NOT SHOWN)	1
11	300-2565 300-2590	PUMP ASSEMBLY, 2.2GPM, 1100WCX*** PUMP ASSEMBLY, 2.9GPM, 1100WCX***	1
12	300-0166	GAUGE, 2000 PSI	1
13	300-3543	OIL, ISO 68, 21 OZ. BOTTLE, (NOT SHOWN)	1
14	300-3603	SEAL KIT, REBUILD, 2SF (NOT SHOWN)	2
15	300-3599	VALVE KIT, REBUILD, 2SF (NOT SHOWN)	1
16	300-1104	UNLOADER , INTERNAL SPRING	1
17	300-0115	THERMAL VALVE, 140° F	1
18	300-3110	HOSE, 1/2" CLEAR NYLEX (BY THE FOOT)	1
19	300-1290	HOSE CLAMP, 5/16" - 7/8"	2
20	300-2115	PRESSURE SWITCH, WATER SUPPLY	1
21	300-2667	COVER, STAINLESS STEEL, 1100WCX	1
22	300-2114	BLEEDER VALVE ASSEMBLY, 1100WCX	1
23	300-0130	HOSE, WATER SUPPLY, 6', FGH X FGH, BLACK	1
24	300-0162	FOOT SCREEN, CHEMICAL PICK UP	1
25	300-3120	TUBING, 1/4, CLEAR NYLEX (BY THE FOOT)	6'
26	300-1304	CLAMP, TUBING, 5/16" - 1/2"	1
27			
28			

ASSEMBLIES AND PARTS FOR 1100WCX

300-2285-00

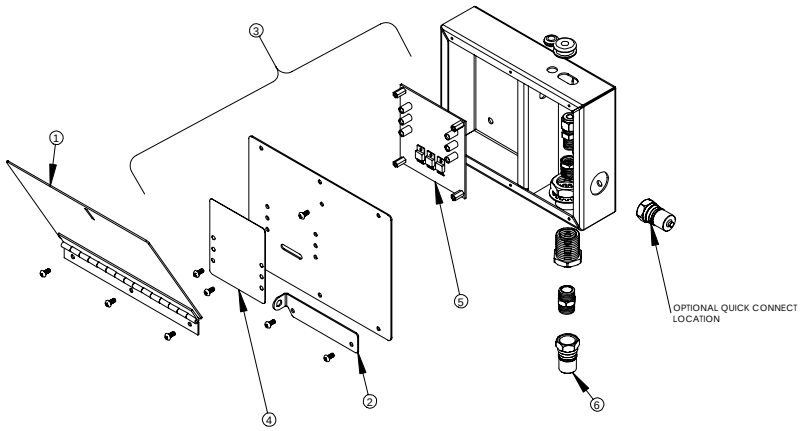
Figure 6. Exploded View, SMT 1100WCX



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	300-0041	MOTOR, 2000 REY/WCY, 208-230V	1
2	300-1883	MASTER CONTROL BOX, 2000 REY/WCY	1
3	300-2888	RELAY, ICE CUBE (NOT SHOWN)	2
4	300-2849	FUSE, 1/4 AMP (230V) (NOT SHOWN)	1
5	300-3790	TIMER, 3 SEC. (NOT SHOWN)	1
6	300-1919	CONTACTOR, 2 POLE, 30 AMP (NOT SHOWN)	1
7	300-2861	TRANSFORMER, 24VAC (NOT SHOWN)	1
8	200-1025	CIRCUIT BREAKER, (NOT SHOWN)	1
9	300-2584 300-1641	PUMP ASSEMBLY, 3.2 GPM, 2000 REY/WCY*** PUMP ASSEMBLY, 4.0 GPM, 2000REY/WCX***	1
10	300-0167	GAUGE, 3000 PSI	1
11	300-3543	OIL, ISO 68, 21 OZ. BOTTLE (2 REQUIRED)	2
12	300-3587	SEAL KIT, REBUILD, 4SF (NOT SHOWN)	1
13	300-3586	VALVE KIT, REBUILD, 4SF (NOT SHOWN)	1
14	000-0242	QUICK CONNECT SOCKET, F-T 3/8"MPT	1
15	300-1732	UNLOADER ASSEMBLY, 2000 REY/WCY***	1
16	300-2117	UNLOADER, BLUE SPRING, (BASIC)	1
17	300-2947	THERMAL LIMIT SWITCH, 140° F	1
18	300-1539	LINE PRESSURE RELEASE SOLENIOD	1
19	300-3598	KIT, REBUILD, LINE PRESSURE RELEASE SOLENOID (NOT SHOWN)	1
20	300-0384	FLOW SWITCH, CHEMICAL ENABLE	2
21	300-1671	FLOAT TANK ASSEMBLY, 2000 REY/WCY***	1
22	300-0219	FLOAT VALVE (2 REQUIRED)	2
23	300-1538	FLOAT SWITCH	1
24	300-3620	FILTER BULB	1
25	300-2726	TANK, BOTTOM	1
26	300-2725	FLOAT TANK, 12", COVER	1
27	300-3110	HOSE, 1/2", CLEAR NYLEX	4'
28	300-1290	CLAMP, HOSE, 5/16" X 7/8"	4
29	300-1967	BLEEDER VALVE ASSEMBLY	1
30	300-3798	HOSE, WATER SUPPLY, "Y" OUTPUT, 6' BALL COCK	1
31	300-3280	SOLENOID, CHEMICAL CONTROL	1
32	300-0162	FOOT SCREEN, CHEMICAL PICK UP	1
33	300-3120	TUBING, 1/4" CLEAR NYLEX	6'
34	300-1304	CLAMP, TUBING, 5/16" X 1/2"	6
35	300-1831	FRAME PLATE	1

Figure 7. Exploded View, SMT 2000REY

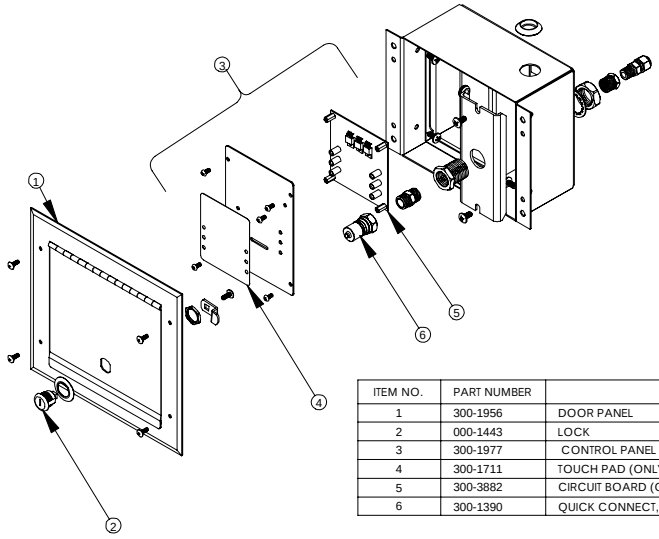
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	300-1982	COVER, LOCKABLE	1
2	300-1983	HASP, COVER LOCK	1
3	300-1988	CONTROL PANEL WITH TOUCH PAD AND CIRCUIT BOARD	1
4	300-1711	TOUCH PAD (ONLY)	1
5	300-3882	CIRCUIT BOARD (ONLY)	1
6	300-1390	QUICK CONNECT, SHUT-OFF	1



SERVICE ASSEMBLIES AND PARTS FOR
SURFACE MOUNT REMOTE STATIONS

300-2287-00

Figure 8. Exploded View, Surface Mount Remote Stations

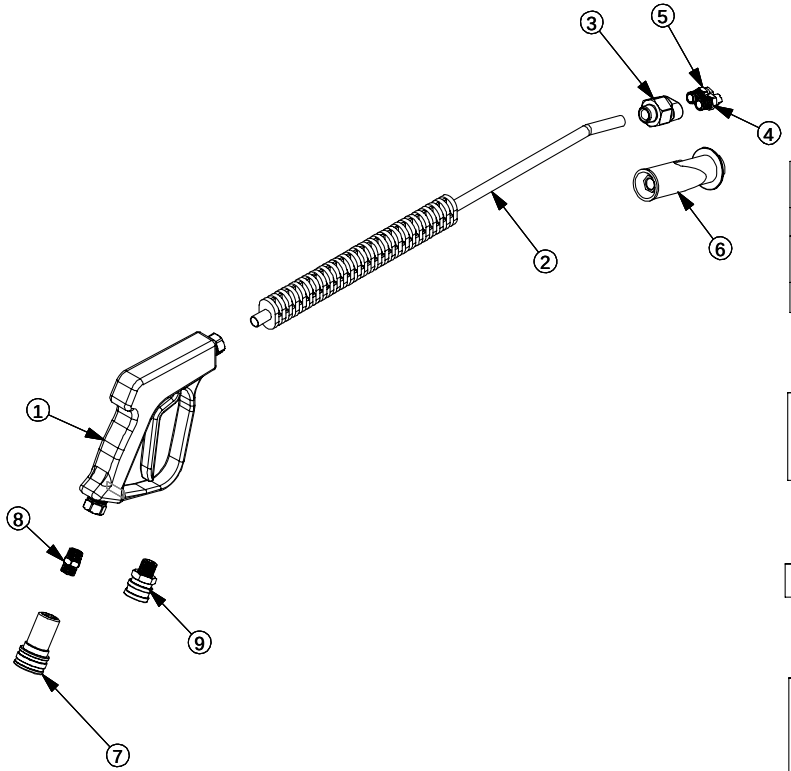


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	300-1956	DOOR PANEL	1
2	000-1443	LOCK	1
3	300-1977	CONTROL PANEL WITH TOUCH PAD AND CIRCUIT BOARD	1
4	300-1711	TOUCH PAD (ONLY)	1
5	300-3882	CIRCUIT BOARD (ONLY)	1
6	300-1390	QUICK CONNECT, SHUT-OFF	1

SERVICE ASSEMBLIES AND PARTS FOR
RECESSED MOUNT REMOTE STATIONS

300-2286-00

Figure 9. Exploded View, SMT Recess Mount Remote Stations



GUN & NOZZLE ASSEMBLY

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	300-1088	TRIGGER GUN	
2	300-3480 300-0182	LANCE, 36" LANCE, 24"	
3	300-0192	SELECTOR, DUAL NOZZLE	

NOZZLES, HIGH PRESSURE

4	300-3360 300-3362 300-3375 300-0254	25040 - (2.2 GPM PUMP) 25045 - (3.2 GPM PUMP) 25070 - (2.9 GPM PUMP) 25075 - (4.0 GPM PUMP)	

NOZZLES, LOW PRESSURE

5	300-3410	2530 - (ALL MODELS)	

VARI-NOZZLES, HIGH/LOW PRESSURE

6	300-3440 300-3435 300-3427 300-2863	1.3 (2.2 GPM - 1100 PSI) 1.4 (3.2 GPM - 2000 PSI) 1.7 (2.9 GPM - 850 PSI) 1.8 (4.0 GPM - 1800 PSI)	

7	000-0041	QUICK CONNECT SOCKET - SHUTOFF FOR CENTRAL SYSTEMS	
8	300-1120	NIPPLE, HEX, 3/8" FOR USE WITH 000-0041	
9	000-0242	QUICK CONNECT SOCKET - FLOW THRU FOR WALLMOUNT & PORTABLE SYSTEMS	

300-3300-00

Figure 10. Exploded View, SMT Spray Gun Assembly