



INSTRUCTION MANUAL

S SERIES

MODELS 501S | 571S | 581S | 591S



FOR ASSISTANCE CALL 1-800-711-1414

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SAFE USE INSTRUCTIONS

General

- **KEEP THIS MANUAL AND MSDS IN A PLACE THAT IS READILY AVAILABLE TO THE USER.**
- Read and understand the Instruction Manual and Material Safety Data Sheet (MSDS) for the solvent used in the Recycling Parts Washer.
- Observe all warnings posted in this manual and on the equipment.
- **FIRST AID:** See MSDS for detailed information.
 - **EYE CONTACT:** For eyes, immediately flush with plenty of water for 15 minutes and CALL A PHYSICIAN.
 - **SKIN CONTACT:** In case of contact with skin immediately remove contaminated clothing. Wash thoroughly with soap and water. Wash contaminated clothing before reuse. Discard contaminated shoes.
 - **INHALATION:** After high vapor exposure, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped give artificial respiration. CALL A PHYSICIAN IMMEDIATELY!
 - **SWALLOWING:** If swallowed, CALL A PHYSICIAN IMMEDIATELY! Do NOT induce vomiting. Have patient lie down and keep warm. Vomiting may lead to pneumonitis, which may be fatal.
- **FIRE:** In case of fire see MSDS for detailed information.
- **ACCIDENTAL RELEASE:** See MSDS for detailed information.
 - Following appropriate environmental procedure. Promptly clean up any spills. Stop leaks only when there is no risk or danger. Notify *SystemOne*[®] Service Support at 1-800-711-1414 immediately.
- **HANDLING AND STORAGE OF SOLVENT:** See MSDS for detailed information.
 - Do not smoke, eat or drink in the work area. Use good personal hygiene. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco products.
 - Always wear the appropriate protective equipment (e.g. gloves, eyewear, apron, etc.).
 - KEEP OUT OF REACH OF CHILDREN AT ALL TIMES.
- **CAUTION:** To reduce the risk of fire or explosion, install, operate, and maintain this equipment in accordance with this manual.
- Operating this equipment in an unventilated area is **not** recommended and may be hazardous to your health.

Installation

- This unit is for use in a 103°F (39.5°C) environment with no forced ventilation. Under these conditions the unit shall be spaced 3 feet from potential sources of ignition such as electrical receptacles, switched, pilot lights, fixtures, contacts, and other similar equipment that can produce sparks. If the equipment is used in higher ambient temperatures, an increase in spacing to sources of ignition shall be considered.
- Ensure the Recycling Parts Washer is properly grounded and the power connected in accordance with local area requirements.

Operation

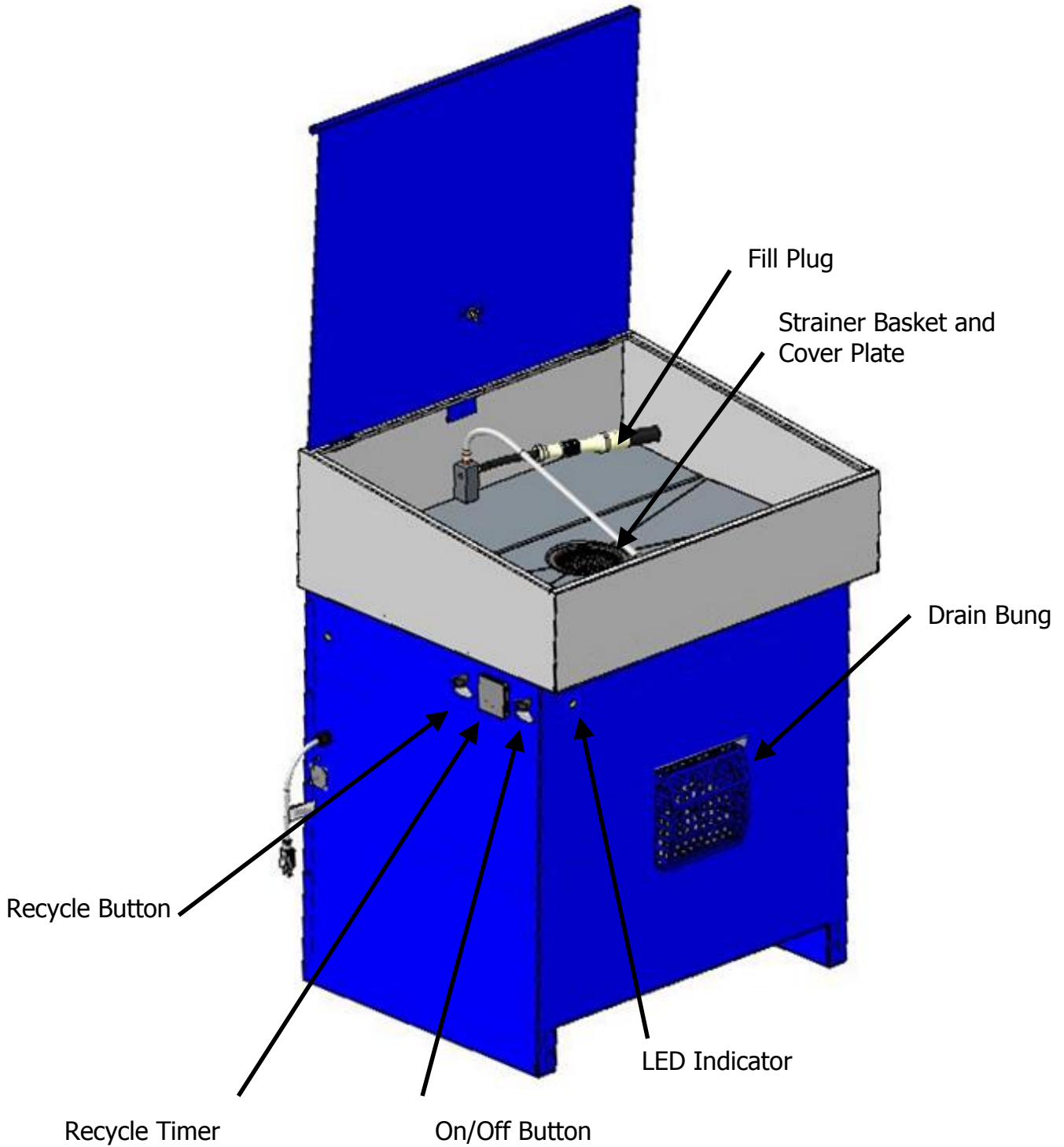
- **WARNING:** Solvent used in this Recycling Parts Washer is a combustible liquid and vapor. Adding other chemicals to the cleaning solvent, including but not limited to kerosene, fuel oil, gasoline, detergents, or chlorinated solvents may cause hazardous conditions for which the manufacturer has no control or responsibility.
- The parts washer lid has a fusible link assembly that holds the lid open during use. This fusible link is a safety feature designed to release the lid in case of fire allowing the lid to close. Do not modify, alter, or obstruct the operation of the fusible link. Do not leave unattended objects in the sink which would interfere with the closing of the lid.
- Do not place hot parts into the Recycling Parts Washer.
- Do not spray aerosols into or around Recycling Parts Washer.
- Do not clean or degrease porous or absorbent materials, such as cloth, leather, wood or paper.
- Do not operate Recycling Parts Washer if any leak is apparent or occurs during use. Contact your service representative.
- Unit produces heat. Do not open the distillation drain knob during a recycle process, or if hot to touch. Allow the unit to complete the recycle process and **always be sure it is cool before attempting to remove oil waste.**
- Close fire lid when not in use.
- Cleaning operations should be conducted in a manner that prevents spillage, splashing, or misting.

Service

- Service should only be performed by an authorized technician. Risk of electric shock or serious injury may occur if improperly serviced.
- **MODIFICATION OF EQUIPMENT WILL VOID THE MANUFACTURER WARRANTY.**

PRODUCT ILLUSTRATION

Figure 1



SPECIFICATIONS

Product Specifications

Power Requirements: 115VAC, 60 Hz, 12A
 Environment: 41°F to 104°F (5°C to 40°C)
 Solvent Capacity: 30 gallons US

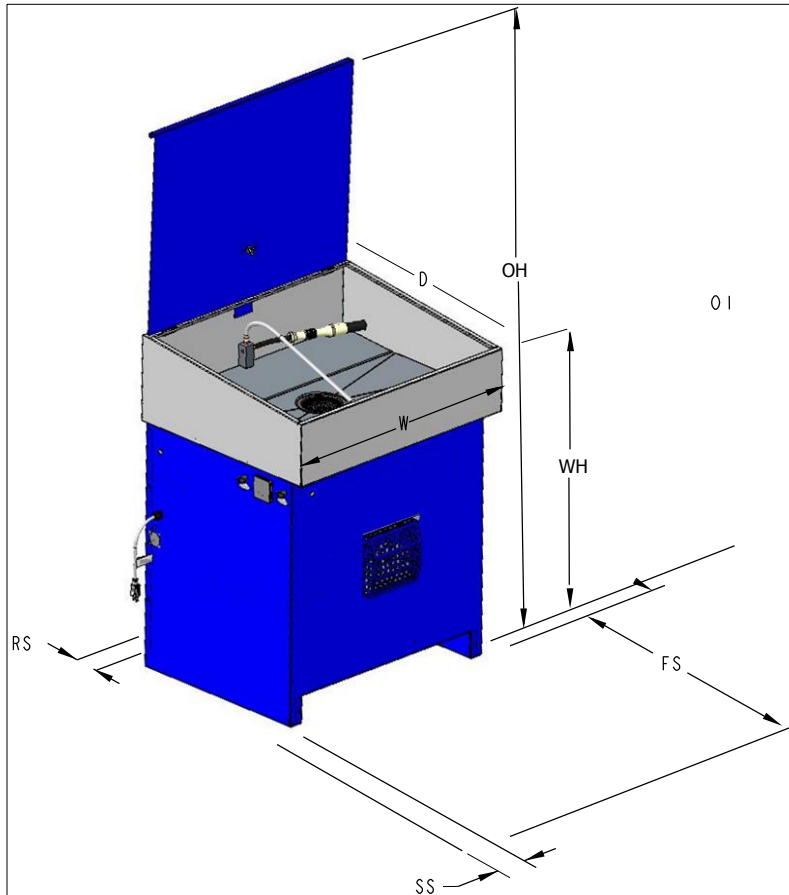


Figure 2

SPECIFICATION	501S	571S	581S	591S
W (Width) Sink Basin	33"	39"	45"	54"
D (Depth) Sink Basin	27"	29"	27"	27"
OH (Operating Height)	68"	70"	68"	68"
WH (Working Height)	39"	39"	39"	39"
FS (Front Spacing)	36"	36"	36"	36"
RS (Rear Spacing)	3"	3"	3"	3"
SS (Side Spacing)	4"	4"	4"	4"
Weight (Empty)	335lb	350lb	363lb	377lb

Approved Solvents

This unit is approved for use with mineral spirits with a flashpoint greater than 140° Qsol® brand solvents. Contact the manufacturer for other approved solvents.

CAUTION: Avoid distilling solvents that may include unstable reactives, such as Nitrocellulose.

Certifications

This unit is ETL listed and conforms to UL 2208, Standard for Solvent Distillation Units and is certified to CAN/CSA C22.2 no.88.



OPERATING INSTRUCTIONS

Unpacking and Setup

1. Attach fire lid bracket to unit as shown in Figure 3.
2. Connect unit to a dedicated 15 ampere branch circuit.
 - CAUTION: Do not use any extension cords as this represents a fire hazard.
 - CAUTION- To provide continued protection against risk of electrical shock, fire, and explosion, connect to properly grounded outlets only.
3. For units shipped empty, remove fill plug and add solvent. Use a dip stick to monitor fluid level when filling. MAXIMUM 30 GALLONS.
4. NEVER start the parts washer dry without solvent. This can cause serious damage to the unit.

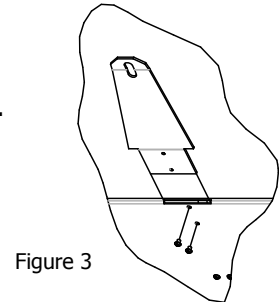


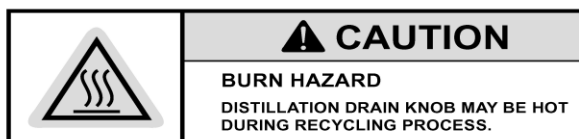
Figure 3

Wash Operation

1. Ensure the machine is plugged into a grounded 3-prong outlet before pressing the on/off button.
2. Put on protective eyewear, gloves, clothing, and shoes before operating unit.
3. Lift lid. Be sure latch catches so lid is held in the open position.
4. Wipe off loose or excess dirt from part or assembly, and drain all excess fluids before placing parts into the wash basin.
5. Adjust nozzle so that it is centered inside the wash basin.
6. Push the on/off button to start solvent flow through spigot and flow-through brush. Solvent flow will stop after 15 minutes or when the on/off button is pressed again. If solvent does not flow when the on/off button is pressed, additional solvent may be transferred to the wash basin. Press and hold the on/off button for up to sixty seconds or until fluid begins to flow. Repeat procedure if necessary.
7. Clean all parts in the wash basin. Avoid splashing outside of the wash basin. Use a stiff brush to remove heavy deposits. When not in use, place the brush in the wash basin. Do not set brush down outside of the wash basin.
8. Drain clean parts in the wash basin for approximately 15 seconds or until dripping ceases.
9. Close lid when not in use.

Recycling Operation

1. Push recycle button once to transfer dirty solvent into the distillation tank and return clean fluid to the wash basin. The clean fluid transfer takes about 5 minutes, at which time the operator may then resume use of the machine.
2. Although the recycling process may run for several hours, it will stop automatically once the cycle is complete. There is a short lockout period before another recycle process can be started. Do not unplug the unit during the recycle process.
3. For periodic draining of residue, wait until the machine cools down and the temperature indicator turns green. Unscrew the drain knob and allow the residue to drain into a container. Reinstall the drain knob and dispose of the residue according to local regulations.



Operation of Automatic Timer

The timer is used whenever you want to automate your recycling schedule and help maintain consistently clean fluid in your parts washer. The timer comes pre-programmed to operate on Monday, Wednesday and Friday at 10pm Eastern Standard Time. The recycling process will operate for 12 hours on each automatic start.

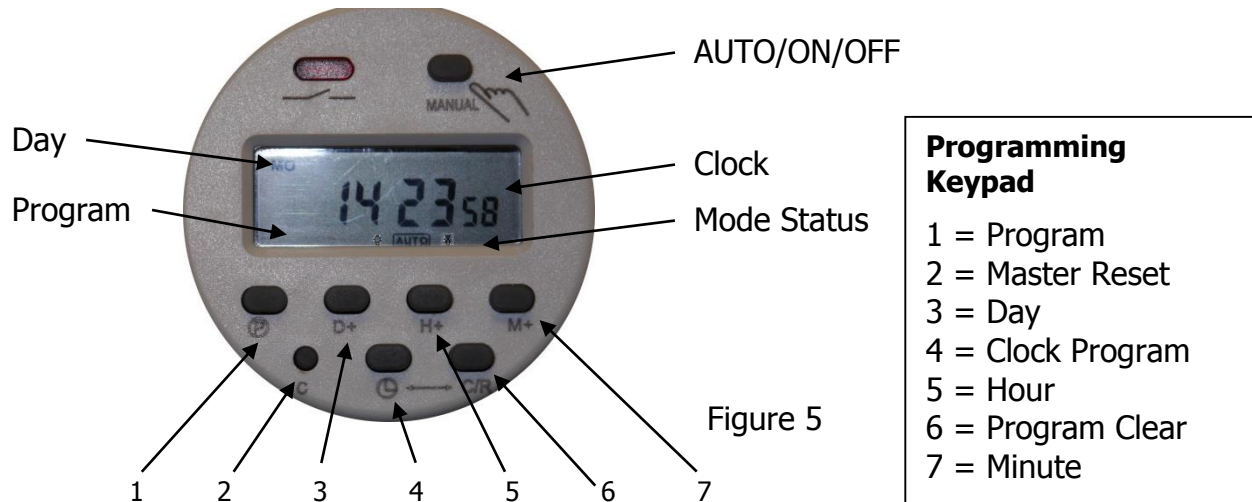


Figure 5

Programming Keypad

- 1 = Program
- 2 = Master Reset
- 3 = Day
- 4 = Clock Program
- 5 = Hour
- 6 = Program Clear
- 7 = Minute

To Program the Clock (Figure 5)

Set the time and/or day of the week

Press and hold the Clock Program button (4)

While you:


Press the Day button (3)


Press the Hour button (5)

Press the Minute button (7)

NOTE: The clock is in 24-hour format.

To Enable or Disable the Automatic Recycle (Figure 5)

To disable the automatic timer from starting the unit, press the "MANUAL" button on the top of the timer until the status indicator displays  as the current mode status.

To enable the automatic timer function, press the "MANUAL" button again until the status indicator shows as the current mode status. 

To Add or Change Automatic Recycle Schedules (Figure 5)

Recycling solvent can occur at any time of the day and any day of the week. An automatic schedule can be created to recycle solvent on alternating days, weekdays only, weekends only, individual days, or any number of different combinations. Up to 18 different schedules can be programmed in the timer.

You will see the following default schedule:

- lower left corner of the display should show program number 1
- clock should read 22:00
- upper left corner of the display should show M-W-F

<p style="text-align: center;">Changing the default schedule</p>	<p>Press the Program button (1)</p> <p>As applicable: Press the Day button (3) Press the Hour button (5) Press the Minute button (7)</p> <p>Press the Clock program button (4)</p>
<p style="text-align: center;">Adding a new schedule</p>	<p>Press the Program button (1) until you arrive at a blank schedule</p> <p>As applicable: Press the Day button (3) Press the Hour button (5) Press the Minute button (7)</p> <p>Press the Clock program button (4)</p>
<p style="text-align: center;">Deleting a schedule</p>	<p>Press the Program button (1) Press the Program Clear button (6)</p>
<p style="text-align: center;">Clearing the current time and all programmed settings</p>	<p>Press the Master Reset button (2)</p>

TROUBLESHOOTING

Problem	Solution	
Wash pump not running	Press on/off button.	
	Check power cord connection.	
	Check outlet/circuit breaker.	
Wash pump runs but no solvent flow	Check for low solvent level by removing the strainer basket. Additional solvent may be transferred to the wash basin. Press and hold the on/off button for up to sixty seconds. Repeat procedure if necessary.	
Recycle process not starting and LED is flashing yellow three times	Drain oil from distillation chamber. Reset then start again.	
Solvent in distillation chamber	Cycle may have stopped prior to completion. Press the technician override button on next to the power cord to resume the distillation process.	
Solvent does not stay in wash basin	Remove debris around pneumatic cylinder located under the wash basin false floors.	
Vacuum Pump sounds louder than normal	Distillation chamber is overfilled, remove excess fluid through the drain knob and press the technician override button to restart the distillation.	
Wash basin overfilled	Too much solvent was transferred into the wash basin by holding the on/off button.	
	Holding tank is too full and overflowed into the wash basin. Remove excess fluid from the holding tank and run a distillation cycle to place fluid back into holding tank.	
LED is flashing green or blue	Fluid level is low. Add 15 gallons directly to holding tank.	
Other LED Faults	RED - 1 blink	Internal fuse failure. Contact customer support.
	RED - 2 blinks	Over temperature switch open. Contact customer support.
	YELLOW - 4 blinks	Check circuit breaker reset by power cord or vacuum pump fuse failure.
	RED - 5 blinks	No vacuum at start of cycle. Check fluid level in holding tank. Check that drain bung is properly installed.
	RED - 6 blinks	Sink didn't drain. Contact customer support.
	RED - 7 blinks	Sink drain isn't sealed. Check for debris in bottom of sink. Contact customer support.
	RED - 8 blinks	Vacuum lost during distillation. Reset machine and start using "technician override" button located by power cord. Contact customer support of fault returns.

MANUFACTURER'S WARRANTY

DEFECTS & PERFORMANCE: SystemOne Series 500 Parts Washers ("Equipment") are warranted by SystemOne Technologies Inc., ("Manufacturer"), to be free of defects in materials and workmanship and to perform in accordance with the Manufacturer's specifications and operating manual ("Warranty") for sixty (60) months commencing on the date of delivery ("Warranty Period"). During the Warranty Period, the Manufacturer will supply all required parts & components directly to the customer, including detailed installation instructions and direct telephonic assistance from Manufacturer's Technical Support Center, free of charge, for on-site installation by the customer. Wearable items such as brushes and spouts are excluded.

ENVIRONMENTAL INFORMATION: Equipment owners/users/operators are responsible for establishing the waste characteristics of their waste stream generated as distillation residue. If information on specific products is unavailable, or if the hazardous or non-hazardous determination is inconclusive, customer should have a waste stream TCLP conducted by a commercial lab. Contact local and state authorities, as well as the EPA when in receipt of your waste analysis to determine the residue disposal requirements in your area.

SOLE SOURCE AFFIDAVIT: (i) SystemOne Technologies Inc. possesses the sole and exclusive rights to manufacture, market and/or distribute various proprietary models of industrial parts washers under the SystemOne® trademark; (ii) SystemOne and/or its authorized distributors and service agents are the sole and exclusive source for all SystemOne equipment, parts and service; (iii) SystemOne currently holds 24 valid United States and International patents on its proprietary technology; and (iv) SystemOne possesses the sole and exclusive rights to the use of the SystemOne® trademark

LIMITED WARRANTY: The Manufacturer shall not be responsible under this limited Warranty for damages resulting from (i) failure to follow Manufacturer's installation, operation or maintenance instructions, (ii) Unauthorized system modification or alteration under the customer's control, (iii) accident, abuse, misuse or negligent acts or omissions of the customer or persons under the customer's control; or acts of God. THERE ARE NO OTHER EXPRESS WARRANTIES, WHETHER WRITTEN OR ORAL, OTHER THAN THE WARRANTY SET FORTH IN PARAGRAPH 1 ABOVE. ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED.

LIMITATION OF WARRANTY: The liability of the Manufacturer and its affiliates, distributors and suppliers for any claims, losses, damages or expenses from any cause whatsoever (including acts or omissions of third parties), regardless of the form of action, whether in contract, tort, or otherwise shall not exceed the lesser of (i) the direct damages proven, (ii) the repair or replacement cost, lease payoff or purchase price, as the case may be, of the Equipment that directly gives rise to the claim. The Manufacturer shall not be responsible for any incidental, special, punitive, exemplary, reliance, consequential (including but not limited to lost profits or lost revenues) or indirect loss or damage incurred in connection with the Equipment to the full extent those damages can be disclaimed by law. For personal injury caused by the Manufacturer's negligence, the Manufacturer's negligence shall be limited to proven damages to person. No action or proceeding against the Manufacturer or its affiliates, distributors or suppliers may be commenced more than twelve (12) months after the cause of action accrues.