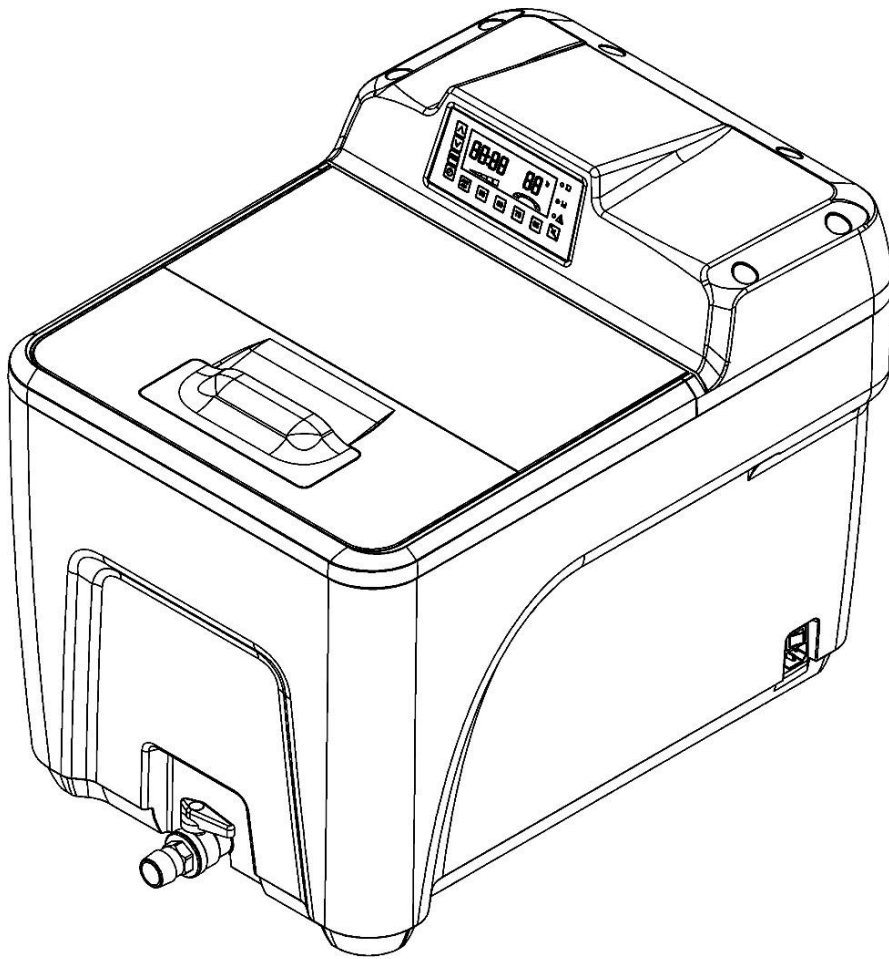


SCA 1200ht

USER MANUAL



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1 Introduction

This manual provides user instructions to properly operate and maintain the SCA 1200ht Support Cleaning Apparatus (SCA).

How to use this guide

This User Guide is laid out in easy to follow sections that cover Setup, Operation, Maintenance, and Troubleshooting. Read each section carefully so you will get the best performance from your cleaning system.

Safety precautions

For your own protection and to ensure proper operation of the SCA please follow these safety precautions. Failure to use the SCA for the intended function may result in personal injury and will void the warranty.

- Do not operate the SCA until you have read and understood this user manual.
- Use the power supply voltage as noted in the Specifications section of this manual. Avoid overloading the electrical outlet with multiple devices.
- Use only the power cord supplied by the manufacturer. Replace a damaged power cord with one approved by the manufacturer.
- Ensure the system is well grounded electrically. As an added level of protection, local codes and regulations may require the unit to be plugged into a Ground Fault Interrupt (GFI) or similar protected outlet.
- Always power off and unplug the SCA from the power outlet when it is being cleaned, moved or serviced.
- Do not use the SCA for any purpose other than removing soluble support material from 3D printed parts.
- Wear thermal gloves and safety glasses when working with or near the SCA. Always refer to the cleaning solution safety Data Sheet (SDS) for additional Personal Protection Equipment (PPE) requirements.
- Do not allow aluminum or zinc to come into contact with caustic cleaning solutions.
- Do not use any liquid other than water and Oryx approved cleaning solution products in the SCA. An approved list of SCA compatible cleaning solution products is available on the Oryx website: www.oryxadditive.com/support.
- DO NOT use hot water when filling the tank. The addition of cleaning solution to water is a heat-releasing reaction and added to hot water will result in dangerous spattering.
- Before disassembling or attempting repairs on the system, contact Technical Support as directed in the Customer Support section of this manual.

The following classifications are used throughout this guide and/or marked on the SCA.



Hot Surface



General Warning



Electrical Danger

Précautions de sécurité

Pour votre propre protection et pour assurer un fonctionnement adéquat de SCA, veuillez suivre ces précautions de sécurité. Tout manquement à utiliser SCA pour son usage attendu pourrait résulter en des blessures corporelles et entraînera l'annulation de la garantie.

- Ne pas faire fonctionner SCA avant d'avoir lu et compris ce manuel d'utilisateur.
- Utilisez la tension d'alimentation indiquée dans la section Spécifications de ce manuel. Évitez de surcharger la prise électrique en y branchant plusieurs appareils.
- Utilisez uniquement le câble d'alimentation fourni par le fabricant. Remplacez tout câble d'alimentation endommagé par un câble approuvé par le fabricant.
- Assurez-vous que le système est bien mis à la terre électriquement. Comme niveau de protection supplémentaire, les codes et réglementations locaux peuvent exiger que l'unité soit branchée sur un interrupteur de fuite à la terre (GFI) ou une prise protégée similaire.
- Toujours éteindre et débrancher SCA de l'alimentation lorsqu'il est nettoyé, déplacé ou fait l'objet d'une réparation.
- Ne pas utiliser SCA for pour tout autre fin que de retirer les matériaux de support solubles de pièces 3D imprimées.
- Portez des gants thermiques et des lunettes de sécurité lorsque vous travaillez avec ou à proximité du SCA. Reportez-vous toujours à la FDS du fabricant de la solution de nettoyage pour les exigences de protection individuelle supplémentaires.
- Ne laissez pas l'aluminium ou le zinc entrer en contact avec la solution de nettoyage caustique. Les produits de solution de nettoyage peuvent contenir de l'hydroxyde de sodium.
- N'utilisez aucun liquide autre que de l'eau et des solutions de nettoyage approuvées par Oryx dans le SCA. Une liste approuvée des solutions de nettoyage compatibles SCA est disponible sur le site Web Oryx: www.oryxadditive.com/support.
- N'UTILISEZ PAS d'eau chaude lors du remplissage du réservoir. L'ajout de concentrés de nettoyage à l'eau est une réaction de dégagement de chaleur et s'il est ajouté à l'eau chaude, il en résultera des éclaboussures dangereuses.
- Avant de désassembler ou de tenter de réparer le système, veuillez communiquer avec le support technique, tel qu'indiqué dans la section Soutien à la clientèle section de ce manuel.

Les classifications suivantes sont utilisées tout au long de ce guide et/ou sont indiquées sur SCA.



Surface chaude



Avertissement général



Danger électrique

2 Overview

The SCA 1200ht Support Cleaning Apparatus (SCA) is designed to remove soluble support from FDM parts (PLA, ABS, PC, nylon) and Material Jetting (MJ) parts (UV Cured Resins) using water or approved caustic cleaning solutions.

How it works

The SCA removes support material by immersing parts created with soluble support material in a bath consisting of water or cleaning solution. The SCA is designed to accommodate a broad range of material specific cleaning solutions and bath temperatures. The gentle bath agitation dissolves the support material without harming the underlying model material. The time required to remove the support material depends on model geometry and the total amount of support material. When the soluble support material is completely removed, models are unloaded from the SCA, rinsed, dried, and ready for further finishing or use.

Package contents

The SCA is shipped with the following contents:

SCA System (1)	Power Cords:
Large Part Basket (1)	110V North America std.
Small Part Basket (1)	220V Europe std.
Quick Reference Card (1)	User's Manual & Warranty (1)

If any parts are missing you should contact customer support immediately.

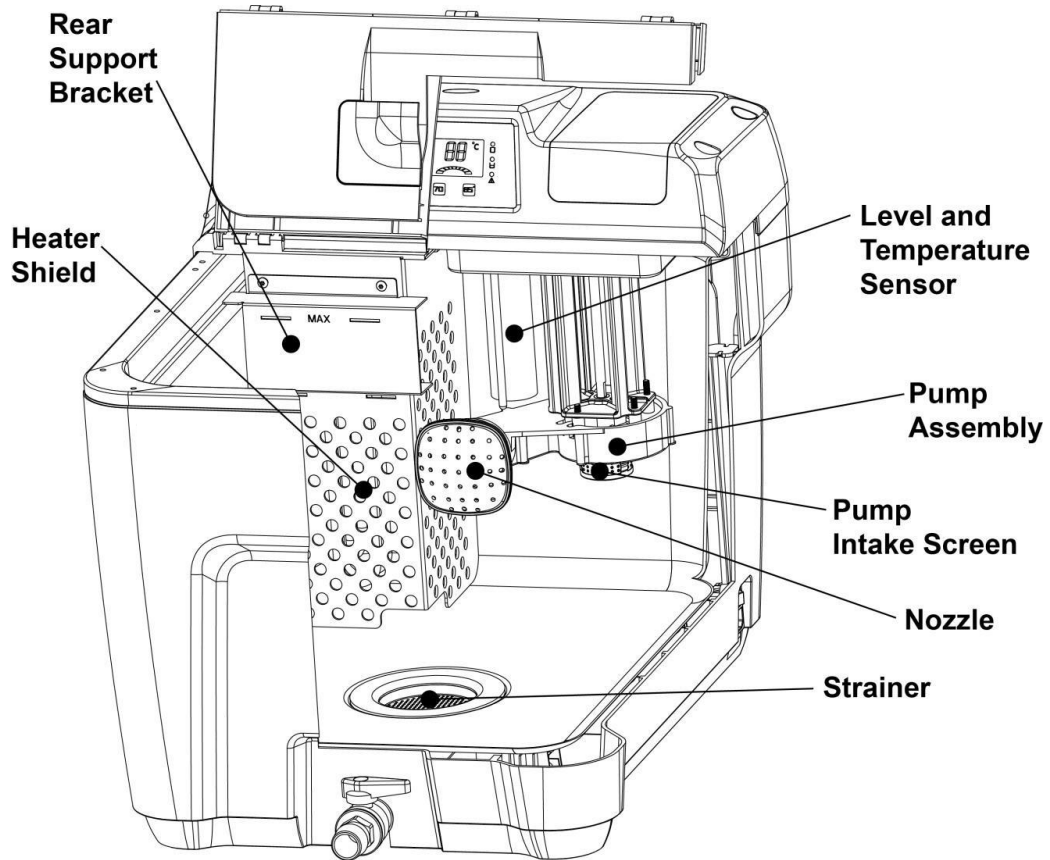
Note: Cleaning solutions are purchased separately and available from your printer reseller or visit www.oryxadditive.com/support for additional information.

Major components

The SCA consists of several key components that all users should be familiar with. Understanding the function of each component is important for the safe operation of the system and will aid in extending the life of your SCA.

Many aspects of the SCA have been designed specifically for safety. All electrical components are properly grounded and labeled for safety protection.

Figure 1 Tank Area



The **Tank Area** is used to hold the liquid and it is where the parts are cleaned. The SCA improves part cleaning by circulating the liquid in the tank.

Figure 2 Large Parts Basket

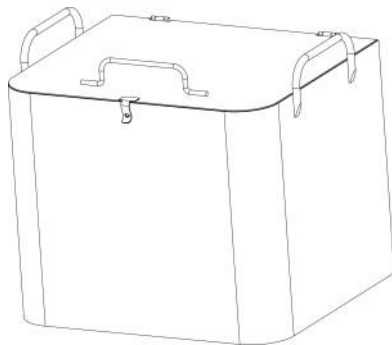
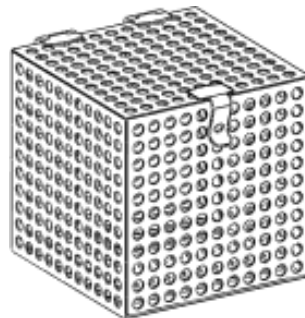


Figure 3 Small Parts Basket



The **Large Parts Basket** is used to hold parts during cleaning and to lift parts out of the tank. Users should wear thermal gloves when lifting the basket from the tank.

The **Small Parts Basket** is used to hold small parts during cleaning.

The **Strainer** over the drain opening in the tank prevents debris from entering the drain when the tank is emptied. It should be rinsed after emptying the tank before refilling with fresh liquid.

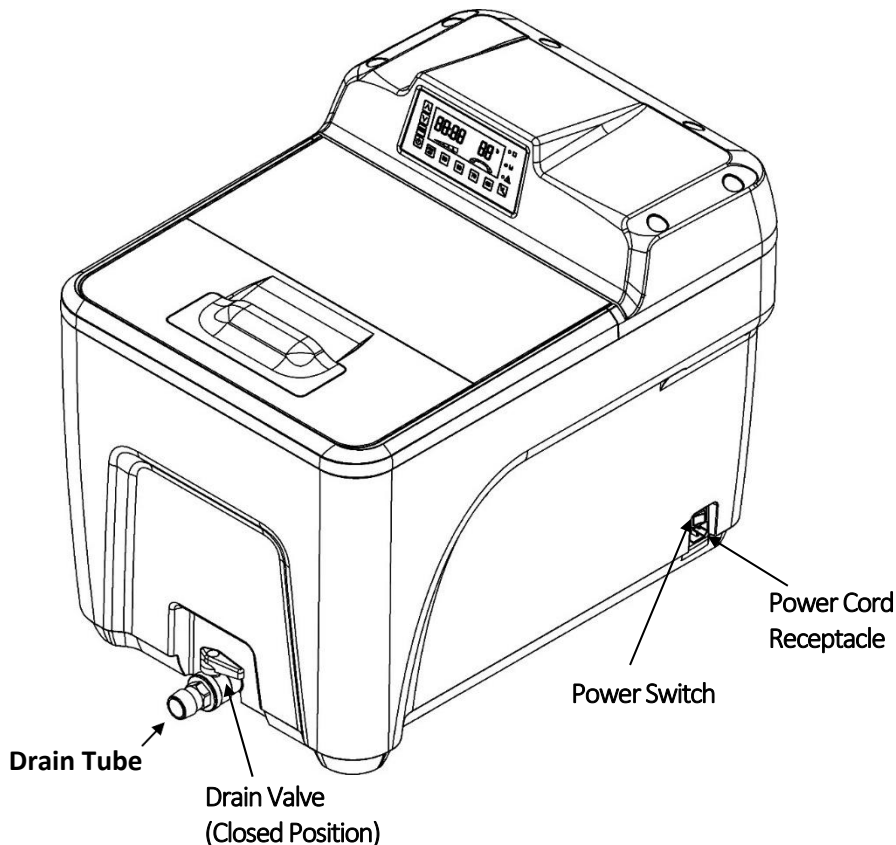
The **Heater** is located behind the perforated Heater Shield. It heats the water in the tank.

The **Spray Nozzle** directs the flow of liquid into the tank. The spray nozzle can be removed for cleaning if the holes are clogged. Simply unscrew the nozzle and rinse with tap water to un-clog holes.

The **Pump Intake Screen** prevents large particulates from entering the pump. It may occasionally need to be cleaned with a soft brush or toothbrush to remove debris trapped in the holes.

The **Temperature and Level sensors** are used to sense the temperature and height of the liquid in the tank. They are mounted behind the rear support bracket.

Figure 4 Unit Front and Side Area



The **Main Power Switch** is located on the right-hand side of the unit. This turns power to the unit on and off.

The **Power Cord** (not shown in figure) is used to connect the system to a wall outlet for power. Only use a power cord provided by the manufacturer.

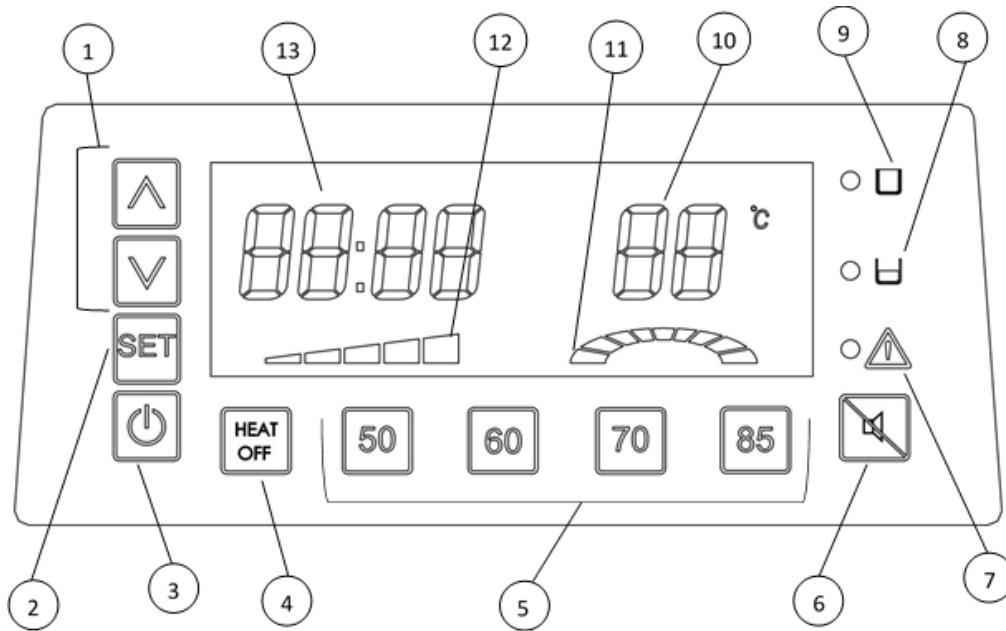
The **Power Cord Receptacle** is where the power cord is connected to the unit. The plug is a disconnecting device and should be easily accessible at all times.

The **Drain Tube and Drain Valve** are on the front of the tank for easy accessibility.

The tank is drained by connecting a hose to the Drain Tube and turning the Drain Valve to the open position. The liquid in the tank should be at room temperature and the unit should be turned off and unplugged from the wall before it is drained.

Control panel

Figure 5 Control Panel



- 1 Up/Down Arrows (Add/Subtract Time)
- 2 Set Timer
- 3 Start/Pause
- 4 No heat Selection
- 5 Temperature Selection
- 6 Silence Alarm
- 7 Alert Indicator

- 8 Low Water Level Indicator
- 9 High Water Level Indicator
- 10 Temperature LED Display
- 11 Pump Operating LEDs
- 12 Progress LEDs
- 13 Time Remaining LED Display

3 Setup

Locating the SCA

To maximize ease of use and operational safety, make sure the following preparations of the physical site are met:

- Place the SCA on a sturdy horizontal surface or cart capable of supporting 200 lbs (the weight when filled with water).
- The selected location should be isolated from unintentional contact from those working in the area.
- The electrical outlet must be located within 2 m (6 ft) of the SCA. Do not use an extension cord or power strip with the system.
- The SCA should be near a grounded wall outlet such that the power cord does not pose a hazard to people or equipment passing by.
- The grounded electrical outlet (US: 110VAC, 20A, 60Hz, single phase, Europe: 220VAC, 16A, 50Hz)
- The power cord plug-in receptacle is a disconnecting device that should be easily accessible at all times. Position the unit so that the plug can be easily reached.
- It is strongly recommended that the unit be placed on a circuit with its own GFCI breaker.
- Place the unit in a well-ventilated area.
- The operating environmental temperature must be between 5°C - 40°C (41°F – 104°F); and operating environmental humidity between 0% - 80% RH.

Preparations for draining and disposal

- Consult your local regulations regarding disposal of the cleaning solution effluent prior to use. A permit or form of pre-treatment may be required.
- The SCA relies on gravity to drain the cleaning tank. Locating the system near a drain or sink will make draining the unit much easier. Alternatively, the SCA can be kept on a cart for easy transport to a sink or drain.
- Use a 1" inner diameter hose made of PVC or equivalent on the drain tube to facilitate draining. Ensure the tubing or hose can withstand the temperature and caustic properties of the cleaning solution.

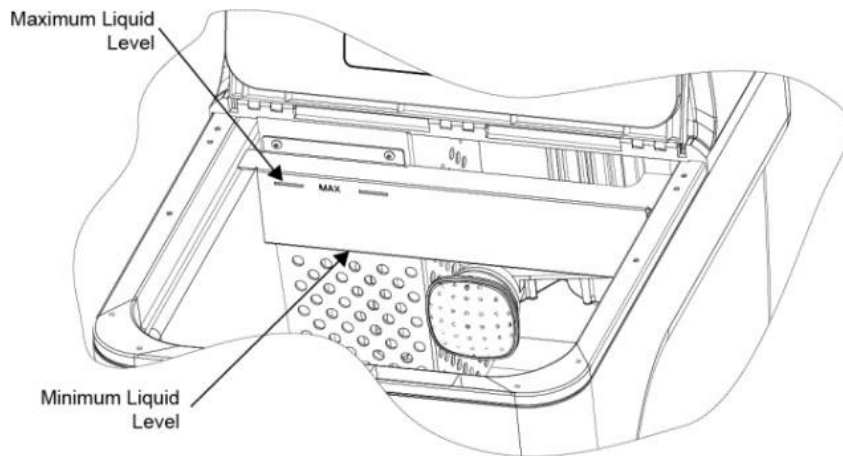
4 Operation

Filling and setup

Adding water

Fill the tank with water to just below the MAX line as shown (approximately 11 gallons, 42L), taking into account that the parts and basket will raise the water level when lowered into the tank.

Figure 6 Liquid Fill Lines



DO NOT use hot water when filling the tank. The addition of cleaning solution to water is a heat-releasing reaction and if added to hot water will result in dangerous spattering.

Never operate the tank unless the liquid level is above the MIN line as shown.

N'UTILISEZ PAS d'eau chaude lors du remplissage du réservoir. L'ajout de concentrés de nettoyage à l'eau est une réaction de dégagement de chaleur et s'il est ajouté à l'eau chaude, il en résultera des éclaboussures dangereuses.

Ne jamais faire fonctionner le réservoir à moins que le niveau de liquide ne soit au-dessus de la ligne MIN, tel qu'illustré.

Adding cleaning solution

Add cleaning solution to the water filled bath in accordance with the manufacturer's recommendations. A list of Oryx approved cleaning solutions and proper mixing ratios are available on the Oryx website: www.oryxadditive.com/support.

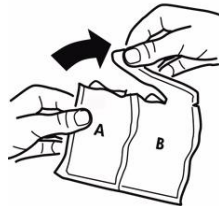
The following are examples of recommended mixing procedures for WaterWorks and EcoWorks in the SCA 1200ht.

If using WaterWorks Soluble Concentrate:

While wearing protective gloves, protective clothing, and eye/face shielding, add one bottle (2.1 lbs, 950 g) of WaterWorks to the water filled bath. Exercise caution when working with the cleaning solution. WaterWorks contains sodium hydroxide and always refer to the Manufacturer’s SDS for PPE and handling requirements.

If using EcoWorks:

1. Open the foil cleaning agent packet as shown. Each packet contains an A & B pouch.



2. Empty all the contents of 6 (6) foil cleaning agent packets into the water filled tank. Avoid handling the contents of the cleaning agent bag.



Preheating and starting the cleaning cycle


Setting cycle time and temperature

Recommended Temperature Settings			
Build Material	Temperature Setting	WaterWorks	EcoWorks
ABS	70°C	Yes	Yes
PC	85°C	Yes	No
Nylon	50, 60 or 70°C**	Yes	Yes
**depending on part wall thickness and desired dimensional accuracy.			
For MJ and PLA parts select the 'HEAT OFF' option.			

Connect the power cord to the SCA and then to a suitable grounded receptacle.

Power on the SCA using the main power ON/OFF switch located at the rear of the unit.


Press one of the four temperature preset buttons or the Heat Off button to select the cleaning temperature. The temperature can be changed at any time during the cycle by selecting a different temperature button. The SCA heats at a rate of about 3 minutes per degree.


Press the SET button and then press the up and down arrows to set the minutes. Press the SET button again and use the up and down arrows to set the hours. Press the SET button again to accept the time. Press the  button to start the heater and pump.

Loading parts and testing level sensors

Wait until the SCA has reached the desired temperature before loading parts into the tank. This minimizes the time the parts are immersed in the cleaning solution.

To load parts for cleaning, place parts inside the large cleaning basket. If cleaning small parts, place the parts inside the small basket and set the small basket inside the large basket. Close the basket lids.

Before placing the basket into the cleaning solution, press the  button to pause the heater and pump. With the basket cutout facing the nozzle, slowly lower the large parts basket into the solution-filled tank. The flow nozzle should be centered on the basket cutout.

If the high level alert lights and the alarm sounds, press the  button to silence the alarm, and remove liquid until the alert indicator is no longer lit.


Note: It is recommended that the level sensors be tested periodically. Adding water to just above the MAX fill line should cause the high level alert to illuminate and the buzzer to sound. Draining water until the liquid level is below the MIN fill line should cause the low level alert to illuminate and the buzzer to sound. If the level sensors are properly working the system will not operate until the liquid level is between the MIN and MAX fill lines.



Close the lids on the SCA to prevent heat loss and evaporation. Never place your face near the tank when opening the lid – vapors from the cleaning solution may cause eye and respiratory irritation.

Fermez les couvercles de SCA afin d'éviter la perte de chaleur et l'évaporation. Ne jamais placer votre visage près du réservoir lorsque vous ouvrez le couvercle ; les vapeurs s'émanant de la solution de nettoyage pourraient causer de l'irritation des yeux et des voies respiratoires.

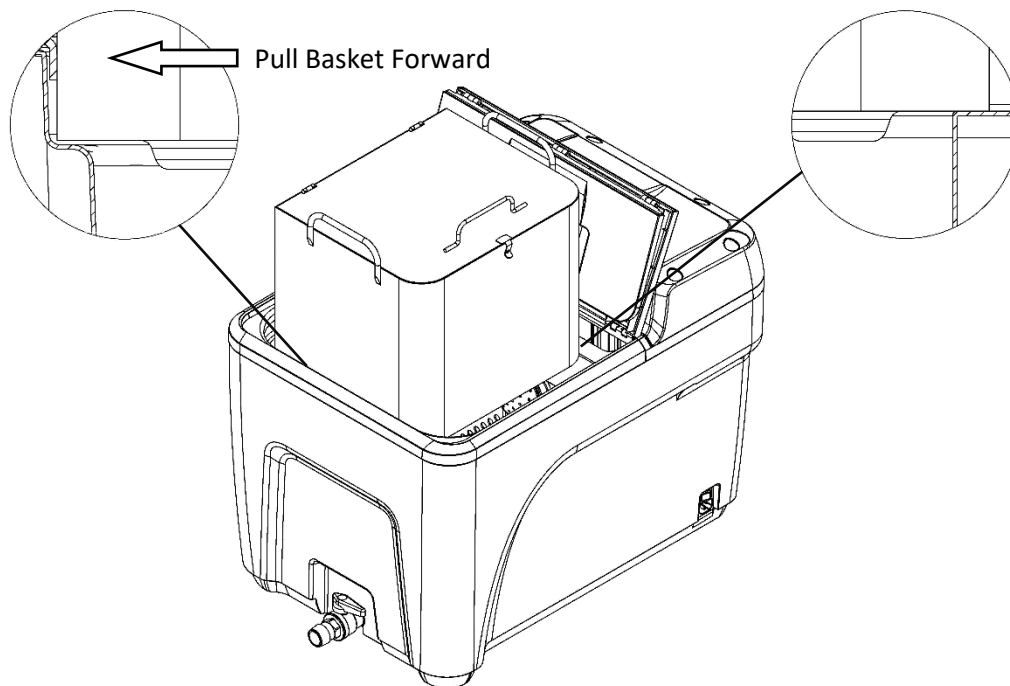
Cleaning the parts

To activate the cleaning cycle after setting the time and temperature, and adjusting the liquid level, press the  button. Illuminated bars will sweep under the temperature display when the pump is operating.


Parts can take a few hours or longer to clean. Cleaning time is affected by the size of the part, the amount of support material, part geometry, and the pH level of the cleaning solution.

Parts can be checked at any time during a cleaning cycle by opening the lid, carefully lifting the Large Parts Basket from the tank, turning the basket 90° and resting it on the rear support bracket and then pulling it forward on to the front tank ledge.


Figure 7 Basket Lift Position



Protective gloves and eyewear should always be worn when lifting the basket from the tank.


If the parts are clean before the end of the cleaning cycle, halt the cycle by pressing the  button.

Des gants de protection et des lunettes protectrices devraient être portés en tout temps lorsque vous soulevez le panier du réservoir.

Si les pièces sont propres avant la fin du cycle de nettoyage, cessez le cycle en appuyant sur le bouton .

Completing the cleaning process

Removing parts from the SCA

When the parts are clean, they can be removed from the SCA. Halt the cleaning cycle by pressing the  button if removing the parts before the timer has finished count down. Open the SCA lids and slowly lift the large basket from the cleaning solution. Rest the basket over the tank by setting the basket lugs (pins) on the support brackets and inner rim of the tank.



Protective gloves and eyewear should always be worn when lifting the basket from the tank or handling wet parts prior to rinsing.

Des gants de protection et des lunettes protectrices devraient être portés en tout temps lorsque vous soulevez le panier du réservoir ou lorsque vous manipulez des pièces mouillées avant qu'elles n'aient été rincées.

Let the basket rest above the tank while draining. After draining, remove the parts from the basket and rinse them with water to remove any residual cleaning solution. Air dry or pat dry with a soft cloth or paper towels.

Readiness for the next cleaning cycle

After removing recently cleaned parts, lower the large basket into the tank and close the lids. If the SCA is used periodically, use the 50°C temperature preset to maintain the water at an elevated temperature. This will shorten the time required to heat the water to an optimal cleaning temperature of 70°C or 85°C while still conserving energy. Alternatively, the SCA can be turned off by pressing the ON/OFF rocker switch at the back of the unit.

If the SCA will not be used for an extended period of time, all liquid should be drained from the tank and the power cord removed from the wall receptacle.

5 Maintenance

Draining the tank



For safety reasons, allow the cleaning solution to cool to room temperature before draining and wear protective gloves and eyewear while working with the effluent.

Pour des raisons de sécurité, laissez la solution de nettoyage refroidir jusqu'à la température ambiante avant le drainage, et portez des gants et lunettes de protection lorsque vous travaillez avec les effluents.

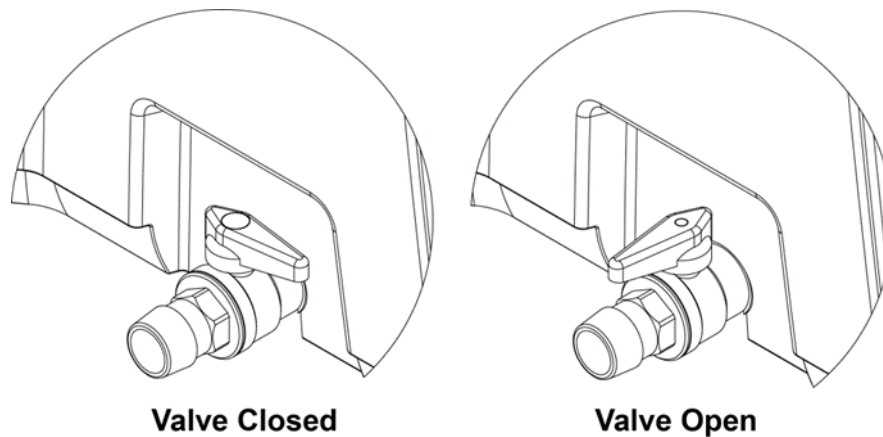
Power off the unit and unplug from the wall receptacle.

Ensure the drain strainer is in place at the bottom of the tank.

Attach a 1 inch (25.4 mm) inner diameter hose or tubing to the end of the drain tube. PVC tubing or equivalent will withstand the caustic properties of the cleaning solution.

Place the other end of the hose in a drain or suitable container for transporting the effluent. Open the drain valve. After draining, make sure the valve is closed.

Figure 8 Drain Valve Position



Disposing of solution

Consult your local regulations regarding disposal of the cleaning solution effluent.

Proper disposal requires the alkalinity (pH) of the used solution be reduced to allowable levels before disposal. The pH may be lowered by either diluting the solution or by neutralizing it with an acid such as malic acid.

If using WaterWorks, dilute the solution at a ratio of 5 parts clean water to 1 part used solution. More dilution may be required, please check your local regulations.

If using EcoWorks, a dilution of 1 part clean water to 1 part used solution is usually sufficient. More dilution may be required, please check your local regulations.

Cleaning the SCA

Apply mild soap and water with a sponge or cloth to clean the exterior surfaces of the SCA and the inside of the tank. Never immerse the system. Any liquid in the electronics area of the system may cause damage or system failure and void the warranty.

Contact the manufacturer for advice on cleaning the inside of the tank if stronger cleaning agents are required.

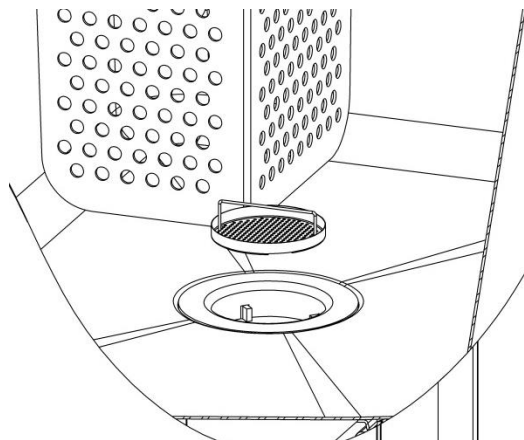
Inspecting and cleaning the drain strainer

The strainer should be cleaned every time the tank is refilled to keep it free of debris.

Never remove the strainer if the tank is filled with used cleaning solution. Doing so allows debris to clog the drain tube.

Remove the strainer by using the strainer handle to lift it up and out of the tank drain.

Figure 9 Removing the Drain Strainer



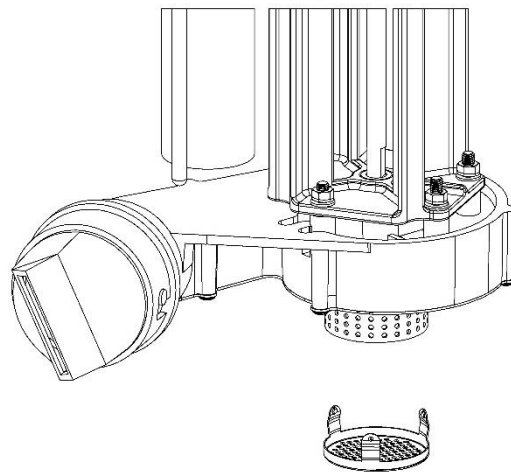
Scrub debris from the strainer using a nylon brush or toothbrush. Rinse with water. Verify all holes are unplugged before replacing the strainer in the drain.

Inspecting and cleaning the pump intake screen

The pump intake screen may become clogged with debris. This will noticeably reduce the flow in the tank.

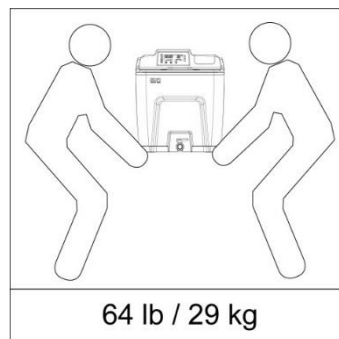
Remove the intake screen by pulling down with sufficient force to unseat the fastening clips from the mating surface. Scrub debris from the intake screen using a stiff brush. Rinse with water. Verify all holes are unplugged before replacing the screen on the pump intake.

Figure 10 Removing Pump Intake Screen



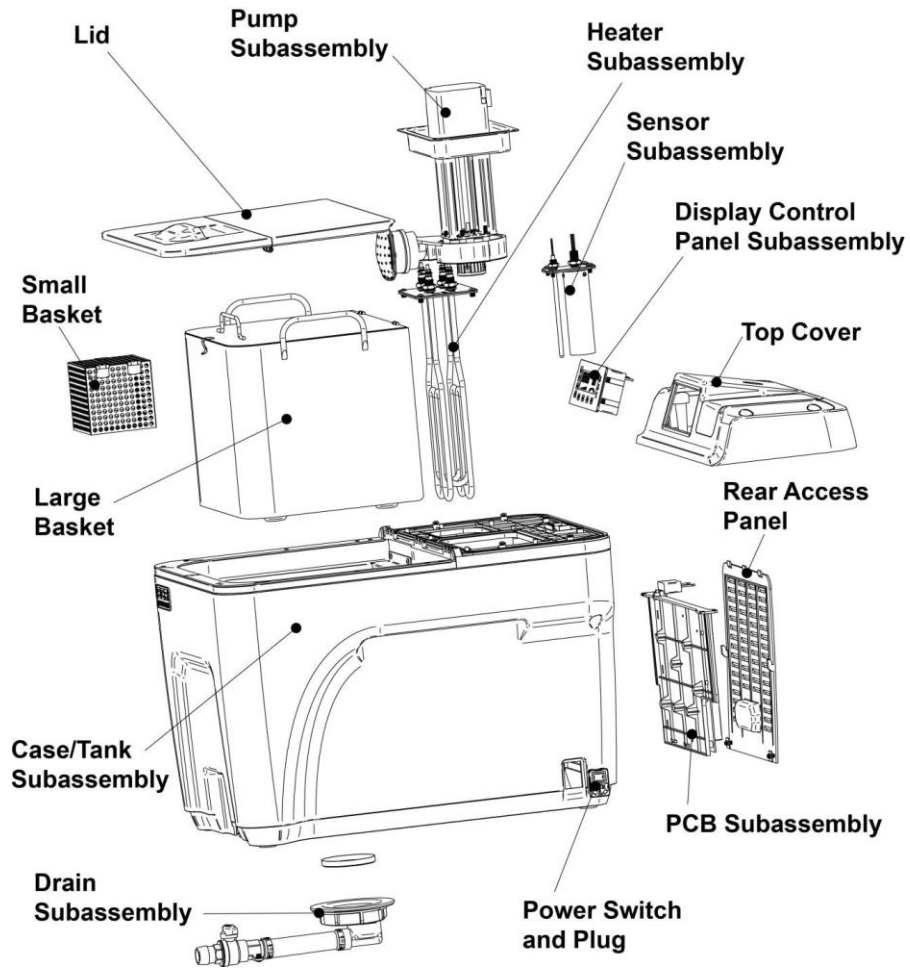
Moving the SCA

Always use two people to lift the SCA. The SCA should always be drained before moving. To lift, have each person stand on either side of the unit and place their hands into the indentations under the unit. Lift the unit to a cart or wheeled table for transport.



Replacement Parts

Figure 11 SCA 1200ht Assembly



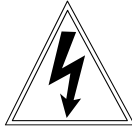
List of Replaceable Components

Large basket
Small parts basket
Pump subassembly w/nozzle
Heater subassembly
Sensor subassembly
Display Control Panel
PCB subassembly
Power switch
Spray nozzle

6 Troubleshooting

High Risk of Electrical Shock

Always disconnect the unit from power
Before removing the back panel!









Risque élevé de choc électrique

Débranchez toujours l'appareil de
l'alimentation
Avant de retirer le panneau arrière!



- ALWAYS WEAR PROTECTIVE GLOVES AND EYEWEAR WHEN ADDING OR REMOVING LIQUID FROM THE TANK.
- ALWAYS WEAR PROTECTIVE GLOVES AND EYEWEAR WHEN WORKING INSIDE THE TANK OR HANDLING COMPONENTS THAT ARE COVERED IN CLEANING SOLUTION.
- NEVER PLACE YOUR FACE NEAR THE TANK WHEN REMOVING THE LID, VAPORS FROM THE CLEANING SOLUTION MAY CAUSE EYE AND RESPIRATORY IRRITATION.
- PORTEZ TOUJOURS DES GANTS PROTECTEURS ET DE LA PROTECTION DES YEUX EN AJOUTANT OU EN ENLEVANT DU LIQUIDE DU RÉSERVOIR.
- PORTEZ TOUJOURS DES GANTS PROTECTEURS ET DE LA PROTECTION DES YEUX EN TRAVAILLANT À L'INTÉRIEUR DU RÉSERVOIR OU EN MANIPULANT DES COMPOSANTS QUI SONT COUVERTS DANS LA SOLUTION DE NETTOYAGE.
- NE PLACEZ JAMAIS VOTRE VISAGE PRÈS DU RÉSERVOIR EN ENLEVANT LE COUVERCLE ; LES VAPEURS DE LA SOLUTION DE NETTOYAGE PEUVENT PROVOQUER L'IRRITATION RESPIRATOIRE ET DES YEUX.

Problem	Probable Causes	What to Do
Power Indicator  is not Lit after pressing the button	Power switch is not "On"	Press rocker switch on the right side of the unit to the "On" position.
	Power cord is not connected to unit or wall	Check the power cord and make sure it is pushed all the way in to the receptacle on the system and is securely connected to a grounded wall socket.
	Fuse is blown	Contact technical support.
	Power circuit has tripped	Check your building circuit breakers, and any power circuit that the unit is plugged into for a tripped circuit breaker or blown fuse. Reset or replace the breaker or fuse as required.
	Power indicator has failed	If the time and temperature displays are lit, and the rocker switch on the back of the unit is ON, the power indicator has probably failed. Contact technical support.

Problem	Probable Causes	What to Do
Pump and heater will not start	Power is not on	Check the power indicator  on the front control panel. If it is off press the  button. If still unlit, then proceed to the “Power Indicator is not Lit” Problem.
	Timer has not been set and started	The system will only run when the timer is counting down. Check the timer display on the control panel. <ul style="list-style-type: none"> • If it is not counting down, press the  button. • If the time being displayed is 00:00, then add time and start the system.
	Liquid level is too high or too low	Check the indicator lights on the right side of the display control panel. If either level indicator is on, add or remove water from the tank until the indicator turns off. Press the  button to restart.
	Liquid temperature is too high Error Code: EO = over temperature	Check the indicator lights on the right side of the display control panel. If the Alert light is on, open the lids and lift the part basket from the tank. Let the liquid cool and try starting the cycle again. If it overheats a second time, contact technical support
	Over-temperature sensor has tripped	A resettable over-temperature sensor located on the back wall of the tank turns off the unit if the temperature of the bath exceeds 95°C. For instructions on resetting this sensor, contact technical support.
	Pump or Heater has failed	Contact technical support.
Buzzer is going off Silence the buzzer by pressing the  button	Liquid level is too high or too low	Check the indicator lights on the right side of the control panel. If either level indicator is on, add or remove water from the tank until the indicators go off.
	Liquid temperature is too high Error Code: EO = over temperature	Check the indicator lights on the right side of the control panel. If the Alert indicator is on, open the lids and lift the parts basket from the tank. Let the liquid cool and try starting the cycle again. If it overheats a second time, contact technical support.

Problem	Probable Causes	What to Do
	<p>Sensor failure, power supply failure, or pump failure.</p> <p>Error Codes: r1 = temperature sensor failure r2 = High level sensor failure r3 = Low level sensor failure EO = over temperature ES = 12VDC out of range</p>	<p>If the Alert Indicator light is also illuminated this is indicative of one of several types of failures.</p> <p>Contact technical support.</p>
Flow in tank appears less than normal	Nozzle is obstructed	Remove the nozzle and ensure no debris is blocking the flow. Ensure the nozzle is aligned with the opening in the basket.
	Pump intake screen is clogged	Drain the tank as instructed in the Maintenance section. Clean the intake screen with a stiff brush until debris is removed from the holes.
Flow from nozzle is not uniform	Nozzle is obstructed	Remove the nozzle and ensure no debris is blocking the flow. Ensure the nozzle is aligned with the opening in the basket.
White deposits noticeable on dark-colored parts	The white-colored support material may have saturated the cleaning solution.	Drain the tank and add fresh water and cleaning solution. Re-clean the parts using the fresh cleaning solution.
The cleaning solution has a strong odor	The cleaning solution is likely saturated with support material.	Drain the tank and add fresh water and cleaning solution.

Problem	Probable Causes	What to Do
After several hours parts don't appear to be much cleaner	The cleaning solution is likely saturated with support material.	Drain the tank and add fresh water and cleaning solution.
	Type of cleaning agent.	If using EcoWorks, try switching to WaterWorks. WaterWorks is a more efficient cleaning concentrate.
Liquid Level indicators did not turn off when liquid was added/removed from the tank	Sensors or Indicators have failed	Contact technical support
System is draining slowly	Drain strainer is clogged	While wearing gloves, reach into the water and remove any large pieces of debris from the drain strainer. If necessary, clean the drain strainer with a toothbrush without removing the strainer. Resume draining. Never drain without the strainer in place.

7 Specifications

Item	Specification	
Model Number	SCA 1200ht	
Power Cord	110 North American	220 International
Power Requirements	100-120V~ 50/60 Hz 12A	220-240V~ 50/60 Hz 9A
Main Supply Voltage Fluctuation	+/- 10%	
Electrical Protection	15A/250VAC Fuse	
Heater Power	1,200 Watts	1,700 Watts
Regulatory Compliance	CE / cTUVus/ RoHS / WEEE	
Tank Capacity	12.2 Gallons / 46.3 Liters	
Physical Dimensions	26L x 17.5W x 20.5H inches / 66 x 44.5 x 52 cm	
Shipping Package Dimensions	29.5 x 21.8 x 24.8 inches / 75.0 x 55.4 x 63.0 cm	
Weight, Shipping Max	NW: 64 lbs / 29 kg GW: 75 lbs / 34 kg	
Large Parts Basket Capacity	10 x 10 x 12 inches / 25 x 25 x 30 cm	
Small Parts Basket Capacity	4 x 4 x 4 inches / 10 x 10 x 10 cm	
Operating Environment Ranges	Temperature: 5°C - 40°C Humidity: 0% - 80% RH Altitude: 0 M – 2000 M	
Temperature Control Accuracy	± 2°C	
Pump Max Flow Rate	10 GPM / 38 LPM	
Temperature Display	Digital LED Readout	
Timer Display	Digital LED Readout	
Liquid Level Checking	Fixed liquid level sensors with separate lamp indicators for high and low level and audible alarm for both.	
Temperature Checking	Over temperature sensor, alerts at 5°C above the set temperature, audible alarm and lamp indicator. Thermal cutoff factory set at 90°C.	
Pump and Heater Safety Lockouts	Low liquid level, high liquid level, over temperature, no time on timer.	
Ventilation Requirements	Must be operated in a well-ventilated space	
Measurement (Installation) Category:	Installation Category II	
Pollution Degree	2	
Protection Class	Class I	
Marked Degree of protection for IEC	For Indoor Use Only, IP20	

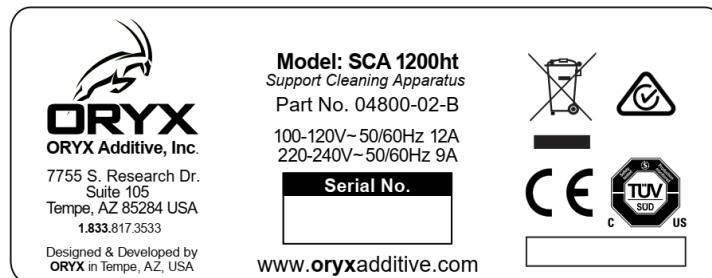
8 Customer Support

Contact support

Technical support for this product is provided by **Oryx Additive, Inc.**


Before contacting technical support please do the following:

1. Try the Troubleshooting table in this manual or at www.oryxadditive.com/support
2. Note the SCA model number, part number, and serial number (found on the back of the unit):



If the unit is covered by an extended warranty, contact the Authorized Reseller from whom the unit was purchased.


Otherwise, to receive technical support:

 www.oryxadditive.com/support, proceed to the “Request Technical Support” page, and fill out the support request form.

 send an e-mail to: support@oryxadditive.com.

Please include:

- full name
- company name
- phone number
- SCA serial number

 Call 1-833-817-3533 and ask for SCA technical support.

Replacement and accessory parts

Send email to support@oryxadditive.com or call 1-833-817-3533 for information on obtaining replacement parts and accessories.

Regulatory Compliance Documents

Visit our website at www.oryxadditive.com/support for the latest regulatory compliance certificates.



9 Supplemental Information

SCA 1200ht Support Cleaning Apparatus Limited Warranty

Product	Limited Warranty Period
SCA 1200ht Support Cleaning Apparatus	1 year

All new Support Cleaning Apparatus (SCA) systems are warranted exclusively by Oryx Additive, Inc.'s ("Manufacturer") limited warranty as follows:

Each Support Cleaning Apparatus system ("System") and its components ("Components"), except those listed below under limits and exclusions, is warranted against defects in the materials and workmanship for a period of one (1) year from the date of installation at the end user's ("Customer") facility.

Repair or replacement only: manufacturer's liability under this agreement shall be limited to repairing or replacing, at the discretion of manufacturer, parts, or components sufficient to return the system to conform to the marketing specifications of the system.

Components subject to wear during normal use and over time such as paint, finish, light bulbs, seals, etc., are excluded from this warranty.

This warranty is void if the system is subjected to mishandling, misuse, neglect, accident, improper installation, improper maintenance, or improper operation or application, or if the machine was improperly repaired or serviced by the customer. This warranty is void if the system is not installed by a certified distributor and the proper installation documentation provided by the manufacturer has not been submitted.

Liability, whether based on warranty, negligence or other cause, arising out of and/or incidental to sale, use or operation of the system, or any part thereof, shall not in any case exceed the cost of repair or replacement of the defective equipment, and such repair or replacement shall be the exclusive remedy of the purchaser, and in no case will manufacturer be responsible for any and/or all consequential or incidental damages including without limitation, and/or all consequential damages arising out of commercial losses.

This warranty is transferrable from the original end user to another party if the machine is sold via private sale before the end of the warranty period.

The foregoing is a limited warranty and it is the only warranty by manufacturer. MANUFACTURER DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

