

# SPECTRUM

# winco®

## ELECTRIC COUNTERTOP IMMERSION CIRCULATOR

### Installation and Operating Instruction Manual



CONSISTENT  
MORE  
NUTRITION  
MORE  
FLAVOR  
RESULTS

#### Optional Accessories



ESV-BH



ESV-IB

ESV-BH	Multi Ring Bag Stand
ESV-IB	Sous Vide Insulation Balls



ESVI-1

Model	Voltage	Power	Amperage	Plug Type	Overall Dimensions			Product Weight
					Length	Depth	Height	
ESVI-1	110-120V~60Hz	900W	7.5 A	NEMA 5-15P	3-5/8" (92mm)	6-11/16" (161mm)	13" (330mm)	4 lbs 1.8 kgs

#### BEFORE OPERATING ANY EQUIPMENT, READ AND FAMILIARIZE YOURSELF WITH THESE USE AND SAFETY INSTRUCTIONS

Congratulations on your purchase of this SPECTRUM commercial equipment. When used as intended, and with proper care and maintenance, you are sure to experience years of reliable operation from this equipment. To ensure best results, it is important that you read and follow the instructions in this manual carefully. **It is important to keep these instructions in a safe place for future reference.**

## Electric Countertop Immersion Circulator

### Important For Future Reference

Please complete this information and retain this manual for the life of the equipment. For Warranty Service and/or parts, this information is required.

\_\_\_\_\_

**Model Number**

\_\_\_\_\_

**Serial Number**

\_\_\_\_\_

**Date Purchased**



**WARNING: IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE PROPERTY DAMAGE, INJURY, OR DEATH. READ THE INSTALLATION, OPERATION, AND MAINTENANCE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING OR SERVICING THIS EQUIPMENT.**

**AVERTISSEMENT: TOUTE INSTALLATION, RÉGLAGE, MODIFICATION, RÉPARATION OU ENTRETIEN INCORRECT PEUT OCCASIONNER DES DOMMAGES MATÉRIELS, DES BLESSURES GRAVES OU LA MORT. LIRE LES INTRUCTIONS D'INSTALLATION, D'UTILISATION ET D'ENTRETIEN ATTENTIVEMENT AVANT D'INSTALLER OU DE RÉPARER CET APPAREIL.**



**CAUTION: THESE MODELS ARE DESIGNED, BUILT, AND SOLD FOR COMMERCIAL USE ONLY. IF THESE MODELS ARE POSITIONED SO THE GENERAL PUBLIC CAN USE THE EQUIPMENT, MAKE SURE THAT CAUTION SIGNS, WARNINGS, AND OPERATING INSTRUCTIONS ARE CLEARLY POSTED NEAR EACH UNIT SO THAT ANYONE USING THE EQUIPMENT WILL USE IT CORRECTLY AND NOT INJURE THEMSELVES OR HARM THE EQUIPMENT.**

**ATTENTION: CES MODÈLES SONT CONÇUS, FABRIQUÉS, ET VENDUS POUR UN USAGE COMMERCIAL SEULEMENT. SI CES MODÈLES SONT PLACÉS POUR QUE LE GRAND PUBLIC PUISSE LES UTILISER, ASSUREZ-VOUS QUE LES CONSIGNES D'ATTENTION, D'AVERTISSEMENT, ET LES INSTRUCTIONS D'UTILISATION SOIENT CLAIREMENT AFFICHÉES PRÈS DE CHAQUE UNITÉ DE SORTE QUE N'IMPORTE QUEL UTILISATEUR DE L'APPAREIL L'EMPLOIE CORRECTEMENT ET NE SE BLESSE PAS OU N'ENDOMMAGE PAS L'APPAREIL.**



**WARNING: A FACTORY AUTHORIZED SERVICE PROVIDER SHOULD HANDLE ALL MAINTENANCE AND REPAIR. BEFORE DOING ANY MAINTENANCE OR REPAIR, FOLLOW SERVICE SET UP ARRANGEMENT ON PAGE 11.**

**AVERTISSEMENT: UN TECHNICIEN AUTORISÉ PAR L'USINE DEVRA EFFECTUER TOUT L'ENTRETIEN ET LES RÉPARATIONS. AVANT DE FAIRE TOUT ENTRETIEN OU RÉPARATION, VEUILLEZ CONTACTER WINCO.**



### Introduction

Congratulations on the purchase of your SPECTRUM™ Commercial Immersion Circulator. Please take time to carefully read through this manual to ensure the machine is operated and maintained properly, to ensure the best possible performance from the product for many years.

SPECTRUM will not accept liability for the following if:

- The instructions in this manual have not been followed correctly.
- Non-authorized personnel have tampered with the machine.
- Non-original spare parts are used.
- The machine has not been handled and cleaned correctly.
- There is any use damage to the unit.

### Immediately Inspect for Shipping Damage

All containers should be examined for damage before and during unloading. The freight carrier has assumed responsibility for its safe transit and delivery. If equipment is received damaged, either apparent or concealed, a claim must be made with the delivering carrier.

- A. Apparent damage or loss must be noted on the freight bill at the time of delivery. It must then be signed by the carrier representative (Driver). If this is not done, the carrier may refuse the claim. The carrier can supply the necessary forms.
- B. If concealed damage or loss is not apparent until after equipment is uncrated, a request for inspection must be made to the carrier within 15 days. The carrier should arrange an inspection. Be certain to keep all contents and packaging material.

# Electric Countertop Immersion Circulator

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### Package Contents

All units come with an Operating Instruction Manual and the following:

- (1) SPECTRUM™ Commercial Immersion Circulator

SPECTRUM prides itself on quality and service, ensuring that at the time of packing, all products are supplied fully functional and free of damage. Should you find any damage as a result of freight, please contact your SPECTRUM dealer immediately.

### Unpacking the Equipment

**DISPOSE OF ALL PACKAGING MATERIALS IN AN ENVIRONMENTALLY RESPONSIBLE MANNER.**

1. Remove all packing materials and tape, as well as any protective plastic and cardboard, from the unit.
2. Clean any glue residue left over from the plastic or tape.
3. Place the unit in the desired position and height.

*Thoroughly read, understand, and follow these instructions before installation and use.*

**Please keep this manual in a safe place for future use!**

### NOTE

*Please remember that this manual and the warning labels do not replace the need to be alert, to properly train and supervise operators, and to use common sense when using this equipment.*

## Installation

These instructions should be followed at all times. Failure to follow these instructions could result in injury to yourself and others.

### TO REDUCE RISK OF INJURY OR DAMAGE TO THE UNIT:



Read this manual thoroughly before installation and operation. DO NOT proceed with installation and operation if you have any questions or do not understand anything in this manual. Contact your representative or the manufacturer first.

1. Remove the SPECTRUM™ Commercial Immersion Circulator from packaging. Be certain that all protective plastics and residues are thoroughly cleaned from its surfaces.
2. Select water bath container (not included) that is rated for temperatures of 212°F(100°C), and will hold the maximum suggested water volume of 7.9 gal(30L) with a minimum water depth of 4-5/16”(110mm) and maximum water depth of 6-1/2”(165mm) after food product displacement.
3. Place water bath container on a firm level surface.
4. Hold the Clamp Hook tightly, push the Slide Plate with your thumb and slide the Connection Sleeve to the desired position, remove thumb from Slide Plate, the connection sleeve should be tight on the Housing.
5. Hang the Immersion Circulator into water bath container and tighten the Clamp Handle to secure in place.
6. Add suggested water volume of 7.9 gal(30L) into the water bath.



7. Proper connections and power supply are essential for efficient performance. Supply the appropriate power and connect to source; your Immersion Circulator is now ready to turn on and operate. (For power supply please see technical specification on page 1).  
*Fournir l'alimentation secteur appropriée et brancher l'appareil à la source d'alimentation ; votre Circulateur d'immersion est maintenant*
8. The units are wired to be used with a standard 110V/AC receptacle and may be plugged into any convenient outlet.
9. The installation of the unit must conform to the NATIONAL ELECTRIC CODE, ALL LOCAL ELECTRIC CODES AND ORDINANCES, AND ALL THE LOCAL ELECTRICAL COMPANY RULES AND REGULATIONS. Additionally, we recommend a 4" spacing surrounding the unit in order to provide adequate ventilation.

<b>WARNING</b>  <b>AVERTISSEMENT</b>		
	<p><b>Fire Hazard.</b> Correct installation precautions, procedures and regulations must be followed. Operation and safety training is necessary for all users of this equipment.</p>	<p><b>Risque d'incendie</b> La surchauffe des vapeurs d'huile ou de l'huile peut s'enflammer et provoquer un incendie. Surveillez la température, la qualité et le niveau d'huile. Utilisez et entretenez le système d'élimination des vapeurs d'huile.</p>
	<p>The equipment must be installed by qualified personnel only. Correct installation precautions, procedures and regulations must be followed in order to reduce the risk of fire. Hood and fire suppression systems must be maintained per manufacturer's guidelines. Only qualified and trained personnel are to use this equipment.</p>	<p>Faire chauffer l'huile avec précaution. Si l'huile fume, réduire le feu. Ne pas laisser l'appareil sans surveillance. Si le feu se produit, éteindre l'appareil, couvrir jusqu'à refroidissement. Ne pas mettre l'eau dans l'huile chaude ou enflammée. Ne faites pas fonctionner avec de l'huile sous la barre d'huile. L'huile sale a un point d'éclair plus bas. Remplacer l'huile sur une base régulière. Maintenir le niveau d'huile correct. Utiliser un système d'évacuation de la vapeur d'huile (capot) pour réduire l'accumulation de graisse et d'huile sur les surfaces de paroi ou de plafond.</p>

<b>WARNING</b>  <b>AVERTISSEMENT</b>		
	<p><b>Electrical Shock Hazard</b> Keep water and other liquids from entering the inside of the unit. Liquid inside the unit could cause an electrical shock.</p>	<p><b>Risque de choc électrique</b> Conserver l'eau et d'autres liquides de pénétrer à l'intérieur de l'appareil. Liquide à l'intérieur de l'appareil pourrait provoquer un choc électrique.</p>
	<p>Do not spray water or cleaning products. Liquid could contact the electrical components and cause a short circuit or an electrical shock. Do not use unit if power cord is damaged or has been modified.</p>	<p>Ne pas pulvériser de l'eau ou des produits de nettoyage. Le liquide pourrait contacter avec les composants électriques et causer un court-circuit ou un choc électrique. Ne pas utiliser l'appareil si le cordon d'alimentation est endommagé, ou a été modifié.</p>

 **CAUTION**

 **ATTENTION**

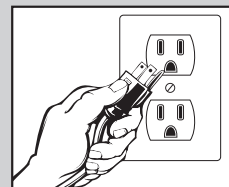
**Do not position or operate near combustible materials/flammable objects.**

**Ne pas placer ni faire fonctionner l'appareil près de matériels combustibles ou d'objets inflammables.**

### Proper Grounding · Mise à la terre correcte

This machine is provided with a three-pronged grounding plug. The outlet to which this plug is connected must be properly grounded. If the receptacle is not the proper grounding type, contact an electrician. DO NOT, under any circumstances, cut or remove the third ground prong from the power cord or use any adapter plug.

*Cette machine est équipée d'une fiche à trois broches. La prise sur laquelle cette fiche est branchée doit être correctement mise à la terre. Si la prise n'est pas le type de mise à la terre, contactez avec un électricien. NE PAS, en aucun cas couper ou enlever la troisième broche de terre à partir du cordon d'alimentation ou utiliser un adaptateur.*

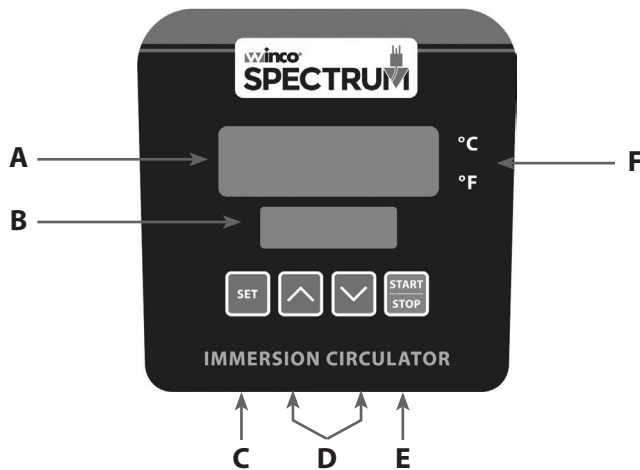


**USE A GROUNDED OUTLET  
DO NOT ADD AN ADAPTOR  
TO THE PLUG**

**UTILISER UNE PRISE AVEC MISE  
À LA TERRE NE PAS AJOUTER UN  
ADAPTEUR SUR LA FICHE**

## Operation

### Using the control panel



- A. Temperature Display Screen
- B. Time Display Screen
- C. "SET" Button
- D. Adjustment Buttons "∧" & "∨"
- E. "START/STOP" Button
- F. °F/°C Display Mode

**NOTE:** Upon powering up, the Immersion Circulator will be in standby mode and display the factory default setting of °C at temperature of 60°C and time of 24 hours, which can be reset as required.

The memory function will display last setting of temperature and time, with each power up.

Completely disconnect unit from power supply when not in use.

### Select temperature mode, (°F) or (°C):

- In standby mode, press & hold the up and down adjustment buttons ("∧" & "∨") simultaneously to switch between either °F (Fahrenheit) or °C (Celsius) display mode.
- An indicator light will illuminate for which mode is displayed.

### Set/Adjust/View Temperature/Time Setting:

#### IN STANDBY MODE

- Press & hold **SET button** (Fig. C) for 2 to 3 seconds and release until the **TIME display screen** (Fig. B) starts flashing. Press the adjustment buttons up or down (Fig. D, "∧" & "∨") to adjust the **time** setting.
- Press & release **SET button** (Fig. C) once until the **TEMPERATURE display screen** (Fig. A) starts flashing. Press the adjustment buttons up or down (Fig. D, "∧" & "∨") to adjust **temperature**.
- Press **START/STOP** (Fig. E) to exit - the circulator will start up and begin to pre-heat the water. The circulator will signal with three (3) beeps when the preset temperature is reached - press **START/STOP** to begin countdown. After countdown ends, the unit will hold the temperature and signal again with a beep - it will beep every 20 seconds.

#### IN WORKING MODE

- The **Temperature and Time Display Screens** (Fig. A) will display current temperature and remaining countdown time. Press & hold the **SET button** (Fig. C) to display the last temperature / time settings.

### Start/Stop Button – Working Mode

- To stop circulator from working when unit is heating with no countdown, press **START/STOP** button (Fig. E) twice.
- To stop the circulator from working when unit is heating with a countdown, press **START/STOP** (Fig. E) once.
- When unit is in the temperature holding status, press **START/STOP** (Fig. E) and return to ready mode.

### Start/Stop Button – Standby/Ready Mode

- After 10 minutes in standby/ready mode with no operation, circulator will shut down and display "OFF". Pressing **START/STOP** (Fig. E) will return unit back to ready mode.

## Operation (continued)


### Operating the Immersion Circulator

1. Place the water bath container on a sturdy level surface.
2. Hang the Immersion Circulator on the side of the Thermal Circulator.  
**NOTE:** The machine body should be immersed in the water and the fastening hook should be facing away from the water.
3. Add water to the water bath container.  
**NOTE:** The water level (after the food is put in) should be higher than the "MIN" but lower than the "MAX" markings. Adjust depth of circulator as required.  
  
**NOTE:** After filling water bath container, shake the immersion circulator gently a few times to release any air in the pump. Air-locked pumps will make a high decibel noise and running with out pumping water may cause damage to the pump.
4. Tighten the locking screw on hook to the water bath.
5. Insert the power cord into the socket with grounding.
6. Press "SET" button and set to desired temperature and time.
7. Place the food into the water bath.

#### **NOTE:**

**FOOD MUST BE VACUUM SEALED OR IN AIR TIGHT MANUALLY SEALED BAGS.**

8. Press the "Start/Stop" button to start.  
**NOTE:** During working mode, press "Start/Stop" button to PAUSE. Press again to restart - the working time will re-count from the beginning.
9. After cooking is complete, the unit will beep.  
**NOTE:** The unit will beep after 20 seconds and repeat if there is no action, and the water temperature will be kept in the preset temperature.
10. Remove the food out of the water bath and is ready for final preparations.
11. After using the Immersion Circulator, unplug the power supply and take the unit out of the water bath.
12. Place the Immersion Circulator upright vertically. Do not lay on its side or upside down to avoid liquids from flowing back into the unit.
13. After the machine is dried and cooled down, store in a safe place.  
**NOTE:** If the vacuum-sealed bag breaks during cooking, the food may escape the bag and block the circulating channel of the machine. In this case, please remove the food from the tank and change to new water. Clean the filter if it is blocked.

<b>WARNING ⚠️ AVERTISSEMENT</b>		
 <b>HOT</b>	<p><b>Burn Hazard.</b> When in operation, the surface of the Immersion Circulator will be hot. <i>Please take extreme caution.</i></p>	<p><b>Risque de brûlure.</b> Ne touchez pas les surfaces chaudes ou chauffées liquide tout appareil chauffe ou en fonctionnement.</p>
	<p><b>Burn Hazard.</b> Do not directly touch the liquid to check temperature, please use temperature display or thermometer. <i>Please take extreme caution.</i></p>	<p><b>Risque de brûlure.</b> Ne touchez pas directement le liquide pour vérifier la température, veuillez utiliser l'affichage de la température ou le thermomètre.</p>
	<p><b>USE CAUTION WHEN TOUCHING THE UNIT.</b></p>	<p><b>Ne touchez pas le liquide chaud ou les surfaces de chauffage lorsque l'appareil chauffe ou en fonctionnement.</b></p>



## Cooking Chart Guide

This table is only meant to serve as a guideline. Temperatures should be adjusted to your preference of doneness. Cooking time should be adjusted to initial temperature, heat transfer characteristics, and thickness of food being cooked.

	Temperature	Thickness	Time to core Temperature	Time (Pasteurized to Core)
<b>CUSTARD</b>				
Crème Anglaise	179.6°F / 82°C		20 min	
<b>BEEF</b>				
Tenderloin	138°F / 59°C	2"	1 hour, 58 min	5 hours, 35 min
Rib Eye Steak	138°F / 59°C	1-1/2"	1 hour, 58 min	3 hours, 20 min
Strip Steak	138°F / 59°C	1-1/2"	1 hour, 58 min	3 hours, 20 min
Porterhouse Steak	138°F / 59°C	1-1/2"	1 hour, 58 min	3 hours, 20 min
Brisket	147°F / 64°C		48 hours	3 hours, 21 min
Veal Shank	167°F / 75°C		12-24 hours	9 hours, 3 min
<b>LAMB</b>				
Lamb Saddle	138°F / 59°C	2-1/2"	2 hours, 16 min	3 hours, 51 min
<b>PORK</b>				
Pork Chop	145°F / 63°C	1-3/4"	1 hour, 45 min	4 hours, 2 min
Ribs	140°F / 60°C		24-48 hours	1 hour, 6 min
<b>POULTRY</b>				
Chicken Breast	150°F / 65°C	1"	47 min	1 hour, 36 min
Duck Breast	135°F / 57°C	1"	60 min	2 hours, 41 min
Chicken Thighs	150°F / 65°C	1-1/2"	1 hour, 20 min	3 hours, 3 min
Foie Gras	147°F / 64°C	2"	2 hours, 16 min	5 hours, 9 min
<b>FISH</b>				
Salmon Filet	130°F / 54.4°C	1"	1 hour, 39 min	5 hours, 31 min
Cod Filet	129°F / 54°C	1"	1 hour, 39 min	3 hours, 47 min
Halibut	129°F / 54°C	1"	1 hour, 39 min	3 hours, 47 min
<b>SHELLFISH</b>				
Shrimp/Prawns	135°F / 57°C	1"	43 min	5 hours, 21 min
Lobster	145°F / 63°C	1"	15 min	5 hours, 5 min
Scallops	135°F / 57°C	1-1/2"	1 hour, 8 min	2 hours, 29 min
<b>VEGETABLES</b>				
Root-Whole (Beets, Carrots, Potatoes, etc.)	190°F / 88°C		60 min	
Root-Cut (Beets, Carrots, Potatoes, etc.)	185°F / 85°C		30-40 min	
Bulb-Whole (Onions, Shallots, etc.)	194°F / 90°C		85 min	
Squash-Cut	185°F / 85°C		30 min	
Artichoke Hearts	194°F / 90°C		60-75 min	
<b>FRUIT</b>				
Peach Wedges	190°F / 88°C		16 min	
Pear Wedges	190°F / 88°C		60 min	
Apple Slicers	190°F / 88°C		40 min	
<b>EGGS IN SHELL</b>				
Soft Poached Egg	143°F / 62°C		57 min	44 min

**NOTE:** Times shown in this table are to achieve the absolute specified core temperature. Cook times can be reduced significantly by adding 1° to the water bath temperature. The closer the bath temperature is to the core temperature, the longer the cooking time will be.

Raw or unpasteurized food must be never served to individuals with a weakened immune system, children, older adults and those that may be pregnant, as there is higher risk for serious illness.

**NOTE:** For most accurate temperature control, be sure to place lid or Sous Vide Insulation Balls (ESV-IB, sold separately) on the vessel when in use.

## Care & Maintenance

**To maintain the appearance and increase the service life, clean your unit. Tap-water contains minerals. When the water is heated to a certain temperature, there will be scale on the heater or surface of the unit. The SPECTRUM™ Immersion Circulator should be cleaned after every 20 uses or after 100 hours of work time; however, the unit may require more frequent cleaning, depending on the volume of production or due to water in your area.**

We suggest changing the water after each use and fill with new water before each use. Reusing old water will cause the mineral in the water to scale on unit components, thus affecting the performance of the unit.

Allow unit to cool to room temperature between water changes and uses. Placing a hot unit into cold water may cause damage and effect the performance of the unit.

Should reduced circulation discharge capacity be experienced, components have become dirty, please disassemble the stainless steel housing to clean inner components.

## Cleaning Inner Components

1. Switch power off, disconnect from the outlet, and let the unit cool down to room temperature before cleaning.



2. Hold the clamp hook tightly, push the slide plate with your thumb and slide the connection sleeve down and off the housing.
3. Remove the fixing screw above the grounding mark, connecting the machine shell and back cover.
4. Remove the stainless steel housing by holding the plastic cover and the housing with your hands and rotate counterclockwise by 15°, then release the housing.
5. Clean inner components with soft wet cloth.
6. Let dry and assemble parts back together.
7. Store the assembled machine properly for the next use

## Cleaning (with Water Bath)

1. The Immersion Circulator should be cleaned after 20 uses or after 100 hours, however your unit may need more depending on volume of production.
2. Place the Immersion Circulator into the container.  
**NOTE:** Make sure the container is over 7"(180mm) high.
3. Combine 50/50 mixture of white vinegar and water, and fill container to the "MAX" line.  
**ATTENTION:** If vinegar comes in contact with eyes, rinse with lots of water. See a doctor if needed.
4. Turn on the machine. Set the working temperature to 176°F (80°C), and working time to 3 hours (03:00). Then press "Start/Stop." After 3 hours, the machine will beep, then turn off the machine and turn power OFF.
5. **QUICK CLEAN PROGRAM:** Press "SET" and "V" at the same time for 3 seconds, the machine will go into clean program. The set temperature will be 176°F (80°C) and work time for 3:00. Then press "Start/Stop", machine will start to clean. (Press "-" immediately all the time when machine power on, there will display the total working hours before cleaning, release will be out of the view mode.)
6. Check if the machine is clean. If not, add vinegar to the container and run the machine again as stated in the above steps. If the machine is clean, drain the water and vinegar from the container. Wash the machine and container with fresh water, then dry them and store them well.
7. **The Immersion Circulator should be placed upright after cleaning. DO NOT lay on its side or upside down.**




## Safety

### SAFETY PRECAUTIONS

**Before installing and operating this equipment be sure everyone involved in its operation are fully trained and aware of all precautions. Accidents and problems can result from a failure to follow fundamental rules and precautions.**

- A WINCO® Approved Recommended Qualified Service Technician should carry out repairs if necessary. Do not remove any components or service panels on this product.
- Allow the Immersion Circulator to cool down after use before dismantling for cleaning; the unit will be too hot to handle immediately after use.
- Before cleaning, switch off power and disconnect power cord from the outlet.
- **Do not immerse unit in water or use hose to clean.**  
*Ne jamais immerger l'appareil dans l'eau ni utilisez un jet d'eau pour le nettoyer.*
- If the power cord is damaged, it must be replaced by a WINCO® Approved Recommended Qualified Service Technician in order to avoid a hazard.

<b>WARNING ⚠ AVERTISSEMENT</b>		
 <b>HOT</b>	<b>Burn Hazard.</b> When in operation, the surface of the Immersion Circulator will be hot. <i>Please take extreme caution.</i>	<b>Risque de brûlure.</b> Ne touchez pas les surfaces chaudes ou chauffées liquide tout appareil chauffe ou en fonctionnement.
	<b>USE CAUTION WHEN TOUCHING THE UNIT.</b>	<b>Ne touchez pas le liquide chaud ou les surfaces de chauffage lorsque l'appareil chauffe ou en fonctionnement.</b>

<b>WARNING ⚠ AVERTISSEMENT</b>		
	<b>Electrical Shock Hazard</b> Keep water and other liquids from entering the inside of the unit. Liquid inside the unit could cause an electrical shock.	<b>Risque de choc électrique</b> Conserver l'eau et d'autres liquides de pénétrer à l'intérieur de l'appareil. Liquide à l'intérieur de l'appareil pourrait provoquer un choc électrique.
	Do not spray water or cleaning products. Liquid could contact the electrical components and cause a short circuit or an electrical shock. Do not use unit if power cord is damaged or has been modified.	Ne pas pulvériser de l'eau ou des produits de nettoyage. Le liquide pourrait contacter avec les composants électriques et causer un court-circuit ou un choc électrique. Ne pas utiliser l'appareil si le cordon d'alimentation est endommagé, ou a été modifié.

## Troubleshooting

If your SPECTRUM™ Immersion Circulator does not operate, please check the following before placing a service call:

ISSUE	MIGHT BE CAUSE BY	RECOMMENDED SOLUTION
The unit is not working and the display is not on	Lack of power	Check main power supply
	Power switch has not been turned on	Check that unit is correctly plugged in and turned on
	Wrong operating procedure	Refer to operating instructions
	Plug and lead are damaged	Replace damaged power cable - <i>Replacement must be done by an authorized service provider</i>
	Internal wiring is faulty.	Replace faulty wiring - <i>Replacement must be done by an authorized service provider</i>
Water temperature does not increase	The set temperature is below or close to the water temperature.	Check the setting.
	Set heating time is too short.	Extend the heating time.
Water continues to heat after the set temperature is reached.	Program is wrong.	Restart the power switch.
	Temperature sensor is faulty.	Replace faulty sensor - <i>Replacement must be done by an authorized service provider</i>
	The circulator is not rotating.	Call WINCO to make service arrangements through its Service Provider Network
E01 appears on the display screen	Water level is below the minimum water level line.	Add water to the cooking tank so that the water level exceeds the minimum water level.
	Machine is not in water.	Place the machine into water and restart the power.
E02 appears on the display screen	After about 15 minutes of heating, the water temperature did not increase 1°F	Check the heating plate
		Check the wiring
		Check the temperature sensor
"CLEAN" appears on the display screen	Machine has worked continuously more than 100 hours.	Clean the machine according to the cleaning instructions
Unit powers on, but no display.	Display is faulty.	Remove power from the unit. Leave the unit off for 2 minutes before resetting power.
High decibel noise from the pump	Air is inside the pump	After filling water into the tank, shake the machine for a few seconds to discharge the air out of the impeller of the pump.
	Debris is inside the pump	Clean the machine and pump according to instruction manual (Or call WINCO to make service arrangements through its Service Provider Network)
	Machine is not in water.	Place the machine into water and restart the power.

## Service and Repair

THIS EQUIPMENT MUST ONLY BE SERVICED BY AN AUTHORIZED AGENT.

### NOTE

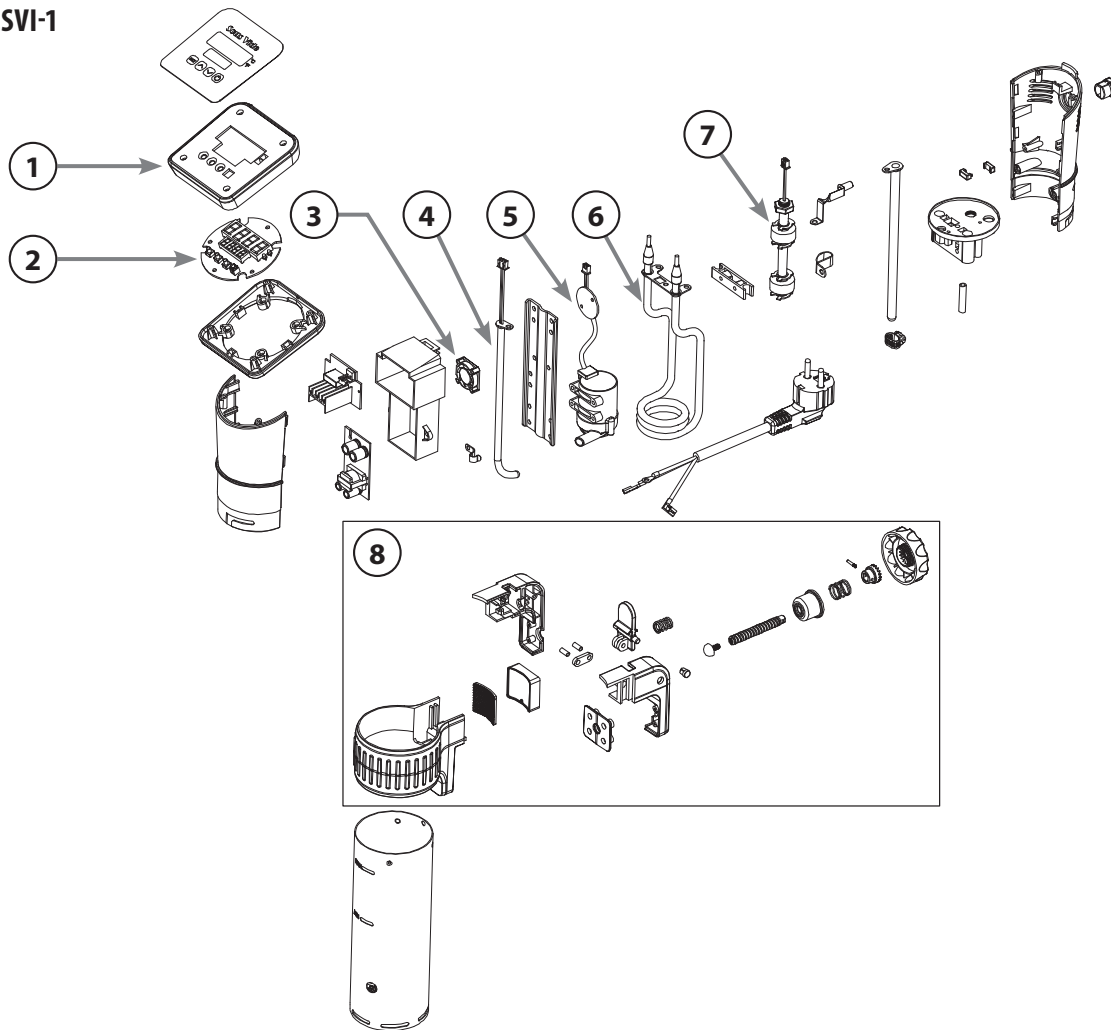
Parts protected by the manufacturer or its agent are not to be adjusted by the installer unless the installer is an authorized service agent.

If you have any questions or problems DO NOT send unit to WINCO® without first contacting our customer service department.

See "Limited Warranty" section on page 12 for details.

## Exploded Views

MODEL: ESVI-1



## Parts List

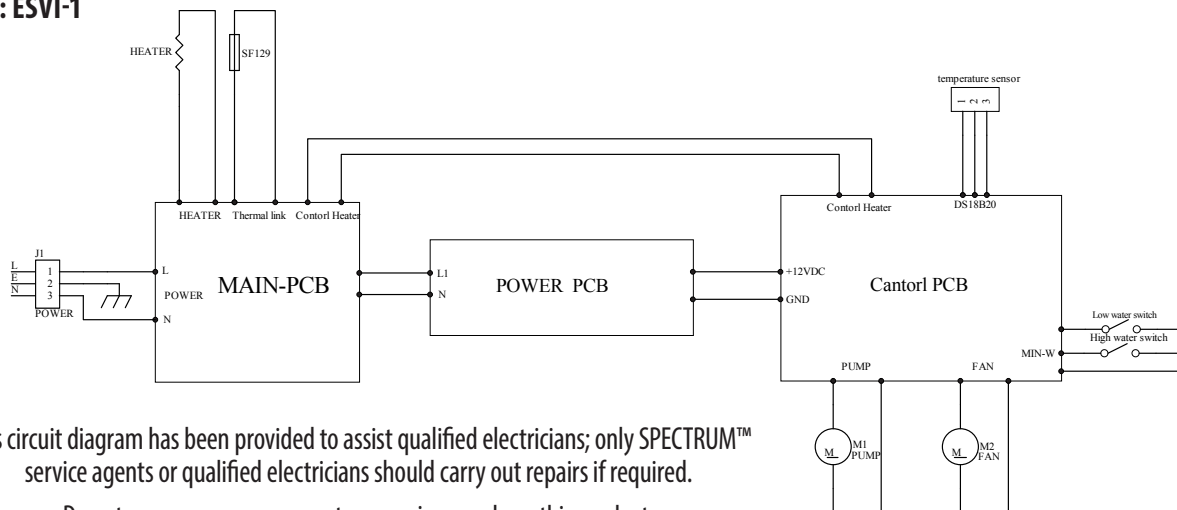
MODEL: ESVI-1

#	Description	Part #	QTY
1	Membrane switch	ESVI-P4	1
2	Control board	ESVI-P5	1
3	Fan	ESVI-P7	1
4	Temperature probe	ESVI-P6	1
5	Pump	ESVI-P3	1
6	Heating Element	ESVI-P9	1
7	Water-level switch	ESVI-P2	1
8	Complete Clamp Assembly	ESVI-P8	1

*Please contact factory for special order parts not listed.*

## Electrical Circuit Diagram

### MODEL: ESVI-1



This circuit diagram has been provided to assist qualified electricians; only SPECTRUM™ service agents or qualified electricians should carry out repairs if required.

Do not remove any components or service panels on this product.

## Limited Warranty

WINCO® warrants to the original purchaser of new equipment that said equipment, when installed in accordance with our instructions within North America and subjected to normal use, is free from defects in material or workmanship for a period of 1 year. The labor warranty is one year from original installation or 18 months from actual factory shipment date, whichever date occurs first.

**THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED. WINCO EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY OR EXPRESSED OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. WINCO'S OBLIGATION AND LIABILITY UNDER THIS WARRANTY IS EXPRESSLY LIMITED TO REPAIRING AND REPLACING EQUIPMENT THAT PROVES TO BE DEFECTIVE IN MATERIAL OR WORKMANSHIP WITHIN THE APPLICABLE WARRANTY PERIOD.**

**IN NO EVENT SHALL WINCO BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES TO BUYER OR ANY THIRD PARTY, INCLUDING, WITHOUT LIMITATION, LOSS OF PROPERTY, PERSONAL INJURY, LOSS OF BUSINESS OR PROFITS OR OTHER ECONOMIC LOSSES, OR STATUTORY OR EXEMPLARY DAMAGES, WHETHER IN NEGLIGENCE, WARRANTY, STRICT LIABILITY, OR OTHERWISE.**

This warranty is given only to the first purchaser from a retail dealer. No warranty is given to subsequent transferees.

Warranty does not cover product failures caused by: failure to maintain, neglect, abuse, damage due to excess water, fire, normal wear, improper set up and use. Periodic maintenance is not covered.

This warranty is not in force until such time as a properly completed and digitally signed Installation/Warranty Registration has been received by WINCO within 30 days from the date of installation.

### WARRANTY SERVICE

To initiate warranty service contact: [EquipService@wincous.com](mailto:EquipService@wincous.com) or call: 973-295-3899

DO NOT send unit to WINCO® without first contacting our customer service department.

### REGISTER ONLINE AT:

<http://support.wincous.com>

Proof of purchase is required to extend warranty more than 1 year from date of shipment from the factory.

**THE FOREGOING WARRANTY PROVISIONS ARE A COMPLETE AND EXCLUSIVE STATEMENT BETWEEN THE BUYER AND SELLER. WINCO® NEITHER ASSUMES NOR AUTHORIZES ANY PERSONS TO ASSUME FOR IT ANY OTHER OBLIGATION OR LIABILITY IN CONNECTION WITH SAID EQUIPMENT.**

Examples of items not covered under warranty, but not limited to just these items:

1. Natural disasters (ie: earthquakes, tornadoes, hurricanes, etc.), fire, water damage, burglary, accident, theft.
2. Freight damage.
3. Improper installation or alteration of equipment.
4. Use of generic or after-market parts.
5. Repairs made by anyone other than a WINCO® designated service provider.
6. Lubrication.
7. Expendable wear parts, adjustable feet, blown fuses, lamps, etc.
8. Cleaning of equipment.
9. Misuse or abuse.

***Please keep this manual in a safe place for future use!***