ELECTRIC COUNTERTOP
THERMAL CIRCULATOR
Installation and Operating Manual



CONSISTENT MORE NUTRITION MORE FLAVOR RESULTS

ESVC-28D
ESVC-28D-CAN

ESVC-28D-CE

For California Customers
WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

Model	Voltage	Power	Amperage	Plug Type	Overall Dimensions			Product Weight
					Length	Depth	Height	
ESVC-28D	120 V ~ 60 Hz	1800 W	15.0 A	NEMA 5-15P	22.5 in (570 mm)	17.4 in (442 mm)	12.1 in (308 mm)	16.5 lb 7.5 kg
ESVC-28D-CAN	120 V ~ 60 Hz	1800 W	15.0 A	NEMA-5-20P				
ESVC-28D-CE	220 V ~ 50 Hz	1800 W	8.18 A	VDE				

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

Congratulations on your SPECTRUM™ commercial equipment purchase! 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.***

Form No. ESVC-28D-Series Manual - R01-1126

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.

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.

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

INTRODUCTION

Congratulations on your SPECTRUM™ commercial equipment purchase! 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.

TABLE OF CONTENTS

Specifications 1
Warnings 2
Introduction 2
Packaging 3
Installation 4
Operation 5
Cooking Chart Guide 7
Cleaning, Care & Maintenance 8
Safety 8
Troubleshooting 9
Service & Repair 9
Exploded View 10
Parts List 11
Electrical Diagram 12

PACKAGE CONTENTS

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

- SPECTRUM™ Commercial Thermal Circulator
- Lid
- Sectioned Cooking Rack
- Drain Faucet

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:

1. 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.



⚠ WARNING ⚠

Fire Hazard.

Correct installation precautions, procedures and regulations must be followed. Operation and safety training is necessary for all users of this equipment.

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.

2. Remove the SPECTRUM™ Commercial Thermal Circulator from the packaging. Be certain that all protective plastics and residues are thoroughly cleaned from its surface.
3. Place your Thermal Circulator on a firm level surface. Local standards and regulations should be consulted in order to abide by standards set in relation to positioning, spacing, and ventilation. SPECTRUM™ recommends no less than 4 in for a ventilation gap around the perimeter of this unit.

⚠ CAUTION

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

Once your Thermal Circulator has been placed in position, be sure the cooking rack is correctly positioned.



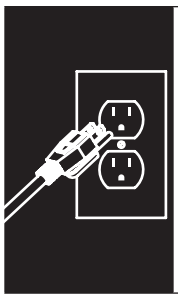
⚠ WARNING ⚠

Electrical Shock Hazard

Keep water and other liquids from entering the inside of the unit. Liquid inside the unit could cause an electrical shock.

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.

4. Proper connections and power supply are essential for efficient performance. Supply the appropriate power and connect to source; your Thermal Circulator is now ready to turn on and operate. (For power supply please see technical specification on page 1).
5. The ESVC-28D and ESVC-28D-CAN units are wired to be used with a standard 110 V receptacle and may be plugged into any convenient outlet. The ESVC-28D-CE units are wired to be used with a standard 220 V receptacle
6. 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 in spacing surrounding the unit in order to provide adequate ventilation.



Proper Grounding

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

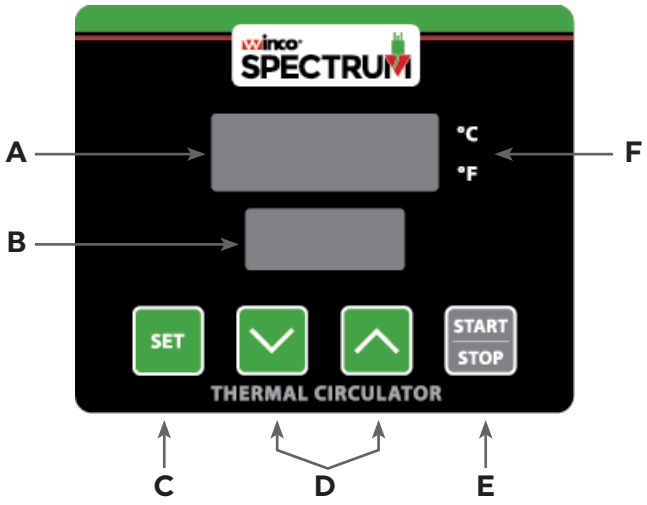
This machine is provided with a three-pronged grounding plug. The outlet to which this plug is connected must be properly grounded. If the receptacle is not the proper grounding type, contact an electrician. DO NOT, under any circumstances, cut or remove the third ground prong from the power cord or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

OPERATION

Preparing the thermal circulator

Food should be prepared first in vacuum-seal bags to ensure no liquid or air can get inside.
Please also ensure that the vacuum seal bags are suitable for temperatures up to 203°F (95°C).

Using the control panel



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

NOTE: Upon power up the Thermal Circulator will be in standby mode and display the factory default setting of °C, temperature 60°C, time 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.

Adjust Fahrenheit / Centigrade Mode:

- In standby mode, press/hold Adjustment Buttons ("Λ" & "V") simultaneously to switch between °F/°C display mode. A light will indicate which mode is displayed.

Time and Temperature Lockout Feature:**

- Allows the operator to lock the programmed time and temperature settings to prevent accidental changes to the programmed settings. Unit is shipped with the time and temperature settings unlocked and ready for normal operation.
- Press the "SET" button and use the Adjustment Buttons ("Λ" & "V") to set the desired time and temperature. Press "START/STOP" to begin operation.
- To lock the settings, press and hold the "SET" and DOWN Adjustment Button ("V") simultaneously for 10 seconds. The LED display will show "LOC," indicating that the time and temperature settings are locked and cannot be adjusted
- The unit will retain its locked status when powered OFF and back ON
- To unlock the settings, press and hold the "SET" and DOWN Adjustment Button ("V") simultaneously for 10 seconds. The LED display will show "ULOC," indicating that the time and temperature settings can be adjusted again

**** Applies to units shipped after 12/1/2026**

Using the control panel (continued)

Set/Adjust/View Temperature/Time Setting:

- **In standby mode**
  - Press/hold (2-3 seconds) "SET", until "Temperature Display Screen" starts flashing, press "Adjustment Buttons" ("Λ" & "V") to adjust to desired temperature.
  - Press/hold "SET", again until "Time Display Screen" starts flashing, press "Adjustment Buttons" ("Λ" & "V") to adjust to desired time.
  - Press "START/STOP", to exit, the circulator will start and begin to pre-heat water, when the preset temperature is reached the circulator will signal with three (3) beeps, press "START/STOP" to start countdown. After countdown ends, the unit will hold the temperature and signal with beep every 20 seconds.
- **In working mode**
  - The "Temperature Display Screen" will display current water bath temperature, to view the temperature setting, press/hold "SET" to display the last temperature setting.
  - The "Time Display Screen" will display remaining countdown time, to view the time setting, press/hold "SET" again to display the last time setting.
  - Press "START/STOP" to exit return to working mode

Start/Stop Button – Working Mode

- Press "START/STOP" continuously two (2) times to stop the circulator working when unit is heating without countdown.
- Press 'START/STOP" one (1) time to stop the circulator working when heating under countdown or in the temperature holding status, unit will return to ready mode.

Start/Stop Button – Standby/Ready Mode

- After 10 minutes in standby or ready mode with no operation, circulator will shut down and display "OFF". Press "START/STOP" to return unit to back to ready mode.

Operating the thermal circulator

1. Open the lid and fill the basin with water. The water level (after the food is put in) should be higher than the "MIN" but lower than the "MAX" markings.
2. Connect the power and turn the power switch to ON (near the plug). The Temperature Display Screen will display as "OFF." Press the "START/STOP" to enter standby mode, the Temperature Display Screen (A) will show the current temperature and the Time Display Screen (B) will show the previous set time.
3. While still in standby mode, press "SET" button and set desired temperature and time by using the adjustment buttons.
   NOTE: The flashing screen indicates the one being adjusted.
   NOTE: Default setting is °C. After choosing °C or °F, this will remain in the memory for future use.
4. Place the food into the thermal circulator and close lid. Press the "START/STOP" to start the unit.
   NOTE: Before cooking, the food must be vacuum packed first.
   The water level (after the vacuum-packed food is put in) should be higher than the "MIN" but lower than the "MAX" marking on the unit.



⚠ WARNING ⚠
Burn Hazard

When in operation, the surface of the Thermal Circulator will be hot.
Please take extreme caution.

USE CAUTION WHEN TOUCHING THE UNIT.

5. After cooking, the unit will beep. Press "START/STOP" to stop the unit.
   NOTE: The unit will continue to beep after 20 seconds and repeat if there is no action. The water temperature will be kept in the preset temperature for about 30 minutes.
6. **CAUTION: HOT STEAM.**
   Slowly lift up the lid, keeping clear of the escaping steam, then lift up the tray and take the food out.
7. After using the Thermal Circulator, turn OFF the power supply. Drain all water after use and clean the unit after each use.

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)
CUSTARD				
Crème Anglaise	179.6°F / 82°C		20 min	
BEEF				
Tenderloin	138°F / 59°C	2 in	1 hour, 58 min	5 hours, 35 min
Rib Eye Steak	138°F / 59°C	1.5 in	1 hour, 58 min	3 hours, 20 min
Strip Steak	138°F / 59°C	1.5 in	1 hour, 58 min	3 hours, 20 min
Porterhouse Steak	138°F / 59°C	1.5 in	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
LAMB				
Lamb Saddle	138°F / 59°C	2.5 in	2 hours, 16 min	3 hours, 51 min
PORK				
Pork Chop	145°F / 63°C	1.75 in	1 hour, 45 min	4 hours, 2 min
Ribs	140°F / 60°C		24-48 hours	1 hour, 6 min
POULTRY				
Chicken Breast	150°F / 65°C	1 in	47 min	1 hour, 36 min
Duck Breast	135°F / 57°C	1 in	60 min	2 hours, 41 min
Chicken Thighs	150°F / 65°C	1.5 in	1 hour, 20 min	3 hours, 3 min
Foie Gras	147°F / 64°C	2 in	2 hours, 16 min	5 hours, 9 min
FISH				
Salmon Filet	130°F / 54.4°C	1 in	1 hour, 39 min	5 hours, 31 min
Cod Filet	129°F / 54°C	1 in	1 hour, 39 min	3 hours, 47 min
Halibut	129°F / 54°C	1 in	1 hour, 39 min	3 hours, 47 min
SHELLFISH				
Shrimp/Prawns	135°F / 57°C	1 in	43 min	5 hours, 21 min
Lobster	145°F / 63°C	1 in	15 min	5 hours, 5 min
Scallops	135°F / 57°C	1.5 in	1 hour, 8 min	2 hours, 29 min
VEGETABLES				
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	
FRUIT				
Peach Wedges	190°F / 88°C		16 min	
Pear Wedges	190°F / 88°C		60 min	
Apple Slices	190°F / 88°C		40 min	
EGGS IN SHELL				
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 with be.

Raw or unpasteurized food must never be 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™ Thermal 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 draining 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. Fill with cool tepid water only.

WARNING: Adding cold water to a hot unit or hot water to a cold unit may cause damage and affect the performance of the unit.



⚠ WARNING ⚠

Burn Hazard

When in operation, the surface of the Thermal Circulator will be hot.
Please take extreme caution.

USE CAUTION WHEN TOUCHING THE UNIT.



⚠ WARNING ⚠

Electrical Shock Hazard

Keep water and other liquids from entering the inside of the unit. Liquid inside the unit could cause an electrical shock.

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.

CLEANING

1. Switch power off, disconnect from the outlet, and let the unit cool down to room temperature before cleaning.
2. The Thermal Circulator should be cleaned regularly. Recommend after 20 uses or after 100 hours, or more per volume of use.
3. Remove the tray and clean separately.
4. Combine 50/50 mixture of white vinegar and water, and fill container to the "MAX" line.
5. Turn on the unit, set the working temperature in 176°F (80°C), the working time to 3 hours (03:00), and press "START/STOP" to start the unit. After 3 hours, the unit will beep, press "START/STOP" to stop the unit.
6. Check if the unit is clean. Make sure that the filters are cleaned. The filters can be unscrewed to remove for cleaning. If not clean, add vinegar to the unit and run the Thermal Circulator again as stated in the previous step.
7. If the unit is clean, drain the water and vinegar.
8. Rinse the Thermal Circulator with fresh water and dry. Do not submerge unit in water.
9. After drying the unit and accessories, put the accessories back into the Thermal Circulator for storage.
10. Place the Thermal Circulator standing upright after cleaning, do not place it 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 Thermal Circulator to cool down after use before dismantling for cleaning; **the unit will be too hot to handle immediately after use.**
- Before cleaning, switch power OFF and disconnect power cord from the outlet.
- **Do not immerse unit in water or use hose to clean.**
- If the power cord is damaged, it must be replaced by a WINCO® Approved Recommended Qualified Service Technician in order to avoid a hazard.

TROUBLESHOOTING

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

ISSUE	MIGHT BE CAUSED 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	Call WINCO® to make service arrangements through its Service Provider Network
	Internal wiring is faulty.	Replace faulty wiring - *Replacement must be done by an authorized service provider*
The unit is heating but the display is not on	Faulty display	Replace display - *Replacement must be done by an authorized service provider*
	The unit has reached temperature	The unit is operating correctly
Display is on but the unit is not heating	Faulty element(s)	Replace faulty element(s) - *Replacement must be done by an authorized service provider*
	Faulty energy regulator	Replace regulator - *Replacement must be done by an authorized service provider*
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
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

SERVICE AND REPAIR

THIS EQUIPMENT MUST ONLY BE SERVICED BY AN AUTHORIZED AGENT.

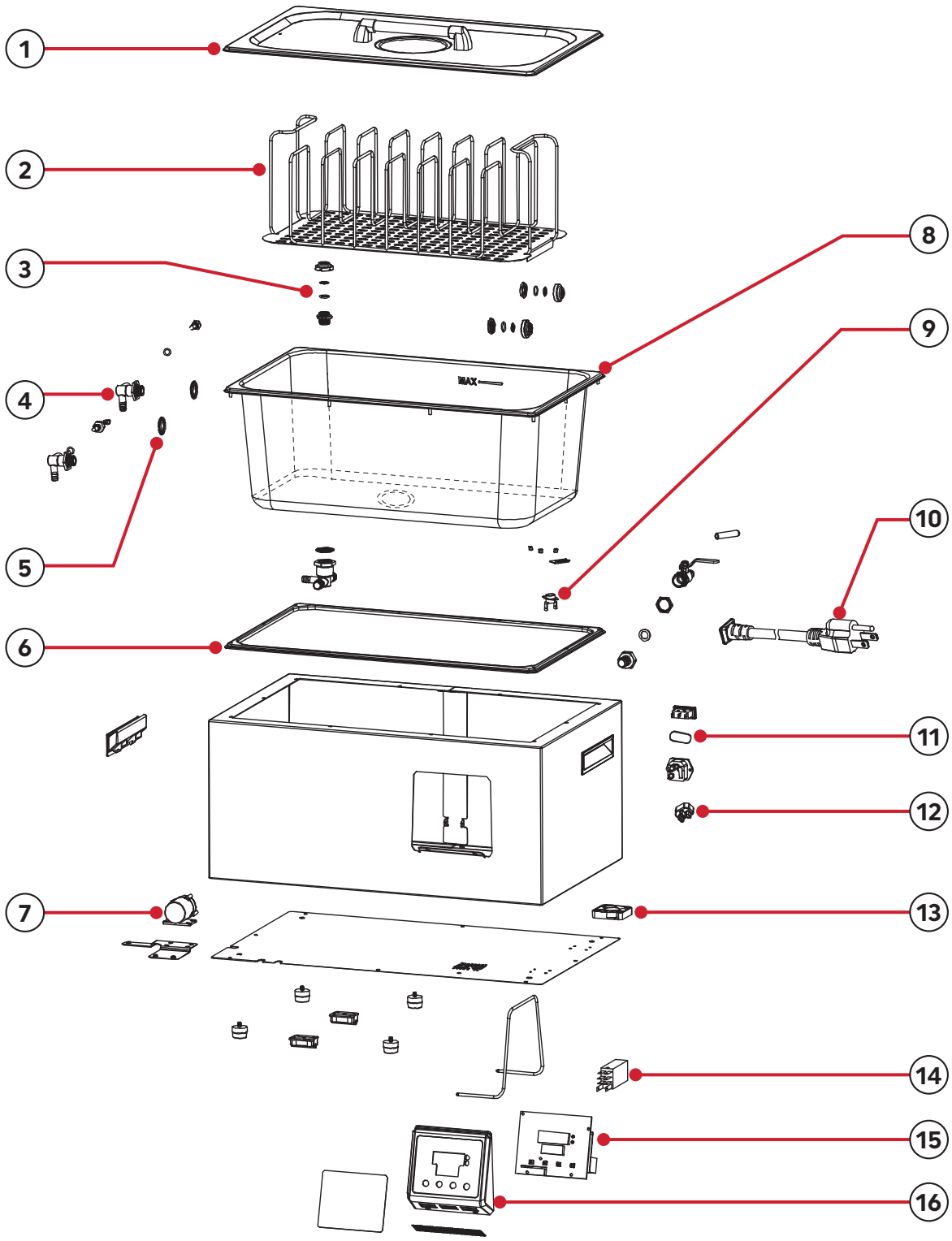
NOTE

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 www.wincous.com for details.

EXPLODED VIEW



PARTS LIST

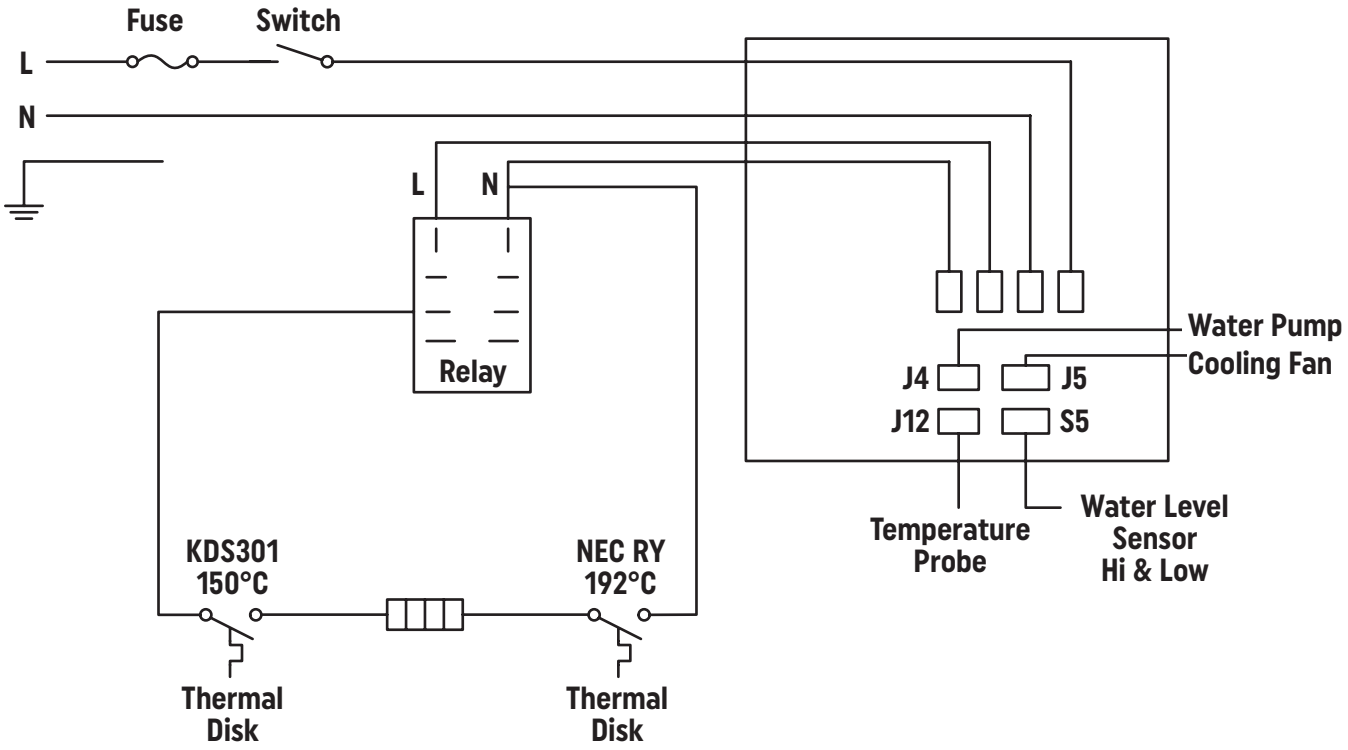
#	Description	Part #		
		ESVC-28D	ESVC-28D-CAN	ESVC-28D-CE
1	Lid Assembly	ESVC-P40		
2	Baffle Assembly	ESVC-P41		
3	Water Level Probe	ESVC-P10		
4	Temperature Probe	ESVC-P8		
5	Temperature Probe Gasket	ESVC-P9		
6	Joint Gasket	ESVC-P7		
7	Pump Assembly	ESVC-P3		
8	Heating Tank	ESVC-P12		ESVC-P47
9	Filter Screen	ESVC-P11		
10	NEMA 5-15P Cord with Strain Relief	ESVC-P43	-	-
	NEMA 5-20P Plug with Strain Relief	-	ESVC-P44	-
	VDE Cord with Strain Relief	-	-	ESVC-P45
11	Blow Fuse Plate	ESVC-P6		
12	Thermal Disk 150°C	ESVC-P5		
13	Fan	ESVC-P4		
14	Relay	ESVC-P42		
15	Control Board	ESVC-P2		ESVC-P46
16	Membrane Switch	ESVC-P1		

SCAN TO ORDER PARTS

If having trouble or unable to scan, enter the web address https://www.wincous.com/pages/order-parts

ELECTRICAL DIAGRAM

Models: ESVC-28D and ESVC-28D-CAN

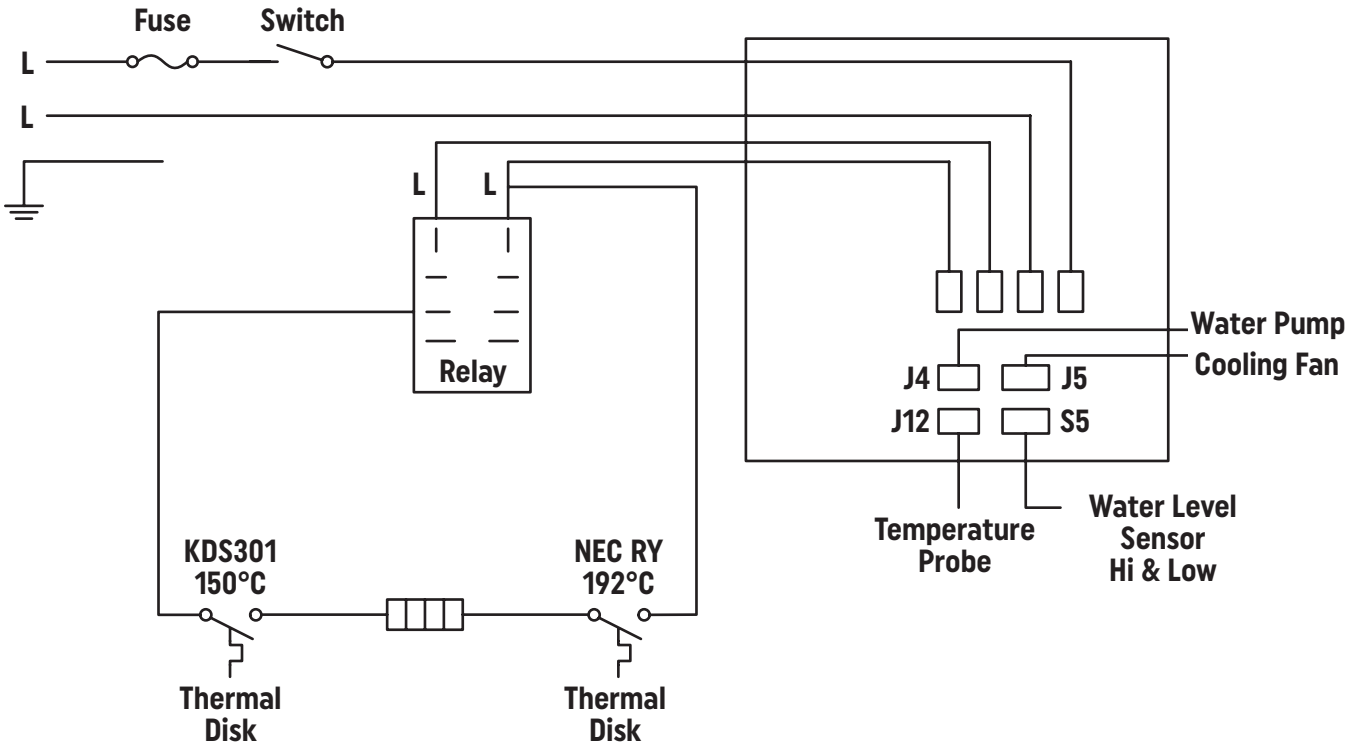


This circuit diagram has been provided to assist qualified electricians;
only WINCO® service agents or qualified electricians should carry out repairs if required.

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

ELECTRICAL DIAGRAM

Model: ESVC-28D-CE



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

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



NEW JERSEY DISTRIBUTION CENTER
65 Industrial Road,
Lodi, NJ 07644

FLORIDA SHOWROOM & DISTRIBUTION CENTER
10800 NW 103rd Street,
Bldg 22, Ste 11, Miami, FL 33178

NEVADA DISTRIBUTION CENTER
3777 Marion Drive,
Las Vegas, NV 89115

Phone: 1-888-946-2682 **Fax:** 1-973-916-9959 **Email:** cs@wincous.com **Web:** www.wincous.com



4711 East Hefner Road, Oklahoma City, OK 73131