Thermodyne
FOODSERVICE PRODUCTS, INC.

STEAM GIANT

INSTALLATION & OPERATION MANUAL

For additional information on Thermodyne Foodservice Products, Inc.,
or to locate an authorized parts and service provider in your area,
visit our website at www.tdyne.com

Thermodyne Foodservice Products, Inc.
4418 New Haven Avenue
Fort Wayne, IN 46803

800-526-9182
www.tdyne.com

Thermodyne
FOODSERVICE PRODUCTS, INC.

Thermodyne Steamer:
STEAM GIANT

MANUAL CONTENTS

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SECTION 1 – GENERAL INFORMATION

- CONTACT INFORMATION
- WARRANTY

CONTACT INFORMATION

Address: 4418 New Haven Avenue
Fort Wayne, Indiana 46803

Phone: Toll Free: (800) 526-9182
Local: (260) 428-2535

Fax: (260) 428-2533

Online: www.tdyne.com

Email: fluidshelf@tdyne.com

PARTS AND SERVICE

Phone: Toll Free: (800) 526-9182

Fax: (260) 428-2580

___ WARRANTY

Thermodyne Foodservice Products, Inc (Thermodyne) makes the following limited warranties for parts and labor to the original purchaser of the equipment for the Steam Giant steamer, Model _____ that is installed in the continental United States and subject to the following conditions:

Any component which proves to be defective in material or workmanship within two years from the date of original purchase will be repaired or replaced without charge by Thermodyne or an authorized Thermodyne service representative. This warranty will not cover gaskets or defective components and service labor that resulted from accidents, misuse, abuse, alteration, improper operation/maintenance/installation of the equipment, or poor water quality.

Any warranty claim must be presented to Thermodyne or an authorized Thermodyne service representative prior to replacing components or servicing the equipment. To validate this warranty, the warranty registration card must be mailed to Thermodyne within 30 days after installation.

This warranty is exclusive and is in lieu of all other warranties, express or implied, including any implied warranty of merchantability or fitness for a particular purpose, each of which is hereby expressly disclaimed. The above limited warranty is exclusive and sets forth the sole remedy against Thermodyne for any breach of warranty, and in no event shall Thermodyne be liable for consequential, incidental or special damages for breach or delay in performance of this limited warranty.

RESPONSIBILITIES OF PURCHASER

It is the responsibility of the purchaser to:

1. Arrange on site electrical services in accordance with Thermodyne specifications.

2. Receive shipment of Thermodyne Steam Giant to include unloading, uncrating, inspecting for damage in shipment, and installation of the Steamer in its proper location; in accordance with installation instructions.

3. Arrange that the electric services are connected properly by a qualified technician. All such connections must be in accordance with applicable code requirements and Thermodyne installation procedures.

Please note the specific details on the Warranty and make certain that service connections are made to the proper utility services. This warranty and purchasers responsibility information should be retained for future reference.

For assistance please call:
Toll Free: (800) 526-9182
Local: (260) 428-2535

Thermodyne
FOODSERVICE PRODUCTS, INC.

SECTION 2 – SAFETY PRECAUTIONS

- GENERAL SAFETY PRECAUTIONS

GENERAL SAFETY PRECAUTIONS

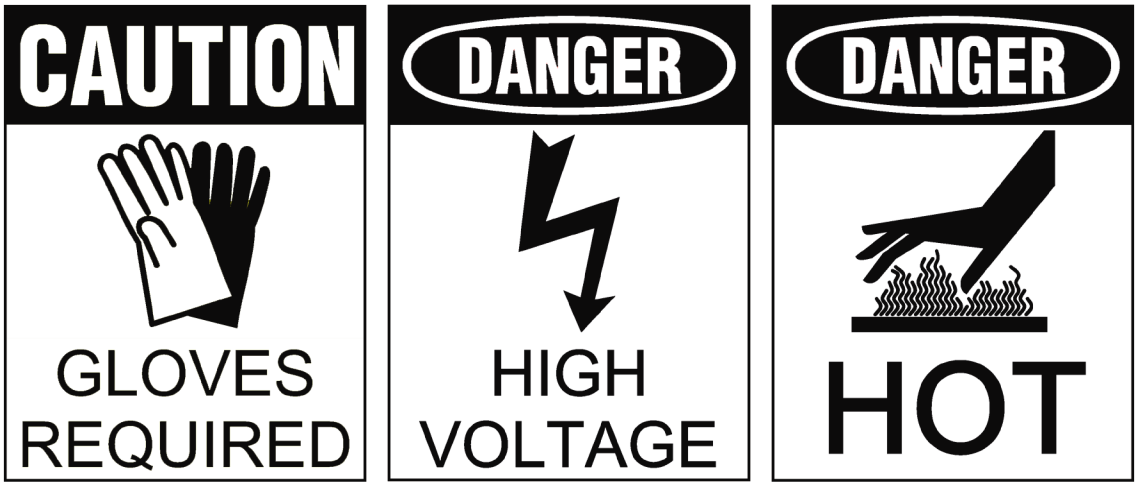
WARNING – USE EXTREME CAUTION WHEN SERVICING OR TROUBLESHOOTING ANY COMPONENT OR ELECTRICAL POWERHEAD. ALWAYS DISCONNECT ELECTRICAL SOURCE FROM UNIT.

PREVENTATIVE MAINTENANCE

1. Drain and Clean unit after every day of use.
2. Keep stainless steel cabinet clean.

SAFETY PRECAUTIONS

1. Comply with all electrical, fire and other applicable codes or ordinances when installing your equipment.
2. Check temperature of equipment before touching.
3. Use proper safety equipment when handling hot kitchen equipment.
4. Do not operate with a worn or poorly connected power cord.
5. Always unplug unit before removing powerhead panel.
6. Shut down unit and disconnect electrical source at first sign of any malfunction.



SECTION 3 – INTRODUCTION

- THERMODYNE HISTORY

THERMODYNE HISTORY

Thermodyne Foodservice Products, Inc., was founded in 1987 upon the development of a revolutionary method of heat transfer. Dating back to the late 1970's, research and development began to seek out a better method of transferring heat to food products and maintaining food quality for extended periods of time, after it was cooked. The focus was two fold:

1. Transferring heat at an exact temperature without exceeding it at any time.
2. Developing an efficient heat transfer method suitable to the foodservice industry to decrease the usage of damaging high temperatures.

After extensive design and testing, Thermodyne's first ever model was released as the THS 2000, three-in-one unit. This model was marketed as the Swiss Army Knife of the foodservice industry, as it offered amazing capability in cooking, holding, and rethermalizing a large variety of food products in the same cabinet at the same time. In the years to follow, Thermodyne continued refining technology and adding models to the line of conduction equipment in an effort to address food capacity needs of all sizes.

Today, Thermodyne offers more than 20 different models ranging from a three-shelf counter-top unit to a unit capable of holding 42 full size steam table pans, many of which are available for same day shipment in the United States. Thermodyne also offers extensive design experience and the manufacturing capacity to customize equipment to meet specific customer needs.

As we continue to grow, we have not lost sight of how it all started. Thermodyne continues to research and develop new products that are sure to impact the foodservice industry for many years to come.
Thank you for choosing Thermodyne!

Thermodyne
FOODSERVICE PRODUCTS, INC.

SECTION 4 – INSTALLATION

- INSTALLATION

INSTALLATION

1. Steam Giant should be on a level surface.
   The Thermodyne Steam Giant is intended to be used on a countertop or on a stainless steel stand. The unit should be placed on level working surface for optimal use. The Steam Giant is equipped with adjustable legs to ensure the unit is installed in a level condition.

2. Peel off protective plastic from side panels.
   For protective reasons, equipment is generally shipped with the plastic protective coating still applied, it should be removed after installation.

3. Automatic water filling units will need to have a ¼" NSF approved water line plumbed into the rear. Each Steam Giant comes with a brass hose connector, it will successfully connect to a copper or nylon water line. Incoming pressure should be no greater than 60PSI. Turn water on and inspect connections to make sure no water leaks are present. Once power is applied to the steamer it will fill itself.

4. Unit should be located where there is plenty of room for ventilation.
   The Steam Giant is designed with louvers on the side panel for ventilation to reach the electrical components, please be sure to leave at least 2" around the unit for proper ventilation.

5. Plug unit into appropriate size outlet and breaker.
   The Steam Giant is available in single and 3 phase, 208-230 VAC. Be sure the receptacle is the voltage listed on the Steam Giant data plate. Connection to any other voltage may damage your Steam Giant or cause component failure. This type of damage is not covered by the Thermodyne Foodservice Products, Inc. warranty.

6. When unit is plugged in and turned on, the red Power switch will light up.

7. Place a 4" pan in the drain pan location underneath the unit.

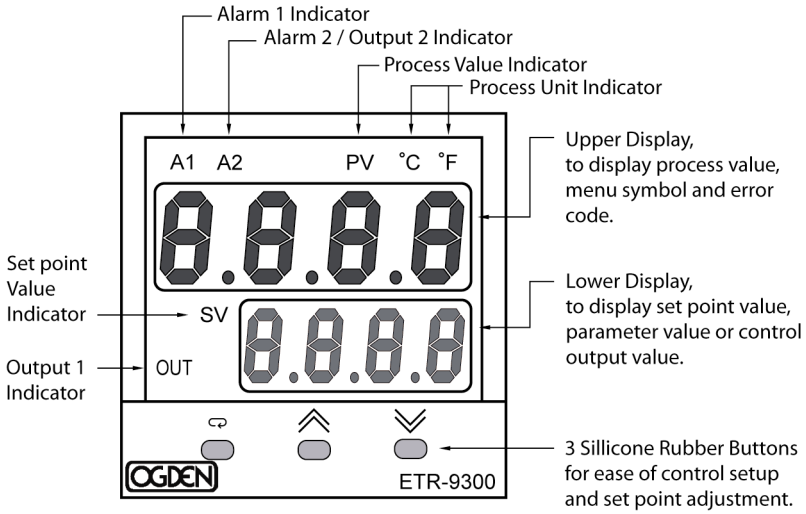
SET UP

1. To set temperature:

TOUCH KEYS	FUNCTION	DESCRIPTION
⩓	Up Key	Press and release quickly to increase the value of the displayed parameter. Press and hold to accelerate increment speed.
⩔	Down Key	Press and release quickly to decrease the value of the displayed parameter. Press and hold to accelerate decrement speed.

2. 'OUT' button will be lit up solid while warming up.
3. When 'OUT' button is blinking, the unit has reached the desired temperature.

NOTE: THIS CONTROLLER IS NOT AN INDICATOR OF WATER LEVEL IN THE STEAMER.



TEMPERATURE RANGES

Steaming refers to cooking food by placing it on a rack over boiling or simmering water. Steaming is one of the gentlest methods of cooking food, moisture envelops the food allowing it to retain most of its natural flavors, juices and nutrients.

Our steaming methods are ideal for delicate foods that would lose their flavor, shape and quality if submerged in a liquid or high pressure steam device. Water is the most common steaming medium, however with our system you may also use broths, beer, wines or herb infused liquids for an easy way to infuse flavor.

Steamer Temperatures range from 140°F to 212°F.

Low: 140°-165°F ranges are recommended for holding temperatures.

-Low temperatures are ideal for holding vegetables, starches (not fried), casseroles and seafood.

Medium: 165°-190°F ranges are recommended for rethermalizing temperatures.

-Medium temperatures are ideal for cooking seafood, vegetables and specialty rice.

High: 175°-212°F ranges are recommended for cooking temperatures.

-High temperatures are ideal for your standard steaming recipes, once products are cooked you can reduce the temperature down to Low for proper holding.

SECTION 5 – MAINTENANCE

- CLEANING
- FILLING UNIT WITH WATER

CLEANING

CAUTION: To prevent injury, before cleaning always make sure cabinet is unplugged from the electrical source and has had sufficient time to cool. DO NOT EXPOSE POWERHEAD TO WATER.

The cleaners should always be used at the recommended concentrations.

CLEANING STAINLESS STEEL
To remove most soil, use a nonabrasive, non-chlorinated soap solution.

Rinse thoroughly with warm water and wipe dry using an absorbent cloth.

To remove heavy soil, rub the area with a nonmetallic, fine grain scouring cloth.

Rinse thoroughly with warm water and wipe using a soft absorbent cloth. Be sure to rub in the same direction as the metal grain.

As a final step, a stainless steel polish may be used. The polish will shine the stainless steel and provide a protective finish that will reduce future soiling.

CLEANING SAFEGUARDS
Always read the label of the cleaning solutions. Check for warnings about use on stainless steel or aluminum products. Repeated use of chlorinated solvents may cause a chemical reaction with stainless steel and aluminum, which will damage the surface and cause rusting.

FILLING UNIT WITH WATER

ALWAYS USE ORDINARY TAP WATER IN STEAM GIANT.

1. Open Steamer door.
2. Remove Insulated Steam Restrictor Plate.
3. Add 3 gallons of water to unit.
4. Replace Insulated Steam Restrictor Plate.
5. Close door, turn unit ON.

At the beginning of each day, follow these instructions on adding water to your Thermodyne Steam Giant. The 3 gallons used to fill the unit at the beginning of the day may need to be replenished depending upon the usage and products cooked in the Steam Giant. If the Add Fluid Light does come on during use, follow the steps to add more water. Always use caution when adding water to hot equipment.

MINIMUM WATER QUALITY STANDARDS:

Total Dissolved Solids	less than	200 parts per million
Total Alkalinity	less than	50 parts per million
Silica	less than	7 parts per million
pH Factor	greater than	7.5

All Thermodyne Steam Giant Steamers are shipped with a de-scaling filter. Install de-scaling filter according to manufacturer's specifications. See manual included with filter. If a de-scaling filter is not included with your shipment contact your Thermodyne Representative immediately. Failure to use approved de-scaling system may void warranty for your Steam Giant.

SECTION 6 – SERVICE

- SPECIFICATIONS
- PARTS LIST
- EXPLODED VIEW OF OVEN
- WIRING DIAGRAM
- TROUBLESHOOTING

SPECIFICATIONS

EXTERIOR DIMENSIONS 23.88“W x 28.38“D x 31.50“H
INTERIOR DIMENSIONS 15.25“W x 22.00“D x 19.25“H

CUBIC CAPACITY 3.72 ft3

MAX OPERATING TEMP 212°F

NET WEIGHT 155 lbs.
SHIPPING WEIGHT 205 lbs.

ELECTRICAL SPECIFICATIONS:

PHASE 1
VOLTS 208 / 230
AMPS 33 / 36
TOTAL WATTS 6760 / 8265
HERTZ 50 / 60

PHASE 3
VOLTS 208 / 230
AMPS 18.80 / 20.70
TOTAL WATTS 6760 / 8265
HERTZ 50 / 60

CAPACITIES:
STANDARD STEAM TABLE PANS

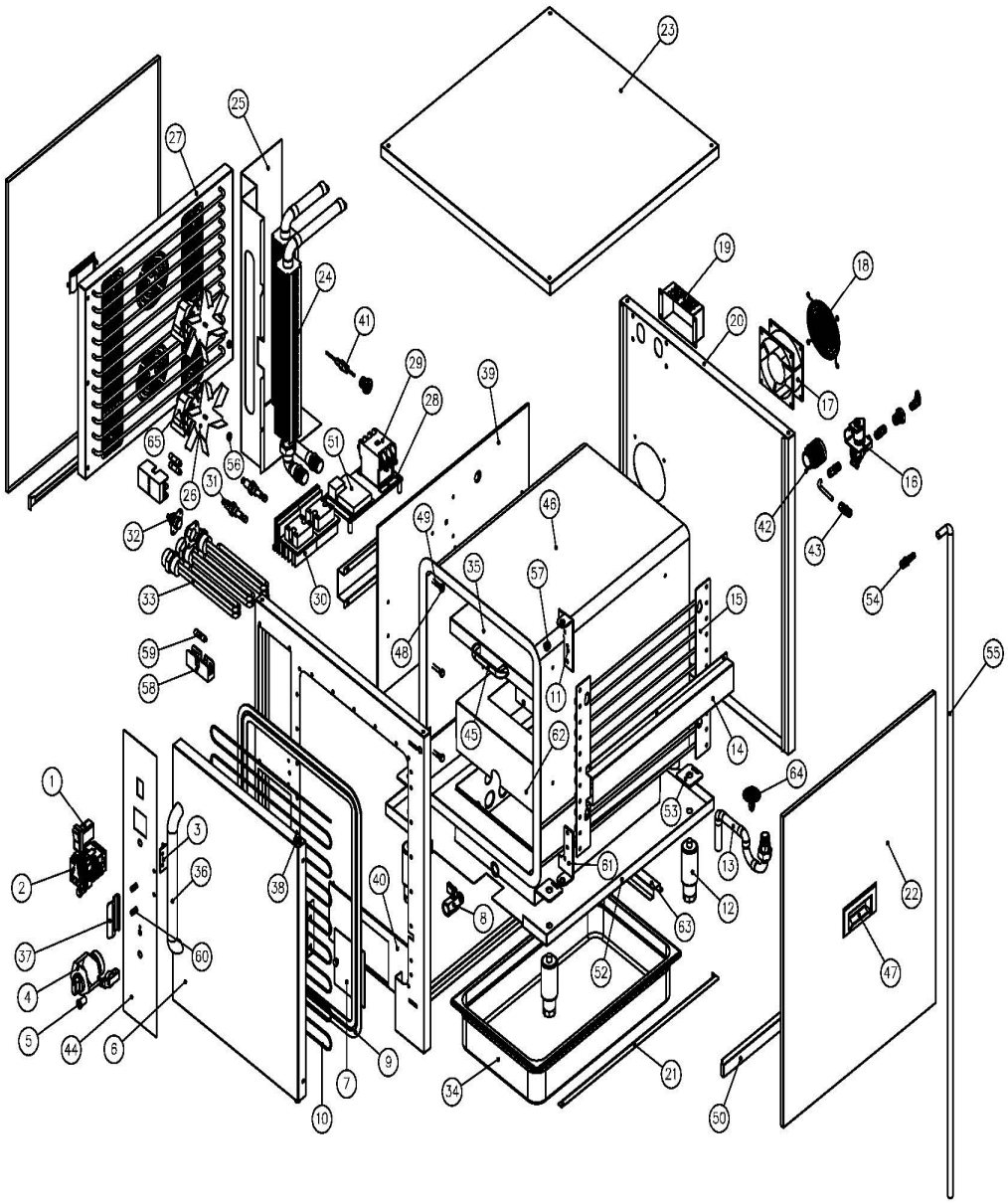
-6: 12” x 20” x 2.5”
-4: 12” x 20” x 4”

TEMPERATURE RANGE 140°F-212°F

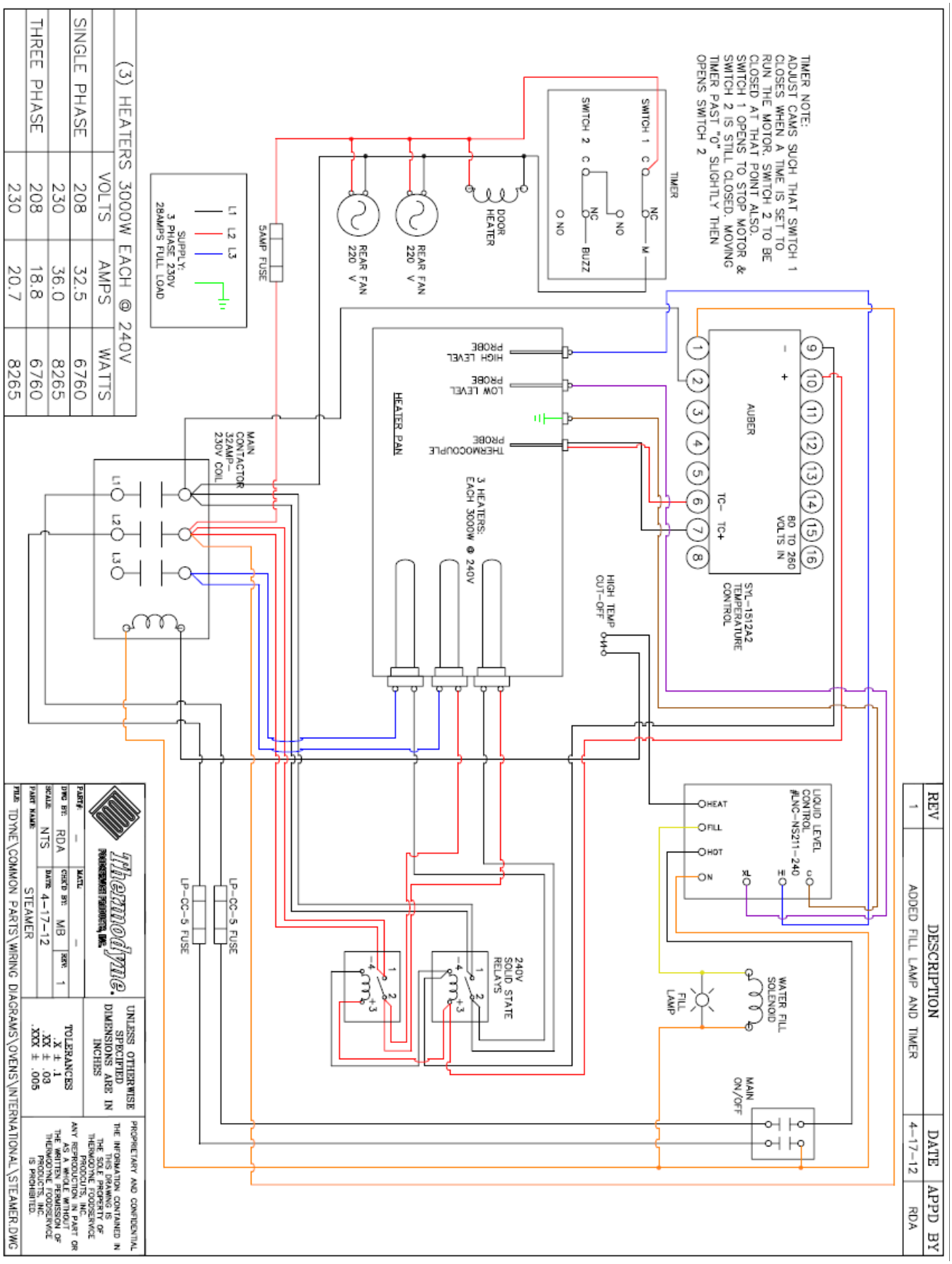
PARTS LIST

	Part name	Quantity			Part name	Quantity
1	On / off switch	1		**40**	Drain cover	1
2	Temp controller	1		**41**	Thermocouple	1
3	Door latch	1		**42**	Cord grip	1
4	Timer (90min)	1		**43**	1/4"compression fitting	1
5	Light indicator 220V	2		**44**	Control cover	1
6	Steamer Door	1		**45**	Pull handle	1
7	Access panel (drain)	1		**46**	Jacket	1
8	Drain valve	1		**47**	Recessed handle	2
9	Door seal Gasket	1		**48**	Knurled knobs	8
10	Door heater 210V	1		**49**	SS stand offs	3
11	Door hinge (top)	1		**50**	Panel support guide	2
12	4' leg extension	4		**51**	Circuit board	1
13	"P" trap	1		**52**	Base	1
14	Hat channel	2		**53**	Leg support	4
15	Pan guide	1		**54**	Hose barb	1
16	Water fill connector	1		**55**	Overflow drain hose	1
17	Cooling Fan 230V	1		**56**	LH metric 1/4" fan nuts	2
18	Fan guard	1		**57**	Grommit plug	1
19	Steam cover	1		**58**	5amp fuse holder	1
20	Back panel	1		**59**	5amp fuses	2
21	Z bar (drain pan)	2		**60**	Latch springs	2
22	Side panel	2		**61**	Door hinge (bottom)	1
23	Top cover	1		**62**	Heater cover	1
24	Heat exchanger	2		**63**	Bottom Support channel	2
25	Baffle shroud	1		**64**	Drain plug	1
26	Fan blades	2		**65**	Air blown fan 230V	2
27	Fan cover / pan guide	1				
28	Float board	1				
29	Contactor	1				
	30amp 3 pull 220 coil					
30	SS relay	2				
31	Probes	2				
32	High limit switch	1				
33	Heating elements	3				
	3000W 240V					
34	Drip pan w/ overflow	1				
35	Bell cover	1				
36	Door handle	1				
37	Door latch	1				
38	Door pin	2				
39	Lexan shield	1				

EXPLODED VIEW OF OVEN



WIRING DIAGRAM



TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
No Power:	1. Main power switch off.	1. Turn switch on.
	2. Not plugged in.	2. Check plug.
	3. Breaker off or tripped.	3. Check breaker.
	4 Bad contactor.	4. Change Contactor
Low Water light is on - Steamer heating properly:	1. Steamer is low on fluid.	1. Add **Water** per instructions.
Low Water light is on - Steamer not heating properly:	1. Steamer disabled due to low water level cut out.	1. Reservoir water level is too low, add water.
	2. Fluid level probe defective.	2. Repair or replace.*
	3. System leak.	3. Repair leak.*
Heater(s) not working:	1. Unit not properly wired.	1. Check wiring.*
	2. Bad heater(s).	2. Replace heater(s).*
	3. Contactor or solid state relays not working.	3. Repair or replace.*
	4. Off due to low water cut out.	4. Add **Water** per instructions.
	5. Failed temperature controller.	5. Replace temperature controller.*
	6. High limit snap disc tripped.	6. Reset snap disc and check for cause.*
Steamer hotter than set point:	1. Temperature controller out of calibration.	1. Recalibrate temperature controller. *
	2. Thermocouple defective.	2. Replace thermocouple.*
	3. Solid state relay(s) stuck on.	3. Replace solid state relay(s).*
	4. Failed temperature controller.	4. Replace temperature controller.*
Steamer colder than set point:	1. Low water in reservoir. (Low Water light should be lit)	1. Add **Water** per instructions.
	2. Failed temperature controller.	2. Replace temperature controller.*
	3. Heater(s) not working.	3. See "Heater(s) not working".
	4. Door open.	4. Close door securely.
	5. Thermocouple failure.	5. Change Thermocouple.
Steamer heats up too slow:	1. Heater(s) not working.	1. See "Heater(s) not working".

*Recommended to be done by a qualified service agency.

NOTE: Most problems associated with the Thermodyne Steam Giant cabinet are due to failure to add Water. Check water level first. In the event service is required on your Thermodyne Steam Giant, please call: (800) 526-9182