

PIPER

The Food-Focused Equipment Company

HEATED AND UNHEATED DISH DISPENSERS

Drop-in, Mobile, Open and Enclosed Models
Installation and Operating Manual



AT



1-ATG



2-AT8-ST

For service information call 800-544-3057

Please have the following information available before calling. Information can be found on the identification/certification tag:

- Model Number
- Serial Number
- Date of Purchase
- Part Description and number as shown in parts list



**IMPORTANT INFORMATION
READ BEFORE USE**

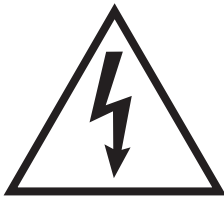
This manual contains important safety information concerning the maintenance, use and operation of this product. Failure to follow these instructions could result in damaging equipment, voiding the warranty, serious injury or even death.

Piper Products, Inc
300 South 84th Avenue
Wausau, WI 54401

Phone: 715-842-2724 . FAX: 715-842-3125

Model #
Serial #
Date of Manufacture

Purchased From: _____



WARNING

RISK OF FIRE OR ELECTRIC SHOCK
DO NOT OPEN



**WARNING, TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK)**

NO USER-SERVICEABLE PARTS INSIDE

REPAIR SHOULD ONLY BE DONE BY AUTHORIZED SERVICE PERSONNEL ONLY



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product's enclosure that may be of sufficient magnitude to constitute a risk of fire or electric shock to persons.



The exclamation point with an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

TABLE OF CONTENTS

2	INTRODUCTION
2	FREIGHT DAMAGE CLAIMS
2	SAFETY PRECAUTIONS
3	UNPACKING AND INSTALLATION
3	DROP-IN SPECIFICATIONS
4	MOBILE DISPENSER SPECIFICATIONS - CABINET STYLE
5	MOBILE DISPENSER SPECIFICATIONS - TUBULAR FRAME STYLE
6	SILO REMOVAL AND ADJUSTMENT
7	SPRING ARRANGEMENTS
7	THERMOSTAT ADJUSTMENTS
8	MAINTENANCE
8	GENERAL CLEANING
9	DROP-IN PARTS BREAKDOWN
10	CABINET STYLE PARTS BREAKDOWN
12	TUBULAR FRAME STYLE PARTS BREAKDOWN
12	ATH WIRING DIAGRAM
13	STH WIRING DIAGRAM
14	WARRANTY

INTRODUCTION

Congratulations! You have just purchased one of the finest pieces of equipment on the market today. Before installing or operating your new Piper equipment, you should read through this manual. This manual should be retained for future reference as it contains installation and operating instructions, service tips, part lists and warranty information.

For your safety, read and follow all cautions and warnings.

FREIGHT DAMAGE CLAIMS

Your Piper equipment was carefully inspected and packed before leaving our factory. The transportation company assumes full responsibility for safe delivery of this equipment. Piper Products cannot assume responsibility for damage or loss incurred in transit. Visible damage or loss should be noted on the freight bill and signed by the person making the delivery.

A freight claim should be filed immediately with the transportation company. If damage is unnoticed or concealed until equipment is unpacked, notify the transportation company immediately and tell them you want to file a concealed damage claim. This must be done within five (5) days after delivery was made. Be sure to retain all packing material and cartons.

WARNING

Installation of this equipment should be done only by persons qualified or licensed to install electrical equipment. All electrical and plumbing must meet local, state, and federal codes.

Adjustments and service work should be performed only by a qualified service technician. Service is available through Authorized Piper Parts and Service Distributors throughout the United States. Call or write Piper Products, Inc. for the name of the nearest distributor.

This equipment is intended for commercial use only. Not for household use. Use of other than genuine Piper replacement parts or service work performed by other than an authorized Piper service agent will void the warranty.

Do not use any corrosive cleaners. Piper only approves soap and water for cleaning stainless steel.

SAFETY PRECAUTIONS

1. Read all instructions and warranty before operating unit.
2. Equipment should be installed by a qualified electrician familiar with local electrical codes.
3. Equipment should be installed on a solid, level floor.
4. Adequate space should be allotted surrounding the unit to allow for proper air flow and provide access for servicing (see Electrical Information for more details).
5. Flammable materials should not be stored near the equipment. Do not cover or block any openings or vents.
6. All warnings and operating instructions should be followed.
7. When replacement parts are required, be sure the service technician has parts specified by the manufacturer, or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electrical shock or other hazards.
8. This Operators Manual should be retained for future reference.
9. WARNING – Risk of Electric Shock. See installation instructions.

UNPACKING YOUR EQUIPMENT

1. Check crate for damage upon arrival. Make notation on freight bill of any damage.
2. Unpack equipment and check for concealed damage. If damaged, call the freight company immediately to come and inspect the equipment. Save the crate and packing material for inspection.

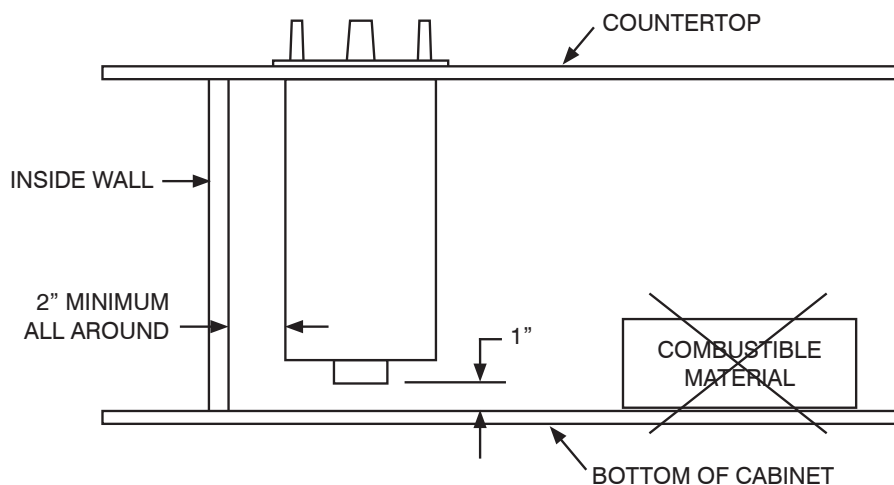
INSTALLATION OF HEATED DROP-IN MODELS

The installer must meet UL conditions of acceptability listed below:

The unit has been tested by UL in wooden enclosures. The minimum spacing of the enclosure to the unit is 2 inches from the rear wall, 2 inches from the side wall, 1 inch from supporting surface and 1 inch between adjacent components.



DO NOT store combustible materials in the same confined area as the heated dispenser.



DROP-IN SPECIFICATIONS

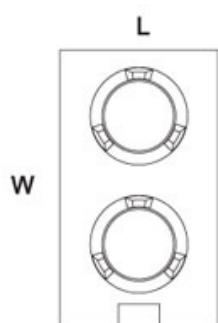
MODELS			DISH DIA.	MAXIMUM O.D.	COUNTER HOLE DIA.	WATTAGE (HEATED MODEL)	AMPS at 120V	AMPS at 220V
UNHEATED		HEATED						
AT-1	ATS-1	ATH-1	5-1/8 Max.	8-1/4	7-7/16	210	1.8	1
AT-2	ATS-2	ATH-2	5-1/4 to 5-7/8 Max.	9	8-3/16	240	2.0	1.1
AT-3	ATS-3	ATH-3	6 to 6-5/8 Max.	9 3/4	8-15/16	270	2.3	1.2
AT-4	ATS-4	ATH-4	6-3/4 to 7-3/8 Max.	10-1/2	9-11/16	300	2.5	1.4
AT-5	ATS-5	ATH-5	7-1/2 to 8-1/4 Max.	11-3/8	10-9/16	330	2.8	1.5
AT-6	ATS-6	ATH-6	8-3/8 to 9-1/4 Max.	12-3/8	11-9/16	380	3.2	1.7
AT-7	ATS-7	ATH-7	9-3/8 to 10-1/4 Max.	13-3/8	12-9/16	420	3.5	1.9
AT-75	ATS-75	ATH-75	10-3/8 to 11-1/4 Max.	14-1/4	13-9/16	500	4.2	2.3
AT-8	ATS-8	ATH-8	11-3/8 to 12 Max.	15-1/8	14-5/16	500	4.2	2.3

MOBILE DISH DISPENSER SPECIFICATIONS CABINET STYLE

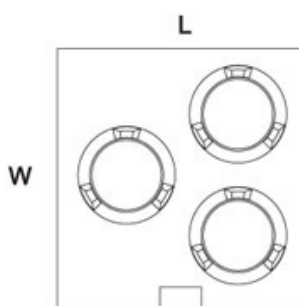
UNHEATED MODELS									
DISH DIAM.	MODEL NO.	W	L	MODEL NO.	W	L	MODEL NO.	W	L
. 5-1/8 Max.	2AT1-ST	18-1/8	28-1/8	3AT1-ST	18-1/8	28-1/8	4AT1-ST	22-5/8	28-1/8
. 5-1/4 to 5-7/8	2AT2-ST	18-1/8	28-1/8	3AT2-ST	18-1/8	28-1/8	4AT2-ST	22-5/8	28-1/8
. 6 to 6-5/8	2AT3-ST	18-1/8	28-1/8	3AT3-ST	26-1/8	28-1/8	4AT3-ST	22-5/8	28-1/8
. 6-3/4 to 7-3/8	2AT4-ST	18-1/8	28-1/8	3AT4-ST	26-1/8	28-1/8	4AT4-ST	31-3/8	33-1/8
. 7-1/2 to 8-1/4	2AT5-ST	18-1/8	28-1/8	3AT5-ST	26-1/8	28-1/8	4AT5-ST	31-3/8	33-1/8
. 8-3/8 to 9-1/4	2AT6-ST	20-1/8	35-1/8	3AT6-ST	31-3/8	33-1/8	4AT6-ST	31-3/8	33-1/8
. 9-3/8 to 10-1/4	2AT7-ST	20-1/8	35-1/8	3AT7-ST	31-3/8	33-1/8	4AT7-ST	31-3/8	33-1/8
. 10-3/8 to 11-1/4	2AT75-ST	20-1/8	35-1/8	3AT75-ST	31-3/8	33-1/8	4AT75-ST	31-3/8	33-1/8
. 11-3/8 to 12	2AT8-ST	20-1/8	35-1/8	3AT8-ST	31-3/8	33-1/8	N/A		
Shipping Wt.	140			175			200		

DISH DIAM.	MODEL NO.	W	L	MODEL NO.	W	L	MODEL NO.	W	L
. 5-1/8 Max.	2AT1-STH	18-1/8	28-1/8	3AT1-STH	18-1/8	28-1/8	4AT1-STH	22-5/8	28-1/8
. 5-1/4 to 5-7/8	2AT2-STH	18-1/8	28-1/8	3AT2-STH	18-1/8	28-1/8	4AT2-STH	22-5/8	28-1/8
. 6 to 6-5/8	2AT3-STH	18-1/8	28-1/8	3AT3-STH	26-1/8	28-1/8	4AT3-STH	22-5/8	28-1/8
. 6-3/4 to 7-3/8	2AT4-STH	18-1/8	28-1/8	3AT4-STH	26-1/8	28-1/8	4AT4-STH	31-3/8	33-1/8
. 7-1/2 to 8-1/4	2AT5-STH	18-1/8	28-1/8	3AT5-STH	26-1/8	28-1/8	4AT5-STH	31-3/8	33-1/8
. 8-3/8 to 9-1/4	2AT6-STH	20-1/8	35-1/8	3AT6-STH	31-3/8	33-1/8	4AT6-STH	31-3/8	33-1/8
. 9-3/8 to 10-1/4	2AT7-STH	20-1/8	35-1/8	3AT7-STH	31-3/8	33-1/8	4AT7-STH	31-3/8	33-1/8
. 10-3/8 to 11-1/4	2AT75-STH	20-1/8	35-1/8	3AT75-STH	31-3/8	33-1/8	4AT75-STH	31-3/8	33-1/8
. 11-3/8 to 12	2AT8-STH	20-1/8	35-1/8	3AT8-STH	31-3/8	33-1/8	N/A		
Shipping Wt.	175			225			275		
Watts	750 (XH 1500)			1500 (XH 3000)			1500 (XH 3000)		
Amps. @ 120V	6.3 (XH 12.5)			12.5 (XH 25)			12.5 (XH 25)		

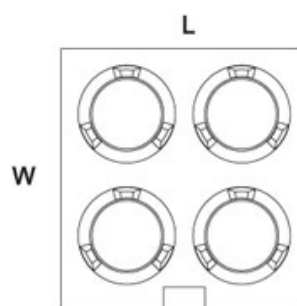
Voltages other than 120V are for international use only.



MODEL 2AT-ST(H)



MODEL 3AT-ST(H)



MODEL 4AT-ST(H)

Height - Cabinets 36"

Overall height (including dish guides) add 4"

MOBILE DISH DISPENSER SPECIFICATIONS TUBULAR FRAME STYLE

DISH DIAM.	MODEL NO.	L	W	WT	WATTS	AMPS @120V	MODEL NO.	L	W	WT	WATTS	AMPS @120V
5-1/8 Max.	1ATG(H)1	14	14	45	210	1.8	2ATG(H)1	24	14	60	420	3.5
5-1/4 to 5-7/8 Max.	1ATG(H)2	14	14	50	240	2.0	2ATG(H)2	24	14	65	480	4.0
6 to 6-5/8 Max.	1ATG(H)3	17	17	65	270	2.3	2ATG(H)3	30	17	80	540	4.5
6-3/4 to 7-1/8 Max.	1ATG(H)4	17	17	70	300	2.5	2ATG(H)4	30	17	85	600	5.0
7-1/2 to 8-1/4 Max.	1ATG(H)5	17	17	70	330	2.8	2ATG(H)5	30	17	85	660	5.5
8-3/8 to 9-1/4 Max.	1ATG(H)6	19	19	75	380	3.2	2ATG(H)6	34	19	90	760	6.3
9-3/8 to 10-1/4 Max.	1ATG(H)7	19	19	75	420	3.5	2ATG(H)7	34	19	90	840	7.0
10-3/8 to 11-1/4 Max.	1ATG(H)75	19	19	80	500	4.2	2ATG(H)75	34	19	95	1000	8.3
11-3/8 to 12 Max.	1ATG(H)8	21	21	80	500	4.2	2ATG(H)8	38	21	105	1000	8.3

DISH DIAM.	MODEL NO.	L	W	WT	WATTS	AMPS @120V	MODEL NO.	L	W	WT	WATTS	AMPS @120V
5-1/8 Max.	3ATG(H)1	31	19	80	630	5.3	4ATG(H)1	24	24	120	840	7.0
5-1/4 to 5-7/8 Max.	3ATG(H)2	31	19	85	720	6.0	4ATG(H)2	24	24	125	960	8.0
6 to 6-5/8 Max.	3ATG(H)3	39	23	95	810	6.8	4ATG(H)3	30	30	140	1080	9.0
6-3/4 to 7-1/8 Max.	3ATG(H)4	39	23	100	900	7.5	4ATG(H)4	30	30	145	1200	10.0
7-1/2 to 8-1/4 Max.	3ATG(H)5	39	23	100	990	8.3	4ATG(H)5	30	30	150	1320	11.0
8-3/8 to 9-1/4 Max.	3ATG(H)6	44	26	105	1140	9.5	4ATG(H)6	34	34	180	1520	12.7
9-3/8 to 10-1/4 Max.	3ATG(H)7	44	26	105	1260	10.5	4ATG(H)7	34	34	180	1680	14.0
10-3/8 to 11-1/4 Max.	3ATG(H)75	44	26	110	1500	12.5	4ATG(H)75	34	34	190	2000	16.6**
11-3/8 to 12 Max.	3ATG(H)8	48	29	120	1500	12.5	4ATG(H)8	38	38	200	2000	16.6**

SILO REMOVAL AND ADJUSTMENT

The dispenser you purchased is shipped calibrated for an average sized dish. It may be necessary to re-calibrate. Each self-leveling unit has internal springs that are field-adjustable without the use of tools. Remove the lids and lift out the self-leveling dispenser through the top to expose springs. Adjust springs equally on each side following the diagram on page 5.

1. Allow unit to cool before removing dishes from dispenser
2. Remove dishes from dispenser
3. Remove dispenser from counter
4. Engage or disengage springs by hooking or unhooking lower ends
 - Use larger springs for coarse adjustment
 - Use smaller springs for fine adjustment
 - Springs must be SYMMETRICALLY engaged for uniform loading
5. Check calibration by loading dispenser one dish at a time. If dish level drops, additional springs engaged or added. If dish level rises, some springs must be disengaged.

IMPORTANT: Before installing a drop-in dispenser in your counter, calibrate as instructed above. Be certain that the connected springs are distributed as evenly as possible among the sections. See Spring Arrangement diagram on page 5 for details.



WARNING: If dispenser appears to stick in a down position, DO NOT ATTEMPT TO RELEASE IT BY PUSHING THE DISHES DOWN. THIS COULD RESULT IN AN INJURY.

Sticking is not caused by weak springs, but by mechanical malfunction. The following procedure must be used to release the unit:

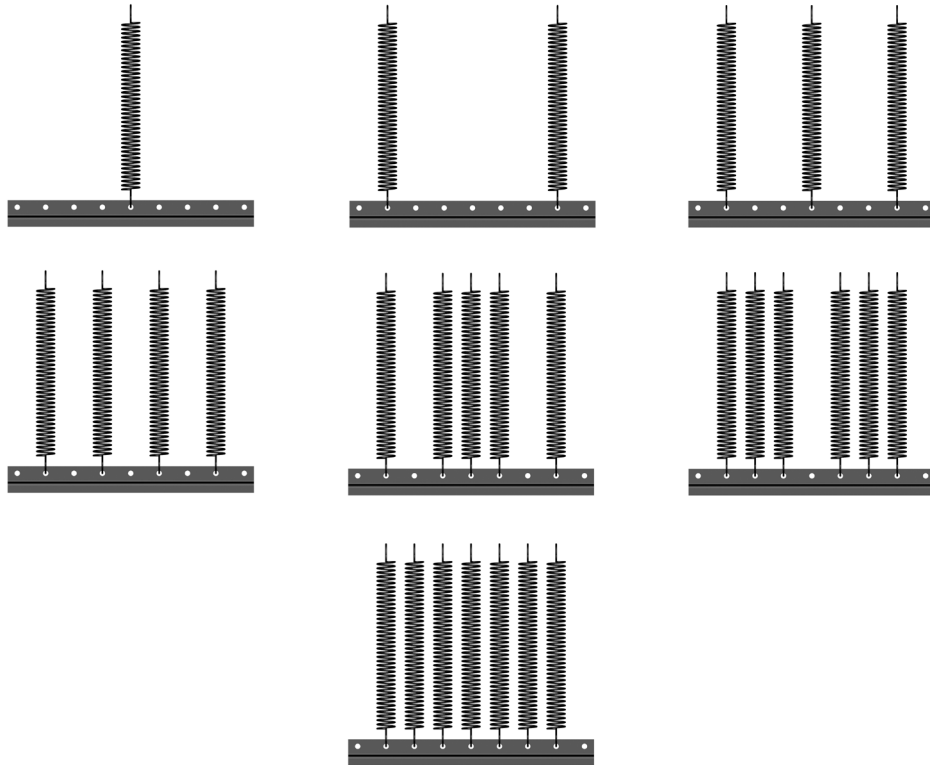
With a helper present, lift the unit out of the counter and stand it on the floor or on a table. If the unit is heated, be sure to first unplug the power supply. Inspect the unit to determine the cause of the sticking:

1. The dishes are too small for the dispenser and are catching (check dish diameter range as indicated in size chart on page 3)
2. The dishes are too large for the dispenser and are binding (check dish diameter range as indicated in size chart on page 3)
3. The mechanism has been incorrectly reassembled after disassembly for cleaning
4. That a foreign object has fallen in and jammed the unit

Reload with a full load of dishes so as to relieve pressure on the springs. While the helper holds the dishes down, use a tool to remove whatever has caused the problem. When making this repair, do not put your hands inside the dispenser while the springs are engaged. Injury could result from the considerable pressures involved. Now slowly remove dishes so as to allow mechanism to rise. Inspect the unit, make whatever corrections might be required and then check that the unit now works smoothly. **NOTE:** If it should become necessary to reach into the dispenser in order to complete the repair, then **ALL SPRINGS MUST BE DETACHED BEFORE PROCEEDING.** Use care when disengaging springs as they are under tension.

Check again that the operating springs are evenly distributed. Also make certain that the top cover is properly installed. Only then should you replace the unit into the counter.

SPRING ARRANGEMENTS



Note: Spring sections should look like one of the above illustrations. ALL sections should be configured the same.

THERMOSTAT ADJUSTMENT

Heated dispensers are factory set on HIGH. The temperature may be changed by turning the temperature adjustment dial:

- Clockwise to increase temperature
- Counter-clockwise to decrease temperature



STH Knob



AT Dial

MAINTENANCE

To obtain the best performance from your equipment, it should be cleaned daily and maintained in good condition.

PERSONAL PROTECTION:

Check your company safety and environmental policy before cleaning or servicing.



Safety Tip! : Utilize protective gloves and safety glasses

ELECTRICAL POWER:

Before performing EXTENDED CLEANING where electrical components can become wet, the power switch must be turned to OFF and the unit disconnected from the power source.



WARNING: Do not use any chlorinated or highly caustic cleaners, acids, ammonia or other corrosive cleaners. These may cause corrosion and/or damage to the stainless steel. Piper only approves soap and water for cleaning stainless steel. Do not allow water to stand in wells for long periods of time. Well must be emptied and cleaned after every serving period.

GENERAL CLEANING



CAUTION: BURN HAZARD: Some exterior surfaces on unit will get hot. Use caution when touching these areas.

CAUTION: Prior to cleaning or maintenance, turn all switches “OFF” and disconnect the power.

Stainless Steel and Aluminum:

- It is necessary that the toggle switch be in the “OFF” position and the electrical supply cord be removed.
- Allow the unit to cool.
- Remove all bases.
- Wipe entire unit using a clean cloth or sponge with mild detergent.
- Piper only approves soap and water for cleaning stainless steel.

NOTICE: Do NOT use chlorinated cleaners.



WARNING: The interior of the heater is very hot. DO NOT attempt to service units or reach into silos unless heaters have been disconnected from power source and allowed to cool down.

WARNING: Do not splash or pour water onto the warmer control panel and wiring.

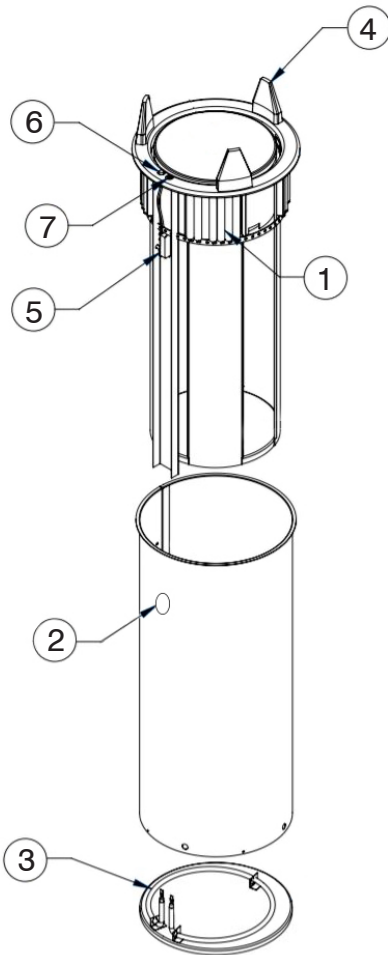
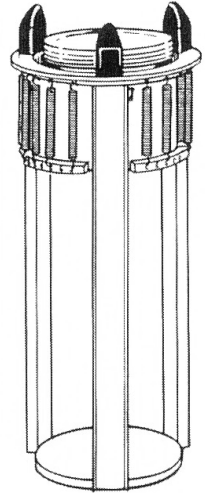
CAUTION: Possible shock hazard may result and unit may be damaged should electrical components become wet.

CAUTION: Never spray wash unit or use chlorine or other caustic cleaners.

- You may also remove the Dispenser Drop-Ins to clean the inside of the units.

PARTS BREAKDOWN - AT & ATH MODELS

ITEM NUMBER	PART NUMBER	DESCRIPTION
1	13-102399	Spring, S/S, Small - AT, ATS Units
1	13-102400	Spring, S/S. Large - AT, ATS Units
1	13-102401	Spring, S/S, Small - ATH Units
1	13-102402	Spring, S/S. Large - ATH Units
2	13-101111	Decal, thermostat adjustment
3	See Below	Heater, 120V (need model number and voltage)
3	See Below	Heater, 208V (need model number and voltage)
4	13-101115	Dish guide, plastic
5	13-101139	Thermostat, bimetal, adjustable
6	13-100993	Pilot light, 240V
6	13-100994	Pilot light, 110V
7	13-101041	Switch, push, SPST
7	13-102984	Boot, rubber (neoprene)

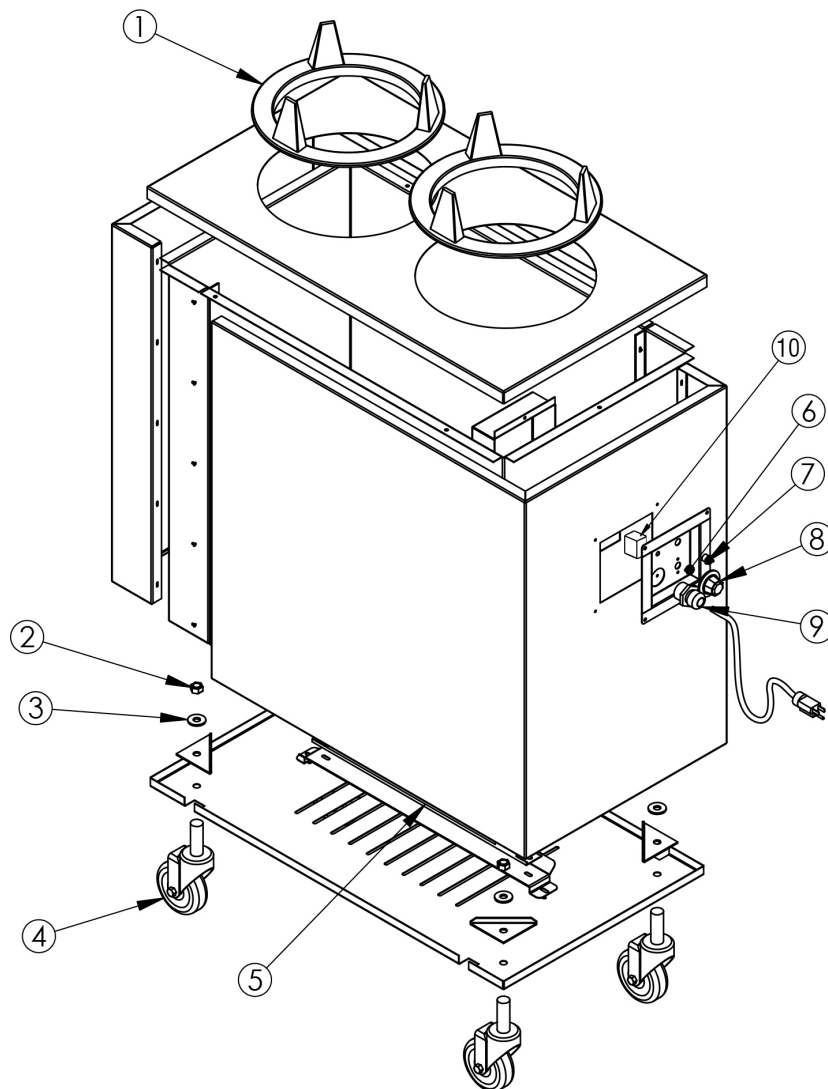


HEATER ELEMENTS - DROP-IN ATH MODELS

HEATER	120V	240V
ATH-1	13-102018	13-101393
ATH-2	13-102019	13-101394
ATH-3	13-102020	13-102911
ATH-4	13-102022	13-101395
ATH-5	13-102024	13-102905
ATH-6	13-102025	13-102906
ATH-7	13-102028	13-102907
ATH-75	13-101686	13-101795
ATH-8	13-102030	13-102908

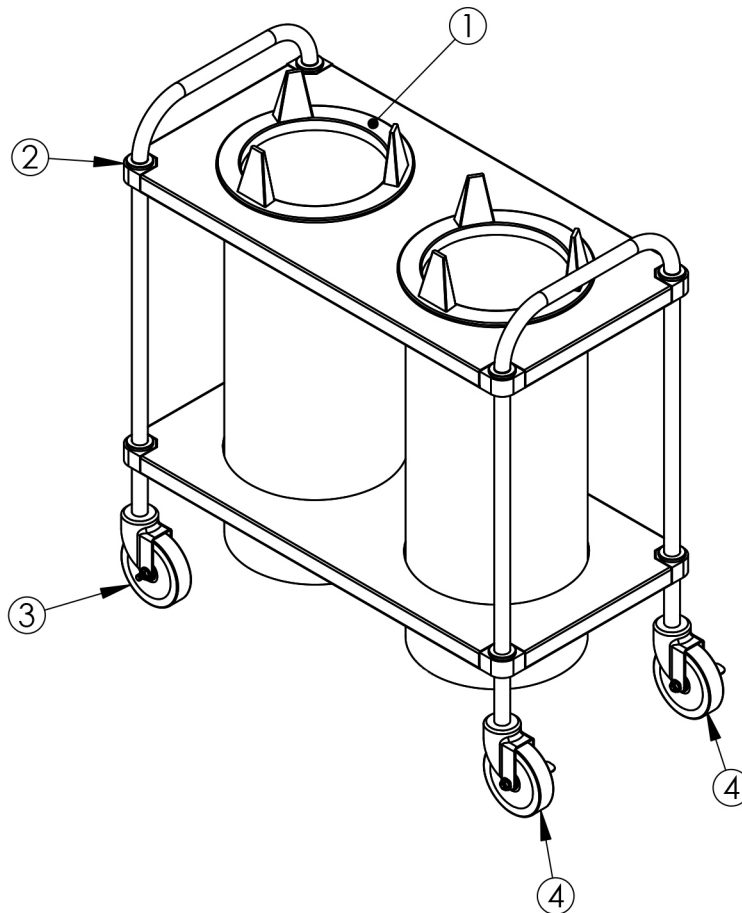
PARTS BREAKDOWN - AT-STH MODELS

ITEM NUMBER	PART NUMBER	DESCRIPTION
1	AT	Dish Dispenser Drop-In (see page 7 for breakdown)
2	0112573	Nut - 5-13 HEX
3	401064	Washer - .5 FLAT 1.25 OD
4	CSTR-4POS	Caster, 4 IN. Stem - No Brake
5	13-102238	Heater Strip - 120V, 750 Watt
5	13-109542	Heater Strip - 208V, 750 Watt
5	13-106544	Heater Strip - 120V, 1500 Watt (for XH Units)
6	13-100333	Indicator Light - 120V
6	13-100335	Indicator Light - 208V
7	13-101390	On/Off Switch
8	13-102216	Knob - Control
9	13-102286	Power Cord Connector
10	13-100079	Thermostat



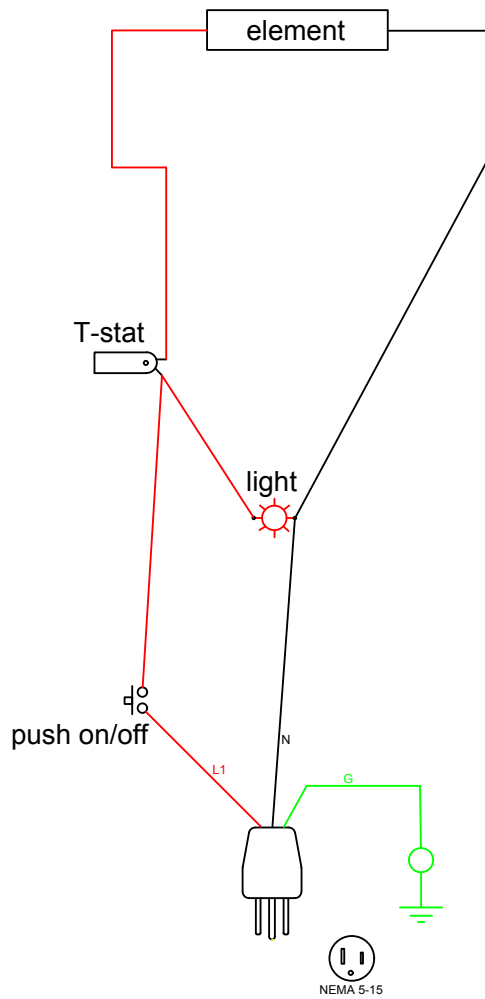
PARTS BREAKDOWN - ATG MODELS

ITEM NUMBER	PART NUMBER	DESCRIPTION
1	AT	Dish Dispenser Drop-In (see page 7 for breakdown)
2	13-101772	Corner Bracket
2	13-103065	Screw, set, SQ HD, S/S, 3/58-16x1
2	13-101774	1" Spacer for corner bracket
3	CSTR-4POS	Caster, 4 In. Stem - No Brake
4	CSTR-4POSB	Caster, 4 In. Stem - With Brake

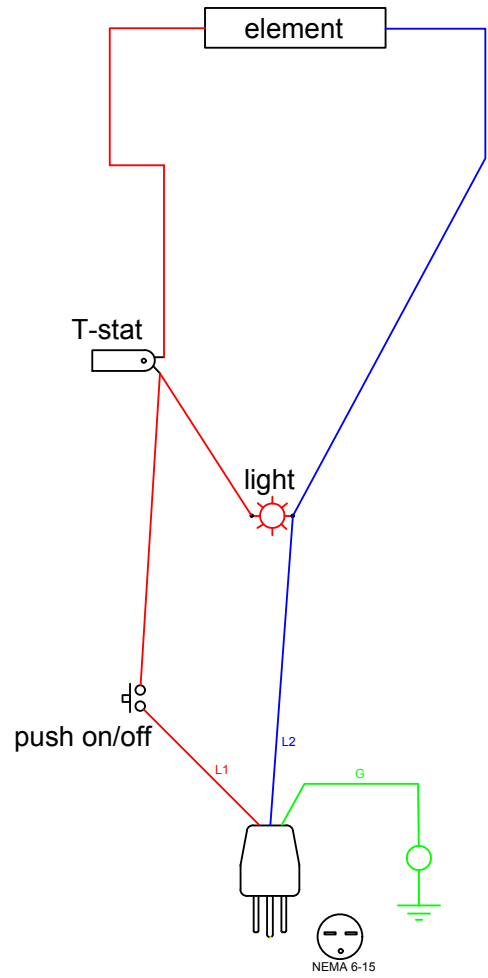


ATH WIRING DIAGRAM

120 volt unit

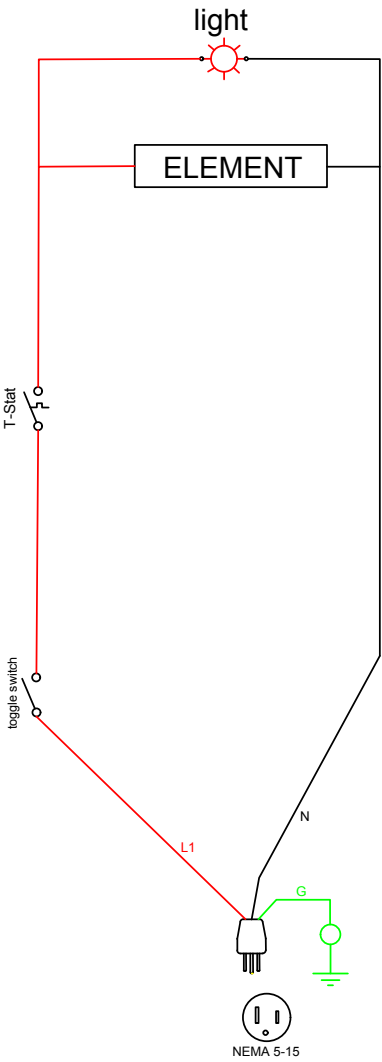


208 or 240 volt unit

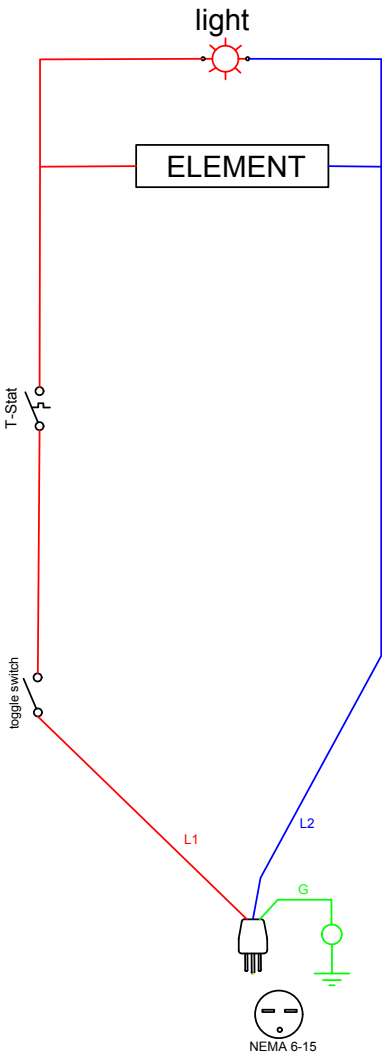


STH WIRING DIAGRAM

120 volt unit



208/240 volt unit



PIPER PRODUCTS, INC. LIMITED WARRANTY

Piper Products, Inc. warrants to the original purchaser that its equipment will be free from defects in the materials and/or parts for a period of 12 months from date of shipment and reported to the factory.

The purchaser is responsible for having equipment properly installed, operated under normal conditions with proper supervision and to perform periodic preventative maintenance. Equipment failures caused by inadequate water quality, improper cleaning, harsh chemicals, or acids are not covered under warranty.

The manufacturer's obligation under this warranty shall be the replacement or repair of defective parts within the warranty period. Excessive labor (more than 1/2 hour) required to access Piper equipment built into cabinets, tables or structures by others, is NOT covered under labor warranty. Example: Piper multiple- or single-well food wells. All labor shall be performed during regular working hours. Overtime premium will be charged to buyer. After thorough examination, the decision of the Piper Products Service Department shall be final.

Any defective parts to be repaired or replaced must be returned to Piper Products, Inc., 300 South 84th Avenue, Wausau, WI 54401, transportation charges prepaid, and they must be properly packed and tagged. The serial and model number of the equipment and date of original installation of such equipment must be given. However, after one year we will not assume any responsibility for any expenses (including labor) incurred in the field incidental to the repair or replacement of equipment covered by this warranty. Our obligation hereunder to repair or replace a defective part is the exclusive remedy for breach of this warranty; and we will not be liable for any other damages or claims, including consequential damages.

If, upon inspection by Piper Products, Inc. or its Authorized Service Agency, it is determined that this equipment has not been properly installed or has not been used in an appropriate manner, has been modified, has not been properly maintained, the warranty will be void. Also, if the nameplate or other identifying marks have been removed, defaced or changed or the unit has been repaired or altered by persons other than expressly approved by Piper Products, Inc., the warranty will be void. If the equipment has been subjected to misuse or misapplication, neglect, abuse, accident, damage during transit or delivery, fire, flood, riot or acts of God, then this warranty shall also be void. When any situation occurs which voids the warranty the manufacturer shall not be liable for any damage to any person or any property which may result from the use of the equipment thereafter.

Warranty is limited to Piper manufactured products only and does not apply to other equipment which may be connected to or installed within.

No representative, dealer, distributor or any other person is authorized or permitted to make any other warranty or obligate Piper Products, Inc. to any liability not strictly in accordance with this policy.

This warranty is in lieu of all other warranties expressed or implied, including any warranty of merchantability, and fitness for a particular purpose. Piper Products does hereby exclude and shall not be liable to purchaser for any consequential or incidental damages including but not limited to damages to property, damages for loss of use, loss of time, loss of profits or income, resulting from any breach of warranty.

NOTES

PIPER

The Food-Focused Equipment Company

a **CFS** BRANDS company

Piper Products, Inc
300 South 84th Avenue
Wausau, WI 54401
Phone: 715-842-2724 . FAX: 715-842-3125