



manufactured fun

P A R A G O N

OWNER'S MANUAL

Apex 32/48/64 Ounce Popcorn Machine

Zenith 32/48/64 Ounce Popcorn Machine

Apex Machine



Zenith Machine



**Apex Machine
with Cabinet Base**



**Zenith Machine
with Cabinet Base**



Model/Number:

Apex 32/48/64 Ounce Popcorn Machine / #1132600 / #1148600 / #1164600

Zenith 32/48/64 Ounce Popcorn Machine / #1132500 / #1148500 / #1164500

32/48/64 Ounce Apex Cabinet Base / #3390600

32/48/64 Ounce Zenith Cabinet Base / #3390500

www.paragonconcessions.com

Paragon International, Inc • 731 W. 18th Street • P.O. Box 560 • Nevada, IA 50201 USA

Phone (515) 382-8000 • Toll-free (800) 433-0333 • Fax (515) 382-8001 • Email:

cs@manufacturedfun.com

IMPORTANT OWNER INFORMATION

Record the model number, serial number and voltage in the spaces below (the data plate is located on the operator's side of the machine in the bottom right). Please have this information available when calling Paragon for service assistance.

Model No. _____

Serial No. _____

Voltage _____

Business Hours: 8:00 AM to 4:30 PM Central Standard Time (CST)

Telephone: 515-382-8000; 800-433-0333

Email: cs@manufacturedfun.com

Fax: 515-382-8001

Additional information can be found by visiting our web site at www.paragonconcessions.com

TABLE OF CONTENTS

IMPORTANT OWNER INFORMATION	1
TABLE OF CONTENTS.....	2
SAFETY PRECAUTIONS.....	4
INTRODUCTION	6
Model Description.....	6
Machine Features:	6
Other Features and Options (if equipped):.....	6
Paragon 32 / 48 / 64 Ounce Machine Specifications:.....	7
Popcorn Machine Applications	8
INSTALLATION	9
Unpacking & Inspection	9
Included Accessories.....	9
Electrical Requirements	9
Electrical Plug Receptacle (Non-Export Units)	10
Installation Instructions	10
OPERATION	11
Control Switch Functions	11
Additional Details for Select Switches and Lights:	12
POPPING POPCORN	14
Before Popping with a B.I.B. Oil System (if equipped):.....	14
Popping Popcorn.....	14
After Popping:	15
TEMPERATURE SETTINGS.....	16
Popping Temperature Programming	16
High Temperature Safety Limit	17
Kettle Automatic Shutoff	17
Thermocouple Errors	18
CLEANING.....	19
Daily Cleaning Instructions.....	19
B.I.B. OIL SYSTEM (if equipped)	22
B.I.B. Features	22
B.I.B. Installation	22
B.I.B. Operation.....	22
B.I.B. Oil Programming.....	23

B.I.B. Oil System Fuse Replacement.....	23
AUTODUMP SYSTEM (if equipped)	24
Autodump Features	24
Autodump Operation.....	24
MAINTENANCE.....	25
Kettle Installation.....	25
Kettle Removal.....	25
Cabinet Base Stand	26
Stand Installation	26
Stand Removal	26
Circuit Breakers.....	27
TROUBLESHOOTING.....	29
ORDERING SPARE PARTS.....	33
Replacing Broken Glass.....	34
Cabinet Exterior Parts	35
Reversible Dome	36
Chassis Parts.....	37
Chassis Parts.....	38
Cabinet Interior Parts.....	39
Cabinet Base Interior	41
Cabinet Base Stand – (Apex 3390600, Zenith 3390500).....	43
Cabinet Door Assembly.....	45
Kettle Top Assembly	46
Kettle Bottom Assembly	48
Kettle Inner Assembly	49
WIRING DIAGRAM.....	50
WARRANTY	51

SAFETY PRECAUTIONS

Paragon values your continued safety above all else. Please follow these guidelines when using your equipment to prevent injury and maximize product performance:



No direct contact to equipment by the general public should be allowed when used in food service locations. Only trained personnel should operate this equipment. Carefully read any and all instructions before beginning operation of the equipment.



Always wear safety glasses when servicing equipment.



Kettle reaches extreme heat during operation. To avoid injury, NEVER touch kettle while hot.



Any alterations made to equipment by anyone other than certified Paragon personnel will void warranty and may also create unsafe working conditions. NEVER make alterations to the equipment.



Machine must be properly grounded to prevent electrical shock. Do NOT immerse kettle, warmer, or any other part of this equipment in water. Doing so may damage equipment and prevent it from working properly. Always unplug equipment before cleaning or servicing to prevent electric shock.



Ensure equipment is secured to the stand to avoid tipping accidents.



**CALIFORNIA PROPOSITION
65 WARNING**

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

ADVERTENCIA: Este producto contiene productos químicos reconocidos por el estado de California que provocan cáncer, defectos de Nacimiento u otros daños reproductivos.

For more information: www.p65Warnings.ca.gov

INTRODUCTION

PARAGON IS PROUD TO BE YOUR PARTNER FOR MANUFACTURED FUN.

Paragon's goal is to provide our customers with high quality, innovative products at a great value. Paragon's innovative products are designed to help customers expand their business, and improve their profits. That's why this product has been specially-crafted to meet precise specifications for performance, efficiency, and output.

Model Description

The Paragon Apex[®] and Paragon Zenith[®] popcorn machines are commercial units made for high volume entertainment venues. Both models can operate as countertop units or be placed on an optional stand/cabinet base unit (sold separately). For additional efficiency, both popcorn machine models can be equipped with an optional bag-in-box (B.I.B) oil delivery system (sold separately).

NOTE: Individual popcorn machine features and outward appearance/design vary by model. Accordingly, the images and diagrams provided throughout this manual are for reference only.

Machine Features:

- A high-output, anodized kettle for powerful performance and easy cleaning.
- A rotatable kettle for efficient operation and ease of cleaning.
- Sturdy cabinet construction that withstands heavy commercial use and maintains an attractive appearance.
- Stainless steel food zone and glass panels for sanitary food environment and easy cleaning.
- Built-in warming deck with an 800-watt heating element keeps the popcorn hot and fresh.
- Old maid drawer to catch un-popped kernels that effortlessly sift through for later disposal.
- Presentation lamps which create an attractive display setting for increased impulse buying.

Other Features and Options (if equipped):

- Cabinet base stand
- B.I.B. oil delivery system
- A switch that allows Salted/Sweet popcorn temperature setting modes.
- Autodump Technology enabling automatic kettle dumping of popped popcorn.
- Sign Options (LED or LED Neon) reversible from Front Counter (customer side) to Back Counter (operator side) of popper.
- Stainless steel reversible square top or customizable colored reversible curved top

Paragon 32 / 48 / 64 Ounce Machine Specifications:

Apex 32 / 48 / 64 Ounce Popcorn Machine	1132600 / 1148600 / 1164600
Zenith 32 / 48 / 64 Ounce Popcorn Machine	1132500 / 1148500 / 1164500
32 / 48 / 64 Ounce Apex Cabinet Base	3090600
32 / 48 / 64 Ounce Zenith Cabinet Base	3090500
Free Standing	Yes
32 / 48 / 64 Ounce Kettle	32 / 48 / 64 Ounce, Anodized Kettle
32 / 48 / 64 Ounce Machine Wattage (without B.I.B.)	5571 watts / 6671 watts / 7221 watts
B.I.B. Wattage (if equipped)	378 watts
Volts	120/208, 120/240, 230 V
Machine Output 32 / 48 / 64	600 / 900 / 1200 (one ounce) servings per hour
Construction	Stainless Steel Cabinet, Glass Windows, Plexiglas Doors
Popcorn Machine Dimensions (Without Cabinet Base, sold separately)	34.5" W x 26.5" D x 47.5"
Cabinet Base Dimensions (Without Popcorn Machine, sold separately)	35.875" W x 27.875" D x 35.25" H"
Popcorn Machine Weight (Without Cabinet Base, sold separately)	230 lbs (105 kg)
Cabinet Base Weight (Without Popcorn Machine, sold separately)	115 lbs (52 kg)
Certifications	Pending UL, CE, NSF
Warranty	2 Year Commercial Parts Warranty

Popcorn Machine Applications

- Movie Theaters
- Entertainment Venues
- Athletic Stadiums
- Convenience Stores
- Grocery Stores
- Restaurants
- Food Trucks
- Schools
- Bars

Should you have any questions about your equipment, or would like to know more about our other innovative concession equipment and supplies, please contact us or visit us on the web at **paragonconcessions.com**.

Telephone: 515-382-8000; 800-433-0333

Email: cs@manufacturedfun.com

Fax: 515-382-8001

Thank you for your purchase and enjoy!

INSTALLATION

Unpacking & Inspection

Paragon carefully inspects each product during assembly and after completion to adhere to strict quality guidelines and packs it securely to ensure safe delivery to each of our customers. Be sure to carefully remove all packing material and adhesive before any operation. Please examine your product to guarantee all equipment has arrived complete and in good condition.

If you believe that any damage may have occurred during shipment or parts may be missing, please contact Paragon Customer Service immediately at:

Address: 731 W 18th Street, Nevada, Iowa, 50323, USA

Phone: (800) 433-0333

Email: cs@manufacturedfun.com

Web Site: ParagonConcessions.com

Included Accessories

- Operating Manual (if requested paper copy)
- Registration Warranty
- Seed Scoop 32 / 48 / 64 Ounce, PN: 93017 / 93018 / 93019
- Electrical Receptacle (Non-Export Units) 32 / 48 / 64:
NEMA L14-30R / NEMA 14-50R / NEMA 14-50R
- Salt Measuring Scoop, PN: 93013 (Call Customer Service for specific 32/48/64 oz)
- Salt Bin, PN: 5068
- Oil Measuring Cup, PN: 1063
- Popcorn Scoop, PN: 1042
- Light bulbs, PN: 12161

Electrical Requirements

Before using your Paragon Apex ® or Paragon Zenith ® machine, have a certified electrician ensure the correct electrical plug receptacle and proper power with the correct polarity can be supplied. It is recommended that Paragon Apex ® and Paragon Zenith ® popcorn machine models be plugged directly into a wall outlet that uses dedicated and protected circuits. Do not use extension cords and/or ground to non-ground adapters as they pose safety concerns and can result in poor and/or failure of machine performance.

Paragon Apex ® and Paragon Zenith ® popcorn machine models are designed to use the following electrical requirements in accordance with the shipping destination.

Voltage	Current	Power	Frequency
120/208 VAC or 120/240 VAC or 230 VAC (export)	single or three phase, 30 AMP (32 oz) 50 AMP (48, 64 oz)	5171 W (32 oz, no B.I.B.) 5549 W (32 oz, with B.I.B.) 6671 W (48 oz, no B.I.B.), 7049 W (48 oz, with B.I.B.) 7221 W (64 oz, no B.I.B.), 7599 W (64 oz, with B.I.B.)	50/60 Hz

All Paragon Apex[®] and Paragon Zenith[®] popcorn machine models are designed to use single or three phase current through a four-wire supply, (2 hot wires, 1 neutral wire, and 1 ground wire). All components in Paragon Apex[®] and Paragon Zenith[®] popcorn machine models use 120 V, using hot to neutral connections. Reference wiring diagram for wiring details.



Danger! The machine must be properly grounded to prevent electrical shock. Failure to do so could result in injury or death.

Electrical Plug Receptacle (Non-Export Units)

The electrical receptacle used by Paragon Apex[®] and Paragon Zenith[®] popcorn machine models is a NEMA L14-30R receptacle (for 32 oz) or a NEMA 14-50R receptacle (for 48, 64 oz). A certified electrician must install the provided receptacle noting the proper electrical connections for the NEMA L14-30P plug (for 32 oz) or a NEMA 14-50P plug (for 48, 64 oz). Improper wiring can pose a fire hazard and/or result in popcorn machine performance failure and will void warranty.

Installation Instructions

1. Remove all packaging and tape.
2. Remove all protective manufacturing plastic on glass, plexiglass, and metal parts.
3. For countertop models, place machine on a sturdy, level countertop.
4. Check that proper electrical requirements and electrical receptacle are available to power the popcorn machine. If uncertain, see the prior Electrical Requirements section for details.
5. Check that the CABINET LIGHTS, KETTLE, STIRRER, EXHAUST, WARMER, and SIGN switches are in their OFF positions.
6. Clean the popcorn machine before use. See the Cleaning section of this manual for instructions.
7. Plug in the popcorn machine and see the Popping Instructions section of this manual to begin popping popcorn.

OPERATION

Control Switch Functions

This section describes the popcorn machine control panel, detailing functionality of all switches and lights. Reference the control panel image below.



Control Panel for Paragon 32 / 48 / 64 Ounce Popcorn Machines

- CABINET LIGHTS:** Turns on the Presentation Lamps, lighting the area inside the cabinet for better popcorn display.
- KETTLE:** Activates the kettle heat control, allowing power to flow to the kettle heating elements until the target popping temperature is reached.
- STIRRER:** Activates a motor which rotates the kettle stir rod to evenly mix popcorn kernels with oil, seasoning, and heat for best popping results.
- EXHAUST:** Activates the exhaust blower, allowing air above the kettle to be drawn through the filtration system before being directed out the top of the machine.
- WARMER:** Activates the cabinet base heating element and blower to keep popped popcorn warm and crisp after popping in the kettle.
- SIGN:** Enables power to the top display sign(s).
- OIL:** Controls the oil dispensing for B.I.B. oil system (if equipped). See the B.I.B. Oil System section for full functionality.
- AUTODUMP:** Activates the automatic dumping kettle to empty the popped popcorn from the kettle (if equipped).
- WAIT/READY INDICATORS:** LED Lights that illuminate when the KETTLE switch is in the ON position, indicating when the kettle is heating (WAIT) or has reached the target popping temperature (READY).

Additional Details for Select Switches and Lights:

KETTLE:

If neither the READY or WAIT lights are illuminated and the kettle switch is in the ON position, please see the kettle portion of the troubleshooting section. The kettle automatic shutoff may be active.

STIRRER:

The stirrer switch should always be in the ON position when popping popcorn for best results.

SIGN: (if equipped)

For programmable color LED signs, the sign switch ONLY ENABLES power to the LED sign. **To turn on the sign**, put the sign switch in the ON position and then use the power button on the remote.

OIL: (if equipped)

The oil switch has three functions that allow control of the B.I.B. oil dispensing system. The three functions are as follows:

1. **Dispense Saved Oil Amount:** The B.I.B. system is factory set to dispense 10 fl oz of oil when the OIL switch is PRESSED and RELEASED. To adjust the amount of oil dispensed, see the programming portion of the B.I.B. oil system section.
2. **Cancel Dispensing:** If the B.I.B. oil system is actively pumping oil and needs to be canceled, PRESS and RELEASE the oil switch. This will immediately stop the B.I.B. pump. **NOTE:** If canceled, there may be a slight delay (up to 25 seconds) before the pump can be used to dispense more oil as the B.I.B. system finishes its timer logic.
3. **Dispense Until Switch Released:** To dispense oil without a timer, PRESS and HOLD the oil switch. This will continuously dispense oil until the oil switch is released. **NOTE:** Oil may not come out of the oil spout immediately as the oil must first travel up through the corner post of the machine to get to the spout above the kettle.

AUTODUMP: (if equipped)

The Autodump switch has two functions that allow control of the automatic kettle dumping cycle. The two functions are as follows:

1. **Automatic Kettle Dumping:** When popping popcorn, right after the oil and seeds have been added to the kettle, PRESS and RELEASE the AUTODUMP switch to activate. A chime will beep to confirm the Autodump cycle has started. Then when popcorn is done popping and ready to be dumped, the Autodump system will chime again and empty the popped popcorn from the kettle.
2. **Autodump Cancel:** If the automatic dumping cycle needs to be canceled, PRESS and RELEASE the Autodump switch. The kettle will immediately stop and automatically return to its upright position.

WAIT LED Light:

The amber colored WAIT LED light has two modes which are as follows:

1. **Solid on:** This means the kettle is actively heating up. This will occur when the kettle switch is in

the ON position and the current kettle temperature is below the target popping temperature.
CAUTION: The kettle will be HOT TO THE TOUCH.

2. **Flashing:** When the amber light is flashing on and off at 3 second intervals, this means the kettle is OFF and cooling down but it is still HOT TO THE TOUCH (greater than 120 degrees Fahrenheit), and **will cause burns if touched**. This mode will occur either when the kettle switch is in the OFF position or if the kettle has been left in the ON position for more than 30 minutes without popping, (kettle automatic shutoff).

READY LED Light:

The green colored READY LED light indicates the kettle has completed heating up to the target popping temperature and is ready to add ingredients for popping popcorn. CAUTION: The kettle will be HOT TO THE TOUCH and **will cause burns if touched**.

POPPING POPCORN

The Paragon Apex ® and Paragon Zenith ® popcorn machines were designed to provide ease of use while producing high quality popcorn. For best results, Paragon recommends using the following products:

Popcorn:

- Country Harvest Yellow Popcorn Seeds

Oil:

- Buttery Goodness Coconut Oil

Flavoring:

- Buttery Goodness Popcorn Salt

Before Popping with a B.I.B. Oil System (if equipped):

If using a B.I.B. oil system, ensure the oil in all parts of the system are liquified before use. Check that the oil in the box, oil in the hoses connected to the pump, oil in the pump, and oil in the line leading to the kettle is liquified and clear of any blockages. With the oil liquified, prime the B.I.B. system by holding a cup under the oil spout and PRESS and HOLD the oil switch until oil is dispensed into the cup. Once oil begins dispensing into the cup, RELEASE the oil switch. The B.I.B. system is now primed and ready. The B.I.B. system is factory set to 10.5 oz. If needing to change the programmed amount of oil, see the B.I.B. Oil Programming section.

Popping Popcorn

For popping salted or sweet popcorn, Paragon recommends the following recipes and instructions:

NOTE: When switching between popping sweet and salted popcorn, the kettle must be cleaned. See Daily Kettle Cleaning in the Cleaning section for instructions.

Salted Popcorn Recipe:

Ingredient	32 oz	48 oz	64 oz
Popcorn	32 oz (946 ml)	48 oz (1420 ml)	64 oz (1892 ml)
Coconut Oil	10.5 fl oz (311 ml)	16 fl oz (473 ml)	21 fl oz (621 ml)
Popcorn Salt	1 Tbsp (15 ml)	1.5 Tbsp (22 ml)	2 Tbsp (30 ml)

Sweet Popcorn Recipe:

Ingredient	32 oz	48 oz	64 oz
Popcorn	20 oz (592 ml)	30 oz (890 ml)	40 oz (1180 ml)
Oil	8 fl oz (240 ml)	12 fl oz (355 ml)	16 fl oz (475 ml)
Sugar	15 oz (445 ml)	22 oz (650 ml)	30 oz (890 ml)

Instructions:

1. Turn the following switches to the ON position: CABINET LIGHTS, KETTLE, STIRRER, EXHAUST, WARMER; Additionally, set the Salt/Sweet Switch to the type of popcorn being popped (see temperature settings for switch location).
2. Measure out seeds, salt or sugar, and oil (if NOT using B.I.B. oil system).
3. When the kettle is heated up (about 4 to 6 minutes), the green READY light will illuminate.
4. Lift the kettle lid and pour the measured seeds and salt or sugar into the kettle.
5. Add oil:
 - a. For B.I.B. System, PRESS and RELEASE the OIL switch to automatically add the oil to the kettle.

- b. If not using a B.I.B. oil system, add the pre-measured amount of oil into the kettle.
6. Close the kettle lid.
7. Wait until popcorn has finished popping (generally about 2 seconds between pops) and dump kettle.
 - a. If using the Autodump system, PRESS and RELEASE the AUTODUMP switch to activate the dumping cycle and a chime will sound. When done popping, the Autodump system will chime and automatically dump the popped popcorn from the kettle.
 - b. If not using an Autodump system, use the kettle handle to rotate and gently dump the remaining popped popcorn from the kettle.
8. When finished popping, turn the KETTLE and STIRRER switches to their OFF positions. The CABINET LIGHTS and WARMER switches may remain on to display and help keep popped popcorn warm and crisp.

NOTE: NEVER LEAVE THE KETTLE ON WHEN NOT POPPING POPCORN

After Popping:

Before switching between sweet/salted popcorn (if equipped) or if done popping for the day, clean the kettle AFTER it has COOLED COMPLETELY. The kettle will be HOT TO THE TOUCH while the amber WAIT light is flashing when the KETTLE switch is in the OFF position. Wait until the kettle is at a safe to handle temperature (below 120 degrees Fahrenheit). See Daily Kettle Cleaning in the Cleaning section of this manual for instructions.

TEMPERATURE SETTINGS

Popping Temperature Programming

There are no mechanical thermostats in Paragon Apex[®] and Paragon Zenith[®] machines. Instead, the kettle temperature is monitored using two thermocouples and a programmable logic controller (PLC). This means the popping temperature can be adjusted to temperatures between 350 to 490 degrees Fahrenheit (177 to 254 Celsius). For convenience there are two programmable popping temperatures, one for salted popcorn and one for sweet popcorn. Both are factory set for optimal popping results but can be adjusted to values within the temperature ranges below.

Salted Popcorn Temperature Range: 460 to 490 degrees Fahrenheit (238 to 254 Celsius).

Sweet Popcorn Temperature Range: 360 to 400 degrees Fahrenheit (182 to 204 Celsius).

Factory Set Salted Popping Temperature: 480 degrees Fahrenheit (248 Celsius)

Factory Set Sweet Popping Temperature: 400 degrees Fahrenheit (204 Celsius)

NOTE: If the popcorn machine loses power, the temperature settings will default back to the factory values. If temperature values other than the factory values are desired, reprogram the machine using the following instructions after power is restored.

For programming a new popping temperature value, use the switches shown in the image below.



PROGRAM TEMPERATURE: Enables temperature program mode when in the ON position. Exits temperature program mode when in the OFF position.

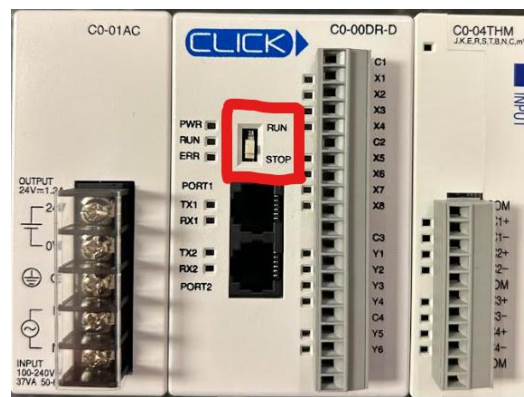
+ TEMPERATURE: Increases the programmed temperature value by 5 degrees Fahrenheit each time it is pressed.

- TEMPERATURE: Decreases the programmed temperature value by 5 degrees Fahrenheit each time it is pressed.

SALT/SWEET: Selects the temperature settings for type of popcorn. Press the switch to the ON position for popping SWEET popcorn. Press the switch to the OFF position for popping SALTED popcorn.

1. To program a new popping temperature, select the popcorn type. Press the SALT/SWEET switch in the ON position for SWEET popcorn, or the OFF position for SALTED popcorn.
2. Press the PROGRAM TEMPERATURE switch so it is in the ON position.
3. Use the + TEMP and – TEMP switches to increase and decrease the popping temperature to the desired value. Each PRESS and RELEASE of the +TEMP switch will increase the programmed temperature by 5 degrees Fahrenheit. Each PRESS and RELEASE of the -TEMP switch will decrease the programmed temperature by 5 degrees Fahrenheit.
4. When done programming, press the PROGRAM TEMPERATURE switch to the OFF position to exit temperature program mode.
5. The new popping temperature has been set.

To reset the popping temperatures to the factory values, slide the PLC RUN/STOP mode slider switch (located on the top of the PLC as shown below) to the STOP position and then back to the RUN position. The temperature values are now set to the default factory values (Salted popping temperature 485 F, Sweet Popping Temperature 400 F). Note, if using a B.I.B. oil delivery system, the oil dispensing also gets reset to the factory value (10.5 oz).



High Temperature Safety Limit

Light Code: If the high temperature safety limit is active, the READY and WAIT lights will simultaneously flash on and off at 1 second intervals

Description: A very hot kettle can be a fire hazard. As a safety precaution, Paragon Apex[®] and Paragon Zenith[®] popcorn machines have a fixed, factory set, high temperature safety limit value of 600 degrees Fahrenheit (315 Celsius). If either of the kettle thermocouples detect a temperature value at or above 600 degrees Fahrenheit, the machine's PLC will turn off power to the kettle heating elements. . If the kettle reaches the high temperature safety limit contact Paragon customer service for kettle inspection.

Kettle Automatic Shutoff

Light Code: The amber WAIT light may be flashing on and off at 3 second intervals meaning the kettle is off but hot to the touch (kettle above 120 degrees Fahrenheit), or both the WAIT and READY LEDs will be off (kettle lower than 120 degrees Fahrenheit).

Description: If the kettle is left on (kettle switch is in the ON position) for more than 30 minutes without popping popcorn, the automatic kettle shutoff will become active. This means the kettle will not heat even though the kettle switch is in the ON position. To reset the automatic shutoff, turn the kettle switch to the OFF position and then back to the ON position. Then kettle will begin heating again.

Thermocouple Errors

1. High Temperature Safety Limit Reached:

Light Code: Amber WAIT and Green READY lights flashing on and off simultaneously at 3 second intervals.

Description: If the kettle reaches a temperature greater than or equal to 600 degrees Fahrenheit (315 Celsius), the PLC will turn off heat to the kettle. This state is active if both the LED READY/WAIT lights are flashing simultaneously on and off at 3 second intervals. If the kettle reaches the high temperature safety limit contact Paragon customer service for kettle inspection.

2. Incorrect Thermocouple Wiring Polarity:

Light Code: Amber WAIT light flashing on and off at 1 second intervals.

Description: If the PLC detects the kettle temperature at or below -50 degrees Fahrenheit, the kettle will not heat and the amber WAIT light will flash on and off at 1 second intervals. This error occurs if the PLC thermocouple(s) are wired in reverse polarity. To fix this error, UNPLUG the machine and check that the thermocouple wires are correctly installed in the thermocouple block of the PLC. The YELLOW wire is the positive (TC+) and the RED wire is the negative (TC-). These wires come in pairs where kettle plug socket pins 2 and 4 are a thermocouple pair and pins 3 and 6 are a pair. For a full wiring diagram, see the Wiring Diagrams section of this manual.

CLEANING



Machine must be properly grounded to prevent electrical shock.
Do NOT immerse kettle, warmer, or any other part of this equipment in water.
Doing so may damage equipment and prevent it from working properly.
Always unplug equipment before cleaning or servicing to prevent electric shock.



Kettle reaches extreme heat during operation. To avoid injury, NEVER touch kettle while hot.

To maintain popcorn machine performance and a sanitary popping environment, it is important to regularly clean all equipment. When cleaning equipment, only use cleaning products that are non-toxic food grade cleaners. Prior to starting the cleaning process of the popcorn machine and kettle, make sure all switches are turned to their OFF positions. Wait until the kettle has **COOLED COMPLETELY**. Once cool, **UNPLUG** the popcorn machine and proceed with the following cleaning steps.

NOTE: When cleaning the popcorn machine, do NOT use any oven cleaners, ammonia-based cleaners, or abrasive materials as they will damage the popcorn machine equipment and can result in performance failure. The warranty does not cover parts that are damaged due to improper cleaning.

CAUTION: When the KETTLE switch is in the OFF position with the amber WAIT light is flashing, the kettle will be **HOT TO THE TOUCH**. If touched during this cooling time, **the kettle will cause burns**. Wait until the kettle is at a safe to handle temperature (below 120 degrees Fahrenheit).

Daily Cleaning Instructions

1. Wait until the kettle has cooled and make sure all switches are in their OFF positions.
2. Clean and sanitize all accessories such as the popcorn seed scoop.
3. Clean the oil filters. Reference the Filter Cleaning section of this manual for instructions.
4. Remove all popcorn bits and seeds on and below the clean out tray. Prior to cleaning under the clean out tray the drop door must be removed.

CAUTION: Be careful when lifting/removing the clean out tray to avoid pinching any fingers or catching any articles of clothing.

5. Remove and empty the old maid drawer of all popcorn bits and seeds.
6. Wipe grease off the cabinet glass using a clean, damp cloth.
7. Use another clean cloth and stainless steel cleaner to wipe the cabinet clean out tray and the old maid drawer.
8. Wipe the cabinet glass panels using a clean cloth and glass cleaner.
9. Use a clean cloth and a non-ammonia cleaner to wipe plexiglass/plastic doors and panels of the machine.

Daily Kettle Cleaning

NOTE: The kettle should never be removed from the popcorn machine for cleaning. If particulates and/or water get inside the kettle plug or bottom of the outer kettle, severe damage can occur, resulting in performance failure.

CAUTION: A hot kettle **will cause burns if touched**. Always let the kettle COOL COMPLETELY before following the cleaning instructions. Wait until the kettle is at a safe to handle temperature (below 120 degrees Fahrenheit).

NOTE: Never use water or ice to cool down a hot kettle or to clean a kettle, this can damage the kettle and result in popcorn machine performance failure. The warranty does not cover parts that are damaged due to improper cleaning.

1. When the kettle is cool, wipe the exterior and interior of the kettle with a soft, clean cloth. Doing this as often as possible helps to minimize heavy build-up of deposits that require specialized cleaning.
2. For heavily carbonized kettles, Paragon recommends using a food safe, commercial popcorn kettle cleaner for anodized kettles.

Daily Filter Cleaning

1. Make sure all switches are in their OFF positions and the kettle has COOLED COMPLETELY.
2. Remove the mesh filter cover by loosening and removing the two thumb screws making sure to keep a hand on the filter cover so it does NOT fall.
3. With the filter cover and thumb screws removed, use the handles on the mesh filters, pulling down to remove them.
4. Clean the mesh filters in warm soapy water and rinse. Let them dry overnight and reinstall them by reversing steps 1 and 2.

Cabinet Warmer Cleaning

The cabinet warmer compartment should be cleaned every 3-4 months. It is located below the clean out tray and cabinet warmer cover. Make sure all switches are in their OFF positions and all machine parts have COOLED COMPLETELY before cleaning. Follow the instructions below for warmer compartment cleaning:

1. With all switches in their OFF positions and the machine cooled, unplug the machine.
2. Remove the drop door.
3. Lift and remove the clean out tray. Be careful when lifting/removing the clean out tray to avoid pinching any fingers or catching any articles of clothing.
4. Remove the cabinet warmer cover.
5. Use a vacuum to carefully remove any popcorn bits and seeds.
6. Reverse steps 2 through 4 above to reinstall the cabinet warmer cover, clean out tray, and drop door.

B.I.B. Oil System Cleaning (if equipped)

Reference the B.I.B. oil dispensing system user manual for oil system cleaning instructions.

B.I.B. OIL SYSTEM (if equipped)

B.I.B. Features

The Paragon Apex ® and Paragon Zenith ® popcorn machine models can be equipped with an optional bag-in-box (B.I.B) oil delivery system (sold separately). From the factory, the B.I.B. system is set to 10.5 fluid ounces. This is an adjustable value detailed in the B.I.B. Oil Programming section. The B.I.B. unit holds a maximum of two 35-pound boxes of oil, has a heater/blower system to help keep oil warm, and a heated line to the kettle.

B.I.B. Installation

To install a B.I.B. oil system, use the following steps:

1. Place the B.I.B in desired location.
2. Make sure the POWER switch is in the OFF position
3. Make sure the PROGRAM MODE switch is in OFF position (position away from the label is pressed)
4. Carefully line up and plug in the B.I.B. control harness from the B.I.B system to the port on the machine in the right rear.
5. Connect oil hose lines to the oil box, oil pump, and to the oil line to the popcorn machine kettle.
6. Plug in the B.I.B power cord.
7. B.I.B. system is now ready to be turned on and primed.

B.I.B. Operation

Prior to operation, ensure oil in all parts of the B.I.B. system is COMPLETELY liquified, (in the box, in the lines connected to the oil pump, in the oil pump, in the oil filter, and in the line leading to the kettle). After checking all oil in the B.I.B. system is liquified and there are no blockages, turn the power switch to the ON position and use the following instructions for B.I.B. system priming and use:

NOTE: Using a B.I.B. system when the oil is NOT COMPLETELY liquified can result in B.I.B. system performance failure.

Priming

1. Hold a cup under the spout above the kettle and PRESS and HOLD the OIL switch until oil is dispensed into the cup.
2. Once oil begins to pour into the cup, RELEASE the OIL switch and continue holding the cup under the spout to catch any remaining oil that may drip.
3. The BIB oil system is now primed.

Dispensing

1. PRESS and RELEASE the OIL switch.
 - a. If the first batch of popcorn after priming the B.I.B. system, check the desired amount of oil is being dispensed by holding a measuring cup under the spout.
2. Oil will dispense for the set amount of time.

Cancel Dispensing

1. To CANCEL the oil being dispensed, PRESS and RELEASE the OIL switch a second time.

NOTE: If the dispensing of oil is canceled there may be a delay of up to 25 seconds before oil can be dispensed again. This is due to the BIB system finishing its timer logic.

B.I.B. Oil Programming

To program the amount of oil the B.I.B. dispenses when the OIL switch is PRESSED and RELEASED, follow the instructions below:

Factory Set Oil Amount: 10.5 fl oz (311 ml)

Programmable Oil Amount Range: 5 to 25 fl oz (148 to 740 ml)

1. Locate the B.I.B. programming switch, (on the side of the B.I.B. unit).
2. PRESS the programming switch so it is in the PROGRAM OIL position
3. Programming mode is now active.

NOTE: The oil pump will NOT be able to pump oil when in programming mode.

4. Now adjust the oil amount by using the OIL and AUTODUMP switches:
 - a. Each time the OIL switch is PRESSED and RELEASED, the amount of oil is decreased by 1 fluid ounce.
 - b. Each time the AUTODUMP switch is PRESSED and RELEASED, the amount of oil is increased by 1 fluid ounce.
5. After adjusting the desired amount of oil, save the new amount by pressing the PROGRAM OIL switch to the opposite position.
6. The B.I.B. oil dispensing timer is now set.
7. Confirm the desired oil amount by holding a measuring cup above the kettle below the oil spout. PRESS and RELEASE the OIL switch to dispense oil. Check the desired amount is dispensed. If the dispensed amount is not as desired, repeat steps 1 through 6.

To reset the oil amount to the factory values, slide the PLC RUN/STOP mode slider switch (located on the top of the PLC as shown below) to the STOP position and then back to the RUN position. The oil amount has now been reset to the factory value of 10.5 fl oz (311 ml). Note, if resetting the B.I.B. oil amount to the factory value, the salt and sweet popping temperature values will also be reset to the factory values (salted, 480 F, sweet, 400 F).

B.I.B. Oil System Fuse Replacement

To replace the B.I.B. fuse, use the following instructions:

1. Make sure the POWER switch is in the OFF position.
2. Unplug the B.I.B power cord.
3. Locate the fuse holder, (on the side of the B.I.B. unit).
4. Push and twist counter-clock-wise to release the fuse holder.
5. Pull the fuse holder out and remove the fuse.
6. Replace the blown fuse with a new **AGC 1 Ampere (AGC 1A)** fuse.
7. Line up the fuse holder and push all the way in and then twist clock-wise to lock in place.
8. The fuse is installed correctly if only the black plastic of the fuse holder can be seen (none of the fuse can be seen).

AUTODUMP SYSTEM (if equipped)

Autodump Features

The Paragon Apex ® and Paragon Zenith ® popcorn machine models can be equipped with an optional automatic kettle dumping (Autodump) system (sold separately). When the Autodump cycle is NOT active, the kettle can be dumped/rotated manually by using the kettle arm handle.

Autodump Operation

Use the following steps when using the Autodump system while popping popcorn.

CAUTION: NEVER attempt to manually move the kettle when the Autodump cycle is active. Attempting to do so **can result in injury and machine damage** resulting in performance failure.

Autodump

1. Right after adding corn and oil to the kettle (see the Popping Popcorn section for all steps), PRESS and RELEASE the AUTODUMP switch to activate the Autodump cycle and a chime will sound.
2. When the popped popcorn is done popping, the chime will sound and the Autodump system will automatically dump the popped popcorn from the kettle.

Cancel Autodump

1. PRESS and RELEASE the AUTODUMP switch a second time.
2. The Autodump cycle will immediately stop and return the kettle to the upright position.

MAINTENANCE



Always wear safety glasses when servicing equipment.



Kettle reaches extreme heat during operation. To avoid injury, NEVER touch kettle while hot.



Any alterations made to equipment by anyone other than certified Paragon personnel will void warranty and may also create unsafe working conditions. NEVER make alterations to the equipment.



Machine must be properly grounded to prevent electrical shock.
Do NOT immerse kettle, warmer, or any other part of this equipment in water. Doing so may damage equipment and prevent it from working properly.
Always unplug equipment before cleaning or servicing to prevent electric shock.

Kettle Installation

To install the kettle, follow the instructions below:

1. Carefully lift the kettle into the machine and place on the kettle hanger arms, keeping the locking collars and kettle cleaning hook on the correct sides of the hanger arms.
2. Rotate kettle all the way back so the kettle is in the upright position.
3. Align and push the kettle plug into the kettle socket so that it is oriented correctly. This will allow the locking ring on the kettle plug to reach the threading of the kettle socket. Twist the locking ring until tight so the kettle plug and socket are securely connected.

Kettle Removal

Prior to kettle removal, make sure all switches are in their OFF positions and all popcorn machine parts are COOLED COMPLETELY. The kettle will be HOT TO THE TOUCH while the amber WAIT light is flashing. Wait until the kettle is at a safe to handle temperature (below 120 degrees Fahrenheit).

CAUTION: NEVER lift the popcorn machine alone. Failure to follow the instructions below can lead to injury and/or machine damage.

CAUTION: A hot kettle **will cause burns if touched**. Always let the kettle COOL COMPLETELY before removal.

1. With all switches in their OFF positions and machine COOLED COMPLETELY, UNPLUG the machine.
2. Twist the locking ring of the kettle plug to loosen it and pull down to unplug the kettle.
3. Tilt and carefully lift the kettle off the kettle hanger arms and out of the machine.

CAUTION: The popcorn machine kettle weighs **more than** 35 lbs (16 kg). DO NOT attempt to lift alone.

Cabinet Base Stand

CAUTION: NEVER lift the popcorn machine alone. Failure to follow the instructions below can lead to injury and/or machine damage.

NOTE: Obtain a piece of wood or something similar to the height of the rubber feet on the bottom of the popcorn machine before placing the popcorn machine onto, or removing the machine from, the stand.

Stand Installation

Keeping in mind the important notes at the start of this section, use the following instructions to install the popcorn machine onto the stand:

1. Make sure all machine switches are in their OFF positions and the popcorn machine is UNPLUGGED.
2. If using a BIB oil system, disconnect the oil tube AND wire harness from the popcorn machine.
3. Place the obtained piece of wood under the popcorn machine behind the front rubber feet.
4. Remove the plexiglass doors by lifting them off the hinges.
5. Remove the drop door.
6. Remove the Old Maid drawer.
7. Lift and remove the clean out tray.
8. Locate the bolts holding the front rubber feet in place (inside the machine cabinet) and remove them. This will allow enough clearance to lift the machine into the stand.
9. Carefully lift the popcorn machine onto the stand, placing all attached cords into the stand and lining up the corners of the popcorn machine base with the stand before lowering into place.

CAUTION: The popcorn machine weighs 230 lbs (105 kg). DO NOT attempt to lift alone.

NOTE: Be careful not to pinch fingers, clothing, and cords when lowering the popcorn machine into place.

10. Reinstall the clean out tray, drop door, plexiglass doors, and Old Maid drawer.
11. If using a BIB oil system, reconnect both the oil tube AND wire harness of the popcorn machine to the BIB system.
12. Place the front rubber feet and bolts into a safe storage area.

Stand Removal

Keeping in mind the important notes at the start of this section, use the following instructions to remove the popcorn machine from the stand:

1. Make sure all machine switches are in their OFF positions and the popcorn machine is UNPLUGGED.
2. If using a BIB oil system, disconnect the oil tube AND the wire harness from the popcorn machine, both located inside the stand.
3. Pull the popcorn machine power cord into the stand so no cord is hanging outside the stand.
4. Remove the plexiglass doors by lifting them off the hinges.

5. Remove the drop door.
6. Remove the Old Maid Drawer.
7. Place the obtained piece of wood on a flat surface where the popcorn machine is to be placed after lifting.

NOTE: Looking inside the stand, there are four spots on the bottom of the popcorn machine where four rubber feet can be mounted. The two in the back are installed already (furthest from stand doors) and the two in the front are NOT installed (closest to the stand doors). So, when setting the popcorn machine on the piece of wood, be sure to leave the holes for the front feet exposed.

8. Carefully lift the popcorn machine straight upward to lift off the stand. Be careful not to pinch any cords and fingers.

CAUTION: The popcorn machine weighs 230 lbs (105 kg). DO NOT attempt to lift alone.

9. Carefully place the popcorn machine onto a flat surface so the two rubber feet and obtained piece of wood support the machine.
10. Now add the two front rubber feet onto the machine using the provided bolts.
11. Remove the piece of wood below the machine so that the machine is supported by the four rubber feet.
12. Reinstall the clean out tray, drop door, plexiglass doors, and Old Maid drawer.
13. If using a BIB oil system, reconnect both the oil tube AND wire harness of the popcorn machine to the BIB system.

Circuit Breakers

The Paragon Apex ® and Paragon Zenith ® popcorn machine models are equipped with a kettle circuit breaker. The kettle circuit breaker may trip during shipment due vibrations during transit. If the circuit breaker is tripped the kettle will NOT heat up. The circuit breaker must be reset to restore power to the kettle.

NOTE: The kettle may not heat due to issues other than the circuit breaker being tripped. Before checking the kettle circuit breaker, check for other possible issues in the Troubleshooting section first.

To reset a circuit breaker, open the machine's plexiglass doors. Look on the ceiling of the machine and press the button on the breaker. If the circuit breaker is reset and trips again, contact Paragon customer service for machine electrical troubleshooting and inspection.

Stirrer Adjustment

CAUTION: The kettle will be HOT TO THE TOUCH while the amber WAIT light is flashing. Wait until the kettle is at a safe to handle temperature (below 120 degrees Fahrenheit). A hot kettle **will cause burns if touched**. Always let the kettle COOL COMPLETELY before adjusting the stir rod.

To adjust the stir rod height, use the following instructions:

1. Turn all switches to their OFF positions and allow the machine to COOL COMPLETELY.
2. Unplug the machine.
3. Loosen the set screws of the stir rod collars above and below the cast stir rod housing.

4. Adjust the stir rod so that the gap between the bottom of the stir rod and the surface of the kettle is approximately 1/32".
5. Tighten the set screws of the stir rod collars above and below the cast stir rod housing.
6. Spin the kettle stir rod by hand to check that there is enough clearance between the stir rod and kettle.

TROUBLESHOOTING

Problem: No Power to The Popcorn Machine

Possible Cause 1: No Power to The Popcorn Machine

Solution: Check the popcorn machine's power cord is plugged in.

Possible Cause 2: Circuit Breaker(s) Tripped

Solution: The popcorn machine Circuit Breakers are located inside the cabinet on the ceiling. The Circuit Breakers are a safety device that allows power to flow to all machine components during normal operation. If tripped, the electrical connection is broken and must be reset. See Circuit Breakers in the Maintenance section for identification and resetting instructions of each breaker. If a breaker is reset and then trips again right away, contact Paragon Customer Service for inspection and repair.

Problem: Kettle Does Not Heat Up

Possible Cause 1: No Power to The Kettle

Solution: Check that the kettle power cord is completely plugged into the kettle plug receptacle. The plug should be correctly aligned so when pushed all the way in, the locking ring screws onto the kettle plug receptacle. See Kettle Installation in the Maintenance section for instructions.

Possible Cause 2: Kettle Automatic Shutoff

Solution: If the kettle is left ON and no popcorn is popped for 30 minutes, the kettle will shutoff even if the KETTLE switch is in the ON position. To reset the automatic shutoff, turn the KETTLE switch to the OFF position and then back to the ON position.

Possible Cause 3: Faulty Kettle Switch

Solution: Have a certified electrician or service person check the correct voltages are reaching the KETTLE switch. If the switch or connection(s) to the switch is/are faulty, contact Paragon Customer Service to order a replacement.

Possible Cause 4: Kettle Circuit Breaker(s)

Solution: If the kettle is not heating when the popcorn machine is plugged in and the KETTLE switch is in the ON position, a kettle circuit breaker may be tripped. See Circuit Breakers in the Maintenance section for breaker identification and reset instructions. If a breaker is reset and then trips again right away, contact Paragon Customer Service for inspection and repair.

Possible Cause 5: Temperature Control Issue

Solution: Thermocouple reading errors can occur if the kettle power cord is not completely plugged into the kettle plug receptacle (see solution to possible cause 1).

A defective thermocouple will cause reading errors. If the machine READY and or WAIT lights are flashing, see Thermocouple Errors section for further details.

Possible Cause 6: Kettle Heating Element(s)

Solution: One or more heating elements in the kettle may be burnt out. Have a certified electrician or service person contact Paragon Customer Service for inspection and repair.

Problem: Slow Pop Cycles

(Longer than 6 minutes for Salted Popcorn; Longer than 8 minutes for Sweet Popcorn)

Possible Cause 1: Kettle Heating Element(s)

Solution: One or more heating elements in the kettle may be burnt out, causing the kettle to slowly or never reach popping temperature. Have a certified electrician or service person contact Paragon Customer Service for inspection and repair.

Possible Cause 2: Inadequate Power

Solution: If the popcorn machine doesn't receive enough voltage (supply voltage is too low), this can cause the kettle to slowly or never reach popping temperature. Have a certified electrician check there is enough voltage being supplied to the popcorn machine. See the Electrical Requirements section for machine electrical specifications.

The use of extension cords and/or the use of inadequately sized power supply cords are a fire hazard. Additionally, these can cause the kettle to slowly or never reach popping temperature. Have a certified electrician check power supply lines are adequate in size/capability. See the Electrical Requirements section for machine electrical specifications.

Possible Cause 3: Popcorn Seed Quality

Solution: Using poor quality popcorn seeds will result in slow popping cycles and poor quality popcorn. Only use the best quality popcorn seeds.

If using high quality popcorn seeds, if the popcorn seeds accumulate moisture or dry out, the popping cycles will be slow.

Problem: B.I.B. Oil System Issues (if equipped)

Possible Cause 1: No Power to The B.I.B. Oil System

Solution: Make sure the BIB Oil System power cord is plugged in and the POWER switch is in the ON position.

Possible Cause 2: Signal Cord Connection

Solution: Check that the B.I.B. Oil System signal cord from the popcorn machine is properly aligned and securely plugged into the B.I.B. unit. See B.I.B. Installation in the B.I.B Oil System section for further details.

Possible Cause 3: Program Mode Is Active

Solution: When the B.I.B. unit is in program mode, all oil pumping functions are disabled. Check that the PROGRAM OIL switch is in the OFF position, (position away from the label is pressed). See B.I.B. Programming Dispensing Timer in the B.I.B Oil System section for further details.

Possible Cause 4: Blown Fuse

Solution: Check that the B.I.B. unit fuse is NOT blown. If the fuse is blown, replace it. See B.I.B. Oil System Fuse Replacement in the Maintenance section for instructions. If right after replacing the fuse, the fuse is blown again, have a certified electrician or service person contact Paragon Customer Service for inspection and repair.

Possible Cause 5: Circuit Breaker(s) Tripped

Solution: The popcorn machine Circuit Breakers are located inside the cabinet on the ceiling. The Circuit Breakers are a safety device that allows power to flow to all machine components during normal operation. If tripped, the electrical connection is broken and must be reset. See Circuit Breakers in the Maintenance section for identification and resetting instructions of each breaker. If a breaker is reset and then trips again right away, contact Paragon Customer Service for inspection and repair.

Problem: **Stirrer/Kettle Stir Rod Not Rotating**

Possible Cause 1: Circuit Breaker(s) Tripped

Solution: The popcorn machine Circuit Breakers are located inside the cabinet on the ceiling. The Circuit Breakers are a safety device that allows power to flow to all machine components during normal operation. If tripped, the electrical connection is broken and must be reset. See Circuit Breakers in the Maintenance section for identification and resetting instructions of each breaker. If a breaker is reset and then trips again right away, contact Paragon Customer Service for inspection and repair.

Possible Cause 2: Faulty Stirrer Switch

Solution: Have a certified electrician or service person check the correct voltages are

reaching the STIRRER switch. If the switch or connection(s) to the switch is/are faulty, contact Paragon Customer Service to order a replacement.

Possible Cause 3: Faulty Stirrer Motor

Solution: Have a certified electrician or service person check the correct voltages are reaching the stirrer motor. If the motor or connection(s) to the motor is/are faulty, contact Paragon Customer Service to order a replacement.

Possible Cause 4: Improper Kettle Clearance

Solution: If the kettle stir rod is not rotating due to contact between the bottom of the stir rod shaft and the popping surface of the inner kettle, then there is improper kettle clearance. To adjust the kettle's stir rod height to allow proper clearance see Stirrer/Kettle Stir Rod Adjustment in the Maintenance section.

ORDERING SPARE PARTS

1. Use the photos, illustrations, diagrams, and/or parts lists to identify the part needed.
NOTE: Images are for reference only.
2. Only use Paragon approved replacement parts when servicing.
3. When ordering parts, please include the part number, part name, and quantity needed.
4. Please include your model number, and serial number (located on the machine nameplate/data plate) with your order.
5. Address all parts orders to:

Paragon Customer Service, 731 W 18th Street
Nevada, Iowa, 50323, USA

Or, place orders by phone or online:

Phone: (800) 433-0333

Email: cs@manufacturedfun.com

Web Site: ParagonConcessions.com

Replacing Broken Glass

Material: Tempered Glass

Dimensions: (Height x Width x Thickness)

Front/Back Panel: 33 21/32" x 30 3/32" x 5/32"; (855 mm x 765 mm x 4 mm) PN: 11384

Side Panel: 33 21/32" x 22 7/32" x 5/32"; (855 mm x 565 mm x 4 mm) PN: 11380

Replacement Instructions:

1. Make sure all switches are in their OFF positions and then UNPLUG the popcorn machine. Allow the machine to COOL COMPLETELY before attempting to replace glass.
2. After machine has cooled completely, carefully remove any broken glass from inside the machine.
3. Carefully remove the kettle and set aside. See Kettle Removal in the Maintenance section for detailed steps.
4. Remove the popcorn machine top ventilation cover and disconnect the connection(s) to the sign(s).
5. Carefully lift the popcorn top off the machine and set aside.
6. Locate the chassis retaining nuts inside the cabinet and remove them.
7. Carefully lift the chassis up off the corner posts and slide it over enough to expose the top of the broken glass panel.

NOTE: Be careful not to move it too far as there are wires that connect between chassis components and cabinet base components. If using a B.I.B. system, the B.I.B. unit signal cord and metal oil tube also run through a corner post. Unplug the B.I.B. unit signal cord and lift the metal oil tube enough to pivot it out of the way.

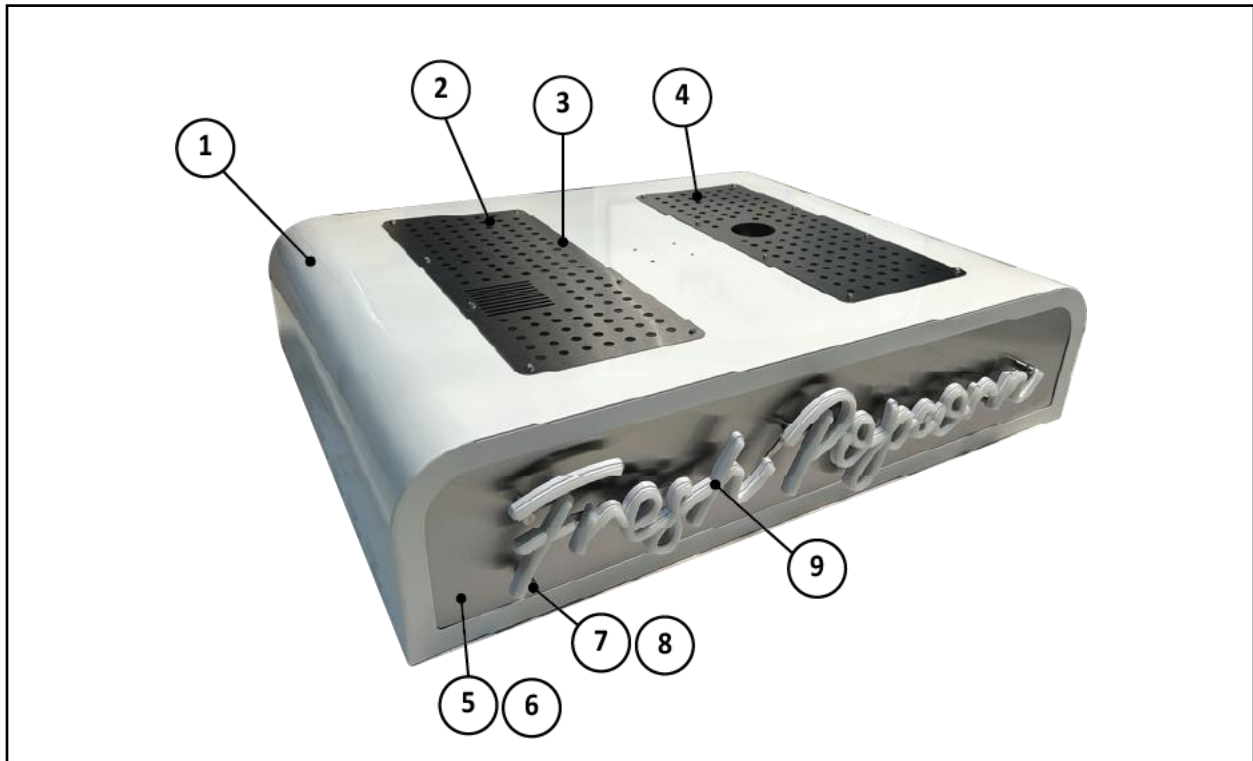
8. With the top of the slot holding the broken glass panel exposed, carefully slide the broken glass panel up and out of the corner posts.
9. Remove the plastic edge guards from the broken panel and place them on the new panel of tempered glass.
10. Carefully slide the new panel of glass into the slots in the corner posts.
11. Move the chassis back into place so it rests on the chassis studs on the corner posts.
12. Reinstall chassis retaining nuts.
13. If using a B.I.B. Oil System move and lower the metal oil tube back into place over the kettle spout hole. Plug in the B.I.B. signal cord.
14. Carefully lift the popcorn machine top back onto the machine.
15. Reconnect the sign(s) and install the top ventilation cover.
16. Carefully reinstall the kettle. See Kettle Installation in the Maintenance section for detailed steps.

Cabinet Exterior Parts



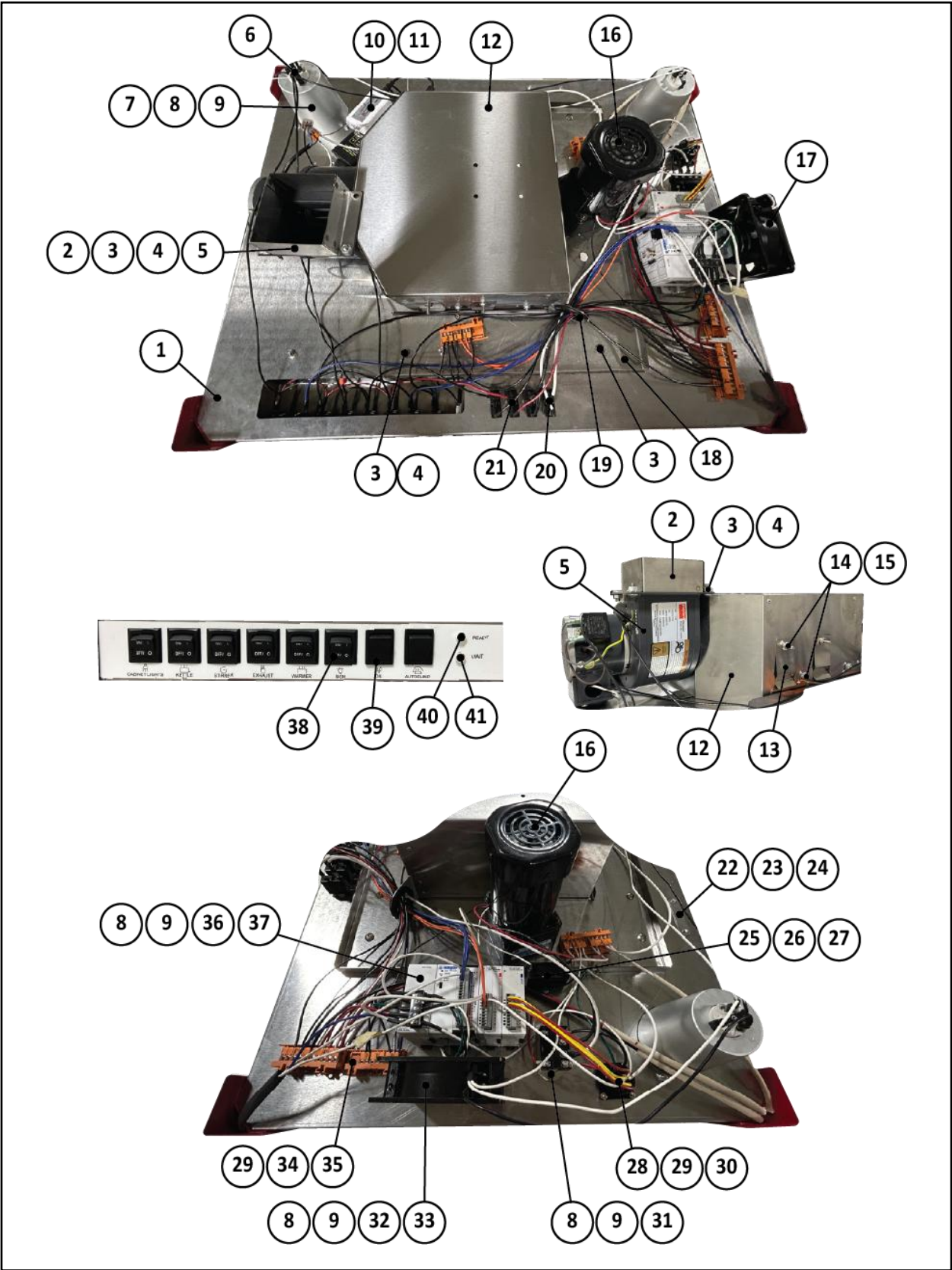
Item	Description
1	Reversible Dome
2	Popcorn Machine Cabinet
3	Cabinet Door Assembly
4	Drop Door
5	Cabinet Foot
6	Old Maid Drawer
7	Electrical Plug
8	Kettle Assembly

Reversible Dome



Item	Part Number (Apex/Zenith)	Description
1	93480	Cover Wldmt-Rnd Top, Red, XL
2	93493	Screen- Exhaust, XL Top
3	19028	SCREW- 8-32x3/8 IHWH SS
4	93492	Screen- Motor, XL Top
5	93490	Sign-Backing Plate, Rnd Top,XL
6	93491	Sign-Blank Plate, Rnd Top,XL
7	40115	NUT-6-32 SERR FLG 18-8 SS
8	11139	SCREW-6-32 X 1/2 PHIL RND SS
9	12262	LED Sign

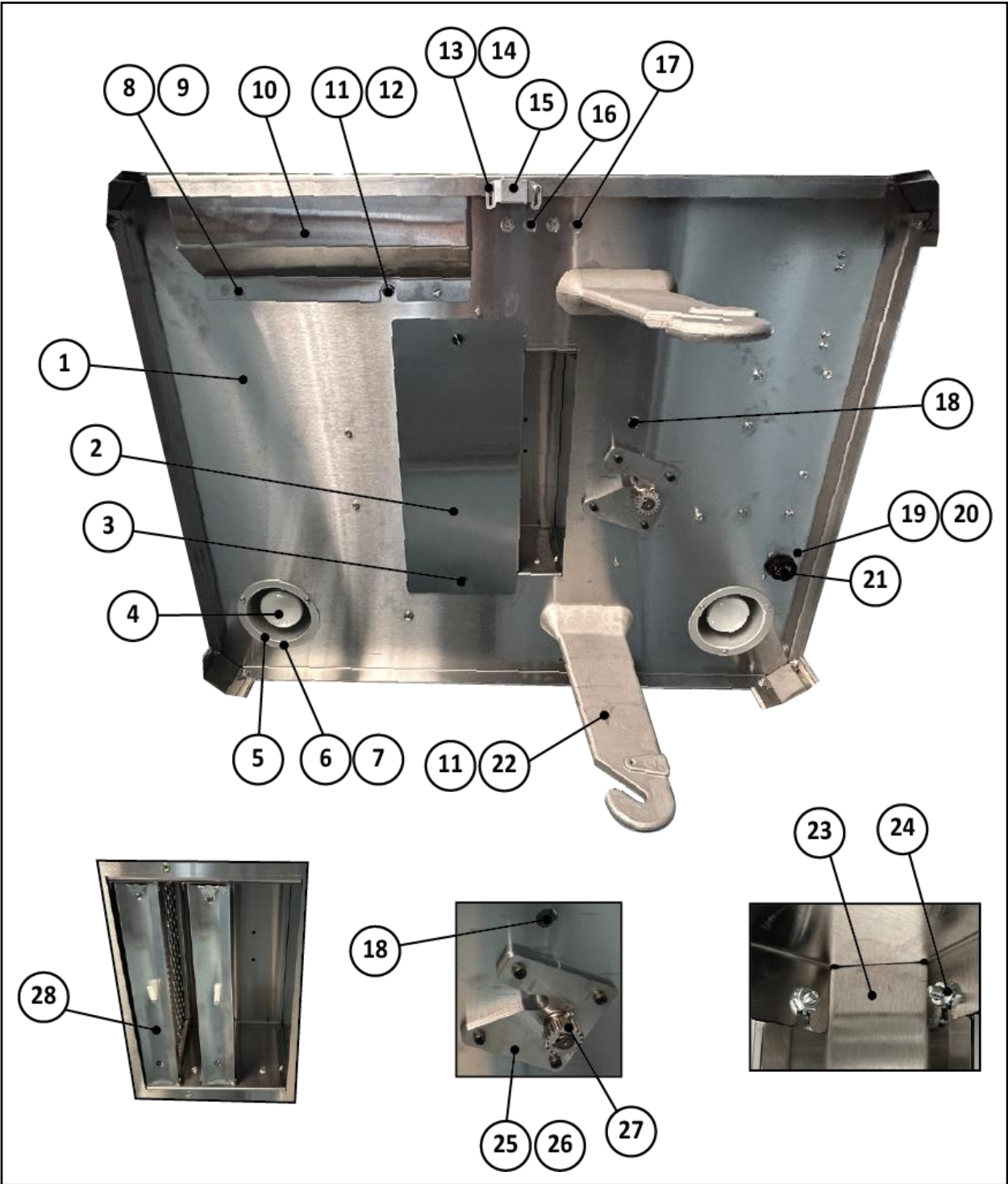
Chassis Parts



Chassis Parts

Item	Part Number (Apex/Zenith)	Description
1	93358	Chassis- XL
2	93352	Chute- Exhaust, XL Cabinet
3	12091	SCREW 1/4-20x3/8 TRUSS,PHIL,SS
4	19022	NUT - 1/4"-20, SERRATED FLANGE
5	12253	Blower - Ventilation
6	12155	LAMP SOCKET – PORCELAIN
7	93000	Lamp Guard- 32oz Popcorn
8	19028	SCREW- 8-32x3/8 IHWH SS
9	19041	Locknut, 8-32 Thread Size, Ser
10	N/A	LED sign controller
11	N/A	LED sign AC/DC converter
12	93342	Housing-Air Filter, XL Cabinet
13	93347	Clip- Housing, Air Filter, XL
14	19043	NUT 10-32 HEX SERRATED FLG SS
15	12035	Screw, 10-32 x 3/8, 18-8 Stain
16	12252	Motor
17	30045	PLC fan
18	93359	Support- Chassis, XL
19	25840	Grommet, Rubber- 1.75" Hole
20	12264	Kettle Circuit Breaker (Call Customer Service for specific Amperage)
21	12263	15 Amp Circuit Breaker
22	93355	Cover- Auto Dump, Chassis Hole
23	19028	Autodump plate bolt
24	19041	Autodump plate nut
25	N/A	Stir rod motor capacitor
26	19028	SCREW- 8-32x3/8 IHWH SS
27	12040	Narrow Hex Nut, 8-32 Thread Si
28	93006	Kettle plug receptacle
29	11139	SCREW-6-32 X 1/2 PHIL RND SS
30	40114	NUT – HEX 6-32 SS
31	78211	Relay (Call Customer Service for specific Amperage)
32	93356	Mount- Fan, XL Chassis
33	12280	Screw- 8-32 x 1.75" Lg, 18-8SS
34	15416	Carrier- Wago (Call Customer Service for specific Amperage)
35	40115	NUT-6-32 SERR FLG 18-8 SS
36	93008	PLC
37	93365	Rail- Din 3, 5.625" Long
38	12400	SWITCH- MASTER ON/OFF
39	13025	Switch, Rocker, Momentary
40	40245	Green LED
41	40247	Amber LED

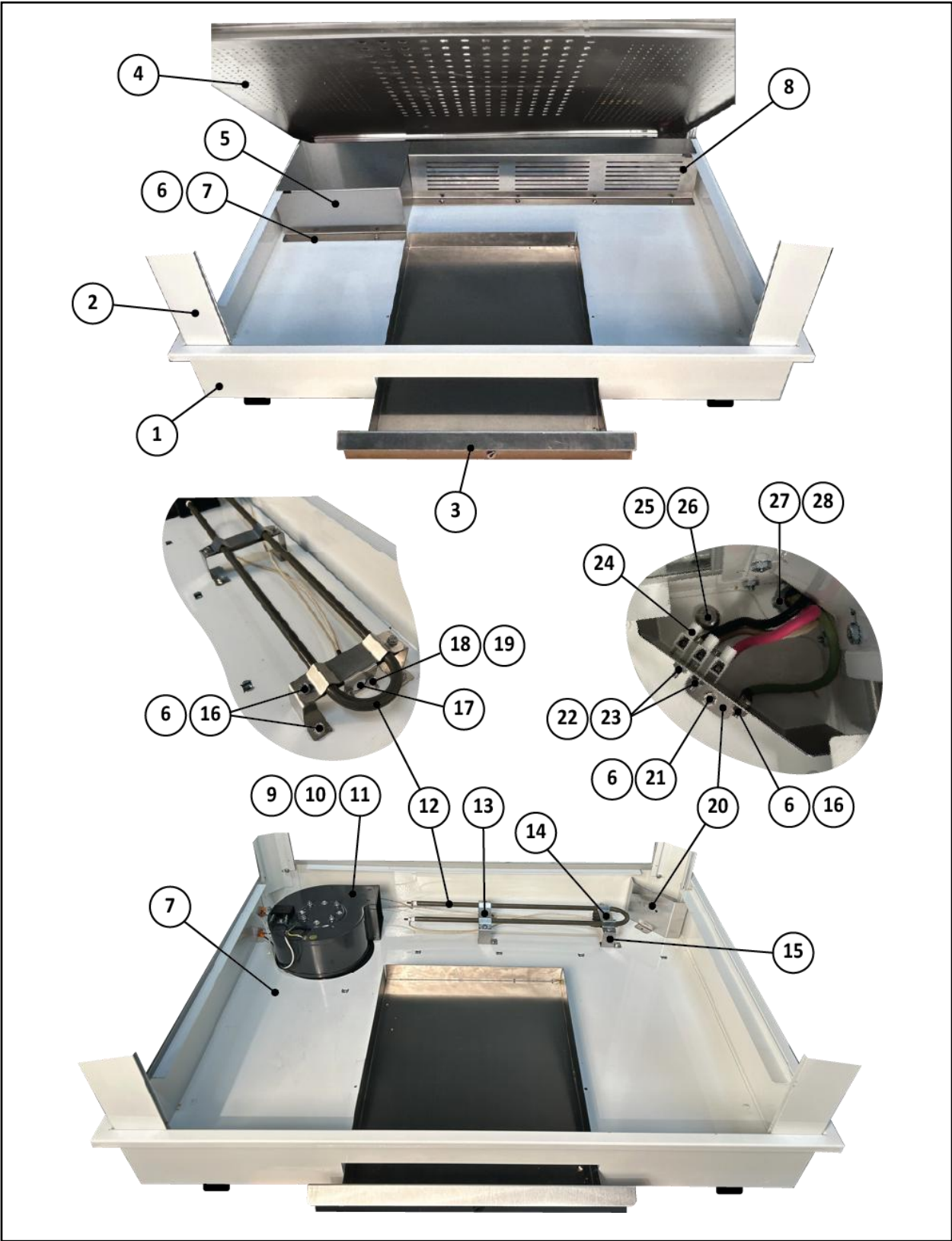
Cabinet Interior Parts



Cabinet Interior Parts

Item	Part Number (Apex/Zenith)	Description
1	93358	Chassis- XL
2	93348	Cover- Removable, Exhaust, XL
3	81835	Thumb Screw, 8-32, 3/8"- Black
4	12161	Light bulb
5	93000	Lamp Guard- 32oz Popcorn
6	19028	SCREW- 8-32x3/8 IHWH SS
7	19041	Locknut, 8-32 Thread Size, Ser
8	12035	Screw, 10-32 x 3/8, 18-8 Stain
9	19043	NUT 10-32 HEX SERRATED FLG SS
10	93349	Cover- Switches, XL Cabinet
11	12091	SCREW 1/4-20x3/8 TRUSS,PHIL,SS
12	19022	NUT - 1/4"-20, SERRATED FLANGE
13	12081	SCREW-6-32 X 3/8 18-8SS
14	40115	NUT-6-32 SERR FLG 18-8 SS
15	14078	MAGNET - DOOR ALUMINUM
16	12263	15 amp circuit breaker
17	12264	20 amp circuit breaker
18	23535	BIB tube
19	11139	SCREW-6-32 X 1/2 PHIL RND SS
20	40114	NUT – HEX 6-32 SS
21	93006	Kettle receptacle
22	13239	Kettle Support Arm
23	93323	Corner Post- BK, Red, XL
24	95160	Nut, 10-32, Serrated Flange, Z
25	93350	Guide- Lower, Stirrer Rod, XL
26	93351	Guide- Upper, Stirrer Rod, XL
27	93325	Gear- Kettle/Stirrer
28	93326	Mesh filter

Cabinet Base Interior



Cabinet Interior Parts

Item	Part Number (Apex/Zenith)	Description
1	93330	Base Wldmt- Red, XL
2	93321	Corner Post- FL, Red, XL
3	93552	Drawer- Old Maid, XL
4	93340	Cleanout Tray- XL
5	93556	Cover- Blower, XL Cabinet
6	12035	Screw, 10-32 x 3/8, 18-8 Stain
7	12537	Nut- 10-32, Snap-In, Zn-Plated
8	93553	Cover-Heat Element, XL Cabinet
9	12254	Blower- Cabinet Warming
10	93558	Gasket- Blower, XL Cabinet
11	93557	Screen- Blower, XL Cabinet
12	12257	ELEMENT-WARMER 800 watt
13	93550	Strap-Heat Element, LH, XL Cab
14	93551	Strap-Heat Element, RH, XL Cab
15	93549	Mount-Heat Element, XL Cabinet
16	19043	NUT 10-32 HEX SERRATED FLG SS
17	12197	Thermostat
18	11139	SCREW-6-32 X 1/2 PHIL RND SS
19	40114	NUT – HEX 6-32 SS
20	93559	Guard- Heat, XL Cabinet
21	95160	Nut, 10-32, Serrated Flange, Z
22	13046	SCREW - 8-32 X 1 HWH 18-8SS
23	19041	Locknut, 8-32 Thread Size, Ser
24	12255	Terminal Block - 3 Position (Call Customer Service for specific Amperage)
25	13533	Bolt- M8-1.25mm x 16mm 18-8 SS
26	13513	Foot- Rubber Bumper
27	12061	NUT-1/2" LOCK STEEL
28	78501	CORD GRIP, LIQUID TIGHT (Call Customer Service for specific Amperage)

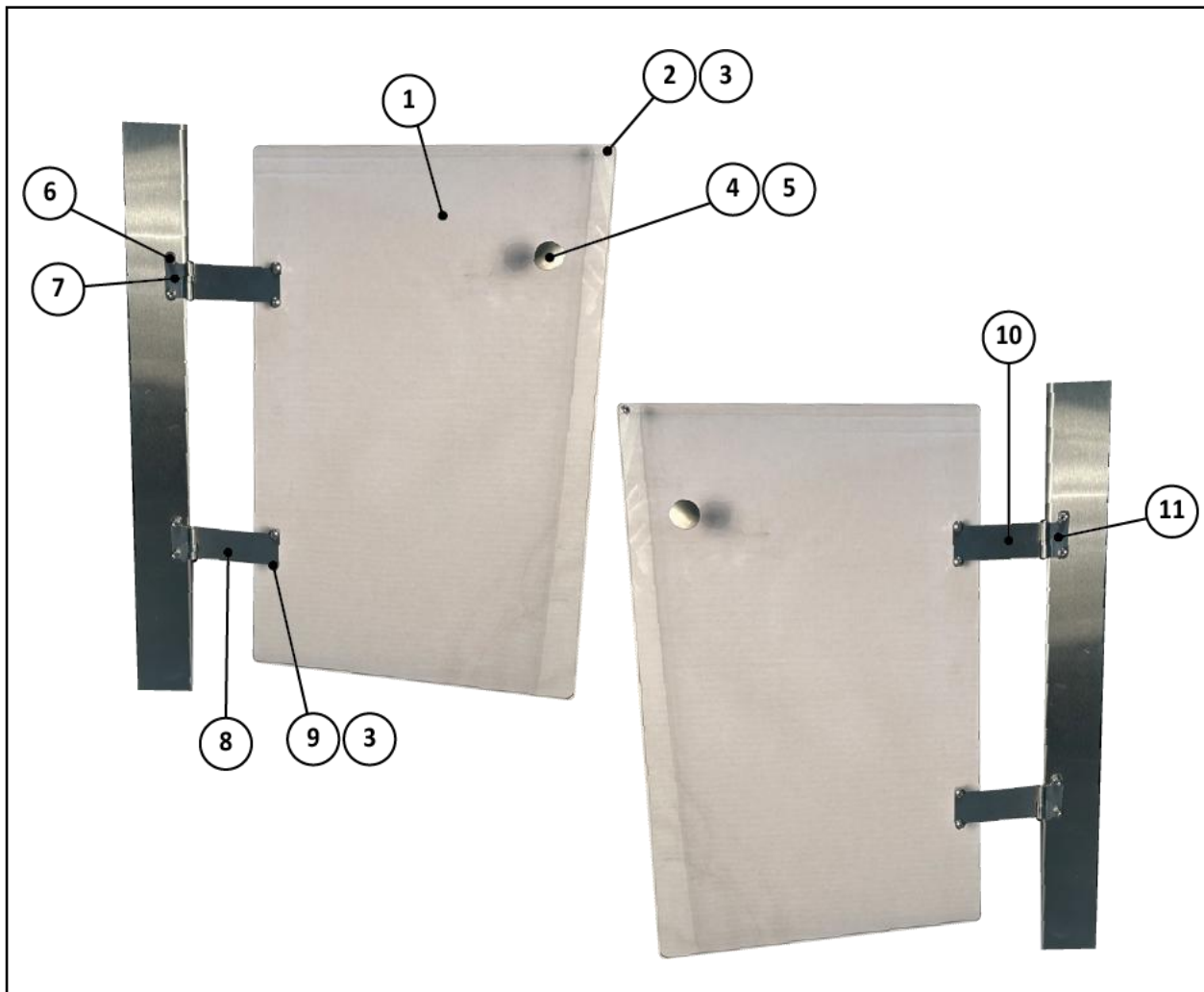
Cabinet Base Stand – (Apex 3390600, Zenith 3390500)



Cabinet Base Stand

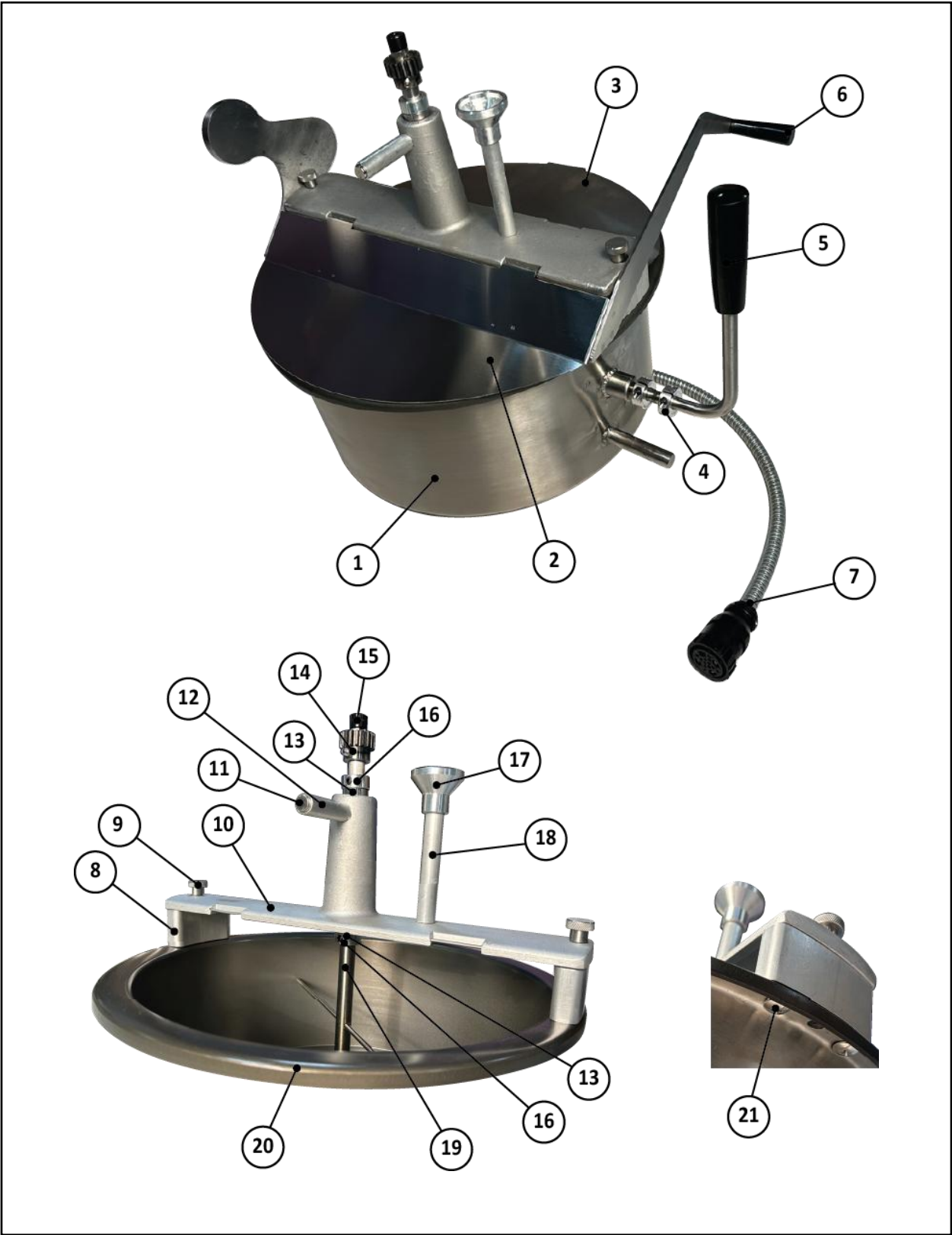
Item	Part Number (Apex/Zenith)	Description
1	23561	Drawer Weldment, XL Stand
2	23526	Corn Tub Cover
3	23553	Mounting Bracket – Drawer Slide
4	12533	Drawer Slide
5	12019	Screw – 1/4-20 x 1/2"
6	16189	Screw – 1/4-20 x 3/4"
7	23517	Spacer – 0.5"OD x 0.252"ID x 0.5"L 18
8	19022	Nut – 1/4"-20, serrated flange
9	12091	Screw – 1/4-20 x 3/8"
10	13536	Corn Tub
11	23614	Door – Left, Bottom, XL Stand
12	23615	Door – Right, XL Stand
13	12524	Hinge – Lift off, Lower LH
14	12525	Hinge – Lift off, LH
15	12526	Hinge – Lift off, Lower RH
16	12527	Hinge – Lift off, RH
17	12035	Screw – 10-32 x 3/8"
18	19043	Nut – 10-32 Hex Serrated FLG SS
19	19046	Handle – 4" x 1"
20	19028	Screw – 8-32 x 3/8"
21	23523	Support – Caster Wheel, XL Stand, FL, RR
22	23524	Support – Caster Wheel, XL Stand, FR, RL
23	12534	Caster – 3" Swivel, Locking
24	16189	Screw – 1/4-20 x 3/4"
25	16191	Washer – Flat 1/4"
26	16193	Nut – 1/4"-20, Hex
27	23531	Mount – Magnet, XL Stand
28	80006	Magnet – Stainless Steel Casin
29	12078	Screw – 10-32 x 3/4" Flat Head
30	16165	Grommet – 4" Snap in, Plastic
31	23522	Bracket – Front Support, XL Stand

Cabinet Door Assembly



Item	Part Number (Apex/Zenith)	Description
1	11382	Door- XL, Blank, 14.56"x23.25"
2	12535	Stud, 10-32 x 3/8" Flush Head
3	12055	NUT-10-32 ACORN 18-8SS
4	12531	Knob- Door, XL
5	14033	Door knob screw
6	12523	Screw, Drilling - No. 10 x 1/2
7	12544	Hinge- Lift Off, Lower LH, XL
8	12545	Hinge- Lift Off, LH, XL
9	12018	Screw, 10-32 Thread, 1/2" Lg.,
10	12547	Hinge- Lift Off, RH, XL
11	12546	Hinge- Lift Off, Lower RH, XL

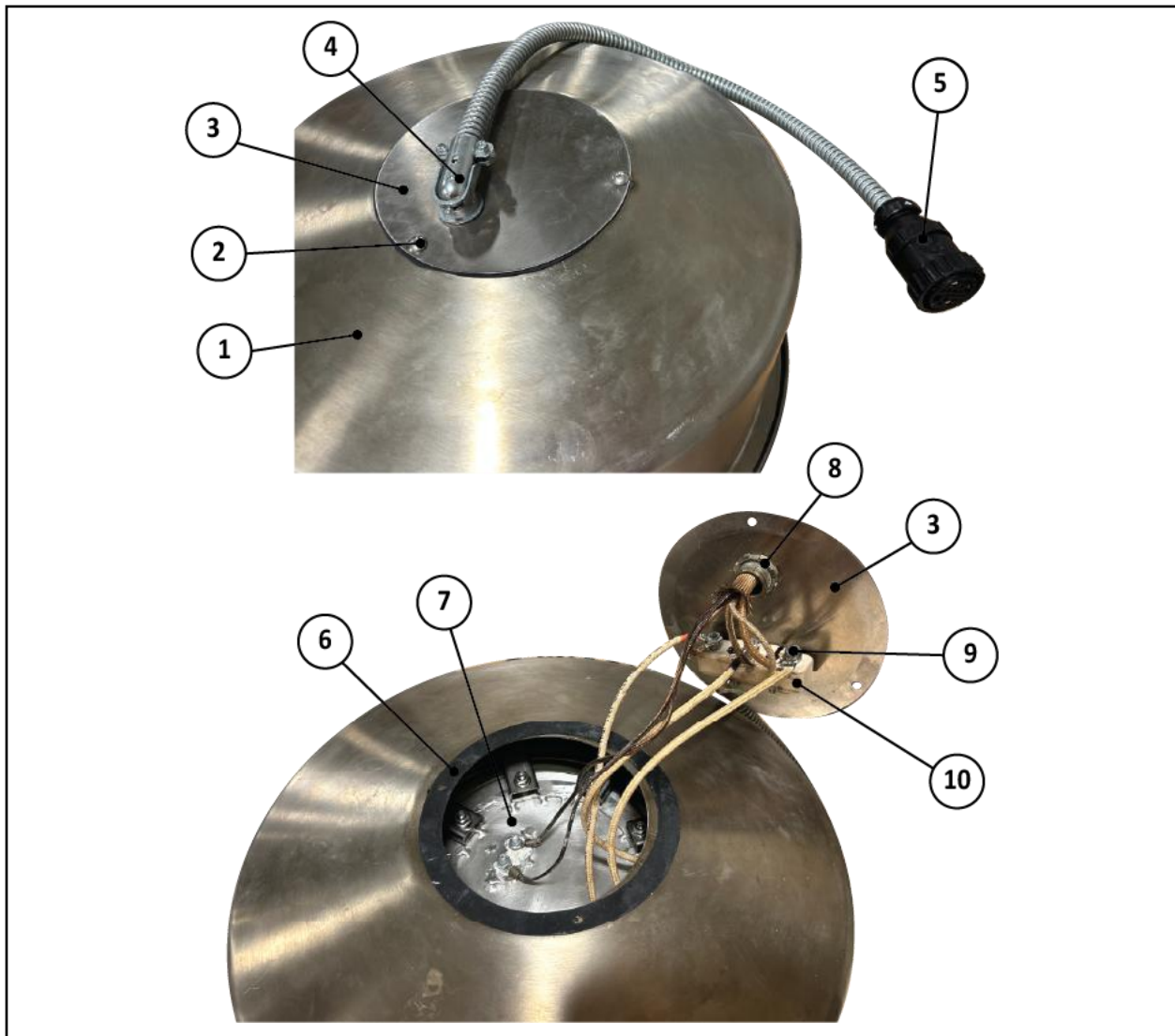
Kettle Top Assembly



Kettle Top Assembly

Item	Part Number (Apex/Zenith)	Description
1	13200	Kettle- Outer, Weldment, XL
2	93360	Lid- Wld, Kettle, Front, XL
3	93370	Lid- Wld, Kettle, Rear, XL
4	12538	Collar- 12mm, 2 Piece
5	19082	Kettle Handle Knob
6	12010	Kettle Lid Knob
7	93005	Wire Set- Kettle Plug, XL
8	13237	Lid Standoff Extrusion
9	12091	SCREW 1/4-20x3/8 TRUSS,PHIL,SS
10	13236	Lid Casting
11	13254	Magnet- 1/2" OD x 3/16" Thick
12	13253	Magnet Holder- 32oz Kettle
13	13255	Sleeve Bearing-Stir Rod,32oz K
14	93325	Gear- Kettle/Stirrer
15	12541	Bearing- Cam Following, M6x1
16	12539	Collar- 15mm, 1 Piece
17	13252	Funnel- Oil, 32oz Kettle
18	13251	Funnel Tube- 32oz Kettle
19	13250	Stirrer Weldment- 32oz Kettle
20	13201	Kettle- Inner, Weldment, XL
21	12091	SCREW 1/4-20x3/8 TRUSS,PHIL,SS

Kettle Bottom Assembly



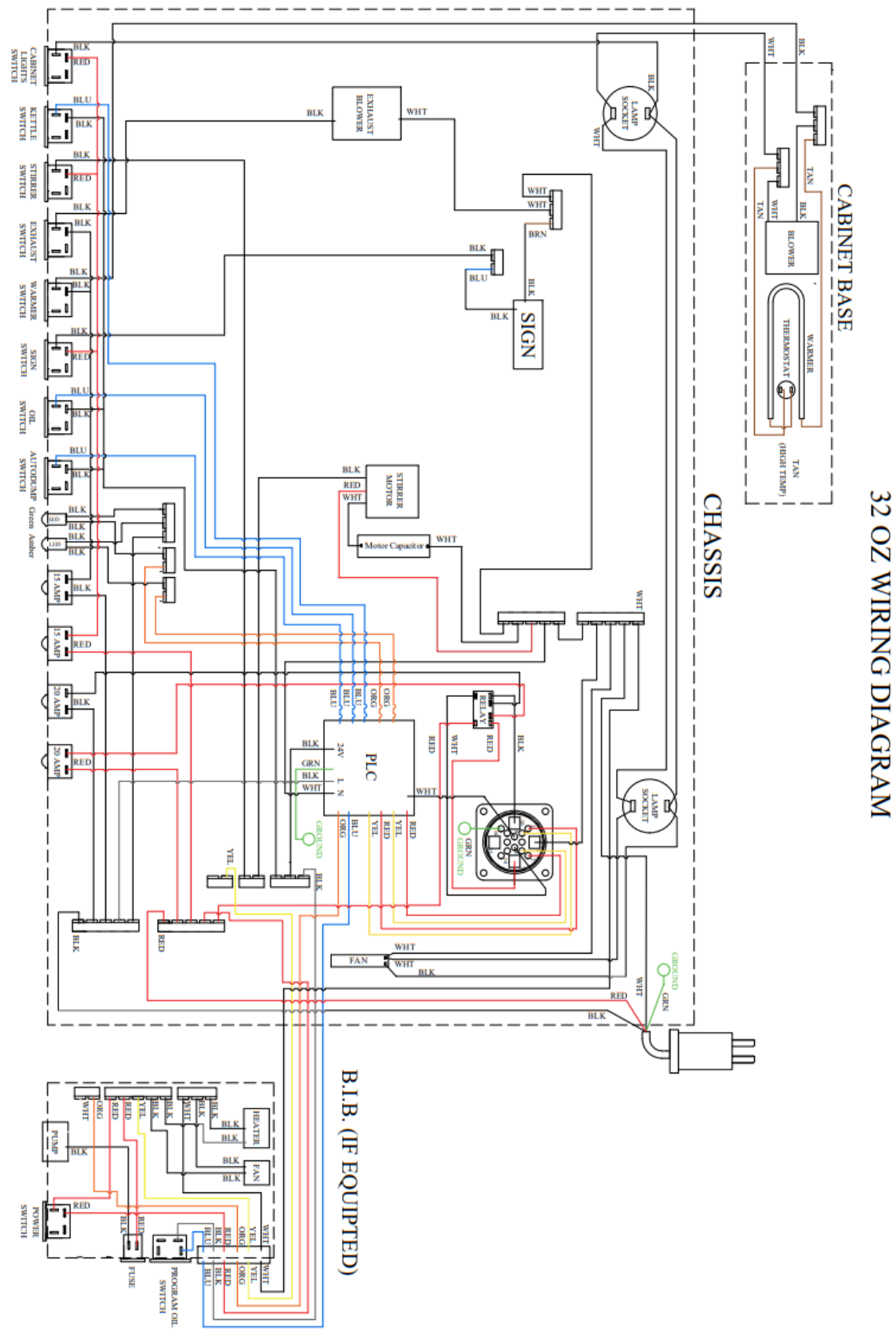
Item	Part Number (Apex/Zenith)	Description
1	13200	Kettle- Outer, Weldment, XL
2	12017	SCREW 10-32x3/8 TRUSS,PHIL,SS
3	13221	Bottom Cover, 32oz Kettle
4	12060	CONNECTOR - T/B FLEX SQUEZE
5	93005	Wire Set- Kettle Plug, XL (Call Customer Service for specific 32/48/64 oz)
6	13220	Bottom Gasket, 32oz Kettle
7	13201	Kettle- Inner, Weldment, XL
8	12061	NUT-1/2" LOCK STEEL
9	12007	NUT-HEX 8-32 ZINC 11/32 ACROSS
10	13222	Terminal Block- Asy,Ceramic,XL

Kettle Inner Assembly



Item	Part Number (Apex/Zenith)	Description
1	13201	Kettle- Inner, Weldment, XL
2	19043	NUT 10-32 HEX SERRATED FLG SS
3	13227	Strap- Element Hold, Kettle,XL
4	16136	ELEMENT-120V Inner (Call Customer Service for specific 32/48/64 oz)
5	16139	ELEMENT-120V Middle (Call Customer Service for specific 32/48/64 oz)
6	16134	ELEMENT-120V Outer (Call Customer Service for specific 32/48/64 oz)
7	13225	Top Gasket, 32oz Kettle

WIRING DIAGRAM



WARRANTY



WARRANTY PROGRAM

THE WARRANTY:

Paragon International, Inc. hereinafter referred to as “Paragon” warrants the original purchaser of new food equipment manufactured by Paragon to be free from defects in material or workmanship from the date of the original purchase for a period of two years.

WHO IS COVERED BY THIS WARRANTY:

The original purchaser who has provided proper proof of the original retail purchase and all other requested information.

WHAT IS WARRANTIED:

The obligation of Paragon under this warranty is limited to the replacement of parts or assemblies that in Paragon’s opinion are defective, F.O.B. the factory, or at such other location that Paragon may designate.

WHAT VOIDS THE WARRANTY:

1. Any part or assembly that has been altered, changed, or modified.
2. Water damage to components of the kettle assembly due to immersion or improper cleaning techniques.
3. Any part or assembly that has been subject to abuse, neglect, misuse, or accidents.
4. Damage to the components of the kettle assembly due to improper use of cooking oil.
5. Any machine that has been installed, operated and/or maintained inconsistent with Paragon’s publications.

EXTENT OF WARRANTY:

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES WHETHER ORAL, WRITTEN, OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE. The liability of Paragon arising out of sale, use or operation of Paragon’s parts or equipment, whether in warranty, contract, negligence or strict liability, including claims for special indirect or consequential damages, shall not in any event exceed the cost of furnishing a replacement for a defective part or assembly as hereinabove provided. Upon the expiration of the warranty period, as hereinabove provided, any such liability shall terminate. The foregoing warranty shall constitute the sole and exclusive liability of Paragon.

Within the terms of this warranty the term “Original Purchaser” is limited to the individual, company, or organization stated as the purchaser in warranty records of the Paragon or an authorized reseller.