HA4 Series HA4002 HA4003 HA4005 HA4503 HA4507 HA4508 HA4009 HA4509 HA4511 HA4519 HA4022 HA4522 HL4022 HL4522 HMA018





HOLDING CABINET

Owner's Manual



4272X294 R25 bh 07.30.13

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welcome

Thank you for your purchase of a Winston CVap[®] holding/proofing cabinet. The benefits you will enjoy from this cabinet include longer hold times, better quality food, quicker service, higher productivity, and safer food temperatures.

This CVap holding cabinet utilizes Controlled Vapor (CVap) technology. Using a combination of dry and moist heat, CVap holding cabinets keep foods hot and maintain texture, whether moist or crisp, throughout long serving periods. The two electronic differential control dials are easy to understand and reliable. **The controls never need field calibration.** The FOOD TEMP dial allows precise control of food temperature from 90°F (32°C) to 180°F (82°C). The FOOD TEXTURE dial maintains just cooked texture with settings labeled very moist, firm moist, and crisp. No guesswork required.

CVap holding/proofing cabinets are built with durable stainless steel construction and full insulation, and they are designed for high volume usage.

If you have any questions, or if anything held in your CVap holding/proofing cabinet doesn't meet your satisfaction, please call our Customer Service Center at 1-800-234-5286 or 502-495-5400, or email us at CustomerService@WinstonInd.com.

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Need to contact us? Choose the most convenient method.

Internet: www.winstonind.com Email: CustomerService@winstonind.com Phone: 800-234-5286 • 502-495-5400 • Fax 502-495-5458 Mail: 2345 Carton Drive • Louisville, KY 40299 USA.

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Please read this entire use & care manual before operating your CVap holding cabinet. The manual contains important safety information and operating instructions.

As is the case with many kitchen appliances, your CVap holding cabinet should be used with caution. Please read the following warnings to avoid injuries.

A DANGER

Electrical Hazard

Can cause serious injury or death. Do not attempt to install or service this appliance unless you are a licensed electrician or trained servicer.

- Because this appliance utilizes high voltage, it should only be installed and serviced by a licensed electrician or trained servicer. Attempting to install or service the appliance yourself could result in serious, potentially fatal injuries.
- If an electrical shock is felt when touching appliance, shut off power immediately (either pull power cord or turn off circuit breaker) and call a trained servicer for repair. Failure to do so could result in serious, potentially fatal injuries.
- 3 Always turn power switch off any time appliance is not in use.

AWARNING

Burn Hazard

Can cause serious injury. Avoid heated vapor when opening or closing appliance door.

4. This appliance utilizes heated water vapor, which transfers heat much more quickly and efficiently than dry air of the same temperature. Use caution when opening doors or reaching into the appliance, as heated vapor can quickly cause burns.

AWARNING

Contamination Hazard

Can cause serious illness or damage to appliance.

Clean appliance daily to avoid potential contamination hazard.

- Clean appliance daily to prevent buildup of food residue or chlorides, which can also damage stainless steel and contaminate food. Failure to follow proper cleaning procedures can void your warranty.
- 6. Prior to using appliance for the first time, perform the daily cleaning procedure listed on pages 16 and 17.

ACAUTION

Burn Hazard Can cause injury. Allow 30 minutes for appliance to cool before attempting to clean.

7. Always allow appliance to cool before cleaning, to avoid potential burns.

ACAUTION

High Temperature and Grease Hazard Can cause damage to appliance. Avoid placing appliance near high heat or in grease laden atmosphere.

8. Do not place appliance in areas where air temperature exceeds 100°F (38°C). A heat shield may be required to prevent heat exposure and grease laden vapors from affecting the appliance if near heat, vapor, or grease generating devices (such as grills, steamers, ovens, etc.). Excess heat and grease inside the appliance cavities may cause electrical components to fail.

receiving your cabinet

Shipping Damage

Examine equipment thoroughly for shipping damage before, during and after unloading. All Winston products are carefully inspected and verified to be in good condition before leaving our factory. The carrier delivering your cabinet has assumed responsibility for its safe arrival. If you notice any damage (obvious or hidden), a claim must be made to the carrier.

Obvious Loss or Damage

Please note any obvious loss or damage on the freight bill or express receipt, and have the carrier's agent sign to acknowledge the claim. The carrier will supply the necessary forms. If you do not obtain and complete the forms before the carrier's agent departs, the carrier might refuse your damage claim.

Concealed Loss or Damage

Sometimes loss or damage is not obvious until the product has been unpacked. If you notice damage that was concealed by packaging or crating, contact the carrier in writing to notify them of the damage. The carrier should agree to inspect the damage within 15 days. Please retain all packing materials. The carrier will supply an inspection report and the required claim forms.

Physical

Casters are non-marking; back casters are non-locking, front are locking.

Water Supply

In order to operate properly, the evaporator in this cabinet must be filled with clean, potable water. An optional automatic water fill system is available. This option includes hardware to connect the appliance to a copper line in your facility's water system. If your facility has plastic or galvanized pipes, contact a licensed plumber to connect the water supply. Equipment should be installed to comply with applicable federal, state, or local plumbing codes.

Appliances with automatic water fill systems are to be installed with adequate backflow protection to comply with federal, state, and local codes.

| Model | Height with 3" Casters (IN / MM) | Width (IN / MM) | Depth (IN / MM) | Weight (LBS / KG) |
|--------|-------------------------------------|--------------------|--------------------|----------------------|
| HA4002 | 33.2/843 | 19.9/505 | 27.1/688 | 120/55 |
| HA4003 | 36.1/916 | 19.9/505 | 27.1/688 | 135/61 |
| HA4005 | 43.5/1105 | 19.9/505 | 27.1/688 | 190/86 |
| HA4503 | 36.1/916 | 19.9/505 | 27.1/688 | 135/61 |
| HA4507 | 36.2/919 | 27.6/701 | 34.5/876 | 210/96 |
| HA4508 | 41.4/1051 | 24.6/625 | 34.5/876 | 250/113 |
| HA4009 | 41.2/1046 | 27.6/701 | 34.5/876 | 225/102 |
| HA4509 | 41.2/1046 | 27.6/701 | 34.5/876 | 225/102 |
| HA4511 | 45.8/1165 | 27.6/701 | 34.5/876 | 280/127 |
| HA4519 | 73.1/1857 | 24.6/625 | 34.5/876 | 369/168 |
| HA4022 | 73.1/1857 | 27.6/701 | 34.5/876 | 355/162 |
| HA4522 | 73.1/1857 | 27.6/701 | 34.5/876 | 405/184 |
| HL4022 | 73.1/1857 | 27.6/701 | 34.5/876 | 355/162 |
| HL4522 | 73.1/1857 | 27.6/701 | 34.5/876 | 405/184 |
| HMA018 | 66.5/1689 | 29.5/749 | 39.0/991 | 370/168 |

As water evaporates, minerals in the water will deposit on the surface of the evaporator. These mineral deposits will inhibit the transfer of heat. Deposits can also degrade and damage stainless steel. To avoid mineral deposits clean the appliance daily. It is advisable to contact your water utility for advice on minimizing deposit buildup.

installing auto water fill

Automatic water fill is available as an optional feature. To remove the plastic tubing from the water line connector, use your fingers to carefully press the small brass capture ring in toward the body of the connector. Then gently pull the tubing out of the connector. To insert tubing back into connector, push the tubing **fully** into the connector. Once seated, try to pull the tubing out of the connector so that the capture ring comes out (about 1/16" (1.6mm)) and the tubing cannot be removed. See drawing below. Auto water fill systems must be hooked up to a potable water supply line. Winston RECOMMENDS that the tap valve included with the kit be attached to **cold**

water, copper, brass or steel line (the valve can handle any size line from 3/8" to 1" (9.5mm to 25.4mm)). The maximum incoming water temperature may not exceed 140°F (60°C) and the incoming water pressure must be between 20 and 150 psi (1.4 Kgf/cm2 to 10.5 Kgf/cm2 (kilogram-force per sq. centimeter)).



High Temperature Hazard Can cause damage to appliance. Fill evaporator with water prior to turning power on, and do not allow evaporator to run dry.

Appliances with auto water fill systems MUST NOT BE ALLOWED TO RUN DRY. Heat damage to the water valve may result.

It is the responsibility of the owner and installer to make sure that installation complies with all applicable local and state plumbing codes.



PUSH BRASS CAPTURE RING AGAINST CONNECTOR BODY BEFORE REMOVING TUBING. WHEN PLACING TUBING BACK INTO CONNECTOR, PUSH TUBE <u>FULLY</u> INTO CONNECTOR AND MAKE SURE CAPTURE RING IS FULLY EXTENDED.

electrical

The appliance is shipped from the factory with a 7' (213cm) (minimum) power cord and plug. Refer to the table below to determine the correct electrical outlet. It may be necessary for a licensed electrician to install the correct outlet or wiring. Winston does not recommend wiring the appliance direct.

Below is electrical information for various models of Winston's CVap[®] holding cabinets.

| Model | Volts | Hertz | РН | Amps | Watts | Circuit Amp | Plug Type |
|---------------|-------|-------|----|------|-------|----------------|--------------------|
| HA4002 | 120 | 60 | 1 | 17.0 | 2040 | US 20/CAN 30 | US 5-20P/CAN 5-30P |
| INTERNATIONAL | 230 | 50 | 1 | 8.8 | 2024 | N/A | N/A |
| HA4003 | 120 | 60 | 1 | 17.6 | 2112 | US 20/CAN 30 | US 5-20P/CAN 5-30P |
| INTERNATIONAL | 230 | 50 | 1 | 8.8 | 2024 | N/A | N/A |
| HA4503 | 120 | 60 | 1 | 18.6 | 2232 | 20 | 5-20P |
| INTERNATIONAL | 230 | 50 | 1 | 9.1 | 2106 | N/A | N/A |
| HA4005 | 120 | 60 | 1 | 14.8 | 1775 | US 15 | US 5-15P |
| HA4507 | 120 | 60 | 1 | 19.3 | 2320 | US 20/CAN 30 | US 5-20P/CAN 5-30P |
| INTERNATIONAL | 230 | 50 | 1 | 10.1 | 2320 | N/A | N/A |
| HA4009 | 120 | 60 | 1 | 14.2 | 1700 | US 15/CAN 20 | US 5-15P/CAN 5-20P |
| HA4508 | 120 | 60 | 1 | 19.1 | 2290 | US 20/CAN 30 | US 5-20P/CAN 5-30P |
| INTERNATIONAL | 230 | 50 | 1 | 8.8 | 2020 | N/A | N/A |
| HA4509 | 120 | 60 | 1 | 19.3 | 2320 | US 20/CAN 30 | US 5-20P/CAN 5-30P |
| INTERNATIONAL | 230 | 50 | 1 | 10.1 | 2320 | N/A | N/A |
| HA4511 | 120 | 60 | 1 | 19.3 | 2320 | US 20/CAN 30 | US 5-20P/CAN 5-30P |
| INTERNATIONAL | 230 | 50 | 1 | 10.1 | 2320 | N/A | N/A |
| HA4519 | 120 | 60 | 1 | 19.3 | 2320 | US 20/CAN 30 | US 5-20P/CAN 5-30P |
| INTERNATIONAL | 230 | 50 | 1 | 10.1 | 2320 | N/A | N/A |
| HA4022 | 120 | 60 | 1 | 17.6 | 2112 | US 20/CAN 30 | US 5-20P/CAN 5-30P |
| INTERNATIONAL | 230 | 50 | 1 | 9.2 | 2112 | N/A | N/A |
| HA4522 | 120 | 60 | 1 | 19.3 | 2320 | US 20/CAN 30 | US 5-20P/CAN 5-30P |
| INTERNATIONAL | 230 | 50 | 1 | 10.1 | 2320 | N/A | N/A |
| HL4022 | 120 | 60 | 1 | 14.0 | 1685 | US 15/CAN 20 | US 5-15P/CAN 5-20P |
| HL4522 | 120 | 60 | 1 | 14.4 | 1730 | US 15/CAN 20 | US 5-15P/CAN 5-20P |
| HMA018 | 120 | 60 | 1 | 15.0 | 1840 | US 15/CAN 20 | US 5-15P/CAN 5-20P |
| INTERNAIONAL | 230 | 50/60 | 1 | 8.0 | 1840 | N/A | N/A |

ventilation requirements

Ventilation clearances - To operate properly, the appliance will need sufficient space for air circulation. Allow at least 2" (51mm) clearance on all sides, particularly around ventilation holes. Care should be taken to prevent placing the appliance close to anything combustible. It must be installed with its supplied legs, feet, or casters. Counter top appliances supplied without legs or casters may be placed directly upon a counter top of non-combustible material. In this situation, the appliance may have to be sealed to the counter top with a food-grade silicone sealant (check local health codes). Half size appliances may be stacked upon each other using only a Winston supplied stacking kit and following the instructions enclosed with the kit. Your warranty may be void if you do not adhere to these ventilation requirements.

ACAUTION

High Temperature and Grease Hazard Can cause property damage. Avoid placing appliance near high heat or in grease laden atmosphere.

Do not place appliance in an area where ambient temperature (air temperature around the appliance) exceeds 100°F (38°C). A heat shield may be required to prevent excessive heat exposure and grease laden vapors from affecting the appliance if adjacent to heat, vapor, or grease generating devices (such as grills, steamers, ovens, etc.). Excess heat and grease inside the appliance cavities may cause electrical components to fail.

Vent hood - Generally this appliance does not need to be installed under a mechanical ventilation system (vent hood). Check local health and fire codes for requirements specific to your location.



Full size cabinet shown. Elements are common to all holding cabinets.

- 1. Control panel contains power switch and control escutcheon. Allows operator to program food temperature and food texture. Escutcheon is removable for servicing or replacing microprocessor.
- Door Gasket seals food chamber against heat or vapor loss.
- 3. Door & Latch can be reversed on site.
- 4. Adjustable Rack Supports located on both sides inside appliance, hold trays, pans, shelves, and racks.
- 5. Food chamber holding cavity where the dual heat system combines to create the perfect holding environment.
- 6. **Trough** collects moisture that condenses on door.
- 7. Drain Cap is removable for draining water from evaporator.

- 8. Evaporator and Heaters (not visible) supply vapor atmosphere to the food chamber by heating water within the evaporator.
- 9. Cord Wrap (behind unit) provides storage for power cord.
- 10. Air Heaters (not visible) supply heat for precise food texture control.
- 11. Name Plate identifies model number and serial number (important for servicing and ordering parts), voltage, power, and electrical information. Electrical **Requirements Label** identifies that appliance is for use with an individual branch circuit only.
- 12. U.L. Sanitation Label shows that appliance is in accordance with NSF standard.
- 13. Casters provide easy movement when front casters are in unlocked position.

controls





- 1. **Power Switch** controls electrical power to the appliance.
- Digital LED Readout shows current cabinet temperature(s). The default temperature display on the A series control is the temperature of the water in the evaporator. To view current air temperature, turn the Food Texture dial up or down 5° F, then immediately back to set temperature. The actual air temperature will display for five seconds. After five seconds the default evaporator temperature will be displayed.
- 3. **Food Temp Dial** controls the temperature of the water in the evaporator, which directly controls the temperature of the food being held.
- F°/C° Button is used to switch appliance display between Centigrade and Fahrenheit temperature scales.

On older cabinet models, simply press button to switch from one mode to the other. Newer cabinet models allow the operator to program the default temperature display scale, and at the same time choose between the display of evaporator (Food Temp) or air (Food Texture) temperature. Briefly pressing the °F/°C key will cause the display to cycle through the following readings: EF (Evaporator Fahrenheit), EC (Evaporator Celsius), AF (Air Fahrenheit), and AC (Air Celsius). Continue to give the key brief presses until the temperature mode you desire is displayed. This changes the default display from the factory setting (EF) to the selected mode.

5. Food Texture Dial controls the air temperature within the food chamber. The "+" temperature scale indicates the number of degrees that the air temperature is elevated above the Food Temp setting. A texture setting at or near the food temp setting will provide a moist texture. Elevating the texture setting will deliver a progressively drier and crisper texture.

daily operating procedures

AWARNING

Contamination Hazard

Can cause serious illness. Clean appliance prior to first use, to remove traces of industrial chemicals and oils.

Prior to using appliance for the first time, please perform the daily cleaning procedure listed on pages 16 and 17.

ACAUTION

High Temperature Hazard Can cause damage to appliance. Fill evaporator with water prior to turning power on, and do not allow evaporator to run dry.

Please make certain evaporator has an adequate supply of water prior to turning on power switch. Water level should be approximately 1" (2.5 cm) from overflow.

 Set appropriate food temperature using the FOOD TEMP dial (set in accordance with local health codes). Set desired texture (from moist to crisp) using the FOOD TEXTURE dial. See guidelines on pages 12-15 for specific settings. Fill evaporator to within 1" (25mm) of overflow with water.

NOTE: For locations with hard water, add 1 tablespoon (15ml) of white vinegar or lemon juice to water to help minimize scale buildup. Please consider contacting your local water authority to obtain advice on possible water treatment to protect the appliance. Some water supplies are high enough in chemical content to be capable of damaging stainless steel (if used untreated). The evaporation process can concentrate the chemicals in the water to a level which could cause a damaging reaction with the stainless steel. If you are using the optional automatic water fill with your appliance, and water is of unknown quality, please make the water connection via a deionizer/demineralizer. Failure to do so could void the warranty!

- 3. Toggle **Power Switch** on. Allow 30 minutes for warm-up.
- 4. Insert food.
- 5. Adjust **FOOD TEMP** or **FOOD TEXTURE** dials as needed to achieve desired food quality.

KEEP DOOR(S) CLOSED WHEN NOT IN USE. If food temperature becomes too low during serving period, increase **FOOD TEMP** setting by 10-20°F (11-17°C) to maintain desired food temperature.

| Food Holding Reference Chart | | | | | | | |
|--|--------------|--------------------|--|--|--|--|--|
| Product | Food Temp | Food Texture | | | | | |
| <i>Very moist foods</i> Sauces, gravies, vegetables, etc. | 140°F (60°C) | +5°F (3°C) | | | | | |
| Soft moist foods Bakery, meats, fish, chicken, etc. | 140°F (60°C) | +10°F (6°C) | | | | | |
| <i>Firm moist foods</i> Finger foods, baked potatoes, etc. | 140°F (60°C) | +15-30°F (8-17°C) | | | | | |
| Crisp dry foods Crispy fried chicken, french fries, etc. | 140°F (60°C) | +50-60°F (28-33°C) | | | | | |

See Holding Guidelines Charts on pages 12-13 for product recommendations with F/C settings.

- **NOTE:** 1. The actual temperature of crisp dry foods may substantially exceed optimal serving temperatures, making it necessary to reduce the **FOOD TEMP** setting as much as 20-30°F (11-17°C) to obtain the desired temperature.
 - 2. Total Food Texture (air temperature) setting equals the addition of the **FOOD TEMP** and **FOOD TEXTURE** settings. For example, a **FOOD TEMP** setting of 140°F (60°C) and a **FOOD TEXTURE** setting of +10°F (+6°C) is equal to an evaporator temperature of 140°F (60°C) and an air temperature of 150°F (66°C) (140+10°F (60+6°C)).

general market guidelines - HA45 series

| | FAHRE | NHEIT | CELS | SIUS |
|--|---|--|---|---|
| PRODUCT | Food Temp F° | Temp Texture | | Food Texture C° |
| BREAD PRODUCTS Biscuits Rolls Danishes Croissants White/Wheat Bread French/Italian Bread Pancakes/Waffles French Toast Fruit Pies Gingerbreads | 140-150 140-150 140-150 140-150 140-150 140-150 140-150 140-150 140-150 | +20 +10 +10 +10 +15 +10 +15 +10 +15 +15 | 60-66 60-66 60-66 60-66 60-66 60-66 60-66 60-66 60-66 | +11 +5 +5 +5 +5 +8 +5 +8 +5 +8 +8 |
| DAIRY & EGG PRODUCTS Eggs (Benedict, Fried, Scrambled, Poached) Omelets Puddings/Custards | 145-150 150-160 140-150 | +5 +10 +5 | 62-66 66-71 60-66 | +2 +5 +2 |
| MEATS Beef (Prime Rib, Roasts, Steaks, BBQ) Pork (Roasts, Chops, BBQ, Bacon, Ham, Sausage) Lamb & Veal Hamburger Patties Hot Dogs | 130-140 140-150 140-150 150-160 150-160 | +15 +15 +15 +10 +10 | 54-60 60-66 60-66 66-71 66-71 | +8 +8 +8 +5 +5 +5 |
| POULTRY Chicken Fried, Soft Fried, Crisp Roasted BBQ Turkey, Goose, Duck | 150-160 130-140 150-160 150-160 150-160 | +15 +50 +15 +15 +15 | 66-71 54-60 66-71 66-71 66-71 | +8 +27 +8 +8 +8 |
| SEAFOOD & SHELLFISH Fish, Fried Fish, Broiled/Baked Shrimp, Fried Fish/Shrimp in Sauce/Gravy | 130-140 150-160 130-140 150-160 | +50 +15 +50 +5 | 54-60 66-71 54-60 66-71 | +27 +8 +27 +2 |

| | FAHRE | NHEIT | CELSIUS | | | | | |
|---|---|---|---|---|--|--|--|--|
| PRODUCT | Food Temp F° | Food Texture F° | Food Temp C° | Food Texture C° | | | | |
| VEGETABLES Vegetables, Unbreaded Vegetables, Breaded Potatoes, Baked | 150-160 130-140 150-160 | +5 +60 +15 | 66-71 54-60 66-71 | +2 +33 +8 | | | | |
| STARCHES Spaghetti Rice Lasagna Beans Soups & Sauces Cooked Cereals Casseroles | 140-150 140-150 150-160 140-150 140-150 150-160 150-160 | +5 +5 +10 +15 +5 +10 +5 | 60-66 60-66 66-71 60-66 60-66 66-71 66-71 | +2 +2 +5 +8 +2 +5 +2 | | | | |
| CRISP TEXTURED FOODS Pizza Pastry Shells Crisp Breadings Crisp, Dry Foods French Fries | 130-140 130-140 130-140 130-140 130 | +60 +60 +60 +60 +60 | 54-60 54-60 54-60 54-60 38 | +33 +33 +33 +33 +33 | | | | |
| PREPARED FOODS Seafood in Sauce Hamburgers in Buns Cheeseburgers in Buns Open Sandwich w/Sauce/Gravy Plated Foods Entrees Corn Dogs | 150-160 150-160 150-160 150-160 150-160 140-150 140-150 | +15 +10 +10 +5 +5 +15 +40 | 66-71 66-71 66-71 66-71 66-71 60-66 60-66 | +8 +5 +5 +2 +2 +8 +22 | | | | |
| PROOFING Dough (Yeast Rolls, Danish Dough) | 100 | +10 | 38 | +5 | | | | |
| Notes: 1. The recommendation | ons in this | | | | | | | |

1. The recommendations in this chart should be regarded as starting points. If user desires a more firm/dry textured product, increase the **Food Texture** setting; for a more soft/moist textured product, decrease the **Food Texture** setting.

2. The holding time for very crisp foods may be less than for other products.

3. Use a thermometer to assure compliance with local health codes.

school guidelines - HA45 series

| | FAHRE | NHEIT | CELS | SIUS | | FAHR | ENHEIT | CEL | SIUS |
|--|---------------------------------|-------------------------------|----------------------------|--------------------------|--|--|--|---|---|
| PRODUCT | Food Temp F° | Food Texture F° | Food Temp C° | Food Texture C° | PRODUCT | Food Temp F° | Food Texture F° | Food Temp C° | Food Texture C° |
| PROOFING BREAKFAST Breakfast Pizza | 90-100 145 | +5 +40 | 32-38 63 | +3 | Breaded Foods Chicken, Fried Chicken, Fillet | 130 130 | +50 +50 | 54 54 | +27 +27 |
| Cinnamon Rolls Eggs, Scrambled Grits Muffins Pancakes | 140 150 150 140 150 | +20 +10 +10 +5 +5 | 60 66 66 63 66 | +11 +5 +5 +2 | Chicken, Fingers Chicken, Nuggets Corn Dogs Breaded Beef Patty | 130 140 150 140 | +50 +40 +20 +30 | 54 63 66 63 | +27 +22 +11 +16 |
| Piggiestix Sausage Patties Waffles | 150 150 150 145 | +5 +5 +5 +10 | 66 66 63 | +2 +2 +2 +5 | VEGETABLES Broccoli Baked Beans Green Beans | 150 150 150 | +5 +5 +5 | 66 66 66 | +2 +2 +2 |
| LUNCH Pizza Thin Crust Thick Crust Parbaked Thin Crust Parbaked Thick Crust | | +50 +30 +50 +30 | 60 63 60 63 | +27 +16 +27 +16 | Corn on Cob Peas & Carrots Potato, Baked Mexican Beans Vegetables, Steame Squash | 150 150 150 150 150 150 150 | +5 +5 +20 +5 +5 +5 | 66 66 66 66 66 | +2 +2 +11 +2 +2 +2 +2 |
| Tony's ReadyRise Sandwiches Ham & Cheese Melt Hamburgers on Bun | 145 130 150 150 | +30 +30 +10 +10 | 63 54 66 66 | +16 +16 +5 +5 | BREADS Biscuits Cornbread/Muffins Rolls, Yeast | 140 150 140 | +20 +20 +20 | 63 66 63 | +11 +11 +11 |
| Hot Dogs on Bun Meats BBQ Pork, Chopped Chicken, Baked Fish, Baked | 150 150 150 | +10 +10 +20 +5 | 66 66 66 | +5 +5 +11 +2 | SIDE ITEMS Apples, Baked French Fries, Oven Style Macaroni & Cheese | 150 130 150 | +10 +80 +10 | 63 54 66 | +5 +44 +5 |
| Hamburger Patties Hot Dog Wieners Meat Loaf | 150 150 150 150 | +5 +5 +5 +5 | 66 66 66 | +2 +2 +2 +2 | Rice Tater Tots, Oven Style | 150 | +5 +60 | 66 54 | +2 +33 |
| Pork Chops Salisbury Steak Turkey, Whole Roasted | 150 150 | +10 +5 +20 | 66 66 66 | +5 +2 +11 | DESSERT Fruit Cobbler Apple Fritter | 150 150 | +20 +40 | 66 66 | +11 +11 |
| Casseroles Beef-a-Roni Ravioli Squash Casserole Turkey Tetrazzini | 150 150 150 150 | +10 +10 +15 +15 | 66 66 66 66 | +5 +5 +8 +8 | Notes: The recommendat as starting points, textured product, a more soft/moist Texture setting. The holding time for other products Use a thermomet health codes. | If user des ncrease the textured pro- for very cris | ires a more e Food Te x oduct, decr p foods ma | e firm/dry cture setti rease the ay be less | ng; for Food than |

general market guidelines - HA40 series

| | FAHRE | NHEIT | CELS | SIUS |
|--|---|--|---|---|
| PRODUCT | Food Temp F° | Food Texture F° | Food Temp C° | Food Texture C° |
| BREAD PRODUCTS Biscuits Rolls Danishes Croissants White/Wheat Bread French/Italian Bread Pancakes/Waffles French Toast Fruit Pies Gingerbreads | 150-160 150-160 150-160 150-160 150-160 150-160 150-160 150-160 150-160 | +20 +10 +10 +10 +15 +10 +15 +10 +15 +15 | 66-71 66-71 66-71 66-71 66-71 66-71 66-71 66-71 66-71 | +11 +5 +5 +5 +5 +5 +5 +5 +5 +8 +8 +8 |
| DAIRY & EGG PRODUCTS Eggs (Benedict, Fried, Scrambled, Poached) Omelets Puddings/Custards | 155-160 160-170 150-160 | +5 +10 +5 | 68-71 71-77 66-71 | +2 +5 +2 |
| MEATS Beef (Prime Rib, Roasts, Steaks, BBQ) Pork (Roasts, Chops, BBQ, Bacon, Ham, Sausage) Lamb & Veal Hamburger Patties Hot Dogs | 150-160 150-160 150-160 160-170 160-170 | +15 +15 +15 +10 +10 | 66-71 66-71 66-71 71-77 71-77 | +8 +8 +8 +5 +5 |
| POULTRY Chicken Fried, Soft Fried, Crisp Roasted BBQ Turkey, Goose, Duck | 160-170 140-150 160-170 160-170 160-170 | +15 +50 +15 +15 +15 | 71-77 60-66 71-77 71-77 71-77 | +8 +27 +8 +8 +8 |
| SEAFOOD & SHELLFISH Fish, Fried Fish, Broiled/Baked Shrimp, Fried Fish/Shrimp in Sauce/Gravy | 140-150 160-170 140-150 160-170 | +50 +15 +50 +5 | 60-66 71-77 60-66 71-77 | +27 +8 +27 +2 |

| FAHRE | NHEIT | CELSIUS | | |
|---|--|---|---|--|
| Food Temp F° | Food Texture F° | Food Temp C° | Food Texture C° | |
| 160-170 140-150 160-170 | +5 +60 +15 | 71-77 60-66 71-77 | +2 +33 +8 | |
| 150-160 150-160 160-170 150-160 150-160 160-170 160-170 | +5 +5 +10 +15 +5 +10 +5 | 66-71 66-71 71-77 66-71 66-71 71-77 71-77 | +2 +2 +5 +8 +2 +5 +2 +2 | |
| 140-150 140-150 140-150 140-150 110 | +60 +60 +60 +60 +60 | 60-66 60-66 60-66 60-66 43 | +33 +33 +33 +33 +33 | |
| 160-170 160-170 160-170 160-170 160-170 150-160 150-160 | +15 +10 +10 +5 +5 +15 +40 | 71-77 71-77 71-77 71-77 71-77 66-71 66-71 | +8 +5 +5 +2 +2 +2 +8 +22 | |
| 110 | +10 | 43 | +5 | |
| | Food Temp F° 160-170 140-150 160-170 150-160 150-160 150-160 150-160 150-160 160-170 140-150 140-150 140-150 140-150 140-150 140-150 140-150 140-150 140-150 140-150 140-150 140-150 140-150 140-150 140-150 140-150 140-150 110 160-170 160-170 160-170 160-170 160-170 160-170 160-170 160-170 160-170 160-170 160-170 150-160 150-160 100 100 | Food Temp F°Food Texture F° $160-170$ $140-150$ $160-170$ $+5$ $+60$ $160-170$ $+15$ $150-160$ $150-160$ $+5$ $160-170$ $150-160$ $+5$ $160-170$ $+10$ $160-170$ $+5$ $140-150$ $160-170$ $+50$ $140-150$ $140-150$ $+60$ $140-150$ $+60$ $140-150$ $+60$ 110 $160-170$ 110 $160-170$ 100 $160-170$ $150-160$ $+15$ $150-160$ $+15$ $150-160$ $+15$ $150-160$ $+15$ $150-160$ $+10$ 110 | Food Temp F°Food Texture F°Food Temp C° $160-170$ $+5$ $+60$ $71-77$ $140-150$ $+5$ $160-170$ $66-61$ $71-77$ $150-160$ $+5$ $150-160$ $66-71$ $66-71$ $150-160$ $150-160$ $+5$ $150-160$ $66-71$ $71-77$ $150-160$ $+5$ $150-160$ $66-71$ $71-77$ $140-150$ $+60$ $160-170$ $60-66$ $60-66$ $140-150$ $+60$ $140-150$ $60-66$ $60-66$ $140-150$ $+60$ 100 $60-66$ 43 $160-170$ $+15$ $+10$ $71-77$ $71-77$ $160-170$ $+15$ $150-160$ $71-77$ $71-77$ $160-170$ $+5$ $+15$ $71-77$ $71-77$ $160-170$ $+5$ $+15$ $71-77$ $71-77$ $160-170$ $+5$ $+15$ $71-77$ $71-77$ $160-170$ $+5$ $+15$ $71-77$ $66-71$ | |

 The recommendations in this chart should be regarded as starting points. If user desires a more firm/dry textured product, increase the Food Texture setting; for a more soft/moist textured product, decrease the Food Texture setting.

2. The holding time for very crisp foods may be less than for other products.

3. Use a thermometer to assure compliance with local health codes.

school guidelines - HA40 series

| | FAHRENHEIT CELSIUS | | | FAHRE | FAHRENHEIT | | CELŞIUS | | |
|--|---|---------------------------------|--|----------------------------------|---|--|---|--|--|
| PRODUCT | Food Temp F° | Food Texture F° | Food Temp C° | Food Texture C° | Texture | | Food Texture F° | Food Temp C° | Food Texture C° |
| PROOFING | 100-110 | +5 | 38-43 | +2 | Breaded Foods | | | | |
| BREAKFAST Breakfast Pizza Cinnamon Rolls Eggs, Scrambled Grits Muffins | 160 160 160 160 160 | +30 +10 +5 +5 +10 | 71 71 71 71 71 71 | +16 +5 +2 +2 +5 | Chicken, Fried Chicken, Fillet Chicken, Fingers Chicken, Nuggets Corn Dogs Breaded Beef Patty | 140-150 160 160 160 160 140-150 | +30 +30 +30 +30 +10 +20 | 60-66 71 71 71 71 60-66 | +16 +16 +16 +16 +5 +11 |
| Pancakes Piggiestix Sausage Patties Waffles | 160 160 160 160 | +5 +10 +5 +10 | 71 71 71 71 | +2 +5 +2 +5 | VEGETABLES Broccoli Baked Beans Green Beans | 160 160 160 | +2 +5 +5 | 71 71 71 | +1 +2 +2 |
| LUNCH Pizza Thin Crust Thick Crust Parbaked Thin Crust Parbaked Thick Crust Tony's ReadyRise | | +30 +15 +30 +15 +15 | 68 68-71 68 68-71 68-71 | +16 +8 +16 +8 +8 | Corn on Cob Peas & Carrots Potato, Baked Mexican Beans Vegetables, steamed Squash | 160 160 160-170 160 160 160 | +5 +5 +5 +5 +5 +5 +5 +5 | 71 71 71-77 71 71 71 71 | +2 +2 +2 +2 +2 +2 +2 +2 +2 |
| Sandwiches Ham & Cheese Melt Hamburgers on Bun Hot Dogs on Bun | 140 160 160-170 | +20 +10 +10 | 60 71 71-77 | +11 +5 +5 | BREADS Biscuits Cornbread/Muffins Rolls, Yeast | 150 160 165 | +10 +10 +10 | 66 71 74 | +5 +5 +5 |
| Meats BBQ Pork, Chopped Chicken, Baked Fish, Baked Hamburger Patties Hot Dog Wieners | 160 160-170 160 160 160-170 | +5 +10 +5 +5 +5 | 71 71-77 71 71 71 71-77 | +2 +5 +2 +2 +2 +2 | SIDE ITEMS Apples, Baked French Fries, Oven Style Macaroni & Cheese Rice Tater Tots, Oven Style | 160 140 160 160 130-140 | +5 +80 +5 +5 +5 | 71 60 71 71 54-60 | +2 +44 +2 +2 +27 |
| Meat Loaf Pork Chops Salisbury Steak Turkey, Whole Roasted | 160 160 160 160 | +5 +5 +5 +10 | 71 71 71 71 | +2 +2 +2 +5 | DESSERT Fruit Cobbler Apple Fritter | 160 160 | +10 +20-30 | 71 71 | +5 +11-16 |
| Casseroles Beef-a-roni Ravioli Squash Casserole Turkey Tetrazzini | 160 160 160 160 | +5 +5 +10 +10 | 71 71 71 71 | +2 +2 +5 +5 | Notes: The recommendati as starting points. It textured product, in a more soft/moist te Texture setting. The holding time for for other products. Use a thermometer health codes. | f user desi icrease the extured pro | res a more e Food Te oduct, deci o foods ma | e firm/dry xture setti rease the ay be less | ng; for Food than |

daily cleaning

Required Cleaning Accessories & Supplies

- Pan for draining evaporator
- Food grade germicidal detergent
- Descaling agent (ScaleKleen[™]) (available through Winston Customer Service 1-800-234-5286)

A DANGER

Electrical and Burn Hazard

Can cause serious injury or death. Do not attempt to install or service this appliance unless you are a licensed electrician or trained servicer.

This appliance utilizes high voltage electrical systems, high temperature heating systems, and hot water vapor. If used improperly, any of these hazards are capable of causing serious injury or death. To avoid the potential for an accident, please have appliance installed by a licensed electrician, and serviced only by trained servicers. Please make this page available to the servicer.

A DANGER

Electrical Hazard

Can cause serious injury or death. Disconnect appliance and contact licensed electrician or trained servicer.

If an electrical shock is felt during operation or cleaning, unplug appliance and have it serviced before placing back into service.



Contamination Hazard

Can cause serious illness or damage to appliance.

Clean appliance daily to avoid potential contamination hazard.

Ensure safe operation by cleaning appliance daily. Failure to do so can allow harmful deposits to develop, increasing the potential for food contamination, and endangering your customers.

ACAUTION

Corrosion Hazard

Can cause damage to appliance. Clean appliance daily to avoid potential corrosion damage.

Clean evaporator daily to prevent chlorides (salts) from accumulating. Chlorides can cause the evaporator tank to corrode, to the extent that leaks can occur. Leaks caused by corrosion, which is caused by a failure to clean daily, are not covered under the manufacturer's warranty.

AWARNING

Contamination Hazard

Can cause serious illness. Clean appliance prior to first use, to remove traces of industrial chemicals and oils.

Prior to using appliance for the first time, perform the daily cleaning procedure listed on the facing page.

daily cleaning procedure

ACAUTION

Burn Hazard

Can cause injury. Allow 30 minutes for appliance to cool before attempting to clean.

Before each cleaning procedure, disconnect appliance from its electrical power source and allow to cool for at least one half hour.

- 1. Place empty pan under drain cap, remove cap and allow evaporator to drain.
- 2. Remove and clean rack supports using a food-grade germicidal agent. Rinse and allow to dry.
- 3. Spray food chamber and evaporator with a food grade germicidal detergent.
- 4. Wipe inside surfaces to remove all food deposits.
- Inspect for scale build-up on the tank surface, sensor (optional automatic water fill sensor shown), and probe (see photo below). If present, apply descaling agent. Read ALL warnings and follow directions listed on descaling agent package.

| 2 | |
|--------------------|--|
| CLEAN ALL | |
| SCALE DEPOSITS: | |
| SENSOR | |
| TANK | |
| PROBE | |

- 6. Inspect heating elements (if exposed). The elements are stainless steel. If cleaning is needed, scrub with Teflon[™] or nylon bristle brush to remove heavy food particles. Further cleaning may be done with a plastic scouring pad and alkaline based cleansers. DO NOT use wire brushes, scrapers, steel wool pads or chloride based cleansers. Follow cleanser manufacturer's instructions for use on stainless steel. Rinse well with clean water and wipe immediately.
- 7. Rinse all inside surfaces, including evaporator, and dry with clean towel.

AWARNING

Electrical Hazard

Can cause serious personal injury or damage to appliance. Avoid spraying appliance exterior or controls with water.

Do not spray outside of appliance or controls with water.

- 8. Replace rack supports.
- 9. Verify O-ring is on drain pipe, replace drain cap, and refill evaporator.
- 10. Reconnect appliance to electrical power and make ready for use.

troubleshooting

We know how frustrating and costly it can be when a critical piece of equipment is down for repairs. It is our goal to minimize service disruptions, to get you back up and operating in the shortest time possible.

We carefully analyze all service calls. This analysis helps us to improve our manufacturing processes, and reduces product service issues. Generally speaking, most equipment failures can be attributed to the following three causes:

- Faulty use and care practices.
- Electrical supply problems.
- Equipment faults.

Please refer to the Troubleshooting Chart on the next page for common problems and solutions. If the problem you're experiencing isn't listed, or if the standard solution fails to resolve your problem, you will need a qualified servicer to diagnose and repair the problem.

If your equipment is still under warranty, or you are uncertain whether or not warranty is still in place, please call Winston Customer Service at 1-800-234-5286 (or 502-495-5400). Our friendly staff will help you verify coverage, and if under warranty, will arrange for a servicer to call on you.

If your equipment is no longer under warranty, you can call our Customer Service line at 1-800-234-5286, or visit our website at **www. winstonind.com**, and click the Service tab to locate an authorized servicer near you.

In order to expedite service, please have the complete model and serial number (found on the appliance's identification tag) on hand when you contact us.

Service parts may be purchased directly from the factory online. Visit www.winstonind.com

Please have the following information on hand when contacting Winston Industries regarding product service.

| 1. | Model | _Serial # |
|----|-------------------------|-----------|
| | (located on name plate) | |
| 2. | Your name | |
| | Company name | |
| | | |
| | | |
| 5. | Company phone | |
| | | |
| | | |
| | | |
| | | |

troubleshooting

TROUBLE

FAULT CODE

| Digital display fails to light Flooding/leaking water Food drying out Food excessively moist Food not hot enough Food too hot | C, H, I B, E, F, H D, G E, G, H D, F |
|--|--|
| Injury or accident | J |

FAULT

CORRECTION

| Α. | Circuit breaker tripped | Adjust |
|----|--|---------------|
| | Fuse blown | Replace |
| | Power cord not plugged in | Plug in |
| | Faulty cordset | Call servicer |
| | Faulty power switch | Call servicer |
| Β. | Evaporator (water) tank empty | See page 9 |
| C. | Drain pipe o-ring defective or missing | Replace |
| D. | Food Temp setting too high | See page 9 |
| Ε. | Food Temp setting too low | See page 9 |
| F. | Food Texture setting too high | See page 9 |
| G. | Food Texture setting too low | See page 9 |
| Η. | Door gasket defective | Replace |
| | Drain cap defective or missing | |
| J. | Injury or accident, call manufacturer | • |

troubleshooting

A DANGER

Electrical Hazard

Can cause serious injury or death. Do not attempt to install or service appliance unless you are a licensed electrician or trained servicer.

This appliance utilizes high voltage electrical systems, high temperature heating systems, and hot water vapor. If used improperly, any of these hazards are capable of causing serious injury or death. To avoid the potential for an accident, please have appliance installed by a licensed electrician, and serviced only by trained servicers. Please make this page available to the servicer.

| SERVICE PARTS | PART NO. | SERVICE PARTS | PART NO. |
|---------------------------|----------|----------------------|----------|
| Power Switch (120V-240V) | PS2304 | Gasket, Door | |
| Circuit Board Asm | | HA4509 | PS1444 |
| (before 4/1/05) | | HA4519 (Top) | PS1442 |
| 120V | PS2720 | HA4519 (Bottom) | PS1446 |
| 208V-240V | PS2891 | HA4522 (Top) | PS2151 |
| HA4522 | | HA4522 (Bottom) | PS2150 |
| HA4022 | | Probe, Air | PS2255 |
| HA4519 | | Probe, Water | PS2177 |
| (after 4/1/05) | | Heater, Air | |
| 120V | PS2827 | HA4002 120V | PS2556 |
| 208V-240V | PS2842 | HA4003 120V | PS2557 |
| HA4507 | | HA4003 208V-240V | PS2558 |
| HA4509 | | HA4503 120V | PS2388 |
| HA4511 | | All Others 120V | PS2067 |
| (after 7/18/05) | | All Others 240V | PS2099 |
| 120V | PS2827 | Heater, Water | |
| 208V-240V | PS2842 | HA4002 & 4003 120V | PS2198 |
| Circulating Fan 120V | PS2051 | HA4003 208V-240V | PS2389 |
| Circulating Fan 208V-240V | PS2100 | HA4503 120V | PS2198 |
| Cooling Fan 120V | PS2066 | All Others 120V | PS2068 |
| Cooling Fan 208V-240V | PS2098 | All Others 208V-240V | PS1711 |
| Latch, Door | PS1774 | Casters | |
| Hinge Kit, Door | PS2116 | 3" Locking | PS2146 |
| Gasket, Door | | 3" Non-Locking | PS2147 |
| HA4002 | PS2555 | 5" Locking | PS2142 |
| HA4003, HA4503 | PS1440 | 5" Non-Locking | PS2141 |
| HA4507 | PS2554 | | |

circuit diagram - A series



ZAP zero accidents program

This warranty agreement applies to Commercial Equipment, Equipment Service Parts, and Safety Parts (collectively, "Products") manufactured by Winston Industries, LLC ("Winston") and its corporate predecessors and is extended to any purchaser, lessee, or successor purchaser ("Purchaser").

NEW EQUIPMENT

Any part of a new piece of equipment, except gaskets, hoses, lamps, power cords, fryer baskets, glass panels, and evaporators, which proves to be defective in material or workmanship within one (1) year from the date of delivery to original end-user purchaser or 18 months from the date of manufacture, whichever comes first, will be repaired or replaced (at Winston's option) free of charge.

REPLACEMENT PARTS

Any equipment replacement part, except gaskets, hoses, lamps, power cords, fryer baskets, glass panels, batteries, and evaporators, which proves to be defective in material or workmanship within one (1) year from the date of original installation will be repaired or replaced free of charge.

LABOR, TRAVEL, TRANSPORTATION

The warranty for new equipment covers the repair or replacement (at Winston's option) of the defective part(s), delivery of the replacement part(s), labor charges for the removal and installation of replacement part(s) for one (1) year from the start of the warranty period. This warranty includes travel time not to exceed two hours and mileage not to exceed 50 miles (100 miles round trip).

The warranty for replacement parts covers the repair or replacement (at Winston's option) of the defective part(s) and does not include any labor charges for the removal and installation of any part(s), travel, transportation, or other expenses incidental to the repair or replacement of part(s).

The warranty does not cover: gaskets, hoses, lamps, power cords, fryer baskets, glass panels, evaporators, supply items (including but not limited to: gaskets, brushes, filter paper, cleansers, etc.), software, corrosion of stainless steel, normal maintenance, lubrication, cleaning or descaling, programming or adjusting temperatures, calibration, tightening of fasteners or plumbing connections, equipment with removed or altered identification tags, damage resulting from delivery of the equipment, customer mishandling or abuse, or no problem found.

THE USE OF POOR QUALITY WATER WILL VOID PRODUCT WARRANTIES. See Product Owner's Manual for water quality recommendations.

PROPER INSTALLATION IS THE RESPONSIBILITY OF THE PURCHASER AND IS NOT COVERED BY THIS WARRANTY. PRODUCTS MUST NOT BE INSTALLED IN LOCATIONS EXPOSING THEM TO EXCESSIVE HEAT SOURCES, AMBIENT TEMPERATURES ABOVE 100° F, OR CONTAMINATES DETRIMENTAL TO THE EQUIPMENT COMPONENTS (SUCH AS CAUSTIC SOLUTIONS, HIGH MOISTURE, WATER, OR GREASE LADEN VAPORS NEAR ELECTRONIC COMPONENTS, ETC.).



WINSTON INDUSTRIES

As a condition to the application of this warranty, Purchaser will operate, clean, and maintain Products in accordance with use and care instructions, warnings, manuals, and any other notices and/or instructions from Winston which may be with or on Products or sent separately; will notify Winston of resale, removal, or retirement of Products; will notify Winston immediately of any accident or injury arising out of use of Products and cooperate with Winston in the investigation of any such accident or injury; will maintain registration with Winston of location and serial number of Products while in Purchaser's control and use; will require all personnel operating Products to become thoroughly familiar with use and care instructions and all other notices and/or instructions before such personnel operate Products; will thoroughly train all personnel operating Products to follow all instructions contained on or in all Safety Labels and use and care instructions; will immediately affix Safety Labels and put into use the use and care instructions; will immediately use, according to instructions, Safety Parts supplied by Winston; will install Equipment Service Parts in accordance with Winston's written instructions; will utilize only Winston manufactured replacement parts and make no changes or alterations to Products, except as approved or instructed in writing by Winston; and, will when requested by Winston, cooperate with Winston in the prevention of injuries from Purchaser's use of Products.

PURCHASER'S SOLE AND EXCLUSIVE REMEDY AGAINST WINSTON SHALL BE FOR THE REPAIR OR REPLACEMENT OF DEFECTIVE PARTS AS PROVIDED HEREIN. THE TOTAL LIABILITY OF WINSTON WITH RESPECT TO ITS PRODUCTS, WHETHER UNDER WARRANTY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE OF THE PRODUCTS AND THE LABOR AND TRAVEL TO REPLACE THE PRODUCTS OR ANY PART THEREOF. WINSTON SHALL NOT BE LIABLE TO THE PURCHASER OR OTHERS FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OR LOSS OF PROFITS RESULTING FROM ANY CAUSE WHATSOEVER, INCLUDING BUT NOT LIMITED TO, DEFECTIVE WORKMANSHIP, MATERIALS, OR ANY ERROR OR OMISSION OF WINSTON.

WINSTON EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE AND ANY IMPLIED WARRANTY OF MERCHANTABILITY.

For warranty inquiries and customer specific warranties, call Winston Customer Service at 1.800.234.5286 or 502.495.5400.

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Prices subject to change without notice. F.O.B. Louisville, KY, USA (800) 234-5286 or (502) 495-5400 Fax (502) 495-5458 www.winstonind.com All sales subject to Company's Terms and Conditions Winston Products Company 2345 Carton Drive Louisville, KY 40299

terms & conditions



In consideration of the mutual benefits hereby to be derived, Winston Industries, LLC ("Winston") and any purchaser, lessee or successive purchaser ("Purchaser"), of Winston Commercial Equipment, Equipment Service Parts, and Safety Parts (collectively "Products") agree that:

1. Terms of sale for Products are net 25 (payment must be received within 25 days from invoice date). Prices are subject to change without notice. Purchaser agrees to pay all costs of collection of past due accounts, including reasonable attorney's fees. All claims must be made within five (5) days of receipt of goods or claim will not be allowed. All goods are shipped at Purchaser's risk. Confirmed orders may not be cancelled or delayed without written permission from Winston. Cancelled or delayed orders may be subject to a 20% inventory adjustment/warehousing fee. Delayed orders will be invoiced on the confirmed ship date. Products may not be returned without written permission from Winston as described in paragraph #6 below. Orders placed prior to a price increase, which are due to ship after the increase, may be charged at the new price.

2. An order will not be effective until accepted by an authorized representative at Winston's home office. Unless otherwise specified in writing (a) delivery will be made F.O.B. Louisville, Kentucky and risk of loss or damage shall pass to Purchaser upon delivery to the carrier, and (b) the method or agency of transportation and routing will be selected by Winston. Winston reserves the right to ship freight collect.

3. Winston shall not be liable for any delay in performance due to fire, explosion, casualty, strike or other labor difficulties, shortage of utility facility, delay to transportation, breakdown or accident, compliance with other action to carry out the intent or purpose of any law or regulation, or any cause, whether similar or dissimilar, beyond Winston's reasonable control and Winston shall have such additional time for performance as may be reasonably necessary under the circumstances and the right to apportion its production among its customers in such a manner as it may deem equitable.

4. Purchaser agrees to indemnify and hold Winston harmless from any loss, cost or expense, including cost of defense, and reasonable attorney's fees, incurred by Winston, arising from or related to (1) Purchaser's use or sale of Products, including, but not limited to, Purchaser's failure to warn Purchaser's workers and others of hazards involving the Products; Purchaser's failure to provide copy of Terms and Conditions at time of sale of Products to others; Purchaser's failure to instruct Purchaser's workers and others in how to safely use the Products in compliance with the Use and Care Manual; and Purchaser's failure to provide safe working conditions and proper safety clothing and gear with respect to the Products, and (2) non-compliance with these Terms and Conditions, or both.

5. Purchaser shall pay, in addition to the price hereunder, as a separate item, any taxes which Winston may be required to pay or collect under existing or future laws with respect to the sale, delivery, transportation, or use of any Product sold hereunder including all taxes, however designated, upon or measured by amounts paid to Winston by Purchaser hereunder, except net income tax.

6. Products may not be returned by Purchaser except by prior written agreement with Winston. Returns without prior authorization, as indicated by an RA number applied to the returned packaging, will be refused. All returned Products are subject to inspection by Winston and a 20% restocking charge (\$30 minimum), which may be reduced if replacement Product is ordered, plus any other costs necessary to restore the Products to new condition. The Products must be returned to the Winston factory freight prepaid, in new condition, and in the original packaging. Winston reserves the sole right to determine the amount of credit to be issued on any Products may be considered for return and credit. No returns will be accepted on modified or special order Products (built to a Purchaser's specifications), used Products, or on Products older than 90 days from the original date of shipment.

Prices subject to change without notice. F.O.B. Louisville, KY, USA (800) 234-5286 or (502) 495-5400 Fax (502) 495-5458 www.winstonind.com All sales subject to Company's Terms and Conditions Winston Products Company 2345 Carton Drive Louisville, KY 40299

7. Acceptance is expressly limited to the Terms and Conditions set forth herein and any additional or different terms proposed by Purchaser are rejected unless expressly assented to in writing. In the event during the course of dealing, Winston signs or otherwise accepts any documents or forms submitted by Purchaser containing any Terms or Conditions contrary to or in addition to those of Winston set forth herein, such documents and forms shall be deemed to have been used for the mere convenience of Purchaser in the conduct of its internal business affairs and not for the purpose of varying the Terms and Conditions of this order. This order including these Terms and Conditions shall constitute entirely the Terms and Conditions between the parties with respect to the transaction covered hereby and to all subsequent transactions for Products obtained from Winston, and no waiver, alteration or modification shall be binding on Winston unless in writing and signed by an authorized officer of Winston at its home office.

8. Purchaser's sole warranty is the Zero Accident Program (ZAP) Warranty Agreement on products manufactured by Winston in effect at the time of the sale.

OTHER THAN THE ZAP WARRANTY AGREEMENT, WINSTON MAKES NO WARRANTY OF ANY KIND WHATSOEVER, EXPRESS OR IMPLIED, CONCERNING THE PRODUCTS. WINSTON EXPRESSLY EXCLUDES ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE TOTAL LIABILITY OF WINSTON WITH RESPECT TO ANY PRODUCT SHALL IN NO EVENT EXCEED THE PURCHASE PRICE THEREOF, AND LABOR TO REPLACE. WINSTON SHALL IN NO EVENT BE LIABLE TO PURCHASER OR OTHERS FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OR LOSS OF PROFITS RESULTING FROM ANY CAUSE WHATSOEVER, INCLUDING, BUT NOT LIMITED TO, DEFECTIVE WORKMANSHIP, MATERIALS OR ANY ERROR OR OMISSION OF WINSTON.

9. Winston shall not be liable for claims of patent infringement against Purchaser or Purchaser's loss of the right to use the Product.

10. ARBITRATION: Any controversy or claim arising out of or relating to this Order, or the breach thereof, shall be settled by binding arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association, except that any arbitration hearing shall be held in Louisville, Kentucky. Judgment upon the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof. Any application for review of an arbitration award shall be allowed only to the extent required by Kentucky law and shall be brought in an appropriate court in the Thirteenth Judicial Circuit or District of Kentucky, or in the United States District Court for the Western District of Kentucky.

11. GOVERNING LAW: This Order and the rights, duties and legal relations of the parties, and any arbitration are governed by and construed under Kentucky laws.

12. The products sold hereunder are produced in compliance with the Fair Labor Standards Act.

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