

INSTALLATION AND OPERATING INSTRUCTIONS

1/2 SIZE ELECTRIC CONVECTION OVEN Model: HSO-200

INTENDED FOR OTHER THAN HOUSEHOLD USE RETAIN THIS MANUAL FOR FUTURE REFERENCE OVEN MUST BE KEPT CLEAR OF COMBUSTIBLES AT ALL TIMES

FOR YOUR SAFETY: Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.



WARNING: Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the Installation, Operating and Maintenance Instructions thoroughly before installing or servicing this equipment.



WARNING: Initial heating of oven may generate smoke or fumes and must be done in a well-ventilated area. Overexposure to smoke or fumes may cause nausea or dizziness.



This equipment has been engineered to provide you with year round dependable service when used according to the instructions in this manual and standard commercial kitchen practices.



P/N 8834100 9-07

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IMPORTANT FOR FUTURE REFERENCE

Please complete this information and retain this manual for the life of the equipment. For Warranty Service and/or Parts, this information is required.

Model Number

Serial Number

Date Purchased

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TECHNICAL DATA

DATA PLATE

The data plate containing the oven characteristics is glued to the back.

POWER SUPPLY TERMINAL BOARD

The power supply terminal block is inside the right side of the oven. A small data plate positioned near the terminal block states the types of connections which are possible.

AFTER SALES SERVICE

Technical Service: Perfect operation over time of our convection ovens is ensured by a wide-ranging technical service network. Specialized technicians are ready to intervene in a timely manner to ensure the work of food services professionals continues uninterrupted.

Warranty: All our convection ovens undergo careful operating tests before they go on the market, as shown by the test certificate that is enclosed with each one of them and by the one-year guarantee.



PART RESERVED FOR INSTALLER

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SAFETY STANDARDS

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- The installer must read this booklet carefully before installing the convection oven.
- Installation and subsequent maintenance, cleaning, inspection and repairs must be carried out with the electrical power supply disconnected.
- Installation of the ovens must be in comply with current standards in the country of use. Otherwise the manufacturer shall not honor the warranty in the event of direct or indirect damage.
- Installation, adjustment and assistance are to be carried out by qualified personnel in compliance with current
 accident prevention legislation in the country of use. The installer must also check for any fire prevention
 regulations.
- The manufacturer shall not be held liable for any damage arising from improper use of the convection oven, unauthorized modifications and anything not covered by this manual.

ENVIRONMENTAL STANDARDS

All materials used for packaging are compatible with environmental protection standards. They may be stored without any hazard, or disposed of in accordance with current laws in the country of use. **Do not leave the plastic coverings within reach of children or animals as they are potentially hazardous.** The plastic components which can be disposed of and recycled are marked as follows: POLYETHYLENE: packaging outer film, instructions bag, etc. POLYPROPYLENE: clips, etc.

TRANSPORT AND UNPACKING

Any movement of the oven must be carried out by suitable means such as a forklift or pallet loader. These must be at least half as large as the convection oven (see fig.1). If it is necessary to store the oven temporarily, keep it in a covered, ventilated place at a temperature from 14°F to 122°F, with humidity no higher than 95%.

Use protective gloves and remove the packaging. Lift the oven with a forklift, remove the base and place it in its intended location.

After removing the packaging, immediately check the condition of the oven. If in doubt, do not use the oven. Contact an authorized retailer.



INSTALLATION INSTRUCTIONS

POSITIONING AND SET-UP FOR USE

- 1) Place the machine in its place of intended use in compliance with the following instructions:
 - A) Check that there is enough space (minimum 8") from any walls or obstacles which may prevent proper air flow (fig.2).
 - B) Check that maintenance can be performed with a certain freedom of movement.
 - C) Avoid placing the oven in places with poor air circulation, in places exposed to sunlight, where there are high temperatures, near heat sources or in windy locations (fig.3).
 - D) Ambient air temperature must not exceed 89°F. Above that temperature, proper operation of the oven cannot be ensured.
 - E) Always install the oven under a properly operating aspiration hood for the extraction of vapors.
- 2) Remove the film which covers some parts of the oven before starting to use it.
- 3) Clean all substances, including glue residue. Do not use abrasive substances.
- 4) Position the machine so that it is perfectly level and set the height by means of the leveling feet (fig. 4).



ELECTRICAL CONNECTIONS

The oven is setup for operation at the voltage set forth on the technical data plate. All ovens are provided with a power cord. The flexible cable for connection to the electrical mains must not have characteristics which are less than those of a type with rubber insulation mod. H07RN F and it must have a section which corresponds with that set forth in the section "Technical Data" of the oven. The cable must also be anchored to the frame with the cable clamp, the screw of which can be reached through a hole in the frame. It must in any case be positioned in such a way that at no point does it reach a temperature which is 122°F greater than the ambient temperature. It must be type SJTO, 3 conductor, AWG12, 20A, 250V. The plug is NEMA6-20P.

The connection to the electrical line must be made by placing an automatic switch of sufficient capacity (see "Technical data" of the oven) and with an opening distance between contacts of at least 3 mm. Also, during operation of the oven, the power supply must not vary from the nominal voltage value by $\pm 10\%$.

The oven **MUST** be earthed by means of the terminal which carries the earth symbol on the connection board (fig. 6).

It must also be inserted in an equipotential system (the efficiency of which must be checked in accordance with current standards) using the terminal with the equipotential symbol (fig. 6A). It is located near the electrical cable entry on the panel of the oven bottom.

The manufacturer will not be held liable if this accident prevention standard is not adhered to.





AUTOMATIC SAFETY & CONTROL DEVICES OF OVEN

PROTECTION OF THE AUXILIARY ELECTRICAL CIRCUIT

It is checked by the fuses positioned on a terminal block at the line entry.

PROTECTION OF THE CHAMBER FAN

A remote switch stops the fan motor in the event of a malfunction or overload. It is located behind the oven and must be reset manually. When it cuts in, it stops the motor and shuts off the heating elements.

OVEN CHAMBER SAFETY THERMOSTAT

The safety thermostat disconnects the heating elements if the temperature in the oven chamber is too high (644°F). It must be reset manually. If it activates, technical service must be notified. All components are protected by the following type of fuse: **CLASS CC,G 600V 20A**.

REPLACEMENT OF SPARE PARTS

Replacement of spare parts must be performed exclusively by qualified and AUTHORIZED personnel. Turn the main switch OFF and unplug the convection oven before carrying out any spare parts replacement.

REPLACEMENT OF MOTORS: It is necessary to remove the back by removing the 4 fastening screws "A" and the 4 screws "B" that support them (fig.8).

OUTER COVERING: Remove the 4 rear fastening screws "C" (fig.9).

BULB, HEATING ELEMENT AND MOTOR FAN: It is necessary to access the inside of the oven, first removing pans, racks and related supports, and then the conveyor.

30W MOTOR: Remove the fan by following the procedure outlined above, disconnect the motor from the electrical system, loosen the 4 screws and replace the motor. Before re-installing the fan, check that there is no friction between the motor shaft and the ring nut located inside the oven. If there is, loosen the fixing screws of the ring nut and re-tighten them after eliminating the friction and having centered the ring nut on the motor shaft.

HEATING ELEMENTS: Disconnect the heating element connections outside the oven chamber. Loosen the heating elements from inside the oven chamber and replace them.

ELECTRO-MECHANICAL CONTROLS: All the electric components are visible. To replace them it is necessary to disconnect the attachments, remove the knobs, unscrew the fastening screws or nuts and replace them. **Attention:** For theadjustable thermostat, safety thermostat and thermometer, unscrew the guard and the supports and remove the bulbs. Once they have been replaced use high-temperature resistant silicone to seal the holes. After replacement, reseal the holes for the passage of the capillaries with high temperature silicone.

CHAMBER FACE GASKET: It is simply pressed in. Pull to remove it. NB: Before removing it, note its position carefully so as to place the new one in the same position.

REPLACEMENT OF CHAMBER LIGHT AND GLASS GASKET: Check and replace the glass gasket and any lights in the oven chamber (fig. 10).

Figure 7









PART RESERVED FOR THE USER

GENERAL SAFETY STANDARDS



- This manual is part of the documentation provided with the oven and contains all required information for proper use and maintenance of the convection oven.
- Carefully read the user's instructions contained in this manual before turning the oven on. Special attention must be given to the standards concerning the automatic safety and control devices.
- The user must carefully read the instructions in it and keep it where it is accessible to all authorized users;
- The ovens is of a professional type and must be used **only by qualified personnel**, which is the cooking of foods in food service facilities.
- Always turn off the main electrical switch after using the oven, especially during maintenance and repair or in the event of long periods of disuse.
- It is advisable to have the oven checked on a yearly basis by an authorized technical service center.
- The owner of the oven must periodically train their staff on the use of the machines and provide them with safety instructions.
- During cooking, the external parts of the oven (e.g. door glass) may get hot. Be careful when touching them.

GENERAL INSTRUCTIONS FOR USE

- The oven may be used to bake creams, cookies, cakes, sauces and pizza, for au gratin cooking and for defrosting frozen food convection ovens.
- Avoid adding salt to foods in the cooking chamber.
- Try to distribute foods evenly in the pans, avoiding accumulations.
- Between one level and the next there must be a space of at least 1 ½". Hot air must be able to circulate both above and below the food in order for it.
- Do not use pans with sides that are higher than necessary. The sides Create a barrier to air circulation.
- When using the oven for the first time, it is advisable to run it empty at maximum temperature for about an hour. This will
 eliminate any unpleasant odors from protective lubricants used in the factory.
- Leave room between dishes on the same level.
- Preheat the oven. It is always better to place the food in a pre-heated oven.
- During cooking, racks and pans reach very high temperatures. Use caution to prevent burns.

USE OF THE OVEN



KEY TO CONTROL PANEL SYMBOLS

- 1) TIME SETTING KNOB: Sets cooking time from 0 120 minutes or to continuous operation.
- 2) TEMPERATURE SETTING KNOB: Sets chamber temperature from 50 to 520°F

3) ON/OFF MAIN SWITCH

START-UP AND USE

To start the oven, press the main switch (3) ON/OFF. Set the cooking time by turning the time setting knob (1). Then use knob (2) to set the desired cooking temperature. If knob (2) is left in position '0', only the light and fan will operate, and the oven chamber will not heat up.

SWITCHING OFF

Cooking ends automatically when the cooking time set on knob (1) has expired. Nonetheless, turn all knobs to "O" and turn off the main switch (3) ON/OFF.



ROUTINE MAINTENANCE

Before performing maintenance, unplug the oven. During cleaning, use protective gloves, mask and garments as required by standards.

At the end of each workday clean the inside of the oven with appropriate convection ovens following the suggestions of your supplier. Do not use corrosive or acidic convection ovens, or convection ovens which are not suitable for this type of cleaning.

To make cleaning easier, remove the lateral diffusers by lifting them slightly so they are free of the holding pegs.

Clean the stainless steel parts daily with lukewarm soapy water, and rinse thoroughly. Then dry.

Absolutely do not clean the stainless steel with steel wool or common steel brushes, since they may leave ferrous particles which may oxidize, thus causing rust spots.

Stainless steel wool can be used in the direction of the satin finish.

If the oven is not used for long periods, use a cotton ball to lay a coat of petroleum jelly on all surfaces; also regularly ventilate the rooms.

OVEN CHAMBER CLEANING

- Remove any food and/or fat residues from the oven chamber after each cooking cycle.
- The combination of fat, heat and forced circulation dirties the oven. Only by cleaning the oven daily is it possible to avoid difficult cleaning operations.
- To clean the oven, use a suitable de-greasing convection oven (non-foaming) as suggested by your detergent retailer. A spray is preferable to reach behind the protection shield. Do not use abrasive or corrosive substances, scrapers or steel wool (fig.12).
- Adhere to safety instructions included with cleaning convection ovens for the protection of skin and eyes. When cleaning, proceed as follows:
 - a) Heat the oven chamber to approx.158-176°F and clean it using the de-greasing detergent in the recommended quantities.
 - b) Close the oven and heat it.
 - c) Let the cleansing convection oven act for 20-30 minutes and then turn the oven off.
 - d) Slowly open the oven with care to avoid eye and skin damage.



- e) Remove the racks or pans from the oven, remove the rack supports attached to the side and shield, remove the shield by loosening the fastening screws. Wash separately (they can also be placed in the dishwasher).
- f) Clean and rinse the oven and fan with water.
- g) Re-install the shield and the rack supports.
- h) Dry the oven by turning the CONVECTION cycle on.

To make cleaning the oven chamber easier, it is possible to remove the door completely in a few simple steps as shown in figures 13A & 13B. Follow the sequence in reverse order to re-install the door.



CLEANING DOOR GLASS

To reach the inside glass of the oven door, use the lower latch "A", open outer glass "B" raising it from the bottom upwards. This will make it possible to get inside the glass for normal cleaning. Upon completion, close the external glass by pushing it slowly downwards **until the click is heard of insertion in component "A"**.

CLEANING THE FAN

Periodically check the condition of the fan. Make sure that there is not too much grease on the blades since it may slow motor rotation (which in turn may lead to overheating) and uneven heat distribution (resulting in uneven cooking).

WHAT TO DO IN CASE OF A BREAKDOWN OR LONG PERIODS OF INACTIVITY

- Switch off the main electrical switch.
- Set all control panel knobs to zero.
- Inform technical assistance (only in case of a malfunction).
- Clean the oven inside and out.

TROUBLESHOOTING GUIDE

PROBLEM	PROBABLE CAUSE	REMEDY		
Oven does not turn on	Unit unplugged	Check the plug connection and reconnect if necessary		
	Fuses	Check the fuses and replace them if necessary		
	Cables/terminal block	Check the cables connection for loose wire and reconnect if necessary		
	Switch	Check the switch and the voltage at the inlet and outlet. Replace switch if necessary		
	Safety thermostat	Check the safety thermostat and push the red button		
Oven does not warm up	Resistor contactor	Check the voltage at the inlet and outlet of the contactor and replace if necessary		
	Heating element burn out	Replace the heating element		
	Thermostat	Check the temperature with a manual thermometer and if necessary replace the thermostat		
Lights not lit	Switch/lights	Check the switch and the lights and replace if necessary		
Motors do not work	Motor contactor/Motor	Check the voltage at the inlet and outlet of the contactor. Check the motor and replace the contactor or the motor if necessary		
Oven suddenly stops	Safety thermostat	Push the red button on the thermostat		
	Short circuit	Check the fuses and replace them if necessary, if the failure persists check all parts with an appropriate tester in order to find which is the part to replace		



HSO-200

Electric Convection Oven

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PARTS LIST Model: HSO-200 Electric Convection Oven						
POS.	CODE	DESCRIPTION (ENGLISH)	DESCRIPTION (FRENCH)	DESCRIPTIÓN (SPANISH)		
1FI	0014	MONPHASE MOTOR	MOTEUR MONOPHASE	MOTOR MONOFÁSICO		
2M I	0163	HEATING ELEMENT	RESISTANCE	RESISTENCIA		
l1P	0596	THERMOSTAT	THERMOSTAT	TERMOSTATO		
13	0050	TIMER	MINUTEUR	TEMPORIZADOR		
I1Q	0166	THERMOSTAT	THERMOSTAT	TERMOSTATO		
27G	10024	CONTACTOR	CONTACTEUR	CONTAGOR		
38A	0616	GREEN LAMP	TEMOIN VERT	INDICADOR VERDE		
37A	0617	RED LAMP	TEMOIN ROUGE	INDICADOR ROJO		
33E	14075	GASKET	JOINT	JUNTA		
79G	10338	FUSE	FUSIBLE	FUSIBLE		
451	10339	FUSE-HOLDER TERMINAL	PORTE-FUSIBLES	PORTAFUSIBLES		
44	0012	TERMINAL BOARD	BORNIER	BORN ERA		
7Z1	1523.01	DOOR GLASS	VITRE PORTE	PUERTA CRISTAL		
50D	10342	LAMP HOLDER	DOUILLE POUR AMPOULE	PORTA-BOMBILLA		
101	35.0003.01	LAMP 15W	AMPOULE 15W	BOMBILLA 15W		
6AH I	10304	GLASS SEAL	JOINT VITRE	JUNTA DE CRISTAL		
71A	10305	GLASS FOR LAMP HOLDER	VERRE AMPOULE	VETTRO PORTALAMPADA		
136	10306	OVEN LIGHT FIXING FRAME	ENCAD. LAMPE PORTE	ELEM. FIJACIÓN BOMBILLA		
40G	15021	KNOB	MANETTE	MAN DO		
35D	10353	SWITCH	INTERRUPTEUR	INTERRUPTOR		
153E	10586	POWER CORD 3X12	CORDON D'ALIMENTATION	CABLE DE AUMENTACIÓN		
51C	471	CABLE LOCK	SERRE-CABLE	SUJETA CABLES		
47C	0364A	FOOT	PIED	PATAS		
93AH	35365	ASSEMBLY DOOR KIT	KIT ENS. PORTE	CONJUNTO PUERTA HORNO		
95	10951	WIRING	ĈABLAGE	CABLEADO		
129A	20045	TRAY	BAC	CUBETA		
146AG	0020	OVEN RUNG SUPP.	SUPPORT GRILLE	PORTABANDEJAS		
143Q	16754AFO	CONTROL PANEL	BAN DEAU	PANEL DE CONTROL		
96U	35350	BACK	PANNEAU POSTERIEUR	TRASERA		
24	15062	OVEN DOOR HINGE	CHARNIÈRE PORTE DU FOUR	BISAGRA PUERTA HORNO		
39P	35370	HANDLE	POIGNEE	TIRADOR		
69M	35379	PIPE	PIPE	TUBO		
144Q	35355	CONVEYOR	CONVEGEUR	CONVEGOR		
88H	12167	PIN	CHEVILLE	PERNO		
92AS	35360	COVER	COUVERCLE	COBERTURA		
94AT	35373	RH SIDE	COTE DROIT	LADO DERECHO		
94AU	35374	LH SIDE	COTE GAUCH E	LADO IZQUIERDO		

Note: When ordering, ALWAYS specify Part #, Model #, Serial #, Voltage/Phase & type of Gas.



Notes:

APW WYOTT EQUIPMENT LIMITED WARRANTY

APW Wyott Foodservice Equipment Company warrants it's equipment against defects in materials and workmanship, subject to the following conditions:

This warranty applies to the original owner only and is not assignable.

Should any product fail to function in its intended manner under normal use within the limits defined in this warranty, at the option of APW Wyott such product will be repaired or replaced by APW Wyott or its Authorized Service Agency. APW Wyott will only be responsible for charges incurred or service performed by its Authorized Service Agencies. The use of other than APW Wyott Authorized Service Agencies will void this warranty and APW Wyott will not be responsible for such work or any charges associated with same. The closest APW Wyott Authorized Service Agent must be used.

This warranty covers products shipped into the 48 contiguous United States, Hawaii, metropolitan areas of Alaska and Canada. There will be no labor coverage for equipment located on any island not connected by roadway to the mainland.

Warranty coverage on products used outside the 48 contiguous United States, Hawaii, and metropolitan areas of Alaska and Canada may vary. Contact the international APW Wyott distributor, dealer, or service agency for details.

Time Period

One year for parts and one year for labor, effective from the date of purchase by the original owner. The Authorized Service Agency may, at their option, require proof of purchase. Parts replaced under this warranty are warranted for the un-expired portion of the original product warranty only.

Exceptions

*Gas/Electric Cookline: Models GCB, GCRB, GF, GGM, GGT, CHP-H, EF, EG, EHP. Three (3) Year Warranty on all component parts, except switches and thermostats. (2 additional years on parts only. No labor on second or third year.)
 *Broiler Briquettes, Rock Grates, Cooking Grates, Burner Shields, Fireboxes: 90 Day Material Only. No Labor.
 *Heat Strips: Models FD, FDL, FDD, FDDL. Two (2) Year Warranty on element only. No labor second year.
 *Glass Windows, Doors, Seals, Rubber Seals, Light Bulbs: 90 Day Material Only. No Labor.

In all cases, parts covered by extended warranty will be shipped FOB the factory after the first year.

Portable Carry In Products

Equipment weighing over 70 pounds or permanently installed will be serviced on-site as per the terms of this warranty. Equipment weighing 70 pounds or under, and which is not permanently installed, i.e. with cord and plug, is considered portable and is subject to the following warranty handling limitations. If portable equipment fails to operate in its intended manner on the first day of connection, or use, at APW Wyott's option or its Authorized Service Agency, it will be serviced on site or replaced.

From day two through the conclusion of this warranty period, portable units must be taken to or sent prepaid to the APW Wyott Authorized Service Agency for in-warranty repairs. No mileage or travel charges are allowed on portable units after the first day of use. If the customer wants on-site service, they may receive same by paying the travel and mileage charges. Exceptions to this rule: (1) countertop warmers and cookers, which are covered under the Enhanced Warranty Program, and (2) toasters or rollergrills which have in store service.

Exclusions

The following conditions are not covered by warranty:

*Equipment failure relating to improper installation, improper utility connection or supply and problems due to ventilation.

*Equipment that has not been properly maintained, calibration of controls, adjustments, damage from improper cleaning and water damage to controls.

*Equipment that has not been used in an appropriate manner, or has been subject to misuse or misapplication, neglect, abuse, accident, alteration, negligence, damage during transit, delivery or installation, fire, flood, riot or act of god. *Equipment that has the model number or serial number removed or altered.

If the equipment has been changed, altered, modified or repaired by other than an Authorized Service Agency during or after the warranty period, then the manufacturer shall not be liable for any damages to any person or to any property, which may result from the use of the equipment thereafter.

This warranty does not cover services performed at overtime or premium labor rates. Should service be required at times which normally involve overtime or premium labor rates, the owner shall be charged for the difference between normal service rates and such premium rates. APW Wyott does not assume any liability for extended delays in replacing or repairing any items beyond its control.

In all cases, the use of other than APW Wyott Authorized OEM Replacement Parts will void this warranty.

This equipment is intended for commercial use only. Warranty is void if equipment is installed in other than commercial application.

Water Quality Requirements

Water supply intended for a unit that has in excess of 3.0 grains of hardness per gallon (GPG) must be treated or softened before being used. Water containing over 3.0 GPG will decrease the efficiency and reduce the operation life of the unit.

Note: Product failure caused by liming or sediment buildup is not covered under warranty.

"THE FOREGOING WARRANTY IS IN LIEU OF ANY AND ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSES AND CONSTITUTES THE ENTIRE LIABILITY OF APW WYOTT. IN NO EVENT DOES THE LIMITED WARRANTY EXTEND BEYOND THE TERMS STATED HEREIN."

