Commercial Refrigerator And Freezer User’s Manual

Refrigerated Pizza Prep Units
178APPT71HC

Refrigerated Sandwich Prep Units
178APT27HC, 178APT27MHC, 178APT48HC, 178APT48MHC,
178APT60HC, 178APT60MHC, 178APT71HC, 178APT71MHC

Please read the manual thoroughly prior to equipment set-up, operation and maintenance.
Warning

DANGER – RISK OF FIRE OR EXPLOSION. FLAMMABLE REFRIGERANT USED. TO BE REPAIRED ONLY BY TRAINED SERVICE PERSONNEL. DO NOT PUNCTURE REFRIGERANT TUBING.

PELIGRO - RIESGO DE INCENDIO O EXPLOSION. REFRIGERANTE INFLAMABLE UTILIZADO. PARA SER REPARADO SOLAMENTE POR PERSONAL DE SERVICIO CALIFICADO. NO PINCHAR LA TUBERÍA REFRIGERANTE.

DANGER – RISQUE DE FEU OU D’EXPLOSION. LE FRIGORIGÈNE EST INFLAMMABLE. CONFIER LES RÉPARATIONS À UN TECHNICIEN SPÉCIALISÉ. NE PAS PERFORER LA TUBULURE CONTENANT LE FRIGORIGÈNE.

CAUTION – RISK OF FIRE OR EXPLOSION. FLAMMABLE REFRIGERANT USED. CONSULT REPAIR MANUAL/OWNER’S GUIDE BEFORE ATTEMPTING TO SERVICE THIS PRODUCT. ALL SAFETY PRECAUTIONS MUST BE FOLLOWED.

ATENCION - RIESGO DE INCENDIO O EXPLOSIÓN. REFRIGERANTE INFLAMABLE UTILIZADO. CONSULTE EL MANUAL DE REPARACIÓN / GUÍA DEL PROPIETARIO ANTES DE INTENTAR DAR SERVICIO A ESTE PRODUCTO. DEBEN CUMPLIR CON TODAS LAS PRECAUCIONES DE SEGURIDAD.

ATTENTION – RISQUE DE FEU OU D’EXPLOSION. LE FRIGORIGÈNE EST INFLAMMABLE. CONSULTER LE MANUEL DU PROPRIÉTAIRE/GUIDE DE RÉPARATION AVANT DE TENTER UNE RÉPARATION. TOUTES LES MESURES DE SÉCURITÉ DOIVENT ÊTRE RESPECTÉES.

CAUTION – RISK OF FIRE OR EXPLOSION DUE TO PUNCTURE OF REFRIGERANT TUBING; FOLLOW HANDLING INSTRUCTIONS CAREFULLY. FLAMMABLE REFRIGERANT USED.

ATENCION - RIESGO DE INCENDIO O EXPLOSIÓN DEBIDO A LA PERFORACION DE LA TUBERÍA REFRIGERANTE; SIGA LAS INSTRUCCIONES DE MANIPULACIÓN CON CUIDADO. REFRIGERANTE INFLAMABLE UTILIZADO.

ATTENTION – RISQUE DE FEU OU D’EXPLOSION SI LA TUBULURE CONTENANT LE FRIGORIGÈNE EST PERFORÉE; SUIVRE LES INSTRUCTIONS DE MANUTENTION AVEC SOIN. LE FRIGORIGÈNE EST INFLAMMABLE.

CAUTION – RISK OF FIRE OR EXPLOSION DUE TO FLAMMABLE REFRIGERANT USED. FOLLOW HANDLING INSTRUCTIONS CAREFULLY IN COMPLIANCE WITH LOCAL GOVERNMENT REGULATIONS.

ATENCIÓN – RIESGO DE INCENDIO O EXPLOSIÓN DEBIDO A REFRIGERANTE INFLAMABLE UTILIZADO. SIGA LAS INSTRUCCIONES DE MANIPULACIÓN CON CUIDADO CONFORME A LAS REGLAS DE LA MUNICIPALIDAD.

ATTENTION – RISQUE DE FEU OU D’EXPLOSION SI LE FRIGORIGÈNE EST INFLAMMABLE. SUIVRE LES INSTRUCTIONS DE MANUTENTION AVEC SOIN CONFORMÉMENT AUX RÈGLEMENTATION GOUVERNEMENTALE LOCAUX.
Installation

Important!!! Please Read Before Installation

• If the shelf has a raised lip, the lip needs to be installed facing up towards the rear of the cabinet to promote proper air flow. Failure to install the shelves properly is considered user-error and is not covered by warranty.

• If the unit has recently been transported on its side, please let unit stand still for a minimum of 24 hours before plugging it in.

• Make sure that the unit drops down to desired temperature before loading the unit with product.

• Make sure that there is proper ventilation around the unit in the area where it will operate.

• Make sure all accessories are installed (i.e.. Shelves, shelf clips, casters) before plugging the unit in.

• Please read through the manual in its entirety.

Cabinet Location Guidelines

• Install the unit on strong and leveled surfaces
  - Unit may be noisy and/or malfunction if surface is uneven.

• Install the unit in an indoor, well-ventilated area
  - For best performance, please maintain clearance of 4" on the back of the unit. Brackets should be attached on the back of the unit.
  - Outdoor use may cause decreased efficiency and damage to the unit.

• Avoid installation in a high humidity and/or dusty area
  - Humidity could cause unit to rust and decrease efficiency of the unit.
  - Dust collected on condenser coil will cause unit to malfunction.
  - Malfunction due to dirty condenser will void warranty.

• Select a location away from heat and moisture-generating equipment
  - High ambient temperatures will cause the compressor to overwork, leading to higher energy bills and gradual breakdown of the unit.
  - With the lid open, the unit should not be used in areas over 80 degrees. The unit should not be used in areas over 90 degrees.
  - Malfunction due to high ambient temperature will void warranty.

• For optimal performance, 3” of clearance is required around all louvered or vented panels, to allow for proper air flow
  - For your convenience, a set of brackets is included to prevent this unit from being pushed up against a wall
  - Component failure due to improper installation is not covered under warranty.
**Electrical**

- Please ensure that the required voltage of the compressor is being supplied at all times. Low or high voltage can detrimentally affect the refrigeration unit.
- All units should be plugged into a grounded and properly-sized electrical outlet with appropriate overcurrent protection. Please refer to the electrical requirements on the nameplate.
- Please make sure that your unit has its own dedicated outlet.
- Do not use an extension cord.

**Temperature Controls**

- Refrigerant LED - Compressor is on
- Fan LED - Fan is on
- Defrost LED - Defrost cycle is running

**Functions**

**Adjusting the Temperature**

Your new refrigerator or freezer is already factory-set to run at optimum temperatures for food safety and should require no adjustments.

Refrigerators are set to cycle between a minimum temperature of 33 degrees Fahrenheit and a maximum temperature of 40 degrees Fahrenheit.

Adjusting the temperature changes the **minimum** temperature your unit will run at. Your unit will not run constantly at this setting. To change it, follow these instructions:

**Digital Control Units**

- Hold “SET” for 1 sec. The display will flash the current minimum temperature.
- Use the arrow buttons to adjust the minimum temperature you want it to run at.
- Press “SET” again to save your settings

Always remember to calculate the differential if you change the minimum temperature setting. The cabinet temperature will fluctuate up to +7 degrees over your set minimum temperature as the compressor runs and shuts off. Setting the temperature too high will result in unsafe maximum temperatures.
Loading Product

Before loading shelves, please be sure that all shelf clips are completely fastened in their correct locations. It is important that all shelves rest completely level before stocking your cabinet with product. In order to maintain correct air flow inside the unit, please be sure to leave two to four (2 to 4) inches of space between the back wall and stored product. Blocking the evaporator fans will result in a warmer cabinet temperature, and ultimately compressor failure.

Running a Manual Defrost Cycle

This unit is pre-programmed to run automatic defrost cycles at preset intervals. However, if you would like to run a manual defrost cycle at any time, please follow the steps below:

Refrigerators: Press the defrost button (snowflake symbol and down arrow) for approximately 3 seconds. Repeat to stop the defrost cycle.

Defrost Systems

Refrigerator coils are kept below the freezing point (32° F). During compressor down-time, the evaporator fan continues to circulate air through the evaporator coil. This air circulation raises the coil temperature above the freezing point, melting any accumulated frost. Run-off water is drained into the evaporator pan and evaporated. Freezer coils are defrosted electrically. Automatic defrost timers automatically initiate at pre-set intervals and for a pre-determined duration.

Loading Food Pans

Pizza prep units and sandwich prep units are designed to function with all pans in place, even if some pans are to be left empty. For maximum food freshness, fill the pans only with an amount that can be used in a specific usage period. During non-use, please close the insulated lid cover.
Safety / Warning

Please pay close attention to the safety notices in this section. Disregarding these notices may lead to serious injury and/or damage to the unit.

**Attention**

- To minimize shock and fire hazards, be sure not to overload outlet. Please designate one outlet for your unit.
- Do not use extension cords.
- Do not put your hands under the unit while it is being moved.
- When the unit is not in use for a long period of time, please unplug the unit from the outlet.
- After unplugging the unit, wait at least 10 minutes before plugging it back in. Failure to do so could cause damage to the compressor.

**Unplug Cord**

- To minimize shock and fire hazards, please do not plug or unplug the cord with wet hands.
- During maintenance and cleaning, please unplug the unit.

**Proper Grounding Required**

- To minimize shock and fire hazards, make sure that the unit is properly grounded.

**Warning**

- Do not attempt to remove or repair any component unless instructed by factory.
- Make sure that the unit is not resting on or against the electrical cord and plug.
- To minimize personal injury, do not hang on the doors.
- Do not store any flammable and explosive gas or liquids inside the unit.
- Do not attempt to alter or tamper with the electrical cord.
# Food Pan Layouts:
## Standard Top

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Dimensions</th>
<th>Pan Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>178APT27HC</td>
<td>(6) 1/6 Size, (2) 1/9 Size</td>
<td>24.25&quot;</td>
<td>(6) 1/6 Size, (2) 1/9 Size</td>
</tr>
<tr>
<td>178APT48HC</td>
<td>(12) 1/6 Size, (6) 1/3 Size</td>
<td>42.5&quot;</td>
<td>(12) 1/6 Size, (6) 1/3 Size</td>
</tr>
<tr>
<td>178APT60HC</td>
<td>(16) 1/6 Size, (8) 1/3 Size</td>
<td>56.25&quot;</td>
<td>(16) 1/6 Size, (8) 1/3 Size</td>
</tr>
<tr>
<td>178APT71HC</td>
<td>(18) 1/6 Size, (9) 1/3 Size</td>
<td>66&quot;</td>
<td>(18) 1/6 Size, (9) 1/3 Size</td>
</tr>
<tr>
<td>178APPT71HC</td>
<td>(9) 1/3 Size</td>
<td>63.3&quot;</td>
<td>(9) 1/3 Size</td>
</tr>
</tbody>
</table>

### Diagrams
- [178APT27HC Diagram](#)
- [178APT48HC Diagram](#)
- [178APT60HC Diagram](#)
- [178APT71HC Diagram](#)
## Mega Top

### 178APT71MHC

(30) 1/6 Size

<table>
<thead>
<tr>
<th>6.5&quot;</th>
<th>6.5&quot;</th>
<th>6.5&quot;</th>
<th>6.5&quot;</th>
<th>6.5&quot;</th>
<th>6.5&quot;</th>
<th>6.5&quot;</th>
<th>6.5&quot;</th>
<th>6.5&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.5&quot;</td>
<td>66&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 178APT60MHC

(24) 1/6 Size

<table>
<thead>
<tr>
<th>6.5&quot;</th>
<th>6.5&quot;</th>
<th>6.5&quot;</th>
<th>5.5&quot;</th>
<th>6.5&quot;</th>
<th>6.5&quot;</th>
<th>6.5&quot;</th>
<th>6.5&quot;</th>
<th>6.5&quot;</th>
<th>6.5&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.5&quot;</td>
<td>56.25&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 178APT48MHC

(18) 1/6 Size

<table>
<thead>
<tr>
<th>6.5&quot;</th>
<th>6.5&quot;</th>
<th>3.3&quot;</th>
<th>6.5&quot;</th>
<th>6.5&quot;</th>
<th>6.5&quot;</th>
<th>6.5&quot;</th>
<th>6.5&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.5&quot;</td>
<td>42.25&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 178APT27MHC

(9) 1/6 Size, (3) 1/9 Size

<table>
<thead>
<tr>
<th>6.5&quot;</th>
<th>6.5&quot;</th>
<th>6.5&quot;</th>
<th>4.33&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.5&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- 8 -
# Food Pan Divider Bars:

<table>
<thead>
<tr>
<th>ITEM #</th>
<th>SIZE</th>
<th>APT27HC</th>
<th>APT48HC</th>
<th>APT60HC</th>
<th>APPT71HC</th>
<th>APT-71-HC</th>
</tr>
</thead>
<tbody>
<tr>
<td>178SCLB15354</td>
<td>13 15/16” x 9/16”</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>178SCLB15327</td>
<td>12 7/8” x 9/16”</td>
<td>2</td>
<td>2</td>
<td></td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>178SCLB25354</td>
<td>13 15/16” x 1”</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>178SCLB25327</td>
<td>12 7/8” x 1”</td>
<td>5</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>178PICB15331</td>
<td>13” x 9/16”</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>178PICB25331</td>
<td>13” x 1”</td>
<td></td>
<td></td>
<td>8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

# Food Pan Divider Bars: A-PT-M

<table>
<thead>
<tr>
<th>ITEM #</th>
<th>SIZE</th>
<th>APT-27-MHC</th>
<th>APT-48-MHC</th>
<th>APT-60-MHC</th>
<th>APT-71-MHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>178SCLB15532</td>
<td>20 15/16” x 9/16”</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>178SCLB25532</td>
<td>20 15/16” x 1”</td>
<td>3</td>
<td>6</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>178SCLB90532</td>
<td>20 15/16” x 3 3/16”</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>178SCLB10853</td>
<td>20 15/16” x 4 1/4”</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
Regular Maintenance

WARNING: DISCONNECT POWER CORD BEFORE CLEANING ANY PARTS OF THE UNIT.

Cleaning The Condenser Coil
• For efficient operation, it is important that the condenser surface be kept free of dust, dirt, and lint.
• We recommend cleaning the condenser coil and fins at least once per month.
• Clean with a commercial condenser coil cleaner, available from any kitchen equipment retailer.
  Brush the condenser fins from top to bottom, not side to side.
• After cleaning, straighten any bent condenser fins with a fin comb.

Cleaning The Fan Blades and Motor
If necessary, clean the fan blades and motor with a soft cloth. If it is necessary to wash the fan blades, cover the fan motor to prevent moisture damage.

Cleaning The Interior of Unit
• When cleaning the cabinet interior, use a solvent of warm water and mild soap.
• Do not use steel wool, caustic soap, abrasive cleaners, or bleach that may damage the stainless steel surface.
• Wash door gaskets on a regular basis, preferably weekly. Simply remove door gasket from the frame of the door, soak in warm water and soap for thirty (30) minutes, dry with soft cloth, and replace.
• Check door gaskets for proper seal after they are replaced.
• Periodically remove the shelves and pilasters from the unit and clean them with mild soap and warm water. To remove the pilasters, first remove the shelves and shelf brackets. Then, simply lift the pilaster up and out.
## Troubleshooting

### Compressor Not Running

<table>
<thead>
<tr>
<th>Issue</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuse blown or circuit breaker tripped.</td>
<td>Replace fuse or reset circuit breaker.</td>
</tr>
<tr>
<td>Power cord unplugged.</td>
<td>Plug in power cord.</td>
</tr>
<tr>
<td>Thermostat set too high.</td>
<td>Set thermostat to lower temperature.</td>
</tr>
<tr>
<td>Cabinet in defrost cycle.</td>
<td>Wait for defrost cycle to finish.</td>
</tr>
</tbody>
</table>

### Condensing Units Run For Long Periods of Time.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excessive amount of warm product placed in cabinet.</td>
<td>Allow adequate time for product to cool down.</td>
</tr>
<tr>
<td>Prolonged door opening or door ajar.</td>
<td>Ensure doors are closed when not in use. Avoid opening doors for long periods of time.</td>
</tr>
<tr>
<td>Door gasket(s) not sealing properly.</td>
<td>Ensure gaskets are snapped in completely. Remove gasket and wash with soap and water. Check condition of gasket and replace if necessary.</td>
</tr>
<tr>
<td>Dirty condenser coil.</td>
<td>Clean the condenser coil.</td>
</tr>
<tr>
<td>Evaporator coil iced over.</td>
<td>Unplug unit and allow coil to defrost. Make sure thermostat is not set too cold. Ensure that door gasket(s) are sealing properly.</td>
</tr>
</tbody>
</table>

### Cabinet Temperature is too Warm.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermostat set too warm.</td>
<td>Set thermostat to lower temperature.</td>
</tr>
<tr>
<td>Airflow blocked.</td>
<td>Re-arrange product to allow for proper air flow. Make sure there is at least four inches of clearance from evaporator.</td>
</tr>
<tr>
<td>Excessive amount of warm product placed in cabinet.</td>
<td>Allow adequate time for product to cool down.</td>
</tr>
<tr>
<td>Fuse blown or circuit breaker tripped.</td>
<td>Replace fuse or reset circuit breaker.</td>
</tr>
<tr>
<td>Dirty condenser coil.</td>
<td>Clean the condenser coil.</td>
</tr>
<tr>
<td>Evaporator coil iced over.</td>
<td>Ensure doors are closed when not in use. Avoid opening doors for long periods of time.</td>
</tr>
</tbody>
</table>
**Warranty Information**

**Limited Service Warranty - Valid only in the United States**

**1 Year Parts and Labor Warranty**

Unless otherwise stated, Avantco Refrigeration warrants to the original purchaser of new Avantco Refrigeration units (and all parts thereof), that such equipment will be free from defects in material and workmanship for a period of 1 year from the date of delivery.

**5 Year Compressor Warranty**

In addition to the 1 year parts and labor warranty above, Avantco Refrigeration warrants the compressor on select units to be free of defects in material and workmanship for a period of 5 years from the date of delivery. This additional warranty applies to the following product series:

- UBB, UDD, PICL, SCL, MC, JBC, GDC, CFD, CBE, SSPT, APT, APPT, SS, HBB, GF, A-Series,
- VAC, CP, BC, MC, SSUC, SSWT, GF, DLC

On products without the 5 year compressor warranty, the compressor is covered for 1 year under the standard parts and labor warranty.

**What This Warranty Does Not Cover:**

Avantco Refrigeration will not warrant coverage for component failure or other damages that arise under the following conditions:

- Failure to install and/or use the unit within proper operating conditions specified by Avantco Refrigeration.
- Failure to properly maintain the unit. This includes, but is not limited to, basic preventative maintenance like cleaning the condenser coil.
- Installation in non-commercial or residential applications.
- Products sold or used outside of the United States.
- Any damage that occurs as a result of negligence or improper handling.
- Overloading or improper loading of the unit in a manner that prevents proper airflow.

Additionally, no claims can be made against this warranty for spoilage of products, loss of sales or profits, or any other consequential damages.

Normal wear type parts, such as light bulbs and gaskets, are not included in warranty coverage.

**For Warranty Inquiries or Service:**

This warranty is only valid on equipment purchased from an authorized dealer. A list of authorized dealers for your state can be found by going to avantcorefrigeration.com.

- Locate the model number (located on the front of the unit, or inside the door jamb).
- Locate the bold number on the service plate (located on the front of the unit).

Next, call 1-800-678-5517. You must have the model number and service plate number when contacting service technicians.

Failure to contact Avantco Refrigeration prior to obtaining equipment service may void your warranty.