



## Commercial Refrigerator And Freezer User's Manual

### ***Reach-in Refrigerator And Freezer***

08/2018

***Refrigerator model: 178SS1RHC, 178SS2RHC, 178SS3RHC***

***Freezer model: 178SS1FHC, 178SS2FHC, 178SS3FHC***

***Glass Door Refrigerator model: 178SS1RGHC, 178SS2RGHC***

***Half Door Refrigerator model: 178SS1R2HC, 178SS2R4HC***

***Half Door Freezer model: 178SS1F2HC, 178SS2F4HC***

***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.

ATENCIÓN - 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.

ATENCIÓN - 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

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

### **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 the unit stand upright for a minimum of 24 hours before plugging it in.
- Make sure the unit has reached the desired temperature before loading the unit with products.
- Make sure all accessories are installed (shelves, shelf clips, etc...) before plugging in the unit.
- Do not attempt to remove or repair any component of the unit. Consult an authorized service technician for servicing / repair.
- Do not hang on doors or stand inside the unit.
- Please read through this manual in its entirety.

### **Field Convertible Doors**

The Avantco 178SS1RHC and 178SS1FHC both ship with a right-hinged door design. If you would like to convert the reach-in to a left hinged door design (solid door models), you must purchase the left hinges separately (Avantco item #178SS1KITFR ) and follow these instructions:

#### **Tools Needed:**

Socket Set  
Pliers  
Adjustable Wrench  
Phillips Head Screwdriver

1. Remove the bottom vent, which is held on by loosening the 4 Phillips head screws that hold it on. You do not need to remove the whole way, as the vent will slide up and out.
2. Remove the top panel next. It is held on with 2 small screws. Once the screws are out, the top panel will hinge up.
3. Remove the small Philips head screws at the top and bottom door hinge where it attaches to the brackets. Be careful not to lose the small washers.
4. Next take off the top bracket. It is held on with 3 bolts.

5. The door should come off at this point.
  - **Note:** Do not lose the small round brass spacer on the bottom hinge!
6. Remove the bottom bracket. It is held on with 3 bolts.
7. Replace the bottom hinge with the new left hand bottom bracket. It is held on with 3 bolts.
8. At this point, you will need to adjust the top and bottom spring tensioners so the door will close properly.
9. Put the door on the bottom hinge on the left side. You will need to reuse the brass spacer from step 5.
10. Next, place the top bracket on the top of the door before bolting it to the unit with the 3 bolts.
11. Replace the small screws on the top and bottom of the bracket and door spring. Make sure the door is on properly before you do this.
12. Reattach the bottom vent and the top panel

## ***Cabinet Location Guides***

- Install the unit on a strong and leveled surface.
  - If the surface is uneven, the unit may be noisy.
  - The unit may malfunction if the surface is uneven.
- Install the unit in an indoor, well ventilated area.
  - For best performance, maintain 6" of clearance on both sides and the back of the unit at all times.
  - Outdoor use may cause decreased efficiency and damage to the unit.
  - Avoid direct sunlight.
- Avoid installation in a high humidity and / or dusty area.
  - High humidity can cause the unit to rust and may decrease efficiency.
  - Dust collected on the condenser coil may cause unit to malfunction.
  - Malfunction due to high ambient temperatures, humidity, or improperly maintained condenser coil will void the warranty.
- Select a location away from heat and moisture-generating equipment.
  - High ambient temperatures may cause the compressor to malfunction.
  - Malfunction due to high ambient temperatures and humidity will void the warranty.

## **Electrical**

- Please ensure that the required voltage is being supplied at all times.
- The unit should be plugged into a grounded and properly-sized electrical outlet with appropriate over-current protection. Please refer to the electrical requirements on the unit's nameplate.
- The unit should have its own dedicated outlet.
- Do not use extension cords.
- Ensure the unit is not resting on or against the electrical cord.
- If the unit is not in use for a long period of time, please unplug the unit from the outlet.
- To avoid shock and fire hazards, do not plug in or unplug the unit with wet hands.
- After unplugging the unit, wait at least 10 minutes before plugging it back in. Failure to do so could cause damage to the compressor.

## **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.

Freezers are set to cycle between a minimum temperature of -5 degrees Fahrenheit and a maximum temperature of 2 degrees Fahrenheit.

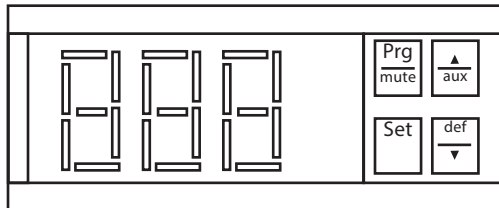
Adjusting the temperature changes the **minimum** temperature your unit will run at. Your unit will not run constantly at this setting. To change it, follow these instructions:

### **Digital Control Units**

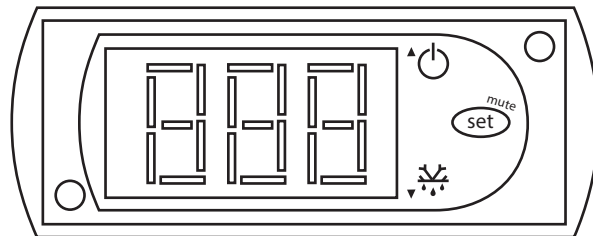
- Hold "SET" for 1 sec. The display will flash the current minimum temperature.
- Use the arrow buttons to adjust the minimum temperature you want it to run at.
- Press "SET" again to save your settings

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 and possible health code violations.

Freezer Control



Refrigerator Control



## 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:

**Freezers:** Press the defrost button (“def” and down arrow) for approximately 5 seconds. Repeat to stop the defrost cycle.

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

## Defrost System

Refrigerator coils are kept below the freezing point (32 degrees Fahrenheit). 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.

## Operation/Maintenance

**NOTE:** We strongly recommend that any servicing be performed by an authorized service technician.

### Loading Product

- Do not block the air duct / fan at the top of the unit. Maintain a minimum of 4” of clearance between products and the fan at all times.
- Ensure all shelves are sitting level and properly secured before loading products.
- Do not store flammable and explosive gas or liquids inside the unit.

### Cleaning the Condenser Coil

- For efficient operation, keep the condenser surface free of dust, dirt, and lint.

- We recommend cleaning the condenser coil at least once per month.
- Clean the condenser with a commercial condenser coil cleaner, available from any kitchen equipment retailer.

## ***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 interior finish.
- Wash door gaskets on a regular basis, preferably weekly. Simply remove the door gasket from the frame of the door, soak it in warm water and soap for thirty (30) minutes, then dry with soft cloth and replace.
- Check door gaskets for proper seal after they are replaced.
- Periodically remove the shelves and shelf brackets from the unit, and clean them with a mild soap and warm water.



## Trouble Shooting

### ***Compressor is Not Running***

Fuse blown or circuit breaker tripped.	Replace fuse or reset circuit breaker.
Power cord unplugged.	Plug in power cord
Thermostat set too high.	Set thermostat to lower temperature.
Cabinet in defrost cycle.	Wait for defrost cycle to finish.

### ***Cabinet Temperature is too Warm***

Thermostat is set too high.	Set thermostat to lower temperature.
Airflow is blocked.	Re-arrange products to allow for proper air flow. Make sure there is at least four inches of clearance from the fan.
Low refrigerant levels.	Contact a service technician to check refrigerant levels.
Door is slightly ajar.	Make sure door is completely closed.

### ***Interior Light is Not Working***

Poor switch connection.	Turn off light switch and turn it back on.
Bulb is not connected.	Make sure the bulb is correctly inserted in the socket.
Bulb has burned out.	Replace the bulb.

### ***Condensation is Collecting on the Cabinet and/or Floor***

Gasket is not sealing properly.	Clean, repair, or replace the gasket as necessary.
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## 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](http://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.**