



HC Slide-In Refrigerator

Equipment Manual

H&K Model Number HCPPTB.01P



This manual is for the exclusive use
of licensees and employees of
McDonald's Systems Inc.

Manufactured by:

H&K International
2200 Skyline Drive
Mesquite, TX 75149 U.S.A.

Telephone: (214) 818-3500
Fax: (214) 818-3596

Distributed by:

H&K International
2200 Skyline Drive
Mesquite, TX 75149 U.S.A.

Telephone: (214) 818-3500
Fax: (214) 818-3596



Table of Contents

Warnings	3
Introduction	4
Power Requirements	4
Installation Instruction.....	4
Inspection.....	4
Uncrate the Unit	4
Remove Packing & Loose Components	5
Wash and Sanitize Unit Interior & Shelving Components	5
Location.....	5
Installation	6
Operating Instructions	9
Temperature Setting.....	9
Operating Procedure.....	9
Loading and Restocking	10
Cleaning.....	10
Preventative Maintenance.....	11
Clean the Condenser Coils (Quarterly)	11
Check the Door Gasket (Quarterly).....	11
Product Warranty	12
Special Conditions.....	12
Troubleshooting.....	13
Assembly Drawing & Wiring Diagram	15
Refrigeration Specification.....	17
Replacement Parts.....	17
Controller Setting.....	18



This unit contains a flammable refrigerant.
Exercise caution when installing and servicing
this item. See page 3 of this manual for details

Warnings

This Installation & Operating Manual contains important instructions and safety information. Read and understand the contents of this manual before attempting to install, operate, or service the unit.

Disconnect all power sources before attempting any service work. A licensed technician should do all servicing and repairs.

Use of abrasive pads to clean the unit will result in scratching and spoiling the finish of the unit.

Do not leave the door open for extended period of time.

CAUTION: This unit contains a flammable refrigerant:

- Under no circumstances can a mechanical device be used to defrost evaporator.
- Do not puncture refrigeration tubing.
- The unit is to be repaired by only a trained technician with experience with flammable refrigerants.
- Consult this manual before attempting to install or service a product with a flammable refrigerant.
- Unit must be disposed of in accordance with Federal or local regulations.



Introduction

The High Capacity Slide-In Refrigerator is designed to hold products between 33- 41°F temperature during normal and peak sales periods. This new innovative design has 22% storage capacity increased over the previous version, and significant energy consumption reduction.

Power Requirements

All electrically operated appliances must be electrically grounded in accordance with local codes, or in the absence of local codes, with National Electric Code, ANSI/NFPA No. 70-1990.

Power supply:
115V/60hz/1ph Current =
2 Amps
Maximum Fuse/Circuit Breaker = 15A

Installation Instruction

Installation of this equipment must be completed by qualified personnel in compliance with all manufacturer's instructions and local building, food safety and electric codes.

Inspection

Upon receipt, examine the equipment carefully for any damage. If damage has occurred, notify the freight carrier and H&K immediately.

Uncrate the Unit

This unit will arrive crated in a skid-mounted carton.

Caution! The shipping container may have staples, nails, banding under tension and possible wood splinters, which can cause injuries. Wear gloves and eye protection to reduce the risk of injury when uncrating.

- Cut the banding holding the cardboard carton to the shipping pallet, using heavy scissors or tin snips. Use caution to avoid contact with cut banding.
- Lift the cardboard carton straight up and off the unit.
- Cut the banding that holds the refrigerator to the shipping pallet or skid.
- Use caution to avoid contact with the cut banding.

***Note: Leave unit on skid until ready to install**

- Peel the protective adhesive film from all exposed areas (front, sides, and interior).

Caution! This unit is very heavy; do not attempt to remove this unit from its packaging without assistance.

Remove Packing & Loose Components



Remove any tape and foam blocking used to secure the loose components.

Wash and Sanitize Unit Interior & Shelving Components

Note! Use only McDonald’s approved cleaning and sanitizing agents according to instructions.

Wipe down, sanitize and dry the refrigerator interior.

Pre-Installation Checklist

	Ensure floor is level where unit is to be installed.
	Power receptacle within 72" (1828 mm) to plug in unit

Location

The slide-in refrigerator has been designed to fit inside the Prep Table and it’s for the Prep Table only!

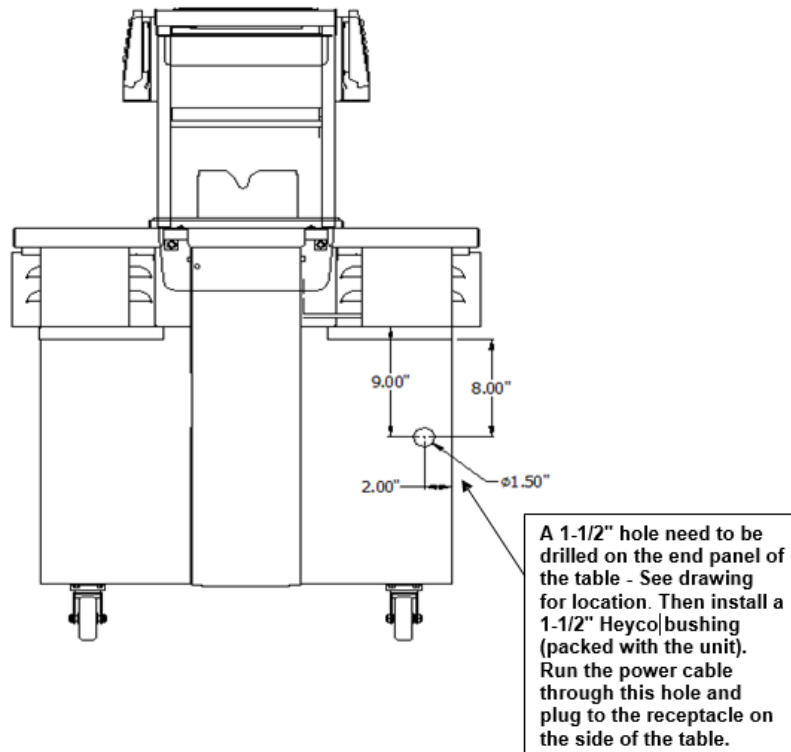
Installation

Follow the 7 step by step instructions as shown below:

1. Remove the shelf or the old refrigerator. Knock off all the studs on the end panel, see pictures for details. Clean any obstacles that may stick the new refrigerator from sliding into the tab

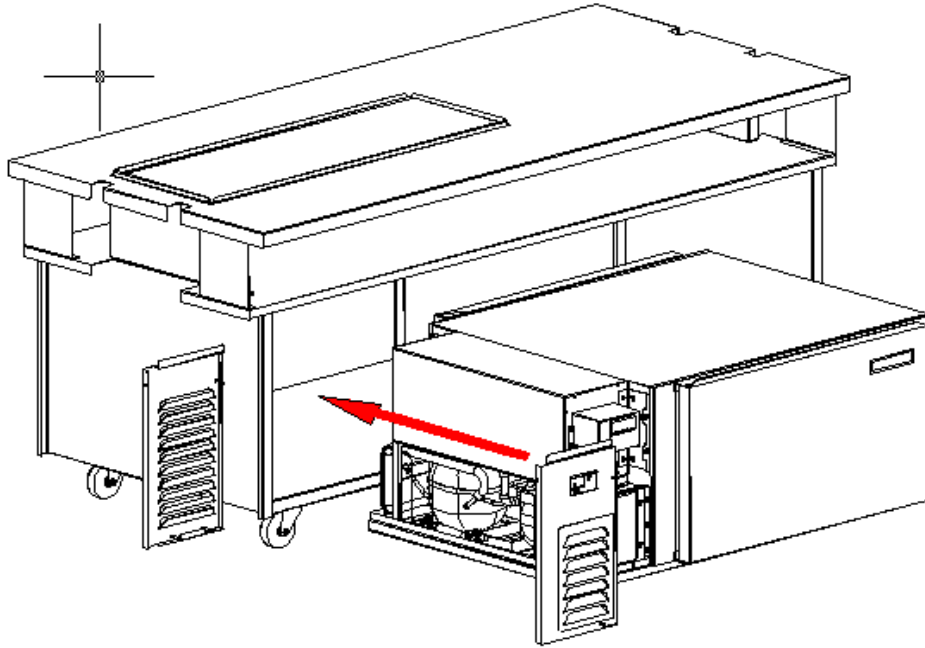


2. Drill a 1-1/2" diameter hole on the leg panel. See the attached drawing for the hole location dimension. Install the 1-1/2" Heyco Bushing



HC Slide-In Refrigerator

3. Remove the two Louver panels on the new refrigerator. Then slide the refrigerator all the way into the table. Align the base of the refrigerator with the base of the table; put silicon along the joint of the refrigerator and the table.



Install the 2
louver panels

Align base of the
refrigerator with
base of the table

4. Run the Power cord of the refrigerator through the new-drilled hole and plug to the receptacle on the side of the table. The evaporator fan should be on immediately, the compressor and condenser fan should be on in 2 minutes. Check to make sure both fans and compressor are running normally.



5. Install the 2 Louver panels.
6. The controller is already preset, no field setting needed. Let the unit run about 30 minutes, the refrigerator should pull down to 38F.
7. Job is done. The refrigerator is ready to use.

Operating Instructions






Temperature Setting

The HCPPT has been tested and preset at the factory to maintain a temperature between 33°F (0°C) and 41°F (5°C). The temperature controller located on the front panel displays the internal temperature of the refrigerator.

To view current set point or if the temperature is not reading within the range specified above, the electronic controller can be adjusted using the following procedure:



SETPOINT

- Press  button for at least half second, to display the set point value.
- By keeping  button pressed, use button  or  to set the desired value.
- When  button is released, the new value is

confirmed. A complete manual of the controller is attached with unit.

Operating Procedure

Start-Up: The refrigerator is turned ON by plugging the cord into the outlet on side panel of the table. The evaporator fan shall run immediately, the compressor & the condenser fan shall run after 1 minute delay. Let the unit run for 30 minutes before placing product in the refrigerator.

Temperature Setting: The unit has been tested at the factory and the control has been preset to maintain a temperature between 33 and 41°F (1 and 5°C).

Condensate Disposal: The condensate from the refrigerator is disposed via a drain to a condensate evaporator located in the base of the condensing unit.

Loading and Restocking

- **DO NOT** over-load the refrigerator. All refrigeration requires good air circulation to maintain uniform temperatures.
- **DO NOT** let plastic bags, packaging or containers block or obstruct the evaporator air intake and return openings.
- **DO NOT** leave the door open, except to remove product or to restock.

Cleaning

Caution! Do not use a pressurized spray to clean the HCPPT.

Caution! Do not use abrasives or strong chemicals to clean any surfaces of the HCPPT.

Warning! Do not spray liquids directly onto the power switch, into the compressor compartment at the top of the cabinet, or into the evaporator. Doing so will void the warranty and risk serious personal injury.

Exterior Cleaning

The exterior of the unit must be cleaned using a clean towel with EXCEED Glass & Multi-Surface Cleaner. Do not use abrasive cleaners to clean the exterior of the cabinet as this might damage the stainless steel finish. Do not use steel wool or any strong chemicals.

Interior Cleaning

The anodized aluminum interior of the refrigerator must be cleaned using a clean towel with EXCEED Glass & Multi-Surface Cleaner. Do not allow liquid to puddle in the unit. Wipe the inner liner dry after cleaning.

Preventative Maintenance

Warning! Failure to properly perform scheduled preventative maintenance may void manufacturer's warranty.

WARNING! Verify refrigerator is disconnected from the power source before attempting any preventative maintenance. Failure to disconnect the electric power could result in electric shock, burns, injuries or death.

CAUTION! The fins on a condenser coil are very sharp, and some refrigeration components can be very hot, resulting in possible cuts and/or burns. Avoid physical contact with the fins on the condenser coil or any related refrigeration lines. Gloves are recommended when accessing the internal components of any refrigerated equipment.

Clean the Condenser Coils (Quarterly)

For proper operation of the condensing unit, the condenser fins should be cleaned every one (1) quarter. The front grill is designed to be removable without the use of tools for this purpose.

Tools:

- Brush
- Safety Gloves

Procedure

1. Remove appropriate cover to access fins to be cleaned.
2. Carefully brush any remaining greasy dust or debris.
3. Replace cover after cleaning.



Check the Door Gasket (Quarterly)

Check to see if door gasket is broken. If the door gasket is broken, and cannot seal the cabinet properly, please call 1-800-521-3987 to order replacement gasket.

Product Warranty

H&K International makes the following limited warranties to the original purchaser only for this equipment and replacement parts:

H&K warrants all components to be free of defects in material and workmanship, if properly installed, operated and maintained, for period of (2) years from the date of the delivery.

The company's obligation under this warranty is limited to repairing or replacing any part or parts of the refrigerator determined to be defective by an authorized representative of H&K.

The company reserves the privilege of determining if such repairs are to be made in the field or at the H&K factory.

The company assumes no liability for expenses or repairs made by other parties except by written consent.

Corrections of such defects by repair or replacement shall constitute fulfillment of all company obligations to the purchaser.

H&K shall not be liable for loss, damages or expenses arising from misuse, abuse, alteration, accident or improper installation of the refrigerator such as:

- Improper or unauthorized repair;
- Failure to follow proper installation instruction;
- Improper maintenance;
- Damage in shipment;
- Abnormal use;
- Improper power supply;
- Natural disaster;

Special Conditions

This warranty also does not cover:

- Overtime or holiday charges;
- Consequential damages (the cost of repairing or replacing other property which is damaged), loss of time, profits, use of any other incidental damages of any kind.

Expected life of this equipment is 7 to 10 years provided that it is maintained properly through H&K approved suppliers using only approved component parts and that the unit is cleaned regularly and not abused.

Troubleshooting

Warning: UNPLUG THE POWER CORD Before open the panel of the machinery Compartment for checking any issue.



PROBLEM	POSSIBLE CAUSE	WHAT TO DO
Unit does run after plug into the receptacle on the side of the table	Unit is not “fully” plugged in.	Verify unit is plugged into outlet.
	The receptacle on the side of the table isn’t working.	Plug the refrigerator into another extension outlet. If the receptacle on the side of the table is not working, use alternate and contact licensed electrician to repair it.
	Circuit breaker has been tripped.	Check circuit breaker to see if it has tripped. Reset if necessary. If these steps do not fix problem, call H&K at 800-788-2445.
Refrigerator is running but it won’t reach target operating temperature of 33°F (1°C) to 41° F (5°C).	Condenser Coil is dirty or clogged with debris.	Use a vacuum cleaner or soft brush to clean coils, per Preventative Maintenance instructions. If these steps do not fix problem, Call H&K at 800-788-2445 for service
	Door is left opened for extended periods.	Review product loading and general use instructions with crew to ensure door is open for restocking and order filling only.
	Room temperature and/or humidity exceed recommended maximums. 100°F (38°C) 50% RH max	Adjust store air conditioning. If these steps do not fix problem, Call H&K at 800-788-2445.
	Door gasket has been broken and door is not properly sealed.	Check door gasket condition according to the reference pictures below this table. Call H&K at 800-521-3987 if need to order replacement gasket.
Controller reads “E1”	The sensor probe has failed and must be replaced	Call H&K at 800-788-2445 for service

HC Slide-In Refrigerator

Controller reads "E2"	The evaporator probe has failed and must be replaced	Call H&K at 800-788-2445 for service
Controller read 'def"	Unit is currently in defrost cycle.	If unit does not go back to normal operation after 1 hour, Call H&K at 800-788-2445 for service
Controller read 'rec"	Unit is currently is in recovery after defrost.	If unit does not go back to normal operation after 1 hour, Call H&K at 800-788-2445 for service

Gasket condition reference pictures:

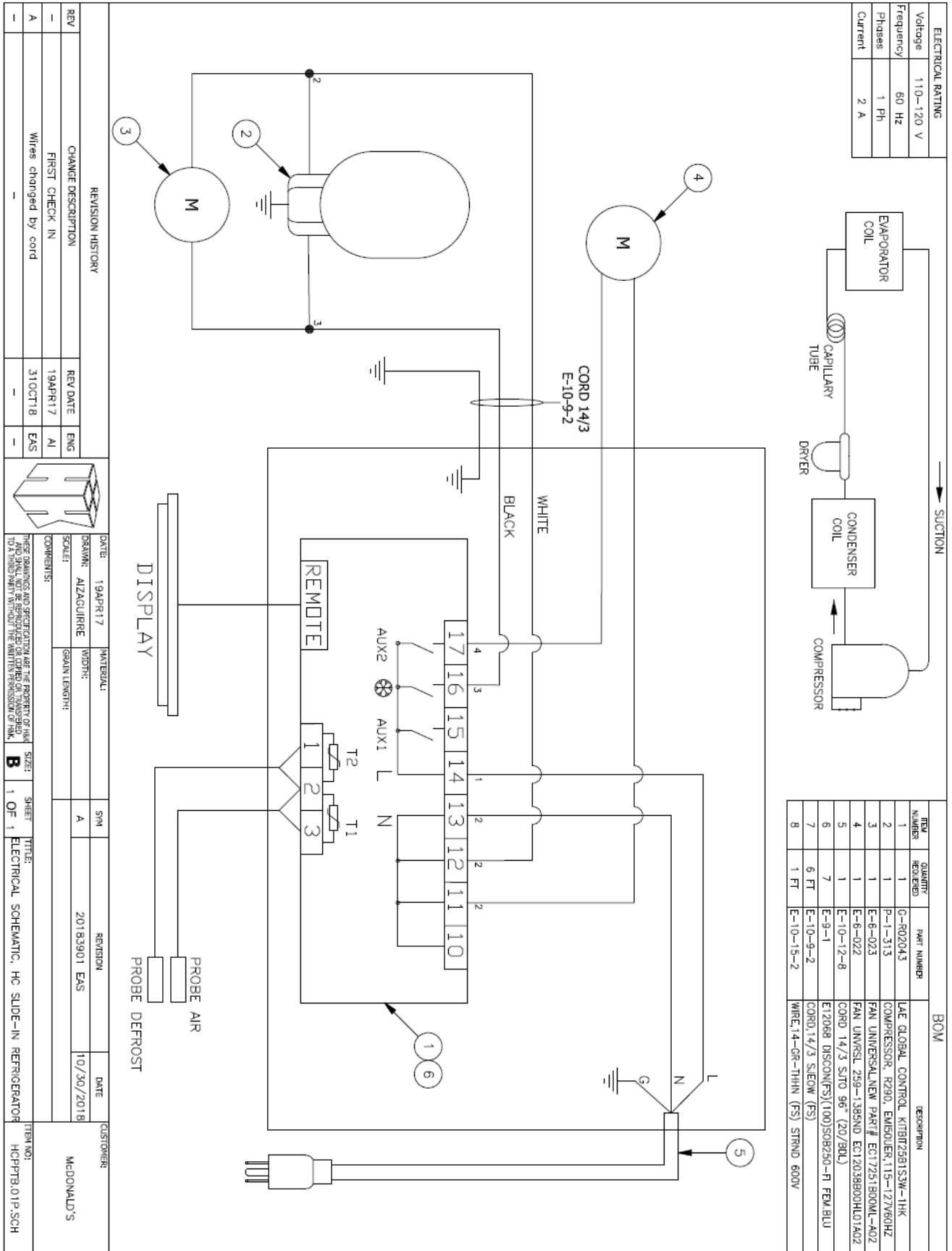
Gasket in good condition



Gasket broken, need to be replaced



HC Slide-In Refrigerator



Refrigeration Specification

Refrigerant	R290
Operating pressure	LSP = 15 PSIG HSP = 100 PSIG
Electrical Data	115V-1PH-60Hz or 100V-1PH- 50Hz MCA 3.2 MAX. FUSE 15 AMPS
System charge	4.6 OZ.

Replacement Parts

DESCRIPTION	H&K PART NO.
Compressor	P-1-313
Evaporator Fan	E-6-022
Capillary tube (0.031" ID)	P-1-56-1200 (8 FT)
Dryer	P-1-12-25
Controller	G-R02043
Power Cord	E-10-12-8
Condenser Fan	E-6-023
Controller Probe (Replacement)	E-4-3-157

Controller Setting

PARAMETER	SETTING VALUE	PARAMETER	SETTING VALUE
SPL	30 °F	FT2	00
SPH	40 °F	FT3	03
SP	33 °F	ATM	NON
C-H	REF	ADO	05
HYS	08	AHM	NON
CRT	01	ACC	00
CT1	05	IISM	NON
CT2	07	SB	YES
CSD	00	DI1	NON
DFM	TIM	DI2	NON
DFT	12	LSM	NON
DFB	YES	OA1	NON
DLI	44 °F	OA2	FAN
DTO	50	OS1	-01
DTY	OFF	T2	YES
DPD	00	OS2	00
DRN	00	TLD	30
DDM	DEF	SCL	°F
DDY	10	SIM	00
FID	YES	ADR	01
FDD	45	RES	NO
FTO	00		
FCM	NON		
FDT	00		
FDH	01		
FT1	00		