



H&K DALLAS INC.
"Our Quality Shines Through"



WALL FREEZER WF04

H&K DALLAS INC., 1343 S.HENDERSON AVE., DALLAS, TX 75223.



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WARNINGS!!!

DO NOT OPERATE OR SERVICE THE FREEZER WITHOUT FIRST READING THIS MANUAL.

DISCONNECT ALL POWER SOURCES BEFORE ATTEMPTING ANY SERVICE OR REPAIR WORK.

DO NOT ADJUST THE DIFFERENTIAL SCREW ON THE THERMOSTAT.

A LICENSED TECHNICIAN SHOULD DO ALL SERVICING AND REPAIR.

USE OF ABRASIVE PADS TO CLEAN THE UNIT WILL RESULT IN SCRATCHING AND SPOILING THE FINISH OF THE UNIT.

DO NOT LEAVE THE FREEZER DOOR OPEN FOR EXTENDED PERIOD OF TIME.



INTRODUCTION

The WF04 single door wall freezer is designed to hold all menu items that are kept frozen, at the desired temperature during normal and peak sales periods. The WF04 has a reversible door that can be hinged on the right or left side depending on the customer requirements.

WARRANTY STATEMENT

H&K Dallas 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 a period of one (1) year 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 Freezer 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 Dallas 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 Freezer such as:

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

This warranty also does not cover:

- ? Transportation or travel over 100 miles (160 km) or travel time over two (2) hours;
- ? Overtime or holiday charges;
- ? Consequential damages (the cost of repairing or replacing other property which is damaged), loss of time, profits, or any other incidental damages of any kind.

SERVICE INFORMATION

If you experience any technical problems with this product, please call
H&K DALLAS
214-818-3500

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.

Compressor
Voltage = 120 V AC
Frequency = 60 Hz.
Current = 13.7 Amps.
Single Phase



INSTALLATION

1. **Inspection:** Upon receipt, examine the equipment carefully for any damage. If damage has occurred, notify the carrier and H&K immediately..
2. **Unpacking:** Remove the unit from the plastic packing and untie the electrical cord by removing the holding tape. It is recommended that the unit remain crated until it has reached the installation location.
3. **Location:** The location of the freezer should be away from extreme heat and cold. Enough clearance should be allowed around the freezer to facilitate easy closing and opening of the doors.
4. **Leveling:** In order to provide adequate condensate drainage, it is imperative that the unit be level. The wall where the unit is located should be straight and unit should be level.

OPERATING PROCEDURE

1. **Power Source:** Insert the plug of the freezer into standard 115V AC 60 Hz. outlet. The unit consists of one compressor. The compressor is provided with its own cord. Other motors and heavy appliances should not be used on the same circuit with the freezer.
2. **Start-Up:** Start up the unit by plugging the cord into the outlet and flipping the switch in the upper right corner to the ON position. Check if the condenser fan is running. Let the unit run for 1 hour before placing product in the freezer.
3. **Temperature Setting:** The unit has been tested at the factory and the thermostat has been set to maintain a temperature between -10 to 0°F (-23.3 to -17.7°C).
4. **Thermostat Adjustment:** If the unit does not hold the desired temperature, the thermostat located in the compressor compartment can be adjusted. For colder temperatures,



turn knob clockwise one number at a time. For warmer temperature setting, turn knob counter clockwise one number at a time. Wait for 1 hour before readjusting the thermostat. Excessive tampering with the thermostat may lead to service difficulties.

CAUTION: Do not leave the freezer cover open for extended period of time.

MAINTENANCE

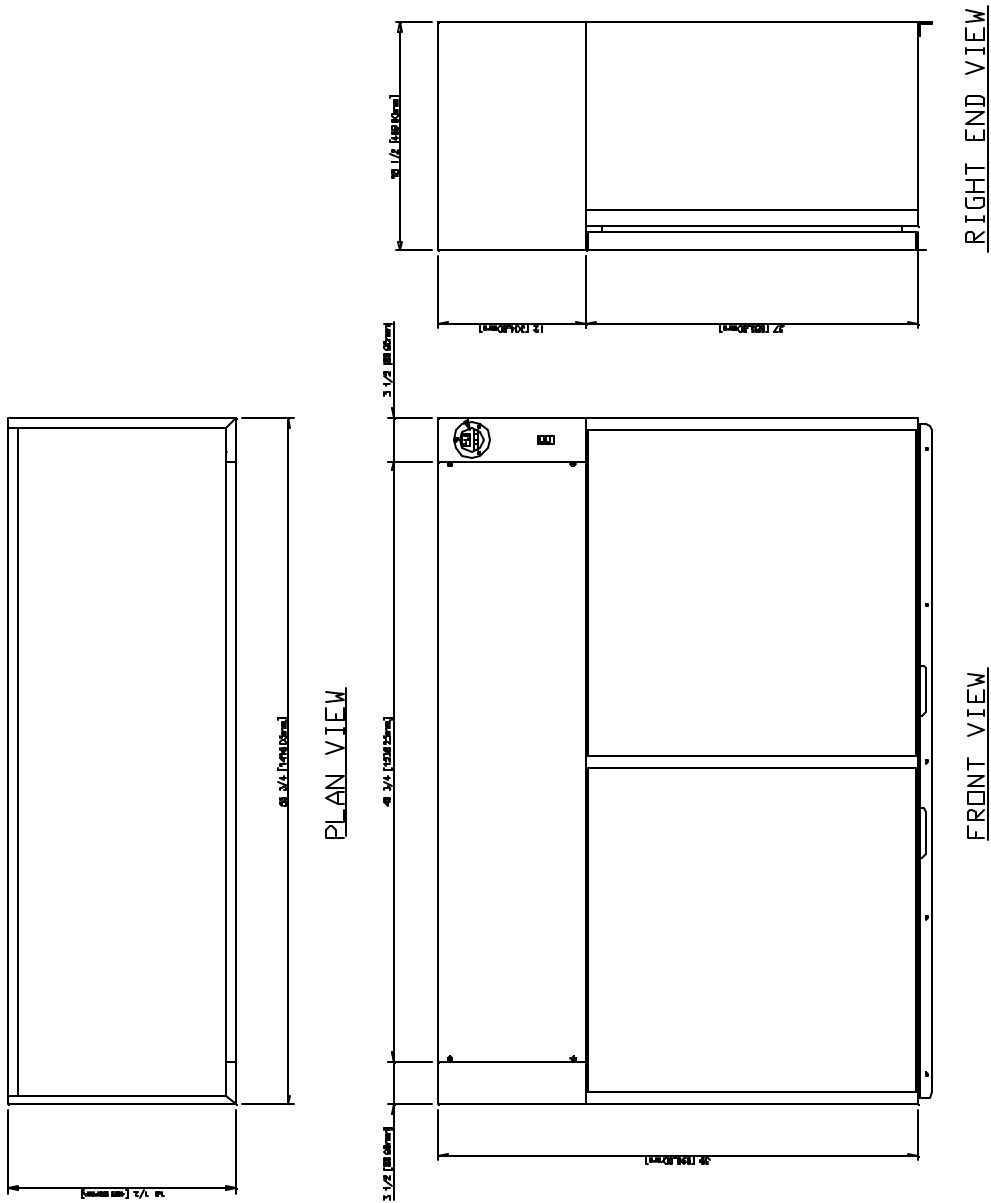
1. **Exterior Cleaning:** The exterior of the unit should be cleaned with a soap and water mixture. Do not use abrasive cleaners to clean the exterior of the cabinet as this might damage the stainless steel finish. Do not use steel wool.
2. **Interior Cleaning:** The anodized aluminum interior of the freezer can be cleaned using a soft sponge and a soap-water mixture. The pilasters can be removed without tools to aid in cleaning the interior.
3. **Condenser:** For proper operation of the condensing unit the condenser fins and fans should be cleaned and vacuumed every 3 months. The front grill is designed to be removable for this purpose.

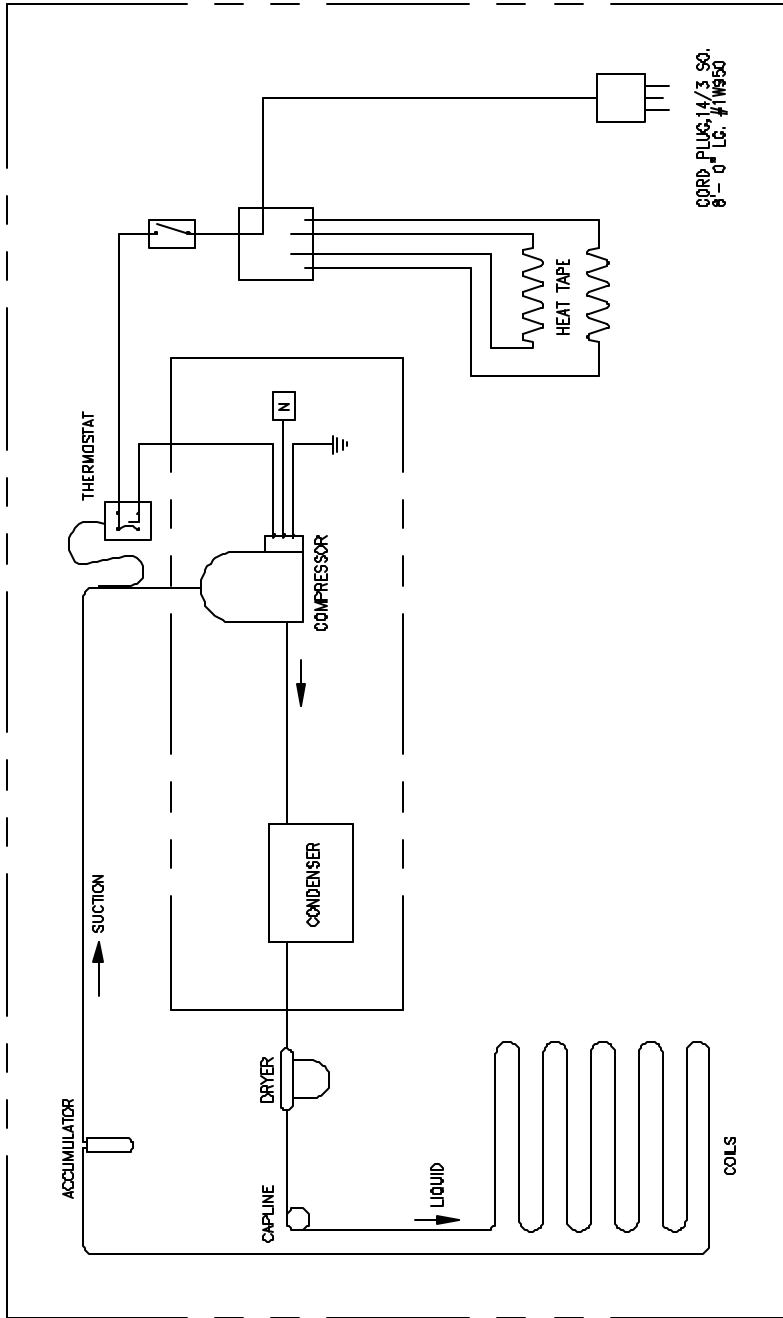


TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
Compressor will not start	<ol style="list-style-type: none"> 1. Cord not plugged in. 2. Fuse blown. 3. Thermostat stuck in open position. 4. Improperly wired. 5. Low voltage to unit. 	<ol style="list-style-type: none"> 1. Plug in cord. 2. Replace fuse. 3. Replace thermostat. 4. Check wiring against diagram. 5. Correct the voltage.
Unit short cycles	<ol style="list-style-type: none"> 1. Differential set too close. 2. Overcharge. 3. Undercharge. 	<ol style="list-style-type: none"> 1. Increase differential. 2. Reduce charge. 3. Fix leak, add refrigerant.
Unit runs continuously	<ol style="list-style-type: none"> 1. Undercharge. 2. Bad thermostat. 3. Dirty condenser. 	<ol style="list-style-type: none"> 1. Add refrigerant. 2. Replace thermostat. 3. Clean condenser fins.
Condensation	<ol style="list-style-type: none"> 1. Leak in Gasket. 2. Wiring to condensate heater faulty. 	<ol style="list-style-type: none"> 1. Reinstall gasket properly. 2. Rewire condensate heater.
Unit noisy	<ol style="list-style-type: none"> 1. Loose parts or mounting. 2. Fan motor bearings worn. 3. Fan blade bent. 4. Compressor assembly rattling. 	<ol style="list-style-type: none"> 1. Tighten parts. 2. Replace motor. 3. Replace fan blade. 4. Check if mounted correctly and securely.
Temperature too high.	<ol style="list-style-type: none"> 1. Temperature setting too high 2. Overcharge. 3. Condenser fins blocked. 4. Restricted air flow. 	<ol style="list-style-type: none"> 1. Reset temperature 2. Reduce Charge. 3. Clean Fins. 4. Ensure air can circulate around the unit.
Compressor short cycles on overload protector.	<ol style="list-style-type: none"> 1. Additional current through overload protector. 2. Run capacitor defective. 	<ol style="list-style-type: none"> 1. Check wiring diagram. 2. Replace run capacitor.

NOTE: All troubleshooting must be performed by a certified technician.





ITEM	PART NO.	QTY	DESCRIPTION
11	E-1-19-1	1	SWITCH CARING LIGHT ROCKER #1A-201-TRE
10	E-2-13	1	J-BOX 4 X 4 X 2
9	E-2-5	1	PLATE 4 X 4 GALV. COVER
8	P-1-208	1	COMPRESSOR COPELAND #FVA1-AD50-MA-203. 1/2 HP.
7	E-5-12-3	2	HEAT CABLE DOUBLE 118V. 192" LG.
6	P-1-53-1200	1	CAP TUBE #1 1/4" O.D. X .114" I.D. 108" LONG
5	P-1-25	1	DRYER SPOKLAN #S-052-S HH
4	P-1-18-B	1	THERMOSTAT BUTLER-HAMMER #B53DN1230
3	P-1-49	1	ACCUMULATOR 1/2 STRAIGHT WATSCO #A-B
2	E-4-15	1	THERMOMETER F-DEG. #RR40D OR #RR100FA-24
1	E-10-12-9	1	CORD 14/3 SO. 6' LG. W/20 AMP STRAIGHT #P-4B PLUG

NOTES:
 A. ALL WIRING SHALL BE 14 AWG TYPE THIN-TWIN-AWM, RATED 600V, 105 C.
 B. ALL WIRING SHALL CONFORM TO THE NATIONAL AND CANADIAN ELECTRIC CODE.
 C. FREEZER TEMPERATURE SHALL MAINTAIN -10° TO 0° F.
 D. MULLION HEATER UL/CSA LISTED "HEAT TECH" INC., 192" LG. DOUBLE SERIES HEATER CABLE RATED AT 115 VOLT, 3.0 WATT PER FOOT, W/2-48" LEADS
 HEATER TAPE LEADS:
 PRIMARY CIRCUIT - BLACK AND WHITE
 SECONDARY CIRCUIT - BLUE AND YELLOW
 (CAPOFF SECONDARY LEADS)
 E. EVAPORATOR - 3/8" O.D. COPPER TUBING, COLD WALL CONSTRUCTION, APPROXIMATELY 936" LONG.
 F. CONDENSING UNIT IS UL LISTED - RATED AT 1/2 HP., 115 VOLT, 60HZ, 1PH, 404A REFRIGERANT.

STORE NO:	ITEM NO: ASSEMBLY TEMPLATE B	SHEET: 1 OF 1	TITLE: ASSEMBLY,	DATE: 01 MAR 02	SYM	REVISION	DATE	SCALE: NONE
				DRAWN: EMPLOYEE NAME	CHECKED:			





CONDENSING UNIT SPECIFICATIONS

REFRIGERANT	R-404A
CAPACITY @ 90°F AMBIENT	1590 Btuh @-20°F (0.46 kW@-28.8°C)
HORSE POWER	1/2
OVERALL DIMENSIONS (INCHES)	16.2 X 13.2 X 11.9
OPERATING PRESSURES	LSP = 12 PSIG HSP = 240 PSIG
ELECTRICAL DATA	115-1-60 MCA 13.7 MAX. FUSE 20 AMPS
SYSTEM CHARGE	11.5 OZ.

REPLACEMENT PARTS

DESCRIPTION	H&K PART NO.
CONDENSING UNIT	P-1-209
CAP TUBE	P-1-53-1200
ACCUMULATOR	P-1-49
DRYER	P-1-23
THERMOSTAT	P-1-18-6
SWITCH	E-1-19-1
SHELF	WF04.013
GASKET	H-4-39-14

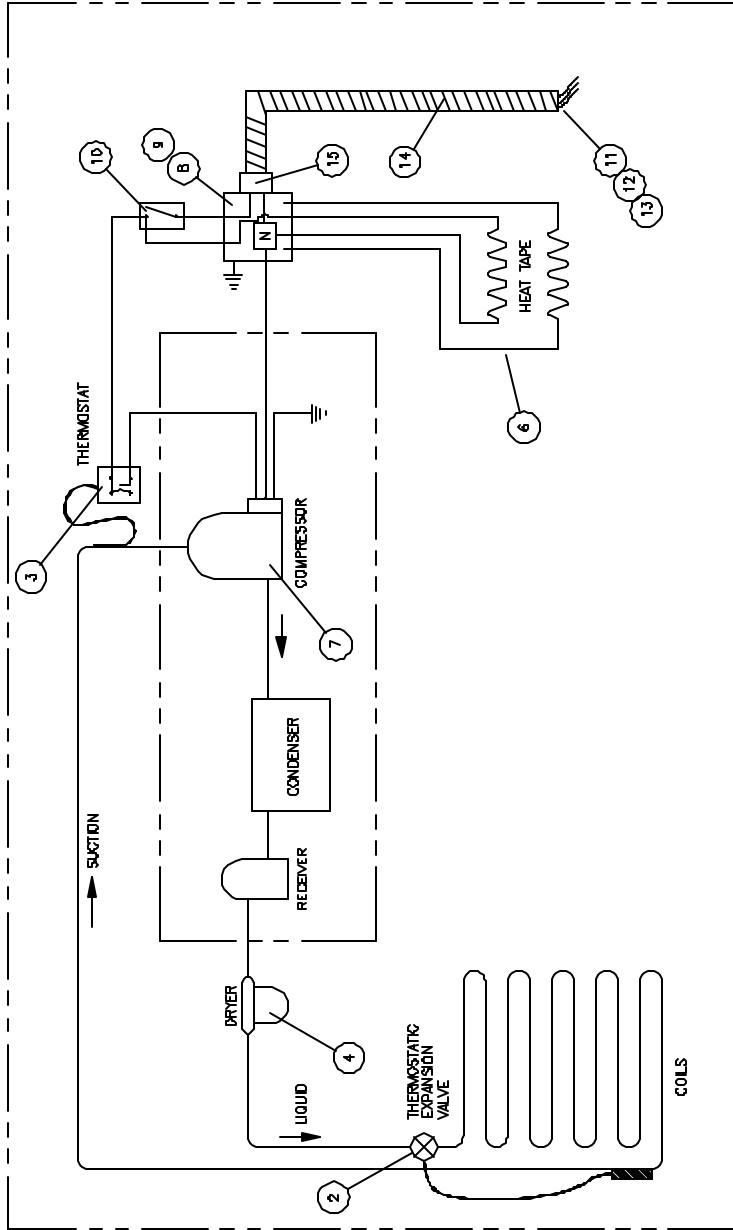


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DRAWING FILE DATE: 06/31/01 11:19:54

LOGIN ID: C. MARTIN

DRAWING PLOT DATE: 06/31/01 11:10 C. MARTIN



ITEM	PART NO.	QTY	DESCRIPTION
10	E-B-50	1	CONNECTOR, 1/2" CONDUIT
14	E-10-9-1	1	CONDUIT, 1/2" FLEXIBLE
13	E-10-13-2	1	WIRE, # 14 AWG GREEN
12	E-10-15-1	1	WIRE, # 14 AWG WHITE
11	E-10-15	1	WIRE, # 14 AWG BLACK
10	E-1-19-1	1	SWITCH, DARKING, LIGHT ROCKER #1A-201-118
9	E-2-13	1	J-BOX, 4 X 4 X 2
8	E-2-5	1	PLATE, 4 X 4 GALV. COVER
7	P-1-2085	1	COMPRESSOR, COPELAND #FJAF-4050-LAZ-304-1/3 HP, 220/230 50HZ
6	E-8-12-35	-	HEATER TAPE, DOUBLE, 220V, 187' LG.
5	-	-	NUMBER NOT USED
4	P-1-23	1	DRYER, SPORLAN, #D-052-S HI
3	P-1-18-6	1	THERMOSTAT, CUTLER-HAMMER, #8530N1230
2	P-1-12-7	1	VALVE, EXPANSION, THERMOSTATIC, SPORLAN, EFS-1/4-Z
1	E-4-15	1	THERMOMETER, F-DIES, #RR400 OR #RR100FA-24

NOTES:

- A. ALL WIRING SHALL BE 14 AWG TYPE THIN-THIN-AWM, RATED 90°C, 105 C.
- B. ALL WIRING SHALL CONFORM TO THE NATIONAL AND CANADIAN ELECTRIC CODE.
- C. FREEZER TEMPERATURE SHALL MAINTAIN -10° TO 0° F.
- D. MULLION HEATER UL/CSA LISTED 'HEAT TECH', INC., 192" LG, DOUBLE SERIES HEATER CABLE RATED AT 220 VOLT, 3.0 WATT PER FOOT, W/1-48" LEADS HEATER TAPE LEADS
- E. PRIMARY CIRCUIT - BLACK AND WHITE SECONDARY CIRCUIT - BLUE AND YELLOW (CAREFUL SECONDARY LEADS)
- F. EVAPORATOR - 3/8" O.D. COPPER TUBING, COLD WALL CONSTRUCTION, APPROXIMATELY 936" LONG.
- G. CONDENSING UNIT IS UL LISTED - RATED AT 1/2 HP., 220 VOLT, 50HZ, 1PH, 40-44 REFRIGERANT.

STORE NO:	ITEM NO:	WFO5_SCH	SHEET:	1 OF 1	TITLE:	SCHEMATIC, 2-DOOR WALL MOUNT FREEZER 220V/50HZ INTERNATIONAL	DATE:	10FEB96	SYM:	A	REVISION:	BBS1CN	DATE:	31MAY01	SCALE:	NONE	
	CUSTOMER:	MCDONALD'S CORPORATION		DATE:		10FEB96		CHECKER:		M. ROWLAND							