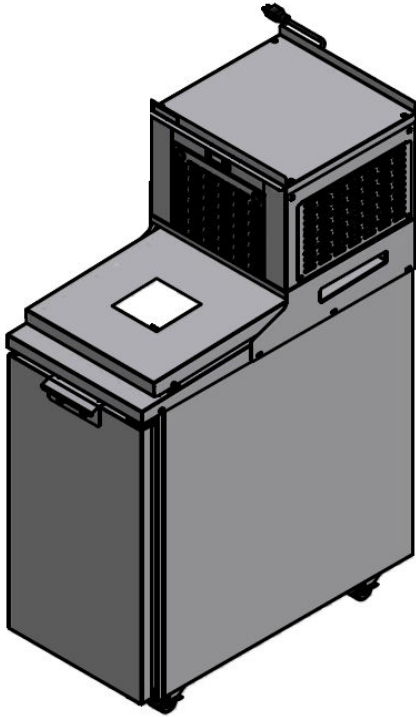
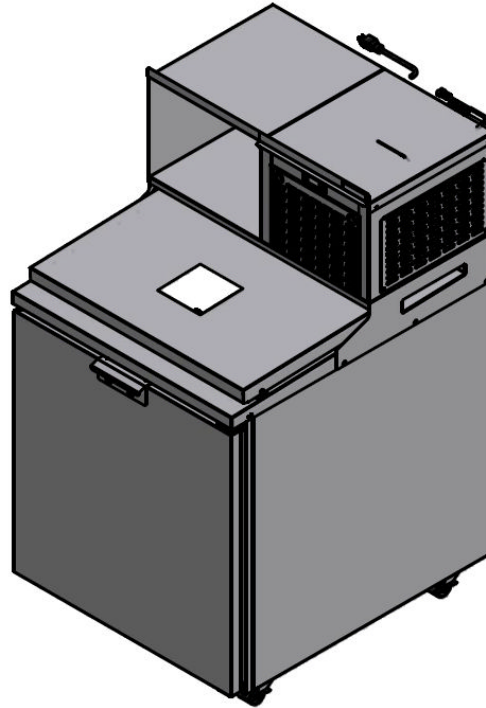


High Capacity Meat Freezers



Model HCMF-18 (18" wide)



Model HCMF-30 (30" wide)

Section Contents

	<u>Section</u>	<u>Page</u>
HCMF Model Overview & Specifications	1	2
Control Settings & Operating Parameters	2	4
Electric & Compressor Schematics	3	5
Trouble Shooting Table	4	7
Eliwell Controller Error Codes	5	9
Component Parts List & Diagrams	6	11
Basic Operator Preventive Maintenance	7	13
General Unit Service Instructions & Warnings	8	14
Key Parts Replacement Tips	9	15
Component Adjustments	10	19

Section 1 – Model Overview & Specifications:

Model HCMF Series – High Capacity Meat Freezers

The HCMF is a compact, custom freezer designed for short-term grill-side storage of frozen hamburger patties and secondary grilled product, providing quick and easy access at point-of-use. Designed to be positioned immediately adjacent to the Grill Station, the HCMF is available in two sizes, 18-inches wide and 30-inches wide, with a front case-loading door and an insulated, automatic roll-back top lid that provides quick access, with minimum exposure of frozen product.

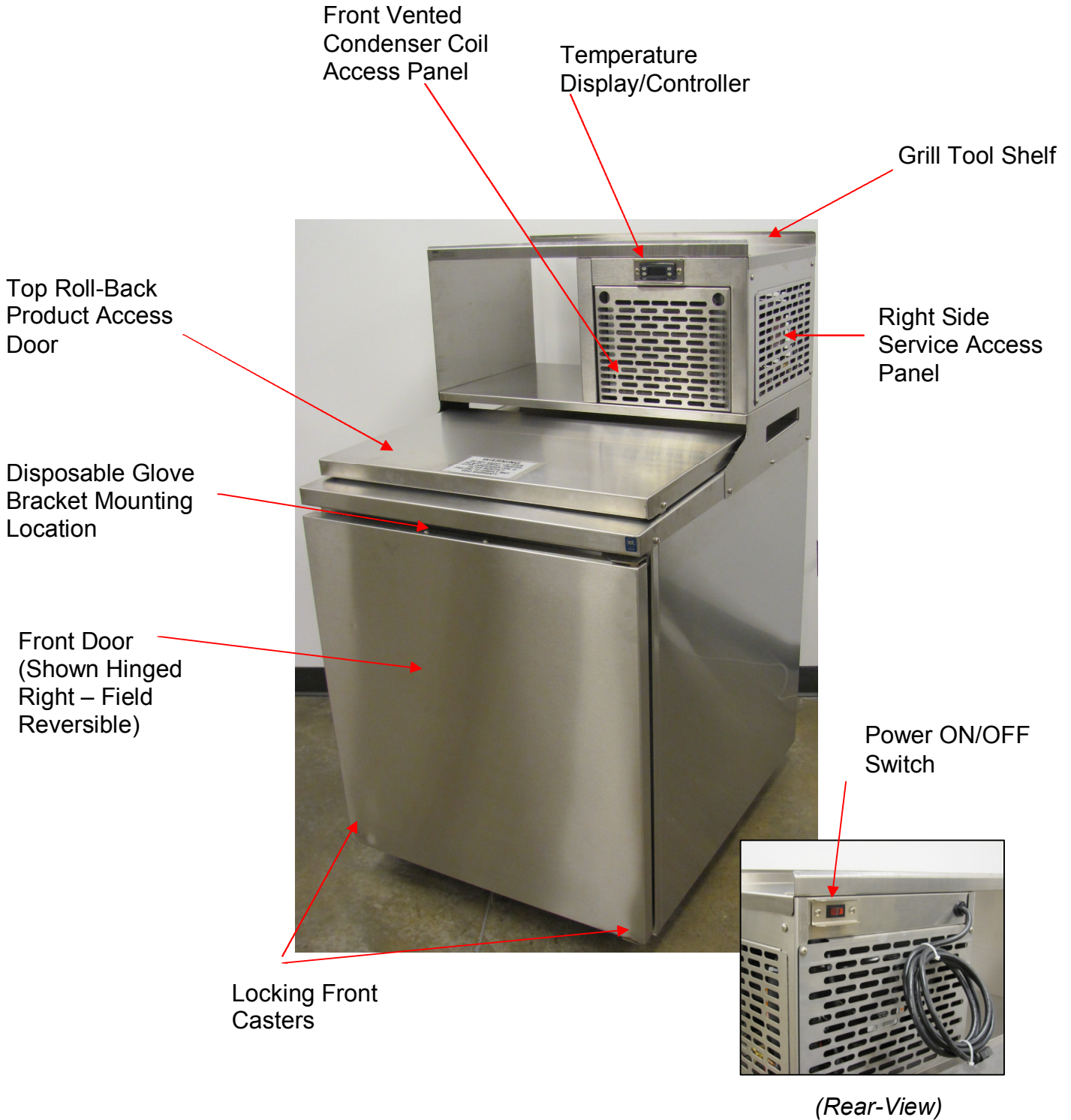
Unlike previous grill-side freezers (GSF & FRGSF), HCMF Models have a top mounted condenser package that provides easy access for regular PM and service access from five sides. HCMF Models are more energy efficient, provide more storage space, cost less to operate and have the following specifications and utility requirements:

Key Performance Specifications		
Product Model:	HCMF-18	HCMF-30
Part Number:	18005560	18005519*
Capacity: Cubic Feet	6.8	13.1
Capacity: Burgers	3 box	6 boxes
Refrigeration/Type:	Forced air cooling system using R-404A Refrigerant	
Agency Listings:	cULus & NSF	cULus & NSF
Key Dimensions & Weights		
Unit Width:	18" (458 mm)	30.86" (784 mm)
Unit Depth [front-to-back]:	37" (940 mm)	37" (940 mm)
Unit Height	54.77" (1391 mm)	54.77" (1391 mm)
Minimum Door Swing	+22" (to depth)	+32" (to depth)
Shipping Weight	337 lbs.	427 lbs.
Unit Operating Weight	265 lbs.	365 lbs.
Electrical/Utility Requirements		
Voltage [VAC]	120 VAC	120 VAC
Phase [PH]	1-phase	1-phase
Cycles [Hz]	60 Hz	60 Hz
Amperage [AMP]	7.3 AMPs	10 AMPs
Watts	840	1200
Power Cord Provided	Yes	Yes
Plug Provided	Straight Blade	Straight Blade
Installation/Operating Conditions/Requirements		
Max. Room Temp.	82° F	82° F
Max. Room Humidity	60%	60%
Min. Side Clearance	0" (2" recommended)	0" (2" recommended)
Min. Rear Clearance	1" (2" recommended)	1" (2" recommended)

* **NOTE:** P/N: 18005519 has the **condenser mounted top-right**. P/N 18005056 has the condenser factory-mounted top-left.

Model HCMF Key Components

HCMF-30 [18005519 – Condenser-Right] Model Shown



Section 2 – Control Settings & Operating Parameters:

Control Settings & Operating Characteristics (For Troubleshooting)

Danfoss Temperature Controller		For More Information
Temperature Range	Adjustable	See Section 10 on page 19 to adjust temperature
Coldest Set Point	-30 degrees F	
Normal Cut Out (Set Point)	- 4 degrees F	
Differential	2 degrees F	
Normal Cut In	- 2 degrees F	
Warmest Set Point	+30 degrees F	
Compressor Protection	Fixed	
Minimum On Time from Start to Start	2 minutes	
Fail Safe Mode (if sensor fails)	Fixed	
Faulty Probe On Time	4 minutes	
Error Off Time	2 minutes	
Defrost Settings	Fixed	
Termination Temperature	60 degrees F	
Maximum Time Allowed	60 minutes	
Drip Time (heat off)	1 minute	
Defrost Based On Compressor On Time	Fixed	
Time Between Defrosts	3 hours	
Fan Settings	Fixed	
During Defrost	Off	
Start Delay After Defrost	4 minutes	
Fan Duty Cycle – ON	40 seconds	
Fan Duty Cycle - OFF	90 seconds	
Display Features:	Adjustments	
Select degrees F or C?	No	NOTE: Contact Franke for degrees C
Adjust temperature from display?	Yes	See Section 10 on page 19 to adjust temperature or initiate manual defrost
Initiate Defrost from display?	Yes	
Display during Defrost Cycle:	dEF	NOTE: dEF shown for maximum of 30 minutes after defrost.

Normal Operating Pressures		Normal Operating Amps	
High Side (85 air to condenser)	235 PSIG	HCMF-30	8 – 9 Amps (4.8A Defrost)
Low Side (-5 air into coil)	13 PSIG	HCMF-18	5 – 6 Amps (3.8 Defrost)

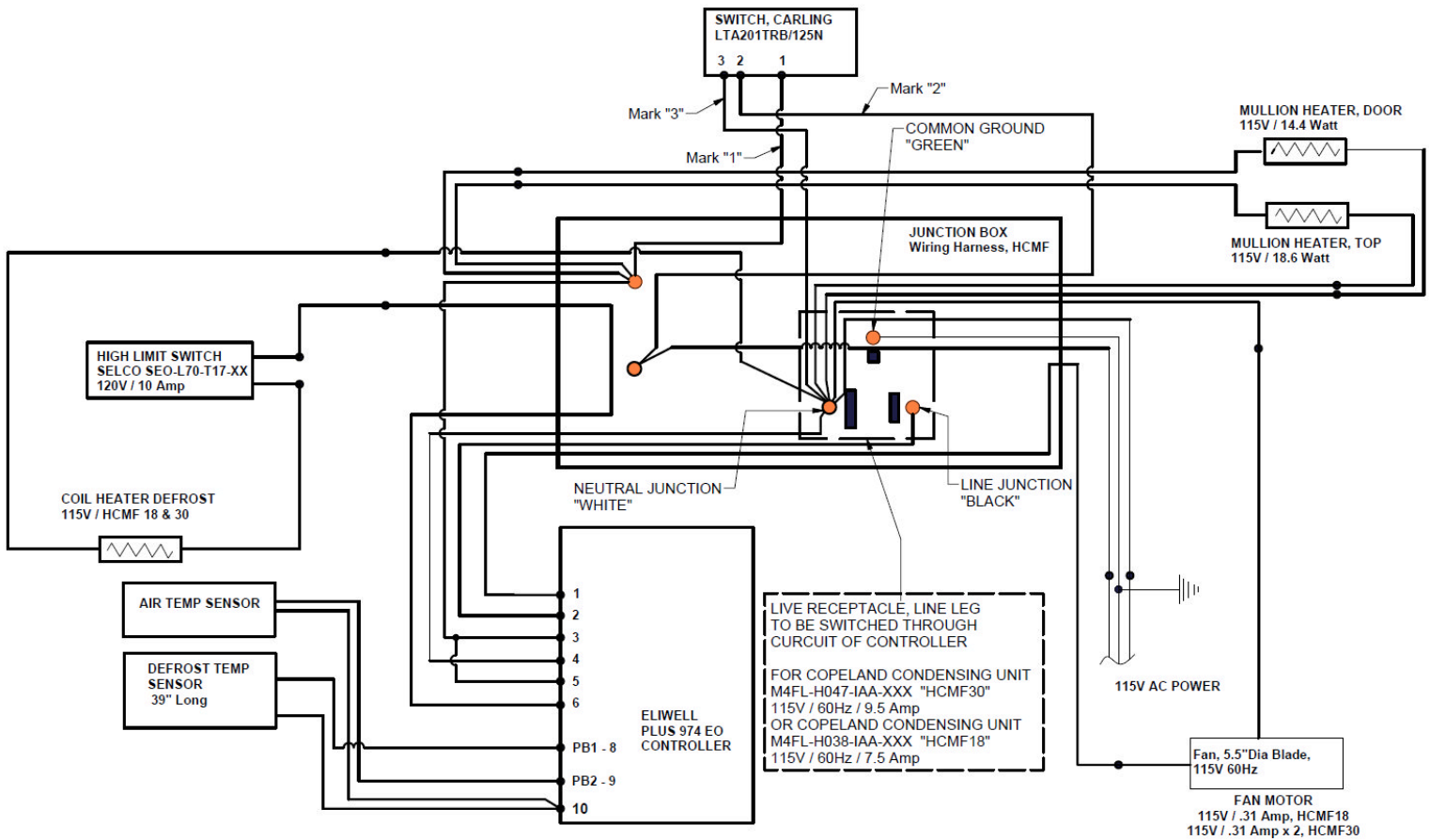
High Pressure Safety		Rated Operating Amps	
Cut Out Setting	460 PSIG	HCMF-30	10 Amps
Differential	30 PSIG	HCMF-18	7.3 Amps

Defrost High Limit Safety		Operating Voltage	
Cut Out Setting	70 degrees F	HCMF-30	120V
Differential	15 degrees F	HCMF-18	120V

Refrigeration Type & Quantity:	HCMF-30	HCMF-18
R-404A	18 ounces	16 ounces

Section 3 – Electric & Compressor Schematics:

HCMF-18 & HCMF-30 Wiring Harness

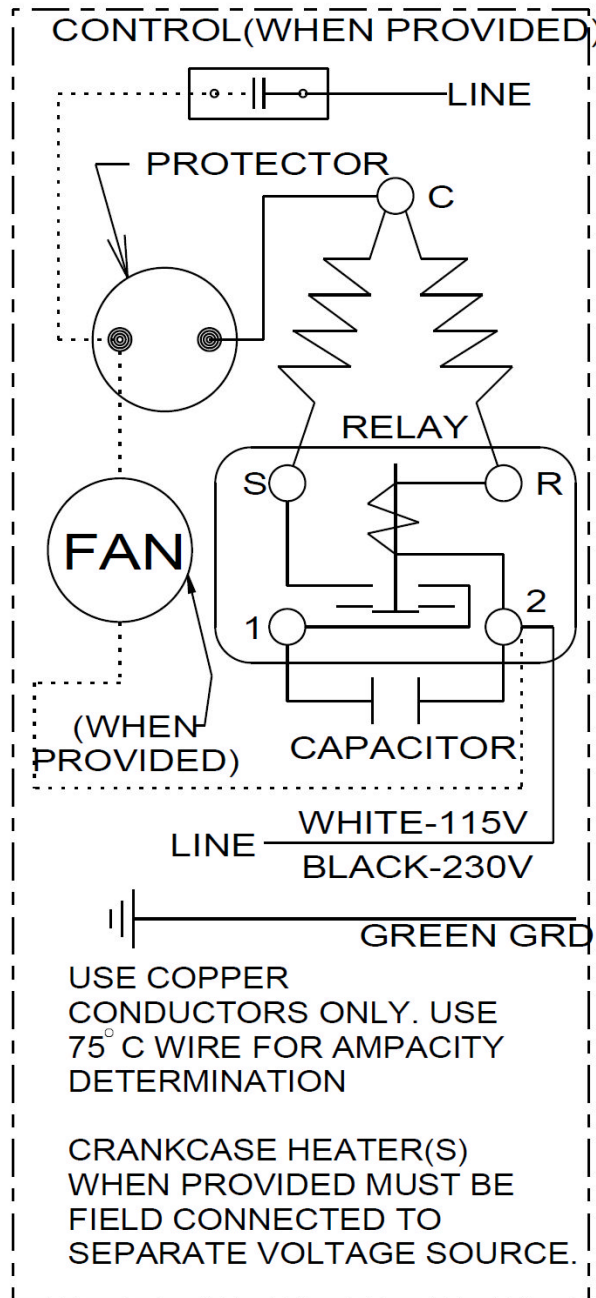


NOTE:
 Model HCMF-18 has one fan motor
 Model HCMF-30 has two fan motors

Copeland Compressor Schematic

Model HCMF-18 – Copeland No. M4FL-H038-IAA-121 – Franke P/N: 19004507

Model HCMF-30 – Copeland No. M4FL-H047-IAA-121 – Franke P/N: 19004310




Section 4 – Trouble Shooting Guide:

The Problem	Possible Cause	What To Check & Do
Main Power not "ON"	Power not available to unit?	Breaker OK? Yes = Continue; No = Call electrician
		Receptacle OK? Yes = Continue; No = Call electrician
	Power cord OK?	Yes = Continue; No = Replace power cord.
	Internal wiring OK?	Yes = Continue; No = Replace wiring harness. (Contact Franke Technical Support.)
	Power switch not ON? (Switch located behind condenser, top-right.)	Check for power at switch. Switch OK? Yes = Continue; No = Replace Power Switch (See Tips T-5)
Main Power "ON" but Freezer does not run	Compressor thermal overload tripped?	Unplug Freezer power cord for 1 hour, then retry. If problem reoccurs, ensure condenser coil is clear of debris and cleaned, per PMM Page Instructions. If dirty or obstructed, vacuum or brush off condenser coil and notify manager.
		Test condenser electric components for defects or failure, including: start-capacitor, start relay, condenser fan motor & compressor. Replace if needed. (See Tips T-7)
	Power disconnected to temperature controller	Check input voltage to temperature controller. Replace wiring harness if damaged.
	Temperature controller disconnected from condensing unit	Check output voltage at temperature controller. Replace wiring harness to Condenser, if damaged
	Condenser Package is unplugged inside.	Check Condenser Package plug. (Remove top access panel.) Plug in if unplugged or loose.
Temperature controller is defective	Replace defective controller. (See Tips T-2)	
Freezer is turned ON but is not cooling & Temperature Display reads OFF.	Controller has been turned OFF	Press the ON/OFF button (top-right) on Controller/Display to turn ON.

Section 4 – Trouble Shooting Guide CONTINUED:

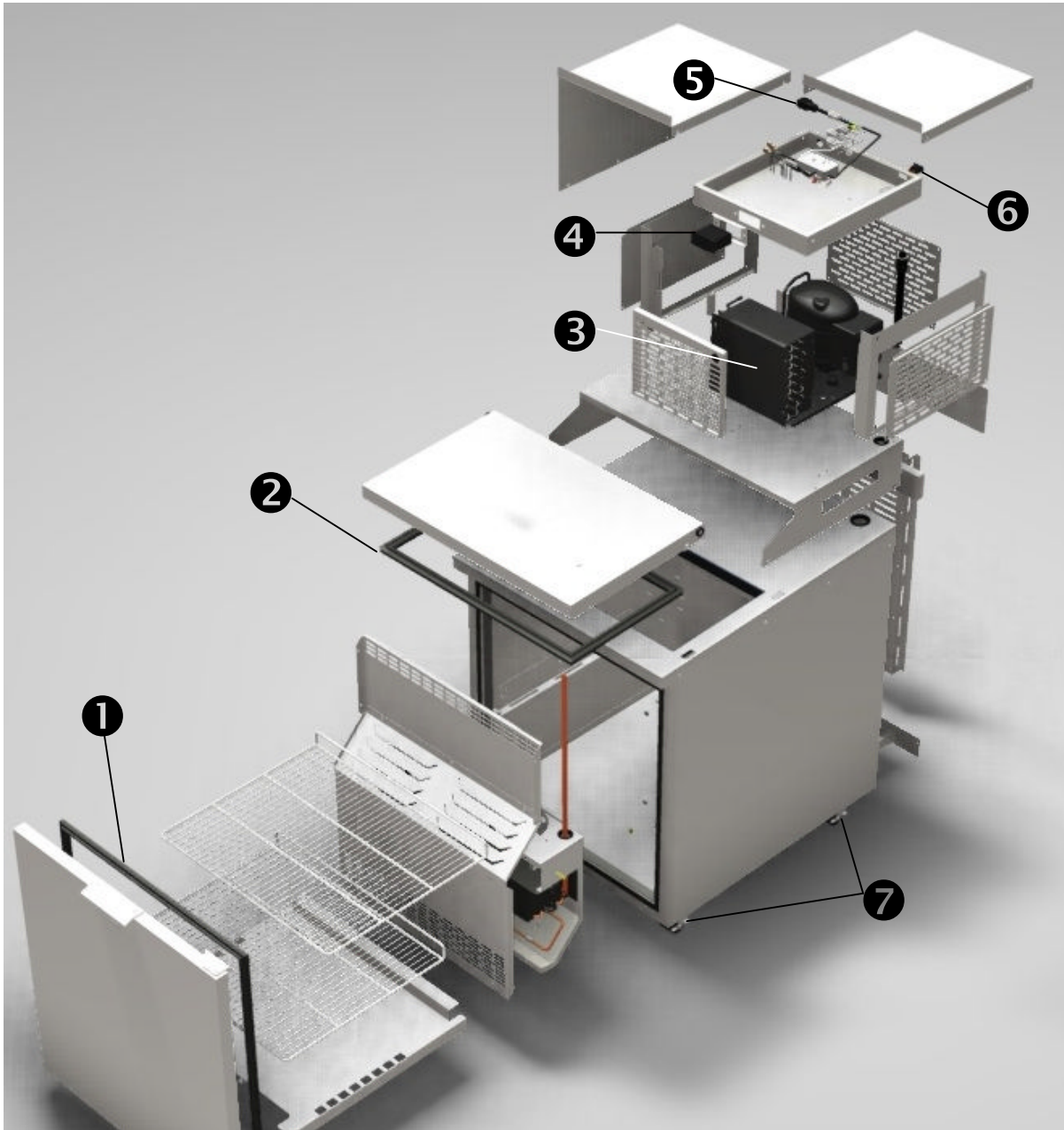
The Problem	Possible Cause	What To Check & Do
Temperature Display Reads Temperature But Freezer Does Not Cool To 0° F	Set point too high	Adjust thermostat setting. (See Adjustment A2)
	Door and/or Rolling Lid leaking cold air	Inspect door and lid gaskets for damage. If needed replace. (See Tips T-1)
	Evaporator fan not functioning	Check fan for blockage. Clear blockage if found. Check motor and replace if not running properly. (See Tips T-10) NOTE: It is normal for the evaporator fan(s) to cycle on-and-off when the compressor isn't running.
	Evaporator coil blocked with ice	Check temperature controller circuit for defrost heater. Does relay close when manual defrost is initiated? If not, replace temperature controller. (See Tips T-2)
		Check high temperature cutoff switch for proper function. If needed, replace.
		Check the defrost heater integrity. If needed, replace defrost heater. (See Tips T-9)
	Refrigerant charge is not correct or system has a leak.	Inspect service valves, lines, joints and components for signs of leaks, kinks or restrictions.
		Check system pressure and check for leaks. If leak is found, repair leak.
	Condensing unit is not starting properly or is tripping on overload.	Ensure condenser coil is clean, unobstructed and being cleaned every three months (or more frequently, if needed) per HCMF PMM Page instructions. If dirty or obstructed, vacuum or brush out condenser coil and notify unit manager.
		Check condenser electrical components for defects (start-capacitor, start-relay, condenser fan motor, compressor, etc.) Replace if needed. (See Tips)

Section 5 – Eliwell Controller Error Codes:

The Eliwell Controller provides error code messages on the temperature display when the HCMF freezer is not performing as required. Alarms are indicated by the error code and an alarm icon  which appears on the controller display.

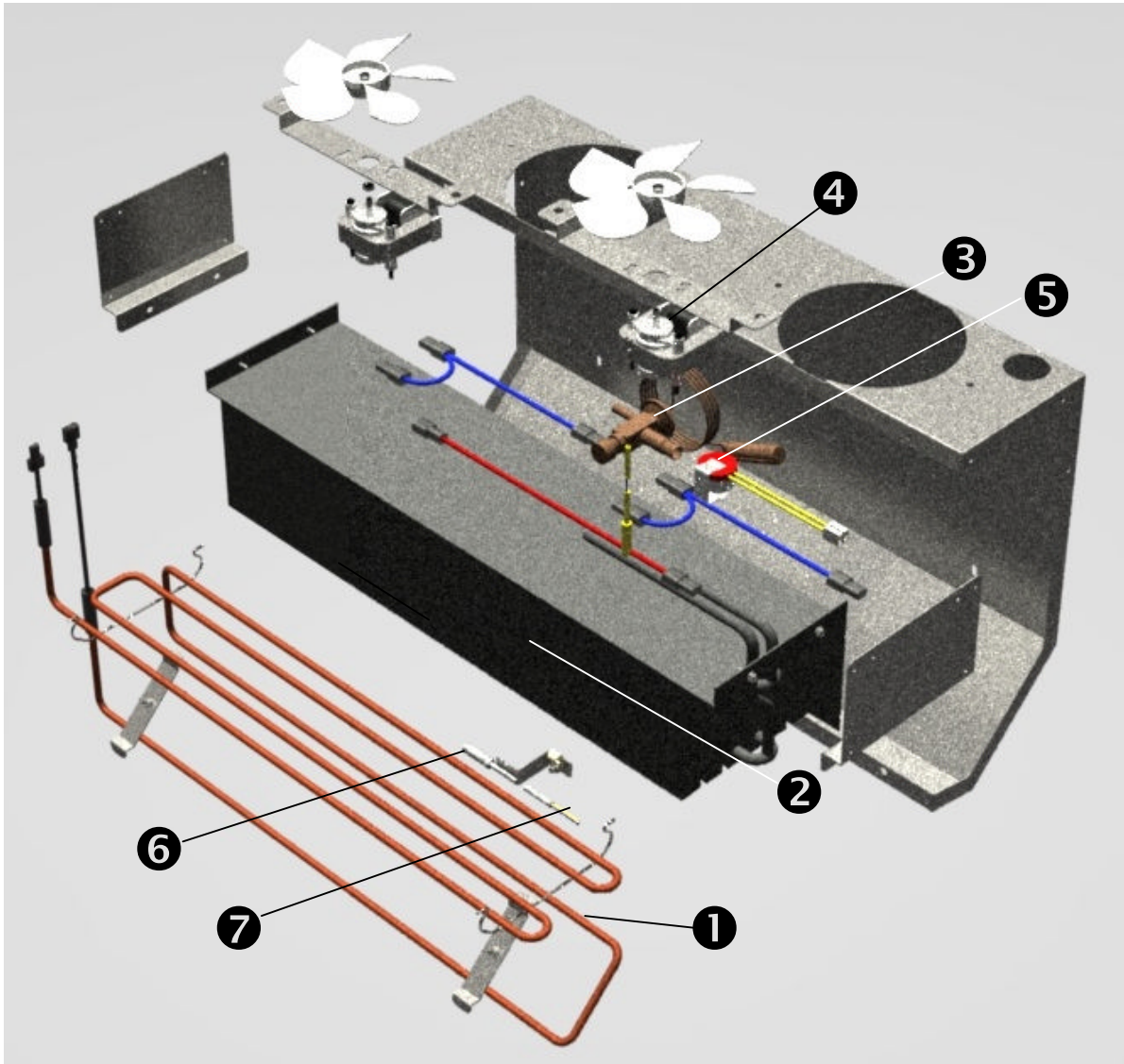
The Problem	Possible Cause	What To Check & Do
Error Code E1 Displayed – Probe 1 Faulty	<ul style="list-style-type: none"> Measured values outside operating range Probe faulty, short circuited or open 	<ul style="list-style-type: none"> Check probe for damage Check probe wiring for damage. If faulty: Replace temperature probe. (See Tips T-3)
Error Code E2 Displayed – Probe 2 Faulty	<ul style="list-style-type: none"> Measured values outside operating range Probe faulty, short circuited or open 	<ul style="list-style-type: none"> Check probe for damage Check probe wiring for damage. If faulty: Replace defrost probe. (See Tips T-4)
Error Code AH1 Displayed – Alarm for HIGH probe temperature	<ul style="list-style-type: none"> Value measured by probe greater than HAL (50°F) after (tAL) factory set time??? 	<ul style="list-style-type: none"> Wait for value read by probe (Pb1) to return below HAL
Error Code AL1 Displayed – Alarm for LOW probe temperature	<ul style="list-style-type: none"> Value measured by probe greater than LAL (-50°F) after (tAL) factory set time??? 	<ul style="list-style-type: none"> Wait for value read by probe (Pb1) to return below LAL This is typically a probe failure. If faulty, replace temperature probe. (See Tips T-3)

Section 6 – Key Parts & Exploded Parts Diagrams: (Model HCMF-30 Shown)



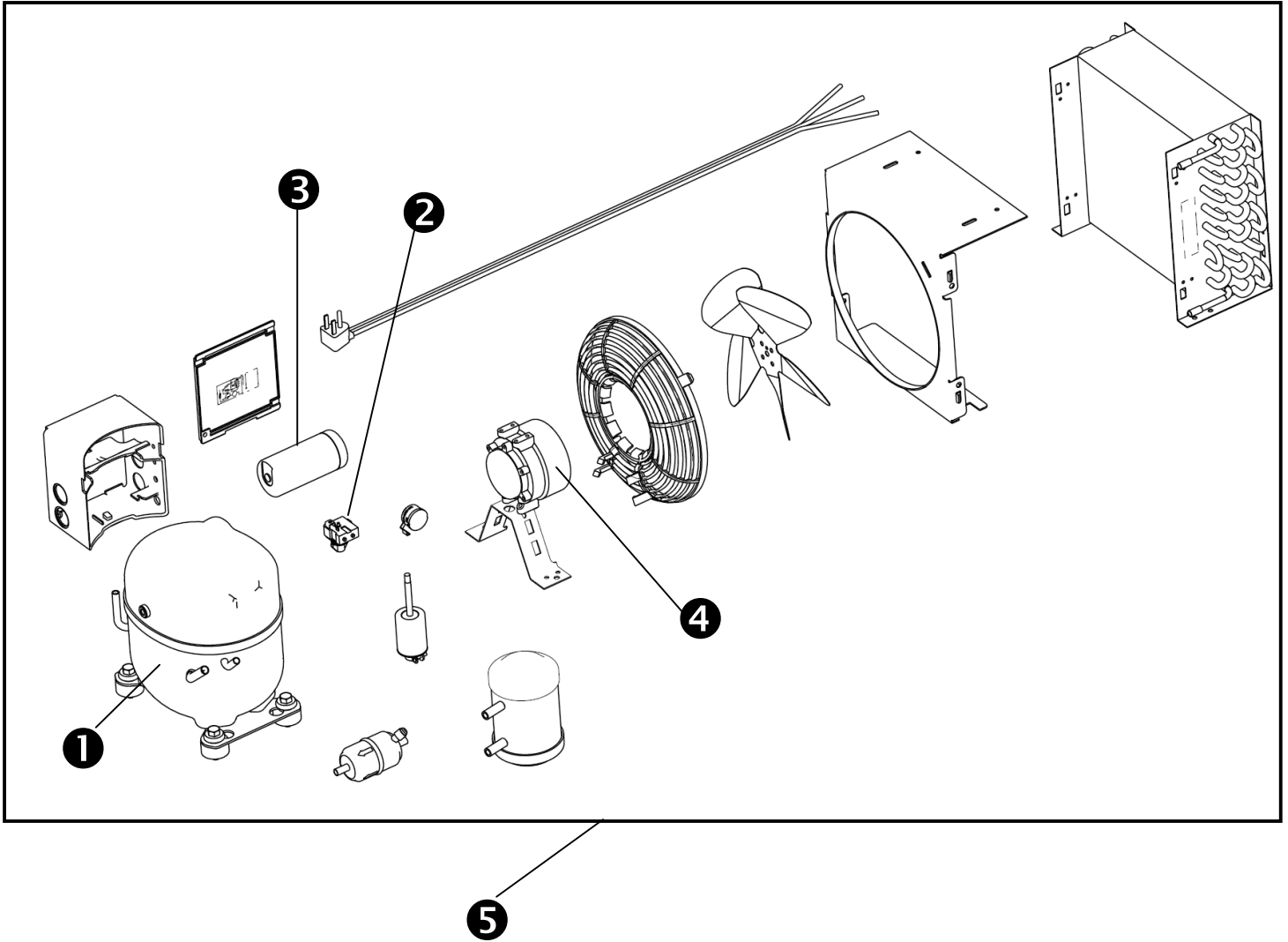
Key No.	Part Description	HCMF-18 P/N	HCMF-30 P/N
1	Door Gasket (Front)	19004385	19004309
2	Lid Gasket (Roll-back Top)	19004631	19004449
3	Condensing Unit (Copeland)	19004507	19004310
4	Eliwell Display/Controller	18005958	18005958
5	Cord Set (5-15P)	19000282	19000282
6	Power ON/OFF Switch (Carling)	3126151	3126151
7	Casters, Swivel - Locking	19000817	19000817

Section 6 – Key Parts & Exploded Parts Diagrams: Evaporator Coil



Key No.	Part Description	HCMF-18 P/N:	HCMF-30 P/N:
1	Defrost Heating Element	19004386	19004308
2	Evaporator Coil	19002059	19002060
3	Thermostatic Expansion Valve	19001190	19001190
4	Evaporator Fan Motor	19000455	19000455 (2 ea.)
5	High Limit Switch	19004832	19004832
6	Air Temperature Sensor (grey)	19004769	19004769
7	Defrost Coil Sensor (yellow)	19004832	19004832

Section 6 – Key Parts & Exploded Parts Diagrams: Condenser Package*



Key No.	Part Description*	HCMF-18 P/N	HCMF-30 P/N
1	Compressor Only	19005288	19005289
2	Start Relay	19005290	19005291
3	Start Capacitor	19005292	19005292
4	Condenser Fan Motor	19005293	19005293
5	Condenser Unit/Package	19004507	19004310

* For other sub-components contact Franke Technical Support.

Section 7 – Operator Preventive Maintenance:

NOTE: Before attempting service, failure diagnosis or component repairs, verify basic operator maintenance has been done.

PROBLEM: Freezer is running but will not reach 0° F [-18° C] or lower. High temperatures caused by a dirty condenser coil, blocking the front or side louvered panels or direct contact with the Grill Station may cause the freezer to function improperly, not maintain temperature or cease operating.

- 1) **FIRST- Perform a Manual Defrost:** Push and HOLD (for five seconds) the lower button to the left of temperature display. Display will read: **dEF**.
- 2) Open the front compartment door and verify that freezer has been defrosted. If significant ice buildup is still present, turn OFF rear power switch, open the freezer compartment door and allow the ice to melt.
- 3) Check to see if freezer is overloaded or if plastic carton liners are obstructing evaporator fan openings.
- 4) Check freezer door gasket for damage. If damage is found, replace the door gasket.
- 5) Check rear and side clearance around unit. To operate efficiently, the following clearances are recommended:

Model	Min. Side Clearance	Min. Rear Clearance
HCMF-18	0" (2" recommended)	1" (2" recommended)
HCMF-30	0" (2" recommended)	1" (2" recommended)

- 6) Pull off front louvered access panel. Inspect the condenser coil to ensure it is clean and free of dust and debris. If it is dirty, clean it with a soft bristle brush or portable vacuum.
- 7) **Test** unit for operation within the 0° to -10° F [-18 to -23° C] normal operating temperature range.
- 8) If these steps correct problem, notify unit manager of problems noted with crew cleaning, operator preventive maintenance or location of unit. If problem persists, see Troubleshooting Guide.

[Photo 1]



If freezer needs defrosting, push and hold lower button for five seconds. Display will read: dEF.

[Photo 2]



To inspect condenser coil, pull off the front access panel. It has right & left magnetic catches.

[Photo 3]



If condenser coil is dirty, clean with soft brush or portable vacuum.

Section 8 – General Unit Service Instructions & Warnings:

- 1) Technicians should be authorized to work on Franke Equipment and be **EPA Certified** and qualified to diagnose and repair refrigeration equipment.
- 2) The Franke High Capacity Meat Freezer comes in two sizes, the compact HCMF-18 model and larger HCMF-30 model.
- 3) Both models operate on 120-volt power and are provided with a grounded (5-15P) plug and 8' power cord.

WARNING:

Unplug unit from its 120-volt power source whenever servicing electrical components or removing the rear or side service access panels. Failure to unplug unit may result in electric shock, burns or death.

- 4) The HCMF-30 refrigeration system is charged with 18 ounces (539 g) of ozone-safe R404A refrigerant. The HCMF-18 is charged with 16 ounces (311 g) See unit Data Plate and use in-line site glass provided, when filling.
- 5) Only use R404A refrigerant when recharging this unit.
- 6) Always verify proper unit cleaning before replacing or repairing components. [See Section 6]

Suggested [On-Truck] Repair Parts:

We suggest the following to ensure a first-trip fix of a HCMF:

<u>HCMF-18</u>	<u>HCMF-30</u>	<u>Description</u>	<u>Qty.</u>
19004385	19004309	Front Door Gasket	1 ea.
19004631	19004449	Top Rolling Door Gasket	1 ea.
19001991	19001991	Top Rolling Door Rollers	4 ea.
18005958	18005958	Display/Controller- Eliwell	1 ea.
19004386	19004308	Defrost Heater (Evaporator)	1 ea.
19004769	19004769	Sensor, Air Temp. (Gray)	1 ea.
19004832	19004832	Sensor, Coil Temp (Yellow)	1 ea.
19000817	19000817	Swivel Caster w/Brake	4 ea.
19005293	19005293	Condenser Fan Motor	1 ea.
19000454	19000454	Evaporator Fan Motor	2 ea.
19005292	19005292	Start Capacitor	1 ea.
19005290	19005291	Start Relay	1 ea.
19001190	19001190	Thermostatic Expansion Valve	1 ea.
19004507	19004310	Condensing Unit	1 ea.
19005288	19005289	Compressor ONLY	1 ea.
3126151	3126151	Power ON/OFF Switch	1 ea.
19000282	19000282	Power Cord (8') & Plug	1 ea.
19004832	19004832	High Limit Switch	1 ea.

[Model & Serial Number]



The HCMF Unit Serial Number is located below the Model Number & Data sticker, which is on the back of unit.

Tools Required:

[For Mechanical Systems Repair]


- 3/8" screwdriver
- 1/4" screwdriver
- 1/16" "mini" screwdriver
- 1/8" Allen/hex wrench
- 3/16" Allen/hex wrench
- 5/32" Allen/hex wrench
- 5 mm Allen/hex wrench
- 13 mm Allen/hex wrench
- 7/16" box/socket wrench
- Razor knife
- Needle nose pliers
- Small wire cutters
- Rubber mallet
- Plastic Wire Ties


Section 9 – Key Parts Replacement Tips:

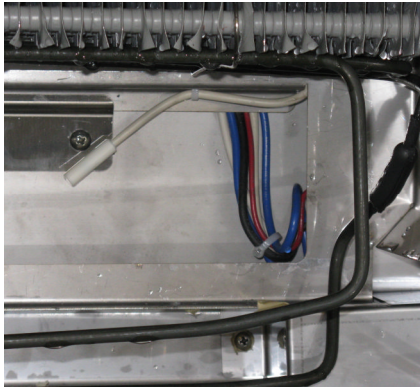
This HCMF Condensed Service Manual assumes you are familiar with basic refrigeration repair and previous Franke Grill-Side Freezers, including GSF and FRGSF Models. See Tips tables that follow for some HCMF-specific service tips.


	Replacement Part Covered	Page		Replacement Part Covered	Page
T-1	Door Gasket Replacement	15	T-6	Condenser Package Replacement	17
T-2	Eliwell Controller Replacement	15	T-7	Start Relay & Capacitor Replace.	17
T-3	Temperature Sensor Replacement	16	T-8	Condenser Fan Replacement	17
T-4	Defrost Sensor Replacement	16	T-9	Defrost Heater Replacement	18
T-5	Power ON/OFF Switch Replace	16	T-10	Evaporator Fan Motor Replace.	18

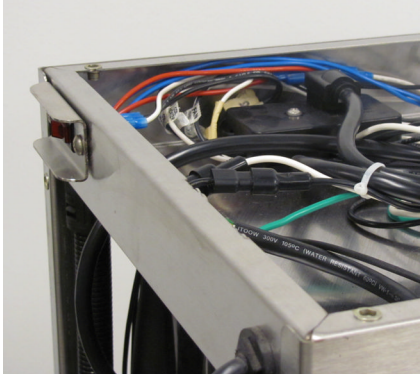
For additional information refer to GSF or FRGSF Service Manuals, or contact Franke Technical Support at 800 537-2653.


T-1 Front Door or Top Gasket Replacement Tips:	P/N: 19001773 or 19001986
<ol style="list-style-type: none"> 1. Remove the door to replace the gasket. 2. NOTE: Plastic extrusion can be easily damaged. Using a razor knife to separate the old gasket from its retaining tailpiece. 3. Remove the separated tailpiece from the slot by pulling toward each corner, using a small needle nose plier. 4. Insert new gasket tailpiece into the gasket-mounting slot. Align the corners and start at the top of the door. Continue around the door. 5. Tip: Place door on a cushioned surface and carefully hammer the new gasket tailpiece into the slot 	


T-2 Temperature Display/Controller Replacement Tips:	P/N: 18005969
<ol style="list-style-type: none"> 1. Access controller through top panel. You can access and remove connections without removing the controller. 2. Use small screwdriver to release/secure control and sensor wires: <ul style="list-style-type: none"> • Harness wires into terminals marked: 1-6 • Yellow Coil Sensor wires into terminals: 8 & 10 • Grey Air Sensor wires into terminals: 9 & 10 3. Test Controller - Initiate manual defrost by pushing the lower –left button for 7-10 seconds, until display reads: DEF. Compressor will shut off and the evaporator heater coil will come on. At the end of manual defrost cycle, heater will shut off, compressor will start and the display will show actual compartment temperature. 	 <p><i>An electric schematic is on top of Controller.</i></p>


<p>T-3 Temperature Sensor/Cable Replacement Tips:</p>	<p>P/N: 19004769</p>
<ol style="list-style-type: none"> 1. Follow grey sensor cable up to compartment penetration/chase leading up to Evaporator. Cut any wire ties that bind sensor cable to other harness wires. 2. Obtain new Air Temperature Sensor & Cable [P/N: 19004769], remove any protective packaging and uncoil the cable. 3. From inside freezer compartment – use electric tape to secure connector-end of new sensor cable to the old sensor. 4. Through the right access panel – carefully pull the old sensor cable down through electric chase until new sensor cable connector will reach the Controller. 5. Remove tape and discard old sensor & cable. 6. Use plastic tie to secure sensor cable to top of wire chase. NOTE: Ensure sensor doesn't touch evaporator coils. 	 <p><i>Remove drip pan cover mounting screws, maneuver cover over heater coil and out.</i></p>

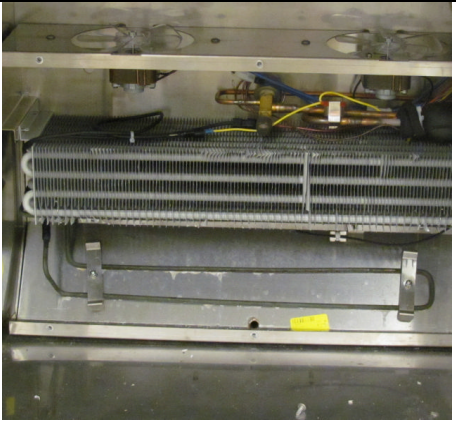
<p>T-4 Defrost Sensor/Cable Replacement Tips:</p>	<p>P/N: 19004832</p>
<ol style="list-style-type: none"> 1. From inside freezer compartment – gently pull defrost coil sensor out of top of Evaporator Coil. NOTE: Be careful not to bend delicate coil fins. 2. Follow yellow sensor cable up to compartment penetration/chase leading up to Evaporator. Cut any wire ties that bind sensor cable to harness wires. 3. Obtain new Air Temperature Sensor & Cable [P/N: 19004832], remove any protective packaging and uncoil the cable. 4. From inside freezer compartment – use electric tape to secure connector-end of new sensor cable to the <u>old</u> sensor. 5. Through the right access panel – carefully pull the old sensor cable down through electric chase until new sensor cable connector will reach the Controller. 	

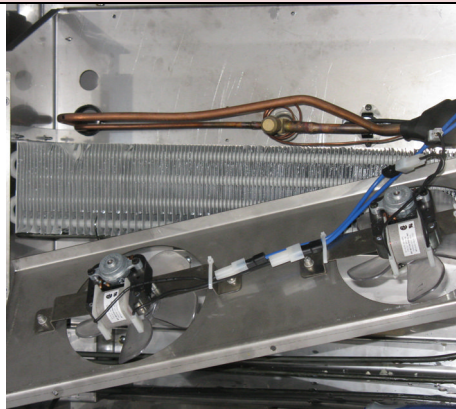
<p>T-5 Power ON/OFF Switch Replacement Tips:</p>	<p>P/N: 3126151</p>
<ol style="list-style-type: none"> 1. To access power switch, remove the six screws that secure to top Grill Tool Shelf to condenser enclosure. Lift off. 2. Remove the terminal connectors to the three switch terminals marked: 1-2-3. 3. Remove the two screws from the switch mounting plate that doubles as a protective bezel. 4. Position new switch through bezel and attached to condenser housing frame. 5. Attach wires marked 1-2-3 to corresponding switch terminals. 6. Replace Tool Shelf, test the new switch and unit operation. 	

<p>T-6 Condenser Package Replacement Tips:</p> <ol style="list-style-type: none"> 1. Rear, left side and right side access panels can be removed to provide easy access to the condenser package. 2. Slit insulation on refrigeration lines 6" [15-18 cm] above enclosure bottom. Push back or remove enough insulation to expose sweat joints. Sweat those joints to separate compressor from evaporator. 3. IMPORTANT: Recover any residual refrigerant and ensure line pressure is equalized to zero, before opening the refrigeration system. 4. NOTE: When resealing the system, use a continuous Nitrogen charge to assure no contaminants enter the system, especially when brazing. 	<p>P/N: 19004507 or 19004310</p> 
--	--

<p>T-7 Start Relay & Start Capacitor Replacement</p> <ol style="list-style-type: none"> 1. Access relay and capacitor through right side access panel. 2. The start relay and capacitor are mounted in a plastic box just right of the compressor. (See page 6 for relay terminal connections.) 3. WARNING - Use caution when working around capacitor. There is a danger of electrical shock, which can cause injury or even death! 4. Top of box opens to provide access to both components. 	<p>See Part No. Guide below</p> 									
<table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr style="background-color: #ffffcc;"> <th style="padding: 5px;">Part No. Guide</th> <th style="padding: 5px;">Model HCMF-18</th> <th style="padding: 5px;">Model HCMF-30</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Start Relay:</td> <td style="padding: 5px;">19005290</td> <td style="padding: 5px;">19005291</td> </tr> <tr> <td style="padding: 5px;">Start Capacitor:</td> <td style="padding: 5px;">19005292</td> <td style="padding: 5px;">19005292</td> </tr> </tbody> </table>	Part No. Guide	Model HCMF-18	Model HCMF-30	Start Relay:	19005290	19005291	Start Capacitor:	19005292	19005292	
Part No. Guide	Model HCMF-18	Model HCMF-30								
Start Relay:	19005290	19005291								
Start Capacitor:	19005292	19005292								

<p>T-8 Condenser Fan Motor Replacement</p> <ol style="list-style-type: none"> 1. Disconnect fan motor wires from start relay terminals. 2. Remove four screws securing wire condenser fan guard to condenser. 3. Slowly move fan assembly between rear of compressor and condenser coil housing. NOTE: It is a tight fit; remove the Grill Tool Shelf to gain access from above. 4. Separate condenser motor from the wire fan guard & a 1/8" Allen Wrench to loosen setscrew and remove motor fan blade. 5. Take new motor [P/N 19005293] and mount to wire fan guard. 6. IMPORTANT: When reinstalling fan, make sure fan blades are facing the proper direction. 7. NOTE: Make sure motor wires are clear of refrigeration lines. Use wire ties as needed. 	<p>P/N: 19005293</p> 
---	--

<p>T-9 Defrost Heater Replacement</p>	<p>P/N: 19004386 or 19004308</p>
<ol style="list-style-type: none"> 1. The defrost heater is mounted below the evaporator coil on the sloped condensate collection pan. One loop is pressed into the bottom fins of the evaporator coil 2. Gently pull heater loop free of evaporator coil. IMPORTANT: Use caution to avoid damaging coil fins. 3. Disconnect heater leads from the high-limit and harness, located above the evaporator coil. 4. DANGER - The coil test procedure requires the unit to be operated with a service access panel open and meter checking of HOT/live electrical wiring. This test should only be done by a qualified service technician, taking safety precautions. 5. On HCMF-18 Model the heater AMP draw should be about 3.8 (450W @120V); on HCMF-30 Model heater AMP draw should be about 4.8 (575W @120V). 	

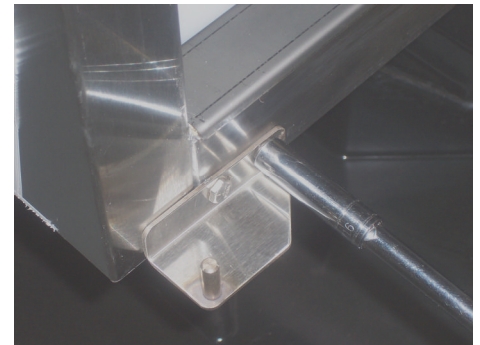
<p>T-10 Evaporator Fan Motor Replacement</p>	<p>P/N: 19000455</p>
<ol style="list-style-type: none"> 1. When re-attaching the fan blade, gently press it on the motor shaft. IMPORTANT: Make sure the fan blade is installed correctly so that it will blow air UP. 2. Secure the motor/harness to the motor strap using a wire tie. NOTE: Make sure wire won't interfere with fan blade(s). 3. IMPORTANT: Before powering up unit, verify that evaporator fan blade(s) turn freely. 4. To TEST, plug in unit to a 120-volt power source. NOTE: There is a four (4) minute delay after compressor starts and the evaporator must get cold (10° F) <u>before</u> fan(s) come on. 	

Section 10 – Component Adjustments

The HCMF is designed with some adjustable components including removable mirror-image door hinges to change the swing, plus a controller that can change the target temperature set point.

A-1 To Change Door Swing (HCMF ships Hinged-Left)

1. Using a 10 mm wrench or socket to remove the two upper hinge bracket-mounting bolts, while supporting the weight of the door. [Tip: If a second person is available, have them support the weight of the freezer door.]
2. Remove upper hinge bracket from the door bushing.
3. Lift the door up and off the lower hinge pin.
4. Remove the two M6 hex bolts from lower hinge bracket.
5. Locate the mirror image bracket mounting holes on the right side of the freezer cabinet frame. Remove fill plugs with sharp flat blade screwdriver. [Save them.]
6. Take the upper hinge-mounting bracket and reinstall it in the lower hinge position with the hinge pin up, using the same two mounting bolts.
7. Rotate the Freezer Door 180 degrees and place what was the upper hinge bushing on the lower hinge mounting bracket pin.
8. Position the remaining [former lower] hinge mounting bracket with the pin in the [now] upper door hinge bushing and secure that bracket with the two remaining M6 Hex mounting bolts.
9. Take the hole fill plugs and press them back into the left side bracket mounting holes.



Remove upper hinge, left off door then remove the bottom hinge.



Mount lower hinge, place door on bottom hinge pin & secure top hinge.

A-2 To Change Set Temperature

1. Push 'SET' button to display: **SEt** then press it again to display the set point temperature, which is factory set at -5° to -7° F.
2. Push the up-arrow button (upper-left) to raise target temperature or the down-arrow button (lower-left) to lower set point.
3. The current compartment temperature will automatically reappear. (If the target temperature was reduced, the compressor should come on to lower the compartment temperature.)



(See Section 7 to initiate a Manual Defrost Cycle)