SERVICE MANUAL -

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DUAL COLD TABLE

PART #: 18017647

Dual Cold Table

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IMPORTANT SAFETY INFORMATION

EXPLANATION OF SAFETY AND NOTICE SYMBOLS

⚠DANGER DANGER indicates a hazardous situation which, if not avoided, **WILL** result in death or serious injury.

⚠WARNING WARNING indicates a hazardous situation which, if not avoided, **COULD** result in death or serious injury.

⚠CAUTION CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE NOTICE is used to address practices not related to physical injury.

READ AND SAVE THESE INSTRUCTIONS

⚠DANGER

Energized electrical circuits present a life-threatening hazard of electric shock, explosion, or arc flash.

- NEVER hose down unit or clean with water jet.
- ALWAYS disconnect unit from power IMMEDIATELY if bare wires or other electrical conductors are exposed.
- ALWAYS ensure all electrical circuits are disconnected and discharged, with an appropriately rated voltage detecting device, before performing service, maintenance, or installation work.
- ALWAYS follow all national and local standards, laws, and codes, as well as all applicable safe electrical work practices.

Failure to follow these safety instructions WILL result in death or serious injury.

Refrigeration systems that use R-290 (Propane) present a life-threatening hazard of fire or explosion. All refrigeration systems present a hazard of flash freezing and oxygen displacement.

- ONLY defrost unit naturally to avoid puncture or damage to the refrigeration circuit.
- ALWAYS perform repairs on the unit in a well ventilated area, away from any source of ignition.
- ALL service work MUST be performed ONLY by factory-authorized service personnel following all national, local, or other applicable refrigerant safe handling work practices, standards, laws, and codes.
- ONLY use original equipment manufacturer (OEM) components designed for use in R-290 refrigeration systems when servicing, to minimize the risk of ignition from incorrect parts or improper service.
- ALWAYS use caution when handling or moving refrigerated equipment to avoid damage to the refrigeration tubing so as to minimize the risk of leaks.
- ALWAYS read the unit's operation and service manuals completely before performing service work.
- ALWAYS use caution when handling refrigeration discharge lines because they are hot and can burn.
- ALWAYS wear appropriate personal protective equipment (PPE) when servicing equipment.

Failure to follow these safety instructions WILL result in death or serious injury.

⚠WARNING

Unauthorized modifications or repairs pose a hazard in the form of an improperly functioning unit.

- ONLY for commercial use.
- NEVER make ANY modifications to the unit that are not authorized by documentation provided by *Franke*.
- NEVER remove any labels from the unit.
- ALWAYS replace ANY labels that have been removed or damaged IMMEDIATELY.
- ONLY use original equipment manufacturer (OEM) parts when service, maintenance, or installation work is performed.

- NEVER operate with factory installed parts or components removed.
- NEVER use for other than intended use.

Failure to follow these safety instructions COULD result in death or serious injury.

These instructions are intended for qualified persons ONLY. Use by others creates an unsafe condition.

- ONLY persons who are certified technicians or trades persons with the requisite knowledge, skills, ability, and training, MUST perform service or installation work.
- ALWAYS keep out of the reach of children.
- ONLY allow access to unit by trained personnel who have read this manual.

Failure to follow these safety instructions COULD result in death or serious injury, as well as property damage or void of warranty.

⚠CAUTION

Lifting and transporting heavy objects poses a hazard of injury.

- NEVER lift or move equipment without proper tools or assistance.

Failure to follow these safety instructions COULD result in minor to moderate injury.

Steel surfaces may have sharp edges which pose a hazard of injury

- ALWAYS wear appropriate personal protective equipment (PPE) when moving or handling equipment.

Failure to follow these safety instructions COULD result in minor to moderate injury.

NOTICE

NEVER use inappropriate tools, processes, or procedures. Damage to components of unit can occur.

- Follow these instructions EXACTLY to avoid property damage or void of warranty.

NEVER discard any loose parts received with unit. They may be required for proper and safe installation and operation.

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Power ON/OFF Switches & Controllers

⚠DANGER

RISK OF ELECTRIC SHOCK

ALWAYS disconnect and discharge electrical circuits before performing circuit work. Verify circuit is discharged using an appropriately rated voltage detecting device.

⚠CAUTION

SHARP SURFACES HAZARD

ALWAYS wear appropriate personal protective equipment (PPE) when handling sharp edges or surfaces.

To remove power ON/OFF switches and controllers:

1. Remove four (4) M5 × 12 screws fastening controller frame to front of unit (Fig. 1).
2. Disconnect wiring to switches and controllers.
3. Remove power switches by pressing in on tabs on sides of each switch. Pull switch through frame to remove (Fig. 2).
4. Remove controllers by pressing in on tabs to either side of each controller. Slide mounting clips back and off of controller. Pull controller through frame to remove (Fig. 3).
5. Install in reverse order. Refer to Fig. 4 through 8, as well as Tables 1 through 5, for connection points to each controller and power ON/OFF switch.

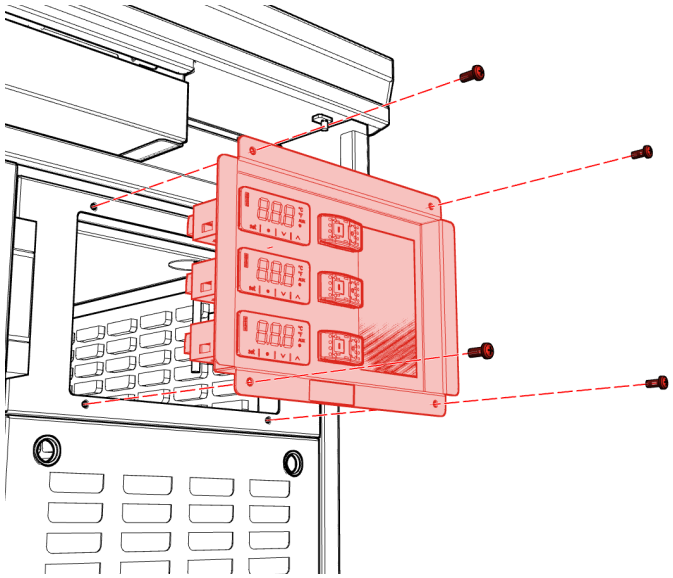


Fig. 1

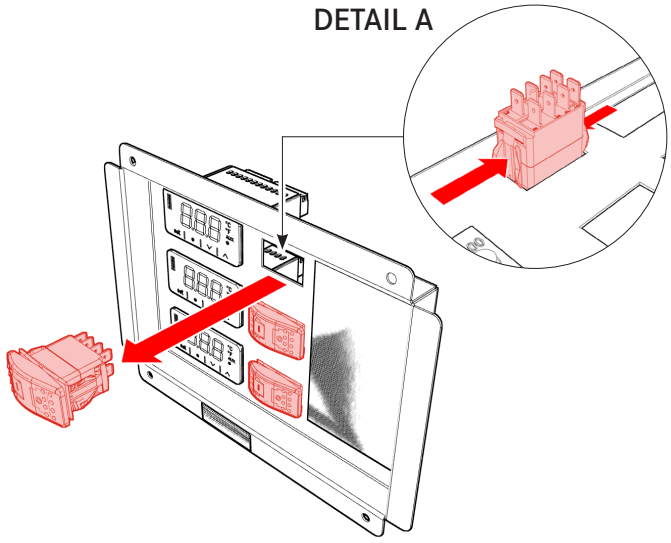


Fig. 2

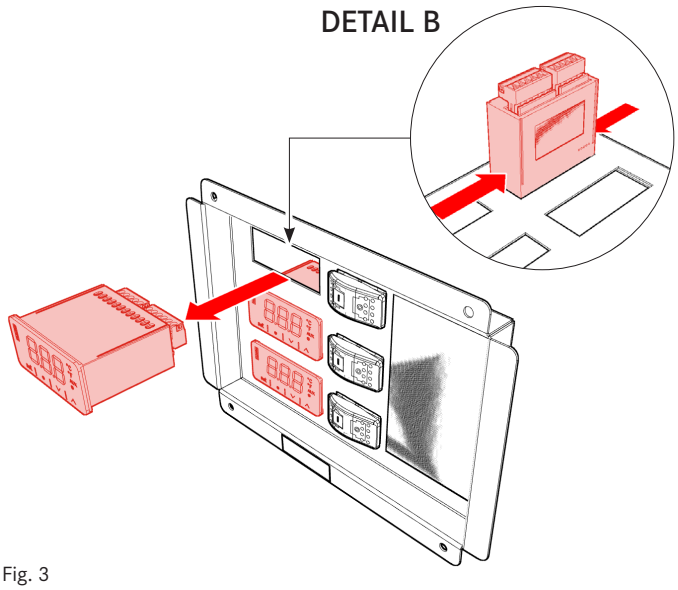


Fig. 3

REMOVAL & INSTALLATION OF PARTS

CONTROLLER (REFRIGERATOR)

ELIWELL TERMINAL	WIRE COLOR
Terminal 1	Brown (to Evaporator Fans)
Terminal 2	Red (to Timer)
Terminal 3	Empty
Terminal 4	White (to Power ON/OFF Switch)
Terminal 5	Red (to Solenoid)
Terminal 6	Black (to Power ON/OFF Switch)
Terminal 7	Empty
Terminal 8	Empty
Terminal 9	Empty
Terminal 10	White (to Temp. Sensor)
Terminal 11	Black (to Temp. Sensor)
Terminal 12	Empty

Table 1

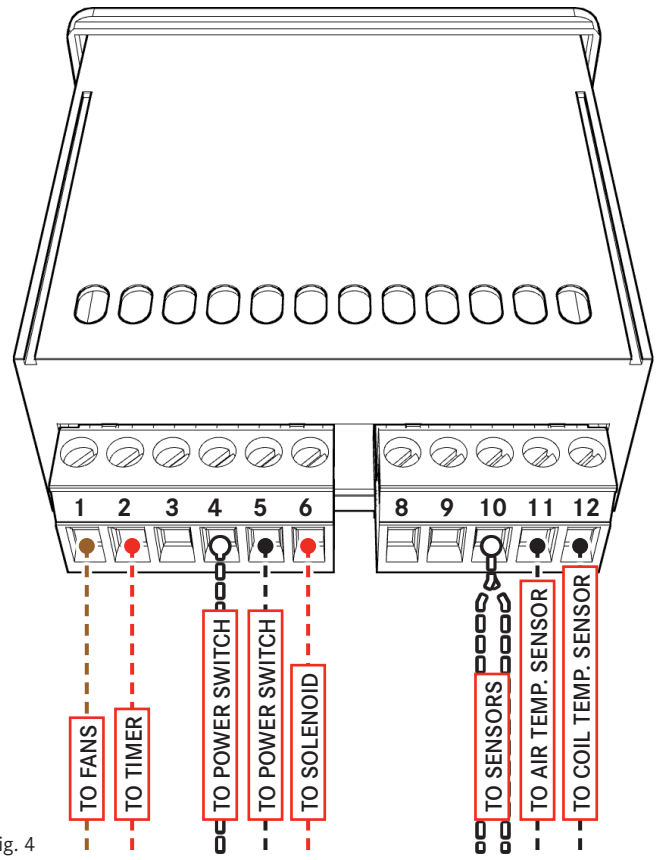


Fig. 4

CONTROLLER (FRONT/BACK COLD WELLS)

ELIWELL TERMINAL	WIRE COLOR
Terminal 1	Empty
Terminal 2	Red (to Timer)
Terminal 3	Empty
Terminal 4	White (to Power ON/OFF Switch)
Terminal 5	Red (to Solenoid)
Terminal 6	Black (to Power ON/OFF Switch)
Terminal 7	Empty
Terminal 8	Empty
Terminal 9	Empty
Terminal 10	White (to Temp. Probes)
Terminal 11	Black (to Air Temp. Probe)
Terminal 12	Black (to Coil Temp. Probe)

Table 2

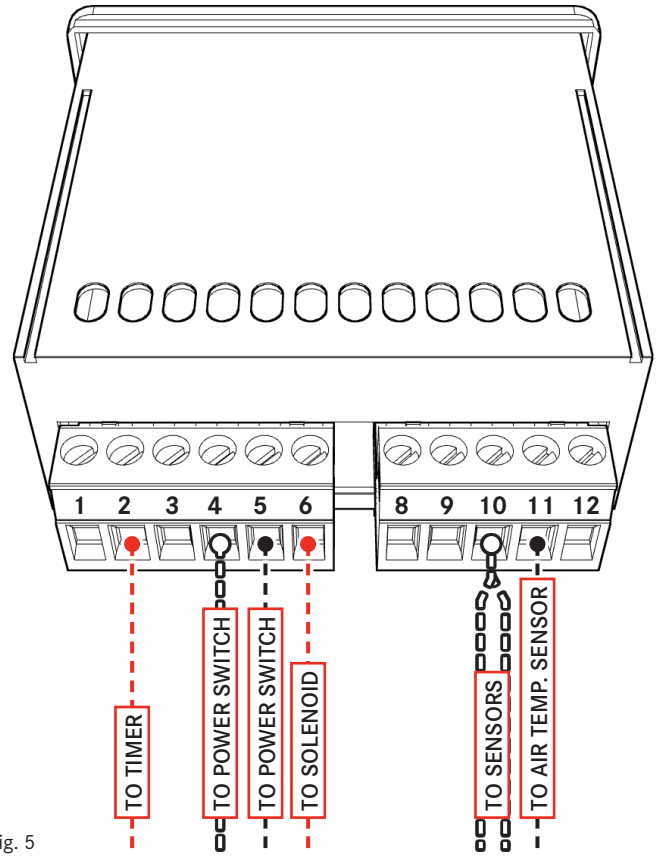


Fig. 5

POWER ON/OFF SWITCH (REFRIGERATOR)

SWITCH TERMINAL	WIRE COLOR
Terminal 1	Black (to Controller)
Terminal 2	White (to Controller)
Terminal 3	Empty
Terminal 4	Black (to Power Cord)
Terminal 5	White (to Power Cord)
Terminal 6	Empty
Terminal 7	Empty
Terminal 8	Empty

Table 3

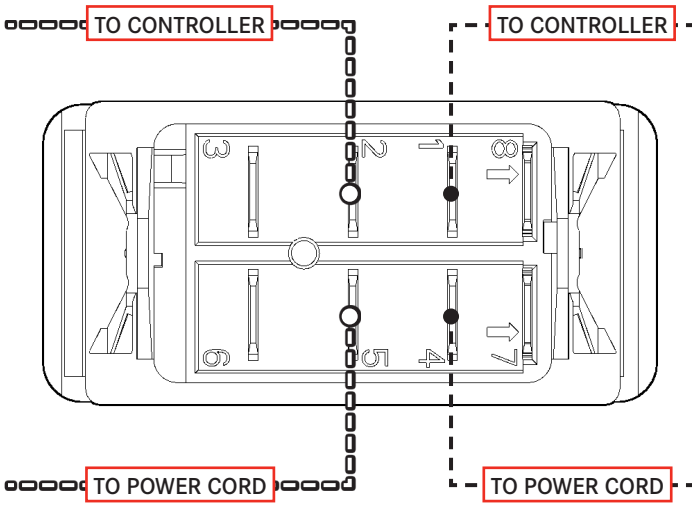


Fig. 6

POWER ON/OFF SWITCH (FRONT COLD WELL)

SWITCH TERMINAL	WIRE COLOR
Terminal 1	Black (to Controller)
Terminal 2	White (to Controller)
Terminal 3	Empty
Terminal 4	Black (to Power Cord)
Terminal 5	White (to Power Cord)
Terminal 6	Empty
Terminal 7	Empty
Terminal 8	Empty

Table 4

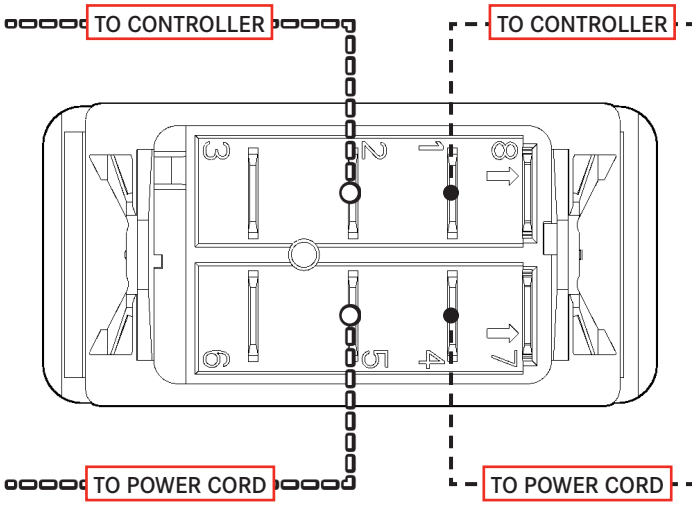


Fig. 7

POWER ON/OFF SWITCH (BACK COLD RAIL)

SWITCH TERMINAL	WIRE COLOR
Terminal 1	Black (to Controller)
Terminal 2	White (to Controller)
Terminal 3	Empty
Terminal 4	Black (to Power Cord)
Terminal 5	White (to Power Cord)
Terminal 6	Empty
Terminal 7	Empty
Terminal 8	Empty

Table 5

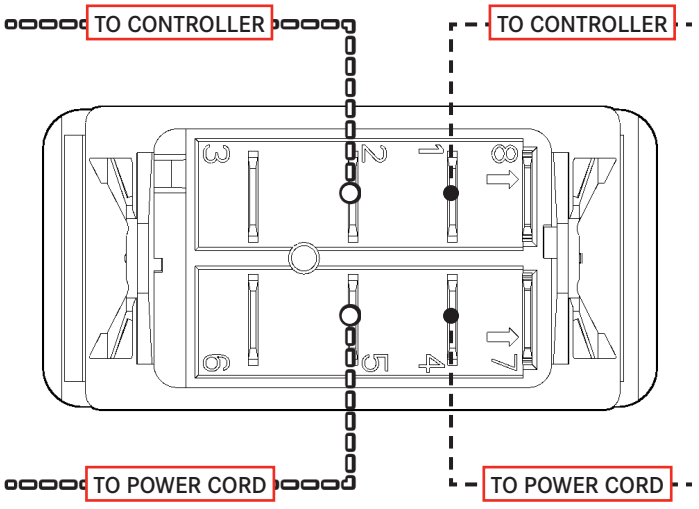


Fig. 8

Evaporator Module

⚠DANGER

RISK OF ELECTRIC SHOCK

ALWAYS disconnect and discharge electrical circuits before performing circuit work. Verify circuit is discharged using an appropriately rated voltage detecting device.

RISK OF SUFFOCATION/FROSTBITE

ALWAYS perform service work on refrigeration equipment in a well ventilated environment. ALWAYS use caution when moving or handling equipment to minimize risk of damage to the refrigeration circuit.

⚠CAUTION

SHARP SURFACES HAZARD

ALWAYS wear appropriate personal protective equipment (PPE) when handling sharp edges or surfaces.

To remove evaporator module:

1. Remove wire racks from interior of refrigerator (Fig. 9).
2. Lift and remove condensate pan from angle brackets at bottom of evaporator module (Fig. 10).
3. Remove two (2) M5 × 12 screws on EACH side of evaporator module fastening rack support angles to refrigerator (Fig. 11).
4. Loosen two (2) M5 × 12 screws on EACH side of evaporator module fastening top of module to refrigerator (Fig. 12). Slide module back, then away from refrigerator interior to remove.
5. Cut copper tubing between evaporator and condensing unit. Cut lines close to evaporator module (refer to *Refrigeration Diagram*, page 26)
6. Install in reverse order.

NOTICE

RISK OF EQUIPMENT FAILURE

ALWAYS replace the filter drier whenever service work is performed that opens the refrigeration circuit.

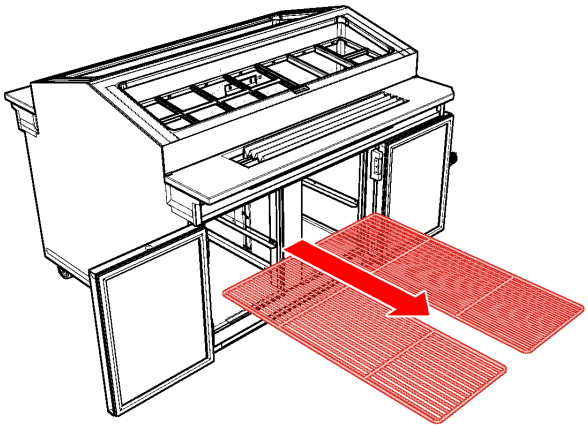


Fig. 9

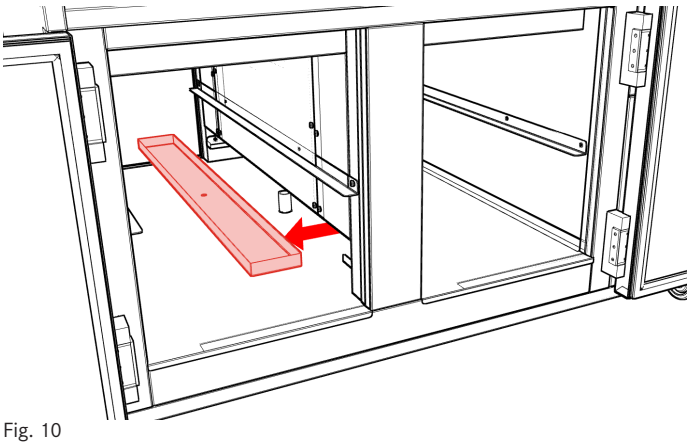


Fig. 10

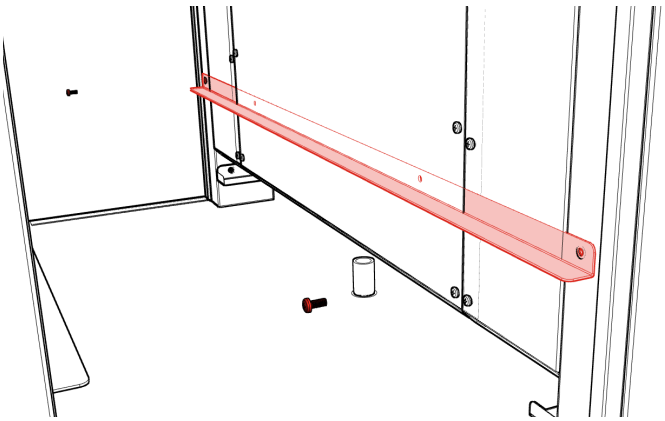


Fig. 11

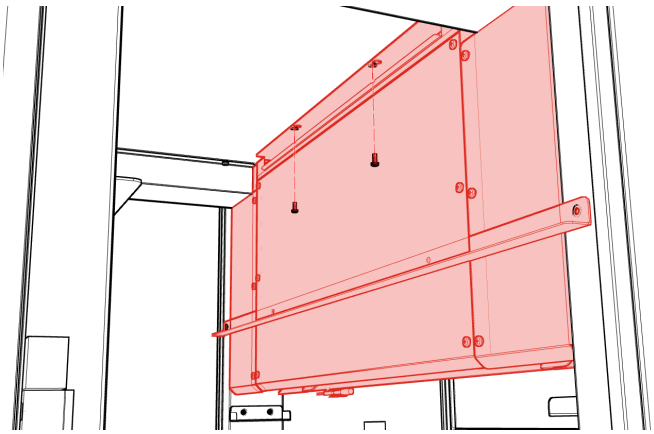


Fig. 12

Evaporator Fans

⚠DANGER

RISK OF ELECTRIC SHOCK

ALWAYS disconnect and discharge electrical circuits before performing circuit work. Verify circuit is discharged using an appropriately rated voltage detecting device.

⚠CAUTION

SHARP SURFACES HAZARD

ALWAYS wear appropriate personal protective equipment (PPE) when handling sharp edges or surfaces.

To remove evaporator fans:

1. Remove six (6) M5 × 12 screws on LEFT side of evaporator module. Lift module access panel away to remove (Fig. 13).
2. Remove six (6) M5 × 12 screws from evaporator side access panels (Fig. 14).
3. Remove two (2) M5 × 12 screws from EACH end of evaporator module, fastening evaporator fan assembly to module (Fig. 15). Lift fan assembly away from evaporator to remove.
4. Remove four (4) M5 × 12 screws fastening EACH fan to evaporator fan assembly (Fig. 16).
5. Install in reverse order.

NOTICE

RISK OF EQUIPMENT FAILURE

Ensure that electrical connections for fans are in the correct position (Fig. 16, Detail C) and that the direction of air flow is inward, as indicated by the arrows stamped into each fan. Fan wiring should NEVER be pinched against fan assembly when reinstalling.

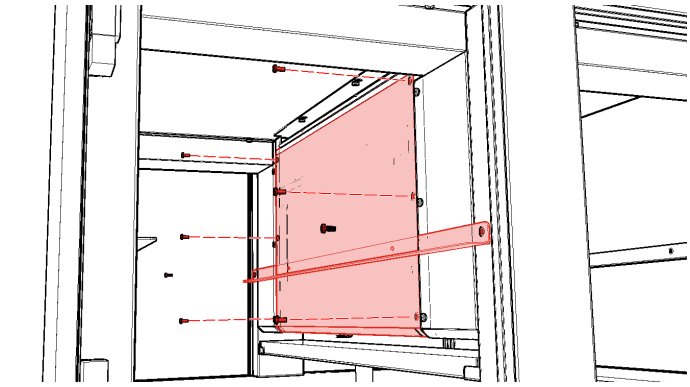


Fig. 13

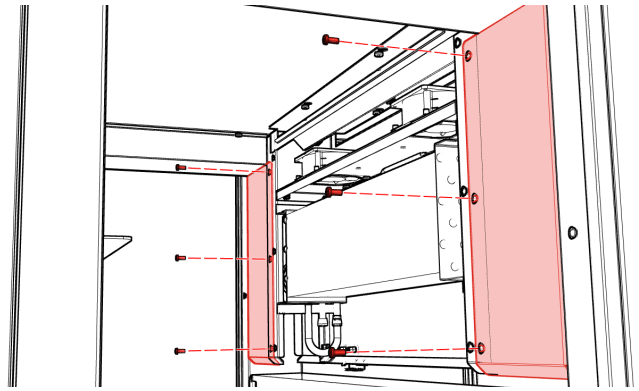


Fig. 14

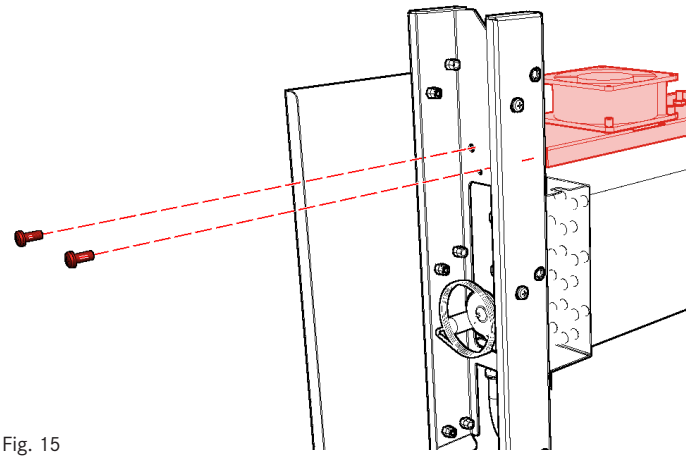


Fig. 15

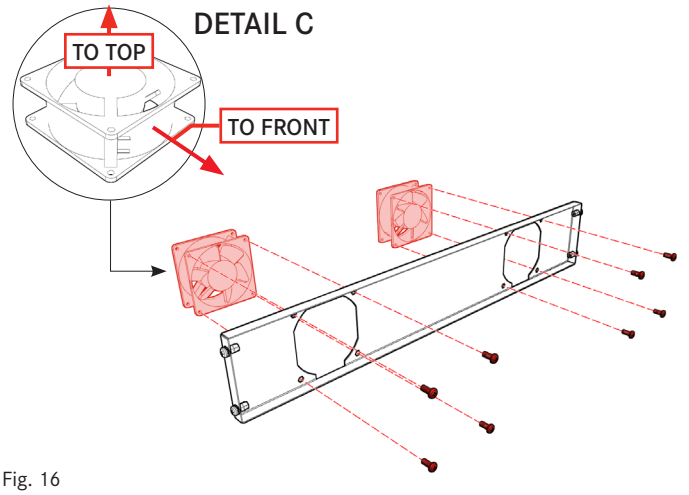


Fig. 16

Coil Temperature Sensor

⚠DANGER

RISK OF ELECTRIC SHOCK

ALWAYS disconnect and discharge electrical circuits before performing circuit work. Verify circuit is discharged using an appropriately rated voltage detecting device.

⚠CAUTION

SHARP SURFACES HAZARD

ALWAYS wear appropriate personal protective equipment (PPE) when handling sharp edges or surfaces.

To remove coil temperature sensor:

1. Remove six (6) M5 × 12 screws on LEFT side of evaporator module. Lift module access panel away to remove (Fig. 17).
2. Disconnect coil temperature sensor wiring from controllers (refer to Fig. 18 and *Power ON/OFF Switches & Controllers*, page 5).
3. Locate coil temperature sensor within top of evaporator. Note location of sensor between evaporator fins (Fig. 19).
4. Pull sensor out of evaporator to remove (Fig. 20).
5. Install in reverse order.

NOTICE

RISK OF EQUIPMENT FAILURE

Avoid installing the temperature sensor in a position that places the sensor in contact with metal surfaces outside of the evaporator coil. Doing so will cause the condensing unit to short-cycle, reducing equipment lifespan.

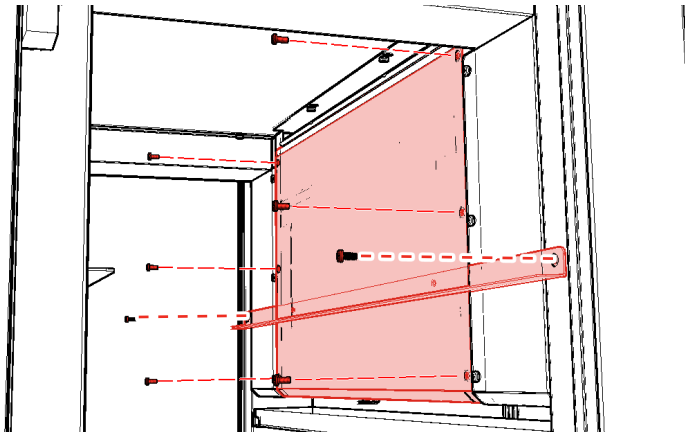


Fig. 17

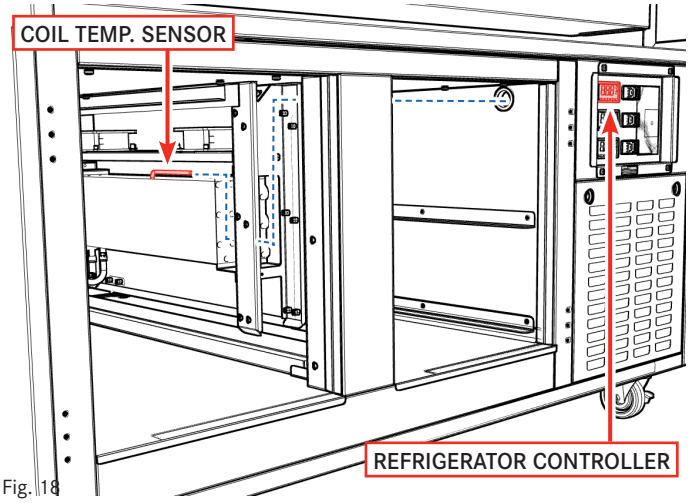


Fig. 18

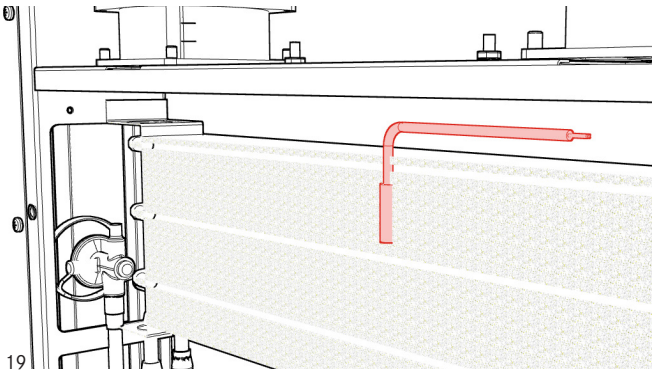


Fig. 19

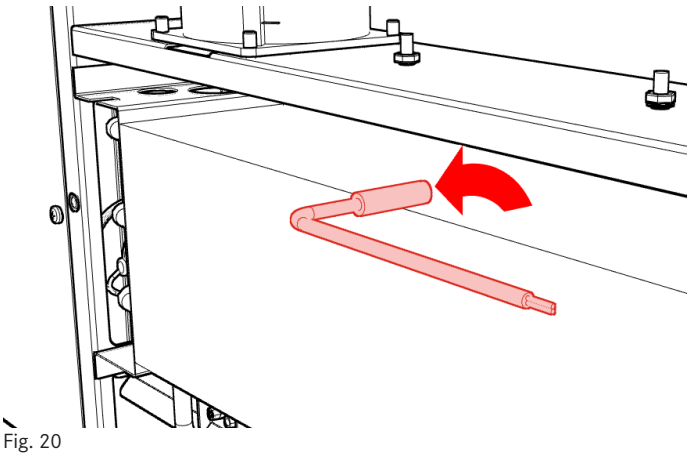


Fig. 20

Air Temperature Sensor (Refrigerator)

⚠DANGER

RISK OF ELECTRIC SHOCK

ALWAYS disconnect and discharge electrical circuits before performing circuit work. Verify circuit is discharged using an appropriately rated voltage detecting device.

⚠CAUTION

SHARP SURFACES HAZARD

ALWAYS wear appropriate personal protective equipment (PPE) when handling sharp edges or surfaces.

To remove refrigerator air temperature sensor:

1. Lift and remove condensate pan from angle brackets at bottom of evaporator module (Fig. 21).
2. Disconnect air temperature sensor wiring from refrigerator controller (refer to Fig. 22 and *Power ON/OFF Switches & Controllers*, page 5).
3. Locate air temperature sensor behind sensor guard at bottom of evaporator module (Fig. 23).
4. Cut wire ties fastening air temperature sensor to evaporator module (Fig. 24). Pull sensor away from module to remove.
5. Install in reverse order.

NOTICE

RISK OF EQUIPMENT FAILURE

Avoid installing the temperature sensor in a position that places the sensor in contact with metal surfaces. Doing so will cause the condensing unit to short-cycle, reducing equipment lifespan.

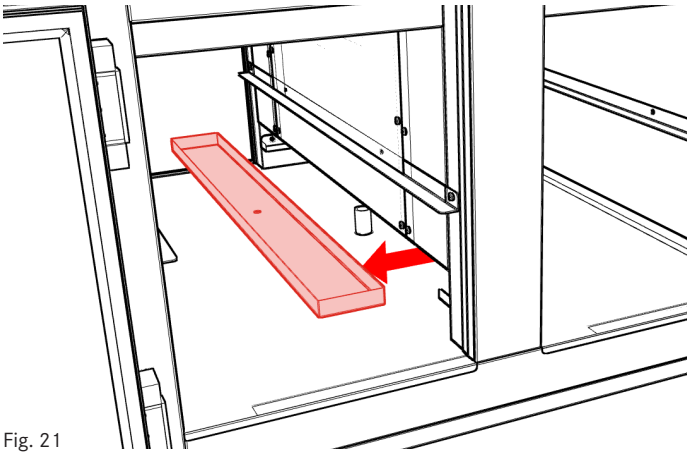


Fig. 21

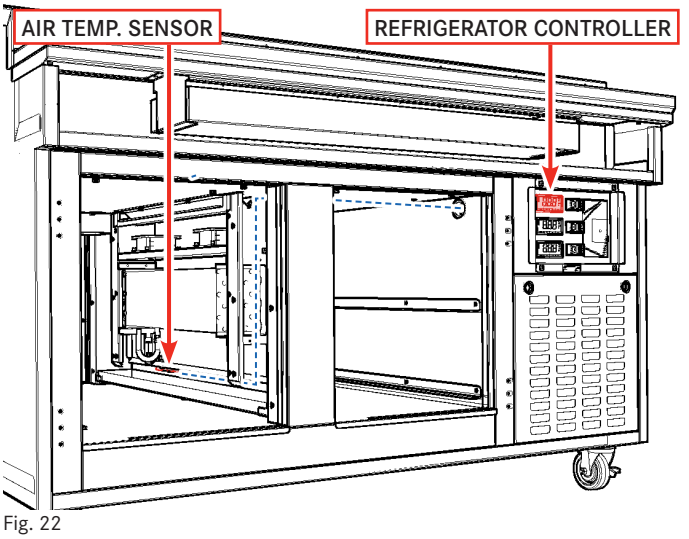


Fig. 22

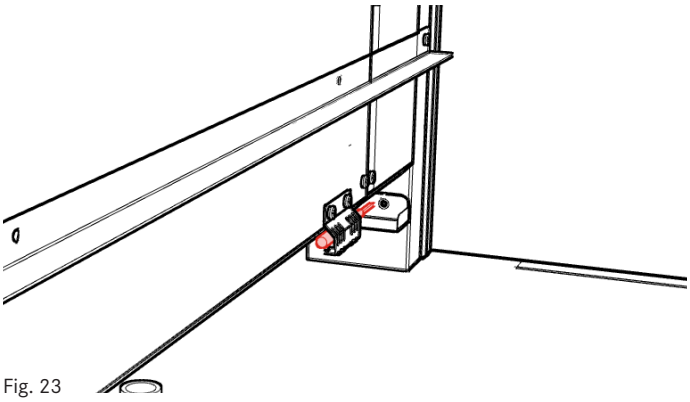


Fig. 23

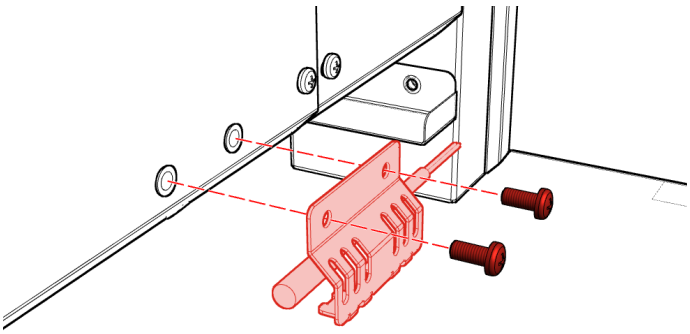


Fig. 24

Air Temperature Sensor (Cold Rail)

⚠DANGER

RISK OF ELECTRIC SHOCK

ALWAYS disconnect and discharge electrical circuits before performing circuit work. Verify circuit is discharged using an appropriately rated voltage detecting device.

⚠CAUTION

SHARP SURFACES HAZARD

ALWAYS wear appropriate personal protective equipment (PPE) when handling sharp edges or surfaces.

To remove cold rail air temperature sensors:

1. Lift and remove pan dividers from cold rails (Fig. 25).
2. Disconnect air temperature sensor wiring from appropriate cold rail controller (refer to Fig. 26 and *Power ON/OFF Switches & Controllers*, page 5).
3. Locate rail air temperature sensor module at back of each cold rail. Remove two (2) M5 × 12 screws fastening rail cover to module (Fig. 27).
4. Cut wire ties fastening air temperature sensor to bracket within sensor module. Pull sensor away from module to remove (Fig. 28).
5. Install in reverse order.

NOTICE

RISK OF EQUIPMENT FAILURE

Avoid installing the temperature sensor in a position that places the sensor in contact with metal surfaces outside of the evaporator coil. Doing so will cause the condensing unit to short-cycle, reducing equipment lifespan.

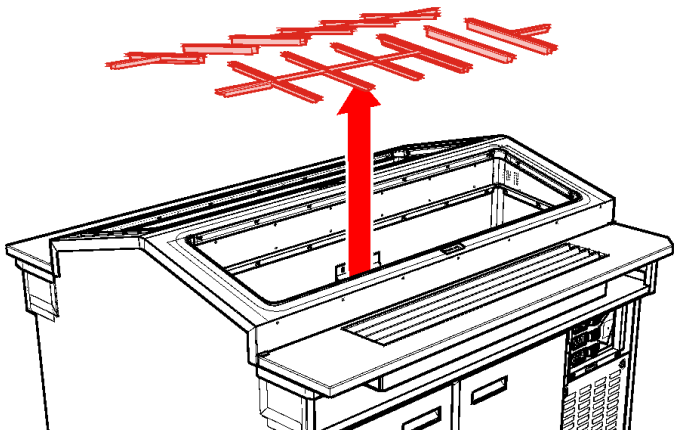


Fig. 25

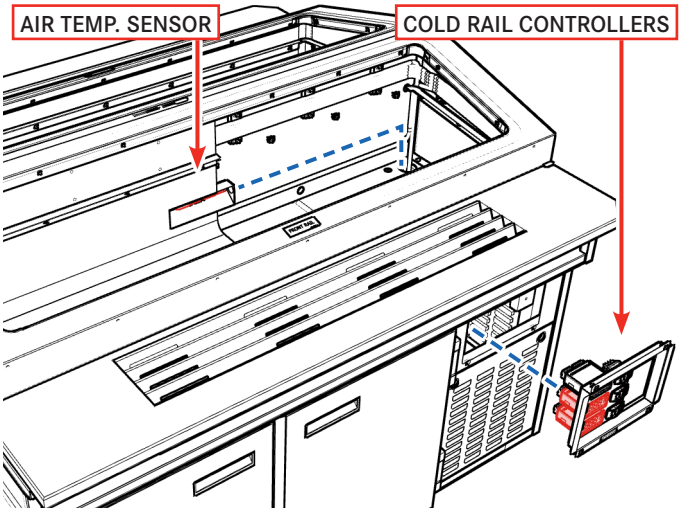


Fig. 26

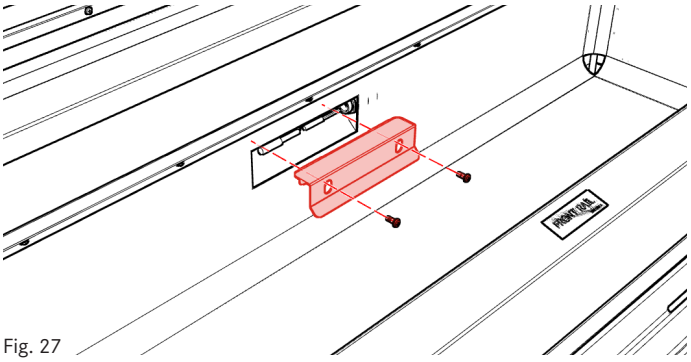


Fig. 27

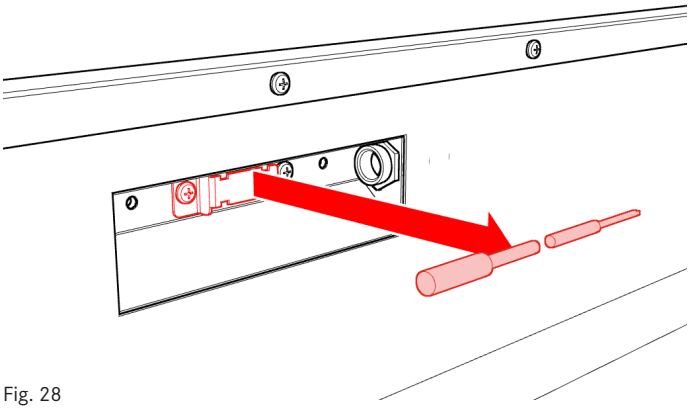


Fig. 28

Refrigeration Timer

⚠DANGER

RISK OF ELECTRIC SHOCK

ALWAYS disconnect and discharge electrical circuits before performing circuit work. Verify circuit is discharged using an appropriately rated voltage detecting device.

⚠CAUTION

SHARP SURFACES HAZARD

ALWAYS wear appropriate personal protective equipment (PPE) when handling sharp edges or surfaces.

To remove refrigeration timer:

1. Remove seven (7) M5 × 12 screws fastening side condenser access cover to unit. Drop cover down and away from unit to remove (Fig. 29).
2. Locate timer on back of controller frame. Disconnect wiring to timer (Fig. 30).
3. Remove one (1) screw fastening timer to controller plate. Pull timer away from controller plate to remove (Fig. 31).
4. Install in reverse order. Refer to *Electrical Diagram*, page 25, for timer wiring.

NOTICE

IMPORTANT SERVICE INFORMATION

Timer configuration is preset from the factory and should NEVER be modified. Contact Franke Technical Support for assistance if timer has been modified.

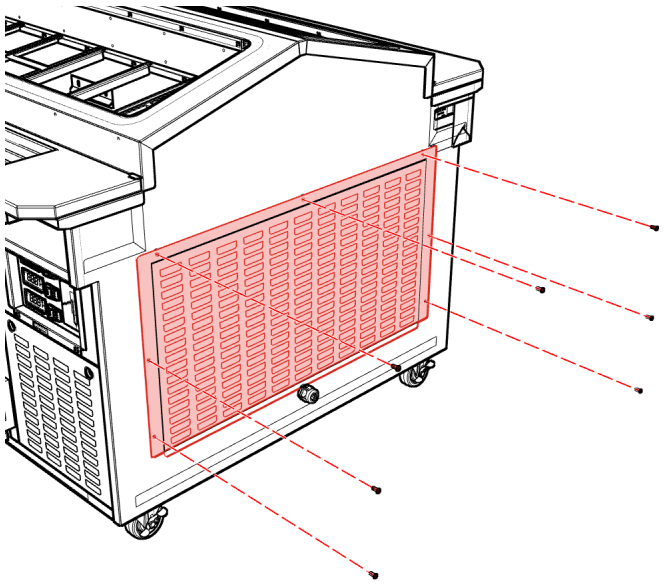


Fig. 29

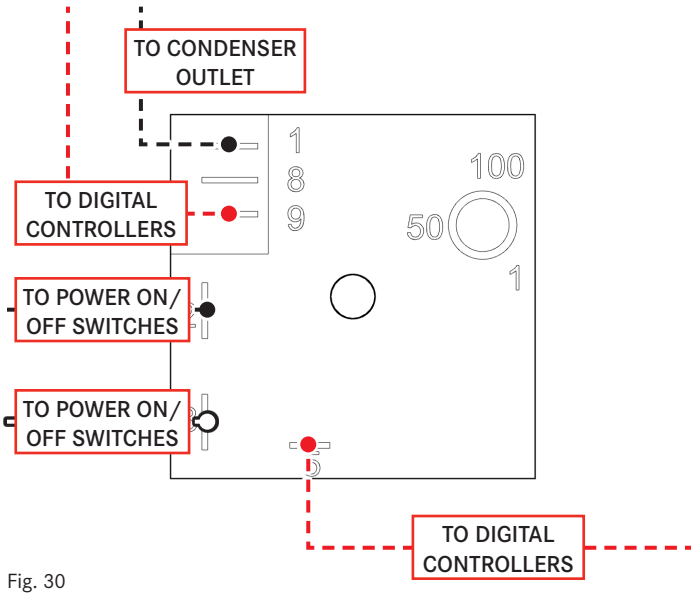


Fig. 30

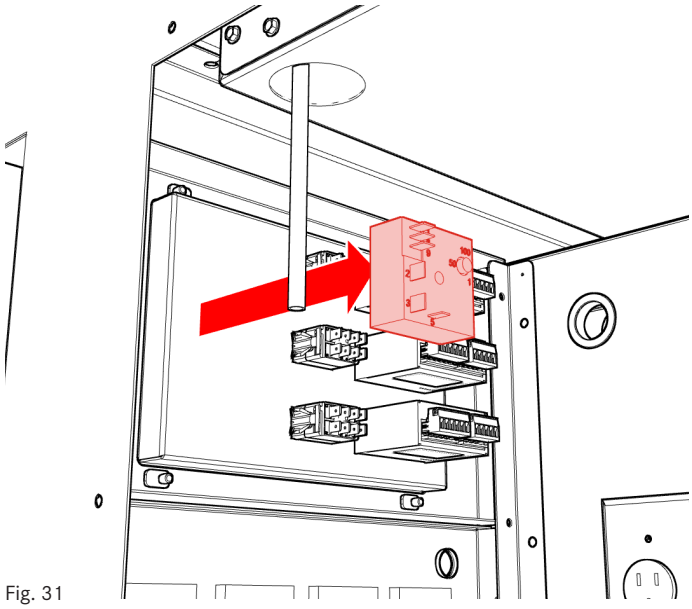


Fig. 31

Condenser

⚠DANGER

RISK OF ELECTRIC SHOCK

ALWAYS disconnect and discharge electrical circuits before performing circuit work. Verify circuit is discharged using an appropriately rated voltage detecting device.

RISK OF FIRE/EXPLOSION

ALWAYS perform service work on R-290 (Propane) refrigeration systems in a well ventilated environment, away from potential sources of ignition.

RISK OF SUFFOCATION/FROSTBITE

ALWAYS perform service work on refrigeration equipment in a well ventilated environment. ALWAYS use caution when moving or handling equipment to minimize risk of damage to the refrigeration circuit.

⚠CAUTION

SHARP SURFACES HAZARD

ALWAYS wear appropriate personal protective equipment (PPE) when handling sharp edges or surfaces.

LIFTING HAZARD

Use appropriate help, tools, and techniques when lifting or moving heavy objects.

To remove condenser:

1. Remove seven (7) M5 × 12 screws fastening side condenser access cover to unit. Drop cover down and away from unit to remove (Fig. 32).
2. Unplug condenser from receptacle located within condenser compartment (Fig. 33).
3. Remove refrigerant from system per all national, local, or other applicable refrigerant safe handling work practices, standards, laws and codes.

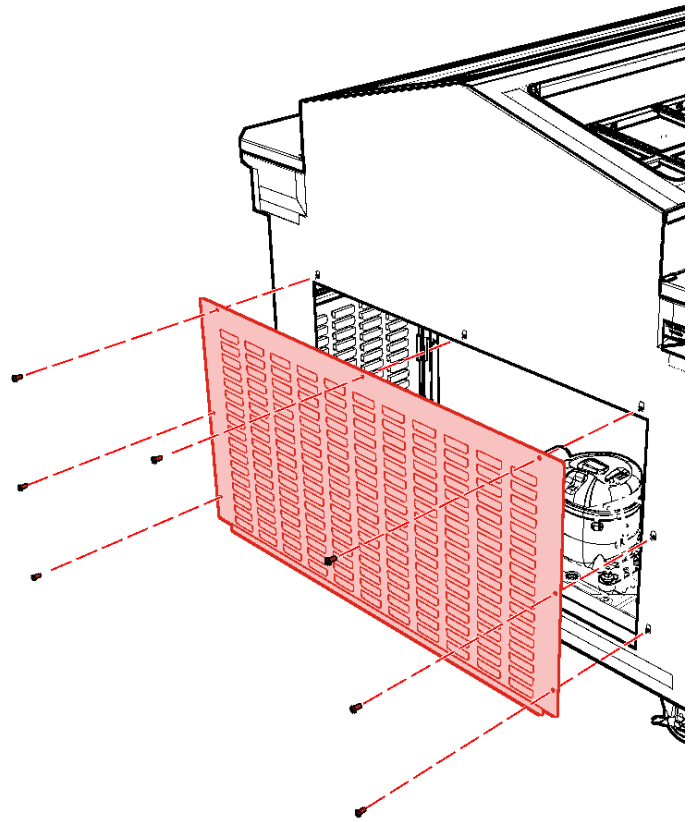


Fig. 32

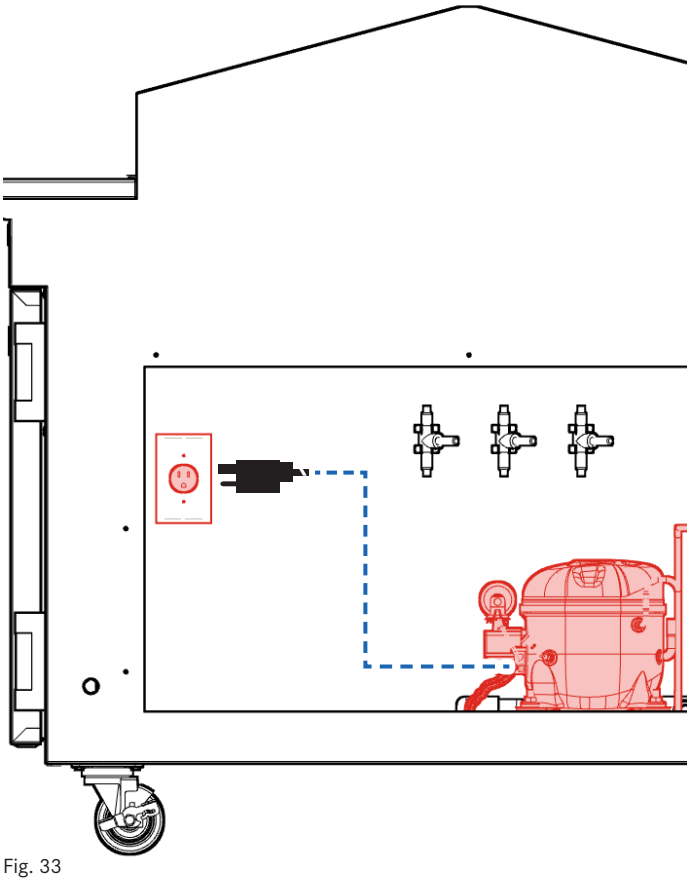


Fig. 33

4. Cut copper tubing between evaporator and condensing unit. Cut lines close to compressor, inside condenser compartment (refer to *Refrigeration Diagram*, page 26).
5. With appropriate assistance, lift condenser out of condenser compartment (Fig. 34).
6. Install in reverse order. Charge with refrigerant per all national, local, or other applicable refrigerant safe handling work practices, standards, laws and codes (refer to *Specifications*, page 24)

NOTICE

RISK OF EQUIPMENT FAILURE

ALWAYS replace the filter drier whenever service work is performed that opens the refrigeration circuit.

RISK OF EQUIPMENT FAILURE

NEVER leave refrigerant valves installed after service work. Remove all valves and completely close refrigeration circuit before returning unit to operation.

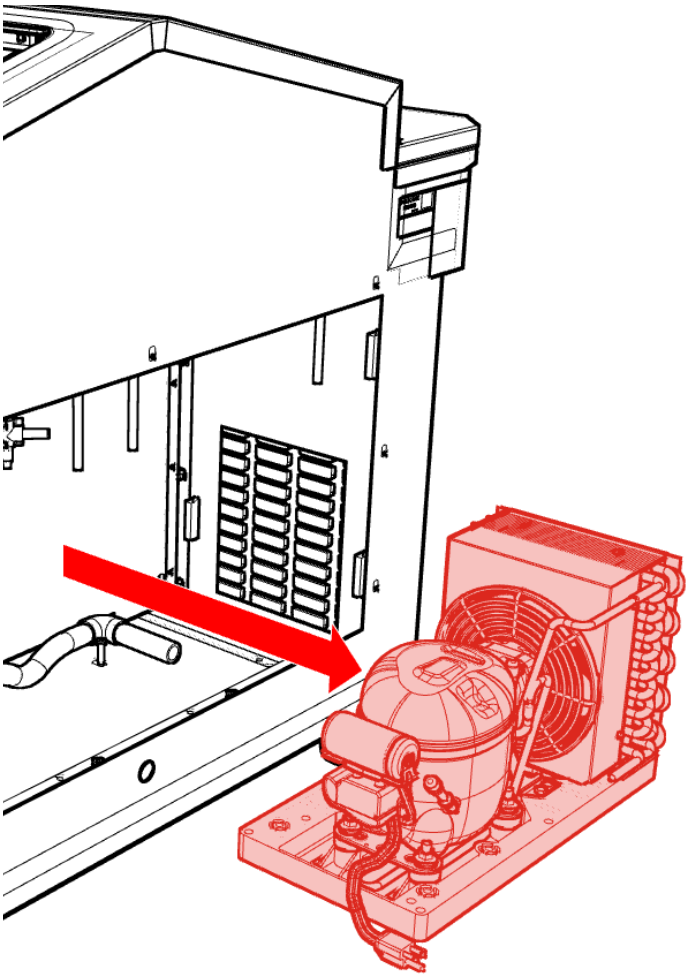


Fig. 34

PROCEDURES & ADJUSTMENTS

Temperature Setpoint Adjustment

Refer to the ***Dual Cold Table Operation Manual*** for the temperature setpoint adjustment and toggling between refrigeration modes.

Document URL:
https://tinyurl.com/w7xastc

Periodic Maintenance

Refer to the ***Dual Cold Table Operation Manual*** for periodic maintenance procedures.

Document URL:
https://tinyurl.com/w7xastc

NOTICE

IMPORTANT SERVICE INFORMATION

By default, the controller is locked from the factory. Do NOT unlock the controller unless requested to do so by a store manager.

Locking the Controller

To lock the controller:

1. From the current temperature display, press and hold the Set button for approximately 5 to 8 seconds.
2. Use the Up and Down arrow buttons to scroll to **PA1**, and press the Set button. If **PA1** does not appear, skip to *step 4*.
3. Use the Up arrow button to increase the value from 0 to 14, which is the pass code, and press the Set button.
4. Use the Up and Down arrow buttons to scroll to **LOC**, and press the Set button.
5. The letter '**y**' should be displayed. Use the Up and Down arrow buttons to scroll to '**n**', and press the Set button.
6. Press the Power button momentarily twice (upper right hand button), and the display returns to the current temperature display.

Unlocking the Controller

To unlock the controller:

1. From the current temperature display, press and hold the Set button for approximately 5 to 8 seconds.
2. Use the Up and Down arrow buttons to scroll to **PA1**, and press the Set button. If **PA1** does not appear, skip to *Step 4*.
3. Use the Up arrow button to increase the value from 0 to 14, which is the pass code, and press the Set button.
4. Use the Up and Down arrow buttons to scroll to **LOC**, and press the Set button.
5. The letter '**n**' should be displayed. Use the Up and Down arrow buttons to scroll to '**y**', and press the Set button.
6. Press the Power button momentarily twice (upper right hand button), and the display returns to the current temperature display.

Testing the Temperature Sensors

It is important to confirm whether the coil and air temperature sensors are operating within specified parameters.

Use the following test to determine if sensor replacement is necessary.

1. Fill a cup with ice and water.
2. Using a thermometer to monitor, allow the temperature of the water to stabilize at 32°F (0°C).
3. Remove the temperature sensor from the refrigerator (refer to *Coil Temperature Sensor,* page 10, *Air Temperature Sensor (Refrigerator)*, page 11, and *Air Temperature Sensor (Cold Rail)*, page 12), and submerge sensor into the cup of water.
4. Test the sensor at the black and white wires using a calibrated ohmmeter. Confirm that it is reporting a resistance value of 27.28k ohms, +/- 1%.
5. If the sensor is outside of the specified parameters, replace it.

Setting and Adjusting Refrigeration Timer

The refrigeration timer installed on this unit is designed to prevent the short cycling of the refrigeration condenser. This is achieved by preventing the condenser from cycling back on too soon after powering down, delaying a request from the communicating temperature controller until the set timer period has expired.

The timer is set from the factory for a delay of 100 seconds. This is the optimal delay based on the unit's design and should NOT be adjusted unless advised to do so by Franke Technical Support.

In the event that the timer has been adjusted, preventing the normal function of the condenser, use the following steps to return the timer to the default setting.

1. Remove seven (7) M5 × 12 screws fastening side condenser access cover to unit. Drop cover down and away from unit to remove (Fig. 35).

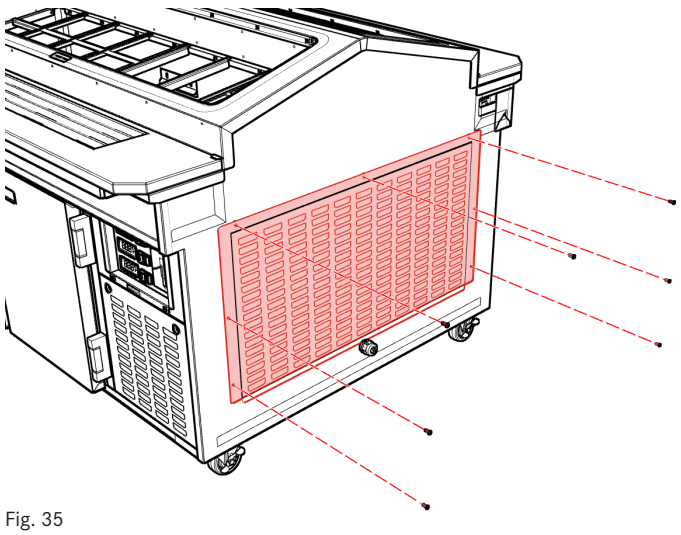


Fig. 35

2. Locate timer on back of controller frame, identifying timer delay control knob on timer (Fig. 36).

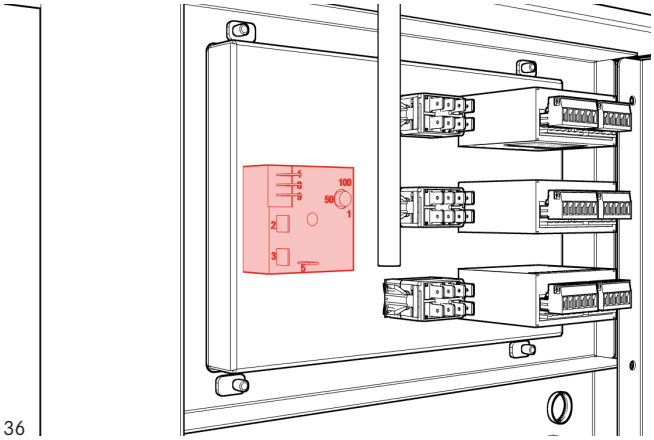


Fig. 36

3. Turn timer delay control knob until arrow on knob is pointed towards "100" label on timer (Fig. 37).

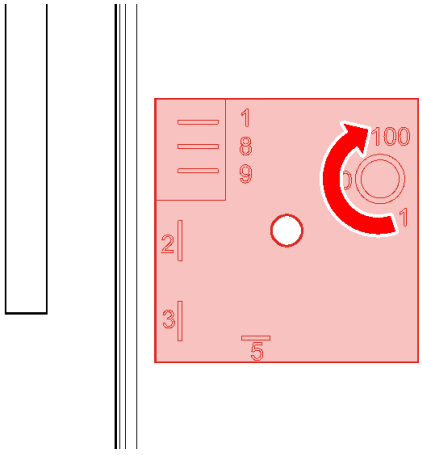


Fig. 37

4. Reinstall condenser access cover and test unit to verify correct operation.

TROUBLESHOOTING

ISSUE	POSSIBLE CAUSE	REMEDY
Unit does not start when powered ON.	Unit is not plugged in.	Verify unit is plugged into an appropriately rated electrical outlet.
	Outlet is not working.	Plug unit into another, nearby outlet. If individual outlet is not working, use alternate, and contact licensed electrician to repair or replace outlet.
	Circuit breaker has been tripped.	Check circuit breaker to see if it has tripped. Reset if necessary.
	Power switch not receiving power.	Confirm with a voltmeter that electricity is flowing from the power cord to the power switch. Replace any damaged or non-functional wiring.
	Power switch is not working.	Test, and replace the power switch if necessary.
Power is ON but condenser does not run.	The compressor thermal overload has tripped.	Unplug the unit for one (1) hour, then plug in, restart, and confirm operation.
	Power is not flowing through the condensing unit components.	Confirm that power is flowing through the start capacitor, start relay, condenser fan motor, and compressor. Replace any damaged or non-functional components.
	Controller has been turned OFF.	Turn the controller ON by pressing the power (top-right) button on the controller.
	Controller is not receiving power.	Check input voltages to the controller. Replace wiring and/or controller as needed.
	Controller is not sending signals to the condensing unit.	Check output voltages from the controller. Replace wiring and/or controller as needed.

ISSUE	POSSIBLE CAUSE	REMEDY
Drawers are too warm.	Refrigerator setpoint is set too high.	Adjust the setpoint temperature (refer to *Temperature Setpoint Adjustment*, page 15).
	Drawer gaskets are worn/ damaged.	Replace any worn, torn, or damaged drawer gaskets.
	Condenser coil is dirty or clogged with debris.	Use a soft bristle brush to clean the condenser coil (refer to *Periodic Maintenance*, page 14).
	Evaporator fans are dirty or clogged with debris.	Clean the evaporator fans.
	Evaporator fans are not functioning.	Confirm that the evaporator fans are receiving power. Replace any damaged or non-functional fans.
	Power is not flowing through the condensing unit components.	Confirm that voltage is present at the start capacitor, start relay, overload, condenser fan motor, and condenser. Replace any damaged or non-functional components.
	Refrigerant is not flowing freely through the refrigeration circuit.	Check pressures throughout the refrigeration circuit and verify that the TD1 TXV valve is working correctly. Replace damaged or defective components.
	Refrigerant is low or is leaking.	Repair any leaks, if found. Replace any lost refrigerant, up to the rated amount for the equipment (refer to *Specifications*, page 24).
	Air temperature sensor is not positioned correctly.	Confirm that the air temperature sensor is positioned correctly (refer to *Air Temperature Sensor (Refrigerator)*, page 11, and *Air Temperature Sensor (Cold Rail)*, page 12).
Drawers are too cold.	Refrigerator setpoint is set too low.	Adjust the setpoint temperature (refer to *Temperature Setpoint Adjustment*, page 15).
	Controller is not sending or receiving signals correctly.	Check input and output voltages for the controller. Replace the controller if damaged or non-functional.
	Coil temperature sensor is not positioned correctly.	Confirm that the coil temperature sensor is positioned correctly in the evaporator coil (refer to *Coil Temperature Sensor,* page 10).
	Coil temperature sensor is not functioning.	Test the coil temperature sensor to confirm operation (refer to *Testing the Temperature Sensors*, pages 16). Replace the sensor if necessary.

TROUBLESHOOTING

ISSUE	POSSIBLE CAUSE	REMEDY
Ice is building up on the evaporator coil.	Refrigerator setpoint is set too low.	Adjust the setpoint temperature (refer to *Temperature Setpoint Adjustment*, page 15).
	Drawer gaskets are worn/ damaged.	Replace any worn, torn, or damaged drawer gaskets.
	Coil valve solenoid is not working correctly.	Verify that the coil valve solenoid is working correctly. Replace if defective or damaged.
	Coil temperature sensor is not positioned correctly.	Confirm that the coil temperature sensor is positioned correctly in the evaporator coil.
	Coil temperature sensor is not functioning.	Test the coil temperature sensor to confirm operation (refer to *Testing the Temperature Sensors*, pages 16). Replace the sensor if necessary.
	Refrigerant is not flowing freely through the refrigeration circuit.	Check pressures throughout the refrigeration circuit and verify that the TD1 TXV valve is working correctly. Replace damaged or defective components.
	Refrigerant is low or is leaking.	Repair any leaks, if found. Replace any lost refrigerant, up to the rated amount for the equipment (refer to *Specifications*, page 24).

If following these steps does not fix the problem,
contact Franke at (800) 537-2653 and press 2 for Technical Support.

Exterior & Cold Rails

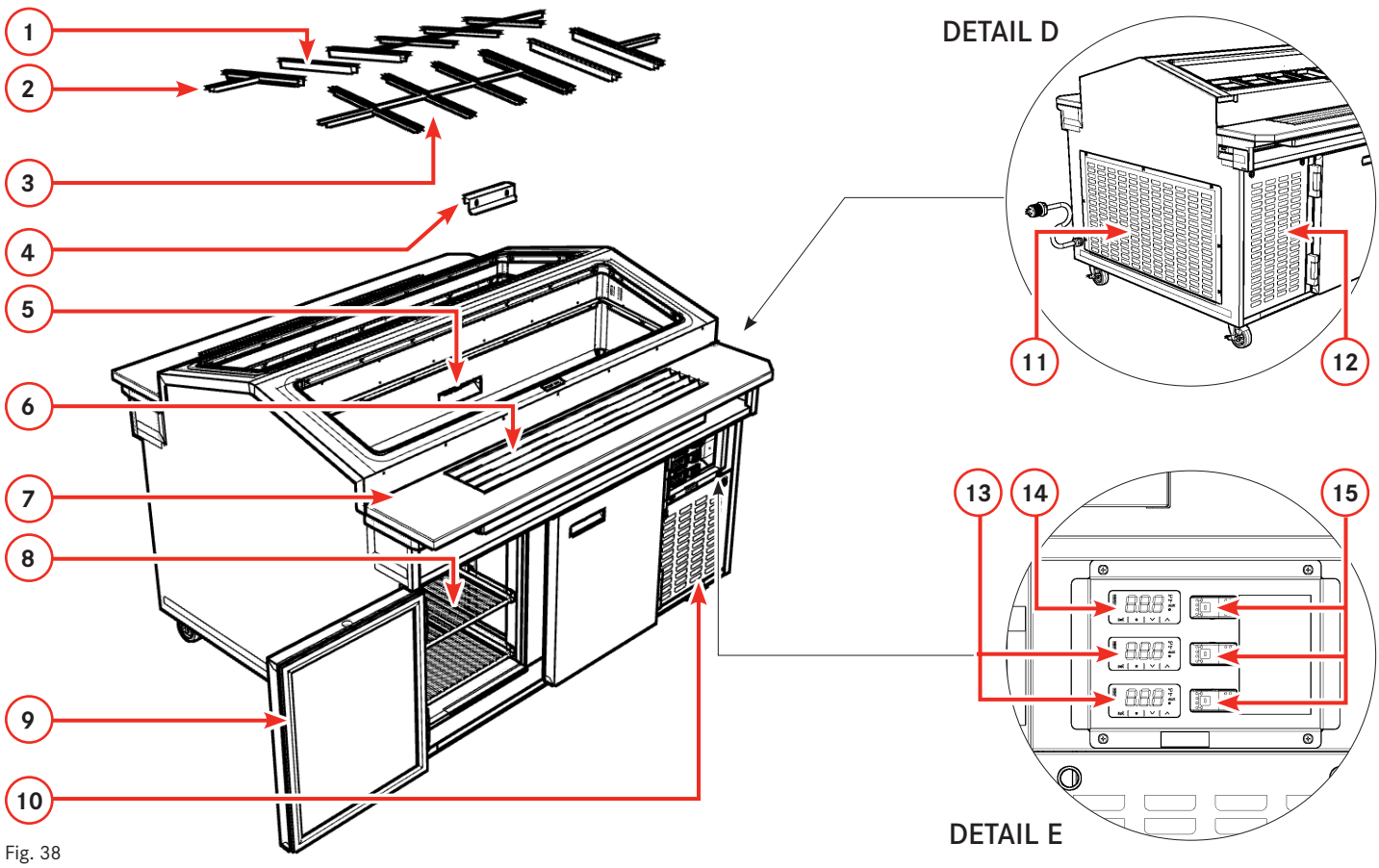


Fig. 38

ITEM	PART #	DESCRIPTION	QTY
1	30-210009977	Divider Bar, Straight	6
2	30-210004876	Divider Bar, T	4
3	30-210004873	Divider Bar, H	6
4	30-210009794	Sensor Cover, Cold Rail	2
5	19009962	Sensor, Air Temperature	2
6	30-210005441	Taco Rail	2
7	19014370	Cutting Board, 56" x 9-¾" x 1"	2
8	19013229	Shelf, Wireform	2
9	19013223	Gasket, Door	4
10	30-210005412	Door, Condenser Access, Front	1
11	30-210005418	Access Cover, 36" x 19"	1
12	30-210005811	Door, Condenser Access, Back	1
13	18018316	Controller, *Evco*, Dual Cold Table Refrigerator	1
14	18018315	Controller, *Evco*, Dual Cold Table Cold Well	2
15	19006980	Switch, Rocker, DPST, Sealed	3

Table 6

COMMON SERVICE PARTS

Evaporator Module

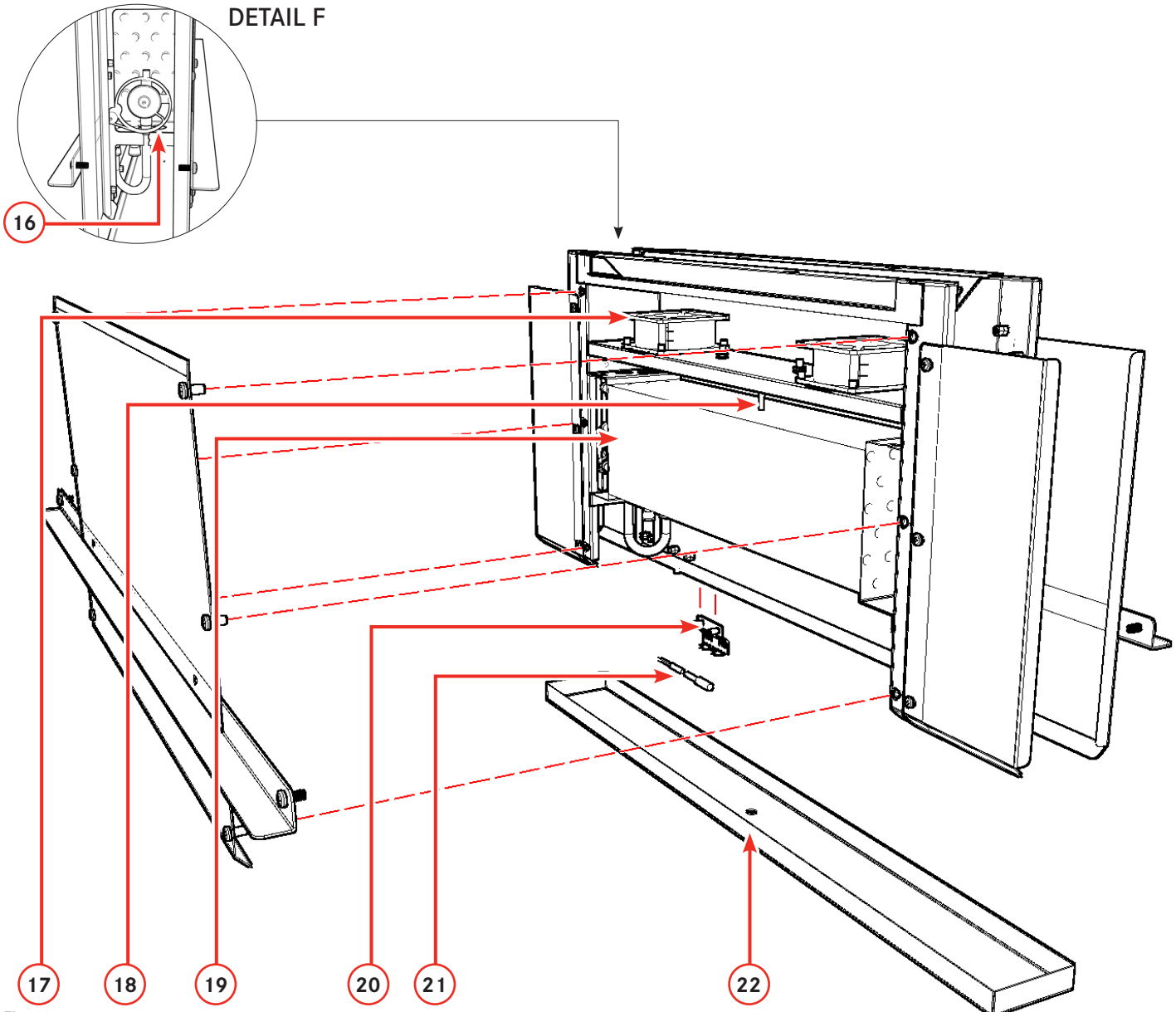


Fig. 39

ITEM	PART #	DESCRIPTION	QTY
16	19017657	TD1 TXV	1
17	19011078	Fan, *Mechatronics*	2
18	19009962	Sensor, Coil Temperature	1
19	19011768	Evaporator	1
20	20.210015433	Guard, Sensor	1
21	19004769	Sensor, Air Temperature	1
22	30-210005999	Drip Pan	1

Table 7

Condenser

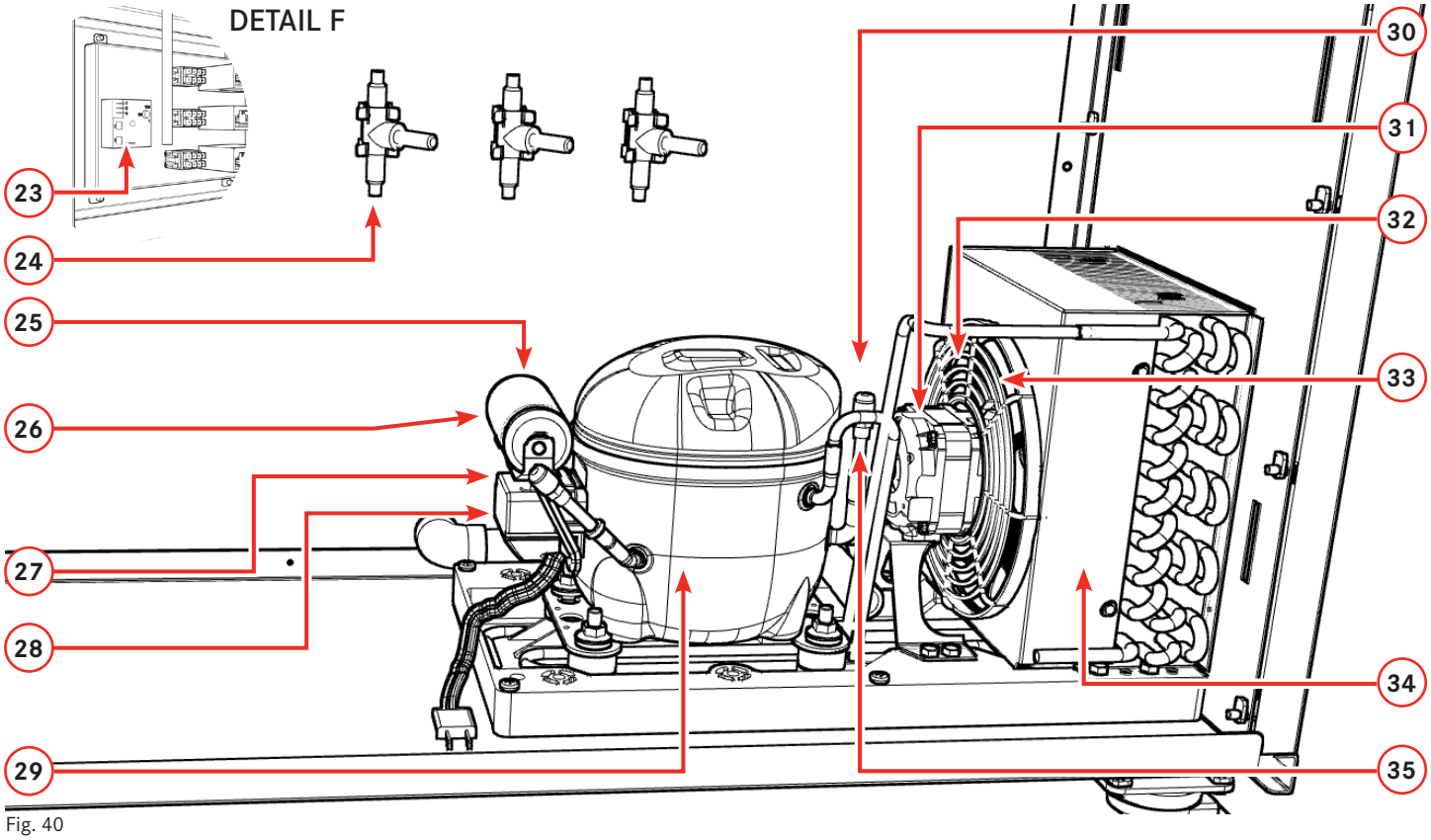


Fig. 40

ITEM	PART #	DESCRIPTION	QTY
*	18024670	Low Temp Condensing Unit W/Schrader Valves	1
*	19002038	Coil, Solenoid Valve	3
*	19017657	TD1 TXV	2
23	19015420	Timer, with Relay	1
24	19006915	Valve, Solenoid Body Valve, ¼" Tube	3
25	19012880	Capacitor, Start	1
26	19012881	Capacitor, Run	1
27	19012877	Overload	1
28	19012878	Relay, Start	1
29	19014311	Compressor	1
30	19008935	Switch, High Pressure	1
31	19008931	Motor, Condenser Fan	1
32	19008932	Blade, Condenser Fan	1
33	19012875	Guard, Condenser Fan	1
34	19012876	Coil, Condenser	1
35	330049427FMC	Valve Schrader Straight 1/4” Tube	2

Table 8

SPECIFICATIONS

CONTROLLER SETTINGS

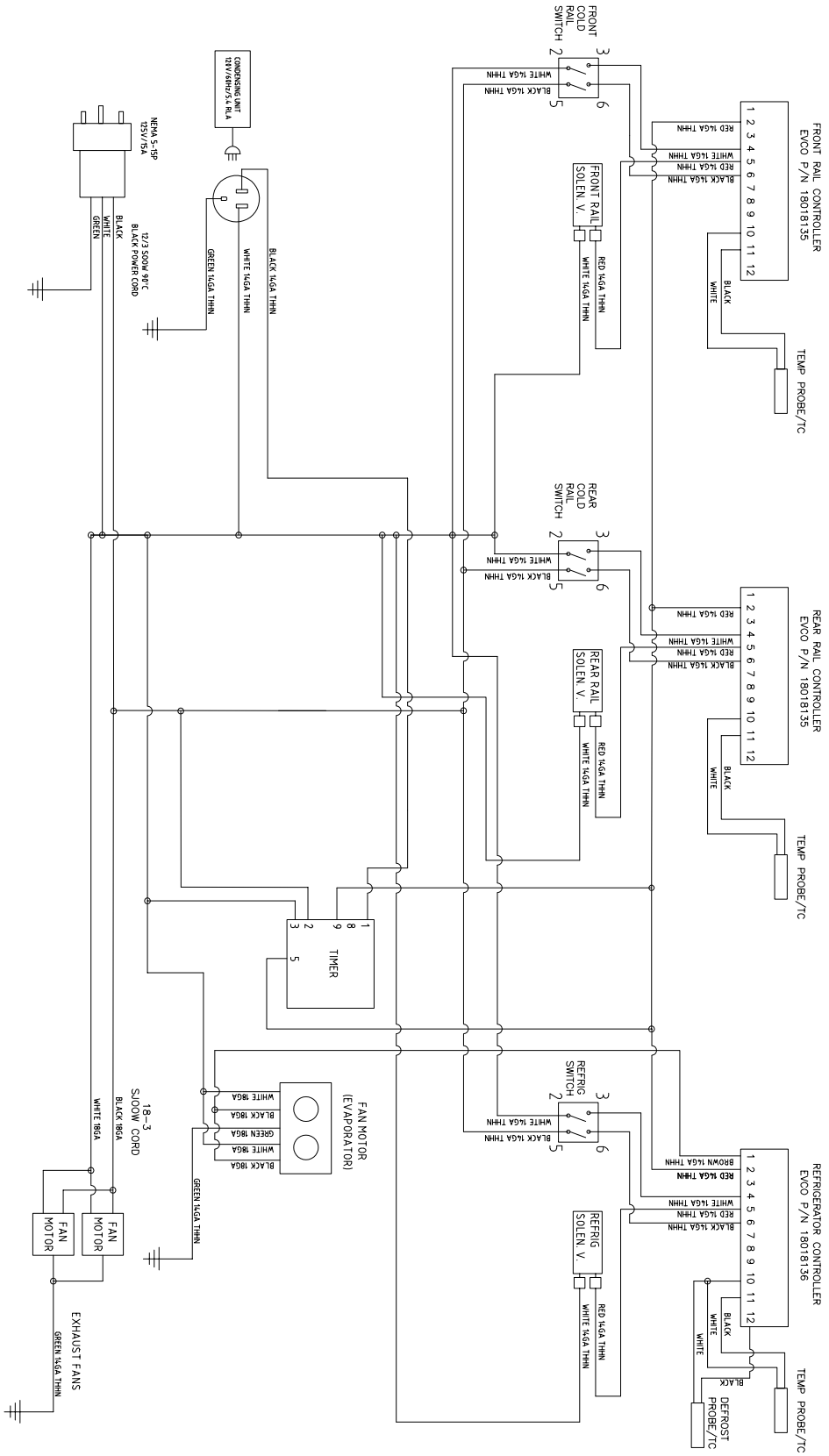
PARAMETER	SETTING (REFRIGERATOR)	SETTING (COLD RAILS)
Temperature Range	**Adjustable**	**Adjustable**
Coldest Set Point	33.5°F	20.0°F
Normal Set Point	34.0°F	21.0°F
Warmest Set Point	40.0°F	40.0°F
Compressor Protection	**Fixed**	**Fixed**
Minimum On Time	2 minutes	2 minutes
Minimum Off Time	2 minutes	2 minutes
Defrost Settings	**Fixed**	**Fixed**
Defrost Start Temp (Evaporator Probe)	@ -35.0°F or less for 30 minutes	@ -30.0°F or less for 30 minutes
Maximum Time Between Defrosts	5 hours compressor run time	3 hours compressor run time
Termination Temp (Evaporator Probe)	41.0°F	68.0°F
Maximum Time Allowed	60 minutes	30 minutes
Display Features	**Adjustments**	
Can select °F or °C?	No	
Can adjust temperature from display?	Yes	
Can Initiate Defrost from display?	Yes	
Display During Defrost Cycle	dEF	

ELECTRICAL

PARAMETER	DUAL COLD TABLE
Supply Power	120 V/60 Hz/1 Ph
Operating Amperage	8.2 A

REFRIGERATION

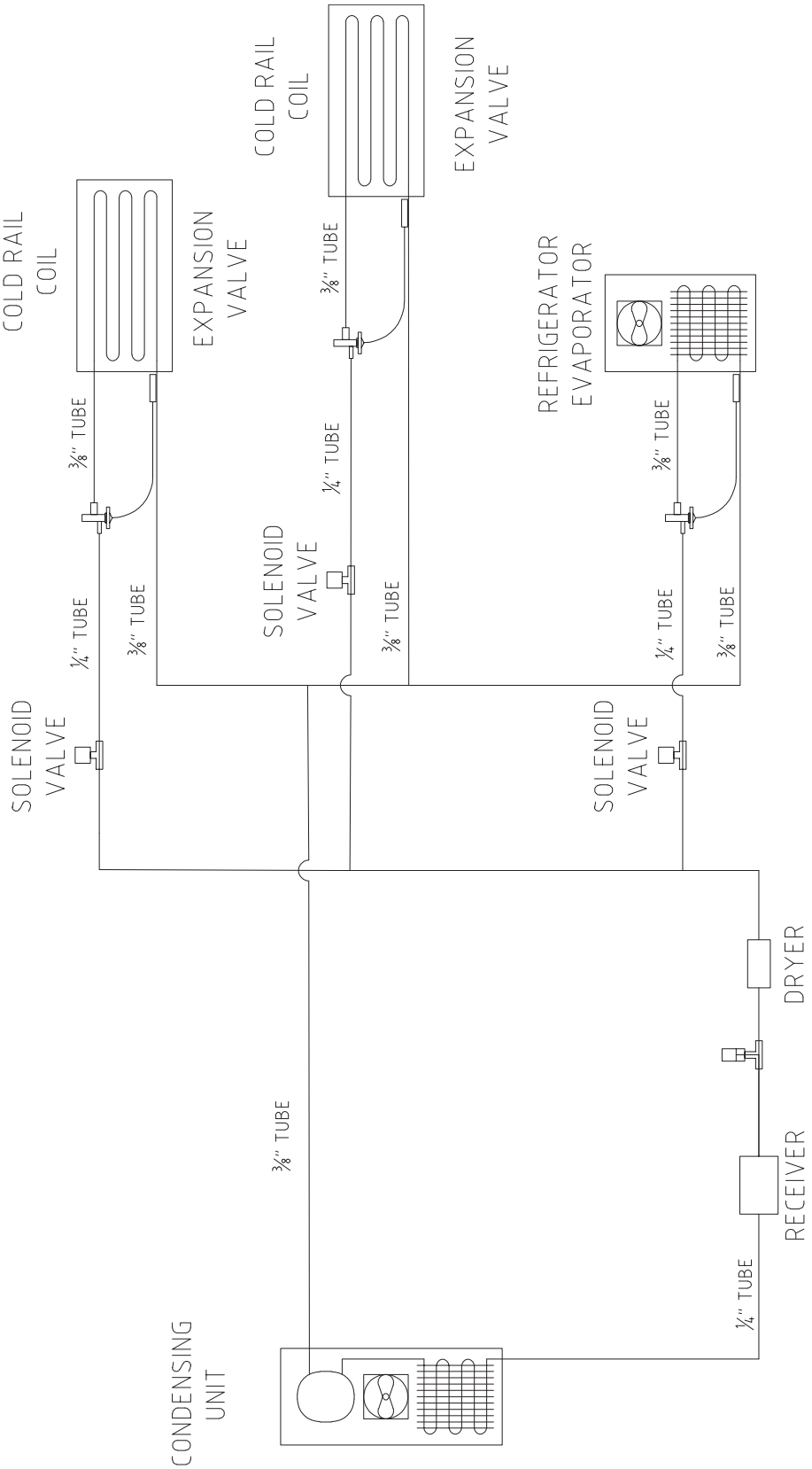
PARAMETER	DUAL COLD TABLE
Refrigerant Type	R-290 (Propane)
Refrigerant Charge	5.2 oz
Compressor Amperage	8.2 Amps
Compressor RLA	5.4 Amps
Compressor LRA	41.0 Amps
Operating Pressures (85°F air to condenser @ normal setpoint)	
High Side	230 PSIG +/- 10%
Low Side	25 PSIG +/- 10%



TITLE	DRAWING #	REV.	VERS. DATE
Electrical Diagram, Dual Cold Table	19013234	E	2/25/2020

Fig. 41

REFRIGERATION DIAGRAM



TITLE	DRAWING #	REV.	VERS. DATE
Refrigeration Diagram, Dual Cold Table	19013235	A	2/14/2019

Fig. 42

Franke Foodservice Systems ("Franke") warrants new equipment manufactured in Franke's own facilities to be free of defects due to poor materials or workmanship for the period of time listed below (following the date of original installation):

Franke-Manufactured Equipment

- All Components (including compressor) - 1 Year Parts and Labor (year 1)
- Compressor - 5 Years (parts only years 2-5)

Exclusions: Certain Franke parts that are expendable by nature and need to be replaced frequently may not be covered. Franke is not liable under these warranties for repairs or damages due to improper operation, maintenance or cleaning, attempted repairs or installation by unauthorized persons, alterations, water quality, abuse, fire, flood or acts of God.

Additionally, this warranty may be voided in the case of:

- Failure to follow Franke instructions for use, care or maintenance.
- Removal, alteration or defacing of the Franke-affixed serial number labels.
- Service by a non-authorized service company.
- Use of non-OEM (Original Equipment Manufacturer) parts.

This warranty is conditional upon Franke receiving notice of any defect subject to this warranty within thirty (30) days of its original discovery by the Buyer.

Other Equipment (Not Manufactured by Franke)

- Equipment not manufactured by Franke (commonly known as "buyouts" or purchased goods) and manufactured by other entities is covered by the warranties, if any, of such third-party manufacturers. Where such third party manufacturers provide warranties on any or all portions of said "buyouts," Franke agrees to transfer all such warranties to the Buyer.

For Support, Please Call: 1.800.5.FRANKE, opt. 2 (1.800.537.2653, opt. 2)

FRANKE

RECYCLE DOCUMENTS AND EQUIPMENT RESPONSIBLY