

McCALL[®]

Series I Reach-Ins with Aluminum Interior

Service, Installation and Care Manual

Please read this manual completely before attempting to install or operate this equipment!
Notify carrier of damage! Inspect all components immediately. See page 3.



**IMPORTANT INFORMATION
READ BEFORE USE
PLEASE SAVE THESE INSTRUCTIONS!**

June 2010

Important Warning And Safety Information



WARNING

Read this manual thoroughly before operating, installing, or performing maintenance on the equipment.

FAILURE TO FOLLOW INSTRUCTIONS IN THIS MANUAL CAN CAUSE PROPERTY DAMAGE, INJURY OR DEATH.

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS OR LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.

UNLESS ALL COVER AND ACCESS PANELS ARE IN PLACE AND PROPERLY SECURED, DO NOT OPERATE THIS EQUIPMENT.

DAMP OR WET HANDS MAY STICK TO COLD SURFACES.

ALLOW HEATED EQUIPMENT TO COOL DOWN BEFORE ATTEMPTING TO CLEAN OR SERVICE.



CAUTION

Observe the following:

- Minimum clearances must be maintained.
- Keep the equipment area free and clear of combustible material.
- Allow adequate clearance for air openings.
- Operate equipment only on the type of electricity indicated on the specification plate.
- Unplug the unit before making any repairs.
- Retain this manual for future reference.

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Serial Number Location

The serial number is on the identification plate that also includes the model number. A typical identification plate is shown below. On refrigeration and freezer unit the identification plate is located inside the right most door near the top front corner of the right interior wall. On heated units, the identification plate is located in the shroud area on the right side panel.

Always have the serial number of your unit available when calling for parts or service. A complete list of authorized McCall parts depots can be found at www.mccallrefrigeration.com.

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Covington, Tennessee

Model: MCCR1-S	Serial #: 0801152000599
Elec.Req.: 115V 60Hz 1Ph	Ampacity: 6.8

	System 1	System 2
Refrigerant Type:	R404A	
Refrigerant Amount:	12.5ozs.	
Design Pressures:		
High Side:	450	
Low Side:	150	

For Parts or Service Please Call:
1-800-733-8829




Receiving And Inspecting The Equipment

Even though most equipment is shipped crated, care should be taken during unloading so the equipment is not damaged while being moved into the building.

1. Visually inspect the exterior of the package an skid or container. Any damage should be noted and reported to the delivering carrier immediately.
2. If damaged, open and inspect the contents with the carrier.
3. In the event that the exterior is not damaged, yet upon opening, there is concealed damage to the equipment notify the carrier. Notification should be made verbally as well as in written form.
4. Request an inspection of the concealed equipment. This should be done within 10 days from receipt of the equipment.
5. Check the lower portion of the unit to be sure legs or casters are not bent.
6. Also open the compressor compartment housing and visually inspect the refrigeration package. Be sure lines are secure and base is still intact.
7. Freight carriers can supply the necessary forms upon request.
8. Retain all crating material until an inspection has been made or waived.

Uncrating the Equipment

First cut and remove the banding from around the crate. Remove the front of the crate material, use of some tools will be required. If the unit is on legs remove the top of the crate as well and lift the unit off the skid. If the unit is on casters it can be "rolled" off the skid.

Model Numbers

Series	Temp	Configuration	Section	Doors
MCC = McCall Reach-In	R=Refrigerator F=Freezer H=Heated D=Dual Temp	None=Reach-in PT=Pass Thru RL=Refrigerator Left TR=Top Refrigerator	1=1 Section 2=2 Section 3=3 Section	S=Solid Full SH=Solid Half SLG=Sliding Glass Full G=Hinged Glass Full GH=Hinged Glass Half

Introduction

McCall reach-in models have an aluminum interior and exterior with a stainless steel front and shroud. Door gaskets are magnetic and mount to the door, snapping in place and are removable without tools. Keyed door lock is mounted in the door next to the handle.

Doors can be removed from the cabinet without the use of tools. Each door has two edge mount, self-closing, cam lift style hinges.

Refrigeration System

All components are mounted to the exterior cabinet ceiling, outside the food zone and are assembled as one-piece and can be removed as one-piece. Environmentally friendly R404A refrigerant is used. The system has the capability of maintaining between 27°F and 41°F (3°C and 5°C) in heavy use food service operations. Refrigerant is metered using a highly responsive thermostatic expansion valve. Systems are controlled using an electronic temperature control. It provides improved pull down times, reducing compressor cycling and longer compressor life with lower energy consumption. Control system uses adaptive defrost to assure evaporator coil is free of ice and operating at optimum efficiency. Evaporator condensate is eliminated using an energy efficient hot gas system.

Freezer Refrigeration System

All components are mounted to the exterior cabinet ceiling, outside the food zone and are assembled as one-piece and can be removed as one-piece. Environmentally friendly R404A refrigerant is used. The system has the capability of maintaining between -5°F and 0°F (-21°C and -18°C) in heavy use food service operations. Refrigerant is metered using a highly responsive thermostatic expansion valve. System is controlled using an electronic temperature control, which provides improved pull down times, reducing compressor cycling and longer compressor life with lower energy consumption. Control system uses adaptive defrost to assure evaporator coil is free of ice and operating at optimum efficiency. Evaporator condensate is eliminated using an energy efficient hot gas system.

Heating System

Heating system cabinets are designed to maintain temperatures between 120°F and 200°F (49°C and 93°C). Heating elements are helical shaped, with tubular fins. A circulating fan provides uniform airflow in the cabinet. The entire heating system is mounted to the exterior of the cabinet ceiling, outside the food zone. It is assembled as one piece and can be removed as one piece. An adjustable electronic thermostat controls temperature. The system ON/OFF switch is located on the front exterior of the cabinet.

Dual Temperature Refrigeration/Freezer

Each compartment has its own separate refrigeration system. Condensing units are located on top of the cabinet, outside the food zone, behind the removable upper shroud. Evaporator coils are located inside the cabinet mounted to the interior ceiling of each compartment. Defrost is automatic. Condensate travels down a tube in the cabinet sidewall to a receptacle mounted to the exterior bottom of the cabinet where it evaporates with the aid of an electric heater. Each compartment's temperature is individually monitored and controlled. Two exterior Thermometer, Digitals monitor temperature. Refrigerator compartment maintains temperature between 33°F and 41°F (1°C and 5°C). Freezer compartment maintains temperature between -5°F and +5°F (-21°C and -15°C). Refrigerant is metered using a highly responsive thermostatic expansion valve.

Specifications

Reach-In Refrigerators - Hinged Doors - Standard Width & Depth

Model	Voltage	Amps	Storage Capacity Ft ³	Shelf Capacity Ft ²	No. Of Shelves	H.P.	BTU/HR	R-404A Charge Oz.	Shipping Weight	NEMA Plug	Energy (KWH)
MCCR1-S,SH,G,GH	115	6.8	24.96	12.81	3	1/4	2092	12.5	418lbs/ 190kg	5-15P	2.64
MCCR2-S,SH,G,GH	115	9.0	51.92	27.54	6	1/3	3226	19	650lbs/ 295kg	5-15P	4.51
MCCR3-S,SH,G,GH	115	16.0	78.89	42.47	9	1/2	5465	24	830lbs/ 376kg	5-20P	5.51

Reach-In Refrigerators - Sliding Glass Doors - Standard Width & Depth

Model	Voltage	Amps	Storage Capacity Ft ³	Shelf Capacity Ft ²	No. Of Shelves	H.P.	BTU/HR	R-404A Charge Oz.	Shipping Weight	NEMA Plug	Energy (KWH)
MCCR2-SLG	115	9.0	51.92	27.54	6	1/3	3226	19	670lbs/ 304kg	5-15P	N/A

Reach-In Refrigerator/Freezer Combinations - Dual Temps - Hinged Doors - Standard Width & Depth

Model	Section	V	Amps	Storage Capacity Ft ³	Shelf Capacity Ft ²	No. Of Shelves	H.P.	BTU/HR	R-404A Charge Oz.	Shipping Weight	NEMA Plug	Energy (KWH)
MCCDTR1-SH	Refrigerator	115	14.0	11.52	4.23	2	1/5	1543	10	525lbs/ 238kg	5-20P	N/A
	Freezer	115		11.52	4.23	2	1/3	1260	12			
MCCDRL2-S,SH,G,GH	Refrigerator	115	6.8	24.96	12.81	3	1/4	2092	12.5	730lbs/ 331kg	5-15P	N/A
	Freezer	115	7.8	24.96	12.81	3	1/2	1516	12.5		5-15P	

Reach-In Freezers - Hinged Doors - Standard Width & Depth

Model	Voltage	Amps	Storage Capacity Ft ³	Shelf Capacity Ft ²	No. Of Shelves	H.P.	BTU/HR	R-404A Charge Oz.	Shipping Weight	NEMA Plug	Energy (KWH)
MCCF1-S,SH	115	7.8	24.96	12.81	3	1/2	1516	12.5	440lbs/ 200kg	5-15P	7.63
MCCF1-G,GH	115	11.5	24.96	12.81	3	3/4	1923	12.5	440lbs/ 200kg	5-15P	11.29
MCCF2-S,SH	115	12.0	51.92	27.54	6	3/4	2648	17	710lbs/ 322kg	5-15P	15.16
MCCF2-G,GH	115/ 208-230	10.0	51.92	27.54	6	1	4793	30	710lbs/ 322kg	N/A	19.95
MCCF3-S,SH	115/ 208-230	10.0	78.89	42.47	9	1	4793	30	960lbs/ 435kg	N/A	16.26
MCCF3-G,GH	115/ 208-230	11.4	78.89	42.47	9	1	5940	72	960lbs/ 435kg	N/A	29.07

Specifications, continued

Pass-Thru Refrigerators - Hinged Doors - Standard Width

Model	Voltage	Amps	Storage Capacity Ft ³	Shelf Capacity Ft ²	No. Of Shelves	H.P.	BTU/HR	R-404A Charge Oz.	Shipping Weight	NEMA Plug	Energy (KWH)
MCCRPT1-S,SH	115	6.8	26.64	12.81	3	1/4	2092	12.5	455lbs/ 206kg	5-15P	3.14
MCCRPT1-G,GH	115	7.8	26.64	12.81	3	1/3	2488	12.5	455lbs/ 206kg	5-15P	4.58
MCCRPT2-S,SH	115	16.0	55.42	27.54	6	1/2	5465	24	700lbs/ 318kg	5-20P	5.96
MCCRPT2-G,GH	115	16.0	55.42	27.54	6	1/2	5465	24	700lbs/ 318kg	5-20P	8.16

Reach-In Hot Food Cabinets - Hinged Doors - Standard Width & Depth

Model	Voltage	Amps	Storage Capacity Ft ³	Shelf Capacity Ft ²	No. Of Shelves	Shipping Weight	NEMA Plug	Energy (KWH)
MCCH1-S,G	120/208-240	9.0	24.96	12.81	3	418lbs/ 190kg	N/A	N/A
MCCH2-S, G	120/208-240	16.0	51.92	27.54	6	650lbs/ 295kg	N/A	N/A
MCCH3-S, G	120/208-240	17.8	78.89	42.47	9	830lbs/ 376kg	N/A	N/A

Installation

Location

Cabinets represented in this manual are intended for indoor use only. Be sure the location chosen has a floor strong enough to support the total weight of the cabinet, 1000 pounds (450 kg) per door section. Reinforce the floor if necessary to provide for maximum loading. For the most efficient operation, be sure to provide good air circulation inside and out. The location should be selected so that the power cord can be connected without any extensions.

Inside Unit

Take care not to block airflow to the fans or heating elements and allow space along the front, back and sides.

Outside Unit

Be sure that the unit has access to ample air; avoid hot corners and locations near stoves and ovens. Provide a minimum clearance of 12" (30cm) above the unit that is open to the front.

Door Removal

The doors can be removed during installation if necessary. Remove the door by opening the door to 90°, lift it up and ease it out of the hinge brackets

Leg, Caster, Utility Base Installation



WARNING

Some cabinets may weigh over 1000 pounds (450 kg). Use a lifting device capable of supporting the unit when removing skid or installing legs, casters or utility base.

To install the legs, or casters refer to Figure 1. To install the utility base, refer to Figure 2. Proceed as follows:

1. Remove unit from skid.
2. Raise unit to access leg/caster mounting holes on bottom of unit.
3. Attach the legs, casters or utility base to bottom of cabinet using hex head bolts.

Leveling

After the cabinet has been placed in the desired location, cabinets with legs must be leveled. Level units from front to back and from side to side. Leveling will insure proper door operation and removal of condensate. Cabinets with casters must have the caster brake set so the cabinet cannot move.

Stabilizing

It is very important that all legs are properly adjusted to keep the cabinet level, evenly distribute the weight and to make sure the unit will not rock, lean or be unstable.

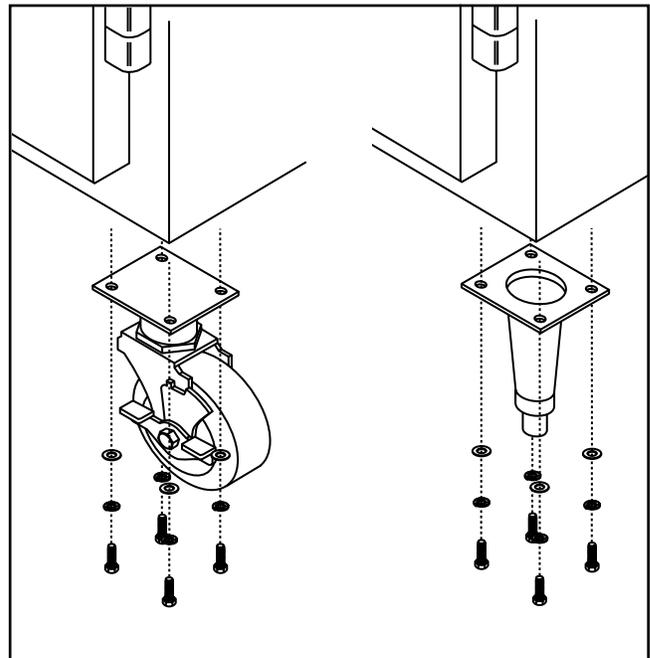


Figure 1. Leg or Caster Installation

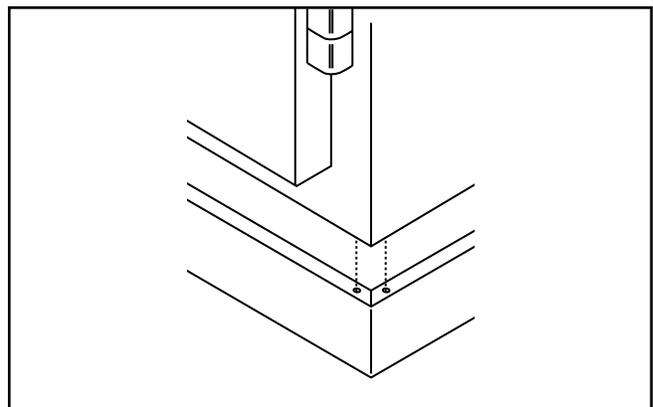


Figure 2. Utility Base Installation

Installation, continued

Electrical Connection



Refer to the amperage data list in the SPECIFICATIONS or the serial tag data and your local code or the National Electrical Code to be sure the unit is connected to the proper power source. A protected circuit of the correct voltage and amperage must be run for connection of the supply cord or permanent connection to the unit. The power must be turned off and disconnected whenever performing maintenance or repair functions.



Permanently connected units must be connected in accordance with NEC Article 422 Appliances, C-Disconnecting means. It is the responsibility of the end user to provide the disconnect means to satisfy the authority having jurisdiction.

The power cords supplied with this equipment are three-pronged plugs and must be connected to a three-pronged wall outlet for proper grounding. Do not use an adapter to connect to a two-pronged outlet. The three pronged-outlet provides a ground connection which must be used to prevent a shock hazard.



Have the wall outlet checked by a qualified electrician to be sure a proper ground is present and that the outlet provides the correct voltage and required amperage to match the rating plate.

Any power cord that is frayed or damaged should be replaced. When disconnecting the unit from the power source, do not pull on the wire. Firmly grip the plug and remove from outlet.

The plugs shown in Figure 3 are used on the various models.

**(North America Use Only!)
NEMA plugs**

**McCall uses these types of plugs.
If you do not have the right outlet
have a certified electrician install
the correct power source.**

	115/60/1 NEMA-5-15R
	115/208-230/1 NEMA-14-20R
	115/60/1 NEMA-5-20R

Figure 3. Plug Configurations

Electronic Temperature Control Operation

The electronic temperature control constantly monitors box temperature as well as evaporator coil temperature to maintain consistent product temperatures. The control also sends temperature readings to the digital temperature display. The control circuits continually self-check and if an error occurs, the digital display will switch from temperature read-out to error read-out, i.e. E1. Even when an error is displayed, the refrigeration and controls system should continue to function, however not at optimal performance. Whenever the display has an error read-out, McCall Service should be contacted.

At initial start-up or anytime power is disconnected, then reconnected to the unit, the control will delay all operations for a short time (up to 10 minutes.) While in this delay period, the control initializes the control parameters and confirms that the temperature sensors and circuits are operational. The digital temperature display will not display temperature OR errors until the self-check is complete and the control has switched on the evaporator fan motor, compressor and condenser fan motor.



REGARDING FREEZERS: After initializing, the control will immediately enter a DEFROST mode and the display will read DEF. The compressor and condenser fan as well as the evaporator fan will remain off until initialization defrost is complete. This initial defrost cycle may take up to 15 minutes to complete, at which time the freezing cycle will begin. The display will continue to read DEF for an additional 30 minutes before displaying temperature.

The control is located in the control box in the top of the unit behind the hinged louvered front panel. Refrigerators are factory set at mid-range to maintain about 38°F (3°C) box temperature. Freezers are factory set at mid-range to maintain about 3°F (-18°C) box temperature. To adjust for colder temperatures, turn the knob clockwise. For warmer temperatures, turn the knob counter-clockwise. Turn the knob fully counter-clockwise to turn the refrigeration system off. Never turn the knob more than 1 dial number and always allow 8 hours for temperature stabilization before making any additional adjustments.

Refrigerator:

Whenever the refrigerator is plugged in, and the control has completed initializing, the evaporator fans will run continuously and the optional digital temperature will display box temperature in degrees F. The temperature control will cycle the compressor and condenser fan motor to maintain box temperature at the control setting.

Refrigerator Defrost

The temperature control also monitors the evaporator temperature and will turn off the compressor and condenser fan motor when needed to allow accumulated frost on the evaporator to clear. During this defrost cycle, the digital temperature display will read dEF. After the defrost cycle is complete, the temperature

control will return to a normal cooling cycle, but the display will continue to read dEF until the evaporator returns to normal cooling temperatures (up to 15 minutes).

Energy Saver Switch

The energy saver switch is a rocker switch located next to the thermostat knob. The normal operating position for this switch is the OFF or "0" position. If excessive condensation is observed on the door opening, flip the energy saver switch to the ON or "-" position, (red portion of the rocker switch will be visible).

Freezer:

Whenever the freezer is plugged in, and the control has completed initializing including the initial defrost cycle, the evaporator fans will run continuously (except during a defrost cycle) and the digital temperature display will display box temperature in degrees F. The temperature control will cycle the compressor and condenser fan motor to maintain box temperature at the control setting.

Freezer Automatic Defrost

The control also monitors compressor total running time and will enter a defrost cycle after total compressor running time is greater than 4-hours since the last defrost cycle OR if evaporator coil temperature drops below -34°F (-37°C) (indicating excessive frost on the coil.)

Freezer Manual Defrost

If a manual defrost is desired, simply unplug the unit for several seconds, then plug unit back in. This will cause the control to re-initialize and then enter a defrost cycle.

When the control enters the defrost mode, it switches off the evaporator fan motor, compressor and condenser fan motor, and switches on the defrost heater to warm the evaporator coil. Thereby melting all frost accumulated during the previous refrigeration cycle. The digital temperature display will now read dEF. The control will continue the defrost cycle for a MINIMUM of 8 minutes and a MAXIMUM of 30 minutes depending on the amount of frost accumulated on the evaporator coil.

After the defrost cycle is complete, the control returns to a normal refrigeration cycle, however the evaporator fan motor will not switch on for 2 minutes AFTER the compressor and condenser fan motor have begun operating. The digital temperature display will continue to read dEF until the evaporator has returned to normal freezing temperatures (up to 30 minutes).

Dual Temperature Refrigerator/Freezer Cabinets

These units combine both a refrigerator compartment and a freezer compartment in the same cabinet. Each compartment has its own separate refrigeration unit.

Heated Cabinet Operation

The Heated units have a POWER ON/OFF switch located behind the flip up shroud at the front top of the unit for controlling power to the unit and an electronic thermostat for setting the temperature. A circulating fan provides uniform airflow in the cabinet.

Power Up

1. Check that unit is properly connected to the power source.
2. Raise the shroud to access the controls.
3. Set the Main POWER ON/OFF switch, to the ON position.
4. Adjust the electronic thermostat to the desired temperature.
5. Allow unit to warm-up before use.



The unit surface is very hot! Avoid direct contact with skin; use appropriate protective apparel, such as gloves.

Power Down

1. Turn the unit off by setting the POWER ON/OFF switch to the OFF position
2. After use, allow unit to cool down.
3. Clean equipment as discussed in the MAINTENANCE section of this manual.

Maintenance

Door Gasket Maintenance

Door gaskets require regular cleaning to prevent mold and mildew build up and also to retain the elasticity of the gasket. Gasket cleaning can be done with the use of warm soapy water. Avoid full strength cleaning products on gaskets as this can cause them to become brittle and crack. Never use sharp tools or knives to scrape or clean the gasket. Gaskets can be easily replaced and do not require the use of tools or an authorized service person. The gaskets are “Dart” style and can be pulled out of the groove in the door and new gaskets can be “pressed” back into place.

Drain Maintenance - Base

Each unit has a drain located inside the unit that removes the condensation from the evaporator coil and routes it to an external condensate evaporator pan. Each drain can become loose or disconnected during normal use. If you notice water accumulation on the inside of the unit be sure the drain tube is connected to the evaporator drain pan. If water is collecting underneath the unit make sure the end of the drain tube is in the condensate evaporator in the machine compartment. The leveling of the unit is important as the units are designed to drain properly when level. Be sure all drain lines are free of obstructions.

Caster Maintenance

Wipe casters with a damp cloth monthly to prevent corrosion.



The power switch must be turned to OFF and the unit disconnected from the power source whenever performing service, maintenance functions or cleaning the refrigerated area.

Refrigerators and Freezers

The interior and exterior can be cleaned using soap and warm water. If this isn't sufficient, try ammonia and water or a nonabrasive liquid cleaner. When cleaning the exterior, always rub with the “grain” of the stainless steel to avoid marring the finish. Do not use an abrasive cleaner because it will scratch the stainless steel and can damage the breaker strips and gaskets.

Stainless Steel Care and Cleaning

To prevent discoloration or rust on stainless steel several important steps need to be taken. First, we need to understand the properties of stainless steel. Stainless steel contains 70- 80% iron, which will rust. It also contains 12-30% chromium, which forms an invisible passive film over the steel's surface, which acts as a shield against corrosion. As long as the protective layer is intact, the metal is still stainless. If the film is broken or contaminated, outside elements can begin to breakdown the steel and begin to form discoloration or rust. Proper cleaning of stainless steel requires soft cloths or plastic scouring pads.

NEVER USE STEEL PADS, WIRE BRUSHES OR SCRAPERS!

Cleaning solutions need to be alkaline based or non-chloride cleaners. Any cleaner containing chlorides will damage the protective film of the stainless steel. Chlorides are also commonly found in hard water, salts, and household and industrial cleaners. If cleaners containing chlorides are used be sure to rinse repeatedly and dry thoroughly. Routine cleaning of stainless steel can be done with soap and water. Extreme stains or grease should be cleaned with a non-abrasive cleaner and plastic scrub pad. Always rub with the grain of the steel. There are stainless steel cleaners available which can restore and preserve the finish of the steels protective layer. Early signs of stainless steel breakdown are small pits and cracks. If this has begun, clean thoroughly and start to apply stainless steel cleaners in attempt to restore the passivity of the steel.



Never use an acid based cleaning solution! Many food products have an acidic content, which can deteriorate the finish. Be sure to clean the stainless steel surfaces of ALL food products. Common items include, tomatoes, peppers and other vegetables.

Cleaning the Condenser Coil

In order to maintain proper refrigeration performance, the condenser fins must be cleaned of dust, dirt and grease regularly. It is recommended that this be done at least every three months. If conditions are such that the condenser is totally blocked in three months, the frequency of cleaning should be increased. Clean the condenser with a vacuum cleaner or stiff brush. If extremely dirty, a commercially available condenser cleaner may be required.

Failure to maintain a clean condenser coil can initially cause high temperatures and excessive run times. Continuous operation with a dirty or clogged condenser coil can result in compressor failure. Neglecting the condenser coil cleaning procedures will void any warranties associated with the compressor and cost to replace the compressor.



Never use a high-pressure water wash for this cleaning procedure as water can damage the electrical components located near or at the condenser coil.

Doors/Hinges

Over time and with heavy use doors the hinges may become loose. If this happens tighten the screws that mount the hinge brackets to the frame of the unit. Loose or sagging doors can cause the hinges to pull out of the frame, which may damage both the doors and the hinges. In some cases this may require qualified service agents or maintenance personnel to perform repairs.

Maintenance, continued



Do not place hot pans on/against the grey ABS door liner. Do not throw items into the storage area. Failure to follow these recommendations could result in damage to the interior of the cabinet or to the blower coil. Overloading the storage area, restricting the airflow, and continuous opening and closing of the doors and drawers will hamper the units ability to maintain operational temperature.

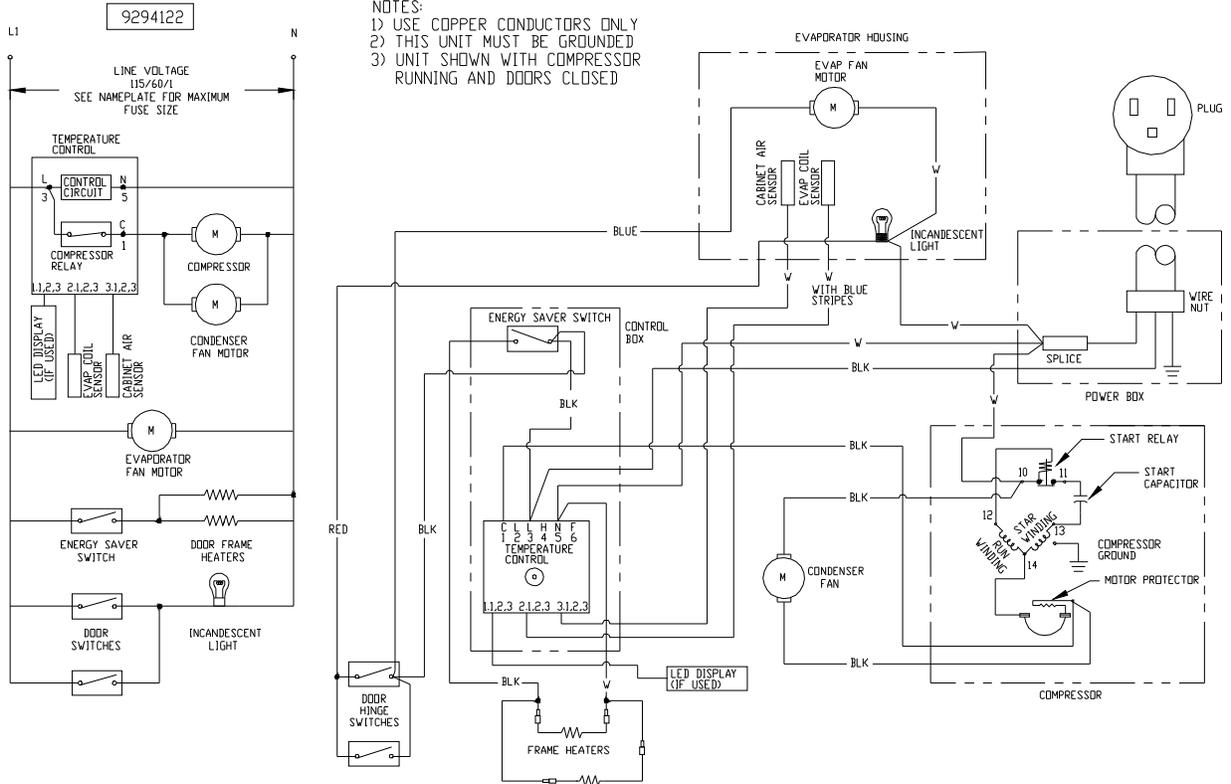
Preventing blower coil corrosion

To help prevent corrosion of the blower coil, store all acidic items, such as pickles and tomatoes, in sealable containers. Immediately wipe up all spills.

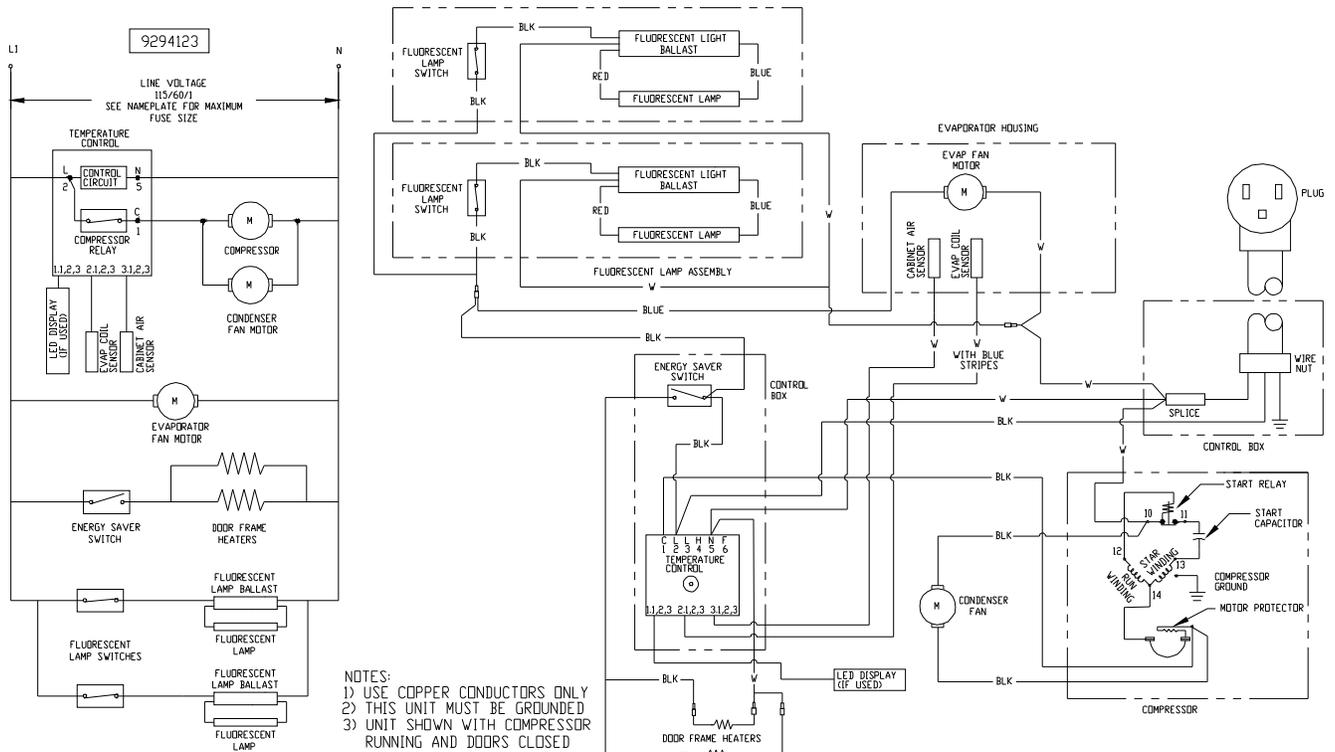
Continuous opening and closing of the doors will hamper the unit's ability to maintain optimum refrigeration temperature.

Refrigerator Wiring Diagrams

MCCR2 - Solid Doors

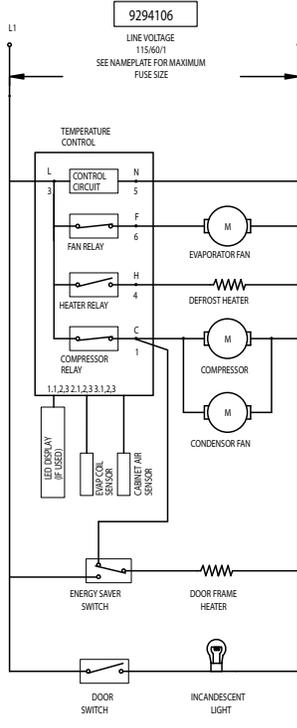


MCCR2, MCCR2-SL - Glass Doors

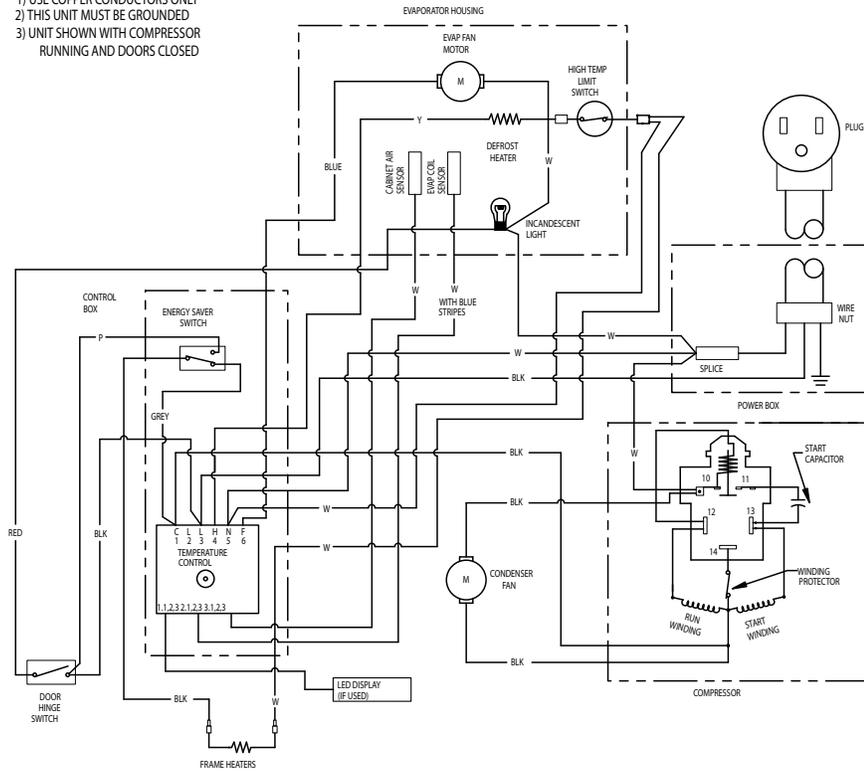


Freezer Wiring Diagrams

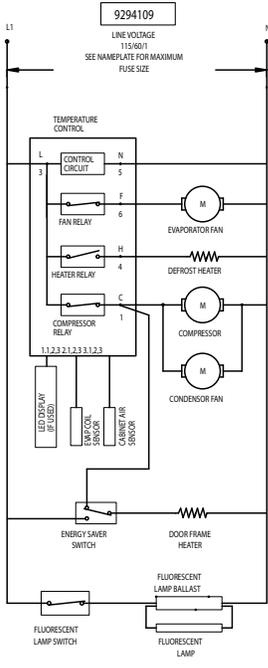
MCCF1 - Solid Doors



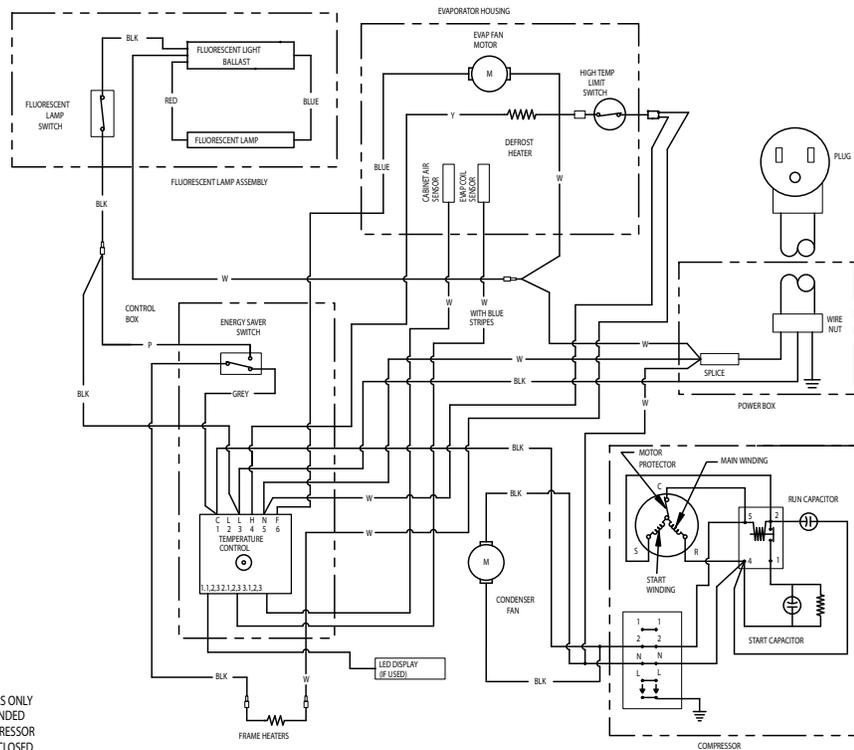
NOTES:
 1) USE COPPER CONDUCTORS ONLY
 2) THIS UNIT MUST BE GROUNDED
 3) UNIT SHOWN WITH COMPRESSOR RUNNING AND DOORS CLOSED



MCCF1 - Glass Doors

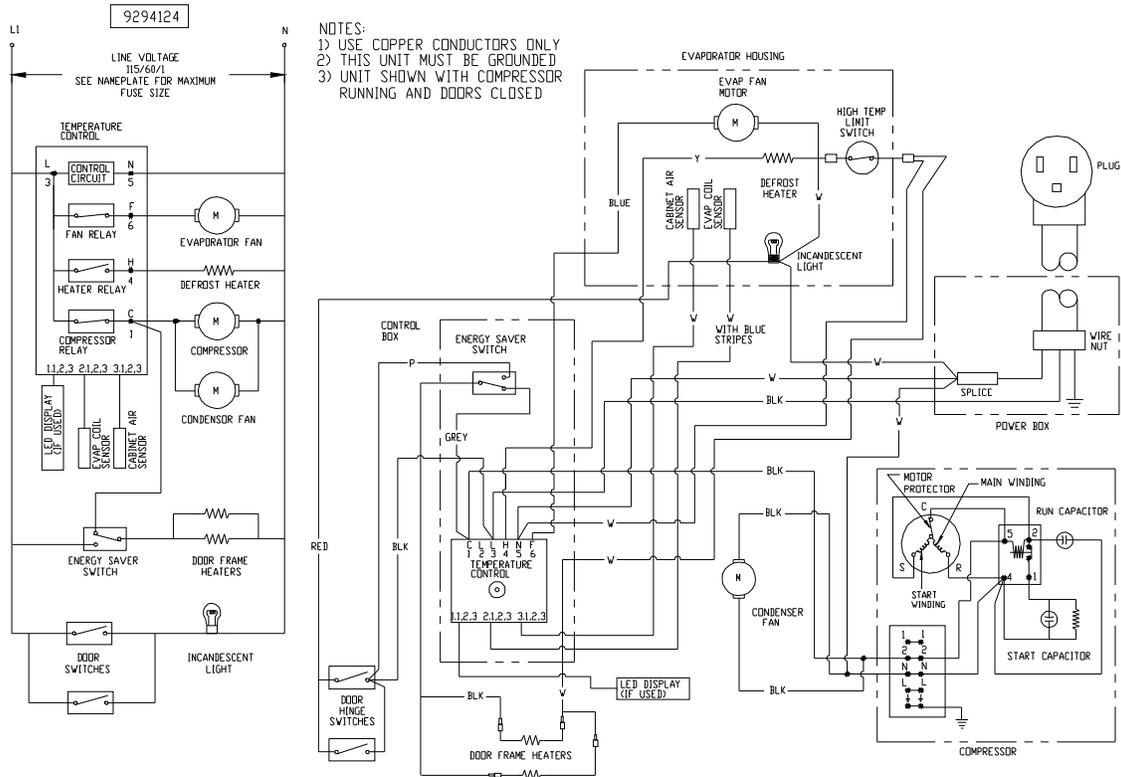


NOTES:
 1) USE COPPER CONDUCTORS ONLY
 2) THIS UNIT MUST BE GROUNDED
 3) UNIT SHOWN WITH COMPRESSOR RUNNING AND DOORS CLOSED

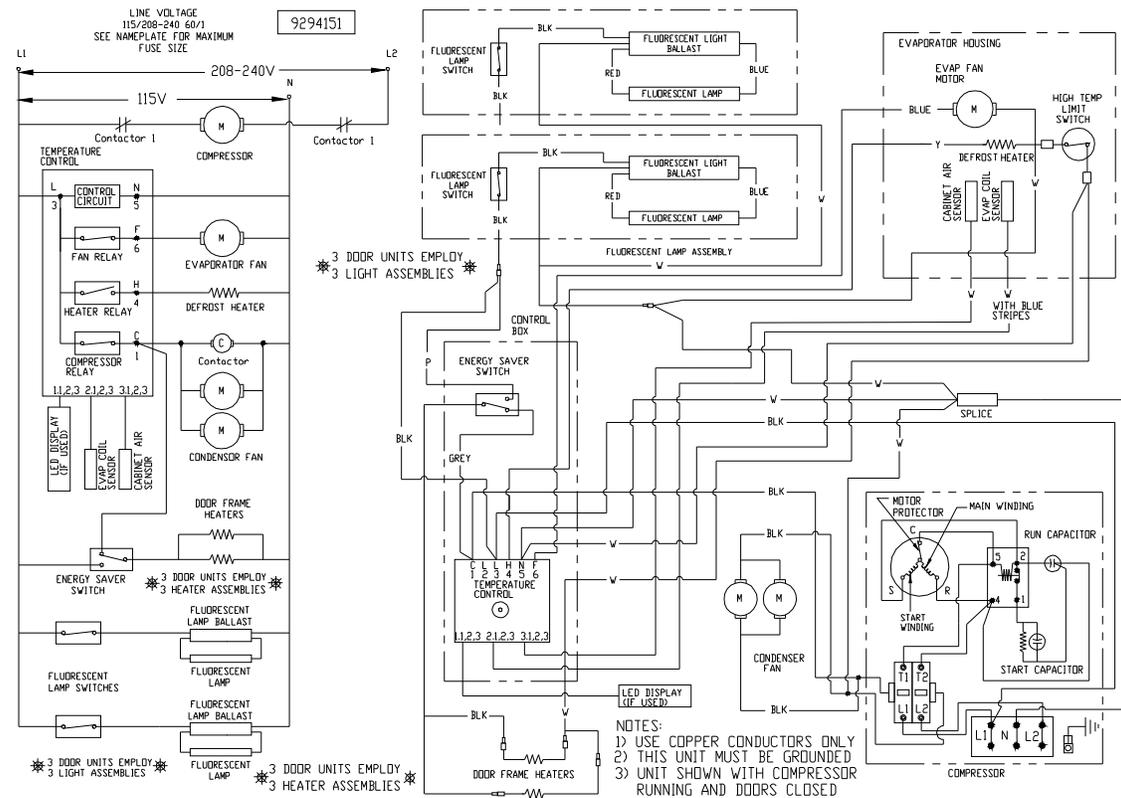


Freezer Wiring Diagrams

MCCF2 - Solid Doors

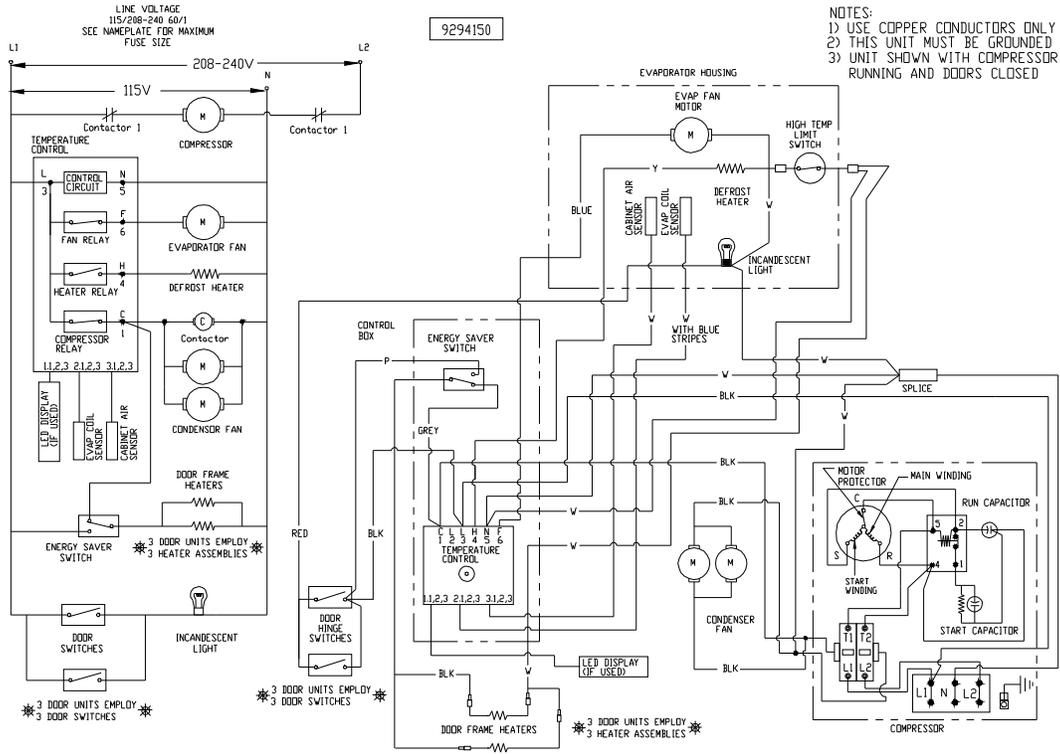


MCCF2, MCCF3 - Glass Doors



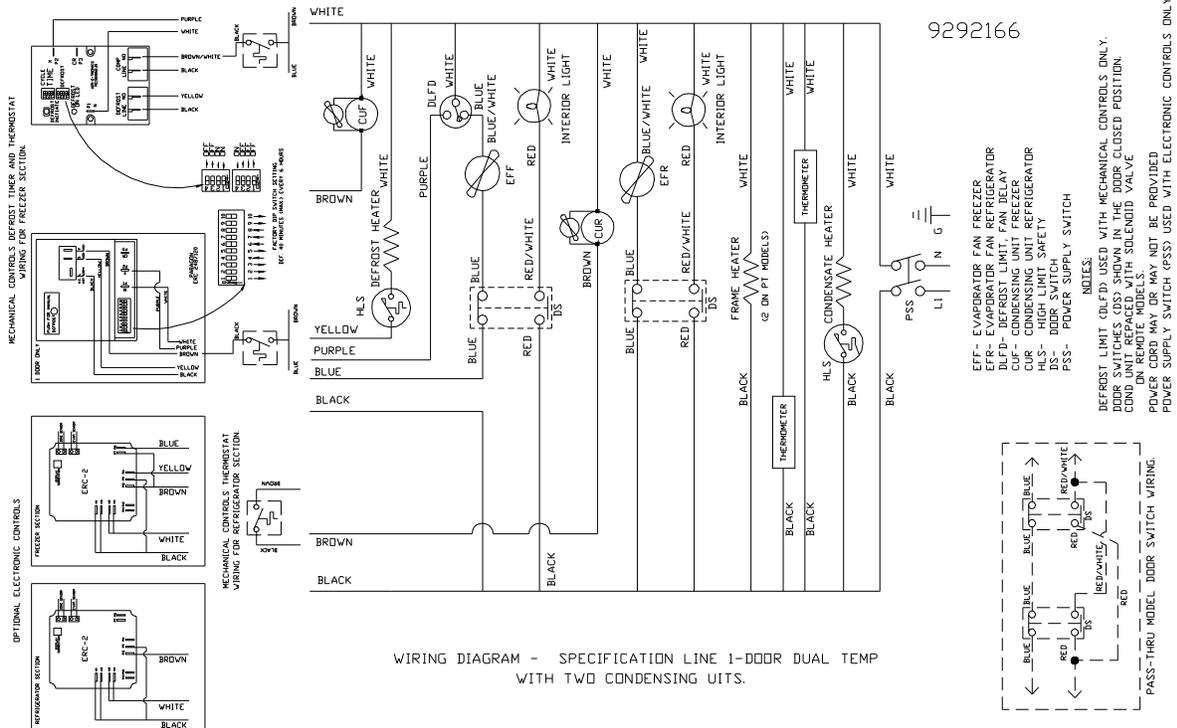
Freezer Wiring Diagrams

MCCF3 - Solid Doors



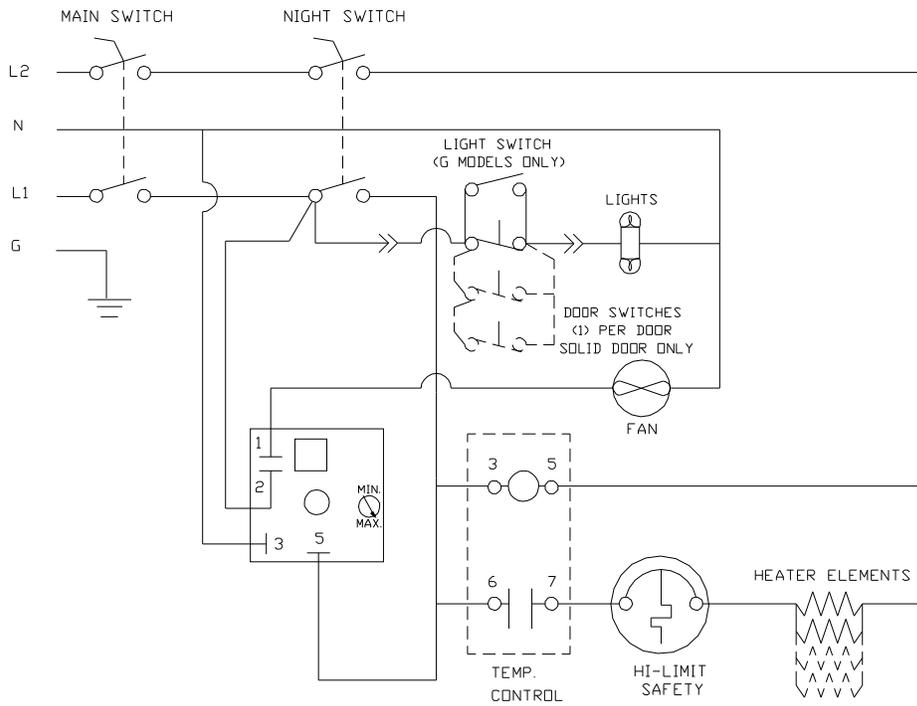
Refrigerator/Freezer Combination Wiring Diagram

MCCDTR1 - Solid Doors



Heated Models Wiring Diagram

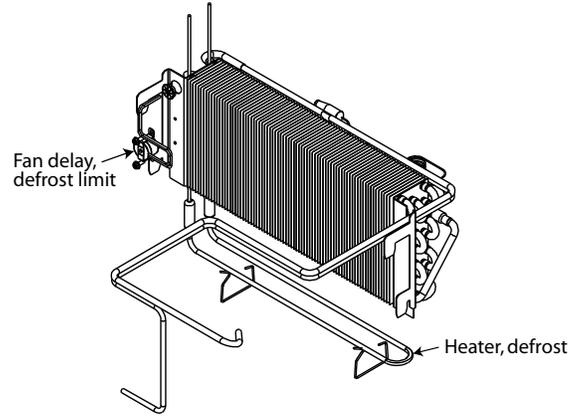
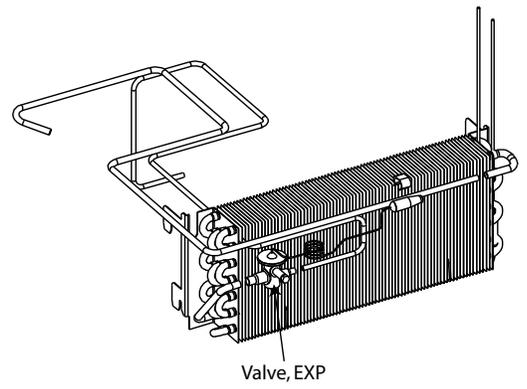
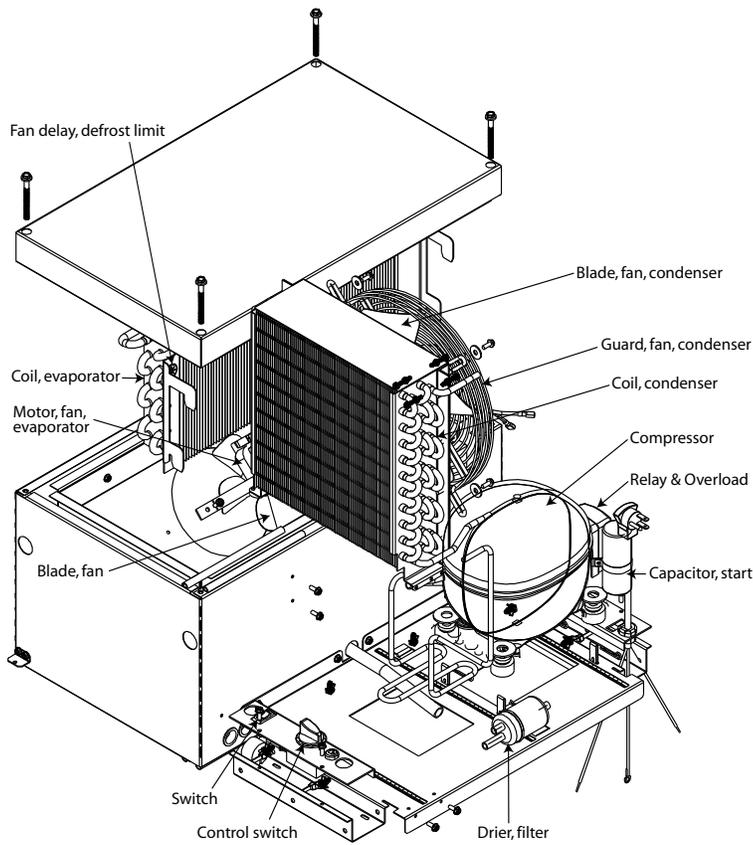
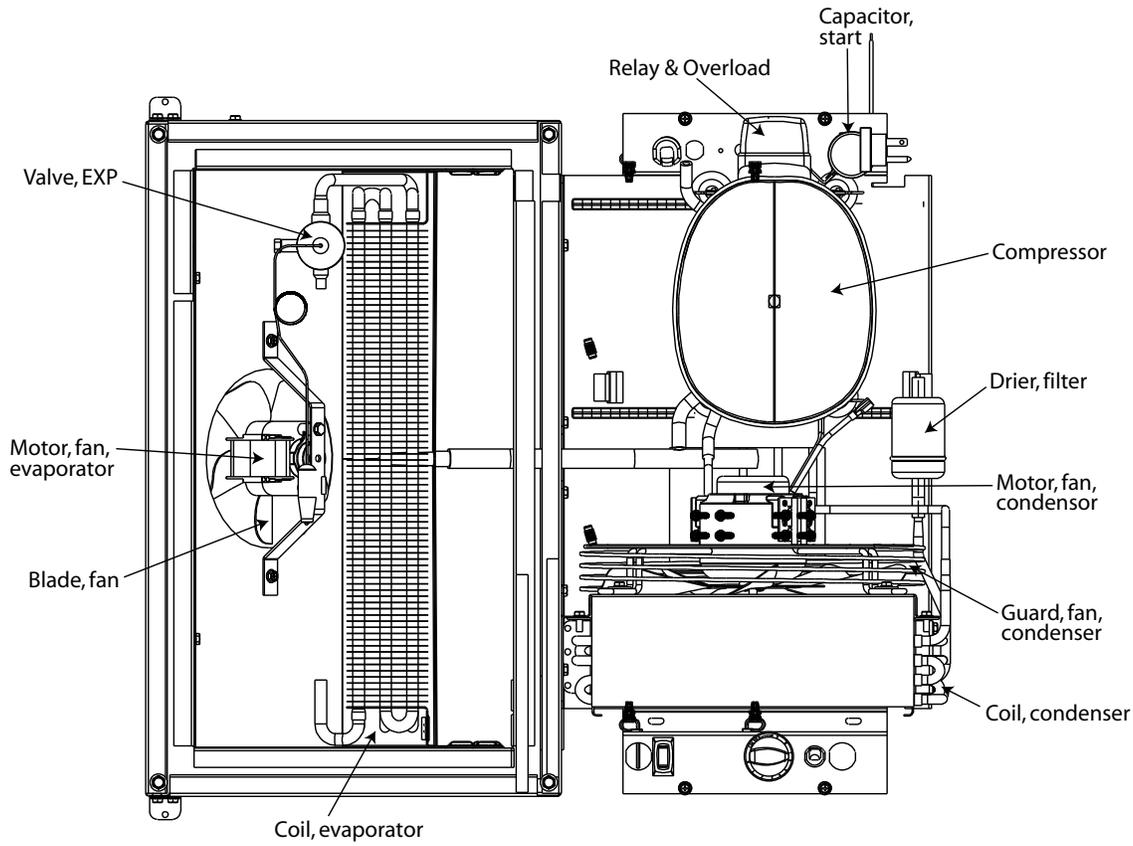
MCCH1, MCCH2, MCCH3 - Solid & Glass Doors



WIRING DIAGRAM - 115/208-230V

* COMPONENT AND ALL COMPONENT MATERIALS MUST BE ROHS (RESTRICTION OF HAZARDOUS SUBSTANCES) COMPLIANT. SPECIFIC SUBSTANCES ARE:
 -LEAD
 -MERCURY
 -CADMIUM
 -HEXAVALENT CHROMIUM
 -POLYBROMINATED BIPHENYLS (PBB)
 -POLYBROMINATED DIPHENYL ETHERS (PBDE)

Compressor Diagrams



Replacement Parts

MCCR1, MCCRPT1, MCCDRL2, - Solid Doors MCCR1, MCCDRL2 - Glass Doors

<i>Part Number</i>	<i>Description</i>
3516432	Blade, Fan, 25Deg, 8.75"
3517390	Blade, Fan, 5.56, CW, Lexan
3516204A	Breaker, Vacuum
2194787	Capacitor, Start, 280MFD
3516426	Coil, Condenser, Small
3516437	Coil, Evap, Ref, 1DR
3526999	Comp, NF5.5CLX, 115V,60HZ
3516444	Comp, Relay, Ovid, NF5.5CLX
2194782KT	Control, Ref, Danfoss
3516322	Drier, Filter, (2)Inlet
2160019	Guard, Fan, Wire
2162717	Motor, Fan, 9W, 115V, CW
2162715	Motor, Fan, Bay, 3/4ST
2190154	Switch, Rocker, 20A/125V
3516570	Thermometer, Digital
3516429	Valve, Therm EXP, W/O MOP

MCCR2 - Solid Doors MCCR2, MCCR2-SL - Solid & Glass Doors

<i>Part Number</i>	<i>Description</i>
3516433	Blade, Fan, 25
3516204A	Breaker, Vacuum
2194788	Capacitor, Start, 320MFD
3517343	Coil, Condenser, Small
3517341	Coil, Evap, Sml Ref, 2dr, Up
3527000	Comp, NF7.0,115V/60HZ
2194782KT	Control, Ref, Danfoss
3516322	Drier, Filter, (2)Inlet
2160019	Guard, Fan, Wire
2162716	Motor, Fan, 16W, 115V,CW
3516438	Relay, Comp, Ovid, NF7CLX
2190154	Switch, Rocker, 20A/125V
3516570	Thermometer, Digital
3516429	Valve, Therm EXP, W/O MOP

MCCRPT1 - Glass Doors

<i>Part Number</i>	<i>Description</i>
3516433	Blade, Fan, 25
3517390	Blade, Fan, 5.56, CW, Lexan
3516204A	Breaker, Vacuum
2194788	Capacitor, Start, 320MFD
3516427	Coil, Condenser, Large
3516437	Coil, Evap, Ref, 1DR
3527000	Comp, NF7.0,115V/60HZ
2194782KT	Control, Ref, Danfoss
3516322	Drier, Filter, (2)Inlet
2160019	Guard, Fan, Wire
2162716	Motor, Fan, 16W, 115V,CW
2162715	Motor, Fan, Bay, 3/4ST
3516438	Relay, Comp, Ovid, NF7CLX
2190154	Switch, Rocker, 20A/125V
3516570	Thermometer, Digital
3516429	Valve, Therm EXP, W/O MOP

MCCR3, MCCRPT2 - Solid & Glass Doors

<i>Part Number</i>	<i>Description</i>
3516433	Blade, Fan, 25
3516204A	Breaker, Vacuum
3516442	Capacitor, Start, Run, Assy
3517344	Coil, Condenser, Lrg 2dr
3517341	Coil, Evap, Sml Ref, 2dr, Up
3527016	Comp, SC15MLX.2,115V/60HZ
2194782KT	Control, Ref, Danfoss
3517345	Drier, Filter, 3/8", Danfos
2160019	Guard, Fan, Wire
2162716	Motor, Fan, 16W, 115V,CW
2190154	Switch, Rocker, 20A/125V
3516570	Thermometer, Digital
3516557	Valve, Thermal, Expansion

Replacement Parts, continued

MCCF1, MCCDRL2 - Solid Doors

MCCDRL2 - Glass Doors

<i>Part Number</i>	<i>Description</i>
3516432	Blade, Fan, 25DEG, 8.75"
3517390	Blade, Fan, 5.56, CW, Lexan
3516204A	Breaker, Vacuum
2194789	Capacitor, Start, 240MFD
3516426	Coil, Condenser, Small
3516436	Coil, Evap, Frz, 1DR
3527001	Comp, SC12CLX.2, 115/60HZ
2194783KT	Control, Frz, Danfoss
3516322	Drier, Filter, (2)Inlet
2160019	Guard, Fan, Wire
2194785	Htr, Def, 400W, 115V, 1DR
2194953	Limit, High Defrost
2162717	Motor, Fan, 9W, 115V, CW
2162715	Motor, Fan, Bay, 3/4ST
3516441	Relay, Comp, SC12CLX.2
2194959	Switch, Rocker, Snap-in
3516570	Thermometer, Digital
3516429	Valve, Therm Exp, W/O MOP

MCCF1 - Glass Doors

<i>Part Number</i>	<i>Description</i>
3516433	Blade, Fan, 25
3517390	Blade, Fan, 5.56, CW, Lexan
3516204A	Breaker, Vacuum
3516442	Capacitor, Start, Run, Assy
3516427	Coil, Condenser, Large
3516436	Coil, Evap, Frz, 1DR
3527002	Comp, SC18CLX.2
2194783KT	Control, Frz, Danfoss
2160019	Guard, Fan, Wire
2194785	Htr, Def, 400W, 115V, 1DR
2194953	Limit, High Defrost
2162716	Motor, Fan, 16W, 115V, CW
2162715	Motor, Fan, Bay, 3/4ST
2194959	Switch, Rocker, Snap-in
3516570	Thermometer, Digital

MCCF2 - Solid Doors

<i>Part Number</i>	<i>Description</i>
3516433	Blade, Fan, 25
3516204A	Breaker, Vacuum
3516442	Capacitor, Start, Run, Assy
3517340	Coil, Evap, Sml FRZ, 2dr, Up
3527002	Comp, SC18CLX.2
2194783KT	Control, Frz, Danfoss
3516322	Drier, Filter, (2)Inlet
2160019	Guard, Fan, Wire
2194970	Heater, Defrost, 600W, 115V
2194953	Limit, High Defrost
2162716	Motor, Fan, 16W, 115V, CW
2194959	Switch, Rocker, Snap-in
3516570	Thermometer, Digital
3516557	Valve, Thermal, Expansion

MCCF3 - Solid Doors

MCCF2 - Glass Doors

<i>Part Number</i>	<i>Description</i>
3516433	Blade, Fan, 25
3516204A	Breaker, Vacuum
2194979	Capacitor, Run, 45 MFD
2194978	Capacitor, Start, 145-175
3517344	Coil, Condenser, Lrg 2dr
3517342	Coil, Evap, Lrg Frz, 2dr
3527017	Comp, AWA2460ZXD, 208V/60H
2194974	Contact, 2 Pole, 120V
2194783KT	Control, Frz, Danfoss
2160019	Guard, Fan, Wire
2194970	Heater, Defrost, 600W, 115V
2194953	Limit, High Defrost
2162716	Motor, Fan, 16W, 115V, CW
2194980	Relay, Potential, Start
2194959	Switch, Rocker, Snap-in
3516570	Thermometer, Digital
3516557	Valve, Thermal, Expansion

Replacement Parts, continued

MCCF3 - Glass Doors

<i>Part Number</i>	<i>Description</i>
3517390	Blade, Fan, 5.56, CW, Lexan
3516204A	Breaker, Vacuum
3516305	Coil, Evap, R-404A
3526917	Cond Unit, DJAL-0150-CAV
2194991	Condensate Heater
3516043	Control, Temp, Frz
3516227	Drier, Filter, 5 CU. IN.
2194046	Fan Delay/Defrost Limit
2194671	Heater, 115V, 400W, 2-PC
2194672	Heater, 115V, 500W, 10A, 2-
2162691	Motor, Fan, 115V,50/60
3516223	Regulator, Pressure, 5/8
2194751	Relay, SPST-NO, 120V, FRZ
2190154	Switch, Rocker, 20A/125V
3516570	Thermometer, Digital
2194260	Timer, Paragon Reach-in
3516280	Valve, EXP, R404A, FRZ, 1/2
3516041	Valve, Solenoid, 1/4ODF

MCCDTR1 - Solid Doors

<i>Part Number</i>	<i>Description</i>
3516172	Blade, Fan, 5.56, CCW
3516239	Coil, Evap, Dough, RT, Spec
3516220	Coil, Evap, Frz, RT, Spec
3526969	Cond Unit, 1/3HP, 404A, FRZ
3526968	Cond Unit, 1/5HP, 404A, REF
2194782KT	Control, REF, Danfoss
2194536	Control, Temp, In@40D/Out
2194046	Fan Delay/Defrost Limit
3516173	Guard, Plastic, Fan, 6
3978197	Guard, Wire, Evaporator
2194659	Heater, 115V-100W, 1A
2194670	Heater, 115V-305W, 3A
2194679	Heater, Drain, 120V-3.75W
2162691	Motor, Fan, 115V, 50/60
5066440	Switch, Rocker #SPDT-D8
3516570	Thermometer, Digital
2194532	Thermostat, FRZ
RF000072	Timer, Defrost, Air-O
3516271	Valve, EXP, R404A, FRZ, 1/4
3516273	Valve, EXP, R404A, REF, 1/4

All Heated Models

<i>Part Number</i>	<i>Description</i>
2162516	Blower, Hi-Temp, Reach-In
2194377	Control Knob
2194645	Heating, Elem, Fin, 900W
2194618	Relay, Timer, 120V, 1HP
2162517	Ring, Inlet, Hi-Temp
2194370	Sensor, Temp, Htd Cab
2194409	Switch, Rocker, 20A, 2HP
3516570	Thermometer, Digital
000-C1A-0001	Thermostat, Hi-Limit
2194372	Thermostat, Htd Cabinet

Shelf Replacement Parts

<i>Part Number</i>	<i>Description</i>
3978170	Shelf, Chrome, Heated Model
3978279	Shelf, Epoxy, Refrigerator & Freezer
3234617KT	Hinge, 1-5/16" Offset with adjustable housing
3234782	Shelf Clip, SS

Standard Labor Guidelines To Repair Or Replace Parts On McCall Equipment

Advice and recommendations given by McCall Service Technicians do not constitute or guarantee any special coverage.

- A maximum of 1-hour is allowed to **diagnose a defective component**.
- A maximum of 1-hour is allowed for **retrieval of parts** not in stock.
- A maximum **travel distance** of 100 miles round trip and 2-hours will be reimbursed.
- Overtime, installation/start-up, normal control adjustments, general maintenance, glass breakage, freight damage, and/or correcting and end-user installation error will not be reimbursed under warranty unless pre-approved with a **Service Work Authorization** from McCall. You must submit the number with the service claim.

Labor Of 1-Hour Is Allowed To Replace:

- Thermostat
- Door Jamb Switch
- Solenoid Coil
- Hi-limit/Thermal Protector Switch
- Fan Delay/Defrost Termination Switch
- Compressor Start Components and Overload Protector
- Defrost Timer
- Thermometer
- Contactor/Relay
- Evaporator/Condenser Fan Motor and Blade
- Circulating Fan Motor and Blade
- Microprocessor Control
- Transformer
- Door Hinges, Locks, and Gaskets
- Condensate Element

Labor Of 2 Hours To Replace:

- Drawer Tracks/Cartridges
- Pressure Control
- Solenoid Valve
- Defrost Element
- Heating Element
- Locate/Repair Leak

Labor Of 3 Hours To Replace:

- EPR or CPR Valve
- Expansion Valve
- Condenser or Evaporator Coil

Labor Of 4 Hours To Replace:

- Compressor

This includes recovery of refrigerant and leak check.

\$55.00 maximum reimbursement for refrigerant recovery (includes recovery machine, pump, torch, oil, flux, minor fittings, solder, brazing rod, nitrogen, or similar fees.)

Refrigerants:

- R404A A maximum of \$15.00/lb. or \$1.00/oz. will be reimbursed.

Standard One Year Limited Warranty (One year parts and labor, five year compressor)

McCall warrants to the Original Purchaser of the McCall product (herein called the "Unit") that such Unit, and all parts thereof, will be free from defects in material and workmanship under normal use and service for a period of one (1) year from the date of shipment of the Unit to the Original Purchaser **or, if the Original Purchaser returns the warranty card completely filled out including the date of installation within thirty (30) days of receipt of the Unit, one (1) year from the date of installation.** During this one year warranty period, McCall will repair or replace any defective part or portion thereof returned to McCall by the Original Purchaser which McCall determines was defective due to faulty material or workmanship. During this one year warranty period, McCall will pay labor, crating and freight incurred in the removal of the Unit or defective component and shipment to McCall. Reimbursement is subject to the following limitations: A maximum of 1-hour is allowed to diagnose a defective component; A maximum of 1-hour is allowed for retrieval of parts not in stock; A maximum travel distance of 100 miles round trip and 2-hours will be reimbursed. Overtime, installation/start-up, normal control adjustments, general maintenance, glass breakage, freight damage, and/or correcting an end-user installation error will not be reimbursed under warranty unless pre-approved with a Service Work Authorization from McCall. McCall will pay the return costs if the Unit or part thereof was defective.

The term "Original Purchaser" as used herein means that person, firm, association, or corporation for whom the Unit was originally installed.

This warranty does not apply to any Unit or part thereof that has been subjected to misuse, neglect, alteration, or accident, such as accidental damage to the exterior finish, operated contrary to the recommendations specified by McCall; or repaired or altered by anyone other than McCall in any way so as to, in McCall's sole judgment, affect its quality or efficiency. This warranty does not apply to any Unit that has been moved from the location where it was originally installed. This warranty also does not cover the refrigerator drier or the light bulbs used in the Unit. **The warranty is subject to the user's normal maintenance and care responsibility as set forth in the Service and Installation Manual, such as cleaning the condenser coil, and is in lieu of all other obligations of McCall. McCall neither assumes, nor authorizes any other person to assume for McCall, any other liability in connection with McCall's products.**

Removal or defacement of the original Serial Number or Model Number from any Unit shall be deemed to release McCall from all obligations hereunder or any other obligations, express or implied.

Parts furnished by suppliers to McCall are guaranteed by McCall only to the extent of the original manufacturer's express warranty to McCall. Failure of the Original Purchaser to receive such manufacturer's warranty shall in no way create any warranty, expressed or implied, or any other obligation or liability on McCall's part in respect thereof.

IF THE CUSTOMER IS USING A PART THAT RESULTS IN A VOIDED WARRANTY AND A McCall AUTHORIZED REPRESENTATIVE TRAVELS TO THE INSTALLATION ADDRESS TO PERFORM WARRANTY SERVICE, THE SERVICE REPRESENTATIVE WILL ADVISE CUSTOMER THE WARRANTY IS VOID. SUCH SERVICE CALLS WILL BE BILLED TO CUSTOMER AT THE AUTHORIZED SERVICE CENTER'S THEN APPLICABLE TIME AND MATERIALS RATES. CONSIDER: CUSTOMER MAY INITIATE A SERVICE AGREEMENT WITHOUT PARTS COVERAGE.

Under no condition does this warranty give the Original Purchaser the right to replace the defective Unit with a complete Unit of the same manufacturer or of another make. Unless authorized by McCall in writing, this warranty does not permit the replacement of any part, including the motor-compressor, to be made with the part of another make or manufacturer.

If shipment of a replacement part is requested prior to the arrival in the McCall factory of the part claimed to be defective, the Original Purchaser must accept delivery of the replacement part on a C.O.D. basis, with credit being issued after the part has been received and inspected at McCall's plant and determined by McCall to be within this warranty.

No claims can be made under this warranty for spoilage of any products for any reason, including system failure.

The installation contractor shall be responsible for building access, entrance and field conditions to insure sufficient clearance to allow any hood(s), vent(s), or Unit(s) if necessary, to be brought into the building. McCall will not be responsible for structural changes or damages incurred during installation of the Unit or any exhaust system.

McCall shall not be liable in any manner for any default or delay in performance hereunder caused by or resulting from any contingency beyond McCall's control, including, but not limited to, war, governmental restrictions or restraints, strike, lockouts, injunctions, fire, flood, acts of nature, short or reduced supply of raw materials, or discontinuance of the parts by the original part manufacturer.

The Service Labor Contract, if applicable, the foregoing is exclusive and in lieu of all other warranties, whether written or oral, express or implied. This warranty supersedes and excludes any prior oral or written representations or warranties. McCall expressly disclaims any implied warranties of merchantability, fitness for a particular purpose, or compliance with any law, treaty, rule or regulation relating to the discharge of substances into the environment. The sole and exclusive remedies of any person relating to the Unit, and the full liability of McCall for any breach of this warranty, will be as provided in this warranty.

Other than this McCall Standard One Year Limited Warranty, any applicable McCall Additional Three Year Protection Plan or applicable McCall Service Labor Contract, the Original Purchaser agrees and acknowledges that no other warranties are offered or provided in connection with or for the Unit or any other part thereof.

In no event will McCall be liable for special, incidental or consequential damages, or for damages in the nature of penalties.

IF DURING THE WARRANTY PERIOD, CUSTOMER USES A PART FOR THIS McCall EQUIPMENT OTHER THAN AN UNMODIFIED NEW OR RECYCLED PART PURCHASED DIRECTLY FROM McCall OR ANY OF ITS AUTHORIZED SERVICE CENTERS AND/OR THE PART BEING USED IS MODIFIED FROM ITS ORIGINAL CONFIGURATION, THIS WARRANTY WILL BE VOID. FURTHER, McCall AND ITS AFFILIATES WILL NOT BE LIABLE FOR ANY CLAIMS DAMAGES OR EXPENSES INCURRED BY THE CUSTOMER WHICH ARISE DIRECTLY OR INDIRECTLY, IN WHOLE OR IN PART, DUE TO THE INSTALLATION OF ANY MODIFIED PART AND/OR PART RECEIVED FROM AN UNAUTHORIZED SERVICE CENTER. If the warranty becomes void, Customer may purchase from McCall, if available, a Service Agreement or service at the then current time and materials rate.

For more information on McCall warranty's log on and check out the service section of our web site at www.mccallrefrigeration.com.

Additional Four Year Protection Plan (for motor-compressor only)

In addition to the Standard One Year Warranty on the Motor-Compressor contained in the above listed McCall product (the "Unit"), McCall also agrees to repair, or exchange with similar or interchangeable parts in design and capacity at McCall's option, the defective Motor-Compressor contained in the Unit (the "Motor-Compressor), or any part thereof, for the Original Purchaser only, at any time during the four (4) years following the initial one (1) year period commencing on the date of installation for the Original Purchaser. **Failure of the Original Purchaser to register the registration card containing the Original Purchasers name, address, date of installation, model number and serial number of the Unit containing the Motor-Compressor within 30 days from the date of installation shall void this warranty.** This additional warranty is only available if the Motor-Compressor is inoperative due to defects in material or factory workmanship, as determined by McCall in its sole judgment and discretion. The Original Purchaser shall be responsible for returning the defective Motor-Compressor to McCall prepaid, F.O.B. at the address shown on the back cover of this manual.

The term "Original Purchaser" as used herein means that person, firm, association, or corporation for whom the Unit was originally installed.

The term "Motor-Compressor" as used herein does not include unit base, air or water cooled condenser, receiver, electrical accessories such as relay, capacitors, refrigerant controls, or condenser fan/motor assembly. This warranty does not cover labor charges incidental to the replacement of parts. This warranty further does not include any equipment to which said condensing unit is connected, such as cooling coils, temperature controls or refrigerant metering devices. This warranty shall be void if the Motor-Compressor, in McCall's sole judgement, has been subjected to misuse, neglect, alteration or accident, operated contrary to the recommendations specified by the Unit manufacturer, repaired or altered by anyone other than McCall in any way so as, in McCall's sole judgment, to affect its quality or efficiency or if the serial number has been altered, defaced or removed. This Warranty does not apply to a Motor-Compressor in any Unit that has been moved from the location where it was originally installed. The addition of methyl chloride to the condensing unit or refrigeration system shall void this warranty.

General Conditions

McCall shall not be liable in any manner for any default or delay in performance hereunder caused by or resulting from any contingency beyond McCall's control, including, but not limited to, war, governmental restrictions or restraints, strike, lockouts, injunctions, fire, flood, acts of nature, short or reduced supply of raw materials, or discontinuance of any part or the MotorCompressor by the unit manufacturer.

Replacement of a defective Motor-Compressor is limited to one (1) Motor-Compressor by us during the four (4) four period. McCall shall replace the Motor-Compressor at no charge.

This warranty does not give the Original Purchaser of the Motor-Compressor the right to purchase a complete replacement Motor-Compressor of the same make or of another make. It further does not permit the replacement to be made with a Motor-Compressor of another kind unless authorized by McCall. In the event McCall authorizes the Original Purchaser to purchase a replacement Motor-Compressor locally, only the wholesale cost of the Motor-Compressor is refundable.

Expressly excluded from this warranty are damages resulting from spoilage of goods.

Except as provided in any applicable Standard One Year Limited Warranty or applicable Service Labor Contract, the foregoing is exclusive and in lieu of all other warranties, whether written or oral, express or implied. This Warranty supersedes and excludes any prior oral or written representations or warranties. McCall expressly disclaims any implied warranties of merchantability, fitness for a particular purpose or compliance with any law, treaty, rule or regulation relating to the Motor-Compressor, and the full liability of McCall for any breach of this warranty, will be as provided in this warranty.

Other than any applicable McCall Standard One year Limited Warranty, this McCall Additional Four Year Protection Plan and any applicable McCall Service Labor Contract, the Original Purchaser agrees and acknowledges that no other warranties are offered or provided in connection with or for the Motor-Compressor or any part thereof.

In no event will McCall be liable for special, incidental or consequential damages, or for damages in the nature of penalties.

McCALL®

Thank you for choosing McCall!

Help is a phone call away. Help our team of professional, courteous customer service reps by having your model number and serial number available at the time of your call (800) 733-8829.

Model: _____ S/N: _____

Installation Date: _____

For a list of McCall's authorized parts depots,
visit our website at www.mccallrefrigeration.com.

McCALL®

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