



When ordering parts, always state:
MODEL NO. - PRODUCT NO. - QUANTITY -
PART NUMBER - DESCRIPTION
For Electric Details also state:
VOLTAGE - WATTAGE

MODEL RM2193 Series PARTS LIST

USA
SERVICE OFFICE
Dometic Corporation
509 South Poplar Street
Lagrange, IN 46761
260-463-4858

CANADA
Dometic Distribution
866 Langs Drive
Cambridge, Ontario
CANADA N3H 2N7
519-653-4390

**For Service Center
Assistance Call:**
800-544-4881

Product No.	Model	Voltage	Refrig. Frame Color	Door Style	Door/Door Trim Color	Market	Brand
921131022	RM2193	12V-120V	Gray-Brown	Standard	Gray-Brown	USA/Canada	Dometic
921131023	RM2193	12V-120V	Gray-Brown	Standard	Gray-Brown	USA/Canada	Dometic
921131024	RM2193	12V-120V	Gray-Brown	Standard	Gray-Brown	USA/Canada	Dometic
921131025	RM2193	12V-120V	Gray-Brown	Standard	Gray-Brown	USA/Canada	Dometic

PARTS LIST

MODEL RM2193 Series

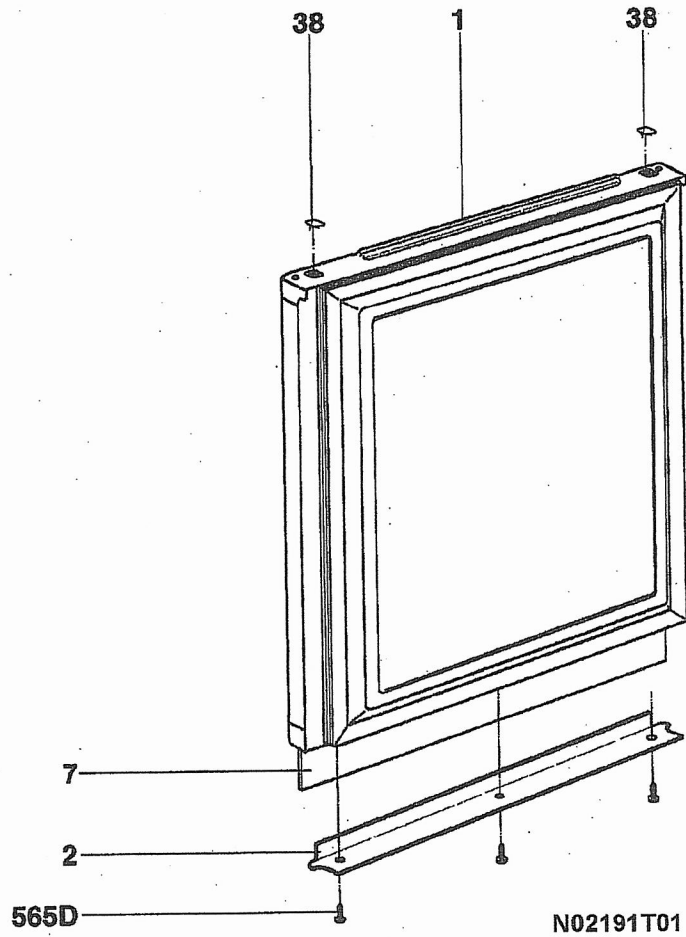
ALPHABETICAL INDEX

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SPECIFICATIONS

Model	RM2193
Product Number*	921131022 921131023 921131024 921131025
Energy Source	12VDC, 120VAC, Gas
AC Heating Element	
Amperage	1.2
Ohm Resis. +/- 10%	104
Wattage	115
DC Heating Element	
Watts	115
Amperage	9.58
BTU's Gas Burner	
Low	293
High	635
Jet Size	45
Flue Baffle	
Size	4-3/4" x 9/16"
Wire Length	3"
* Product number located on refrigerator data plate.	

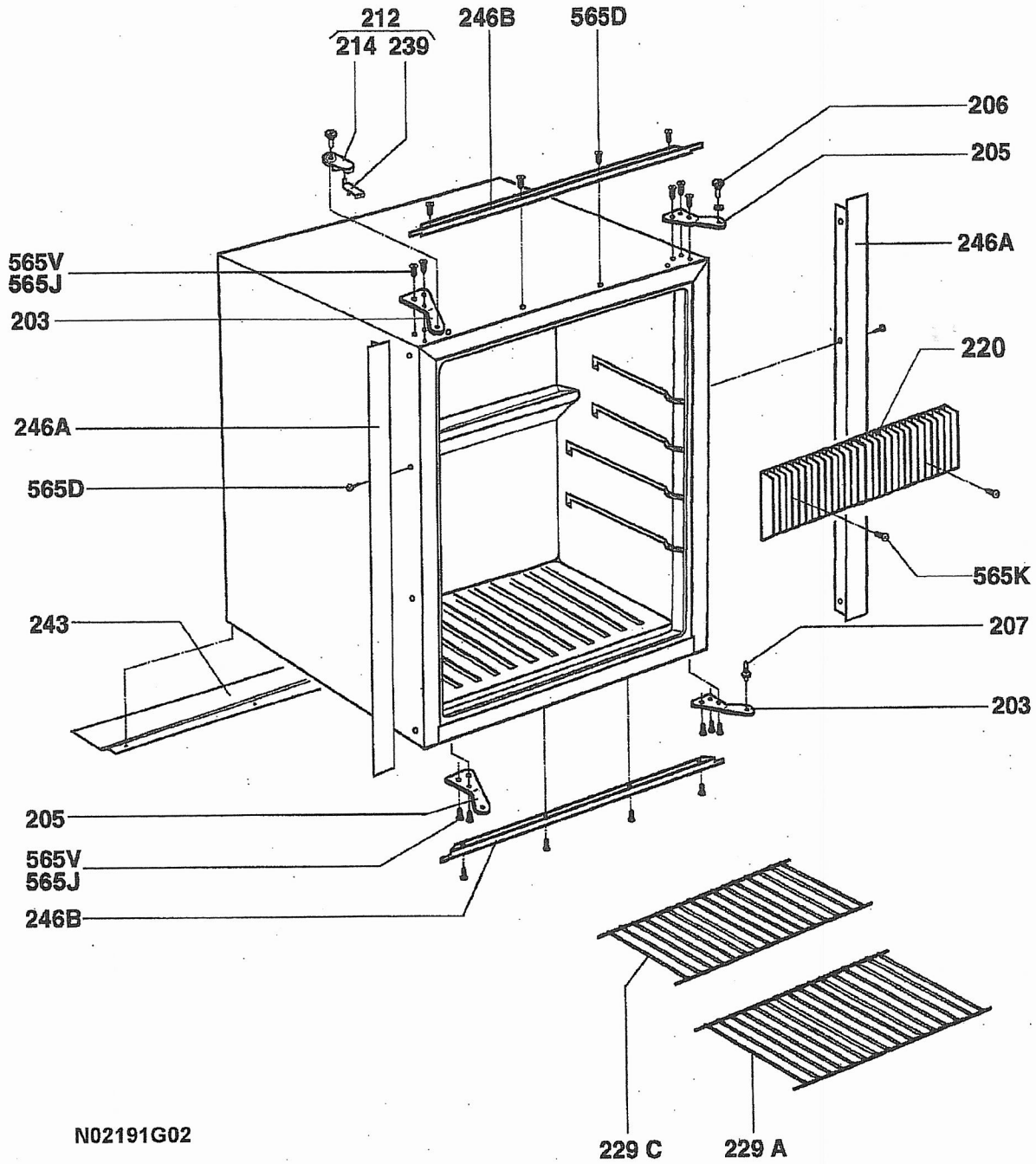
DOOR ASSEMBLY



Index #	Part #	921131022	921131023	921131024	921131025	Description
		A	B	C	D	
1	2936361407	A	B	C	D	Door, Complete
2	2951240155	A	B	C	D	Trim, Door Gray/Brown
38	2951297056	A	B	C	D	Cover Gray/Brown
565D	7296279016	A	B	C	D	Screw, C 3.5 x 9.5

Only Those Parts Identified With An Index Number Are Available For Service Replacement.

CABINET, COMPONENTS



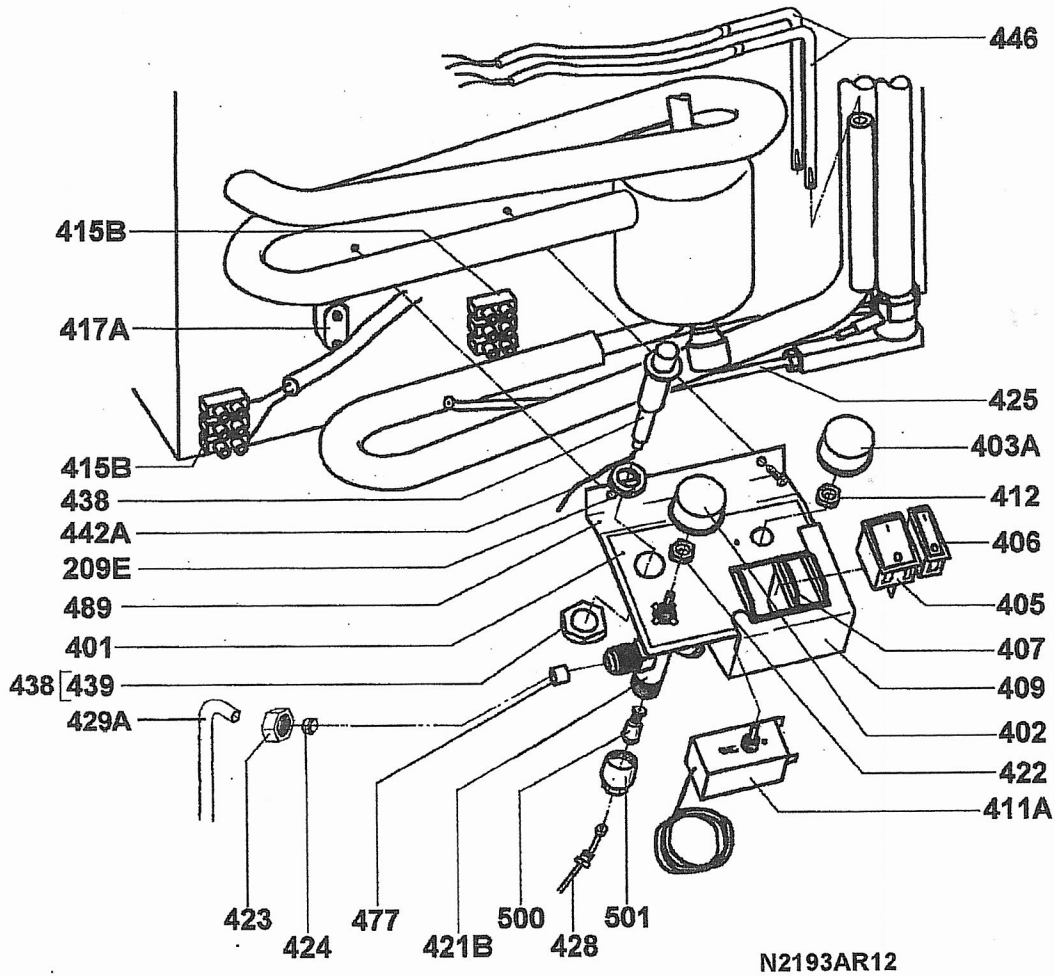
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CABINET, COMPONENTS

Index #	Part #	921131022	921131023	921131024	921131025	Description
		A	B	C	D	
203	2951888003	A	B	C	D	Hinge, Upper LH Lower RH
205	2951889001	A	B	C	D	Hinge, Upper RH Lower LH
206	2923005009	A	B	C	D	Bolt, Hinge, Chrome
207	2926265006	A	B	C	D	Bolt, Hinge, Chrome
212	2951880109	A	B	C	D	Door Lock, Complete Gray/Brown
214	2951964119	A	B	C	D	Door Lock Gray/Brown
220	2412606606	A	B	C	D	Fins
229A	2951892054	A	B	C	D	Shelf 282x357mm
229C	2951891056	A	B	C	D	Shelf 233x375mm
239	2951883012	A	B	C	D	Support Door Lock Gray/Brown
243	2951896006	A	B	C	D	Mounting Rail L=356mm
246A	2951886015	A	B	C	D	Frame, Side L=539mm
246B	2951887013	A	B	C	D	Frame, Top L=440mm
565D	7296279016	A	B	C	D	Screw, C 3.5x9.5
565J	7296342012	A	B	C	D	Screw, B8x13
565K	2951230008	A	B	C	D	Screw, B4.8x19

Only Those Parts Identified With An Index Number Are Available For Service Replacement.

GAS & ELECTRIC COMPONENTS



Only Those Parts Identified With An Index Number Are Available For Service Replacement.

GAS & ELECTRIC COMPONENTS

Index #	Part #	921131022	921131023	921131024	921131025	Description
		A	B	C	D	
401	2951893102	A	B	C	D	Shield, Control Panel
402	2923334458	A	B	C	D	Knob Gas Valve Gray/Brown
403A	2923468355	A	B	C	D	Knob, Thermostat Gray/Brown
405	2951433107	A	B	C	D	Switch, AC Voltage
406	2951398201	A	B	C	D	Switch, DC
407	2923815167	A	B	C	D	Frame, Switch Gray/Brown
409	2952005003	A	B	C	D	Cover, Electric Black
411A	2926528031	A	B	C	D	Thermostat, Electric
412	2927881009	A	B	C	D	Nut 10x0.75
415B	2923466045	A	B	C	D	Terminal Board
417A	2926560000	A	B	C	D	Strain Relief
421B	2951955109	A	B	C	D	Gas Valve
422	2923676007	A	B	C	D	Nut, M12x1
425	2951945001	A	B	C	D	Gas Inlet Pipe
428	2923435230	A	B	C	D	Thermocouple
438	2923024109	A	B	C	D	Piezo Ignitor
442A	2951918040	A	B	C	D	Ignition Cable
446	2951917000	A	B	C	D	Heater 12VDC/115W
	2951996012	A	B	C	D	Heater 120VAC/115W
477	2923191007	A	B	C	D	Filter, Gas
489	2951900105	A	B	C	D	Plate Mounting

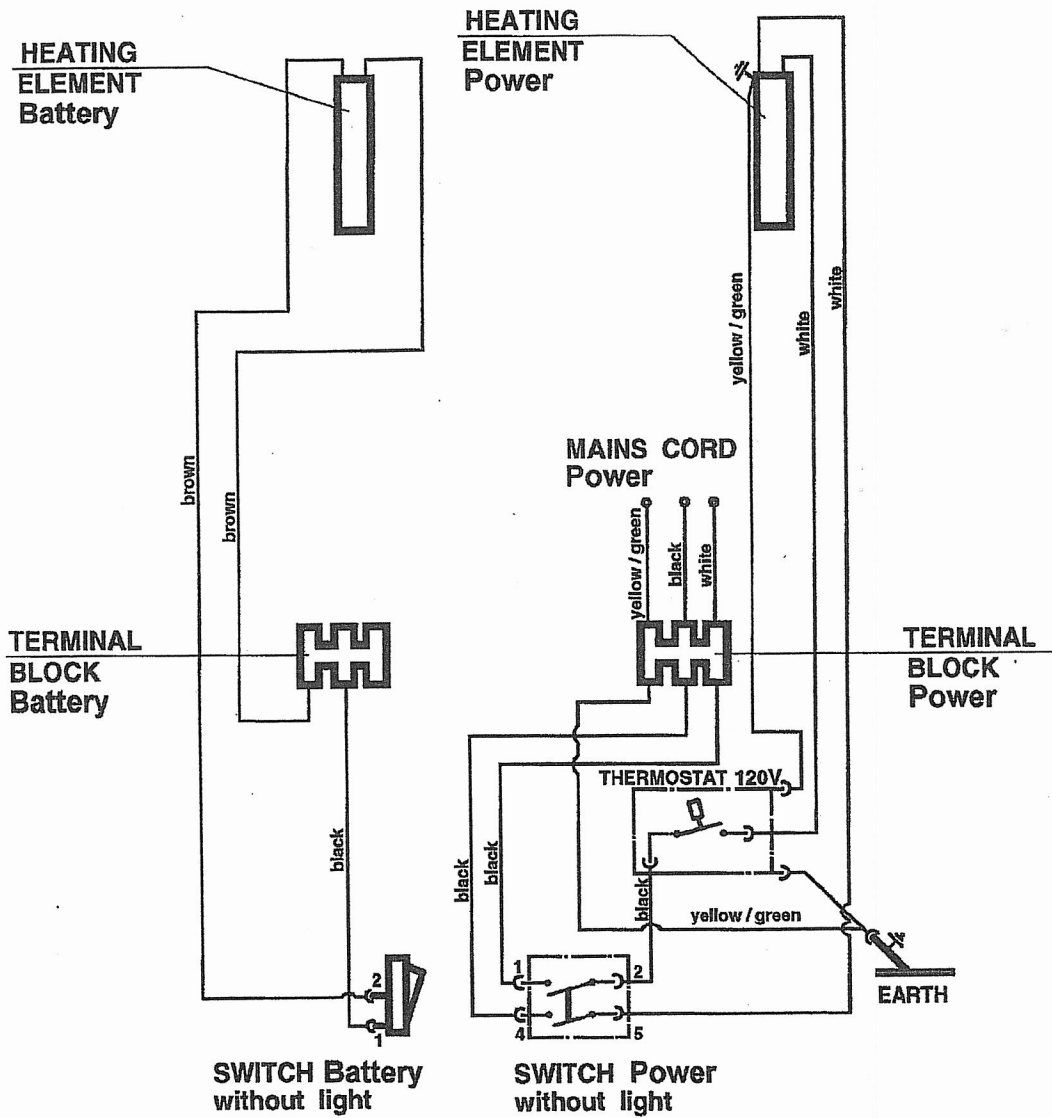
Only Those Parts Identified With An Index Number Are Available For Service Replacement.

CONTROL & BURNER COMPONENTS

Index #	Part #	921131022	921131023	921131024	921131025	Description
		A	B	C	D	
101	2936360110	A	B	C	D	Cooling Unit
102	2926212602	A	B	C	D	Flue Baffle
103	2924082205	A	B	C	D	Sleeve, Boiler
104	2926680139	A	B	C	D	Insulation Boiler
105	2924979004	A	B	C	D	Top Cover, Boiler
106	2924089002	A	B	C	D	Bottom Cover, Boiler
108	2923430603	A	B	C	D	Burner
110	2922033044	A	B	C	D	Jet, #45
111	2923626002	A	B	C	D	Electrode
114	2952083018	A	B	C	D	Cover, Burner
117	2952444301	A	B	C	D	T-Pipe
125	2952435408	A	B	C	D	ScrewM4x6
126	2926559036	A	B	C	D	Lock Washer
327	2106626100	A	B	C	D	Nut

Only Those Parts Identified With An Index Number Are Available For Service Replacement.

WIRING DIAGRAM



N292682750EN

5C. GAS THERMOSTAT (RM2804 & RM2604 ONLY)

On the LP gas mode, full line pressure is directed through the thermostat to the burner until the thermostat senses that the refrigerator cabinet has reached proper cooling temperature. At that time an internal valve closes and redirects the gas flow through the by-pass screw. This reduces the amount of LP gas going to the burner assembly. The gas flow remains in this "by-pass" mode until the thermostat senses that the refrigerator cabinet needs more cooling. Again, the thermostat directs LP gas flow through the thermostat at full line pressure until the cabinet temperature is sufficient. The thermostat is calibrated by the manufacturer so that at mid-range the cabinet temperature should be approximately 40 degrees Fahrenheit. To check the calibration of the thermostat, place a container of water in the cabinet of the refrigerator and operate at mid-range setting until the thermostat is satisfied. Then, check the temperature of the water. It should be approximately 40 degrees. We do not recommend any calibration in the field. If calibration is not correct, replace the thermostat. To check the thermostat for proper gas flow, set the thermostat to maximum and check the gas pressure at the pressure test port. It should be line pressure, between 11 to 12 inches water column. If you have less than 11 inches of water column pressure, the next step would be to shut off the gas supply and remove the by-pass screw. Then install a by-pass screw that does not have the small o-ring on it. Next, turn on the gas supply and take a reading. If the manometer now reads 11 inches of water column, the thermostat is defective and must be replaced. If the by-pass screw test shows no change in pressure, the problem lies in the filter, the shut-off valve or the gas supply. Shut off the gas supply, remove the by-pass screw, replace it with a proper one that has an o-ring and turn the gas on.

NOTE: Check for leaks with an approved LP gas leak solution whenever any part of the gas system has been worked on.

6C. DUAL THERMOSTAT LP GAS MODE

On the LP gas mode, full line pressure is directed through the thermostat to the burner until the thermostat senses that the refrigerator cabinet has reached proper cooling temperature. At that time an internal valve closes and redirects the gas flow through the bypass screw. This reduces the amount of LP gas going to the burner assembly. The gas flow remains in this "bypass" mode until the thermostat senses that the refrigerator

7C. FLAME INDICATOR METER (On Top Mounted Controls Only)

The flame indicator meter is basically a DC volt meter. It reads DC millivolts coming from the thermocouple. If the millivolts from the thermocouple are 5 millivolts or more, the red needle in the meter should be in the green section.

If the blue wire to the meter is shorted to ground or if the blue and red wires are shorted together, a flame failure condition could result.

8C. FILTER

A filter is located in the inlet fitting to the thermostat. It protects the internal valve portion of the thermostat by collecting any particles and/or oil that could get into the LP gas line. The filter can become saturated and cause a restriction to gas flow. This could cause a lack of cooling on gas mode. If you suspect a restriction, first verify the thermostat and bypass screw are good. If these components are good, and filter is restricted, replace thermostat.

9C. ELECTRIC THERMOSTAT (For RM2804 & RM2806 Only)

It is an electric only thermostat. On 2-way models it controls the AC heating element. On 3-way models it controls the DC heating element as well as the AC heating element. The thermostat regulates the cabinet temperature by making and breaking the heat source circuit. The internal mechanism breaks contact (continuity) when adequate cabinet temperature has been reached. Check the thermostat for continuity or use a jumper wire with insulated clips and bypass the thermostat.

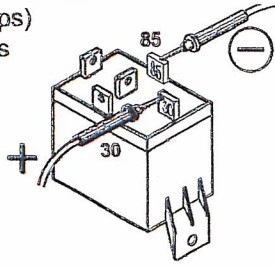
NOTE: Care should be used. Do not short to thermostat casing. Also remove the jumper after testing is completed.

If the above test allows the refrigerator to operate, replace the thermostat.

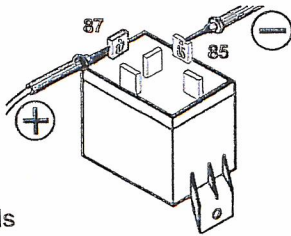
10C. RELAY (RM2604/RM2610/RM2804/RM2810 3-WAY MODELS ONLY)

The relay controls the circuit to the DC heating element. The load (amps) of the DC heating element goes through the relay.

To check the relay, first verify the selector switch is on DC mode and the thermostat is **NOT** completing the circuit. Next, verify voltage is present between terminals 85 and 30. If voltage is not present, check wiring to both terminals.

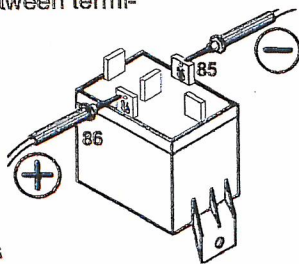


Next, check for voltage between terminals 85 and 87. If voltage is present, the relay is defective and needs to be replaced.

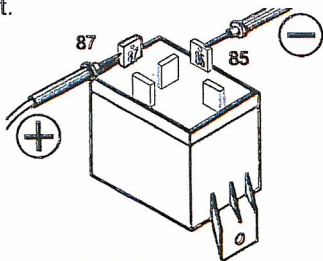


Second, verify the selector switch is on DC mode and the thermostat is completing the circuit.

Next, verify voltage is present between terminals 85 and 86. If no voltage is present, check wiring and connections.

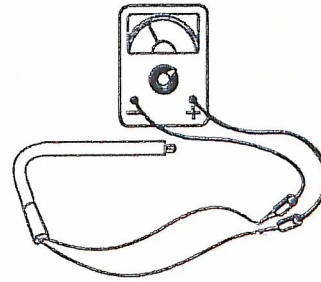


Next, if voltage is present between 85 and 86 terminals, then voltage should be present between terminals 85 and 87. If no voltage is present, the relay is defective, replace it.



11C. HEATING ELEMENT (3-WAY MODELS ONLY)

The heating element is designed to deliver a predetermined amount of heat to the cooling unit. Check the heating element with ohms resistance using a properly calibrated ohm meter. This check is to be done with the element at room temperature.



For values, refer to Technical Data Section, Pg. 86.

12C. IGNITER

1. MODEL RM2310, 2410, 2452, 2453

The piezo lighter is a self-contained assembly which generally does not need maintenance. When the button is pushed, a spring loaded striker creates a spark. If there is no resistance when pressing the button, the piezo igniter is defective and must be replaced. If the piezo snaps or has resistance when the button is pushed, but there is no spark, the problem lies in the electrode or electrode wire.

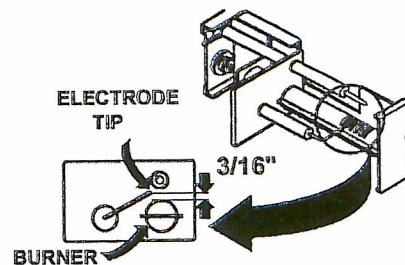
2. MODEL RM2510, 2610, 2810, 2552, 2553

The igniter is an electronic device that produces high voltage to create a spark at the burner, only on gas mode. First, check that the switch is in the gas mode and is completing the circuit. Next, verify proper voltage at the positive (+) and ground (-) terminals of the igniter. The reading should be within one volt of incoming voltage at the terminal block. A voltage drop of more than one volt would indicate a loose connection. No voltage would indicate an open circuit, check switch, wiring and DC voltage requirements.

ELECTRODE

To check the electrode, first do a visual inspection for cracks or breaks on the ceramic insulator. Also, verify the mounting bracket is attached properly to the electrode. If either of the above conditions are found, replace the electrode. Next, check the spark gap. It must be set at three sixteenths (3/16) of an inch and the tip of electrode above the slots in the burner.

NOTE: If igniter and high voltage cable are good and there is no spark at the tip of the electrode, **REPLACE THE ELECTRODE.**

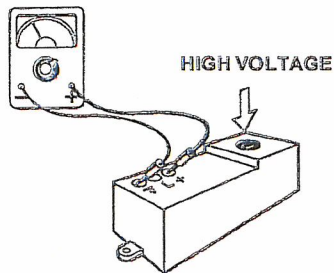


RM2452/RM2453/RM2552/RM2553 SWITCH

HIGH VOLTAGE CABLE

NOTE: Be sure switch and igniter are good before checking the high voltage cable and the switch is in the gas mode.

To check the high voltage cable, first disconnect DC power at the terminal block. Next, disconnect high voltage cable from electrode. Then reconnect DC power to the terminal block. If sparking starts, cable is good, **DO NOT REPLACE**, check the electrode. If no sparking, disconnect DC power at the terminal block and then disconnect high voltage cable at the igniter. Reconnect DC power to the terminal block. If sparking sound from igniter, replace the high voltage cable.



Next, disconnect DC power at the terminal block. Remove high voltage cable from igniter. Reconnect DC power, the igniter should produce a sparking sound. If not, replace the igniter.

ON MODEL RM2510, 2604, 2610 AND 2804, 2810: Next, with the igniter producing spark, set the meter on 20 volts DC or lower scale, connect meter leads to L and ground terminals on the igniter. The meter should read a pulsating voltage. If not, replace the igniter.

If all of the previous checks are correct, the igniter is good, **DO NOT REPLACE**. The pulsating voltage allows a lamp to illuminate on the front of the refrigerator to advise the customer spark has been produced. To check the lamp, first, verify it is wired correctly. Next, verify the lamp receptacle is receiving the signal, if so, and lamp is not illuminating (flashing), replace the lamp.

NOTE: Do not supply DC power to the lamp. It will **NOT** illuminate with normal DC power. For the lamp to illuminate it must receive an increased DC signal.

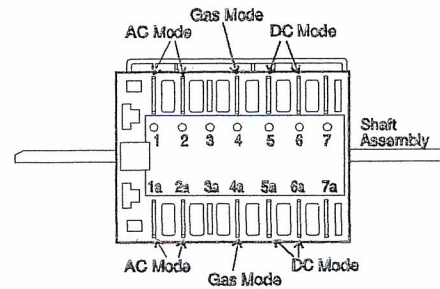
13C. SWITCH (TOP MOUNT CONTROLS)

The Selector Switch should be checked for continuity in the following manner. Remove all wires from the assembly.

For the DC Mode (3-Way Models ONLY), continuity should exist between terminals 5 and 5a and 6 and 6a.

For the AC Mode, continuity should exist between terminals 1 and 1a and 2 and 2a.

For the Gas Mode (on refrigerators equipped with automatic reignitors ONLY), continuity should exist between terminals 4 and 4a.



14C. DC COMPONENTS

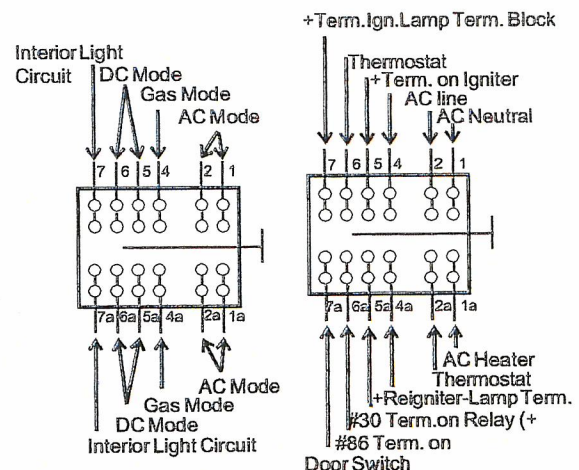
SWITCH

This is the switch that selects the mode of operation (120 volt AC, gas and 12 volt DC). It is also a circuit interrupter for each mode of operation on the refrigerator. When the customer selects either AC, gas or DC (3-way models only) operation, the selector switch directs electricity first to the interior light and the thermostat and on to the heating element or the igniter for gas mode. When this switch is turned off, the AC or DC circuit is interrupted. To check the switch in the AC mode, continuity should exist between these terminals: 1 to 1A, 2 to 2A and 7 to 7A. To check the switch in the gas mode, continuity should exist between these terminals: 4 to 4A and 7 to 7A.

To check the switch in the DC mode (on 3-way models only), continuity should exist between these terminals: 5 to 5A, 6 to 6A and 7 to 7A.

NOTE: To do a continuity check, first be sure all power is disconnected or off to the refrigerator. Second, remove all wires from the switch. After the check, be sure switch is wired properly per the wiring diagram.

When the switch is in the off position a continuity reading **SHOULD NOT** be indicated on any terminals. If the above test results are correct, **DO NOT REPLACE** the switch. If any one of the above tests are not correct **REPLACE** the switch.



15C. DC VOLTAGE REQUIREMENTS

For the refrigerator to operate, igniter (gas mode) and DC volt operation (3-way models only), DC voltage must be supplied to the terminal block or blocks (2 terminal blocks on 3-way models) at the rear of the refrigerator. The operational range is 10.5 to 15 volts DC. Connecting the refrigerator to an unregulated converter can result in improper operation of the refrigerator. Check for proper voltage at the terminal block or blocks at the back of the refrigerator. If power is outside the operational range, correct the power supply problem. The power supply to the refrigerator must be fused. The igniter will draw about 1 amp at 12 volts DC.

The DC heating element (on 3-Way Models ONLY) will draw the following amps at 12 volts:

RM2310	10.4 AMPS
RM2410	10.4 AMPS
RM2510	14.6 AMPS
RM2604/2610	17.9 AMPS
RM2804/2810	17.9 AMPS
RM2453	14.6 AMPS
RM2553	14.6 AMPS

The maximum fuse size is as follows:

RM2310	15 AMPS
RM2410	15 AMPS
RM2510	20 AMPS
RM2604/2610	25 AMPS
RM2804/2810	25 AMPS
RM2452	15 AMPS
RM2453	15 AMPS
RM2552	20 AMPS
RM2553	20 AMPS

16C. DC COMPONENTS

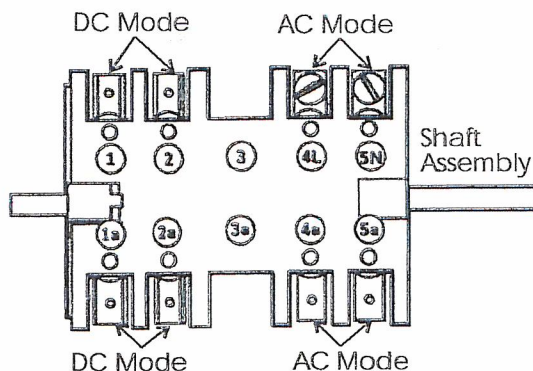
SWITCH (BOTTOM MOUNT CONTROLS)

A. The selector switch should be checked for continuity in the following manner. Remove all wires from the assembly.

For the DC mode, continuity should exist between terminals 1 and 1A and 2 and 2A. (3-Way Models Only)

For the AC mode, you should have continuity between 4L and 4A and 5N and 5A. If you lack continuity in any mode when making these checks, the switch is defective and should be replaced.

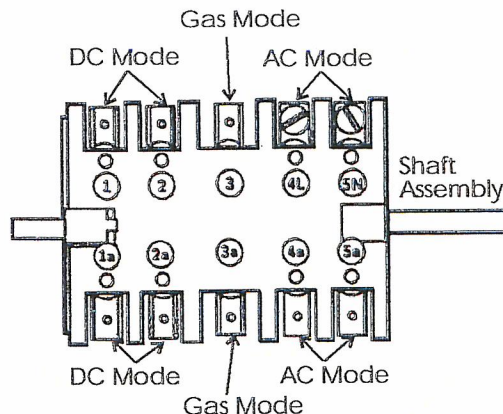
RM2310 & RM2410 SWITCH ASSEMBLY



B. The RM2510/RM2610/RM2810 selector switch should be checked for continuity in the following manner. Remove all wires from the assembly. For the DC mode, continuity should exist between terminals 1 and 1A and 2 and 2A. For the gas mode, you should have continuity between 3 and 3A.

For the AC mode, you should have continuity between 4L and 4A and 5N and 5A. If you lack continuity in any mode when making these checks, the switch is defective and should be replaced.

RM2510/RM2610/RM2810 SWITCH ASSEMBLY



17C. AC VOLTAGE REQUIREMENTS

- 1) The refrigerator is a 120-volt AC, 60 Hz appliance. The proper operating range is 100 to 132 volts. Check the AC volts at the receptacle where the refrigerator is attached. If voltage drops below 100 volts, cooling efficiency will decrease with voltage decrease. If voltage is outside of the proper operating range, correct the power source problem.