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# SIBIR

## GAS/ELECTRIC REFRIGERATOR

### MODEL E 2321/3W

# OWNER'S MANUAL

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### For your Safety

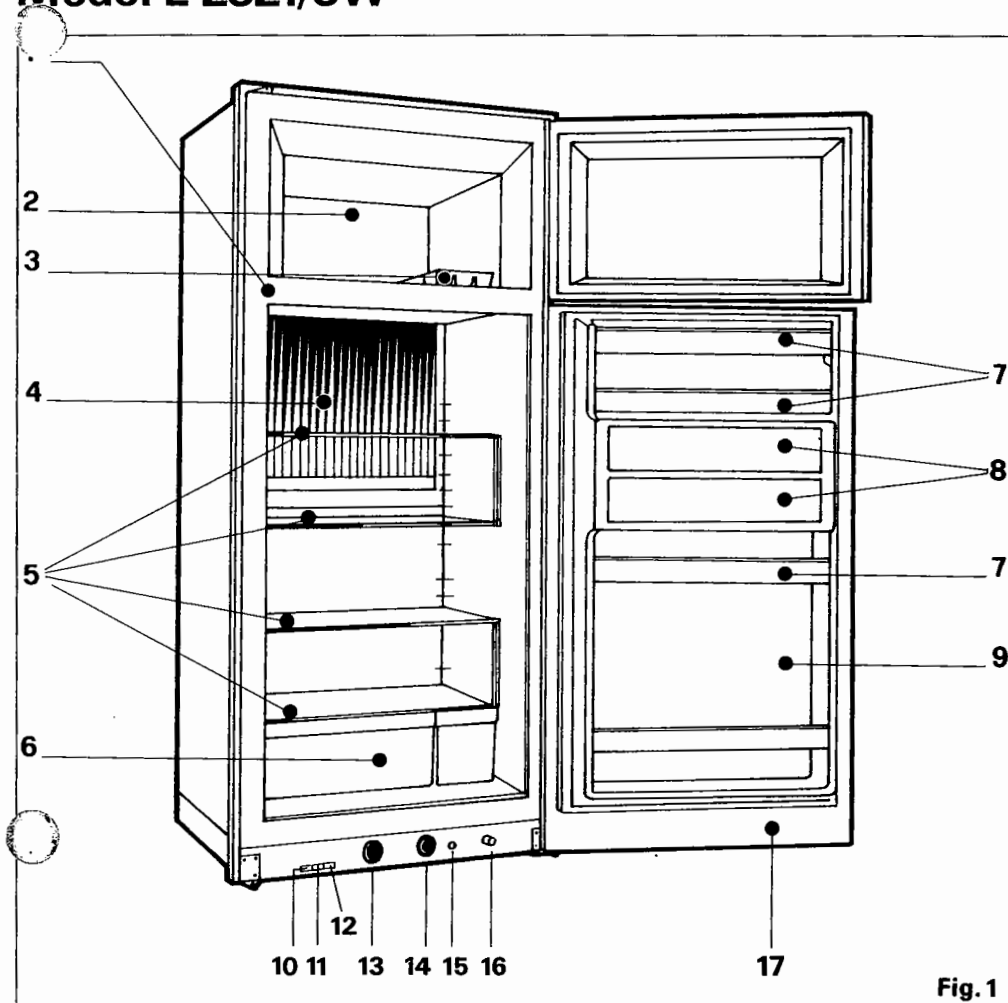
**Do not store or use gasoline or other liquids with flammable vapors in the vicinity of this or any other appliance.**

**An odorant is added to the gas used by this appliance.**

**If you smell gas:**

- 1. Open windows.**
- 2. Do not touch electrical switches.**
- 3. Extinguish any open flame.**
- 4. Shut off gas supply at bottle.**
- 5. Contact your nearest service dealer or gas supplier.**

# Major Parts Descriptions Model E 2321/3W



**Fig. 1**

- |                        |                                      |                              |
|------------------------|--------------------------------------|------------------------------|
| 1. Travel Lock         | 7. Egg Racks                         | 13. Electric Thermostat Knob |
| 2. Freezer Compartment | 8. Dairy Compartment                 | 14. Gas Thermostat Knob      |
| 3. Ice Trays           | 9. Bottle Rack                       | 15. Gas Valve Button         |
| 4. Evaporator          | 10. Electric Selector Switch - 12 V  | 16. Ignition Button          |
| 5. Storage Shelves     | 11. Gas Selector Switch              | 17. Lighting Instructions    |
| 6. Vegetable Bins      | 12. Electric Selector Switch - 110 V |                              |

# Operating

## 1. General

Your refrigerator has a freezer compartment for the storage of frozen foods and for making ice cubes, and a general storage compartment.

The refrigerator has been designed to allow you to operate it on either LP gas, 110 volts, or 12 volts from a storage battery, and the following pages will explain the various features for you and provide you with instructions on operation and maintenance.

## 2. Controls

All controls are mounted at the front of the refrigerator and can be reached by opening the refrigerator door.

The controls are arranged in sequence as follows:

electric selector switch – 12 V (10), gas selector switch (11), electric selector switch – 110 V (12), electric thermostat (13), gas thermostat (14), gas valve button (15), ignition button (16).

Selection of either L.P. gas or electric operation is made by push controls which are interlocked for safety to prevent the accidental use of both systems at the same time. *Once selected, a switch will remain in until it is again pushed and released, at which time it will pop out, thus shutting down the system.*

## 3. Starting Up

### Gas Operation

- a) Check that the refrigerator is level (see caution notice page 2).
- b) Turn on gas supply at bottle.
- c) Turn the gas thermostat knob to maximum.
- d) Push the gas selector switch. The switch should stay in.
- e) Push in and hold the gas valve button.
- f) Push the ignition button several times.
- g) Observe the spark through the lens at rear of cabinet interior (behind vegetable bin).

When flame shows clearly, release the ignition button but hold the gas valve button for further 20 secs. to activate safety device.

- h) If flame goes out or there is difficulty in lighting burner wait 5 mins. before repeating e, f, and g.

As air may be present in the gas lines at first ignition it may be necessary to repeat the lighting procedure several times.

- i) If, after a few hours, the cabinet is found to be too cold turn the gas thermostat knob to a lower position.

**Note:** To turn off the gas system push and release the Gas selector switch which will then pop out.

## 4. Starting up

### Electric operation (12 V)

- a) Check that the refrigerator is level (see caution notice page 2).
- b) Turn the electric thermostat knob to maximum.
- c) Push the electric selector switch marked 12 V. The switch should stay in.

**Note:** To turn off the electric system push and release the selector switch which will then pop out.

### Caution:

The low voltage operation is primarily intended for use when in transit.

The refrigerator draws current from storage batteries which are re-charged by the vehicle's alternator and the amperage drain is shown on the data plate on the back of the refrigerator. When the refrigerator has not been used for some time and the interior storage space is warm, it requires full power until the interior temperature has dropped to the required level and the thermostat begins to cycle to maintain the set temperature.

It is recommended that, when starting up after a period of disuse, the refrigerator be precooled by operation on gas or 110 V for 12 hours. This will ensure that your refrigerator has reached operating temperature and will conserve battery power for in-transit use.

### Electric Operation (110 V)

- a) Check that the refrigerator is level (see caution notice page 2).
- b) Turn the electric thermostat knob to maximum.
- c) Push the electric selector switch marked 110 V. The switch should stay in.

Note: To turn off the electric system push and release the selector switch which will then pop out.

### 5. Changing from Electricity to Gas

- a) Push and release the electric selector switch in use.
- b) Follow instructions in 3 for Gas Operation.
- c) Turn the gas thermostat knob to the desired setting.

### 6. Changing from Gas to Electricity

- a) Push and release the gas selector switch.
- b) Push the required electric selector switch.

Note: It may be convenient to always keep both thermostats at the same setting to avoid mistakes in switching from one fuel system to the other.

### 7. Ice Making

For fastest ice production set the thermostat control knob at maximum. Ice cubes take some time to form and it is advisable to keep the ice trays full and ready for immediate use. Where this procedure is

followed the freezer compartment will make ice cubes without altering the thermostat setting.

### 8. Storage of Frozen Foods

The freezer compartment is adequate for the storage of frozen foods for up to three months. However, frozen foods do not keep indefinitely and reference should be made to the instructions, if any, on the package. Frozen foods which have been partially defrosted should not be re-frozen but should be used as soon as possible. The general food storage compartment should never be tightly packed with food or beverages which will prevent a free air circulation otherwise performance of the refrigerator will be affected.

### 9. Defrosting

Frost will gradually form on the evaporator fins in the food storage compartment. As excessive frost accumulation may reduce cooling efficiency the refrigerator should be defrosted at regular intervals. (Approx. every 10 days.)

To defrost turn the thermostat control knob to a low setting. This will allow the storage compartment temperature to rise but will maintain low temperature in the frozen food compartment. The frost will melt and run off the evaporator fins and drain to the rear of the unit where it will be evaporated by the heat from the cooling unit.

In areas where both the outside air temperature and humidity are high and there is frequent opening of the refrigerator it can be expected that frost build up will be faster. It may be necessary, therefore, to defrost more frequently.

After defrosting remember to turn the thermostat control knob to the regular setting.

When the refrigerator is not in use for any considerable period of time, keep doors open to allow freezer and cabinet interiors to dry out.

## 10. Cleaning

The plastic interior of the refrigerator can best be cleaned with mild soap and water. After cleaning, the refrigerator interior should be rinsed with a mild solution of baking soda and water and wiped dry with a soft cloth.

Avoid the use of abrasives or caustic cleaning powders or solvents which will scratch or damage the plastic.

When the refrigerator is not in use for any considerable period of time, keep doors open to allow freezer and cabinet interiors to dry out.

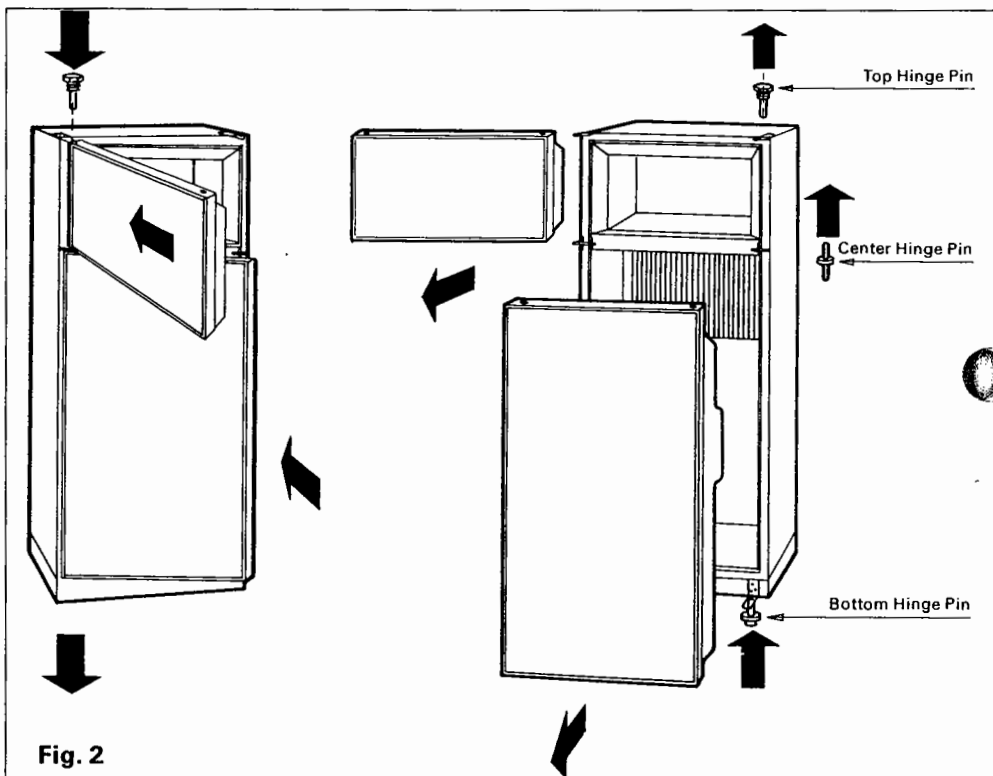
## 11. Travel Latch

The refrigerator is fitted with a travel latch to lock the doors closed while in transit. This may be left in the open position during normal use as the doors are fitted with magnetic gaskets to provide a tight seal.

## 12. Interchanging of Door Hinging

The door hinging has been designed to permit either right hand or left hand opening by moving the hinge pins. This can be accomplished as follows:

1. Unscrew and remove the top hinge.
2. Remove the freezer door.
3. Lift out the centre hinge pin.
4. Remove the general storage door.
5. Unscrew the bottom hinge pin and fit it to the opposite side.
6. Remove the travel latch and fit it to the opposite side.
7. Fit the general storage door on the bottom pin.
8. Insert the centre hinge pin.
9. Fit the freezer door on the centre pin.
10. Insert and screw in the top hinge pin.



### 13. Maintenance Instructions

Although the control assembly is relatively simple in design the operation is dependent on the proper function of each component.

In the event that the refrigerator is not working properly there are a few simple checks which can be made but it is recommended in the interest of safety that replacement of components be carried out by a trained service dealer who can ensure that the integrity of gas supply lines is maintained after re-assembly.

- a) A list of simple trouble shooting hints is given on page 8.
- b) In the event you are unable to locate and correct the trouble, turn off the gas and electric systems. This can be checked by ensuring that all three control buttons are in the out position. (See sections 3 and 4.) Contact your nearest service dealer giving him model number and serial number as found on the data plate and full details of your trouble.
- c) A list of the commonly used replacement parts will be found on page 10. These are obtainable from:

KEVCO INCORPORATED  
23410 CR 6/P.O. BOX 1426  
ELKHART, INDIANA 46515  
219/262-2531

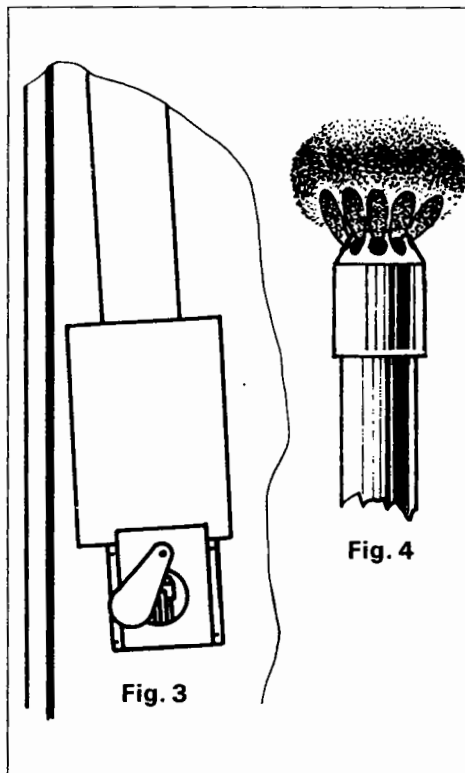
- d) The recess in which your refrigerator is installed must be kept clear of all combustible materials, and flammable liquids should never be stored there.
- e) The vents installed as the combustion air kit and for ventilation air are required for the proper operation of the refrigerator. They must not be blocked, obstructed, or modified in any way.
- f) A visual check of the burner flame should be made periodically. When the refrigerator is installed in a recreational vehicle an access door is provided at the rear.

The burner is protected by a cover with a viewing port which pivots to one side. See Fig. 3. Check that the burner flame is blue with no yellow or other discoloration.

There should be a noticeable difference in the height of the burner flame when the gas thermostat control knob is rotated from the maximum position to minimum. See Fig. 4 for typical burner flame.

If you observe any peculiarity in the burner flame consult your service dealer.

- g) If the refrigerator has not been used for some time check all gas connections for possible leaks using a soap solution. Never use a lighted match to check for gas leaks.



#### 14. Trouble Shooting Hints

Troubles	Probable Causes	Remedies
<b>No burner flame or flame does not stay on.</b>	Thermocouple out of position.	Correct the thermocouple setting position.
	Dirty or loose lead wire connection of the thermocouple.	Clean and tighten the connection.
	Thermocouple failed.	Replace the thermocouple.
	Safety device failed.	Replace the safety device.
	Defective orifice.	Clean or replace the orifice.
<b>Burner remains on low fire, and the cabinet interior can not be cooled sufficiently in spite of the thermostat being set at "COLDEST".</b>	Thermostat failed.	Replace the thermostat.
	Thermostat out of calibration.	Replace the thermostat.
	Supply gas pressure too low.	Check gas supply.
	Gas supply cock partially closed.	Open the cock all the way.
	Defective orifice.	Clean or replace the orifice.
	Valve gas ways clogged.	Clean the valve gas ways.
<b>Burner remains on high flame, and the cabinet interior stays too cold in spite of the thermostat being set at "DEFROST".</b>	Thermostat failed.	Replace the thermostat.
	Thermostat out of calibration.	Replace the thermostat.
	Thermostat capillary off evaporator.	Clip capillary to the second evaporator fin.
<b>Burner flame is soft or yellow.</b>	Burner air passage clogged.	Clean the air passage.
	Flue clogged.	Clean the flue.
	Defective or improper orifice function.	Replace the orifice.
	Burner not centered under the flue.	Reposition the burner.
<b>Burner flame is hard.</b>	Defective or improper orifice function.	Replace the orifice.
	Baffle missing in the flue.	Replace the baffle.
<b>Refrigerator not cooling.</b>	<b>Refrigerator out of level.</b>	<b>Level up refrigerator.</b>

Note: If this refrigerator is used intermittently, have it checked for proper operation by a qualified serviceman at least once a year.

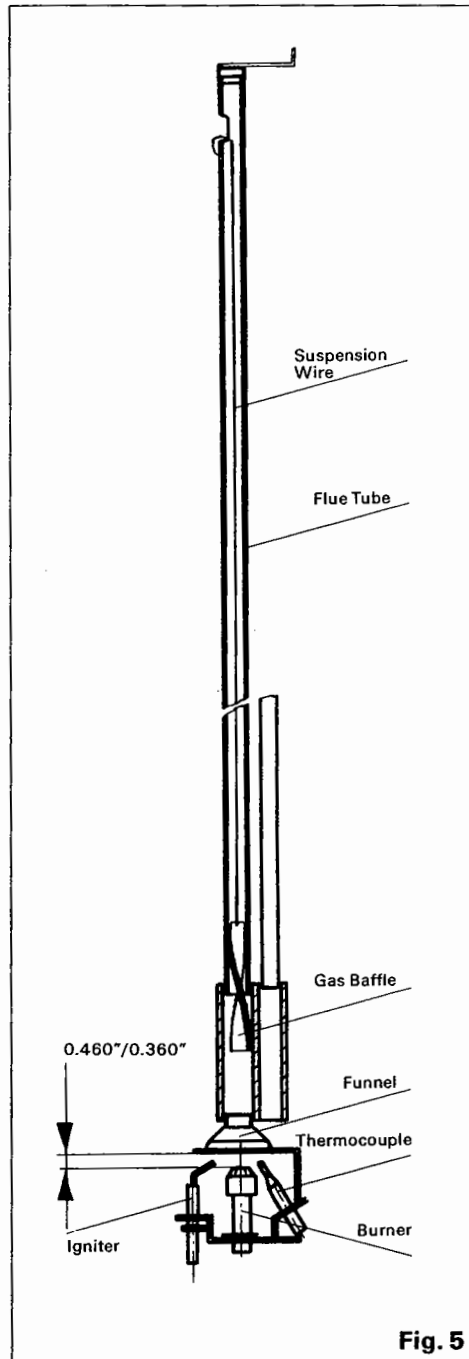
### 15. Flue Cleaning

It is advisable to clean the flue at regular intervals to keep it free from dust and soot.

Fig. 5 shows the assembly of flue extension, suspension wire, and gas baffle. These should be removed, cleaned, and carefully reassembled.

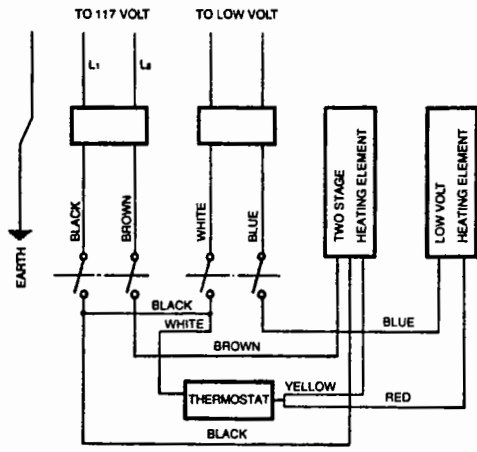
When cleaning the flue be sure to cover the top of the burner with a soft cloth so that soot or other debris will not enter the burner ports.

Before relighting remember to remove the cloth.





### Circuit Diagram



### Wiring Diagram

