



Model ST-16RF



Owner's Manual

Troubleshooting

When using this appliance, you may come across some problems that in many cases result from improper handling and can easily be eliminated.

TROUBLESHOOTING GUIDE

The appliance fails to operate after being connected to the power source.

- Check whether the power supply is active and that the thermostat is not set to the **STOP (0)** position.

The compressor is running continuously.

- The doors were opened frequently or were left open too long.
- The doors are not properly closed (the doors may sag, the gaskets may be dirty or damaged).
- The power supply has been interrupted for a long period of time.
- The appliance may have been overloaded with items above room temperature.
- There may be inadequate ventilation of the compressor and condenser. (Assure there is adequate air circulation behind the appliance and wipe the dust from the condenser.)

Noise

Cooling in refrigeration appliances is enabled by the refrigerating system with compressor, which produces noise. How noisy the appliance is depends on where it is placed, how it is used and how old the appliance is.

- During the operation of the compressor, the noise of liquid is heard and when the compressor is not operating, the refrigerant flow is heard. This is a normal condition and has no influence whatsoever on the lifetime of the appliance.
- After starting the appliance, the operation of the compressor and the refrigerant flow may be louder. This does not mean that something is wrong. Gradually the noise is reduced.
- Sometimes a louder noise is heard, which is unusual for the appliance. This noise is often a consequence of improper placement of the unit. (The unit should be placed and leveled firmly on a solid base and it should not touch the wall or cabinets standing next to it.)

WARNING

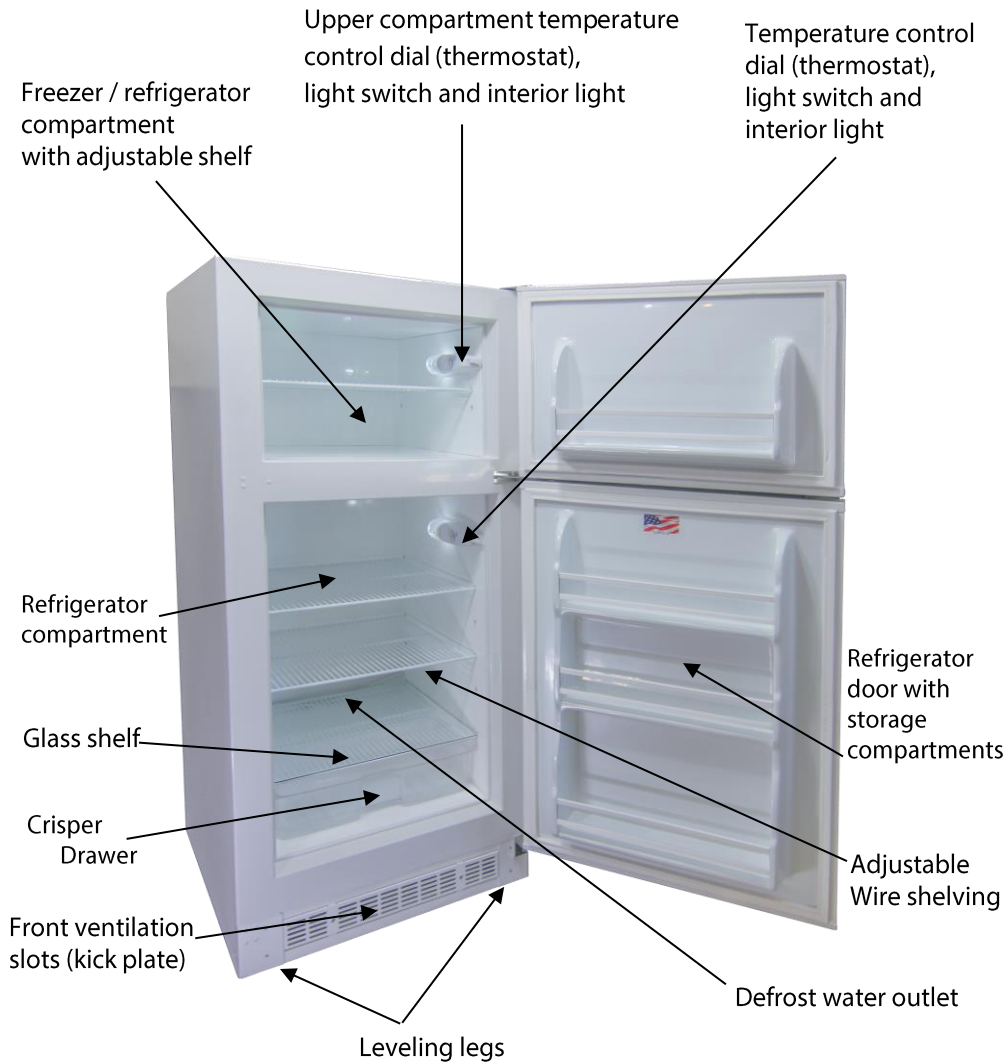
- Use 2 or more people to move and install the appliance. Failure to do so can result in back or other injury
- To ensure proper ventilation for your appliance, the front of the unit must be completely unobstructed. Choose a well-ventilated area with temperatures below 100°F (32°C). This unit must be installed in an area protected from the elements, such as wind, rain, water spray, or drips.
- The appliance should not be located next to ovens, radiators, or sources of high heat.
- Do not kink or pinch the power supply cord of the appliance.
- The fuse (or circuit breaker) size should be 20 amp.
- It is important for the appliance to be leveled in order to work properly. You may need to make several adjustments to level it.
- Never allow children to operate, play with, or crawl inside the appliance.
- Do not use solvent-based cleaning agents or abrasives on the interior. These cleaners may damage or discolor the interior.
- Do not use this apparatus for other than its intended purpose.

Table of Contents

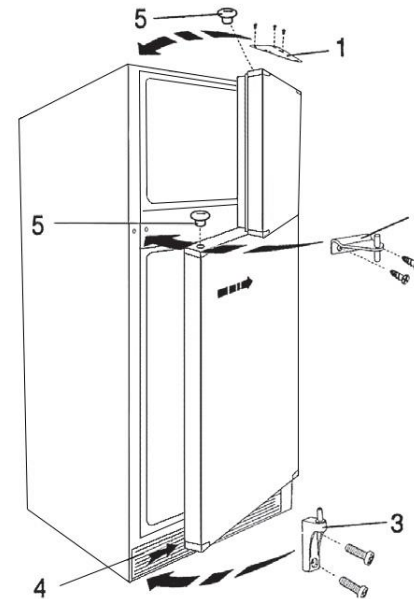
Dear Customer: Please follow the user manual to achieve the best service performance and the longest service of life for your machine.

TOPIC	DESCRIPTION	PAGE NUMBER
1	Location of Parts	1
2	Technical Information	2
3	Installation Instructions	2
4	Cable Requirements	3
5	Operating Refrigerator/Freezer	3
6	Defrosting Appliance	4
7	Care and Maintenance	4
8	Energy Saving Tips	5
9	Reversing the Door Swing	5
10	Warning	7
11	Troubleshooting Guide	8
12	Contact Information	8

Location of Parts



3. Lift the top hinge straight up to free the pin from the socket on the top of the door.
4. Lift the freezer door and place it on a padded surface to prevent scratching it.
5. Remove the plug buttons from the upper left holes as illustrated and transfer them to the uncovered holes at the right side. Be sure to press the plug buttons firmly into the holes.
6. Unscrew the middle hinge. Keep these for later use.
7. Take off the refrigerator door and place it on a padded surface to prevent scratching.
8. Unscrew the lower hinge.
9. Remove, change and replace the bottom hinge and plugs to the opposite side.
10. Stand the unit upright and replace the refrigerator door.
11. Insert the bottom of the middle hinge into the top of the refrigerator door. With the door open, screw the middle hinge into the uncovered holes.
12. Place the bottom of the freezer door into the top of the middle hinge.
13. Replace the top hinge in the uncovered holes on the top left side of the freezer.
14. Should the gasket seals not adhere to the casing of the appliance perfectly, they will have to be heated from a suitable distance (by means of a hair drier, for example) and lightly stretched to the required height.



1. Upper hinge
2. Middle hinge
3. Lower hinge
4. Kick plate
5. Door hinge plug

Vacation Time:

During long absences, remove all contents. Unplug the appliance, clean it, and leave the doors open slightly to avoid possible formation of condensation, mold, or odors.

Moving Your Appliance:

1. Remove the contents.
2. Securely tape down all loose items inside your unit.
3. Turn the leveling legs up to the base to avoid damage.
4. Tape the doors shut.
5. Be sure the appliance stays secure in the upright position during transportation.

Energy Saving Tips:

- The unit should be located in the coolest area of the room, away from heat-producing appliances or heating ducts and out of direct sunlight.
- Try not to open the doors too often, especially when the weather is damp and hot. Once you open a door, close it as soon as possible.
- Occasionally check if the appliance is sufficiently ventilated (adequate air circulation behind the appliance).
- Set the thermostat from higher to lower settings on the temperature dial.
- Before loading items into the unit, be sure they have cooled to ambient temperature.
- A layer of frost and ice increases energy consumption, so defrost the freezer as soon as the layer is ½" thick.

Reversing the Door Swing:

If you find the direction of opening the doors of the appliance inconvenient, you can change it. Holes on the opposite side have already been prepared at the factory.

This appliance can be opened from either the right side or the left. By default, the door hinges are on the right side. If you prefer them on the left, please follow these instructions and refer to the illustration on the following page.

NOTE: All parts removed must be saved to do the re-installation of the doors.

1. Remove the hinge on the right top of the cabinet.
2. Remove the bolts and washers (using a ratchet tool with a phillips head/tip) that holds the top hinge to the cabinet. Keep these for later use.

Technical Information

Model Number	ST-16RF
Color	White / Gray
Capacity	16 cu. ft.
Electrical Input	12/24 V DC
Rated Current	5 amp
Energy Consumption	0.6 kw @ 24 hrs.
Refrigerant	R134a
Installation	Free-standing
Net Weight	275 lbs.
Unit Dimensions (w x d x h)	31" x 34.0" x 68"

LED Flash number

- 1
- 2
- 3
- 4
- 5

Fault Occurring

- Battery protection cut out
- Fan over-current cut out
- Motor start error
- Minimum motor speed error
- Thermal cut-out of module

NOTE: LED light is attached to compressor control module

Installation Instructions

Before Using Your Appliance:

- Remove the exterior and interior packing.
- Before connecting the unit to a power source, let it stand for approximately 5 hours. This will reduce the possibility of a malfunction in the cooling system from handling during transportation.
- Remove the shelves and clean them and the interior surfaces of the unit with lukewarm water using a soft cloth.

Installing the Refrigerator/Freezer:

- Place the unit on a floor that is strong enough to support the appliance when it is fully loaded. To level the unit, adjust the two leveling legs at the front
- Model ST-16RF is designed to be free-standing only. When installing, allow at least 3 inches of space at the top, sides, and rear of the unit, which will allow the proper air circulation to cool the compressor and condenser.
- Locate the unit away from direct sunlight and sources of heat (oven, heater, radiator, etc.). Direct sunlight may affect the acrylic coating and heat sources may increase electrical consumption.
- Avoid locating the unit in moist areas. Too much moisture in the air will cause frost to form quickly on the evaporator, requiring more frequent defrosting of the unit.

Cable Requirements

To ensure the correct start and operating conditions for the unit, the following cable dimensions must be observed:

Wire Sizing Chart (Gauge)	Max . length between battery and compressor module (ft.)	
	12V/DC	24V/DC
# 8	15 ft	30 ft
# 6	25 ft	50 ft
# 4	35 ft	70 ft

Operating Your Refrigerator/Freezer

Temperature Control

- The temperature in each compartment is controlled with a thermostat knob located inside towards the upper right-hand corner. Each compartment has its own thermostat. Turn the knob clockwise from the **STOP (0)** position toward a higher number for colder temperature.
- When the temperature dial is in the **STOP (0)** position, the cooling system shuts off but the power is still active and will not interrupt lights if the door is open.
- Top Compartment: To refrigerate, turn knob to 1 or 2 position. To freeze, turn knob to 3 – 7 position.
- Bottom Compartment: Refrigerate only, turn knob to position 1 – 7.
- Changes in the ambient temperature will affect temperature inside the unit. For best results, set the unit to the desired position. Place a refrigerator thermometer (not supplied) inside the compartment to be tested. Keep the door closed for at least 8 hours. Please note normal refrigeration temperature is 38 degrees Fahrenheit and normal freezer temperature is 0 degrees Fahrenheit. If needed, turn the dial to a higher or lower number to get to recommended temperature.
- This unit does not use interior fans for higher efficiency. Please note temperatures are coldest in the lower, rear of each compartment and contents should be loaded accordingly.



NOTES:

1. For best storage, do not over-pack. Be sure the doors close fully.
2. The interior light comes on automatically when the refrigerator door is opened.
3. If the unit is unplugged, has lost power, or is turned off, you must wait 3 to 5 minutes before restarting. If you attempt to restart the unit before this time delay, it will not start.

Defrosting Your Appliance:

Top Compartment – Defrosting is required when frost develops to approximately ½ inch in thickness.

1. Remove all contents from compartment and store in insulated coolers. Pay special attention to keep all frozen items as cold as possible during the defrost procedure, making sure that frozen items do not begin to thaw.
2. Note the settings of the control knob. Set the thermostat to **STOP (0)**.
3. Open the compartment to accelerate defrosting.
4. Once the frost or ice has melted enough to remove, use a sponge or towel to remove water and melting ice from the freezer floor and dry completely.
5. Restart the appliance by turning the thermostat to its original position. Return the contents to compartment after 1 hour.

Bottom Compartment – Defrosting is not required.

1. High humidity areas, periodically wipe inside down so it is clean and dry.
2. If using coldest settings, ice may accumulate. Use defrosting instructions.

CAUTION: Do not use boiling water, sharp objects or an electric device such as a hair dryer to help the defrosting process. This could damage the components in the unit and void the warranty. We suggest opening the doors to accelerate the defrost procedure.

Care and Maintenance

Cleaning Your Appliance

1. Unplug the appliance, turn the thermostat to **STOP (0)** and remove all contents, including shelves.
2. Wash the inside surfaces with a solution of lukewarm water and vinegar. Wipe dry with a clean, soft cloth.
3. Wash the shelves with a mild detergent, then rinse and dry thoroughly.
4. Wash the outside cabinet with warm water and mild liquid detergent. Rinse well and wipe dry with a clean soft cloth.
5. Wring excess water out of the sponge or cloth before cleaning the area of the temperature control or any electrical parts.
6. After you have cleaned the appliance, reconnect it to the power supply, reset the thermostat and return all contents to their place.

CAUTION: Failure to unplug the unit could result in electrical shock or injury.

Power Failure:

Most power failures are self-corrected and should not affect the temperature of your appliance if you minimize the number of times the door is opened. If the power is going to be off for a longer period of time, take the proper steps to protect your frozen and chilled items.