





INSTALLATION & OPERATOR'S GUIDE

MODEL 1082 FREE-STANDING REFRIGERATOR



Improper installation, adjustment, alteration, service, or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information consult a qualified installer, service agency, or the gas supplier.

FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors and liquid in the vicinity of this or any other appliance.

FOR YOUR SAFETY

If you smell gas:

- 1. Extinguish any open flames, pilot lights, and all smoking material.
- 2. Do not touch any electrical switches.
- 3. Shut off the gas supply at the tank valve(s) or gas supply connection.
- 4. Open doors and other ventilating openings.
- 5. Leave the area until gas odor clears.
- 6. Have the gas system checked and leakage source corrected.

NOTICE: THIS APPLIANCE IS NOT APPROVED FOR USE IN R.V. OR MARINE APPLICATIONS. THIS REFRIGERATOR IS EQUIPPED FOR LP GAS AND CANNOT BE CONVERTED TO ANY OTHER FUELS (NATURAL GAS, BUTANE, ETC.).

Safety Awareness

Read this manual carefully and become thoroughly acquainted with its contents before installing and operating the refrigerator.

Be alert to a potential Safety Hazard when the Safety Alert Symbol A appears on your refrigerator or in this manual.

A signal word (i.e., Danger, Warning, Caution) accompanying the Safety Alert Symbol identifies the seriousness of the Safety Hazard. Review the safety symbols and signal words below. Carefully read their descriptions to understand their meaning. They are for your safety.



DANGER indicates the presence of a hazard that <u>will</u> cause severe personal injury, death, or substantial property damage if ignored.



WARNING indicates the presence of a hazard that <u>can</u> cause severe personal injury, death, or substantial property damage if ignored.



CAUTION indicates the presence of a hazard that <u>will</u> or <u>can</u> cause a minor personal injury or substantial property damage if ignored.



WARNING

Always apply the following precautions when operating this refrigerator. Failure to heed these precautions can result in substantial property damage, severe personal injury, or death.

- Carbon Monoxide can be hazardous to your to health and can result in death. A gas appliance can emit excessive Carbon Monoxide gas if the refrigerator's burner and flue system is not regularly cleaned. See pages 10 & 11 in this manual for instructions.
- Unauthorized or improper servicing of this refrigerator can cause severe personal injury, property damage, or both. All required service and maintenance must be performed by your dealer, your propane gas supplier, or by a Norcold authorized service center.
- This refrigerator must be used in the manner for which it was designed. Refer to this manual for installation and operating procedures.
- Keep the refrigerator and the surrounding area clean. Never store combustible materials near the refrigerator. Storing combustible materials near the refrigerator not only creates a safety hazard, but also inhibits the air flow to the cooling system thereby reducing cooling efficiency.
- Propane gas can cause an explosion that can result in property damage, personal injury, or death. Use extreme care when working with or near a propane gas system. Do not smoke or create sparks. Do not use an open flame to check supply piping and fittings for leaks.
- Ground the 120 volt AC circuit in compliance with any applicable local, state, or national codes. Never cut or remove the round grounding prong from the refrigerator's AC power cord. Do not use a two-prong adapter. Do not use an extension cord.
- Always replace a blown fuse with a fuse of the same ampere rating. A circuit overload can result in an electrical fire if undersized wires or improperly sized fuses are used. To prevent a possible electrical fire, follow Norcold's fuse size requirements (page 5) and any applicable state and local codes.

- Protect all wiring from physical damage, vibration, and excessive heat.
- Always disconnect the AC power source from the refrigerator when performing routine maintenance. All servicing of this refrigerator must be performed by a qualified service technician.
- Keep liquids away from electrical connections. Many liquids are electrically conductive and could cause serious arching damage and fires.
- Never bend, drop, drill, weld, manipulate, or impact the cooling system. Doing so can cause the system to rupture, releasing corrosive chemicals that can cause severe damage to the eyes and skin.
- Never attempt to repair or recharge the cooling system. A defective cooling system must be replaced by a qualified appliance repair technician.
- After the refrigerator is in operation, do not touch the cold surfaces of the freezer, particularly with damp or wet hands. Skin may adhere to the cold surfaces.
- To prevent child entrapment, limit access to the refrigerator and insure all wire shelves are securely fastened. *Always remove the door(s) before disposing of any refrigerator.*
- This refrigerator has sharp edges and corners at the rear. Use care when working on this refrigerator. To prevent cuts or abrasions, wear cut resistant gloves.
- Surfaces at the rear of the refrigerator are extremely hot. Contact with these surfaces can result in minor burns. Turn the refrigerator off for several hours before attempting to move the refrigerator.

Refrigerator Specifications

LP Gas Operation - 11.0 Inches Water Column Propane

AC Operation - 120 Volts AC (132 Volts Max.; 108 Volts Min.); 60 Hertz Grounded Circuit

Operation where these specifications are exceeded may cause refrigerator damage and will void the refrigerator warranty.

Introduction

You are now the owner of a Norcold Model 1082 Free-Standing Refrigerator. When used properly, this product gives years of trouble free operation. Please read this manual carefully; it is designed to help you keep your refrigerator running efficiently and to answer any questions that may arise concerning your refrigerator.

Unlike a compressor driven refrigerator, the Norcold Model 1082 Refrigerator uses a gas absorption cooling system. This cooling system uses an external energy source to heat the cooling solution, thereby evaporating the solution and providing refrigerant circulation by means of percolation. The refrigerant travels to the freezer and refrigerator areas, where it condenses and re-evaporates before returning to start the cycle again. This cooling system has special requirements that do not apply to compressor driven refrigerators. These requirements include critical leveling, ventilation concerns, and adequate gas and electrical inputs, and are specified in later sections of this manual. If a problem occurs with your refrigerator, please refer to the trouble shooting section in the back of this manual.

The information provided in the trouble shooting section helps in solving minor problems.

The model and serial number of this refrigerator must be recorded. You will find these numbers on the serial tag located in the interior of the refrigerator. These numbers should be used in any correspondence, either written or verbal, concerning this refrigerator.

Model:

Serial Number:

If a problem arises that is not addressed in the trouble shooting section of this manual, you will need to contact an authorized Norcold Service Center. The service center booklet included in the information packet lists authorized service centers in the United States and Canada.

Locating and Installing the Refrigerator

Installation

This refrigerator must be installed in accordance with these Installation Instructions for the certifications and the Norcold factory warranty to be in effect.

This appliance is design certified under the latest edition of ANSI Z21.19 Standards by the American Gas Association and is approved by the Canadian Gas Association.

Install the refrigerator in accordance with local codes. In the absence of local codes, the installation must conform with the following, as applicable:

In the United States:

- The National Fuel Gas Code, ANSI Z223.1.
- The manufactured Home Construction and Safety Standard, Title 24 CFR Part 3280.

When an external electrical source is utilized, the refrigerator, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, the National Electrical Code, ANSI/NFPA 70.

In Canada:

- Any applicable code.
- Current Can 1-B 149.2 Installation Code for Propane Appliance and Equipment.

The refrigerator must be electrically grounded with the current Canadian Electrical Code C22.2 Parts 1 and 2.

Locating the Refrigerator



Improper location, installation, adjustments, or unauthorized modifications can cause injury or property damage. Refer to this manual for proper instructions. For assistance or additional information consult a qualified installer, service agency, or your gas supplier.

> The Norcold refrigerator is to be located on a solid and level floor that is strong enough to support the combined weight of the refrigerator and its contents. Keep the refrigerator away from direct sunlight and other heat generating sources.

> The refrigerator must be installed with the following clearances:

Тор:	6 inches minimum
Right Side:	2 inches minimum
Left Side:	0 inch minimum
Bottom:	0 inch minimum
Rear:	0 inch minimum

Do not locate the refrigerator in an area where the flow of combustion and ventilation air is obstructed.

<u>Notice</u>: Never install the refrigerator directly on carpeting or vinyl floor covering. Carpeting or vinyl flooring must be protected by a metal or wood panel beneath the refrigerator. The panel should extend at least the full width and depth of the refrigerator.

Keep the refrigerator and the surrounding area clear and free of combustible materials, gasoline, and other flammable vapors and liquids.



Figure 1

Location

Leveling the Refrigerator

The refrigerator has a moisture reduction device located in the divider panel. This device will inhibit moisture from accumulating on the divider panel between the refrigerator and freezer doors. To insure proper operation of the refrigerator and the moisture reduction device, the refrigerator must be level.

The refrigerator is equipped with leveling feet. Using a bubble level placed on the floor of the freezer, adjust the leveling feet to obtain proper leveling. To raise the refrigerator, turn screw of leveling feet clockwise. To lower the refrigerator, turn screw of leveling feet counterclockwise. See Figure 2.



Gas Connection

Install a pressure regulator between the main gas supply tank and the refrigerator to maintain the supply pressure of 11 inches water column. <u>Do not connect the refrigerator directly to the main gas supply without a pressure regulator in line.</u>

Use gas supply tubing and fittings that comply with local, state, and national codes. We recommend that the gas be supplied by 3/8 inch diameter copper piping to prevent gas pressure loss to the refrigerator. The gas connection at the rear of the refrigerator is a 3/8 inch SAE (UNF 5/8 inch-18) male flare connection.

The gas piping should be routed to limit the possibility of damage. It is recommended that the supply piping enter directly at the rear of the refrigerator through the floor which supports the refrigerator. The hole through which the gas piping enters should be of sufficient size (approximately 1/2" in diameter) to provide adequate clearance. Once the gas piping is installed, apply a sealant around the piping at its point of entry to minimize abrasion and to serve as a barrier from external moisture.

Provide an adequate length of gas supply tubing for connecting the refrigerator to the main gas supply tank. Additional tubing is required at the rear of the refrigerator (Figure 3) to allow the refrigerator to be pulled several feet from the wall for cleaning, maintenance, and burner flame inspection.

To prevent gas leaks and damage to the gas supply tubing, use two wrenches when connecting gas fittings, as illustrated in Figure 3.

The propane gas supply tubing must be inspected and tested for leaks from the refrigerator to the main gas supply tank. *Do not test for leaks with an open flame.* Testing of the gas supply piping and measurement of input gas pressure must be performed by a qualified installer, service agency, or gas supplier.

Check gas pressure to the refrigerator without other gas appliances operating. The pressure should not exceed 11 inches water column. With other gas appliances operating the pressure should not be less than 10.5 inches water column.

The refrigerator and its individual shutoff valve must be disconnected from the main gas supply during testing at pressures in excess of 1/2 psig (14 inches water column).

The refrigerator must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (14 inches water column).



Gas Connection

Leveling

Gas Device Safety Test

Safety Test

After placing the refrigerator into operation, the gas safety device must be tested. The purpose of the gas safety device is to prevent the escape of unburned gas from the burner if the burner flame is extinguished. While there is a flame present at the burner, turn the refrigerator's manual shutoff valve to "OFF". Wait 3 minutes and turn the manual shutoff valve to "ON". Follow the Lighting Instructions (do not push the control knob in) and try to ignite the burner. The flame should not ignite. This test confirms that the safety valve is functioning properly.



Burner Flame

The efficiency of your refrigerator while operating in the gas mode is dependent upon the correct burner flame. The burner flame provides energy to the refrigerator's cooling system.

The burner flame efficiency is a function of a) correct input gas supply pressure, and, b) the burner and burner orifice cleanliness.

After installation, the propane supply line from the main tank to the refrigerator must be tested for leaks and for the correct supply pressure. <u>All tests must be performed by the propane gas supplier or a qualified installer.</u>

A visual inspection check of the burner flame should be made regularly. The flame should be sharp blue with a stable burning appearance (Figure 4). If there is a constant yellow component observed or if the flame appears erratic or unstable, switch the refrigerator to electric or turn the refrigerator "OFF", and contact a qualified installer, service agency, or gas supplier.

120 Volts AC Connection

A WARNING

This refrigerator is designed to operate on a 120 volts AC, 60 Hertz grounded circuit. The refrigerator AC power cord is equipped with a three-prong grounding plug which must mate with a three-prong grounding receptacle to protect against possible shock hazards. Operating the refrigerator without proper ground can cause property damage, severe personal injury, or loss of life. It is the owner/installer's personal responsibility and obligation to provide a properly grounded circuit to the refrigerator in accordance with local codes, or in the absence of local codes, the National Electrical Code, ANSI/NFPA 70. Do not cut or remove the grounding prong from the refrigerator's AC power cord.



The refrigerator's AC electrical circuit is protected by a 5 amp fuse. The fuse is located at the rear of the refrigerator to the right of the AC power cord.

The free length of AC power cord is 72 inches. It is recommended that the three-prong grounded receptacle be located within reach of the cord. The cord must be routed so as not to come in contact with the burner, flue pipe, or any other component that could cause damage to the cord.

Instructions for Reversing Door Swing

This refrigerator allows the owner to change the door swing if desired. The hinging of the doors can be changed to the opposite side anytime you wish.

TOOLS REQUIRED

Phillips Screwdriver - Size #2 Two Slotted Screwdrivers

REMOVING THE DOORS

- Turn ELEC-OFF-GAS switch, located on the control panel, to OFF. Remove all items of food, juices, etc., from the doors. Remove the juice rack and storage bins. Close both doors before removing hinge pins.
- Remove the top hinge pin using one of the slotted screwdrivers. Remove the center hinge pin (both pieces) using the two slotted screwdrivers; one on each end of the pin. Lastly, remove the bottom hinge pin. Be sure to save the pins for reassembly later. (See Figure 12)
- 3. Remove the upper door by opening the door slightly and pulling the bottom of the door away from the refrigerator. Allow enough room to slide the door down off of the upper hinge pin shoulder. (See Figure 6)
- 4. Remove the lower door by opening it slightly and pulling the top of the door away from the refrigerator. Allow enough room so the door can be lifted up and off of the bottom hinge pin shoulder (See Figure 7). Be sure to save the hinge plates along with the spacer used in the middle hinge bracket, for reassembly later. (See Figures 12 - A, B, and C)



REMOVING AND RELOCATING THE HINGE BRACKETS

- 5. Remove the middle hinge bracket by using the #2 Phillips screwdriver and taking out the three screws holding it in place. Next, remove the three screws on the opposite side corresponding to the center hinge location. Relocate them in the holes just exposed by the removal of the hinge bracket. Attach the hinge bracket to the refrigerator where the hole plugs previously were. Do not tighten screws completely. (See Figure 8)
- 6. Remove the top hinge bracket and reposition it in the opposite bottom corner. Use the same technique as outlined in Step #5.
- 7. Remove the bottom hinge bracket and reposition it in the opposite top corner. Use the same technique as outlined in Step #5.





RELOCATING THE TRAVEL LATCHES

- 8. Remove both travel latches by taking out the two screws holding each to the refrigerator. Use the #2 Phillips screwdriver. Remove the two screws from each of the corresponding holes on the opposite side of the refrigerator. Relocate them in the two holes just exposed by the removal of the latches. Attach each latch in the new position so the tab points towards the opposite side of the refrigerator. Do not tighten screws completely. (See Figure 9)
- Turn the door over so that the end previously at the bottom is now at the top. Relocate the bottom of the door on the bottom hinge pin shoulder. Close door and align holes in top hinge brackets. The magnetic gasket will hold the door in place. Before reinstalling the top door, check to insure that the spacer is in place. (See Figures 10 and 12 - C)



Figure 10

- 10. Reposition the upper door in a similar manner as described in Step #9, except the top of the door must be engaged into the hinge pin shoulder before setting the door in place. (See Figure 11)
- 11. Starting at the top, replace the hinge pins using the slotted screwdrivers as in the removal procedure. Tighten all screws.

ALIGNMENT OF THE DOORS

- 12. Align the upper door with the lower so that there is a parallel gap between the doors and around the frame. Adjust the doors to the cabinet so the gaskets seal but do not bind. Tighten the screws holding the hinge brackets in place.
- 13. Door Seal: The door seal can be checked by closing the door on a long narrow strip of paper. A slight drag should be noticed when the paper is pulled out from between the gasket and the cabinet. Repeat the process around all four sides of the door. If the door does not seal properly, readjust the hinge brackets.
- 14. Position the travel latches so that they secure the doors when closed but do not prevent the doors from closing properly. Tighten the two screws in each travel latch.
- 15. Replace the juice rack and storage bins into the door. Make sure that the milk bins (wider storage bins) are installed in the lowest door position.





About Your Refrigerator

Lighting and Start Up Instructions

Lighting Instructions - Gas Operation



Hazardous Vapors. Holding the gas valve (C) in without flame ignition will cause gas to build-up in the burner area and can result in severe personal injury, property damage, or death. Do not hold the gas valve in for more than 30 seconds. If the flame is not indicated within this time, turn the mode selector knob to OFF, wait 2 minutes, and retry. If the flame still will not ignite, shut the refrigerator off and contact a service repair technician.

To light the refrigerator:

- 1. Turn on the gas supply to the refrigerator.
- 2. Set the thermostat (B) to it's maximum setting.
- 3. Push and turn the "Elec-Off-Gas" (C) knob counter-clockwise to the "Gas" position.
- 4. Hold the control knob (C) in and push the igniter (A) repeatedly until the gas is lit at the burner.
- 5. When the flame indicator (D) starts to move, stop pushing the igniter. Continue to hold the control knob in for approximately 5 seconds, then release. The flame indicator needle should remain in the green area indicating the flame is present at the burner. If not, repeat steps 4 and 5.

The flame should ignite within 10 seconds. On initial refrigerator Start-Up, it may take longer than 10 seconds to allow air to be purged from the propane gas supply line.

6. Move the thermostat control (B) to desired setting.

Shutdown - All Modes

 Push and turn the "Elec-Off-Gas" (C) control knob to the "Off" position.



Start-Up Instructions - AC Operation

- 1. Make certain 110 volts AC are available to the refrigerator.
- 2. Set thermostat to maximum setting.
- Push and turn "Elec-Off-Gas" control knob clockwise to "Elec". Upon release, the knob will move outward, indicating the control is locked into electric operation.

About Your Refrigerator

THIS APPLIANCE IS DESIGNED FOR STORAGE OF FRESH FOODS, STORAGE OF FROZEN FOODS, AND MAKING ICE.

Storage Volume

The model 1082 Free-Standing refrigerator provides 7.5 cubic feet of usable storage volume.

Controls

The Norcold free-standing refrigerator utilizes a single combination control to determine and regulate the mode of operation (Gas and Electric). The control is operated by two control knobs. The first knob selects the operating mode and the second controls the thermostat setting. The control consists of a gas shut-off valve, safety valve, thermostat, and electric interlock. The interlock prevents the possibility of operating on gas and electric at the same time.

During normal operating conditions, set the thermostat at a mid-range setting. When the refrigerator or freezer door is opened frequently or the ambient temperature is higher than 90 degrees, set the thermostat to a colder position.

On initial start up, it is recommended that the refrigerator be empty until the desired temperature is obtained. Cooling to the desired operating temperature will take from eight to twelve hours, depending upon ambient temperatures.

Periodic Refrigerator Use

The burner, burner orifice, and the flue tube <u>must</u> be inspected prior to igniting the burner flame after extended shut-down (seasonal) periods. These areas must be free from dust, spider webs, or other obstructions which would restrict the flow of exhaust air, resulting in unsatisfactory refrigeration and increased carbon monoxide emissions <u>(See REFRIGERATOR MAINTENANCE)</u>.

Divider Moisture Reduction Device

This refrigerator is equipped with a moisture reduction device located in the divider panel. This device inhibits moisture from accumulating on the divider panel between the refrigerator doors.

The Freezer Compartment

This compartment is designed to retain food in a frozen state. It is not intended for quick freezing of food. When making ice, place the ice trays on the bottom freezer surface. Set the thermostat to its coldest setting. Do not place packages on top of or around the ice trays while making ice.

The freezer shelf can be adjusted for different heights or can be removed to increase freezer storage capacity.

The Fresh Food Compartment

This compartment is intended to store and cool fresh foods.

<u>Notice</u>: Refrigeration requires air circulation within the fresh food compartment. Restriction of air circulation will cause inadequate refrigerator temperatures and possible food spoilage. DO NOT COVER THE REFRIGERATOR SHELVES WITH PAPER OR PLASTIC.

To control food odors, store odor emitting foods in sealed containers. Cover vegetables to retain their crispness. To reduce frost formation on the cooling fins, cover liquids and moist foods. Do not put hot foods into the refrigerator or let the doors remain open longer than necessary.

Allow the refrigerator to operate for a minimum of eight hours or overnight before loading the refrigerator with foods. Loading a warm refrigerator with warm foods will result in a longer refrigerator cool down period.

Door Bins

This refrigerator comes equipped with convenient door bins. These bins allow you to store smaller items in the door, where they are easier to reach. These bins can be moved by simply lifting them off their attachment clips and pushing them down over their new attachment clips. The large bins, however, need to remain in the bottom of the door.

Crispers

The crispers located in the bottom of the refrigerator are designed to provide a higher humidity region to maintain vegetable crispness. It is recommend that vegetables with strong odors be wrapped so that their odor and taste will not be transmitted to other stored foods.

Refrigerator Care and Cleaning

Cleaning the Interior Surfaces of the Refrigerator

<u>Notice</u>: Do not use abrasive cleaners to clean the interior of the refrigerator. Abrasive cleaners can harm the refrigerator's interior surfaces. Do not wash removable plastic door bins, shelves, etc., in an automatic dishwasher.

It is important to keep the refrigerator interior clean to minimize food odors. The best time to clean the refrigerator interior is after defrosting. Add a small quantity of dish detergent to lukewarm water and wash the interior.

Rinsing the interior in a solution of baking soda and water (*a tablespoon of baking soda to a quart of water*) will freshen the cabinet and neutralize odors. Wipe with a soft dry cloth to prevent water spots.

The door gaskets can be cleaned in the same manner as the refrigerator interior. After cleaning, a thin layer of petroleum jelly may be applied to the gaskets on the hinge side to keep the gaskets soft, thereby insuring a proper door seal.

Cleaning the Interior

Cleaning the Exterior Surfaces of the Refrigerator

Clean the outer surface of the refrigerator with a damp sponge or cloth. Remove stubborn stains using a mild solution of soap and warm water.

The area surrounding the refrigerator, particularly at the rear, needs to be cleaned often. Cleaning prevents dust and other foreign materials from collecting in the burner and the flue tube. Collection of dust, spider webs, etc., on the refrigerator's condenser and absorber coils (Figure 13) restricts air circulation and results in poor refrigerator performance. Use a soft brush to clean the absorber and condenser coils.

Procedure for Cleaning Burner, Burner Orifice, and Flue (Refer to Figure 13 on Page 11)



Carbon Monoxide can be hazardous to your health and life. Gas appliances may emit excessive Carbon Monoxide if the burner, burner orifice, and the flue tube are not regularly cleaned. To prevent Carbon Monoxide build-up, the burner, burner orifice, and flue tube must be cleaned at least twice a year and after prolonged (seasonal) shut-down periods. Refer to the following cleaning procedures, or contact a qualified installer, service agency, or your gas supplier.

- 1. Turn off gas at the main tank supply.
- 2. Turn the mode selection knob to the OFF position.
- 3. Allow the refrigerator to sit for 2-3 hours to insure the components at the rear of the refrigerator are cool before cleaning.
- 4. Pull the refrigerator forward from its permanent location.
- 5. Unplug the refrigerator's AC power cord.



Exercise care when servicing this refrigerator. The rear of this refrigerator is extremely hot and has sharp edges. To prevent minor burns, turn the refrigerator off for several hours before accessing the rear of the refrigerator. Wear cut resistant gloves to prevent cuts or abrasions while attempting to move the refrigerator.

Cleaning the Flue

- 6. Remove the heat reflector cap from the flue.
- 7. Remove the spiral baffle assembly from the flue tube.
- 8. Using a stiff brush or fine emery cloth, clean spiral baffle of debris.
- 9. Clean the inside of the flue tube with a flue brush.
- 10. Re-install the spiral baffle. *Insure the baffle is securely in place. The spiral baffle is required for efficient* <u>cooling while operating in the gas mode.</u>

Cleaning the Burner and Burner Orifice

- 11. Remove the screws securing the burner cover and burner box to the refrigerator.
- 12. Review the illustration of the burner and orifice assembly (Figure 13 on page 11).
- 13. Loosen the gas tube connection fitting.
- 14. Carefully remove the gas tube from the burner.
- 15. Remove the orifice and orifice gasket and clean them with alcohol and air pressure. **Do not clean the orifice** with a pin, drill, or similar object.
- 16. Remove the screw securing the burner to the burner bracket. Remove the burner.
- 17. Use air pressure to remove dust, spider webs, etc., from inside the burner. Clean the ports of the burner with a brush.
- 18. Clean and inspect the ignition electrode and the thermocouple. Replace if corroded.
- 19. Using air pressure, clean any debris from burner bracket of cooling system.
- 20. To reinstall, reverse the above procedures. *Make sure the orifice and orifice's copper gasket are assembled as illustrated in Figure 13 on page 11.*
 - Note: If the copper gasket shows signs of wear or damage, dispose of it and contact your dealer for a replacement.
- 21. Insure the burner slots are centered under the flue tube and the ignition electrode and thermocouple are properly located (See Figure 13).
- 22. Leak test all fittings using a soapy water solution. Do not leak test fittings with an open flame.





Checking Door Seals

The door gaskets must seal completely around the entire length of the door. This will insure cooling efficiency and prevent frost formation. Frequent frost formation or reduced cooling can be indications of air leaks. To check for proper door seal, lay a long narrow strip of paper between the gasket and the refrigerator. Close the door and withdraw the paper. A frictional drag should be observed. Repeat all around the doors. If the paper does not have a noticeable drag, the gasket is not sealing. Contact your service agency for corrective procedures.

Defrosting

After a period of operation, frost may accumulate on the freezer plate and the cooling fins, impairing cooling efficiency. Refrigerator efficiency can be improved by periodically defrosting the refrigerator.

To defrost the refrigerator, set the "Elec-Off- Gas" control knob to "Off". Empty the refrigerator, leaving the drip tray under the cooling fins and the doors open. To quicken the defrost cycle, fill a pan with hot water and place it in the freezer. When the frost has melted, empty the drip tray and wipe it with a clean cloth. Replace the drip tray. Replace all food and restart the refrigerator. Set the "Elec-Off-Gas" control knob to the desired mode of operation. Set the thermostat to its maximum setting for several hours before returning it to a normal setting.

Wiring Pictorial / Diagram

Refrigerator Moving and Storage



Harmful gases. The gases in the cooling system are flammable and can be harmful to your health if inhaled. To prevent the release of these gases, never place undue stresses on the cooling system. Do not manipulate the refrigerator by grabbing the cooling system.

Before moving this refrigerator, it should be emptied, cleaned, and dried. It is imperative that the refrigerator remain in an upright position while being moved. Failure to do so can result in a cooling system failure. Also, the refrigerator must not be manipulated by grabbing the cooling system. This could result in a fracture of the cooling system and the release of hazardous refrigerant.

If this refrigerator is going to be out of service for long periods of time, it should be emptied of all contents and cleaned. Also, if possible, the doors should be left open to allow air to circulate in the refrigerator. This will prevent the build up of odor in the refrigerator cabinet.



Trouble Shooting



Unauthorized or improper servicing of this refrigerator can cause severe personal injury, property damage, or both. All required service and maintenance <u>must</u> be performed by your dealer or a Norcold authorized service center. Norcold will not accept responsibility for improper installation, adjustment, alteration, service, or maintenance performed by anyone other than a qualified dealer or a Norcold Service Center. Costs and consequential problems resulting from unauthorized or improper servicing of this refrigerator are the refrigerator owner's responsibility.

<u>Note</u>: The refrigerator information packet supplied with your refrigerator includes a Norcold Service Center location booklet.

<u>SYMPTOM</u>	Possible Causes
Refrigerator does not operate in AC Mode	 * Switch may be set to "OFF" or "GAS". See page 8 * Temperature Selector set too low. See page 8 * Refrigerator's power cord may not be securely plugged in. See page 5 * Circuit breaker or fuse may be tripped or blown (AC power source to refrigerator). * Wall outlet may be inoperative. (This can be checked by trying a different appliance in the same outlet.) * If unit fails to operate after the above items have been checked, unplug the unit and contact a service center.
SYMPTOM	Possible Causes
Refrigerator does not operate in Gas Mode	 * Temperature Selector set too low. See page 8 * May be using gas other than LP gas. <u>TURN OFF GAS AND CONTACT SERVICE CENTER.</u> * Gas not available to refrigerator (clogged gas supply line, empty tanks, etc.). Contact gas supplier. * Burner and orifice need cleaned. See pages 10 & 11 * Spark igniter needs replaced. * If unit fails to operate after the above items have been checked, unplug the unit and contact a service center.
SYMPTOM	Possible Causes
Poor Performance, Gas and Electric	 * Incorrect power supply. See pages 4 & 5 * Incorrect installation. See page 3 * Refrigerator off level. See page 4 * Unusually high ambient temperatures. * Door opened frequently or for extended periods. * Internal cabinet air circulation (wire shelves) blocked by food items, paper, or plastic. See page 9 * Hot foods placed in refrigerator. See page 9 * Refrigerator needs defrosting. See page 11 * Temperature selector set too low. See page 8

LIMITED WARRANTY

NORCOLD P O BOX 4248 SIDNEY OH 45365-4248

This Limited Warranty is given by NORCOLD ("Company") to the original consumer-purchaser of any new refrigerating equipment ("Equipment") supplied by the Company, excluding glassware, electric light bulbs, replaceable fuses, and will be effective for a period of one year from date of original purchase. The Company warrants, provided that the Equipment shall at all times have been in possession of and used by the original consumer-purchaser, that:

- A. The Company will provide free service and replacement of defective parts at no charge at all authorized Norcold Service Centers for a period of one year from the date of original purchase. This Limited Warranty covers labor costs incurred in removing and re-installing the refrigerator only when necessary to replace a defective part. The Company will pay inbound and outbound transportation costs of any defective part, for a 1-year period commencing with date of purchase. The original consumer-purchaser must pay all expenses incurred in making the equipment available at one of the Norcold Service Centers. Any parts replaced under warranty (including cooling units) will be warranted for the duration of the original warranty period.
- B. The following procedure shall be followed by an original consumer-purchaser desiring to obtain performance under the terms of this Limited Warranty. The refrigerator must be brought to any of the Norcold Service Centers and the original consumer-purchaser must present evidence (1) to identify the original consumer-purchaser: and (2) that the item claimed to be defective is still within the warranty coverage. If the original consumer-purchaser is unable to accomplish this task, written notice should be immediately directed to Norcold and advice will be promptly given concerning the manner in which warranty service may be obtained. Inablity to physically bring the refrigerator to a Norcold Service Center will not void the warranty, but any additional costs thereby incurred are solely for the account of the original consumer-purchaser.
- C. The Company will not be liable under this Limited Warranty for any of the following:
 - (1) Defects which arise by reason of transit damage, misuse, neglect or accident.
 - (2) Manufacturing defects found at the time of purchase, or parts replaced under warranty, and associated labor, which are not communicated to the Company within 30 days.
 - (3) Labor performed without need for parts replacements which is not communicated to the Company within 30 days.
 - (4) Defects in glassware, electric light bulbs, or replacement of fuses.
 - (5) Defects arising from improper installation or adjustment of the Equipment.
 - (6) The need for normal maintenance of this refrigerator according to the guidelines specified in the Installation and Operating Instructions.
 - (7) Defects arising from the improper use of parts or parts not manufactured or supplied by the Company in the course of repairs or replacements to the Equipment.
- D. Employees and agents of the Company, and its authorized service representatives, have no authority to vary the terms of the Limited Warranty, which applies only to Equipment purchased and installed in the United States of America and the Dominion of Canada. The Company reserves the right to make any improvements or changes in parts or models without notice to any original consumer-purchaser.
- E. The Company shall not be liable or in any way responsible for any loss or damage to person or property, or lost profits or other similar loss or damage that may result or be claimed to have resulted from a defect in any parts of the Equipment covered by this Limited Warranty. Some states do not allow the exclusion or limitations of any incidental or consequential damages, so the above limitation or exclusion may not apply to you.
- F. ANY IMPLIED WARRANTY OF MERCHANTABLITY OR FITNESS FOR A PARTICULAR PURPOSE:
 - (1) APPLICABLE TO A PART OR PARTS OF THE REFRIGERATOR IS LIMITED TO A PERIOD OF ONE YEAR FROM DATE OF PURCHASE.
 - (2) SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS. THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.
- G. This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.