# NORTHLAND

## INSTALLATION INSTRUCTIONS

For reference, please record the model number, the serial number and the date of purchase. Model number and serial number are found on the serial nameplate, which is located at the top of the liner – on the right – behind the light shield.

Date of Purchase	
Dealer's Name	
Dealer's Address	
Dealer's City	
Dealer's State	Zip
Appliance Serial Number	
Appliance Serial Number	

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**Before you begin -** Read these instructions completely and carefully. **IMPORTANT -** Save these instructions for local inspector's use. **IMPORTANT - OBSERVE ALL GOVERNING CODES AND ORDINANCES. Note to Installer -** Be sure to leave these instructions with the Consumer. **Note to Consumer -** Keep these instructions with your Use and Care Book for future reference.

### **UNPACKING:**

Check Cabinet and Power Module for freight damage.

This cabinet was carefully packed and thoroughly inspected before leaving our factory. Responsibility for its safe delivery was assumed by the carrier upon acceptance of the shipment. Claims for loss or damage sustained in transit must be made on the carrier as follows:

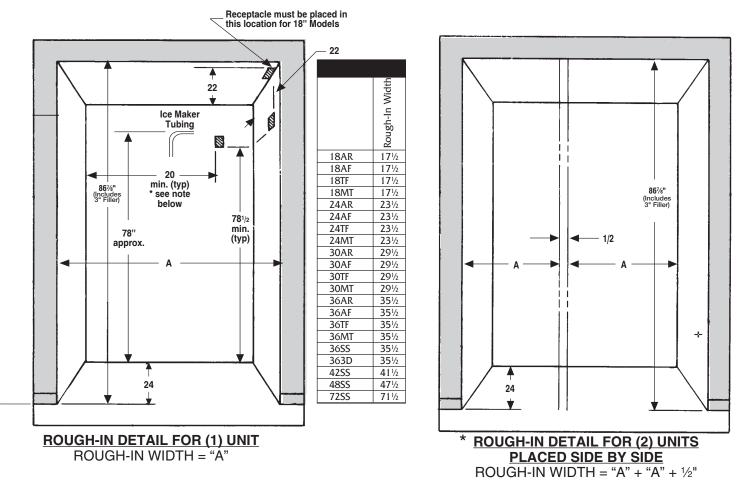
- *Exterior damage:* Make thorough damage notation on your delivery receipt and have driver acknowledge by signature and date. Send a written request for an inspection report from carrier. Include the name of carrier representative and the date the inspection was requested. Retain inspection report and receipt for filing of the claim.
- Concealed damage: This must be reported to the carrier within fifteen days. Obtain inspection report from the carrier. Retain the inspection report for filing of the claim. DO NOT RETURN DAMAGED MERCHANDISE TO MANUFACTURER-FILE THE CLAIM WITH THE CARRIER.

Protect kitchen floor. Remove all packing materials from cabinet and if there was no freight damage destroy cartoning, plastic bags and any exterior wrapping material. Children should never use these items for play. Remove all staples from the carton. Staples can cause severe cuts and destroy finishes if they come in contact with other appliances or furniture. Carefully read and follow the child safety precautions in the pamphlet enclosed with your new refrigerator. It is published by the Association of Home Appliance Manufacturers.

### TOOLS TO HAVE AVAILABLE

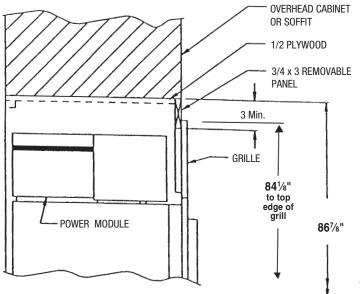
Phillips screwdriver Flat blade screwdriver 5/16" & 1/4" hexhead nutdriver Level Drill and Drill Bit (#6 - .204) 7/16" & 1/2" open end wrench Pliers Adjustable wrench 1/4" open end wrench Utility knife Tape measure

### **PRE-INSTALLATION INSTRUCTIONS**



Floor under Product MUST be at or above the same level as the surrounding FINISHED floor, for ease of installation and removal.

- ELECTRICAL: Provide 115 Volt, 60 Cycle, Single Phase, 15 Amp, AC Receptacle. It is recommended that a separate circuit, serving only this appliance, be provided.<sup>\*</sup> Two (2) units side by side, require separate circuits, except 72RF. (See instruction sheet 34361-000). Electrical opening should be placed 78<sup>1</sup>/<sub>2</sub>" min. from floor.
- **PLUMBING:** Ice Maker water supply line (<sup>1</sup>/<sub>4</sub>" O.D. Copper Tubing) to come up the rear of rough-in opening approximately 78" off the floor depending on height adjustment. Tubing should then pass around right side of module and around the front to the solenoid valve (see Installation Instructions provided with the unit).



#### IMPORTANT

For installation under a cabinet or soffit, a 3" space should be provided above the Power Module (as shown on left). Use a removable panel so that the Module can be installed or removed easily without disturbing the lower cabinet.

**Note:** Recommended rough-in height (86<sup>7</sup>/<sub>8</sub>") (Includes 3" filler).

#### \*\*NOTE

If no overhead cabinet or soffit is present, you must cover the top of the rough opening with at least  $\frac{1}{2}$ " plywood.

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### - READ THIS BEFORE PROCEEDING WITH INSTALLATION -

The Module comes with a 3-prong power supply cord. It must be plugged into a mating 115 volt, 60 Hz, 15 amp separately fused, 3-prong grounded outlet serving only this product, and wired in accordance with National and Local Electrical Codes and ordinances. A time delay fuse or circuit breaker is recommended. DO NOT USE AN EXTENSION CORD OR ADAPTER PLUG.

#### DO NOT REMOVE THE GROUND PRONG FROM THE POWER SUPPLY CORD UNDER ANY CIRCUMSTANCES!

If voltage varies by 10 percent or more, performance of your refrigerator may be affected. Operating the refrigerator with insufficient voltage can damage the compressor. Such damage is not covered under your warranty. If you suspect your voltage is high or low, consult your power company for testing.

Do not pinch, knot, or bend the power cord in any manner.

Never unplug the refrigerator by pulling on the power cord. Always grip the plug firmly and pull straight out from the receptacle. To avoid electrical shock, unplug the refrigerator before cleaning and before replacing a light bulb.

**NOTE:** Turning the control to OFF turns off the compressor, but does not disconnect power to the light bulb or other electrical components. The unit must be unplugged or turned off at the circuit breaker.

### **IMPORTANT**

Locate the refrigerator in the coolest part of the room, out of direct sunlight and away from heating ducts or registers.

Do not place the refrigerator next to heat-producing appliances such as a range, oven or dishwasher. If this is not possible, a section of cabinetry or an added layer of insulation between the two appliances will help the refrigerator operate more efficiently.

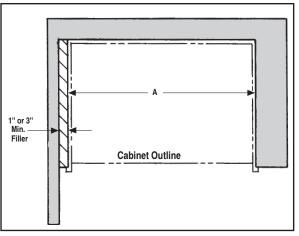
**IMPORTANT:** When installing water line for the Ice Maker, be sure to install a SHUT-OFF VALVE at a convenient location between the Refrigerator and the supply line.

Required water pressure range is 20 to 120 P.S.I.

Also required is an in-line WATER FILTER between the Refrigerator and the supply line to prevent sediment from blocking water flow through the Water Solenoid Valve.

#### NOTE

Self-piercing water valves and plastic tubing are not approved for water supply to Ice Maker.

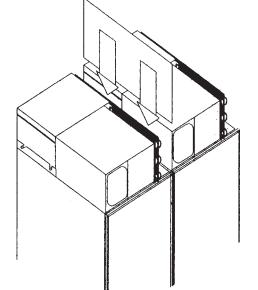


Enclosure must permit Refrigerator to be removed for Service.

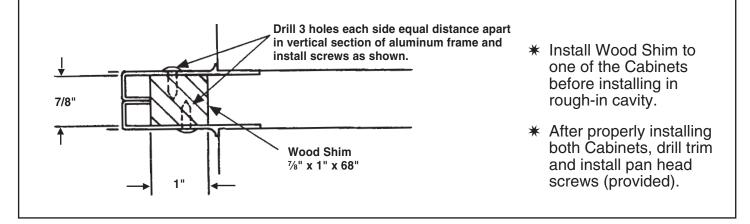
**PANEL READY UNITS:** for corner installations, a minimum 1" filler must be used as shown above.

ANY UNIT WITH FACE MOUNTED HANDLE: filler must be 3" minimum.

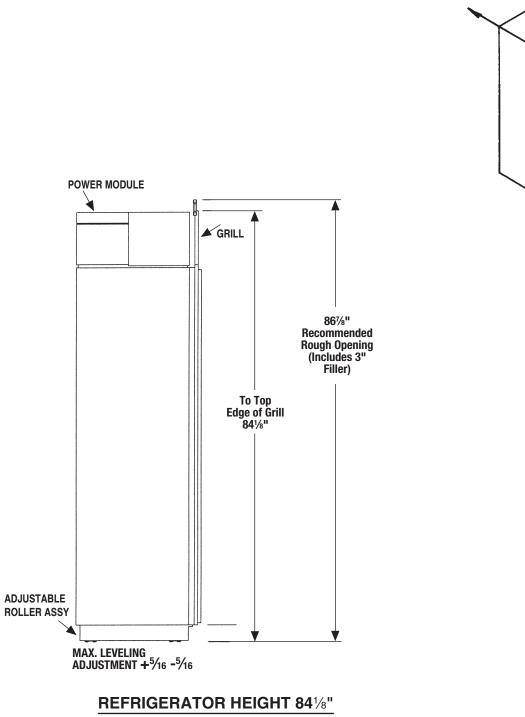
### **INSTALLING TWO UNITS SIDE-BY-SIDE**



When two units are installed together, a 23½" x 12"(min.) divider panel needs to be installed between the two modules (refer to illustration) with self-tapping screws. The divider panel can be made of any material available i.e. ½2" aluminum, ½"-¼" wood paneling), or you can order Kit #34747-000 from the Northland Service Department. Locate the divider panel approximately 1" down from top of cabinet and flush with back of cabinet. Drill three pilot holes approximately ½" up from bottom of divider panel, through panel, and into cabinet. Secure panel to cabinet with three screws using pilot holes previously drilled.



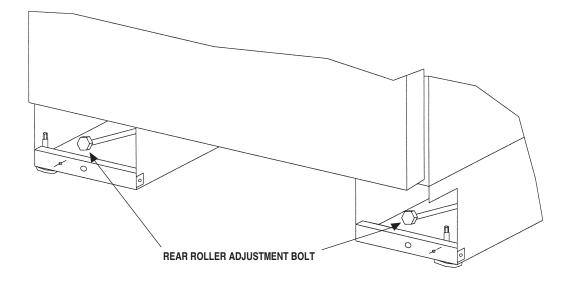
<u>NOTE:</u> UNIT MUST BE INSTALLED LEVEL IN ALL PLANES, ON A FLOOR THAT IS STRONG ENOUGH TO SUPPORT A FULLY LOADED REFRIGERATOR.



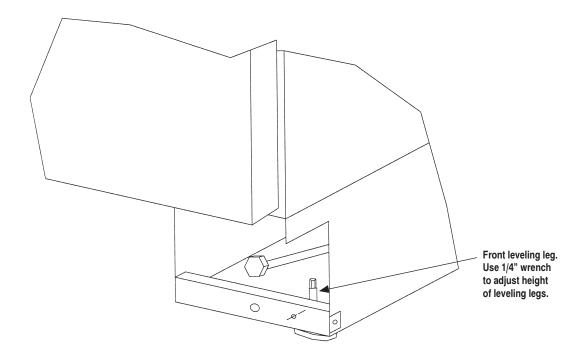
841/8" Height leaves 4" from floor to bottom of door

#### **ROUGH-IN DEPTH = 24**"

### **ROLLER ADJUSTMENTS**



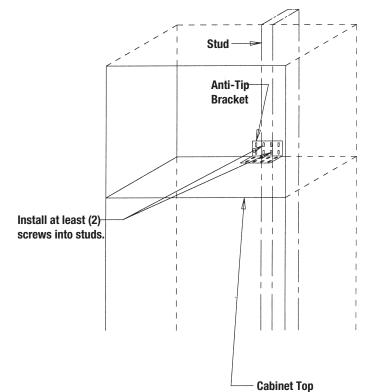
This unit is equipped with front and rear rollers. Rollers will aid during installation. Rear rollers are adjustable from the front of the unit. Total adjustment is +5/16, -5/16. Turn adjusting bolt clockwise to raise cabinet and counter-clockwise to lower cabinet. Front leveling legs must be adjusted to the floor for leveling and to prevent the unit from rolling during use.

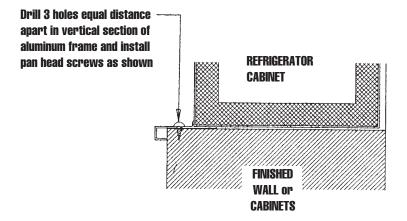


### **INSTALLING THE CABINET**

Before placing the cabinet in opening, the depth of the rough opening should be at least 24". If the rough opening depth is more than 24", then a piece of wood must be secured crosswise on the wall into the studs at the height of the anti-tip bracket. Slide the cabinet into position and level cabinet with adjustable rear roller and front leveling legs. Locate and mark a center stud in the back of the rough opening for the L-shaped anti-tip bracket – (the bracket should fit tight to the top of the cabinet). Install at least (2) two screws thru the bracket into the stud located in the wall behind the cabinet. The front leveling legs also prevent the unit from rolling during use. Check fit of toe kick and grill.

IMPORTANT: Drill and screw through the side trim into adjoining cabinets and/or walls for additional support.





**<u>DO NOT</u>** install anti-tip bracket over the top of power module.

#### NOTE:

18" wide models <u>cannot</u> use antitip bracket. Side screws <u>must</u> be used for safety.

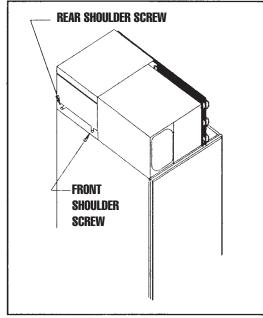
#### **IMPORTANT:**

Re-check Cabinet installation for:

- \* Proper space left for Grill installation.
- ★ Cabinet levelness.
- \* Door opening and closing appearance.
- \* SAFETY ... To prevent unit from tipping forward:
  - > Are screws installed securely through front Trim into adjoining cabinetry and/or walls?
  - > Is Anti-tip mounting bracket secured to wall studs?

### After above checks have been made, proceed with refrigeration installation.

### **MODULE INSTALLATION**



### **CAUTION:**

Module **NOT** fastened to cabinet below. Remove before tipping or transporting.

Place module on top of cabinet with the rear shoulder screws resting on the locator brackets behind the front slots. Slide module toward rear of cabinet until the rear shoulder screws engage the slots in the rear of the brackets. Rest the front shoulder screws into the front slots of the brackets.

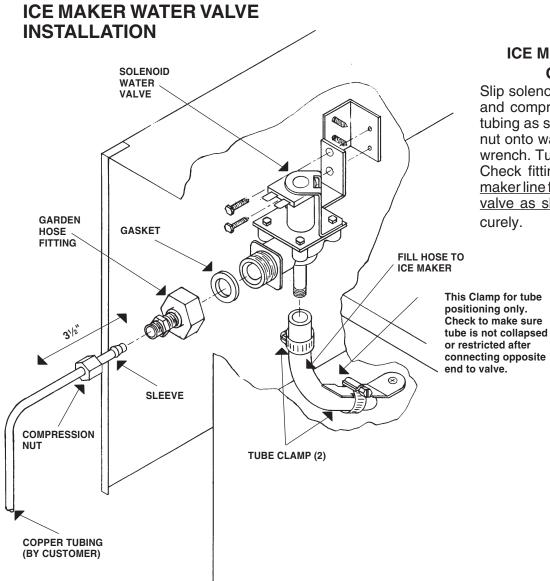
**IMPORTANT:** Check to make sure wiring and Icemaker tubing is clear and not interfering with module seal. Do NOT start Product during construction, as dust can block Module condenser coils. If dust accumulates on coils, vacuum immediately, using a soft brush attachment.

Do not operate the refrigerator in the presence of explosive fumes.

Do not install the refrigerator where the temperature will drop below 60°F (15°C) or rise above 110°F (43°C). The compressor will not be able to maintain proper temperatures.

Do not overcrowd the shelves or block cold air ducts. Do not install a shelf closer than 8" from the top in the refrigerator section. Do not allow packages to overhang sides or rear of shelves as this will block air circulation, making the refrigerator less efficient.

WATER VALVE ICE MAKER LEADS MODULE JUNCTION Make electrical connections вох from the top of the lower cabinet to the junction box at left side of Module. If NO Ice Maker, CABINET I FADS then only one cabinet line will be protruding. With Ice Maker, be sure also to plug the ice maker line into Module, and the solenoid valve as well. See POWER CORD Module Diagram on right.



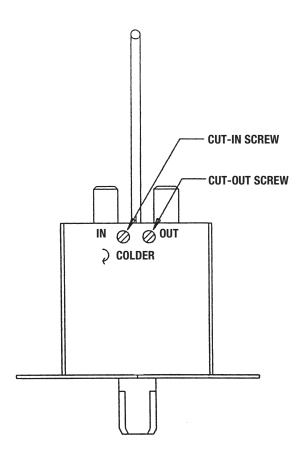
### ICE MAKER (SOLENOID)

#### CONNECTION

Slip solenoid valve compression nut and compression sleeve on copper tubing as shown in diagram. Tighten nut onto water valve with adjustable wrench. Turn on water supply valve. Check fittings for leaks. <u>Clamp Ice</u> <u>maker line from cabinet onto solenoid</u> <u>valve as shown</u>. Tighten clamp securely.

### ALTITUDE ADJUSTMENT FOR TEMPERATURE CONTROL

**NOTE:** This adjustment should only be done by a qualified service person

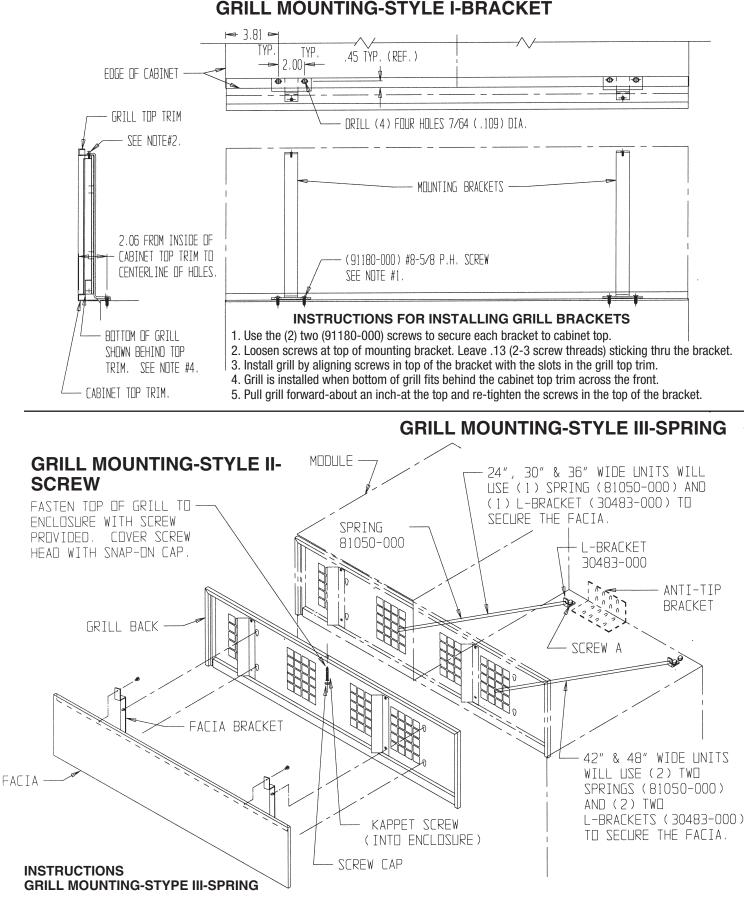


ALTITUDE CORRECTION							
<b>BOTH CUT-IN &amp; CUT-OUT</b>							
SCREWS MUST BE ADJUSTED.							
ALTITUDE	COUNTER						
IN FEET	CLOCKWISE TURNS						
2,000	7/60 = .12						
3,000	13/60 = .22						
4,000	19/60 = .32						
5,000	25/60 = .42						
6,000	31/60 = .52						
7,000	37/60 = .62						
8,000	43/60 = .72						
9,000	49/60 = .82						
10,000	55/60 = .92						

- 1. Turn off power to refrigerator before servicing.
- 2. Remove screws holding freezer air return and drop air return grill to expose control assembly.
- 3. Locate cut-in and cut-out adjustment screws.
- 4. Determine the altitude of your location and refer to the chart above for the number of counter clockwise turns to adjust control for proper calibration.

**NOTE:** Both cut-in and cut-out screws must be adjusted the same number of turns.

5. Re-assemble the return air grill and plug in the refrigerator.



- 1. Remove screw (A) in mounting bracket. Mount L-Bracket with screw A.
- 2. Hook one end of spring (81050-000) through hole in L-Bracket. Holding the facia in positionstretch the spring and secure the hook end to the facia through a square top hole in the facia.

### HINGE AND GASKET ADJUSTMENT

It is possible that doors may become out of adjustment in shipment. See diagram on right.

If product is installed slightly "out of level", doors may not line up properly. Check this BEFORE adjusting hinges.

**NOTE:** Door gaskets occasionally compress in shipment. If gasket does not seal all around, warm slightly with a hair dryer and pull outward softly until magnet in gasket seals against cabinet.

#### CABINET CABINE

### PANEL READY DOORS

To expose concealed door hinge screws, first remove handle trim. Then slide trim over hinge toward handle side. If your unit requires Door Panels, see "CUSTOM DOOR PANEL", section on page 16.

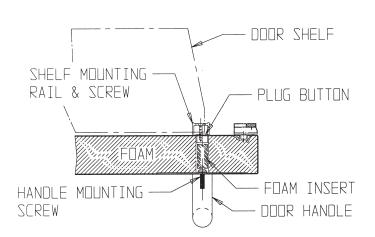
All hinge sections attached to DOORS, adjust left or right. Top and Bottom Cabinet Hinges are also adjustable in and out.

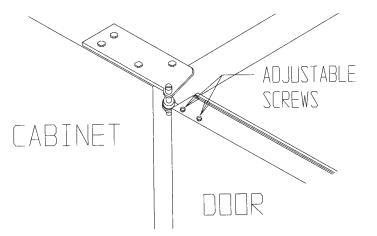
#### CHANGE OR TIGHTEN FACE MOUNTED DOOR HANDLES.

- 1. Open the door-remove the interior door shelves.
- 2. Remove the screws that secure the shelf mounting rail & the rail.
- 3. Remove the plug buttons-(Exposing handle screws) make sure not to scratch the inner liner.
- 4. Remove the foam insert to expose the door handle mounting screw.
- 5. Change handle/tighten screw and replace foam insert, plug button, shelf rail and door shelf.

### STAINLESS STEEL WRAP DOOR UNITS

To expose concealed door hinge screws, remove plug buttons if present. All hinge sections attached to Doors adjust left or right. Top and Bottom Cabinet Hinges are also adjustable in and out. See diagram (shown without cabinet trim).





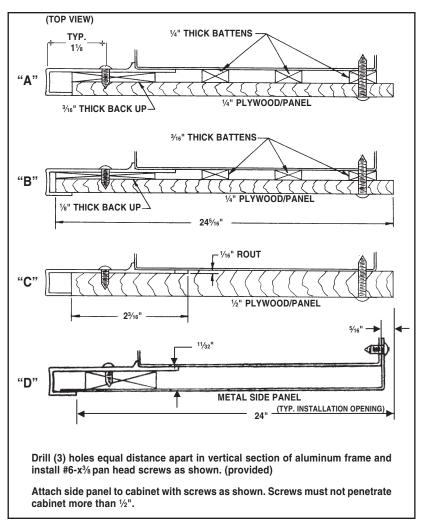
### IF FASTENING SIDE PANELS TO REFRIGERATOR:

- A. Side panels should be 24"D (or 24<sup>5</sup>/<sub>16</sub>"D when tucked into front trim).
- B. Panel height to match installation height.
- C. Install side panels per drawings on right.

**NOTE:** To avoid damage to panels or flooring, raise panels slightly, to clear floor when installing.

Drill three (3) holes equal distance apart in vertical section of aluminum frame and install pan head screws as shown.

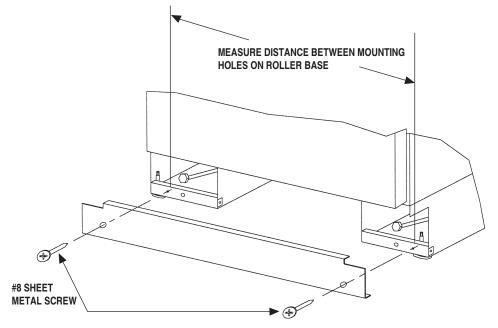
Anchor side panel with screw as shown. Be sure screw used goes no more than 1/2" deep into Product. Do NOT overtighten.



### **TYPICAL SIDE PANEL INSTALLATIONS**

### **KICKPLATE INSTALLATION**

Use (2) #8 sheet metal screws to facilitate holding your kick plate in place. Mount screws in holes in roller base. (Notching of upper corners may be required to clear hinges).

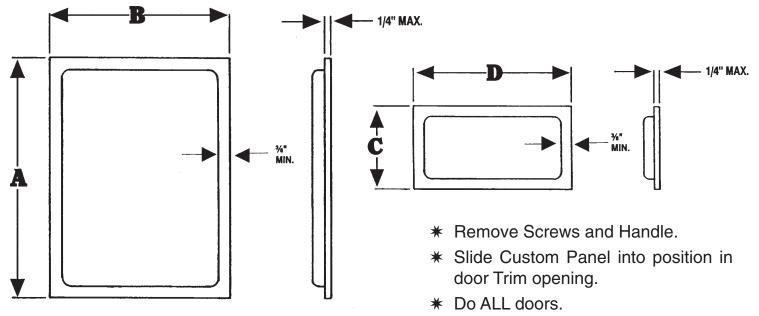


### **CUSTOM DOOR PANELS**

Northland Panel Ready Built-In design allows you to insert decorative material on the doors of your refrigerator/freezer. If a panel thinner than 1/4" is being used, we recommend a filler be inserted behind it for a proper fit, as frames are designed to accept up to 1/4" material. If a raised panel is used, route edges to fit the frame.

**CAUTION:** Door Panels **must not** exceed 50 lbs. Panels weighing more than 50 lbs. may cause product damage. We recommend that the door load (panel and food) not exceed 90 lbs.

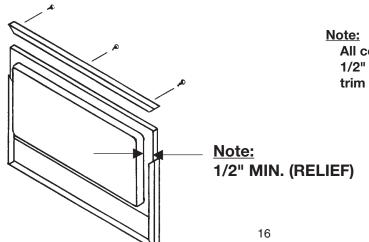
**NOTE:** Do not use glass, mirrors, granite, thick wood or similar heavy materials for panels.



**CUSTOM GRILL PANELS** 

**CAUTION:** Grill Panels **must not** exceed 20 lbs. Panels weighing more than 20 lbs. may cause product damage.

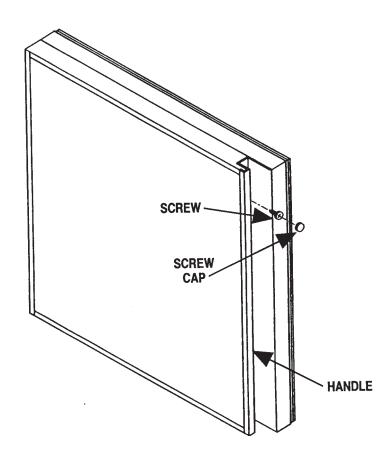
\* For Grill Installation, see separate Instruction Sheets, No. 31395-000, and No. 34072-000 packed in Grill package.



- Do not replace Handle until Hinge and Gasket adjustments have been made if necessary. (See page 14.)
- ★ Replace Handle and Screws and install Plastic Screw Caps provided.

All center hinged doors, cannot exceed 1/2" in panel thickness from the door trim face.

MODEL NUMBER	CUSTOM DOOR PANEL SIZES					Grill Pa Model Ni	umber	
	Refrigerator door		Freezer door		Second do	freezer or		width %i6")
	Height <b>X</b>	Width <b>B</b>	Height <b>D</b>	Width	Height <b>D</b>	Width <b>D</b>		Grille panel width (height – 8%i6")
18AR	68	15½					18AR	14 <sup>13</sup> /16
18AF			68	15½			18AF	1413/16
18TF	45 <sup>1</sup> / <sub>8</sub>	15½	22 <sup>1</sup> /4	15½			18TF	1413/16
18MT	55½	15½	111 %	15½			18MT	1413/16
24AR	68	21½					24AR	2013/16
24AF			68	21½			24AF	2013/16
24TF	45 <sup>1</sup> / <sub>8</sub>	21½	22 <sup>1</sup> /4	21½			24TF	2013/16
24MT	55½	21½	111 %	21½			24MT	2013/16
30AR	68	<b>27</b> ½					30AR	2613/16
30AF			68	<b>27</b> ½			30AF	2613/16
30TF	45 <sup>1</sup> / <sub>8</sub>	<b>27</b> ½	22 <sup>1</sup> /4	<b>27</b> ½			30TF	2613/16
30MT	55½	27½	111 %	<b>27</b> ½			30MT	2613/16
36AR	68	<b>33</b> ½					36AR	<b>32</b> <sup>13</sup> /16
36AF			68	<b>33</b> ½			36AF	<b>32</b> <sup>13</sup> /16
36TF	45 <sup>1</sup> / <sub>8</sub>	33½	22 <sup>1</sup> /4	<b>33</b> ½			36TF	<b>32</b> <sup>13</sup> /16
36MT	55½	33½	111 %	<b>33</b> ½			36MT	<b>32</b> <sup>13</sup> /16
36SS	68	17	68	15½			36SS	<b>32</b> <sup>13</sup> /16
363D	68	17	221/4	15½	45 <sup>1</sup> /8	15½	363D	<b>32</b> <sup>13</sup> /16
42SS	68	21½	68	17			42SS	3813/16
48SS	68	<b>27</b> <sup>1</sup> / <sub>2</sub>	68	17			48SS	<b>44</b> <sup>13</sup> / <sub>16</sub>

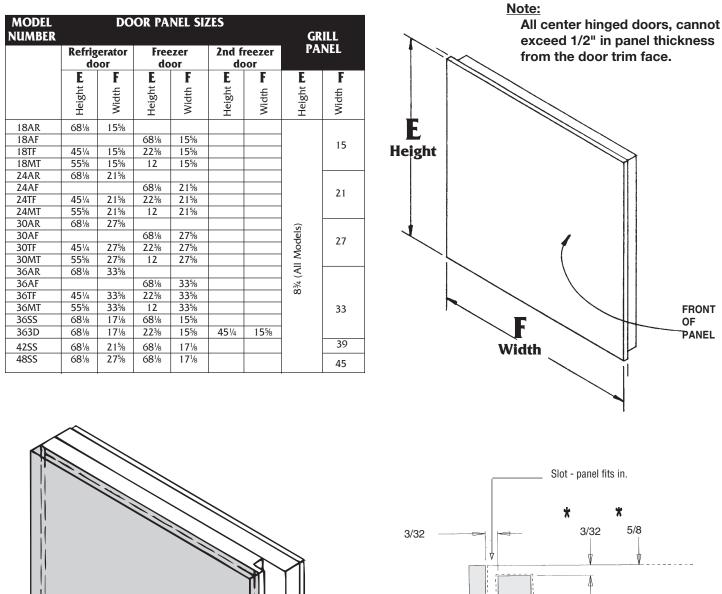


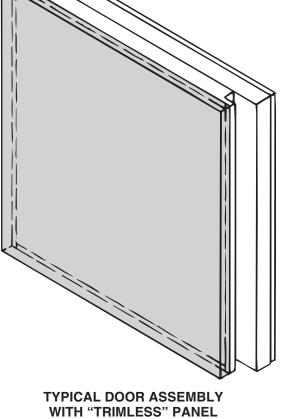
### REMOVING PROTECTIVE FILM FROM FACTORY INSTALLED DECORATIVE PANELS:

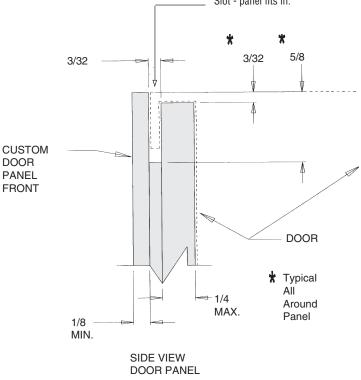
- \* Cabinets are shipped with protective film over the exterior surface of decorative panels. (optional)
- Do not remove protective film until the cabinet has been completely installed to prevent scratching or marring the decorative panels.
- ★ To remove the protective film, firmly grasp the loose edge of the film and slowly pull the film downward off the decorative panels.
- \* Decorative panels may be removed if necessary by removing the handle screws and handle and then sliding the decorative panel out of the door frame.
- Please refer to the Use and Care Guide for cleaning.

### "TRIMLESS" DOOR/GRILL PANELS

Follow the same instructions for installing Custom Door Panels described on the previous page, except prepare the Door Panels as shown to give your unit a "Trimless" appearance.







### **Installation Checks**

- Anti-Tip Mounting Bracket must be installed correctly and anchored to prevent cabinet from tipping forward.
- Rear of Module should be flush with the rear of the cabinet. Module should not extend beyond the rear wall of the cabinet.
- Module should be engaged in the slots on the Module positioning brackets and seated on the foam seal without air gaps. Module positioning brackets should not be removed.
- All wires from the lower cabinet to Module must be securely connected. If a problem is suspected, inspect both male and female plugs and insure that terminals in the plug are sufficiently forward to engage.
- Cabinet must be level both side to side and front to back. Front leveling legs should rest firmly on the floor. Cabinetry on both sides of the cabinet must be secure and level to prevent the cabinet from shifting when the doors are opened.
- Doors must not hit adjacent walls or counter tops.
- Gaskets must seal completely. If gaskets seal well, no further adjustments need to be made.
- On models with ice makers, check water connections for leaks. If water is not yet connected, the plastic water fill tube to the freezer compartment must either be attached to the solenoid or sealed to prevent air leaking into the cabinet.
- Brown and white wires should be connected to the solenoid. The remaining Molex connector plugs into the Power Module.

### **Common Installation Errors**

- Any air leaks between the module and the cabinet will keep the cabinet from operating efficiently.
- The water supply line and electric outlet must be located in a manner that will not interfere with Module to cabinet alignment when the unit is pushed into place.
- Power cord to outlet sitting under the Power Module will create an air leak.
- Ice maker fill tube (plastic) not connected or loose creating a water and/or air leak.
- Plugs from cabinet not connected to ice maker and/or Power Module.
- Floor under products lower than finished floor making the unit inaccessible for service. Floor under product must be strong enough to support weight of fully loaded refrigerator.
- No 3" removable filler panel above grill making the Power Module difficult for service.
- Product not anchored properly (to prevent tipping). Bracket not secured to rear wall studs or screws through product side trim into adjoining cabinets or walls.

#### IF PRODUCT DOES NOT START WHEN PLUGGED IN, CHECK THE FOLLOWING:

- 1. Does light bulb go on when refrigerator door is opened? If NOT, check bulb, then ...
  - a. Is cord from lower cabinet plugged into module?
  - b. Is power cord plugged in at receptacle?
  - c. Is circuit breaker or fuse "on"? Check by plugging another electric device into outlet.
- 2. If light bulb DID go on when door is opened ...
  - a. Turn Defrost timer clockwise (might be in "Defrost") until compressor starts.
- 3. If motor "hums", but doesn't start ...
  - a. Check for adequate line voltage at outlet.
  - b. Module may have been transported or stored on side or upside down, causing temporary displacement of motor oil. Let rest 24 hours, then plug in again.

### NORTHLAND

Northland Corporation P.O. Box 400 Greenville, Michigan 48838-0400 Part of the AGA Foodservice Group