



**NG012200 Under Counter Refrigerator
Owner's Manual**

FOR YOUR SAFETY

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS OR LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.

WARNING: IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, OR MAINTENANCE CAN CAUSE INJURY OR DEATH. READ THE INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING OR SERVICING THIS EQUIPMENT.

KEEP THIS MANUAL IN A SAFE PLACE AND RETAIN FOR FUTURE USE



Owner's Manual

Sertek Under Counter Refrigerator

Supplier Name:	Sertek LLC
Address:	6399 Shier Rings Rd Dublin, OH 43016
Serial #:	_____
Date Received:	_____
Date Installed:	_____
Telephone #:	614-504-5828
Fax#:	614-504-5728
Service Warranty NSC #:	877-277-7221

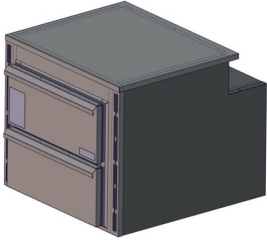
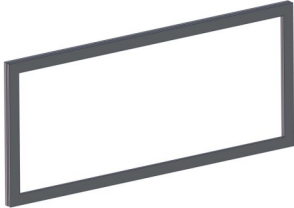
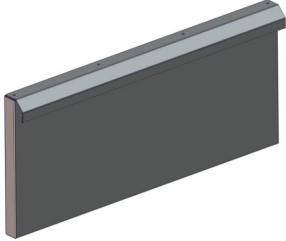
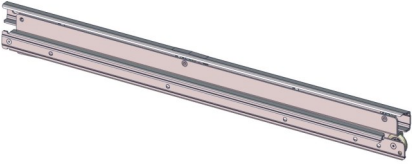
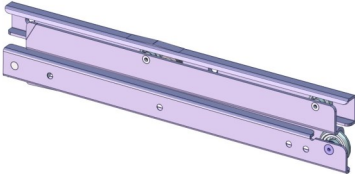
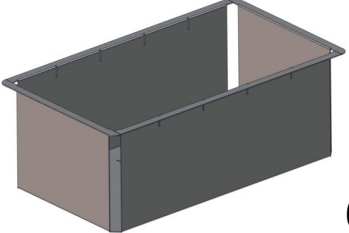
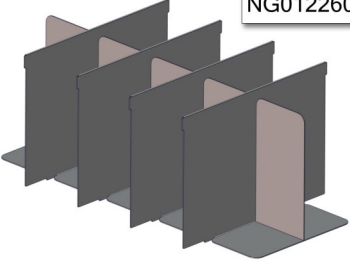
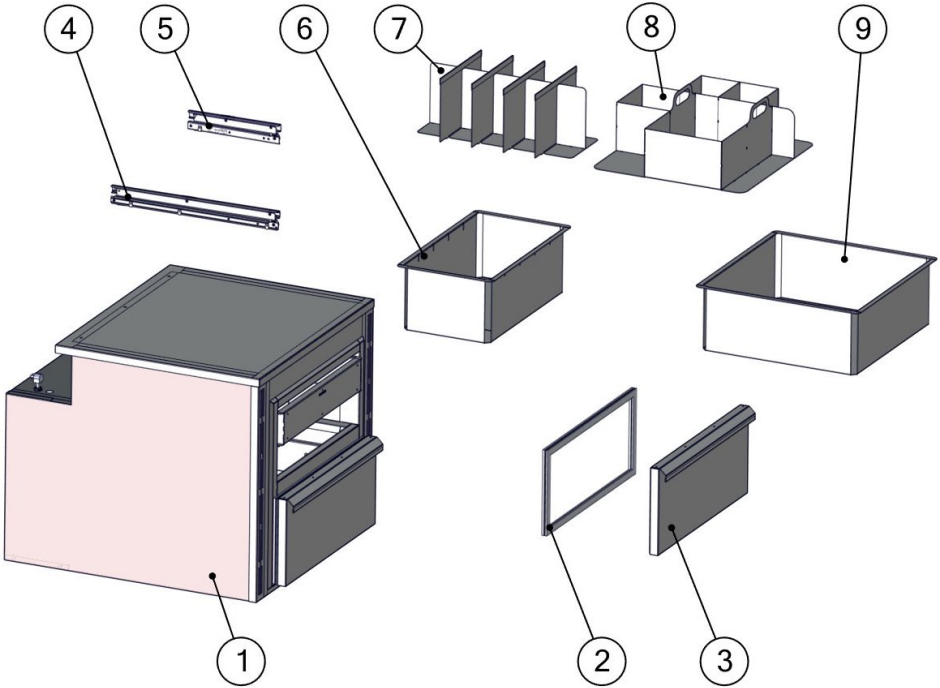
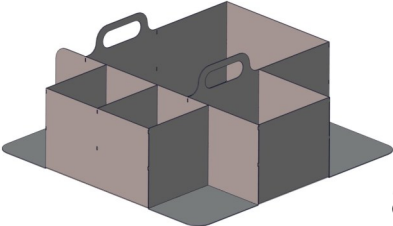
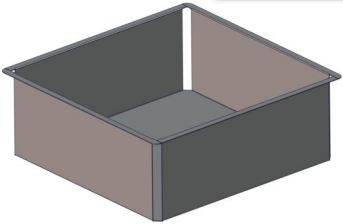
Product Description

The NGK Under Counter Refrigerator MG3 Model NG012200 has been built to fit into Wendy's NGK front counter assemblies. It features two drawers for holding packaged product.

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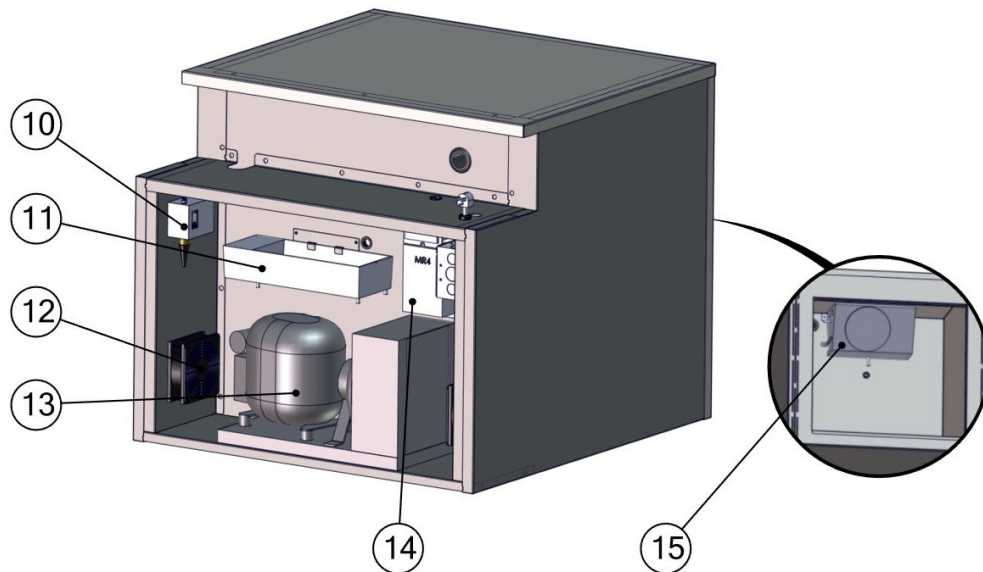
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Replacement Parts List

<p>Under Counter Refrigerator NG012200 QTY-1</p>  <p>1</p>	<p>Drawer Gasket 07000272-25 QTY-2</p>  <p>2</p>	<p>Drawer Front NG012200-200-DF QTY-2</p>  <p>3</p>
<p>Heavy Duty Drawer Slide (Bottom) 7000486-550 QTY-2</p>  <p>4</p>	<p>Heavy Duty Drawer Slide (Top) 7000486-300-CLOSED QTY-2</p>  <p>5</p>	<p>Top Drawer Pan 0902616 QTY-1</p>  <p>6</p>
<p>Top Drawer Insert NG012260 QTY-1</p>  <p>7</p>		
<p>Bottom Drawer Insert NG012265 QTY-1</p>  <p>8</p>		
<p>Bottom Drawer Pan 0902588 QTY-1</p>  <p>9</p>		

Refrigeration Unit

<p>Ranco High Pressure Control Model #: 016-108 7000009 QTY-1</p>  <p>10</p>	<p>Component Hardware Condensate Evap. Pan Model #: T12-5000 7000023-72 QTY-1</p>  <p>11</p>	<p>Orion Axial Fan Model # OA109AP-11-1 TBIP55 7000291-OYL QTY-2</p>  <p>12</p>
<p>Copeland Condensing Unit 1/10th HP Model #: ASE12C4e-IAA-103 7000025 QTY-1</p>  <p>13</p>	<p>Johnson Controls Temp Control Model #: MR4PMUHV-12 RU010103 QTY-1</p>  <p>14</p>	<p>HeatCraft Evaporator Coil Model #: VAK08AG 7000836 QTY-1</p>  <p>15</p>
<p>Emerson Expansion Valve Model #: ACP1 7000113 QTY-1</p>  <p>16</p>		

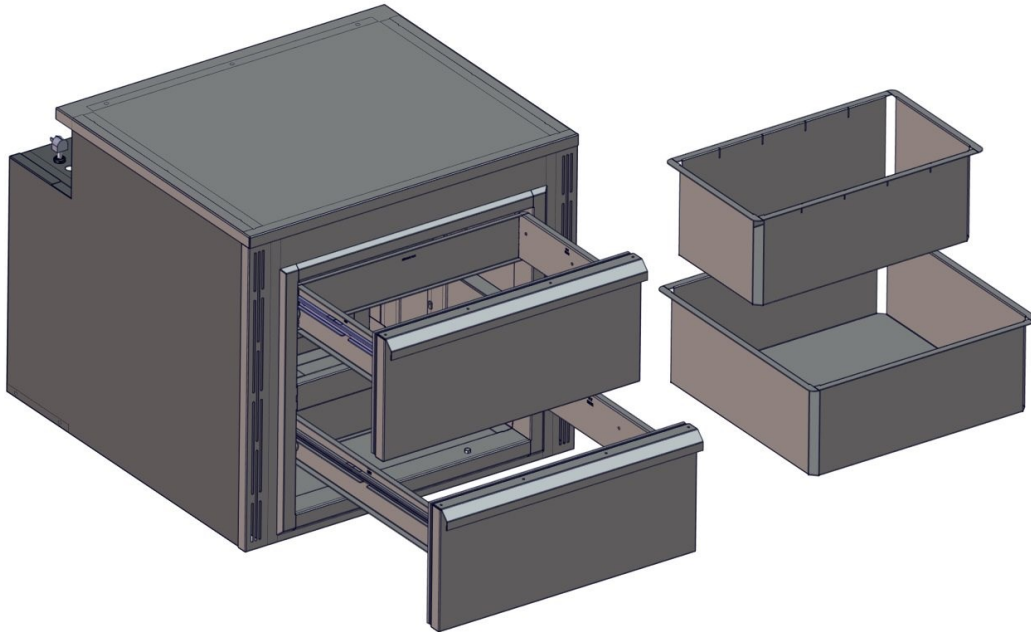


List of Replacement Parts

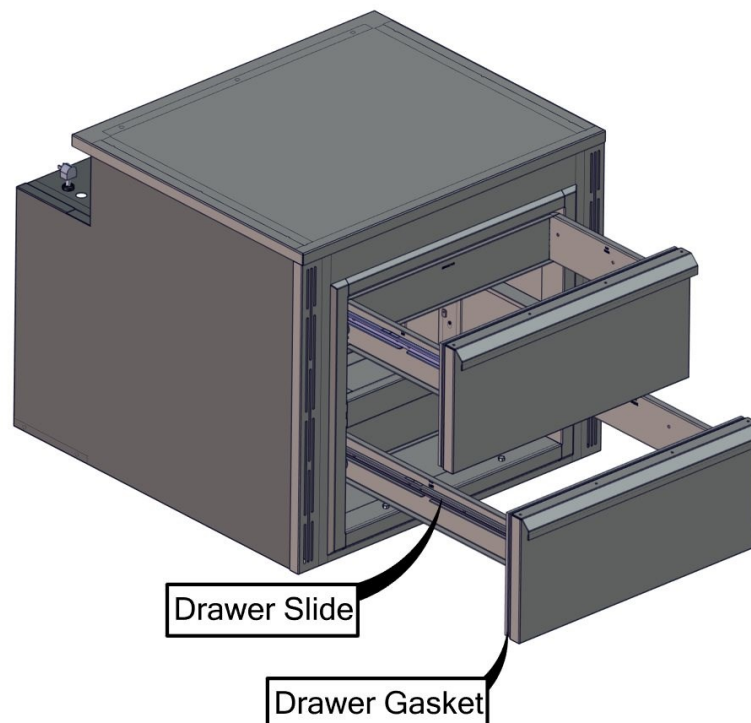
LIST ID #	DESCRIPTION	PART #	QTY
1	Under Counter Refrigerator	NG012200	1
2	Drawer Gasket	07000272-25	2
3	Drawer Front	NG012200-200-DF	2
4	Heavy Duty Drawer Slide (Bottom)	7000486-550	2
5	Heavy Duty Drawer Slide (Top)	7000486-300-CLOSED	2
6	Top Drawer Pan	0902616	1
7	Top Drawer Insert	NG012260	1
8	Bottom Drawer Insert	NG012265	1
9	Bottom Drawer Pan	0902588	1
10	Ranco High Pressure Control	7000009	1
11	Component Hardware Condensate Evaporator Pan	7000023-72	1
12	Orion Axial Fan	7000291-OYL	2
13	Copeland Condensing Unit	7000025	1
14	Johnson Controls Temperature Controller	RU010103	1
15	HeatCraft Evaporator Coil	7000836	1
16	Emerson Expansion Valve	7000113	1

Daily Maintenance

1. Remove the two pans to be cleaned at the store's dish tank.

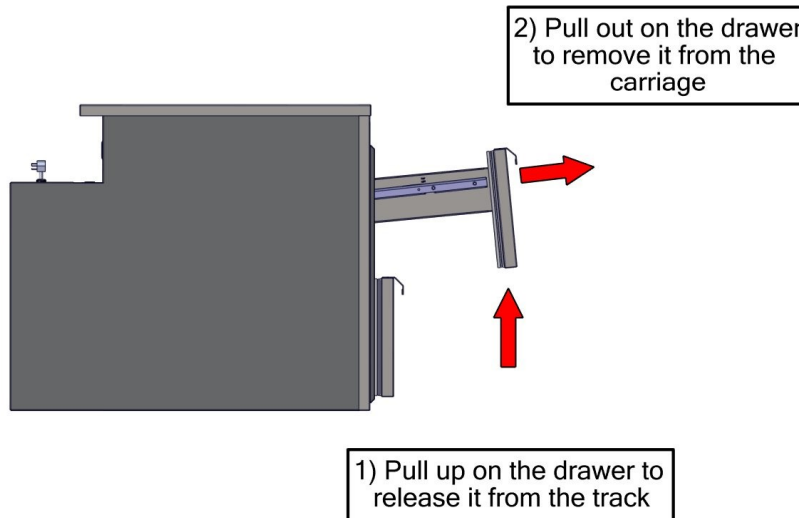


2. Inspect the unit's drawer gaskets and slides. Ensure that there is no food build up and that both the drawer slide and gasket are functioning properly.

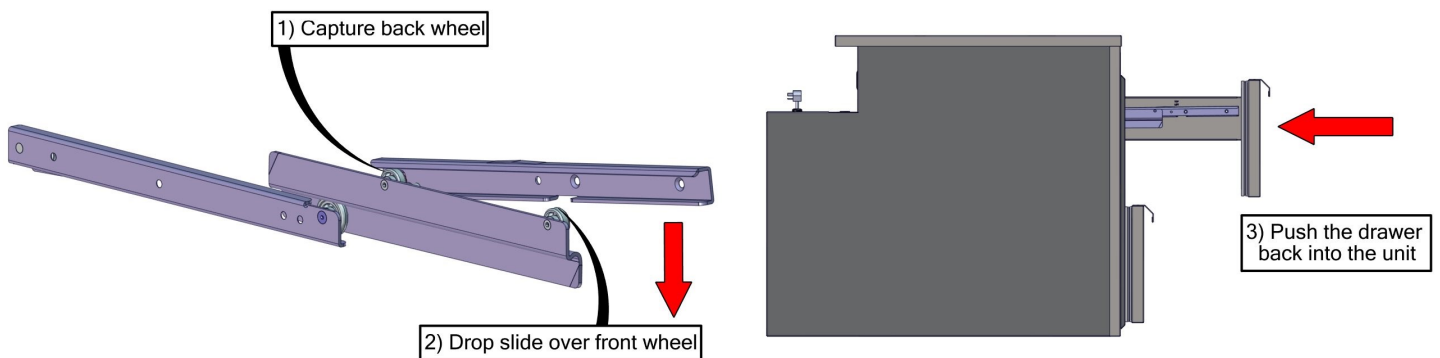


Monthly Maintenance

1. Perform Daily Maintenance.
2. Remove the unit's drawer slides and clean the storage bay.
 - I. Follow the steps below to remove the drawer slides from the unit.

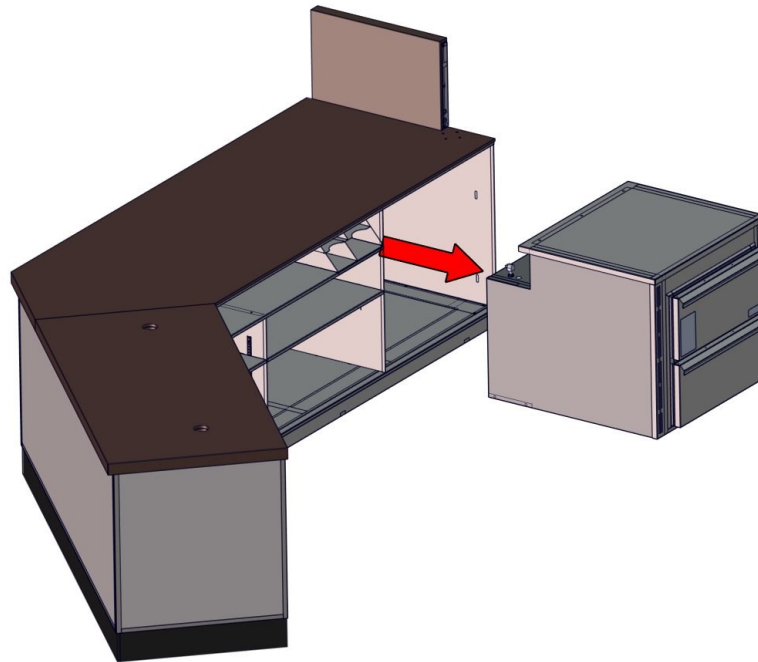


- II. With the drawer slides removed there is clear access to the storage bay. Use a damp cloth and Wendy's approved cleaner to thoroughly wipe down the interior of the unit.
- III. Once the bay is cleaned replace the drawer slides following the steps shown below.

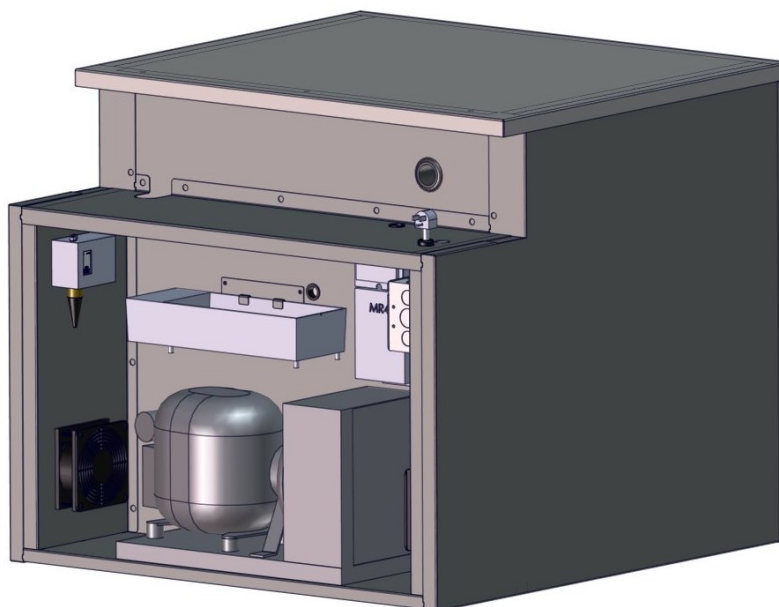


Servicing the Condensing Unit

1. Remove the unit from it's housing in the Front Counter.

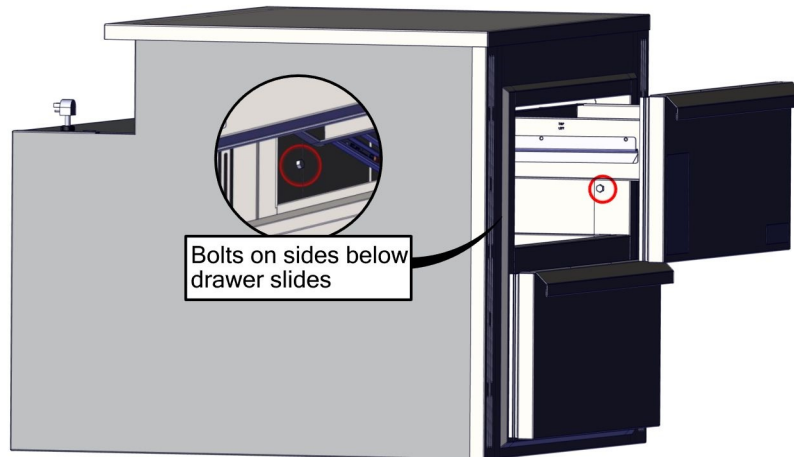


2. The condensing unit, temperature control, high pressure switch, axial fans, and condensate evaporator pan can be accessed from the back of the unit.

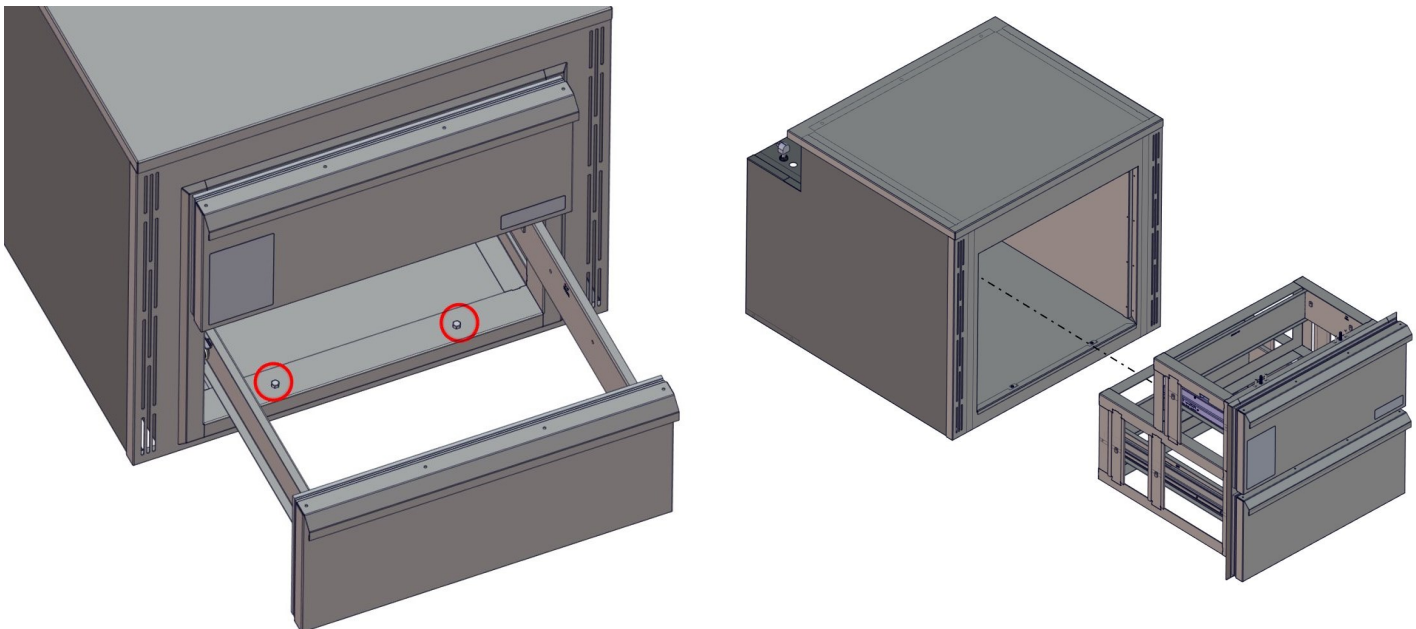


Servicing the Evaporator

1. In order to reach the evaporators and expansion valve complete access to the cooler bay will be needed. To accomplish this you will need to remove the drawer assembly insert. First remove all the pans from the drawer slides. Next remove the four 7/16" bolts securing the inserts to the cooler bay. The locations of these bolts are shown below

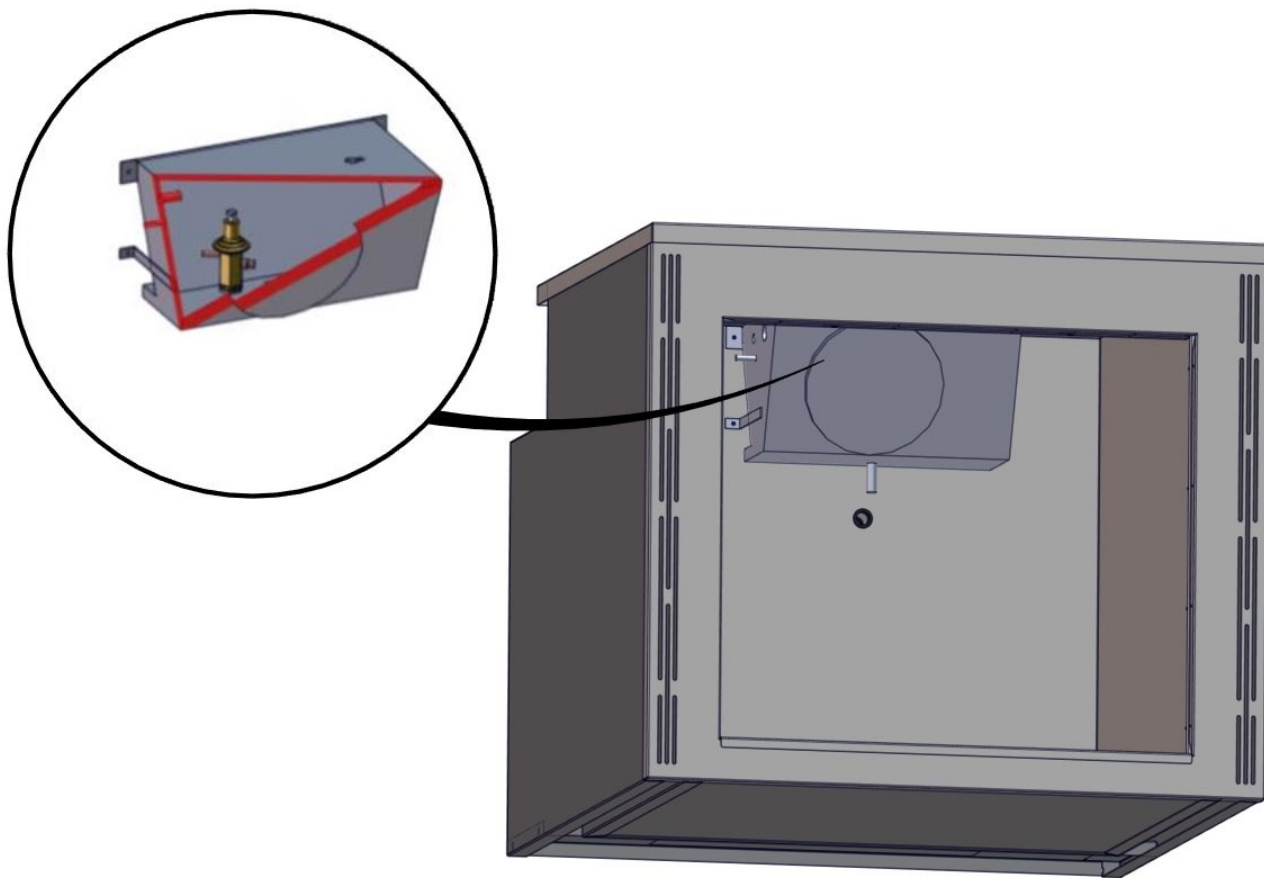


2. Remove the two 7/16th bolts from the bottom and the drawer carriage can be pulled from the front of the unit.



Servicing the Evaporator

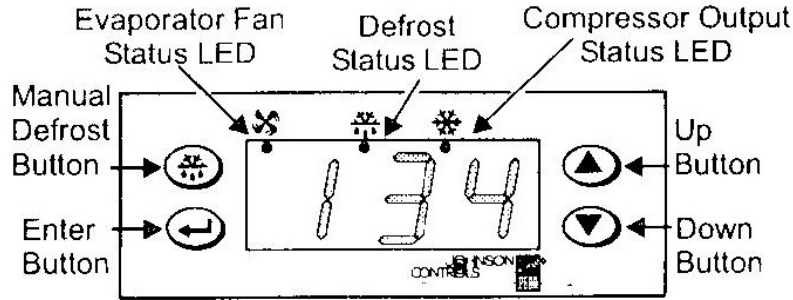
3. Once the drawer carriage is removed there is clear access to the evaporator. To open the evaporator casing and access the coil and expansion valve, remove the four 1/4" hex head screws holding the cover in place.



Troubleshooting Guide

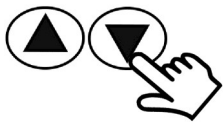
Problem	Possible Cause	Solution
UNIT WILL NOT RUN	<ul style="list-style-type: none"> • Breakers could be turned off. • Partial electrical power to the building. • Unit is unplugged 	<ul style="list-style-type: none"> • Turn the breakers off and back on to see if the unit comes on. • Ensure the unit is plugged into the receptacle on the front counter • Check to make sure other equipment is working. If so and the Under Counter Refrigerator is not running call the NSC service line. (877-277-7221) • If you are experiencing problems with other equipment as well call your maintenance provider.
THE FANS INSIDE OF THE REFRIGERATION BOX ARE RUNNING BUT IT IS NOT KEEPING THE PRODUCT AT THE PROPER TEMPERATURE	<ul style="list-style-type: none"> • Condensing coil for the compressor condensing unit may be plugged up not allowing enough air to pass through the coil causing the unit to overheat. • The high pressure control high pressure switch may have tripped, causing the condensing unit to shut down. 	<ul style="list-style-type: none"> • Check the store's main breaker box to ensure the proper breakers are turned on. • Turn the unit off for approximately 15 minutes to allow time for the unit to cool down. Ensure that all fans are operating correctly and there is nothing blocking the intake on the front of the unit. After 15 minutes have elapsed turn the unit back on and wait for it to reach temperature. • If all the breaker switches are turned on and the Under Counter Refrigerator is not running call the NSC service line. (877-277-7221)

MR4PMUHV Temperature/Defrost Control Quick Reference Guide

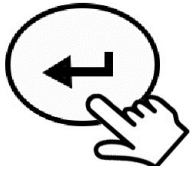


Using the control module

During normal operation, the display shows the main sensor temperature.



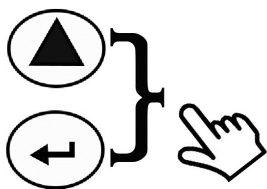
Press up or down to scroll through the main sensor temperature, evaporator sensor temperature, and the binary input status.



Press and hold enter for approximately three seconds to view the set point.

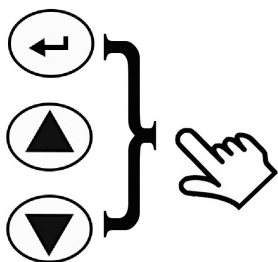
Note: After 15 seconds of inactivity, the display shows the main temperature.

Initiating a manual deep freeze



1. In sequence, press and hold enter then up.
2. Hold both buttons for five seconds.
3. The compressor output status LED lights and compressor contacts close.

Unlocking or locking access to programming



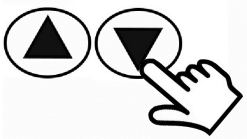
1. In sequence, press and hold enter, up, and then down.
2. Hold all three buttons until ——— is displayed.
3. Continue holding until the sensed temperature is displayed (approximately ten seconds).

MR4PMUHV Temperature/Defrost Control Quick Reference Guide

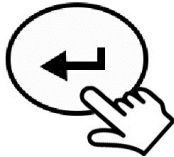
Changing the set point



1. Press and hold enter for approximately three seconds.
2. Release enter when the set point value is displayed.



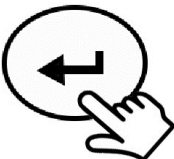
3. Press up or down to display the new set point value.



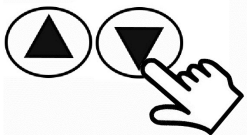
4. Press enter to save the new set point value.

Note: if enter is not pressed, the new set point value is not saved, and control reverts to the previous set point value.

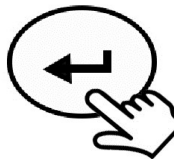
Changing other function settings



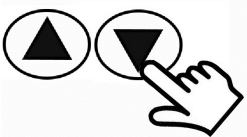
1. Press and hold enter for approximately 10 seconds.
2. The display code for differential is displayed (HY).



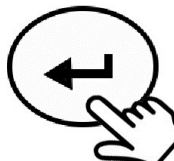
3. Press up or down until the display code for the desired function is displayed (see freezer settings list).



4. Press enter. The functions existing value is displayed.



5. Press up or down until the desired setting value is displayed.



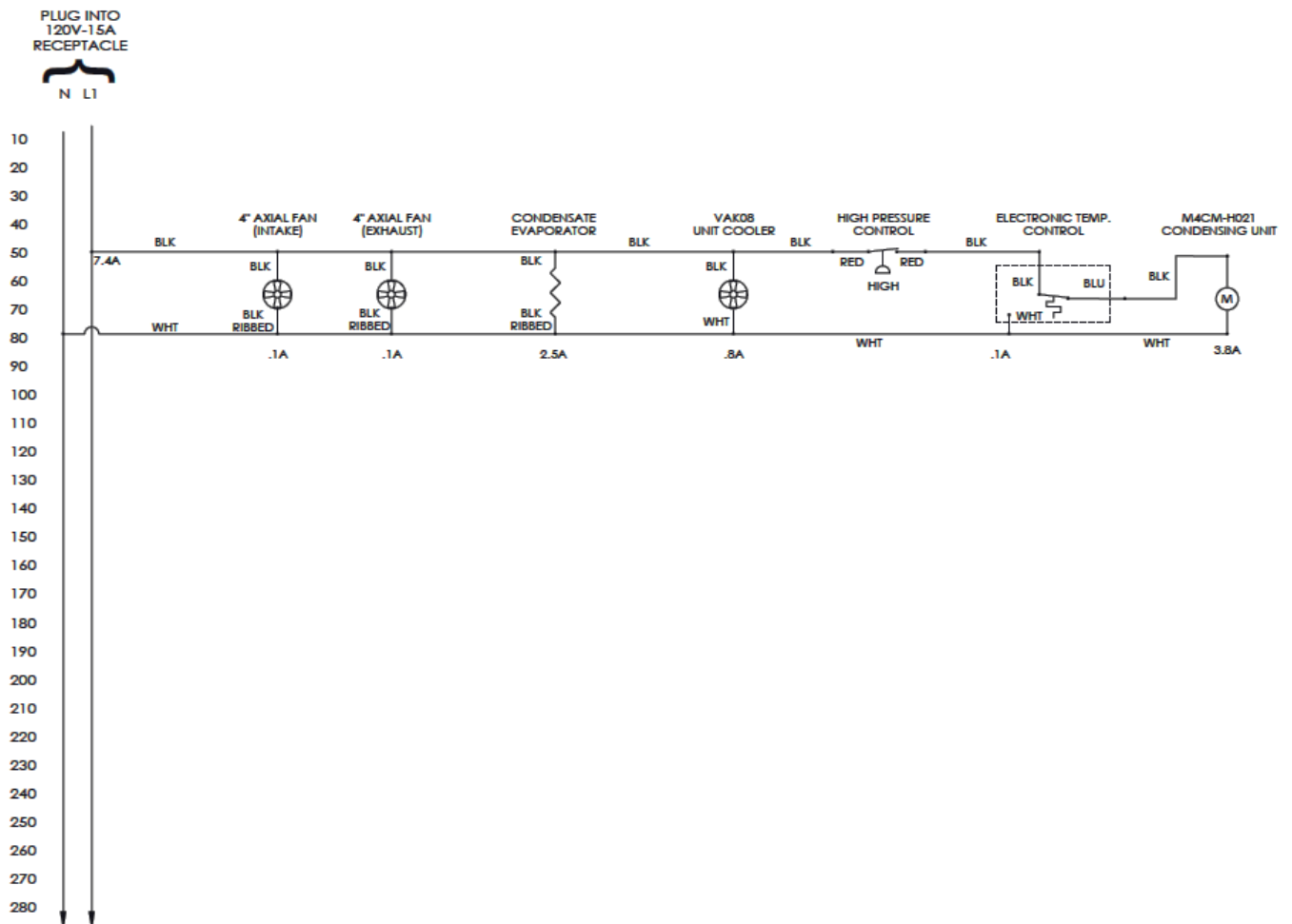
6. Press enter to save the new value. After 10 seconds of inactivity the, display returns to normal operation.

Note: If enter is not pressed, the new value is not saved and reverts to the previous saved value.

MR4PMUHV Display Code Chart

Display Code	Function	Setting Range	Factory-Set Value	Cooler Settings
(None)	Setpoint	-40° 99°F (-40° to 37°C)		35(°F)*
HY	Differential	1° to 9°F (-17° to -13° C)	5(°F)	2(°F)*
LL	Low Setpoint Stop	-40°F (-40°C) to High Setpoint Stop	-25(°F)	32(°F)*
HL	High Setpoint Stop	Low Setpoint Stop to 99°F (37°C)	40(°F)	36(°F)*
CC	Cycle Delay	0 to 9 min	1 min	1 min
Co	Deep Freezing Time	0 to 99 min	60 min	60 min
AH	High Temperature Alarm	0 to 50°F (-17 to 10°C)	10(°F)	5(°F)*
AL	Low Temperature Alarm	-50° to 0°F (-45° to -18°C)	-10(°F)	-5(°F)*
Ad	Alarm Differential	1° to 9°F (-17° to -13°C)	5(°F)	5(°F)
At	Alarm Time Delay	0 to 99 min	3 min	3 min
dF	Defrost Mode	0=Electric Defrost / 1 = Hot Gas Defrost	0	0
dE	Defrost Termination Mode	0 = Time Based / 1 = Temperature Based	1	1
dt	Defrost Termination Temperature	32° to 68°F (0 to 20°C)	55(°F)	44(°F)*
di	Defrost Interval	1 to 99 hours	7 hours	6 hours*
dd	Maximum Defrost Duration	0 to 99 min	45 min	45 min
dC	Dripping Time	0 to 99 min	5 min	5 min
dU	First Defrost Delay	OF (Off), 0 to 99 min	OF (OFF)	OF (OFF)
dP	Display During Defrost	0 = Last Main Sensor Reading / 1 = Main Setpoint	0	0
dr	Display Delay After Defrost	1 to 99 min	20 min	20 min
iF	Binary Input Mode	0 = No Response 1 = Compressor Off 2 = Alarm On 3 = Evaporator Fan Off, Alarm On	0	0
id	Binary Input Time Delay	0 to 99 min	0 min	0 min
FF	Fan Operating Mode	0 = Parallel with Compressor 1 = Always On	0	1*
Fd	Fan Startup Delay	0 to 99 min	5 min	0 min*
Fr	Fan Start Temperature	-22° to 41° F (-30 to 5°C)	40(°F)	40(°F)
SF	Sensor Failure Operation	0 = Compressor on 1 = Compressor Off 2 = Based on Last 4 Cycles	2	2
So	Temperature Sensor Offset	-20° to 20°F (-29° to -6° C)	0(F°)	0(°F)
Un	Temperature Units Used	0 = °C / 1 = °F	1	1
PU	Display Refresh Rate	1 to 99 sec	1 sec	1 sec

Electrical Schematics





NGK UNDER COUNTER REFRIGERATOR

MODEL NG012200

OWNER'S MANUAL

7NG012200-MNL1.1015

3/9/16 RS