

# Milk, Ice Cream and Milk & Ice Cream Dispensers Service and Installation Manual

Please read this manual completely before attempting to install or operate this equipment! **Notify carrier of damage!** Inspect all components immediately. See page 2.



N, N6/N10/N14
Free-standing milk or beverage dispensers



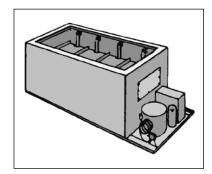
**NDF**Free-standing milk or beverage dispensers



**NLFAC**Free-standing milk or beverage dispensers with air curtain



NSCF, SCF
Free-standing ice cream
dispensers and milk & ice
cream dispensers



MF, MFSC, FF,
FFSC, RFF, RFFSC
Built-in milk or beverage,
ice cream, and milk & ice cream
dispensers



#### Milk, Ice Cream & Milk & Ice Cream Dispensers Service and Installation Manual

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## **Serial Number Location**

### Serial number tag locations

**MF/MFSC**, **FF/FFSC** and **RFF/RFFSC** — on the end above the refrigeration system.

**N, N6/N10/N14, and SCF** — rear of the unit above the louver.

**NDF** — Front right hand corner under the lid.

**NLFAC** — at the rear of the unit by the power cord.

Always have the serial number of your unit available when calling for parts or service. A complete list of authorized Delfield parts depots is available at www.delfield.com.

The units represented in this manual are for indoor use only.

# **Receiving and Inspecting the Equipment**

Even though most equipment is shipped crated, care should be taken during unloading so the equipment is not damaged while being moved into the building.

- Visually inspect the exterior of the package and skid or container. Any damage should be noted and reported to the delivering carrier immediately.
- 2. If damaged, open and inspect the contents with the carrier
- In the event that the exterior is not damaged, yet upon opening, there is concealed damage to the equipment notify the carrier. Notification should be made verbally as well as in written form.
- Request an inspection by the shipping company of the damaged equipment. This should be done within 10 days from receipt of the equipment.
- 5. Check the lower portion of the unit to be sure casters are not bent.

- 6. Also open the compressor compartment housing and visually inspect the refrigeration package. Be sure lines are secure and base is still intact.
- 7. Freight carriers can supply the necessary damage forms upon request.
- Retain all crating material until an inspection has been made or waived.

#### **Uncrating the Equipment**

First cut and remove the banding from around the crate. Remove the front of the crate material, use of some tools will be required. If the unit is on legs remove the top of the crate as well and lift the unit off the skid. If the unit is on casters it can be rolled off the skid.



# **Specifications**

| Model  | H.P.  | Loading/Dispensing   | Length Depth Height  | Weight (lbs)   | Amps (115V)   | NEMA Plug   | BTU Load   | Evap BTU/TD  | BTU Capacity  | Ref/Charge  |
|--|---|--|--|--|---|---|--|--|---|---|
| Self-contained free  | _   | g milk or beverage dispense  |  | Worght (150)   | mipo (1101)   |   | DTO LOUG   | 2100 510,15  | Dro capatily  | 1101/Onurgo   |
| N-520  | 1/4   | sliding top lids   | 29" x 28" x 36"  | 327  | 5.0   | 5-15P   | 189  | 33/31°   | 1035  | 134a/16oz   |
| N-860  | 1/4   | sliding top lids   | 42" x 28" x 36"  | 392  | 5.0   | 5-15P   | 259  | 42/28°   | 1167  | 134a/16oz   |
| N-1200   | 1/4   | sliding top lids   | 55" x 28" x 36"  | 462  | 5.0   | 5-15P   | 328  | 51/25°   | 1273  | 134a/16oz   |
| N-1530   | 1/4   | sliding top lids   | 68" x 28" x 36"  | 532  | 5.0   | 5-15P   | 398  | 60/23°   | 1360  | 134a/16oz   |
| N6-1313-34   | 1/4   | sliding top lids   | 36" x 32" x 34"  | 382  | 5.0   | 5-15P   | 245  | 42/28°   | 1167  | 134a/16oz   |
| N6-1313-36   | 1/4   | sliding top lids   | 36" x 32" x 36"  | 402  | 5.0   | 5-15P   | 245  | 42/28°   | 1167  | 134a/16oz   |
| N10-1313-34  | 1/4   | sliding top lids   | 54.5" x 32" x 34"  | 545  | 5.0   | 5-15P   | 353  | 55/24°   | 1315  | 134a/16oz   |
| N10-1313-36  | 1/4   | sliding top lids   | 54.5" x 32" x 36"  | 565  | 5.0   | 5-15P   | 353  | 55/24°   | 1315  | 134a/16oz   |
| N14-1313-34  | 1/4   | sliding top lids   | 73" x 32" x 34"  | 650  | 5.0   | 5-15P   | 455  | 68/21°   | 1422  | 134a/16oz   |
| N14-1313-36  | 1/4   | sliding top lids   | 73" x 32" x 36"  | 670  | 5.0   | 5-15P   | 455  | 68/21°   | 1422  | 134a/16oz   |
|  |   | g milk or beverage dispense  |  |  | 3.0   | 3 131   |  | 00/21  | 1722  | 1040/1002   |
| NDF-12   | 1/4   | drop front & flip top lids   | 35.88" x 33.38" x 57"  | 365  | 5.0   | 5-15P   | 687  | 49/25°   | 1204  | 134a/16oz   |
| NDF-18   | 1/3   | drop front & flip top lids   | 49.88" x 33.38" x 57"  | 430  | 7.0   | 5-15P   | 898  | 60/27°   | 1585  | 134a/24oz   |
|  |   |  | rs with air curtain (BTU is wit  |  | 7.0   | J-1JI   | 030  | 00/21  | 1303  | 1040/2402   |
| NLFAC-8  | 1/3   | hinged lids w/air curtain  | 40" x 32" x 42.50"   | 401  | 7.0   | 5-15P   | 668  | 140/16°  | 2184  | 134a/24oz   |
| NLFAC-0  | 1/2   | hinged lids w/air curtain  | 54" x 32" x 42.50"   | 491  | 9.0   | 5-15P   | 859  | 140/16°  | 2885  | 134a/2402<br>134a/320z  |
| NLFAC-16   | 1/2   | ·  | 68" x 32" x 42.50"   | 583  | 11.0  | 5-15P   | 1050   | 140/21°  | 3193  | 134a/32oz   |
|  |   | hinged lids w/air curtain<br>milk and ice cream dispens  |  |  | 11.0  | J-1JI   | 1030   | 170/20   | 0100  | 1040/0202   |
| NSCF-48  | 1/4   | hinged top lids  | 48" x 28" x 37"  | 390  | 7.1   | 5-15P   | 139(ref)<br>414(frz)   | 37/43°(ref)<br>37/21°(frz)   | 1596(ref)<br>796(frz)   | 404A/16oz   |
| Self-contained free  | e-standin   | g ice cream dispensers   |  |  |   |   |  |  |   |   |
| SCF-32   | 1/4   | hinged top lids  | 32.5" x 28" x 37"  | 334  | 7.1   | 5-15P   | 709  | 51/18°   | 915   | 404A/16oz   |
| SCF-48   | 1/3   | hinged top lids  | 48" x 28" x 37"  | 414  | 8.0   | 5-15P   | 1043   | 69/19°   | 1350  | 404A/24oz   |
| Model  | ип  |  |  |  |   |   |  |  |   |   |
| mouer  | H.P.  | Cutout Dim. (L x D)  | LxDxH  | Weight (lbs)   | Amps (115V)   | NEMA Plug   | BTU Load   | Evap BTU/TD  | BTU Capacity  | Ref/Charge  |
|  |   |  | L x D x H  .87" space is required betwee   |  | Amps (115V)   | NEMA Plug   | BTU Load   | Evap BTU/TD  | BTU Capacity  | Ref/Charge  |
|  |   |  |  |  | Amps (115V) 5.0   | NEMA Plug<br>5-15P  | BTU Load   | <b>Evap BTU/TD</b> 51/24°  | BTU Capacity 1223   | 134a/16oz   |
| Self-contained bui   | ilt-in milk   | or beverage dispensers *a 2  | .87" space is required betwee  | n each cutout  |   |   |  | ,  |   |   |
| Self-contained buil  | ilt-in milk<br>1/4                                  | or beverage dispensers *a 2 (1) 25.25" x 22.25"  | .87" space is required betwee<br>43.25" x 26.25" x 28.25"  | n each cutout  | 5.0   | 5-15P   | 304  | 51/24°   | 1223  | 134a/16oz   |
| Self-contained bui<br>MFSC-2020<br>MFSC-2821   | 1/4<br>1/4  | or beverage dispensers *a 2 (1) 25.25" x 22.25" (1) 10.75" x 21"   | .87" space is required betwee<br>43.25" x 26.25" x 28.25"<br>28.5" x 26.25" x 28.25"   | n each cutout<br>303<br>267  | 5.0<br>5.0  | 5-15P<br>5-15P  | 304<br>264   | 51/24°<br>45/26°   | 1223<br>1166  | 134a/16oz<br>134a/16oz  |
| Self-contained buil MFSC-2020 MFSC-2821 MFSC-31  | 1/4<br>1/4<br>1/4                                   | or beverage dispensers *a 2 (1) 25.25" x 22.25" (1) 10.75" x 21" (2) 10.75" x 21"*   | .87" space is required betwee<br>43.25" x 26.25" x 28.25"<br>28.5" x 26.25" x 28.25"<br>42" x 26.25" x 28.25"  | 303<br>267<br>306  | 5.0<br>5.0<br>5.0   | 5-15P<br>5-15P<br>5-15P   | 304<br>264<br>296  | 51/24°<br>45/26°<br>50/24°   | 1223<br>1166<br>1212  | 134a/16oz<br>134a/16oz<br>134a/16oz   |
| Self-contained bui<br>MFSC-2020<br>MFSC-2821<br>MFSC-31<br>MFSC-44<br>MFSC-57  | 1/4<br>1/4<br>1/4<br>1/4<br>1/4<br>1/4              | or beverage dispensers *a 2 (1) 25.25" x 22.25" (1) 10.75" x 21" (2) 10.75" x 21"* (3) 10.75" x 21"* (4) 10.75" x 21"*   | .87" space is required betwee<br>43.25" x 26.25" x 28.25"<br>28.5" x 26.25" x 28.25"<br>42" x 26.25" x 28.25"<br>55.5" x 26.25" x 28.25"   | n each cutout<br>303<br>267<br>306<br>413<br>461   | 5.0<br>5.0<br>5.0<br>5.0  | 5-15P<br>5-15P<br>5-15P<br>5-15P  | 304<br>264<br>296<br>408   | 51/24°<br>45/26°<br>50/24°<br>64/21°   | 1223<br>1166<br>1212<br>1346  | 134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz  |
| Self-contained bui<br>MFSC-2020<br>MFSC-2821<br>MFSC-31<br>MFSC-44<br>MFSC-57  | 1/4<br>1/4<br>1/4<br>1/4<br>1/4<br>1/4              | or beverage dispensers *a 2 (1) 25.25" x 22.25" (1) 10.75" x 21" (2) 10.75" x 21"* (3) 10.75" x 21"* (4) 10.75" x 21"*   | .87" space is required betwee<br>43.25" x 26.25" x 28.25"<br>28.5" x 26.25" x 28.25"<br>42" x 26.25" x 28.25"<br>55.5" x 26.25" x 28.25"<br>69" x 26.25" x 28.25"  | n each cutout<br>303<br>267<br>306<br>413<br>461   | 5.0<br>5.0<br>5.0<br>5.0  | 5-15P<br>5-15P<br>5-15P<br>5-15P  | 304<br>264<br>296<br>408   | 51/24°<br>45/26°<br>50/24°<br>64/21°   | 1223<br>1166<br>1212<br>1346  | 134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz  |
| Self-contained bui<br>MFSC-2020<br>MFSC-2821<br>MFSC-31<br>MFSC-44<br>MFSC-57<br>Remote built-in mi  | 1/4<br>1/4<br>1/4<br>1/4<br>1/4<br>1/4<br>1/4       | or beverage dispensers *a 2 (1) 25.25" × 22.25" (1) 10.75" × 21" (2) 10.75" × 21"* (3) 10.75" × 21"* (4) 10.75" × 21"* erage dispensers *a 2.87" sp  | .87" space is required betwee<br>43.25" x 26.25" x 28.25"<br>28.5" x 26.25" x 28.25"<br>42" x 26.25" x 28.25"<br>55.5" x 26.25" x 28.25"<br>69" x 26.25" x 28.25"<br>ace is required between each  | n each cutout 303 267 306 413 461 cutout   | 5.0<br>5.0<br>5.0<br>5.0<br>5.0   | 5-15P<br>5-15P<br>5-15P<br>5-15P<br>5-15P   | 304<br>264<br>296<br>408<br>519  | 51/24°<br>45/26°<br>50/24°<br>64/21°<br>79/18°   | 1223<br>1166<br>1212<br>1346<br>1447  | 134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz   |
| Self-contained bui<br>MFSC-2020<br>MFSC-2821<br>MFSC-31<br>MFSC-44<br>MFSC-57<br>Remote built-in mi  | 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/A 1/A 1/A 1/A N/A | or beverage dispensers *a 2 (1) 25.25" x 22.25" (1) 10.75" x 21" (2) 10.75" x 21"* (3) 10.75" x 21"* (4) 10.75" x 21"* erage dispensers *a 2.87" sp (1) 25.25" x 22.25"  | .87" space is required betwee<br>43.25" x 26.25" x 28.25"<br>28.5" x 26.25" x 28.25"<br>42" x 26.25" x 28.25"<br>55.5" x 26.25" x 28.25"<br>69" x 26.25" x 28.25"<br>acce is required between each<br>29.25" x 26.25" x 28.25"   | n each cutout 303 267 306 413 461 cutout 240   | 5.0<br>5.0<br>5.0<br>5.0<br>5.0<br>5.0  | 5-15P<br>5-15P<br>5-15P<br>5-15P<br>5-15P   | 304<br>264<br>296<br>408<br>519  | 51/24°<br>45/26°<br>50/24°<br>64/21°<br>79/18°   | 1223<br>1166<br>1212<br>1346<br>1447  | 134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz  |
| Self-contained bui<br>MFSC-2020<br>MFSC-2821<br>MFSC-31<br>MFSC-44<br>MFSC-57<br>Remote built-in mi<br>MF-2020<br>MF-2821  | 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/A 1/A N/A     | or beverage dispensers *a 2 (1) 25.25" x 22.25" (1) 10.75" x 21" (2) 10.75" x 21"* (3) 10.75" x 21"* (4) 10.75" x 21"* erage dispensers *a 2.87" sp (1) 25.25" x 22.25" (1) 10.75" x 21"   | .87" space is required betwee 43.25" x 26.25" x 28.25" 28.5" x 26.25" x 28.25" 42" x 26.25" x 28.25" 55.5" x 26.25" x 28.25" 69" x 26.25" x 28.25" ace is required between each 29.25" x 26.25" x 28.25" 14.5" x 26.25" x 28.25"   | n each cutout 303 267 306 413 461 cutout 240 197   | 5.0<br>5.0<br>5.0<br>5.0<br>5.0<br>5.0<br>N/A   | 5-15P<br>5-15P<br>5-15P<br>5-15P<br>5-15P<br>N/A  | 304<br>264<br>296<br>408<br>519<br>304<br>264                                    | 51/24°<br>45/26°<br>50/24°<br>64/21°<br>79/18°<br>51/24°<br>45/26°                                 | 1223<br>1166<br>1212<br>1346<br>1447<br>N/A   | 134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/N/A   |
| Self-contained bui<br>MFSC-2020<br>MFSC-2821<br>MFSC-31<br>MFSC-44<br>MFSC-57<br>Remote built-in mi<br>MF-2020<br>MF-2821<br>MF-31   | 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 N/A N/A         | or beverage dispensers *a 2 (1) 25.25" × 22.25" (1) 10.75" × 21" (2) 10.75" × 21"* (3) 10.75" × 21"* (4) 10.75" × 21"* erage dispensers *a 2.87" sp (1) 25.25" × 22.25" (1) 10.75" × 21"   | .87" space is required betwee 43.25" x 26.25" x 28.25" 28.5" x 26.25" x 28.25" 42" x 26.25" x 28.25" 55.5" x 26.25" x 28.25" 69" x 26.25" x 28.25" ace is required between each 29.25" x 26.25" x 28.25" 14.5" x 26.25" x 28.25"   | n each cutout 303 267 306 413 461 cutout 240 197 238   | 5.0<br>5.0<br>5.0<br>5.0<br>5.0<br>N/A<br>N/A   | 5-15P<br>5-15P<br>5-15P<br>5-15P<br>5-15P<br>N/A<br>N/A   | 304<br>264<br>296<br>408<br>519<br>304<br>264                                    | 51/24°<br>45/26°<br>50/24°<br>64/21°<br>79/18°<br>51/24°<br>45/26°<br>50/24°                       | 1223<br>1166<br>1212<br>1346<br>1447<br>N/A<br>N/A  | 134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/N/A<br>134a/N/A   |
| Self-contained bui<br>MFSC-2020<br>MFSC-2821<br>MFSC-31<br>MFSC-44<br>MFSC-57<br>Remote built-in mi<br>MF-2020<br>MF-2821<br>MF-31<br>MF-44<br>MF-57   | 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4             | or beverage dispensers *a 2 (1) 25.25" x 22.25" (1) 10.75" x 21" (2) 10.75" x 21"* (3) 10.75" x 21"* (4) 10.75" x 21"* erage dispensers *a 2.87" sp (1) 25.25" x 22.25" (1) 10.75" x 21"* (2)10.75" x 21"* (3)10.75" x 21"*  | .87" space is required betwee     43.25" x 26.25" x 28.25"     28.5" x 26.25" x 28.25"     42" x 26.25" x 28.25"     55.5" x 26.25" x 28.25"     69" x 26.25" x 28.25"     ace is required between each     29.25" x 26.25" x 28.25"     14.5" x 26.25" x 28.25"     41.5" x 26.25" x 28.25"     55" x 26.25" x 28.25"   | n each cutout 303 267 306 413 461 cutout 240 197 238 312   | 5.0<br>5.0<br>5.0<br>5.0<br>5.0<br>5.0<br>N/A<br>N/A<br>N/A                             | 5-15P<br>5-15P<br>5-15P<br>5-15P<br>5-15P<br>N/A<br>N/A<br>N/A                                    | 304<br>264<br>296<br>408<br>519<br>304<br>264<br>296<br>408                      | 51/24°<br>45/26°<br>50/24°<br>64/21°<br>79/18°<br>51/24°<br>45/26°<br>50/24°<br>64/21°             | 1223<br>1166<br>1212<br>1346<br>1447<br>N/A<br>N/A<br>N/A   | 134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/N/A<br>134a/N/A<br>134a/N/A   |
| Self-contained bui<br>MFSC-2020<br>MFSC-2821<br>MFSC-31<br>MFSC-44<br>MFSC-57<br>Remote built-in mi<br>MF-2020<br>MF-2821<br>MF-31<br>MF-44<br>MF-57   | 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4             | or beverage dispensers *a 2 (1) 25.25" x 22.25" (1) 10.75" x 21" (2) 10.75" x 21"* (3) 10.75" x 21"* (4) 10.75" x 21"* erage dispensers *a 2.87" sg (1) 25.25" x 22.25" (1) 10.75" x 21"* (2)10.75" x 21"* (3)10.75" x 21"* (4) 10.75" x 21"*  | .87" space is required betwee     43.25" x 26.25" x 28.25"     28.5" x 26.25" x 28.25"     42" x 26.25" x 28.25"     55.5" x 26.25" x 28.25"     69" x 26.25" x 28.25"     ace is required between each     29.25" x 26.25" x 28.25"     14.5" x 26.25" x 28.25"     41.5" x 26.25" x 28.25"     55" x 26.25" x 28.25"   | n each cutout 303 267 306 413 461 cutout 240 197 238 312   | 5.0<br>5.0<br>5.0<br>5.0<br>5.0<br>5.0<br>N/A<br>N/A<br>N/A                             | 5-15P<br>5-15P<br>5-15P<br>5-15P<br>5-15P<br>N/A<br>N/A<br>N/A                                    | 304<br>264<br>296<br>408<br>519<br>304<br>264<br>296<br>408                      | 51/24°<br>45/26°<br>50/24°<br>64/21°<br>79/18°<br>51/24°<br>45/26°<br>50/24°<br>64/21°             | 1223<br>1166<br>1212<br>1346<br>1447<br>N/A<br>N/A<br>N/A   | 134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/N/A<br>134a/N/A<br>134a/N/A   |
| Self-contained bui<br>MFSC-2020<br>MFSC-2821<br>MFSC-31<br>MFSC-44<br>MFSC-57<br>Remote built-in mi<br>MF-2020<br>MF-2821<br>MF-31<br>MF-44<br>MF-57<br>Remote built-in ic   | 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4             | or beverage dispensers *a 2 (1) 25.25" × 22.25" (1) 10.75" × 21" (2) 10.75" × 21"* (3) 10.75" × 21"* (4) 10.75" × 21"* erage dispensers *a 2.87" sp (1) 25.25" × 22.25" (1) 10.75" × 21" (2)10.75" × 21"* (3)10.75" × 21"* (4) 10.75" × 21"* (4) 10.75" × 21"*   | .87" space is required betwee     43.25" x 26.25" x 28.25"     28.5" x 26.25" x 28.25"     42" x 26.25" x 28.25"     55.5" x 26.25" x 28.25"     69" x 26.25" x 28.25"     ace is required between each     29.25" x 26.25" x 28.25"     14.5" x 26.25" x 28.25"     41.5" x 26.25" x 28.25"     41.5" x 26.25" x 28.25"     55" x 26.25" x 28.25"     41.5" x 26.25" x 28.25"     75" x 26.25" x 28.25"   | n each cutout 303 267 306 413 461 cutout 240 197 238 312 335   | 5.0<br>5.0<br>5.0<br>5.0<br>5.0<br>N/A<br>N/A<br>N/A<br>N/A                             | 5-15P<br>5-15P<br>5-15P<br>5-15P<br>5-15P<br>N/A<br>N/A<br>N/A<br>N/A                             | 304<br>264<br>296<br>408<br>519<br>304<br>264<br>296<br>408<br>519               | 51/24° 45/26° 50/24° 64/21° 79/18°  51/24° 45/26° 50/24° 64/21° 79/18°                             | 1223<br>1166<br>1212<br>1346<br>1447<br>N/A<br>N/A<br>N/A<br>N/A                                    | 134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/N/A<br>134a/N/A<br>134a/N/A<br>134a/N/A                                     |
| Self-contained bui<br>MFSC-2020<br>MFSC-2821<br>MFSC-31<br>MFSC-44<br>MFSC-57<br>Remote built-in mi<br>MF-2020<br>MF-2821<br>MF-31<br>MF-44<br>MF-57<br>Remote built-in ict<br>FF-3324<br>FF-2   | 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4             | or beverage dispensers *a 2 (1) 25.25" x 22.25" (1) 10.75" x 21" (2) 10.75" x 21"* (3) 10.75" x 21"* (4) 10.75" x 21"* erage dispensers *a 2.87" sp (1) 25.25" x 22.25" (1) 10.75" x 21"* (2)10.75" x 21"* (4) 10.75" x 21"* (4) 10.75" x 21"* (ispensers *a 2.87" space is a control of the contro | .87" space is required betwee  43.25" x 26.25" x 28.25"  28.5" x 26.25" x 28.25"  42" x 26.25" x 28.25"  55.5" x 26.25" x 28.25"  69" x 26.25" x 28.25"  ace is required between each  29.25" x 26.25" x 28.25"  14.5" x 26.25" x 28.25"  41.5" x 26.25" x 28.25"  cequired between each cutout  14.5" x 26.25" x 28.  | n each cutout 303 267 306 413 461 cutout 240 197 238 312 335   | 5.0<br>5.0<br>5.0<br>5.0<br>5.0<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A                      | 5-15P<br>5-15P<br>5-15P<br>5-15P<br>5-15P<br>N/A<br>N/A<br>N/A<br>N/A                             | 304<br>264<br>296<br>408<br>519<br>304<br>264<br>296<br>408<br>519               | 51/24°<br>45/26°<br>50/24°<br>64/21°<br>79/18°<br>51/24°<br>45/26°<br>50/24°<br>64/21°<br>79/18°   | 1223<br>1166<br>1212<br>1346<br>1447<br>N/A<br>N/A<br>N/A<br>N/A                                    | 134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/N/A<br>134a/N/A<br>134a/N/A<br>134a/N/A                                     |
| Self-contained bui<br>MFSC-2020<br>MFSC-2821<br>MFSC-31<br>MFSC-44<br>MFSC-57<br>Remote built-in mi<br>MF-2020<br>MF-2821<br>MF-31<br>MF-44<br>MF-57<br>Remote built-in ict<br>FF-3324<br>FF-2   | 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4             | or beverage dispensers *a 2 (1) 25.25" x 22.25" (1) 10.75" x 21" (2) 10.75" x 21"* (3) 10.75" x 21"* (4) 10.75" x 21"* erage dispensers *a 2.87" sp (1) 25.25" x 22.25" (1) 10.75" x 21"* (2)10.75" x 21"* (4) 10.75" x 21"* (4) 10.75" x 21"* (ispensers *a 2.87" space is a control of the contro | .87" space is required betwee 43.25" x 26.25" x 28.25" 28.5" x 26.25" x 28.25" 42" x 26.25" x 28.25" 55.5" x 26.25" x 28.25" 69" x 26.25" x 28.25" ace is required between each 29.25" x 26.25" x 28.25" 14.5" x 26.25" x 28.25" 41.5" x 26.25" x 28.25" 41.5" x 26.25" x 28.25" equired between each cutout 14.5" x 26.25" x 28.25" required between each cutout 14.5" x 26.25" x 28.   | n each cutout 303 267 306 413 461 cutout 240 197 238 312 335   | 5.0<br>5.0<br>5.0<br>5.0<br>5.0<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A                      | 5-15P<br>5-15P<br>5-15P<br>5-15P<br>5-15P<br>N/A<br>N/A<br>N/A<br>N/A                             | 304<br>264<br>296<br>408<br>519<br>304<br>264<br>296<br>408<br>519               | 51/24°<br>45/26°<br>50/24°<br>64/21°<br>79/18°<br>51/24°<br>45/26°<br>50/24°<br>64/21°<br>79/18°   | 1223<br>1166<br>1212<br>1346<br>1447<br>N/A<br>N/A<br>N/A<br>N/A                                    | 134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/N/A<br>134a/N/A<br>134a/N/A<br>134a/N/A                                     |
| Self-contained buil MFSC-2020 MFSC-2821 MFSC-31 MFSC-31 MFSC-44 MFSC-57 Remote built-in mil MF-2020 MF-2821 MF-31 MF-44 MF-57 Remote built-in icc FF-3324 FF-2 Self-contained buil   | 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4             | (1) 25.25" × 22.25" (1) 10.75" × 21" (2) 10.75" × 21"* (3) 10.75" × 21"* (4) 10.75" × 21"* erage dispensers *a 2.87" sp. (1) 25.25" × 22.25" (1) 10.75" × 21"* (2) 10.75" × 21"* (4) 10.75" × 21"* (4) 10.75" × 21"* (5) 10.75" × 21"* (6) 10.75" × 21"* (7) 10.75" × 21"* (8) 10.75" × 21"* (9) 10.75" × 21"* (1) 10.75" × 21"* (2) 10.75" × 21"* (2) 10.75" × 21"*   | .87" space is required betwee     43.25" x 26.25" x 28.25"     28.5" x 26.25" x 28.25"     42" x 26.25" x 28.25"     55.5" x 26.25" x 28.25"     69" x 26.25" x 28.25"     ace is required between each     29.25" x 26.25" x 28.25"     14.5" x 26.25" x 28.25"     41.5" x 26.25" x 28.25"     41.5" x 26.25" x 28.25"     75" x 26.25" x 28.25"     41.5" x 26.25" x 28.25"     75" x 26.25" x 28.25" | n each cutout 303 267 306 413 461 cutout 240 197 238 312 335 215 290 cutout                            | 5.0<br>5.0<br>5.0<br>5.0<br>5.0<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A                      | 5-15P 5-15P 5-15P 5-15P N/A N/A N/A N/A N/A N/A N/A   | 304<br>264<br>296<br>408<br>519<br>304<br>264<br>296<br>408<br>519               | 51/24° 45/26° 50/24° 64/21° 79/18°  51/24° 45/26° 50/24° 64/21° 79/18°  35/22° 51/18°              | 1223<br>1166<br>1212<br>1346<br>1447<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A                             | 134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/N/A<br>134a/N/A<br>134a/N/A<br>134a/N/A<br>134a/N/A<br>404A/N/A             |
| Self-contained bui<br>MFSC-2020<br>MFSC-2821<br>MFSC-31<br>MFSC-44<br>MFSC-57<br>Remote built-in mi<br>MF-2020<br>MF-2821<br>MF-31<br>MF-44<br>MF-57<br>Remote built-in ici<br>FF-3324<br>FF-2<br>Self-contained bui<br>FFSC-3324  | 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4             | or beverage dispensers *a 2 (1) 25.25" × 22.25" (1) 10.75" × 21" (2) 10.75" × 21"* (3) 10.75" × 21"* (4) 10.75" × 21"* erage dispensers *a 2.87" sp (1) 25.25" × 22.25" (1) 10.75" × 21"* (2)10.75" × 21"* (3)10.75" × 21"* (4) 10.75" × 21"* (1) 10.75" × 21"* (2)10.75" × 21"* (2)10.75" × 21"* (2)10.75" × 21"* (2)10.75" × 21"* ream dispensers *a 2.87" sp (1) 10.75" × 21" (2) 10.75" × 21" (2) 10.75" × 21"   | .87" space is required betwee     43.25" x 26.25" x 28.25"     28.5" x 26.25" x 28.25"     42" x 26.25" x 28.25"     55.5" x 26.25" x 28.25"     69" x 26.25" x 28.25"  lace is required between each     29.25" x 26.25" x 28.25"  14.5" x 26.25" x 28.25"  41.5" x 26.25" x 28.25"  ace is required between each cutout  14.5" x 26.25" x 28.25"  ace is required between each  28.5" x 26.25" x 28.25"   | n each cutout 303 267 306 413 461 cutout 240 197 238 312 335 215 290 cutout 308 408                    | 5.0<br>5.0<br>5.0<br>5.0<br>5.0<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A        | 5-15P<br>5-15P<br>5-15P<br>5-15P<br>5-15P<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A | 304<br>264<br>296<br>408<br>519<br>304<br>264<br>296<br>408<br>519<br>434<br>709 | 51/24° 45/26° 50/24° 64/21° 79/18°  51/24° 45/26° 50/24° 64/21° 79/18°  35/22° 51/18°              | 1223<br>1166<br>1212<br>1346<br>1447<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A                      | 134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/N/A<br>134a/N/A<br>134a/N/A<br>134a/N/A<br>134a/N/A<br>404A/N/A<br>404A/N/A |
| Self-contained bui<br>MFSC-2020<br>MFSC-2821<br>MFSC-31<br>MFSC-44<br>MFSC-57<br>Remote built-in mi<br>MF-2020<br>MF-2821<br>MF-31<br>MF-44<br>MF-57<br>Remote built-in ici<br>FF-3324<br>FF-2<br>Self-contained bui<br>FFSC-3324  | 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4             | or beverage dispensers *a 2 (1) 25.25" × 22.25" (1) 10.75" × 21" (2) 10.75" × 21"* (3) 10.75" × 21"* (4) 10.75" × 21"* erage dispensers *a 2.87" sp (1) 25.25" × 22.25" (1) 10.75" × 21"* (2)10.75" × 21"* (3)10.75" × 21"* (4) 10.75" × 21"* (1) 10.75" × 21"* (2)10.75" × 21"* (2)10.75" × 21"* (2)10.75" × 21"* (2)10.75" × 21"* ream dispensers *a 2.87" sp (1) 10.75" × 21" (2) 10.75" × 21" (2) 10.75" × 21"   | .87" space is required betwee     43.25" x 26.25" x 28.25"     28.5" x 26.25" x 28.25"     42" x 26.25" x 28.25"     55.5" x 26.25" x 28.25"     69" x 26.25" x 28.25"     ace is required between each     29.25" x 26.25" x 28.25"     14.5" x 26.25" x 28.25"     41.5" x 26.25" x 28.25"     ace is required between each cutout     14.5" x 26.25" x 28.25"     ace is required between each cutout     28.5" x 26.25" x 28.25"     ace is required between each     28.5" x 26.25" x 28.25"     42" x 26.25" x 28.25"  | n each cutout 303 267 306 413 461 cutout 240 197 238 312 335 215 290 cutout 308 408                    | 5.0<br>5.0<br>5.0<br>5.0<br>5.0<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A        | 5-15P<br>5-15P<br>5-15P<br>5-15P<br>5-15P<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A | 304<br>264<br>296<br>408<br>519<br>304<br>264<br>296<br>408<br>519<br>434<br>709 | 51/24° 45/26° 50/24° 64/21° 79/18°  51/24° 45/26° 50/24° 64/21° 79/18°  35/22° 51/18°              | 1223<br>1166<br>1212<br>1346<br>1447<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A                      | 134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/N/A<br>134a/N/A<br>134a/N/A<br>134a/N/A<br>134a/N/A<br>404A/N/A             |
| Self-contained bui<br>MFSC-2020<br>MFSC-2821<br>MFSC-31<br>MFSC-44<br>MFSC-57<br>Remote built-in mi<br>MF-2020<br>MF-2821<br>MF-31<br>MF-44<br>MF-57<br>Remote built-in ico<br>FF-3324<br>FF-2<br>Self-contained bui<br>FFSC-3324<br>FFSC-2<br>Self-contained bui<br>RFFSC-103 | 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4             | or beverage dispensers *a 2 (1) 25.25" × 22.25" (1) 10.75" × 21" (2) 10.75" × 21"* (3) 10.75" × 21"* (4) 10.75" × 21"* erage dispensers *a 2.87" sp (1) 25.25" × 22.25" (1) 10.75" × 21"* (2) 10.75" × 21"* (3) 10.75" × 21"* (4) 10.75" × 21"* (1) 10.75" × 21"* (2) 10.75" × 21"* ream dispensers *a 2.87" sp (1) 10.75" × 21" (2) 10.75" × 21"* (2) 10.75" × 21"* (2) 10.75" × 21"* (2) 10.75" × 21"* (2) 10.75" × 21"*   | .87" space is required betwee  43.25" x 26.25" x 28.25"  28.5" x 26.25" x 28.25"  42" x 26.25" x 28.25"  55.5" x 26.25" x 28.25"  69" x 26.25" x 28.25"  ace is required between each  29.25" x 26.25" x 28.25"  14.5" x 26.25" x 28.25"  41.5" x 26.25" x 28.25"  41.5" x 26.25" x 28.25"  41.5" x 26.25" x 28.25"  equired between each cutout  14.5" x 26.25" x 28.25"  required between each cutout  28" x 26.25" x 28"  ace is required between each  28.5" x 26.25" x 28.25"  42" x 26.25" x 28.25"  | n each cutout 303 267 306 413 461 cutout 240 197 238 312 335 215 290 cutout 308 408 en each cutout 428 | 5.0<br>5.0<br>5.0<br>5.0<br>5.0<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A | 5-15P 5-15P 5-15P 5-15P 5-15P N/A N/A N/A N/A N/A N/A 5-15P 5-15P                                 | 304<br>264<br>296<br>408<br>519<br>304<br>264<br>296<br>408<br>519<br>434<br>709 | 51/24° 45/26° 50/24° 64/21° 79/18°  51/24° 45/26° 50/24° 64/21° 79/18°  35/22° 51/18°  37/43°(ref) | 1223<br>1166<br>1212<br>1346<br>1447<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A<br>N/A<br>1596 (ref) | 134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/16oz<br>134a/N/A<br>134a/N/A<br>134a/N/A<br>134a/N/A<br>404A/N/A<br>404A/N/A<br>404A/N/A |



## Installation

#### Location

These units are intended for indoor use only. Be sure the location chosen has a floor strong enough to support the total weight of the cabinet and contents. Units in this product line can weigh as much as 1500 pounds when it is fully stocked. Reinforce the floor as necessary to provide for maximum loading.

For the most efficient refrigeration, be sure to provide good air circulation inside and out.

**Inside cabinet:** Do not pack unit so full that air cannot circulate. Take care not to block air flow to the fans and allow space along sides.

**Outside cabinet:** Be sure that the unit has access to ample air. Avoid hot corners and locations near stoves and ovens. It is recommended that the rear of the unit be no less than two inches from any wall, partition or any other object which will restrict exhaust air flow.

#### Leveling

A level cabinet looks better and will perform better because the cabinet will not be subject to unnecessary strain due to doors not properly lining up with door frames.

Some models have casters for ease of cleaning underneath and for mobility. It is important that the unit be installed in a stable condition with the front casters locked before operating. Locking the front casters after installation is the operator's responsibility.

#### **Electrical connection**

A standard self-contained unit is provided with a power cord and three-prong grounded plug.

The unit should be plugged into a receptacle with its own circuit protection that matches the amperage of the plug.



Refer to the amperage data on page three or the serial tag data and your local code or the National Electrical Code to be sure the unit is connected to the proper power source. A protected circuit of the correct voltage and amperage must be run for connection to the unit.



The power supply must be disconnected whenever performing maintenance or repairing the equipment!



The unit must never be operated without the louvered panel in place.

#### **Built-in units**

All self-contained units (MFSC, FFSC and RFFSC) are tested at the factory to assure proper operation. The unit should not be installed directly next to high heat generating equipment (ranges, griddles, etc.).

These units are built into the counter from below and must be supported from the bottom. The counter cut-out sizes and power supply requirements are shown in the specifications on page three. All refrigerators have drains located in the bottom of the tank. An appropriate drainage area or container must be provided by the customer. Be sure to place the unit so the pressure control, located near the compressor, can be reached.

For installation of remote units (MF, FF and RFF), consult a refrigeration service company to connect refrigeration lines to the remote condensing unit.



Self-contained refrigerated units (MFSC, FFSC and RFFSC) require air flow to the compressor. A louver is provided and must be installed in the counter in front of the condenser. An equal size opening at the rear of the cabinet must also be provided to allow warm air to escape. Failure to do so will void all product warranties.

### Free standing units

All self-contained units (N, N6/10/14, NDF, NLFAC, SCF and NSCF) are tested at the factory to assure proper operation. The unit should not be installed directly next to high heat generating equipment (ranges, griddles, etc.).

These units are free standing, either on legs or casters. The power supply requirements are shown on page three. All free standing units have drains located in the bottom of the tank. An appropriate drainage area or container must be provided by the customer.

Do not place the unit against a wall or any object that will block air circulation through the condensing unit. If the unit must be placed against a wall, leave a minimum of 2" of space for air flow.

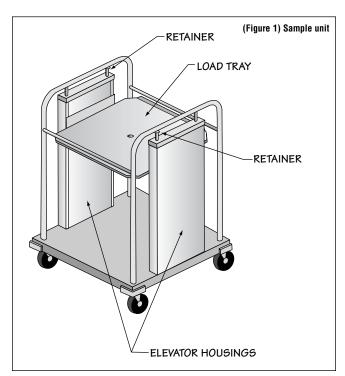


## **Installation Continued**

### How to adjust self-leveling dispenser

**Tools Needed:** One small flat head screw driver; One Phillips head screw driver.

- **1.** Always wear safety glasses when adjusting your dispenser. Also, lock brakes on mobile units before beginning.
- **2.** Unload dispenser and remove stainless steel load tray by lifting straight up and set it aside (see figure 1).

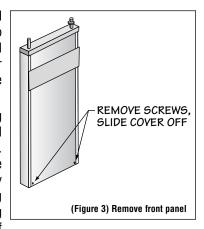


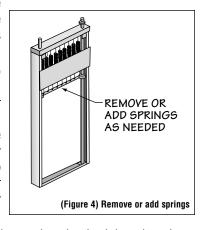
- Use small regular screw driver to loosen each retainer mounted on stainless steel rod at top of each elevator housing.
- 4. To remove elevator housing. lift housing straight up to clear the stud on unit base. Then gently swing the bottom of the housing towards the inside of the unit and pull housing out of the unit (see figure 2). Lay housing on flat surface.



- 5. Use Phillips head screw driver to remove front panel on the elevator housing (see figure 3).
- 6. If carrier is riding too high, you need to remove springs. With carrier all the way to the top, gently disengage one spring at a time, unhooking bottom loop out of carrier bracket (see figure 4). Remove as many springs as necessary.

If carrier is riding too low, you need to add springs. With carrier all the way to the top, gently engage one spring at a time by hooking bottom loop of spring into carrier bracket. Add as many springs as necessary.





- 7. When finished, put elevator housing back in unit and put stainless steel load tray back on elevator housings. Load unit to test dispensing level. If spring adjustment does not position carrier properly, repeat procedure #6 trying different springs. If this does not work, a different set of springs may be required. To order, call The Delfield Company Parts and Service Department at 800.733.8829
- 8. If level is appropriate, put front panels back on and tighten retainer.



CAUTION: Dispenser should not be operated with front panels off elevator housing.

**NOTE:** When adjusting the elevators make sure each have the same number and size of springs connected to the carrier on both sides. This will prevent the load tray from binding.



## Operation: N, N6/10/14, NDF, NLFAC, MF & MFSC Series

N, N6/10/14, NDF, NLFAC and MFSC Series milk dispensers are set at the factory to maintain temperatures between 36°F and 40°F. No further adjustment should be necessary. To begin operation on self-contained models, plug the electrical supply cord into a receptacle with the correct voltage. Remote models will require a connection to a separate refrigeration system.

### Loading: N, MF & MFSC Series

To load, place a complete layer of cartons or bottles standing upright on the load tray. Then place a divider tray on top of this layer, then another layer of cartons or bottles on this tray, then another tray and another layer, etc. As each additional tray is loaded, the elevators gradually lower. The last layer may be placed on top without the use of another tray. When loading the average tall half pint bottles, four layers may be loaded into each compartment standing upright and the fifth layer laying down.



It is very important to use the divider trays provided between each successive layer of contents to assure the correct balance of the load and the proper action of the elevating mechanism.

Wire racks, when used, should be loaded completely. When placing one rack on top of the other, be sure the stacking lugs are properly aligned.

#### Loading: N6/10/14 Series

These cabinets are designed to dispense 13" x 13" x 11" high (maximum dimensions) dairy cases. Place one case loaded with milk on the carrier and then place a second case loaded with milk on top of the first case. Press down on the cases

leaning them toward the retaining bracket located under the top lid track, then gradually release pressure on the cases so that the top edge of the case engages with the retaining bracket.

The elevating mechanism is designed to keep the contents several inches below the top of the cabinet when fully loaded. This distance serves two purposes:

- **A.** It keeps the top layer of milk completely refrigerated even when the lids are removed.
- **B.** It insures that the lids will operate without striking the contents as successive layers are added.

### **Loading: NDF Series**

These cabinets are designed to dispense  $13^{\circ} \times 13^{\circ} \times 11^{\circ}$  high (maximum dimensions) dairy cases. They do not have a self-leveling mechanism. Simply place the cases on top of each other inside the cabinet through the wide opening in the top and front.

#### **Loading: NLFAC Series**

These cabinets are designed to dispense  $13^{\circ} \times 13^{\circ} \times 11^{\circ}$  high (maximum dimensions) dairy cases. Model NLFAC-8 holds eight cases; four on the bottom and four on the top. Model NLFAC-12 holds twelve cases; six on the bottom and six on the top. Model NLFAC-16 holds sixteen cases, eight on the bottom and eight on the top.

Milk cases are loaded through the wide opening in the top and front of the unit. Fold the hinged lids up and back and rest them on the top. The cabinet interior has self-locating guides installed to make loading easy.

## Operation: FFSC, RFFSC, SCF & NSCF series

FFSC and SCF Series ice cream dispensers are set at the factory to maintain temperatures between -5°F and 0°F. RFFSC and NSCF Series combination milk and ice cream dispensers are set at the factory to maintain temperatures between 36°F and 40°F for refrigerated product and between -5°F and 0°F for frozen product. Each combination unit is constructed with two tanks and separate controls. No further adjustments should be necessary. To begin operation plug the electrical supply cord

into a receptacle with the correct voltage.

#### Loading

To load, place two layers of ice cream on the load tray, then a tray, two additional layers of ice cream, then another tray, etc. Do not stack ice cream above the frost line on the interior of the freezer. See the instructions for the MF units (above) for loading the refrigerated portion of the combination units.

## **Temperature Control**



#### **NLFAC Thermostat Control**

Set the thermostat toward 1 for higher temperatures and toward 7 for lower temperatures. The refrigerator factory setting is 4 and maintains 38°F (3°C) in the box.



#### Low Pressure Control, Remaining Self Contained Models

If it is necessary to adjust the temperature, turn the knob clockwise as indicated on the control. Make adjustments gradually. It may take an hour to realize the temperature change. Milk or beverage dispenser factory settings are 17°F differential, 34°F cut in, and 17°F cut out. Milk and ice cream dispenser factory settings are 25°F differential, 30°F cut in, and 5°F cut out.



## **Maintenance**

#### **Door Gasket Maintenance**

Door gaskets require regular cleaning to prevent mold and mildew build up and also to retain the elasticity of the gasket. Gasket cleaning can be done with the use of warm soapy water. Avoid full strength cleaning products on gaskets as this can cause them to become brittle and crack. Never use sharp tools or knives to scrape or clean the gasket. Gaskets can be easily replaced and do not require the use of tools or an authorized service person. The gaskets are "Dart" style and can be pulled out of the groove in the door and new gaskets can be "pressed" back into place.

#### **Drain Maintenance - Base**

Each unit has a drain located inside the unit that removes the condensation from the evaporator coil and routes it to an external condensate evaporator pan. Each drain can become loose or disconnected during normal use. If you notice water accumulation on the inside of the unit be sure the drain tube is connected to the evaporator drain pan. If water is collecting underneath the unit make sure the end of the drain tube is in the condensate evaporator in the machine compartment. The leveling of the unit is important as the units are designed to drain properly when level. Be sure all drain lines are free of obstructions.

#### **Caster Maintenance**

Wipe casters with a damp cloth monthly to prevent corrosion.



The power switch must be turned to OFF and the unit disconnected from the power source whenever performing service, maintenance functions or cleaning the refrigerated area.

#### **Refrigerators and Freezers**

The interior and exterior can be cleaned using soap and warm water. If this isn't sufficient, try ammonia and water or a nonabrasive liquid cleaner. When cleaning the exterior, always rub with the "grain" of the stainless steel to avoid marring the finish. Do not use an abrasive cleaner because it will scratch the stainless steel and can damage the breaker strips and gaskets.

#### **Stainless Steel Care and Cleaning**

To prevent discoloration or rust on stainless steel several important steps need to be taken. First, we need to understand the properties of stainless steel. Stainless steel contains 70-80% iron, which will rust. It also contains 12-30% chromium, which forms an invisible passive film over the steels surface, which acts as a shield against corrosion. As long as the protective layer is intact, the metal is still stainless. If the film is broken or contaminated, outside elements can begin to breakdown the steel and begin to form discoloration of rust. Proper cleaning of stainless steel requires soft cloths or plastic scouring pads.

#### **NEVER USE STEEL PADS, WIRE BRUSHES OR SCRAPERS!**

Cleaning solutions need to be alkaline based or non-chloride cleaners. Any cleaner containing chlorides will damage the protective film of the stainless steel. Chlorides are also commonly found in hard water, salts, and household and industrial cleaners. If cleaners containing chlorides are used be sure to rinse repeatedly and dry thoroughly. Routine cleaning of stainless steel can be done with soap and water. Extreme stains or grease should be cleaned with a non-abrasive cleaner and plastic scrub pad. Always rub with the grain of the steel. There are stainless steel cleaners available which can restore and preserve the finish of the steels protective layer. Early signs of stainless steel breakdown are small pits and cracks. If this has begun, clean thoroughly and start to apply stainless steel cleaners in attempt to restore the passivity of the steel.



Never use an acid based cleaning solution! Many food products have an acidic content, which can deteriorate the finish. Be sure to clean the stainless steel surfaces of ALL food products. Common items include, tomatoes, peppers and other vegetables.

#### Cleaning the Condenser Coil

In order to maintain proper refrigeration performance, the condenser fins must be cleaned of dust, dirt and grease regularly. It is recommended that this be done at least every three months. If conditions are such that the condenser is totally blocked in three months, the frequency of cleaning should be increased. Clean the condenser with a vacuum cleaner or stiff brush. If extremely dirty, a commercially available condenser cleaner may be required.

Failure to maintain a clean condenser coil can initially cause high temperatures and excessive run times. Continuous operation with a dirty or clogged condenser coil can result in compressor failure. Neglecting the condenser coil cleaning procedures will void any warranties associated with the compressor and cost to replace the compressor.



Never use a high-pressure water wash for this cleaning procedure as water can damage the electrical components located near or at the condenser coil.

#### Preventing blower coil corrosion

To help prevent corrosion of the blower coil, store all acidic items, such as pickles and tomatoes, in sealable containers. Immediately wipe up all spills.

Cleaning the condensate evaporator (remote models only)

The stainless steel condensate evaporator pan should be cleaned every six months. Use a vacuum cleaner or damp cloth to remove dust that may have accumulated. This will prevent corrosion of the stainless steel.

#### Defrosting

Milk or Ice Cream dispensers require defrosting after 3/8" to 1/2" of frost forming. On/Off switch is located above the louver panel.

Never use sharp objects or tools to clean or scrape ice/frost build up. A puncture could cause irreparable damage to the refrigeration system.

#### Cleaning the NLFAC milk dispensers

The following special instructions apply to the model NLFAC dispenser only. After cleaning the interior and exterior as described above, be sure to return the milk case loading tray to the bottom of the unit. The load tray is required not only for easy self-locating of milk cases, but it also ensures proper air flow through the evaporator coil for the air curtain.



Any restriction to the air flow path, including leaving the milk case load tray out of the cabinet, will result in the voiding of your warranties.

A drain is supplied to simplify cleaning of the interior. Open the clamp used to close off the drain tube. Drain accumulated liquid from the cabinet. Be sure to re-clamp the tubing before resuming operation of the NLFAC unit.

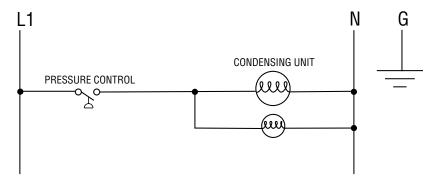
#### Air Diffuser Cleaning Procedure

The air diffuser is located on the inside wall by the evaporator fans. Remove the air diffuser from the equipment. Soak in fresh hot dishwater for five minutes. Rinse by spraying soap off with warm water, directing the spray into the holes. Repeat rinsing steps until material is visibly clean. Soak in sanitizing solution for five minutes. Replace into equipment.

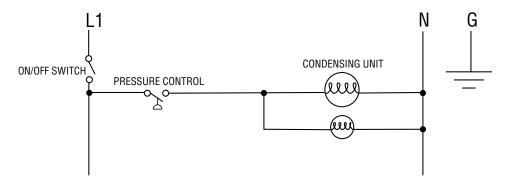


# Wiring Diagrams

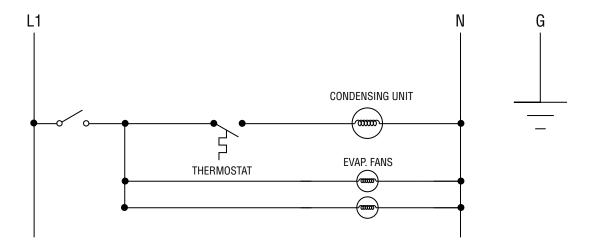
## MODELS — MFSC, & RFFSC



## MODELS — N, SCF, NSCF, & NDF

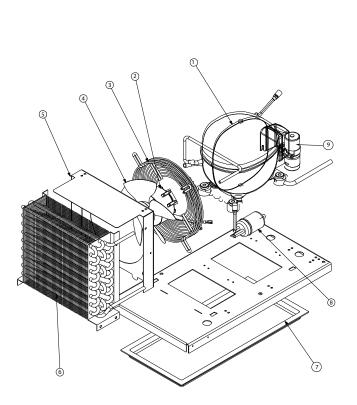


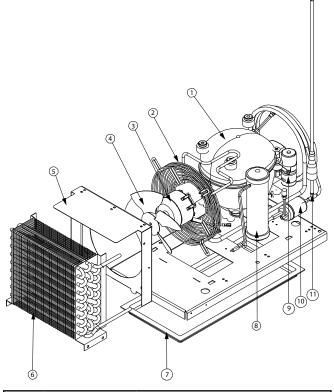
### MODEL — NLFAC





# **Replacement Parts - Condensing Units**



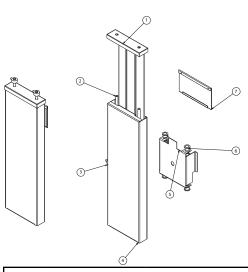


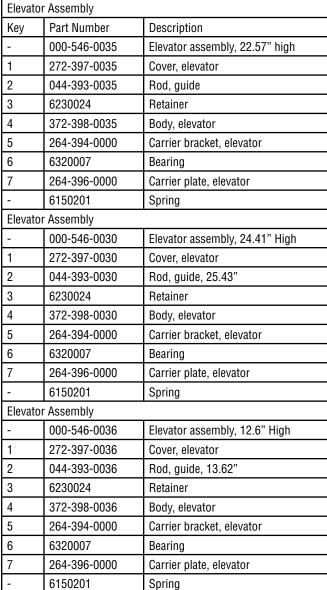
| Condensing Unit |              |   |  |  |
|-----------------|--------------|---|--|--|
| Key             | Part Number  | Description                             |  |  |
| -               | 000-BN5-0030 | Condensing Unit                         |  |  |
| 1               | 3526999      | Compressor, Danfoss, NF5.5CLX, 115V/60Z |  |  |
| 2               | 2162717      | Motor, condenser fan, 9W, 115V          |  |  |
| 3               | 2160020      | Guard, condenser fan                    |  |  |
| 4               | 3516457      | Blade, condenser fan                    |  |  |
| 5               | 026-C58-0030 | Shroud, condenser coil                  |  |  |
| 6               | 3516454      | Coil, Condenser                         |  |  |
| 7               | 075-231-0030 | Pan, condensate                         |  |  |
| 8               | 3516322      | Drier, filter                           |  |  |
| 9               | 2194787      | Capacitor, start 280MFD                 |  |  |
| 9               | 3516444      | Relay, overload, Danfoss, NF5.5CLX      |  |  |

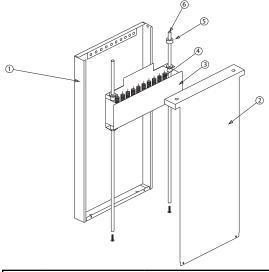
| Condensing Unit |              |   |  |  |
|-----------------|--------------|---|--|--|
| Key             | Part Number  | Description                               |  |  |
| -               | 000-BN5-003G | Condensing Unit                           |  |  |
| 1               | 3527000      | Compressor, Danfoss, NF7CLS,<br>115V/60HZ |  |  |
| 2               | 2160020      | Guard, condenser fan                      |  |  |
| 3               | 2162717      | Motor, condenser fan, 9W, 115V            |  |  |
| 4               | 3516457      | Blade, condenser fan                      |  |  |
| 5               | 026-C58-0030 | Shroud, condenser coil                    |  |  |
| 6               | 3516254      | Coil, condenser                           |  |  |
| 7               | 075-231-0030 | Pan, condensate                           |  |  |
| 8               | 3516458      | Receiver tank                             |  |  |
| 9               | 3516438      | Relay, overload, Danfoss, NF7CLX          |  |  |
| 9               | 2194788      | Capacitor, start, 320MFD                  |  |  |
| 10              | 3516322      | Drier, filter                             |  |  |
| 11              | 3516324      | High pressure cutout                      |  |  |



## **Replacement Parts - Elevator Assemblies**







| Elevator Assembly |               |                              |  |  |
|-------------------|---------------|------------------------------|--|--|
| -                 | 000-546-Z0002 | Elevator Assembly, Large     |  |  |
| 1                 | 312-398-Z000B | Jacket elevator              |  |  |
| 2                 | 221-397-Z0006 | Cover, top, elevator         |  |  |
| 3                 | 000-BJQ-Z0000 | Carrier, elevator            |  |  |
| 4                 | 6150201       | Spring, Extension            |  |  |
| 4                 | 6150202       | Spring, Extension            |  |  |
| 5                 | 6230024       | Retainer, Field Adj.         |  |  |
| 6                 | 044-393-Z0000 | Rod, Guide, Elevator, 25.43" |  |  |
| -                 | 6320007       | Bearing, 0.50"ID, 0.625"OD   |  |  |
| Elevator          | Assembly      |                              |  |  |
| -                 | 000-546-Z000A | Elevator Assembly, Small     |  |  |
| 1                 | 312-398-Z000C | Jacket, elevator             |  |  |
| 2                 | 272-397-Z0007 | Cover, top, elevator         |  |  |
| 3                 | 000-BJQ-Z0001 | Carrier, elevator            |  |  |
| 4                 | 6150201       | Spring, Extension            |  |  |
| 5                 | 6230024       | Retainer, Field Adj.         |  |  |
| 6                 | 044-393-Z0000 | Rod, Guide, Elevator, 25.43" |  |  |
| -                 | 6320007       | Bearing, 0.50"ID, 0.625"OD   |  |  |



| NLFAC8         |                                      |
|----------------|--------------------------------------|
| 3516172        | Blade, fan, evaporator               |
| 031-264-0000   | Bracket, Evaporator Fan Motor        |
| 3234783        | Caster, 5, Plate, Swivel, Break      |
| 3234156        | Catch, Magnetic, Snap-In             |
| 3516065        | Coil, Evaporator, 3.00" X 24.75"     |
| AE630AT-602-J7 | Compressor                           |
| 3526675        | Condensing Unit, 1/3HP, Hi, R134A    |
| 2183348        | Cord, power, 16/3 W/Nema 5-15P       |
| 3516101        | Drier, Filter, 1/40DF                |
| 3516173        | Guard, Plastic, Fan                  |
| 3234684        | Lock Assembly, Glass Door            |
| 2162691        | Motor, evaporator, 115V,50/60        |
| 2190154        | Switch, Rocker, 20A/125V,            |
| 3516059        | Thermometer, Digital                 |
| 000-282-0054   | Thermostat control                   |
| 3516062        | Valve, Expansion, R134A              |
| *271-BGF-0003  | Divider, Milk Crate, NLFAC           |
| *359-411-0040  | Louver, 13.00" X 25.00"              |
| *377-AZ0-0004  | Bolt, Lock                           |
| *000-BI7-0030  | Cover assembly, NLFAC8               |
| 6230007        | Track, Door, 36.21, PVC, Black       |
| 6230017        | Hinge, aluminum in-between           |
| 6230020        | Hinge, aluminum                      |
| 6230110        | Hinge, plastic insert                |
| NLFAC12        |                                      |
| 000-282-0054   | Assembly, Control, Thermostat        |
| 3516172        | Blade, fan, evaporator               |
| 031-264-0000   | Bracket, Fan Motor                   |
| 3234783        | Caster, 5, Plate, Swivel, Break      |
| 3234156        | Catch, Magnetic, Snap-In             |
| 3516065        | Coil, Evaporator, 3.00 X 24.75       |
| 3527025        | Compressor, AK168AT-038-J7, Tecumseh |
| 3526688        | Condensing Unit, 1/2HP, Hi, R134A    |
| 2183348        | Cord, power, 16/3 W/Nema 5-15P       |
| 3516101        | Drier, Filter, 1/40DF                |
| 3516173        | Guard, Plastic, Fan, 6"              |
| 3234684        | Lock Assembly, Glass Door            |
| 2162691        | Motor, Fan, 115V, 50/60              |
| 2190154        | Switch, Rocker, 20A/125V             |

| 3516059       | Thermometer, Digital                 |
|---------------|--------------------------------------|
| 3516062       | Valve, Expansion, R134A, RFG         |
| *271-BGF-0003 | Divider, Milk Crate, NLFAC           |
| *359-411-0040 | Louver, 13.00 X 25.00                |
| *377-AZ0-0004 | Bolt, Lock                           |
| *000-BI7-0031 | Cover Assembly, Lift, NLFAC-12       |
| 6230008       | Track, Door, 50.21,PVC,BLACK         |
| 6230018       | Hinge, aluminum in-between 24.0"     |
| 6230020       | Hinge, Aluminum, Heavy Duty          |
| 6230110       | Insert, Plastic, Hinge, #6           |
| NLFAC16       |                                      |
| 000-282-0054  | Assembly, Control, Thermostat        |
| 3516172       | Blade, fan, evaporator               |
| 031-264-0000  | Bracket, Fan Motor                   |
| 3234783       | Caster, 5, Plate, Swivel, Break      |
| 3234156       | Catch, Magnetic, Snap-In             |
| 3516065       | Coil, Evaporator, 3.00 X 24.75       |
| 3527024       | Compressor, AK169AT-038-J7, Tecumseh |
| 3526689       | Condensing Unit, 1/2HP, Hi, R134A    |
| 2183348       | Cord, power, 16/3 W/Nema 5-15P       |
| 3516101       | Drier, Filter, 1/40DF                |
| 3516173       | Guard, Plastic, Fan, 6"              |
| 3234684       | Lock Assembly, Glass Door            |
| 2162691       | Motor, Fan, 115V, 50/60              |
| 2190154       | Switch, Rocker, 20A/125V             |
| 3516059       | Thermometer, Digital                 |
| 3516062       | Valve, Expansion, R134A, RFG         |
| *271-BGF-0003 | Divider, Milk Crate, NLFAC           |
| *359-411-0040 | Louver, 13.00 X 25.00                |
| *377-AZ0-0004 | Bolt, Lock                           |
| *000-BI7-0032 | Cover Assembly, Lift, NLFAC-16       |
| 6230009       | Track, Door, 64.21, PVC, Black       |
| 6230019       | Hinge, Aluminum, In Between          |
| 6230020       | Hinge, Aluminum, Heavy Duty          |
| 6230110       | Insert, Plastic, Hinge, #6           |



<sup>Part print on page 16.
Condenser Assembly on page 9.
Elevator Assembly on page 10.</sup> 

### Milk, Ice Cream & Milk & Ice Cream Dispensers Service and Installation Manual

| N-520, 860, 1200 & 1530 |   |  |  |
|-------------------------|---|--|--|
| *265-774-0039           | Carrier, elevator                                       |  |  |
| AE540AT-238-J7          | Compressor, Tecumseh                                    |  |  |
| 3526674                 | Condensing Unit, 1/4HP, Hi, R134A                       |  |  |
| 2183348                 | Cord, power, 16/3 W/Nema 5-15P                          |  |  |
| *030-392-0030           | Divider, Tray   |  |  |
| 3234065                 | Drain, 1" brass, 4" long, w/locknut and washer          |  |  |
| 6690493                 | Drain, Valve, 3/4 NPT                                   |  |  |
| 3516101                 | Drier, Filter, 1/40DF                                   |  |  |
| †000-546-0036           | Elevator assembly, 12.6" High (on condensing unit side) |  |  |
| †000-546-0030           | Elevator assembly, 24.41" High                          |  |  |
| 3234110                 | Handle, lid, N-520/860/1200/1530                        |  |  |
| 3234645                 | Leg, 6"   |  |  |
| 000-AYP-0037            | Lid, sliding, bottom, N-520/860/1530                    |  |  |
| 000-AYP-0038            | Lid, sliding, bottom, N-1200/1530                       |  |  |
| 000-AYP-0035            | Lid, sliding, top, N-520/860                            |  |  |
| 000-AYP-0036            | Lid, sliding, top, N-1200/1530                          |  |  |
| 3234105                 | Locknut/Washer,1 Drain                                  |  |  |
| *356-AZD-0000           | Louver, 13.5" x 9"                                      |  |  |
| *356-AZD-0001           | Louver, 13.5" x 13"                                     |  |  |
| *356-411-000C           | Louver, 25" x 13"                                       |  |  |
| 2193927                 | Pressure control  |  |  |
| 2190154                 | Switch, Rocker, 20A/125V,                               |  |  |
| 3516062                 | Valve, Expansion, R134A, RFG,                           |  |  |

| N6-N10-N14     |   |
|----------------|---|
| *265-774-003A  | Carrier, N6, N10, N14                           |
| AE540AT-238-J7 | Compressor - Tecumseh                           |
| 3526674        | Condensing Unit, 1/4HP, Hi, R134A               |
| 2183348        | Cord, power, 16/3 W/Nema 5-15P                  |
| 3234065        | Drain, 1" brass, 4" long, w/ locknut and washer |
| 6690493        | Drain, Valve, 3/4" NPT                          |
| 3516101        | Drier, Filter, 1/4"ODF,                         |
| †000-546-0035  | Elevator assembly, 22.57" high                  |
| 3234110        | Handle, lid, N6/10/14                           |
| 3234645        | Leg, 6"   |
| 000-AYP-0033   | Lid Assembly, Bottom Sliding, N6                |

| 000-AYP-0034  | Lid Assembly, Bottom Sliding, N10/14 |
|---------------|--------------------------------------|
|               | 3, 3,                                |
| 000-AYP-0030  | Lid Assembly, Top Sliding, N6        |
| 000-AYP-0031  | Lid Assembly, Top Sliding, N10       |
| 000-AYP-0032  | Lid Assembly, Top Sliding, N14       |
| 3234105       | Locknut/Washer, 1" Drain             |
| *356-AZD-0000 | Louver, 13.5 x 9                     |
| *356-AZD-0001 | Louver, 13.5 x 13                    |
| *356-411-000C | Louver, 25 x 13                      |
| 2193927       | Pressure control                     |
| 2190154       | Switch, Rocker, 20A/125V             |
| 3516062       | Valve, Expansion, R134A, RFG         |

| NDF-12         |                                   |
|----------------|-----------------------------------|
| 6230170        | Bumper, Corner, Small, PVC        |
| 3234180        | Caster, 4, Plate, Swivel, Break   |
| 3234307        | Catch, Door                       |
| AE540AT-238-J7 | Compressor - Tecumseh             |
| 3526674        | Condensing Unit, 1/4HP, Hi, R134A |
| 2193927        | Control, Pressure, Low            |
| 2183348        | Cord, Lead, 16/3 W/Nema 5-15P     |
| 3234242        | Drain, Plastic, 1IPS, 2.87        |
| 6690493        | Drain, Valve, 3/4" NPT            |
| 3516101        | Drier, Filter, 1/4"ODF            |
| 6700007        | Gasket, Snap-In                   |
| 000-B0V-0031   | Hinge, Pin Assembly, Right Hand   |
| 000-BOV-0030   | Hinge/Pin Assembly, Left Hand     |
| 000-BOM-0032   | Lid Assembly, Front, NDF-12       |
| 000-BOM-0030   | Lid Assembly, Top, NDF-12         |
| 6230003        | Lock, Key, Lid, NDF/NDFA          |
| *359-AZD-0030  | Panel, Access, NDF-12             |
| 3516059        | Thermometer, Digital              |
| 3516062        | Valve, Expansion, R134A, RFG      |



Part print on page 16.
Condenser Assembly on page 9.
Elevator Assembly on page 10.

| NDF-18         |                                 |
|----------------|---------------------------------|
| 6230170        | Bumper, Corner, Small, PVC      |
| 3234180        | Caster, 4, Plate, Swivel, Break |
| 3234307        | Catch, Door                     |
| AE630AT-602-J7 | Compressor                      |
| 3526675        | Condensing Unit, 1/3HP, Hi      |
| 2193927        | Control, Pressure, Low          |
| 2183348        | Cord, power, 16/3 W/Nema 5-15P  |
| 3234242        | Drain, Plastic, 1IPS, 2.87      |
| 6690493        | Drain, Valve, 3/4 NPT           |
| 3516101        | Drier, Filter, 1/40DF           |
| 6700008        | Gasket, Snap-In                 |
| 000-B0V-0031   | Hinge, Pin Assembly, Right      |
| 000-B0V-0030   | Hinge/Pin Assembly, Left        |
| 000-BOM-0033   | Lid Assembly, Front, NDF-18     |
| 000-B0M-0031   | Lid Assembly, Top, NDF-18       |
| 6230003        | Lock, Key, Lid, NDF/NDFA        |
| *359-AZD-0031  | Panel, Access, NDF-18           |
| 3516059        | Thermometer, Digital            |
| 3516062        | Valve, Expansion, R134A, RFG    |

| NSCF-48        |                                  |
|----------------|----------------------------------|
| 372-395-Z000B  | Carrier, Large Ice Cream         |
| 2193927        | Control, Pressure, Low           |
| 2183348        | Cord, power, 16/3 W/Nema 5-15P   |
| *030-392-0000  | Divider, Shelley IC Tank         |
| 3234242        | Drain, Plastic, 1IPS, 2.87       |
| 6690493        | Drain, Valve, 3/4 NPT            |
| 3234645        | Leg, 6", s/s                     |
| 3234188        | Lid                              |
| *359-411-0003  | Louver, 25 x 13                  |
| *356-AZD-0001  | Louver, Side, 13.00 X 13.50      |
| *356-AZD-0000  | Louver, Side, 9.00 X 13.50       |
| 2190154        | Switch, Rocker, 20A/125V         |
| 3516273        | Valve, Expansion, 1/4, Hi, R404a |
| 3516225        | Valve, Expansion, 1/4, Lo, R404a |
| *3516265       | Valve, EPR, 3/8 ODF              |
| †000-546-Z000A | Elevator Assembly, Small         |
| **000-BN5-0030 | Condensing Unit                  |

| SCF-32         |                                   |
|----------------|-----------------------------------|
| 372-395-Z000B  | Carrier, Large Ice Cream          |
| 2193927        | Control, Pressure, Low            |
| 2183348        | Cord, power, 16/3 W/Nema 5-15P    |
| *030-392-0000  | Divider, Shelley IC Tank          |
| 3234242        | Drain, Plastic, 1IPS, 2.87        |
| 6690493        | Drain, Valve, 3/4 NPT             |
| 3234645        | Leg, 6", s/s                      |
| 3234188        | Lid                               |
| *359-411-0003  | Louver, 25 x 13                   |
| *356-AZD-0001  | Louver, Side, 13.00 X 13.50       |
| *356-AZD-0000  | Louver, Side, 9.00 X 13.50        |
| 2190154        | Switch, Rocker, 20A/125V          |
| 3516225        | Valve, Expansion, Freezer, 1/4Ton |
| †000-546-Z000A | Elevator Assembly, Small          |
| **000-BN5-0030 | Condensing Unit                   |

| SCF-48         |                                   |
|----------------|-----------------------------------|
| 372-395-Z000B  | Carrier, Large Ice Cream          |
| 2193927        | Control, Pressure, Low            |
| 2183348        | Cord, power, 16/3 W/Nema 5-15P    |
| *030-392-0000  | Divider, Shelley IC Tank          |
| 3234242        | Drain, Plastic, 1IPS, 2.87        |
| 6690493        | Drain, Valve, 3/4 NPT             |
| 3234645        | Leg, 6", s/s                      |
| 3234188        | Lid                               |
| *359-411-0003  | Louver, 25 x 13                   |
| *356-AZD-0001  | Louver, Side, 13.00 X 13.50       |
| *356-AZD-0000  | Louver, Side, 9.00 X 13.50        |
| 2190154        | Switch, Rocker, 20A/125V          |
| 3516225        | Valve, Expansion, Freezer, 1/4Ton |
| †000-546-Z000A | Elevator Assembly, Small          |
| **000-BN5-003G | Condensing Unit                   |

- \* Part print on page 16.
- \*\* Condenser Assembly on page 9.
- † Elevator Assembly on page 10.



| MFSC-31, MFSC-44, | MFSC-57, MFSC-2821                |
|-------------------|-----------------------------------|
| 372-395-Z000B     | Carrier, ice cream                |
| AE540AT-238-J7    | Compressor, Tecumsh               |
| 3526674           | Condensing Unit, 1/4HP, Hi, R134A |
|                   | Control, Pressure, Low            |
| 2183348           | Cord, power, 16/3 W/Nema 5-15P    |
| 1701278           | Cover, expansion valve            |
| *030-392-0000     | Divider, Shelley IC Tank          |
| 3234242           | Drain, Plastic, 1IPS, 2.87        |
| 3516101           | Drier, Filter, 1/40DF             |
| 3234188           | Lid, Large, Ice Cream             |
| *359-411-0003     | Panel, Louvered, DropIn           |
| 3234021           | Stopper, Drain, 1IPS              |
| 3516062           | Valve, Expansion, R134A, RFG      |
| †000-546-Z000A    | Elevator Assembly, Small          |
| MFSC-2020         |                                   |
| 372-395-Z000C     | Carrier, ice cream                |
| AE540AT-238-J7    | Compressor, Tecumsh               |
| 3526674           | Condensing Unit, 1/4HP, Hi, R134A |
| 2193927           | Control, Pressure, Low            |
| 2183348           | Cord, power, 16/3 W/Nema 5-15P    |
| 1701278           | Cover, expansion valve            |
| 3234242           | Drain, Plastic, 1IPS, 2.87        |
| 3516101           | Drier, Filter, 1/40DF             |
| 3234110           | Handle, lid                       |
| 000-BMN-Z0001     | Lid, Assembly                     |
| *359-411-0003     | Panel, Louvered, DropIn           |
| 3234021           | Stopper, Drain, 1IPS              |
| 3516062           | Valve, Expansion, R134A, RFG      |
| †000-546-Z0002    | Elevator Assembly, Large          |

| MF-2821, MF-31, MF-44, MF-57 |                            |  |
|------------------------------|----------------------------|--|
| 6320007                      | Bearing, 0.50ID, 0.6250D   |  |
| 372-395-Z000B                | Carrier                    |  |
| 000-BJQ-Z0001                | Carrier, elevator          |  |
| 1701278                      | Cover, expansion valve     |  |
| 272-397-Z0007                | Cover, top, elevator       |  |
| *030-392-0000                | Divider, Shelley IC Tank   |  |
| 3234242                      | Drain, Plastic, 1IPS, 2.87 |  |
| †000-546-Z000A               | Elevator Assembly, Small   |  |

- Part print on page 16.
- Condenser Assembly on page 9. Elevator Assembly on page 10.

| MF-2020        |                              |
|----------------|------------------------------|
| 1701278        | Cover, expansion valve       |
| 3234242        | Drain, Plastic, 1IPS, 2.87   |
| 3234110        | Handle, lid                  |
| 000-BMN-Z0001  | Lid assembly                 |
| 3234021        | Stopper, Drain, 1IPS         |
| 3516062        | Valve, Expansion, R134A, RFG |
| *030-392-0000  | Divider, Shelley IC Tank     |
| 372-395-Z000C  | Carrier                      |
| †000-546-Z000A | Elevator Assembly, Small     |

| FF-2 & FF-3324 |                                   |
|----------------|-----------------------------------|
| 1701278        | Cover, expansion valve            |
| 3234242        | Drain, Plastic, 1IPS, 2.87        |
| 3234188        | Lid                               |
| 3234021        | Stopper, Drain, 1IPS              |
| 3516225        | Valve, Expansion, Freezer, 1/4Ton |
| †000-546-Z000A | Elevator Assembly, Small          |

| L              |                                   |
|----------------|-----------------------------------|
| FFSC-2         |                                   |
| 2193927        | Control, Pressure, Low            |
| 2183348        | Cord, power, 16/3 W/Nema 5-15P    |
| 3234242        | Drain, Plastic, 1IPS, 2.87        |
| 3516101        | Drier, Filter, 1/40DF             |
| 3234188        | Lid                               |
| 3234021        | Stopper, Drain, 1IPS              |
| 3516225        | Valve, Expansion, Freezer, 1/4Ton |
| 372-395-Z000B  | Carrier, Large Ice Cream          |
| *030-392-0000  | Divider, Shelley IC Tank          |
| †000-546-Z000A | Elevator Assembly, Small          |
| **000-BN5-003G | Condensing Unit                   |
| FFSC-3324      |                                   |
| 2193927        | Control, Pressure, Low            |
| 2183348        | Cord, power, 16/3 W/Nema 5-15P    |
| 3234242        | Drain, Plastic, 1IPS, 2.87        |
| 3516101        | Drier, Filter, 1/40DF             |
| 3234188        | Lid, Large, Ice Cream             |
| 3234021        | Stopper, Drain, 1IPS              |
| 3516225        | Valve, Expansion, Freezer, 1/4Ton |
| *030-392-0000  | Divider, Shelley IC Tank          |
| 1701278        | Cover, expansion valve            |
| †000-546-Z000A | Elevator Assembly, Small          |
| **000-BN5-0030 | Condensing Unit                   |
|                |                                   |



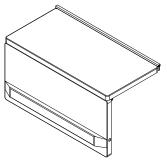
| RFFSC-103      |                                   |
|----------------|-----------------------------------|
| 372-395-Z000B  | Carrier, Large Ice Cream          |
| 2193927        | Control, Pressure, Low            |
| 2183348        | Cord, Lead, 16/3 W/Nema 5-15      |
| 1701278        | Cover, Expansion Valve, Molded    |
| *030-392-0000  | Divider, Shelley IC Tank          |
| 3234242        | Drain, Plastic, 1IPS, 2.87        |
| 3516101        | Drier, Filter, 1/40DF             |
| 3234188        | Lid, Large, Ice Cream             |
| 3234021        | Stopper, Drain, 1IPS              |
| *3516265       | Valve, EPR, 3/8 ODF               |
| 3516225        | Valve, Expansion, Freezer, 1/4Ton |
| 3516273        | Valve, Expansion, R404A, REF, 1/4 |
| †000-546-Z000A | Elevator Assembly, Small          |
| **000-BN5-0030 | Condensing Unit                   |

| RFF-103        |                                   |
|----------------|-----------------------------------|
| 372-395-Z000B  | Carrier, Large Ice Cream          |
| 1701278        | Cover, Expansion Valve, Molded    |
| *030-392-0000  | Divider, Shelley IC Tank          |
| 3234242        | Drain, Plastic, 1IPS, 2.87        |
| 3234188        | Lid, Large, Ice Cream             |
| 3234021        | Stopper, Drain, 1IPS              |
| 3516225        | Valve, Expansion, Freezer, 1/4Ton |
| 3516273        | Valve, Expansion, R404A, Ref, 1/4 |
| †000-546-Z000A | Elevator Assembly, Small          |

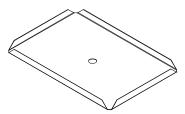
- Part print on page 16. Condenser Assembly on page 9.
- † Elevator Assembly on page 10.



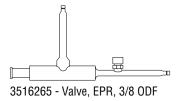
## **Replacement Part Prints**

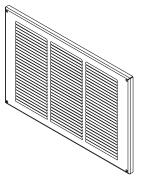


000-B17-0030 - Cover assembly, NLFAC8 000-B17-0031 - Cover Assembly, Lift, NLFAC-12 000-B17-0032 - Cover Assembly, Lift, NLFAC-16



030-392-0000 - Divider, Shelley IC Tank 030-392-0030 - Divider, Tray, MF, FF, RFF, SCF Series

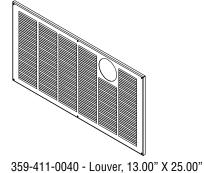




356-AZD-0000 - Louver, 13.5" x 9" 356-AZD-0001 - Louver, 13.5" x 13" 356-411-000C - Louver, 25" x 13", N-Series 359-411-0003 - Louver, 25" x 13"



265-774-0039 - Carrier, elevator, N520, N860, N1200, N1530





359-AZD-0030 - Panel, Access, NDF-12 359-AZD-0031 - Panel, Access, NDF-18



265-774-003A - Carrier, N6, N10, N14

271-BGF-0003 - Divider, Milk Crate, NLFAC



377-AZ0-0004 - Bolt, Lock



### Standard Labor Guidelines To Repair Or Replace Parts On Delfield Equipment

Advice and recommendations given by Delfield Service Technicians do not constitute or guarantee any special coverage.

- A maximum of 1-hour is allowed to diagnose a defective component.
- A maximum of 1-hour is allowed for **retrieval of parts** not in stock.
- A maximum travel distance of 100 miles round trip and 2-hours will be reimbursed.
- Overtime, installation/start-up, normal control adjustments, general maintenance, glass breakage, freight damage, and/or correcting and end-user installation error will not be reimbursed under warranty unless pre-approved with a Service Work Authorization from Delfield. You must submit the number with the service claim.

#### Labor Of 1 Hour Is Allowed To Replace:

- · Compressor Start Components and Overload Protector
- Condensate Element
- Defrost Timer
- · Door Hinges, Locks, and Gaskets
- Evaporator/Condenser Fan Motor and Blade
- Fan Delay/Defrost Termination Switch
- · Hi-limit/Thermal Protector Switch
- · Springs/Lowerator
- Thermometer
- Thermostat

#### **Labor Of 2 Hours To Replace:**

- Defrost Element
- · Locate/Repair Leak
- · Pressure Control

### Labor Of 3 Hours To Replace:

- · Condenser or Evaporator Coil
- Expansion Valve

#### Labor Of 4 Hours To Replace:

Compressor

This includes recovery of refrigerant and leak check.

\$55.00 maximum reimbursement for refrigerant recovery (includes recovery machine, pump, torch, oil, flux, minor fittings, solder, brazing rod, nitrogen, or similar fees.)

#### Refrigerants:

- R134A A maximum of \$5.00/lb. or 31¢/oz. will be reimbursed.
- R404A A maximum of \$15.00/lb. or \$1.00/oz. will be reimbursed.



#### Milk, Ice Cream & Milk & Ice Cream Dispensers Service and Installation Manual

### Standard One Year Limited Warranty One Year Parts, 90 Days Labor

The Delfield Company ("Delfield") warrants to the Original Purchaser of the Delfield product (herein called the "Unit") that such Unit, and all parts thereof, will be free from defects in material and workmanship under normal use and service for a period of one (1) year from the date of shipment of the Unit to the Original Purchaser or, if the Original Purchaser returns the warranty card completely filled out including the date of installation within thirty (30) days of receipt of the Unit, one (1) year from the date of installation. During this one year warranty period, Delfield will repair or replace any defective part or portion there of returned to Delfield by the Original Purchaser which Delfield determines was defective due to faulty material or workmanship. The Original purchaser will pay all labor, crating, freight and related costs incurred in the removal of the Unit of defective component and shipment to Delfield, except that during a period of either ninety (90) days from the date of shipment of the Unit to the Original Purchaser or, if the Original Purchaser returns the warranty card completely filled out including the date of installation within thirty (30) days of receipt of the Unit, ninety (90) days from the date of installation Delfield will pay all related labor costs. Delfield will pay the return costs if the Unit or part thereof was defective.

The term "Original Purchaser" as used herein means that person, firm, association, or corporation for whom the Unit was originally installed.

This warranty does not apply to any Unit or part thereof that has been subjected to misuse, neglect, alteration, or accident, such as accidental damage to the exterior finish, operated contrary to the recommendations specified by Delfield; or repaired or altered by anyone other than Delfield in any way so as to, in Delfield's sole judgement, affect its quality or efficiency. This warranty does not apply to any Unit that has been moved from the location where it was originally installed. This warranty also does not cover the refrigerator drier or the light bulbs used in the Unit. The warranty is subject to the user's normal maintenance and care responsibility as set forth in the Service and Installation Manual, such as cleaning the condenser coil, and is in lieu of all other obligations of Delfield. Delfield neither assumes, nor authorizes any other person to assume for Delfield, any other liability in connection with Delfield's products.

Removal or defacement of the original Serial Number or Model Number from any Unit shall be deemed to release Delfield from all obligations hereunder or any other obligations, express or implied.

Parts furnished by suppliers to Delfield are guaranteed by Delfield only to the extent of the original manufacturer's express warranty to Delfield. Failure of the Original Purchaser to receive such manufacturers warranty shall in no way create any warranty, expressed or implied, or any other obligation or liability on Delfield's part in respect thereof.

IF THE CUSTOMER IS USING A PART THAT RESULTS IN A VOIDED WARRANTY AND A DELFIELD AUTHORIZED REPRESENTATIVE TRAVELS TO THE INSTALLATION ADDRESS TO PERFORM WARRANTY SERVICE, THE SERVICE REPRESENTATIVE WILL ADVISE CUSTOMER THE WARRANTY IS VOID. SUCH SERVICE CALLS WILL BE BILLED TO CUSTOMER AT THE AUTHORIZED SERVICE CENTER'S THEN APPLICABLE TIME AND MATERIALS RATES. CONSIDER: CUSTOMER MAY INITIATE A SERVICE AGREEMENT WITHOUT PARTS COVERAGE.

If shipment of a replacement part is requested prior to the arrival in the Delfield factory of the part claimed to be defective, the Original Purchaser must accept delivery of the replacement part on a C.O.D. basis, with credit being issued after the part has been received and inspected at Delfield's plant and determined by Delfield to be within this warranty.

Under no condition does this warranty give the Original Purchaser the right to replace the defective Unit with a complete Unit of the same manufacturer or of another make. Unless authorized by Delfield in writing, this warranty does not permit the replacement of any part, including the motor-compressor, to be made with the part of another make or manufacturer.

No claims can be made under this warranty for spoilage of any products for any reason, including system failure.

The installation contractor shall be responsible for building access, entrance and field conditions to insure sufficient clearance to allow any hood(s), vent(s), or Unit(s) if necessary, to be brought into the building. Delfield will not be responsible for structural changes or damages incurred during installation of the Unit or any exhaust system.

Delfield shall not be liable in any manner for any default or delay in performance hereunder caused by or resulting from any contingency beyond Delfield's control, including, but not limited to, war, governmental restrictions or restraints, strike, lockouts, injunctions, fire, flood, acts of nature, short or reduced supply of raw materials, or discontinuance of the parts by the original part manufacturer.

Except as provided in any Additional Four Year Protection Plan, if applicable, and the Service Labor Contract, if applicable, the foregoing is exclusive and in lieu of all other warranties, whether written or oral, express or implied. This warranty supersedes and excludes any prior oral or written representations or warranties. Delfield expressly disclaims any implied warranties of merchantability, fitness for a particular purpose, or compliance with any law, treaty, rule or regulation relating to the discharge of substances into the environment. The sole and exclusive remedies of any person relating to the Unit, and the full liability of Delfield for any breach of this warranty, will be as provided in this warranty.

Other than this Delfield Standard One Year Limited Warranty, any applicable Delfield Additional Four Year Protection Plan or applicable Delfield Service Labor Contract, the Original Purchaser agrees and acknowledges that no other warranties are offered or provided in connection with or for the Unit or any other part thereof.

In no event will Delfield be liable for special, incidental or consequential damages, or for damages in the nature of penalties.

IF DURING THE WARRANTY PERIOD, CUSTOMER USES A PART FOR THIS DELFIELD EQUIPMENT OTHER THAN AN UNMODIFIED NEW OR RECYCLED PART PURCHASED DIRECTLY FROM DELFIELD OR ANY OF ITS AUTHORIZED SERVICE CENTERS AND/OR THE PART BEING USED IS MODIFIED FROM ITS ORIGINAL CONFIGURATION, THIS WARRANTY WILL BE VOID. FURTHER, DELFIELD AND ITS AFFILIATES WILL NOT BE LIABLE FOR ANY CLAIMS DAMAGES OR EXPENSES INCURRED BY THE CUSTOMER WHICH ARISE DIRECTLY OR INDIRECTLY, IN WHOLE OR IN PART, DUE TO THE INSTALLATION OF ANY MODIFIED PART AND/OR PART RECEIVED FROM AN UNAUTHORIZED SERVICE CENTER. If the warranty becomes void, Customer may purchase from Delfield, if available, a Service Agreement or service at the then current time and materials rate.

For more information on Delfield warranty's log on and check out the service section of our web site at www.delfield.com.



### Additional Four Year Protection Plan (For Motor-Compressor Only)

| Delfield Model# | Serial # | Date |
|-----------------|----------|------|
|                 |          |      |

In addition to the Standard One Year Warranty on the Motor-Compressor contained in the above listed Delfield product (the "Unit"), The Delfield Company ("Delfield") also agrees to repair, or exchange with similar or interchangeable parts in design and capacity at Delfield's option, the defective Motor-Compressor contained in the Unit (the "Motor-Compressor), or any part thereof, for the Original Purchaser only, at any time during the four (4) years following the initial one (1) year period commencing on the date of installation for the Original Purchaser. Failure of the Original Purchaser to register the registration card containing the Original Purchasers name, address, date of installation, model number and serial number of the Unit containing the Motor-Compressor within 30 days from the date of installation shall void this warranty. This additional warranty is only available if the Motor-Compressor is inoperative due to defects in material or factory workmanship, as determined by Delfield in its sole judgement and discretion. The Original Purchaser shall be responsible for returning the defective Motor-Compressor to Delfield prepaid, F.O.B. at the address shown on the back cover of this manual.

The term "Original Purchaser" as used herein means that person, firm, association, or corporation for whom the Unit was originally installed.

The term "Motor-Compressor" as used herein does not include unit base, air or water cooled condenser, receiver, electrical accessories such as relay, capacitors, refrigerant controls, or condenser fan/motor assembly. This warranty does not cover labor charges incidental to the replacement of parts. This warranty further does not include any equipment to which said condensing unit is connected, such as cooling coils, temperature controls or refrigerant metering devices. This warranty shall be void if the Motor-Compressor, in Delfield's sole judgement, has been subjected to misuse, neglect, alteration or accident, operated contrary to the recommendations specified by the Unit manufacturer, repaired or altered by anyone other than Delfield in any way so as, in Delfield's sole judgment, to affect its quality or efficiency or if the serial number has been altered, defaced or removed. This Warranty does not apply to a Motor-Compressor in any Unit that has been moved from the location where it was originally installed. The addition of methyl chloride to the condensing unit or refrigeration system shall void this warranty.

#### **General Conditions**

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Delfield shall not be liable in any manner for any default or delay in performance hereunder caused by or resulting from any contingency beyond Delfield's control, including, but not limited to, war, governmental restrictions or restraints, strike, lockouts, injunctions, fire, flood, acts of nature, short or reduced supply of raw materials, or discontinuance of any part or the Motor-Compressor by the unit manufacturer.

Replacement of a defective Motor-Compressor is limited to one (1) Motor-Compressor by us during the four (4) year period. Delfield shall replace the Motor-Compressor at no charge.

This warranty does not give the Original Purchaser of the Motor-Compressor the right to purchase a complete replacement Motor-Compressor of the same make or of another make. It further does not permit the replacement to be made with a Motor-Compressor of another kind unless authorized by Delfield. In the event Delfield authorizes the Original Purchaser to purchase a replacement Motor-Compressor locally, only the wholesale cost of the Motor-Compressor is refundable.

Expressly excluded from this warranty are damages resulting from spoilage of goods.

Except as provided in any applicable Standard One Year Limited Warranty or applicable Service Labor Contract, the foregoing is exclusive and in lieu of all other warranties, whether written or oral, express or implied. This Warranty supersedes and excludes any prior oral or written representations or warranties. Delfield expressly disclaims any implied warranties of merchantability, fitness for a particular purpose or compliance with any law, treaty, rule or regulation relating to the Motor-Compressor, and the full liability of Delfield for any breach of this warranty, will be as provided in this warranty.

Other than any applicable Delfield Standard One year Limited Warranty, this Delfield Additional Four Year Protection Plan and any applicable Delfield Service Labor Contract, the Original Purchaser agrees and acknowledges that no other warranties are offered or provided in connection with or for the Motor-Compressor or any part thereof.

In no event will Delfield be liable for special, incidental or consequential damages, or for damages in the nature of penalties.











Covington, TN

# Thank you for choosing Delfield!

Help is a phone call away. Help our team of professional, courteous customer service reps by having your model number and serial number available at the time of your call (800) 733-8829.

| Model:             | S/N: |
|--------------------|------|
| Installation Date: | -    |



For a list of Delfield's authorized parts depots, visit our website at www.delfield.com.

