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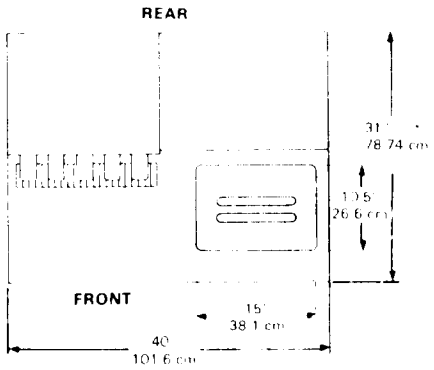
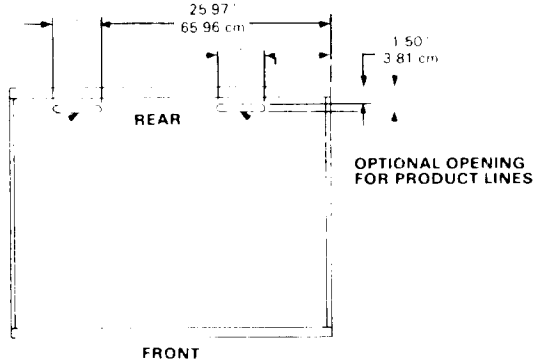
SPECIFICATIONS
MODELS PMF450 & PMF650

TOP VIEW



OPTIONAL OPENING FOR UTILITY LINES



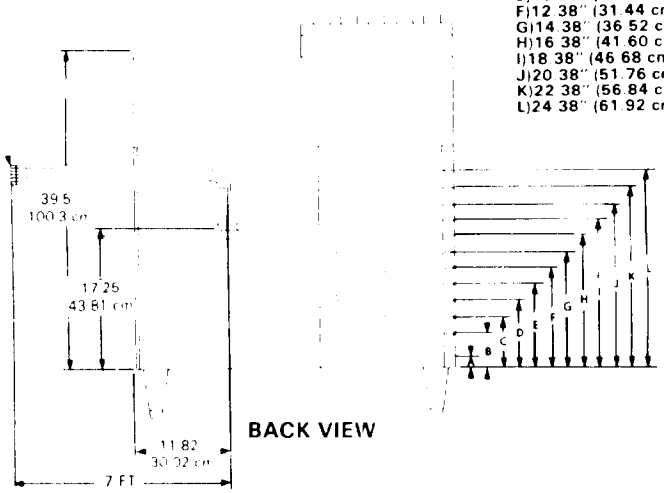
OPTIONAL OPENING FOR PRODUCT LINES

BOTTOM VIEW

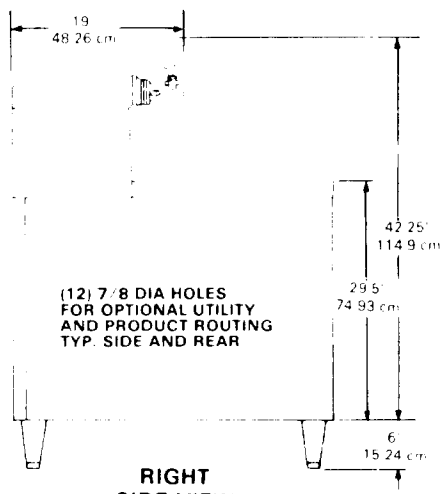
FIVE SYRUP PRODUCT LINES w/1/4 S.S. FLARE SWIVELNUT ENDS

FIVE FLAVORED DRINK DISPENSING VALVES

A)1.44" (3.66 cm)
B)4.38" (11.11 cm)
C)6.38" (16.20 cm)
D)8.38" (21.28 cm)
E)10.38" (26.36 cm)
F)12.38" (31.44 cm)
G)14.38" (36.52 cm)
H)16.38" (41.60 cm)
I)18.38" (46.68 cm)
J)20.38" (51.76 cm)
K)22.38" (56.84 cm)
L)24.38" (61.92 cm)



BACK VIEW



RIGHT SIDE VIEW

SPECIFICATIONS (CONT'D)

MODEL PMF450

Bin Storage: 215 lbs. SS Bin*
Air-Cooled: Model PMF450AE-1
Water-Cooled: Model PMF450WE-1
Electrical: 115/60/1
Est. Ship Wt.: 470 lbs.

MODEL PMF650

Bin Storage: 215 lbs. SS Bin*
Air-Cooled: Model PMF650AE-1
Water-Cooled: Model PMF650WE-1
Electrical: 115/60/1
Est. Ship Wt.: 510 lbs.

FEATURES ON BOTH MODELS

DRINK HEADS

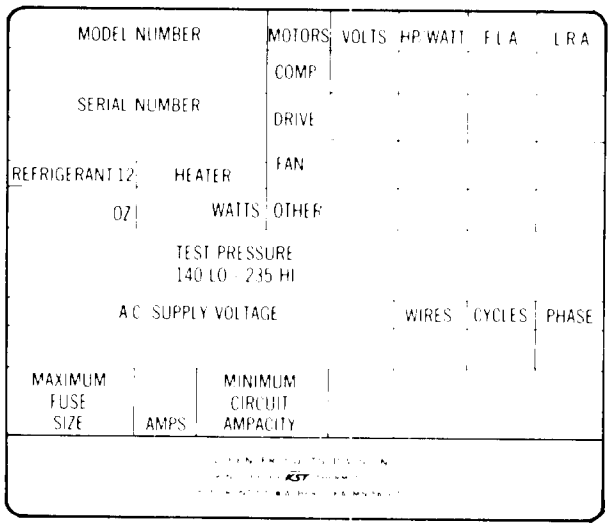
Five Cornelius Pre-Mix Valves

SANITARY COLD PLATE

Sealed Cold Plate System
Solid Aluminum Cold Plate Construction
Five-Circuit Cold Plate cools five syrups

QUICK-DISCONNECT LINES

Five service lines at back of cabinet, connect quickly to syrup tanks. Lines are seven feet long.



TWO YEAR PARTS WARRANTY

FRONT SERVICE ACCESS PANEL

OPTIONAL LEG KIT

KLP2E - 6-inch metal legs, Black Enamel
KLP2S - 6-inch metal legs, Nickel Plated

OPTIONAL PANEL KITS

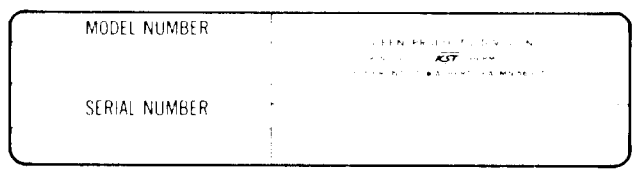
SPKDSF50 - Stainless Steel Panels for use with PMF450 and PMF650.

FINISH

Charcoal Brown Enamel Base, Stainless Steel Tops and Console.

SEE NAMEPLATE, shown at left for electrical and refrigeration specifications. NAMEPLATE located on left rear upright mounting bracket of Chassis, seen with Left Side Panel removed.

Remove Left Front Door to locate Model/Serial Number plate, shown below, on the upper front frame, near the Control Box.



*Storage based on 90-percent of total volume x 34 lb. average density of ice. A.R.I. Standard.

This icemaker has been engineered to our own rigid safety and performance standards. The National Sanitation Foundation (NSF) seal, signifies that it is listed with the NSF and that it complies with the materials and construction standards of the NSF. In addition, the Underwriters Laboratories, Inc., (UL) Listing Mark and the Canadian Standards Association (CSA) Monogram, both signify that its construction and design have been inspected and tested by them. NSF, UL and CSA inspectors also periodically examine production icemakers at the factory, to assure continued compliance.

To retain the safety and performance built into this icemaker, it is important that installation and maintenance be conducted in the manner outlined in this manual.

SECTION I

GENERAL INFORMATION & INSTALLATION

I. INTRODUCTION

This manual provides the specifications and the step-by-step procedures for the installation, start-up, operation, and the maintenance and cleaning for the SCOTSMAN Models PMF450 and PMF650 Icemaker/Drink Dispensers: Separate sections detail more specifically: General Information & Installation; Start Up Operation; Principles of Operation; Adjustment and Removal and Replacement Procedures; Maintenance and Cleaning Instructions; Service Diagnosis; Wiring Diagrams; and, the Illustrated Assemblies and Parts Lists.

Because both Models of these pre-mix Icemaker/Drink Dispensers are identical in physical size and dimensions; equipment, except Freezer and Drivemotor; and, in operation, except production capacities as noted, all instructions and procedures apply equally to both Models, with a very few exceptions. In the few instances where there are vital technical differences between the two Models, separate well identified procedures and data are detailed, so there should be no confusion or error, in following instructions in any section of this manual.

The Models PMF450 and PMF650 Icemaker/Drink Dispensers are quality designed, engineered and constructed, and thoroughly tested icemaking and pre-mix dispensing systems, providing the utmost in flexibility to fit the needs of a particular user.

A removable Dispensing Panel on the front of the Dispensing Tower, allows use of various dispensing heads to be mounted on the Panel.

A five circuit Cold Plate, designed and constructed as the integral bottom of the Bin, allows use of five syrup flavors.

All internal lines are connected prior to shipment from the factory. Five flexible tube assemblies are provided for connections to five syrup tanks.

DESCRIPTION

An attractive compact cabinet of Charcoal Brown enamel base, up-to-date styling with removable panels and doors for easy access to internal lines, connections and mechanical parts and assemblies. A Hood Assembly of stainless steel, attractively designed for front or back counter installation.

SEALED REFRIGERATION SYSTEM

To provide quiet efficient operation of the Icemaker, the Compressor motor is internally spring-mounted. The Compressor motor is covered by a five year parts warranty.

SELF-CONTAINED STORAGE BIN

These Icemaker/Drink Dispensers store their own ice supply in a heavily insulated, stainless steel ice storage Bin, with a handy Ice Access Door opening in the Hood Counter.

STANDARD OVERALL DIMENSIONS

The standard overall dimensions of the Cabinet depth, counter top height, etc., allows the automatic Icemaker/Drink Dispensers to be installed in harmony with the existing counter equipment.

II. UNPACKING AND INSPECTION

1. Call your authorized SCOTSMAN Distributor or Dealer, for proper installation. He's listed under ICE MAKING EQUIPMENT and MACHINERY in the yellow pages of the telephone book.
2. Visually inspect the exterior of the shipping container and skid and any severe damage noted should be reported to the delivering carrier; and, a concealed damage claim filed subject to internal inspection, with carrier representative present.
3. Using nail puller remove nails driven through the sides of the crate into the bottom skid.
4. BEFORE removal of any panels or packing, carefully lay the Cabinet on its back and remove shipping bolts and the shipping base or skid.
5. When ordered, install the optional legs in the Cabinet base sockets, then return the Cabinet to upright position.
6. Remove screws and shipping tape and all panels and doors from the Cabinet and inspect for any concealed damage. Notify carrier of any concealed damage claims, as stated in step 2, above.
7. Check that refrigerant lines do not rub or touch lines or other surfaces, and that fan blades, if any, move freely.
8. Check that the Compressor is snug on all mounting pads.
9. Remove Water Strainer from shipping envelope, for installation in water supply line.

10. Use clean damp cloth or disposable paper wiper to wipe clean the interior surfaces of the ice storage Bin and the exterior surfaces of the Cabinet.
11. SEE NAMEPLATE on the lower part of the left rear upright mounting bracket of the Chassis, and check that the location source voltage corresponds with the voltage specified on the nameplate.

CAUTION

Improper voltage supplied to the Icemaker/Drink Dispenser will void your parts replacement program.

12. Remove the Manufacturer's Registration Card from the front of the User's Manual and fill in all spaces including: Model Number and Serial Number taken from the NAMEPLATE. Forward the completed, self-addressed, registration card to the SCOTSMAN factory.

III. LOCATION AND LEVELING

WARNING

This Icemaker/Drink Dispenser is NOT designed for outdoor installations where air temperatures are below 50-degrees F., or above 100-degrees F., and water temperature is below 40-degrees F. or above 100-degrees F. Extended periods of operation at temperatures exceeding these limitations will constitute misuse, under the terms of the SCOTSMAN Manufacturer's limited warranty, resulting in LOSS of warranty coverage.

1. Position the Cabinet in the selected permanent location.

NOTE

Prior consideration for location site shall include:

1. *Minimum room temperature 50-degrees F. and maximum room temperature 100-degrees F.*
2. *Water inlet temperatures; Minimum 40-degrees F. and Maximum 100-degrees F.*
3. *Well ventilated location for Air-Cooled model, advising user to frequently clean Condenser, located directly behind the front service door.*
4. *CONVENIENCE: Placed for practical, efficient use in a back bar or front bar location; or, fit into a standard soda fountain line up, or as an individual counter unit, with double function providing flaked ice, as well as carbonated beverages.*
5. *SERVICE ACCESS: Adequate space for all service connections, located at the left rear corner post of the Cabinet. A six-inch minimum clearance at rear and front louvered doors, for routing cooling air drawn into and exhausted out of the compartment to maintain proper condensing operation on Air-Cooled Models.*

2. Level the Cabinet in both the left-to-right and front-to-rear directions. The optional leveling legs can be adjusted with an open end wrench.

IV. ELECTRICAL CONNECTIONS

SEE NAMEPLATE for current requirements to determine wire size to be used for electrical hookup. The PMF450 and PMF650 Icemaker/Drink Dispensers require a solid earth ground wire. See wiring diagram.

Be certain the Icemaker/Drink Dispenser is connected to its own electrical circuit and individually fused. The maximum allowable voltage variation should not exceed ten percent of the nameplate rating, even under starting conditions. Low voltages can cause erratic operations and may be responsible for serious damage to the overload switch and motor windings.

All external wiring should conform to the national, state and local electrical permit and services for a licensed electrician will be required.

V. WATER SUPPLY AND DRAIN CONNECTIONS

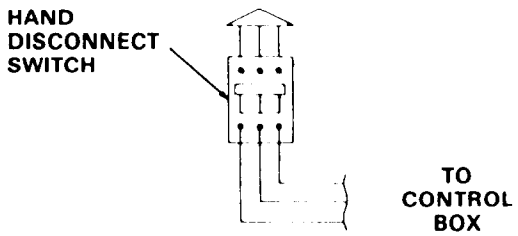
A. AIR-COOLED MODELS: The recommended water supply line is a 1/4-inch O.D. copper tubing. A 1/4-inch flare fitting is provided at the water inlet. Connect to cold water supply line with standard plumbing fittings, with a shutoff valve installed in an accessible place between the water supply and the Cabinet.

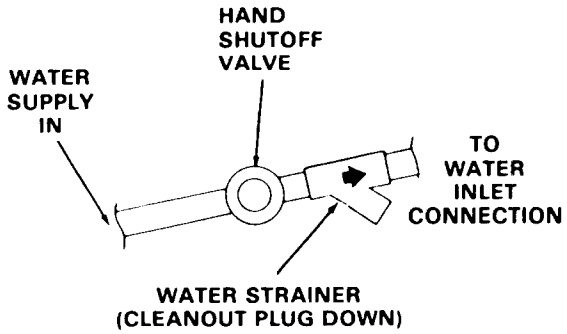
A wire mesh strainer is provided and must be installed with the clean out plug down. Locate the strainer in the water supply next to the Cabinet with the arrow on the strainer, in the direction of the water flow. The strainer protects against large particles of rust, scale, etc., which may be loosened in the water supply pipe, at the time of installation.

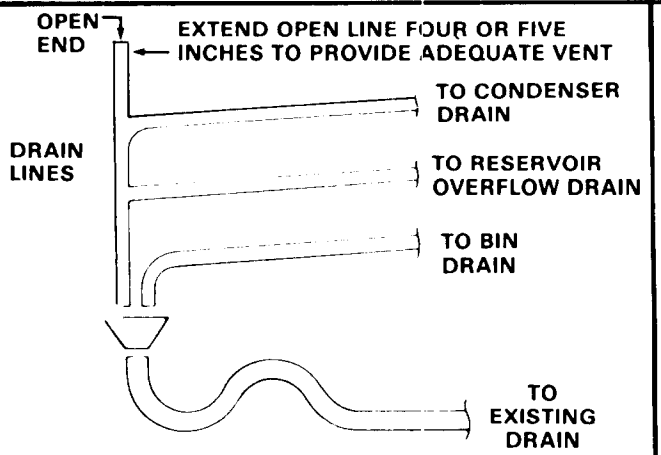
In some cases, a plumbing permit and services of a licensed plumber will be required.

WARNING

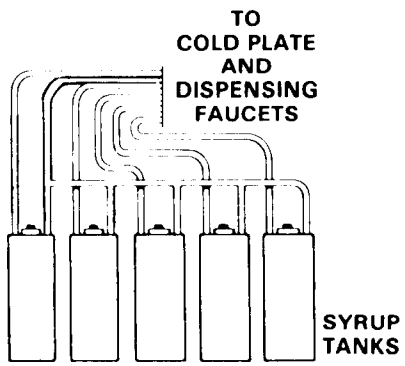
To prevent damage to the freezer mechanism, DO NOT operate this unit when the water supply is OFF, or is below the recommended water pressure. Position the master switch to the OFF position, until proper water supply is resumed.







OPEN, TRAPPED OR VENTED DRAIN. RECOMMENDED 1/4-INCH FALL PER FOOT OF RUN ON DRAIN LINES.



WARNING

THIS ICEMAKER IS NOT DESIGNED FOR OUTSIDE INSTALLATION AND WILL NOT OPERATE IN AMBIENT TEMPERATURES BELOW 50-DEGREES F., NOR ABOVE 100-DEGREES F.

THIS ICEMAKER WILL NOT OPERATE WHEN WATER TEMPERATURES ARE BELOW 40-DEGREES F., NOR ABOVE 100 DEGREES F.

77-1168

Figure 1-1. Installation Practice.

The icemaker in this Cabinet will not operate properly when water supply temperatures are below 40-degrees F, or above 100-degrees F.

B. WATER-COOLED MODELS: On Water-Cooled models a spearate connection to the Condenser is required. A 3/8-inch O.D. copper tubing is provided for a separate water inlet line to be connected and a separate drain line to be connected.

NOTE

The WARNING in the text above for the Air-Cooled models equally applies for the Water-Cooled models. In both type installations, water supply must be installed to confrom with the local plumbing codes. In some cases, a plumbing permit and services of a licensed plumber will be required.

C. DRAIN CONNECTION: All drains are gravity type and must be 1/4-inch fall per foot on horizontal runs. The drains to be installed to conform with local code. The drain receptacle should be an open, trapped or vented construction. See Figure 1-1, to be properly informed on venting.

Recommended bin drain in 5/8-inch O.D. copper tubing and should be vented and run separately. Connect a 7/16-inch I.D. tube from the Reservoir overflow and a drain tube from the Water-Cooled Condenser, on Water-Cooled models.

VI. FINAL CHECK LIST

1. Is the Cabinet Level? (IMPORTANT)
2. Have all electrical and piping connections been made?
3. Has the voltage been tested and checked against the nameplate rating?
4. Is the water supply line shutoff valve installed and electrical wiring properly connected?
5. Have the Bin and Cabinet been wiped clean?
6. Have the Compressor hold-down nuts been checked to be sure the Compressor is snug on the mounting pads?
7. Has the owner/user been given the User Manual and instructed on how to operate the Icemaker/Drink Dispenser?
8. Has the Manufacturer's Registration Card been properly filled out? Check for correct Model and Serial numbers from Serial nameplate, then mail the completed card to the SCOTSMAN factory.
9. Check all refrigerant lines and conduit lines, to guard against vibration or rubbing and possible failure.
10. Is there at least six inches clearance behind and around the Cabinet for proper air circulation?
11. Is the Cabinet in a room where ambient temperatures are a minimum of 50-degrees F. all year around?
12. Has water supply pressure been checked to insure a minimum of 20 PSIG?
13. Has the owner been given the name and telephone number of the authorized SCOTSMAN Distributor or Service Agency serving him?

SECTION II
OPERATING INSTRUCTIONS

I. START UP

1. Remove screws and the Left Front Door, Left Side Panel, Left Rear Door, Ice Access Door, and pull and unsnap the Hood Panel.
2. OPEN the water supply line shutoff valve.
3. Observe the water filling operation: (See Figure 2-1)
   a. Water flows into Water Reservoir.
   b. Float moves up as water rises.
   c. Water flows through water feed line to bottom of Freezer Assembly.
   d. Float stops water flow, when water level reaches 3/8-inch below the molded horizontal line on the body of the Water Reservoir.
4. Connect all lines from the Cold Plate, at the bottom rear of the Cabinet, to the proper fittings on the syrup tanks.
5. CLOSE the water supply line shutoff valve.
6. Check all syrup line fittings to Cold Plate, Dispensing Faucet connections, etc., with bubble soap and correct any leaks.
7. OPEN the water supply line shutoff valve.
8. Check all internal water connections for leaks.
9. Move the manual ON-OFF toggle switch, on the front of the Control Box to the ON position to start the automatic icemaker operation.
10. After two or three minutes of operation, observe that flaked ice begins dropping off the Auger and out the Ice Spout.

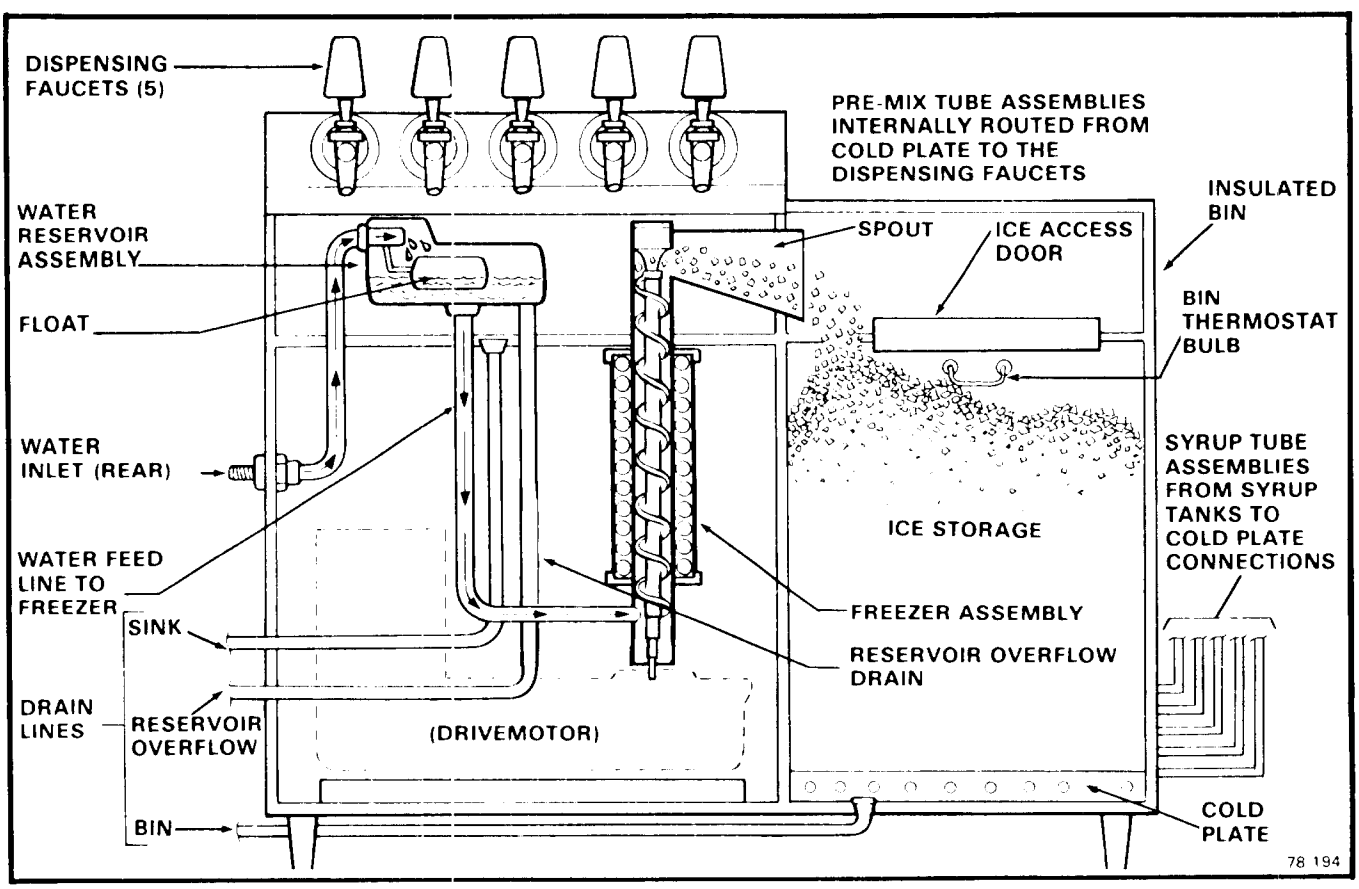


Figure 2-1. Water Schematic

11. Let the system operate for about 30 minutes or until ice covers the Bin bottom. Check for any excess noise in Icemaker, beyond normal Compressor noises.
    a. Fan noises, when Air-Cooled: Blades touch other surfaces; Blades bent out-of-balance.
    b. Vibrating type, from touching lines.
    c. Chattering: Lack of water in Freezer. Lack of water in Pump.
    d. Compressor loose at one or more hold-down bolts.

WARNING

DO NOT operate this Icemaker when the water supply is shut OFF, or is BELOW the recommended 20 PSI water pressure. Move the manual ON-OFF toggle switch on the front of the Control Box to the OFF position immediately.

12. Hold a handful of ice around the Ice Storage Bin Thermostat Control Bulb to test shutoff. Less than one minute is about normal for Bulb shutoff function to cause the Compressor to stop.

NOTE

Within minutes after the ice is removed from the sensing bulb, the bulb will warm up and cause the Icemaker to restart. This control is factory set and should not be reset until testing is performed. Normal setting: about 35-degrees F. CUT-OUT and 45-degrees F. CUT-IN, to prevent short cycling.

13. Check manual reset Low Pressure Control setting.

NOTE

This safety device, inside the Control Box, is set at zero to four PSIG, to prevent cutting off when the Compressor first starts up and still provide safety in case of interruption in water supply, shortage of refrigerant, low ambient temperature, or any other cause of abnormal low suction pressures.

14. Thoroughly explain to the owner, the significant specifications of the dispenser, the start up and operation, going through the procedures in the User Manual operating instructions. Answer all questions about the Dispenser, by the owner; and, inform the owner of the name and telephone of the authorized SCOTSMAN Service Agency serving him.

SECTION III
PRINCIPLES OF OPERATION
How It Works

I. ICEMAKER

The water supply flows from the building source through the inline water strainer, enters at the Cabinet fitting and on to the Water Reservoir. The Water Reservoir functions to maintain a constant water level inside the Freezer Assembly. Water from the Water Reservoir enters at the bottom of the Freezer Assembly and is changed into ice by low temperatures inside the Freezer.

A stainless steel Auger within the Freezer is powered by the Drivemotor Assembly, a direct-drive gearmotor, and the rotating Auger carries the ice upward to the flared end of the Auger, see Figure 3-1, where excess water is pressed out of the ice, as it is extruded or flaked out through the Ice Spout and into the Ice Storage Bin.

Moving the manual ON-OFF toggle switch, on the front of the Control Box, to the ON position starts the automatic and continuous icemaking process. When the Ice Storage Bin has been filled with ice, up to the level of the Thermostat Control Bulb, the sensing bulb shuts off the icemaking process.

As the ice is removed from the Ice Storage Bin, the Thermostat Control Bulb warms up restarting the automatic icemaking process.

Factory settings are 35-degrees F. CUT-OUT and 45-degrees F. CUT-IN.

Altitude adjustment should ONLY be performed on Icemakers installed at 2000-feet level locations and ABOVE, and adjust only in increments of one-fourth turn of screw at a time.

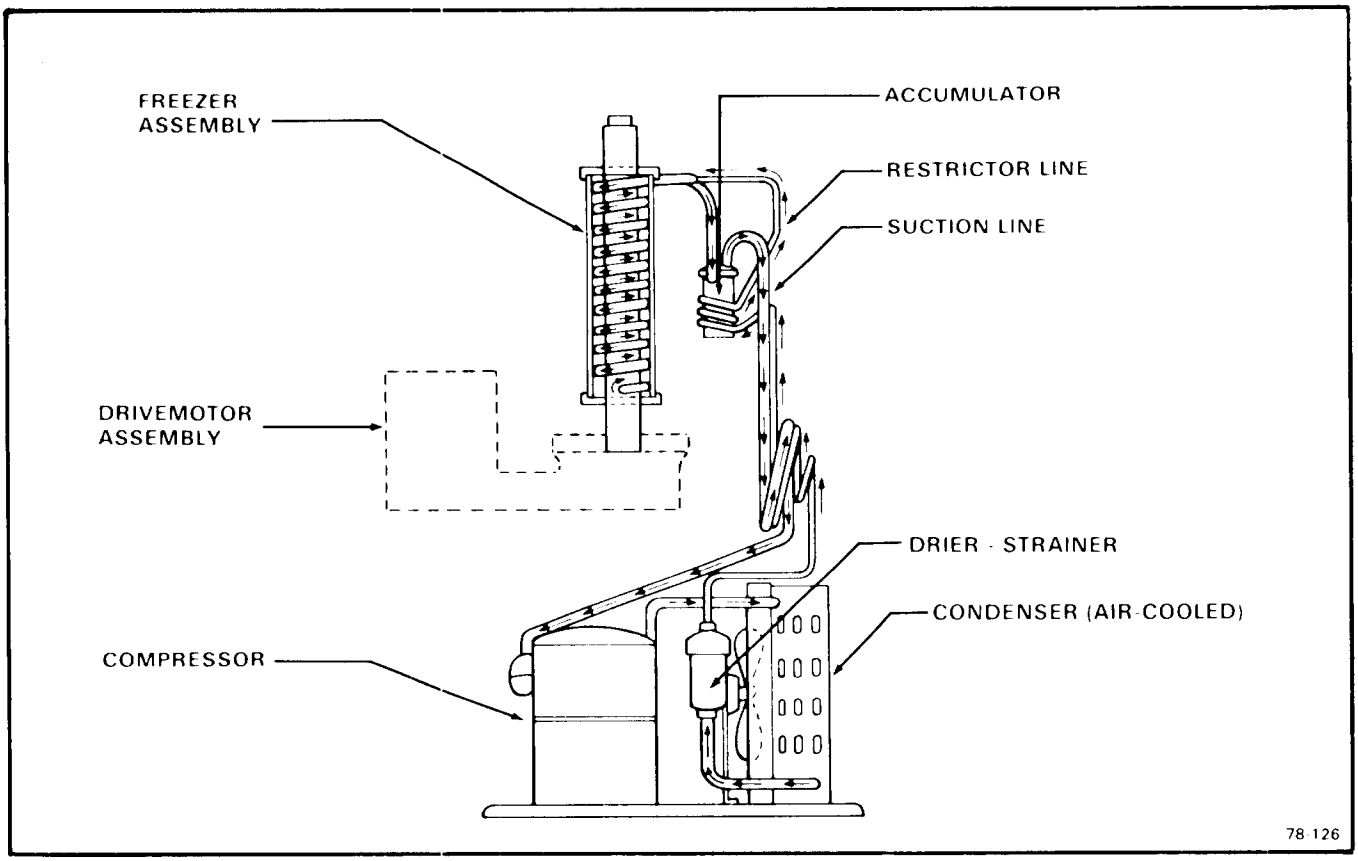


Figure 3-1. Refrigeration Cycle

II. ELECTRICAL/REFRIGERATION

The PMF450 and PMF650 Icemaker/Drink Dispensers are designed to operate on standard electrical supply 115 volts, 60 Hertz, single phase. Other voltage requirements are available on special order. Therefore, always CHECK NAMEPLATE for electrical information BEFORE proceeding with electrical wiring connections to the Icemaker.

Cold ambient temperatures and interruptions in water supply are conditions that can cause excessively hard ice and overloads within the Freezer Assembly, which is directly transmitted to the Drivemotor; and in turn, will cause speed reduction or ultimate freezeup.

When the Drivemotor is slowed to a predetermined RPM, a sensing switch mounted on top of the motor is designed to open the electrical circuit to the Compressor. The Compressor stops operating, no more ice is produced, and the Drivemotor continues to operate rotating the Auger to clear the overload and gradually build up to full speed.

At a pre-determined higher RPM Drivemotor speed, the speed sensing switch closes the electrical circuit to the Compressor, causing the normal icemaking process to resume. Refer to specific details in paragraph V-II-9, on centrifugal sensing switch operation.

A Limit Switch Assembly is mounted on top of the Ice Spout and is actuated by movement of the spring-operated Pressure Plate inside the Ice Spout. The Limit Switch acts as a backup safety switch, should the Thermostat Control Bulb fail and cause ice to jam up in the Ice Spout, and the microswitch will shutoff the condensing unit only, when operated.

There are three safety controls in the Control Box on the Water-Cooled models and two safety controls in the Control Box for the Air-Cooled models. The Low Pressure Control, a manual reset, non-adjustment control, is used on both models and is set to electrically open at zero to four PSIG to stop the entire icemaker. The Auger Delay Switch, a single-pole double-throw (SPDT) switch, used on all models, functions as a control device to allow the gearmotor to rotate the auger to clear the Freezing Chamber while the compressor circuit is OFF.

Refer to the appropriate Wiring Diagram and trace circuitry and control functions, as described in the following paragraph.

As shown on all SCOTSMAN wiring diagrams, the controls are in the ICEMAKING MODE.

Thus, the 1-2 contacts are CLOSED. At STARTUP, the 1-2 contacts are OPEN and the 3-2 contacts are CLOSED. As the icemaker begins to operate, the low side pressure starts to decrease from the stabilized or at-rest pressure. As soon as the pressure is reduced to 20 PSIG, the 3-2 contacts OPEN and the 1-2 contacts CLOSE.

This removes the operating controls, such as the Bin Thermostat, from the gearmotor circuit. If one of the operating controls OPENS, it will SHUT OFF the compressor circuit. The gearmotor will operate until the low side pressure increases to 32 PSIG.

Then, the 1-2 contacts, OPEN and SHUTS OFF the gearmotor, usually within one to two minutes, depending upon ambient conditions. This brief period of time allows the Auger to transport all the ice out of the Freezing Chamber. Consequently, when called on to STARTUP again, there is no ice load to start up against. Again, on STARTUP, the 1-2 contacts are OPEN and the 3-2 contacts are CLOSED.

On all models, a low-water pressure switch functions to discontinue the icemaking process whenever incoming water pressure is reduced to below five PSIG. The Switch will automatically restart the Icemaking process when the water pressure is increased to 20 PSIG.

The head pressure is normal about 130 PSIG, however, it will vary depending upon ambient air temperature.

Suction pressure should be 15 PSIG with proper refrigerant charge and the frost line should extend out from the Accumulator to within no closer than eight to twelve inches of the Compressor. Suction pressure will vary about two PSIG plus or minus, depending upon ambient temperatures and incoming water supply temperatures to the Freezer Assembly.

When charging the system with refrigerant, always CHECK NAMEPLATE for specific refrigeration charge for individual Flaker, and charge with refrigerant so the frost line extends out of the Accumulator to within no closer than eight ot twelve inches of the Compressor, after 15 minutes of operation, for best capacity and performance.

MODEL	PMF-450 Refrig. Chg.
Air-Cooled	20 oz. R-12 (approx.)
Water-Cooled	18 oz. R-12 (approx.)

MODEL	PMF-650 Refrig Chg.
Air-Cooled	27 oz. R-12 (approx.)
Water-Cooled	23 oz. R-12 (approx.)

SECTION IV

ADJUSTMENT AND REMOVAL AND REPLACEMENT

The procedures provided in this Section are arranged in alphabetical order, to make specific Adjustment and Removal and Replacement information easy to locate.

Read the instructions thoroughly before performing any Adjustment or Removal and Replacement Procedures.

I. ADJUSTMENT OF THE BIN THERMOSTAT CONTROL

The control for the Bin Thermostat is the Temperature Control, located on the upper part of the Control Box Assembly.

See Figure 4-1 for location and direction of rotation, clockwise (CW) or counterclockwise (CCW), of the adjusting screws on the Temperature Control, in the particular Control Box the adjustment is to be performed

WARNING

The adjusting screws on the Temperature Control device have very sensitive response to adjustment. DO NOT attempt to adjust the screw until after thoroughly reading and understanding the following instructions and illustrations. Over-adjusting or erratic guessing, can foul the instrument and cause ultimate delay and part replacement, WHICH COULD HAVE BEEN PREVENTED.

II. ADJUSTMENT OF THE DRINK DISPENSER VALVE

Each Drink Dispensing Valve, of the type installed on production model Dispensers, has a single slotted adjustment screw, located on the right side of the valve head, on the flange just

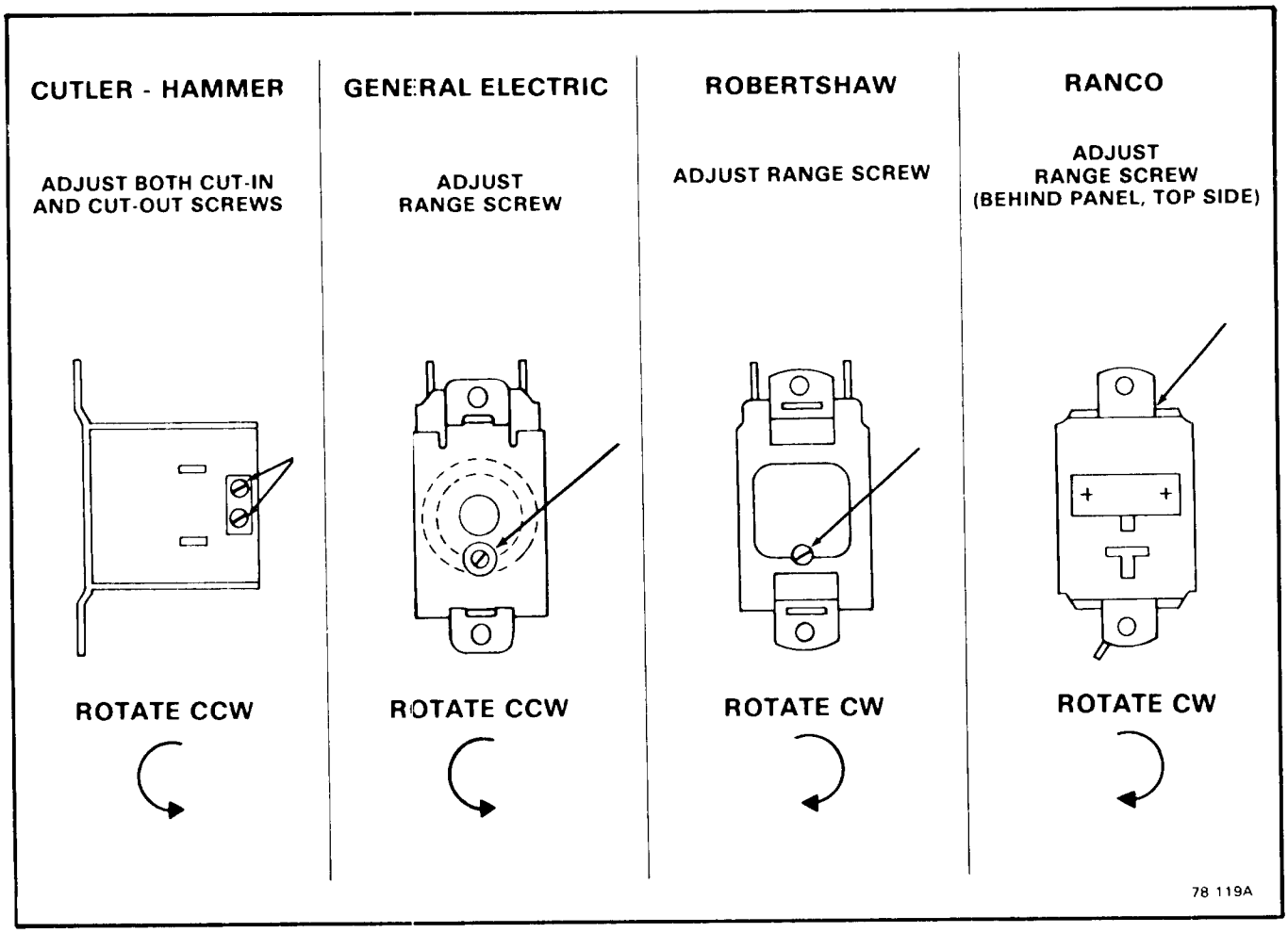


Figure 4-1. Adjustment of the Temperature Control.

behind the nozzle. Adjust to INCREASE or DECREASE the rate of flow of the premix drink as follows:

A. To INCREASE Flow: Rotate screw COUNTERCLOCKWISE, one-eighth turn.

B. To DECREASE Flow: Rotate screw CLOCKWISE, one-eighth turn.

C. Operate the adjusted valve, to test adjusted flow rate; and, repeat step A or B as necessary, to achieve desired flow rate.

III. ADJUSTMENT OF THE WATER REGULATOR ASSEMBLY — WATER-COOLED MODELS

The correct Compressor head pressure on Water-Cooled Models is 135 PSIG. Adjusting the Water Regulator Valve increases or decreases the rate of flow of water, through the Water-Cooled Condenser, which increases or decreases the affected temperature/pressure of the Compressor head pressure. INCREASED water flow, results in DECREASED or LOWER head pressure; while, DECREASED water flow, results in INCREASED or HIGHER head pressure.

To Adjust the Water Regulator Assembly:

A. To INCREASE the Head Pressure: Rotate the adjusting screw IN, or CLOCKWISE.

B. To DECREASE the Head Pressure: Rotate the adjusting screw OUT, or COUNTERCLOCKWISE.

C. Check change in Compressor head pressure, and repeat step A or B as necessary, to achieve desired operating head pressure.

IV. ADJUSTMENT OF THE WATER RESERVOIR FLOAT

The correct water level in the Water Reservoir should be 3/8-inch below the raised molded line, on the side of the body of the Water Reservoir. When the water line level is above or below the raised molded line, adjustment can be performed to raise or lower the water level by bending the metal arm of the Float, inside the Water Reservoir.

To Adjust the Water Reservoir Float:

A. To RAISE the Water Level: Hold one end of the metal arm of the Float and slightly bend the Float UP.

B. To LOWER the Water Level: Hold one end of the metal arm of the Float and slightly bend the Float DOWN.

C. To Perform MAJOR Adjustment:

When repair or replacement has been performed and the water level line between the Water Reservoir and the Spout Opening on top of the Freezer Assembly has been substantially altered:

1. Remove the two Screws and Lockwashers which attach the Reservoir Bracket and Water Reservoir to the vertical upright panel of the Chassis.
2. Move the Reservoir Bracket UP or DOWN, to align with the appropriate set of holes in the panel, that will properly position the Water Reservoir at the correct water line level, even with one-inch below the Spout opening.
3. Attach the Reservoir Bracket and Water Reservoir to the Panel, with the Screws and Lockwashers removed in step 1.

WARNING

Be sure the electrical power supply and the water supply are OFF, before starting any of the following REMOVAL AND REPLACEMENT procedures, as a precaution to prevent possible personal injury or damage to equipment.

V. REMOVAL AND REPLACEMENT OF THE AUGER, WATER SEAL, BEARINGS AND COUPLING.

A. To remove the Auger, Water Seal, Bearings, and Coupling:

1. Remove screws and the Left Side Panel and the Left Rear Door.
2. Pull to unsnap each end of the Hood Panel from the Hood Assembly.
3. Remove three screws, located behind the upper part of the left side opening of the Hood Assembly, which attach the Dispensing Tower to the Hood Assembly.
4. Slide the Dispensing Tower toward the rear, about one-half inch, to disengage the slots; then lift the Dispensing Tower off of the Hood Assembly and lay the Tower, with product lines attached, over the back of the Hood Assembly, out of the way.
5. Remove the Insulation Strap, the Insulation Clip and separate the two-piece Insulation from the top of the Freezer Assembly.
6. Perform the steps in procedures IV-XIV and IV-XV to remove the Limit Box, Pressure Plate Assembly, Spout Assembly and Spout Casting.
7. Remove two Screws, Washers and the Spout Plate from Ice Breaker.
8. Grasp the wire Cap Hook at the top of the Freezer Assembly and pull out the Auger and attached Cap, Ice Breaker, upper Bearing and O-Rings, at the top of the Auger; and, the top half of the Water Seal at the bottom of the Auger.

NOTE

When the Auger cannot be pulled out, proceed to step 16 and 17, to gain access to the bottom of the Auger. Then, with a rawhide mallet or placing a piece of wood on the bottom end of the Auger, tap the bottom of the Auger to break it loose and pull the Auger out, as in step 8 above.

9. Remove the Cap Hook from the Ice Breaker.
10. Remove the Retaining Ring and the Cap.
11. Remove the Cap Screw and Washer and remove the Ice Breaker from the Auger.
12. Clean away the old grease from the top of the Auger, the Ice Breaker, Cap, Cap Screw and Washer, and the O-Ring and Retaining Ring.
13. Inspect the O-Ring at the top of the Ice Breaker and the O-Ring at the bottom inside of the Ice Breaker, for cuts, tears and general worn condition to determine replacement.
14. Inspect the Bearing pressed into the top of the Ice Breaker; and, if it is to be replaced, remove the Retaining Ring and press the Bearing out of the Ice Breaker.
15. Slide the upper half of the Water Seal off of the bottom of the Auger.

NOTE

1. *Any time the Auger is removed for replacement, or for the inspection and replacement of the Bearings or Coupling, use extra care in handling the Water Seal parts, so no dirt or foreign matter are deposited on the surfaces of the Seal.*
2. *If there is any doubt about the effectiveness of Water Seal or O-Ring, REPLACE THEM. A dirty, worn or faulty Water Seal or O-Ring will cause a leak and ultimately require a second, time consuming removal and replacement procedure to be performed, that COULD HAVE BEEN PREVENTED.*

16. Remove four screws and lockwashers which attach the Freezer Assembly to the Adaptor on the Drivemotor Assembly.
17. Raise the Freezer Assembly off of the Adaptor, to gain access to the Bearing and Retainer; then, temporarily secure the Freezer Assembly out of the way to allow room to work. Be careful not to damage the gasket.
18. Using a suitable length and size wooden dowel or stick inserted through the top of the open Freezer Assembly, tap the lower half of the Water Seal and the lower Bearing in the Retainer, out the bottom of the Freezer Assembly.
19. Inspect the lower half of the Water Seal. If reusable, use care to protect it from dirt, etc. prior to replacement procedure.
20. Inspect the lower Bearing in the Retainer; and, if the Bearing is to be replaced, press the Bearing out of the Retainer.
21. Reach through the Adaptor and remove the Coupling on the Drive motor for inspection.
22. Check the Coupling for cracks, chipping and excessive wear.

B. To replace the Auger, Water Seal, Bearings, and Coupling, reverse the removal procedures.

NOTE

1. *When installing the Retainer assembled with Bearing, in the bottom of the Freezer Assembly, some Retainers will insert as a slip fit, and some will have to be forced into place because of very tight fit. Carefully tap a piece of wood positioned across the bottom of the Retainer, to evenly seat the Retainer in the chamber of the Freezer.*
2. *After assembling the parts on the upper end of the Auger and BEFORE installing the Cap and Cap Hook, apply an ample coating of Shell Alvania 3 grease, P/N A29123-001 to the upper part of the Ice Breaker, to cover the Retaining Ring and the Cap Screw and Washer. Then install the Cap and Cap Hook in place.*

VI. REMOVAL AND REPLACEMENT OF THE COLD PLATE BIN ASSEMBLY

A. To remove the Cold Plate Bin Assembly:

1. Remove screws and all side, front and rear doors and panels.
2. Tag and disconnect all product lines connected at the rear of the Cold Plate.
3. Remove 29 screws and lift away from the Dispenser Chassis, the entire Hood Assembly and Dispensing Tower, with product lines attached.
4. Carefully lift the Cold Plate Bin Assembly straight up until the front bottom edge just clears the top of the Chassis; then, tilt the top of the Bin toward the rear, moving the bottom of the Bin slightly forward and lift out of the Chassis.

B. To replace the Cold Plate Bin Assembly, reverse the removal procedure.

VII. REMOVAL AND REPLACEMENT OF THE COMPRESSOR ASSEMBLY

NOTE

Always install a replacement Drier, any time the sealed refrigeration system is opened. Do not replace the Drier until all other repair or replacement has been completed.

A. To remove the Compressor Assembly:

1. Remove screws and the Left Side Panel and the Left Rear Door.

2. Remove two screws and the Cover from the Compressor Junction Box.
3. Disconnect the electrical leads at the Compressor Junction Box, that originate in the Control Box.
4. Unsolder the suction line and the discharge line from the Compressor.
5. Unsolder the process header tube from the Compressor and retain for installation on the replacement Compressor.
6. Remove four bolts, lockwashers and washers which secure the Compressor to the Chassis mounting base.
7. Slide the Compressor and remove through the left side opening of the Cabinet.

NOTE

Thoroughly evacuate the system to remove moisture and non-condensables.

B. To replace the Compressor Assembly, reverse the removal procedure.

VIII. REMOVAL AND REPLACEMENT OF THE CONDENSER — AIR-COOLED MODELS

NOTE

Always install a replacement Drier, any time the sealed refrigeration system is opened. Do not replace the Drier until all other repair or replacement has been completed.

A. To remove the Condenser:

1. Remove screws and the Left Front Door and the Left Side Panel.
2. Bleed off or blow the refrigerant charge through the Schrader valve.
3. Remove one screw and disconnect the Drier Brace and Drier from the Condenser Shroud.
4. Unsolder and disconnect the refrigerant inlet and outlet lines from the Condenser.
5. Remove three screws, lockwashers and washers securing the Condenser to the Chassis Base.
6. Remove the Condenser out through the front opening of the Cabinet.

NOTE

Thoroughly evacuate the system to remove moisture and non-condensables.

B. To replace the Condenser, reverse the removal procedure.

IX. REMOVAL AND REPLACEMENT OF THE CONDENSER — WATER-COOLED MODELS

NOTE

Always install a replacement Drier, any time the sealed refrigeration system is opened. Do not replace the Drier until all other repair or replacement has been completed.

A. To remove the Condenser:

1. Remove screws and the Left Front Door and the Left Side Panel.
2. Bleed off or blow the refrigerant charge through the Schrader valve.
3. Unsolder and disconnect the refrigerant inlet and outlet lines from the Condenser.
4. Remove two screws, lockwashers and washers which secure the Condenser to the Chassis mounting base.
5. Remove the Condenser from the Cabinet.

NOTE

Thoroughly evacuate the system to remove moisture and non-condensables.

B. To replace the Condenser, reverse the removal procedure.

X. REMOVAL AND REPLACEMENT OF THE DRIER

NOTE

Always install a replacement Drier, any time the sealed refrigeration system is opened. Do not replace the Drier until all other repair or replacement has been completed.

A. To remove the Drier:

1. Remove screws and the Left Front Door and the Left Side Panel.
2. Remove screw and Drier Brace attaching the Drier to the Condenser shroud on Air-Cooled models; and, the Chassis base on Water-Cooled models.
3. Bleed off or blow the refrigerant charge through the Schrader valve.
4. Unsolder refrigeration lines at top and bottom of Drier, remove the Drier and separate the Drier from the Drier Brace.

B. To replace the Drier:

CAUTION

1. If the factory seal is broken on the replacement Drier, exposing it to the atmosphere more than a few minutes, the Drier will absorb moisture from the atmosphere and lose substantial ability for moisture removal.

2. Be sure the replacement Drier is installed with the arrow positioned in the direction of the refrigerant flow.

---

1. Remove the factory seals from the replacement Drier and install the Drier in the refrigerant lines with the arrow positioned in the direction of the refrigerant flow.
2. Install the Drier Brace on the Drier.
3. Solder the Drier into the lines, two places.
4. Purge the system and check for leaks.
5. Thoroughly evacuate the system to remove moisture and non-condensables.
6. Charge the system with refrigerant, by weight. SEE NAMEPLATE.
7. Replace the Left Front Door and the Left Side Panel and attach both with screws removed earlier.

XI. REMOVAL AND REPLACEMENT OF THE DRIVEMOTOR ASSEMBLY

1. To remove the Drivemotor Assembly:
   1. Perform all steps in procedure IV-XIII to gain access for removal of the Drivemotor Assembly.
   2. Remove two bolts, lockwashers and washers which attach the Drivemotor to the horizontal mounting bracket at the rear of the Chassis.
   3. Lift the Drivemotor from the bracket and out the rear of the Dispenser.

B. To replace the Drivemotor Assembly, reverse the removal procedure.

XII. REMOVAL AND REPLACEMENT OF THE FAN MOTOR ASSEMBLY — AIR-COOLED MODELS

NOTE

Before beginning this procedure, observe the Fan Blade position on the shaft of the Fan Motor and mark the Fan Blade so it will be correctly positioned during reassembly. Direction of air flow should be toward the Fan Motor.

A. To remove the Fan Motor Assembly:
   1. Remove screws and the Left Front door and the Left Side Panel.
   2. Disconnect the electrical lead from the Fan Motor.
   3. Remove two screws securing the Motor Bracket to the Chassis Base and remove the Fan Motor and Motor Bracket out through the left side opening of the Chassis.
   4. Remove the nut from the end of the Fan Motor shaft and remove the Fan Blade.
   5. Remove four screws securing the Fan Motor to the Motor Bracket and separate the Motor from the Bracket.

B. To replace the Fan Motor Assembly, reverse the removal procedure.

XIII. REMOVAL AND REPLACEMENT OF THE FREEZER ASSEMBLY

NOTE

1. *The Cabinet may have to be removed from its permanent location, especially if located in a corner, in order to have access to the left side and rear of the Chassis.*
2. *In addition to shutting OFF electrical power and inlet water to the Dispenser, be sure to disconnect the inlet water line BEFORE moving the Dispenser from the permanent location.*
3. *Always install a replacement Drier, any time the sealed refrigeration system is opened. Do not replace the Drier until all other repair or replacement has been completed.*

A. To remove the Freezer Assembly, see Figure 4-2:
   1. Remove screws and all side, front and rear doors and panels.

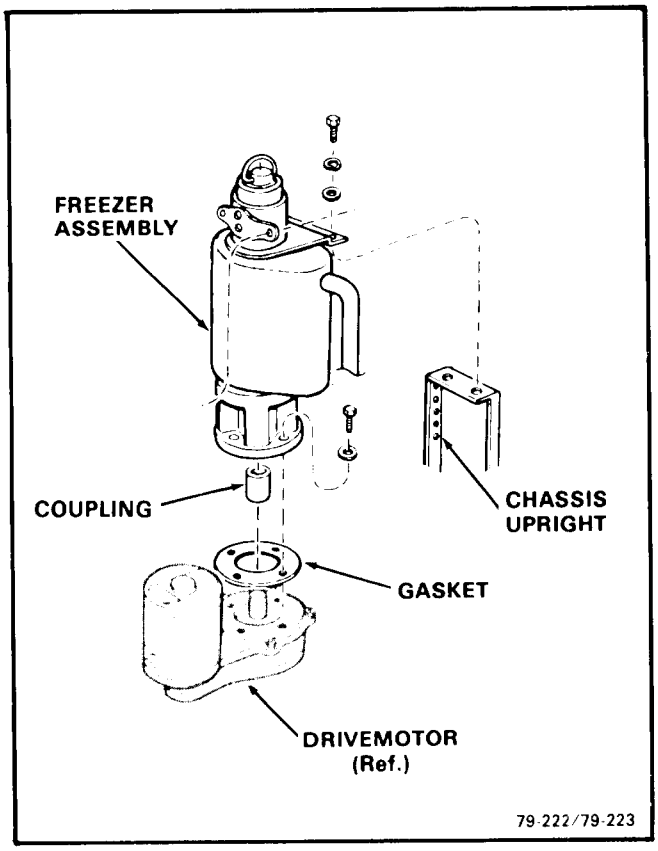


Figure 4-2. Removal of the Freezer Assembly

2. Tag and disconnect all lines at the rear of the Cold Plate that connect to the Dispensing Tower.
3. Remove 29 screws and lift away from the Dispenser Chassis, the entire Hood Assembly and Dispensing Tower, with product lines attached.
4. Refer to procedures IV-XIV and IV-XV and remove the Limit Box Assembly, Pressure Plate Assembly, Spout Assembly, and the Spout Casting.
5. Remove Corbin clamp and Tygon tube from the Freezer Assembly that connects to the Water Reservoir Assembly.
6. Bleed off or blow the refrigerant charge through the Schrader valve.
7. Unsolder the suction line from the Compressor.
8. Unsolder the capillary line at the Drier.
9. Remove two screws and lockwashers which attach the Freezer Assembly to the upper framework of the Chassis, just below area of the Spout Casting location.
10. Remove four screws, lockwashers and washers which attach the bottom of the Freezer Assembly to the Adaptor on the Drivemotor Assembly.
11. Lift the Freezer Assembly up and off of the Adaptor and Drivemotor Assembly.

B. To replace the Freezer Assembly, reverse the removal procedure.

NOTE

Thoroughly evacuate the system to remove moisture and non-condensables.

XIV. REMOVAL AND REPLACEMENT OF THE LIMIT BOX ASSEMBLY

A. To remove the Limit Box Assembly, see Figure 4-3:

1. Pull to unsnap each end of the Hood Panel and remove the Panel from the Hood Assembly.
2. Remove three screws, located behind the upper part of the left side opening of the Hood Assembly, which attach the Dispensing Tower to the Hood Assembly.
3. Slide the Dispensing Tower toward the rear, about one-half inch, to disengage the slots; then lift the Dispensing Tower off of the Hood Assembly and lay the Tower, with product lines attached, on the front apron of the Dispenser.
4. Remove the Insulation Strap, the Insulation Clip and the two-piece Insulation at the top of the Freezer Assembly.

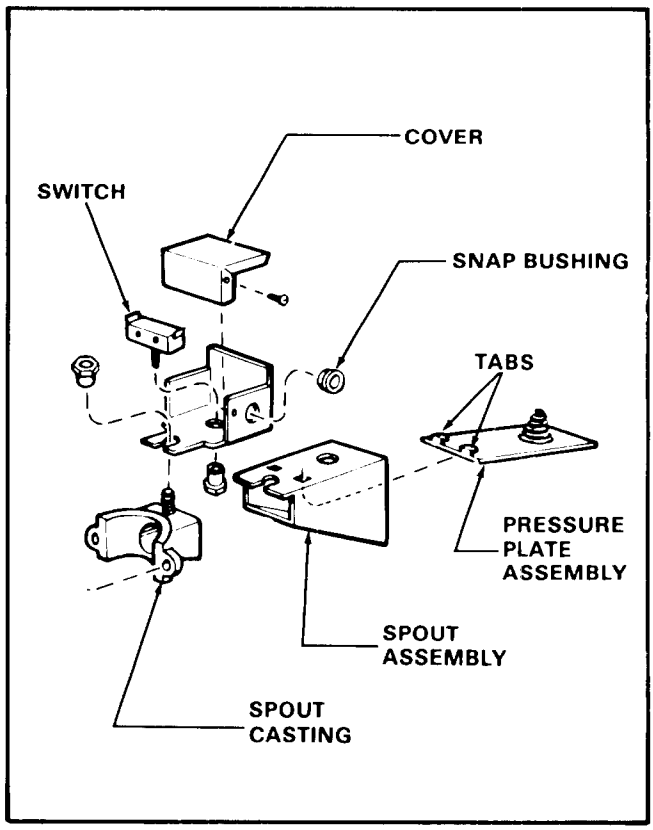


Figure 4-3. Removal of the Limit Switch, Pressure Plate, Spout and Spout Casting.

5. Remove the nut that attaches the Limit Box to the Spout Casting and slide the Limit Box away from the Freezer to disengage from the two tabs, part of the Pressure Plate Assembly.
6. Remove two screws and the Cover from the Limit Box.
7. Disconnect two electrical leads from terminals inside the Limit Box and remove the Limit Box from the Spout Casting.

B. To replace the Limit Box Assembly, reverse the removal procedure.

XV. REMOVAL AND REPLACEMENT OF THE PRESSURE PLATE ASSEMBLY, SPOUT ASSEMBLY AND SPOUT CASTING.

A. To remove the Pressure Plate Assembly, Spout Assembly and Spout Casting, see Figure 4-3:

1. Perform steps 1 through 5 of procedure IV-XIV-A above.
2. Reach through the right side opening of the Hood Assembly and into the Spout and remove the Pressure Plate Assembly.
3. Grasp the Spout Assembly and work back and forth slightly and pull the Spout Assembly off of the Spout Casting and out through the inner wall of the Ice Storage Bin.

4. Remove two screws and lockwashers and separate the Spout Casting and Spout Grommet from the Freezer. Retain the Grommet for replacement procedure.

B. To replace the Pressure Plate Assembly, Spout Assembly and Spout Casting, reverse the removal procedure.

XVI. REMOVAL AND REPLACEMENT OF THE DISPENSING VALVE

CAUTION

SCOTSMAN Parts Department DOES NOT stock repair parts for soda valves. Prevent delay and problems by ordering spare valves, see Figure 8-12, or ordering replacement internal valve parts from the manufacturer:

THE CORNELIUS COMPANY
2727 North Ferry Street
Anoka, Minnesota 55303

A. To remove the Dispensing Valve:

1. Temporarily disconnect syrup line at syrup tank, or otherwise release CO^2 gas pressure to the Dispensing Valve or Faucet to be replaced or repaired.
2. Pull to unsnap each end of the Hood Panel and remove the Hood Panel from the Hood Assembly.
3. Remove three screws, located behind the upper part of the left side opening of the Hood Assembly, which attach the Dispensing Tower to the Hood Assembly.
4. Slide the Dispensing Tower toward the rear, about one-half inch, to disengage the slots; then, lift the Dispensing Tower off of the Hood Assembly and lay the Tower, with product lines attached, on the front apron of the Dispenser for work access to the Valve to be removed.
5. Disconnect the Tube Assembly from the adaptor at the rear of the Dispensing Valve. See Figure 4-4.
6. Unscrew the Shank Nut on the threaded sleeve of the Dispensing Valve, behind the Dispensing Panel; then, remove the Shank Nut, Shank Seal Washer and Shank Seal.
7. Remove the Dispensing Valve from the front of the Dispensing Panel on the Dispensing Tower Assembly, using care to prevent damage to threads.
8. Disassemble and inspect all parts of the Valve for replacement, as necessary.

B. To replace the Dispensing Valve, reverse the removal procedure.

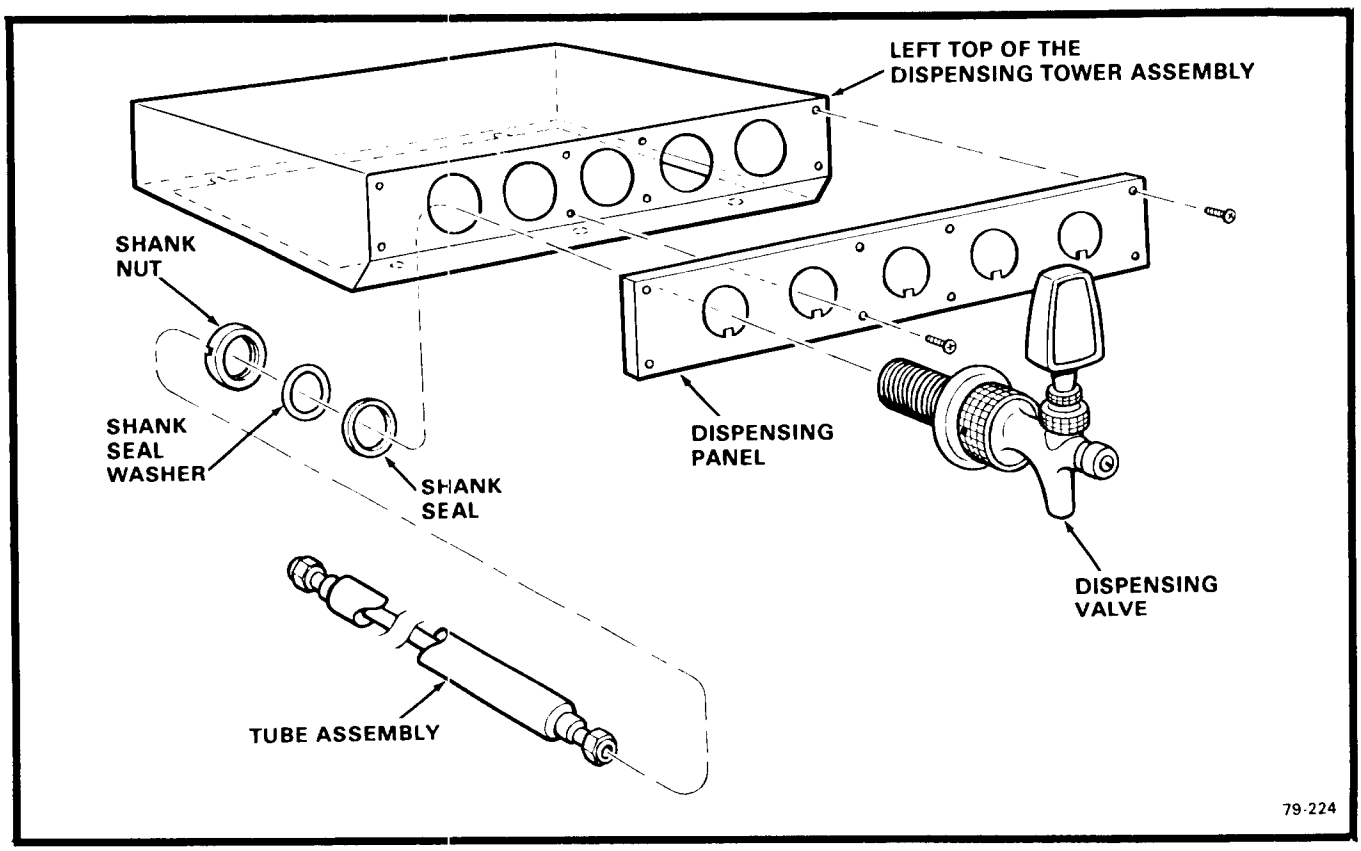


Figure 4-4. Removal of the Dispensing Valve.

XVII. REMOVAL AND REPLACEMENT OF THE WATER REGULATOR ASSEMBLY—WATER-COOLED MODELS.

A. To remove the Water Regulator Assembly:

NOTE

Always install a replacement Drier, any time the sealed refrigeration system is opened. Do not replace the Drier until all other repair or replacement has been completed.

1. Remove screws and lift off the Left Front Door.
2. Bleed off or blow the refrigerant charge through the Schrader valve.
3. Unsolder the Capillary line from the Water Regulator Assembly, where connected at the process header.
4. Disconnect the water inlet line at the rear of the Water Regulator.
5. Disconnect the Condenser water inlet tube at the front of the Water Regulator.
6. Remove two screws, lockwashers and washers which attach the Water Regulator Assembly bracket to the Chassis base and remove the Water Regulator Assembly and bracket.

NOTE

Thoroughly evacuate the system to remove moisture and non-condensables.

B. To replace the Water Regulator Assembly, reverse the removal procedure.

XVIII. REMOVAL AND REPLACEMENT OF THE WATER RESERVOIR ASSEMBLY

A. To remove the Water Reservoir Assembly, see Figure 4-5:

1. Pull to unsnap each end of the Hood Panel and remove the Hood Panel from the Hood Assembly.
2. Remove three screws, located behind the upper part of the left side opening of the Hood Assembly, which attach the Dispensing Tower to the Hood Assembly.
3. Slide the Dispensing Tower toward the rear, about one-half inch, to disengage the slots; then, lift the Dispensing Tower off of the Hood Assembly and lay the Tower, with product lines attached, on the front apron of the Dispenser.

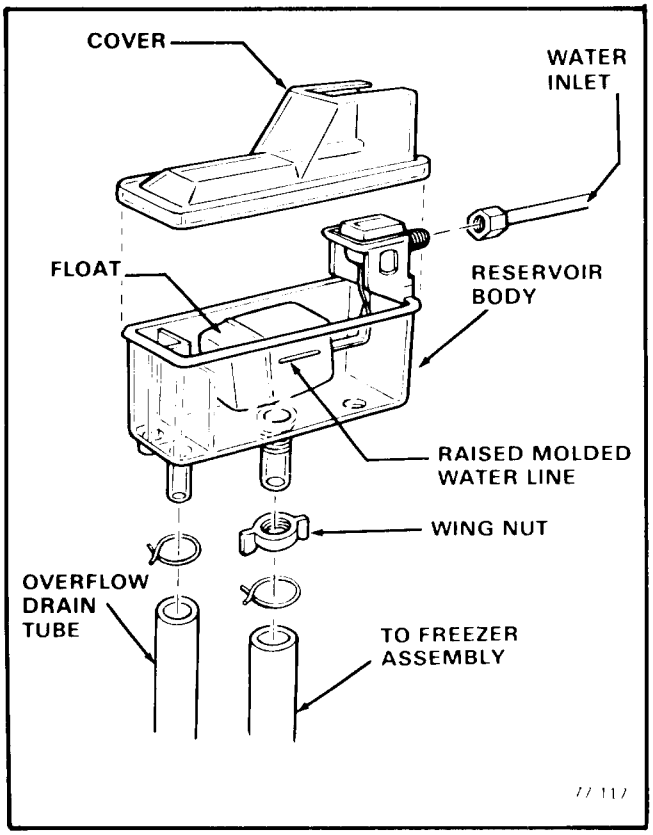


Figure 4-5.

Removal of the Water Reservoir Assembly.

NOTE

Be prepared with container or rags, to catch water left in lines, when lines are disconnected in next steps, to prevent draining water on parts, components, electrical lines, etc.

4. Disconnect the water inlet tube from the Water Reservoir Assembly.
5. Remove two Corbin clamps and two tubes from the bottom of the Water Reservoir Assembly.
6. Unscrew and remove the wing nut from the bottom of the Water Reservoir Assembly.
7. Lift and remove the Water Reservoir Assembly from the mounting bracket.

B. To replace the Water Reservoir Assembly, reverse the removal procedue.

NOTE

Check that the installed replacement Water Reservoir Assembly float moves freely. Bend metal arm of float to adjust, as necessary. The correct water level in the Water Reservoir is 3/8-inch below the raised molded line, on the side of the body of the Water Reservoir.

SECTION V

MAINTENANCE & CLEANING INSTRUCTIONS

I. GENERAL

The periods and procedures for maintenance and cleaning are given as guides and are not to be construed as absolute or invariable. Cleaning especially will vary, depending upon local water conditions and the ice volume produced and dispensed; and, the dispensing of syrup and carbonated drinks must always be considered. Each Icemaker/Drink Dispenser must be maintained individually, in accordance with its own particular location requirements.

II. ICEMAKER

THE FOLLOWING MAINTENANCE SHOULD BE SCHEDULED AT LEAST TWO TIMES PER YEAR ON THIS ICE-MAKER/DRINK DISPENSER. CALL YOUR AUTHORIZED SCOTSMAN SERVICE AGENCY.

1. Check and clean water line Strainers
2. Remove cover from Water Reservoir and depress the float to ensure that a full stream of water enters the Reservoir.
2. Check that the Icemaker/Drink Dispenser cabinet is level, in side-to-side and front-to-rear directions.
4. Check that the water level in the Water Reservoir is below the overflow, but high enough that it does not run out of the spout opening.

NOTE

It is not abnormal for some water to emerge from the Ice Spout with flaked ice during normal ice production.

5. Clean the Water Reservoir and interior of the Freezer Assembly, using a solution of SCOTSMAN Ice Machine Cleaner. Refer to procedure V-III, CLEANING-Icemaker.

NOTE

Cleaning requirements vary according to local water conditions and individual user operation. Visual inspection of the Auger before and after cleaning will indicate frequency and procedure to be followed in local areas.

6. When doubtful about refrigerant charge, install refrigerant gauges on Schrader valves and perform steps 6 and 7. Check gauge for Compressor head Pressure:

   AIR-COOLED MODELS: Varies between 130 and 145 PSIG.

   WATER-COOLED MODELS: Set at 135 PSIG. Adjust screw on top of Water Regulator Valve to raise or lower head pressure.

7. Check gauge for Suction line pressure:

   Varies between 12 to 16 PSIG, depending upon inlet water temperature and ambient air temperature.

8. Check Drivemotor operation:

   Normal operating temperatures are about 160-degrees F., which is hot to touch.

9. Check operation of the centrifugal sensing switch:

   PMF-450: 1/10 HP Motor.
   Switch will OPEN between 400-600 RPM and the Compressor STOPS, with the Drivemotor operating. Switch will CLOSE between 1300-1400 RPM and the Compressor will RESTART, with Drivemotor building back up to normal operating speed.

   PMF-650: 1/4 HP Motor:
   Switch will OPEN between 850-950 RPM and the Compressor STOPS, with the Drivemotor operating. Switch will CLOSE between 1100-1250 RPM and the Compressor will RESTART, with Drivemotor building back up to normal operating speed.

10. Remove the Insulation Strap and Clip, the Right and Left Spout Insulation pieces, the Retaining Ring and the Hook and Cap from the top of the Freezer Assembly.

11. Inspect the Top Bearing. If moisture is around Bearing, wipe clean of all grease and apply a coating of Shell Alvania 3 Grease, Scotsman P/N A29123-001. Replace parts removed in step 10.

NOTE

BEFORE next step, move the manual ON-OFF toggle switch, on the front of the Control Box, to the OFF position to stop the Fan Motor and Icemaker.

12. Clean the Air-Cooled Condenser, using vacuum cleaner, whisk broom or brush. Instruct customer to clean frequently and to be sure Icemaker and Fan Motor are OFF.

13. Check that Fan Blades move freely, are not touching any surfaces and are not bent or out of balance.

14. Check for refrigerant leaks and for proper frost line, which should frost out of Ac-

cumulator to within no closer than eight to twelve inches of the Compressor.

15. Check for water leaks. Tighten drain line connections. Pour water down Bin drain to be sure that drain line is open and clear.
16. Check the quality of ice. Ice flakes should be wet when formed, but will cure rapidly to normal hardness in the Bin.
17. Check the Bin Thermostat Ice Control Bulb and the Pressure Plate and Limit Switch cutoff in the Ice Spout.

NOTE

The Limit Switch only shuts off the Compressor. The Bin Thermostat is factory set at 10-degrees F. differential and should keep the entire Icemaker system shut off at least 10 minutes in high ambient temperatures, longer in low ambient temperatures, during normal operation. Settings are 35-degrees F. CUT-OUT and 45-degrees F. CUT-IN.

III. CLEANING - Icemaker

1. Remove screws and the Left Front Door.
2. Move both manual ON-OFF toggle switches, on the front of the Control Box, to the OFF position.
3. Remove the Ice Access Door and all ice from the ice Storage Bin.
4. CLOSE the water supply shutoff valve; or, block the float in the Water Reservoir.
5. Disconnect the tube between the Water Reservoir and the bottom of the Freezer Assembly and drain all water from the Reservoir and tube. Reconnect the tube.

WARNING

SCOTSMAN Ice Machine Cleaner contains Phosphoric and Hydroxyacetic acids. These compounds are corrosive and may cause burns. If swallowed, DO NOT induce vomiting. Give large amounts of water or milk. Call Physician immediately. In case of external contact flush with water. KEEP OUT OF THE REACH OF CHILDREN.

6. Prepare cleaning solution: Mix six ounces of SCOTSMAN Ice Machine Cleaner with one and one-half quarts of hot water.
7. Remove the Cover to the Water Reservoir.
8. Slowly pour the cleaning solution into the Water Reservoir.
9. Move the lower, manual ON-OFF toggle switch, on the front of the Control Box, to the ON position.
10. Continue to slowly pour the cleaning solution into the Water Reservoir, maintain level just below the Reservoir overflow.
11. Continue icemaking, using the cleaning solution, until all of the solution is used up and the Water Reservoir is almost empty. DO NOT allow the icemaker to operate with empty Reservoir.
12. Move the lower, manual ON-OFF toggle switch, on the front of the Control Box, to the OFF position.
13. Wash and rinse the Water Reservoir.
14. OPEN the water supply shutoff valve; or, remove the block from the float in the Water Reservoir.
15. Move the lower, Manual ON-OFF toggle switch, on the front of the Control Box, to the ON position.
16. Continue icemaking for at least 15 minutes, to flush out any cleaning solution. Check ice for acid taste - continue icemaking until ice tastes sweet.
17. Move the lower, manual ON-OFF toggle switch, on the front of the Control Box, to the OFF position.

CAUTION

DO NOT use ice produced from the cleaning solution. Be sure none remains in the bin.

18. Remove all ice from the ice storage Bin.
19. Add hot water to the ice storage Bin and thoroughly wash and rinse all surfaces within the Bin.
20. Clean all parts removed from the Bin, the Ice Access Door, Splash Panel and Grill in accordance with the regulations of the local Health Authorities.
21. Pour hot water into drip pan each day, to keep drains open from slime build up.
22. Clean and sanitize the ice storage Bin each week. Refer to SANITIZING procedure V-V.

IV. CLEANING - Faucet Assembly

The Faucet Assembly need not be completely disassembled for the cleaning procedure. A special spanner or valve wrench, is shipped with the Icemaker/Drink Dispenser for use in removing the Faucet body and lever assembly for the cleaning procedure.

To remove and clean:
(See Figure 5-1)

1. Temporarily disconnect syrup line at syrup tank, or otherwise release CO^2 gas pressure to the Faucet to be cleaned.
2. Fit the tang at the large curved end of the valve wrench, into a hole in the round nut and unscrew, clockwise, to loosen the nut behind the Faucet.

3. Unscrew the nut and remove the Faucet body and lever assembly and the plastic Compensator from the Faucet sleeve and nut assembly.

WARNING

SCOTSMAN Ice Machine Cleaner contains Phosphoric and Hydroxyacetic acids. These compounds are corrosive and may cause burns. If swallowed, DO NOT induce vomiting. Give large amounts of water or milk. Call Physician immediately. In case of external contact flush with water. KEEP OUT OF THE REACH OF CHILDREN.

4. Prepare cleaning solution: Mix six ounces of SCOTSMAN Ice Machine Cleaner with one and one-half quarts of hot water.

   DO NOT USE SOAP AND WATER FOR FAUCET CLEANING.

5. Immerse the removed parts in the cleaning solution, thoroughly washing solution over all surfaces and scrub surfaces with a brush.
6. Rinse all parts with clear hot water, to flush away all cleaning solution. Drain parts.
7. Repeat all steps, except step 4, for remaining Faucets; then, pour remainder of the hot cleaning solution into the Sink and Grill, to flush out any slime and keep drain open. Rinse with clear hot water.
8. Sanitize all removed Faucet parts. Refer to SANITIZING procedure V-V.
9. Replace cleaned and sanitized Faucet parts in the reverse order of the removal procedure.

V. SANITIZING

Sanitizing is an important phase of the ice-making and dispensing operation. The following sanitizing procedure should be performed after every repair or replacement of parts in the Icemaker/Drink Dispenser, in or through which ice made, stored, water is drained and syrup flows, is dispensed and any drippage is drained. Additional requirements for performing the sanitizing procedure should be followed in accordance with the requirements of the local Health Authorities.

NOTE

Contact your Local Health Authorities and obtain their approval of the sanitizer you intend to use when sanitizing the Icemaker/Drink Dispenser.

Prior to performing the sanitizing procedure, it is assumed the cleaning procedure has been performed.

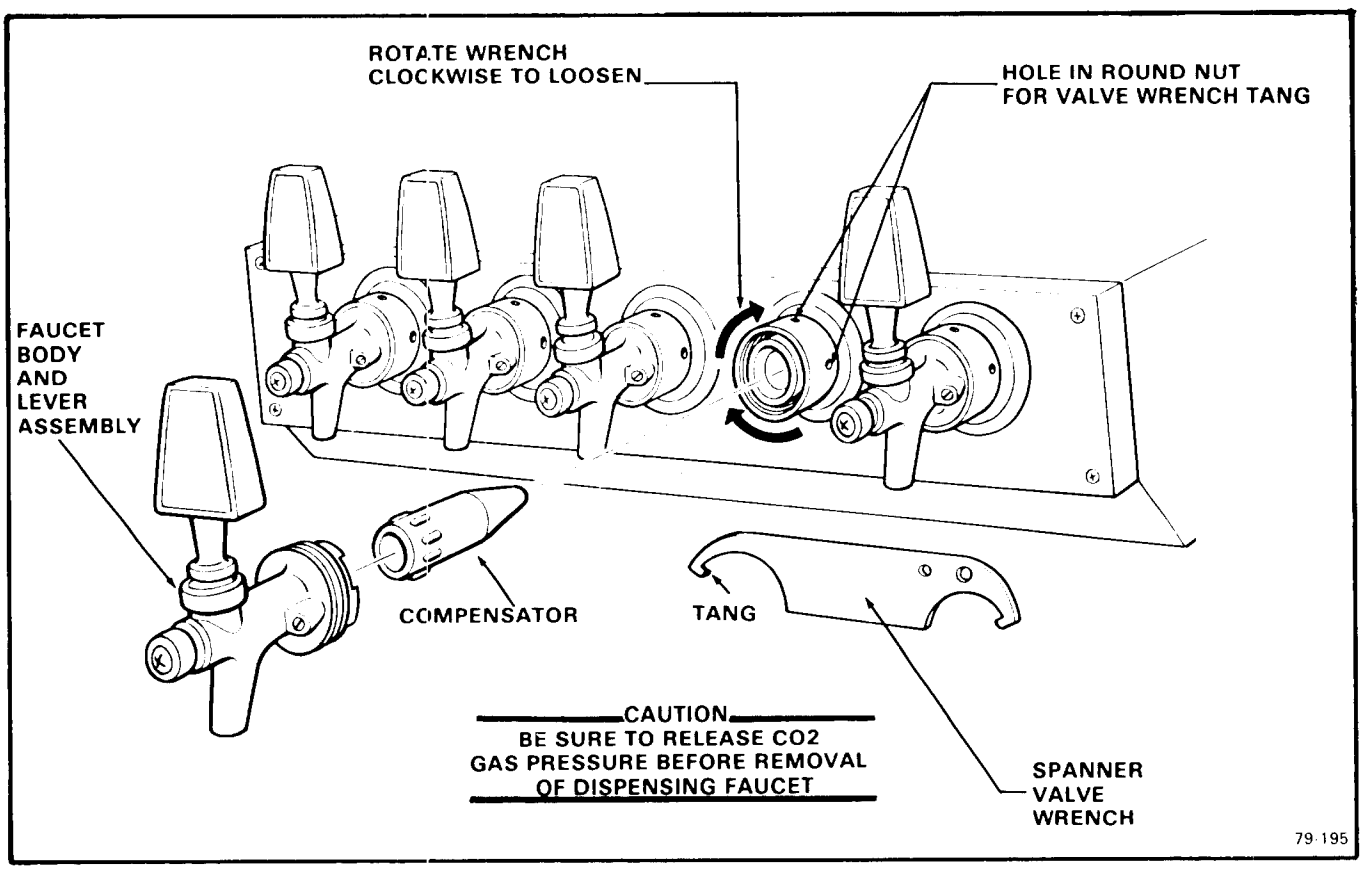


Figure 5-1. Removal of Faucet Parts for Cleaning

WARNING

Read WARNING thoroughly BEFORE preparing sanitizing solution, in next step.

1. STERILEX 3-Q SANITIZING TABLETS

DANGER: KEEP OUT OF REACH OF CHILDREN. Tablets may be harmful or fatal if swallowed. May cause skin irritation or eye damage. Avoid prolonged skin contact. Do not get in eyes. In case of contact, flush with plenty of water. If irritation persists get medical attention. Avoid contamination of food.

FIRST AID: If tablets are swallowed, drink promptly a large quantity of milk, egg whites or gelatin solution. Avoid Alcohol.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsion may be needed. Rinse empty carton container thoroughly with water and discard. Always follow your health department regulations.

2. MIKRO-QUAT

DANGER: Causes high damage and skin irritation. Do not get in eyes, on skin, or on clothing. Protect eyes when handling concentrated product. Harmful if swallowed. Avoid contamination of food.

FIRST AID: In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. For eyes, call a physician. Remove and wash contaminated clothing before reuse. If swallowed, drink promptly a large quantity of milk, egg whites or gelatin solution or if these are not available, drink a large quantity of water. Call a physician immediately.

1. Prepare a sanitizing solution using a quaternary ammonium sanitizing compound.

NOTE

1. *Carefully follow directions and observe all precautions on the sanitizing compound container.*
2. *One *Sterilex 3-Q sanitizing tablet per three quarts of water yields 200 ppm active quaternary; or, one-third ounce of *Mikro-Quat to one gallon of water yields 235 ppm active quaternary.*
3. *The taste of ice and water will not be affected by the sanitizing of parts using the above mixed sanitizing solutions. Rinsing of parts is not required with this relatively mild solution, but air drying of the parts is suggested before reassembly.*

2. Immerse all parts, earlier removed and cleaned, in the sanitizing solution; or, if too large for the container of sanitizing solution, thoroughly wash the solution over all surfaces of all parts.
3. Drain all parts and allow to air dry.
4. Pour some of the sanitizing solution into the Bin drain and the Sink Assembly drain.
5. Reassemble all air-dried parts in the Icemaker/Drink Dispenser.
6. Restore electrical power ON, water pressure ON, and pre-mix syrup and CO^2 pressure ON.
7. Replace all covers, doors and panels earlier removed.
8. Clean and sanitize the Faucet Assemblies and the Bin interior and surfaces each week.

**Sterilex 3-Q sanitizing tablets are distributed by Pittsburgh Chemical Laboratory, Inc., Pittsburgh, PA 15222, and may be obtained through most restaurant supply houses.*

**Mikro-Quat, is manufactured by Economics Laboratory, Inc., Osborn Building, St. Paul MN 55102, and may be obtained from them through their Magnus Division, The Klenzade Division, or from restaurant supply houses.*

SECTION VI
SERVICE DIAGNOSIS

The Service Diagnosis Section is for use in aiding the serviceman in diagnosing a particular problem for pin-pointing the area in which the problem lies, thus an ever available reference for proper corrective action.

The following charts lists corrective actions for the causes of known symptoms of certain problems that can occur.

I. ICEMAKING - REFRIGERATION SYSTEM

SYMPTOM	POSSIBLE CAUSE	CORRECTION
Water Leaks.	Defective water seal.	Replace Seal.
	Gravity feed line leaking.	Check hose clamps.
	Water level in reservoir too high.	Adjust water level to 3/8-inch below reservoir overflow, then raise reservoir until water flows out freezer spout, then lower reservoir 3/4-inch.
	Storage bin drain and connecting fittings.	Check and repair.
Excessive noise or chattering.	Mineral or scale deposit on auger and inner freezing chamber walls.	For severe deposit, remove and manually polish auger, sand inner chamber walls of freezer barrel.
		For lighter concentration, use Scotsman Ice Machine Cleaner periodically.
	Intermittent water supply.	Check and clean water strainer. Check gravity feed line for air lock.
		Remove air lock.
	Water level in reservoir too low.	See CORRECTION for Water Leaks above.
	Gear Reducer loose on frame.	Tighten Gear Reducer.
	Motor compressor not solid on rubber mounts.	Repair or replace rubber mounts.
	Gearmotor end-play or worn bearing.	Repair or replace bearing.
Making wet ice. (Ice melts too quickly, is not cold enough to properly cure in the Bin.)	Surrounding air temperature to high.	Correct or move cabinet.
	Under or over-charge of refrigerant.	Recharge with proper amount.
		Should frost out of accumulator at least 8-inches. See nameplate for correct charge. See CORRECTION for Water Leaks above.

ICEMAKING - REFRIGERATION SYSTEM (Cont'd)

SYMPTOM	POSSIBLE CAUSE	CORRECTION
Making wet ice (Cont'd)	Back pressure too high.	Overcharge of refrigerant, Faulty compressor or high head pressure. Lower pressure as indicated.
	Faulty compressor or valve plate.	Repair or replace compressor or valve plate.
Low ice production.	Loss of refrigerant. Under or over-charge of refrigerant.	Check and recharge. See NAMEPLATE for correction charge.
	Drivemotor weak.	Replace Drivemotor.
	Dirty or plugged condenser.	Clean condenser.
	Low water level in water reservoir.	See CORRECTION for Water leaks above.
	Partial restriction in capillary tube or drier.	Moisture in system. Overcharge of oil in system. Remove charge by blowing back through cap tube.
		Replace drier and recharge.
	Inlet water strainer partially plugged.	Remove screen and clean.
	Corroded or stained auger due to water condition.	Remove auger and clean, or use Scotsman Ice Machine Cleaner. See Maintenance Section.
Gearmotor noise.	Low on oil.	Remove case cover to check for proper oil level. Top of gears should be covered. Use: Sun Oil Company Prestige 50-EP
Icemaker will not operate.	Blown fuse in line.	Replace fuse and check for cause of blown fuse.
	Bin thermostat set too high.	Adjust thermostat. Set at 35-degrees cut-out, 45-degrees cut-in.
	Loose electrical connection.	Check wiring.
	Switch in OFF position.	Set switch to ON position.
	Inoperative master switch.	Replace switch or thermal overload.
	Off on manual-reset pressure control.	Reset.
Icemaker continues to operate with full storage bin.	Bin thermostat not properly set or is defective.	Re-set or replace bin thermostat. Re-set to 35-degrees cut-out, 45-degrees cut-in.
Compressor cycles intermittently.	Low voltage.	Check for overloading.
	Dirty condenser.	Clean condenser.

ICEMAKING - REFRIGERATION SYSTEM (Cont'd)

SYMPTOM	POSSIBLE CAUSE	CORRECTION
Compressor Cycles intermittently (cont'd)	Air circulation blocked.	Remove cause or move unit.
	Inoperative condenser fan motor.	Replace motor.
	Non-condensable gases in system.	Check for gas leaks, evacuate and recharge.
	Bin thermostat differential too small causing short cycling.	Widen differential 35-degrees cut-out, 45-degrees cut in.
	Cycling on ice spout microswitch.	Set or replace Bin thermostat.
Icemaker operates but makes no ice.	Loss or undercharge of refrigerant.	Check for leaks and recharge. See NAMEPLATE for correct charge.
	Water not entering freezing chamber.	Plugged strainer or supply line. Check and clean. Air lock in gravity feed line. Check and remove air lock.
	Moisture in system.	Check, evacuate, replace drier.
		Recharge. See NAMEPLATE for correct charge.
	Water seal leaking.	Replace seal.
	Water turned off while unit was operating.	Freezer inlet water line froze shut. Unit must be turned off and defrosted.
	Drivemotor or drive coupling stripped.	Repair or replace drivemotor or drive coupling.

SECTION VII
WIRING DIAGRAMS

This Section is provided as an aid in understanding the electrical circuitry of the Icemaker/Drink Dispenser.

WARNING

When conducting a continuity check of the Icemaker/Drink Dispenser:

1. **Disconnect the main power source.**
2. **DO NOT use an incandescent lamp or jumper wire, conduct all tests with a volt-ohm-meter.**

The Wiring Diagrams in this Section are:

Figure 7-1. Wiring Diagram PMF-450 Air-Cooled

Figure 7-2. Wiring Diagram PMF-450 Water Cooled.

Figure 7-3. Wiring Diagram PMF-650 Air-Cooled

Figure 7-4. Wiring Diagram PMF-650 Water Cooled.

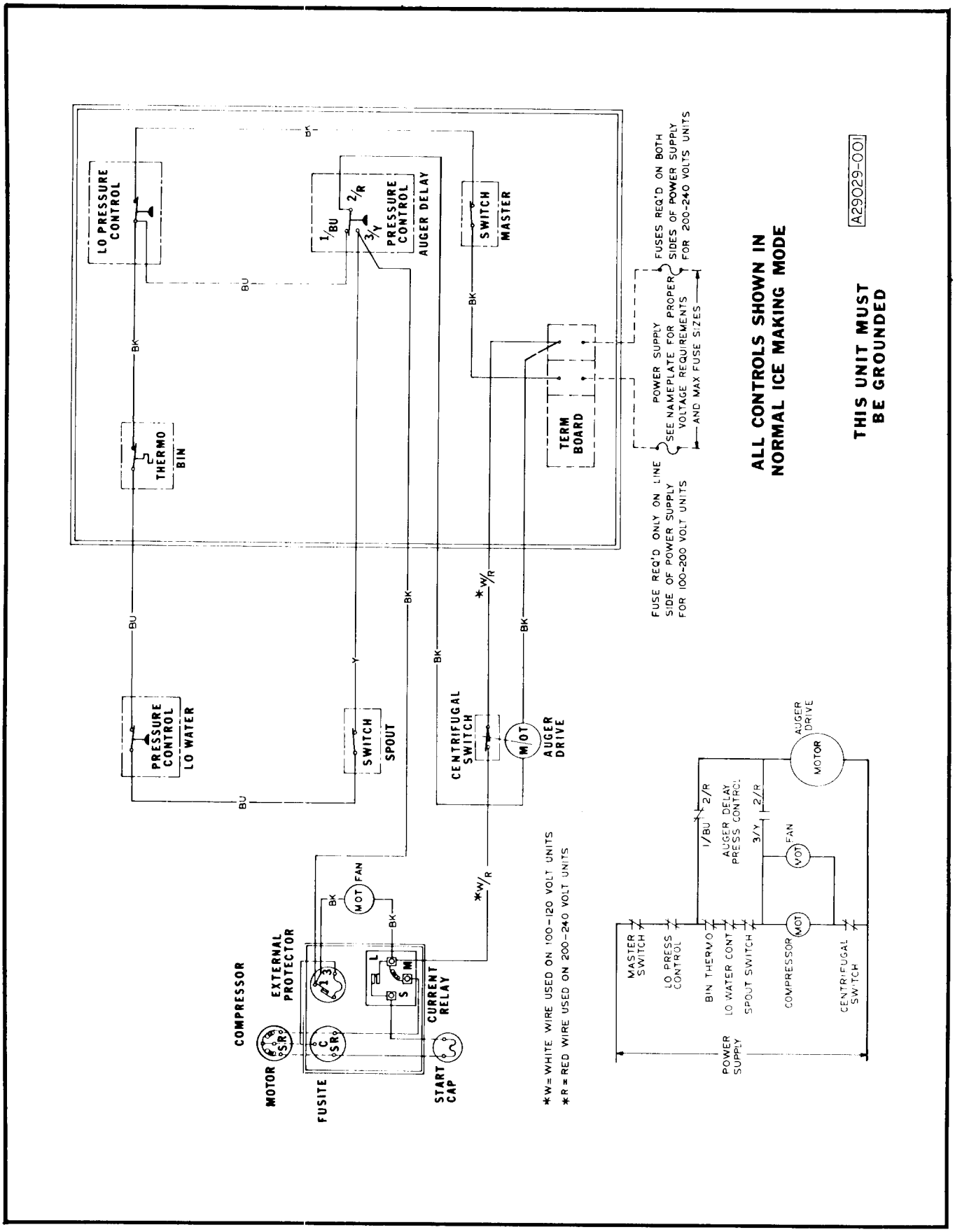


Figure 7-1. Wiring Diagram PMF450 - Air-Cooled

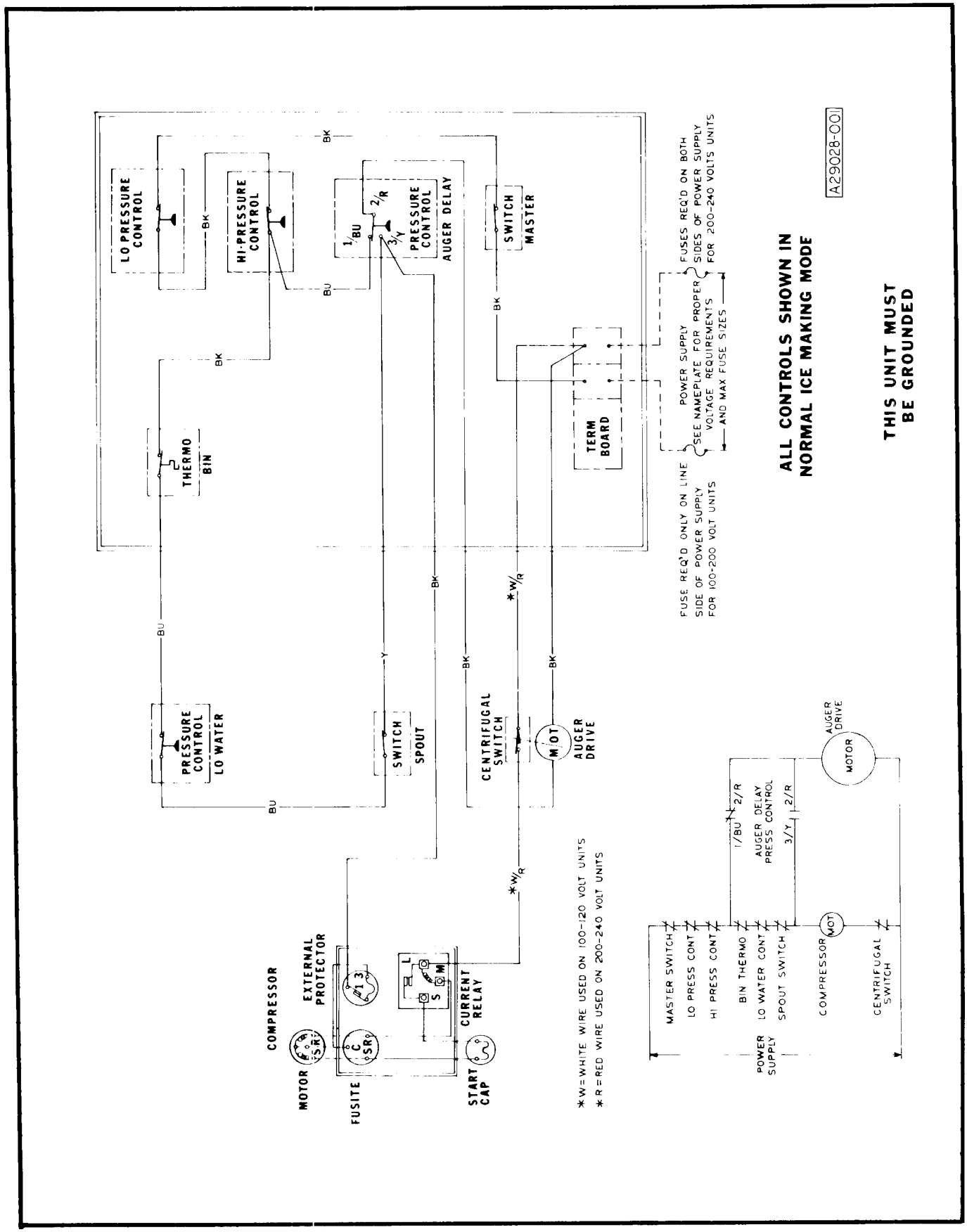


Figure 7-2. Wiring Diagram PMF450 - Water-Cooled

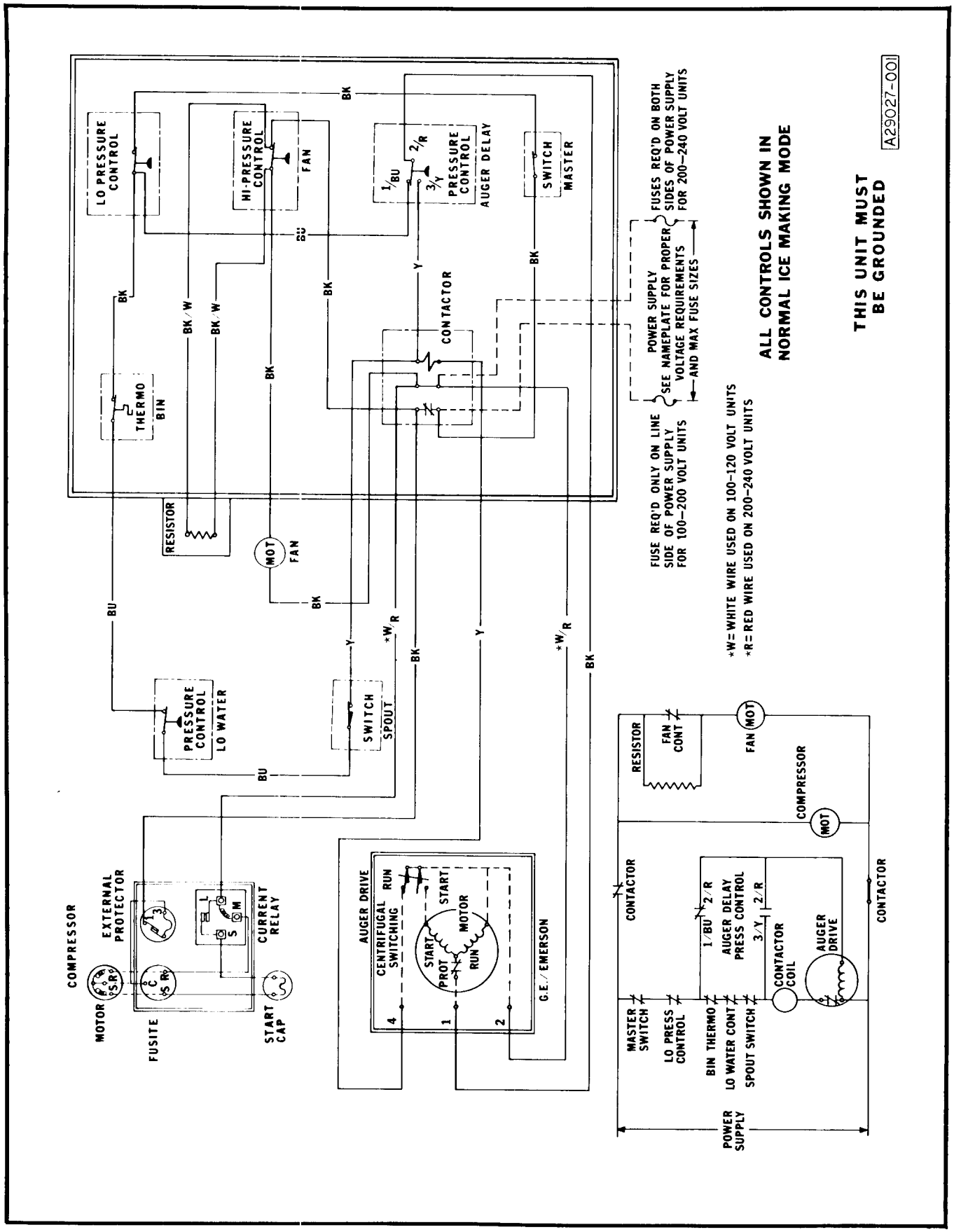


Figure 7-3. Wiring Diagram PMF650 - Air-Cooled

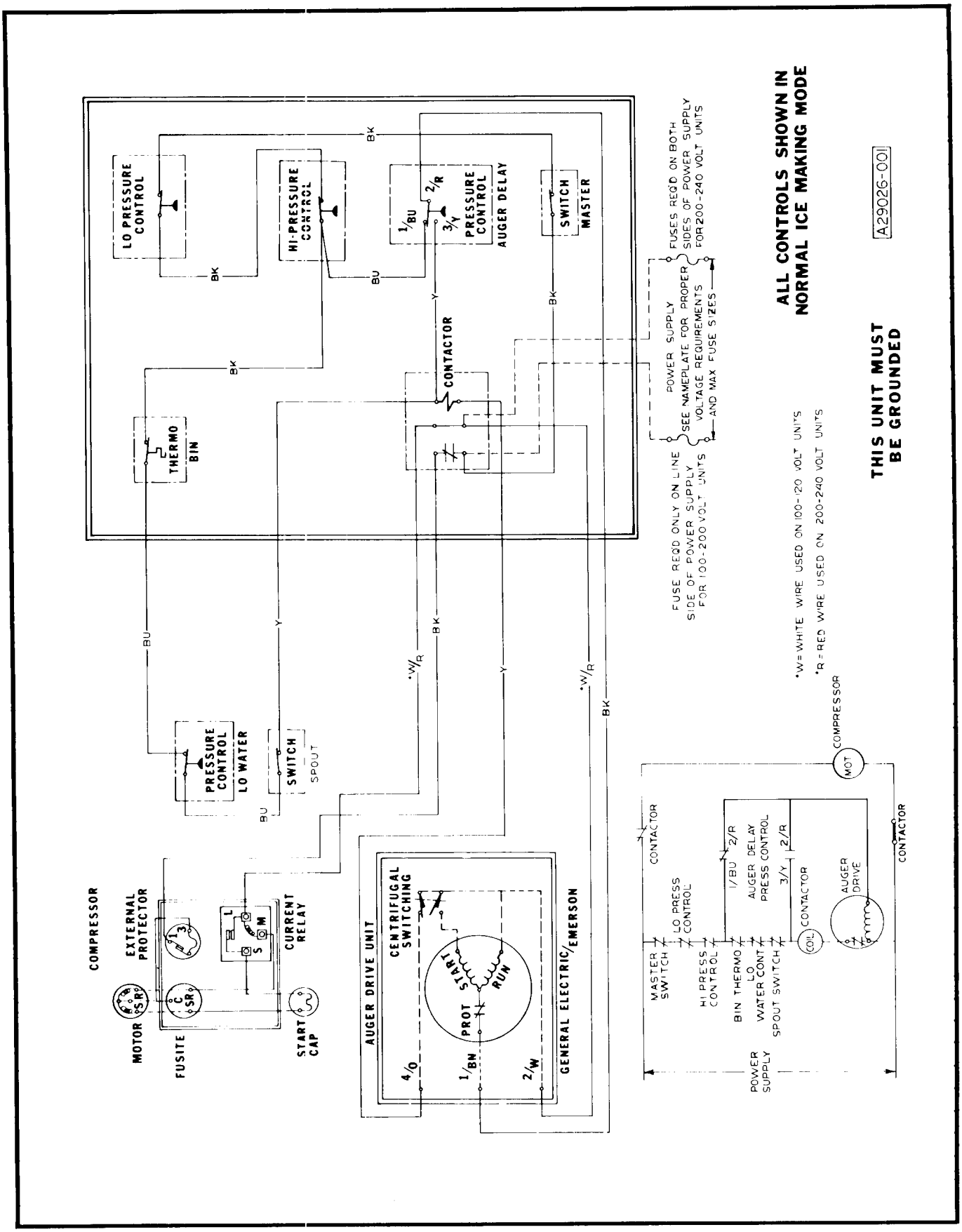


Figure 7-4. Wiring Diagram PMF650 - Water-Cooled

SECTION VIII

THE PARTS ILLUSTRATIONS AND PARTS LIST

I. GENERAL

This section contains the Parts Illustrations and the Parts List for each of the major assemblies in the PMF450/PMF650 Icemaker/Drink Dispenser.

Each Parts Illustration shows an assembly as an exploded view, with an Index Number for each part or sub-assembly, given in disassembly order. These Index Numbers key with the Parts List for the assembly and are found in the Parts ist Column headed Index Number. The Description Column gives the identifying nomenclature for the item indexed. The Part Number Column gives the number of item. The Number Required Column gives the number of items required per assembly, but not necessarily the total number of parts required per Dispenser.

All assemblies are cross-referenced both from the major assembly listing where they first appear in the Parts Listing to their break-down listing, and from the break-down listing, back to the major assembly (next higher assembly) listing.

A *No Number* designation, when used in the Part Number Column indicates the unit is not available from SCOTSMAN as an assembly. This designation is only for the convenience and clarity of division in cataloging.

When an Index Number is followed by a letter (e.g. 4a, 4b.), the letter indicates the part listed is part of the assembly indexed by the basic Index Number. The number required of the part indexed by the number and letter combination is only one of the assemblies indexed by the basic Index Number and not necessarily the total number or parts used in the Dispenser. Where the notation *Ref* occurs in the Number Required Column the number of the assemblies or parts required for use in the Dispenser will be found under previous Index Number or in the next higher listing Figure/Index number is shown in the Description Column immediately following the items description.

II. HOW TO USE THE ILLUSTRATION AND PARTS LIST

To find the part number of a required part or assembly, turn to the List of Illustrations and find the page number of the Parts Illustration of the major or sub-assembly containing the part. Turn to the indicated page and locate the part and its Index Number on the specific illustration. Find the Index Number on the required part in the Parts List to determine the complete description of the parts.

III. HOW TO ORDER PARTS OR ASSEMBLIES

When ordering parts or assemblies, to avoid costly delays and errors in shipment, give the part number, the complete description shown in the list, and the quantities of each part or assembly required. Also include the Model name, the serial number of the Dispenser for which the part is required, and for parts which require color matching, the color of the Cabinet. See Figure 8-00, at the end of this section for detailed ordering information.

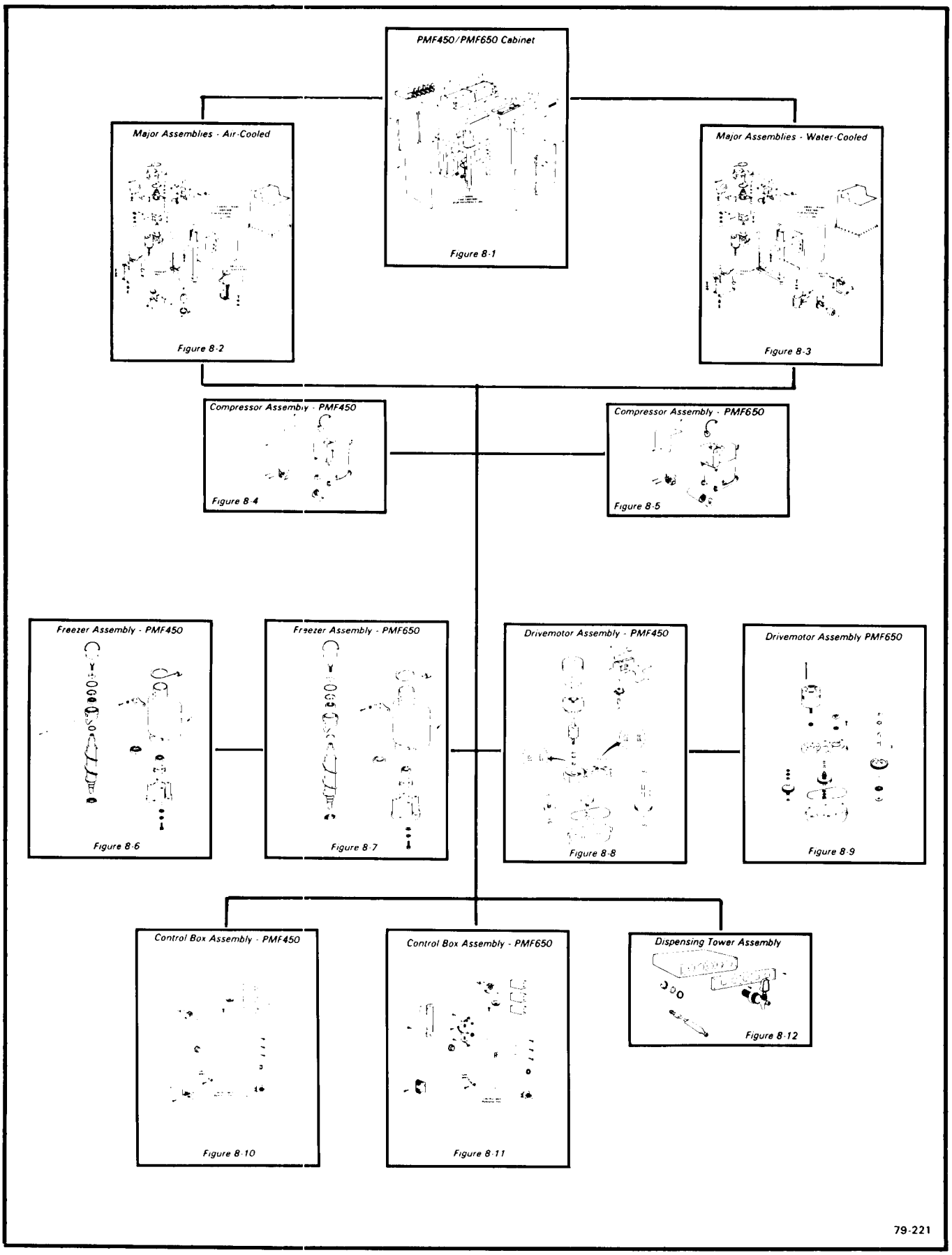


Figure 8-A. PMF450/PMF650 Premix Flaker Drink System Flow Chart

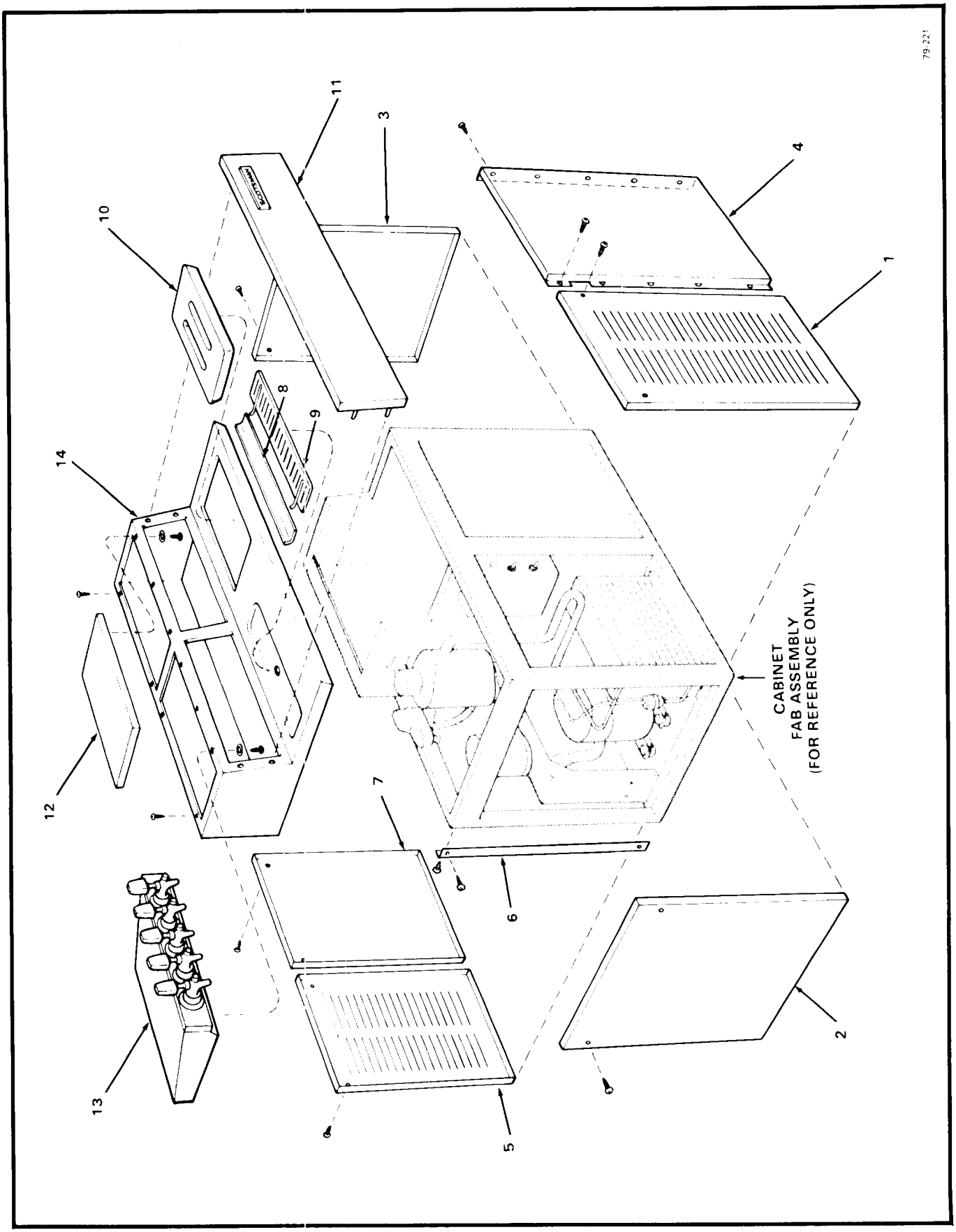


Figure 8-1. Model PMF450/PMF650 Cabinet.

Figure 8-1. PMF450/PMF650 Cabinet

INDEX NO.	DESCRIPTION	PART NUMBER	REQ'D NUMBER
	PMF450/PMF650 Cabinet	No Number	1
	* * *		
1	Door, Front - (CRS Painted)	A27729-003	1
	Door, Front - (Stainless Steel)	A27729-002	1
	Door, Front - (Coca Cola)	A27729-004	1
	attaching parts, Index 1		
	Screw, No. 8 x 1-1/4 S/T Flat Hd	03-1419-09	2
	Speed Nut, No. 8 J-type	03-1423-06	2
	* * *		
2	Panel, Left Side - (CRS Painted)	A27728-003	1
	Panel, Left Side - (Stainless Steel)	A27728-002	1
	Panel, Left Side - (Coca Cola)	A27728-004	1
	attaching parts, Index 2		
	Screw, No. 8 x 1-1/4 S/T Flat Hd	03-1419-09	2
	Speed Nut, No. 8 J-Type	03-1423-06	2
	* * *		
3	Panel, Right Side - (CRS Painted)	A27727-003	1
	Panel, Right Side - (Stainless Steel)	A27727-002	1
	Panel, Right Side - (Coca Cola)	A27727-004	1
	attaching parts, Index 3		
	Screw, No. 8 x 1-1/4 S/T Flat Hd	03-1419-09	2
	Speed Nut, No. 8 J-Type	03-1423-06	2
	* * *		
4	Panel, Front - (CRS Painted)	A17755-010	1
	Panel, Front - (Stainless Steel)	A17755-001	1
	Panel, Front - (Coca Cola)	A17755-011	1
	attaching parts, Index 4		
	Screw, No. 8 x 1/2 T/F Tap	03-1404-09	10
	* * *		
5	Door, Rear - (CRS Painted)	A17754-010	1
	Door, Rear - (Stainless Steel)	A17754-001	1
	Door, Rear - (Coca Cola)	A17754-011	1
	attaching parts, Index 5		
	Screw, No. 1/4-20 x 1 Phil Recess Pan Hd	03-1403-57	2
	* * *		
6	Plate, Corner Post Dress - (CRS Painted)	A19154-010	1
	Plate, Corner Post Dress - (Stainless Steel)	A19154-001	1
	Plate, Corner Past Dress - (Coca Cola)	A19154-011	1
	attaching parts, Index 6		

Figure 8-1. PMF-450/PMF650 Cabinet (Cont'd)

INDEX NO.	DESCRIPTION	PART NUMBER	REQ'D NUMBER
	Screw, No. 8 x 1/2 T/F Tap	03-1404-09	6
	* * *		
7	Panel, Rear - (CRS Painted)	A27730-003	1
	Panel, Rear - (Stainless Steel)	A27730-002	1
	Panel, Rear - (Coca Cola)	A27730-004	1
	attaching parts, Index 7		
	Screw, No. 8 x 1 T/F Tap	03-1404-13	2
	Speed Nut, No. 8 J-Type	03-1423-06	2
	* * *		
8	Panel, Splash - (CRS Painted)	A23186-001	1
	Panel, Splash - (Stainless Steel)	A23186-000	1
	Panel, Splash - (Coca Cola)	A23186-000	1
	* * *		
9	Grill - (CRS Painted)	02-1955-01	1
	Grill -(Stainless Steel)	02-1955-00	1
	Grill - (Coca Cola)	02-1955-00	1
	* * *		
10	Door, Ice Access - (CRS Painted)	02-2381-01	1
	Door, Ice Access - (Stainless Steel)	02-2381-02	1
	Door, Ice Access - (Coca Cola)	02-2381-02	1
	* * *		
11	Panel Assembly, Hood	A22280-000	1
	* * *		
12	Top, Right	A17812-000	1
	attaching parts, Index 12		
	Lockwasher, No. 10 External Tooth	03-1417-04	3
	Screw, No. 10-24 x 3/8 Pan Hd	03-1403-27	3
	Screw, No. 1/4-20 x 3/8 Hex Cap	03-1405-01	2
	* * *		
13	Tower Assembly, Dispensing	A29035-001	1
	(See Figure 8-12)		
	attaching parts, Index 13		
	Lockwasher, No. 10 External Tooth	03-1417-04	3
	Screw, No. 10-24 x 3/8 Pan Hd	03-1403-27	3
	Screw, No. 1/4-20 x 3/8 Hex Cap	03-1405-01	2
	* * *		
14	Hood Assembly	A17616-000	1
	attaching parts, Index 14		

Figure 8-1. PMF-450/PMF650 Cabinet (Cont'd)

INDEX NO.	DESCRIPTION	PART NUMBER	REQ'D NUMBER
	Screw, No. 8 x 1/2 T/F Tap * * * **NOTE:** There are five 96-inch Tube Assemblies that connect to the Cold Plate at one end and to five individual premix syrup tanks at the other end. These tube assemblies are not shown in the illustration. Order P/N A27737-003, for one Tube Assembly, 96-inches long.	03-1404-09	24

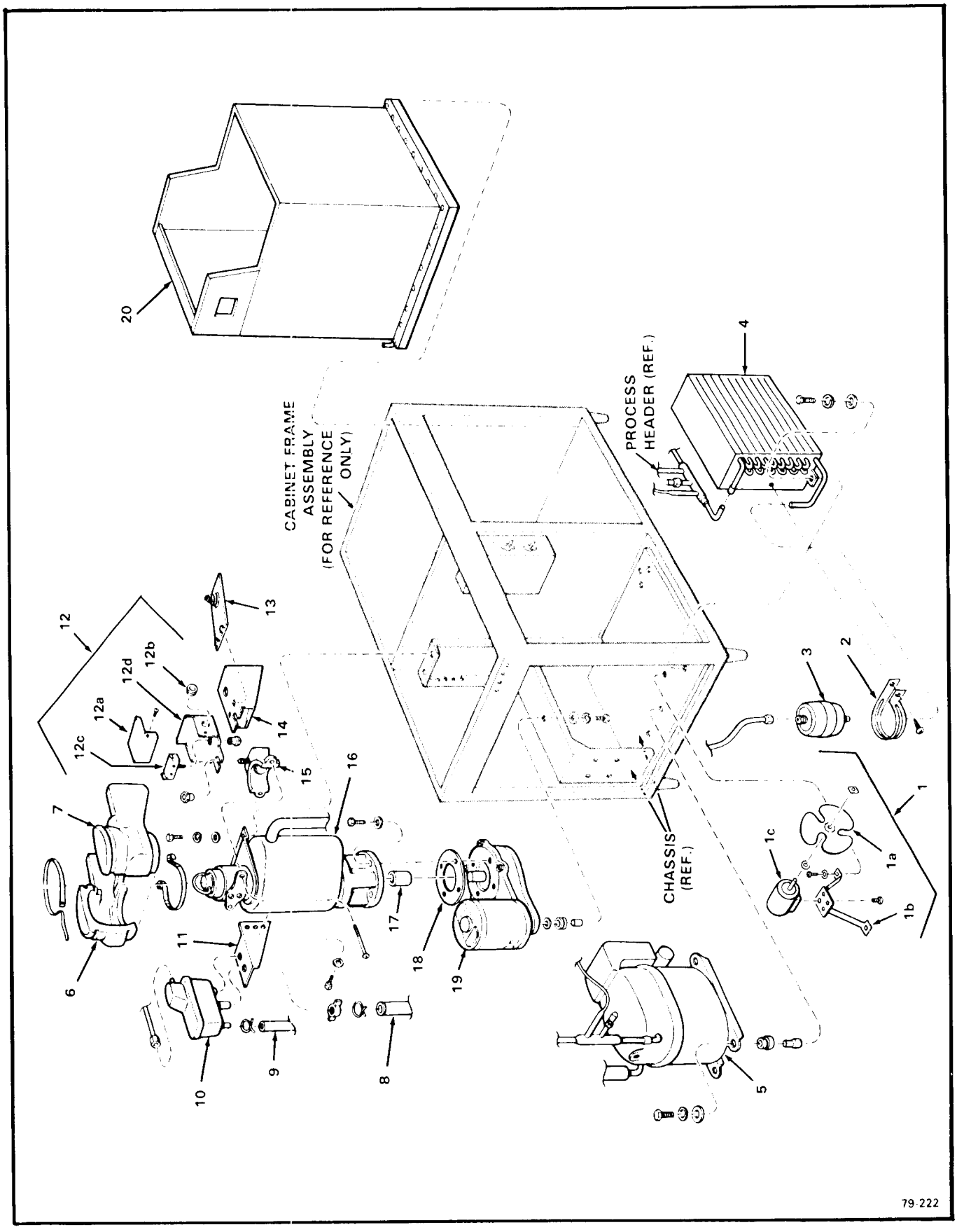


Figure 8-2. Major Assemblies - Air-Cooled Models

Figure 8-2. Major Assemblies - Air-Cooled Models

INDEX NO.	DESCRIPTION	PART NUMBER	REQ'D NUMBER
	Major Assemblies - Air-Cooled Models	No Number	Ref.
	* * *		
1	Fan Motor & Mounting Bracket Assembly	No Number	1
1a	Blade, Fan - (PMF450)	18-0285-01	1
	Blade, Fan - (PMF650)	18-0363-00	1
	Pad, Vibration (p/o Fan Motor)	No Number	1
	Nut, Fan Mounting (p/o Fan Motor)	No Number	1
1b	Bracket, Fan Mounting - (PMF450)	18-0422-00	1
	Bracket, Fan Mounting - (PMF650)	A25548-001	1
1c	Motor, Fan - (PMF450)	12-1575-01	1
	Motor, Fan - (PMF650)	12-1576-01	1
	attaching parts, Index 1c to 1b		
	Screw, No. 8-36 (p/o Fan Motor)	No Number	4
	attaching parts, Index 1 to Chassis Base		
	Lockwasher, No. 1/4 External Tooth	03-1417-09	2
	Screw, No. 1/4-20 x 1/2 T/C Hex Hd	03-0571-00	2
	* * *		
2	Brace, Drier - (PMF450)	A09386-000	1
	Brace, Drier - (PMF650)	A09388-001	1
3	Drier - (PMF450)	03-2426-01	1
	Drier - (PMF650)	02-0544-01	1
	attaching parts, Index 2 & 3		
	Screw, No. 10 x 3/8 T/F Tap	03-1404-15	1
	* * *		
4	Condenser - Air-Cooled (PMF450)	18-0234-00	1
	Condenser - Air-Cooled (PMF650)	18-0396-01	1
	attaching parts, Index 4		
	Lockwasher, No. 1/4 External Tooth	03-1417-09	2
	Screw, No. 1/4-20 x 1/2 T/C Hex Hd	03-0571-00	2
	* * *		
5	Compressor - (PMF450) (See Figure 8-4)	18-4500-01	1
	Compressor - (PMF650) (See Figure 8-5)	18-3900-01	1
	attaching parts, Index 5		
	Grommet	18-2200-28	4
	Sleeve, Mounting	18-2200-27	4
	Washer, Special	03-1408-29	4
	Lockwasher, No. 5/16 Helical Spring	03-1410-04	4
	Screw, No. 5/16-18 x 1-3/4 Hex Cap	03-1405-40	4
	* * *		

Figure 8-2. Major Assemblies - Air-Cooled Models (Cont'd)

INDEX NO.	DESCRIPTION	PART NUMBER	REQ'D NUMBER
6	Insulation, Spout - Left (PMF450)	A15070-000	1
	Insulation, Spout - Left (PMF650)	A15081-000	1
7	Insulation, Spout - Right (PMF450)	A15071-000	1
	Insulation, Spout - Right (PMF650)	A15080-000	1
	attaching parts, Index 6 & 7		
	Strap, Insulation (PMF450)	A08736-000	2
	Strap, Insulation - (PMF650)	A08733-000	1
	Clip, Insulation - (PMF650 only)	02-1438-00	1
	* * *		
8	Tube, Potable Water (Reservoir to Freezer Inlet) (6-1/2 in/lg) (Order by the foot)	13-0674-09	1
9	Tubing (Reservoir overflow To Drain Tee) (28 in/lg) (Order by the foot)	13-0079-03	1
	attaching parts, Index 8 & 9		
	Clamp (use with Index 8)	02-0694-00	2
	Clamp (use with Index 9)	02-0535-00	2
	* * *		
10	Reservoir	02-2217-01	1
	Valve Assembly - (Float, not shown)	02-2217-02	1
	attaching part, Index 10		
	Wing Nut (plastic, p/o Reservoir)	No Number	1
	* * *		
11	Bracket, Reservoir	A21418-000	1
	attaching parts, Index 11		
	Lockwasher, No. 1/4 External Tooth	03-1417-09	2
	Screw, No. 1/4-20 x 1/2 T/C Hex Hd	03-0571-00	2
	* * *		
12	Box Assembly, Limit	No Number	1
	attaching part, Index 10		
	Nut, No. 1/4-20	A14256-000	1
	* * *		
12a	Cover, Limit Box	A14241-000	1
12b	Bushing, Snap	12-1213-10	1
12c	Switch, w/Nut	12-1018-00	1
12d	Box, Limit w/Switch	A14975-000	1
	attaching parts, 12a to 12d		
	Screw, No. 4 x 3/8 T/F Tap	03-1404-01	2
	* * *		

Figure 8-2. Major Assemblies - Air-Cooled Models (Cont'd)

INDEX NO.	DESCRIPTION	PART NUMBER	REQ'D NUMBER
13	Plate Assembly, Pressure	A16353-000	1
	* * *		
14	Spout Assembly	A16350-000	1
	* * *		
15	Casting, Spout	A14269-000	1
	attaching parts, Index 15		
	Lockwasher, No. 1/4 Internal Tooth	03-1417-07	2
	Screw, No. 1/4-20 x 2-1/2 Pan Hd	03-1403-55	2
	* * *		
16	Freezer Assembly	No Number	1
	(See Figures 8-6 & 8-7)		
	attaching parts, Index 16		
	Washer, Plain	03-1407-05	2
	Lockwasher, No. 1/4 External Tooth	03-1417-09	2
	Screw, No. 1/4-20 x 1/2 T/C Hex Hd	03-0571-00	2
	(attaches to upper Chassis)		
	Washer, Special	03-1408-03	4
	Screw, No. 5/16 x 1-1/4 Hex Cap	03-1420-03	4
	(attaches to Drivemotor Assembly)		
	* * *		
17	Coupling - (PMF450)	15-0575-01	1
	Coupling - (PMF650)	15-0573-01	1
	* * *		
18	Gasket - (PMF450)	13-0628-00	1
	Gasket - (PMF650)	13-0704-00	1
	* * *		
19	Drivemotor Assembly	No Number	1
	(See Figures 8-8 & 8-9)		
	attaching parts, Index 19		
	Grommet	13-0639-00	3
	Spacer	A24925-002	3
	Washer, Special	03-1408-02	6
	Lockwasher, No. 5/16 Helical Spring	03-1410-04	3
	Screw, No. 5/16-18 x 1 Hex Cap	03-1405-18	3
	* * *		
20	Bin Assembly, Cold Plate	A27680-022	1
	* * *		
	NOTE: See Figure 8-10 & 8-11 for replacement parts within the Control Box Assembly.		

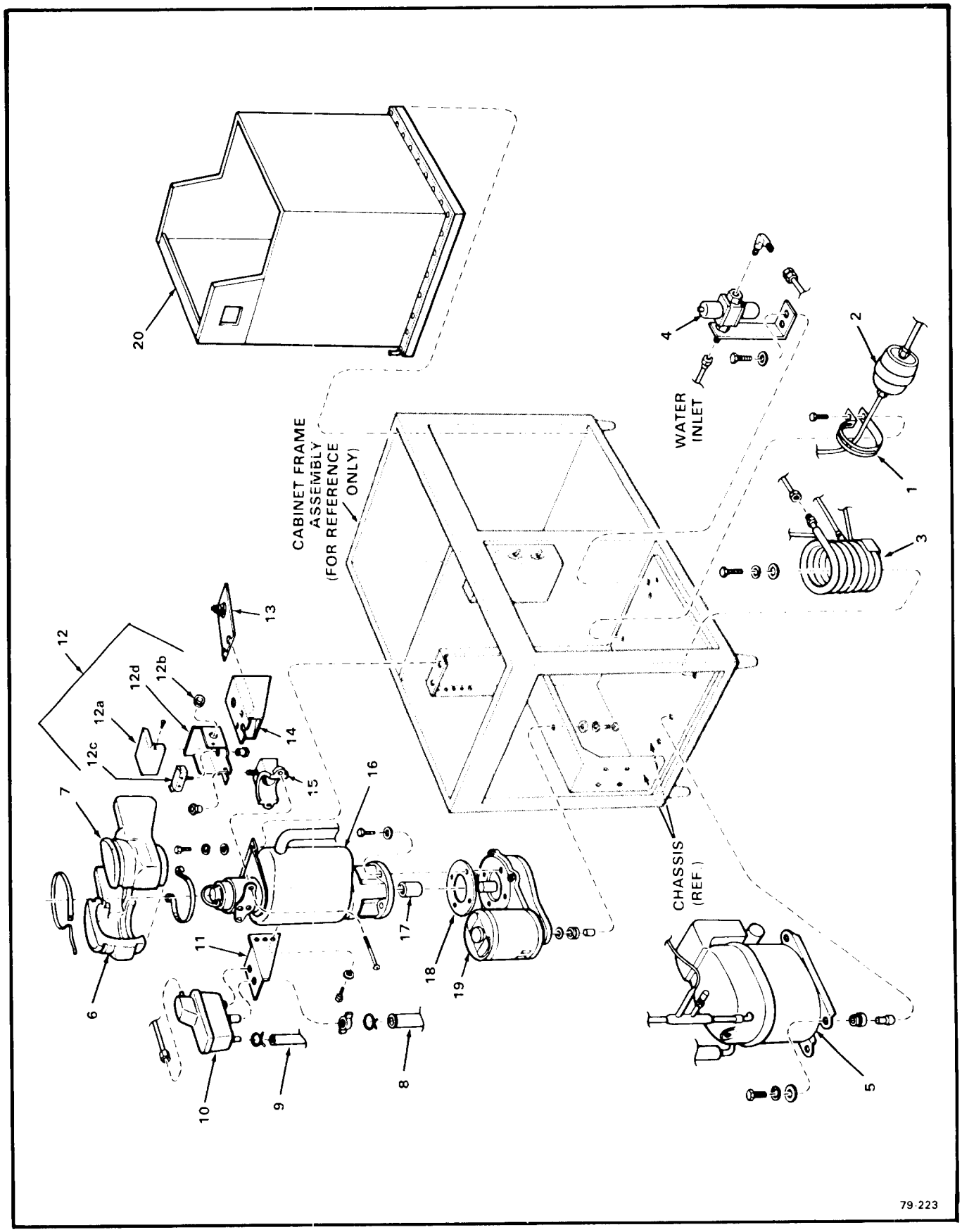


Figure 8-3. Major Assemblies - Water-Cooled Models

Figure 8-3. Major Assemblies - Water-Cooled Models

INDEX NO.	DESCRIPTION	PART NUMBER	REQ'D NUMBER
	Major Assemblies - Water-Cooled Models	No Number	Ref.
	* * *		
1	Brace, Drier - (PMF450)	A09386-000	1
	Brace, Drier - (PMF650)	A09388-001	1
2	Drier - (PMF450)	02-2426-01	1
	Drier - (PMF650)	02-0544-01	1
	attaching parts, Index 1 & 2		
	Screw, No. 10 x 3/8 T/F Tap	03-1404-15	1
	* * *		
3	Condenser - Water-Cooled (PMF450)	18-3303-02	1
	Condenser - Water-Cooled (PMF650)	18-3305-02	1
	attaching parts, Index 3		
	Lockwasher, No. 1/4 External Tooth	03-1417-09	2
	Screw, No. 1/4-20 x 1/2 T/C Hex Hd	03-0571-00	2
	* * *		
4	Regulator Assembly, Water	No Number	1
	attaching parts, Index 4		
	Lockwasher, No. 1/4 External Tooth	03-1417-09	2
	Screw, No. 1/4-20 x 1/2 T/C Hex Hd	03-0571-00	2
4a	Elbow - 3/8 NPT x 3/8 Flare Brass	16-0401-00	1
4b	Nipple Assembly, Pipe (w/Bracket)	A15924-000	1
4c	Valve, Water Regulator	11-0198-02	1
	* * *		
5	Compressor - (PMF450)	18-4500-01	1
	(See Figure 8-4)		
	Compressor - (PMF650)	18-3900-01	1
	(See Figure 8-5)		
	attaching parts, Index 5		
	Grommet	18-2200-38	4
	Sleeve, Mounting	18-2200-27	4
	Washer, Special	03-1408-29	4
	Lockwasher, No. 5/16 Helical Spring	03-1410-04	4
	Screw, No. 5/16-18 x 1-3/4 Hex Cap	03-1405-40	4
	* * *		
6	Insulation, Spout - Left (PMF450)	A15070-000	1
	Insulation, Spout - Left (PMF650)	A15081-000	1
7	Insulation, Spout - Right (PMF450)	A15071-000	1
	Insulation, Spout - Right (PMF650)	A15080-000	1
	attaching parts, Index 6 & 7		

Figure 8-3. Major Assemblies - Water-Cooled Models (Cont'd.)

INDEX NO.	DESCRIPTION	PART NUMBER	REQ'D NUMBER
	Strap, Insulation - (PMF450)	A08736-000	2
	Strap, Insulation - (PMF650)	A08733-000	1
	Clip, Insulation - (PMF650 only)	02-1438-00	1
	* * *		
8	Tube, Potable Water (Reservoir to Freezer Inlet) (5-1/2 in/lg)	13-0674-09	1
	(Order by the foot)		
9	Tubing (Reservoir overflow to Drain Tee) (28-in/lg)	13-0079-03	1
	(Order by the foot)		
	attaching parts, Index 8 & 9		
	Clamp (use with Index 8)	02-0694-00	2
	Clamp (use with Index 9)	02-0535-00	2
	* * *		
10	Reservoir	02-2217-01	1
	Valve Assembly - (Float, not shown)	02-2217-02	1
	attaching part, Index 10		
	Wing Nut (plastic, p/o Reservoir)	No Number	1
	* * *		
11	Bracket, Reservoir	A21418-000	1
	attaching parts, Index 11		
	Lockwasher, No. 1/4 External Tooth	03-1417-09	2
	Screw, No. 1/4-20 x 1/2 T/C Hex Hd	03-0571-00	2
	* * *		
12	Box, Assembly, Limit	No Number	1
	attaching part, Index 10		
	Nut, No. 1/4-20	A14256-000	1
	* * *		
12a	Cover, Limit Box	A14241-000	1
12b	Bushing, Snap	12-1213-10	1
12c	Switch, w/Nut	12-1018-00	1
12d	Box, Limit w/Switch	A14975-000	1
	attaching parts, 12a to 12d		
	Screw, No. 4 x 3/8 T/F Tap	03-1404-01	2
	* * *		
13	Plate Assembly, Pressure	A16353-000	1
	* * *		
14	Spout Assembly	A16350-000	1
	* * *		

Figure 8-3. Major Assemblies - Water-Cooled Models (Cont'd)

INDEX NO.	DESCRIPTION	PART NUMBER	REQ'D NUMBER
15	Casting, Spout	A14269-000	1
	attaching parts, Index 15		
	Lockwasher, No. 1/4 Internal Tooth	03-1417-07	2
	Screw, No. 1/4-20 x 2-1/2 Pan Hd	03-1403-55	2
	* * *		
16	Freezer Assembly	No Number	1
	(See Figures 8-6 & 8-7)		
	attaching parts, Index 16		
	Washer, Plain	03-1407-05	2
	Lockwasher, No. 1/4 External Tooth	03-1417-09	2
	Screw, No. 1/4-20 x 1/2 T/C Hex Hd	03-0571-00	2
	(attaches to upper Chassis)		
	Washer, Special	03-1408-03	4
	Screw, No. 5/16-18 x 1-1/4 Hex Cap	03-1420-03	4
	(attaches to Drivemotor Assembly)		
	* * *		
17	Coupling - (PMF450)	15-0575-01	1
	Coupling - (PMF650)	15-0573-01	1
	* * *		
18	Gasket - (PMF450)	13-0628-00	1
	Gasket - (PMF650)	13-0704-00	1
	* * *		
19	Drivemotor Assembly	No Number	1
	(See Figures 8-8 & 8-9)		
	attaching parts, Index 19		
	Grommet	13-0639-00	3
	Spacer	A24925-002	3
	Washer, Special	03-1408-02	6
	Lockwasher, No. 5/16 Helical Spring	03-1410-04	3
	Screw, No. 5/16-18 x 1 Hex Cap	03-1405-18	3
	* * *		
20	Bin Assembly, Cold Plate	A27680-022	1
	* * *		
	NOTE: See Figure 8-10 & 8-11 for replacement parts within the Control Box Assembly.		

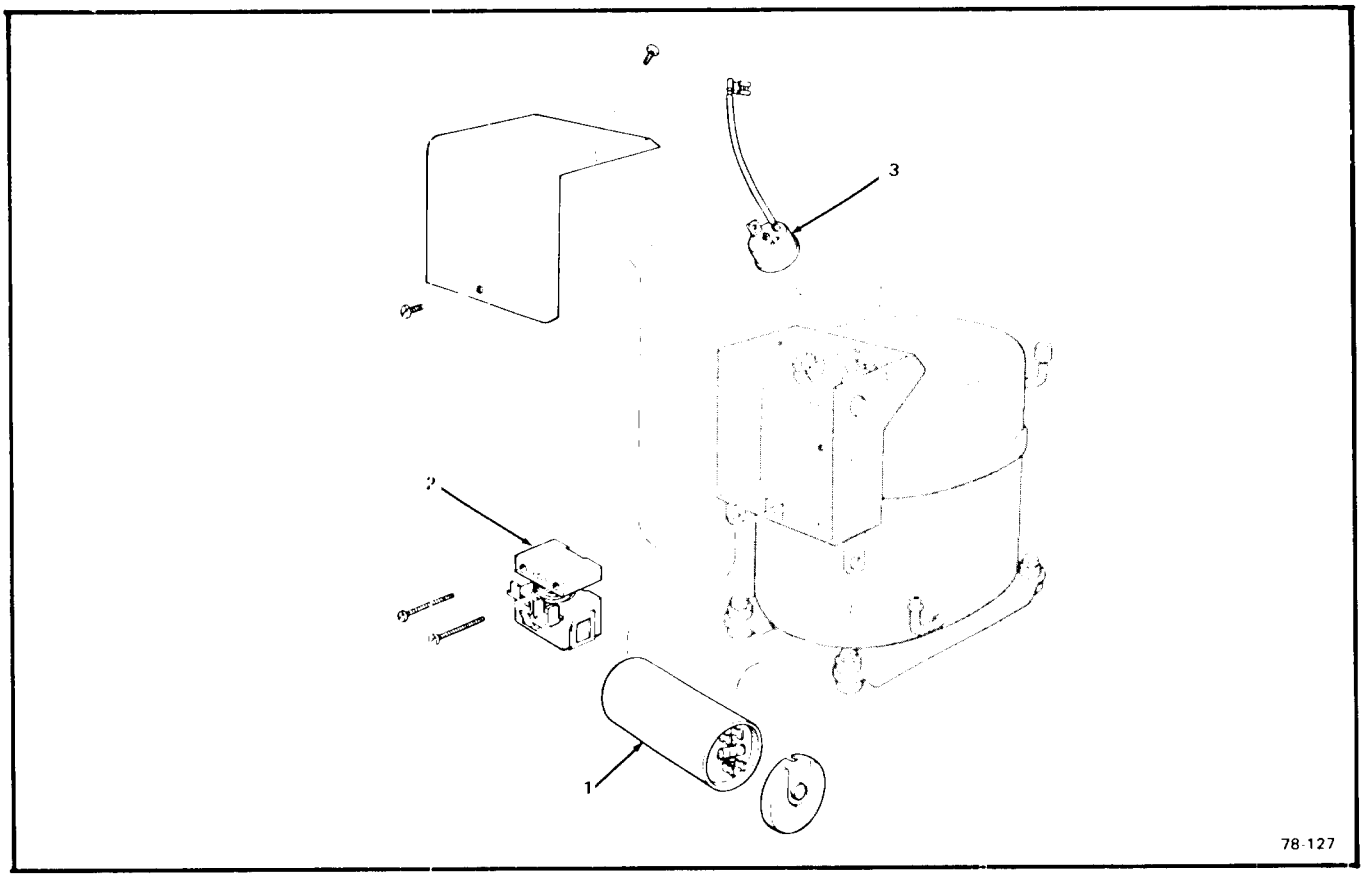


Figure 8-4. Compressor Assembly - PMF450

INDEX NO.	DESCRIPTION	PART NUMBER	REQ'D NUMBER
	Compressor Assembly - PMF450 (See Figure/Index 8-2/5 and 8-3/5 for next higher Assembly) * * *	18-4500-01	Ref.
1	Capacitor - w/cap * * *	18-1901-33	1
2	Relay * * *	18-2200-26	1
3	Overload * * *	18-2200-25	1

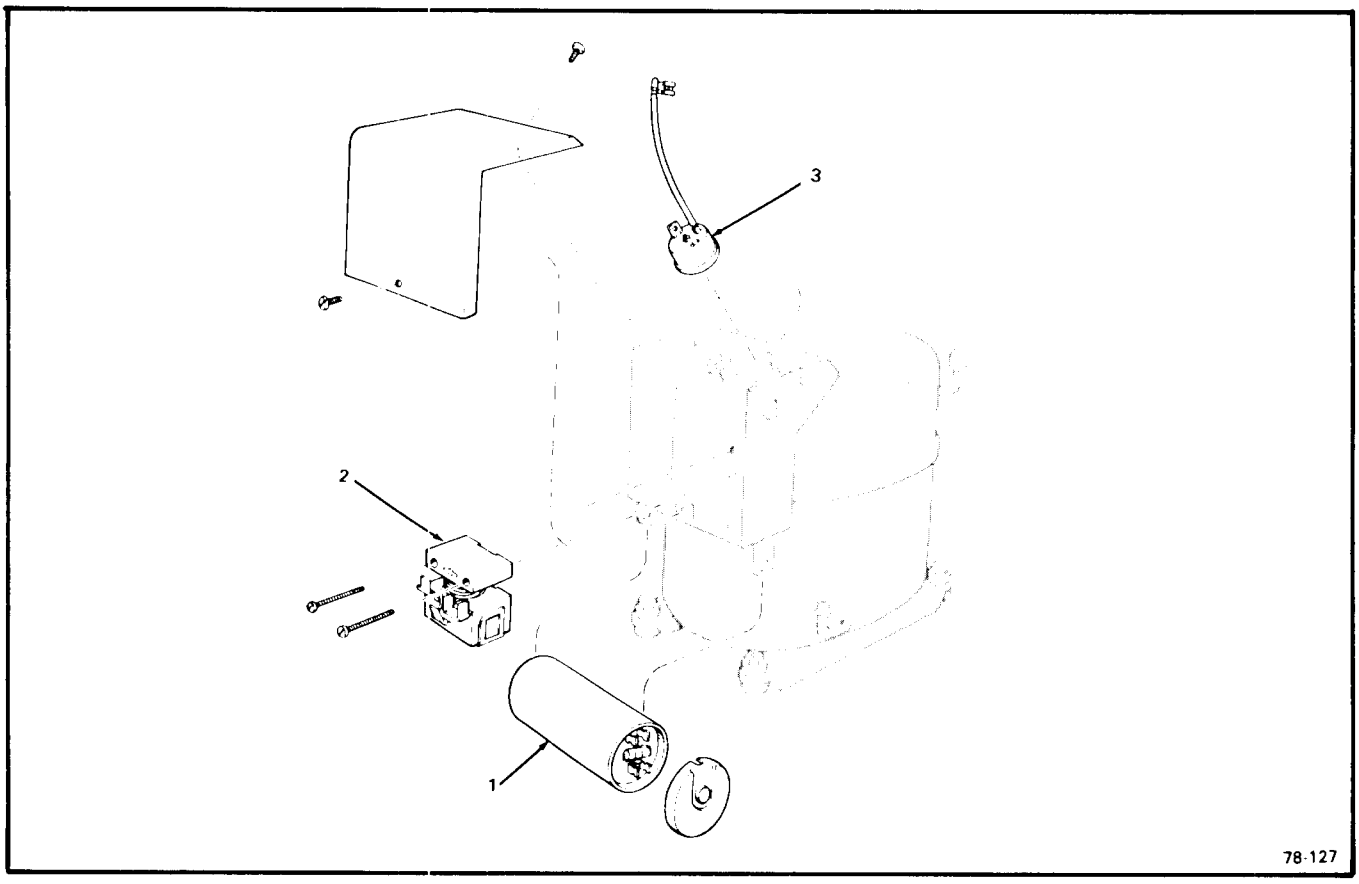


Figure 8-5. Compressor Assembly. - PMF650

INDEX NO.	DESCRIPTION	PART NUMBER	REQ'D NUMBER
	Compressor Assembly - PMF650 (See Figure/Index 8-2/5 and 8-3/5 for next higher Assembly) * * *	18-3900-01	Ref.
1	Capacitor w/cap * * *	18-2420-00	1
2	Relay * * *	18-2410-00	1
3	Overload * * *	18-2400-25	1

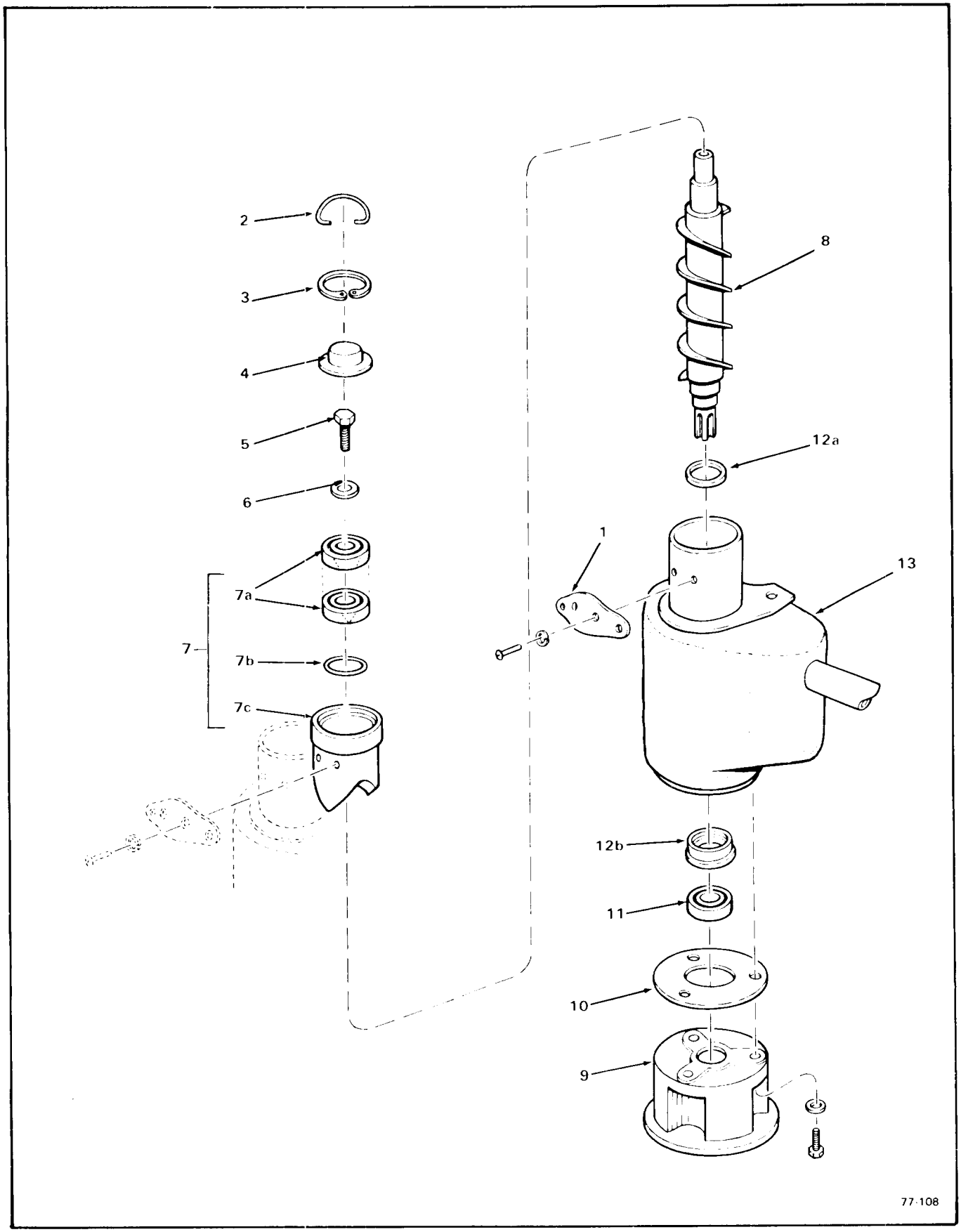


Figure 8-6. Freezer Assembly - PMF-450

Figure 8-6. Freezer Assembly - PMF-450

INDEX NO.	DESCRIPTION	PART NUMBER	REQ'D NUMBER
	Freezer Assembly - PMF-450	No Number	Ref.
	(See Figure/Index 8-2/16 and 8-3/16		
	for next higher Assembly)		
	* * *		
1	Plate, Casting	A18430-000	1
	attaching parts, Index 1, 7 & 13		
	Lockwasher, No. 1/4 Helical Spring	03-1410-03	2
	Screw, No. 1/4-20 x 1/2 Pan Hd		
	* * *		
2	Hook, Cap	A08162-000	1
	* * *		
3	Ring, Lock	03-1558-03	1
	* * *		
4	Cap	A07701-000	1
	* * *		
5	Screw, Cap	03-0758-00	1
6	Washer	A07699-000	1
	* * *		
7	Bearing Assembly, Breaker and	A14678-001	1
7a	Bearing (matched set of two)	02-1412-00	1
7b	O-Ring	13-0617-16	1
7c	Breaker, Ice (Order P/N A14678-001)	No Number	Ref.
	* * *		
8	Auger	02-1538-00	1
	* * *		
9	Adaptor	08-0595-01	1
	Lockwasher, No. 5/16 Helical Spring	03-1410-04	3
	Screw, No. 5/16-18 x 7/8 Hex Cap	03-1405-42	3
	* * *		
10	Gasket	03-1505-00	1
	* * *		
11	Bearing	02-0417-00	1
	* * *		
12	Seal, Water	A18945-000	1
12a	Seal, Upper (Fits on Index 8)	No Number	Ref.
12b	Seal, Lower (Fits on top of Index 11)	No Number	Ref.
	* * *		
13	Freezer - (Repair Assembly)	A27827-020	1
	* * *		

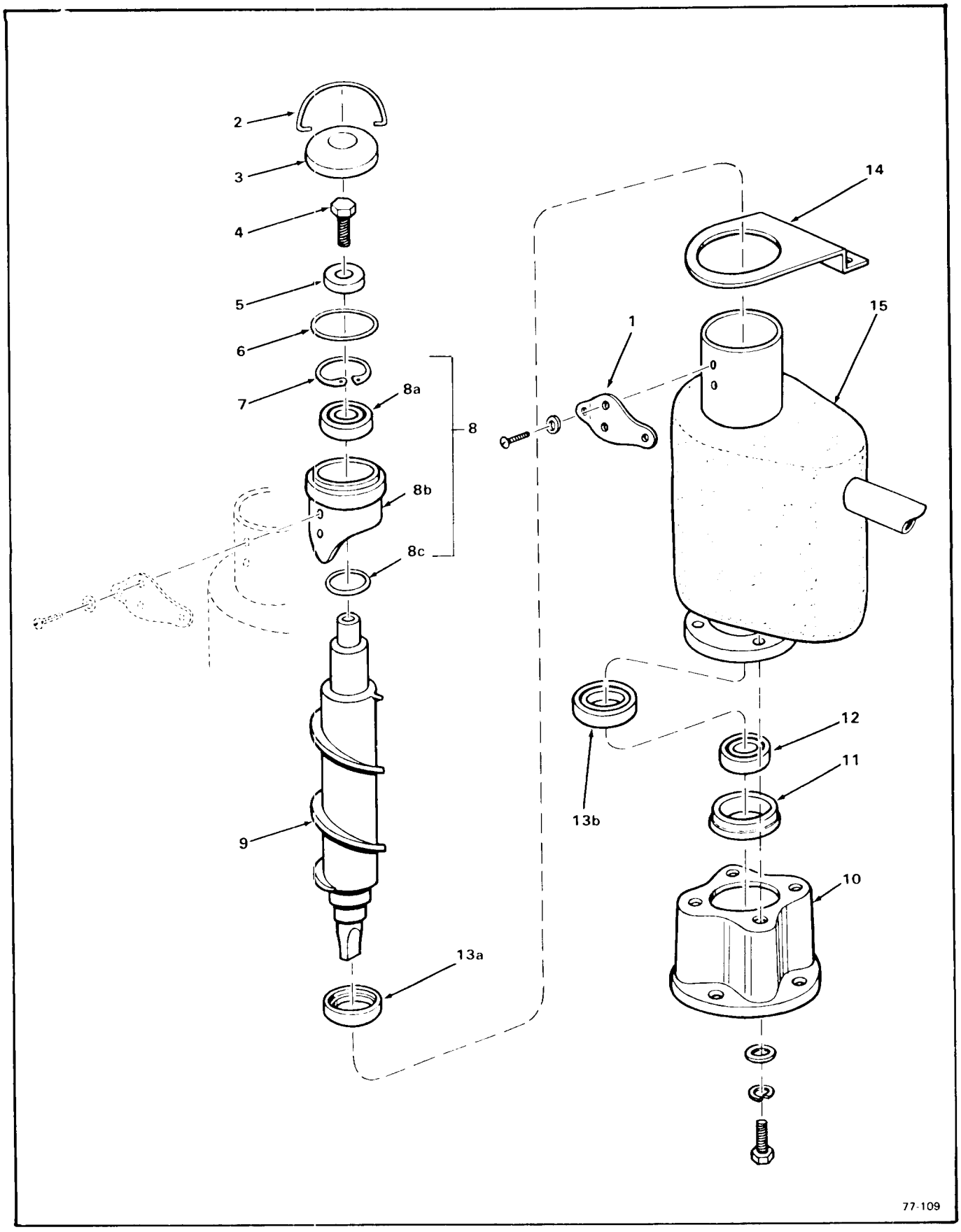


Figure 8-7. Freezer Assembly - PMF-650

Figure 8-7. Freezer Assembly - PMF-650

INDEX NO.	DESCRIPTION	PART NUMBER	REQ'D NUMBER
	Freezer Assembly - PMF-650	No Number	Ref.
	(See Figure/Index 8-2/16 and 8-3/16		
	for next higher Assembly)		
	* * *		
1	Plate, Spout	A18431-001	1
	attaching parts, Index 1, 9 & 15		
	Lockwasher, No. 1/4 Helical Spring	03-1410-03	2
	Screw, No. 1/4-20 x 1/2 Pan Hd	03-1403-48	2
	* * *		
2	Hook	A08582-000	1
	* * *		
3	Cap	A08581-000	1
	* * *		
4	Screw, No. 1/2-20 x 1 Hex Cap	03-1405-36	1
5	Washer, Brass 17/32 I.D. x 1-5/8 O.D. x 5/16	A06273-000	1
	* * *		
6	O-Ring (Fits into outside groove, Index 8)	13-0617-20	1
	* * *		
7	Ring, Internal Retaining	03-1558-04	1
	* * *		
8	Breaker Assembly, Ice	A26704-001	1
8a	Bearing (Top)	02-0646-00	1
8b	O-Ring	13-0617-15	
8c	Breaker, Ice (Order P/N A26704-001)	No Number	Ref.
	* * *		
9	Auger	02-0617-00	1
	* * *		
10	Adaptor	02-1620-00	1
	attaching parts, Index 10, 11, 12, 13 to 15		
	Lockwasher, No. 5/16 Helical Spring	03-1410-04	4
	Washer, Special	03-1408-03	4
	Screw, No. 5/16-18 x 1-1/4 Hex Cap	03-1405-41	4
	* * *		
11	Retainer, Bearing	A10591-000	1
	* * *		
12	Bearing (Lower)	02-0619-00	1
	* * *		
13	Seal, Water	A22569-000	2

Figure 8-7. Freezer Assembly - PMF-650 (Cont'd)

INDEX NO.	DESCRIPTION	PART NUMBER	REQ'D NUMBER
13a	Seal, Upper (Fits on Index 9)	No Number	Ref.
13b	Seal, Lower (Fits on top of Index 11 & 12)	No Number	Ref.
	* * *		
14	Support, Freezer	A20987-000	1
	* * *		
15	Freezer - (Repair Assembly)	A27659-020	1
	* * *		

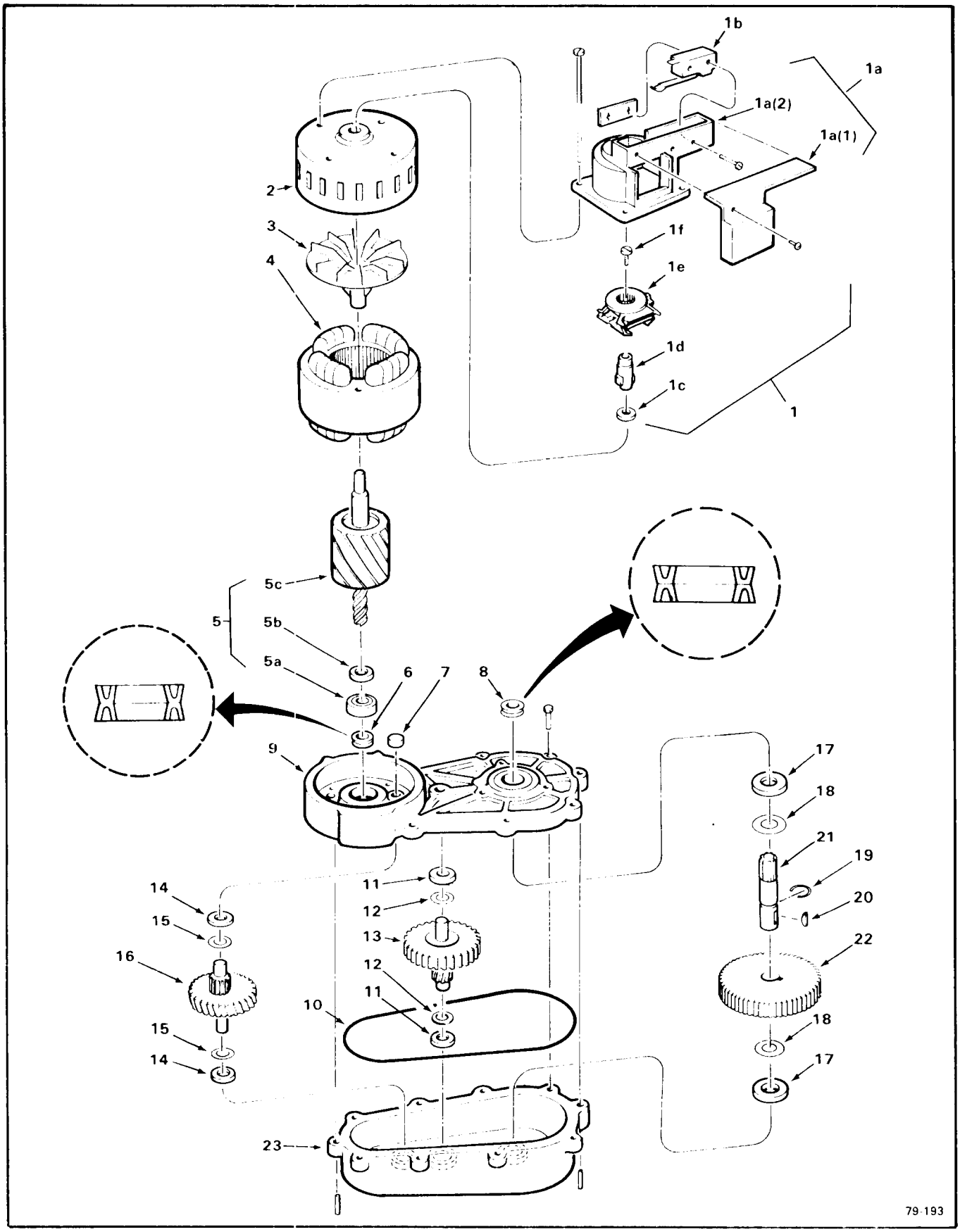


Figure 8-8. Drivemotor Assembly - PMF450 1/10 H.P.

Figure 8-8. Drivemotor Assembly - PMF450 1/10 H.P.

INDEX NO.	DESCRIPTION	PART NUMBER	REQ'D NUMBER
	Drivemotor Assembly (1/10 H.P.) (11.53 RPM) (See Figure/Index 8-2/19 & 8-3/19 for next higher Assembly)	A28151-021	Ref.
	* * *		
1	Kit, Centrifugal Switch	A27494-001	1
	attaching parts, Index 1,2 4 to 11		
	Screw, Motor - No. 10-32 x 5-1/4 Phil Recess Pan Hd	03-1403-82	4
	* * *		
1a	Kit, Centrifugal Switch Housing	A27895-001	1
1a(1)	Cover, Switch Case	No Number	1
1a(2)	Case, Switch Mounting	No Number	1
	attaching parts, Index 1a(1) to 1a(2)		
	Screw, No. 6-32 x 1 Pan Hd	03-1403-09	2
	* * *		
1b	Switch	12-2059-01	1
	attaching parts, Index 1b to 1a(2)		
	Screw, No. 6-32 x 1 Pan Hd	03-1403-09	2
	Nut, Speed	03-0886-00	2
	* * *		
1c	Washer, Special	03-1408-36	1
	* * *		
1d	Extension, Shaft	02-2371-00	1
	* * *		
1e	Actuator, Centrifugal	12-2060-01	1
	attaching parts, Index 1d to 1e		
	* * *		
1f	Screw, No. 10-32 x 1-5/8 Pan Hd	03-1403-77	1
	* * *		
2	Housing Assembly - Motor	A17047-001	1
	* * *		
3	Fan, Boring	A28168-001	1
	attaching parts, Index 3 to 4		
	Setscrew	03-1246-00	2
	* * *		
4	Stator Assembly (115/60/1)	12-1400-01	1
	* * *		
5	Rotor Assembly	A28160-001	1
5a	Bearing	02-1501-00	1

Figure 8-8. Drivemotor Assembly - PMF450 1/10 H.P. (Cont'd)

INDEX NO.	DESCRIPTION	PART NUMBER	REQ'D NUMBER
5b	Washer, Special	03-1408-08	1
5c	Rotor (Order P/N A28160-001)	No Number	1
	* * *		
6	Seal, Grease (Install back-to-back)	02-1504-00	2
	* * *		
7	Cap, Insulating	02-2459-01	1
	* * *		
8	Seal, Grease (Install back-to-back)	02-1503-00	2
	* * *		
9	Cover Assembly, Gear Case	A28165-001	1
	attaching parts, Index 9 to 23		
	Pin, Roll	03-0774-11	2
	Screw, No. 1/4-20 x 3/4 Flange	03-1252-00	2
	Screw, No. 1/4-20 x 5/8 Flange	03-1251-00	6
	* * *		
10	O-Ring	02-1505-00	1
	* * *		
11	Washer, Special (Thick)	03-1408-39	2
	* * *		
12	Washer, Special (Thin/Shim)	03-1408-40	A/R
	* * *		
13	Third Pinion Assembly, Second Gear and	02-2439-01	1
	* * *		
14	Washer, Special (Thick)	03-1408-41	2
	* * *		
15	Washer, Special (Thin/Shim)	03-1408-38	A/R
	* * *		
16	Second Pinion Assembly, First Gear and	02-2438-01	1
	* * *		
17	Washer, Special (Thick)	03-1408-21	2
	* * *		
18	Washer, Special (Thin/Shim)	03-1408-04	A/R
	* * *		
19	Ring, Retaining	03-1515-03	1
	* * *		
20	Key, Woodruff	03-1602-01	1
	* * *		
21	Shaft, Output	02-2445-01	1

Figure 8-8. Drivemotor Assembly - PMF450 1/10 H.P. (Cont'd)

INDEX NO.	DESCRIPTION	PART NUMBER	REQ'D NUMBER
	* * *		
22	Gear, Output	02-2444-01	1
	* * *		
23	Case Assembly, Gear	A28166-001	1
	* * *		

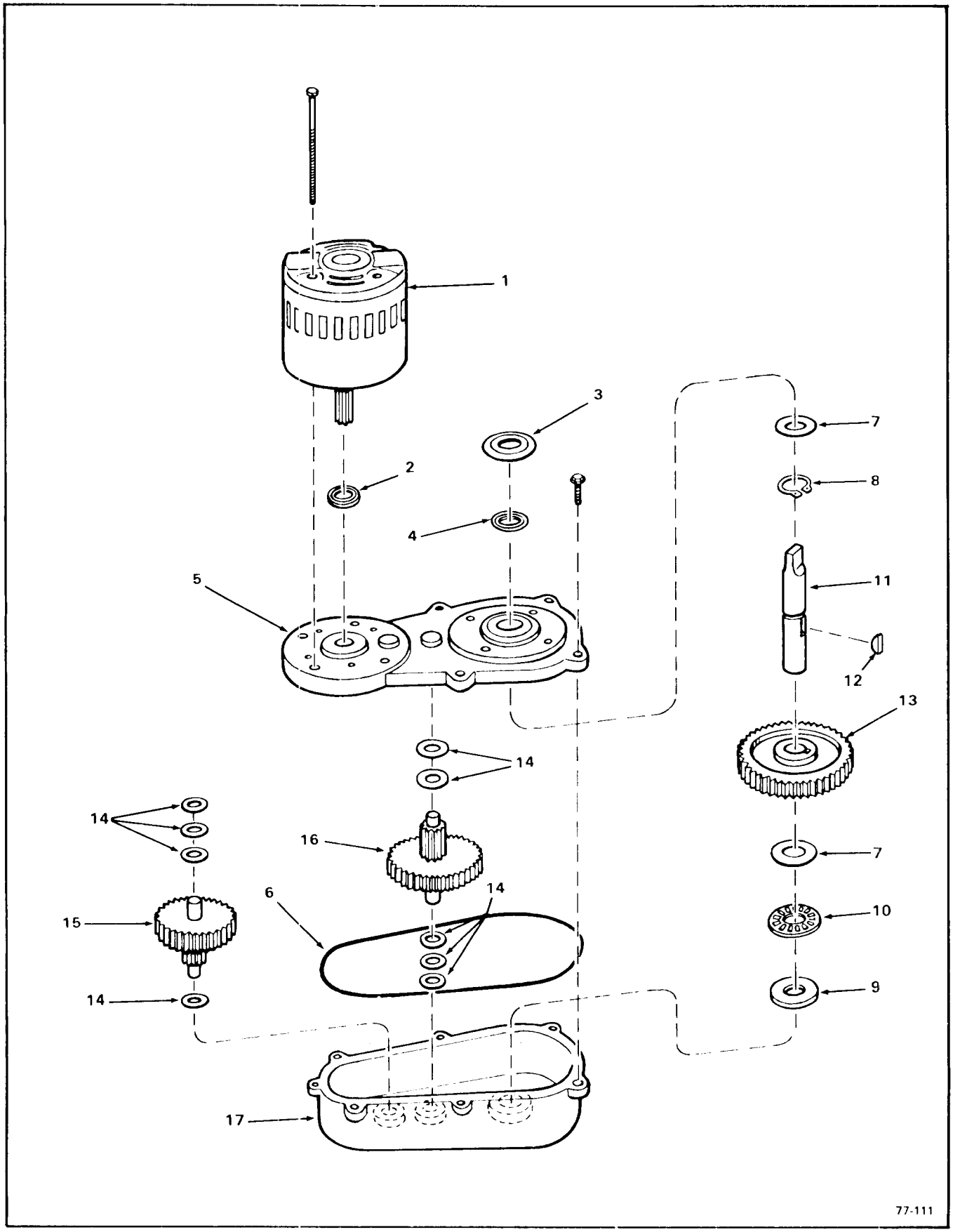


Figure 8-9. Drivemotor Assembly - PMF650 1/4 H.P.

Figure 8-9. Drivemotor Assembly - PMF650 1/4 H.P.

INDEX NO.	DESCRIPTION	PART NUMBER	REQ'D NUMBER
	Drivemotor Assembly - PMF-650 (1/4 H.P.) (10.1 RPM) (See Figure/Index 8-2/19 and 8-3/19 for next higher Assembly * * *	A22750-021	Ref.
1	Motor, Drive 115/60/1 (1/4 H.P. Split Phase) attaching part, Index 1 to 5 Screw, Motor (p/o Index 1) * * *	A26455-001 No Number	1 4
2	Seal, Oil * * *	02-1606-00	1
3	Shed, Water * * *	13-0709-02	1
4	Seal, Oil * * *	02-1607-00	1
5	Cover Assembly, Gear Case attaching parts, Index 5 to 17 Screw, No. 5/16 x 1 Flange * * *	A22200-000 03-1251-01	1 6
6	O-Ring * * *	A26103-001	1
7	Race, Thrust * * *	02-1681-00	2
8	Ring, Retaining * * *	03-1363-00	1
9	Race, Thrust * * *	02-1679-00	1
10	Bearing * * *	02-1680-00	1
11	Shaft, Output attaching part, Index 11 to 13	02-1652-00	1
12	Key (No. 91 Woodruff, Nickel Steel) * * *	03-1364-00	1
13	Gear, Output * * *	02-1653-00	1
14	Washer, Special (.515 I.D. x 875 O.D. x .028 Steel) * * *	03-1408-24	9
15	Second Pinion Assembly, First Gear and * * *	02-1603-00	1

Figure 8-9. Drivemotor Assembly - PMF650 1/4 H.P. (Cont'd)

INDEX NO.	DESCRIPTION	PART NUMBER	REQ'D NUMBER
16	Third Pinion Assembly, Second Gear and * * *	02-1604-00	1
17	Case Assembly, Gear * * *	A22199-000	1

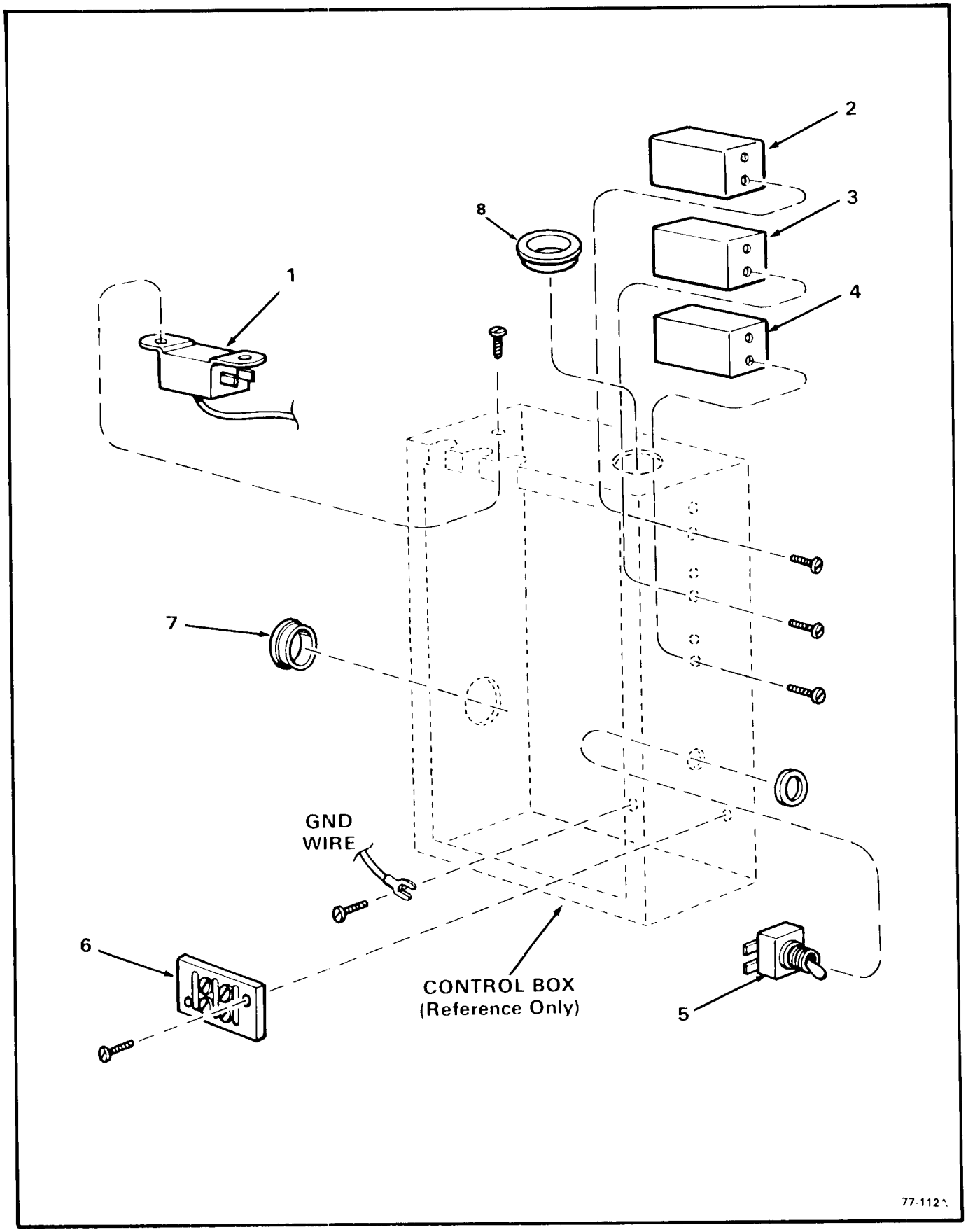


Figure 8-10. Control Box Assembly - PMF450

Figure 8-10. Control Box Assembly - PMF450

INDEX NO.	DESCRIPTION	PART NUMBER	REQ'D NUMBER
	Control Box Assembly-PMF450 (See Figure 8-2 and 8-3 for next higher Assembly) * * *	No Number	1
1	Control, Temperature	11-0354-00	1
	attaching parts, Index 1		
	Screw, No. 8-32 x 3/8 Pan Hd * * *	13-1403-17	2
2	Control, Lo-Pressure	11-0358-01	1
	attaching parts, Index 2		
	Screw, No. 6-32 x 1/4 Pan Hd * * *	03-1403-02	2
3	Switch, Pressure (Air-Cooled Model)	11-0402-01	1
	Control, Hi Pressure (Water-Cooled Model)	11-0388-02	1
	attaching parts, Index 3		
	Screw, No. 6-32 x 1/4 Pan Hd * * *	03-1403-02	2
4	Switch, Pressure (Water-Cooled Model)	11-0402-01	1
	attaching parts, Index 4		
	Screw, No. 6-32 x 1/4 Pan Hd * * *	03-1403-02	2
5	Switch, Toggle * * *	12-0426-01	1
6	Board, Terminal	12-0813-04	1
	attaching part, Index		
	Screw, No. 10-24 x 3/4 Pan Hd * * *	03-1403-31	2
7	Bushing, Snap * * *	12-1213-12	1
8	Bushing, Snap * * *	12-1213-10	1

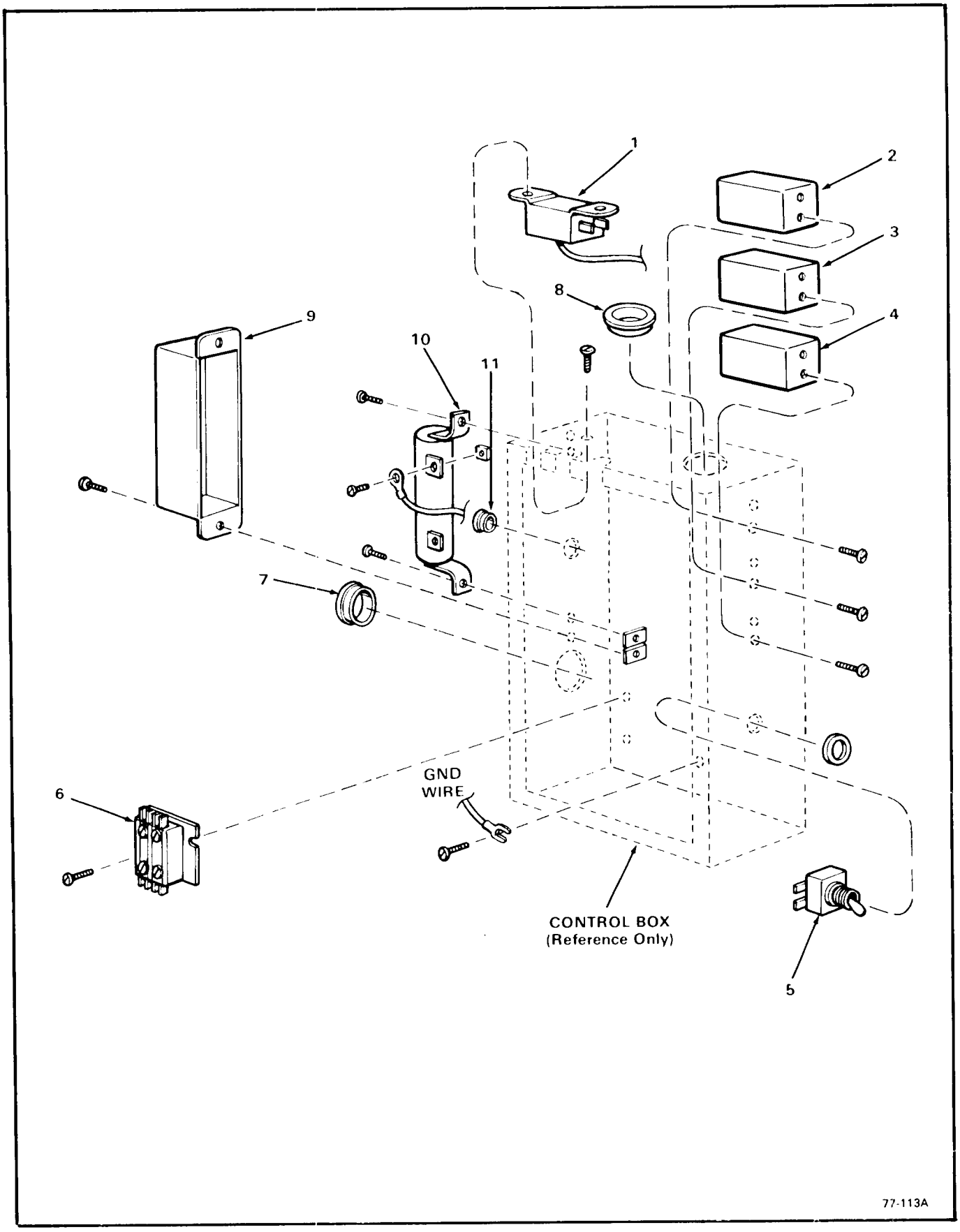


Figure 8-11. Control Box Assembly - PMF-650

Figure 8-11. Control Box Assembly - PMF-650

INDEX NO.	DESCRIPTION	PART NUMBER	REQ'D NUMBER
	Control Box Assembly - PMF650	No Number	1
	(See Figure 8-2 and 8-3		
	for next higher Assembly)		
	* * *		
1	Control, Temperature	11-0354-00	1
	attaching parts, Index 1		
	Screw, No. 8-32 x 3/8 Pan Hd	13-1403-17	2
	* * *		
2	Control, Lo-Pressure	11-0358-01	1
	attaching parts, Index 2		
	Screw, No. 6-32 x 1/4 Pan Hd	03-1403-02	2
	* * *		
3	Control, Fan Pressure (Air-Cooled Model)	11-0362-01	1
	Control, Hi-Pressure (Water-Cooled Model)	11-0388-02	1
	attaching parts, Index 2		
	Screw, No. 6-32 x 1/4 Pan Hd	03-1403-02	2
	* * *		
4	Switch, Pressure	11-0402-01	1
	attaching parts, Index 3		
	Screw, No. 6-32 x 1/4 Pan Hd	03-1403-02	2
	* * *		
5	Switch, Toggle	12-0426-01	1
	* * *		
6	Contactor	12-2037-01	1
	attaching parts, Index 6		
	Screw, No. 8-32 x 1/2 Pan Hd	03-1403-18	2
	* * *		
7	Bushing, Snap	12-1213-12	1
	* * *		
8	Bushing, Snap	12-1213-10	1
	* * *		
9	Cover, Resistor (Air-Cooled Model)	A14384-000	1
	attaching parts, Index 9		
	Screw, No. 8 x 3/8 T/F Tap	03-1404-08	2
	* * *		
10	Resistor - 30 Watt (Air-Cooled Model)	12-0474-00	1
	attaching parts, Index 10		
	Screw, No. 8-32 x 3/8 Pan Hd	03-1403-17	2

Figure 8-11. Control Box Assembly - PMF-650 (Cont'd)

INDEX NO.	DESCRIPTION	PART NUMBER	REQ'D NUMBER
	Speed Nut, No. 8-32	03-1421-02	2
	attaching parts, (electrical leads to Index 10 terminals)		
	Screw, No. 6-32 x 3/8 Pan Hd	03-1403-04	2
	Speed Nut, No. 6-32	03-1421-02	2
	* * *		
11	Bushing, Snap (Air-Cooled Model)	12-1213-04	1
	* * *		

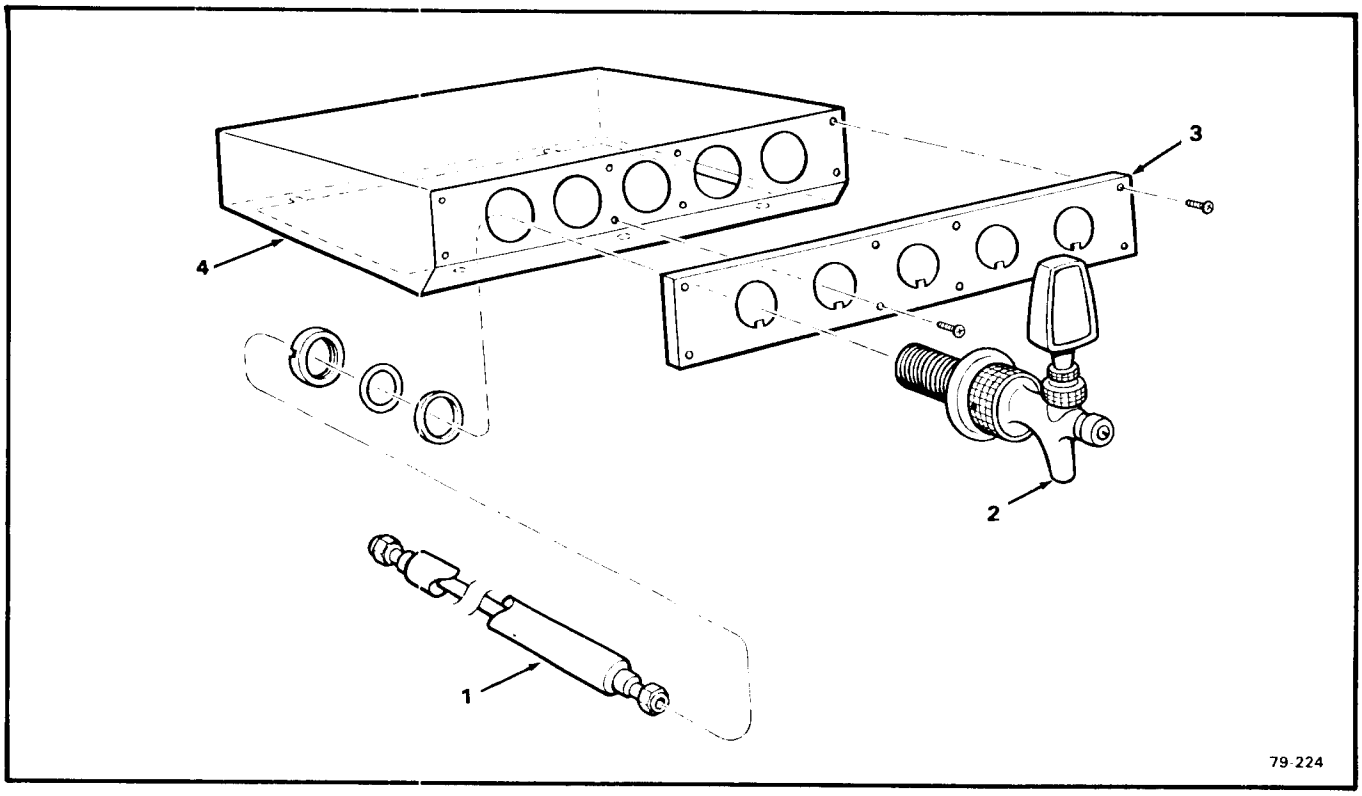
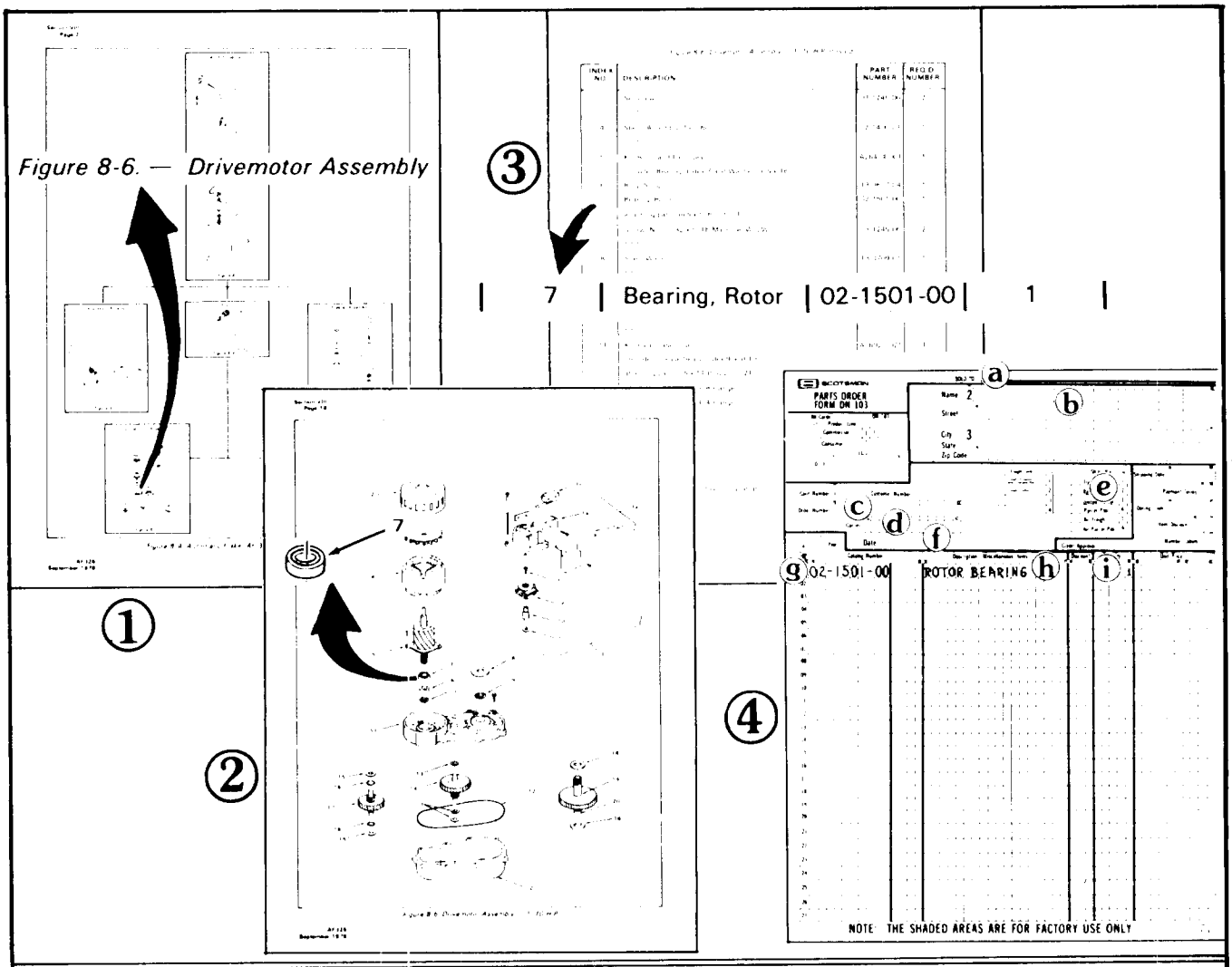


Figure 8-12. Dispensing Tower Assembly

INDEX NO.	DESCRIPTION	PART NUMBER	REQ'D NUMBER
	Dispensing Tower Assembly (See Figure 8-1/13 for next higher Assembly * * *	A29035-001	Ref.
1	Tube Assembly (54 in/lg) * * *	A27737-006	5
2	Valve, Premix Dispensing	02-2486-01	5
	attaching parts, Index 2		
	Seal, Shank (p/o Valve)	No Number	1 (5)
	Washer, Shank Seal (p/o Valve)	No Number	1 (5)
	Nut, Shank (p/o Valve) * * *	No Number	1 (5)
3	Panel, Dispensing	A29024-001	1
	attaching parts, Index 3 to 4		
	Screw, No. 8 x 3/4 T/F Tap * * *	03-1404-12	8
4	Top, Left * * *	A17827-002	1



HOW TO USE A SCOTSMAN PARTS MANUAL WHEN ORDERING PARTS FOR ICE SYSTEMS PRODUCTS

IMPORTANT A. All Part Numbers have TEN DIGITS (spaces), required for use in the Computer System. BE SURE to fill in **ALL SPACES** in the CATALOG NUMBER column, on the Parts Order form as shown above.

B. Enter the QUANTITY of the Parts ordered, in the last digit column under the QUANTITY column heading, the one under the small 55 number, for parts from 1 thru 9. For 10 or more parts use two columns.

To be sure you receive the proper parts in the proper quantities, ALWAYS use the PART NUMBERS and DESCRIPTIONS given in the Parts Manuals.

The figures above illustrate the way a Parts Manual would be used, if the Part being ordered were the ROTOR BEARING that is used in the DRIVEMOTOR ASSEMBLY of an AF325 Automatic Flaker for example.

PROCEDURE:

1. At the beginning of Section VIII, THE PARTS ILLUSTRATIONS AND PARTS LISTS, in each Parts and Service Manual, is Figure 8-A; which, is a flow chart prepared from exploded views in Section VIII. Use the flow chart to quickly determine which Figure contains the Assembly, Component or Part.

FIGURE 1: Since the Part required in the above example is in the DRIVEMOTOR ASSEMBLY, shown as FIGURE 8-6.

2. Open the Manual to page showing FIGURE 8-6.

3. Locate the PART and its INDEX NUMBER on the exploded view illustration.

FIGURE 2: The INDEX NUMBER for the PART is 7.

4. Check the numerical sequence in the associated Parts List following the illustration.

5. LOCATE the INDEX NUMBER 7, in the INDEX NO. column, the first column on the left side of the Parts List page.

FIGURE 3: INDEX NO. 7 is listed as a BEARING, ROTOR in the DESCRIPTION column. The Part Number for the Rotor Bearing is 02-1501-00 as listed in the PART NUMBER column on the right side of the Parts List page. And, one Rotor Bearing is listed in the REQ'D NUMBER column, or that ONLY one of those parts is required for one Drivemotor Assembly.

6. Write an order for the Part. (Use SCOTSMAN Parts Order Form DN103)

FIGURE 4: a. Distributor Name.
b. (Use for DROP-SHIP order ONLY).
c. Distributor Purchase Order Number.
d. Carrier
e. How shipped (Truck, Rail, UPS, etc.)
f. Date ordered
g. Part Catalog Number
(use full TEN digits (spaces) listed in Parts Manual, including dashes between numbers.
h. Description - as listed in Parts Manual.
i. Quantity - number of parts ordered.
(use far right column)

Figure 8-00. How To Use The Illustrated Parts List.