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GENERAL DESCRIPTION

This unit is a counter top or wall suspended type of dispenser which contains a complete flaked ice dispenser, storage bin, and automatic dispensing mechanism.

The primary purpose of this machine is to fill glasses with water and ice or just ice by actuating a control arm with the glass.

Variable portion or continuous flow of ice can be obtained by rotating the ice control switch. By pushing a water switch to "On", water will be dispensed with the ice as long as the glass actuator arm is depressed. Ice dispensing will stop automatically when the preselected portion of ice has been dispensed.

The drain grate is vinyl-coated steel wire allowing spilled ice to pass through freely.

The cabinet is stainless steel or steel with baked-on enamel. Enamel models have a wood grain upper front panel, dark amber control panel, stainless steel splash panel and remaining cabinet enclosure in a textured color.

The complete machine has been designed with sanitation and ease of cleaning emphasized. The storage bin is sealed, and the ice spout is automatically closed when ice is not being dispensed. The dispensing mechanism, storage bin, and parts requiring cleaning are accessible without tools.

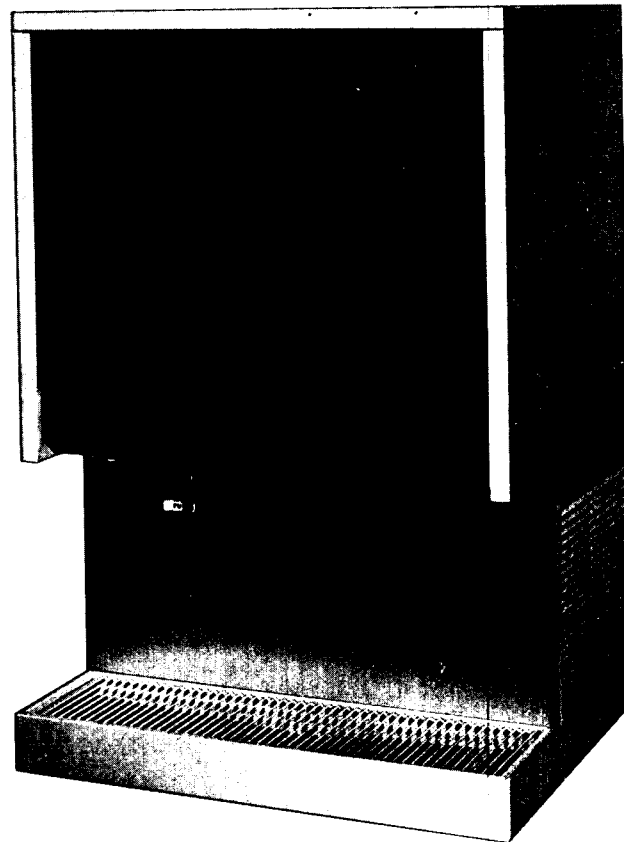
All components are accessible through the top or front panels. On air cooled machines, there is a special removable section of the condenser shroud to facilitate cleaning of condenser.

The on-off switch and portion control are located left of the ice spout under the upper front panel.

The bin control is mechanical arm controlling a switch. This is backed up by a manual reset switch to prevent damage by failure of bin controls.



FD-5 SERIES ICEMAKER- DISPENSERS



ice making capacity

Daily Ice Capacity is directly related to condenser air inlet temperature, water temperature, and age of machine.

To keep you SCOTSMAN FLAKER DISPENSER performing at it's maximum capacity, it is necessary to perform periodic maintenance as outlined on page 10 of this manual.

SPECIFICATIONS

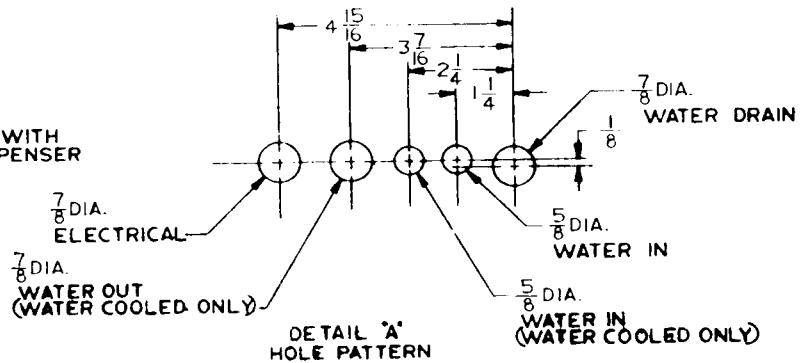
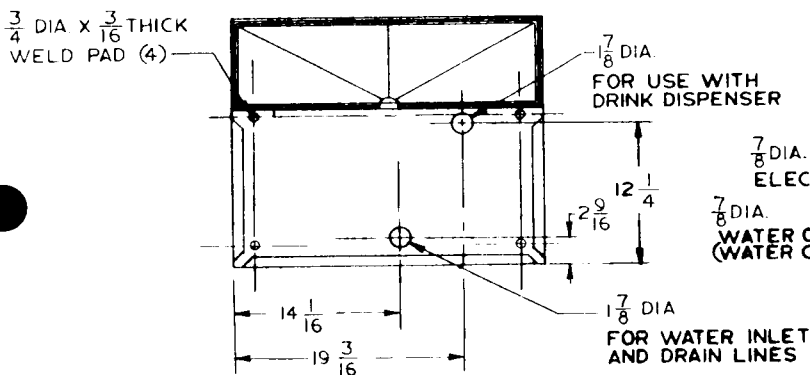
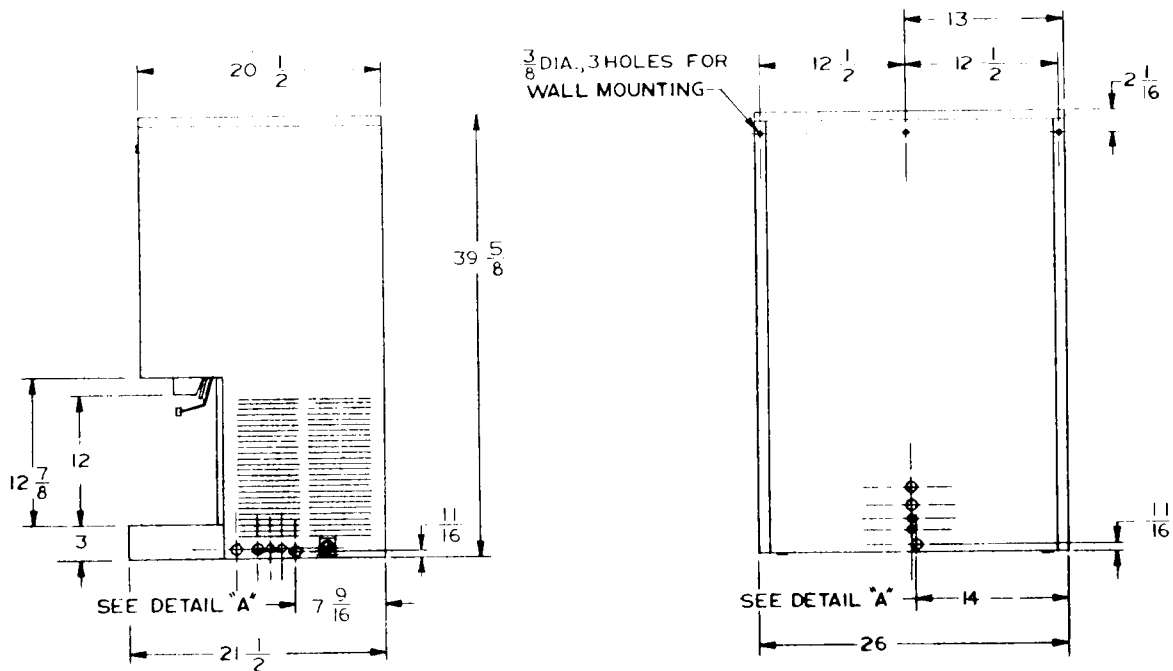
PERFORMANCE DATA:

Ice Storage — Approximately 20 lbs.

Ice Portion — Portion is variable from approx. 1 to 5 oz. per vend or may be positioned to continuous vend.

Vend Rate — Approximately 2.0 oz./sec.

Water Control — Water may be dispensed with all ice portion control settings.



SPECIFICATIONS

ELECTRICAL

Power Supply 115 + 10% Volts 60 Hertz 1 Phase
Minimum Wire size No. 12 AWG
Maximum Fuse Size 20 Amp Time Delay

PLUMBING

Potable Water Inlet 1/4" SAE Male Flare Fitting
Potable Water Outlet Plastic Tube Accepts 5/8" O.D. Tube
Condenser Water Inlet 3/8 N.P.T. at water reg. valve
Condenser Water Outlet 3/8 SAE Flare Fitting

TEMPERATURE LIMITS

100° F. Maximum 50° F. Minimum

WATER LIMITS

100° F. Maximum 125 PSIG Maximum
40° F. Minimum 20 PSIG Minimum

COMPRESSOR

Copelaweld RSF2-0050-1AA-207
115V 60 Cy
11.2 FLA
51.0 LRA
1/2 H.P.

GEAR MOTOR (Freezer Drive)

Queen Products A25995-001
115 V 60 Cy
4.0 FLA
1/10 H.P.

GEAR MOTOR (Ice Dispensing)

Merkle-Korff S-418
115 V 60 Hertz
3.7 FLA
200 Watt

REFRIGERANT CHARGE

Frost Line 6 - 8 Inches From Compressor
Approximate Charge 24 Oz. R12 (Air Cooled)
20 Oz. R12 (Water Cooled)

NORMAL OPERATING PRESSURES

Air Cooled 140 PSIG High Side
14.5 PSIG Low Side
Water Cooled 135 PSIG High Side
14.5 PSIG Low Side

INSTALLATION INSTRUCTIONS

The following installation instructions were written for use by a authorized tradesman only, not the user or customer. We suggest you call your local authorized Scotsman Service Agency for hook-up, start-up, and check out. He's listed under "Ice Making Machinery & Equipment" in your telephone book, yellow pages.

1. Machine should have both sides open to free air for air movement in and out of the machine (air cooled models). Avoid locations with high temperatures and dirty air, such as found next to grills or in kitchens.
2. Machine may be placed on a solid countertop, on other equipment manufactured by Scotsman or fastened to a wall. When wall mounting is desired, use the three mounting holes provided across the reinforcement strip on upper back of cabinet.
3. Remove cabinet top (push up on front edge), remove upper front panel (pull out along top edge) and lower front splash panel (remove 4 screws).
4. Electrical connections and plumbing - connections may enter cabinet through the sides, back or base, whichever is convenient.

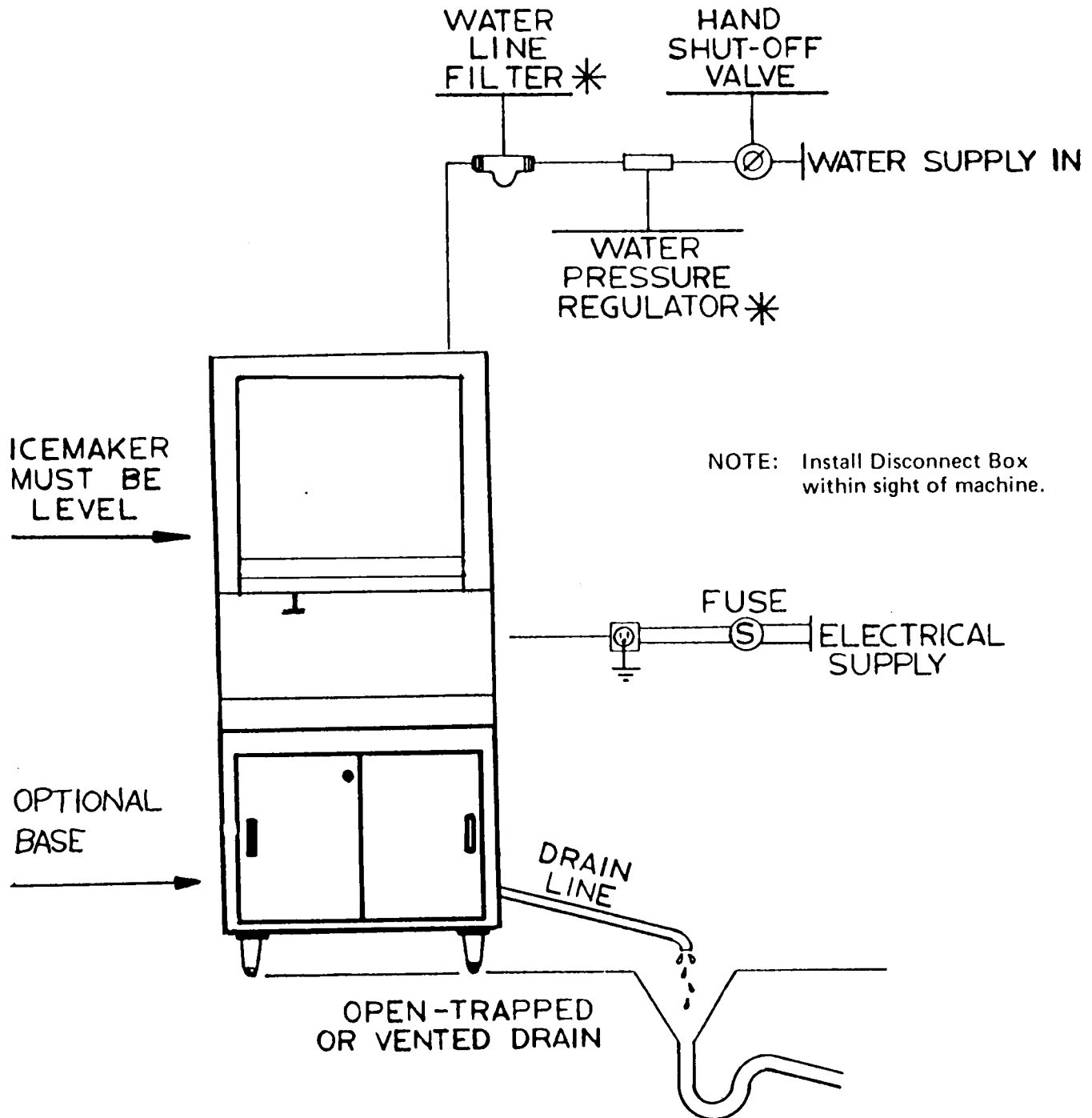
Electrical - Terminate at control box - See wiring diagram for wire and fuse size - Voltage must be within - 10% of nameplate rating during start-up and normal running conditions. Wiring must conform to National and Local Codes.

Plumbing (water In) - Inlet fitting is 1/4" SAE male and has fasteners provided on fitting to attach to cabinet sides. Use 1/4" O.D. copper tube with separate hand shut-off valve. If local conditions warrant, install water regulator and water strainer between machine and valve. Water cooled models have a 3/8" N.P.T. fitting at the water regulating valve for condenser water inlet.

Plumbing (Water Out) - 5/8" O.D. drain tube must be used and connected to plastic tube inside cabinet. Drain must run to an open drain such as a floor drain or sink. Allow ample slope to assure proper drainage of machine. Water cooled models have a 3/8 SAE flare fitting at the condenser water outlet.

5. Remove sink and grill from packaging and mount in place—fasteners are provided with sink. Place drain tube on sink drain fitting and secure with clamp. Clamp is shipped in place on drain tube.
6. Replace panels, turn on water and electrical supply, and set On-Off switch to On position.
7. Thirty minutes after the unit has been started ice can be dispensed.

WARNING: THIS MACHINE MUST NOT BE ALLOWED TO OPERATE WHEN THE WATER SUPPLY IS SHUT OFF, OR AT BELOW RECOMMENDED WATER PRESSURE. TURN MASTER SWITCH TO "OFF" POSITION WHEN WATER SUPPLY IS OFF, OR WHEN WATER PRESSURE IS BELOW RECOMMENDED OPERATING PRESSURE.



* REGULATOR AND FILTER ARE ACCESSORY ITEMS TO BE INSTALLED AS CONDITIONS WARRANT

INSTALLATION LIMITATIONS

ELECTRICAL

1. Scotsman, like most manufacturers, purchases electrical motors that are rated to operate within 10% variance above or below nameplate ratings.
2. Improper voltages applied to Scotsman equipment can cause premature failures and burnouts. Failures of this type are not considered as factory fault or defect.

AMBIENT

WARNING — This machine is not designed for outdoor installations. This machine will not operate when air temperatures are below 50° F. or above 100° F.

This unit was not fabricated nor intended to be installed outdoors.

WATER

3. Scotsman Ice Systems require 20 pounds flowing water pressure to operate satisfactorily. Pressures lower than 20 pounds or interruptions in the water supply can cause serious mechanical damage to this product.

This machine will not operate when water supply temperatures are below 40° F. or above 100° F.

MAINTENANCE AND CLEANING INSTRUCTIONS — FD5

THE FOLLOWING MAINTENANCE SHOULD BE SCHEDULED THREE TIMES PER YEAR ON SCOTSMAN DISPENSERS. CALL YOUR AUTHORIZED SCOTSMAN SERVICE DEPARTMENT.

1. Check and clean water strainers and float valve. Depress float valve to insure full stream of water.
2. Check water level and machine level, keep water level below overflow, but as high as possible and still not run out of spout opening with machine off. Water droplets come out of spout with ice at all times. Adjust as required.
3. Clean reservoir and interior of freezer using SCOTSMAN Ice Machine Cleaner.
 - A. If machine has been cleaned regularly and no problems such as dry ice or chatter are noticed, clean as per the following instructions:
 - a. Set selector switch to continuous ice and vend until bin is empty.
 - b. Disconnect Power.
 - c. Remove inner bin and bin bottom, wash and sanitize these parts and inside of bin.
 - d. Turn Off water supply or block float. Drain reservoir by removing the overflow tube in the reservoir. After draining, replace the overflow tube.
 - e. Turn On power and pour cleaning fluid into reservoir. (Use 4 oz. of Scotsman cleaner and 1 gal. of hot water). Do not fill above overflow tube. Do not allow unit to operate with less than 1" of solution in reservoir.
 - f. While waiting for step "e" to complete, wash and sanitize sink, drain grate, glass filler lever and surrounding area in accordance with local Health Department regulations.
 - g. When cleaning fluid has been depleted, turn on water supply and let unit run for at least 15 minutes to flush out any cleaning fluid. Check ice for acid taste - run unit until ice tastes sweet.
 - h. Disconnect power and melt ice in storage bin with hot water to remove ice and rinse bin parts.
 - i. Re-assemble all parts - unit is ready for normal operation.

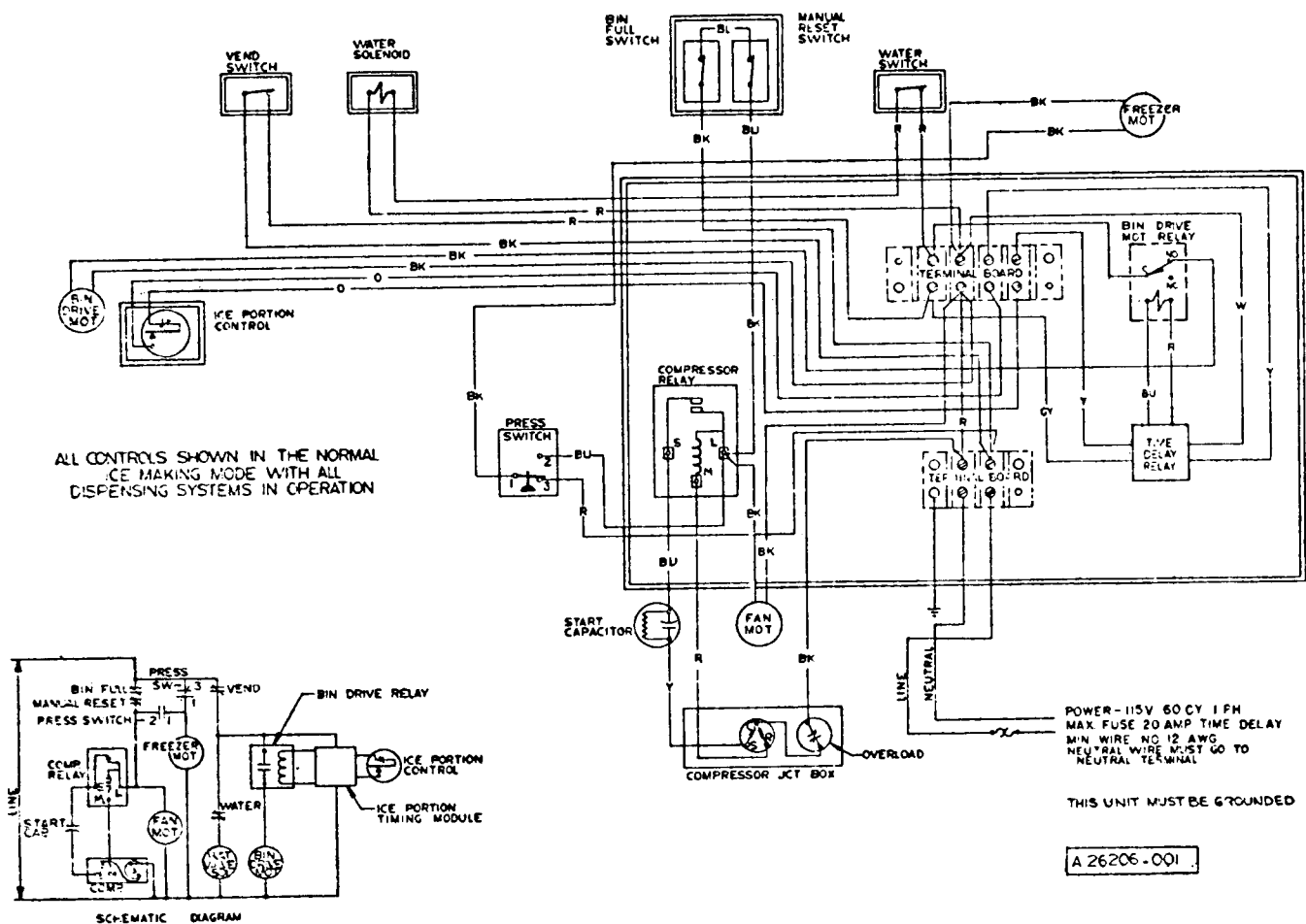
NOTE: Cleaning requirements vary according to local water conditions. Visual inspection of the auger before and after cleaning will indicate best procedure to be followed in local areas.

4. Check high and low side pressure. On air-cooled models head pressures range between 130 and 145 PSI. Suction pressure should be above 12 PSI and will range up to 15 PSI depending upon water and ambient temperatures.
5. Check gearmotor operation. Normal running temperatures are in the area of 160° Fahrenheit, which is hot to the touch.
6. Check top bearing of freezing tube. Remove retainer ring around edge of stamped brass cap. If moisture is around bearing, wipe up and remove grease. Add new grease. Use Beacon No. 325. Replace cap and retainer ring.
7. Clean air-cooled condenser. Inform customer to clean frequently. Always shut off machine when cleaning.
8. Check for refrigerant leaks and proper frost line. Should frost out of accumulator at least one-half way to compressor, and in some areas back to service valve.
9. Check for water leaks. Tighten drain line connections. Run water down bin drain line to make sure it is open.

WIRING DIAGRAM

115/60/1

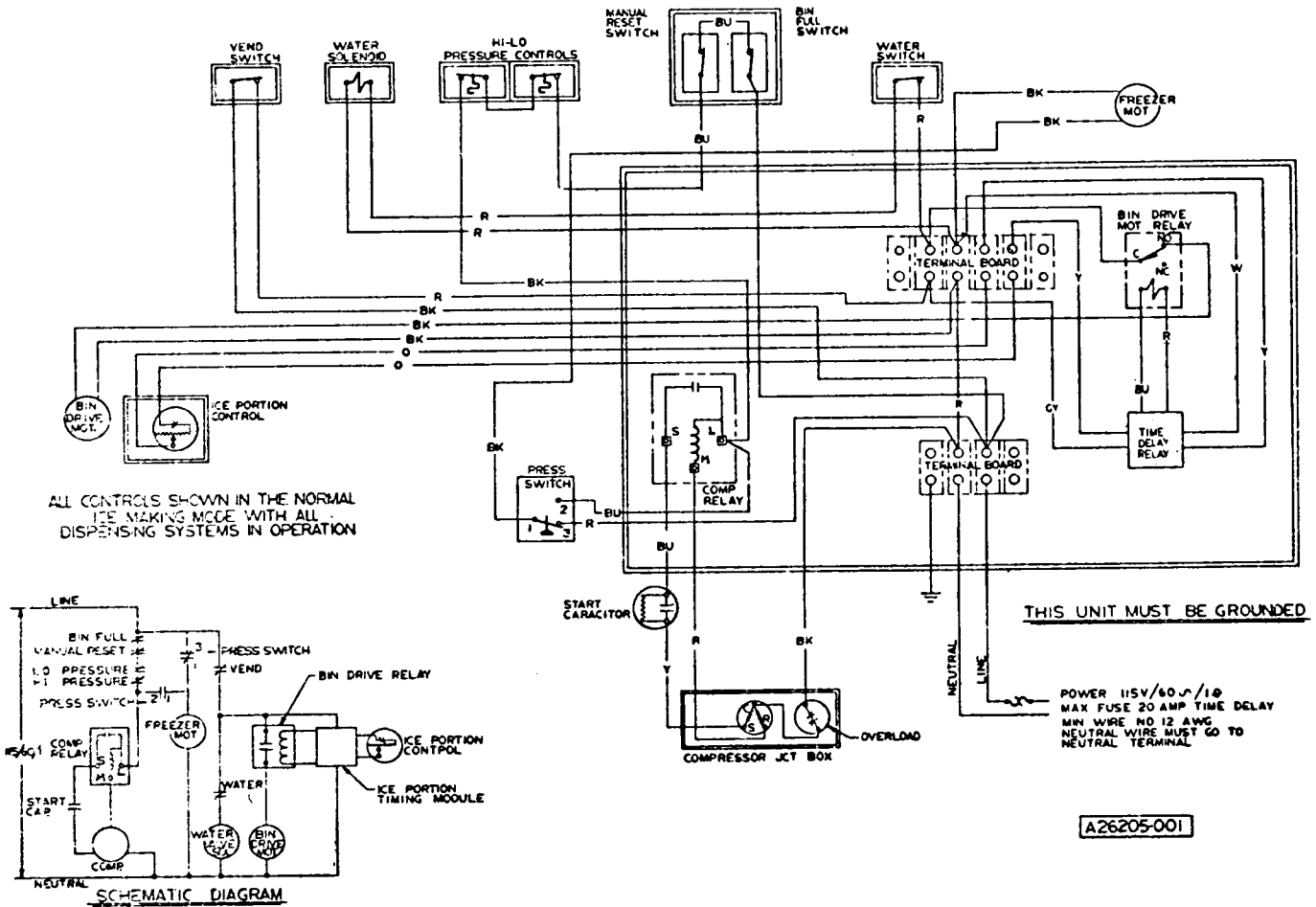
(Air Cooled)



WIRING DIAGRAM

115/60/1

(Water Cooled)



Description of the Function of the Texas Instruments Low Pressure Control Switch When Used on 1/15 and 1/10 H.P. Gear Motors

On all Scotsman units using a 1/15 or 1/10 H.P. gear motor, the centrifugal switch mechanism, mounted on top of the motor, was removed and replaced, in the system, with a low pressure control switch. This is a single pole double throw (SPDT) switch manufactured by Texas Instruments. (Queen Products Part No. 11-0396-01*).

* Refer to a typical wiring diagram, showing contacts, for description of switch function.

On all Queen Products wiring diagrams, the controls are shown in the ice making mode. Thus, the 1-3 contacts are shown as closed. On machine start up the 1-3 contacts are open and the 1-2 contacts are closed. As the unit begins to run, the low side pressures starts to fall from the stabilized or "at rest" pressure. As soon as the pressure drops to 21 Psig, the 1-2 contacts open and the 1-3 contacts close. This removes the operating controls, such as the bin thermostat, from the "gear motor circuit". If one of the operating controls opens, it will shut off the "compressor circuit". The gear motor will run until the low side pressure rises to 29 Psig. At this point the 1-3 contacts open and turns the gear motor off. This usually takes 1-3 minutes depending on ambient conditions. This length of time allows the auger to transport all the ice out of the freezing chamber. Consequently, when called on to start up again, there is no load to start up against. On start up, again, the 1-3 contacts are open and the 1-2 contacts closed.

*Function 11-0393-01 Low Pressure Control Switch

1-3 Contacts - Open on Pressure Rise
Opens at 29 Psig
Closes at 21 Psig

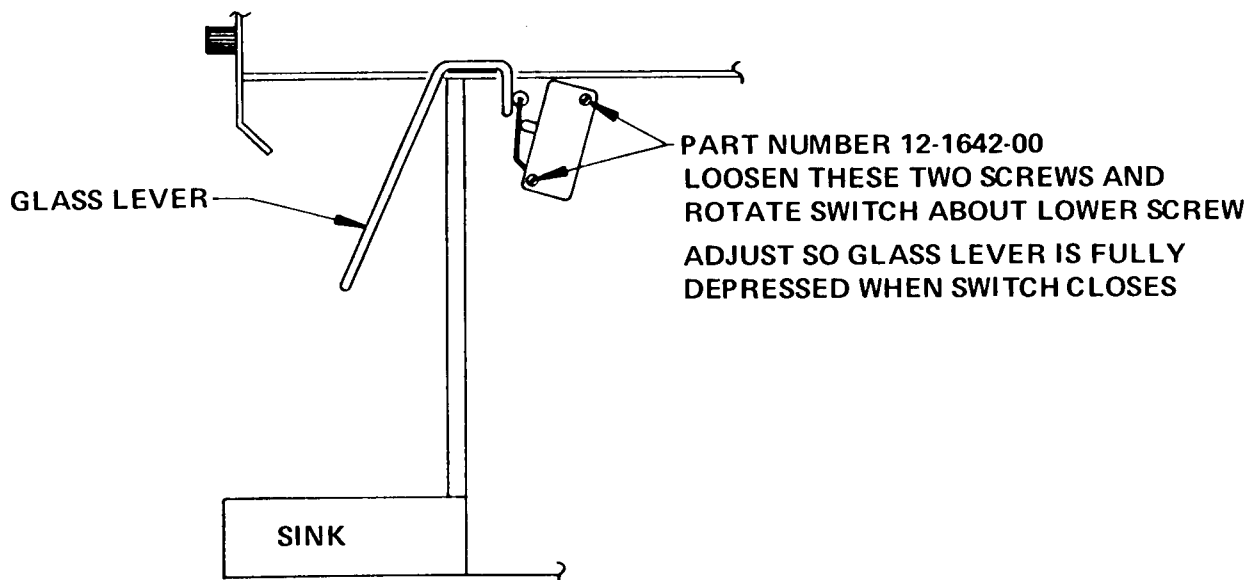
1-2 Contacts - Open on Pressure Fall
Opens at 21 Psig
Closes at 29 Psig

* See wiring diagram.

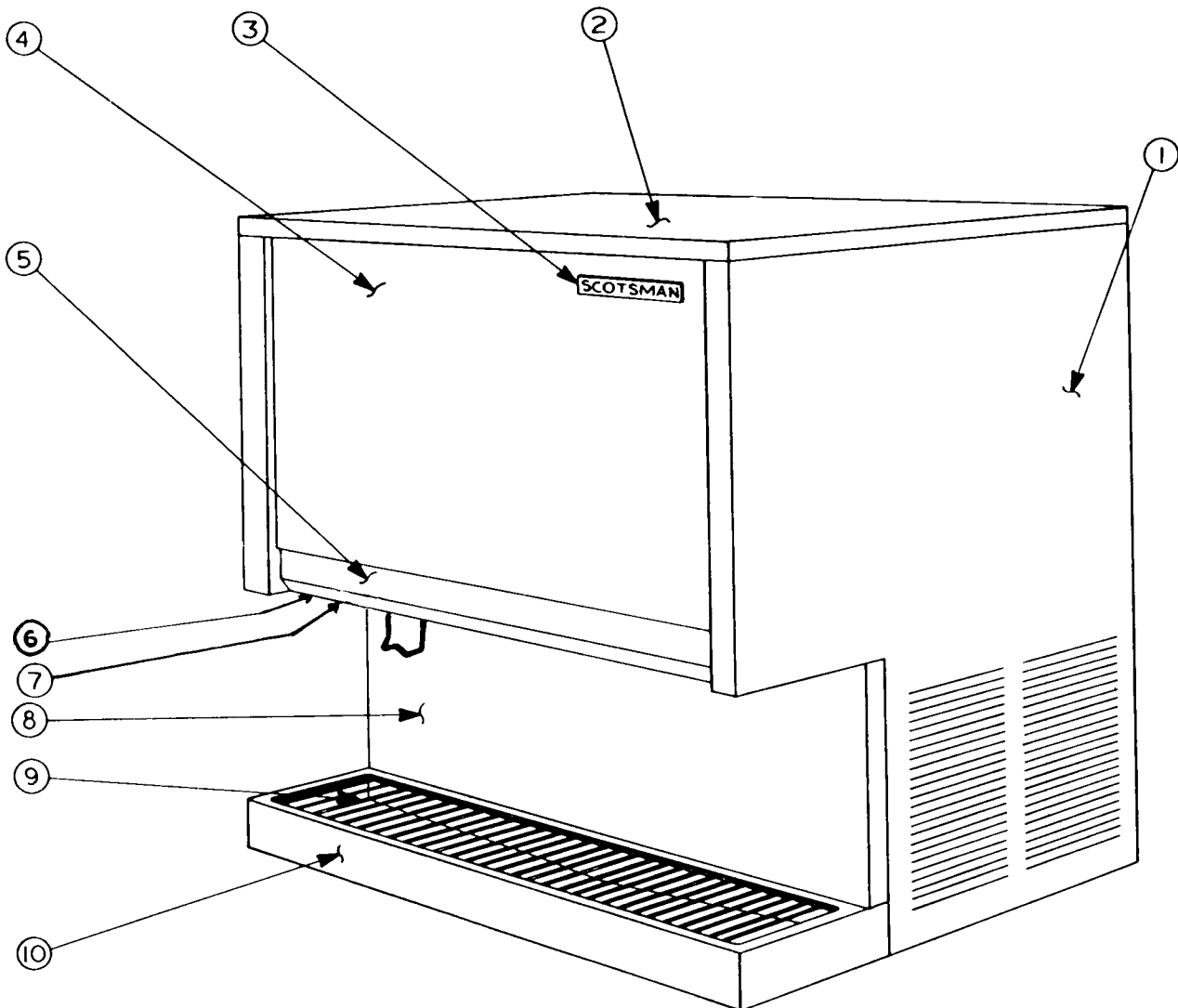
ICE DISPENSER CONTROL SYSTEM

Depressing the glass filler opens the spout and closes the vend switch. The vend switch closes the circuit to the water switch and to the water solenoid valve, if water switch is positioned to "with water". Also, the vend switch closes a circuit to the ice portion control and its timing module located in the control box. If ice control is positioned to continuous, then ice will be dispensed as long as the glass lever is depressed. If ice control is in a portion position, then only that quantity of ice will be dispensed until the glass lever is actuated another time. The portion control and timing module regulate the time period the bin drive motor is engaged. When this time period has lapsed then the normal closed relay is energized, opening the circuit to the drive motor and stopping the dispensing action. The vend switch mounting position is adjustable and must be positioned so glass lever is fully depressed before closing vend switch. This is to insure the ice spout is fully opened.

VEND SWITCH ADJUSTMENT



EXTERNAL CABINET PARTS

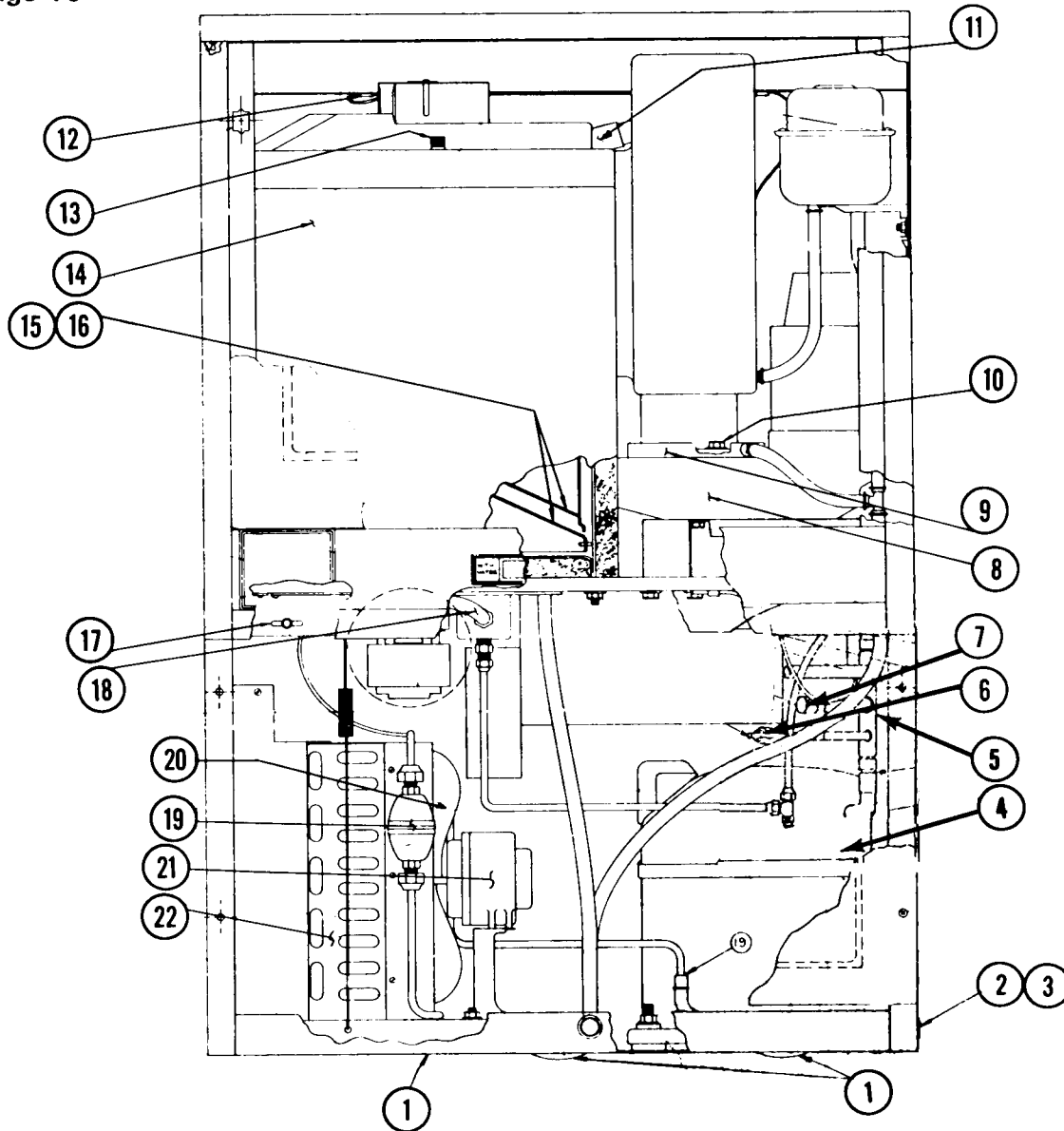


ITEM	PART NO.	DESCRIPTION
1.	A19945-000 A19945-001	Cabinet Painted Cabinet SS
2.	A20192-000 A20192-001	Top Panel Painted Top Panel SS
3.	15-0156-00 03-0271-00	Emblem Scotsman Speed Nut
4.	A21273-000 A21273-001	Front Panel Wood Grain Front Panel SS
5.	A24282-001 A24282-002	Control Panel Painted Control Panel SS
6.	12-1557-00 02-1810-00	Portion Control Knob Portion Control
7.	12-1337-01	Switch Water
8.	A19339-000 03-1418-25	Splash Panel Screws Panel
9.	02-1858-00	Grill
10.	A23212-000	Sink

PANEL FASTENERS	
15-0411-00	Strike
03-1406-04	Nut
02-0836-00	Catch

INTERNAL PARTS VIEW

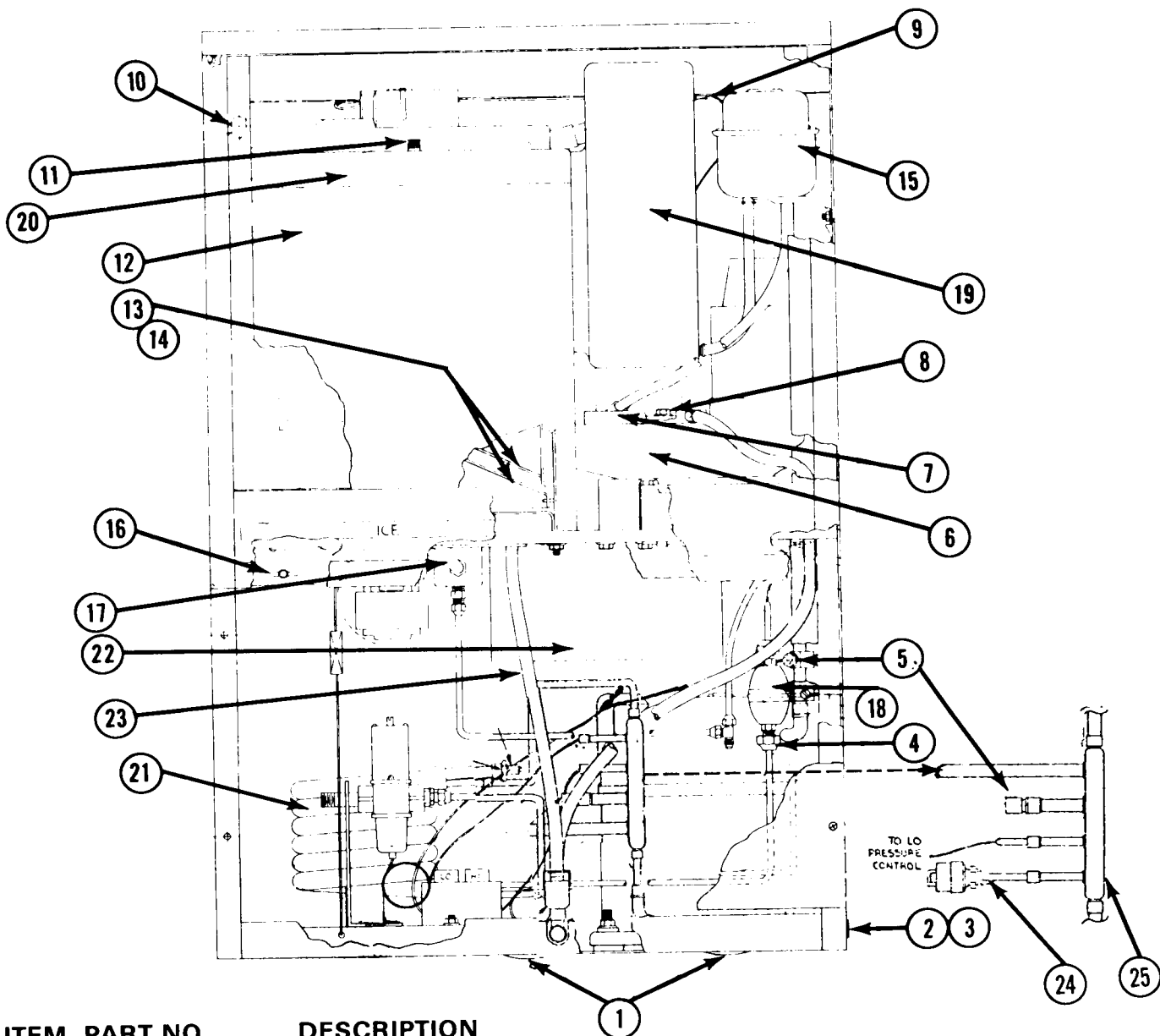
(Air Cooled)



ITEM	PART NO.	DESCRIPTION
1.	A22349-000	Plug Button
2.	02-1875-07	Plug Button Sm.
3.	02-1875-11	Plug Button Lg.
4.	18-2200-01	Compressor
5.	16-0673-04	Processor Header
*6.	11-0396-01	Low Pressure Control
7.	16-0560-00	Valve Core
	16-0563-00	Brass Cap
8.	A25995-001	Gear Motor
9.	A18153-000	Drip Pan Ass'y
	13-0628-00	Gasket
10.	03-1420-04	Screw
	03-1417-12	Washer
11.	A16151-000	Spout Extension
12.	03-1230-00	Tin Clip
13.	A21983-000	Nut
14.	A21386-000	Bin Ass'y.
15.	A19349-000	Inner Bin Fab. Ass'y.
16.	A19343-000	Inner Bin Bottom
17.	A24326-01	Switch Plate Ass'y.
	03-1403-16	Screw
18.	A23315-001	Solenoid Ass'y.
19.	02-0831-00	Filter Drier
20.	18-0137-01	Fan Blade
21.	12-1576-01	Fan Motor
22.	18-1927-00	Condenser

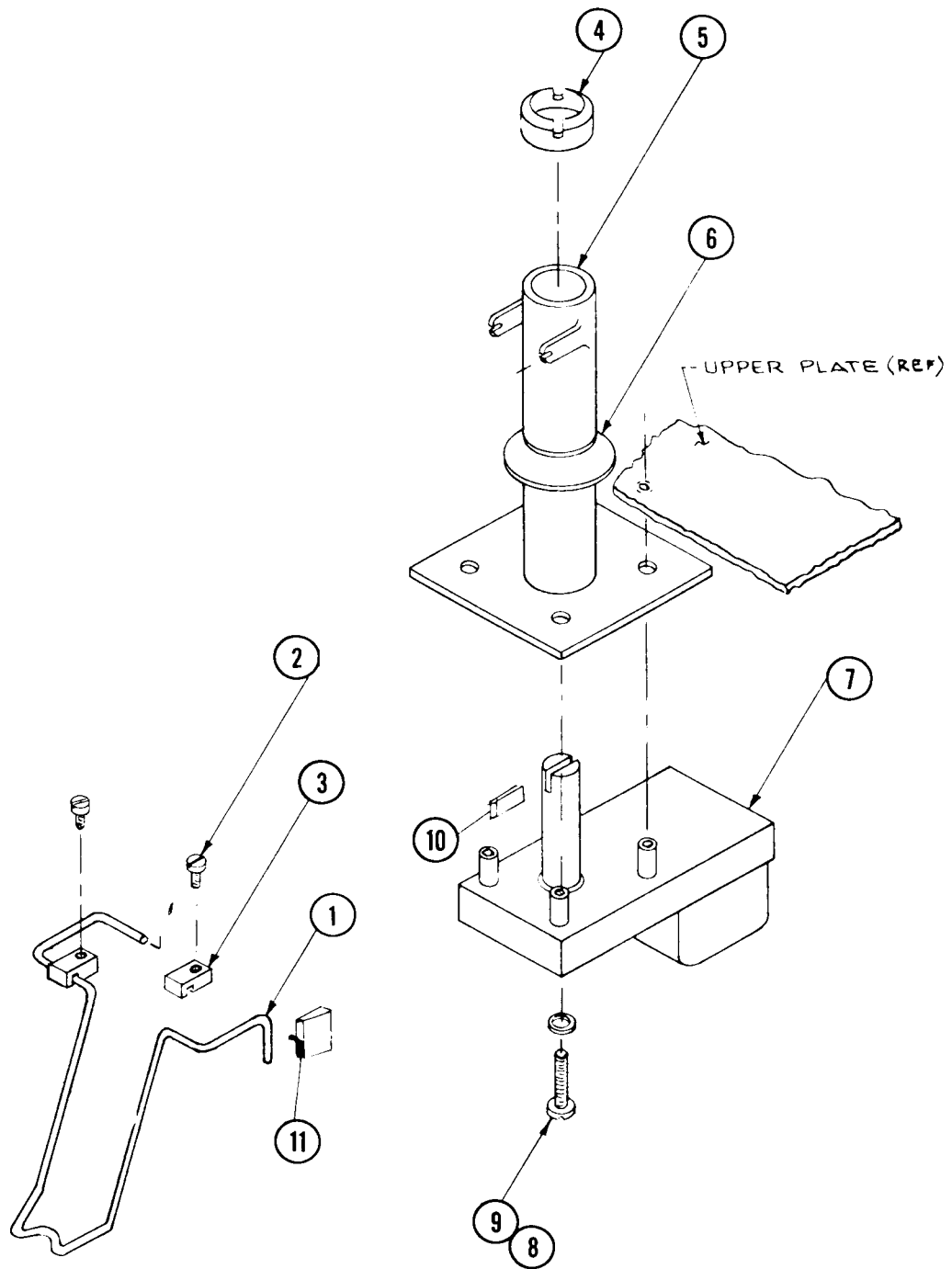
* See Page 13

INTERNAL PARTS VIEW (Water Cooled)



ITEM	PART NO.	DESCRIPTION
1.	A22349-000	Plug Button
2.	02-1875-11	Plug Button (Large)
3.	02-1875-07	Plug Button (Small)
4.	18-2200-01	Compressor
5.	16-0560-00	Valve Core
	16-0563-00	Brass Cap
6.	A25995-001	Gear Motor
7.	A18153-000	Drip Pan Assy.
	13-0628-00	Gasket
8.	03-1420-04	Screw
	03-1417-12	Washer
9.	A16151-000	Spout Extension
10.	03-1230-00	Tin Clip
11.	A21983-000	Nut
12.	A21386-000	Bin Assy.
13.	A19349-000	Inner Bin Fab. Assy.
14.	A19343-000	Inner Bin Bottom
15.	02-2217-01	Reservoir Assy.
16.	A24326-001	Switch Plate Assy.
	03-1403-16	Screw
17.	A23315-001	Solenoid Assy.
18.	02-0831-00	Filter Drier
19.		Freezer Assy. - See Page 22
20.	A22025-001	Bin Top Assy.
21.	18-3303-02	Condenser
22.	02-1827-00	Spring
23.	A16173-000	Drain Tube
*24.	11-0396-01	Low Pressure control
25.	16-0673-06	Processor Header

* See page 13



ITEM	PART NO.	DESCRIPTION
1.	02-2076-01	Glass Filler
2.	03-1403-06	Screw
3.	02-1969-00	Linkage Clamp
4.	02-1976-00	Retaining Collar
5.	02-1971-00	Bracket Gear Motor
6.	13-0747-00	Water Shed
7.	12-1561-00	Gear Motor
8.	03-1410-02	Lockwasher
9.	03-1403-36	Screw
10.	A20472-000	Slot Pin
11.	12-1642-00	Vend Switch

BIN CONTROL SYSTEM

There are two switches mounted in the enclosure on the bin top. One switch is actuated by the lever which is moved by the incoming ice—this switch has a large differential. (4)

In the event this switch fails to stop the ice maker, then the incoming ice forces the lever which in turn pushes the bin switch back into the manual re-set switch. The icemaker will not start until this switch is re-set. (7)

Continual tripping of the re-set switch will result if the bin full switch is defective. If nuisance tripping of this switch occurs, the bin full switch may be moved away from the re-set switch by use of its mounting nuts. Major adjustment can be made by bending the lever to increase or decrease its angle.

To further control the compressor and to avoid the freezing and stoppage of the auger in the freezer, a control is incorporated on the gear motor drive for the freezer.

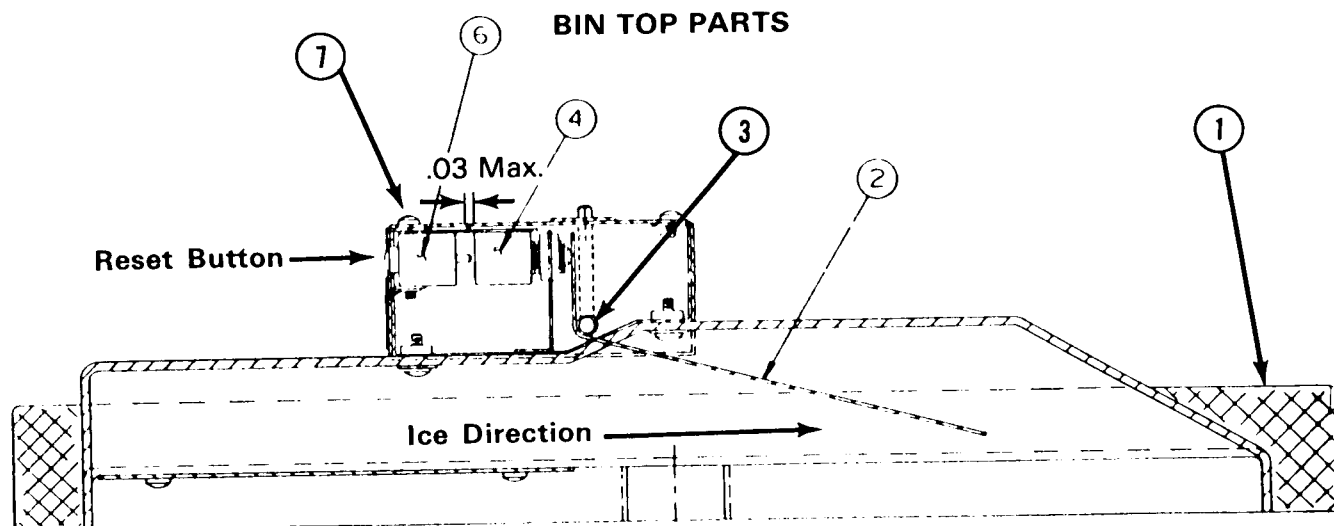
The bin controls do not energize the compressor, only the gear motor. In turn, the gear motor operate the compressor.

A speed sensing switch designed externally on the motor of the gear unit will stop the compressor when the RPM of the motor is reduced or stalled.

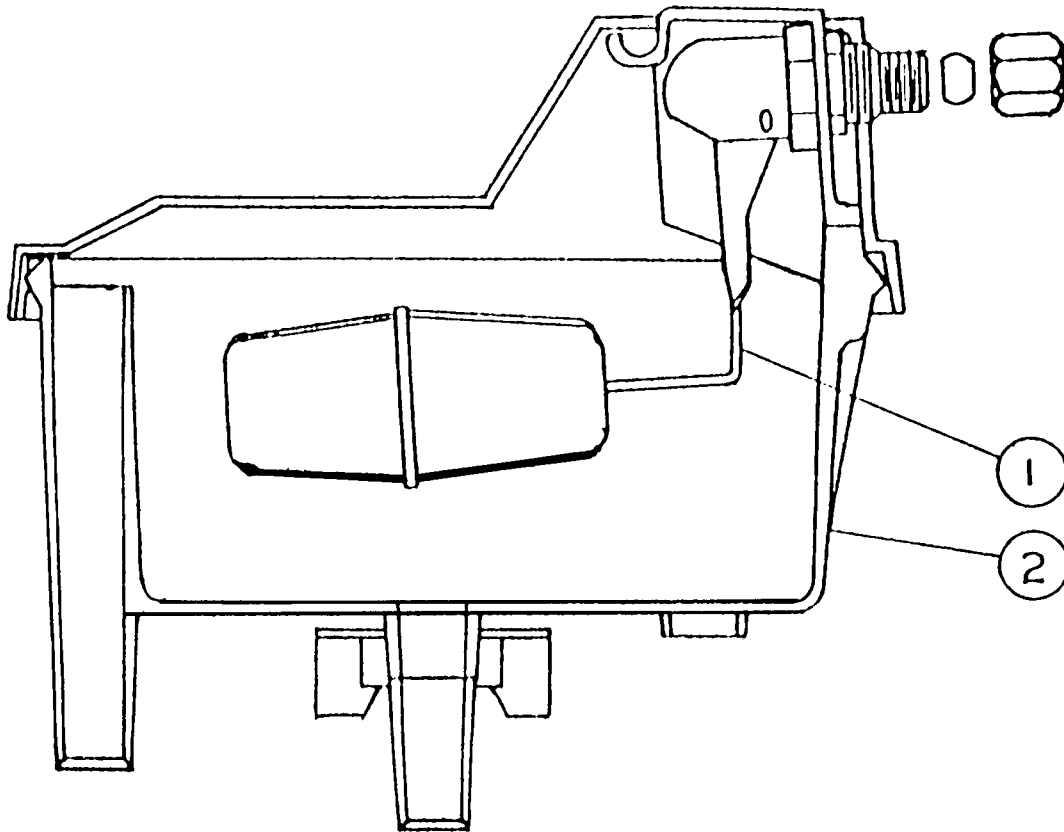
Should the auger begin to freeze, the speed of the gear motor is reduced due to excessive load. At reduced RPM it opens the circuit to the compressor and thereby stopping the freezing. As the gear unit, only, continues to run, it will clear the auger; and when the motor speed increases, the compressor is turned on.

Any freeze-ups are thereby automatically cleared by the unit.

If the water should be shut off when the unit is running, the inlet water line will freeze shut. The control mentioned above will have no control over such a situation.



ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1.	A20486-000	Top Foam Assy.	5.	A21997-000	Electrical Insulation
2.	A21995-000	Actuator Arm	6.	12-1664-00	Reset Switch
3.	A21982-000	Pin	7.	03-1404-07	Screw
4.	12-1018-02	Bin Full Switch			

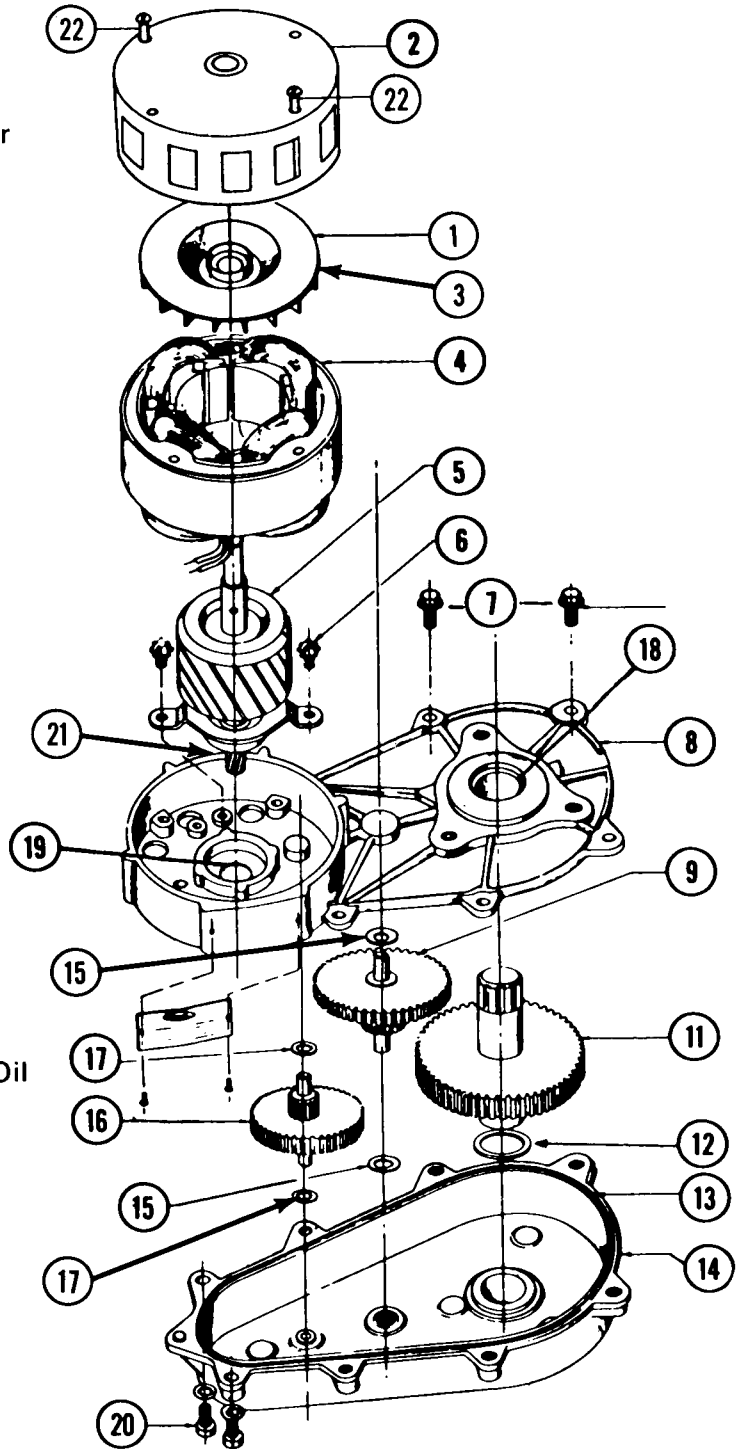


RESERVOIR ASSEMBLY

ITEM	PART NO.	DESCRIPTION
1.	02-2217-02	Valve Assy.
2.	02-2217-01	Reservoir Complete

GEAR MOTOR ASSY.

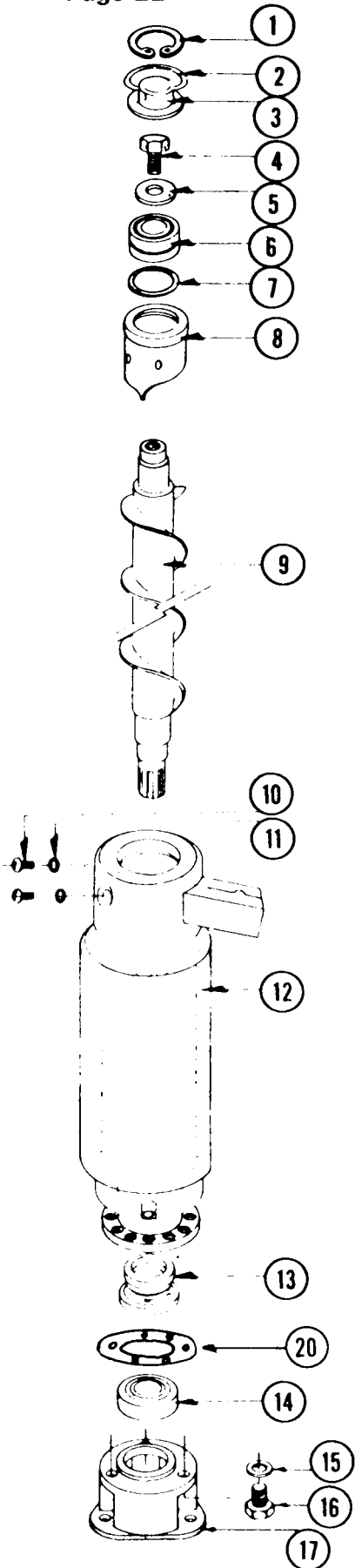
ITEM	PART NO.	DESCRIPTION
1.	03-1246-00	Set Screw (2)
2.	A17047-000	Motor Housing
3.	A16915-000	Cooling Fan
4.	12-1400-01	Stator Assy.
5.	A26454-001	Rotor Assy. & First Gear
6.	03-1245-00	Screws (2)
7.	03-1251-00	Flange Screws (6)
8.	A16920-021	Gear Case Cover
9.	02-1521-00	Gear & Pinion
11.	A26650-001	Gear & Output Shaft
12.	03-1408-21	Washer (2)
13.	02-1505-00	"O" Ring
*14.	A24184-001	Gear Case Assy. Kit
15.	03-1408-06	Washer (3)
16.	A26454-001	1st Gear & Pinion
17.	03-1408-19	Washer (2)
18.	02-1503-00	Grease Seal
19.	02-1504-00	Grease Seal
20.	03-1252-00	Screw (2)
21.	13-0617-04	Oil Slinger Ring
22.	03-1403-43	Motor Bolts



A25995-001 Gear Motor Assy. Complete

*Includes Items #8-13-15-17-18-19 (1) Can Oil

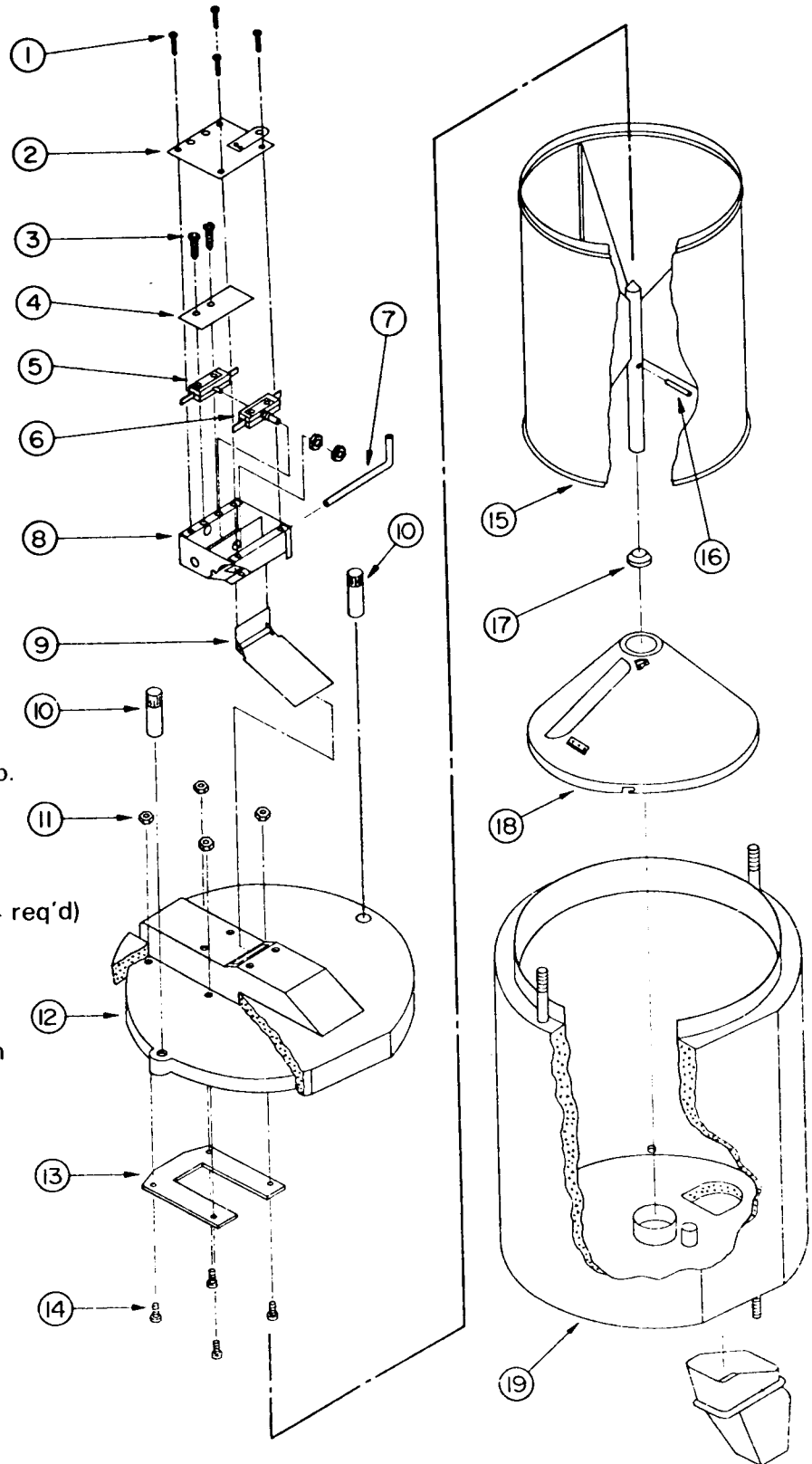
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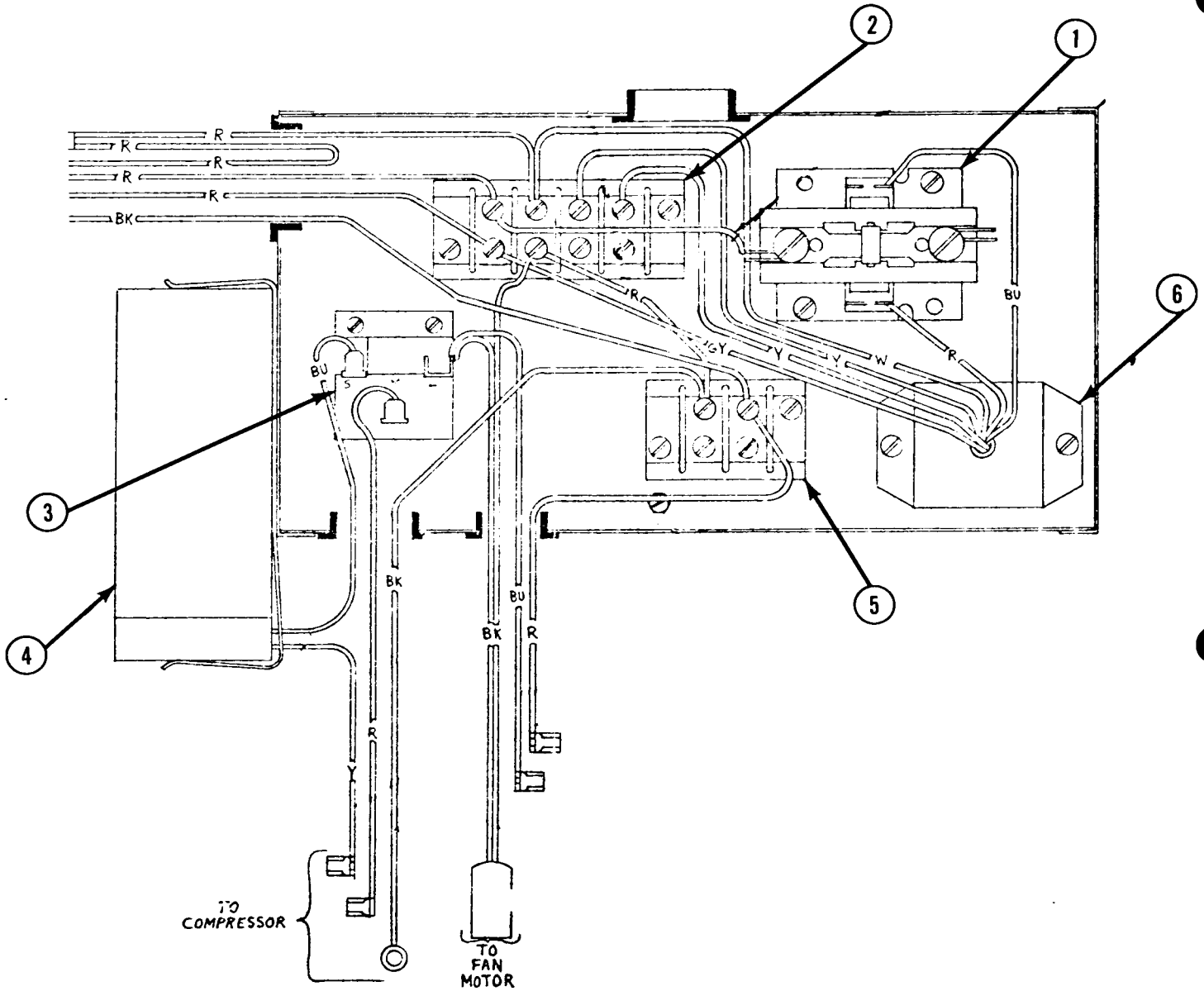
ITEM	PART NO.	DESCRIPTION
1.	03-1558-03	Retainer Ring
2.	A08162-000	Cap Hook
3.	A07701-000	Cap
4.	03-0758-00	Screw
5.	A07699-000	Washer
6.	02-1412-00	Top Bearing—Matched Set
7.	13-0617-16	“O” Ring
8.	A14678-000	Breaker with Bearing
9.	02-1538-00	Auger
10.	03-1403-46	Screw
11.	03-1417-07	Washer
12.	A26752-020	Evaporator Shell includes Suction Line, No internal parts.
13.	A18945-000	Water Seal
14.	02-0417-00	Bearing, Lower
15.	03-1410-04	Washer, (3 Req'd)
16.	03-1405-42	Cap Screw (3 Req'd)
17.	08-0595-01	Adapter-Amaloy
18.	15-0575-01	Spline Drive Coupling
19.	13-0709-01	Shaft Drip Shield — Rubber
20.	03-1505-00	Gasket

STORAGE BIN ASSEMBLY

ITEM	PART NO.	DESCRIPTION
1.	03-1404-04	Screw (4 req'd)
2.	A21996-000	Cover Fab. Ass'y.
3.	03-1403-10	Screw (2 req'd)
4.	03-0886-00	Twin Nut
5.	12-1664-00	Reset Switch
6.	12-1018-02	Switch
7.	A21982-000	Pin
8.	A21992-000	Bin Switch Box
9.	A21995-000	Actuator Arm Fab.
10.	A21983-000	Nut (2 req'd)
11.	03-1406-04	Nut (4 req'd)
12.	A20486-000	Top-Foam Ass'y.
13.	A21987-000	Bridge Plate
14.	03-0255-02	Screw, Thumb (4 req'd)
15.	A19349-000	Inner Bin Fab. Ass'y.
16.	A23223-000	Pin-Inner Bin Collar
17.	02-1976-00	Collar
18.	A19343-000	Inner Bin Bottom Fab. Ass'y.
19.	A21386-000	Bin Ass'y.



CONTROL BOX PARTS



ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1.	12-2041-01	Contactors	4.	18-1901-33	Compressor Capacitor (start)
2.	12-0813-01	Terminal Board	5.	12-0813-04	Terminal Board
3.	18-2200-26	Compressor Relay	6.	A26213-001	Time Delay Relay

SERVICE ANALYSIS ICE MAKER SECTION FD5

SYMPTOM	POSSIBLE CAUSE	CORRECTION
Water Leaks.	Defective water seal. Gravity feed line leaking. Water level in reservoir too high.	Replace. Check hose clamps. Adjust water level to 1/4 inch below reservoir overflow, then raise reservoir until water comes out freezer spout, then lower 3/4 inch.
Excessive noise or chattering.	Mineral or scale deposit on auger and inner freezing chamber walls. Low suction pressure. Intermittent Water Supply. Water level in reservoir Motor compressor not solid on rubber mounts.	Clean per cleaning instructions with Scotsman Ice Machine Cleaner – for severe deposits remove auger and clean freezer parts manually. Add gas to raise suction pressure. Adjust Water Regulator on Water Cooled Machines Check and clean water strainer. Check gravity feed line for air lock. Remove air lock. See "Corrections" under "Symptom" water leaks. Repair or replace rubber mounts.
Gearmotor noise.	Low on oil.	Remove case cover to check for proper oil level. Top of gears should be covered. Use 600W oil.
Unit will not run.	Bin Reset Switch. Water Shortage. Blown fuse. Loose electrical connection. Inoperative master switch.	Push to reset - continue operation - replace bin full switch. Check water supply (Water Cooled Only) Replace fuse and check for cause of blown fuse. Check wiring. Replace switch.

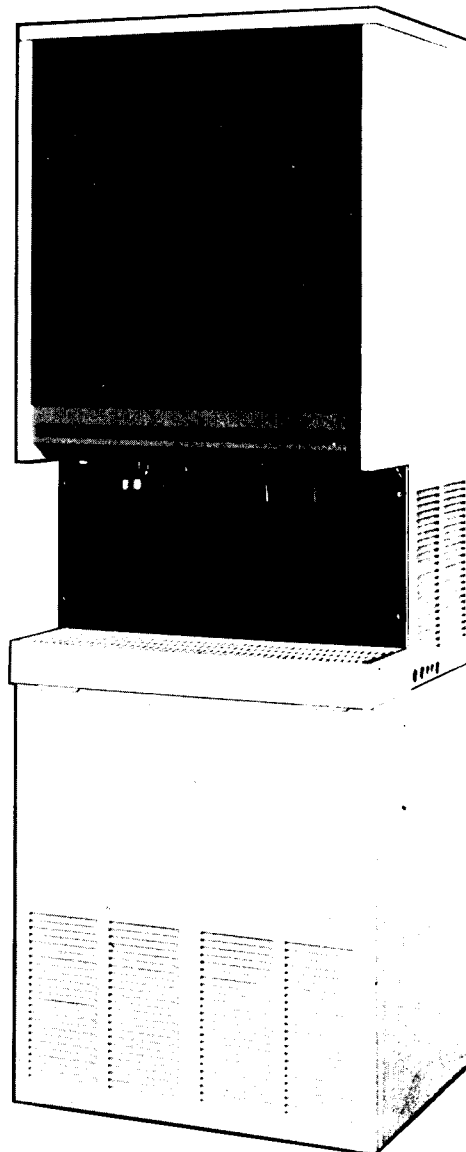
SERVICE ANALYSIS ICE MAKER SECTION FD1

SYMPTOM	POSSIBLE CAUSE	CORRECTION
Compressor cycles intermittently.	<p>High or low voltage.</p> <p>Dirty condenser.</p> <p>Air circulation blocked.</p> <p>Inoperative condenser motor.</p> <p>Non-condensable gases in system.</p>	<p>Check for overloading.</p> <p>Clean.</p> <p>Remove cause or move unit to correct.</p> <p>Replace.</p> <p>Check for leaks, evacuate and recharge.</p>
Making wet ice.	<p>Surrounding air temperature very high.</p> <p>Water Shortage.</p> <p>Under or over-charge of refrigerant.</p> <p>Faulty compressor.</p>	<p>Correct or move unit.</p> <p>Check water supply (Water cooled only)</p> <p>Recharge with the proper amount.</p> <p>Replace or repair.</p>
Low ice production.	<p>Loss of refrigerant, under or over-charge of refrigerant.</p> <p>Dirty or plugged condenser.</p> <p>Water level in water reservoir.</p> <p>Partial restriction in capillary tube or drier.</p> <p>Corroded or stained worm shaft due to water conditions.</p> <p>Inlet water strainer partially plugged.</p>	<p>Check and recharge with proper amount of refrigerant.</p> <p>Clean condenser.</p> <p>Check water supply (water cooled only)</p> <p>See "Corrections" under "Symptoms" water leaks.</p> <p>Moisture in system. Overcharge of oil in system. Remove charge and drier. Replace and recharge system.</p> <p>Remove worm shaft and clean.</p> <p>Remove screen and clean.</p>
Machine runs but makes no ice.	<p>Loss or under-charge of refrigerant.</p> <p>Water not entering freezing chamber.</p> <p>Moisture in system.</p> <p>Water seal leaking.</p> <p>Water turned off while unit was operating.</p>	<p>Check for leaks and recharge.</p> <p>Plugged strainer or supply line.</p> <p>Check and clean. Air lock in gravity feed line. Check and remove air lock.</p> <p>Check and remove charge and drier. Replace and recharge.</p> <p>Replace seal.</p> <p>Inlet water line froze shut. Unit must be turned off and defrosted.</p>

SERVICE ANALYSIS DISPENSING MECHANISM FD5

SYMPTOM	POSSIBLE CAUSE	CORRECTION
Will not dispense.	Power off.	Check fuses and electrical supply to machine. Check symptoms - bin drive motor runs, bin drive motor stopped.
Bin drive motor runs (will not dispense).	<p>Plugged spout.</p> <p>Vend switch adjustment.</p> <p>Gear Motor.</p> <p>Inner bin does not rotate.</p>	<p>Operator held full glass under spout forcing ice to jam, clear spout and instruct personnel using machine.</p> <p>Vend switch must be positioned so it will close only when glass lever is completely depressed to prevent vending when ice chute is only partially open.</p> <p>Check if output shaft turns if not, replace gearmotor.</p> <p>Check keyed coupling to gear motor. Key is soft soldered in place and may be replaced.</p>
Bin drive motor stopped.	<p>Drive motor burned out.</p> <p>Inner bin jammed.</p> <p>Vend switch.</p>	<p>Replace.</p> <p>Check assembly of inner bin bottom, may NOT be down and locked in place.</p> <p>Faulty - replace.</p> <p>Out of adjustment - readjust.</p>
Will not portion ice, runs, continuous.	Ice portion control timing module.	<p>If components fail to open machine will vend continuously when glass lever is depressed. The timing module and ice portion control stop the vend cycle by energizing the relay which opens the circuit to the bin drive motor.</p> <p>It is recommended to service these two components by substitution.</p>

FD5



ACCESSORY ITEM

***DMS 20-D**

OR

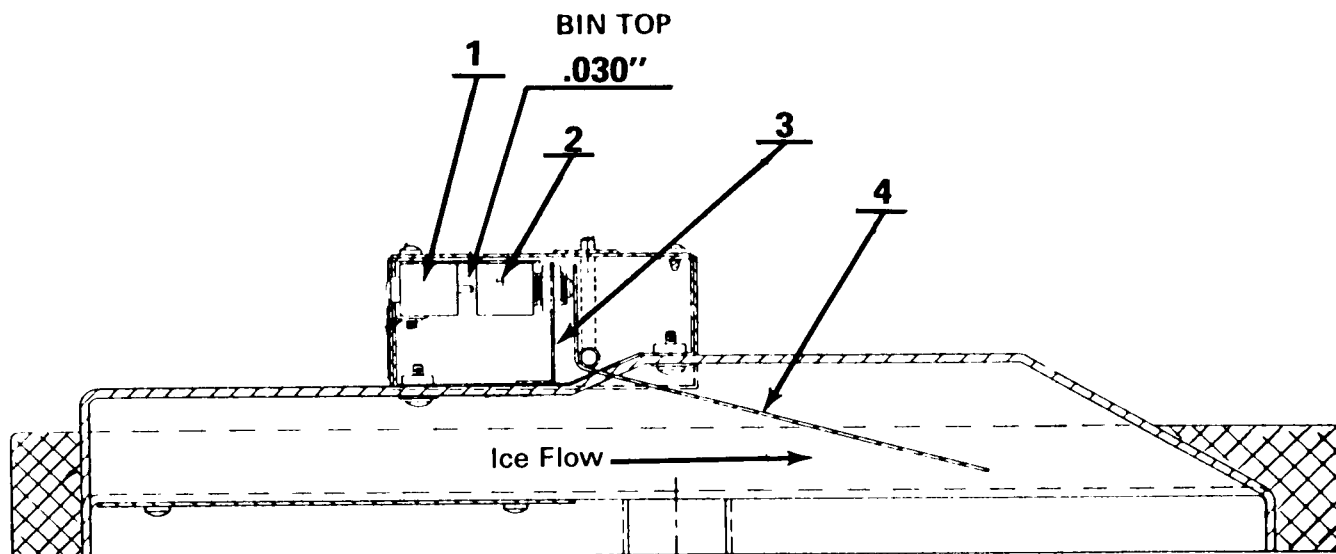
DMS 20-S

MACHINE STANDS

**DMS 20-E is Enamel Finish.
DMS 20-S is Stainless Steel Finish**

***Legs not included with stands. Order separately from Sales Department.**

BIN TOP ADJUSTMENTS



Drawing No. 2

The gap between the tip of the plunger of the safety switch and the back of the bin full switch (items 1 & 2 Drawing) should be no greater than .030 inch. If this gap exceeds .030" two types of problems can occur.

First, in the instance of a bin full switch failure it is conceivable for ice to back up and jam the freezing section before the safety switch trips.

Second, the position of the plunger on the bin full switch is critical in relation to the actuator arm. If the plunger is too forward (a result of a gap larger than .030") the actuator arm would tend to push up on the plunger rather than in. This could damage the switch in such a way that it will not function or the drag alone may be enough to prevent operation.

The gap between the switches can be adjusted by two nuts holding the switch in place. The .030 inch specification is maximum - a smaller gap is acceptable.

In some cases you may find that the mounting plate (item 3 Drawing) for the bin full switch was spot welded so that it is not square with the sides. This can cause a malfunction of the switch the same as an incorrect gap. Where this occurs a new bin switch box part No. A21992-000 should be ordered and installed.