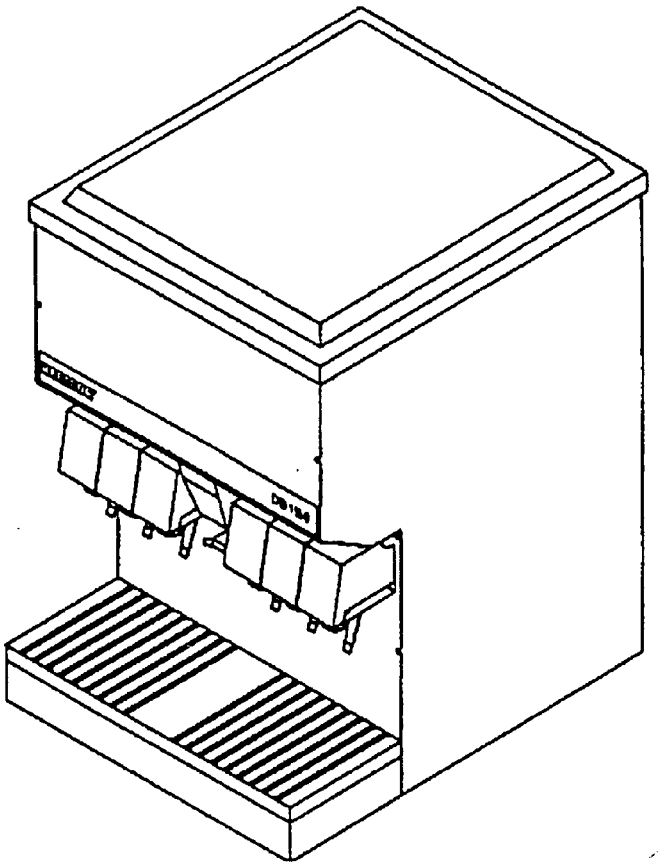
REMCOR®

ICE/BEVERAGE DISPENSER

MODELS: DB150, DB150-B, DB150-BC DB150-Z

Operator's Manual



Publication Number: 91328
Release Date: May 01, 1997
Revision date: May 08, 2014
Revision: E

THIS DOCUMENT CONTAINS IMPORTANT INFORMATION
This Manual must be read and understood before installing or operating this equipment

PRINTED IN U.S.A

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Manufactured Under One or More of the Following Patent Numbers: 3,211,336, 3,274,792, 3,393,839, 3,517,860, 3,739,842, 4,215,803, 4,227,377, 4,300,359, 4,346,824
Canadian Patent Numbers 912,514 (10/72), 936,855 (11/73), 4,429,543, 4,921,149
Other Patents Pending

SAFETY PRECAUTIONS

Always disconnect power to the dispenser before servicing or cleaning.

Never place hands inside of hopper or gate area without disconnecting power to the dispenser. Agitator rotation occurs automatically when the dispenser is energized!

This ice dispenser has been specifically designed to provide protection against personal injury and eliminates contamination of ice. To ensure continued protection and sanitation, observe the following:

ALWAYS be sure the removable lid is properly installed to prevent unauthorized access to the hopper interior and possible contamination of ice.

ALWAYS be sure the upper and lower front panels are securely fastened.

ALWAYS keep area around the dispenser clean of ice cubes.

CAUTION: Dispenser cannot be used with crushed or flaked ice.
Use of bagged ice, which has frozen into large chunks, can void warranty. The dispenser agitator is not designed to be an ice crusher. Use of large chunks of ice which "jam up" inside the hopper will cause failure of the agitator motor and damage to the hopper. If bagged ice is used, it must be carefully and completely broken into small, cube-sized pieces before filling into the dispenser hopper.

GENERAL DESCRIPTION

The 3030 series of ice dispensers solve ice and beverage service needs in the sanitary, space saving, economical way. Designed to be manual filled with ice from any remote ice-making source, these dispensers will dispense cubes (up to 1-1/4 ?in size), cubelets and hard-chipped or cracked ice; and in addition, several flavors of post-mix beverages. "B" models contain beverage faucets **only** and must be supplied with cold product from any remote cold plate or refrigerated soda factory.

"BC" units include faucets and cold plates and are designed to be supplied directly from syrup tanks and carbonator, with no additional cooling required.

IMPORTANT: For dispensing Scotsman "pellet" style ice (Model MH750 Ice makers), REMCORâ part number 27065 Ice Diverter must be installed on the dispenser. (See INSTALLATION INSTRUCTIONS Figure 2).

Table 1. Specifications

Model:	DB150
Ice Storage:	150 lbs.
Maximum Number of Faucets Available:	Not Available
Built-in Cold Plate:	No
Electrical:	120/1/60
Dimensions:	22 "W x 29-3/4 "D x 34-3/16 "H
Model:	DB150*-B
Ice Storage:	150 lbs.
Maximum Number of Faucets Available:	6
Built-in Cold Plate:	No
Electrical:	120/1/60
Dimensions:	22 "W x 29-3/4 "D x 34-3/16 "H
Model:	DB150*-BC
Ice Storage:	150 lbs.
Maximum Number of Faucets Available:	6
Built-in Cold Plate:	Yes
Electrical:	120/1/60
Dimensions:	22 "W x 29-3/4 "D x 34-3/16 "H
Model:	DB150Z, -BZ,-BCZ
Ice Storage:	150 lbs.
Maximum Number of Faucets Available:	6
Built-in Cold Plate:	Yes
Electrical:	120/1/60
Dimensions:	Ice Only and B Units22 "W x 21 "D x 34-3/16 "H BC units 22 "W x 22-1/4 "D x 36-3/16 "H

*CABINET OPTIONS

E - Neutral Beige Baked Enamel Finish with Wood Grain Vinyl-clad Upper Front Panel

S - All Stainless Steel

W- White Baked Enamel Finish

INSTALLATION INSTRUCTIONS

NOTE: This equipment must be installed with adequate backflow protection to comply with federal, state, and local codes.

Note: Water pipe connections and fixtures directly connected to a potable water supply shall be sized, installed and maintained according to Federal, State and Local Laws.

1. Locate the dispenser indoors on a level counter top. Unpack the four (4) legs and install them into the threaded holes provided in the bottom of the unit. The installer must provide flexibility in the product and utility lines to permit shifting the position of the dispenser sufficiently to clean the area beneath it.

2. Utilities: DB150 Model - The electrical power cord and dispenser drain (3/4 FPT) are located at the rear of the unit. DB150 -B, -BC Model - All utilities are routed out the bottom of the unit. See "Mounting Template" Figure 5 for locating the required clearance holes in the counter for these utility lines.

3. Connect the drain tube to an open drain. For DB150 models, the drain line size must be 3/4 ?IPS (or equal) and must continuously pitch downward away from the unit and contain no "traps" or improper drainage will result.

SINK DRAIN ASSEMBLY
-B, -BC MODELS

A. Use tube, clamp and insulation provided to assemble drain.

B. To assure proper drainage, do not allow "trap" to form in drain line. Be sure drain line runs flat with bottom of dispenser. (See figure below.)

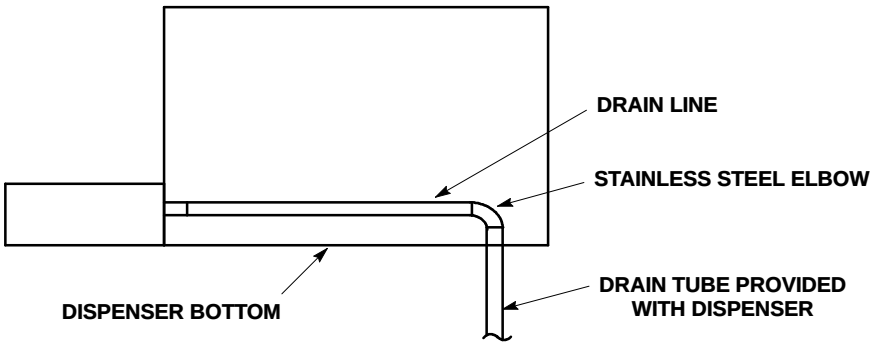


FIGURE 1. SINK DRAIN ASSEMBLY

4. "-B", "-BC" models: connect the beverage system product lines as indicated in "B" and "BC" units, page NO TAG. This work should be done by a qualified serviceperson. Note that the hoses are marked with numbers 1 through 6 for syrup connections and "CW" for carbonated water connection.

5. Clean the hopper interior (see CLEANING INSTRUCTIONS).

6. CONNECT THE POWER CORD TO A 120 VOLT, 60 CYCLE, 3-WIRE grounded receptacle.

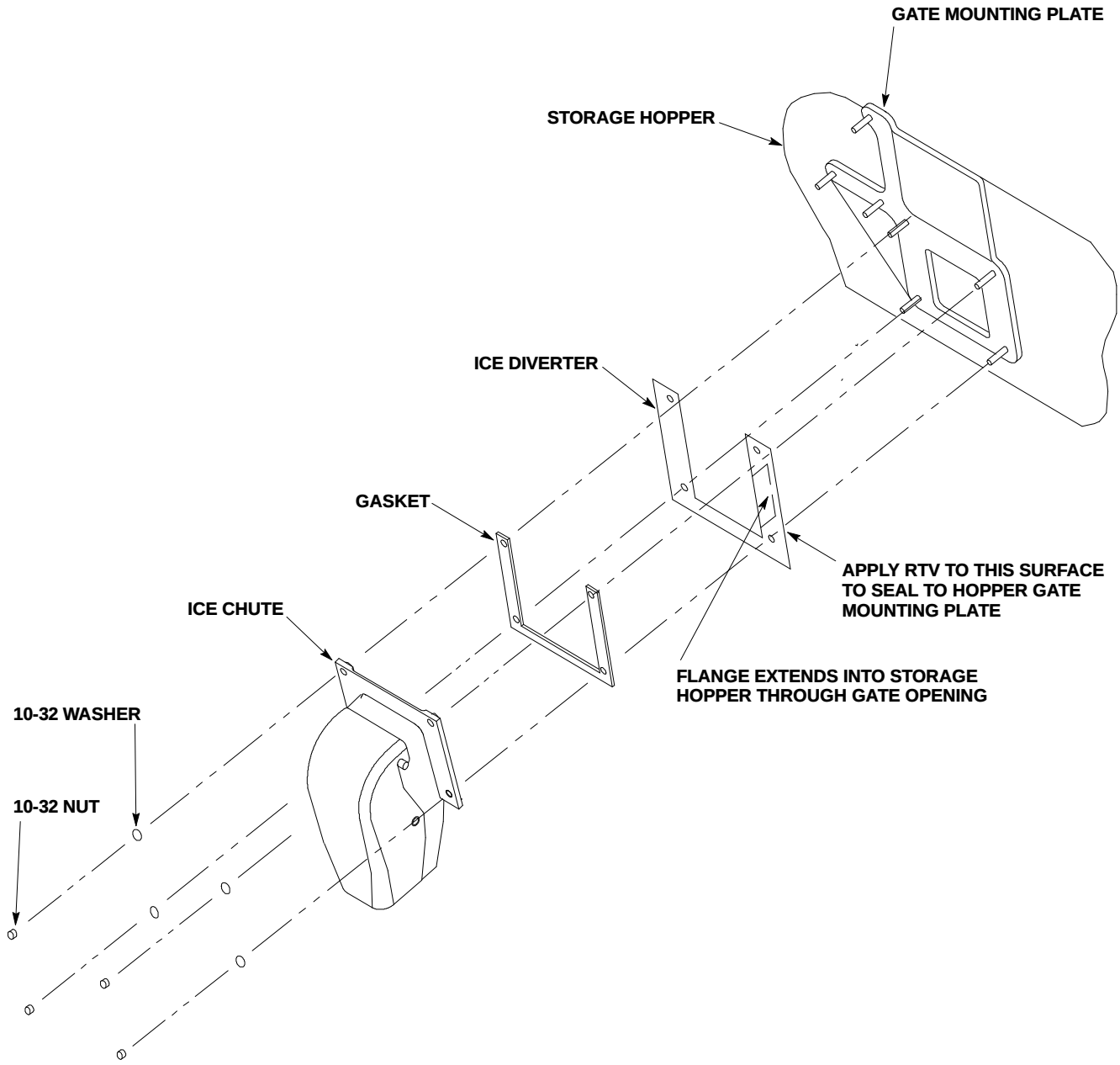


FIGURE 2. INSTALLATION INSTRUCTIONS P/N 27065 ICE DIVERTER

GATE RESTRICTOR PLATE

CAUTION: Disconnect power to dispenser before installing, removing or adjusting restrictor.

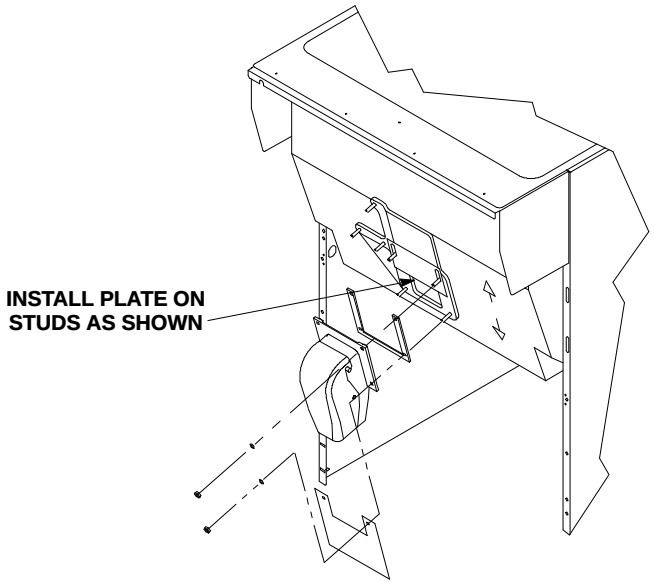


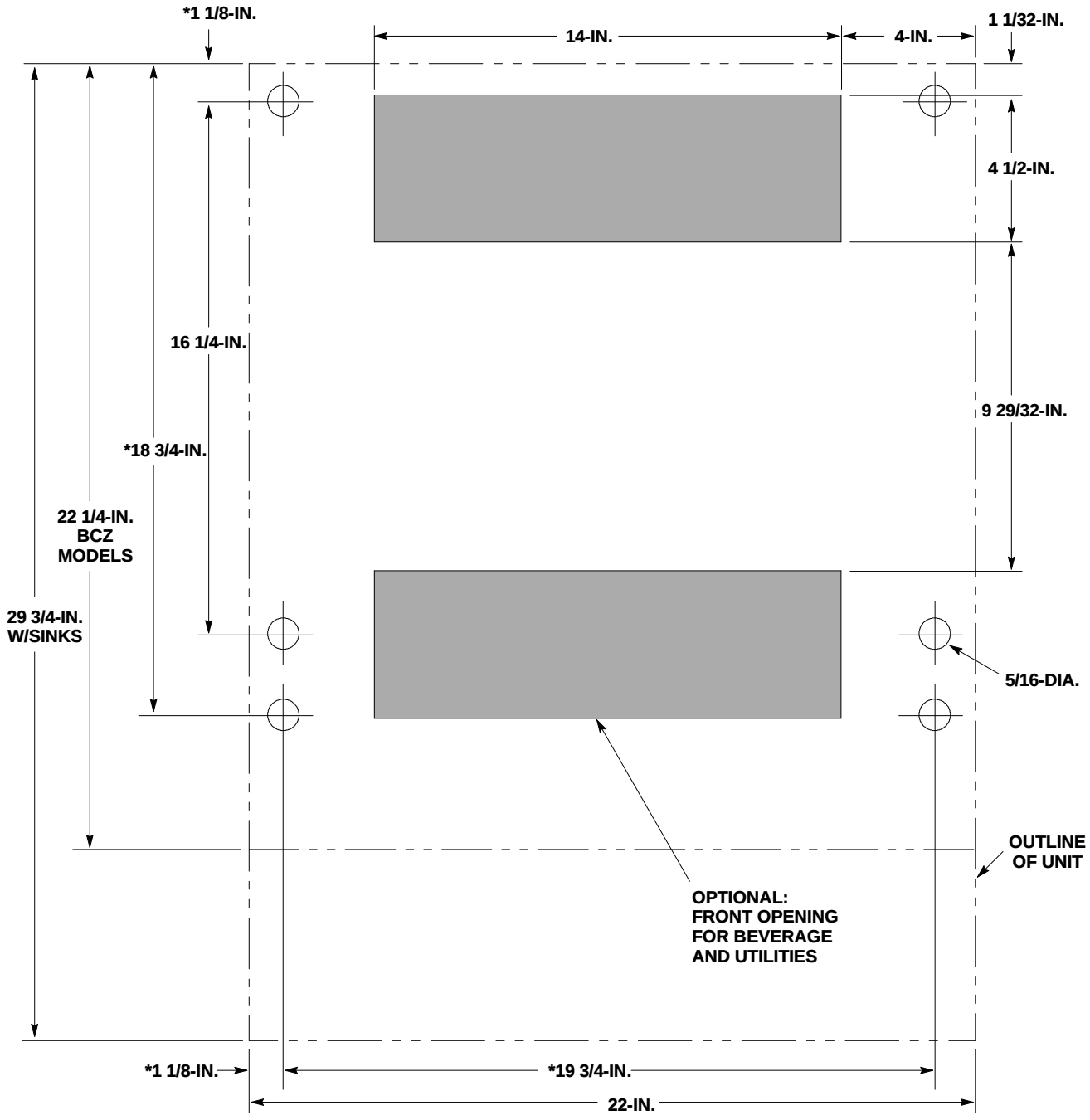
FIGURE 3. GATE RESTRICTOR PLATE

ADJUSTMENT

This dispenser is provided with a gate restrictor plate installed in it's highest position. This plate adjusts the rate of ice flow from the dispenser. In applications using buckets, carafes or other large containers, the plate may be removed entirely for maximum ice flow. For glasses and cups, the plate may be adjusted downward to reduce the flow of ice. The best position depends on the type of ice being used and the size container and must be found by trial and error. Adjustment is made by loosening the upper two ice chute retaining nuts, sliding the restrictor plate to the desired position and re-tightening the nuts.

If the dispenser fails to dispense the ice when operating, check that the hopper has ice in it and that power is being supplied to the unit. If the problem persists, check the following:

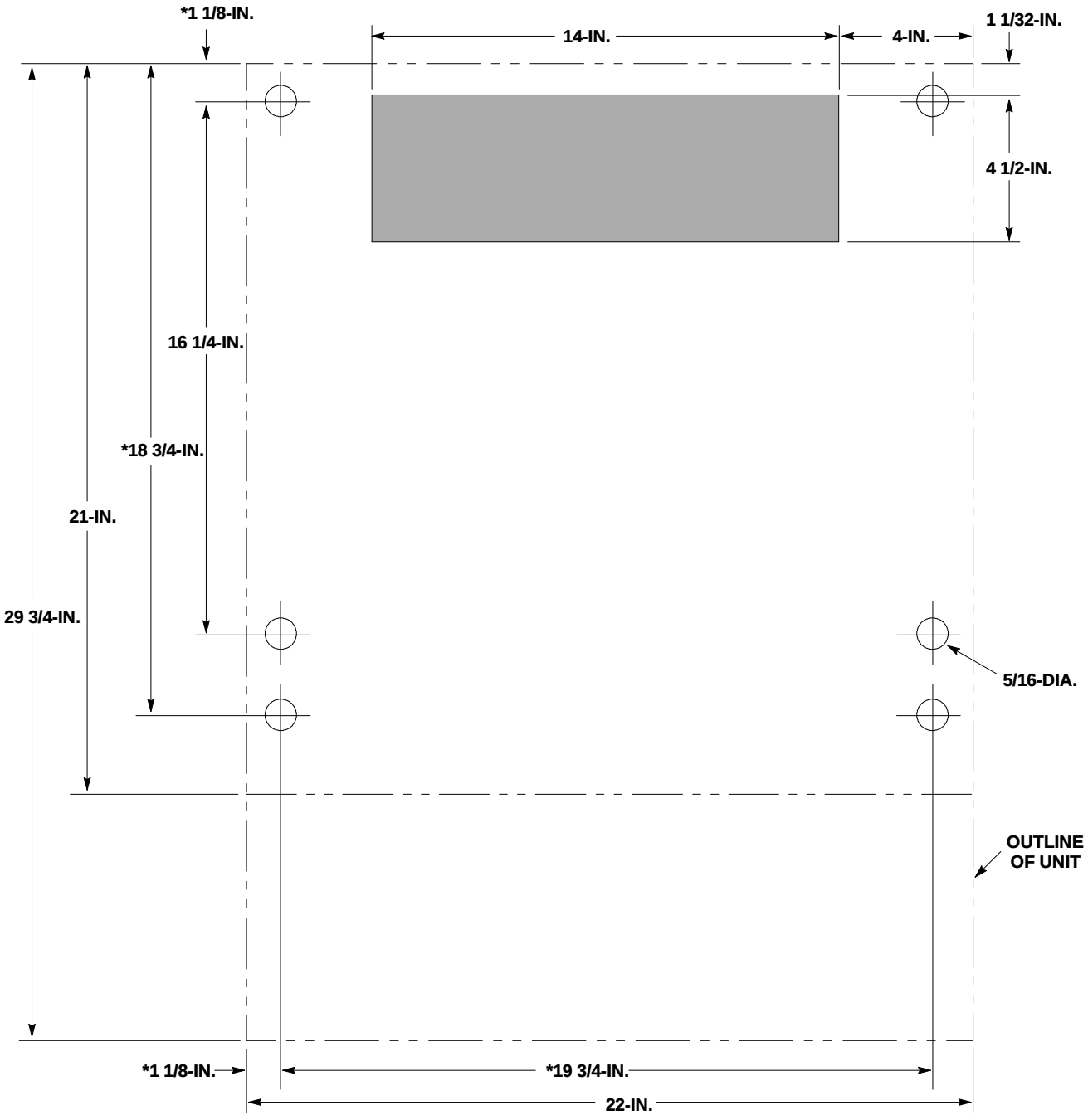
1. Determine if the agitator is rotating (check for the sound of ice movement in the hopper).
2. Observe whether the gate is opening.



NOTE: Shaded areas indicate openings in cabinet bottom needed for utilities and beverage tubing.

*** Leg mounting locations for ref. (5/16–18 threads)**

FIGURE 4. MOUNTING TEMPLATE DB150-BC AND BCZ



NOTE: Shaded areas indicate openings in cabinet bottom needed for utilities and beverage tubing.

*** Leg mounting locations for ref. (5/16–18 threads)**

FIGURE 5. MOUNTING TEMPLATE DB150-B AND Z

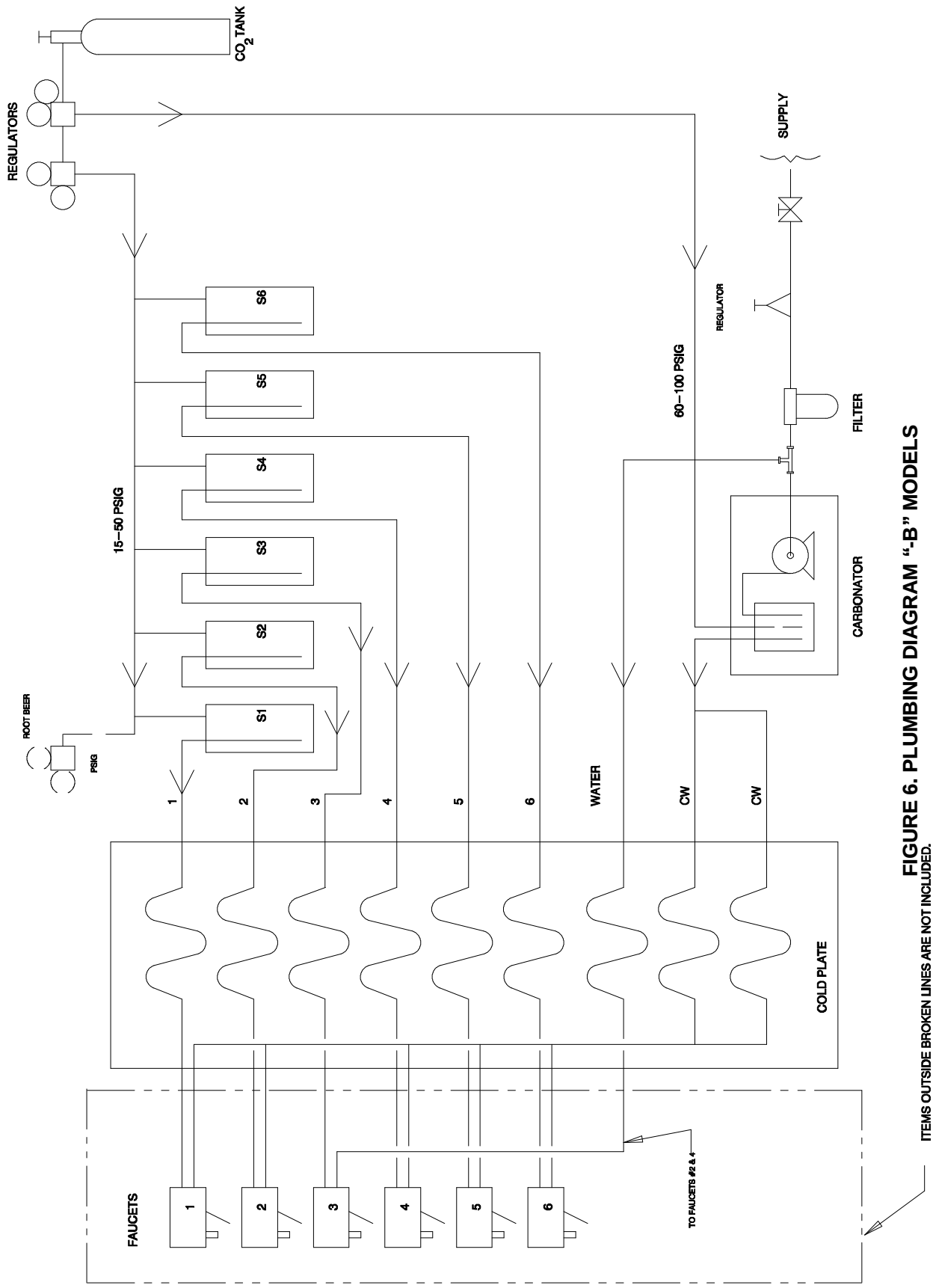


FIGURE 6. PLUMBING DIAGRAM "-B" MODELS

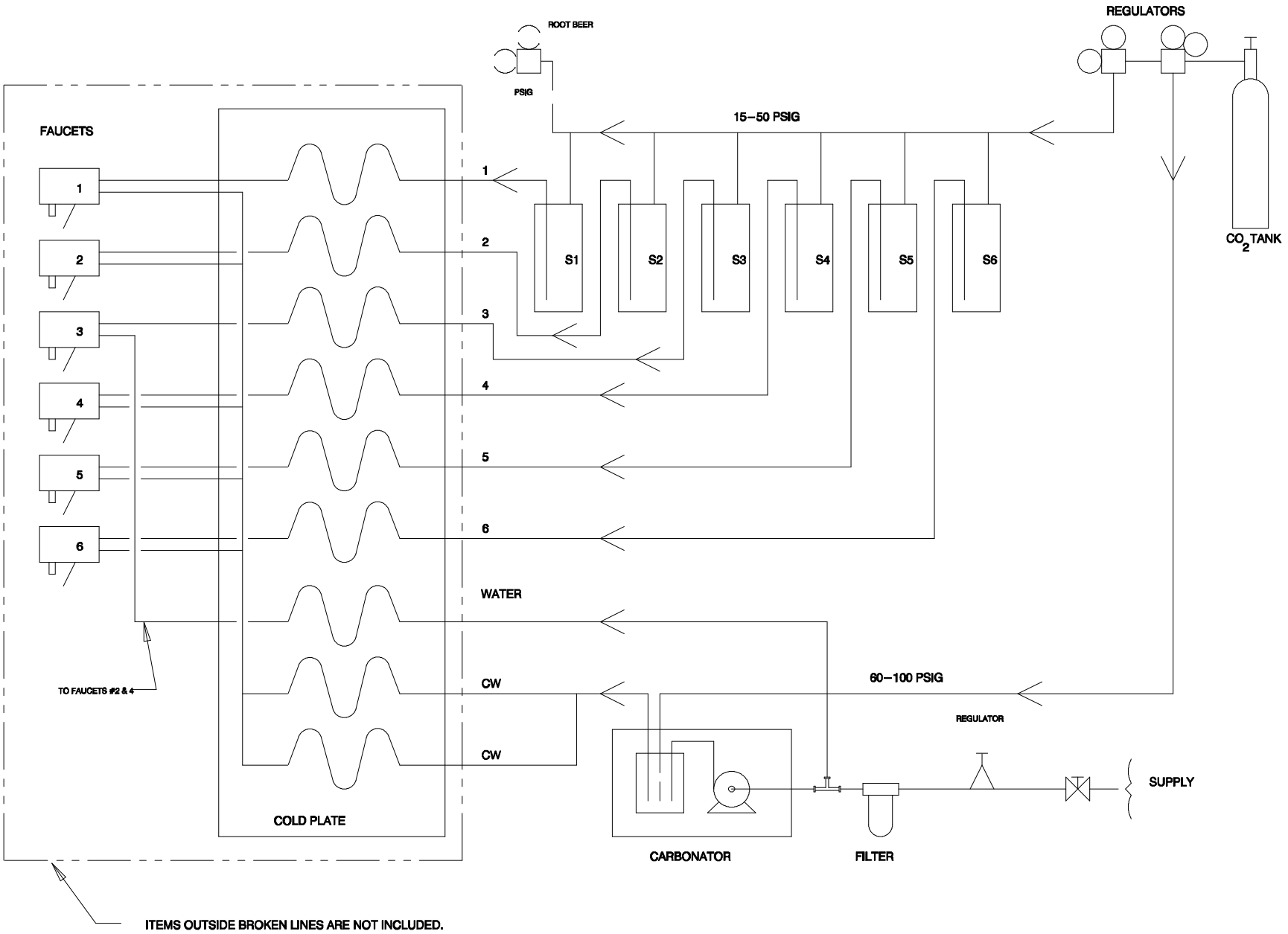


FIGURE 7. PLUMBING DIAGRAM "-BC" MODELS

MAINTENANCE

The following dispenser maintenance should be performed at the intervals indicated:

DAILY(or as required)

Remove foreign material from the vending area sink to prevent drain blockage.

WEEKLY (or as required)

Clean vending area. Check for proper water drainage from the vending area sink.

MONTHLY

Clean and sanitize the hopper interior (see CLEANING INSTRUCTIONS).

START-UP AND OPERATING INSTRUCTIONS

Fill the hopper with ice. With a built-in cold plate, dispense several large cups of ice (approximately one {1} minute total dispensing time) to allow ice to fill the cold plate. Add ice to the hopper as necessary to refill and replace the lid. Allow 10 to 15 minutes for the cold plate to cool down. Repeat this procedure whenever the dispenser has been standing overnight or other long periods without ice use. Start up the beverage system and adjust faucets to the proper brix. Contact your local syrup distributor for complete information on the beverage system.

In normal operation, pushing the ice dispenser lever will cause ice to flow from the ice chute. Ice flow will continue until the lever is released. Pushing the lever on any faucet will provide beverage of the appropriate flavor.

NOTE: Use caution to avoid spilling when filling dispenser. Immediately clean up any spilled ice from filling or operating the unit. To prevent contamination of ice, the lid must be installed on the unit at all times.

CLEANING INSTRUCTIONS

WARNING: DISCONNECT POWER BEFORE CLEANING! Do not use metal scrapers, sharp objects or abrasives on the ice storage hopper, top cover and the agitator disk, as damage may result. Do not use solvents or other cleaning agents, as they may attack the plastic material.

DISPENSER (All Models)

1. Clean the ice storage hopper at least once a month.
2. Remove the center screw and washer on the agitator disk and lift off the agitator and the agitator disk assembly. Wash and rinse them thoroughly.
3. Wash down the inside of the hopper and top cover with a mild detergent solution and rinse thoroughly to remove all traces of detergent.

4. Replace the agitator.
5. Sanitize the inside of the hopper and agitator with a solution of 1/2 ounce of household bleach in 1 gallon of water. (200 PPM)
6. Replace the agitator disk. Sanitize as described in Step 5. Be sure the center screw is replaced and the screw is tight.
7. Remove ice chute cover as follows:
   A. Flex sides outward to disengage lower pins.
   B. Lift ice chute cover to disengage upper pins.
   C. Lower ice chute cover down out of unit. NOTE: It may be helpful to twist cover slightly.
8. Clean the inside of the ice chute with a mild detergent solution and rinse thoroughly to remove all traces of detergent.
9. Reverse steps above to reassemble ice chute.
10. Sanitize as described in Step 5.

COLD PLATE (-BC MODELS)

1. Carefully remove screws holding beverage faucet panel and bring forward.
2. Slide the cold plate cover back. (Remove shipping tape and discard).
3. Remove debris from the drain trough and spring. Check that the drain hole is not clogged.
4. Wash down the inside of the cold plate, tray and cover with a mild detergent solution and rinse. A small, long-handled brush will be found helpful in reaching the corners.
5. Slide the cover forward, taking care that it's securely positioned on the cold plate.
6. Replace beverage faucet panel.

BEVERAGE SYSTEM CLEANING AND SANITIZING (-B, -BC MODELS)

1. Prepare the following cleaning, rinsing and sanitizing solutions using a clean, empty figal (5 gallon syrup tank) for each solution.

   CLEANING TANK – Fill with a solution of 1/2 ounce of a mild liquid detergent (for example, Ivory liquid) to 1 gallon of warm (120°F) potable water.

   RINSING TANK – Fill with warm (120°F) potable water.

   SANITIZING TANK – Fill with a chlorine sanitizing solution in the strength of 1/2 ounce of household bleach (sodium hypochlorite) to 1 gallon of cold (ambient) potable water to obtain a solution strength of 200 PPM.

NOTE: Repeat the following procedure on each of the unit's syrup product lines and beverage faucets.

2. Using a suitable pail or bucket, fill one with a detergent solution and a second container with a sanitizing solution in the strengths as described in step 1.
   A. Remove the syrup line quick disconnect fitting from the product tank and submerge in the detergent solution. Clean with a nylon bristle brush (do not use a wire brush). Rinse with clean potable water.
   B. Wearing sanitary gloves, next submerge the quick disconnect fitting in the sanitizing container for 15 minutes. Remove and air dry.

3. Hook-up the sanitized product line fitting (step 2) to the cleaning tank. Hook-up a gas disconnect fitting to the tank and pressurize with 60 to 80 psig CO_2. Energize the beverage faucet continuously for 1 minute to remove all air bubbles. Continue to operate the faucet until liquid dispensed is free of any syrup. Cycle the faucet for 15 seconds on, off and then immediately on again. Repeat this procedure for 15 cycles. Then energize the faucet to remain flowing for 3 minutes.

4. Hook-up the rinsing tank and pressurize with 60 to 80 psig CO_2. Flush the cleaning solution from the product line by cycling the faucet as described in step 3 and then energize the faucet to flow continuously for 3 minutes.

5. Hook-up the sanitizing tank and pressurize with 60 to 80 psig CO_2. Flow the sanitizing solution through the beverage faucet by cycling the faucet as described in step 3. Next energize the faucet continuously to flush at least 2 cups of the sanitizing solution through the system. Finally deenergize the faucet and allow the sanitizer to remain pressurized in the line to 20 minutes.

6. Wearing sanitary gloves. remove the faucet nozzle and diffuser. Repeat the cleaning and sanitizing procedures as described in step 2, then reassemble to the faucet.

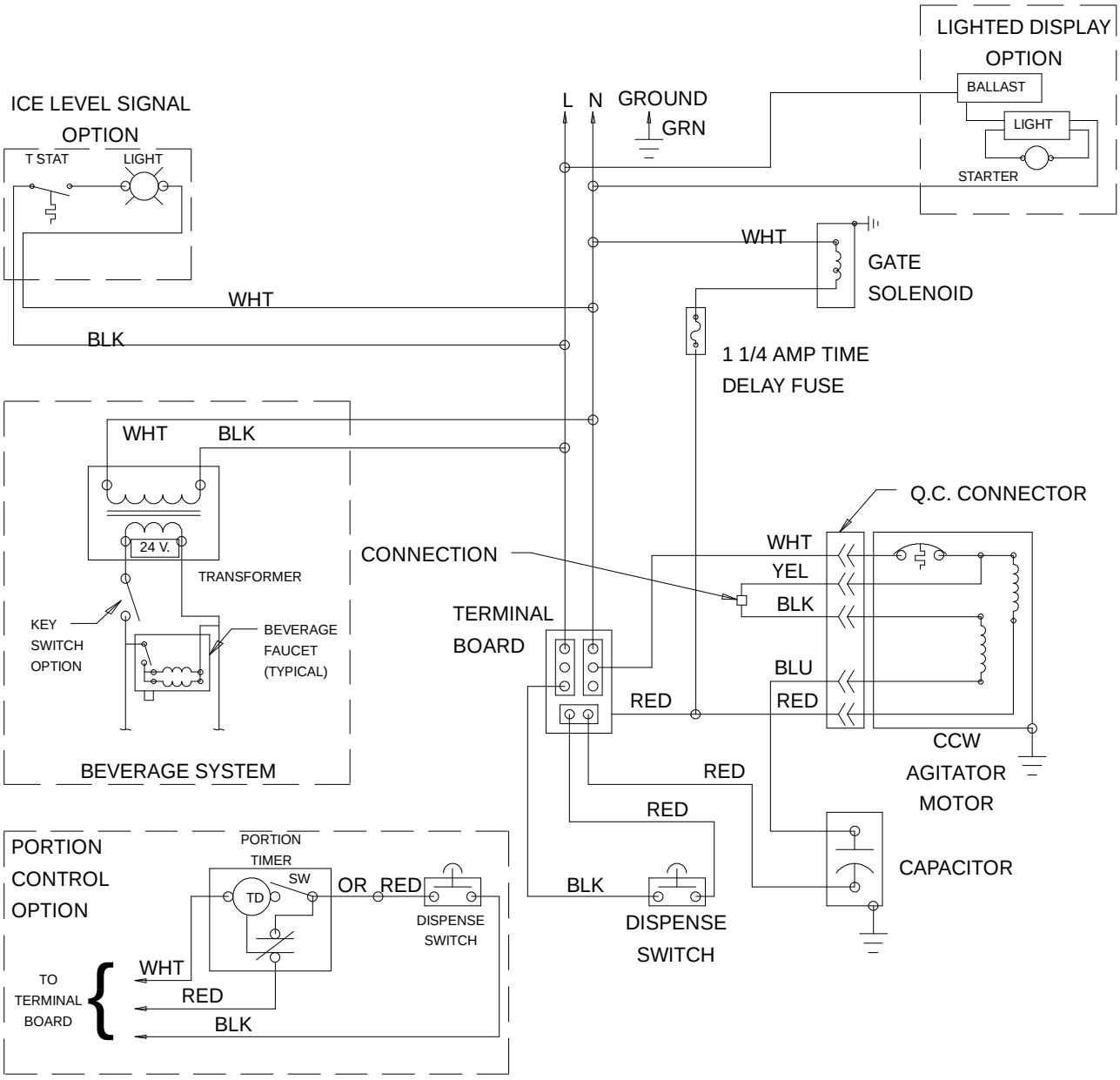
7. Disconnect the sanitizing tank. Hook-up the product tank to the unit and to the CO_2 system. Energize the faucet to flush the sanitizing solution from the syrup line and the faucet. Continue flow on the faucet until only syrup is dispensed.

TROUBLESHOOTING GUIDE

Should your unit fail to operate properly, check that there is power to the unit and that the hopper contains ice. If the unit does not dispense, check the following chart under the appropriate symptoms to aid in locating the defect.

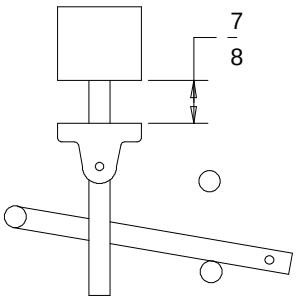
Trouble		Probable Cause
BLOWN FUSE OR CIRCUIT BREAKER.	A.	Short circuit in wiring.
	B.	Defective gate solenoid.
	C.	Defective agitator motor.
GATE DOES NOT OPEN.	A.	No power.
	B.	Bent depressor plate (does not actuate switch).
	C.	Defective dispensing switch.
	D.	Blown/defective fuse or jammed gate solenoid.
GATE DOES NOT OPEN OR IS SLUGGISH. AGITATOR TURNS.	A.	Defective gate solenoid.
	B.	Weak gate spring.
	C.	Excessive pressure against gate slide.
GATE OPENS. AGITATOR DOES NOT TURN.	A.	Ice solidified in hopper.
	B.	Defective agitator motor.
	C.	Defective capacitor.
	D.	BC models only: Defective agitation timer.
ICE DISPENSES CONTINUOUSLY.	A.	Stuck or bent depressor plate (does not release switch).
	B.	Defective dispensing switch.
	C.	Improper switch installation.
SLUSHY ICE. WATER IN HOPPER.	A.	Blocked drain.
	B.	Unit not level.
	C.	Poor ice quality due to water quality or icemaker problems.
	D.	Improper use of flaked ice.
BEVERAGES DO NOT DISPENSE.	A.	No 24 volt power to faucets.
	B.	No CO_2 pressure.
BEVERAGES TOO SWEET.	A.	Carbonator not working.
	B.	No CO_2 pressure in carbonator.
	C.	Faucet brix requires adjusting.
BEVERAGES NOT SWEET ENOUGH.	A.	Empty syrup tank.
	B.	Faucet brix requires adjusting.
BEVERAGES NOT COLD (UNITS WITH BUILT-IN COLD PLATE).	A.	Unit standing with no ice in hopper – no ice in cold plate.

Contact your local syrup or beverage equipment distributor for additional information and troubleshooting of your beverage system.



SERVICE INFORMATION

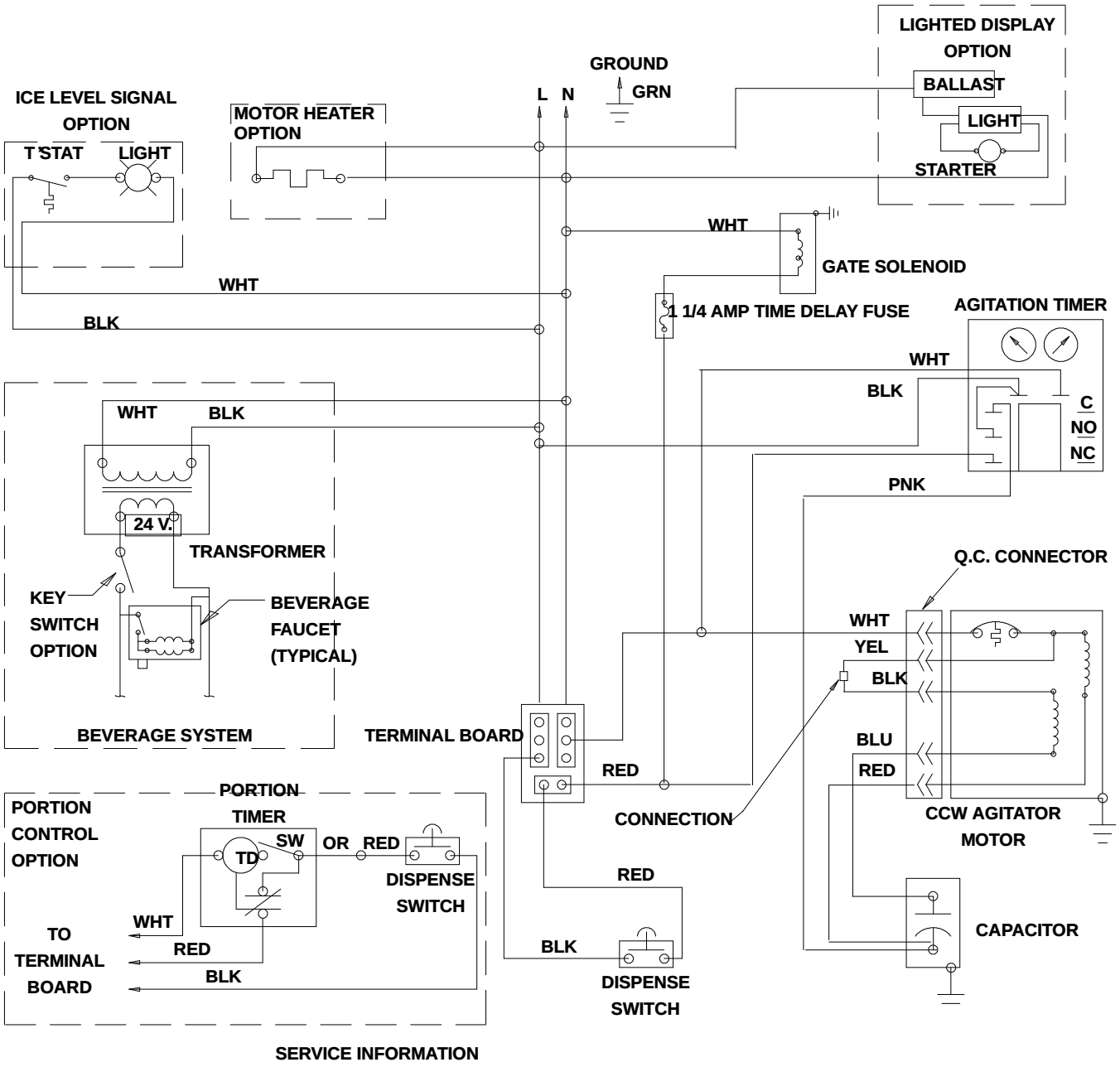
DANGER! ELECTRIC SHOCK HAZARD. DISCONNECT POWER BEFORE SERVICING UNIT.



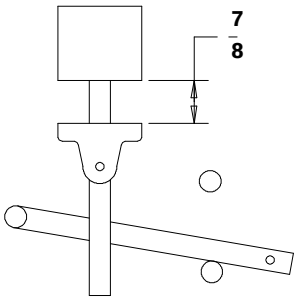
SOLENOID ADJUSTMENT

WHEN REPLACING SOLENOID, ADJUST TO 7/8 AS SHOWN BEFORE TIGHTENING MOUNTING SCREWS.

FIGURE 8. WIRING DIAGRAM DB150-B DISPENSER



DANGER! ELECTRIC SHOCK HAZARD. DISCONNECT POWER BEFORE SERVICING UNIT.



SOLENOID ADJUSTMENT

WHEN REPLACING SOLENOID, ADJUST TO 7/8 AS SHOWN BEFORE TIGHTENING MOUNTING SCREWS.

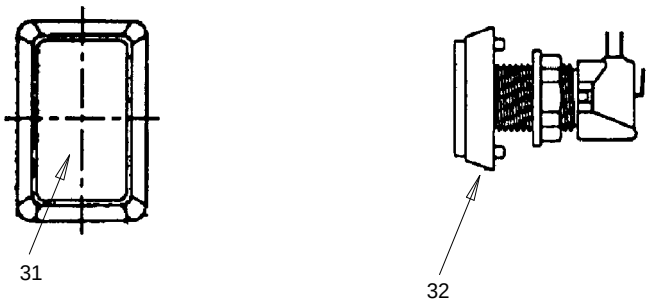
FIGURE 9. WIRING DIAGRAM DB150-BC DISPENSER

DB150 PARTS LIST

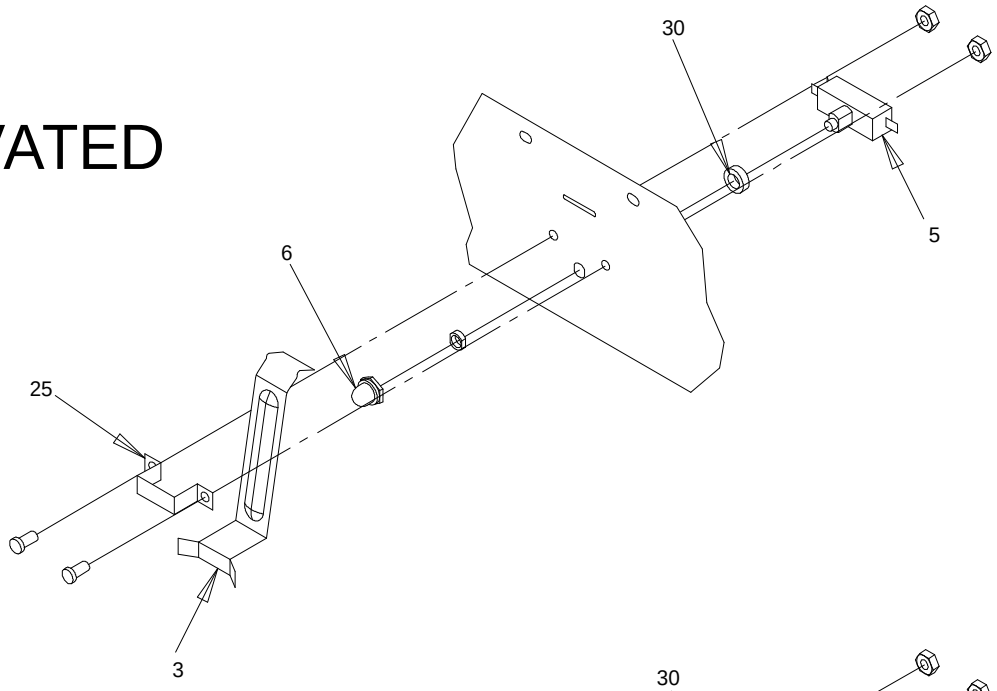
Item No.	Part No.	Name
1	214910	Gate Slide
2	23062	Foam Shield
3	215150	Depressor, Lever (Cup Activated)
4	26591	Agitator
	51916	Agitator Disk
5	30895	Dispense Switch (for items 3 & 28)
6	31007	Switch Boot (for item 5)
7	31091	Transformer (-B, -BC Models)
8	32498	Agitator Motor
9	51859	Motor Shaft Seal
10	51860	Motor Gasket
11	51757	Lid
12	50793	Sink
	51850	Sink (-BC Models Only)
13	53015	Ice Chute Back Section
	53016	Ice Chute Cover
14	51891	Gate Gasket
15	70441	Sink Grill
16	70419	Leg
17	91362	Wiring Diagram
18	91303	"Press for Ice" Label
19	30774	Capacitor, Agitator Motor
20	31763	Agitation Timer (-BC Models Only)
21	31093	Gate Solenoid Assembly (See page 18)
22	31551	Gate Solenoid Kit
23	70438	Rebuilding Kit (Gate Solenoid)
24	31406	Fuse, Gate Solenoid
25	22644	Depressor Retainer (for 21515)
26	30794	Agitator Motor Heater (-BC Models Only)
27	90369	Wiring Diagram (-BC Models Only)
28	27126	Depressor Push Lever
29	27107	Depressor Retainer (for 27126)
30	70847	Switch Spacer

Optional

31	91511	"Push for Ice" Label
32	32763	Switch, Push Bottom



CUP ACTIVATED



PUSH LEVER

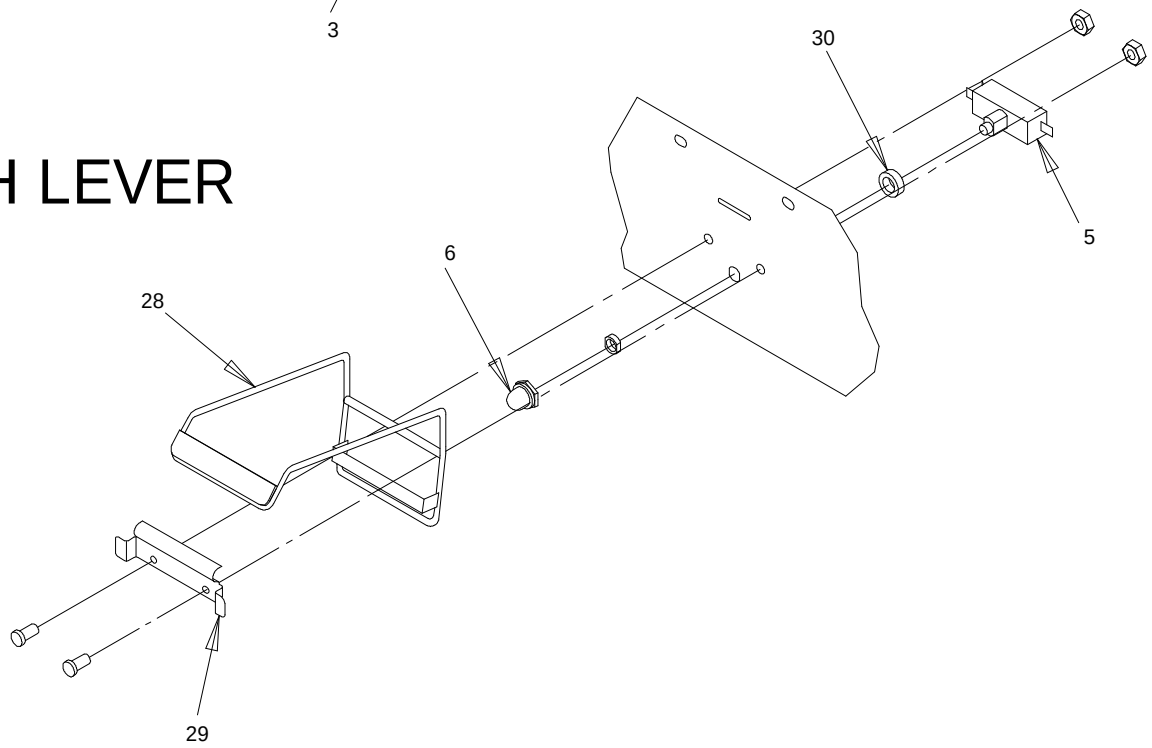


FIGURE 10. DISPENSING LEVERS AND SWITCHES

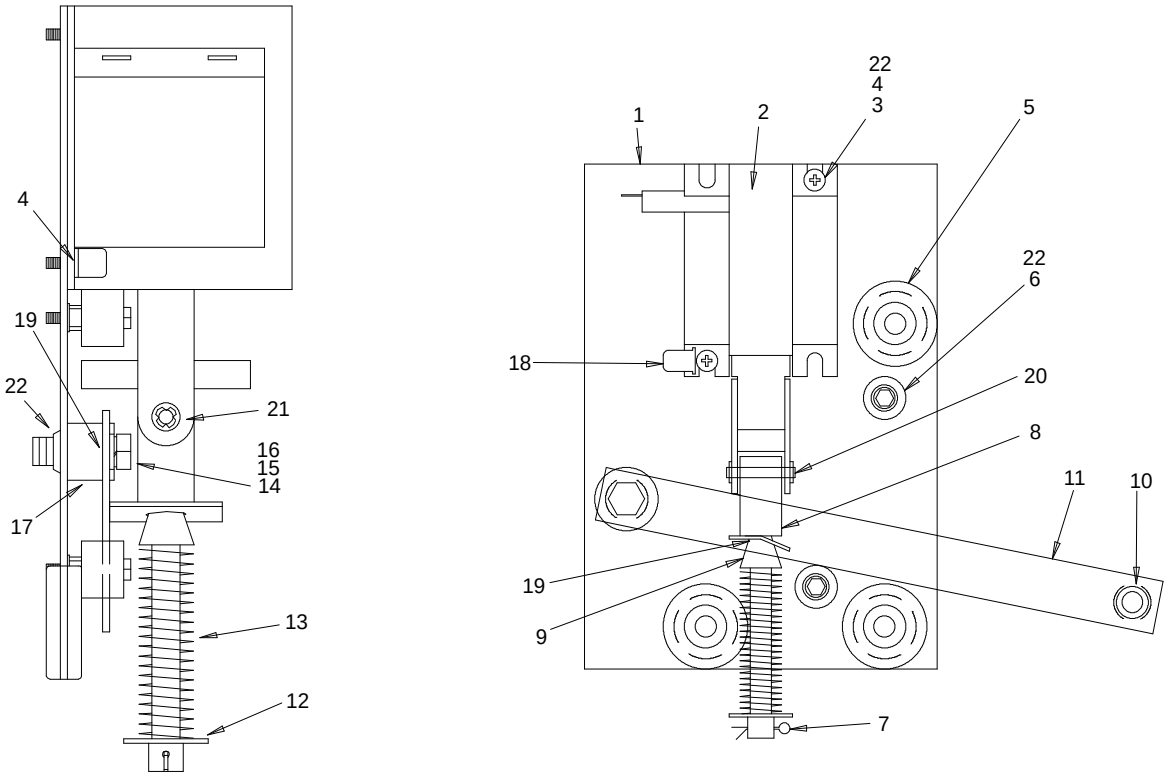


FIGURE 11. GATE SOLENOID ASSEMBLY

Index No.	Part No.	Qty.	Name
1	21493	1	Solenoid Mounting Plate
2#	31551	1	Solenoid Service Kit
3	70171	2	8–32 x 3/8 Phil Tr HD Screw
4	70121	2	No. 8 Lockwasher
5	50752	3	Isolator
6*	50789	2	Bumper Assembly
7*	70423	1	Cotter Pin
8*	10080	1	Gate Lift Rod
9	10081	1	Gate Lift Rod Bushing
10	50754	1	Gate Arm Bearing
11	21492	1	Gate Lift Arm
12	70043	1	Flatwasher
13*	70422	1	Spring
14	70263	1	1/4-20 x 3/4 Hex Hd Screw
15	70048	1	1/4 Lockwasher
16	70066	1	1/4 Flatwasher
17	10077	1	Pivot Bearing
18	30227	1	1/4 Quick Connect Tab
19	50305	––	Lubricant
20*	21592	1	Solenoid Linkage Pin
21*	70433	2	Retainer Ring
22	51088	––	Loctite
––*	70438	––	Rebuilding Kit

NOTE: * Parts supplied with rebuilding kit.
 # 31551 solenoid supplied with items 20 & 21.

REMCOR®