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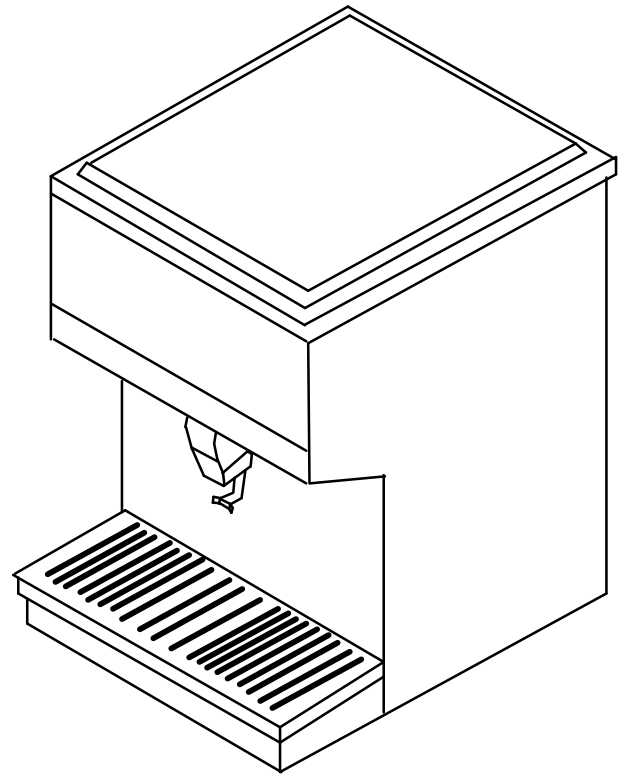
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# Installation Manual

## ICE DISPENSER

### D45 and D90



Part No. 91561  
August, 1995

THIS DOCUMENT CONTAINS IMPORTANT INFORMATION

This Manual must be read and understood before installing or operating this equipment

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# 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 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 removable lid is properly installed to prevent unauthorized access to the hopper interior and possible contamination of the 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 that 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 that “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.

## DESCRIPTION

The D45 or D90 ice dispensers solve your ice and beverage service needs in a sanitary, space saving, economical way. Designed to be manually filled with ice from any remote ice-making source, these dispensers will dispense cubes (up to 1-1/4” size), cubelets and hard-chipped or cracked ice.

**Table 1. Specifications**

|                        |   |
|------------------------|---|
| Model:                 | D45   |
| Ice Storage:           | 45 pounds                                     |
| Electrical:            | 120/1/60, 3 Amps                              |
| Drain Connection:      | 3/4”FPT                                       |
| Electrical Connection: | 6', 3-Wire Cord with 3-Prong Ground Type Plug |
| Dimensions:            | 16”W x 22”D x 26-1/2”H                        |
| Model:                 | D90   |
| Ice Storage:           | 90 pounds                                     |
| Electrical:            | 120/1/60, 3 Amps                              |
| Drain Connection:      | 3/4”FPT                                       |
| Electrical Connection: | 6', 3-Wire Cord with 3-Prong Ground Type Plug |
| Dimensions:            | 22”W x 28”D x 30”H                            |

# INSTALLATION INSTRUCTIONS

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.
2. Connect the 3/4" IPS (or equal) drain line to the 3/4" threaded drain connections at the lower rear of the unit. This line must pitch downward to an open drain and must contain no traps, or improper drainage will result.
3. Clean the hopper interior. (See Cleaning Instructions on page 3.)
4. Connect the power cord to a 120 volt, 60 hertz, 3-wire grounded receptacle. All electrical wiring must conform to national and local electrical codes.

## 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

1. Clean the ice dispenser interior at least once a month.
2. Lift off agitator assembly and wash and rinse it 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 ounce of household bleach in 2 gallons of water.
6. 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.**
7. Clean the inside of the ice chute and ice chute cover with a mild detergent solution and rinse thoroughly to remove all traces of detergent.
8. Sanitize as described in Step 5.
9. Reverse steps above to reassemble ice chute.

# **OPERATING INSTRUCTIONS**

Fill the hopper with ice and replace the lid. Pushing the dispenser lever will cause ice to flow from the ice chute. Ice flow will continue until the lever is released. If ice does not dispense, see the TROUBLESHOOTING GUIDE to find the cause.

**NOTE: Use caution to avoid spilling ice 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.**

## **MAINTENANCE**

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

### **CLEANING**

#### **DAILY (OR AS REQUIRED)**

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

#### **WEEKLY (OR AS REQUIRED)**

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

#### **MONTHLY**

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

If the dispenser fails to dispense ice when operated, 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 operating.

After checking the above, refer to the TROUBLESHOOTING GUIDE for possible problem causes and corrective action.

# 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 still does not dispense, check the following chart under the appropriate symptoms to aid in locating the defect.

| Trouble  | Probable Cause  | Remedy                                 |
|--|---|--|
| BLOWN FUSE OR CIRCUIT BREAKER.                     | A. Short circuit in wiring.                                     | A. Repair wiring.                      |
|  | B. Defective gate solenoid.                                     | B. Replace gate solenoid.              |
|  | C. Defective agitator motor.                                    | C. Replace agitator motor.             |
| GATE DOES NOT OPEN. AGITATOR DOES NOT TURN.        | A. No power.  | A. Restore power.                      |
|  | B. Bent depressor plate (does not actuate switch).              | B. Replace depressor plate.            |
|  | C. Defective dispensing switch.                                 | C. Replace dispensing switch.          |
| GATE DOES NOT OPEN OR IS SLUGGISH. AGITATOR TURNS. | A. Defective gate solenoid.                                     | A. Replace gate solenoid.              |
|  | B. Weak gate spring.  | B. Replace gate spring.                |
|  | C. Excessive pressure against gate slide.                       | C. Reduce pressure against gate slide. |
| GATE OPENS. AGITATOR DOES NOT TURN.                | A. Ice solidified in hopper.                                    | A. Break up ice in hopper.             |
|  | B. Defective agitator motor.                                    | B. Replace agitator motor.             |
|  | C. Defective capacitor (D90 only).                              | C. Replace capacitor.                  |
| ICE DISPENSES CONTINUOUSLY.                        | A. Stuck or bent depressor plate (does not release switch)      | A. Replace depressor plate.            |
|  | B. Defective dispensing switch.                                 | B. Replace dispensing switch.          |
|  | C. Improper switch installation.                                | C. Properly install switch.            |
| SLUSHY ICE. WATER IN HOPPER.                       | A. Blocked drain.   | A. Open drain.                         |
|  | B. Unit not level.  | B. Level unit.                         |
|  | C. Poor ice quality due to water quality or ice maker problems. | C. Clean hopper, then replace ice.     |

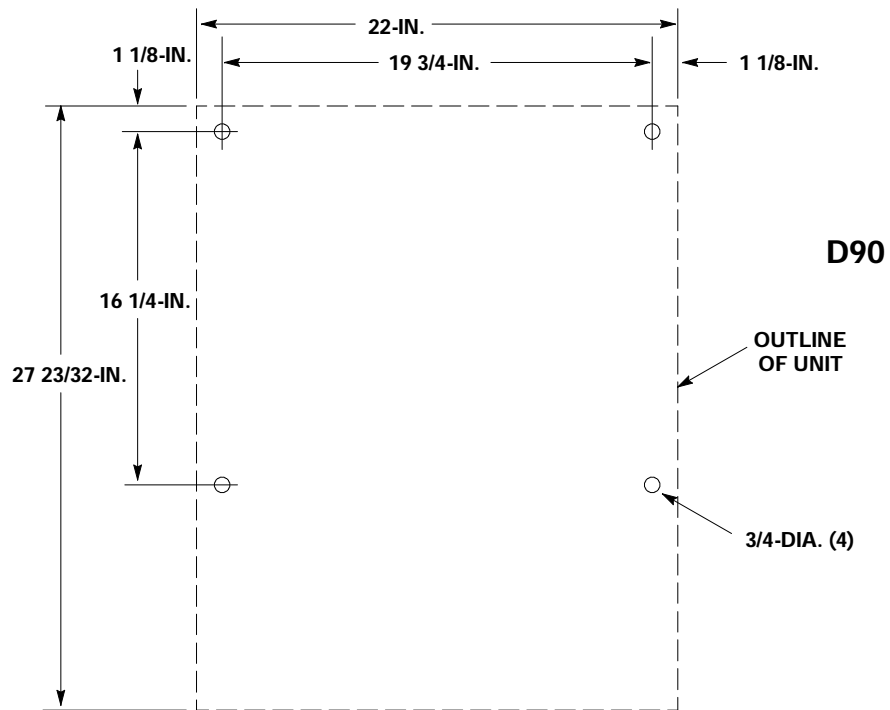
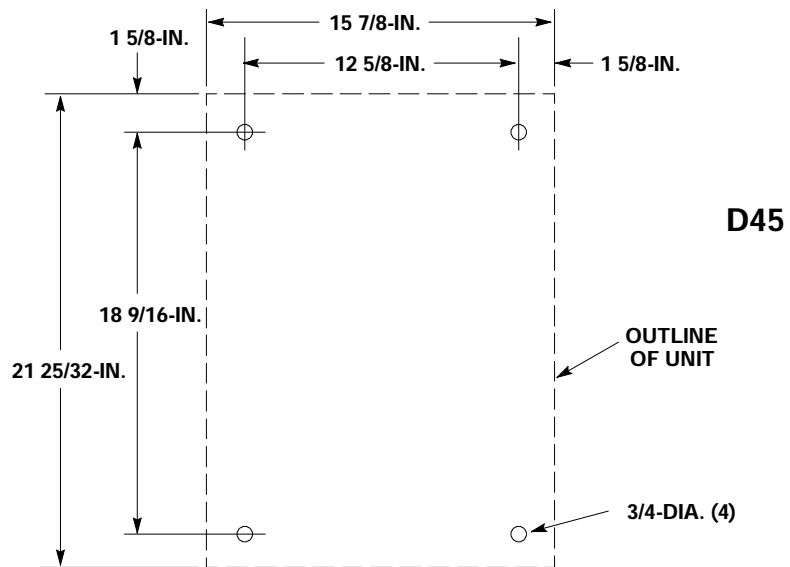
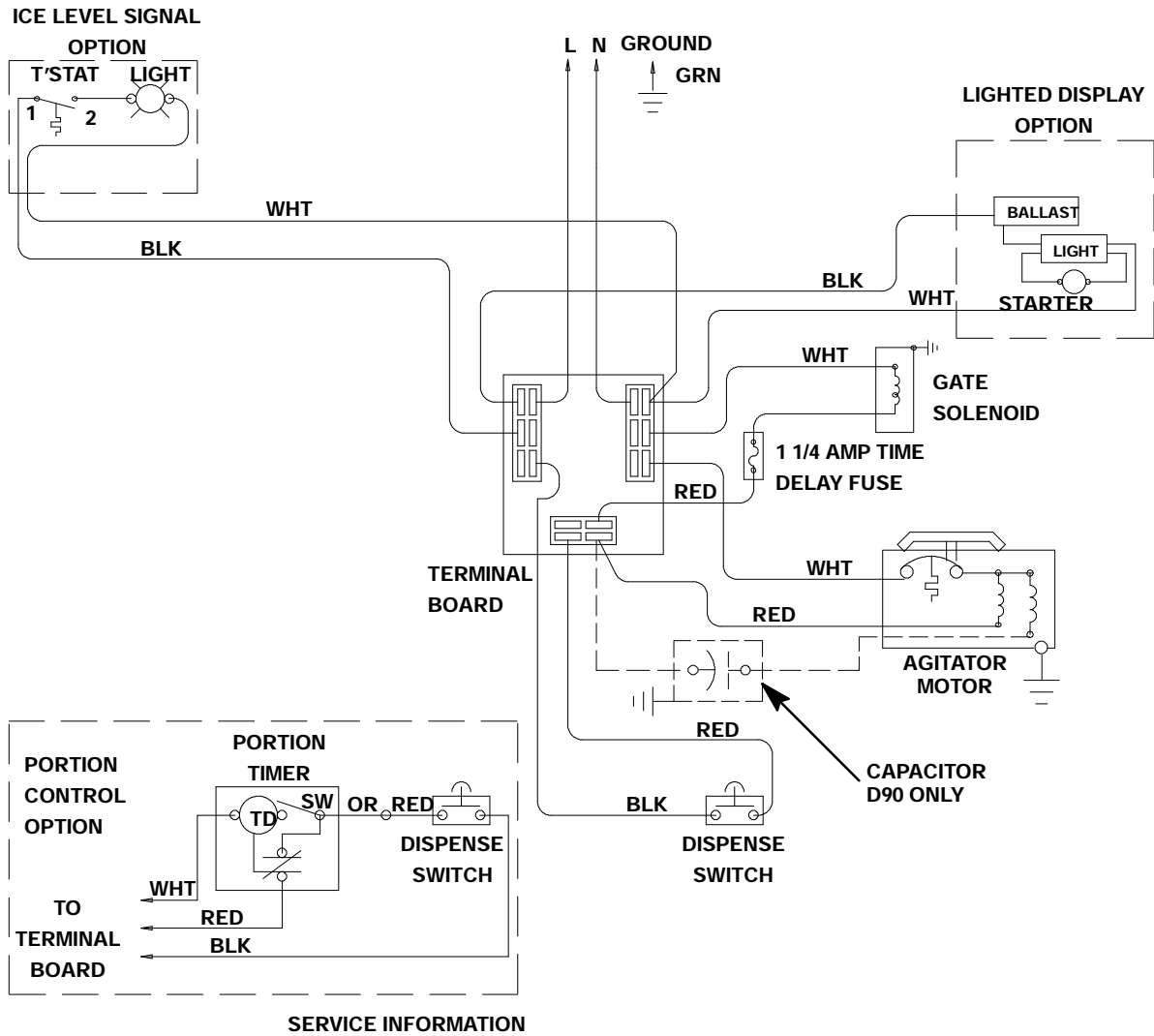
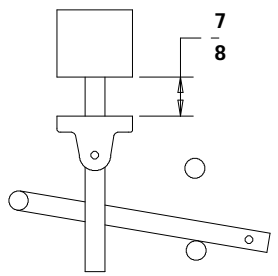


FIGURE 1. MOUNTING TEMPLATES



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

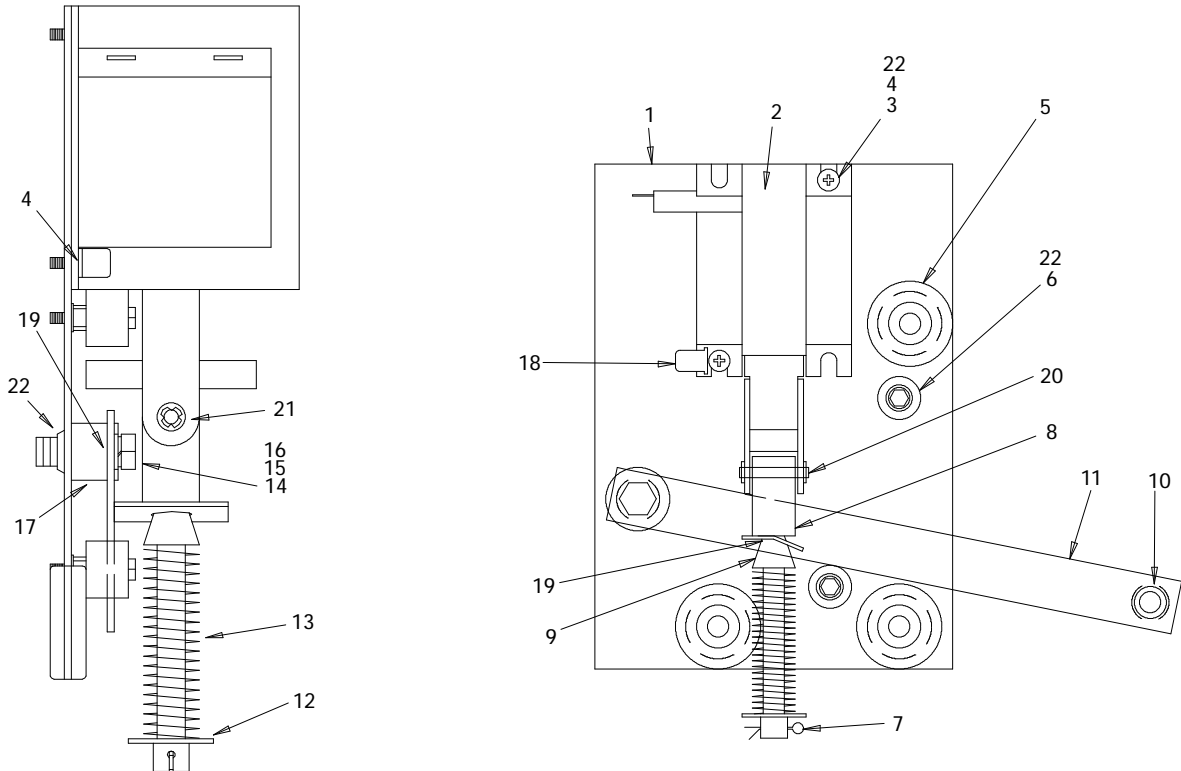


**SOLENOID ADJUSTMENT**

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

**FIGURE 2. WIRING DIAGRAM**



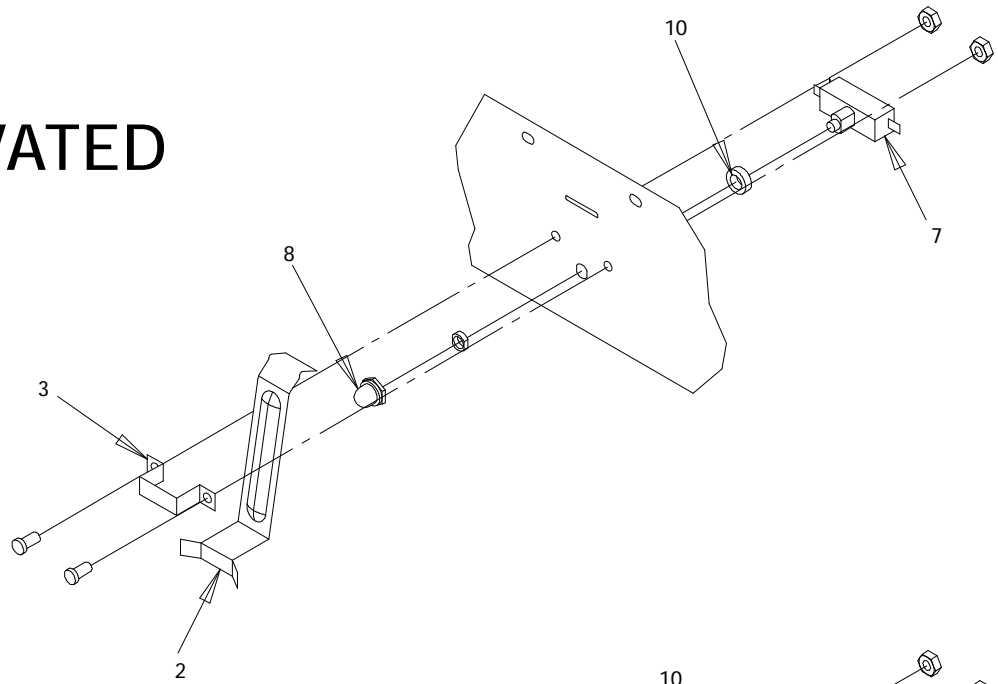


**FIGURE 3. SOLENOID ASSEMBLY - EXPLODED VIEW AND PARTS LIST**

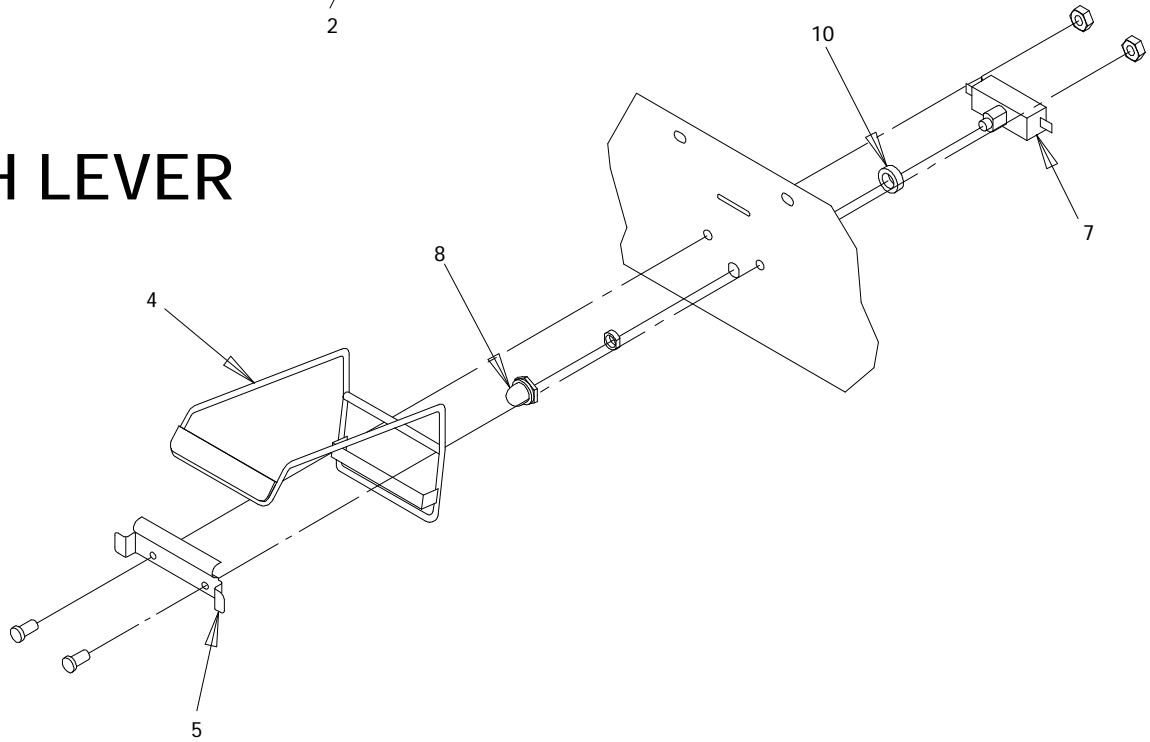
| Index No. | Part No. | Qty. | Name                        |
|-----------|----------|------|-----------------------------|
| 1         | 21493    | 1    | Solenoid Mounting Plate     |
| 2#        | 31551    | 1    | Solenoid Service Kit        |
| 3         | 70171    | 2    | 8-32 x 3/8 Phil Tr HD 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.**

# CUP ACTIVATED



# PUSH LEVER



**FIGURE 4. DISPENSING LEVERS AND SWITCHES**

# PARTS LIST

| Item | Description                    | Part No. D45 | Part No. D90 |
|------|--------------------------------|--------------|--------------|
| 1    | Gate Slide                     | 214910       | 214910       |
| 2    | Depressor, Cup Activated       | 215150       | 215150       |
| 3    | Depressor Retainer (for 21515) | 22644        | 22644        |
| 4    | Depressor Push Lever           | 27126        | 27126        |
| 5    | Depressor Retainer (for 27126) | 27107        | 27107        |
| 6    | Agitator                       | 21517        | 21629        |
| 7    | Dispense Switch                | 30895        | 30895        |
| 8    | Switch Boot                    | 31007        | 31007        |
| 9    | Switch Spacer                  | 70847        | 70847        |
| 10   | Foam Shield                    | 23062        | 23062        |
| 11   | Agitator Motor                 | 31106-1      | 31112-1      |
| 12   | Motor Shaft Seal               | 50454        | 50454        |
| 13   | Motor Gasket                   | 50481        | 50481        |
| 14   | Lid                            | 50748        | 50791        |
| 15   | Sink                           | 50750        | 50793        |
| 16   | Ice Chute, Back Section        | 53015        | 53015        |
| 17   | Ice Chute Cover                | 53016        | 53016        |
| 18   | Gate Gasket                    | 51891        | 51891        |
| 19   | Sink Grill                     | 70426        | 70441        |
| 20   | Leg                            | 70419        | 70419        |
| 21   | Cleaning Label                 | 90295        | 90295        |
| 22   | Wiring Diagram                 | 90615        | 90788        |
| 23   | Front Label                    | 91559        | 91560        |
| 24   | Capacitor                      | -----        | 30774        |
| 25   | Solenoid Assembly (see page 7) | 31093        | 31093        |
| 26   | Rebuilding Kit (see page 7)    | 70438        | 70438        |



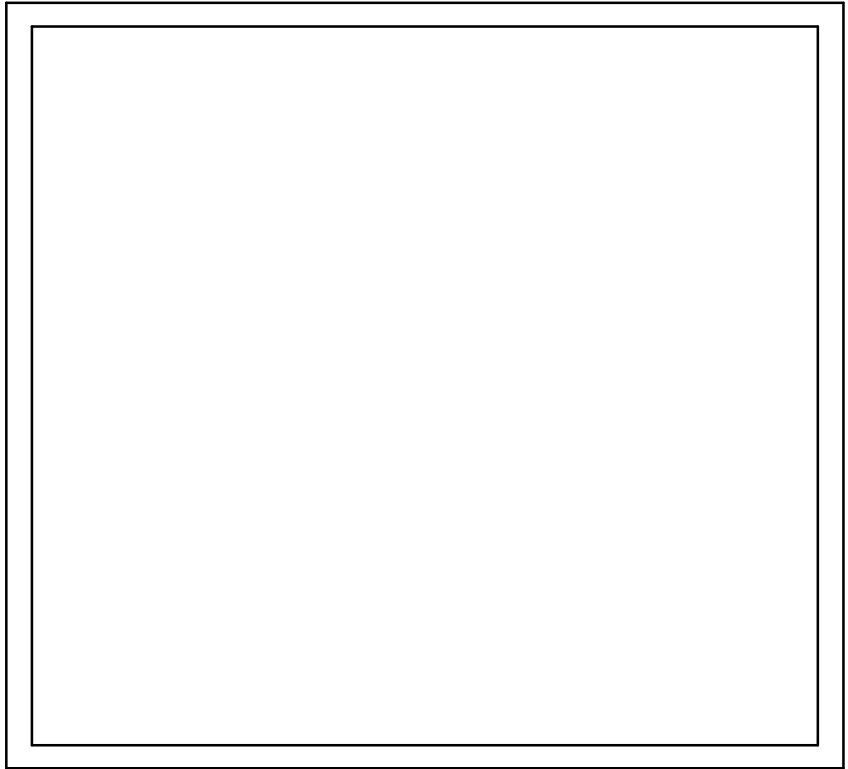
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## WARRANTY

IMI Cornelius Inc. warrants that all equipment and parts are free from defects in material and workmanship under normal use and service. For a copy of the warranty applicable to your Cornelius product, in your country, please write, Fax or telephone the IMI Cornelius office nearest you. Please provide the equipment model number and the date of purchase.

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