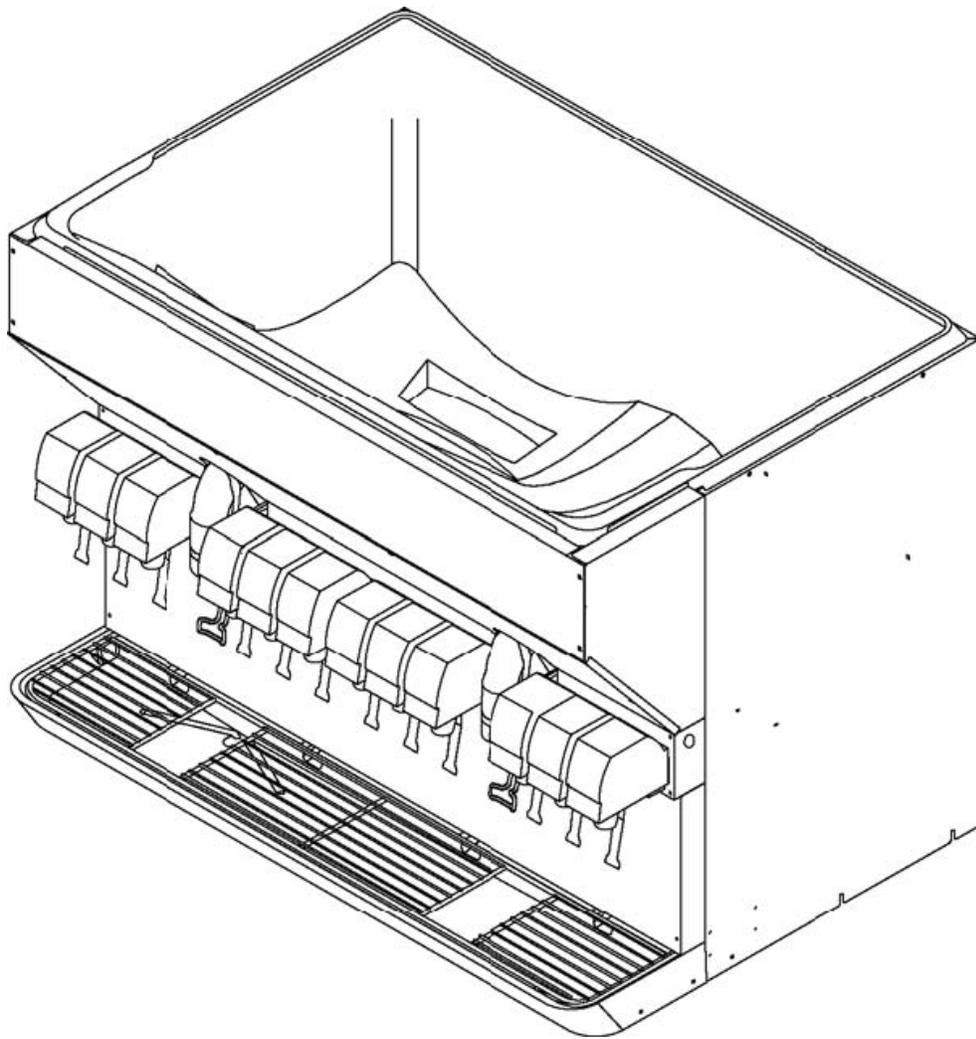


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**ICE/BEVERAGE DISPENSER**  
**ED300 BN and ED300BC (Quick Trip)**  
**Operator's Manual**



**Release Date: November 16, 1998**

**Publication Number: 620913201**

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**Revision: J**

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The products, technical information, and instructions contained in this manual are subject to change without notice. These instructions are not intended to cover all details or variations of the equipment, nor to provide for every possible contingency in the installation, operation or maintenance of this equipment. This manual assumes that the person(s) working on the equipment have been trained and are skilled in working with electrical, plumbing, pneumatic, and mechanical equipment. It is assumed that appropriate safety precautions are taken and that all local safety and construction requirements are being met, in addition to the information contained in this manual.

This Product is warranted only as provided in Cornelius' Commercial Warranty applicable to this Product and is subject to all of the restrictions and limitations contained in the Commercial Warranty.

Cornelius will not be responsible for any repair, replacement or other service required by or loss or damage resulting from any of the following occurrences, including but not limited to, (1) other than normal and proper use and normal service conditions with respect to the Product, (2) improper voltage, (3) inadequate wiring, (4) abuse, (5) accident, (6) alteration, (7) misuse, (8) neglect, (9) unauthorized repair or the failure to utilize suitably qualified and trained persons to perform service and/or repair of the Product, (10) improper cleaning, (11) failure to follow installation, operating, cleaning or maintenance instructions, (12) use of "non-authorized" parts (i.e., parts that are not 100% compatible with the Product) which use voids the entire warranty, (13) Product parts in contact with water or the product dispensed which are adversely impacted by changes in liquid scale or chemical composition.

### **Contact Information:**

To inquire about current revisions of this and other documentation or for assistance with any Cornelius product contact:

**www.cornelius.com**  
**800-238-3600**

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This document contains the original instructions for the unit described.

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# SAFETY INSTRUCTIONS

## READ AND FOLLOW ALL SAFETY INSTRUCTIONS

### Safety Overview

- Read and follow **ALL SAFETY INSTRUCTIONS** in this manual and any warning/caution labels on the unit (decals, labels or laminated cards).
- Read and understand ALL applicable OSHA (Occupational Safety and Health Administration) safety regulations before operating this unit.

### Recognition

<i>Recognize Safety Alerts</i>
 <p><i>This is the safety alert symbol. When you see it in this manual or on the unit, be alert to the potential of personal injury or damage to the unit.</i></p>

## DIFFERENT TYPES OF ALERTS

### **DANGER:**

Indicates an immediate hazardous situation which if not avoided **WILL** result in serious injury, death or equipment damage.

### **WARNING:**

Indicates a potentially hazardous situation which, if not avoided, **COULD** result in serious injury, death, or equipment damage.

### **CAUTION:**

Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury or equipment damage.

## SAFETY TIPS

- Carefully read and follow all safety messages in this manual and safety signs on the unit.
- Keep safety signs in good condition and replace missing or damaged items.
- Learn how to operate the unit and how to use the controls properly.
- **Do not** let anyone operate the unit without proper training. This appliance is **not** intended for use by very young children or infirm persons without supervision. Young children should be supervised to ensure that they do not play with the appliance.
- Keep your unit in proper working condition and do not allow unauthorized modifications to the unit.

**NOTE:** The dispenser is not designed for a wash-down environment and **MUST NOT** be placed in an area where a water jet could be used.

## QUALIFIED SERVICE PERSONNEL

### **WARNING:**

Only trained and certified electrical, plumbing and refrigeration technicians should service this unit. **ALL WIRING AND PLUMBING MUST CONFORM TO NATIONAL AND LOCAL CODES. FAILURE TO COMPLY COULD RESULT IN SERIOUS INJURY, DEATH OR EQUIPMENT DAMAGE.**

**IF THE SUPPLY CORD IS DAMAGED, IT MUST BE REPLACED BY THE MANUFACTURER, ITS SERVICE AGENT OR SIMILARLY QUALIFIED PERSONS IN ORDER TO AVOID A HAZARD.**

## SAFETY PRECAUTIONS

This unit has been specifically designed to provide protection against personal injury. To ensure continued protection observe the following:

### **WARNING:**

Disconnect power to the unit before servicing following all lock out/tag out procedures established by the user. Verify all of the power is off to the unit before any work is performed.

**Failure to disconnect the power could result in serious injury, death or equipment damage.**

### **CAUTION:**

Always be sure to keep area around the unit clean and free of clutter. **Failure to keep this area clean may result in injury or equipment damage.**

## SHIPPING AND STORAGE

### **CAUTION:**

Before shipping, storing, or relocating the unit, the unit must be sanitized and all sanitizing solution must be drained from the system. A freezing ambient environment will cause residual sanitizing solution or water remaining inside the unit to freeze resulting in damage to internal components.

## CO<sub>2</sub> (CARBON DIOXIDE) WARNING

### **DANGER:**

CO<sub>2</sub> displaces oxygen. Strict attention **MUST** be observed in the prevention of CO<sub>2</sub> gas leaks in the entire CO<sub>2</sub> and soft drink system. If a CO<sub>2</sub> gas leak is suspected, particularly in a small area, **IMMEDIATELY** ventilate the contaminated area before attempting to repair the leak. Personnel exposed to high concentrations of CO<sub>2</sub> gas experience tremors which are followed rapidly by loss of consciousness and **DEATH**.

## MOUNTING IN OR ON A COUNTER

### **WARNING:**

When installing the unit in or on a counter top, the counter must be able to support a weight in excess of 730 lbs. to insure adequate support for the unit. **FAILURE TO COMPLY COULD RESULT IN SERIOUS INJURY, DEATH OR EQUIPMENT DAMAGE.**

**THE APPLIANCE HAS TO BE PLACED IN A HORIZONTAL POSITION**

**NOTE:** Many units incorporate the use of additional equipment such as icemakers. When any addition equipment is used you must check with the equipment manufacturer to determine the additional weight the counter will need to support to ensure a safe installation.

# START-UP AND OPERATING INSTRUCTIONS

## ICE DRINK DISPENSER

The ice drink dispenser shall be installed by qualified personnel following instruction given in the Installation manual part number 620913201INS. Fill the hopper with ice. Dispense several large cups of ice (approximately 20 to 30 seconds total dispensing time) to allow ice to fill the cold plate cabinet. Add ice to the hopper as necessary to refill, then replace the lid. Allow 10 to 15 minutes for the cold plate to cool down. Repeat this procedure whenever the dispenser has run out of ice. Start up the beverage system and adjust faucets to the proper brix. Contact your local syrup distributor for complete information on the beverage system.

The ice drink dispenser is designed to operate in ambient temperatures ranging from 40 to 105° F. Do not allow the unit to be stored or operated in conditions below 32° F. This could cause damage to the unit.

### **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 if 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 and left to “temper” or warm up for a minimum of 20 minutes in room temperature before loading into the dispenser hopper

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

### **WARNING:**

Use caution to avoid spilling ice when filling dispenser. Clean up immediately 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. **FAILURE TO CLEAN UP SPILLS COULD RESULT IN SERIOUS INJURY OR DEATH**

If the dispenser fails to dispense ice or beverage, refer to the troubleshooting section in the Installation Manual part number 620913201INS.

**NOTE: The dispenser is not designed for a wash-down environment and MUST NOT be placed in an area where a water jet could be used.**

**NOTE: This appliance is not intended for use by personnel (including children) with reduced physical, sensory or mental capabilities or lack of experience and knowledge, unless given supervision or instruction concerning use of the appliance by a person responsible for safety.**

# CLEANING AND MAINTENANCE INSTRUCTIONS

These instructions are used on all Cornelius ice drink dispensers. Some models may have additional cleaning requirements. Those models will have addition procedures listed later in the manual.

## **WARNING:**

Disconnect power to the unit before cleaning or servicing following all lock out / tag out procedures established by the user. Verify all of the power is off to the unit before performing any work.

**Failure to comply could result in serious injury, death or damage to the equipment.**

## **CAUTION:**

Do not use metal scrapers, sharp objects or abrasives on the ice storage hopper, top cover, agitator disc or exterior surfaces as damage to the unit may result. Do not use solvents or other cleaning agents as they may attack the material resulting in damage to the unit.

**Soap solution** – Use a mixture of mild detergent and warm (100° F ) potable water.

**Sanitizing Solution** – Dissolve 2 packets (4 oz) of Stera Sheen Green Label into 2 gallons of warm (80 – 100° F) potable water to ensure 200 ppm of chlorine.

## **DAILY CLEANING:**

1. Remove cup rest from drip tray and clean with warm soapy water, rinse with clean water and allow to air dry.
2. Wipe down the exterior of the unit with warm soapy water, rinse with clean water and allow to air dry.
3. Remove valve nozzles and diffusers and wash in warm soapy water, rinse in clean water and allow to air dry.
4. Clean the interior of the ice chute using the brush provided with the unit with warm soapy water, rinse with clean water and allow to air dry.
5. Spray the ice chute inside and out with sanitizer and allow to air dry.
6. Pour warm soapy water down the drains to keep them clean and flowing smoothly.
7. Spray the nozzles and diffusers inside and outside with approved sanitizing solution, reinstall them on the valves and allow to air dry.
8. Reinstall the cup rest into the drip tray.
9. Pour all remaining sanitizer solution down the drains to help keep the drain clear.

## **DAILY MAINTENANCE:**

1. Check the temperature, smell and taste of the product.
2. Check the water pressure coming to the unit using the pressure gauges on the back room package.
3. Check carbonation of the drink
4. Check level of CO<sub>2</sub> supply to the system.
5. Check the date on all of the BIB's (bags in boxes).

## **WEEKLY CLEANING: (IN ADDITION TO DAILY PROCEDURES)**

Remove the ice chute cover and clean it along with the back half with warm soapy using the brush provided with the unit. Rinse with clean water and reinstall on the unit. Spray the ice chute assembly with approved sanitizer allowing it to air dry.

## MONTHLY CLEANING: (IN ADDITION TO DAILY AND WEEKLY PROCEDURES)

1. Flush and sanitize all syrup lines as well as all of the syrup connectors. (See the sanitize syrup lines section shown later in this manual).
2. Remove ice from hopper and clean and sanitize the hopper. (See the Cleaning the interior surfaces section shown later in this manual).
3. While cleaning the hopper use the brush provided with the unit to clean the cold plate surface. To accomplish this, the brush needs to be extended through the opening in the bottom of the hopper.

## YEARLY MAINTENANCE:

Have the water pump and check valve inspected and cleaned by a qualified service technician.

Have the CO<sub>2</sub> gas check valve inspected and cleaned by a qualified service technician.

Remove the unit's splash and cold plate cover to clean and sanitize the cold plate surface. (See the cleaning the cold plate section shown later in this manual).

## Cleaning Interior Surfaces (Monthly Cleaning)

### CAUTION:

When pouring liquid into the hopper, do not exceed the rate of 1/2 gallon per minute. Pouring more liquid into the hopper could result in an overflow situation may result in injury or damage to the equipment.

1. Remove agitator assembly.
2. Using a nylon bristle brush or sponge, clean the interior of the hopper, top cover and agitator assembly with soap solution. Thoroughly rinse the hopper, cover and agitator surfaces with clean potable water.
3. Reassemble agitator assembly. Take special care to ensure that the thumbscrew is tight.
4. Using a mechanical spray bottle filled with sanitizing solution, spray the entire interior and agitator assembly. Allow to air dry.
5. Remove merchandiser and ice chute cover from unit.
6. With a nylon bristle brush or sponge, clean the inside of the ice chute, gasket, and cover with soap solution and rinse thoroughly to remove all traces of detergent.
7. Reassemble ice chute assembly.
8. Using a mechanical spray bottle filled with sanitizing solution, spray the inside of the ice chute. Allow to air dry.
9. Reinstall merchandiser.

## Cold Plate (Yearly Maintenance)

1. Remove splash panel.
2. Remove or move the plastic cold plate cover to expose the cold plate.
3. Locate and remove any debris from the drain trough. Check that the drain holes are not clogged.
4. Pour small amount of soap solution through cold plate openings in hopper.
5. Using a cloth, wash down the surfaces of the cold plate and plastic cover with soap solution.
6. Install and properly position the access covers on the cold plate.
7. Install the splash panel in the reverse order it was removed.
8. Rinse cold plate surface by pouring potable water through hopper openings.

## Dispensing Valves: (Daily Cleaning)

Refer to addendum supplied with the unit that is applicable to the manufacturer of the valves installed on the unit.

## Product Tubing (Monthly Cleaning)

### **IMPORTANT:**

Only trained and qualified persons should perform these cleaning and sanitizing procedures.

#### Sanitize Pre-Mix And Post-Mix Tank System

1. Remove all the quick disconnects from all the tanks. Fill a suitable pail or bucket with soap solution.
2. Submerge all disconnects (gas and liquid) in the soap solution and then clean them using a nylon bristle brush. (**Do not use a wire brush**). Rinse with clean water.
3. Prepare sanitizing solution and using a mechanical spray bottle, spray the disconnects. Allow to air dry.
4. Using a clean, empty tank, prepare five (5) gallons of the sanitizing solution. Rinse the tank disconnects with approximately 9 oz. of the sanitizing solution. Close the tank.
5. Prepare cleaning tank by filling clean five (5) gallon tank with a mixture of mild detergent and potable water (120°F).
6. Connect a gas disconnect to the tank and then apply one of the product tubes to the cleaning tank. Operate the appropriate valve until liquid dispensed is free of any syrup.
7. Disconnect cleaning tank and hook up sanitizing tank to syrup line and CO<sub>2</sub> system.
8. Energize beverage faucet until chlorine sanitizing solution is dispensed through the faucet. Flush at least two (2) cups of liquid to ensure that the sanitizing solution has filled the entire length of the syrup tubing.
9. Allow sanitizer to remain in lines for fifteen (15) minutes.
10. Repeat the step above, applying a different product tube each time until all tubes are filled with the sanitizing solution.
11. Remove the nozzle and syrup diffuser and clean them in a mild soap solution. Rinse with clean water and reassemble the nozzle and syrup diffuser on the valve.
12. Rinse the parts in clean water, reassemble the valve and reconnect it to the dispenser.
13. Discard the tank of sanitizing solution and reconnect the product syrup tanks. Operate the valves until all sanitizer has been flushed from the system and only product syrup is flowing.

#### Sanitize syrup lines, B-I-B Systems

1. Remove all the quick disconnects from all the B-I-B containers.
2. Fill a suitable pail or bucket with soap solution.
3. Submerge all disconnects (gas and liquid) in the soap solution and then clean them using a nylon bristle brush. (**Do not use a wire brush**). Rinse with clean water.
4. Using a plastic pail, prepare approximately five (5) gallons of sanitizing solution.
5. Rinse the B-I-B disconnects in the sanitizing solution.
6. Sanitizing fittings must be attached to each B-I-B disconnect. If these fittings are not available, the fittings from empty B-I-B bags can be cut from the bags and used. These fittings open the disconnect so the sanitizing solution can be drawn through the disconnect.
7. Place all the B-I-B disconnects into the pail of sanitizing solution. Operate all the valves until the sanitizing solution is flowing from the valve. Allow sanitizer to remain in lines for fifteen (15) minutes.
8. Remove the nozzle and syrup diffuser from each valve and clean them in a soap solution. Rinse with clean water and reassemble the nozzle and syrup diffuser to the valve.
9. Remove the sanitizing fittings from the B-I-B disconnects and connect the disconnects to the appropriate B-I-B container. Operate the valves until all sanitizer has been flushed from the system and syrup is flowing freely.

## Replenishing CO<sub>2</sub> Supply (As Required)

**NOTE:** When indicator on the 1800-psi gage is in the shaded (“change CO<sub>2</sub> cylinder”) portion of the dial, CO<sub>2</sub> cylinder is almost empty and should be changed.

1. Fully close (clockwise) the CO<sub>2</sub> cylinder valve.
2. Slowly loosen the CO<sub>2</sub> regulator assembly coupling nut allowing CO<sub>2</sub> pressure to escape, then remove the regulator assembly from the empty CO<sub>2</sub> cylinder.
3. Unfasten safety chain and remove the empty CO<sub>2</sub> cylinder

### **WARNING:**

To avoid personnel injury and/or property damage, always secure the **CO<sub>2</sub>** cylinder with a safety chain to prevent it from falling over. Should the valve become accidentally damaged or brokenoff, a **CO<sub>2</sub>** regulator can cause serious personnel injury or death could occur.

4. Position the full CO<sub>2</sub> cylinder and secure with a safety chain.
5. Make sure gasket is in place inside the CO<sub>2</sub> regulator assembly coupling nut, then install the regulator assembly on the CO<sub>2</sub> cylinder.
6. Open (counterclockwise) the CO<sub>2</sub> cylinder valve slightly to allow the lines to slowly fill with gas, then open the valve fully to back-seat the valve (back-seating the valve prevents gas leakage around the valve shaft).
7. Check CO<sub>2</sub> connections for leaks. Tighten any loose connections

## REMOVAL AND REPLACEMENT OF AGITATORS

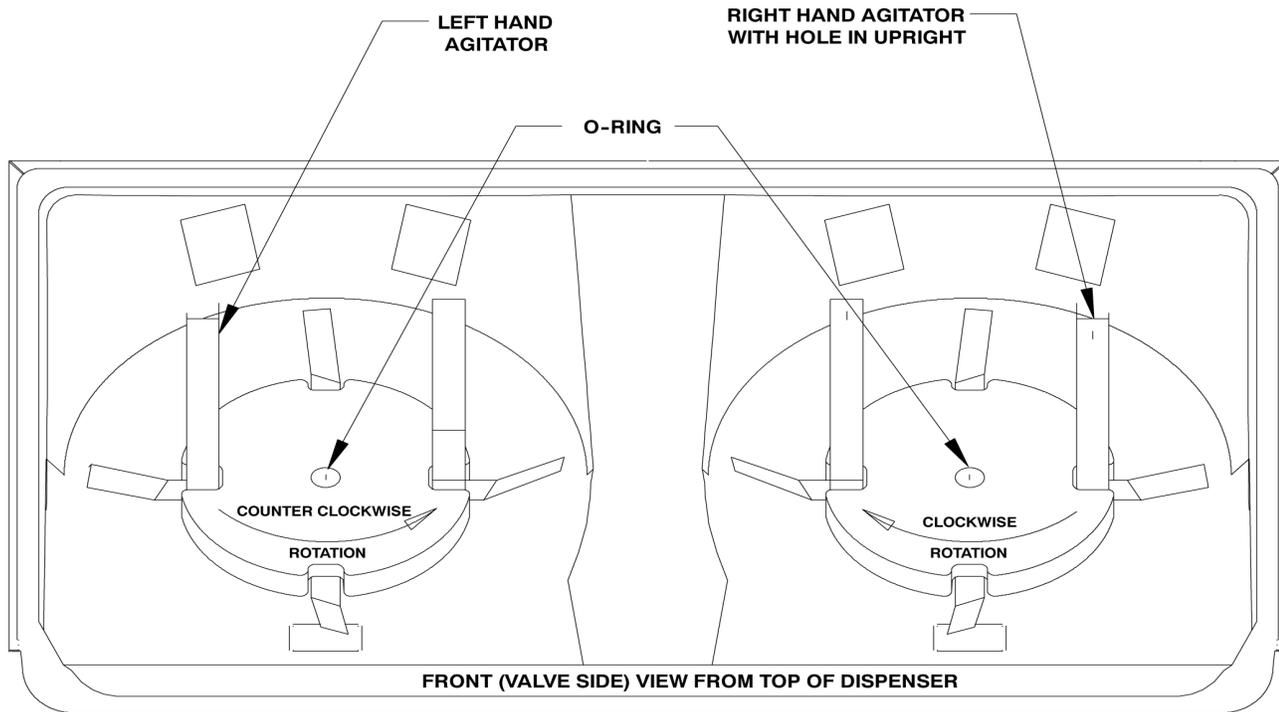


Figure 1.

### To Remove Agitators For Cleaning

1. Lift agitator and disc from unit.
2. Remove O-Ring starting at notch. Warm the O-Ring with water to ease removal.
3. Lift the plastic agitator disc off of the stainless-steel agitator.
4. Replace by reversing steps.

**NOTE:** Refer to Sanitize Procedure in the Owners Instruction for complete cleaning and sanitizing instructions.

# TROUBLESHOOTING



## IMPORTANT:

Only qualified technicians should service internal components or electrical wiring.



## WARNING:

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.



## WARNING:

If repairs are to be made to the ice dispensing system, make sure electrical power is disconnected from the unit.

Trouble	Probable Cause
BLOWN FUSE OR CIRCUIT BREAKER.	A. Short circuit in wiring. B. Defective gate solenoid. C. Defective agitator motor. D. Defective gate rectifier
GATE DOES NOT OPEN. AGITATOR DOES NOT TURN.	A. No power. B. Bent depressor plate (does not actuate switch). C. Defective dispensing switch.
GATE DOES NOT OPEN OR IS SLUGGISH. AGITATOR TURNS.	A. Defective gate solenoid. B. Excessive pressure against gate slide. C. Defective Rectifier.
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 icemark problem. D. Improper use of flaked ice.
BEVERAGES DO NOT DISPENSE.	A. No 24 volt power to faucets. B. No CO <sub>2</sub> pressure.
BEVERAGES TOO SWEET	A. Carbonator not working. B. No CO <sub>2</sub> pressure in carbonator C. Faucet brix requires adjusting.
BEVERAGE NOT SWEET ENOUGH.	A. Empty syrup tank. B. Faucet brix requires adjusting.
AGITATORS TURN IN OPPOSITE DIRECTIONS	A. This is normal and is necessary for uniform ice agitation.
ICE DOES NOT DISPENSE FROM ONE GATE ASSEMBLY	A. Agitators reversed. B. Defective gate solenoid or rectifier. C. Motors wired incorrectly

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

# ENDURO 300 (ED300) (POST-MIX)

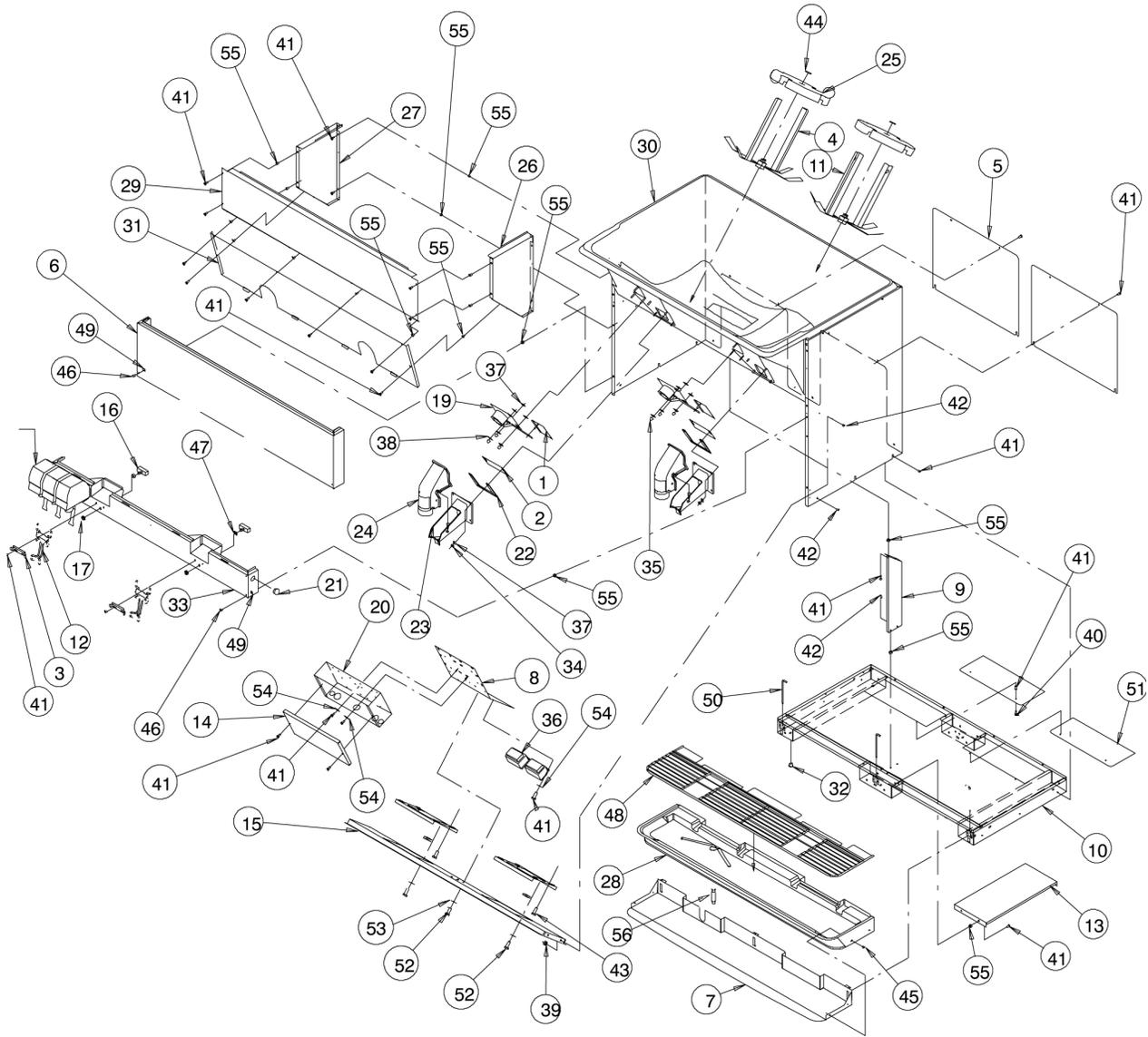


Figure 2. Enduro 300 Assembly



## ENDURO 300 ASSEMBLY

Item No.	Part No.	Name
1	21491	Slide, Gate
2	22081R	Restrictor, Gate
3	27107	Bracket, Lever Depressor
4	15213	Agitator, Left
5	620031608	Panel, Access Rear
6	620044541	Panel, Lower
	620064216	Panel Splash, Lower Ed/df300, Assy Non-cpltd Qt
7	15196	Extension, Drip Tray
8	620031605	Bracket, Electrical Box
9	29507	Bracket, Motor Support
10	15808	Base Ass'y
11	15214	Agitator, Right
12	15500	Lever, Ice Chute
13	29667	Support, Product Lines
14	620031607	Cover, Electrical Box
15	29493	Bracket, Motor Mounting
16	30895	Switch
17	31007	Boot, Switch
18	*32498	Agitator Motor (See Figure 4.)
19	32954	Solenoid Ass'y (See Figure 5.)
20	620307101	Electrical Box Ass'y (See Figure 6.)
21	51908	Plug
22	51891	Gasket, Gate
23	620500901	Ice Chute
24	53168	Cover, Ice Chute
25	53185	Disk, Agitator
26	620031601	Panel, Side, Right-Hand
27	620031610	Panel, Side, Left-Hand
28	53230	Drip Tray
29	620031603	Panel, Upper Front
30	620307401	Hopper/Cabinet Ass'y
31	620031609	Panel, Access Front

Item No.	Part No.	Name
32	52967	Plug
33	620404201	Dispensing Valve Panel Ass'y (See Figure 5)
34	70016	Hex Nut, No. 10-32
35	70017	Insert, Nylon, No. 10-32
36	32682	Transformer, 24V
37	70056	Washer, Flat, No. 10
38	70067	Washer
39	70076	Hex Nut, No. 8-32
40	70055	Tinnerman Clip, No. 8-32
41	70171	Screw, Phil Truss Hd., No. 8-32 By 3/8-In. Long
42	70178	Screw, Phil Truss Hd., No. 8-32 By 1/2-In. Long
43	70204	Screw, Phil Truss Hd., No. 8-32
44	41459	O--Ring
45	70478R	Clip, Pushon
46	70555	Screw, Phil Truss Hd., No. 8-32 By 3-In. Long
47	70847	Washer, Switch
48	71038	Cup Rest
49	71010	Washer, No. 8
50	10145	Pin, Drip Tray
51	51455R	Panel, Base
52	70250	Screw, Phil Truss Hd, 1/4-20 By 1/2-In. Long
53	70060	Lockwasher, 1/4 Ext, Tooth
54	70121	Lockwasher, No. 8 Ext Tooth
55	70959	Nutsert, No. 8-32
56	620704101	Strainer, Drip Tray Drain
57	*620064218	Brkt Offset, Lower Ed/df300
58	*70894	Screw Ma 08-32 Trph 24

**NOTE: \* Not Shown**

# ENDURO 300 CABINET SECTION

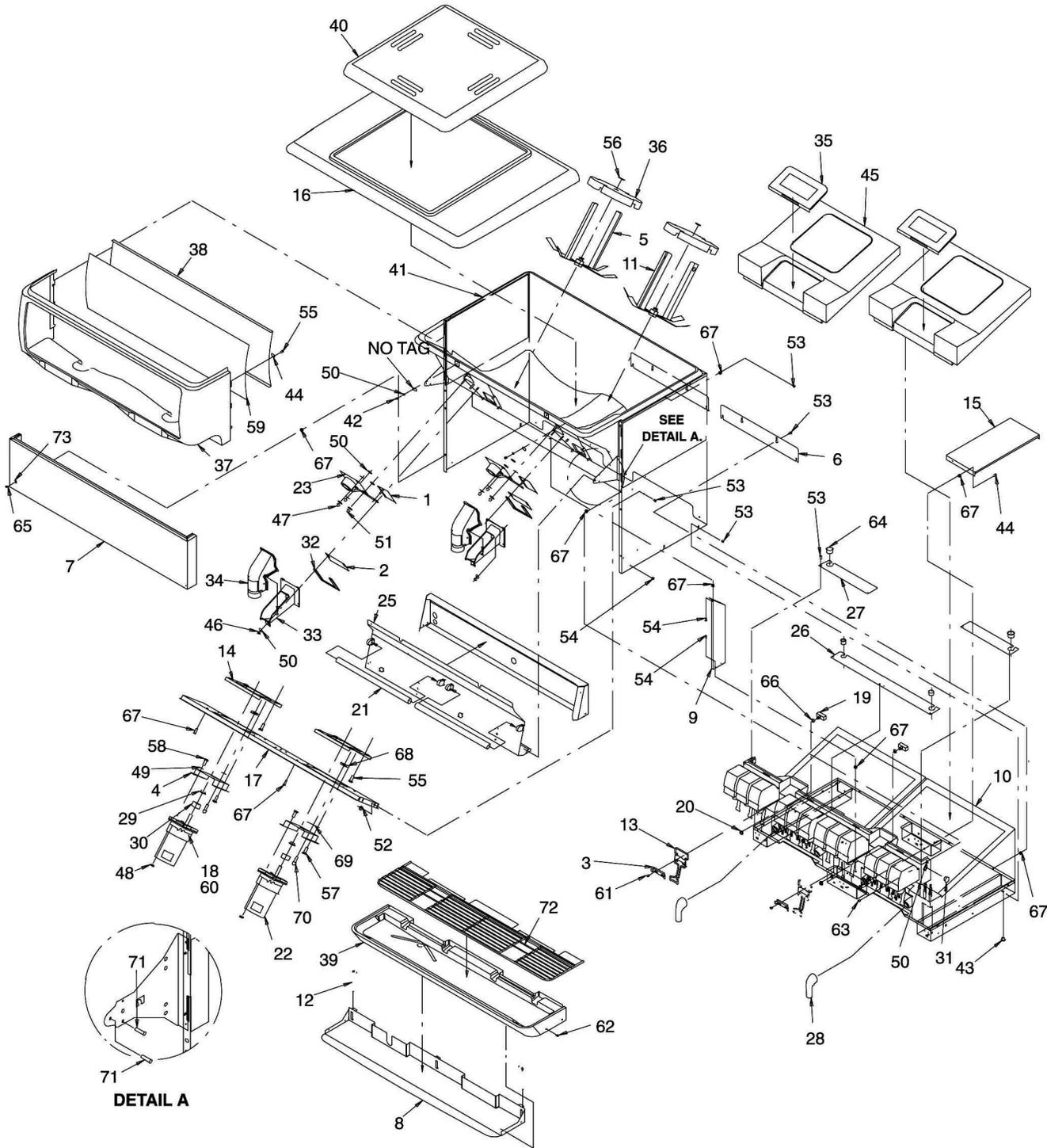


Figure 3. Cabinet Section, Exploded View



Item No.	Part No.	Name
1	21491	Slide, Gate
2	22081R	Restrictor, Gate
3	27107	Retainer, Lever, Ice Disenser
4	**29303R	Plate, Moter Mount
5	15213	Agitator Ass'y, Left
6	29483	Cover, Rear
7	629080209	Panel Ass'y, Lower (For Drip Tray Cold Plate Models)
	629080211	Panel Ass'y, Lower (For Cold Plate "Z" without Drip Tray Models)
	620044541	Panel Ass'y, Lower (For Drip Tray Non-Cold Plate Models)
	15601	Panel Ass'y, Lower Z (Without Drip Tray Non-Cold Plate Models)
8	15196	Extension, Drip Tray
9	29507	Bracket, Motor Support
10	Contact Sales	Panel Cold Plate/Faucet Ass'y
11	15214	Agitator, Right
12	10145	Pin, Mounting Drip Tray
13	15500	Dispense Lever, Short (Cup Activated)
	15488	Dispense Lever, Long (Cup Activated)
	15502	Push Lever, Ice Dispense
14	15218	Plate, Motor Mounting
15	29667	Support, Product Lines
16	53136	Lid, Lower
17	29493	Bracket, Motor Mounting
18	30794	Agitator Motor Heater, 120V
	32826	Agitator Motor Heater, 220-240V
19	30895	Switch, Dispense
20	31007	Boot, Switch
21	31622	Bulb, Florescent
22	**620307901	Agitator Motor, 120V
	**620307902	Agitator Motor, 220-240V
23	32954	Solenoid Ass'y, 120V
	33409	Solenoid Ass'y, 220-240V
24	620304001	Electrical Box Ass'y, 220-240V (B & BC Models)
25	620304201	Electrical Box Ass'y, 120V (B & BC Models)
	620303901	Electrical Box Ass'y, 120V (Ice Only)
26	15811	Baffle, Center
27	15437	Baffle, Side
28	53011	Elbow, Cold Plate Drain

Item No.	Part No.	Name
29	**51859	Shaft Seal, Agitator Motor
30	52876	Gasket, Motor Shaft
31	***51908	Plug, 120 Volts Models Only
32	51891	Gasket, Gate
33	620500901	Ice Chute
34	53168	Cover, Ice Chute
35	53241	Access Cover (Cold Plate Models Only)
36	53185	Disk, Agitator
37	52937	Merchandiser Black
	52952	Merchandiser, Gray
	620011504	Merchandiser, S.S.
	620033201	Merchandiser, S.S. (For Medallion)
38	52943	Lens, Inner
39	53230	Drip Tray, Insulated, Black
	53229	Drip Tray, Insulated, Gray
40	53135	Lid, Upper Dispenser, Black
	53137	Lid, Upper Dispenser, Gray
41	53339	Hopper Cabinet Ass'y, Insulated (Cold Plate Models)
	53342	Hopper Cabinet Ass'y, Insulated (Ice Only, B Models)
42	71089	Shoulder Screw, No. 8-32
43	52967	Plug
44	52972	Clip, Flush, Nylon, White
45	53236	Cover, Insulated (Cold Plate Models Only)
46	70016	Hex Nut, No. 10-32, S.S.
47	70017	Hex Nut, No. 10-32, S.S.
48	**70018	Hex Nut, 1/4-20, Keps
49	**70048	Washer, .255 I.D.
50	70056	Washer, Flat, .219 I.D., No. 10, S.S.
51	70067	Washer, Flat, .218 I.D.
52	70076	Hex Nut, No. 8-32
53	70171	Machine Screw, Phil Truss Hd., No. 8-32 By 3/8-In. Long
54	70178	Machine Screw, Phil Truss Hd., No. 8-32 By 1/2-In. Long
55	70204	Sheet Metal Screw, Phil Truss Hd., No. 8 By 1/2-In. Long
56	41459	O-Ring
57	70250	Machine Bolt, Phil Truss Hd, 1/4-20 By 1/2-In. Long
58	**70260	Machine Bolt, Phil Rd Hd., 1/4-20 By 1-In. Long
59	Contact Sales	Graphics



Item No.	Part No.	Name
60	70341	Spring, (Agitator Motor Heater)
61	620701601	Sheet Metal Screw, No. 10 By 1/2-In. Long
62	70478R	Clip, Pushon
63	70555	Machine Screw, Phil Truss Hd., No. 8-32 by 2 5/8-In. Long
64	70750	Hose Clamp, Screw
65	71006	Machine Screw, Phil Truss Hd., No. 8-32 by 2 1/4-In. Long
66	70847	Spacer, Dispense Switch
67	70959	Nutsert, No. 8-32
68	70992	Receptacle, 1/4-Turn
69	**70993	Retainer, 1/4-Turn
70	**70994	Stud, Wing Hd, 1/4-Turn

Item No.	Part No.	Name
71	70456	Pop Rivet
72	71038	Cup Rest
73	71010	Washer, No. 8, Captivating
74*	51288	Adapter, 1-In. Barb By 3/4-MPT (For Drip Tray Drain)
75*	50952	Adapter, 3/4-Soc By 3/4-FPT (For Drip Tray Drain)
76*	51774	Tube, Drip Tray Drain, 1-In. I.D.
77*	620702201	Brush, Cold Plate Cleaning

**NOTE: \* Not Shown****\*\* Parts Included in Agitator moter kit****\*\*\*For 220-240V Models, 51908 Plug Replaced by 620303001 Push-Button Switch Actuator and 620303002 switch block**

## ENDURO 300 MOTOR COMPONENTS/GATE SOLENOID ASSEMBLY

Item No.	Part No.	Name
1	29303R	Bracket, Gear Box
2	15218	Plate, Motor Mount
3	29493	Bracket, Motor Mount
4	30794	Heater, Motor
5	32498	Motor
6	651859	Seal, Motor Shaft
7	52876	Gasket, Motor
8	70018	Hex Nut, 1/4-20
9	70260	Screw, Phil Rd. Hd., 1/4-20 X 1-In.Long
10	70341	Spring, Motor Heater
11	70992	Receptacle, 1/4-turn
12	70993	Retainer, 1/4-turn
13	70994	Stud, 1/4-turn
14	70048	Washer, Lock, 1/4
15	70250	Screw, Phil Truss Hd, 1/4-20 X 1/2-In.Long

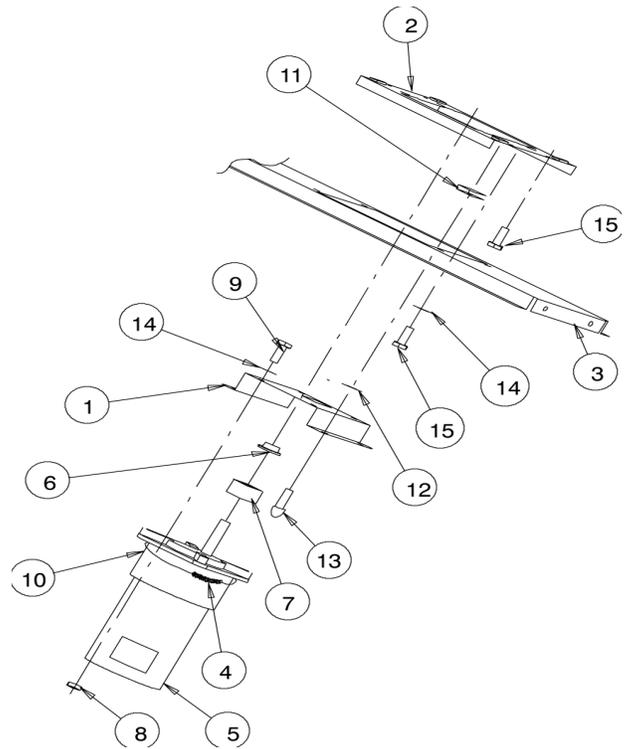


Figure 4. Motor Components

Item No.	Part No.	Name
	32954	Gate Solenoid Ass'y
1	28173	Arm, Gate Lift
2	50754	Bearing, Gate Arm
3	32957	Solenoid
4	28172	Plate, Solenoid Mounting
5	50752	Isolator
6	70015	Hex Nut, No. 10-32
7	70162	Screw, No. 8-32 X 1/4-In. Long
8	70165	Screw, No. 8-32 X 5/8-In. Long
9	71007	Spring, Solenoid Arm
10	51348	Spacer
11	70067	Washer
12	70057	Lockwasher, No. 10

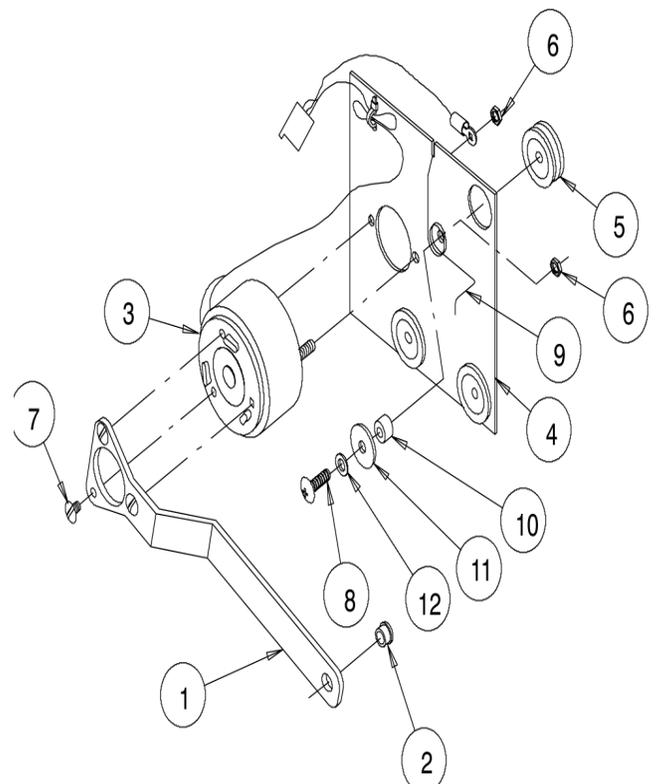


Figure 5. Gate Solenoid Assembly

## ENDURO 300 ELECTRICAL BOX ASSEMBLY

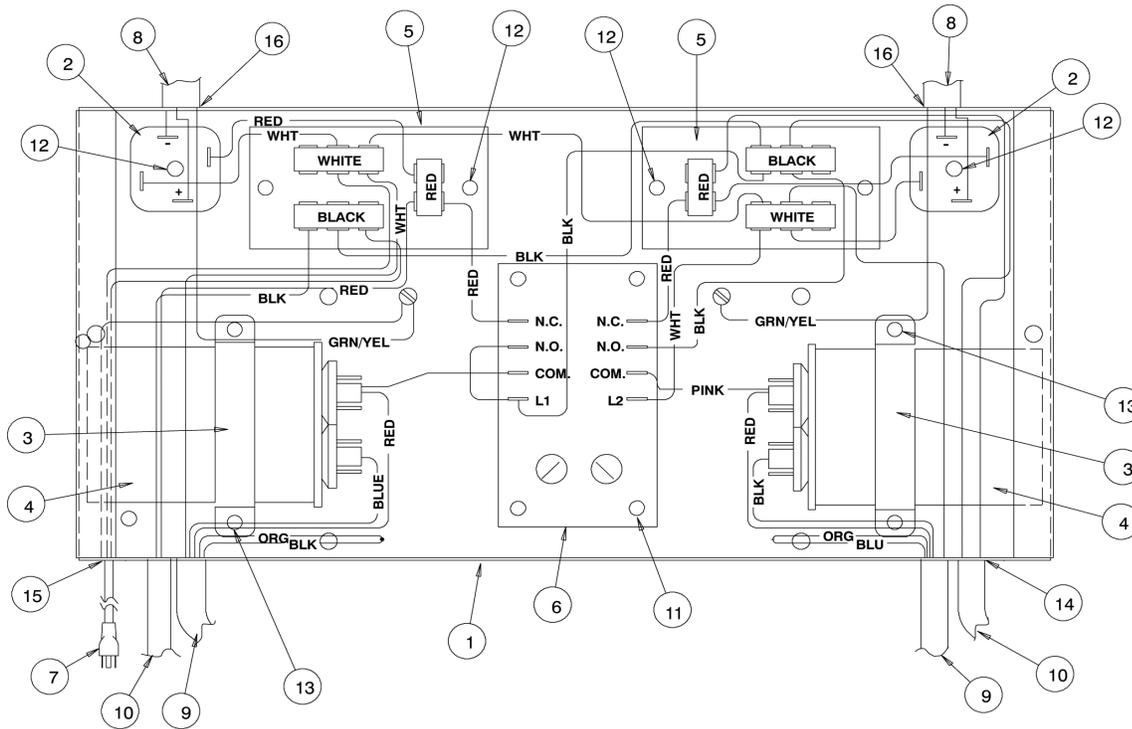


Figure 6. Electrical Box Assembly

Item No.	Part No.	Name
1	620307101	Electrical Box Ass'y
	620031606	Box, Electrical
2	32958	Rectifier
3	30514	Clamp, Capacitor
4	30774	Capacitor
5	31107	Terminal Block
6	31763	Timer, Repeat Cycle
7	30995	Power Cord
8	33615	Harness, Solenoid

Item No.	Part No.	Name
9	33617	Harness, Motor
10	32782	Harness, Dispenser Switch
11	70147	Screw, Phil Rd Hd, No. 6-32 By 1/2-In. Long
12	70219	Screw, No. 8, Type B
13	70215	Screw, SI Washer Hd, No. 8-32 By 1/4-In. Long
14	50459	Bushing, Harness
15	50458	Strain Relief
16	50475	Bushing, Jumper

## ENDURO 300 VALVE PANEL ASSEMBLY

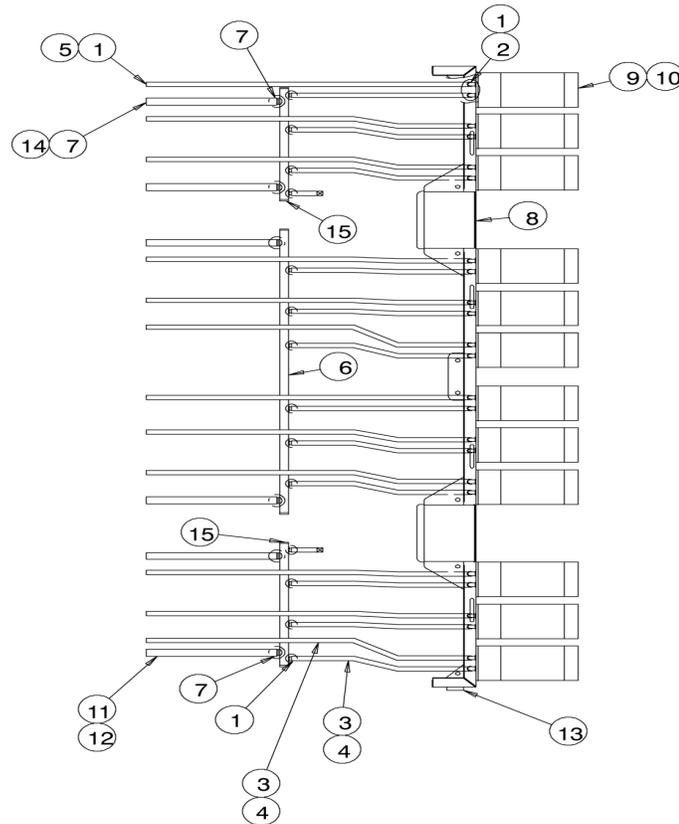


Figure 7. Valve Panel Assembly

Item No.	Part No.	Name
	620404201	Valve Panel Ass'y, 12 Flavor
1	40502	Clamp
2	40439	Fitting, Valve Inlet
3	50249	Insulation, Beverage Tubing
4	52792	Beverage Tubing, 1/4 I.D.
5	40649R	Fitting, Syrup Inlet, 1/4 Barb
6	40949	Manifold, 6-Valve

Item No.	Part No.	Name
7	40657	Clamp
8	15356	Panel, Valve Mount
9	40483	Dispensing Valve
10	620700602	Screw, No. 10
11	50014	Tubing, Water, 1/2 I.D.
12	50130	Insulation, Water Tubing
13	32977	Switch, Valve, on/off
14	40731R	Fitting, Water Inlet, 1/2 Barb
15	41209	Manifold, 4-Valve

## ENDURO 300 Z-STYLE COLD PLATE DRAIN

Item No.	Part No.	Name
1	70750	Hose Clamp
2	53170	Drain Tube
3	51280	Elbow
4	53293	Coupler
5	50278	Drain Tube
6	51295	Tee

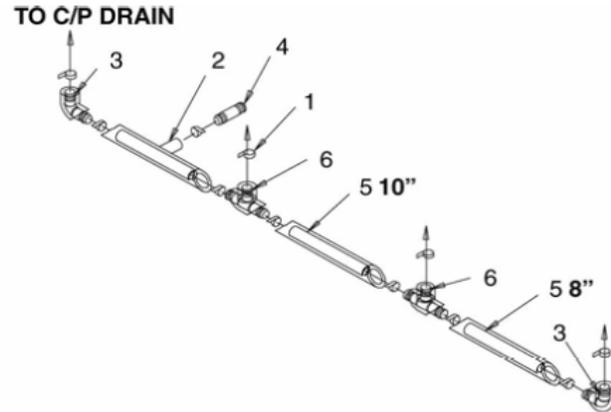


Figure 8. Z-Style Cold Plate Drain

## ENDURO 300 WATER MANIFOLD ASSEMBLY

Item No.	Part No.	Name
1	620407726	Manifold Flex
2	620709065	Fitg Elbow 1/2 X 3/8 Brb
2A	100057	O-ring
3	70204	Screw Sm #8 X 1/2
4	620519005	Plug 3/8 w/O-ring
5	620709066	Fitg Straight 3/8 X 1/4 Brb
6	620046316	Retainer Clip
7	620706632	Screw TRPH # 8-18 X 2 Waxed
*	620711913	Insulation Block, RH
*	620711914	Insulation Block, LH
*	620715408	Hook and Loop Fastener

NOTE: \*Not Shown

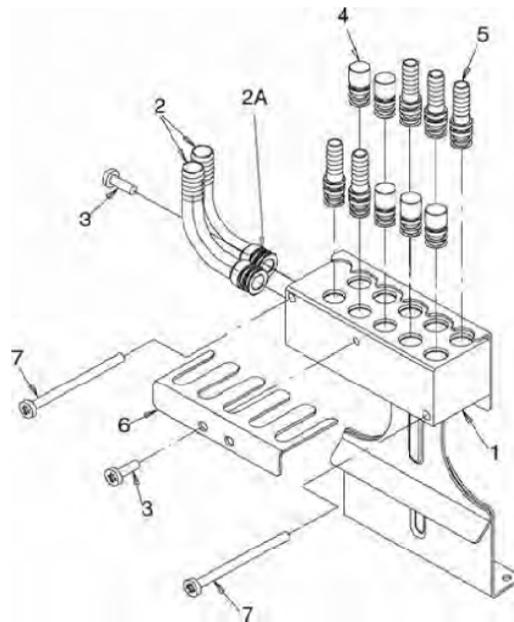


Figure 9. Water Manifold Assembly

# ENDURO 300 LADDER SCHEMATIC

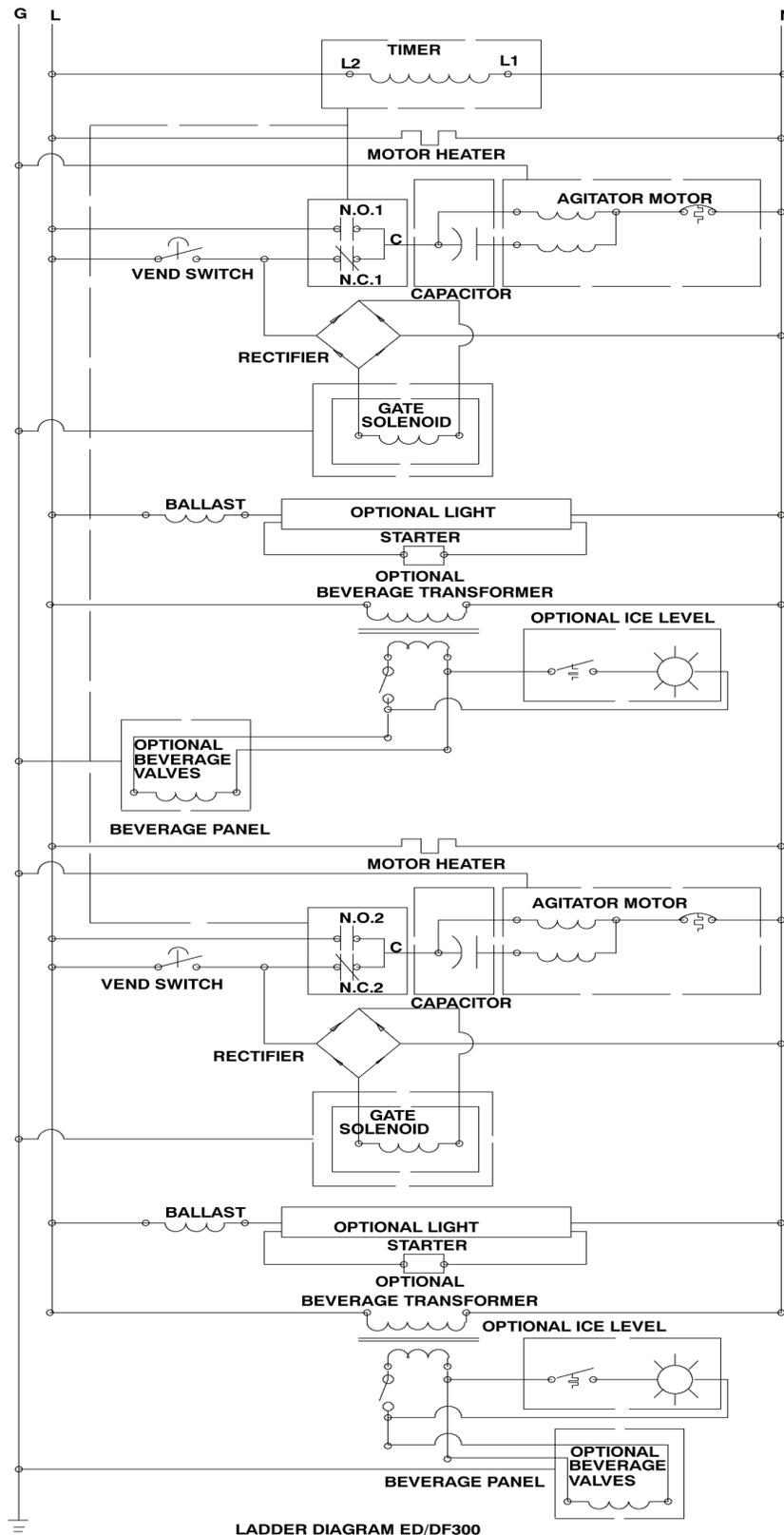


Figure 10. Ladder Schematic





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