UC300



Servend

INSTALLATION & SERVICE GUIDE Part Number 5027727





Manitowoc Beverage Equipment 2100 Future Drive w Sellersburg, IN 47172-1868 Tel: 812.246.7000, 800.367.4233 • Fax: 812.246.9922 www.manitowocbeverage.com

In accordance with our policy of continuous product development and improvement, this information is subject to change at any time without notice.



FOREWORD

SerVend developed this manual as a reference guide for the owner/operator, service agent, and installer of this equipment. Please read this manual before installation or operation of the machine. Consult the troubleshooting guide within this manual for service assistance

If you cannot correct the service problem, call your SerVend Service Agent or Distributor. Always have

UNPACKING AND INSPECTION

A qualified service technician should perform installation and start-up of this equipment.

Note: The CEV Unit was thoroughly inspected before leaving the factory. Any damage or irregularities should be noted at the time of delivery (or not later than 15 days from the date of delivery.)

WARRANTY INFORMATION

Consult your local SerVend Distributor for terms and conditions of your warranty. Your warranty specifically excludes all beverage valve brixing, general adjustments, cleaning, accessories and related servicing.

Your warranty card must be returned to SerVend to activate the warranty on this equipment. If a warranty card is not returned, the warranty period can begin when the equipment leaves the SerVend factory.

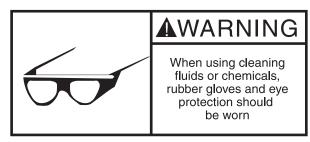
No equipment may be returned to SerVend without a written Return Goods Authorization (RGA). Equipment returned without an RGA will be refused at SerVend's dock and returned to the sender at the sender's expense.

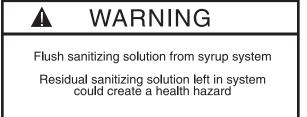
Please contact your local SerVend distributor for return procedures.



SAFETY INSTRUCTIONS

Installation and start-up of this equipment should be done by a qualified service technician. Operation, maintenance, and cleaning information in this manual are provided for the user/operator of the equipment.









IMPORTANT: START UP OF UNIT

DO NOT TURN THE ICEMAKER ON UNTIL 24 HOURS BEFORE ICE USAGE IS TO BEGIN.
IF ICE SITS IN THE BIN LONGER THAN 24 HOURS WITHOUT DISPENSING, ICE
DELIVERY PROBLEMS MAY OCCUR.

DAILY CHECK LIST FOR THE OPERATOR

- Check CO₂ supply. If CO₂ supply is low, an arrow on the primary regulator gauge will point to a shaded area that reads "Low CO₂" or "Change CO₂ Cylinder."
- Clean drain pan, grid, and splash panel. See daily cleaning instructions on page 18.

· Check Syrup supply.

• Clean the valve nozzles and diffusers. See daily cleaning instructions on page 18.



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UC300 SPECIFICATIONS

DESCRIPTION	UC300
Dimensions	42" X 30" X 55"
Weight	425 lbs (with ice 745 lbs)
Electrical Requirements	110 vac 60 hz 4 amps max. 220 vac 50/60 hz 4 amps mex. (available 01/02)
Water	45 to 55 psi at 3 gpm
Ice Machine Options:	Offered with no ice machine or with 1000 lbs/day CVD model SU1024Y with remote condenser
Drain	3/4" fpt fitting. 1 drain, 1" fpt at the center rear 6" above floor level
Syrups	5/16 barb connections for 10 flavors
Standard with Equipment:	Internal carbonation. Offered with 'Intellicarb' for Pepsi applications, or ambient carbonation for commercial applications.
Options:	With or without ice maker
Listing/Approvals:	UL, CSA, CE
Countertop Weight	775 lbs.
Countertop Cutout Dimensions	41.5" X 29.5"



EQUIPMENT OVERVIEW

The unit is a 10 flavor ice and beverage dispenser, with the ice storage bin located below the counter top level. A drink tower extends 19" above the counter top level. The Unit is designed to fit into a 42" wide by 30" deep space, and can be counter mounted (like a conventional drop-in unit), or arranged as a stand alone with cosmetic stainless panels.

Within the 19" drink tower can be a 1000 lb/day remote ice cube maker, especially designed (by Manitowoc) for this application. The ice maker is an option.

Beverage cooling is accomplished by means of a cold plate positioned below the storage bin, and the unit can include an internally mounted or externally mounted carbonator system. Two SerVend Flex Manifolds are incorporated in the tower which allows any valve position to be either carbonated or noncarbonated.

Ice is dispensed from the storage bin by means of the agitator into an auger which raises the ice to the top of the tower where it is dispensed by means of a rocking chute (with a sanitary lever). Only Flomatic sanitary lever valves will be offered, since the intent is for this product to be placed in customer dining areas. The valves are enclosed top and sides by the top cover of the drink tower.

The drink tower is enclosed by 5 panels, one on each side and back, as well as a splash panel in front below the valves, and a top panel. Safety switches will disable the ice and beverage dispensing circuits when either the top panel or the drain pan are removed. The drive motors for agitation and auger ice lifting are mounted using locking pins, and thus can be removed for maintenance and cleaning without tools. Access is provided for in place cleaning of the ice maker. The ice maker water valve, water pan, curtain, and water pump can all be removed for service and cleaning without removing the ice maker itself.

The UC300 can be built in either a left hand or right hand ice dispense arrangement. The drain pan is the only part that is different for the two configurations, all other parts are identical. In the right hand configuration, syrup lines from the BIB pumps are brought in to the unit at the lower left, water, drains, electrical and refrigerant lines on the right.

The waste water from the cuber, spillage and melt water from the drain pan, and melt water from the storage bin and auger are all conveyed into a small catch basin located on the base of the unit. A single drain is then routed to the rear for connecting to the building drain. A water supply line is necessary for the ice maker and beverage system, connecting to a 3/8" OD. beverage tube.



INSTALLATION

The SerVend UC300 is shipped in a heavy duty corrugated carton with a wooden pallet. Inspect the UC300 for freight damage. If any damage is noticed, stop immediately and contact your delivering freight company. You must file a freight claim for your equipment. Failure to do so can void any claims. SerVend is not responsible for any freight damage.

Before you begin the installation, please check to be sure you can achieve a proper installation. Things to look for include, but are not limited to:

- If being installed in a counter make, be sure you have a flat, level counter top.
- Is there enough space for the UC300? You will need to have at least a 36" deep coutertop to do a proper installation.
- How about under the counter? Is there room for the UC300 with drain underneath and beverage tubing coming from the rear of the unit along with the electric necessary? It is suggested that you have at least 18" of open space to the right of the unit for an easy installation.
- If being installed in a counter are there any braces or support structures in the counter top that could be cut and damaged?
- Avoid direct sunlight or close heating / air conditioning ducts.
- Is a proper drain available? The UC300 has a single 3/4" drain underneath the unit.

To properly install the SerVend UC300, Use these guidelines:

- Meet all local code requirements.
- Have a receptacle with the proper voltage at the installation site for connection to the UC300. Astandard three prong plug is needed for the dispenser. If the unit is equipped with an ice maker, the condensing unit will need 208/230v were ever the condenser is mounted.
- Completely unpack the UC300, removing all padding and shipping retainers.

- Route the beverage tubing from the syrup racks to the location of the UC300. Make sure to leave some slack in each of the syrup lines in case the unit needs to be pulled out some for service work or cleaning.
- Make all beverage connections, if necessary, at the syrup racks.
- If installing in a counter mark the counter top with the appropriate cut out opening.
- Check that the cut out location is approved by the owner before any cuts are made in the counter top.
- Compare the marked cut out with the dispenser chest size. Be sure you are going to make the proper hole size.
- · Cut the marked opening in the counter top.
- Install the legs provided to the unit. You will have to tilt the unit back, forward, or to the side to install the legs.

Attach the drain line to the drain connection at the bottom of the chest. The connection is a 3/4" fpt at the center of the unit, 6" above floor level.

Remove the front, back and side panels to make water and syrup connections. You do not have to remove all of these panels but it makes for an easier installation.

There is one water connection that is located on the bottom right side of the unit that feeds all the valves for both non-carbonated and carbonated water drinks. This connection supplies the entire unit with water. See Plumbing diagram for exact routing. The incoming water pressure must be at least 40 psi and no more than 55 psi. Proper measures must be taken if the water pressure is under or over the operating specifications.

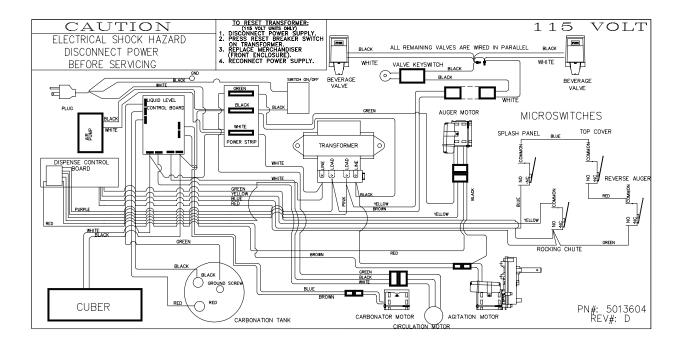
Connect the CO2 supply line. This connection is also located at the bottom right side of the unit and is already connected to the carbonator. The regulator for the carbonator should be set at 75 psi.

Make all syrup connections. These connections are located on the bottom left side of the unit. There are ten connections. Refer to the plumbing diagram for proper valve selection.

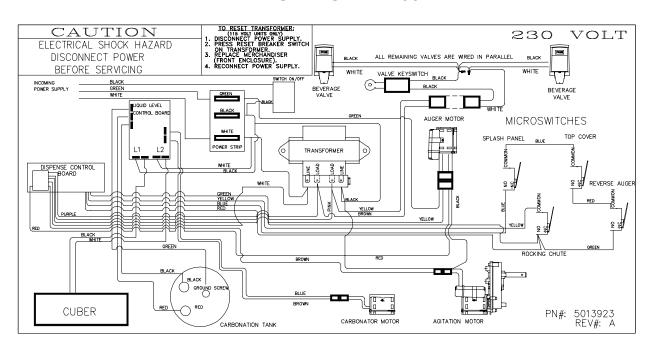
Turn the power switch to on at the electrical box located at the bottom front of the unit.



UC300 WIRING DIAGRAMS WIRING DIAGRAM 115V

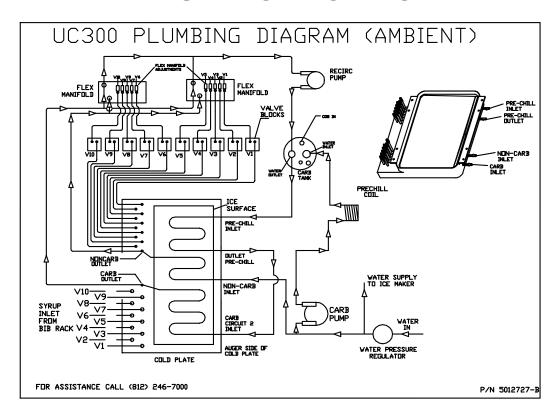


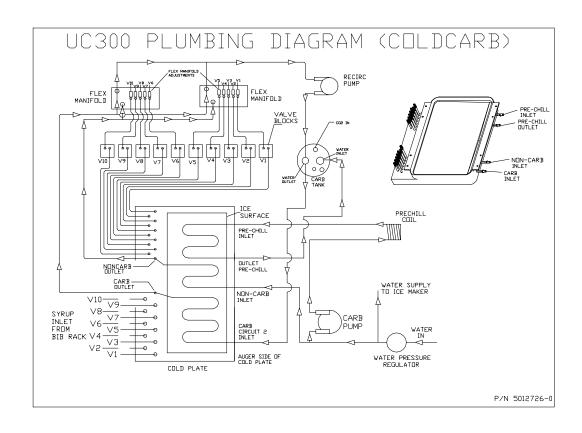
WIRING DIAGRAM 230V





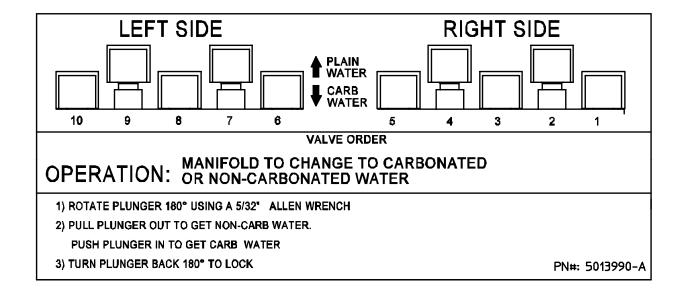
PLUMBING DIAGRAMS







CARBONATED/NON-CARBONATED CONVERSION INSTRUCTIONS



SANITIZING AND CLEANING

Note: Scheduled cleaning must be in compliance with local health codes. This cleaning schedule is a recommendation. Follow cleaning and sanitizing instructions found in the Manitowoc manual to clean and sanitize the icemaker. The UC300 drainpan and splash panel must be removed before cleaning the icemaker.

DISASSEMBLING THE DISPENSER PARTS FOR CLEANING/SANITIZING

- 1. Disconnect electrical power to the unit.
- Remove: splash panel, grid, drainpan, drainpan support bracket, and top cover from the unit.
- 3. Remove all ice from the ice storage bin.
- 4. Remove the agitator by pulling the pins at each end, depressing the agitator alignment shaft into the agitator rod to clear the D-bushing, and then carefully lift it out of the ice bin.

- 5. Remove the bin liner.
- Remove the auger motor assembly by pulling the 3 pins holding it in place, disconnecting the 2 sets of insulated quick slides to the motor, and lifting the assembly straight up and out of the unit.
- 7. Lift the auger and auger tube up and out of the unit.
- 8. Remove the auger transition by pulling the 2 pins holding it in place.
- 9. Remove the ice chute assembly and spout.



CLEANING AND SANITIZING OF THE DISPENSER

Note: Sanitize the dispenser at initial start-up in addition to monthly sanitizing.

Mix a solution of mild, nonabrasive detergent to clean the dispenser bin and components. Using a clean cloth or a soft bristle brush, clean the following dispenser parts:

- Cold plate
- Ice storage bin, including the agitator D-bushing
- Agitator
- ♦ Agitator alignment shaft
- Bin liner
- Drainpan support bracket
- Auger
- Auger tube
- Auger transition
- Ice chute outer bracket
- Ice chute
- Ice chute door
- Ice chute lock
- Ice chute spout

Rinse all parts in clean, running water. Mix a sanitizing solution of ¼ ounce liquid, unscented laundry bleach (5.25% Cl Na O concentration) for each gallon of water, to supply 100 PPM of available chlorine. Using this solution and a clean cloth or soft bristle brush, clean the dispenser parts listed above. Allow parts to air-dry then reassemble.

BAG-IN-BOX BEVERAGE SYSTEM SANITIZING

Needed: Three clean, empty five-gallon buckets to be used for the rinse, detergent, and sanitizing buckets, and a container to be placed under soda valves to carry away detergent and sanitizing agents which will be flushed through the valves.

- 1. Disconnect the bag-in-box connectors.
- 2. Prepare the following in three clean buckets:
 - Rinse bucket fill bucket with clean tap water. (Refill as necessary.)

- Detergent bucket mix approved beverage system deaner with warm water as recommended.
- Sanitizing bucket mix a solution of 1 ounce of liquid, unscented household bleach (5.25% Cl Na O concentration) with two gallons of tap water. The mixture should supply 200 PPM of available chlorine.
- Remove the cap located opposite the tubing connection on the bag-in-box connector.
- Place bag-in-box connector in rinse bucket (step 2A.). Draw clean tap water through the system and out the beverage valve until all syrup is flushed from the system.
- Place bag-in-box-connector in the detergent bucket (step 2B.). Draw detergent solution through the system and out the beverage valve for 2 minutes. Then, allow the remaining detergent to stay in the system for 5 minutes.
- Remove the valve nozzles and diffusers, as described in the daily cleaning instructions. Using a clean cloth or a soft brush, scrub the nozzle, the diffuser, the bottom of the dispensing valve, and the cup lever, if applicable.
- 7. Place the valve diffusers and nozzles in sanitizing solution for 20 minutes, then replace them on the beverage valve.
- Place bag-in-box connector in the sanitizing bucket (step 2C.). Draw sanitizing solution through the system and out the valve for 5 minutes. Allow the sanitizing solution to remain in the system for a minimum of 15 minutes.
- Place the bag-in-box connector in the rinse bucket (step 2A.). Draw clean rinse water through the system and out the valve for 2 minutes, flushing the sanitizing solution from the system.
- 10. Replace the plastic cap opposite the tubing connection on the bag-in-box connector.
- 11. Reconnect the bag-in-box connector to the beverage syrup bag-in-box.
- Repeat the above steps for each beverage valve, or follow this procedure with any number of valves concurrently.



BAG-IN-BOX BEVERAGE SYSTEM SANITIZING

Needed: Three clean, empty five-gallon buckets to be used for the rinse, detergent, and sanitizing buckets, and a container to be placed under soda valves to carry away detergent and sanitizing agents which will be flushed through the valves.

- 1. Disconnect the bag-in-box connectors.
- 2. Prepare the following in three clean buckets:
 - Rinse bucket fill bucket with clean tap water. (Refill as necessary.)
 - Detergent bucket mix approved beverage system cleaner with warm water as recommended.
 - Sanitizing bucket mix a solution of 1 ounce of liquid, unscented household bleach (5.25% Cl Na O concentration) with two gallons of tap water. The mixture should supply 200 PPM of available chlorine.
- 3. Remove the cap located opposite the tubing connection on the bag-in-box connector.
- Place bag-in-box connector in rinse bucket (step 2A.). Draw clean tap water through the system and out the beverage valve until all syrup is flushed from the system.

- Place bag-in-box-connector in the detergent bucket (step 2B.). Draw detergent solution through the system and out the beverage valve for 2 minutes. Then, allow the remaining detergent to stay in the system for 5 minutes.
- Remove the valve nozzles and diffusers, as described in the daily cleaning instructions. Using a clean cloth or a soft brush, scrub the nozzle, the diffuser, the bottom of the dispensing valve, and the cup lever, if applicable.
- 7. Place the valve diffusers and nozzles in sanitizing solution for 20 minutes, then replace them on the beverage valve.
- Place bag-in-box connector in the sanitizing bucket (step 2C.). Draw sanitizing solution through the system and out the valve for 5 minutes. Allow the sanitizing solution to remain in the system for a minimum of 15 minutes.
- Place the bag-in-box connector in the rinse bucket (step 2A.). Draw clean rinse water through the system and out the valve for 2 minutes, flushing the sanitizing solution from the system.
- 10. Replace the plastic cap opposite the tubing connection on the bag-in-box connector.
- Reconnect the bag-in-box connector to the beverage syrup bag-in-box.
- 12. Repeat the above steps for each beverage valve, or follow this procedure with any number of valves concurrently.



FIGAL

Beverage System Sanitizing

- 1. Prepare the following in three clean figal tanks:
 - Rinse tank fill with room temperature water.
 - Detergent tank mix approved beverage system cleaner with warm water as directed.
 - Sanitizing tank mix a solution of 1 ounce of unscented household bleach (5.25% CI NaO concentration) to two gallons of tap water. The mixture should supply 200 PPM available chlorine.
- Disconnect all product and water lines from product tanks and remove carbonator.
- Locate the figal syrup tank for the circuit to be sanitized. Remove both quick disconnects from the figal syrup tank. Rinse quick disconnects in warm tap water.
- Connect rinse tank to the syrup line. Draw clean rinse water through the valve until syrup is flushed from the system.

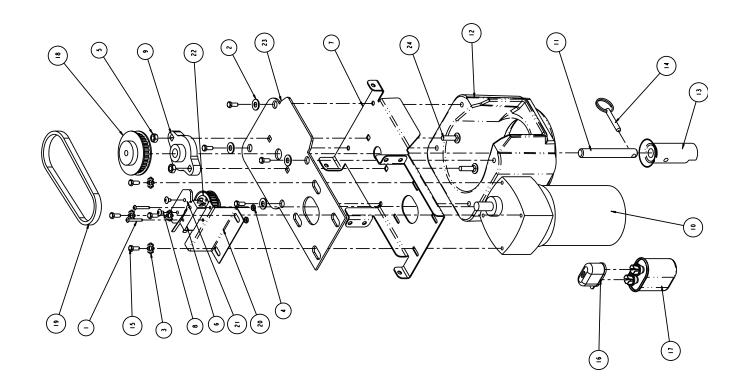
- Connect detergent tank to the syrup line and draw detergent through the valve for 2 minutes.
 Then, allow remaining detergent to stay in the system for 5 minutes.
- Follow steps 6 and 7 in the bag-in-box sanitizing instructions to clean and sanitize the beverage valve nozzle and diffuser.
- 7. Connect sanitizing tank to the syrup line and draw sanitizing solution through the valve for 5 minutes. Allow sanitizing solution to remain in the system for a minimum of 15 minutes.
- 8. Connect rinse tank to the syrup line. Draw clean rinse water through the system for two minutes to flush the sanitizing solution from the system.
- 9. Reconnect syrup and carbonated water lines.



EXPLODED VIEWS

120V DRIVE AUGER

N - 2 w 4 2	Part Number		
- 2 8 4 3		Description	Oţ.
2 8 4 2	1060060	SCR 6-32 X I" SS PH RHMS	2
E 4 3	0901805	WASHER 1/4" FLAT SS	4
2	1061060	WASHER LOCK #10 STAR EXT	4
2	0902101	NUT 1/4"-20 SS HEX	2
	0902105	NUT 1/4"-20 SS HEX	2
9	1000703	MICROSWITCH	_
7	5012027	BRKT AUGER MOTOR	_
8	5012081	SCREW 8-32 X 1/4" PH PS	2
6	5012093	STAMPED BALL BEARING	_
2	5012094	MOTOR AUGER	_
=	5012212	ROD AUGER DRIVE	_
12	5012239-2	TRANSITION AUGER TOP	_
13	5012252	COUPLING AUGER ROD	-
14	5012303	PIN HITCH 1/4 DIA X 1 1/4	-
-5	5012794	SCR 10-32 X 1/2 HEX MACH	8
9_	5012795	CAP TERM	_
1.1	5012796	CAPAC 370VAC 5MFD RUN	_
8_	5012798	30 TOOTH DELRIN PULLEY	_
61	5012799	BELT PULLEY	_
50	5013590	BRACKET REVERSE SWITCH	-
12	5013591	CAM REVERSE ACTUATOR	-
22	5013616	22 TOOTH DELRIN PULLEY	-
23	5013706	INSUL TOP TRANSITION	-
24	5013793	BOLT 1/4"-20 X I" CARRIAGE	2



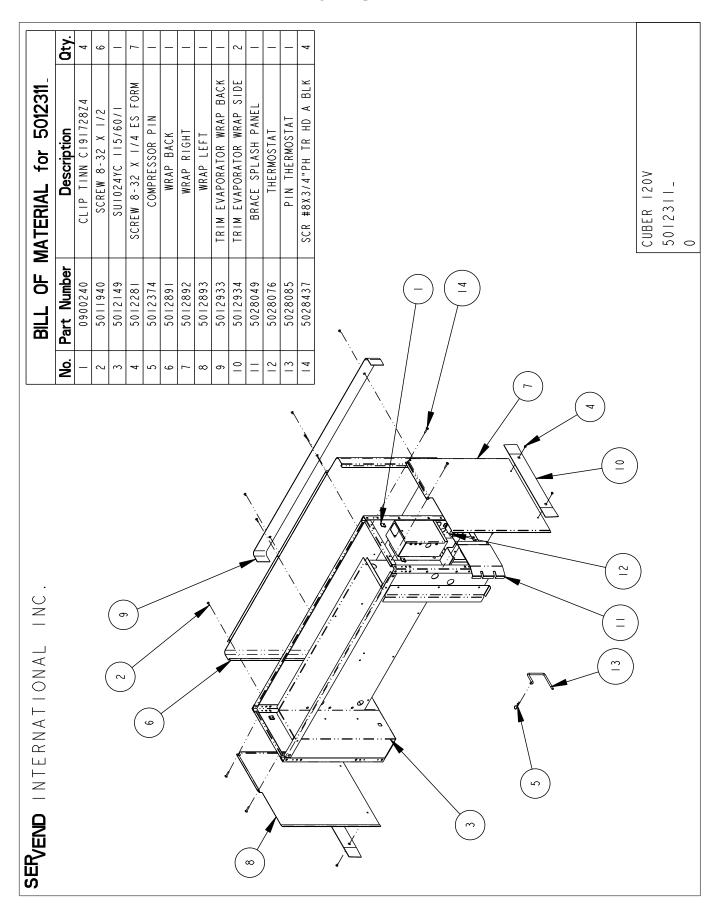


TRANSITION AUGER

60	Qty.	_	2	4	2	_	_	
BILL OF MATERIAL for 5012309	Description	TRANSITION AUGER TUBE	BRKT TRANSITION	2 X I/2 HEX MACH	RUBBER CUSHIONED	BOTTOM TRANSITION	BOTTOM TRANSITION	
ATERIA	٥	TRANSIT	BRKT	SCR 10-32	CLAMP 1.5"	BEARING B	INSERT B	
L OF M	Part Number	5012240	5012244	5012794	5012924	5013805	5013842	(m)
置	№	_	2	8	4	5	9	
		2						

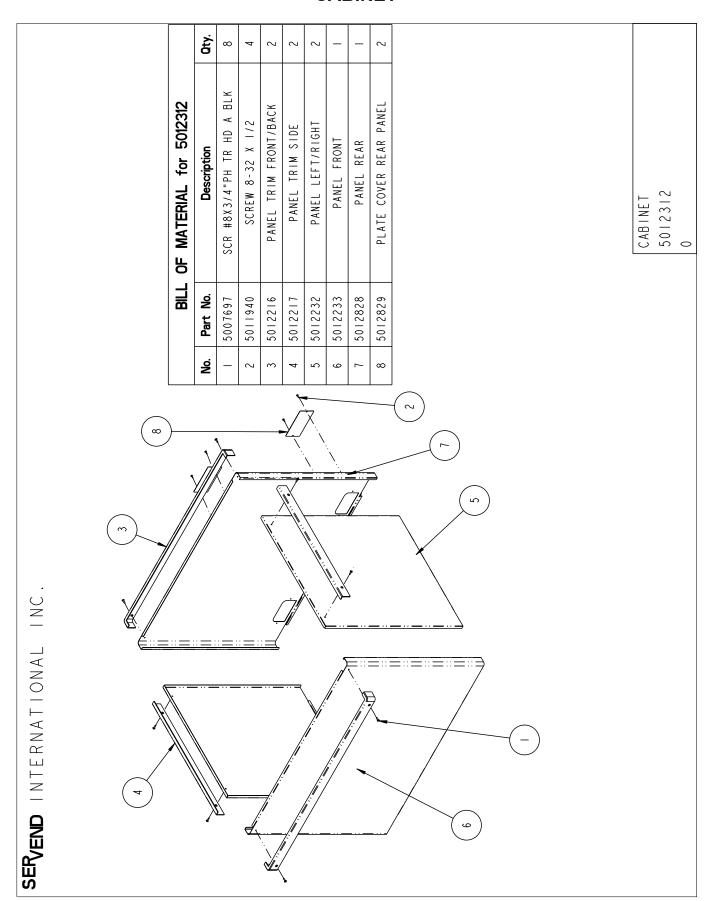


120V CUBER



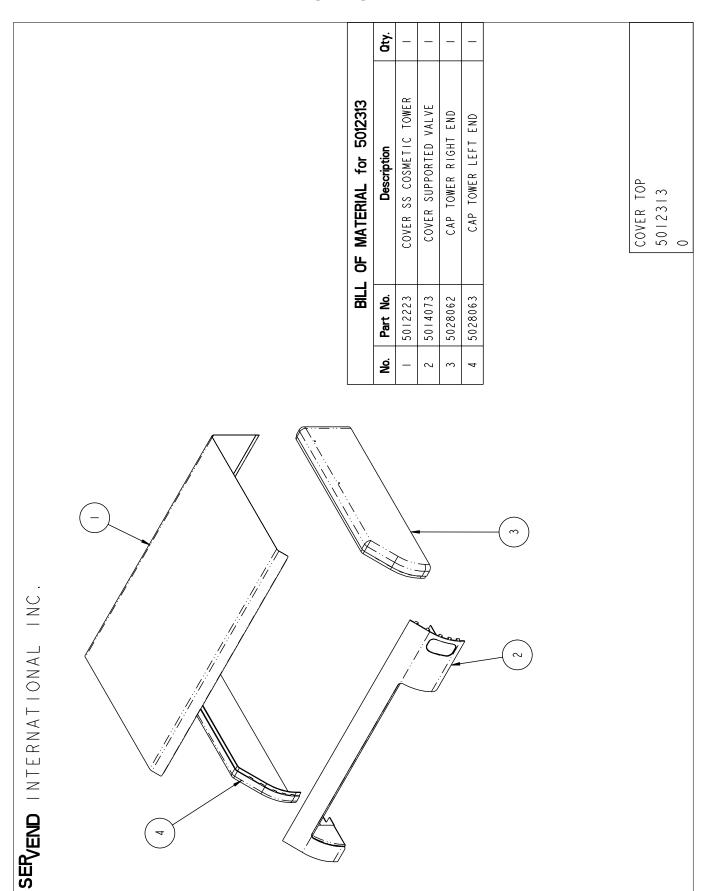


CABINET



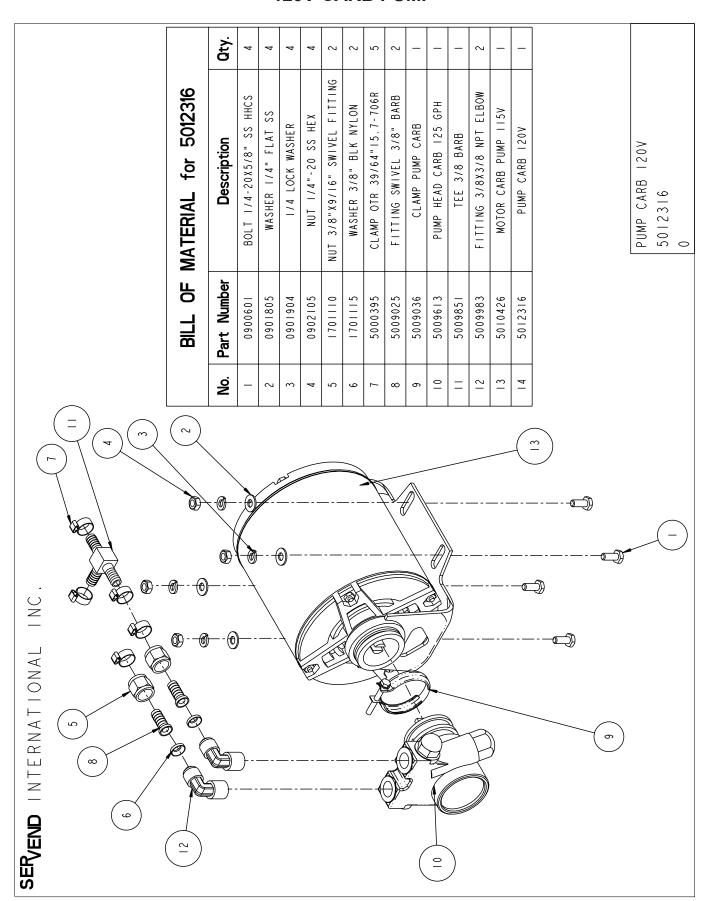


TOP COVER



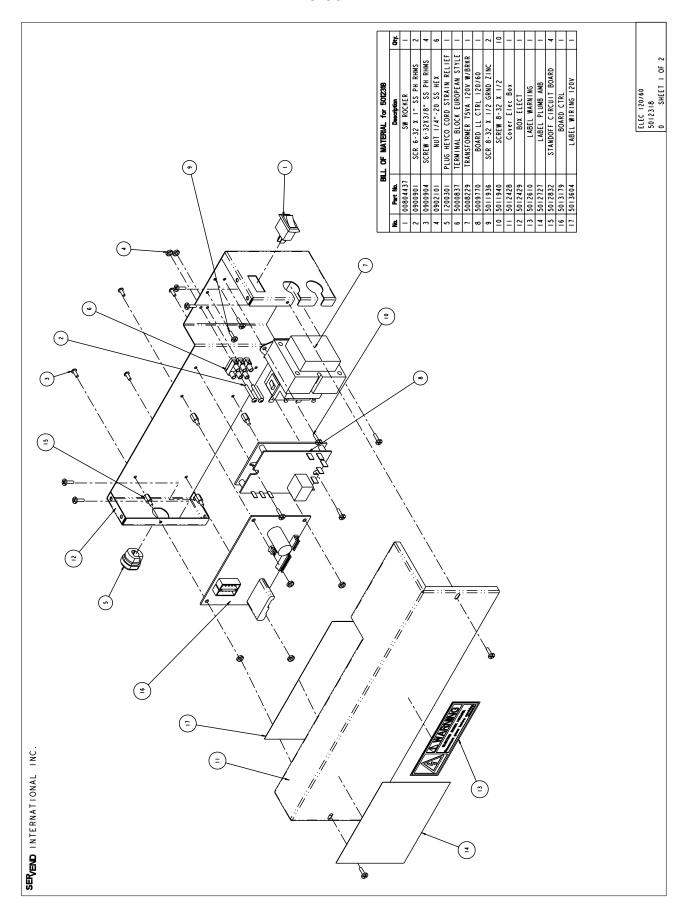


120V CARB PUMP



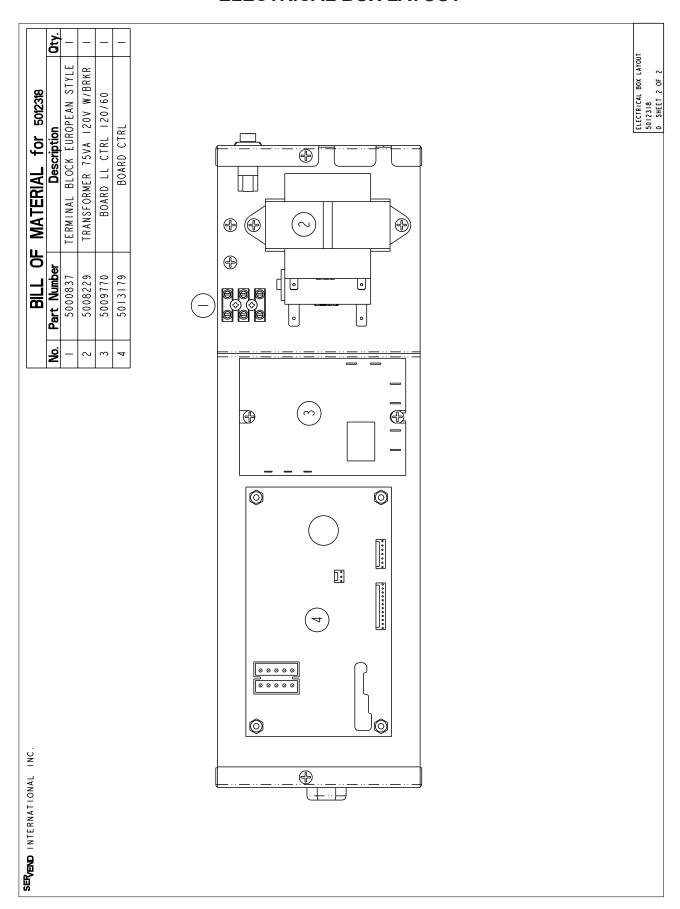


120/60 ELEC



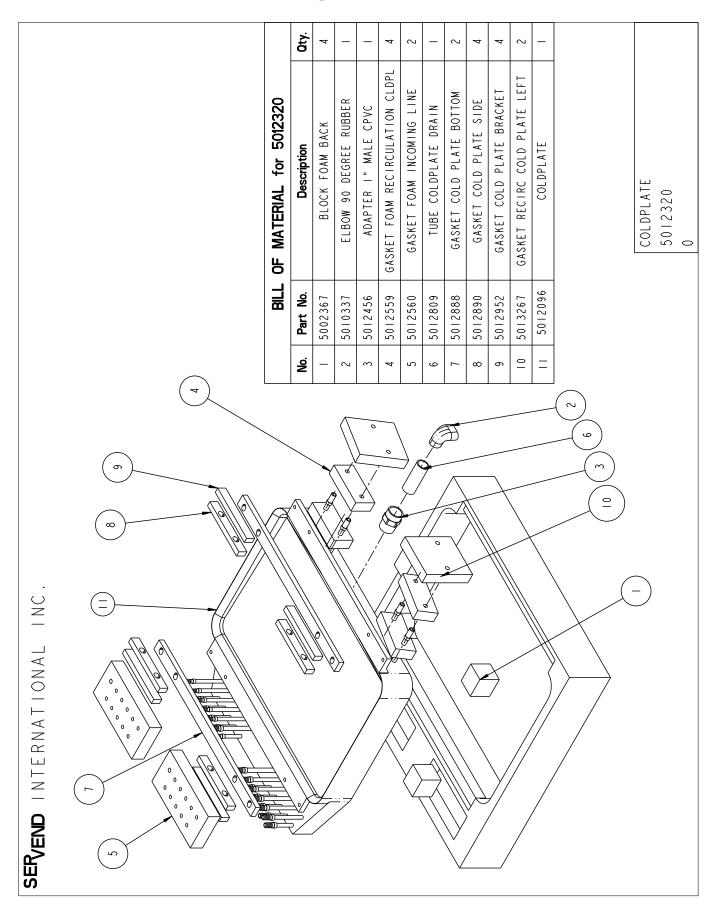


ELECTRICAL BOX LAYOUT





COLDPLATE

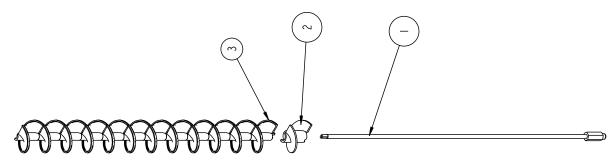




AUGER

1	BILL OF	BILL OF MATERIAL for 5012321		
	No. Part Number	Description	Qty.	
	5012211	ROD AUGER	_	
	5013690	FLIGHT AUGER BOTTOM	-	
	5012092	FLIGHT AUGER	12	

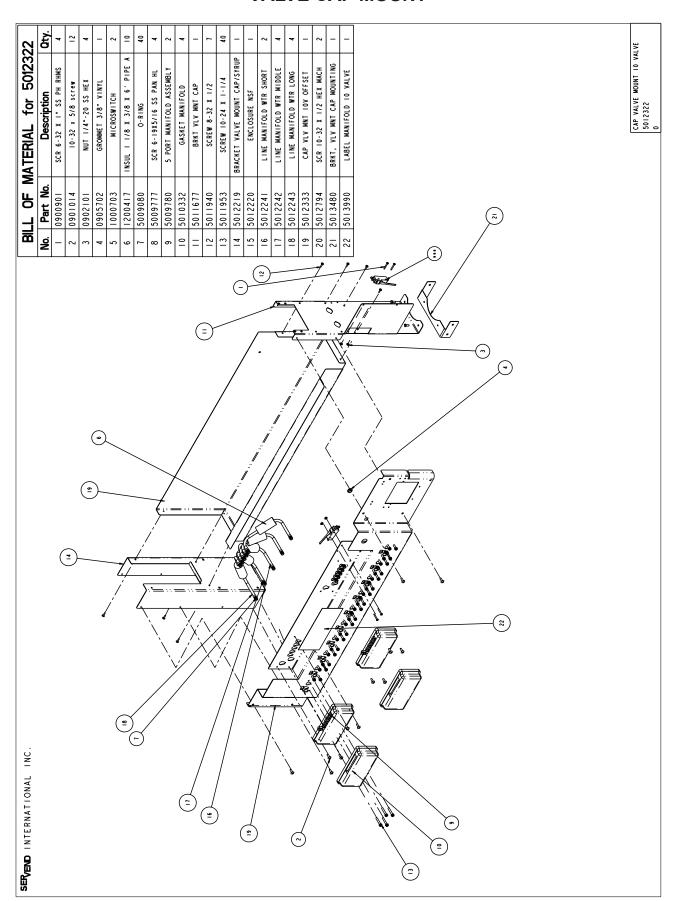
AUGER 5012321



SERVEND INTERNATIONAL INC

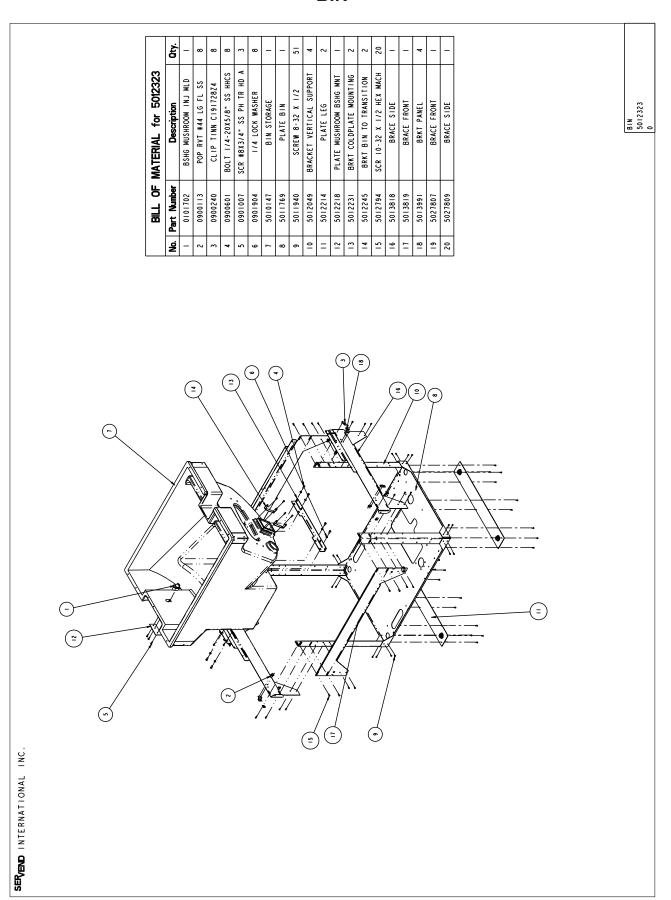


VALVE CAP MOUNT



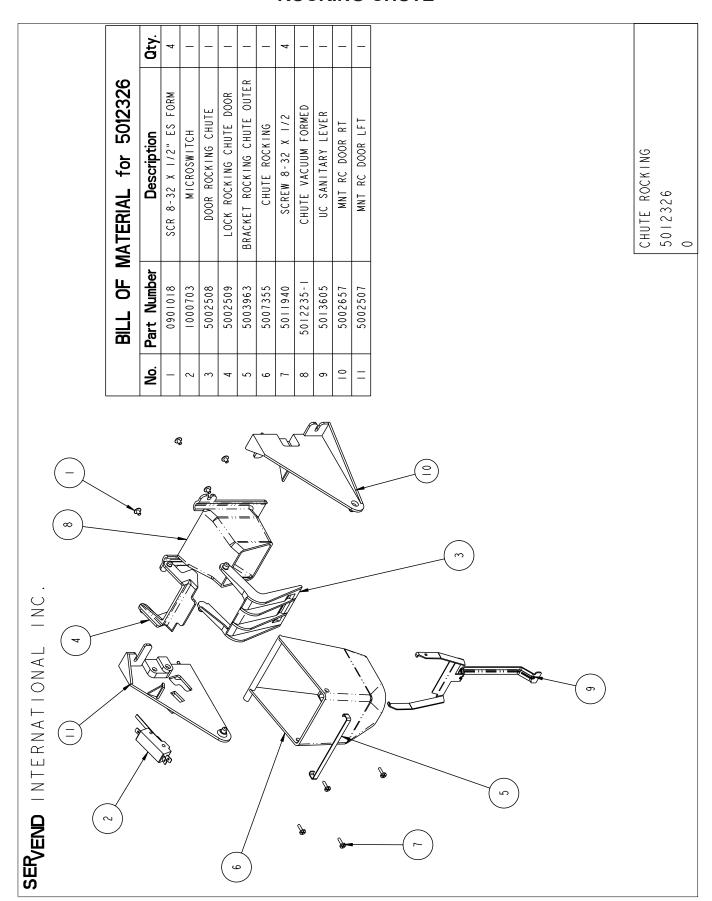


BIN





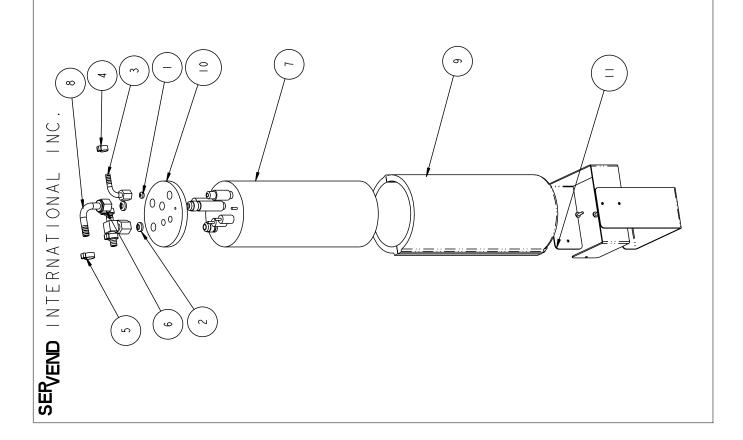
ROCKING CHUTE



CARBONATOR TANK ASSEMBLY

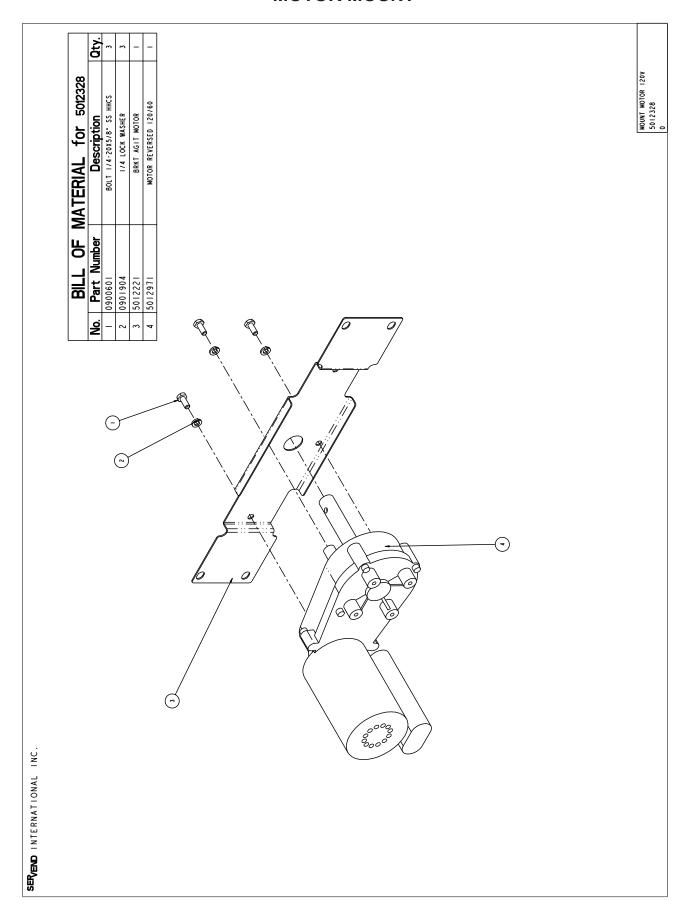
No. Part Number 1 1701113 2 1701115 3 1701150 N 4 1701301 6 5010143 F 6 50101446 8 5010781 F	BILL OF MATERIAL for 5012327	
1701113 1701115 1701150 1701301 5000395 5010143 501046 5010781	Description	Qty.
1701115 1701150 1701301 5000395 5010143 501046 5010781	WASHER 3/8" BLK NYLON	_
1701150 1701301 5000395 5010143 5010446 5010781	WASHER 3/8" BLK NYLON 2	2
5000395 5010143 5010446 5010781 5011894	NUT 1/4X3/8 90 D SWVL W/E	_
5000395 5010143 5010446 5010781 5011894	CLAMP OTR 1/2" 13.3-706R 1	_
5010143 5010446 5010781 5011894	CLAMP OTR 39/64"15.7-706R 3	m
5010446 5010781 5011894	FITTING SWVL 3/8 BARB TEE	_
5010781	TANK CARB VERT 4"X10"	_
	FITTING 3/8 BARB SW/ELBOW I	_
	INSUL CARB TANK WRAP	_
10 5011895	INSUL CARB TANK TOP	_
11 5012226	BRKT CARB TANK MNTG	_

TANK CARBONATOR ASSY 5012327





MOTOR MOUNT





ROCKING CHUTE

	BILL OF	BILL OF MATERIAL for 5013779	
No.	Part Number	Description	Qty.
	1701115	WASHER 3/8" BLK NYLON	2
2	5000395	CLAMP OTR 39/64"15.7-706R	2
8	5010904	FITTING 3/8 X 3/8 MF ADAPTOR	2
4	5013722	COIL PRECHILL	_
5	5013780	BASE PRE CHILLER	_
9	5013781	PRE CHILL TUBE CAP	-
7	5013826	PRE CHILL TUBE CAP	-
8	5013886	PRE CHILL TUBE	_

EXCHANGER HEAT PRE CHILL 5013779

SERVEND INTERNATIONAL INC.



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In accordance with our policy of continuous product development and improvement, this information is subject to change at any time without notice.