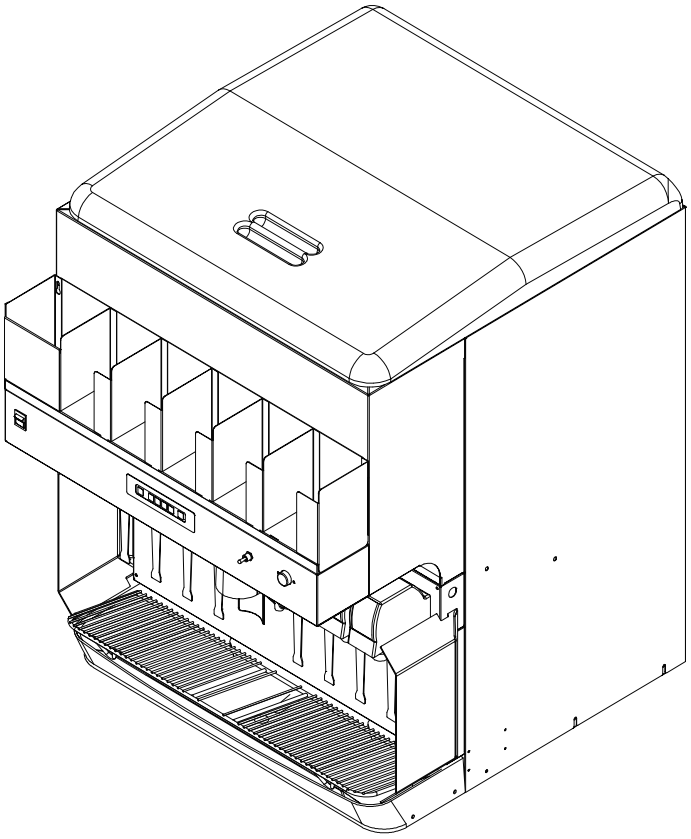
ENDURO ICE/BEVERAGE DISPENSER

ED 250 BCP

Operator's Manual



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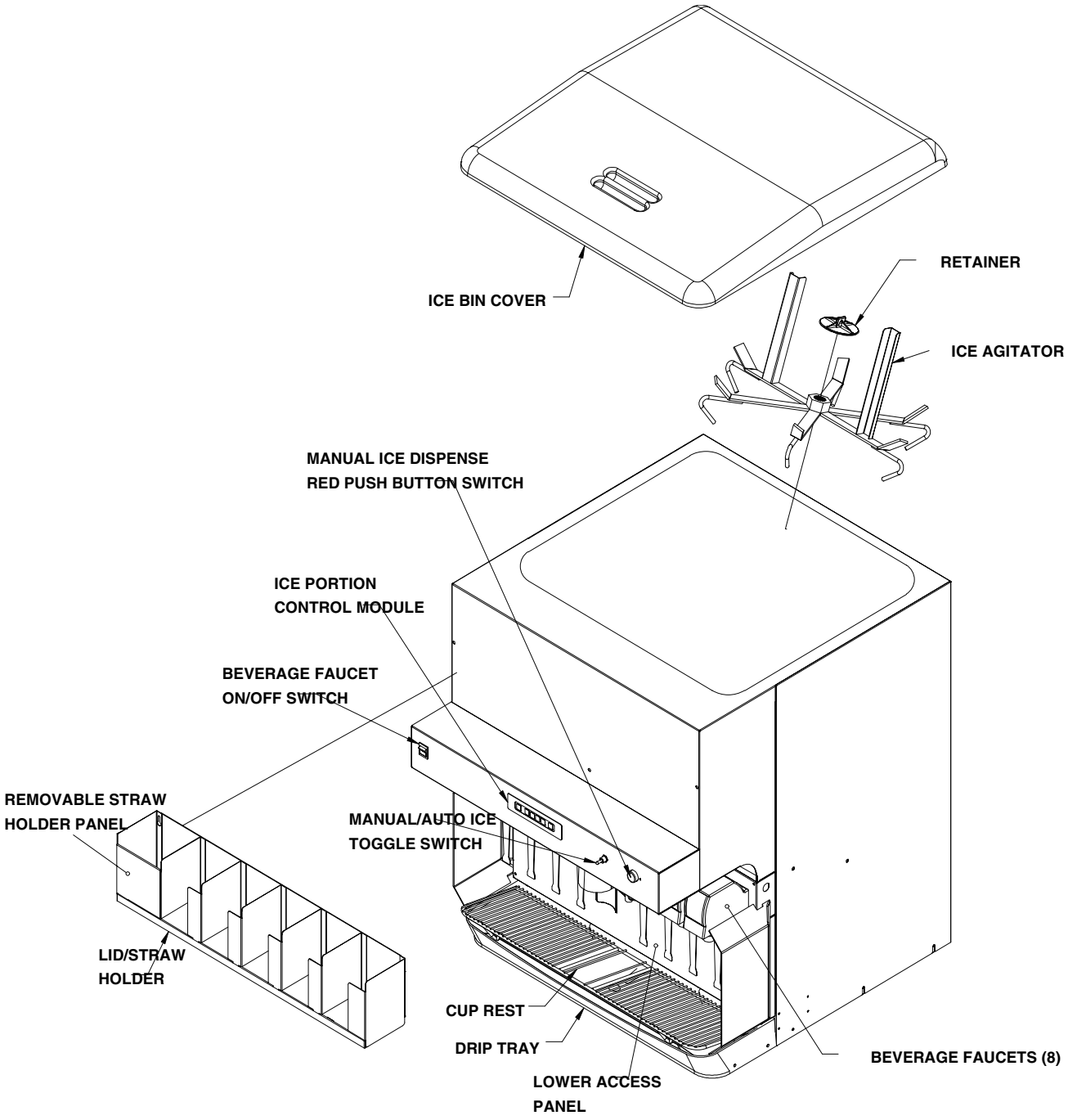

FIGURE 1. PARTS IDENTIFICATION

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START-UP AND OPERATING INSTRUCTIONS

Fill the hopper with ice 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.

To dispense ice, hold cup under ice chute and press the appropriate size button on the ice portion control located above the ice chute. An extra ice portion may be obtained by pressing the increase key before pressing the button.

For beverage dispensing, place a cup on the cup rest against the faucet lever of the desired flavor. Beverage will be dispensed automatically filling the cup and shutting off. A delay feature is provided in the faucet controller to "top-of" the drink after shut off.

CAUTION: 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 at the unit at all times.

If the dispenser fails to dispense ice or beverage, see troubleshooting guide.

CONTROLS AND ELECTRICAL

Portion Control Panel

The portion control panel on the Pro ED Fast Gate has several functions including dispensing 4 programmed ice portions for 4 cup sizes, programming, and cleaning. The portion control panel and its functionality are described in the following illustration:

Portion Control Panel Operations

Light Color	Explanation	Actions That Can Be Taken
Green	Normal Operation	Press any **CUP SIZE** for portioned ice. — or — Press **INCREASE** and then **CUP SIZE** for extra ice.
Green - flashing	Normal Operation Chute Refilling	Wait until chute has refilled and press desired **CUP SIZE** again.
Red then **Yellow**	Clean Mode	To enter Clean Mode simultaneously press **INCREASE** and **DECREASE.** Press any **CUP SIZE** to empty chute, then remove chute for cleaning. When chute is replaced, unit will automatically return to normal operation after one minute, or **INCREASE** and **DECREASE** can simultaneously pressed 3 times.

Ice Portion Control Set Up and Adjustment Procedure

Light Color		Explanation	Actions That Can Be Taken
Step 1. Fill the Ice Chute	**Yellow Flashing**	Chute Agitation Refill Time	To enter Agitation Adjustment Mode simultaneously press **INCREASE** and **DECREASE** three times then press and hold **INCREASE** and **DECREASE** for 3 seconds. Press any **CUP SIZE** to select a preset agitation time (small=shortest time, X-Large=longest time, ect) To exit Agitation Refill Time Adjustment Mode simultaneously press **INCREASE** and **DECREASE.** NOTE: Once in a mode the light will blink to indicate the refill time: 1 blink for the shortest refill time-4 blinks for the longest refill. The factory recommendation is 2 blinks. NOTE: Larger ice portions require more time to refill.

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Light Color		Explanation	Actions That Can Be Taken
Step 2. Set portion level for each size cup	**Yellow**	Ice Portion Adjustment	To enter Portion Adjustment Mode simultaneously press **INCREASE** and **DECREASE** twice. Press and hold **CUP SIZE** to be adjusted and while pressing **INCREASE** or **DECREASE** to change portion size (5 millisecond per pulse). NOTE: Make sure the light blinks as the buttons are pressed. The light will flash green for 5 seconds. While the green light is flashing the ice portion can be tested by pressing the **CUP SIZE** again. To exit Portion Adjustment Mode simultaneously press **INCREASE** and **DECREASE** two times.
Step 3. If desired, set the extra ice portion adjustment	**Red**	Extra Ice Portion Adjustment	To enter Extra Ice Adjustment Mode simultaneously press **INCREASE** and **DECREASE** three times. Press and hold the **CUP SIZE** to be adjusted and press **INCREASE** or **DECREASE** to change portion size (5 millisecond per pulse). NOTE: Make sure the light blinks as the buttons are pressed. To exit Extra Ice Portion Adjustment Mode simultaneously press **INCREASE** and **DECREASE**.

NOTE: Consult store manager on desired ice level in each size cup.

CAUTION: The gate closes immediately when the toggle switch is moved to the auto position. Do not place fingers or foreign objects into the ice chute when operating the toggle switch.

MAINTENANCE

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

DAILY (OR AS REQUIRED)

Remove foreign material from vending area drip tray to prevent drain blockage.

WEEKLY (OR AS REQUIRED)

Clean vending area. Check for proper water drainage from the vending area drip tray.

MONTHLY

Clean and sanitize the hopper interior and beverage system if applicable (see CLEANING INSTRUCTIONS).

CLEANING INSTRUCTIONS

WARNING: Disconnect Power Before Cleaning! Do not use metal scrapers, sharp objects or abrasives on the ice storage hopper, top cover, ice chute, and air cylinder access cover as damage may result. Do not use solvents or other cleaning agents, as they may attack the plastic material.

Soap solution - use a mixture of mild detergent and warm 100 degrees F potable water.

Sanitizing solution - use 1/2 ounce of household bleach in 1 gallon of potable water. Preparing the sanitizing solution to this ratio will create a solution of 200 PPM.

DISPENSER

1. CLEANING EXTERIOR SURFACES

IMPORTANT: Perform the following daily.

A. Remove the cup rest from drip tray.
B. Wash the drip tray with soap solution. Rinse with clean water and allow solution to run down the drain.
C. Wash cup rest with soap solution and rinse in clean water. Install the cup rest into the drip tray.
D. Clean all exterior surfaces with soap solution and rinse in clean water.

2. CLEANING INTERIOR SURFACES

CAUTION: When pouring liquid into the hopper, do not exceed the rate of 1/2 gallon per minute.

CAUTION: It will be necessary to have electrical power on to the unit in order to remove any remaining ice from the storage hopper and ice chute. After the ice has been removed, disconnect electrical power to the unit before proceeding with cleaning and sanitizing.

A. Dispense all ice from the hopper and ice chute by switching the auto/manual toggle switch to the "manual" position. The gate slide will then be held open to empty the ice chute. Depress the red manual pushbutton switch to dispense all remaining ice from the hopper. Discard the ice. Return the toggle switch to the "auto" position to close the gate slide.
B. **IMPORTANT: Disconnect electrical power to the unit for the remainder of the cleaning and** sanitizing procedure.
C. Cold plate inspection before cleaning.
   1. Remove splash panel.
   2. Remove the plastic cold plate access cover to expose the cold plate.
   3. Remove any remaining ice from the cold plate surface and discard.
   4. Locate and remove any debris from the cold plate, drain trough and make certain that the drain holes are not clogged.
   5. Reinstall the cold platecover.

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6. Reinstall the splash panel.

D. Remove the plastic lid, agitator retainer (turn counterclockwise to unscrew), and agitator from the ice storage hopper.

E. Using a long handle nylon bristle brush, clean the interior of the hopper and cold plate with the soap solution. The cold plate can be reached by going through the ice opening on the hopper bottom. Make certain to reach the entire surface of the cold plate including the corners. Thoroughly rinse the hopper interior and cold plate with clean potable water.

F. Clean the agitator, agitator retainer, and lid with the soap solution. Thoroughly rinse with clean potable water. Reassemble the agitator and retainer in the hopper. Make sure that the retainer is secured tightly (turn clockwise to screw in place).

G. Clean and sanitize the ice chute as described below:

1. Remove the ice chute cover (snap-fit) by spreading the sides apart slightly to disengage the tabs in the cover from the ice chute and sliding down to remove the cover. The ice chute (rear half) and the ice gate are now exposed for cleaning.

2. Remove the black plastic access cover for the air cylinder from the splash panel (2 thumbscrews).

3. Wash the ice chute cover, ice chute (rear half), ice gate, and air cylinder access cover with the soap solution. Thoroughly rinse with clean potable water.

4. Using a mechanical spray bottle filled with sanitizing solution, spray these parts with sanitizer. Allow to air dry.

5. Reassemble the ice chute cover and air cylinder access cover.

H. Using the mechanical spray bottle filled with sanitizing solution, spray the entire hopper interior, agitator assembly, and hopper lid. Allow to air dry. Replace the lid on the unit.

BEVERAGE SYSTEM

CLEANING

Soap solution - Use a mixture of mild detergent and warm 100 degrees F potable water.

Sanitizing solution - Use 1/2 ounce of household bleach in 1 gallon of potable water. Preparing the sanitizing solution to this ratio will provide the required solution of 200 PPM.

Cleaning tank - Fill clean, empty tank with a mixture of mild detergent and five (5) gallons of warm 120 degrees F potable water.

Cleaning Dispensing Valves

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

Sanitizing

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

Sanitize tank systems, Post-Mix and Pre-Mix

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 120 degrees F potable water.
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_2 system.
8. Energize beverage faucet until chlorine sanitizing solution is dispensed through the faucet. Flush at least two (2) cups of liquid to insure 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. For post-mix valves, remove the nozzle and syrup diffuser and clean them in a mild soap solution. Rinse with clean water, then reinstall the nozzle and syrup diffuser on the valve.
12. For pre-mix valves, disconnect all product tubes from the tank of sanitizing solution and then open the valves to allow the pressure to be relieved. Remove the valves from the dispenser, disassemble and wash thoroughly in a mild soap solution.
13. Rinse the parts in clean water, reassemble the valve and reconnect it to the dispenser.
14. Discard the tank of sanitizing solution and reconnect the product (syrup or pre-mix) tanks. Operate the valves until all sanitizer has been flushed from the system and only product (syrup or pre-mix) 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 brus**h). Rinse with clean water.
4. Using a plastic pail, prepare approximately five (5) gallons of sanitizing solution.

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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.

WARNING: If repairs are to be made to the beverage system, remove quick disconnects from the applicable product tank, then relieve the system pressure before proceeding. If repairs are to be made to the C_{O2} system, stop dispensing, shut off the C_{O2} supply, then relieve the system pressure before proceeding. If repairs are to be made to the ice dispensing system, make sure electrical power is disconnected from the unit.

TROUBLESHOOTING

IMPORTANT: Only qualified personnel should service internal components or electrical wiring.

WARNING: If repairs are to be made to the beverage system, remove quick disconnects from the applicable product tank, then relieve the system pressure before proceeding. If repairs are to be made to the C_{O2} system, stop dispensing, shut off the C_{O2} supply, then relieve the system pressure before proceeding. If repairs are to be made to the ice dispensing system, make sure electrical power is disconnected from the unit.

TROUBLE	PROBABLE CAUSE	REMEDY
NOTE: 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 symptom(s) to aid in locating the defect.		
BLOWN FUSE OR CIRCUIT BREAKER.	A. Short circuit in wiring (115V circuit).	A. Replace defective wiring.
	B. Defective agitator motor.	B. Replace agitator motor.
SLUSHY ICE. WATER IN HOPPER	A. Blocked drain.	A. Open-up/flush out drain.
	B. Unit not level.	B. Level unit.
	C. Poor ice quality due to water quality or ice maker problems.	C. Install water filter system. For Icemaker problems, consult ice-maker manual.
	D. Improper use of flaked ice.	D. Replaced flaked ice with "cube style ice (see page 2, Unit Description).
BEVERAGES DO NOT DISPENSE.	A. No 24 volt power to faucets.	A. Check that beverage switch is "on". Check 24V transformers.
	B. No CO2 pressure.	B. Check CO2 regulator. Check CO2 tank pressure.
BEVERAGES TOO SWEET.	A. Carbonator not working.	A. Check carbonator.
	B. No CO2 pressure in carbonator.	B. Check CO2 regulator. Check CO2 tank pressure.
	C. Faucet brix requires adjusting.	C. Brix Faucet.
BEVERAGES NOT SWEET ENOUGH.	A. Empty syrup tank.	A. Refill syrup tank.
	B. Faucet Brix requires adjusting.	B. Brix Faucet.
BEVERAGES NOT COLD (UNITS WITH BUILD-IN COLD PLATE).	A. Unit standing with no ice in hopper - no ice in cold plate cabinet.	A. Refill hopper with ice.
NOTE: Contact your local syrup or beverage equipment distributor for additional information and trouble shooting of beverage system.		
NO ICE DISPENSED FROM ICE PORTION CONTROLLER	A. Insufficient ice supply in ice bin.	A. Replenish ice supply as required.
	B. Ice in ice bin bridged (stuck together).	B. Gently tap on ice to break it loose.
	C. No electrical power to dispenser.	C. Plug in dispenser power cord, or check fuse or circuit breaker.
	D. Insufficient or no CO2 supply to dispenser.	D. Restore CO2 supply to dispenser.
	E. Ice chute cover not properly installed.	E. Make sure that cover is "snapped" into place.
	F. Defective ice chute interlock switch.	F. Replace interlock switch.
	G. Defective interlock relay.	G. Replace relay.

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TROUBLE	PROBABLE CAUSE	REMEDY
NO ICE DISPENSED FROM ICE PORTION CONTROLLER (Continued)	H. Defective 24V transformer.	H. Replace transformer.
	I. Defective portion controller.	I. Replace controller.
	J. Defective ice gate cylinder.	J. Replace cylinder.
	K. Defective ice gate solenoid valve.	K. Replace solenoid valve.
	L. Agitation relay wiring incorrect.	L. Red wire should be connected to "+" terminal (#3) of relay coil.
	M. Defective agitation relay.	M. Replace relay.
	N. Defective agitator motor start capacitor or start relay.	N. Replace defective component.
NO ICE DISPENSED FROM MANUAL ICE DISPENSE PUSHBUTTON SWITCH	A. Manual/Auto toggle switch in "Auto" position.	A. Move toggle switch to "Manual" position.
	B. Insufficient or no CO2 supply to dispenser.	B. Restore CO2 supply to dispenser.
	C. Defective 24VAC transformer.	C. Replace Transformer.
	D. Defective manual override solenoid valve.	D. Replace valve.
	E. Defective manual ice dispense pushbutton switch.	E. Replace switch.
	F. Defective agitator motor or start capacitor or start relay.	F. Replace defective component.
	G. Defective ice gate cylinder.	G. Replace cylinder.
ICE DISPENSING DURING AUTOMATIC AGITATION	A. Manual/Auto toggle switch in "manual" position.	A. Move toggle switch to "auto" position.
	B. Defective ice gate cylinder.	B. Replace cylinder.
	C. Defective ice gate solenoid valve.	C. Replace valve.
	D. Defective portion controller.	D. Replace controller.

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, Remcor or Wilshire product, in your country, please write, fax or telephone the IMI Cornelius office nearest you. Please provide the equipment model number, serial number and the date of purchase.

IMI Cornelius Offices

AUSTRALIA • P.O. 210, • RIVERWOOD, • NSW 2210, AUSTRALIA • (61) 2 533 3122 • FAX (61) 2 534 2166

AUSTRIA • AM LANGEN FELDE 32 • A-1222 • VIENNA, AUSTRIA • (43) 1 233 520 • FAX (43) 1-2335-2930

BELGIUM • BOSKAPELLEI 122 • B-2930 BRAASCHAAT, BELGIUM • (32) 3 664 0552 • FAX (32) 3 665 2307

BRAZIL • RUA ITAOCARA 97 • TOMAS COELHO • RIO DE JANEIRO, BRAZIL • (55) 21 591 7150 • FAX (55) 21 593 1829

ENGLAND • TYTHING ROAD ALCESTER • WARWICKSHIRE, B49 6 EU, ENGLAND • (44) 789 763 101 • FAX (44) 789 763 644

FRANCE • 71 ROUTE DE ST. DENIS • F-95170 DEUIL LA BARRE • PARIS, FRANCE • (33) 1 34 28 6200 • FAX (33) 1 34 28 6201

GERMANY • CARL LEVERKUS STRASSE 15 • D-4018 LANGENFELD, GERMANY • (49) 2173 7930 • FAX (49) 2173 77 438

GREECE • 488 MESSOGION AVENUE • AGIA PARASKEVI • 153 42 • ATHENS, GREECE • (30) 1 600 1073 • FAX (30) 1 601 2491

HONG KONG • 1104 TAIKOTSUI CENTRE • 11-15 KOK CHEUNG ST • TAIKOKTSUE, HONG KONG • (852) 789 9882 • FAX (852) 391 6222

ITALY • VIA PELLIZZARI 11 • 1-20059 • VIMARCATE, ITALY • (39) 39 608 0817 • FAX (39) 39 608 0814

NEW ZEALAND • 20 LANSFORD CRES. • P.O. BOX 19-044 AVONDALE • AUCKLAND 7, NEW ZEALAND • (64) 9 8200 357 • FAX (64) 9 8200 361

SINGAPORE • 16 TUAS STREET • SINGAPORE 2263 • (65) 862 5542 • FAX (65) 862 5604

SPAIN • POLIGONO INDUSTRAIL • RIERA DEL FONOLLAR • E-08830 SANT BOI DE LLOBREGAT • BARCELONA, SPAIN • (34) 3 640 2839 • FAX (34) 3 654 3379

USA • ONE CORNELIUS PLACE • ANOKA, MINNESOTA • (763) 421-6120 • FAX (763) 422-3255

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IMI Cornelius Inc.
One Cornelius Place
Anoka, MN 55303-1592
U.S.A.