

Operation Manual & Parts List

Glastender®

A Family Company Manufacturing
In The USA Since 1969

BOTTLE DISINTEGRATION SYSTEM

Glastender BDS Operation and Maintenance Video -
<https://youtu.be/EJT6llb4Kas?si=TYKDUUnaqKgA7S53>

This video describes the operation and general maintenance of the Glastender Bottle Disintegration System.



Glastender, Inc. · 5400 North Michigan Road · Saginaw, MI · 48604-9780
800.748.0423 · 989.752.4275 · Fax 989.752.4444 · <https://glastender.com>



Safety and Grounding Instructions

IMPORTANT SAFETY INSTRUCTIONS

WARNING – When using electric appliances, basic precautions should always be followed, including the following:

- a. Read all the instructions before using the appliance.
- b. To reduce the risk of injury, close supervision is necessary when an appliance is used near children.
- c. Do not contact moving parts.
- d. Only use attachments recommended or sold by the manufacturer.
- e. Do not use outdoors.
- f. – To disconnect, turn all controls to the off (“O”) position, then remove plug from outlet.
– Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
– Unplug from outlet when not in use and before servicing or cleaning.
– Do not operate any appliance with a damaged cord or plug, or after the appliance malfunctions or is dropped or damaged in any manner. Return appliance to the nearest authorized service facility for examination, repair, or electrical or mechanical adjustment.
- g. For a grounded appliance – Connect to a properly grounded outlet only. See Grounding Instructions.
- h. To Reduce the Risk of Electric Shock – Connect to a receptacle that is protected by a ground fault circuit interrupter (GFCI).

SAVE THESE INSTRUCTIONS

GROUNDING INSTRUCTIONS

This appliance must be grounded. In the event of malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

DANGER – Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal. Check with a qualified electrician or serviceman if the grounding instructions are not completely understood, or if in doubt as to whether the appliance is properly grounded. Do not modify the plug provided with the appliance – if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

Index

<u>Topic</u>	<u>Page</u>
Safety and Grounding Instructions.....	1
Introduction.....	2
What is a Bottle Disintegration System (BDS)?.....	2
Utility Requirements and Connections.....	3
Uncrating and Assembly Instructions.....	3
Operating Instructions.....	4
Cleaning Instructions.....	5 - 6
Wiring Diagram.....	7
BDS Parts List.....	8 - 10
Accessories.....	10
220V Parts List.....	10
Troubleshooting Guide.....	11

Terms and Conditions

<https://www.glastender.com/support/documents/policies/terms-and-conditions>

Warranty

IMPORTANT !! Attention Service Companies **IMPORTANT !!**

Please review the important warranty information found here:

<https://www.glastender.com/support/documents/warranty/warranty-statement-form>

If you believe a service call should be covered by the factory, please call 800-748-0423 for authorization 8AM - 5PM EST, Monday through Friday.

Introduction

This manual describes the operational features for the BDS model Bottle Disintegration System. Please review this information before attempting installation and operations. Long term, trouble-free operations will follow if good housekeeping and maintenance procedures are followed. Thank you for selecting Glastender, Inc. products.

What is a Bottle Disintegration System?

It is simply a piece of machinery that crushes or breaks down glass bottles, reducing the area needed to store empty containers and minimizing the volume for disposal purposes. When the ON/OFF switch is on, a motor will run causing the crusher bar to spin rapidly. Glass bottles are introduced into the machine through the bottle chute. When they come in contact with the crusher bar, they are reduced to small pieces of glass called cullet. The cullet falls down the drum and into the bucket in the bottom enclosure of the machine.

For the machine to function normally:

- The bucket must be in place and seated fully in the unit
- The door must be closed
- The covers must be in place
- The crusher bar must be spinning at top speed (allow a minimum of 3 seconds before inserting a bottle)

Utility Requirements and Connections

Electrical: 120 V single phase, 60 Hz, 9' grounded cord included. A dedicated 15 amp circuit is recommended. Power requirements - 9.0 amps.

Uncrating and Start-up Instructions

The BDS is shipped fully assembled in one carton. Refer to photo right to identify the following:

1. Top cover
2. Door
3. Chute opening
4. Baffles
5. Indicator lights and ON/OFF switch
6. Casters

Start-up instructions:

1. Remove all packaging from around the main section.
2. Remove BDS unit from wood pallet and place on a firm, level surface.
3. Remove all plastic protective paper from all stainless steel parts.
4. The BDS must be installed in accordance with local country electrical codes. A standard electrical supply (120VAC only, 60HZ, 9.0A), properly grounded in accordance with the National Electrical Code and local codes and ordinances, is required.
5. Plug in BDS, place in position. BDS unit should be placed up to a wall against the back bumpers (see Figure 1).
6. Lock the front casters, open the door, and assure that the bucket is fully seated in the unit.

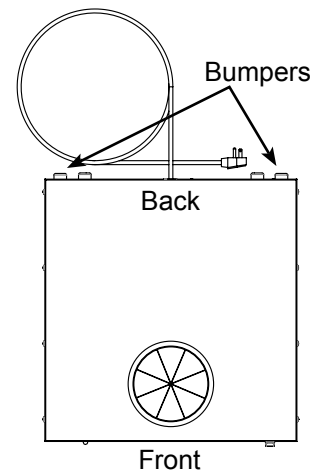


Figure 1



1. Unit must be located on a firm and level surface.
2. A 1/2" clearance above top is required for proper air flow to avoid overheating the motor.
3. Unit must be installed in an area protected from the elements such as rain, water spray, or drips.
4. Unit must NOT be located next to ovens, grills, or other high heat sources.

Operating Instructions



1. Do NOT reach into the bottle chute while machine is running and plugged in.
2. Do NOT attempt to un-jam or repair the machine while it is plugged in.
3. Do NOT reach into the drum opening while the machine is running and plugged in.
4. Do NOT place plastic bags in the bucket.
5. Only use bucket supplied.
6. Do NOT place metal caps, plastics, or ceramics into the Bottle Chute.
7. Do NOT put hand into the bucket and into cullet.
8. Only Glastender, Inc. replacement parts should be used. Components from other suppliers may result in machine malfunctions.

Operating instructions:

1. Turn the machine on by toggling the ON/OFF switch. The green light will illuminate to signify the unit is on and running. Wait a minimum of three (3) seconds for the crusher bar to reach maximum speed.
2. Feed a bottle through the top chute opening. A quick thrust is required to get the bottle through the chute baffles. If desired, you may slowly feed one bottle using the next bottle to push it through the chute. **NOTE:** Although it is safe for your fingertips to be inserted through the top rubber baffles, do NOT reach your hand into the bottle chute!
3. Turn the machine off by toggling the ON/OFF switch when done crushing bottles. **NOTE:** If you intend to remove the bucket, wait a minimum of 60 seconds for the glass particles to settle.
4. Periodically remove the bucket to verify fill level to prevent overflowing.

If the red light is on, turn the machine off and check the following:

1. *Is the bucket properly in place?* Security feature: the unit will not operate when the bucket is not in place. With the bucket handle facing out, move the bucket in place and properly seat into the unit.
2. *Is the door closed?* Security feature: the unit will not operate if the door is open. Close the door completely.

NOTE: For additional assistance please refer to the Trouble Shooting Guide on page 11.

Cleaning Instructions

General Cleaning and Care Instructions for Stainless Steel:

IMPORTANT: Always follow label instructions on cleaning products. Soap, water and a soft cloth or sponge are suggested first unless otherwise noted.

Stainless steel will stain or rust if not cared for properly. Please pay attention to the following guidelines:

- 1. Use the proper tools** – Use non-abrasive tools, such as a soft cloth or plastic cleaning pad. NEVER use steel wool pads, soap filled scouring pads, abrasive cleaners, cleaners containing chlorine, Cooktop Polishing Creme, or gritty washcloths.
- 2. Clean with the polish lines** – Always scrub in a direction that is parallel to the grain or lines in the stainless steel.
- 3. Clean regularly** – Make cleaning easier by doing so frequently to avoid build-up of hard, stubborn stains. Use alkaline, alkaline chlorinated, or non-chloride containing cleaners.
- 4. Rinse and wipe** – Anytime chemicals are used to clean stainless steel, make sure to rinse afterward with clean water and wipe away any standing water.
- 5. Never use hydrochloric acid (muriatic acid) on stainless steel.**

Recommended cleaners for specific situations:

Stainless steel needs to be cleaned for aesthetic considerations and to preserve corrosion resistance. Stainless steel actually thrives with frequent cleaning, and, unlike some other materials, it is impossible to “wear out” stainless steel by excessive cleaning.

Routine cleaning - Use warm water, liquid detergent, ammonia, or all-purpose cleaner. Apply with soft cloth or sponge. Rinse with clean water and dry with a soft cloth.

Food spills - *Clean Immediately.* Use a stainless steel cleaner and polish. Apply with a soft cloth or sponge.

Fingerprints and smears - Use a stainless steel cleaner and polish or glass cleaner. Apply with a soft cloth or sponge.

Hard water spots - Remove with vinegar. Apply with a soft cloth or sponge.

Daily Cleaning:

1. Turn off unit. Wait 60 seconds before opening door.
2. Open door, remove bucket, and empty cullet.
3. Replace bucket and shut door.
4. Clean outside of unit per General Cleaning and Care Instructions for Stainless Steel above.
5. Use a damp cloth to wipe down the top rubber gasket of the bottle chute.

Cleaning Instructions

Odor Control Cleaning:

Use one or a combination of the following steps as needed to control odor.

A. Introduce a multipurpose, water-soluble, malodor counteractant, such as Disappear® by Franklin Maintenance Products. Note: NEVER use chlorine.

1. Pour a few drops of malodor counteractant down the chute opening or pour some in a bottle prior to crushing.

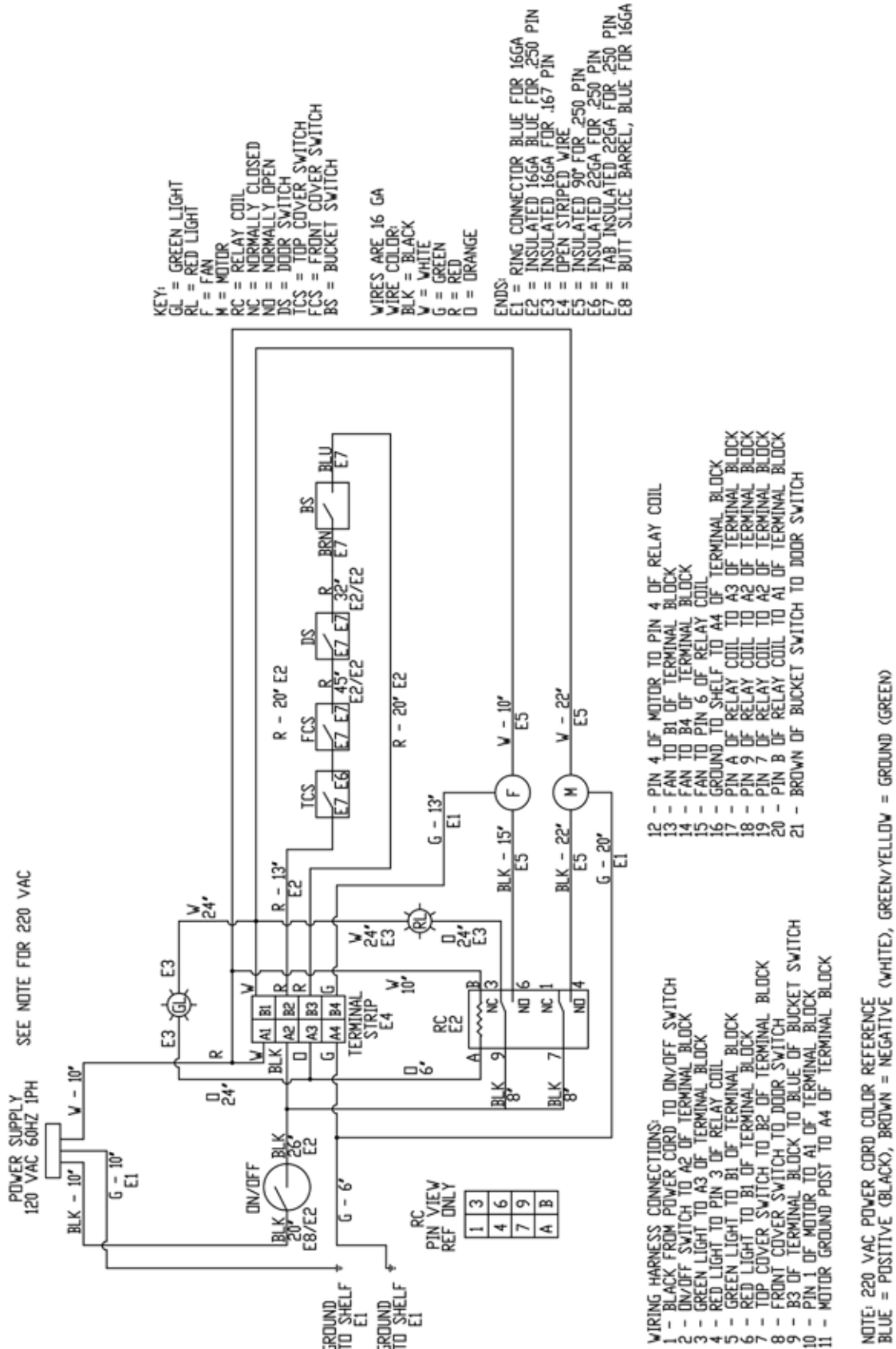
B. Clean interior surfaces:

1. Turn off unit. Wait 60 seconds before opening door.
2. Open door, remove bucket, and empty cullet.
3. Rinse out bucket with hot, soapy water.
4. Vacuum out interior of bottom enclosure.
5. Clean interior of unit per General Cleaning and Care Instructions for Stainless Steel, page 5.
6. Replace bucket and shut door.

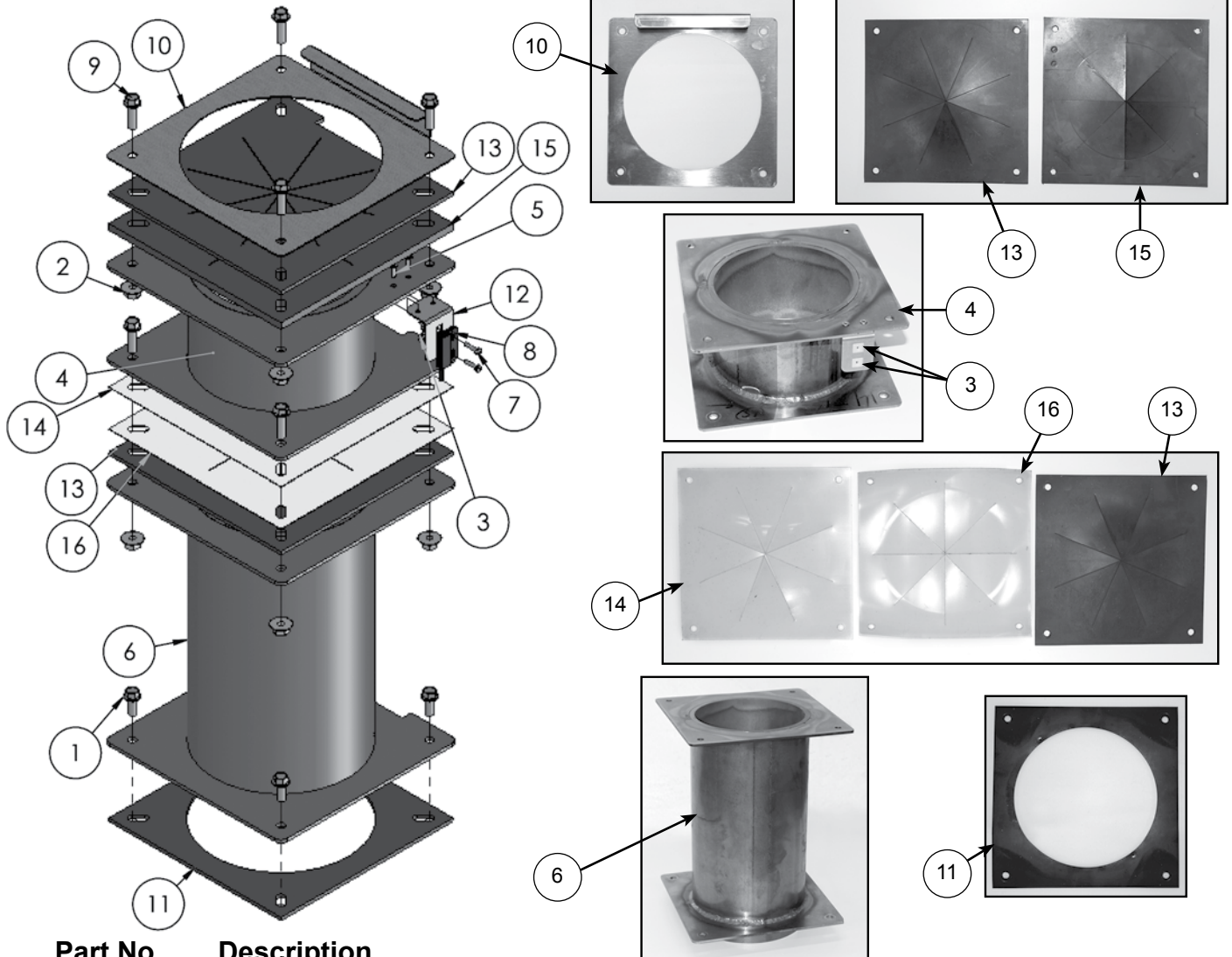
C. Clean bottle chute (NOTE: Reference page 8 for bottle chute assembly diagram):

1. Unplug unit.
2. Remove Top Cover by removing eight (8) screws and lifting off the top cover.
3. To clean the bottle chute:
 - a. Disconnect the safety switch.
 - b. Remove the eight (8) screws and nuts (4 each) for Top Cover of Bottle Chute to Small Tube Weldment and for Small Tube Weldment to Large Tube Weldment.
 - c. Remove the rubber and plastic gaskets and wash with warm, soapy water.
 - d. CAUTION: Do NOT get electrical components wet! Clean per General Cleaning and Care Instructions for Stainless Steel, page 5.
 - e. Re-assemble bottle chute. Note: The middle plastic gasket must be oriented with the star pattern offset of the star pattern of the rubber gasket.
 - f. Re-connect safety switch.
4. Replace top cover and re-install eight (8) screws.
5. Plug in unit.

Wiring Diagram



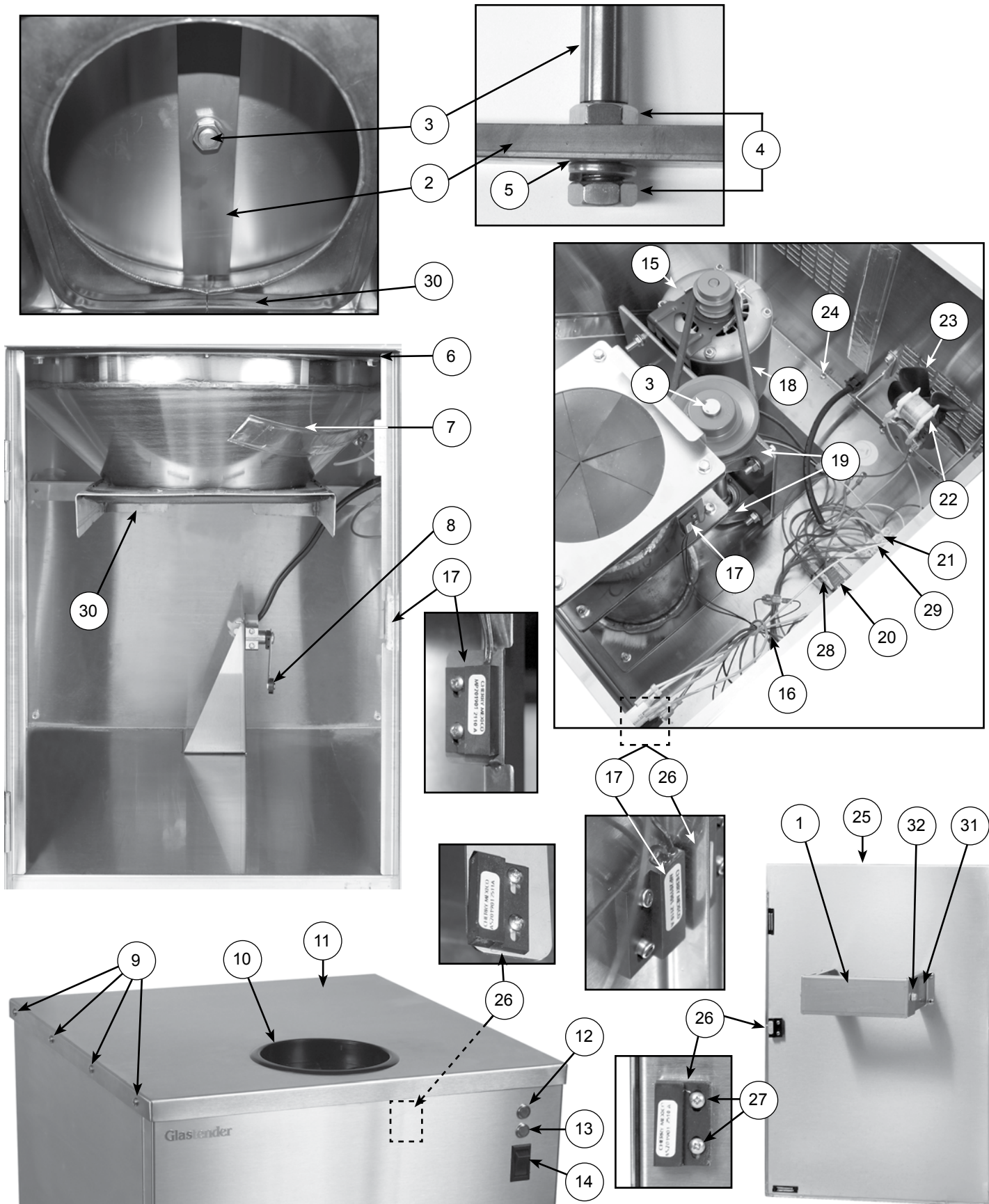
BDS Parts List



Part No.	Description
-----------------	--------------------

1. 00000041	Screw, 1/4-20 x 5/8", whiz lock, zinc (Qty. 4 required)
2. 01000623	Nut, 1/4"-20, large flange serrated nut (Qty. 8 required)
3. 00000257	Grommet, screw, plastic
4. 14000095	Chute assembly, short, BDS
5. 00000178	Pop rivet, stainless 1/8" steel
6. 14000066	Tube weldment, long, BDS
7. 14000062	Screw, 4 x 0.5 pan head, sms, ss
8. 01001428	Sensor, magnetic switch
9. 00000283	Screw, 1/4-20 x 7/8" whiz lock, zinc (Qty. 8 required)
10. 14000013	Chute, top flange
11. 14000081	Gasket, rubber, 1/8" thick, tube bottom
12. 14000012	Bracket, mag. sensor, chute
14000122	Baffle kit, consisting of part #14000020 (2), 14000022, 14000019 and 14000021)
13. 14000020	Baffle, rubber, 1/8" thick, star angled (Qty. 2 required)
14. 14000022	Baffle, plastic liner, star angled
15. 14000019	Baffle, Rubber, 1/4" thick star straight
16. 14000021	Baffle, plastic liner, star straight

BDS Parts List



BDS Parts List

<u>Part No.</u>	<u>Description</u>
1. 14000128	Bucket seating bar
2. 14000034	Crusher bar cr bar hardened
3. 14000032	Drive shaft bar
4. 14000060	Nut, 5/8-11 hex jam stainless steel
5. 14000061	Washer, 5/8 lock stainless steel
6. 14000044	Rubber gasket, drum
7. 14000072	Drum assembly, BDS
8. 14000129	Limit switch, bucket presence
9. 00000039	Screw, 10-32 x 3/8", phillips, truss head, machine, stainless steel
10. 03003291	Grommet, 6", black
11. 14000068	Top cover assembly, BDS (magnetic actuator not included)
12. 01000592	Light, power, green, 125V
13. 07000171	Light, fault indicator, red, 125V
14. 01000549	Switch, on/off
15. 14000039	Motor, 1/3HP 60HZ, 115V
16. 14000092	Wire harness
17. 01001428	Sensor, magnetic switch (3 on unit - top locator, door closed, front cover to side cover)
18. 14000038	Belt (drive) 1/2" x 24"
19. 14000040	Drive shaft bar mount (pillow block, with bearing)
20. 14000043	Relay, controller, 120V, 20A, 8 pm
21. 09000615	Terminal strip, 4-pole 50 amp 300V 18-8 AWG
22. 06001445	Motor, cooling fan, 120V
23. 09000298	Cooling fan blade, 5 blade, black
24. 00000153	Screw, phillips pan head, #3 self drilling, 10 x 1/2, 410 stainless steel
25. 14000069	Door assembly, BDS (magnetic actuator and door bar not included)
26. 01001429	Actuator, magnetic (3 on unit - top locator, door closed, front cover to side cover)
27. 14000062	Screw, 4x.50, phillips, pan head, sms, ss
28. 14000063	Screw, 4 x .375 phillips pan head, sms, ss
29. 14000064	Screw, 4 x .75 phillips pan head, sms, ss
14000053	Bucket, 4-gallon, square
30. 14000120	Bulb seal, bucket
31. 14000211	Bucket seating bar side bracket
32. 00000073	Bolt, 1/4"-2 X 3/8"

220V Parts List

<u>Part No.</u>	<u>Description</u>
01000591	Light, power, green, 240VAC
14000084	Motor, 1/3 HP 60 HZ, 115/208-230V
14000094	Motor, 1/3 HP 50 HZ, 110/208-220V
14000085	Contact Relay, 240 V, 20A, 8 pin, BDS
14000086	Light, red, 240V
06001448	Motor, Fan, 220V, 1300 RPM

Troubleshooting Guide

Problem	Cause	Remedy
Unit does not run.	<ol style="list-style-type: none"> 1. The door is open. 2. The bucket is not seated fully in the unit. 3. The bucket handle is not facing out. 4. The top cover is not on the machine. 5. The chute is not installed correctly on the unit. 6. The front cover is not on the machine. 7. The unit is unplugged. 8. The ON/OFF switch is in the OFF position. 9. The circuit breaker is tripped. 	<ol style="list-style-type: none"> 1. Close the door. 2. Install the bucket fully into the unit. 3. Remove the bucket and re-install with the handle facing out. 4. Install the top cover. 5. Install the chute as shown on page 8. 6. Install the front cover. 7. Plug the unit into the appropriate power source. 8. Toggle the ON/OFF switch to the ON position. 9. Reset the breaker.
Unit is on but the bar is not turning.	<ol style="list-style-type: none"> 1. A bottle or piece of glass or foreign material is jammed in the chute or drum. 	<ol style="list-style-type: none"> 1. While wearing protective gloves, unplug unit, remove bucket, and reach into drum. Grasp crusher bar and rotate counter-clockwise. This should dislodge any material.
Unit is on but the bar is not turning and there are no motor sounds.	<ol style="list-style-type: none"> 1. The motor has turned off on thermal overload due to excessive heat which is caused by inadequate ventilation or high ambient temperature (i.e., room temperature at 100°F or more). 	<ol style="list-style-type: none"> 1. Turn unit off, wait approx. 30 minutes and turn on again. In all cases, to minimize these events, allow ventilation space on sides and back of unit for adequate circulation of air flow.
Unit is on, motor is running, but bottles are falling through without being crushed.	<ol style="list-style-type: none"> 1. The Crusher bar is jammed. 2. The drive belt has broken. 	<ol style="list-style-type: none"> 1. Un-jam the bar - While wearing protective gloves, unplug unit, remove bucket, and reach into drum. Grasp crusher bar and rotate counter-clockwise. 2. Obtain a new belt. Unplug the unit, remove the top cover, replace belt. Re-install top cover.