



SERVICE MANUAL

MODELS:

GBC GLS28, GLX20, GLM11, GLHS9
REXEL RLS28, RLX20, RLM11, RLSM9
(2008.12.18)

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INTRODUCTION

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SPECIFICATIONS

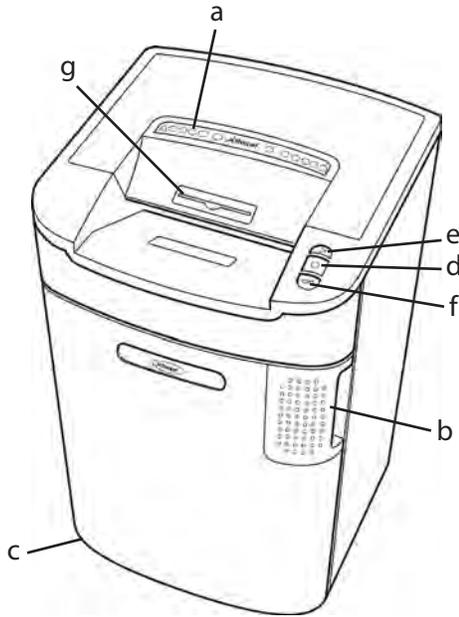
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TROUBLESHOOTING

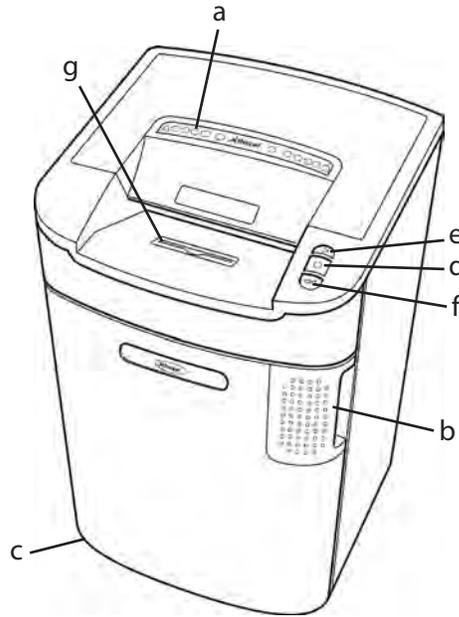
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DISASSEMBLY/ADJUSTMENTS

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Models: GBC GLS28, GLX20 / REXEL RLS28, RLX20



Models: GBC GLM11, GLHS9 / REXEL RLM11, RLSM9

- a Indicator Panel
- b Door for Bin
- c Wheels
- d Power On Button
- e Auto Feed Button
- f Reverse Button
- g CD Slot



Illuminated Panel

- 1 Power On
- 2 Shredder not OK
- 3 Door Open
- 4 Bin Full

Specifications

Models	GLS28	GLX20
Sheet Capacity - 	28 sheets	20 sheets
Duty Cycle - 	Continuous operation	Continuous operation
Volts / Hz	120V AC / 60Hz	120V AC / 60Hz
Amperage	8.0 A	10.0 A

Models	GLM11	GLHS9
Sheet Capacity - 	11 sheets	9 sheets
Duty Cycle - 	Continuous operation	Continuous operation
Volts / Hz	120V AC / 60Hz	120V AC / 60Hz
Amperage	10.0 A	8.0 A

Specifications

Models	RLS28	RLX20
Sheet Capacity - 	28 sheets	20 sheets
Duty Cycle - 	Continuous operation	Continuous operation
Volts / Hz	230-240V AC / 50Hz	230-240V AC / 50Hz
Amperage	6.0A	7.0A

Models	RLM11	RLSM9
Sheet Capacity - 	11 sheets	9 sheets
Duty Cycle - 	Continuous operation	Continuous operation
Volts / Hz	230-240V AC / 50Hz	230-240V AC / 50Hz
Amperage	5.0A	5.0A

Mechanical Operation

The shredder uses two rotating cutting shafts, which are driven by an electrical motor to shred paper.

Electrical Operation

When the center power on switch is pressed, all the LED warning symbols on the indicator panel will flash in sequence. The shredder will now be in standby mode and the "Power-on" symbol on the indicator panel will be illuminated amber. When the shredder is in standby mode and the cabinet door is open, the normally closed door ajar micro switch is opened and prevents power to the motor until the door is closed. When the bag full sensor is triggered, the bag full icon will illuminate. The control board will then disable the motor circuit until the shredder bag is either cleared or emptied.

When the shredder is severely loaded down, the control board will illuminate red and disable the motor circuit.

Electrical Components

Motor - Thermally protected motor designed for continuous operation.

Capacitor - AC motor run capacitor.

Power on/Auto feed on switch - The Power on /Auto feed on switch, when depressed, connects the hot and neutral circuits to electrical components of the shredder.

Door ajar, Machine head safety switch - The safety switch is a normally open micro switch which is actuated by a trigger located inside of the cabinet door. The switch is normally closed when the door is closed and when the machine head is installed on the cabinet.

Bag Full Flap Switch - The flap switch is a normally open switch actuated by the bag full flap. When the shred bag becomes full of shredded material, the bag full flap is pushed back and power is then removed from the motor circuit.

Paper Sensors - Located in the throat area consisting of two components, the emitter and receiver.

Emitter - The infrared light beam from the light emitting diode is sensed by the receiver to activate/deactivate the control board.

Receiver - The receiver is a light activated diode, which works in conjunction with the emitter to activate/deactivate the control board.

Testing Electrical Components

WARNING!

Always disconnect the power cord from receptacle before making continuity or resistance tests.

Switches

Set meter to read resistance. Check switches for continuity from common to closed contacts and infinity from common to the open contact.

Emitter - Set meter to the diode setting. Disconnect emitters from the control board. With the positive meter probe on the emitter wire and the negative meter probe on the black-stripped emitter wire, check for approximately .639 ohms. Reverse the meter leads and infinity should be read.

Receiver - Set meter to read 20M ohms. Disconnect the receiver from the control board. With the positive meter probe on the receiver wire and the negative meter probe on the receiver wire check for approximately 4.62 Mega ohms under normal room light. The resistance will increase when blocked. Reverse the meter leads and infinity should be read.

General Troubleshooting

Malfunction corrections are based on visual observations made by the operator. The causes of the malfunctions are isolated by the symptom of the malfunction and noting at which point in the operating cycle the malfunction occurred. Malfunctions may be pinpointed to a defective electrical component or mechanical part by referring to the Principles of Operation, the troubleshooting guide and the wiring diagram.

Troubleshooting Chart

The troubleshooting guide chart that follows is arranged in order of the normal operational sequence. When a malfunction occurs, read down the SYMPTOM column until you find the appropriate description for your symptom. Read the corresponding PROBABLE CAUSE, then perform the recommended procedure in the CORRECTIVE ACTION column. When replacing electrical components that have push on terminals, label the electrical leads that were removed, to facilitate reconnecting them. Refer to the wiring diagram on page 6 to resolve any wiring difficulties that may occur.

WARNING!

Always unplug the shredder to avoid possible electrical shock hazard before attempting to perform any repairs.

Shredder Does Not Operate, No Indication Of Power

Power Cord Disconnected.
Power switch Defective
Main Board Defective

Connect Power Cord
Replace Power Switch
Replace Main Board

Shredder Does Not Operate, With Indication Of Power Present

Shredder Head Not Installed Properly
Cabinet Door Open
Shred Bag Full
Motor Thermal Cut Off Triggered
Door Switch Defective

Reposition Shredder Head
Close Door
Empty Bag
Allow Motor To Cool
Replace Door Switch

Shredder Does Not Operate, (When Paper Is Present In The Throat)

Defective Capacitor
Motor Defective
Emitter/Receiver Defective
Main Board Defective

Replace Capacitor
Check Motor Input Voltage
Replace Motor If Necessary
Replace If Necessary
Replace If Necessary

Shredder Runs Continuously

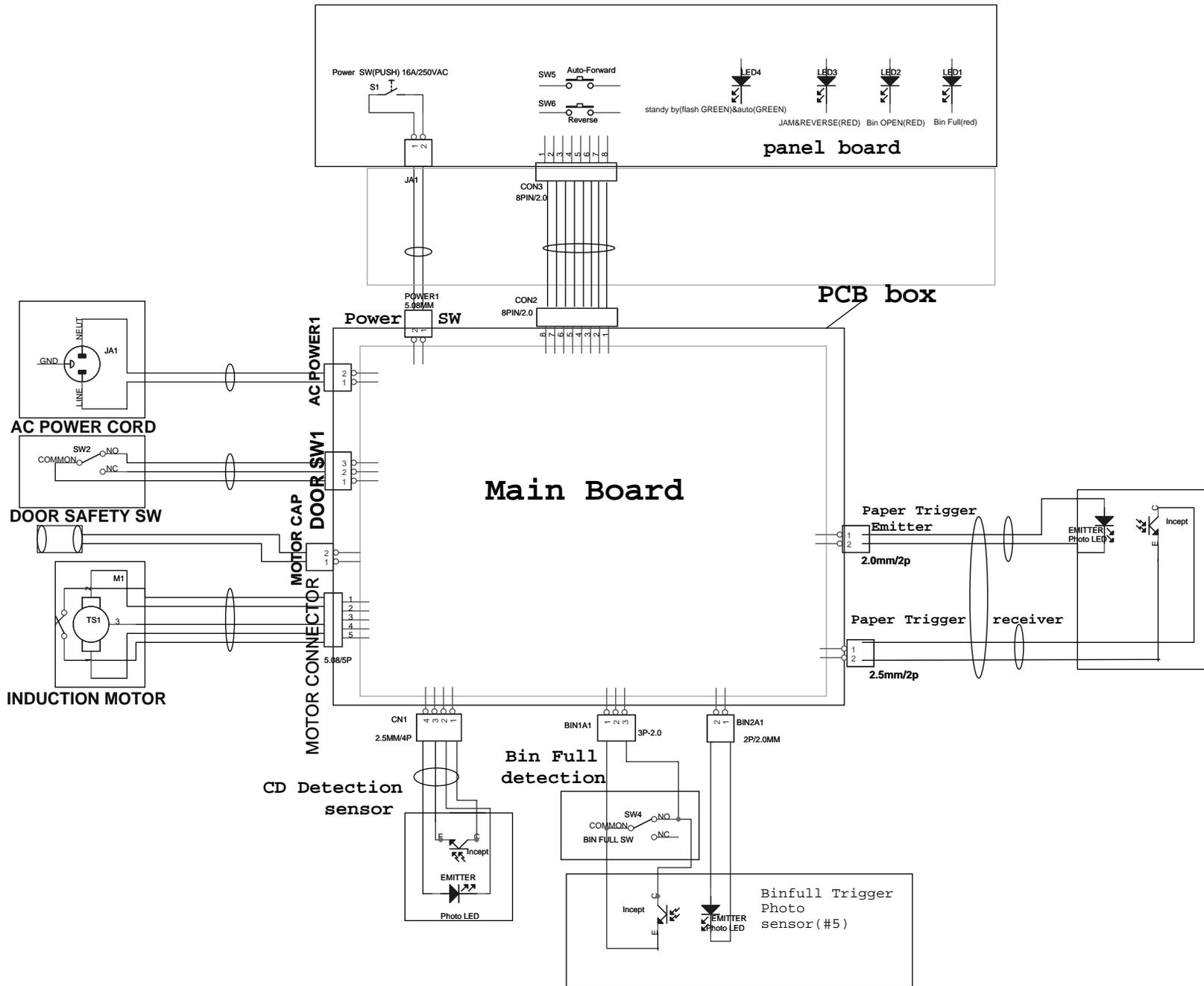
Dust Or Scratch On Emitter/Receiver
Defective Control Board
Emitter/Receiver Defective

Clean Or Replace
Replace If Necessary
Replace If Necessary

Sheet Capacity Diminished

Dry Blades
Dull Cutters
Worn Bearings

Lubricate Cutters
Replace Cutters
Replace Bearings



Necessary Tools

1. Adjustable wrench
2. #2 Phillips Screwdriver

Disassembly of the shredder is described in the following steps.

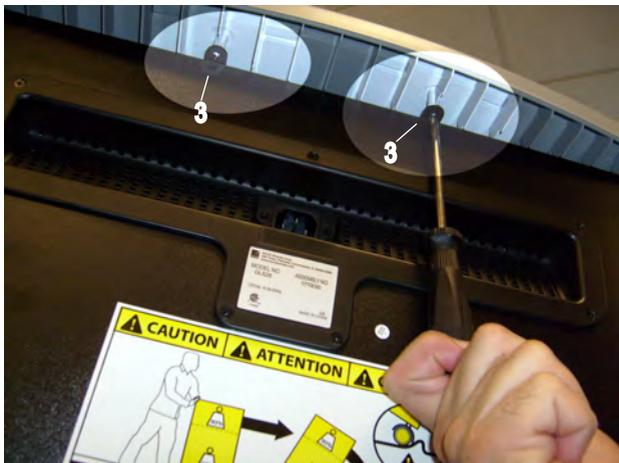
Top Housing Removal



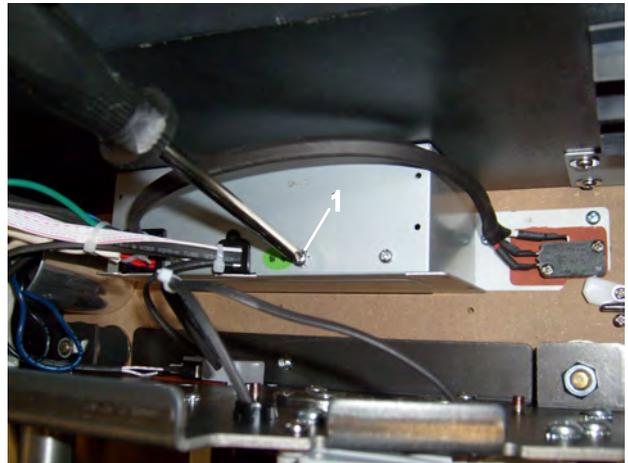
⚠️ WARNING!

Disconnect the unit from the receptacle before performing any disassembly procedures.

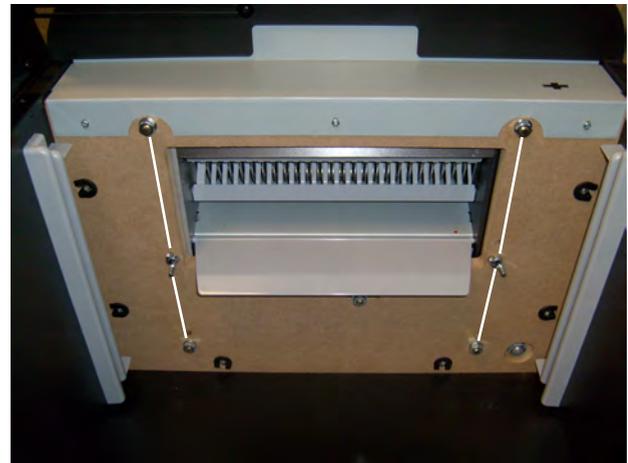
1. Unplug the power cord from the outlet power supply.
2. Open cabinet door and remove the 3 phillip head screws that secure shredder top cover to cabinet base.
3. Remove the 4 phillip head screws from the back side of the shredder which secures top cover to cabinet base.
4. Lift top cover. Remove and label the 3 cables from control panel.



Engine Assy. (Cutting Head Assy.) Removal

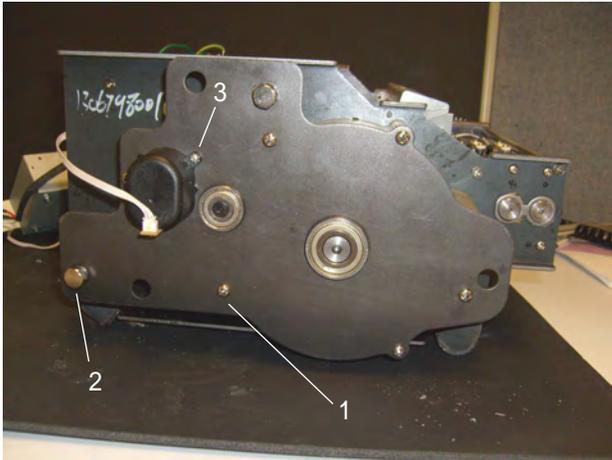


1. Remove the six phillip head screws that secure the main pcb box to the bottom base.
2. Remove pcb box front cover. Unplug and label all wires from main pcb box.



3. Open cabinet door and remove the four (14 mm) hex nuts and two wing nuts from the bottom base of engine (cutting head).
4. Carefully lift out engine (cutting head) assy and place place on your work area.

Gear Box Removal



1. Remove the six phillips screws from the gear box cover.
2. Remove the two 14mm bolts.
3. Remove the two phillips screws from the encoder housing.
4. Remove gearbox cover.

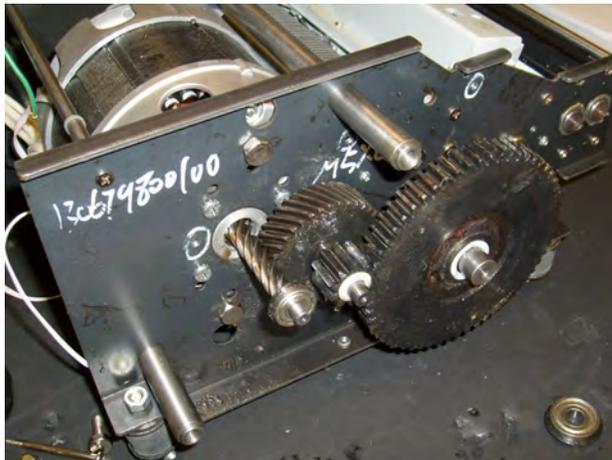
External Cleaning

Make sure you disconnect the shredder from its power source before cleaning. The cover and cabinet may be cleaned with a soft cloth moistened with a mild detergent and warm water. Do not use chemical cleaners or solvents as these may have a harmful effect. Use detergent sparingly to avoid contact with electronic components.

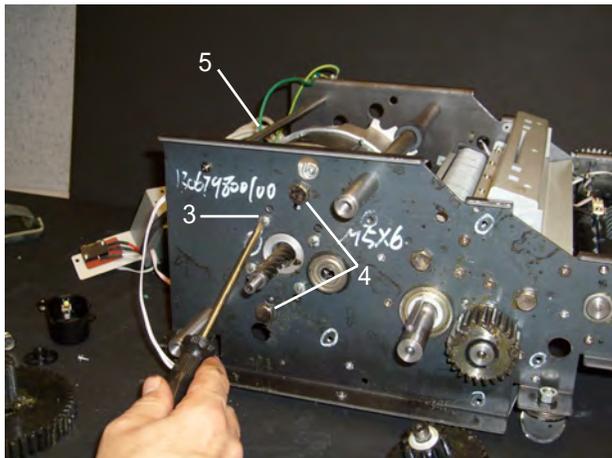
Inspection

Whenever the cover has been removed for corrective maintenance, visually inspect for defects such as loose screws or nuts, damaged wire insulation, loose terminals, etc. Correct any defects before returning the shredder into service.

Motor Removal



1. Remove large double drive gear.
2. Remove small double drive gear.



3. Remove the Four phillip screws.
4. Remove the two 14mm bolts.
5. Remove support bar and replace motor.



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