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Troubleshooting

Symptom: During a normal cycle, the machine stopped. Motor Overheat.

Cause: The unit has possibly overheated without notice to the warning message indicating to run a cool down cycle. Unplug the machine for 15-30 minutes. Plug in the unit and try to operate. If the problem persists, proceed to Repair Guide.

Symptom: Over Current or Motor Stall message

Cause: Locked rotor (motor shaft) or very high food loads – ice or frozen foods stalling blade in container, unintended object in jar stalling blade, etc. Stop Blender, unplug – check for reason for stalled blades and remove. Use more liquids or temper (raise temp) of frozen foods when blending.

Symptom: Jar Sensor Error.

Cause: PC board, membrane switch, ribbon connector or jar sensor has potentially failed.

Symptom: Quiet Shield (Door) Sensor Error.

Cause: PC board, membrane switch, ribbon connector or jar sensor has potentially failed.

Symptom: Motor NTC Error.

Cause: Motor NTC has potentially failed. NTC ribbon connector has become disassembled from PCB. Check connections. Replace motor.

Symptom: Electronics NTC Error.

Cause: Electronics NTC has potentially failed. NTC ribbon connector has become disassembled from PCB. Check connections. Replace PCB.

Symptom: Communication Error.

Cause: Ribbon connectors have become disassembled from PCB. Check connections. Ribbons / connectors have broken conductors or faulty terminals. Replace.

Symptom: The power switch fails to function.

Cause: Check electrical connections. Ensure the PVC switch cover is present (moisture protection). If problem persists proceed to Repair Guide.

Symptom: Motor runs 3-7 seconds and guits.

Cause: Most probable cause is a broken magnet on motor/hall effect sensor.

Symptom: Blender keeps tripping wall circuit breaker.

Cause: Unit needs a dedicated 15-amp circuit (no additional electrical devices should be operating on this circuit).

Hamilton Beach	Revision Description:	Production relea	ase.				Rev. Date	
4421 Waterfront Drive Glen Allen, VA 23060	Description.						10/24/202	.2
	Request #:	DOC12726	Page:	1 of 13	Document #:	520011400	Rev:	A

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Symptom: Unit will not turn on.

Cause: No power at wall outlet. Power switch not turned on. Circuit breaker has tripped. Wire disconnected. PC Board failure.

Symptom: Unit will not power down or the display lights without the unit being turned on.

Cause: Power switch failure. Measure continuity at switch. If the terminals are shorted proceed to the Power Switch section of Repair Guide.

Symptom: Unit is extremely noisy

Cause: Possible worn bearing on cutter assembly. Remove container from blender. Slowly turn the cutter assembly from the bottom of the container. If it is hard to turn or feels loose/wobbly replace cutter assembly. Possible worn drive coupling. Check the teeth of the drive coupling. If worn, replace the drive coupling outlined in the repair guide.

Symptom: Display indicates that jar is not in place when jar is present and installed correctly.

Cause: Verify that 4 magnets are present in the bottom of the container. Verify that jar sensor switch in the upper housing is present and functioning. Inspect jar sensor connection on main pc board. Possible touch pad failure.

Symptom: Motor operates at excessive speeds. Speed Sensor – over-speed

Cause: Defective PCB (TRIAC) failure.

Symptom: Motor operates at lower than normal speed. Speed Sensor – under-speed

Cause: Defective Hall Effect Sensor. Poor connection of Hall Effect to PCB. Defective PCB. Defective

Symptom: USB port will not upload custom program.

Cause: Verify that the correct program is installed in the main directory of the USB drive. Save program hbh850.usb into main directory of USB drive prior to loading into unit. If this does not resolve issue, contact HBB for new file as data may be corrupt. Inspect USB socket to verify that the plug is secured. Check continuity of cable connecting USB PCBA to micro controller / VFD PCBA. Replace cable if there are any open circuits. Check USB PCBA for damage (e.g. evidence of liquid ingress). If there is evidence of damage, replace USB PCBA.

Symptom: Unit functions correctly but display is blank or fragmented.

Cause: VFD Board failure. Proceed to Repair Guide.

Symptom: Pixels will not illuminate on display

Hamilton Beach	Revision Description:	Production release	ase.				Rev. Date	
4421 Waterfront Drive Glen Allen, VA 23060	Description.						10/24/202	.2
	Request #:	DOC12726	Page:	2 of 13	Document #:	520011400	Rev:	A

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Cause: Bad pixels. VFD Board failure. Proceed to Repair Guide.

Symptom: One or more buttons on touch pad will not function correctly.

Cause: Touch pad failure. Proceed to Repair Guide.

Symptom: Excessive noise is evident during operation.

Cause: Male clutch is not concentric. Replace.

Repair Guide

Housing disassembly

- 1. Turn off the unit and unplug from electrical socket.
- 2. Remove the rubber feet at bottom rear to access screws.
- 3. Remove screw (4) that attach upper and lower housing.
- 4. Carefully separate the two housings, disconnecting circuit breaker/cordest wires at PCB. (See Figure 1)

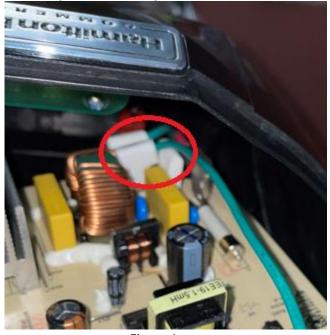


Figure 1

Hamilton Beach	Revision	Production release	ase.				Rev. Date	e:
4421 Waterfront Drive Glen Allen, VA 23060	Description:						10/24/202	2
	Request #:	DOC12726	Page:	3 of 13	Document #:	520011400	Rev:	A

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Motor Clutch Replacement

- 1. Turn off the unit and unplug from electrical socket.
- 2. Follow instructions for Housing Disassembly this is to gain access to the bottom of the motor shaft. Hold motor shaft with flat screw driver.
- 3. Remove coupling by rotating counterclockwise.
- 4. Assembly of replacement drive coupling is reverse.

Cordset Replacement

- 1. Turn off the unit and unplug from electrical socket.
- 2. Follow instructions for Housing Disassembly
- 3. Disconnect wires from the circuit breaker.
- 4. Remove screws (2) from cordset hold down bracket. (See Figure 2)
- 5. Remove cordset.
- 6. Install replacement in reverse order.

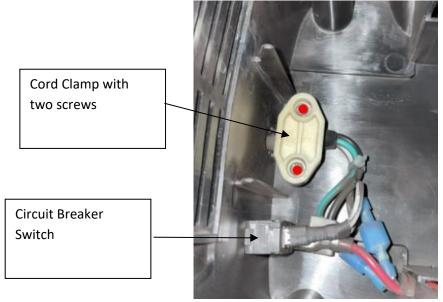


Figure 2

Hamilton Beach	Revision	Production rele	ase.				Rev. Date	e:
4421 Waterfront Drive Glen Allen, VA 23060	Description:						10/24/202	2
	Request #:	DOC12726	Page:	4 of 13	Document #:	520011400	Rev:	A

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Circuit Breaker Replacement

- 1. Turn off the unit and unplug from electrical socket.
- 2. Follow instructions for Housing Disassembly
- 3. Note locations and disconnect wires from the circuit breaker.
- 4. Pinch the two ends of the switch retaining arms toward the center and push out through the hole in the upper housing. See Figure 2.
- 5. Install replacement in reverse order.

USB Board Replacement

- 1. Turn off the unit and unplug from electrical socket.
- 2. Follow instructions for Housing Disassembly
- 3. Unplug USB board wire from PCB.
- 4. Remove screws (2) that secure USB board to lower housing. (See Figure 3)
- 5. Remove USB board.
- 6. Install replacement in reverse order.



Figure 3

Hamilton Beach	Revision	Production rele	ase.				Rev. Date	e:
4421 Waterfront Drive Glen Allen, VA 23060	Description:						10/24/202	.2
	Request #:	DOC12726	Page:	5 of 13	Document #:	520011400	Rev:	A

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PCB Replacement

- 1. Turn off the unit and unplug from electrical socket.
- 2. Follow instructions for Housing Disassembly
- 3. Note locations and routing of wires.
- 4. Disconnect wires from PCB.
- 5. Slide PCB out of silicone rubber mounts.
- 6. Install replacement in reverse order.

Motor Replacement

- 1. Turn off the unit and unplug from electrical socket.
- 2. Follow instructions for Housing Disassembly
- 3. Follow instructions for removing the drive coupling.
- 4. Remove screws (6) from motor housing cover and remove cover. (See Figure 4)
- 5. Remove screws (4) from motor housing.
- 6. Remove screws (4) that secure motor to upper housing. (See Figure 5)
- 7. Remove motor and motor housing together.
- 8. Disconnect motor leads from PCB.
- 9. Install replacement in reverse order.

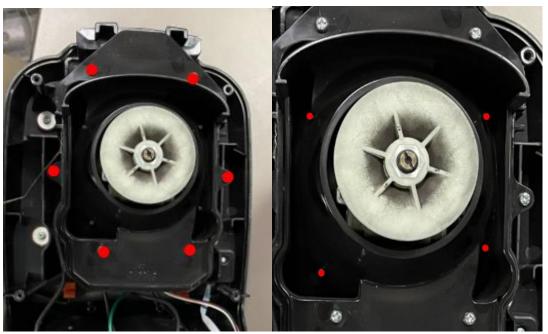


Figure 4 Figure 5

Hamilton Beach	Revision	Production release	ase.				Rev. Date	e:
4421 Waterfront Drive Glen Allen, VA 23060	Description:						10/24/202	2
	Request #:	DOC12726	Page:	6 of 13	Document #:	520011400	Rev:	A

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Touch (control) Panel Removal

- 1. Turn off the unit and unplug from electrical outlet.
- 2. Follow instructions for Housing Disassembly
- 3. Position PCB to the side.
- 4. Disconnect wires from control PCB.
- 5. Depress clear, locking tabs (8) inwards control PCB to release control panel from upper housing. (See Figure 6)
- 6. Remove screws (4) that secure control PCB to control panel assembly.
- 7. Install replacement in reverse order.



Figure 6

Quiet Shield Sensor Replacement

- 1. Turn off the unit and unplug from electrical outlet.
- 2. Follow instructions for Housing Disassembly
- 3. Position upper housing so that access to the guiet shield sensor is obtained.
- 4. Disconnect the (4) ribbon cable from Power PCB. (see Figure 7 below)
- 5. Remove (1) screw that secures sensor to upper housing.
- 6. Install replacement in reverse order.

Hamilton Beach	Revision Description:	Production relea	ase.				Rev. Date	e:
4421 Waterfront Drive Glen Allen, VA 23060	Description.						10/24/202	22
	Request #:	DOC12726	Page:	7 of 13	Document #:	520011400	Rev:	A

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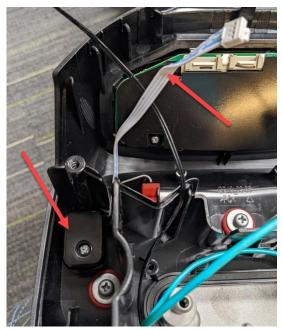


Figure 7

Hamilton Beach 4421 Waterfront Drive Glen Allen, VA 23060	Revision Description:	Production release	ase.				Rev. Date 10/24/202	
	Request #:	DOC12726	Page:	8 of 13	Document #:	520011400	Rev:	A

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Jar Sensor Replacement

- 1. Turn off the unit and unplug from electrical outlet.
- 2. Follow instructions for Housing Disassembly
- 3. Position upper housing so that access to the jar sensor is obtained.
- **4.** Disconnect the (2) ribbon cable from Power PCB. (see Figure 8 below)
- 5. Remove (1) screw that secures sensor to base plate in upper housing.
- 6. Install replacement in reverse order.

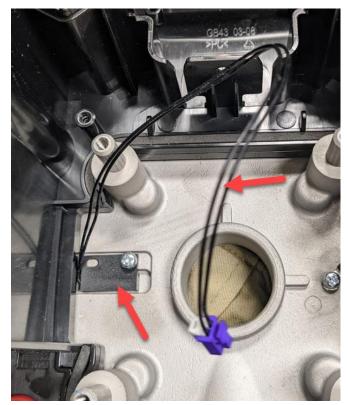


Figure 8

Hamilton Beach 4421 Waterfront Drive Glen Allen, VA 23060	Revision Description:	Production release	ase.				Rev. Date	
	Request #:	DOC12726	Page:	9 of 13	Document #:	520011400	Rev:	A

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Quiet Shield Replacement

- 1. Turn off the unit and unplug from electrical outlet.
- 2. The Quiet Shield assembly does not require any disassembly.
- 3. Open the Quiet Shield. Figure 9
- 4. Grasp the front lower edge of the fixed portion and pull towards the front until the slot disengages the tab on the Base Plate. Figure 10
- 5. Lift upward on lower edge until it clears the base plate. Figure 11
- 6. Shift Quiet Shield towards the rear to disengage the rear tabs. Quiet Shield is now loose. Figure 12
- 7. Install replacement in reverse order.



Figure 9 Figure 10

Hamilton Beach 4421 Waterfront Drive	Revision Description:	Production relea	ase.				Rev. Date	
Glen Allen, VA 23060	Request #:	DOC12726	Page:	10 of 13	Document #:	520011400	Rev:	A

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Figure 11 Figure 12

Hamilton Beach 4421 Waterfront Drive Glen Allen, VA 23060	Revision Description:	Production release	ase.				Rev. Date 10/24/202	
	Request #:	DOC12726	Page:	11 of 13	Document #:	520011400	Rev:	A

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Cutter Assembly Removal from Container

- 1. Remove Container from blender and turn upside down.
- 2. Using a #2 philips screwdriver, remove the retaining screw from the flange of the Cutter Nut. See Green Arrow in Figure 13.
- 3. Using a 35mm (1 3/8inch) socket, remove the Cutter Nut from the Cutter housing threads. See Red Arrow in Figure 14 and Figure 15.
- 4. Cutter Housing can now be pushed out of the container.
- 5. Install replacement in reverse order.

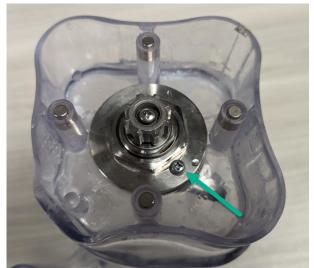




Figure 13





Figure 15

Hamilton Beach 4421 Waterfront Drive Glen Allen, VA 23060	Revision Description:	Production release	ase.				Rev. Date	
	Request #:	DOC12726	Page:	12 of 13	Document #:	520011400	Rev:	A

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Container Clutch Replacement

- 1. Remove Container from blender and turn upside down.
- 2. Using a rag inside the container, hold the blade.
- 3. Using a #2 Philips screwdriver, remove the screw and lockwasher from the center of the clutch. Figure 16
- 4. Install replacement in reverse order.

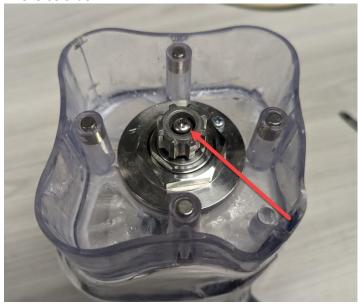


Figure 16

Hamilton Beach 4421 Waterfront Drive Glen Allen, VA 23060	Revision Description:	Production release.					Rev. Date:	
	Request #:	DOC12726	Page:	13 of 13	Document #:	520011400	Rev:	A