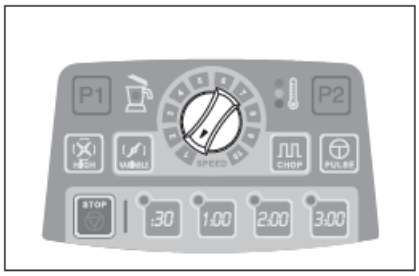
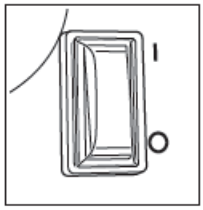
Operation Guide – GB33

Using the Controls



	Variable Speed Control Speeds 1–10. Works with VARIABLE or CHOP functions.
HIGH	**HIGH** Speed starts LOW and ramps to HIGH.
VARIABLE	**VARIABLE** Works with Variable Speed Control.
CHOP	**CHOP** Works with Variable Speed Control.
PULSE	**PULSE** Press and hold for desired time.
P1 P2	**P1 and P2** Preset program buttons. P1 and P2 can be changed to a different preprogrammed cycle.
	Interlock Lid Indicator Light The red light will flash when lid is not in place. The red flashing light will stop when lid is in place and blending can start.
	Thermal Overload Protection Temperature gauge alerts operator if motor overheats while blending back-to-back batches.
:30 1:00 2:00 3:00	**LED Lighted Preset Timer Panel** Programmed for 30 seconds, 1 minute, 2 minutes, and 3 minutes. **NOTE:** 3 minutes is the default setting.
STOP	**STOP** Press STOP or any button to stop operating.

Operation



- Plug in blender.
- Turn switch ON (I).
- The 3-minute (3:00) LED light is the default time on the control panel when plugged in.
- Interlock lid red indicator light will be flashing.
- When jar and lid are in place, light will stop flashing.
- START by using the controls below.
- Select an option:
  - Press any timer button (:30, 1:00, 2:00, 3:00) and press HIGH, OR
  - Press any timer button (:30, 1:00, 2:00, 3:00), press VARIABLE, and turn variable speed dial, OR
  - Press any timer button (:30, 1:00, 2:00, 3:00), press CHOP, and turn variable speed dial, OR
  - Press PULSE. Pulse is not associated with the timer buttons.
- Press STOP or any button to stop operation.

Trouble Shooting Guide – GB33

- **Symptom: Blender fails to start or stops while it is running and cannot be restarted.**
- **Cause(s):** Check to see if unit is securely plugged into an electric outlet. Check to see if the fuse for the electric outlet has blown or if a circuit breaker has tripped. Check control panel for red flashing interlock lid light. Realign lid. Start blending. The motor is overheated. Try mixing smaller batches or running for shorter cycle times. Allow motor to cool between batches. See "Motor Cooling Steps" noted in the Use & Care Instrductions for additional details.

- **Symptom:** Ingredients will not mix properly.
- **Cause(s):** Check to see if enough liquid has been added to the ingredients. Mixture should be fluid and free-running at all times. Solid pieces are too large. Cut pieces smaller. Cutters are not sharp or are damaged. Inspect container and cutter assembly daily. Replace container and cutter assembly if damaged. Check to see if cutter assembly is installed properly. Select speed to create a fluid blend.

- **Symptom: Unit is Noisy**
- **Cause(s):** Drive train incorrectly installed / adjusted. Worn Gears or belt drive. Check assembly. If identified causes are found, correct by replacing parts and provide adequate lubrication. Blender Jar not fully installed or worn clutches.

- **Symptom: During normal operation, the unit stopped.**
- **Cause(s):** The unit has possibly overheated. This unit is equipped with a motor overload protection device. If the motor stops operation due to overheating, unplug and wait for approximately 15 minutes to reset thermal limit device. This unit also is equipped with a circuit breaker in the Power

Switch. Turn the power switch to OFF (O) and then back to ON (I). Additionally, this unit has a overspeed protection in the control. Turn the power switch OFF (O) and then back to ON (I).

- **Symptom: Light is not illuminated during use. Flashing when lid is NOT installed properly.**
- **Cause(s):** Ensure the lid is installed properly. Ensure the power switch is turned ON (I). If problem persists, most probable causes would be bad PCB, bad connections at power cord, PCB or switches – proceed to repair guide.

- **Symptom - Container Lid Red light flashing on touchpad.**
- **Cause (s) –** The container lid not installed or magnet on lid assembly is missing. Reinstall the lid on the container or replace the lid with a new one.

- **Symptom – The red LED on the temperature gauge is illuminated and the motor has stopped.**
- **Cause (s)-** The resettable TCO has been tripped by heat exceeding 135 degrees Celsius. Look for a cause of motor overheat and allow the unit to cool before reenergizing.

- **Symptom - The unit runs full speed on variable setting and cannot be turned down any.**
- **Cause (s) -** Either the speed control potentiometer is bad or is unplugged from the pcb. Replace speed potentiometer and/or reinstall plug. See Figs.35 and 36.

- **Symptom - Motor runs, but, the drive coupling does not.**
- **Cause (s) -** The belt is broken or has come off of the pulley.

- **Symptom: Unit functions but not as intended.**
- **Cause(s):** Check the PCB's & connections for evidence of shorting or incorrect assembly. The PCB leadwire connectors may not be properly seated.

- **Symptom: Power switch fails**
- **Cause(s):** Check connections.

- **Symptom: Blender trips wall circuit breaker.**
- **Cause(s):** Unit should be operated on a dedicated 15 Amp circuit (no additional electrical devices should be operating on this circuit). If symptom is present with unit operating on a dedicated circuit, the cause could be a shorted diode bridge on the power PCB. The main PCBA is bad. Refer to figures 8-18 to replace.

- **Symptom: The Power Light comes on (unit gets power) but the unit will not start.**
- **Cause(s):** Probable causes are the touchpad could be bad or the white motor lead is possibly broken at the PCB board. (see Fig. 31) - Refer to figs. 1-7, 15-16, 21-23 and 32-34 to replace the touchpad. Refer to Figs, 1-9, 15-16, 21-23 and 27-30 to replace the motor.

- **Symptom: Blender will not turn on.**
- **Cause(s):** Ensure blender is plugged in, the power switch is ON (I), start button is pressed. This unit employs a sensor for the Lid, if it is not installed or installed incorrectly, the control will not allow the unit to begin operation, ensure lid is installed correctly. If problem persists, probable causes – broken magnet, faulty sensor, faulty connections, faulty PCB. If identified causes are found, correct by replacing parts.

- **Symptom: The motor stops or strains.**
- **Cause(s):** Check to ensure proper amounts of ingredients have been placed in blender. Use smaller batches if necessary.

- **Symptom: The motor speed seems to be too low or limited**
- **Cause(s):** The PCB software controls the NO LOAD speed to 3600RPM (when there is no food load in the blender jar). If there is food in the blender jar, the control will permit full speed operation. If the user tries to run the unit with no food / water in jar – speed will be limited.

- **Symptom - The memory card will not load program into unit.**
- **Causes (s) -** Bad main PCBA or possibly a bad ribbon cable and socket for memory card. See Figs.1- 18 to replace main PCBA and then figs. 13, and 19-20 to replace memory card socket and cable.

- **Symptom - The output assembly will not turn when the motor is energized and there is a burning smell.**
- **Cause (s) -** The blender spindle is locked up and/or the belt is damaged. Refer to Figs. 4-6, 21-26. the installation is the reverse of disassembly.

Repair Guide

NOTE: For HBF1100SR Series H+ / HBF1100SR-CE Series J+ / HBF1100SR-CN Series K+ / HBF1100SR-UK Series H+ the PCB was revised from Push-on Terminals to Screw Terminal Block – therefore the leadwires from motor, power switch and power cord require ring terminals to attach to the PCB versus flag type push on terminals previously used. SEE RED CIRCLES IN PICTURES BELOW.

- **Housing Dis-assembly**:
  - Turn master switch to OFF (O), unplug unit.
  - Lay unit on side.
  - Remove (8) screws from bottom cover to gain access to the drive system.
  - Remove (2) screws in rear, (4) screws along sides & (2) rubber feet & screws to gain access to the interior (controls, motor, etc.)
  - Remove Jar Pad and Base Clutch.
  - Lift off the Upper Housing. This will allow access for Control Panel, Driven Pulley Support (screwed from bottom) & Bearing, Power PCB, Leadwires and connections & Motor.
  - After repair of component, re-assemble using reverse of steps noted.

- **Case Dis-assembly**:

Fig 1:
HBF1100

Figure 2:
Remove 6 base screws (red arrows). At the green arrows, remove the rubber feet by simply pulling and twisting them out of the base.

Figure 3:
Once the 2 front rubber feet are removed from the base, 2 screws will be visible, remove these screws.

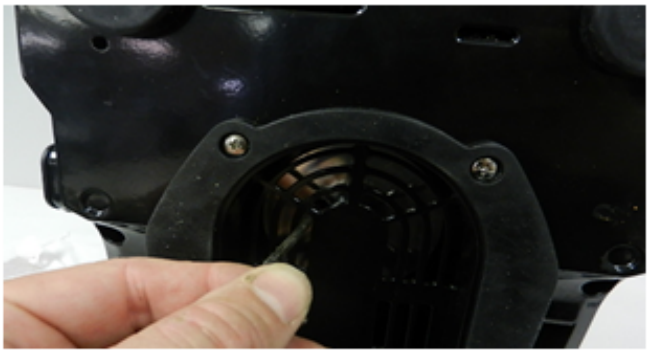


Fig. 4:
Put a suitable tool, (in this case, an 1/8 allen wrench is used), into the ribs of the base at the drive pulley. Align one of the holes in the pulley with the tool and insert it into the pulley.

Fig.5:
With Pliers, grasp the drive coupling.

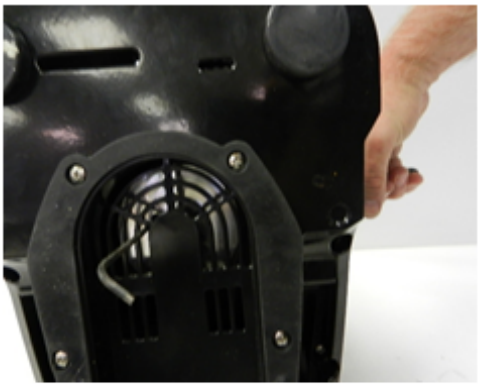


Fig.6:
As shown, now turn the coupling with the pliers to spin the coupling off of the shaft while the output pulley is being held.

Fig:7
Once the base screws and the drive coupling are removed, tilt the upper housing to the right to gain access to the component area.

Fig. 8:
Identify and label each wire or cable in figures 8-16 going to the pcb for it's correct replacement and unplug.

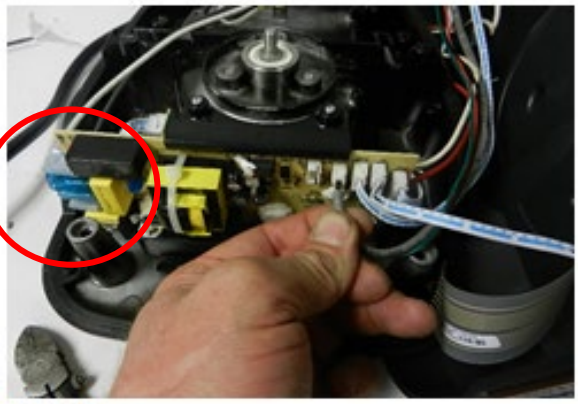


Fig. 9:

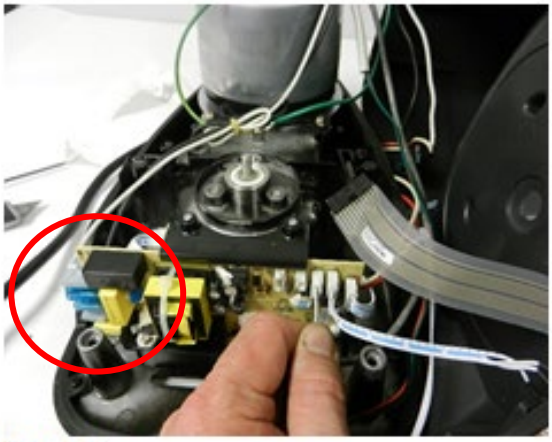


Fig. 10:

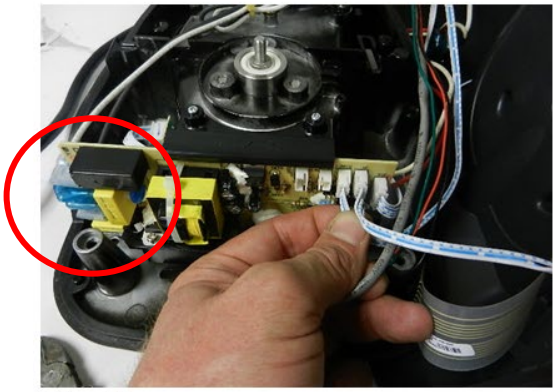


Fig. 11:

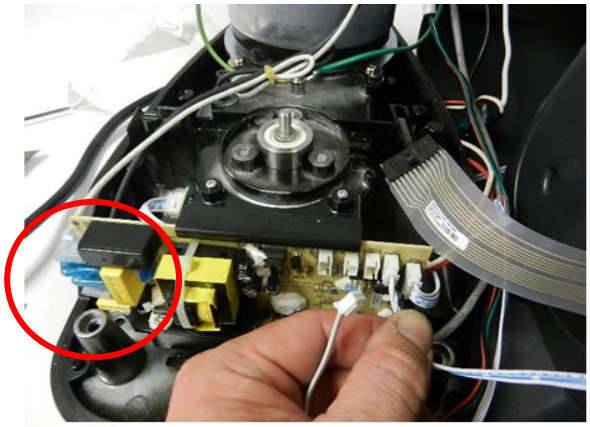


Fig. 12:

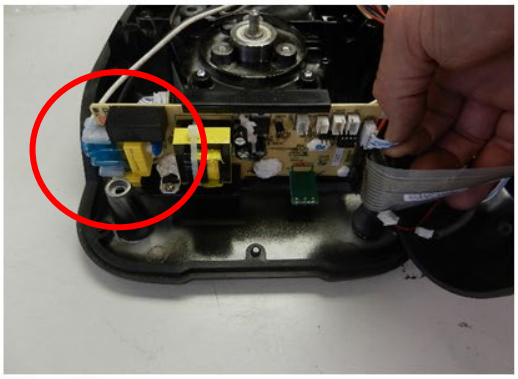


Fig. 13:

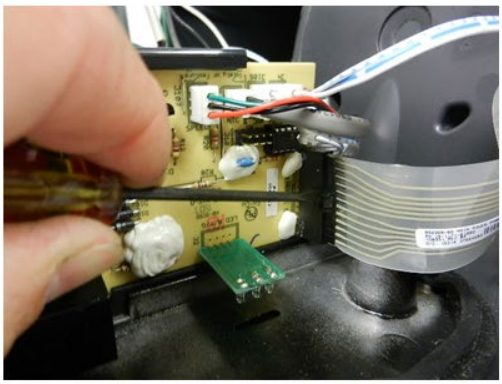


Figure 14:

Figure 15:

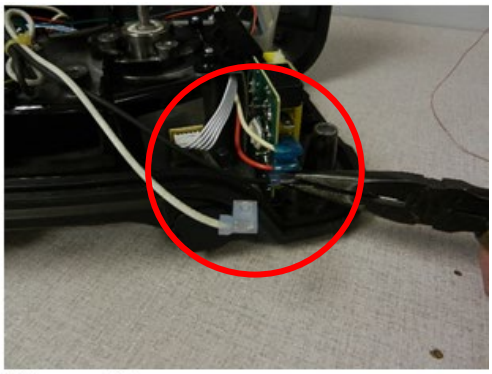


Figure 16:

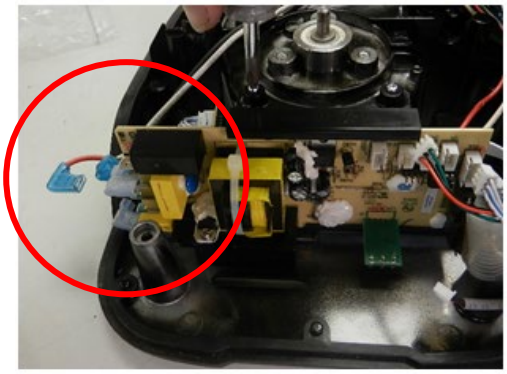


Figure 17:

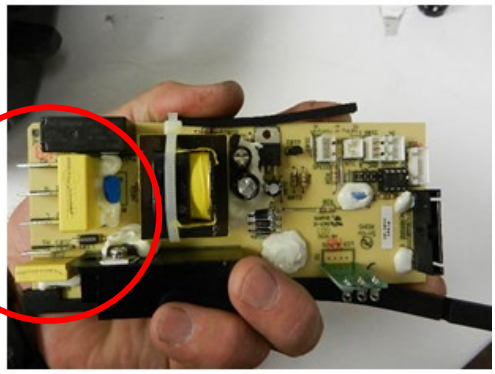


Figure 18:

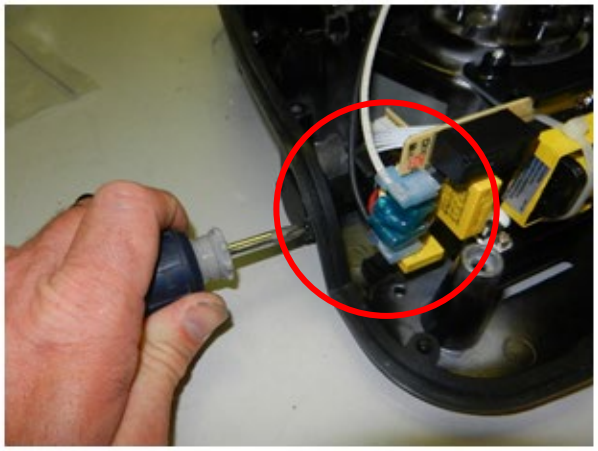


Fig. 19:

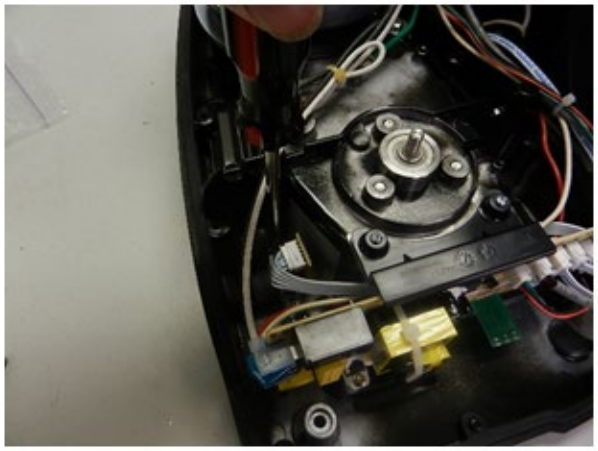


Fig. 20:

Fig. 21:
Remove these screws in the base to get to the belt pulley area.

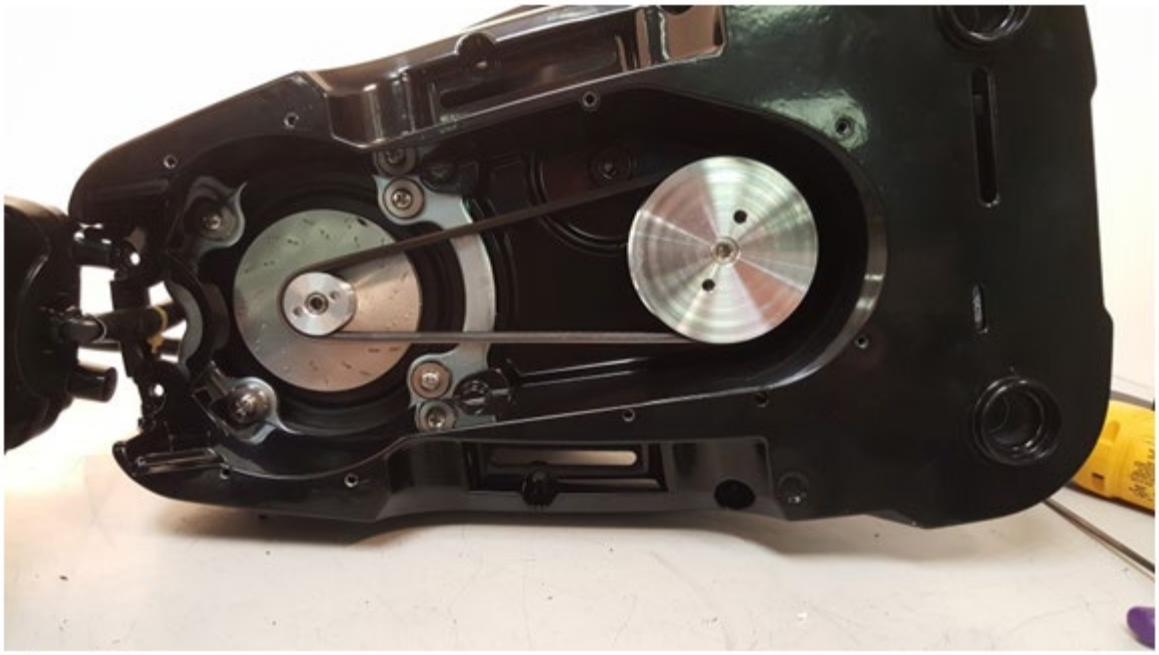


Fig. 22:

Fig.23:
Carefully roll the drive belt off of the smaller pulley at the motor.

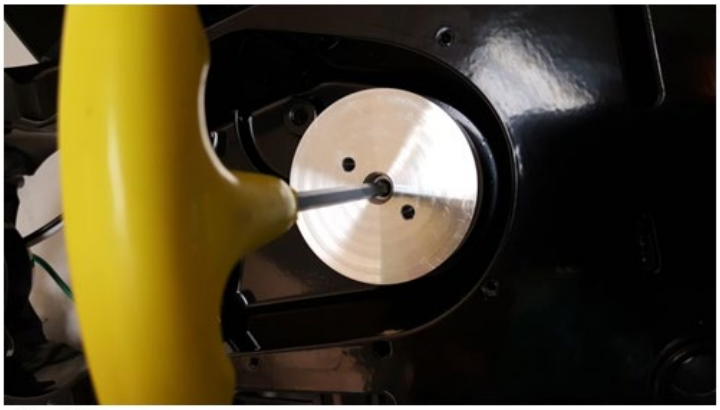


Fig.24:
Insert a 5 mm hex key wrench and turn the screw clockwise to thread the output pulley off of the spindle.

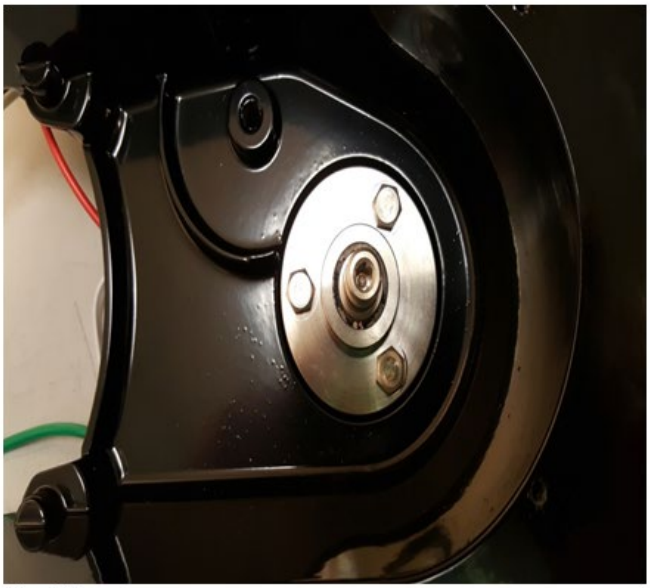


Fig.25:
Use a 10mm socket or wrench to remove the output assembly.

Fig.26:

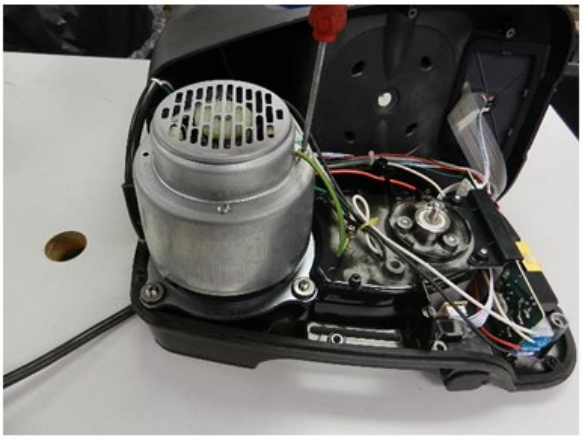


Fig. 27:
Use a T20 Torx driver to remove the motor ground screw.

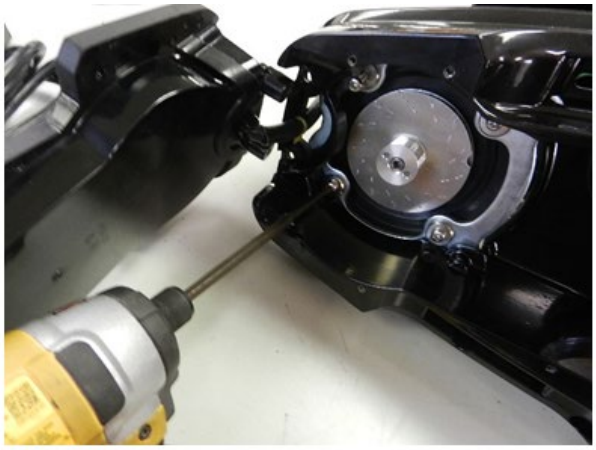


Fig. 28:
Remove the 4 motor mount screws.

Fig. 29:
Temporarily put the belt back on the motor pulley and hold with pliers while also using a 4mm allen wrench to turn the motor shaft counter- clockwise to remove the pulley.

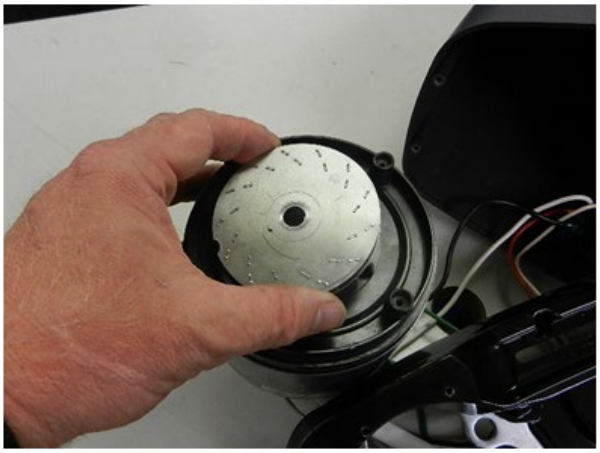


Fig.30:
Once the belt pulley is removed, then remove fan off of the shaft.

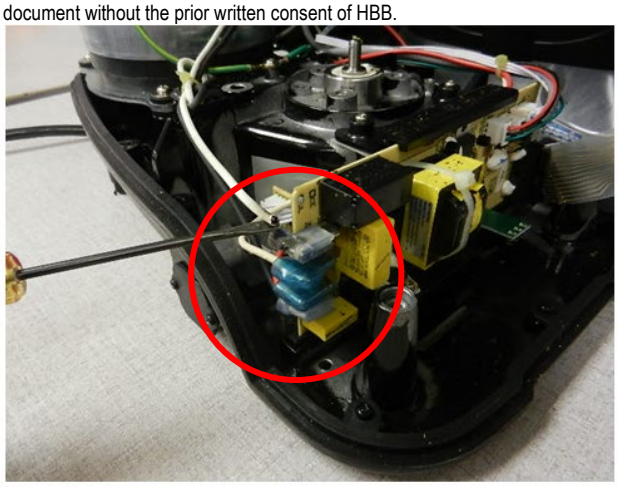


Fig.31:
Broken white wire from motor to PCB.

Fig. 32:
Pry the timer knob off of the timer shaft.

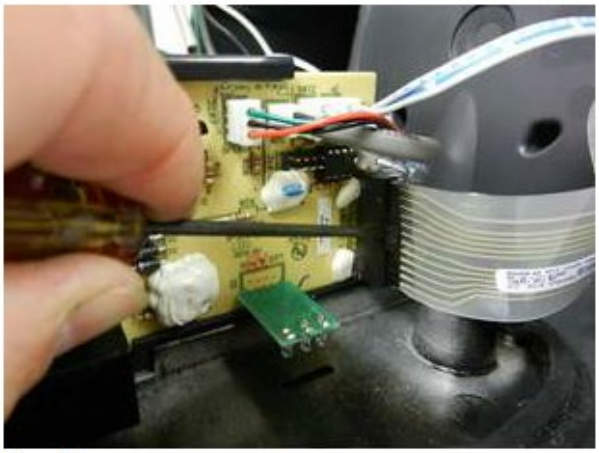


Fig. 33:
Carefully unplug the touchpad ribbon cable.

Fig. 34:
With an utility knife, separate the adhesive backed Touchpad from the backing plate of the touchpad Assembly. Pull the old touchpad off. Replacement Is the reverse of these steps.

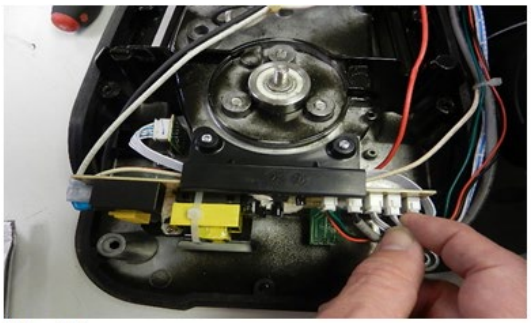


Fig.35

Fig.36