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Eccellenza touch

Service Manual

VKI TECHNOLOGIES INC.

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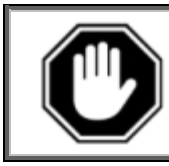

Carefully read this instruction manual before proceeding with the installation and operation of this equipment. Keep this manual in a safe place for future reference.

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SECTION 1

Safety Information & Equipment Specifications

Your safety is extremely important to us. To avoid personal injury or damage to the equipment and its surrounding areas, it is **imperative** that you read and understand the safety information outlined in this section before proceeding with the installation and operation of this equipment.

Safety Symbols

The following symbols are used throughout this publication:

	**Indicates an electrical shock hazard.**
	**Indicates a potential safety risk, or a risk of damage to equipment and/or its surroundings.**
	**Indicates important information that must be understood before proceeding.**
	**Indicates an important note or useful tip.**

Important Safeguards and Precautions

- This equipment is designed for indoor use **ONLY** and must ***never*** be installed outdoors.
- The installation of this equipment must comply with all municipal, state/provincial, and federal electrical and plumbing codes.
- Installation and servicing of this equipment must only be performed by qualified personnel. Do not attempt to install or service this equipment if you are not qualified as it may result in personal injury. There are no user-serviceable parts inside the equipment.
- Do not use an electrical extension cord or power bar.
- This equipment must be installed in a location with an ambient temperature between 5°C-35°C (40°F-95°F).
- The main water supply pressure must be between a minimum of 20psi and a maximum of 100psi.
- This equipment must be positioned so that the wall plug and the main power switch are both easily accessible.
- Do not connect this equipment to a voltage supply other than the voltage indicated on the serial number decal.
- Do not immerse this equipment, or any part of this equipment, in liquid.
- Do not install the equipment in an area where water spray is present.
- This equipment must be installed securely on a level surface. If it does not appear to be a stable location, select another installation location.
- Leave a **minimum of 2" (5cm)** of space around this equipment for proper ventilation.
- Keep hands clear of the dispensing area at the front of this equipment. Liquids being dispensed are extremely hot and can cause severe burns.
- **Never** disconnect this equipment from the wall outlet by pulling on the service cord, and never use this equipment if the service cord is damaged.
- If the service cord is damaged, **it must be replaced with a new service cord** that is available from your distributor or the manufacturer of this equipment.
- **Never** circumvent the safety features incorporated into the equipment. They are there for your protection and **should never be disabled or bypassed under any circumstances**.
- **Always** switch the power off and disconnect the service cord when cleaning the interior of this equipment. Components inside this equipment can cause electrical shock resulting in personal injury.

- Use caution when servicing the water tank or any of its components - the water in the tank and the tank components may be extremely hot and can cause severe burns.
- Use caution when working inside this equipment as there may be sharp edges on some components that can cause cuts.
- To prevent electrical shock, remove all jewelry (rings, watches, etc.) when servicing this equipment.
- **Use only original equipment manufacturer replacement parts**. Unapproved replacement parts can result in personal injury, fire and/or further damage to the equipment.
- **Do not** allow children to access this equipment. They are not aware of the potential dangers that exist.
- **Never** use ammonia-based cleaners on the surfaces of this equipment as they will become discolored and/or damaged permanently. Use mild cleaning products, such as dish soap.
- **Do not** lean on, push or shake the equipment as there is a risk that it can tip or fall, or cause water to overflow and contact electrical components creating a shock hazard.

Unauthorized modifications made to this equipment can result in serious personal injury and/or damage to the equipment and its surroundings (including a risk of fire), and voids all warranties and safety certifications/listings.

Specifications

Voltage Rating	120 Volts AC @ 60hz (120 Volt Model)
Heater Wattage	1300 Watts
Weight	76 lbs (34.5 kg)
Cup Sizes	8-oz, 10-oz, 12-oz
Temperature Control	Electronic Probe
Heating Time	20 minutes after install
Brew Temperature	203°F (95°C)
Heater Protection	Yes
Overflow Protection	Yes
Circuit Protection	Yes
Certifications & Listings	

Capacities

Coffee Hopper 1	1000 grams (2.25 lbs) with partition at center ***or*** 1350 grams (3 lbs) with partition at right side
Coffee Hopper 2	1000 grams (2.25 lbs) with partition at center ***or*** 650 grams (1.5 lbs) with partition at right side
Powder Hopper 1	1000 grams (2.25 lbs)
Powder Hopper 2	1000 grams (2.25 lbs)
Powder Hopper 3	1000 grams (2.25 lbs)
Water Tank	3.8 litres (1 gallon)
Waste Bin	27 cups (10-oz)

Equipment Dimensions

Height:	28.0" (71 cm)
Width:	20.0" (56 cm)
Depth:	20.25" (51 cm)

Installation Dimensions

Height:	34.5" (88 cm)
Width:	22.0" (56 cm)
Depth:	22.5" (57 cm)

Any references made in this manual to coffee blends, powder products and beverages are for example purposes only. The actual products used in the equipment may differ from the examples used in this manual.

SECTION 2

Care and Maintenance

To keep the Eccellenza Touch running efficiently and at peak performance, the following maintenance procedures must be performed at their specified intervals. It is recommended that equipment maintenance be scheduled at a time that would be the least disruptive to your customers. Whenever possible, replace the components requiring maintenance with new or refurbished ones, and then refurbish the older components at your shop.

Daily Care - Caretaker

- **Empty the Cup Stand** – *empty the contents of the cup stand and rinse the stand and grill under clean running water.*
- **Empty the Waste Bin** – *empty the contents of the waste bin.*
- **Refill the Coffee Dispensers and Powder Dispensers** – *top off the coffee and powder dispensers.*
- **Wipe Exterior and Countertop** – *using a clean towel, wipe any coffee grounds and spills from the exterior of the machine and the countertop.*

Every 10,000 Cycles or 12 Months - Service Technician

- **Clean the brewer components** with warm water and dish soap. For detailed information about removing and disassembling the brewer, go to page 21.
- **Replace Brewer Seals and Gaskets** - *there are several seals and gaskets located throughout the brewer assembly that need to be replaced every 12 months. The brewer '**Yearly Maintenance Kit**' (p/n - 202341-001) contains everything required.*

Contents of Yearly Maintenance Kit (202341-001)

- **Clean the whipper components** - for detailed information about disassembling and cleaning the whipper components, consult the "Whipper System Removal, Manual Cleaning and Installation" section on page 39.

Every 3 Years - Service Technician

- **Replace the following:** *heater element, thermal cut-off switch, external relays, all seals and gaskets and o-rings.*
- **Refurbish the Brewer** - *the brewer must be disassembled and all worn components must be replaced.*

Miscellaneous

- Run the **Brewer Rinse Cycle** when prompted by the machine (a message appears on the touch screen).
- Run the **Powder Rinse Cycle** when prompted by the machine (a message appears on the touch screen).
- **Verify Water Tank Components** - *dependant on the local water conditions, inspect, clean or replace components, as required.*
- **Cleaning the Coffee Dispenser** - empty, remove, and clean the coffee dispenser with warm water and dish soap. Thoroughly dry the dispenser before re-installing it. For detailed information about removing the coffee dispenser, go to page 33.
- **Cleaning the Powder Dispensers** - empty, remove, and clean the powder dispensers with warm water and dish soap. Thoroughly dry the dispensers before re-installing them. For detailed information about removing the powder dispensers, go to page 37.

SECTION 3

Error and Reminder Messages

Main Screen

Message Displayed	Condition	Action(s) Required
Backend Services Unreachable. Trying to reconnect...	The connection was lost.	Will reconnect automatically.
• **System Starting** • **Waiting for initialization** • **System initialization** • **System update** • **Warming up** • **Machine warming up** • **System Ready** • **Brewing in progress** • **Water filling** • **Brewer reinitialization**	These are all regular operation messages.	These messages will clear themselves automatically.
Power Saving Mode	The machine is currently in Power Saving mode.	The machine will exit Power Saving mode at its preset wake time.
Powder #1 (#2, #3) low level. Fill powder container #1 (#2, #3)	The powder level for the indentified container (#1, #2 or #3) is low.	Refill the powder container(s). ***Note:*** *the message may continue to appear for a few vends after refilling - this is normal and it will clear.*
Empty waste bin and cup stand	The waste bin is full.	Empty the contents of both the waste bin and the cup stand.
Automatic brewer (or powder system) rinse. Insert an empty container under spout and press <Start>.	The automatic rinse cycle for the brewer or for the powder system has been triggered.	Place an empty, leak proof container under the pour spouts area, and then press <Start> to begin the rinse cycle.
Overflow detected. Remove and empty cup stand and drip tray.	An overflow has been detected.	Remove the cup stand and floor liner and empty their contents.
Verify water connection and feed	The water tank is taking too long to fill.	Check the main water source, as well as the hoses going to the machine inlet valve for leaks or blockages.
Please reinsert waste bin	The waste bin is not installed.	Install the waste bin. If message persists, check the waste bin sensor.
Water Safety Level. Water level has reached the level safety probes.	The water tank has overfilled.	Drain some water from the tank. If this persists, clean the level probes.
Interrupted vend. Insert an empty container under spout and press Start.	The vend was interrupted and the cycle did not finish.	Place a cup under the pour spouts and press the <Start> button. Any liquid still in the system will drain into the cup.

System Status Screen

Message Displayed	Code	Condition	Action(s) Required
Blower & Fan current is over safety level	**B1**	Blower & Fan current is above the recommended safety level. Fan may be drawing too much power.	1 - Check the wiring and connections for the powder system blower. 2 - Clean any accumulation from the blower. 3 - If message persists, replace the powder system blower.
Blower & Fan current is under minimum operation level	**B1**	Blower & Fan current is below the minimum operating level. Fan may not be drawing enough power.	1 - Check wiring and connections for the powder system blower. 2 - If message persists, replace the powder system blower.
Brewer current is over safety level	**M9**	Brewer current has exceeded the maximum operating level.	1 - The brewer may be seized or jammed. 2 - The brewer motor may need to be replaced.
Brewer current is under minimum operation level	**M9**	Brewer current is below the minimum operating level.	1 - Check the wiring and connections to the brewer motor. 2 - The brewer motor may need to be replaced.
Brewer Inversion	**M9**	Brewer is going in the wrong direction. ***or*** Wiper is going in the wrong direction (detected by the activation of the wrong switch).	1 - Check the wiring and connections to the brewer motor. 2 - Check the wiring and connections to the wiper motor switches. 3 - One, or both, of the wiper motor switches needs to be replaced.
Brewer Not Counting	**M9**	The brewer quadrature encoder is not returning any count.	1 - Clear the message. 2 - Reboot the machine. 3 - If message persists, replace the brewer motor.
Brewer Not Initialized	**M9**	A brewer sequence was started while the brewer was not initialized.	1 - Reboot the machine to initialize the brewer.
Brewer Over Current Standby	**M9**	The brewer current was over the configured stand by operation level.	1 - Clear the message. 2 - Reboot the machine.
Brewer Safety Fault	**M9**	The IC of the brewer driver is in fault.	1 - Clear the message. 2 - Reboot the machine. 3 - If message persists, replace the brewer motor.
Brewer Timeout	**M9**	Brewer motion is timed out: brewer is moving too slow, and unable to reach required position in the allotted period of time.	1 - Check the wiring and connections to the brewer motor. 2 - The brewer motor may need to be replaced.
Brewer Unexpected Item Received	**M9**	A brewer sequence step was received while a wiper sequence was already in progress.	1 - Clear the message. 2 - Reboot the machine. 3 - If message persists, replace the brewer motor.
Coffee Dispensers current is close to critical level	**M6, M7**	Coffee Dispenser current is close to maximum operating level.	1 - The coffee dispenser may be jammed. 2 - The coffee dispenser motor may be seized. 3 - If message persists, replace the coffee dispenser motor.
Coffee Dispensers current is close to minimum operation level	**M6, M7**	Coffee Dispenser current is close to minimum operating level.	1 - Check the wiring and connections to the coffee dispenser motor. 2 - The coffee dispenser may not be engaged with the dispenser motor. 3 - The coffee dispenser motor coupling may need to be replaced. 4 - If message persists, replace the coffee dispenser motor.

Message Displayed	Code	Condition	Action(s) Required
Coffee Dispensers current is over safety level	**M6, M7**	Coffee dispenser motor current has exceeded the maximum operating level.	1 - Check to see if the coffee dispenser motor is jammed. 2 - Reboot the machine. 3 - If message persists, replace the coffee dispenser motor.
Coffee Dispensers current is under minimum operation level	**M6, M7**	Coffee dispenser motor current is below the minimum operating level.	1 - Check the wiring and connections to the coffee dispenser motor. 2 - The coffee dispenser may not be engaged with the dispenser motor. 3 - The coffee dispenser motor coupling may need to be replaced. 4 - If message persists, replace the coffee dispenser motor.
Coffee Dispensers Over Current Standby	**Z99**	The coffee dispensers current sum was over the configured stand by operation level.	1 - Clear the message. 2 - Reboot the machine.
Coffee Grinder Over Current Standby	**G1**	The grinder current was over the stand by operation level.	1 - Clear the message. 2 - Reboot the machine.
CUP LIGHT LED #1 is not detected/ CUP LIGHT LED #2 is not detected	**S1, S2**	Cup Light LED #1 or #2 is open circuit.	1 - Replace LED/harness.
Fan is not present or has abnormal operation	**K1**	Fan is not present or operating abnormally.	1 - Check fan wiring and connection to the control board. 2 - Clean any accumulation from fan. 3 - If message persists, replace the exhaust fan. 4 - If message persists, replace the control board.
Grinder Fuse Fault	**G1**	Grinder fuse is in fault.	1 - Check the fuse on the control board.
Grinder Sensor Error	**G1**	Grinder Current Sensor is out of range.	1 - Clear the message. 2 - Reboot the machine.
Grinder's current is close to critical level	**G1**	Grinder current is close to maximum operating level. Grinder may be drawing too much power.	1 - Check to see if the grinder is jammed (possibly a foreign object in the grinder heads). 2 - Check the condition of the grinder belt. 3 - Reboot the machine. 4 - If message persists, replace the grinder.
Grinder's current is close to minimum operation level	**G1**	Grinder current is close to minimum operating level. Grinder may not be drawing enough power.	1 - Reboot the machine. 2 - If message persists, replace the grinder.
Grinder's current is over safety level	**G1**	Grinder current has exceeded the maximum operating level.	1 - Check to see if the grinder is jammed (possibly a foreign object in the grinder heads). 2 - Check the condition of the grinder belt. 3 - Reboot the machine. 4 - If message persists, replace the grinder.
Grinder's current is under minimum operation level	**G1**	Grinder current is below the minimum operating level.	1 - Check the condition of the grinder belt. 2 - Check the wiring and connections to the grinder. 3 - The grinder may need to be replaced.

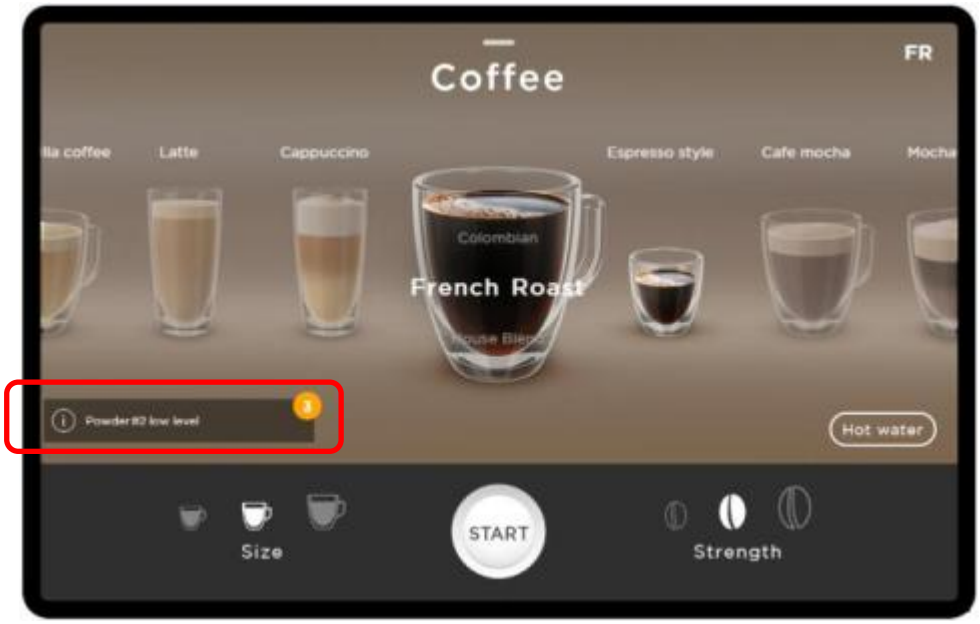
Message Displayed	Code	Condition	Action(s) Required
Heater's current is close to critical level	**H1**	Heater current is close to maximum operating level. Heater may be drawing too much power.	1 - Inspect wiring and connections to the heater relay and heater element. 2 - Heater element may be drawing too much power. If message persists, replace the heater element.
Heater's current is close to minimum operation level	**H1**	Heater current is close to minimum operating level. Heater may not be drawing enough power.	1 - Reboot the machine. 2 - If message persists, replace the heater element.
Heater's current is over safety level	**H1**	Heater current has exceeded the maximum operating level.	1 - Inspect wiring and connections to the heater relay and heater element. 2 - Heater element may need to be replaced. 3 - Heater relay may need to be replaced.
Heater's current is under minimum operation level	**H1**	Heater current is below the minimum operating level.	1 - Check wiring and connections to the heater relay. 2 - Check wiring and connections to the heater element. 3 - Replace heater element.
Impossible temperature (greater than over heat or below 0)	**T1**	Invalid temperature being reported.	1 - Inaccurate temperature reading - replace the temperature probe.
LED in Waste Bin detector has a fault	**D2**	The IR LED of the waste bin sensor voltage is over the configured maximum operation level.	1 - Clear the message. 2 - Reboot the machine. 3 - If message persists, replace the waste bin presence sensor.
Machine Fan Blower Over Current Standby	**Z99**	The fan or blower current sum was over the configured stand by operation level	1 - Clear the message. 2 - Reboot the machine.
Machine No Cup Light 1 Short / Machine No Cup Light 2 Short	**S1, S2**	Cup Light LED #1 or #2 is shorted.	1 - Replace LED/harness.
Powder Dispensers current is close to critical level	**M1, M2, M3**	Powder Dispenser current is close to maximum operating level. Powder motor may be drawing too much power.	1 - The powder product in the dispenser may be packed or compressed. Empty the powder dispenser. 2 - The powder dispenser may be jammed. 3 - The powder dispenser motor may be seized. Try to unseize the motor. 4 - If message persists, replace the powder dispenser motor.
Powder Dispensers current is close to minimum operation level	**M1, M2, M3**	Powder Dispenser current is close to minimum operating level. Powder motor may not be drawing enough power.	1 - Check the wiring and connections to the powder dispenser motor. 2 - The powder dispenser may not be engaged properly with the powder dispenser motor. 3 - The powder dispenser motor coupling may need to be replaced. 4 - If message persists, replace the powder dispenser motor.
Powder Dispensers current is over safety level	**M1, M2, M3**	Powder Dispenser current has exceeded the maximum operating level.	1 - The powder in the dispenser may be packed or compressed. Empty the powder dispenser. 2 - Powder dispenser may be jammed. 3 - The powder dispenser motor may be seized. Try to free the motor. 4 - If message persists, replace the powder dispenser motor

Message Displayed	Code	Condition	Action(s) Required
Powder Dispensers current is under minimum operation level	**M1, M2, M3**	Powder Dispenser current is below the minimum operating level.	1 - Check the wiring and connections to the powder dispenser motor. 2 - If message persists, replace the powder dispenser motor.
Powder Dispensers Over Current StandBy	**Z99**	The powder dispensers current sum was over the configured stand by operation level.	1 - Clear the message. 2 - Reboot the machine.
Powder Whippers Over Current StandBy	**Z99**	Powder whippers current sum was over the configured stand by operation level	1 - Clear the message. 2 - Reboot the machine.
The water level is reaching the safety level probes	**L5**	The water tank has overfilled and the water level is reaching the safety level probe.	1 - If this occurs during initial heating, it may be due to water expansion. Empty some water from tank. 2 - The machine may have been moved causing tank to overfill. Empty some water from tank. 3 - Level probes require cleaning.
Valves & Relay current is over safety level.	**V1-V6**	Valves & Relay current has exceeded the maximum operating level.	1 - Clear the message. 2 - If message persists, the inlet valve or one of the outlet valves may need to be replaced.
Valves & Relay current is under minimum operation level	**V1-V6**	Valves & Relay current is below the minimum operating level.	1 - Clear the message. 2 - Check wiring and connections to inlet and outlet valves. 3 - If message persists, the inlet valve or one of the outlet valves may need to be replaced.
Water Tank Coil Valves Over Current StandBy	**Z99**	Valve(s) current has exceeded the configured stand by operation level.	1 - Clears automatically. If not, reboot the machine.
Water Tank Default Critical Min Temp	**H1**	Water temperature went below the configured minimum critical temperature (Default 0 C).	1 - Clear the message. 2 - Reboot the machine.
Water Tank Default Fill Heating Time	**H1**	Inlet valve and heater were both activated for a period of time longer than the configured timeout.	1 - Clear the message. 2 - Reboot the machine.
Water Tank Detectors Power Failure	**Z99**	Fault signal triggered due to a failure of the level probes and overflow detector power supply.	1 - Clear the message. 2 - Reboot the machine. 3 - If message persists, replace the control board.
Water Tank Heater Over Current StandBy	**Z99**	Heater current has exceeded the configured stand by operation level.	1 - Clears automatically. If not, reboot the machine.
Water Tank Heating Timeout	**H1**	Reaching the water set point (Default 95 C) took longer than the maximum configured heating timeout (Default: 30 min.)	1 - Clear the message. 2 - Reboot the machine. 3 - If message persists, replace the heater element.
Water Tank Heating Probe Error	**H1**	Heater bad connection count has exceeded the configured limit.	1 - Clear the message. 2 - Reboot the machine.
Water Tank Level Error	**L4**	Safety level probe is detected while the normal level probe is not.	1 - Check wiring and connections to the level probes. 2 - Clean level probes.
Water Tank Temperature Probe Short	**T1**	Temperature probe is shorted	1 - Check the wiring and connection to the temperature probe. 2 - Replace the temperature probe.
Water Tank Temperature Probe Not Present	**T1**	Temp probe is open.	1 - Check the wiring and connection to the temperature probe. 2 - Replace the temperature probe.

Message Displayed	Code	Condition	Action(s) Required
Water temperature is not rising while heating	**T1**	Water temperature is not increasing while in heating mode.	1 - Check wiring and connections to heater relay, heater element and control board. 2 - Heater relay may need to be replaced. 3 - Heater element may need to be replaced. 4 - Control board may need to be replaced.
Water temperature is over the maximum level	**H1**	Water temperature has exceeded configured temperature setting.	1- Heater relay may need to be replaced. 2 - Control board may need to be replaced.
Whippers current is close to critical level	**M4, M5, M11**	Powder Whipper current is close to maximum operating level.	1 - If message persists, replace the faulty whipper motor.
Whippers current is close to minimum operation level	**M4, M5, M11**	Powder Whipper current is close to minimum operating level.	1 - If message persists, replace the faulty whipper motor.
Whippers current is over safety level	**M4, M5, M11**	Powder Whipper current has exceeded the maximum operating level.	1 - If message persists, replace the faulty whipper motor.
Whippers current is under minimum operation level	**M4, M5, M11**	Powder Whipper current is below the minimum operating level.	1 - Check the wiring and connections to the whipper motor. 2 - If message persists, replace the faulty whipper motor.
Wiper current is over safety level	**M10**	The wiper motor current was over the configured maximum operation level.	1 - The wiper may be jammed or binding. 2 - The wiper motor may need to be replaced.
Wiper current is under minimum operation level	**M10**	The wiper motor current was under the configured minimum operation level.	1 - The wiper may be missing or improperly installed. 2 - Check wiper motor connections. 3 - The wiper motor may need to be replaced
Wiper Inversion	**M10**	The wiper limit switches are inverted.	1 - Reverse the wiring connections to the wiper switches.
Wiper Not Initialized	**M10**	A wiper sequence was started while the wiper was not initialized (homed).	1 - Clear the message. 2 - Reboot the machine. 3 - If message persists, check wiper motor switches and connections. 4 - If message persists, a wiper motor switch needs to be replaced.
Wiper Over Current Standby	**M10**	The wiper current was over the configured stand by operation level.	1 - Clear the message. 2 - Reboot the machine.
Wiper Safety Fault	**M10**	The IC of the wiper driver is in fault mode.	1 - Reboot the machine. 2 - If message persists, the control board may need to be replaced.
Wiper Timeout	**M10**	Wiper motion is timed out: brewer is moving too slow (or stopped), unable to reach required position in the allotted period of time.	1 - The wiper may be jammed or binding. 2 - Check wiper motor connections. 3 - The wiper motor may need to be replaced.
Wiper Unexpected Item Received	**M10**	A wiper sequence step was received while a wiper sequence was already in progress.	1 - Clear the message. 2 - Reboot the machine.

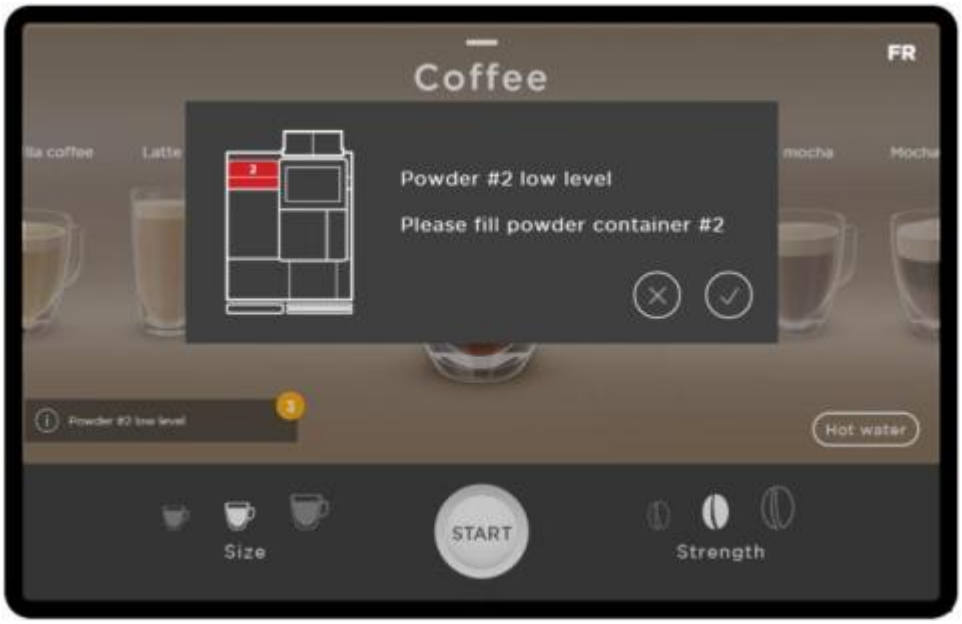
Clearing Error and Reminder Messages

Should an error or reminder message be triggered, the error or message is displayed at the lower left of the screen. In the example below, the message reads "**Powder #2 low level**". However, in our example, there are three messages present, as indicated by the number "**3**" in the upper right corner of the message box. Messages are stacked in the order in which they occur.

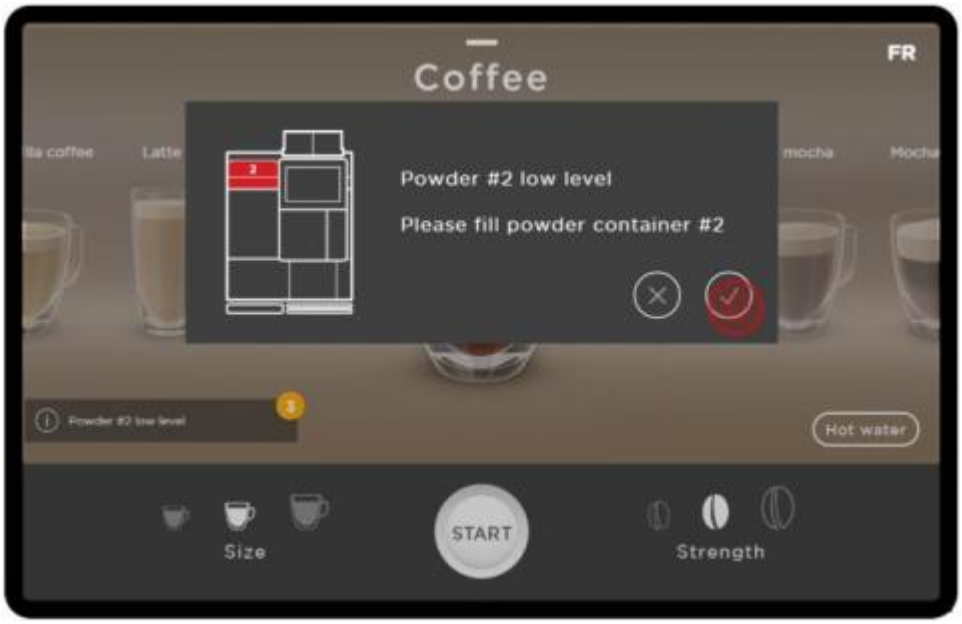


Tap the message box to view more details about the message and the steps required to rectify the issue.

In this case, the 'Powder 2' dispenser is running low and must be refilled. Open the powder dispenser lid and refill the dispenser.



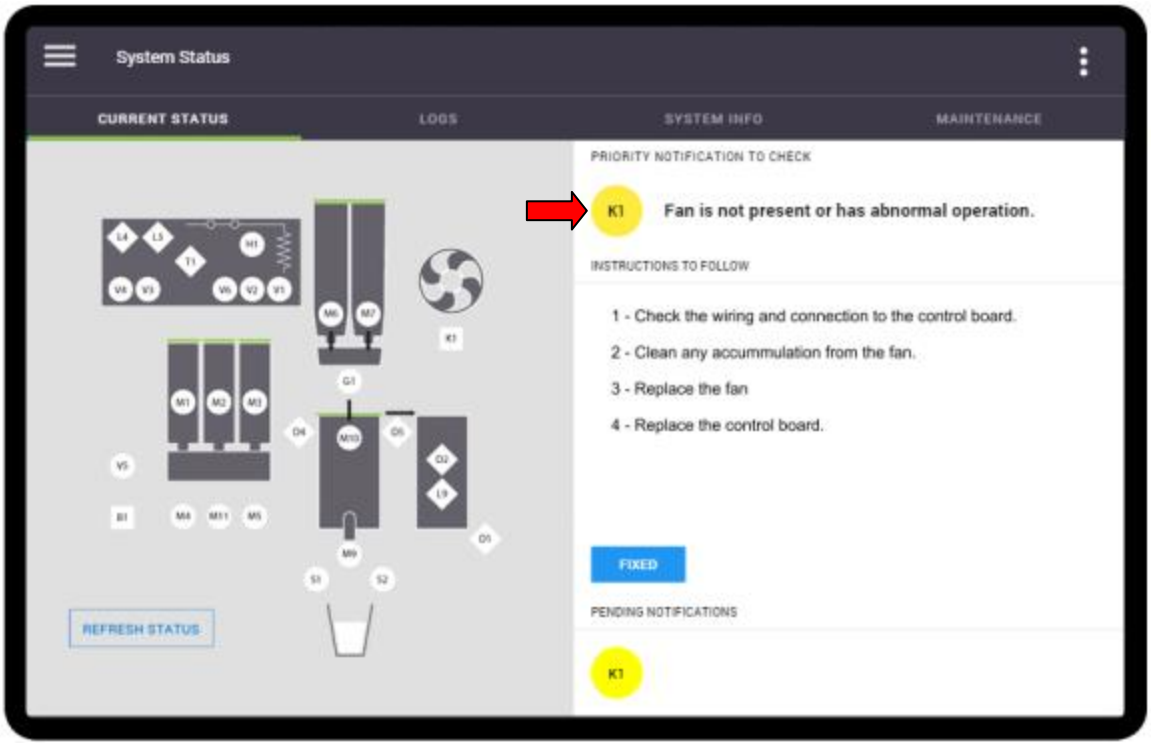
Once done, tap the checkmark to clear this message. If you cannot immediately refill the dispenser, tap the 'X' to close this window without clearing the message.



In a case where multiple messages are present, after clearing the first message, any subsequent messages are displayed (one at a time) until they are all cleared.

Fault Codes

Should a fault be present, it is identified using one of the codes from the list below. The right section of the screen shows the component code, a brief description of the fault, and corrective actions necessary to clear this fault.



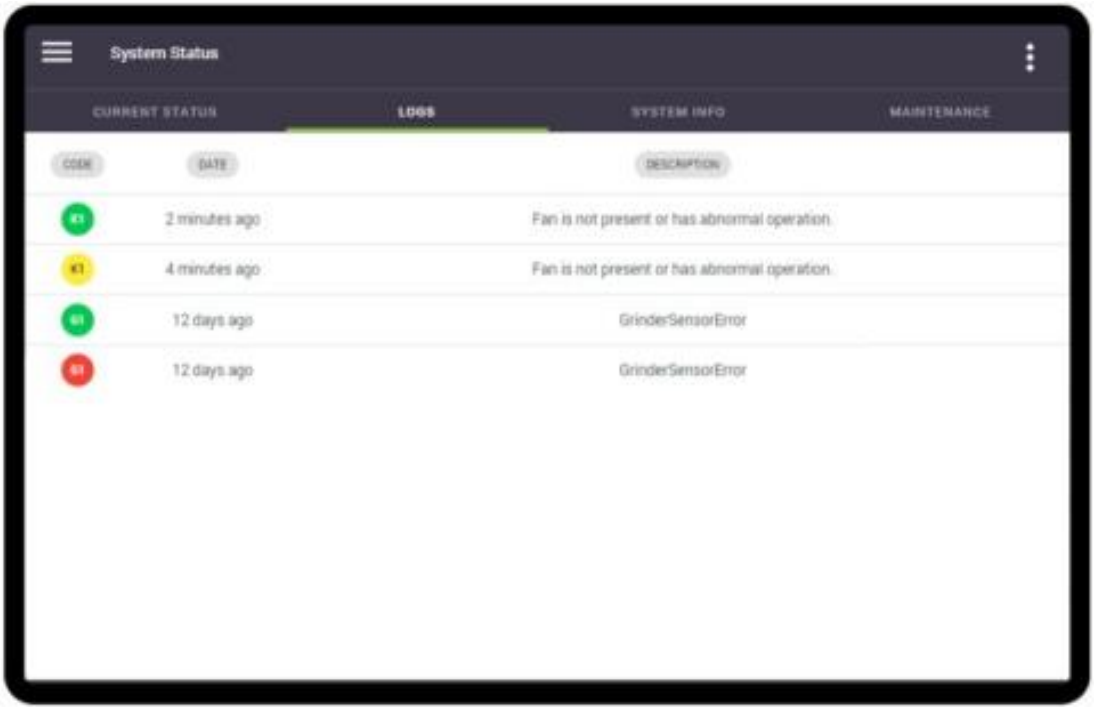
CODE	COMPONENT
B1	Blower (Powders)
D1	Overflow Detection
D2	Waste Bin Presence Detection
D4	Wiper Switch - Left
D5	Wiper Switch - Right
G1	Grinder Motor
H1	Heating Element
K1	Exhaust Fan
L4	Normal Water Level Detection
L5	Safety Water Level Detection
L9	Waste Bin Level Detection
M1	Powder 1 Motor
M2	Powder 2 Motor
M3	Powder 3 Motor
M4	Powder 1 Whipper Motor

CODE	COMPONENT
M5	Powder 2 Whipper Motor
M6	Coffee 1 Motor
M7	Coffee 2 Motor
M9	Brewer Motor
M10	Brewer Wiper Motor
M11	Powder 3 Whipper Motor
S1	Cup Lighting
S2	Esthetic Lighting
T1	Temperature Probe
V1	Outlet Valve - Coffee
V2	Outlet Valve - Powder 1
V3	Outlet Valve - Powder 2
V4	Outlet Valve - Hot Water
V5	Inlet Valve
V6	Outlet Valve - Powder 3

In the example above, a fault has been detected with "**K1**", which is the exhaust fan. Perform each of the recommended steps in the "Instructions to Follow" section of the screen. After ***each*** step, tap the "**Fixed**" button and the machine then runs the diagnostics to verify operation. If the fault has been corrected, the screen displays a green checkmark with the "System is running perfectly" message beneath it. If the fault is still present, proceed to the next step and repeat the process.

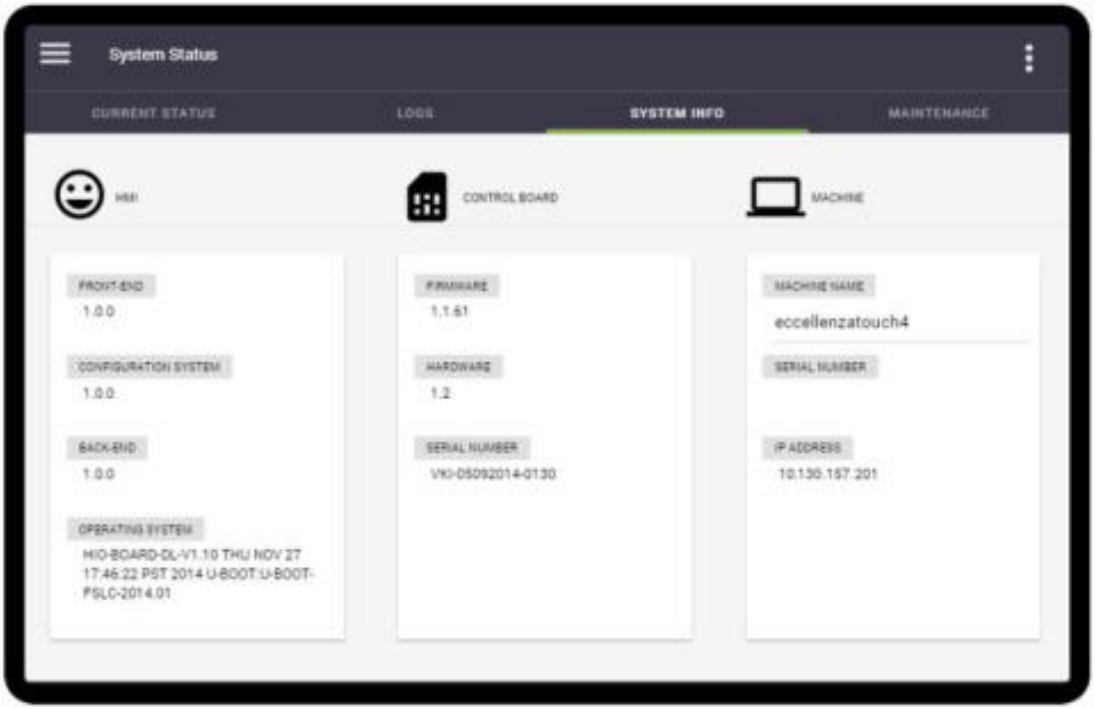
Logs

The 'Logs' tab shows the fault history of the equipment in list form (from newest to oldest). Codes marked in Red identify that servicing was required. Yellow-marked codes warn of potential faults. Codes in green identify that the fault was corrected, and when it was corrected.



System Info

Information about the equipment, such as serial number, firmware versions, network address, etc., can be found in this menu.



SECTION 4

Brewer System

Replacing the Brewer Assembly

1. Remove the waste bin, then unlock and open the front door.
2. Remove the brewer spout assembly.
3. Press on the bottom of the red release latch, and rotate the brewer towards the left (clockwise) to release it.
4. Lift the brewer off the brewer motor to remove it.

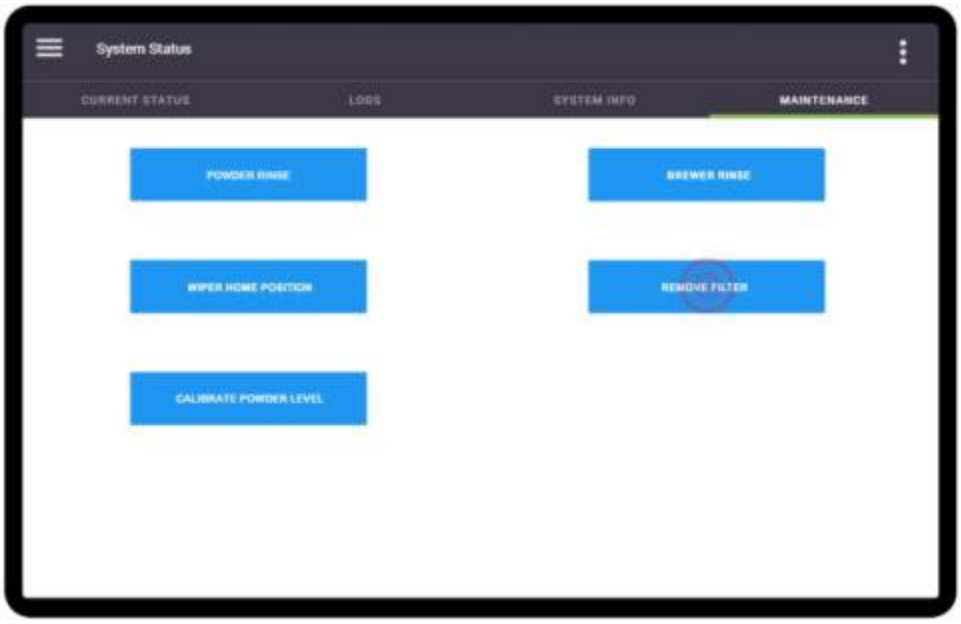
	**If you are performing the annual maintenance on the brewer, continue with this section of the manual for instructions to completely disassemble the brewer.**

To install the brewer, follow these same instructions in the reverse order.

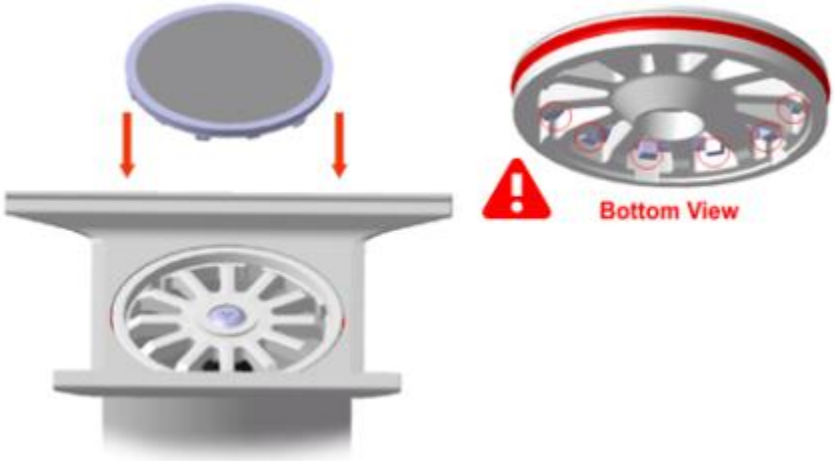
	**When re-installing the brewer, make certain the wiper is properly installed inside of the wiper arm.**

Replacing the Filter Screen

1. Remove the waste bin, open the front door, and re-install the waste bin. Allow the machine to complete its initialization.
2. Access the equipment programming, and navigate to the **'System Status'** menu, and then the **'Maintenance'** sub-menu.
3. Tap the **'Remove Filter'** option.



4. The brewer lowers the piston all the way to the bottom of the cylinder, which will subsequently unclip the filter screen from the piston.
5. The piston then moves to the top of the cylinder, allowing for easy retrieval of the filter screen.
6. Install the new filter screen into the top of the piston by clipping it in place - **make certain it is properly clipped all the way around**.

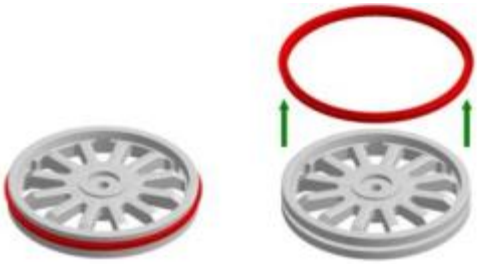


7. Remove the waste bin.
8. Close the door and re-install the waste bin, and allow the machine to complete its initialization.

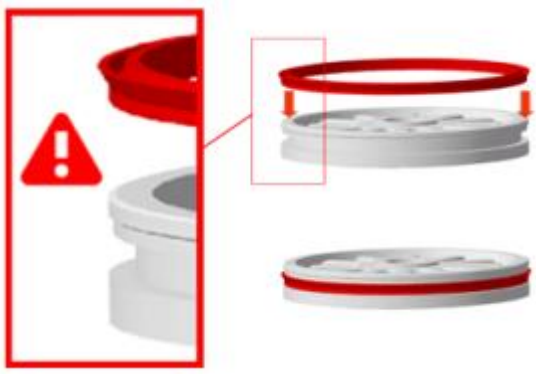
Removing the Brewer Piston & Seal

1. Remove the filter screen *(see page 22)*.
2. Remove the brewer from the machine, and remove the wiper from the brewer.
3. Remove the screw securing the piston to the piston rod, and then remove the piston.

4. Using a small flat head screwdriver, carefully pry the seal from the piston to remove it. ***Avoid damage to the piston as it will then need to be replaced as well.***

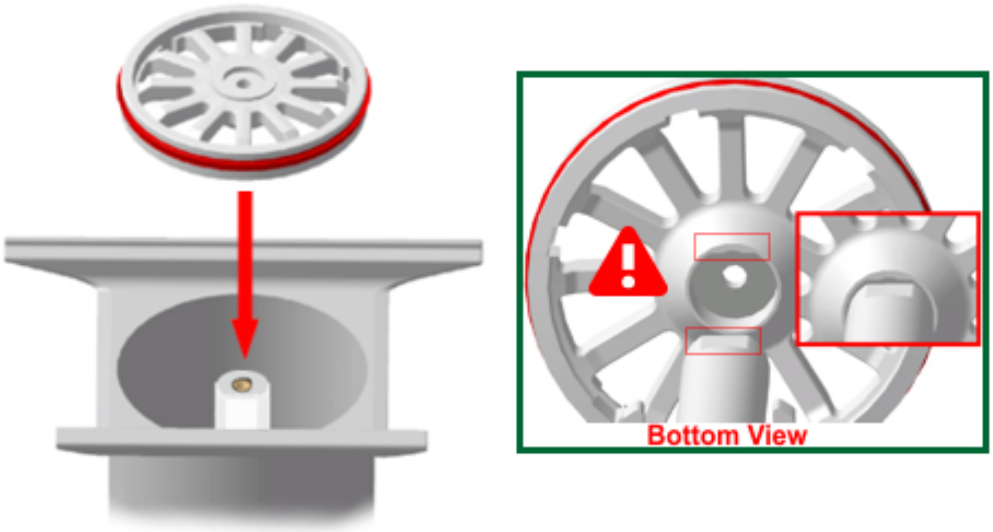


5. Install the new seal onto the piston. **To avoid installing the seal upside down onto the piston, note the orientation of both** *(see image below)*.



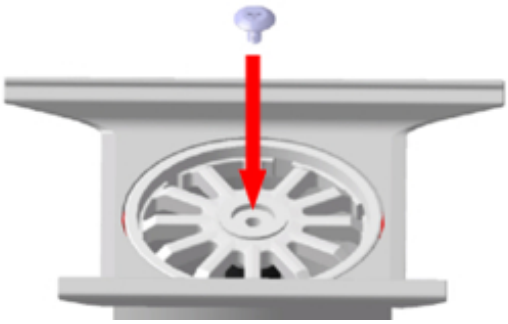
	**Prior to reassembling the brewer, make absolutely certain that the seal is <u>completely inserted into its seat all the way around</u> the piston.**	

6. The piston can only be installed in a specific direction onto the piston rod (the piston rod has a flat spot, as does the piston). Align the piston onto the piston rod and press it down into position.

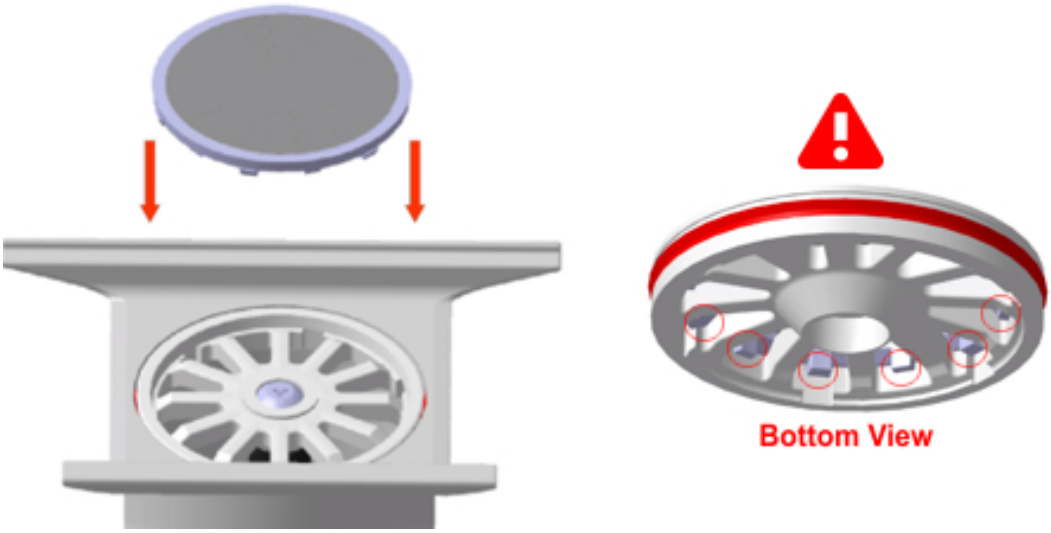


7. Secure the piston to the piston rod using the large sidewalk screw.

NOTE: When re-installing this screw, the torque must be 30 in/lbs.

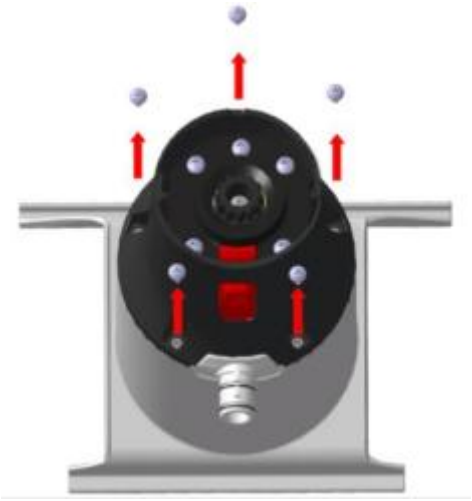


8. Install the filter screen by pressing it onto the piston until it clips into position all the way around.

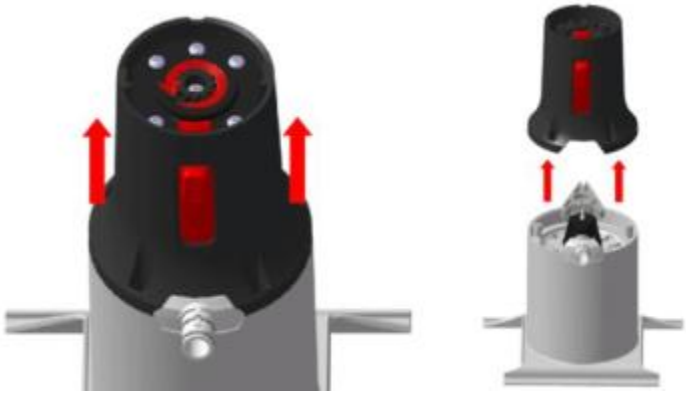


Removing the Brewer Cylinder

1. Remove the brewer piston *(see page 23)*.
2. Remove the five screws securing the brewer cylinder assembly to the cylinder base and set them aside for now.

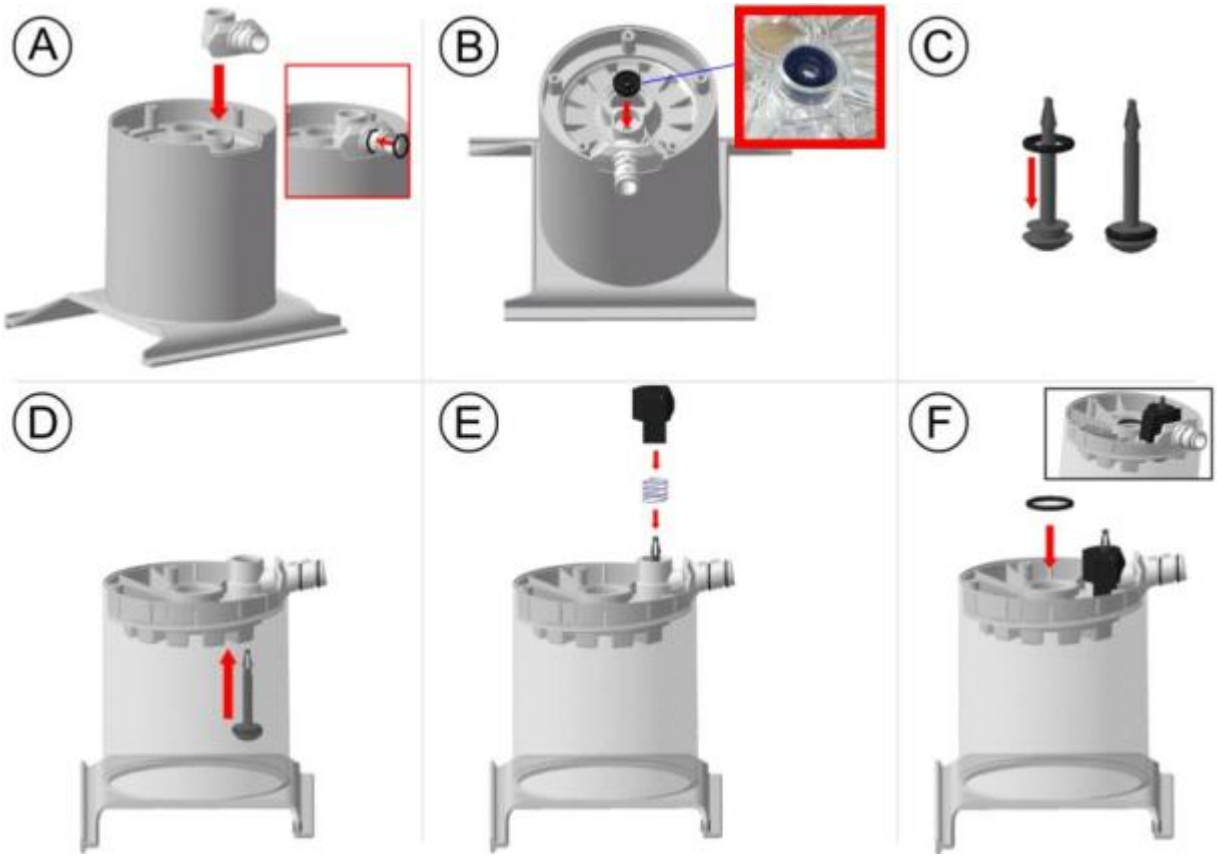


3. Turn the drive gear at the bottom of the brewer counter-clockwise while, at the same time, lifting the base away from the cylinder until it is free, and then remove and discard the old cylinder assembly.



4. Remove the piston rod assembly from the piston, and set it aside as you will be re-installing it later in this procedure.

5. Assemble the new cylinder *(consult VKI Publication #100310-001 for the required parts and their part numbers).*



A) Install the valve housing onto the cylinder (making certain in is pushed down completely), and then install the two o-rings onto the valve housing.

B) Install the U-cup seal into the valve housing.

C) Install the thick o-ring onto the valve head.

D) Pass the valve head through the valve housing from the inside of the cylinder. You need to hold the valve head in this position to perform the next step.

E) Place the spring into the U-Cup seal (with the valve head in the middle of the spring) and then install the valve activator over the spring (flatter side towards the front). While holding the valve body in place inside the cylinder, press firmly on the valve activator until the tip of the valve body passes through the activator, locking everything in place.

F) Install the large o-ring into the recession in the bottom center of the cylinder.

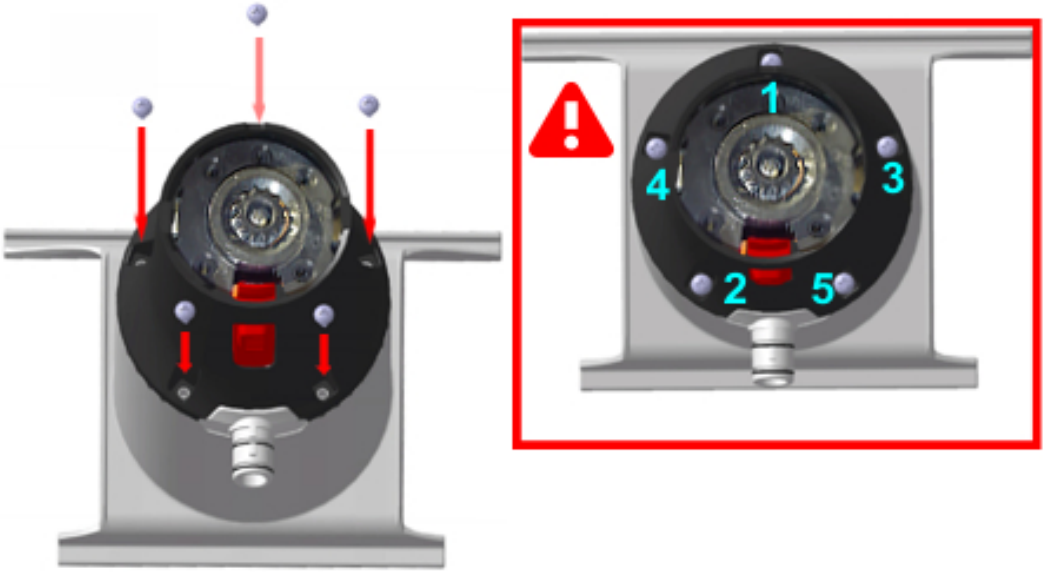
6. Slide the piston rod assembly all the way down into the cylinder.

7. Apply food grade lubricant (Lubrifilm) onto both sides of the piston track inside the cylinder base.

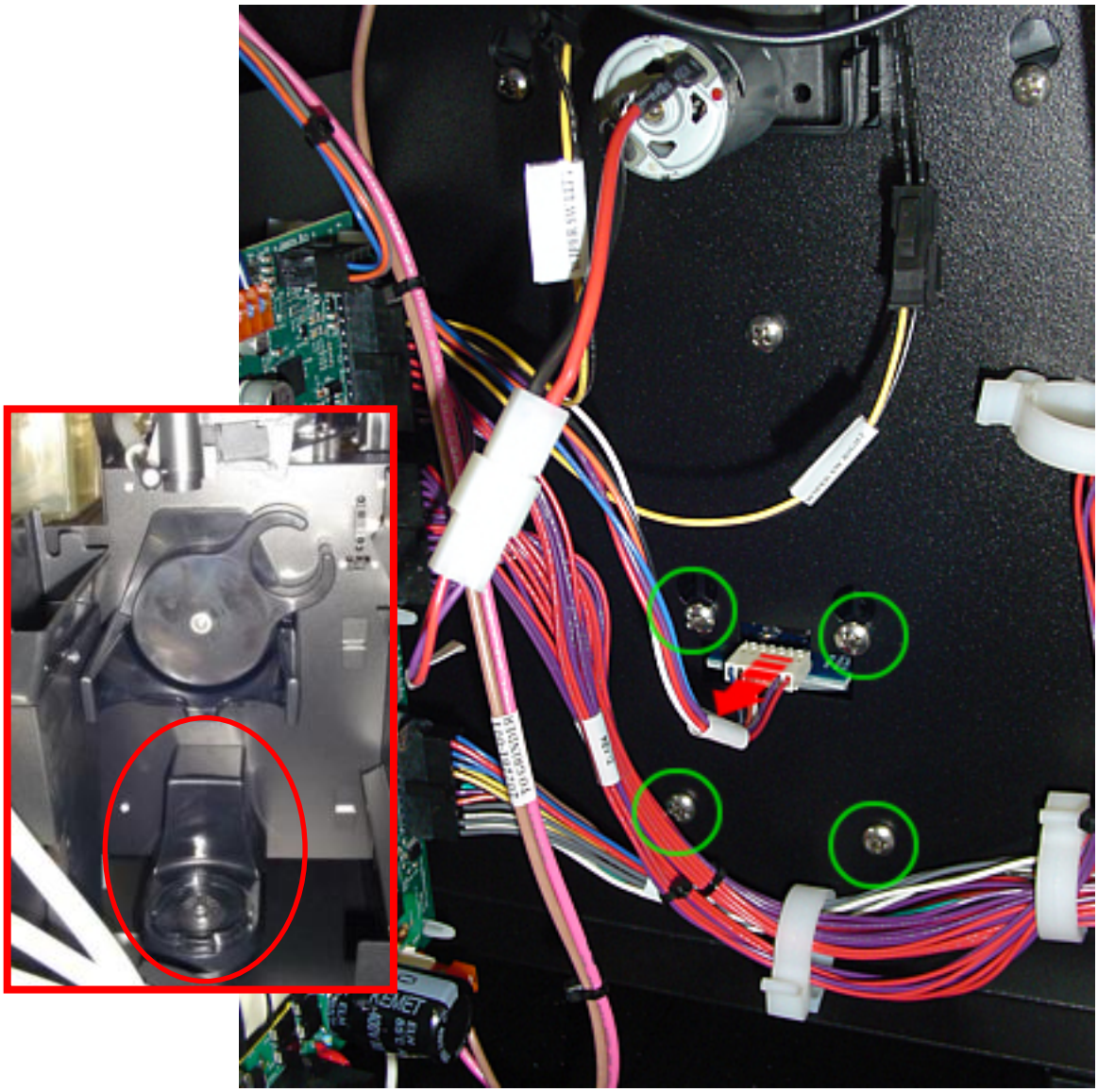
8. Turn the drive gear at the bottom of the brewer clockwise while, at the same time, pushing the base onto the cylinder until it is fully seated.

9. Insert the five screws into the cylinder base and tighten them in the sequence shown.

NOTE: When re-installing these screws, the torque must be 30 in/lbs.



Removing the Brewer Motor

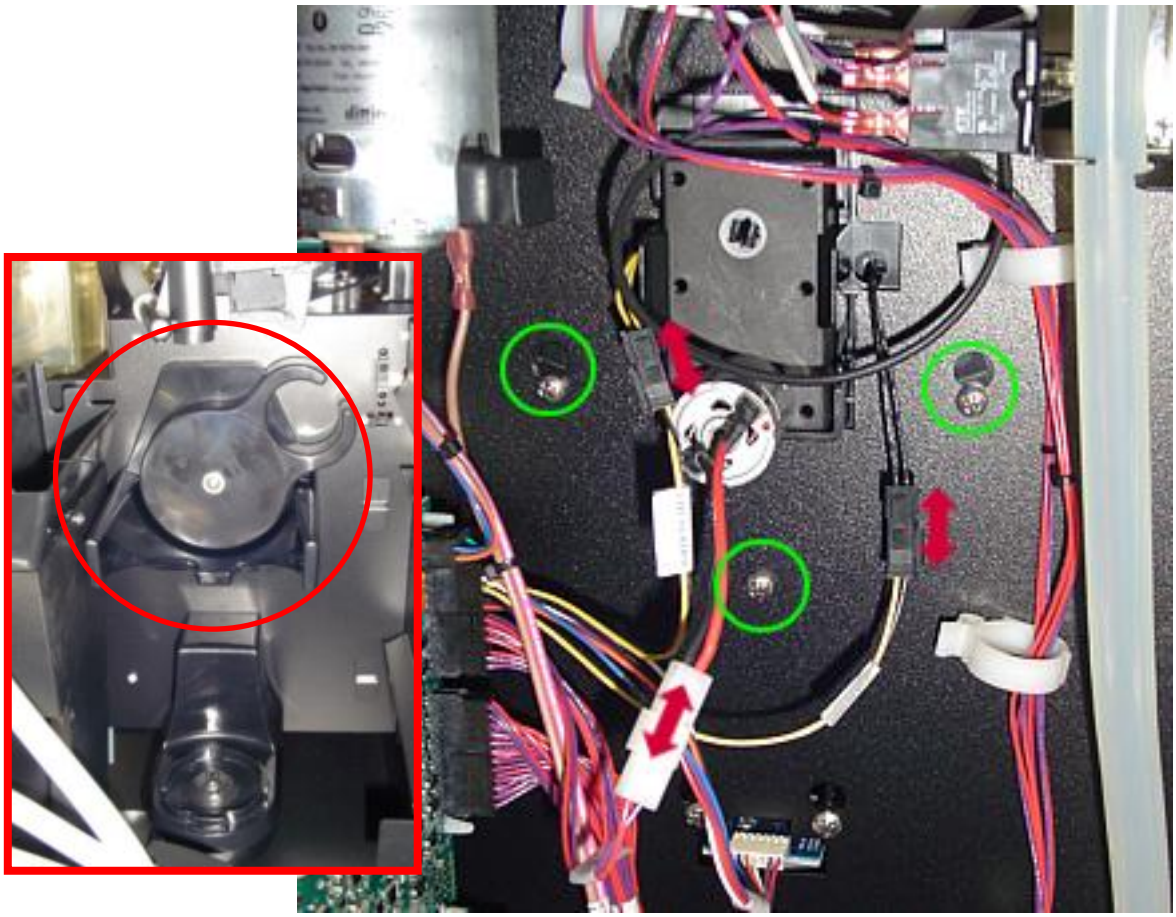


1. Remove the brewer assembly.
2. With the rear panel removed, disconnect the wiring harness from the brewer motor.
3. Loosen the two upper screws and remove the two lower screws.
4. From the front, lift and pull the brewer motor out of the machine.

The brewer motor comes as a complete assembly. There are no spare parts available therefore this motor cannot be serviced.

To install the brewer motor, follow these same instructions in the reverse order.

Removing the Wiper Motor Assembly

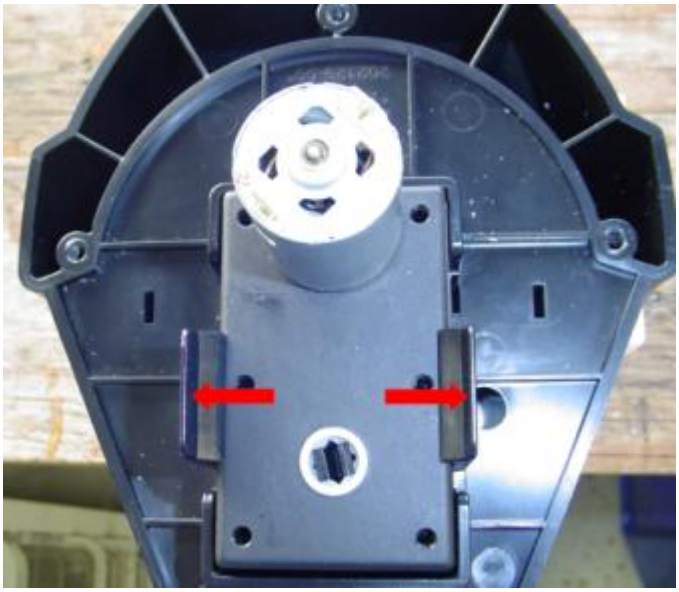


1. Remove the brewer assembly.
2. With the rear panel removed, disconnect the power connector to the brewer wiper motor.
3. Disconnect the left and right switch connectors from the brewer wiper motor.
4. Loosen the two upper screws and remove the lower screw.
5. From the front, lift and pull the brewer wiper motor out of the machine.

To re-install the wiper motor assembly, follow these same instructions in the reverse order.

Removing the Motor from the Wiper Motor Assembly

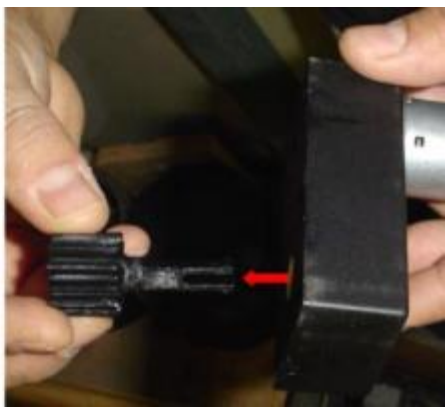
1. Remove the wiper motor assembly.
2. Spread the motor clips outwards to release the motor from its support.



3. Pull the wiper motor from its support.

Removing the Wiper Motor Pinion/Coupling

1. Remove the wiper motor from the wiper assembly.
2. Compress the two pinion clips at the rear of the motor.
3. Pull the pinion out from the front of the motor.



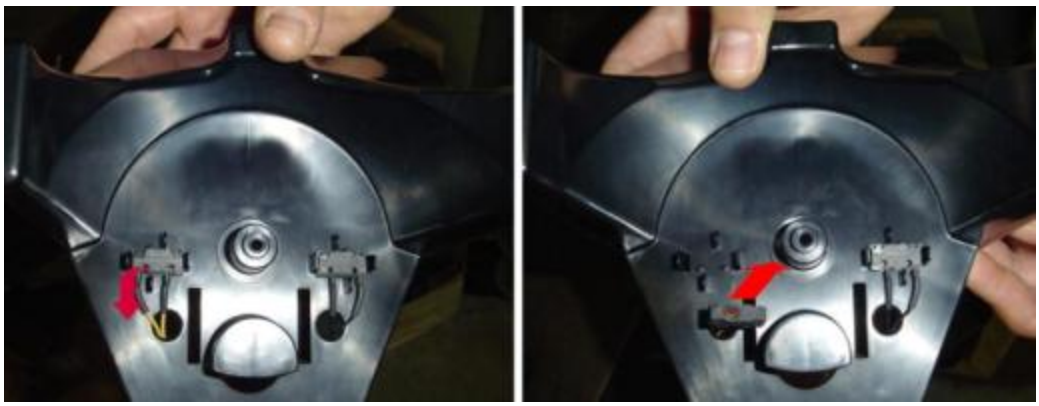
After replacing the pinion, you'll need to apply a liberal amount of food-grade grease to the center of it.

Removing a Wiper Motor Switch

1. Remove the wiper motor assembly.
2. Remove the screw and washer securing the wiper arm to the wiper motor assembly.

   NOTE: When re-installing this screw, the torque must be 22 in/lbs.

3. Remove the wiper arm.
4. Unclip the switch to be replaced from its support, and pull the wiring through the hole in the support to remove it.



To install the wiper motor switch, follow these same instructions in the reverse order.

Prior to replacing the wiper arm, apply a liberal amount of food-grade grease to the center of it.

SECTION 5

Coffee and Powder Dispensing Systems

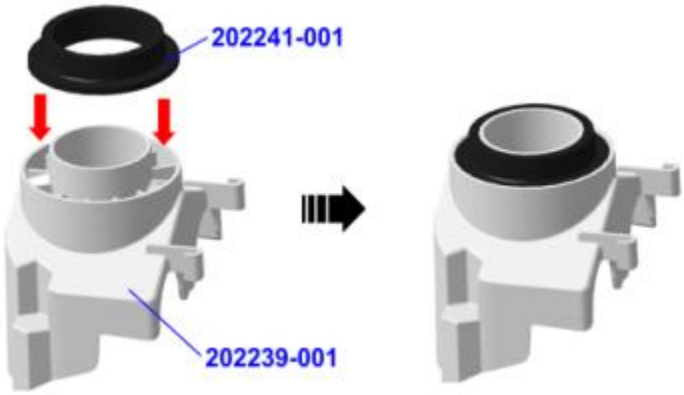
Coffee Dispenser Removal

1. Open the front door.
2. Remove the two hex screws securing the coffee dispenser in place.

   NOTE: When re-installing this screw, the torque must be 15 in/lbs.

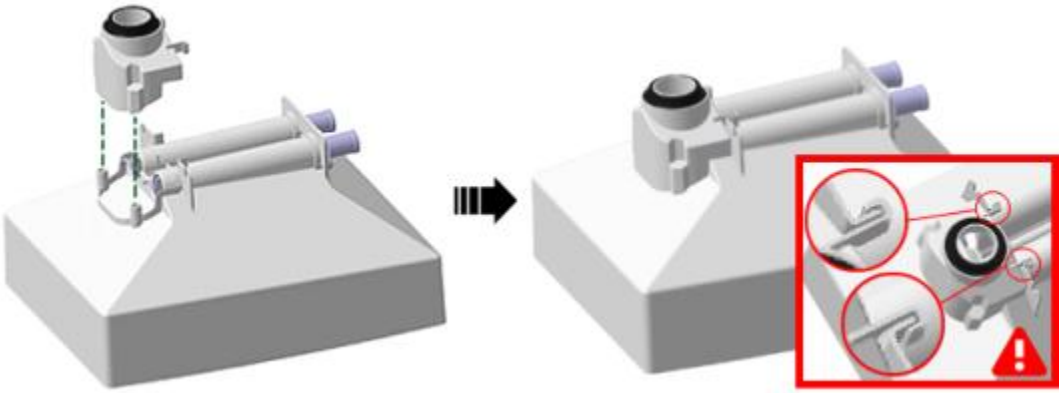
3. Lift the front of the coffee dispenser and pull it away from the motors at the rear to remove it from the machine.

4. If replacing the bean chute, install a new seal into the chute.



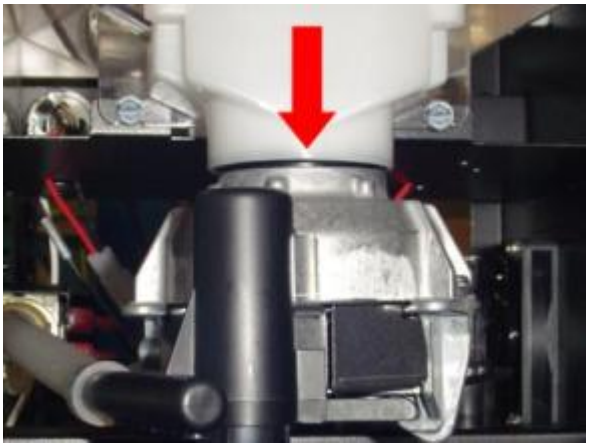
The seal must be inserted completely into the chute. It must be flush with the upper and lower edges of the chute.

5. Install the bean chute assembly onto the bottom of the coffee bean dispenser.



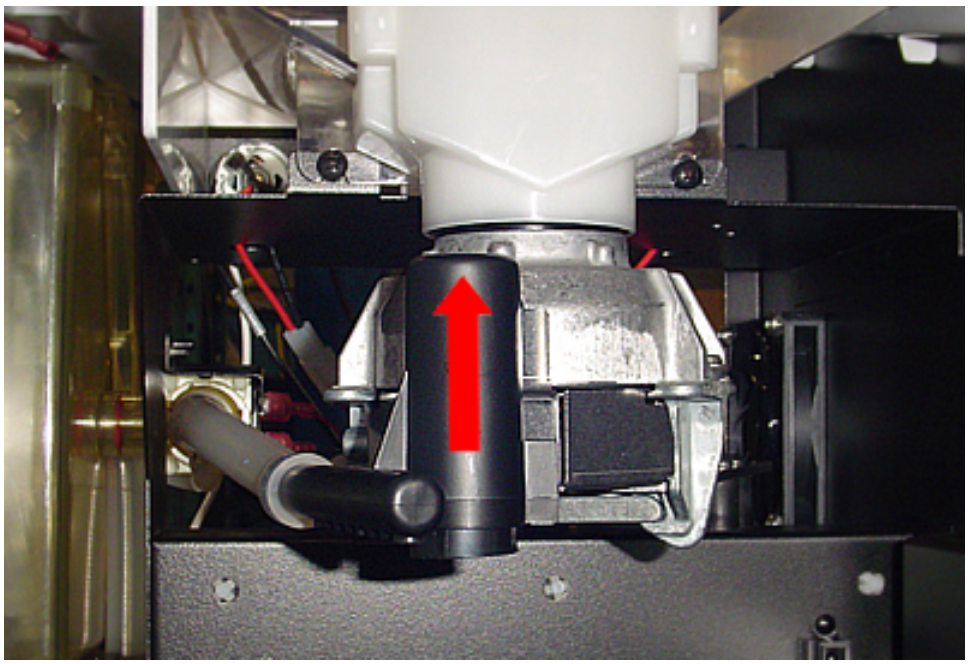
The bean chute must be pushed as far as possible onto the coffee bean dispenser.

6. When installing the dispenser into the machine, make certain that the dispenser is pushed down as far as possible and that the bean chute is inserted and recessed into the top of the grinder prior to tightening the two mounting screws.

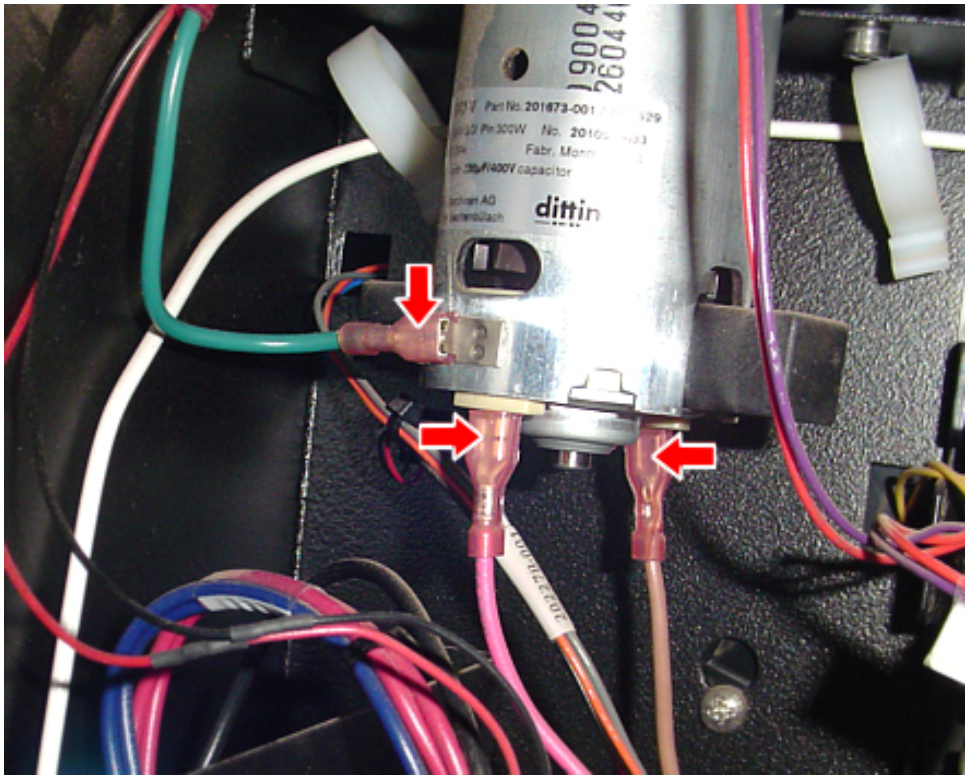


Removing the Grinder

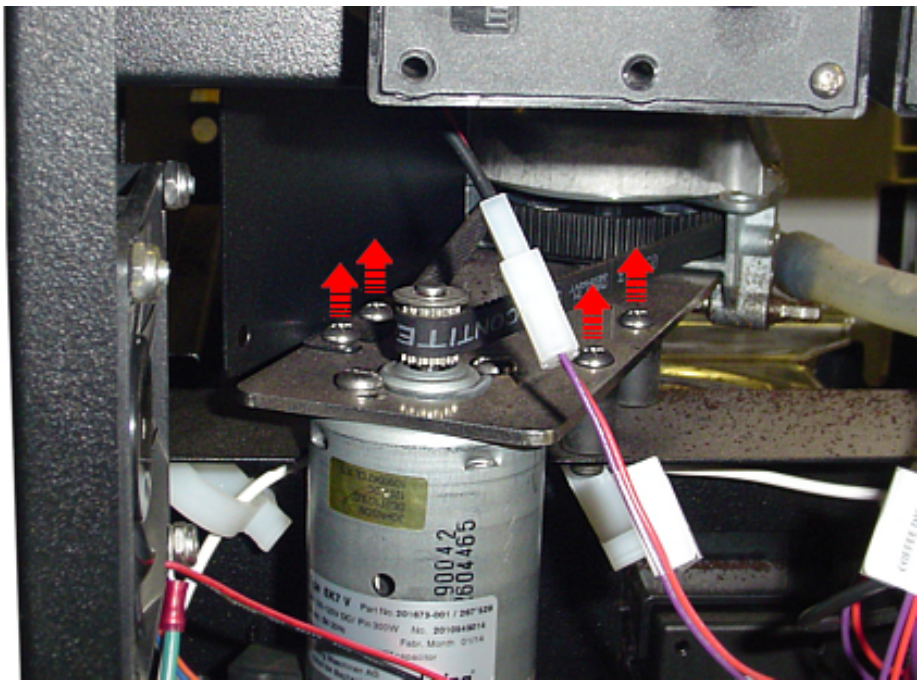
1. Remove the coffee dispenser *(see page 33)*.
2. Lift the outlet spout to remove it from its support on the grinder.



3. With the rear panel removed, disconnect the two power wires and the ground wire from the grinder.

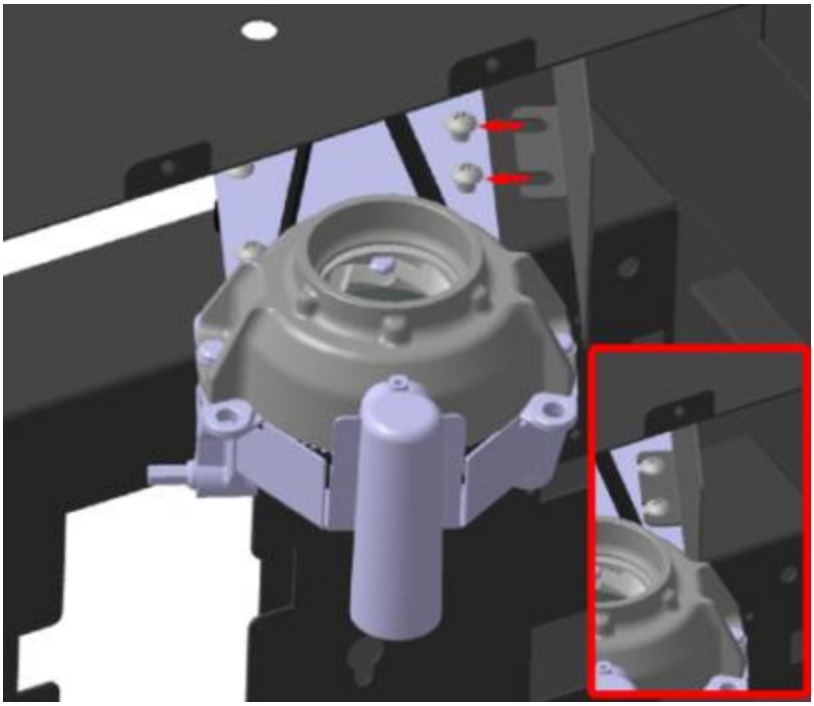


4. Remove the four screws securing the grinder to the machine cabinet, and then remove the grinder.



To install a grinder, follow these same instructions in the reverse order, but please note the following:

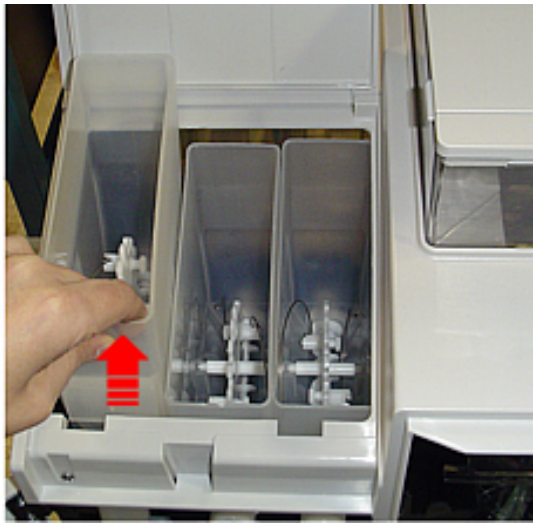
	When installing the two mounting screws closest to the wall, do not tighten them until the grinder guard has been re-installed.



Powder Dispenser Removal

1. Open the powder lid.
2. Unclip and remove the powder liner.

3. Remove the rubberized trim that seals around the edges of the dispensers.
4. Lift the top front of the dispenser, while at the same time pulling the bottom of the dispenser forwards to disengage the coupling from the dispenser motor.



5. Lift the dispenser up and out the top of the machine.

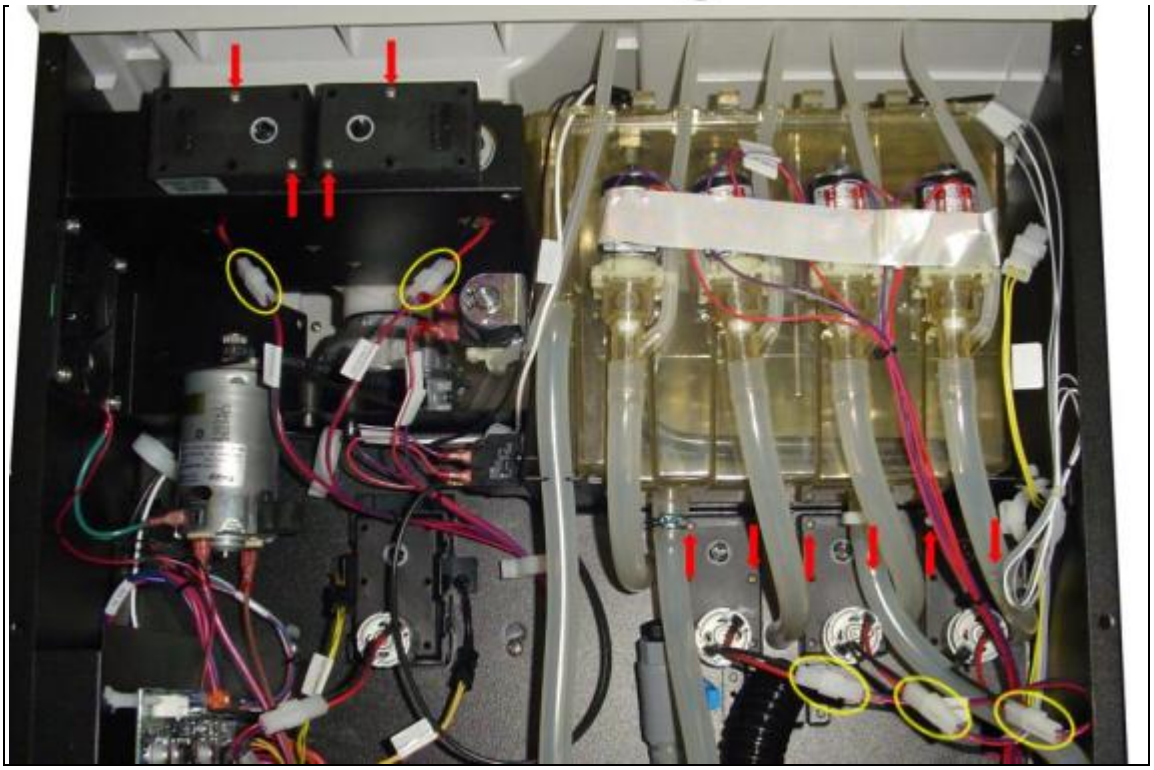
To install a powder dispenser, follow these same instructions in the reverse order.

Removing Coffee and Powder Dispenser Motors

The coffee and the powder dispenser motors are the same component, with the motor coupling configured differently. The coupling can be easily pushed out of the motor housing with a 9/32 nut driver.

Coffee Motor Configuration

Powder Motor Configuration (default)



1. Disconnect the inline wiring connector for the motor to be removed (circled in yellow).
2. Remove the two screws securing the motor to be removed to the machine (red arrows).

   NOTE: When re-installing these screws, the torque must be 4 in/lbs for the coffee motors, and 7 in/lbs for the powder motors.

3. Remove the motor(s).

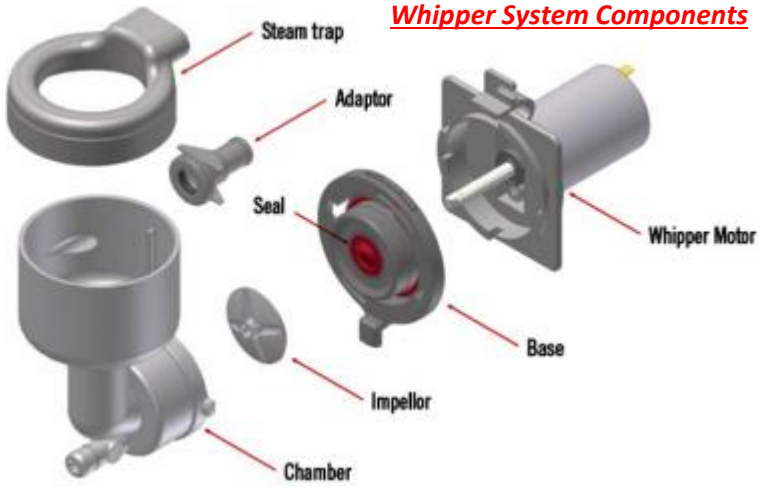
When removing or installing a coffee motor, the wiring (and the connector) needs to be passed through the round opening in the coffee dispenser base.

To install a dispenser motor, follow these same instructions in the reverse order.

Whipper System Removal, Manual Cleaning and Installation

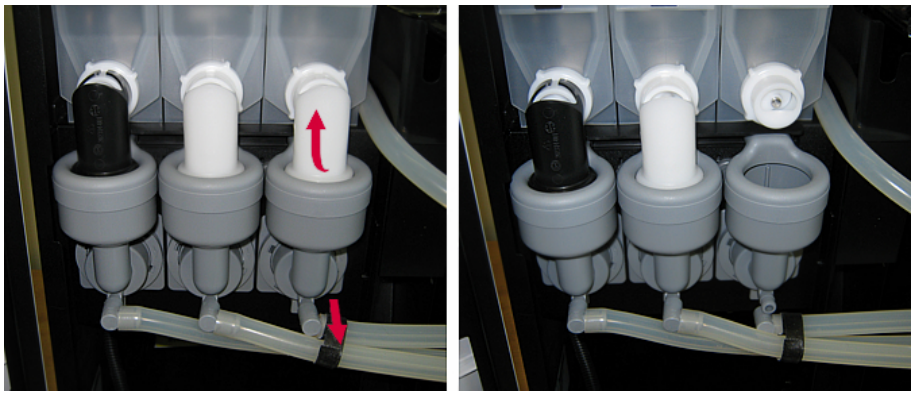
	The same disassembly and cleaning procedure applies for all three of the whipper systems. Also note that the plastic whipper components may be gray or black in color.

Whipper System Components

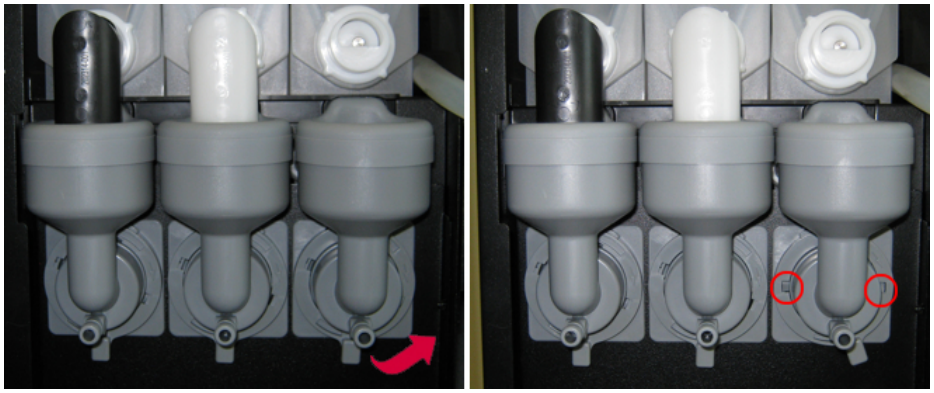


Removing the whipper system components

1. Remove the dispenser chute and disconnect the outlet hose.

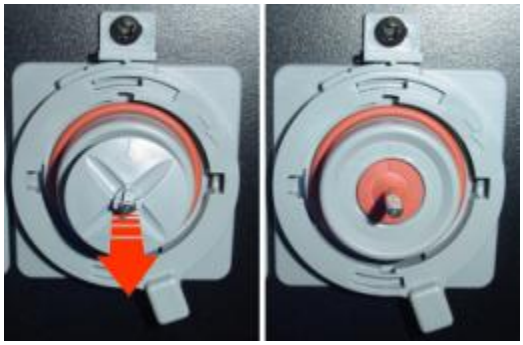


2. Turn the small handle on the locking ring (on the whipper base) to the right until it stops. This unlocks the whipper chamber from the whipper base, allowing it to be pulled off.

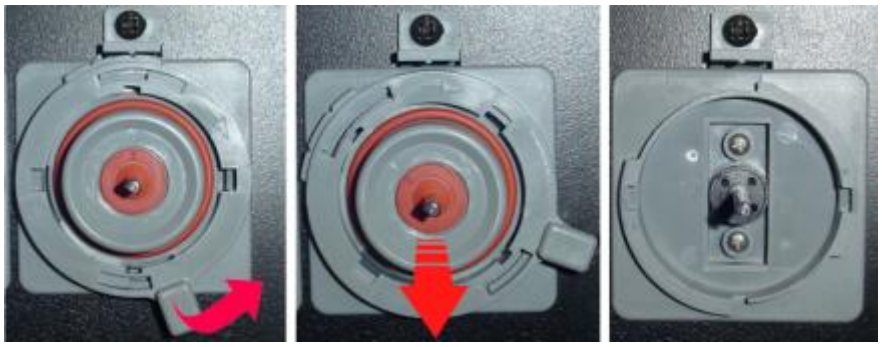


3. Remove the whipper chamber and the steam trap from the whipper base, disengaging it from the powder drawer and inlet fitting.

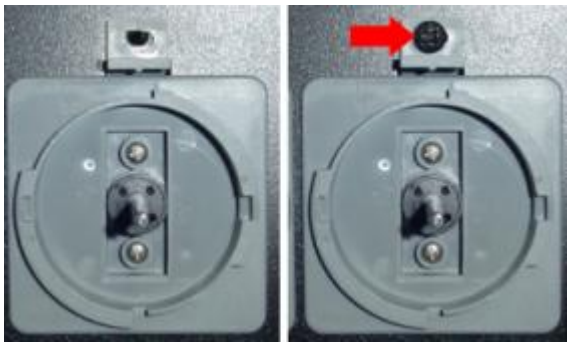
4. Remove the impeller from the motor shaft.



5. Turn the handle to the right and remove the whipper base from the whipper motor.



6. Remove the screw securing the top of the whipper mount.



7. Push down on the locking clip at the front of the base, and pull the base and motor out through the front of the support.

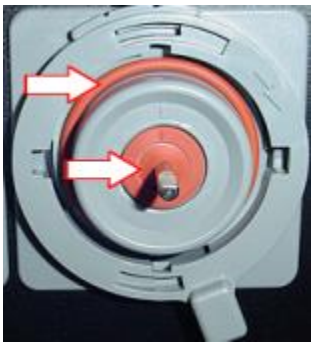
8. Disconnect the inline wiring connector that supplies power to the whipper motor.

Cleaning the whipper components

At this point, all of the **plastic** components have been removed. They can now be cleaned with warm water and dish soap. Thoroughly rinse the components under warm running water for several minutes to remove any remaining residues. Once done, the components must then be dried using a clean cloth.

	**Do not submerge the whipper motor in water.** **Do not rinse the whipper motor with water.** **Do not use any type of cleaner or detergent on the whipper motor.**

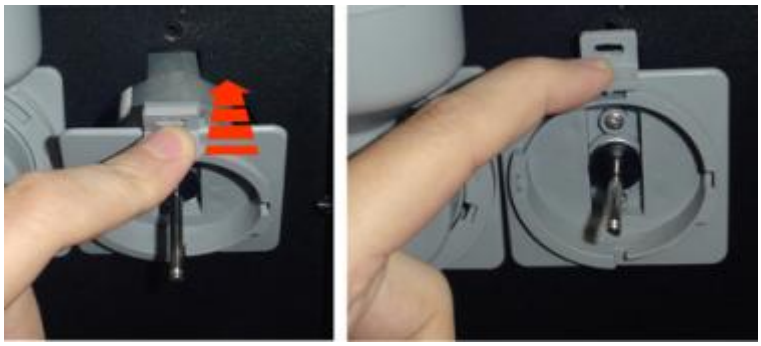
Prior to reassembling the whipper system, we recommend that you inspect and, if required, replace the whipper seal and the large whipper base o-ring.



Installing the whipper system components

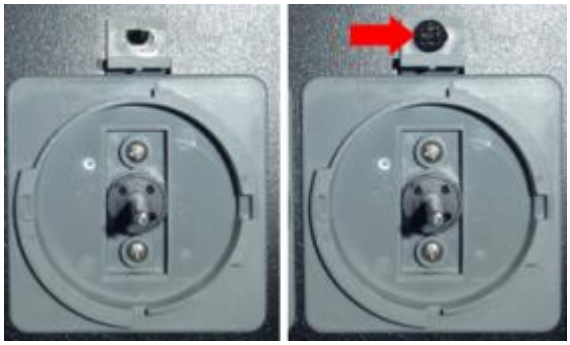
1. Connect the inline wiring connector that supplies power to the whipper motor.

2. Install the new motor into the cutout in the machine wall. Install the bottom of the assembly first, and then push the top of the assembly into the cutout until the plastic clip locks it in place.

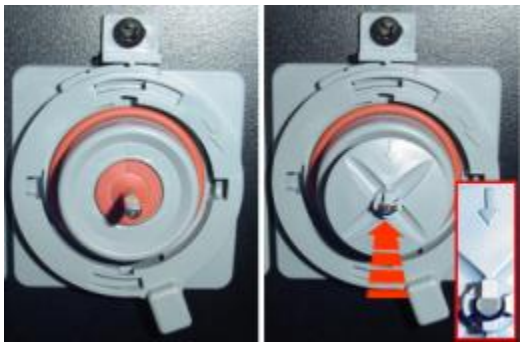


3. Secure the mount to the wall with a screw, and then install the base onto the mount.

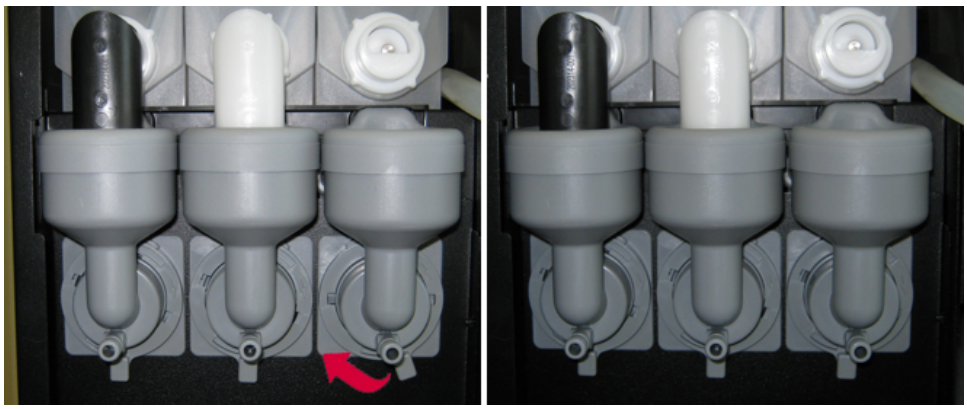
   NOTE: When re-installing the screw, the torque must be 15 in/lbs.



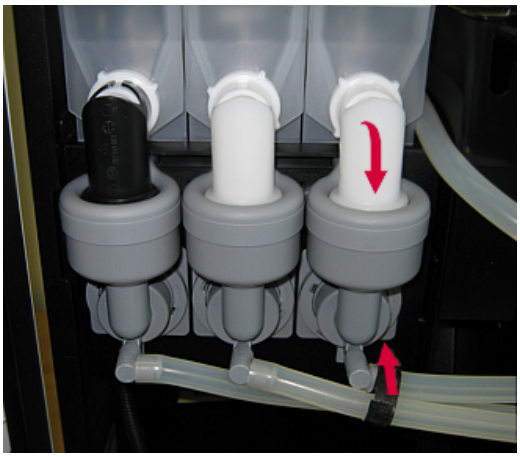
4. Install the impeller onto the shaft (line up the arrow on the impeller with the flat side of the shaft).



5. Insert the whipper chamber into the base (making sure to also insert the chamber's inlet into the adaptor and the steam trap into the powder drawer), and turn the handle on the locking ring to the center position to secure the chamber.



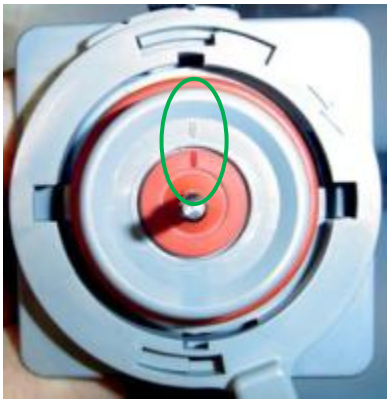
6. Reinstall the powder chute into the whipper and re-connect the whipper outlet hose.



7. Perform a "**Powder Rinse**" cycle to flush any powder that may have fallen into the whipper chamber *(see page 44)*.

Installing the Gasket (Seal) and the Impeller

When replacing the **gasket**, make certain that the small alignment line on the gasket lines up with the alignment line on the base. If the gasket is not aligned properly, it will take on an oval shape, causing an improper seal around the shaft resulting in a major leak.

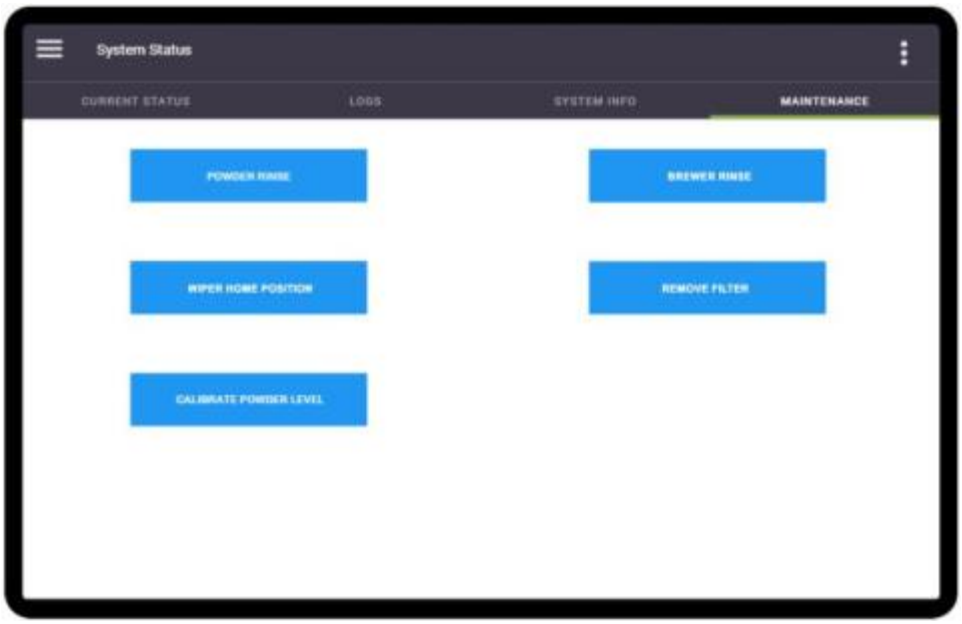


When replacing the **impeller**, align the small arrow on the impeller with the flat side of the whipper shaft. Push the impeller until it clicks in place.

Powder Rinse

After servicing the whipper system, you'll need to perform a 'Powder Rinse' to flush powder that may have fallen into any of the three whippers.

1. Go to the **'System Status'** screen and select the **'Maintenance'** tab.
2. Tap the '**Powder Rinse**' option to activate it.



This option runs a rinse cycle (to clean all three of the powder whipper systems) by sending hot water through each of the whipper units, while at the same time activating each of the whipper motors.

	Place a cup on the cup stand prior to running this cycle as up to 12-oz of water will be dispensed once the cycle is activated.

SECTION 6

Water System

Draining the Water Tank

1. Switch off the machine power, disconnect the service cord from the wall outlet, and turn off the water supply going to the machine.
2. Remove the machine's back panel.
3. Remove the drain hose from its clips.

4. Remove the security plug from the end of the drain hose valve, place the hose inside a waterproof container and open the valve at the end of the hose. Water will start draining into the container.

	Caution: The water draining from the tank may be extremely hot and has the potential to cause severe burns!

5. Once emptied, close the valve at the end of the hose, and re-install the security plug into the valve.
6. If you are not removing the water tank, re-install the drain hose onto its clips on the interior wall of the machine.
7. If you are servicing or removing the water tank, proceed to the next sections.

Replacing the Outlet Valve(s)

1. With the water tank drained and the service cord disconnected, remove the thermal tape from the valves, and disconnect the power wires from the valve(s) to be removed.
2. Disconnect the outlet hose from the valve(s) to be replaced.
3. To remove a valve, grasp the valve body and pull it straight out. You may need to twist it slightly to loosen it.

<u>Caution</u>: There may be a small amount of very hot water that spills when a valve is removed!

4. Install the new valve by sliding it into its respective port on the water tank.

Verify that the o-ring is present on the valve before installing it into the tank. Also make sure that the valve is completely seated into the water tank.

5. Pass the valve breather tube through the round retainer on the edge of the tank lid, and cut the tube so that it is at the same height as the coffee valve breather tube.

6. Connect the outlet hose onto the replacement valve.
7. Connect the power wires onto the replacement valve.
8. Re-install the thermal tape over the four valves at the rear of the tank.
9. Reconnect the service cord, turn on the water supply, and switch the machine power on.
10. Allow the water tank to fill and inspect the machine for leaks. Also inspect the outlet valve for any signs of dripping. If any leaks or dripping is present, the problem must be corrected immediately.

Removing the Water Tank

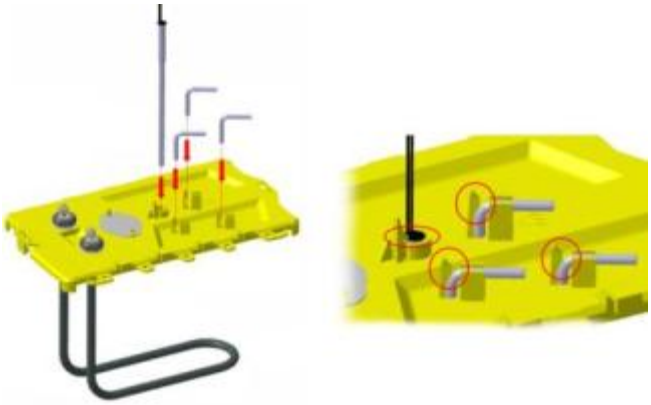
1. With the water tank drained and the service cord disconnected, remove the thermal tape from the valves, and disconnect the power wires from each of the valves.
2. Disconnect the outlet hoses from each of the outlet valves.
3. Disconnect the inlet hose (coming from the inlet valve).
4. Pull the tank towards you and partially out of the machine - you need to get access to the tank top.
5. Disconnect the wiring from the heating element.
6. Disconnect the wiring from the three level probes.
7. Disconnect the inline connector to the temperature probe.
8. Pull the water tank completely out of the machine.

	**You will need to remove the overflow hose from the upper and lower openings in the metal through which the hose is routed.**

Replacing the Temperature Probe and Water Level Probes

1. With the water tank removed, pull the temperature probe and/or the water level probes out through the top of the tank lid. They are simply clipped in place.

2. Slide the new temperature probe and/or water level probes completely into the tank lid until they are clipped and locked in position.



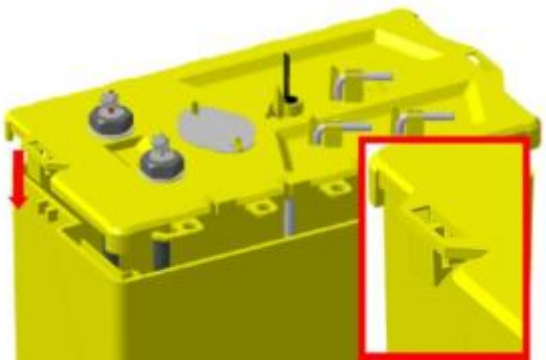
Replacing the Heating Element

	**<u>Caution</u>: The heating element may be extremely hot! Make sure the element has cooled to a safe temperature before attempting to remove it.**

1. With the water tank **and** the tank lid removed, remove the hex nuts (and washers) used to secure the heating element to the tank lid.

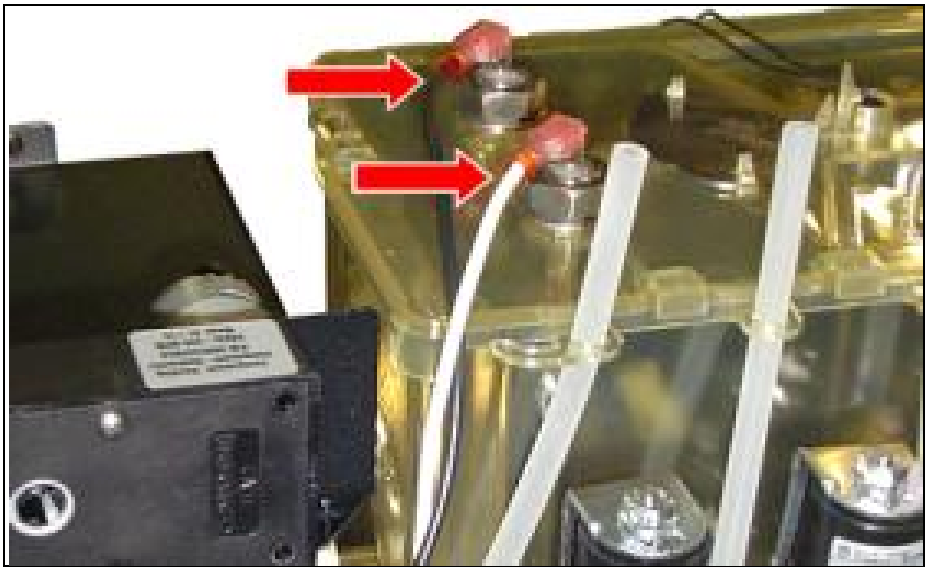
2. Insert the new heating element through the bottom of the tank lid, and secure it to the top using the large hex nuts and washers.

3. Re-install the tank lid buy pushing it onto the water tank body until it clips securely in place.

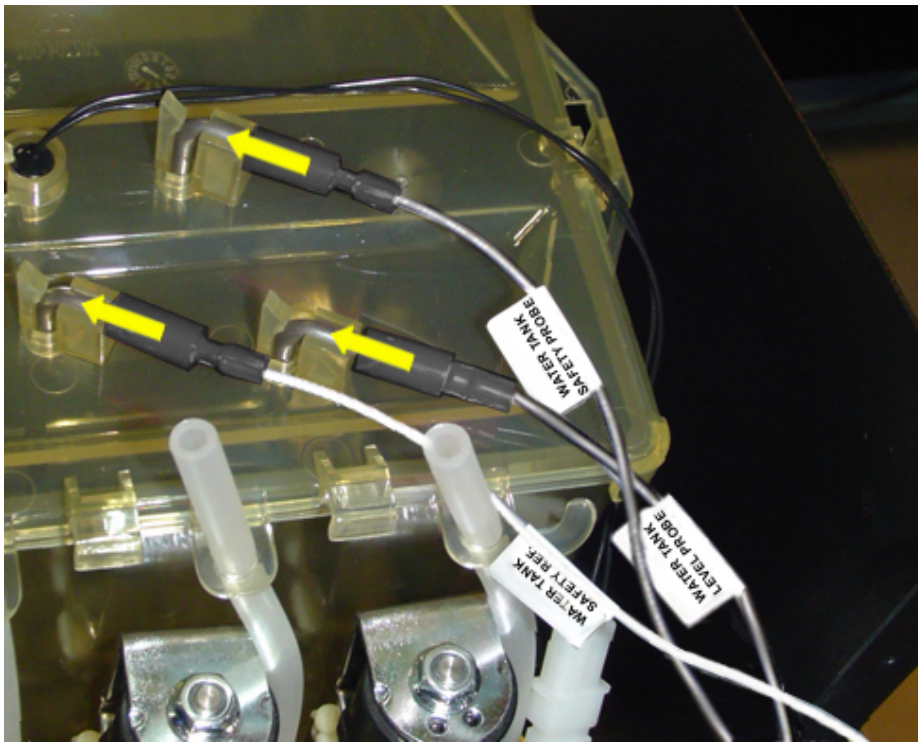


Installing the Water Tank Assembly

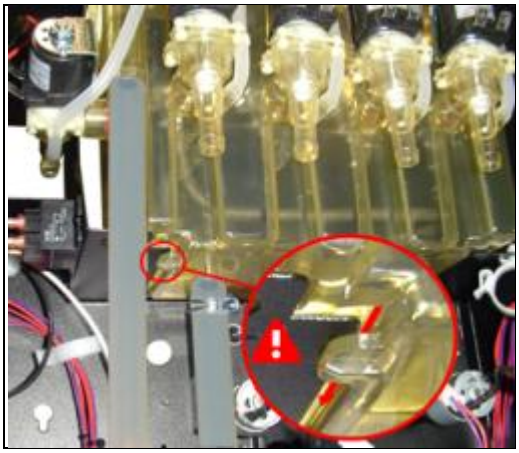
1. Connect the wiring to the heating element.



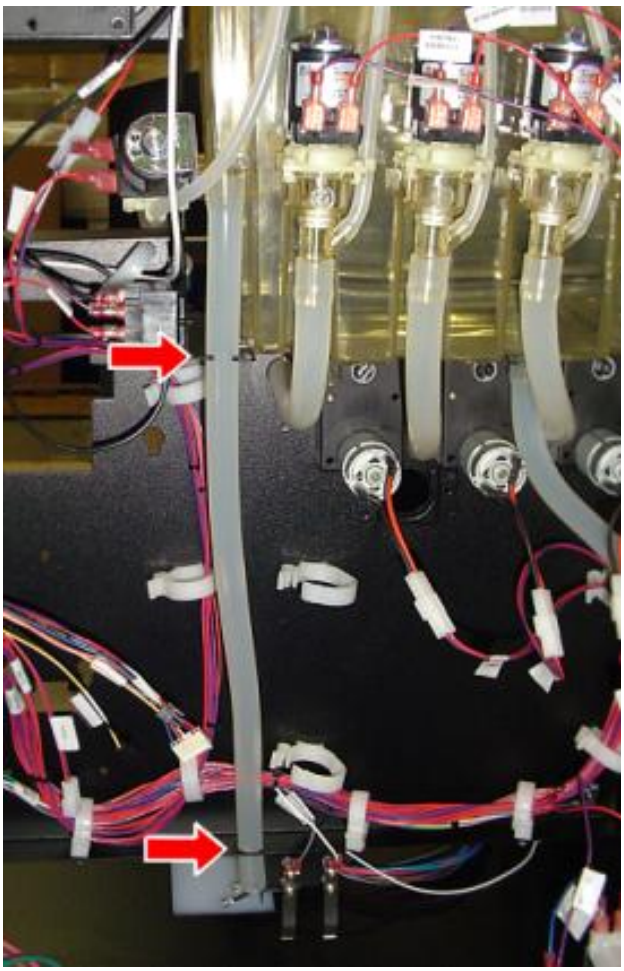
2. Connect the wiring to the water level probes (as illustrated below).



3. Lower and slide the water tank onto its shelf. Make certain the tab at the bottom of the water tank slides under the metal guide.

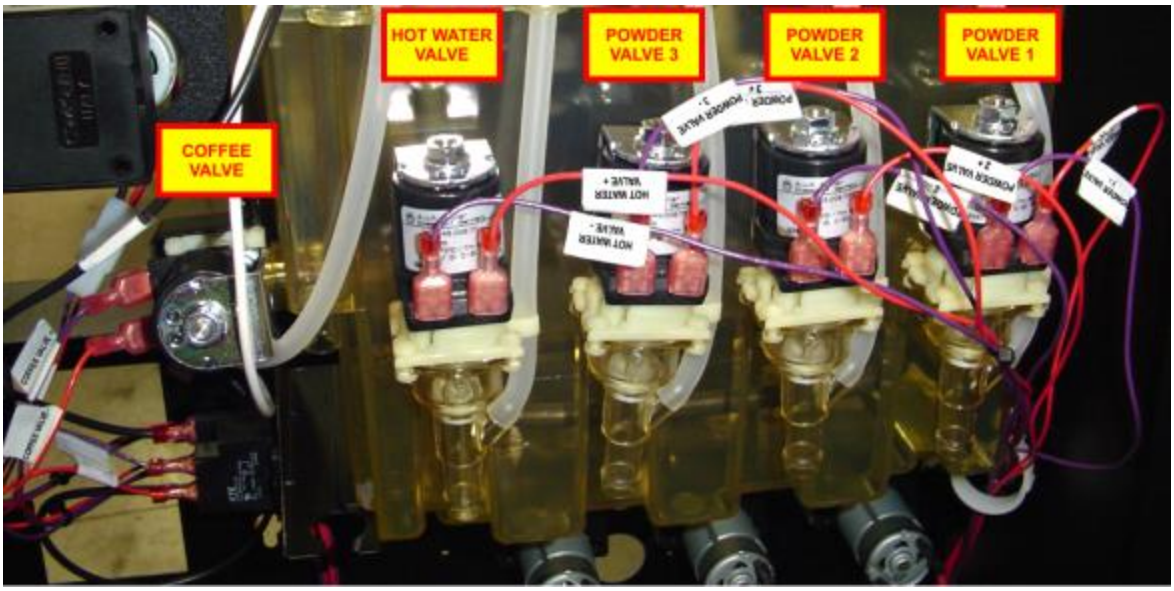


4. Route the overflow hose through its supports in the cabinet.



5. Connect the wiring to the temperature probe.

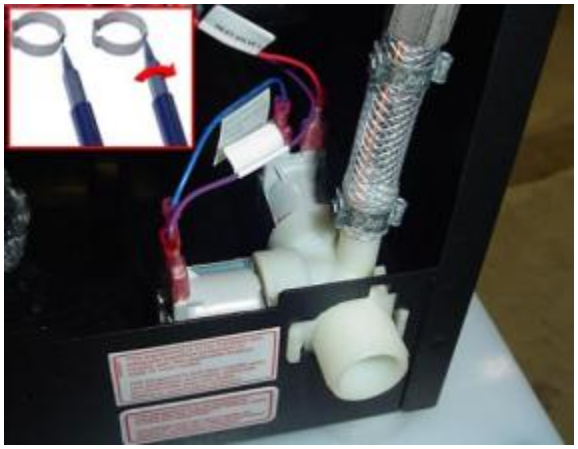
6. Connect the wiring to the five outlet valves (as illustrated below).



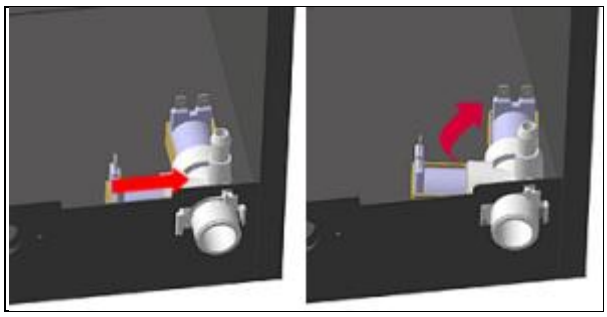
7. Connect the inlet hose to the bottom of the water tank.
8. Connect the outlet hoses to their respective outlet valves.
9. Install the thermal tape over the outlet valve wiring terminals.

Removing Inlet Valve

1. With the rear panel removed, and the water source disconnected, remove the circle clamp and the hose from the inlet valve.



2. Disconnect the wiring from the inlet valve. **Be careful not to discard or misplace the small blue jumper wire.**
3. Push the valve towards the right and turn it slightly to remove it.



To re-install the inlet, follow these same instructions in the reverse order.

	**When installing a new inlet valve, always secure the hose to the valve with a properly installed circle clamp.**

SECTION 7

Electrical and Electronic Systems

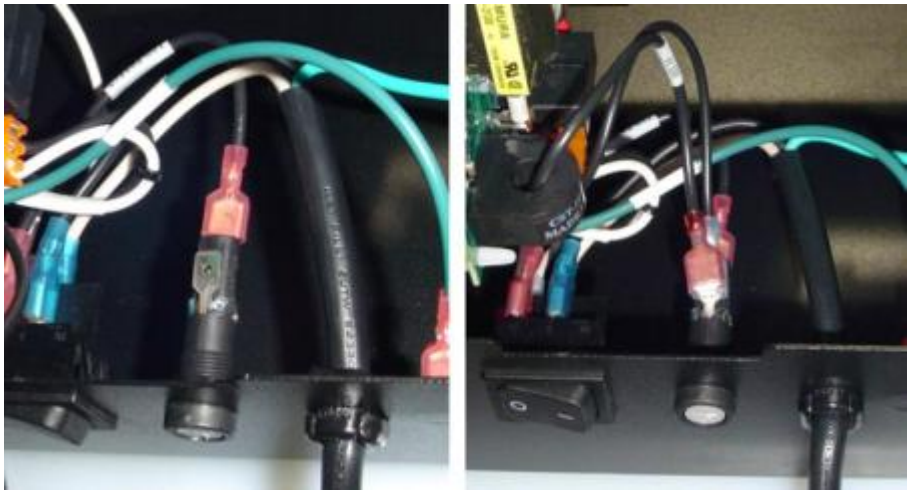
Disconnect the service cord from the wall outlet prior to attempting to replace any of the components in this section. Failure to do so can result in an electrical shock!

Replacing the 15A Fuse

1. Insert a flat screwdriver tip into the fuse holder cap.
2. While pushing in on the cap slightly, turn it counter clockwise to release it.
3. Remove the existing fuse from the fuse holder cap and replace it with a new one.
4. Insert the fuse holder cap (and fuse) into the fuse holder and turn it clockwise to lock it in place.

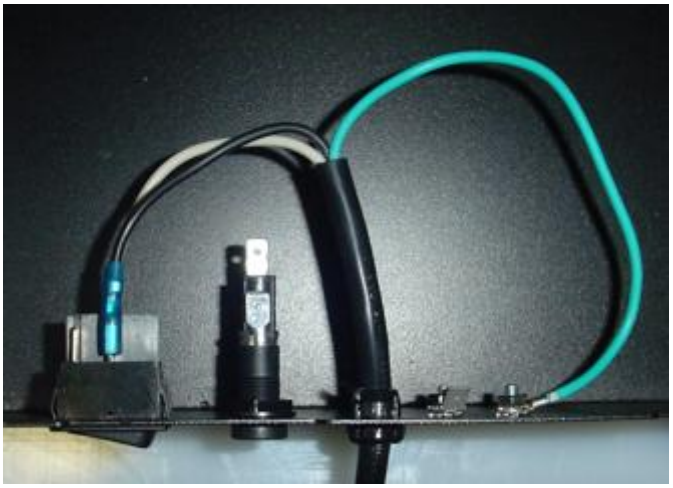
Replacing the Fuse Holder

1. Disconnect the wiring from the fuse holder.
2. Loosen the plastic hex nut that secures the fuse holder to the machine.
3. Remove the fuse holder and replace it with the new one.
4. Transfer the fuse and the cap from the old fuse holder onto the new one (if required).
5. Secure the new fuse holder to the machine with the plastic hex nut.
6. Connect the wiring to the new fuse holder.



Service Cord

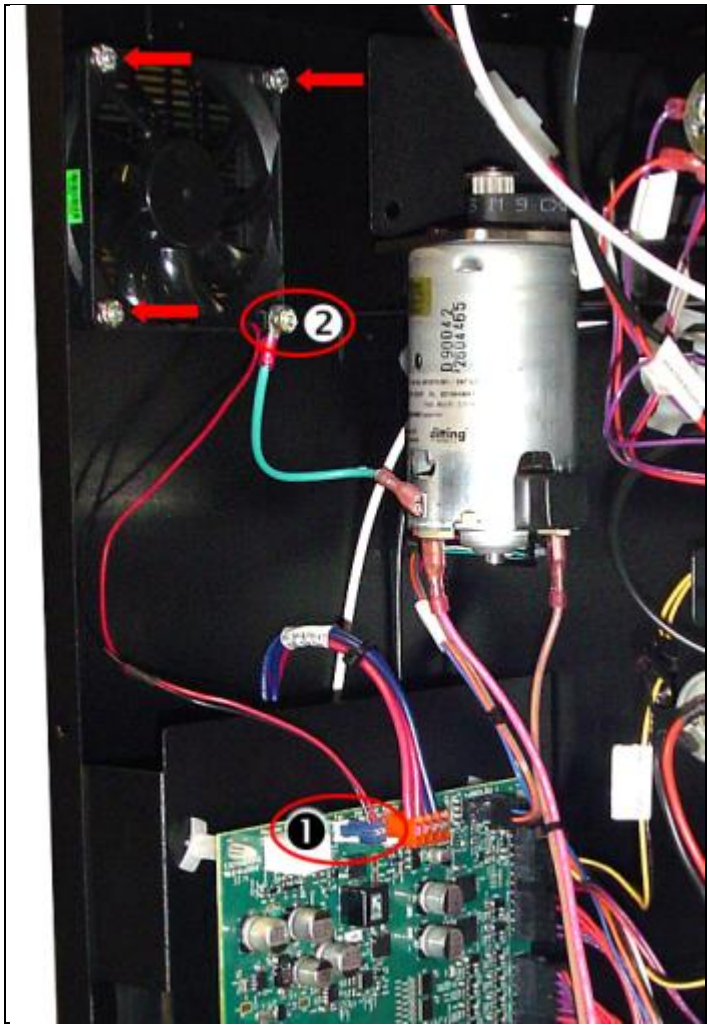
1. Disconnect the black and white service cord wires from the power switch at the rear of the machine.
2. Disconnect the green service cord wire from the ground post at the rear of the machine.
3. Compress the strain relief and pull the service cord from its opening at the rear of the machine.
4. Insert the new service cord into the opening at the rear of the machine and secure it with the strain relief.
5. Reconnect the service cord wiring.
    i. **Black wire** (hot) → connects to the **switch tab #2**.
    ii. **White wire** (neutral) → connects to the **switch tab #1**.
    iii. **Green wire** (ground) → connects to the **ground post**.



Main Power Switch

1. Disconnect the wiring from the main power switch.
2. Compress the clips on each side of the switch, and push it through the opening in the metal (towards the outside).
3. Insert the new switch into the cut-out at the rear of the machine, and snap it in place to secure it - make sure the **'O'** it towards the left and the **'—'** is towards the right.
4. Connect the wiring to the new power switch.
    i. **Tab #2 on switch - black wire from service cord** (hot).
    ii. **Tab #1 on switch - white wire from service cord** (neutral).
    iii. **Tab #2a on switch - black wire to fuse holder**
    iv. **Tab #1a on switch** - **white wire pair from board/power supply**

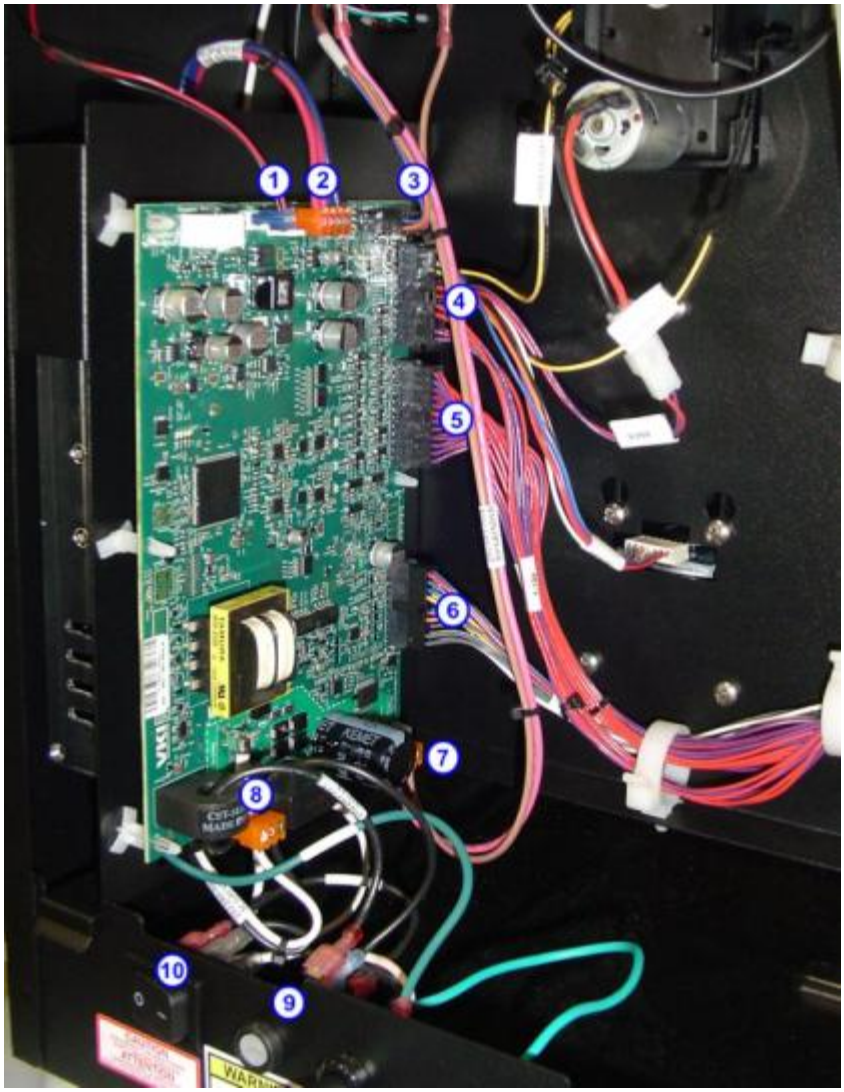
Exhaust Fan



1. With the back panel removed, disconnect the exhaust fan wiring from the control board.
2. Using a 7/16 nut driver, remove the hex nut securing the ground wire and exhaust fan.
3. Remove the remaining three hex nuts.
4. Remove the exhaust fan from its mounting posts.

Removing the Control Board and Power Supply

	Disconnect the service cord from the wall outlet prior to attempting to replace any of the components in this section. Failure to do so can result in an electrical shock!



	The control board and the power supply are both mounted onto the same support bracket. **To replace the power supply, the control board must first be removed from the support bracket.**

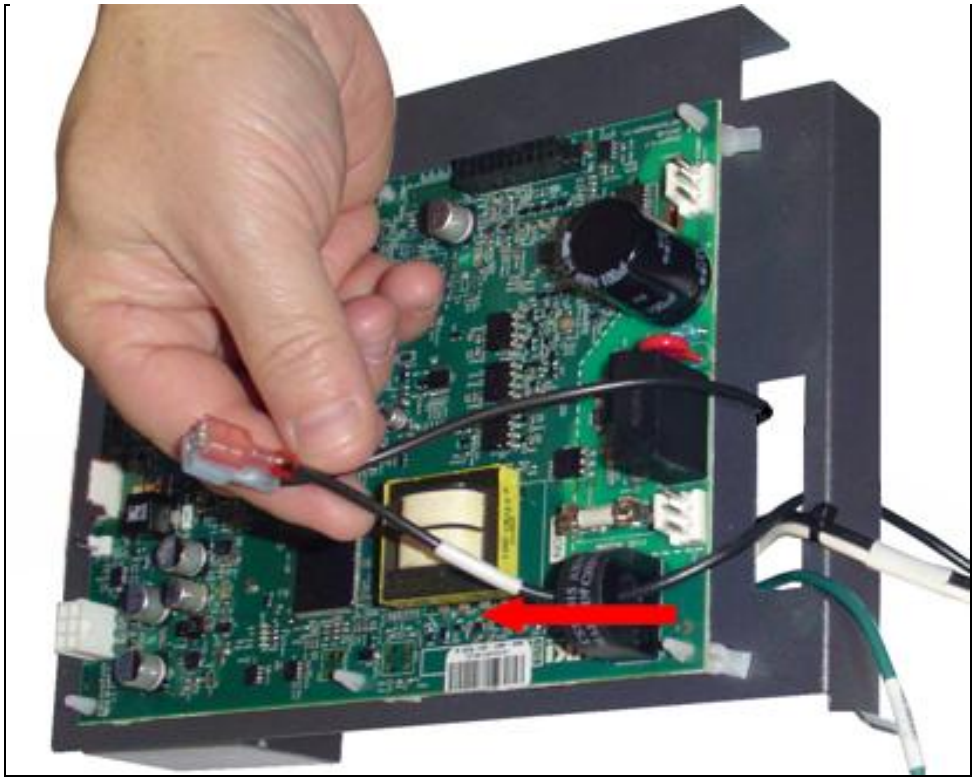
Control Board

1. With the back panel removed, disconnect all of the wiring harnesses from the control board (**#1** to **#8**).
2. Disconnect the black wiring pair from the fuse holder (**#9**).
3. Disconnect the white wiring pair from the main power switch.

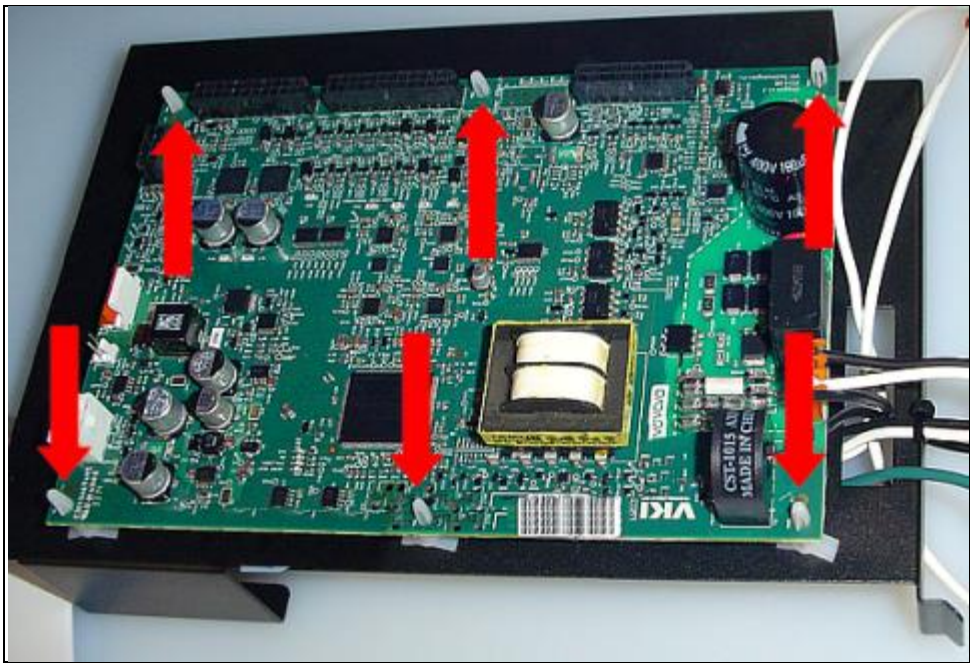
4. Disconnect the black wire (coming from the board/power supply) from the heater relay.
5. Disconnect the white wire (coming from the board/power supply) from the heating element.

6. Remove the black and white wires (going to the heating circuit) from the wire clips.
7. Lift the board and power supply up and to the right to release it from the machine.

8. Remove the long black wire by pulling it through the center of the board-mounted choke.



9. Compress each of the board clips and lift the board off the clips to remove it.

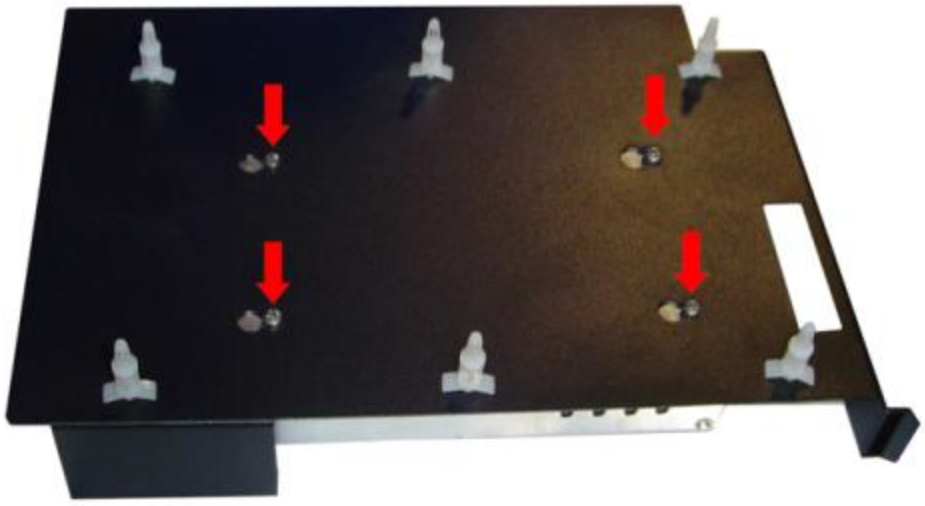


Power Supply

10. Disconnect the wiring from the upper and lower terminal blocks of the power supply.

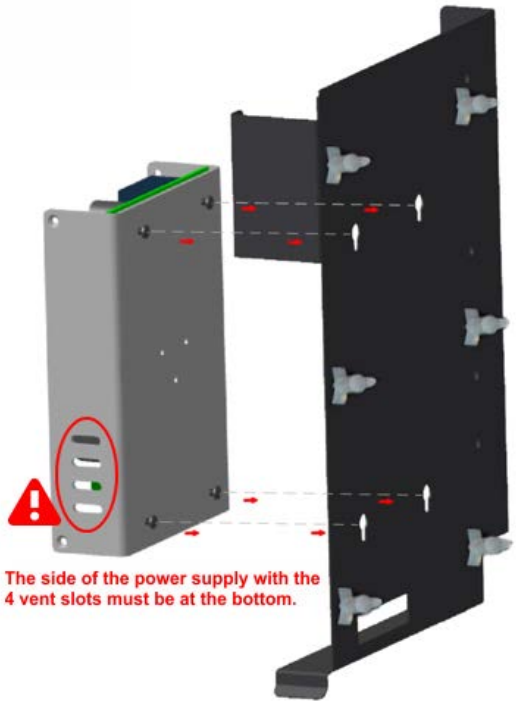
	Do not lose the small screws and square washers when removing the wiring terminals from the power supply as these are not available as service parts.

11. With the control board removed, you now have access to the four screws used to secure the power supply to the support bracket. Loosen these four screws to remove the power supply from the support bracket.

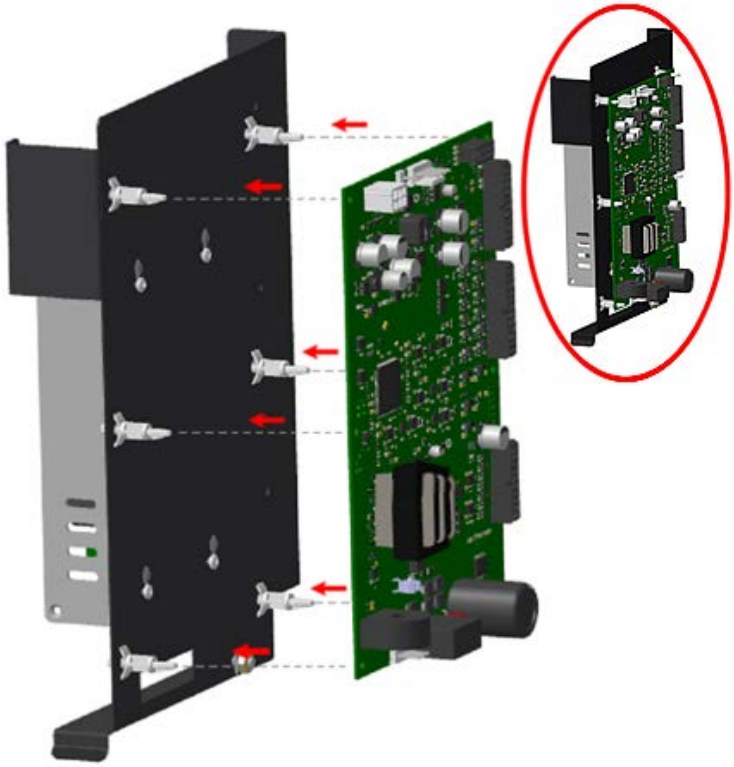


Installing the Control Board and Power Supply

1. Install the power supply onto the support bracket using four screws.

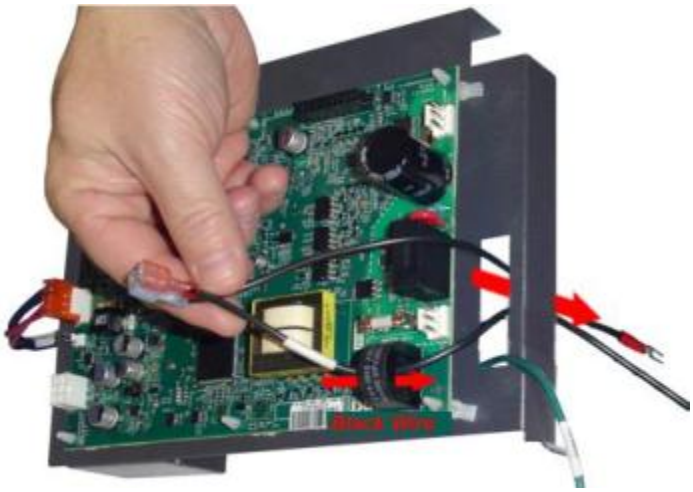


2. Install the control board onto the bracket by pushing it onto the clips.

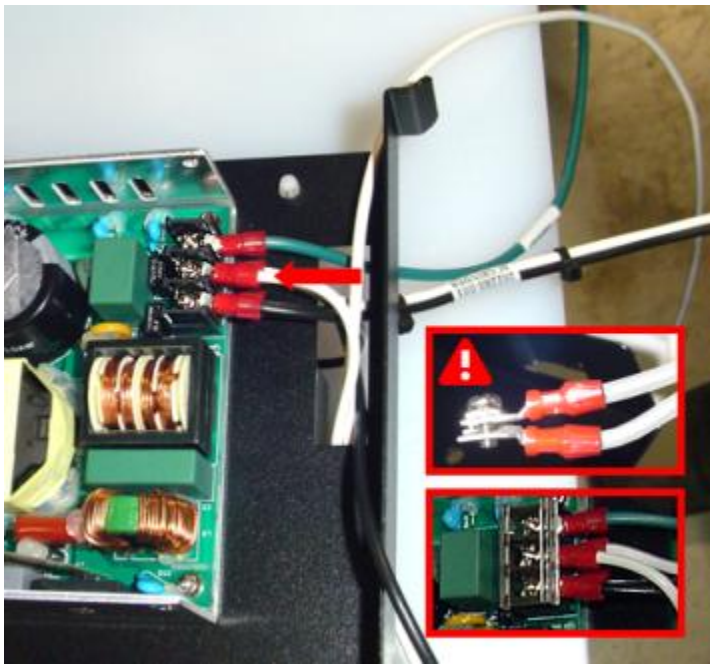


3. Reconnect the output wires to the power supply, as illustrated below.

4. Pass the long black wire through the center of the board-mounted choke and towards the power supply side.

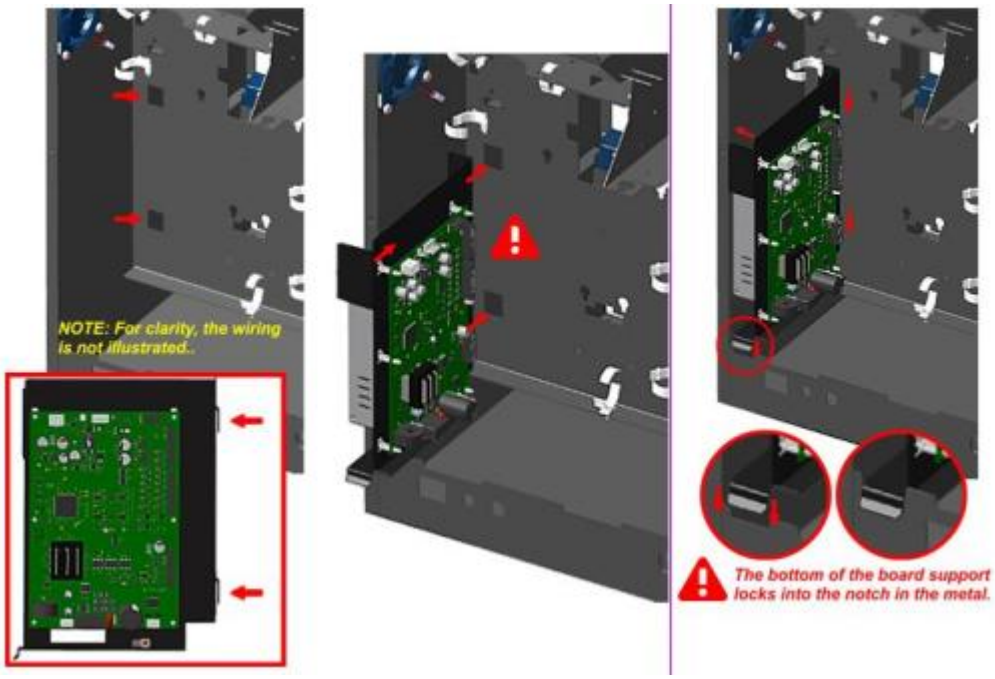


5. Connect the AC wires to the power supply, as illustrated below.



6. Route the black and white heater circuit wires around the outside of the power supply, and then upwards.

7. Install the power supply and control board assembly back into the machine. Make sure the two joggles slide into the openings on the metal wall to lock the assembly in place.



8. Reconnect the black wire to the heater relay and the white wire to the heating element.

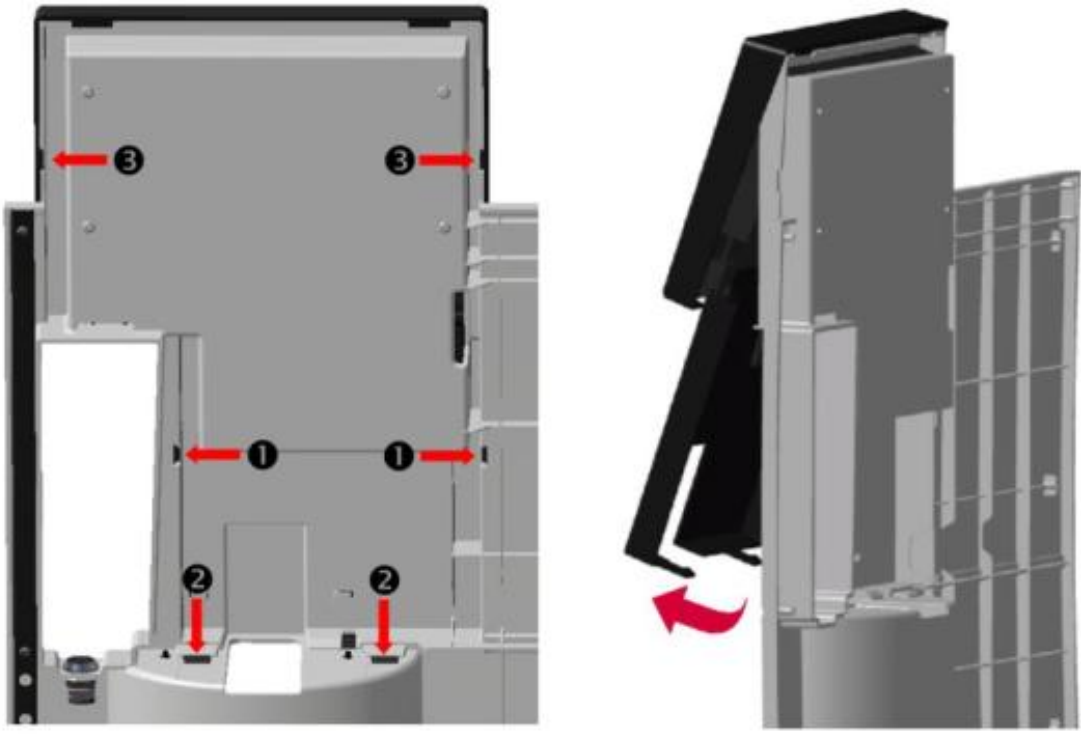
9. Reconnect the black wiring pair to the fuse holder.
10. Reconnect the white wiring pair to the main power switch.
11. Connect the power cord to the wall outlet, but **DO NOT SWITCH ON THE POWER!**

	**After replacing the control board, the firmware must be loaded when the machine is first powered up. Do not power up the machine until the USB Flash drive with the proper firmware is connected to the machine.**

12. Follow the procedure for updating the firmware (*see page 67*).

Replacing the HMI (Touch Panel)

1. Unlock and open the front door.
2. Remove the black door fascia - undo the clips with a flat head screwdriver in the sequence shown, and then pull the bottom of the fascia to remove it.

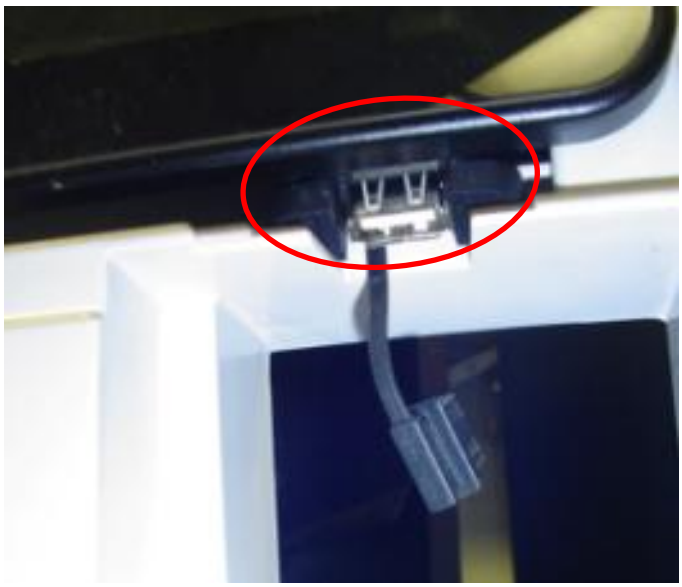


3. Remove the four screws securing the HMI to the front door.

4. Pull the HMI from the door and disconnect the wiring harness from the bottom of the HMI.

5. Remove the small MicroSD card from the original HMI (push in and release to pop it out) and insert it into the new one (push in and release to lock it in place).
6. Install the antenna onto the bottom of the HMI (if missing).
7. Connect the wiring harness to the bottom of the HMI.

8. Place the HMI onto the door, making certain to secure the USB connector to its retainer on the door.



9. Secure the HMI to the front door using four screws.
10. Switch the machine power on.
11. Load the latest firmware into the HMI (*see page 67*).
12. Test the equipment and, if functioning properly, replace the black door fascia.

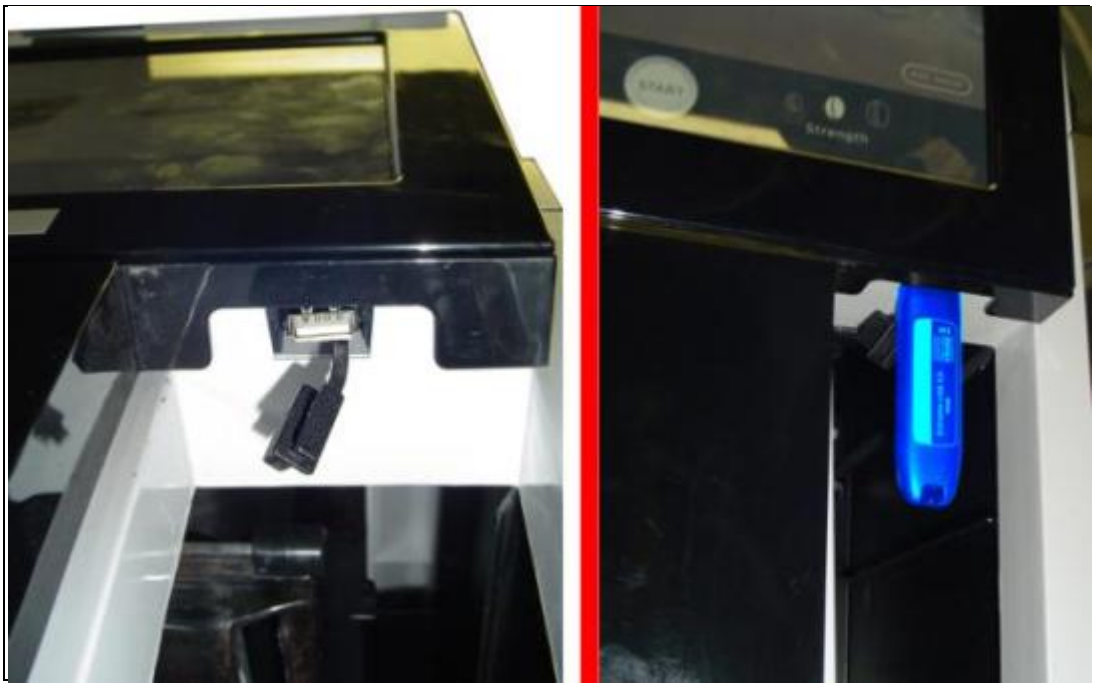
SECTION 8

Updating Firmware

Firmware updates may be released periodically for the Eccellenza Touch. These updates may consist of fixes, new options and features, customizations, etc. This section guides you through the simple process of updating your equipment to the latest firmware.

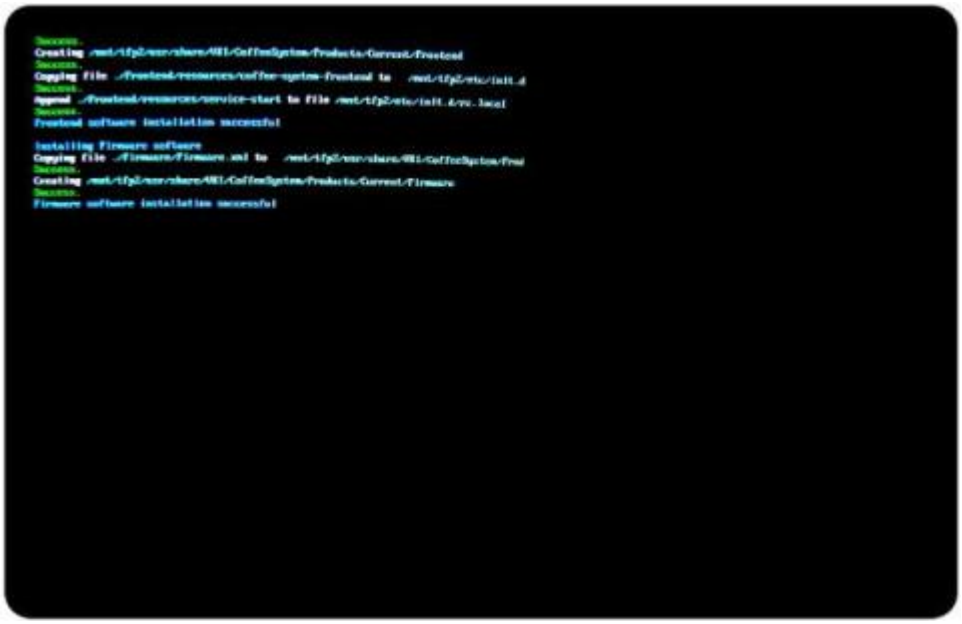
	**After replacing the control board, the firmware must be loaded when the machine is first powered up. Do not power up the machine until the USB Flash drive with the proper firmware is connected to the machine.**

1. Load the latest firmware files onto a USB flash drive (minimum 1GB).
2. Remove the waste bin.
3. Remove the plug from the USB connector and insert your USB flash drive into it. ***Make sure to push the USB flash drive into the USB connector as far as it can go.***

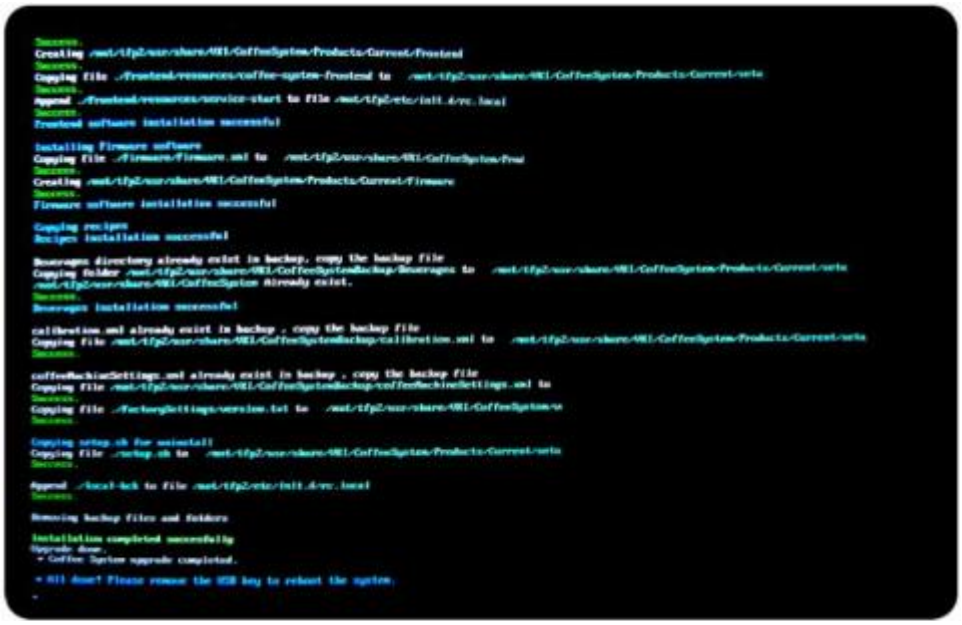


4. Reboot the machine using the main power switch.

5. The updating process is automated and requires no user input. The screen reverts to command-style prompts that provide progress information on the update.



6. Once the update is complete (after 5-10 minutes), you are prompted to remove the USB flash drive to reboot the machine.



7. Remove the flash drive and the Eccellenza Touch will reboot itself twice. While it is rebooting, re-install the plug onto the USB connector and re-install the waste bin.

8. It is possible that an error may be displayed on the screen. If this is the case, simply clear the error.

Updating the Eccellenza Touch firmware will <u>not</u> overwrite or change any existing settings or customizations you may have made in the programming. These settings will be maintained.