



MODEL 2778

80g Aqueous Agitation Unit

Operating Manual



INTRODUCTION

GENERAL INSTRUCTIONS



READ AND UNDERSTAND ALL LABELS, MSDS, AND THIS INSTRUCTION MANUAL BEFORE USE.

The Industrial Aqueous Parts Cleaner is an economical, safe, and innovative system designed to clean parts, using an aqueous based solution. Aqueous solutions, when used to clean grease and oil, must be disposed of properly. Consult your local environmental management agency for additional guidance and other potentially hazardous materials compliance requirements.

Install your parts cleaner on a flat, level surface in an area provided with adequate ventilation. Avoid repeated or prolonged breathing of vapors. Do **NOT** use compressed air to dry parts as this may cause a high concentration of vapors in the immediate area. Local exhaust ventilation should be used in areas of high vapor concentration. Provisions for determining and maintaining adequate ventilation are the responsibility of the operator.

Make sure the parts cleaner is connected to a properly grounded power source. Check serial plate for power requirements.

Do **not** allow parts cleaner to operate unattended.

Complete safety in use is dependent upon proper use and handling of the parts cleaner in your workplace.

It is important that you follow the instructions provided in this manual. If you fail to read, understand, and follow all of the procedures in this manual, you may cause or suffer personal injury.

DO NOT OPERATE ELECTRICAL EQUIPMENT INSIDE OF PARTS CLEANER.



CAUTION

USE ONLY WATER-BASED CLEANING SOLUTIONS DO NOT USE MINERAL SPIRITS

This equipment is designed for use only with Aqueous Based Solutions. Do **NOT** add any other chemicals to the cleaning agent including, but not limited to, kerosene, fuel oil, gasoline, or chlorinated solutions. The use of any other solutions could potentially cause a hazardous condition.



CAUTION

**DO NOT ALLOW HEATER TO OPERATE UNATTENDED FOR LONG PERIODS,
SUCH AS EVENINGS OR WEEKENDS.**

Avoid contact with eyes or skin. Wear protective eyewear, gloves, and clothing. Operation should be conducted in a manner, which prevents splashing, or spillage. Any spills should be promptly and properly cleaned up. Soak up all spills with absorbent material. Remove and dispose of all soaked material in accordance with regulatory requirements.

- This unit is **NOT** intended for outdoor operation.
- Do **NOT** leave solution-soaked rags in parts cleaner or in uncovered containers.
- Do **NOT** obstruct the cover. It is designed to close automatically in the event of a fire. The safety link and cover closing mechanism must be intact. Do **NOT** substitute with any other type of cover positioning device. Do **NOT** leave large objects in the parts cleaner or hang anything on the cover that could prevent the cover from closing in the event of a fire.
- Do **NOT** place heavy objects on edges or front of sink. Although this parts cleaner is designed to be stable, uneven weight distribution could cause a hazardous condition.
- Do **NOT** contaminate cleaning solutions with gasoline, alcohol or flammable liquids.
- When cleaning carburetors or other fuel supplying components: remove all gasoline into a proper disposal container before placing the component into the parts cleaner.
- Do **NOT** spray aerosols into or around this machine. Install the equipment in an area away from heat, sparks, and open flame. Never put hot parts into the solution.
- Do **NOT** use compressed air to dry parts. Be sure parts, especially brake parts, are completely dry prior to reassembly.
- Turn unit "OFF" and close lid when equipment is not in use. This will reduce evaporation.

IMPORTANT SAFETY INSTRUCTIONS

1. Read all instructions.
2. Care must be taken as burns can occur from touching hot parts.
3. Do not operate equipment with a damaged cord or if the equipment has been dropped or damaged – until it has been examined by a qualified service person.
4. If an extension cord is necessary, a cord with a current rating equal to or more than that of the equipment should be used. Cords rated for less current than the equipment may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.
5. Always unplug equipment from electrical outlet when not in use. Never use the cord to pull the plug from the outlet. Grasp plug and pull to disconnect.
6. To reduce the risk of fire, do **NOT** operate equipment in the vicinity of open containers of flammable liquids (gasoline).
7. To reduce the risk of electric shock, do **NOT** use on wet surfaces or expose to rain.
8. Use only as described in this manual. Use only manufacturer's recommended attachments.
9. **ALWAYS WEAR PROPER PPE**
10. Do **NOT** operate any electrical equipment inside sink or vat.
11. Do **NOT** use light bulbs rated over 40 watts.
12. Do **NOT** smoke, eat or drink in the work area.
13. Do **NOT** modify these machines.
14. Do **NOT** operate this unit in any manner that will cause splashing or cause mist to form.
15. Use only the aqueous solution provided.
16. Adjust flexible nozzle or flow-thru brush so solution is directed to inside the sink only.
17. On the Control box, set the breaker switches to **OFF** before plugging in unit.
18. In any emergency, turn off the unit.
19. These parts washers employ a safety feature called a fusible link that holds the cover open during use. Do **NOT** modify, alter, or obstruct the operation of the fusible link.
20. Keep cover closed whenever unit is not in use.
21. Do **NOT** remove fluid from this equipment or it may cause malfunction or unsafe conditions.

SAVE THESE INSTRUCTIONS

SERVICE

- Call your representative should your parts cleaner need service and always unplug unit when servicing.
- Inspect and keep in good working order the power cord and all electrical components. If components show signs of damage or wear replace immediately. All work should be done by a trained technician.
- Do **NOT** replace pump before unplugging unit and letting it completely cool down.
- Do **NOT** replace fusible link with any other device to hold lid up. If fusible link should fail, for any reason, call your representative immediately.

INSTALLATION

- Position equipment on a hard level surface in a well-ventilated area.
- Check to make sure that the rollers are on the roller guides. The rollers are located inside of the machine on the back of the lift.
- Mount the cylinder housing to the machine, and secure with four 10-32 screws. **CAUTION:** Make sure not to pinch any air lines.
- Connect an air supply line of **80-120 PSIG (5.5-8.3bar)** to the air inlet on the back of the control box.
- Turn the agitation selector switch to the up, down, and agitate positions to make sure the machine operates correctly.
- Fill solution reservoir to the correct level. This equipment is designed for use only with Aqueous Based Solutions. Do **NOT** add any other chemicals to the cleaning agent including, but not limited to, kerosene, fuel oil, gasoline, or chlorinated solutions. The use of any other solutions could potentially cause a hazardous condition.

Capacity Model 2778 = 80 gal. (303 L.)

Minimum Level = 48 gal. (182 L.)

- Power Requirements:
 - For the **pump** to function properly, it must be plugged into the receptacle on the back of the control box (right side of the machine). The power cord from the control box must be connected to a properly grounded power source. *Check serial plate for power requirements.*

115 Volt Pump: 115 volt, 1amp, 60 Hz, 1PH

230 Volt Pump: 230 volt, .5amp, 50 Hz, 1 PH

- Connect the power cord from the heater module to a properly grounded power source. Check the serial plate for power requirements:

2778A = 27.3 amp, 230 volt, 50/60 Hz, 1 PH

2778B = 13 amp, 460 volt, 50/60 Hz, 1 PH

- Weight capacity for this parts cleaner is **250LBS. Do not exceed rated load.**

ADDITIONAL SPECIFICATIONS

- Fluid Capacity: 80 Gallons
- 12 Gauge Construction
- Platform Dimensions: 17 1/2"W x 41 1/2"L
- Overall Dimensions: 33"W x 51 1/2"L x 66 1/2"H
- Tank Dimensions: 27"W x 44 1/2"L x 28"H
- Fluid Level: 12"
- Load Capacity: 250 lbs.
- Lift Requirements: 8CFM@120PSI
- 115VAC
- 60HZ
- 1PH
- 1Amp
- Shipping Dimensions: 36 1/4" W x 56 1/2"L x 56 1/2" H
- Shipping weight: 556 lbs.
- Pump/Motor HP: Fractional

OPERATING INSTRUCTIONS

LOADING (Requires the platform to be in the "UP" position).

1. Open the cover by lifting up.
2. Turn the "PLATFORM CONTROL VALVE" to the "UP" position.
3. When the platform is in its upper-most position, place load on the shelf.

DO NOT EXCEED 250 LBS! DO NOT DROP PARTS ON PLATFORM!

AGITATION – OPERATION

1. Turn the "PLATFORM CONTROL VALVE" to the "AGITATE" position. When the platform reaches the bottom position it will begin agitating.
2. To adjust the agitation speed, turn the "PLATFORM SPEED CONTROL" knob counterclock wise to increase and clock wise to decrease the speed. Note: The speed control has a locking feature, if it will not turn, pull up on the knob.
3. To reduce evaporation, close the cover while the parts are agitating.

SOAKING – OPERATION

1. Turn the "PLATFORM CONTROL VALVE" to the "DOWN" position.
2. Close the cover to reduce evaporation while the parts are soaking.

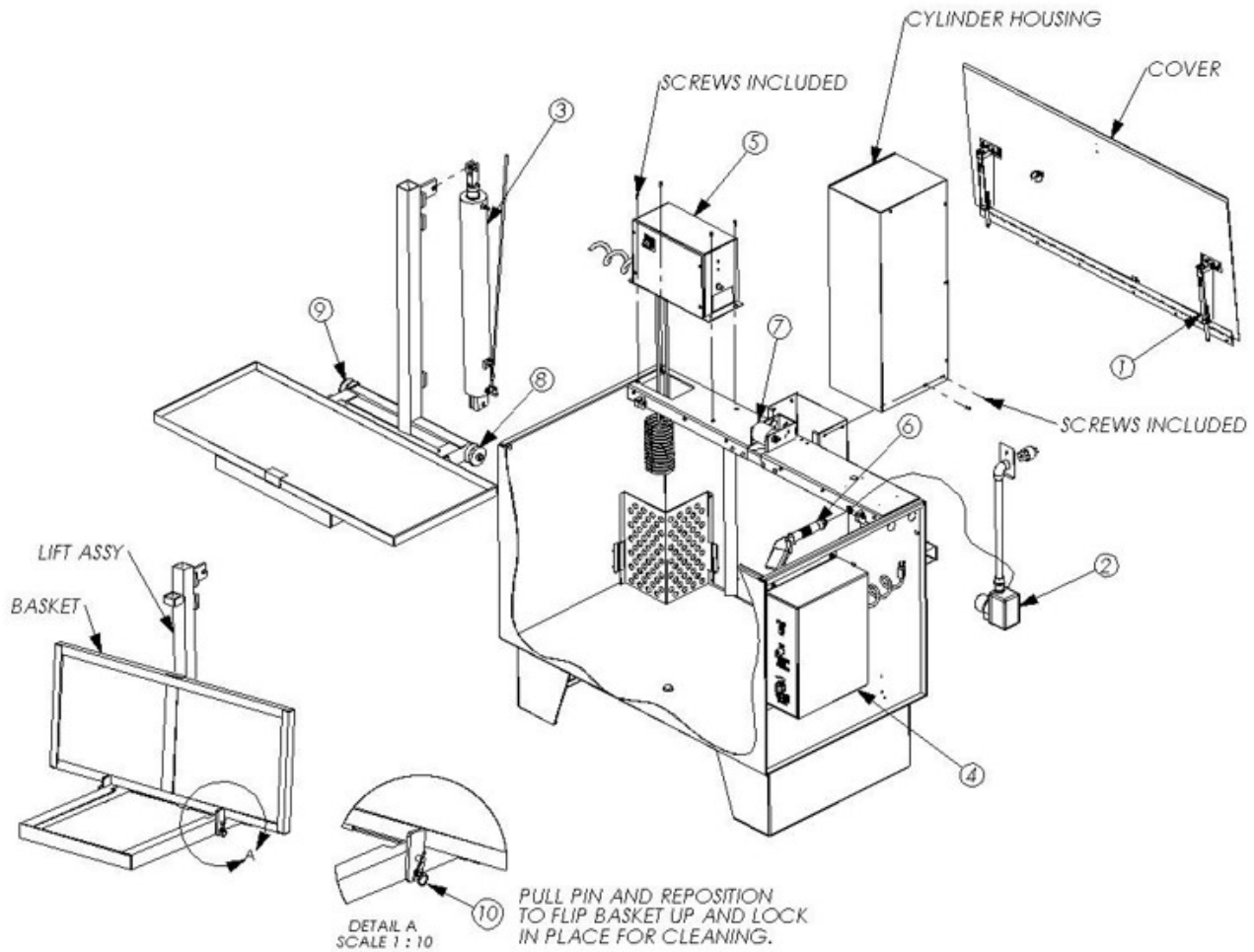
UNLOADING – OPERATION

1. Open the lid of the parts washer.
2. Turn the "PLATFORM CONTROL VALVE" to the "UP" position.
3. When the platform is in its upper-most position, allow parts to drain before removing.

MANUAL PARTS CLEANING – OPERATION

1. Open the lid.
2. Turn the "PLATFORM CONTROL VALVE" to the "UP" position.
3. Turn the pump switch to the "ON" position.
4. Manually clean the parts using the brush.
5. Turn the pump switch to the "OFF" position.
6. Place brush in the brush holder.
7. Unload parts or continue to clean in the agitation operation.

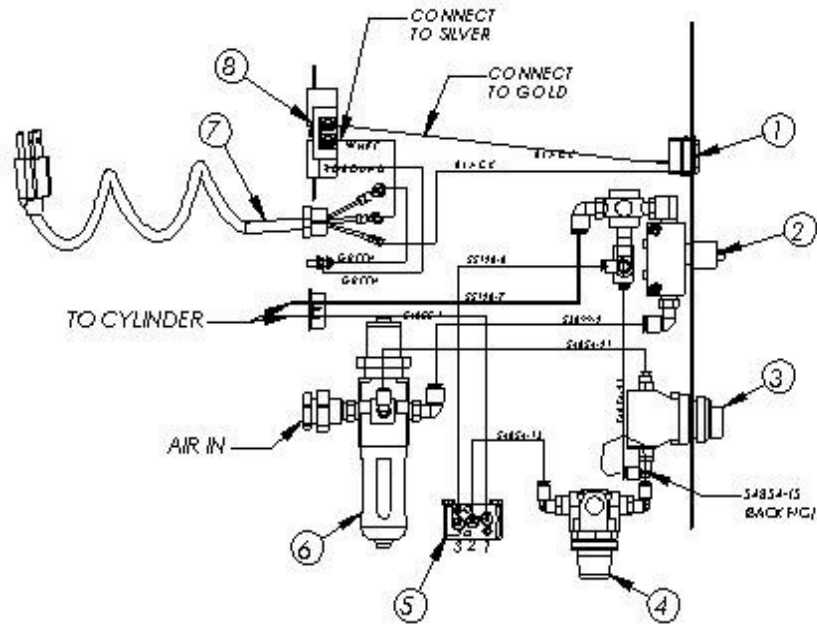
MACHINE DIAGRAM



ITEM	2778A	2778B	DESCRIPTION
1	55449	55449	DOOR CLOSURE ASSY
2	59963	59963	PUMP ASSY
3	8939	8939	CYLINDER
4	59650	59650	CONTROL BOX
5	56640-01	56641-01	HEATER MODULE
6	01205	01205	BRUSH
7	03500	03500	UPPER ROLLER
8	01158	01158	ROLLER, RH
9	8840	8840	ROLLER, LH
10	04294	04294	PULL RING PLUNGER

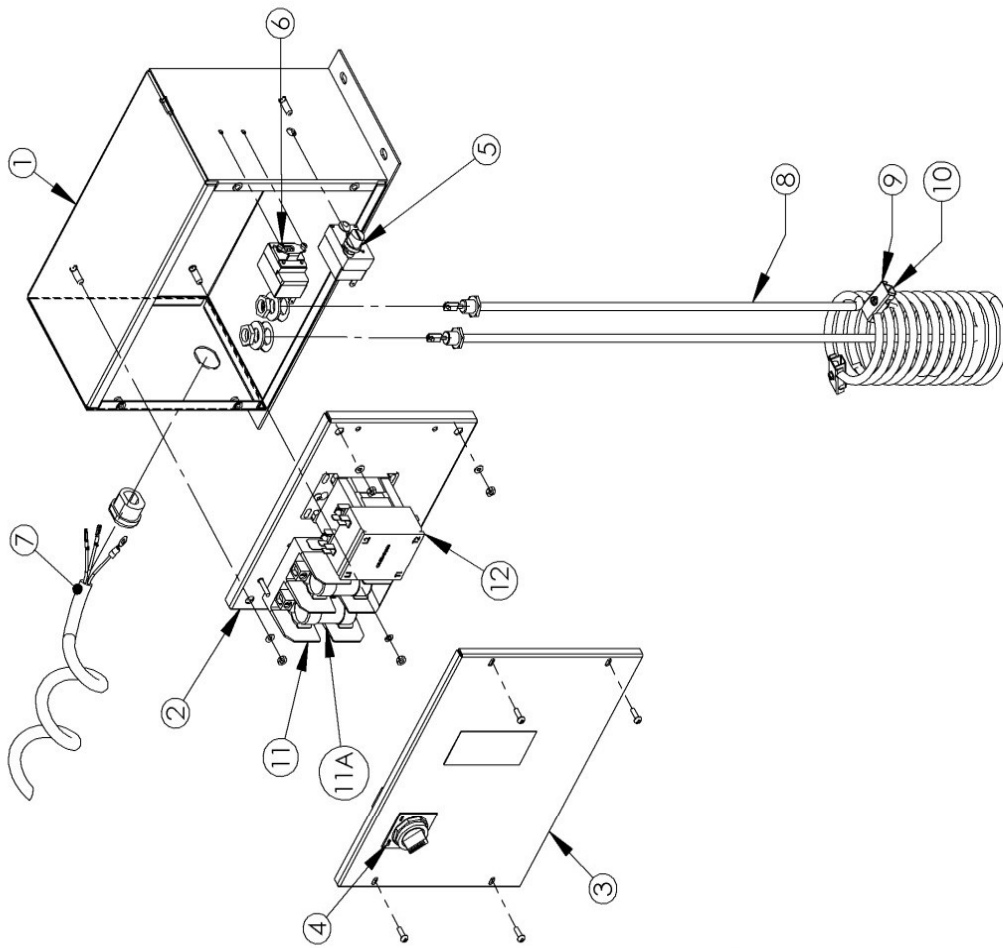
WIRING DIAGRAMS

CONTROL BOX ASSEMBLY (59650 115V ELEC)

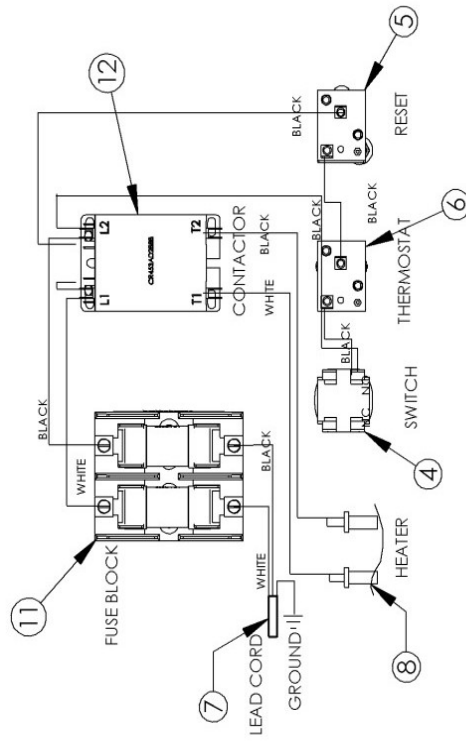


ITEM	2778A&B	DESCRIPTION
1	01122	SWITCH
2	58531	SPEED CONTROL ASSEMBLY
3	59756	3 POS SWITCH ASSEMBLY
4	59757	REGULATOR ASSEMBLY
5	56968	NOT VALVE ASSEMBLY
6	58387	FILTER/REGULATOR ASSEMBLY
7	59656	POWER CORD
8	01132	RECEPTACLE

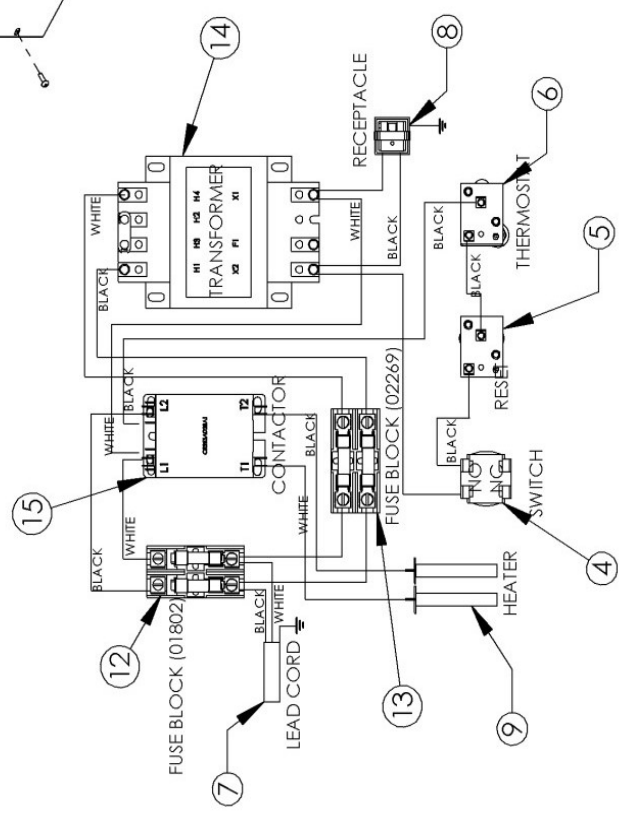
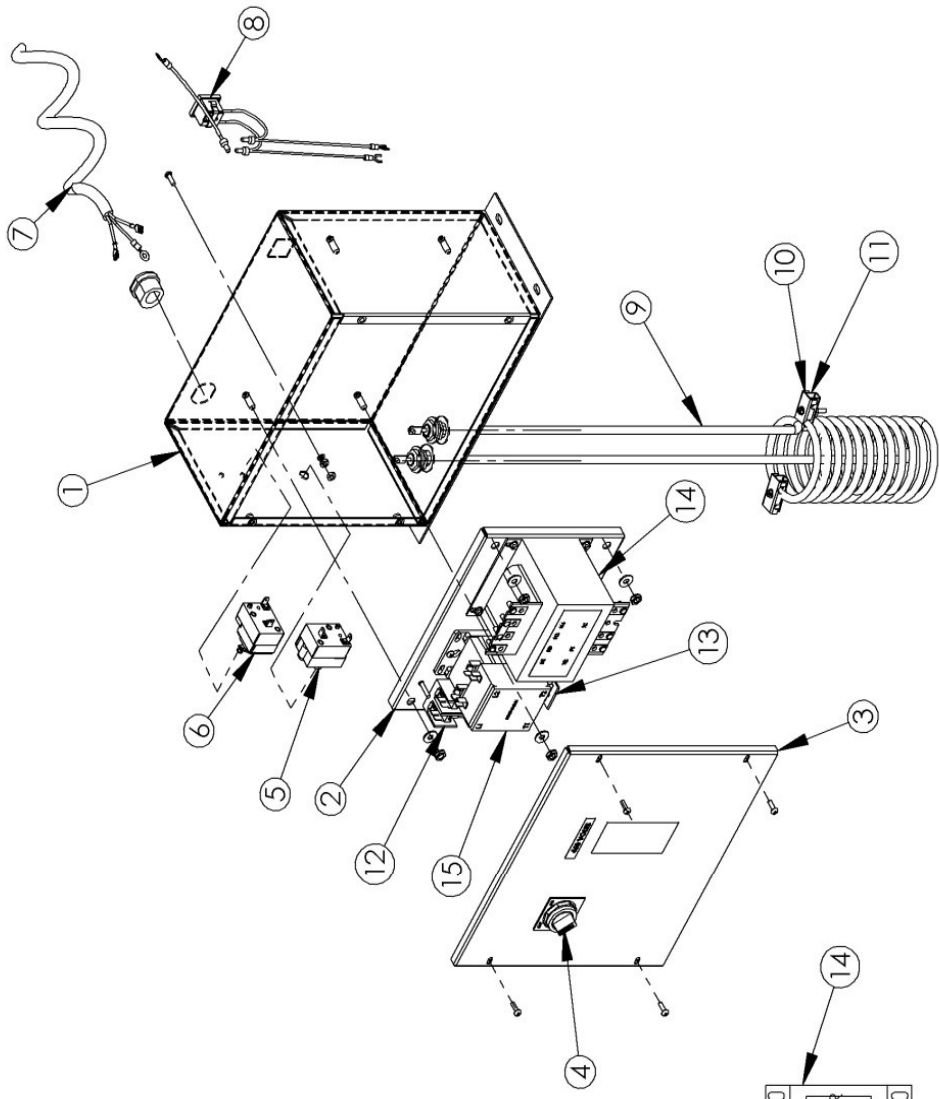
230V HEATER MODULE 56640



56640 INSTR
REV 8-10-06



460V HEATER MODULE 56641



56641 INSTR
8-10-06

230V HEATER MODULE

ITEM #	56640-01	QTY	DESCRIPTION
1	56636	1	HEATER BOX
2	56637	1	PANEL
3	56638	1	COVER
4	8871	1	SWITCH
5	01041	1	RESET, 140F
6	9039 @ 110°	1	THERMOSTAT
7	57353	1	POWER CORD, 10/3
8	01807	1	HEATER, 220V
9	55644	2	PROBE CLIP TOP
10	55645	2	PROBE CLIP BOTTOM
11	01208	1	FUSE BLOCK
11a	01207	2	FUSE, 600V, 35A
12	01206	1	CONTACTOR

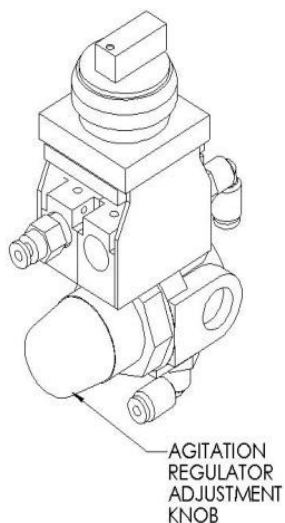
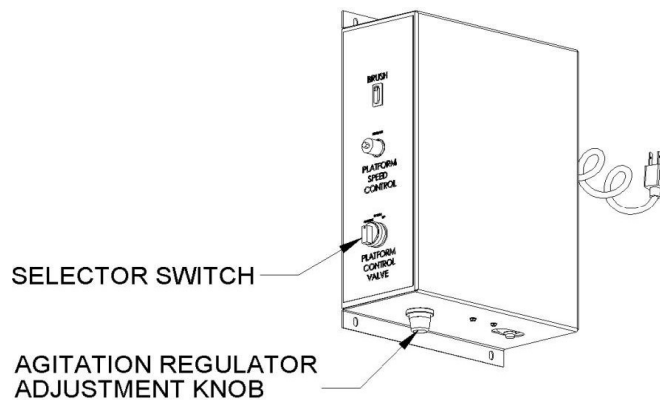
460V HEATER MODULE

ITEM #	56441-01	QTY	DESCRIPTION
1	57341	1	HEATER BOX
2	57342	1	PANEL
3	57345	1	COVER, HEATER BOX
4	8871	1	SWITCH, 2 POSITION
5	01041	1	RESET, 140F
6	9039 @110°	1	THERMOSTAT
7	01209	1	POWER CORD 10/3
8	57344	1	RECEPTACLE
9	01806	1	HEATER, 480V 6000W
10	55644	2	PROBE CLIP TOP
11	55645	2	PROBE CLIP BOTTOM
12	01802	1	FUSE BLOCK
12a	01800	2	FUSE, 600V, 20A
13	02269	1	FUSE BLOCK
13a	02270	2	FUSE, 500V, 2AMP
14	57343	1	TRANSFORMER
15	01805	1	CONTACTOR

NOTICE:

THIS MACHINE IS PRESET AT THE FACTORY TO OPERATE WITH A MINIMUM OF 100 LBS ON THE AGITATION PLATFORM. IF YOU INTEND TO OPERATE THE MACHINE WITH LOADS LESS THAN 100 LBS, YOU WILL NEED TO LOWER THE PRESSURE SETTING ON THE AGITATION REGULATOR ON THE BOTTOM OF THE CONTROL BOX.

1. Place a typical load on the platform.
2. Turn the selector switch to agitate.
3. Pull out on the adjustment knob on the agitation regulator.
4. Rotate the agitation regulator adjustment knob counter clockwise until the lift begins to agitate.
5. Push in the adjustment knob on the regulator to lock the setting.



TROUBLESHOOTING

HEATER DOES NOT HEAT

POSSIBLE CAUSE	FIX
- NO POWER TO THE UNIT	- APPLY POWER
- SWITCH NOT TURNED ON	- TURN ON SWITCH
- RESET TRIPPED	- PRESS THE RESET BUTTON
- FUSE BLOWN	- REPLACE THE FUSE

INCORRECT TEMPERATURE

POSSIBLE CAUSE	FIX
- BAD THERMOSTAT	- REPLACE THE THERMOSTAT

NO AGITATION

POSSIBLE CAUSE	FIX
- NO AIR CONNECTED TO MACHINE	- CONNECT A 120PSI 10CFM AIR SUPPLY
- TOO MUCH WEIGHT ON LIFT	- REMOVE WEIGHT
- SPEED CONTROL TURNED OFF	- ADJUST AGITATION SPEED
- CRIMPED AIR LINE	- CHECK AIR LINES & REMOVE STRAIGHTEN

AGITATES AT TOP OF STROKE

POSSIBLE CAUSE	FIX
- NOT ENOUGH WEIGHT ON LIFT	- ADD WEIGHT
- WRONG AGITATION PRESSURE	- ADJUST THE REGULATOR ATTACHED TO THE BOTTOM OF THE UP/DOWN/AGITATE SWITCH

AGITATES BOTTOMS OUT

POSSIBLE CAUSE	FIX
- TO MUCH WEIGHT ON LIFT	- REMOVE SOME WEIGHT
- WRONG AGITATION PRESSURE	- ADJUST THE REGULATOR ATTACHED TO THE BOTTOM OF THE UP/DOWN/AGITATE SWITCH
- NOT ENOUGH AIR	- CHECK INCOMING AIR SUPPLY SHOULD HAVE 10CFM @ 120PSI

NO FLOW FROM BRUSH

POSSIBLE CAUSE	FIX
- POWER CORD NOT PLUGGED IN	- PLUG IN POWER CORD
- SWITCH NOT TURNED ON	- TURN ON SWITCH
- INLET TO PUMP CLOGGED	- UNCLOG PUMP

