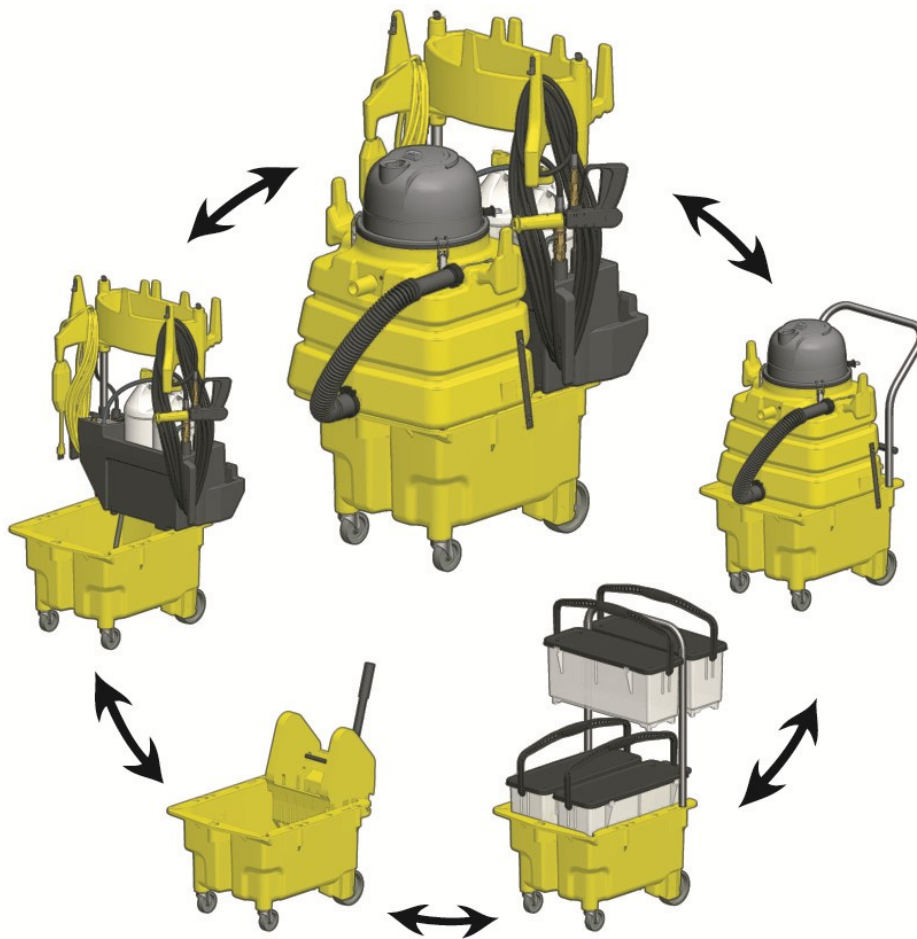




Crossover Cleaning System

Operator & Parts Manual



Revision Sheet

Release No.	Date	Revision Description
Rev. 0	06/28/13	Updated with 230V and product revisions
Rev. 1		

NOTE: Specifications and parts are subject to change without notice

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OPERATOR & PARTS MANUAL

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1.1 Safety Precautions

IMPORTANT SAFETY INSTRUCTIONS—SAVE THESE INSTRUCTIONS READ ALL INSTRUCTIONS BEFORE USING (THIS APPLIANCE)

When using an electrical appliance, basic precautions should always be followed, including the following:

⚠ WARNING: To reduce the risk of fire, electric shock, or injury:

- ◆ Do not leave appliance when plugged in. Unplug from outlet when not in use and before servicing.
- ◆ To Reduce The Risk Of Electric Shock – Do not expose to rain. Store indoors.
- ◆ Connect to a properly grounded outlet only. See Grounding Instructions below.
- ◆ Do not allow to be used as a toy. Close attention is necessary when used by or near children.
- ◆ Use only as described in this manual. Use only manufacturer's recommended attachments.
- ◆ Do not use with damaged cord or plug. Check cord and plug prior to use. If appliance is not working as it should, has been dropped, damaged, left outdoors, or dropped into water, return it to a service center.
- ◆ Do not pull or carry by cord, use cord as a handle, close a door on cord, or pull cord around sharp edges or corners. Do not run appliance over cord. Keep cord away from heated surfaces.
- ◆ Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- ◆ Do not handle plug or appliance with wet hands.
- ◆ Do not put any object into openings. Do not use with any opening blocked; keep free of dust, lint, hair, and anything that may reduce air flow.
- ◆ Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.
- ◆ Turn off all controls before unplugging.
- ◆ Use extra care when cleaning on stairs.
- ◆ Do not use to pick up flammable or combustible liquids, such as gasoline, or use in areas where they may be present.
- ◆ Do not pick up anything that is burning or smoking, such as cigarettes, matches, or hot ashes.
- ◆ Do not use without dust bag and/or filters in place.
- ◆ If using an extension cord with the appliance, make sure the connection is above the floor and away from exposure to liquid.

This product comes with a grounded attachable extension cord. If damaged replace with equivalent cord rated 120V, 15 amps, 3-wire, 14 GA. This cord must be attached and mechanically secured using the provided cord connector to use the equipment.

GROUNDING INSTRUCTIONS

This appliance must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment grounding conductor and grounding plug. The plug must be inserted into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

WARNING – Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance – if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

This appliance is for use on a nominal 120-volt circuit and has a grounding attachment plug that looks like the plug illustrated in sketch A in Figure 20. Make sure that the appliance is connected to an outlet having the same configuration as the plug. No adaptor should be used with this appliance.

Personal Protective Equipment (PPE): It is recommended to wear proper personal protective equipment as required by the chemical product label instructions used in conjunction with the appliance.

⚠ WARNING — To Reduce the Risk of Electric Shock — Do not expose to rain. Store indoors.

1.2 LIMITED WARRANTY PROTECTION PLAN

1 YEAR - Kaivac warrants to the original purchaser/user that the vacuum tank, bucket body, vacuum motor and spray system are free from defects in workmanship and materials under normal use for a period of One Year, subject to the following restrictions:

- ◆ This warranty does not include accessories or wear items.*
- ◆ This warranty does not assume responsibility for damage or faulty performance caused by misuse or abuse, or where repairs or modifications have been made or attempted. Kaivac will make the final determination on whether the damage falls under this limited warranty for manufacturer's defects.
- ◆ PLEASE NOTE: using inappropriate chemicals constitutes misuse of these machines. These machines are not meant to be used with high-foaming or corrosive chemicals. Please check with your distributor or with Kaivac if you have questions about your chemical.
- ◆ This limited warranty is only applicable in the United States with purchase record on file with Kaivac from purchase transaction.
- ◆ Under no circumstances will Kaivac be liable for any loss, damage, expenses or consequential damages arising in connection with the use or inability to use Kaivac's product. This warranty is in lieu of any other warranty expressed or implied, including any warranty of merchantability or fitness for a particular purpose.

* Wear Items Excluded Under This Warranty. These "wear items" are EXCLUDED from coverage: Squeegee blades and wheels, hoses, seals, gaskets, cords, casters, HEPA filter cartridges, chemical feed caps, spray gun, GFCI, vacuum wand assembly and other accessory tools.

1.3 Warranty Registration Form

To be completed and mailed or faxed by the customer purchasing equipment. Return this warranty card within ten days of purchase.

Purchased By:

Name: _____ Title: _____

Company: _____

Street Address: _____

City: _____ State: _____ Zip Code: _____

Phone Number: _____ FAX: _____

Date Purchased: ____/____/____ Name of Distributor: _____

I would like to receive updated information Yes _____ No _____

Email Address: _____

☐ KV1750

☐ KV1250

☐ KV2150

☐ KV1715AC

☐ KV1715

☐ KV1215

☐ OMNIFLEX
Pump Box

☐ OMNIFLEX
Wet/Dry Vac

Serial Number: _____

Type of Business

☐ School/University
☐ Hospital/Health Care

☐ Contract Cleaner
☐ Industrial

☐ Office
☐ Other: _____

Intended Uses (check all that apply)

☐ Restroom Cleaning
☐ Floor Stripping
☐ Kitchen Cleaning
☐ Carpet Extraction

☐ Cleaning Around Machines
☐ Stairwell Cleaning
☐ Lockers & Showers
☐ Hallway Cleaning

☐ Classroom Cleaning
☐ Other: _____
☐

Thank you for registering for our warranty program.

Please return completed forms to:

Kaivac, Inc.
401 S. Third Street
Hamilton, OH 45011
Or Fax to: (513) 887-4601



2.0 KAIMOTION FLEX

2.1 Introduction

Inspection: Carefully unpack and inspect your new KaiMotion Flex Multipurpose Cleaning and Waxing System for shipping damage. For instructions regarding any shipping damage, contact Kaivac, Inc. immediately. All returns must have a Return Authorization Number (RAN), which is available by calling the Kaivac Technical Support Department at 1-800-287-1136.

Equipment Precautionary Statements:

- ◆ Use the equipment for the purposes specified by the manufacturer.
- ◆ Always test chemicals for compatibility on the desired cleaning surface before cleaning.
- ◆ Make sure the spigot is in the “OFF” position prior to filling the KaiMotion Flex Trolley.

Water Damage Prevention to Buildings:

- ◆ The KaiMotion Flex is to be used on water-resistant building surfaces only. This includes concrete, terrazzo, ceramic tile, and quarry tile.
- ◆ The KaiMotion Flex may be used for stripping on vinyl composite tile floors.
- ◆ Discontinue use if any leaks occur.
- ◆ **CAUTION:** Prior to cleaning, always inspect the area to ensure that the surfaces are water-safe. In addition, check for poor construction, damaged walls and floors, missing or damaged tiles or grout, missing or insufficient caulk, and loose wall coverings. If problems are discovered, resolve them prior to clean-

Chemical Use:

- ◆ Keep the appropriate chemical product MSDS on hand at all times (go to www.kaivac.com for updated copies of Kaivac Chemical MSDS Sheets).

Training:

- ◆ This manual provides basic instructions for how to use your Kaimotion Flex or OmniFlex units. For more information and instructions on KaiMotion Flex cleaning and waxing techniques, tricks, and best practices, go to www.kaivac.com. Also, you can refer to the Kaimotion Wall Chart for basic cleaning techniques and instructions.

2.2 Out-Of-Box Setup Instructions & Use

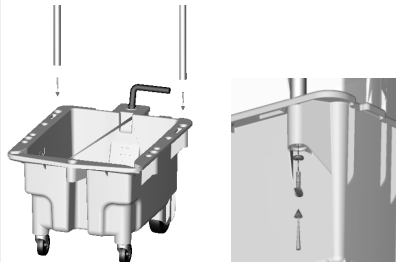
- 1 Handles:** two options are available based on your needs. Contact Kaivac Customer Service for more details at 1-800-287-1136.



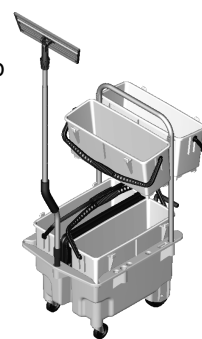
Standard Handle

Super Tray roto-molded Handle

- 2 Assembly:** Insert Handle into wells at back of OmniFlex Trolley. Use spade-head screws and washers from plastic bag and secure Handle into wells.



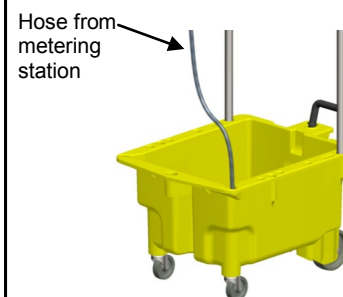
- 3 Assembly:** Microfiber Ergo Handle (sold separately) can be stored in open bin, on top of closed bin, or with handle tip in front center well. Optional Bins only come with certain packages.



- 4 Assembly:** Microfiber mop frame can be stored in front. In this configuration, it can also be used to push when the push handle is removed.



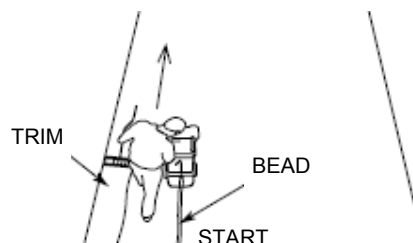
- 5 Fill the Trolley/Reservoir** with properly diluted product from a chemical dilution metering station.



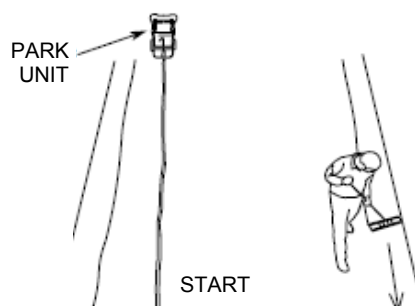
- 6 Filling:** The Trolley-Bucket is graduated for 7 gallons of liquid. For higher capacity needs, the bottom of the "G" marking is 8 gallons, the mid-line of the "G" is 9 gallons, and the top of the "G" is 10 gallons. Filling over the 10 gallons is not recommended.



- 8 Applying Cleaning Solution:** Start on left side with moistened pad. At the same time dispense desired-width bead of solution as shown.



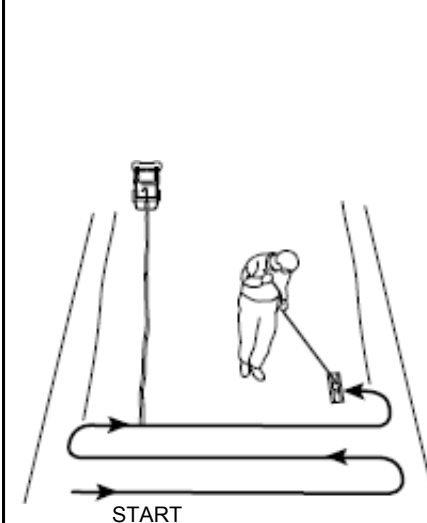
Then trim the opposite side and begin microfiber mopping.



- 7 Dispensing Fluid:** To dispense fluid, turn the spigot as shown. You can vary the flow rate as needed.

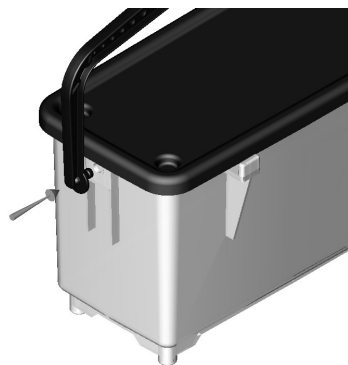


- 9 Microfiber Mopping:** Spread bead of solution in an S-pattern overlapping 1/2 pad width with each pass until section is filled. Change pad as needed.

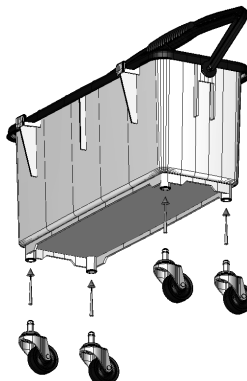


2.3 Bin Setup Instructions

- 1** Snap Bin Handles into holes at ends of bins.

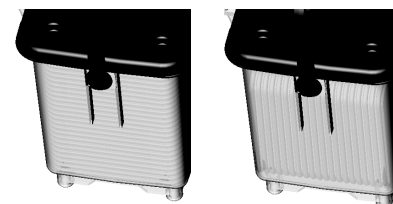


- 2** KaiMotion™ Flex Bins can have optional Casters attached. Casters are included in some KaiMotion™ Flex and KaiMotion™ Flex Bin packages, and are also sold separately.



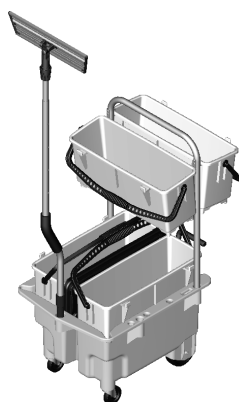
- 3** For pre-soaked pads, you should use 3-5 oz. of solution per pad.

The translucent KaiMotion™ Flex Bins allow the microfiber pads to show through the bin wall, so the number of pads left can be estimated at a glance.



- 4** Bin lids can fit between open bins. Bins may also be hung from hooks on handle.

Note: Placing heavy items in rear handle bin when there is no water in unit may cause unit to tip.

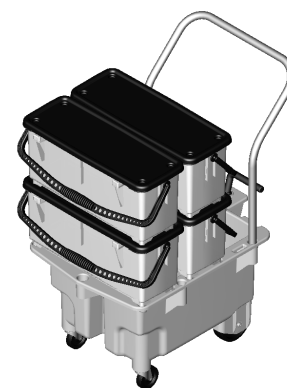


- 5** Bins can also be carried on top of trolley when a larger solution capacity is desired.

Note: Only 2 bin lids may be included in some KaiMotion™ Flex packages. Additional bin lids are sold separately.

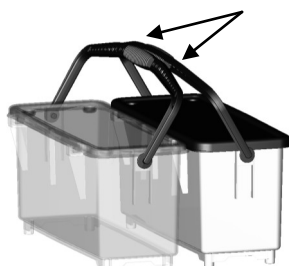


- 6** Additional KaiMotion™ Flex Bins (sold separately) can be stacked on top of the system for your high-capacity cleaning needs.

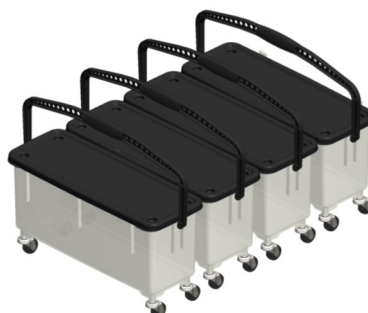


- 7** KaiMotion™ Flex Bins can be linked together to form a dual compartment cleaning tray. Insert the Bin Hook under the Bin Rim as shown. Insert Latch Pins through the Handle Holes to lock the Handles together.

Attach Latch Pins Here



- 8** Any number of KaiMotion™ Flex Bins can be linked together on the floor into a bin train to provide easy mobility and capacity as the job requires.



- 9** KaiMotion™ Flex Bins can be stacked or nested for easy storage and transportation.



2.4 Maintenance

KaiMotion Flex Trolley:

- ◆ Empty and flush out the Trolley daily to prevent mildew and bacteria growth.
- ◆ Clean and disinfect weekly.

2.5 Troubleshooting

Spigot Leaking:

- ◆ Make sure valve is completely closed in the “OFF” position.
- ◆ If leak is occurring at the spigot-trolley connection, disassemble the spigot, unscrew the spigot from the trolley, apply Teflon tape or thread sealant to the spigot and reattach. Test for leakage again prior to reassembling the spigot.
- ◆ If leaking persists at the spigot valve, replace the spigot.

3.0 OMNIFLEX WET/DRY VACUUM SYSTEM

3.1 Introduction

Inspection: Carefully unpack and inspect your new OmniFlex Wet/Dry Vacuum System for shipping damage. Each unit is tested and thoroughly inspected before shipping. For instructions regarding any shipping damage, contact Kaivac, Inc. immediately. All returns must have a Return Authorization Number (RAN), which is available by calling the Kaivac Technical Support Department at 1-800-287-1136.

Equipment Precautionary Statements:

- ◆ Use the equipment for the purposes specified by the manufacturer.
- ◆ Do not remove the float shutoff.
- ◆ Avoid running the vacuum with blocked flow for long periods of time. This may cause product damage.
- ◆ Always test chemicals for compatibility on the desired cleaning surface before cleaning.
- ◆ Replace any damaged cords before using.

Water Damage Prevention to Buildings:

- ◆ The OmniFlex is to be used on water-resistant building surfaces only. This includes concrete, terrazzo, ceramic tile, and quarry tile.
- ◆ The OmniFlex may be used for stripping on vinyl composite tile floors, but daily cleaning of resilient flooring using the OmniFlex is not recommended.
- ◆ Never overflow the vacuum recovery tank.
- ◆ Discontinue use if any leaks occur.
- ◆ **CAUTION:** Prior to cleaning, always inspect the area to ensure that the surfaces are water-safe. In addition, check for poor construction, damaged walls and floors, missing or damaged tiles or grout, missing or insufficient caulk, and loose wall coverings. If problems are discovered, resolve them prior to cleaning in order to avoid any harm that may result from exposure to water or cleaning solution.

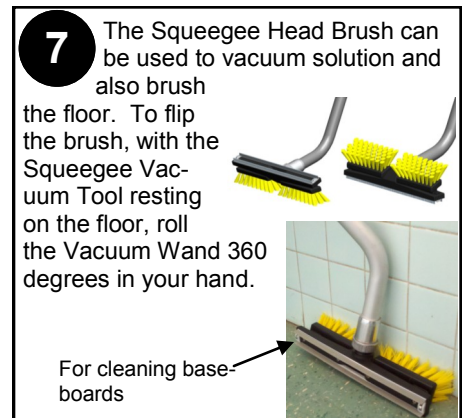
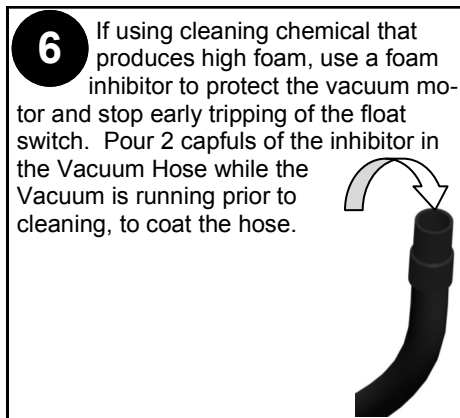
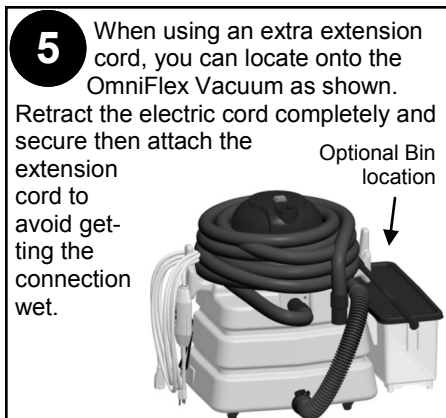
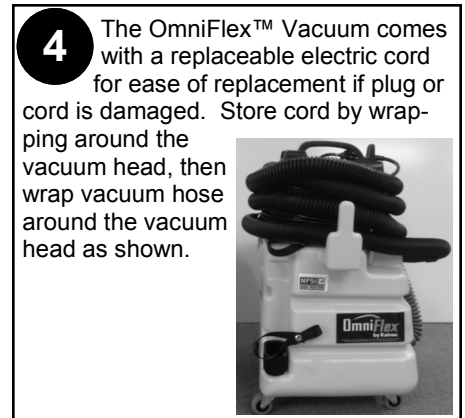
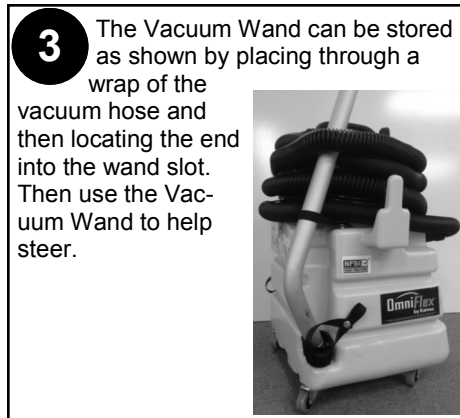
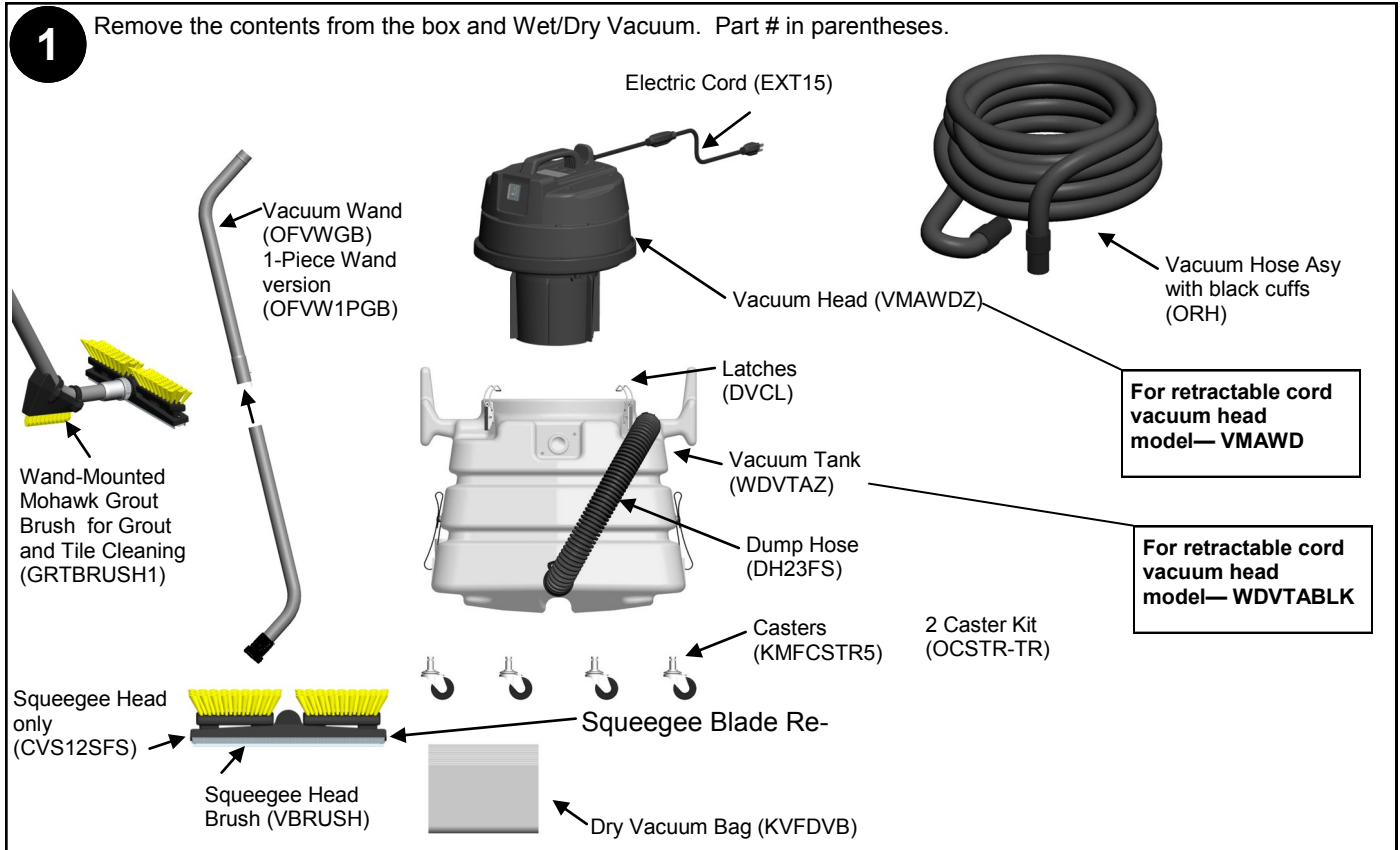
Chemical Use:

- ◆ Only use chemicals approved for use with the OmniFlex. Use of non-Kaivac approved chemicals may cause machine damage and will reduce warranty periods.
- ◆ Keep the appropriate chemical product MSDS on hand at all times (go to www.kaivac.com for updated copies of Kaivac chemical MSDS sheets).

Training:

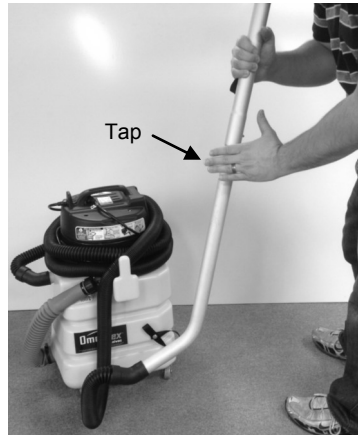
- ◆ This manual provides basic instructions for how to use your Kaimotion Flex or OmniFlex units. For more information and instructions on OmniFlex cleaning techniques, tricks, and best practices, go to www.kaivac.com. Also, you can refer to the Kaimotion Wall Chart for basic cleaning techniques and instructions.

3.2 Out-Of-Box Setup Instructions



3.3 Preparing the OmniFlex Vacuum for Use

- 8** When finished vacuuming and with vacuum on, invert the Vacuum Wand and tap in the middle to dislodge any matter or liquid. Then wrap the vacuum hose around the Vacuum Head.



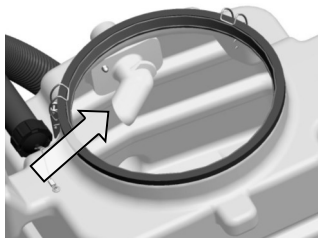
- 9 Dumping:** To dump into toilet, remove Vacuum Head and position on rim as shown and lift.



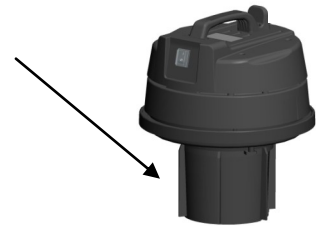
- 10 Dumping:** To dump into the drain, unscrew the Dump Hose cap and lower the end of the Dump Hose into the drain.



- 11 Dry Vacuuming:** remove the Vacuum Head and slide the Dry Vacuum Bag over the deflector as shown. Make sure that the bag is securely attached around the horn of the deflector. Reattach the Vacuum Head. When finished, remove the bag and dispose.



- 12 Maintenance:** The Float Cage of the Vacuum Head needs to be cleaned daily. Keep the Vacuum Head oriented as shown and spray down with hot water and allow to dry. Avoid spraying water up into the Vacuum Motor compartment.

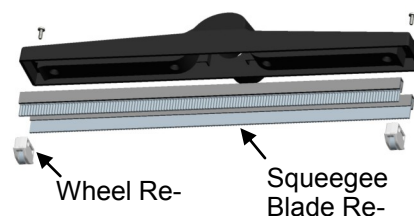


- 13 Maintenance:** Regularly clean out the Vacuum Tank as shown by tilting while dumping and spraying out contents.

CAUTION: Make sure straps are secured to

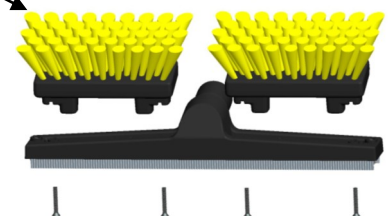


- 14 Maintenance:** The Squeegee Head Brush has Squeegee Blades & Wheels need to be replaced regularly every 2-3 months depending on use. Remove screws as shown to replace.



- 15 Maintenance:** The Squeegee Head Brush has Brushes that wear and need to be replaced regularly depending on use. Remove screws as shown to replace.

Vacuum Brush Replace-



3.4 Maintenance

Item	Procedure
Floor Squeegee Tool	<ul style="list-style-type: none"> ♦ The condition of this tool is very important to the performance of the OmniFlex Vacuum. The floor should be nearly dry after vacuuming. Regularly check the condition of the rubber squeegee blades and wheels on the underside of the tool. If streaking occurs or if there are signs of wear, replace immediately. ♦ NOTE: Rough floor surfaces will cause the blades and wheels to wear out more quickly. Replace as necessary.
Vacuum Tank	<ul style="list-style-type: none"> ♦ Empty and flush vacuum tank after each use. ♦ Regularly check the deflector to make sure there are no blockages. ♦ Clean and disinfect weekly.
Vacuum Motor Head	<ul style="list-style-type: none"> ♦ Check the float shutoff foam filter regularly (weekly recommended). If dirty, remove and clean. ♦ After removing the foam filter, check the float shutoff screen for blockages and clean if necessary. A blocked screen or foam filter will restrict airflow and reduce suction.
Leaks	<ul style="list-style-type: none"> ♦ Be alert for leaks around hoses, fittings, tanks or elsewhere. ♦ Discontinue use until leaks are repaired.
Electrical System	<ul style="list-style-type: none"> ♦ Electric cord must be regularly inspected for tears or cuts in the insulation. If tears or cuts are found repair immediately.

3.5 Troubleshooting

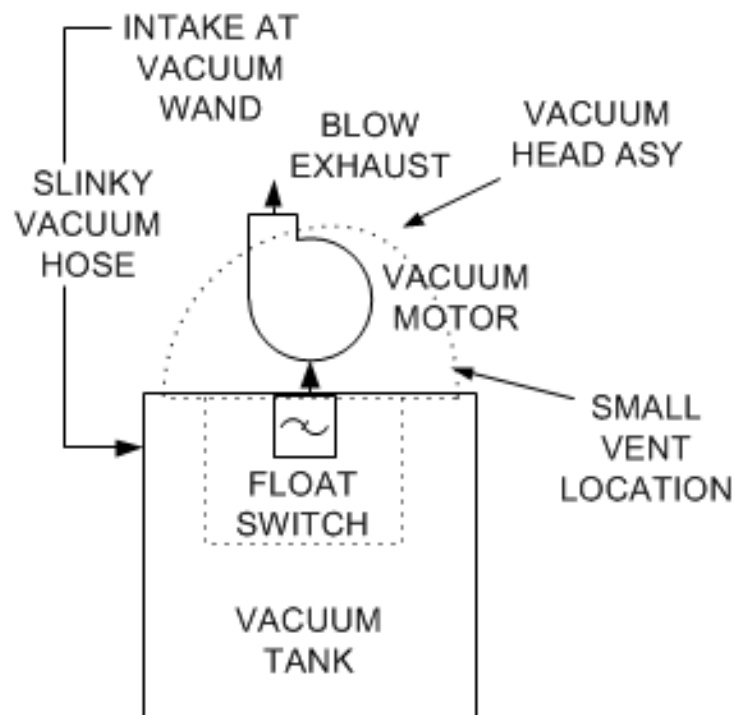
Area	Problem	Possible Cause	Solution
Electrical	No power to vacuum motor	Machine not plugged in	Plug machine in to outlet
		Switch not "ON"	Check if switch is "ON"
		GFCI on Pump Box tripped (only if connected to Pump Box)	Test or reset GFCI (if vacuum plugged into Pump Box)
		Building circuit overloaded	Plug vacuum into different circuit and reset the building circuit breaker
		Switch wires or connections loose on Pump Box (only if connected to Pump Box)	Disconnect power and check for loose wires under control panel of Pump Box
	Electrical burning smell	Vacuum motor brushes worn or motor jammed	Remove vacuum motor and repair or replace.
Dump System	Dump hose will not empty	Dump hose cap not removed	Remove cap
		Clog in tank near dump hose connection	Remove vacuum motor and remove clog
	Dump hose leaks	Dump hose cut	If leak is less than 4" from tank, cut and reattach, or replace
		Dump hose clamp loose	Tighten hose clamp
		Dump hose cap not locked in	Ensure dump hose cap is locked

3.5 Troubleshooting

Area	Problem	Possible Cause	Solution
Vacuum System	No or weak vacuum	Vacuum tank is full	Empty vacuum tank
		Squeegee blades or wheels worn down	Replace
		Float shutoff foam filter or screen is dirty	Clean foam filter and screen
		Float ball is stuck	Tap float to release
		Damaged hose	Repair damaged hose
		Dump hose cap is missing	Contact distributor to replace
		Bad seal between vacuum head and tank.	Reseat vacuum head and securely latch down
		Gasket Ring missing	Replace Gasket Ring
		Clogged vacuum hose or deflector	Check deflector and vacuum hose for clogs and clear
		Too much liquid in vacuum hose	Allow air in when vacuuming
		Vacuum hose still wrapped	Unwrap vacuum hose fully when vacuuming
		Leak in vacuum tank	If repairable, clean and dry affected area and seal with silicone.
	Moisture coming out from motor exhaust	Vacuum tank full	Empty vacuum tank
		Float shutoff ball, screen, or foam filter missing	Replace
		Float ball not sealing properly	Clean ball
		Excessive foam in vacuum tank	Use defoamer
Blow Dry System	No air flow	Blow hose not locked in properly	Reconnect and lock in
	Moisture coming out nozzle	Water in Blow Hose	Dry out Blow Hose
		Moisture coming out from motor exhaust	Refer to "Vacuum System, Moisture coming out from motor exhaust" Troubleshooting
Squeegee Vacuum Tool	Floor streaks	Worn blades or wheels	Replace
	Tool does not rotate easily in wand	Brass ring on wand is not in groove	Loosen wand coupling nut and reposition so ring is in groove
		Coupling nut too tight	Loosen a 1/2 turn
	Tool won't stay on wand	Coupling nut cracked	Replace
		Brass ring is worn out	Replace
	Premature blade wear	Wheels worn out or missing	Replace
	Sucks to the floor too tightly	Wheels worn out or missing	Replace

3.6 OmniFlex Vacuum Diagram

VACUUM DIAGRAM OMNIFLEX SERIES



NOTE: WHEN BLOW HOSE IS NOT CONNECTED TO THE VACUUM HEAD, EXHAUST AIR EXITS THROUGH THE SMALL VENTS AROUND THE PERIMETER OF THE VACUUM HEAD

4.0 OMNIFLEX PUMP SYSTEM

4.1 Introduction

Inspection: Carefully unpack and inspect your new OmniFlex Pump System for shipping damage. Each unit is tested and thoroughly inspected before shipping. For instructions regarding any shipping damage, contact Kaivac, Inc. immediately. All returns must have a Return Authorization Number (RAN), which is available by calling the Kaivac Technical Support Department at 1-800-287-1136.

Equipment Precautionary Statements:

- ◆ Use the equipment for the purposes specified by the manufacturer.
- ◆ Do not run the pump dry. This will void the machine warranty.
- ◆ Do not run hot water through the pump. This will void the warranty.
- ◆ Do not run pump when chemicals in the water tank (with the exception of KaiDri in small amounts). Chemicals in the water tank can be harmful to operator and machine because:
 - Chemicals in the water tank will pass through the pump, which may cause premature pump failure.
 - Use of chemicals in the water tank with pump voids the warranty.
 - Running pump with chemicals in the water tank will aerosolize chemicals and could harm the operator.
- ◆ Always test chemicals for compatibility on the desired cleaning surface before cleaning.
- ◆ Always be sure the water tank and water line filters are clear of debris.
- ◆ Replace any damaged cords before using.
- ◆ See the S-I-M-P-L-E operation section for proper use of equipment.

Water Damage Prevention to Buildings:

- ◆ The OmniFlex is to be used on water-resistant building surfaces only. This includes concrete, terrazzo, ceramic tile, and quarry tile.
- ◆ The OmniFlex may be used for stripping on vinyl composite tile floors, but daily cleaning of resilient flooring using the OmniFlex is not recommended.
- ◆ Never overflow the water tank or the vacuum recovery tank.
- ◆ Discontinue use if any leaks occur.
- ◆ **CAUTION:** Prior to cleaning, always inspect the area to ensure that the surfaces are water-safe. In addition, check for poor construction, damaged walls and floors, missing or damaged tiles or grout, missing or insufficient caulk, and loose wall coverings. If problems are discovered, resolve them prior to cleaning in order to avoid any harm that may result from exposure to water or cleaning solution.

4.1 Introduction

Chemical Use:

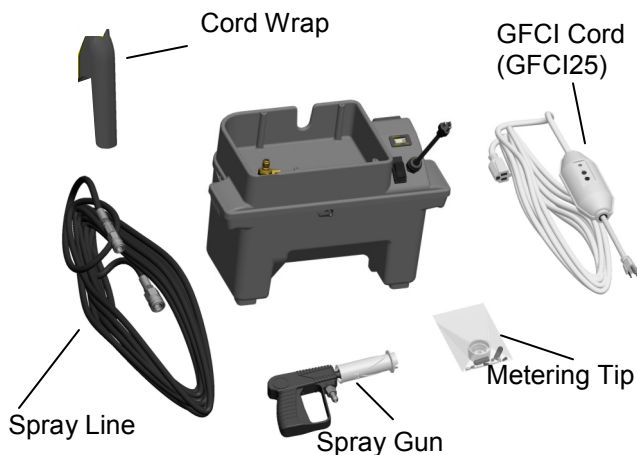
- ♦ Only use chemicals approved for use with the OmniFlex. Use of non-Kaivac approved chemicals may cause machine damage and will reduce warranty periods.
- ♦ Keep the appropriate chemical product MSDS on hand at all times (go to www.kaivac.com for updated copies of Kaivac chemical MSDS sheets).

Training:

- ♦ This manual provides basic instructions for how to use your Kaimotion Flex or OmniFlex units. For more information and instructions on OmniFlex cleaning techniques, tricks, and best practices, go to www.kaivac.com. Also, you can refer to the Kaimotion Wall Chart for basic cleaning techniques and instructions.

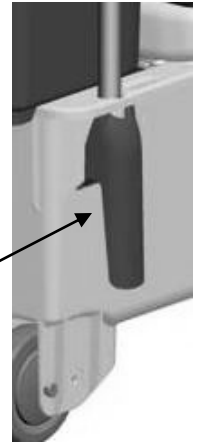
4.2 Out-Of-Box Setup Instructions

- 1** Remove items from box (Pump Box, Spray Line, GFCI Cord, Spray Gun, Chemical Tip Pack, Cord Wrap Horns & Hardware).



- 2** First install the Cord Wrap Horns onto each side of the Trolley where shown with the supplied screws and washers.

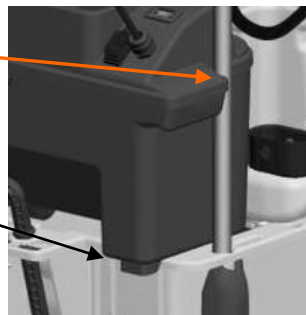
Insert screw and washer on the bottom side in the



- 3** Then snap the Pump Box onto the Handle from the rear and secure the strap around the handle. Make sure that the hoses on the bottom of the Pump Box are free of kinks and hang freely in the Trolley.

Pump Box snaps

Place the rear foot first onto the rear rim of Trol-



- 4** Attach the Spray Gun to the Spray Line and turn the Mini-Ball Valve on the Spray Line to the OFF position.



- 5** Attach the GFCI Cord to the Pump Box Black Electrical Cord and wrap around Top Post and Cord Wrap Horn as shown. Attach the Spray Line to the Brass Injector and wrap similarly to GFCI Cord.

Top
Black Elec-
Brass Injector



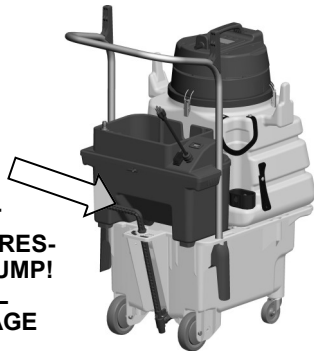
- 6** Final assembly shown with OmniFlex Wet/Dry Vac. You are ready to begin using the system. See Pump Box Use Instructions on the reverse side of this page.



4.3 Preparing the OmniFlex Pump for Use

- 1** Fill the Trolley with clean, cool water only when using the Pump Box.

Fill
Loca-



WARNING: DO NOT PUT CHEMICAL IN TROLLEY RESERVOIR WHEN USING PUMP! FAILURE TO DO SO WILL CAUSE PRODUCT DAMAGE

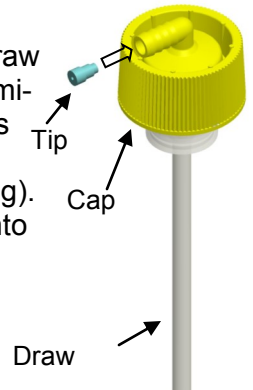
- 3** Check Spray Line and GFCI Cord for damage prior to use. If damage is found, do not continue until proper repairs are completed.



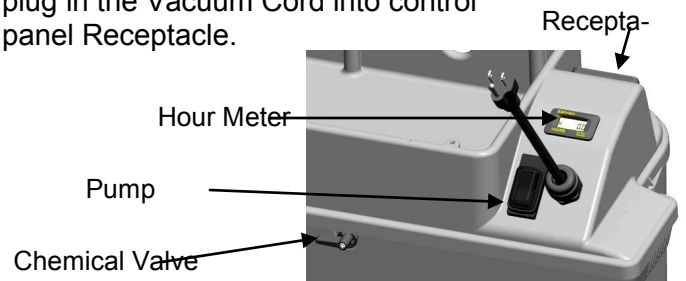
- 5** Plug in and press the Black Test button on the GFCI (Ground Fault Circuit Interrupter), then Red Light should turn off. Then press the Red Reset button and Red Light should come on.



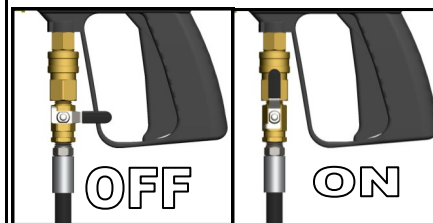
- 2** To prepare the cleaning chemical, make sure the Draw Tube is inserted into the Chemical Jug. Insert the metering tip as shown (see Metering Tip Selection Chart on the Metering Tip Bag). Then screw the Chemical Cap onto the Chemical Jug and make sure the clear Chemical Line is connected to the Chemical Cap.



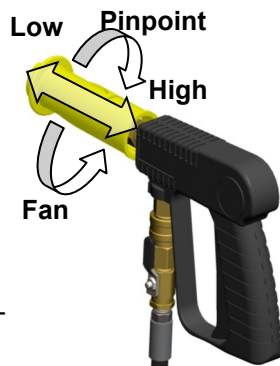
- 4** Review Control Panel. Make sure pump switch and chemical valve in OFF position prior to plugging in. If using with OmniFlex Vac, plug in the Vacuum Cord into control panel Receptacle.



- 6 To prime the Pump:** Turn Spray Line Valve OFF, turn ON the Pump Switch, then turn the Spray Line Valve ON, and squeeze the Spray Gun trigger. If issues priming, call Technical Support.



- 7** Operate the Spray Gun as shown. Chemicals applied in the Low Pressure setting only. Chemicals must be cleared from the Spray Line prior to High Pressure rinsing. To do this, turn OFF the Chemical Valve, then spray in Low Pressure setting for 15 seconds.



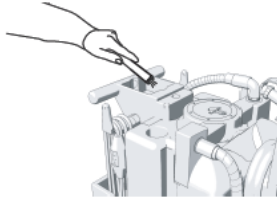
- 8** For best practices, tips, complete manuals, and video training in using your OmniFlex unit, please visit our website at www.kaivac.com.

4.3 Operating OmniFlex Using the S-I-M-P-L-E Process

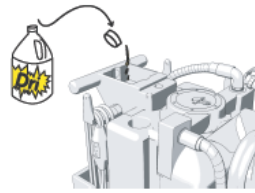
*Applicable to all units, KV1700 Series shown for illustration.

Set-up

Fill with clean, cool water



Add 1 cap of KaiDri
(for spot-free rinsing)

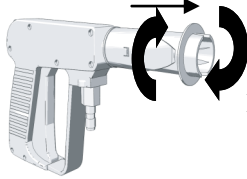


Select metering tip and
insert into cap barb



Inject
chemicals

Chemicals

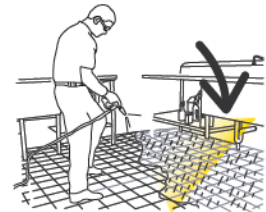


Fan Spray

LOW Pressure



Fan Spray



Manual
Brush
(optional)

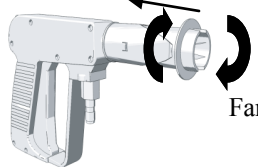


Manually brush
heavily soiled
areas



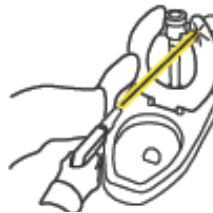
Pressure
wash and
rinse

Fresh Water



Fan

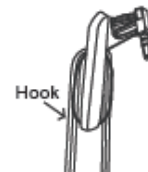
HIGH Pressure Mode



Loop
Spray line



Clock



Adjust last loop (if needed)

Extract
and dry



4.4 Maintenance

Item	Procedure
Spray Gun	<ul style="list-style-type: none"> ◆ Check spray pattern. IF spray pattern will not pinpoint, clean orifice by removing it with an Allen wrench and flushing. Replace if not pinpointing. ◆ If nozzle becomes difficult to move from high to low pressure, lubricate the nozzle with lithium grease.
Pressure Hose	<ul style="list-style-type: none"> ◆ Wipe clean after each use. ◆ Check for cuts or frays in the hose jacket, particularly at the end of the fittings. Replace hose if cuts are found.
Chemical System	<ul style="list-style-type: none"> ◆ Weekly flush the chemical system. With the Chemical Valve in the ON position, detach chemical line from chemical bottle and place into cup or bottle of fresh water, spray in low pressure setting for 30 seconds.
Leaks	<ul style="list-style-type: none"> ◆ Be alert for leaks around hoses, fittings, spray gun, or elsewhere. ◆ Discontinue use until leaks are repaired.
Electrical System	<ul style="list-style-type: none"> ◆ The GFCI (ground fault circuit interrupter) must be tested before each use. ◆ Electric cord must be regularly inspected for tears or cuts in the insulation. If tears or cuts are found repair immediately.

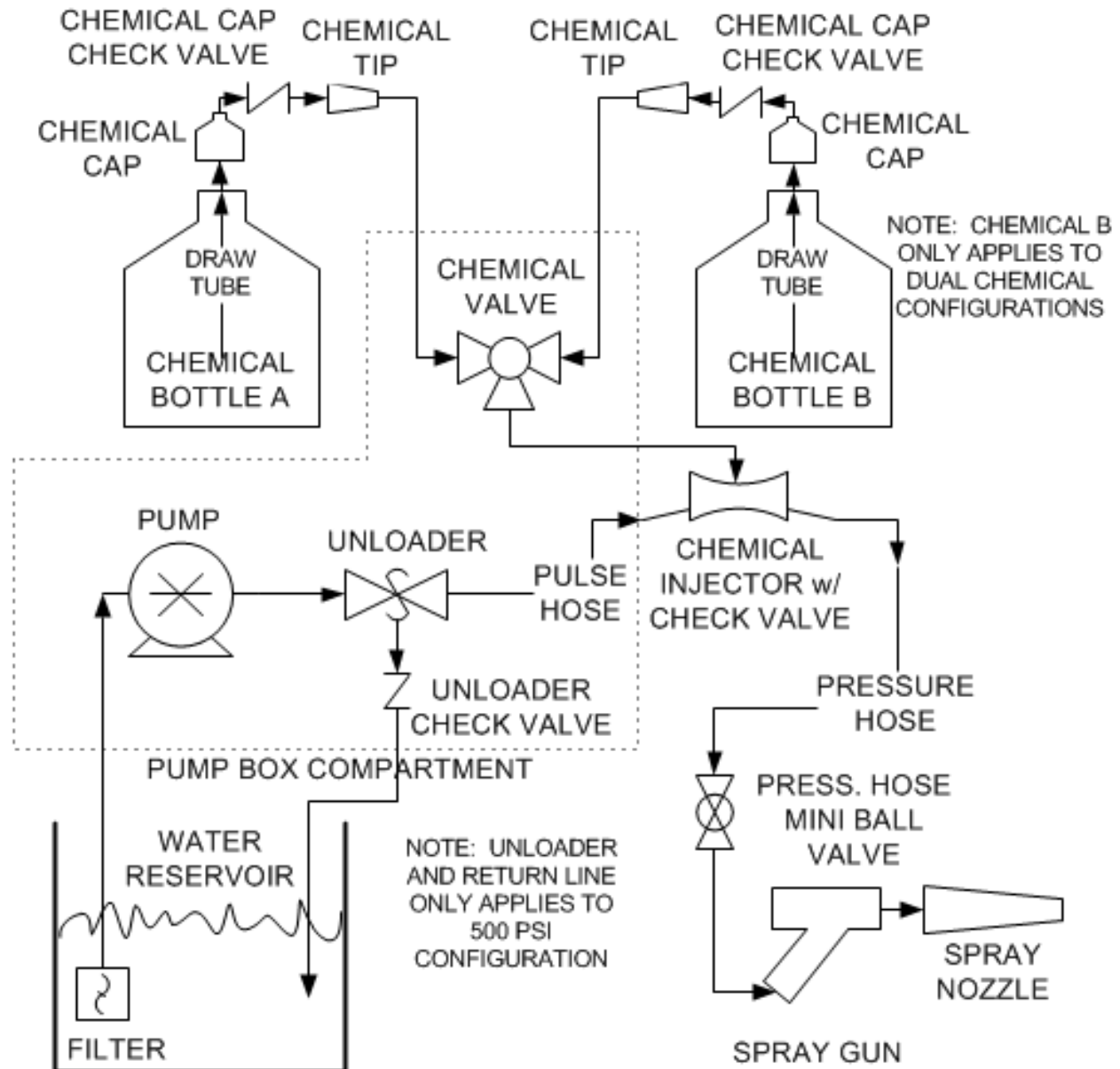
4.5 Troubleshooting

Area	Problem	Possible Cause	Solution
Electrical	No power to pump motor	Machine not plugged in	Plug machine in to outlet
		Switch not "ON"	Check if switch is "ON"
		GFCI on Pump Box tripped	Test or reset GFCI
		Building circuit overloaded	Plug vacuum into different circuit and reset the building circuit breaker
		Switch wires or connections loose on Pump Box (only if connected to Pump Box)	Disconnect power and check for loose wires under control panel of Pump Box
	Electrical burning smell	Pump motor brushes worn or motor jammed	Release pressure on spray line and jog pump switch, if problem persists, remove pump motor and repair or replace.
High Pressure System	No water from pump or low pressure	Out of water	Fill water tank
		Gun nozzle clogged	Remove orifice with Allen wrench and clean
		Air in pump (vapor lock)	Power Prime Technique: Remove spray gun from spray line, turn ON pump and vacuum, turn on mini-ball valve on spray line, hold spray line end in the vacuum hose to suck water through the spray line.
		Gun orifice missing	Replace orifice
		Pump box Filter clogged	Clean filter

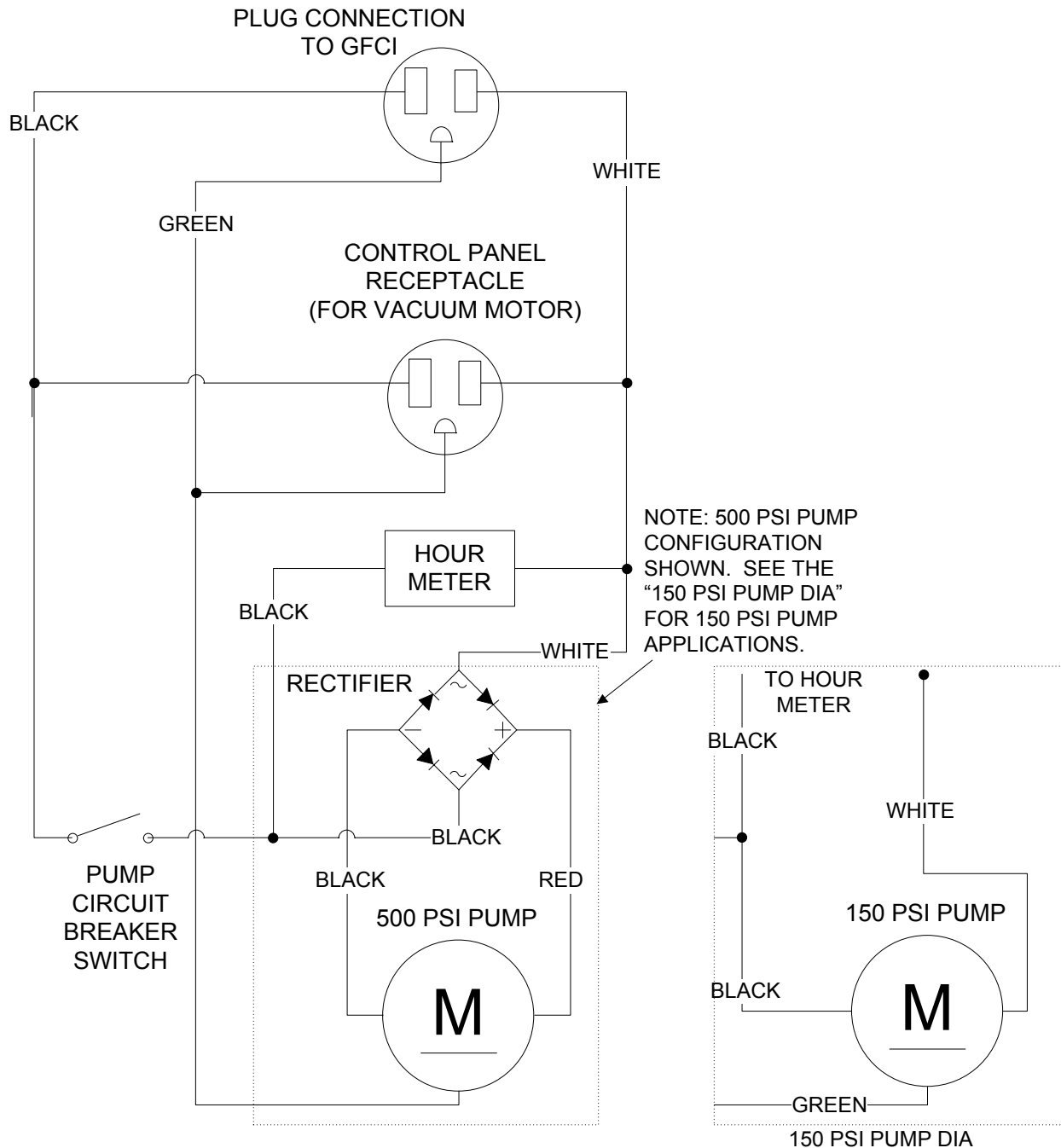
4.5 Troubleshooting

Area	Problem	Possible Cause	Solution
High Pressure System (cont.)	No water from pump or low pressure (cont.)	Pressure hose damaged	Repair or replace
		Quick disconnect leaking	Tighten or replace
		Injector clogged	Remove chemical line from chemical cap and blow small amounts of compressed air into line.
		Pulse hose damaged	Repair or replace
		Unloader failed (500 psi only)	Replace
		Hose kinked	Unkink and check for damage
		Seals in pump need replaced	Remove pump and replace seals
	Sputtering or pulsing from pump motor in high pressure setting	Not fully primed	Power Prime Technique previously stated
		Wrong spray gun	Replace with correct spray gun
		Partially clogged orifice	Remove orifice with Allen wrench and clean
	Bad fan pattern or pinpoint pattern on spray gun	Debris in nozzle	Remove orifice with Allen wrench and clean
		Orifice damaged	Remove and replace
Chemical Injection System	No chemical flow	Out of chemical	Refill chemical
		Chemical cap not secure	Check chemical cap and tighten
		Chemical valve in OFF position	Turn valve ON
		Chemical cap clogged	Replace chemical cap
		Spray gun in wrong pressure mode	Make sure spray gun is in low pressure mode
		Metering tip clogged	Remove tip and clean
		Injector clogged	Remove chemical line from injector and use a straightened paper clip to clear the injector of debris
		Air entering chemical system	Check for air entering system around chemical lines or injector
		Injector installed backwards	Check Injector position with Pump Box Diagrams

4.6 Pump Diagram



4.6 Electrical Diagram



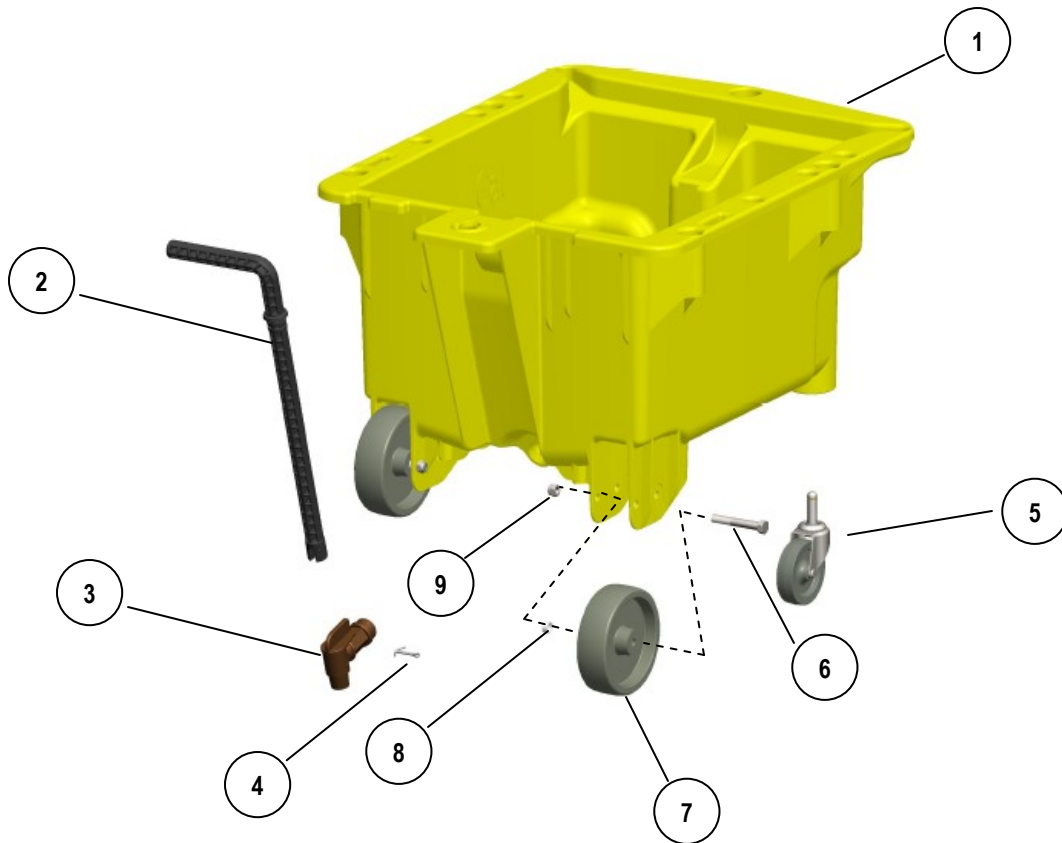
5.0 Parts & Assembly Diagrams

5.0 Parts & Assembly Diagrams

The next pages show the exploded drawings and parts for each of the OmniFlex Assemblies

OMNIFLEX TROLLEY BUCKET ASSEMBLY

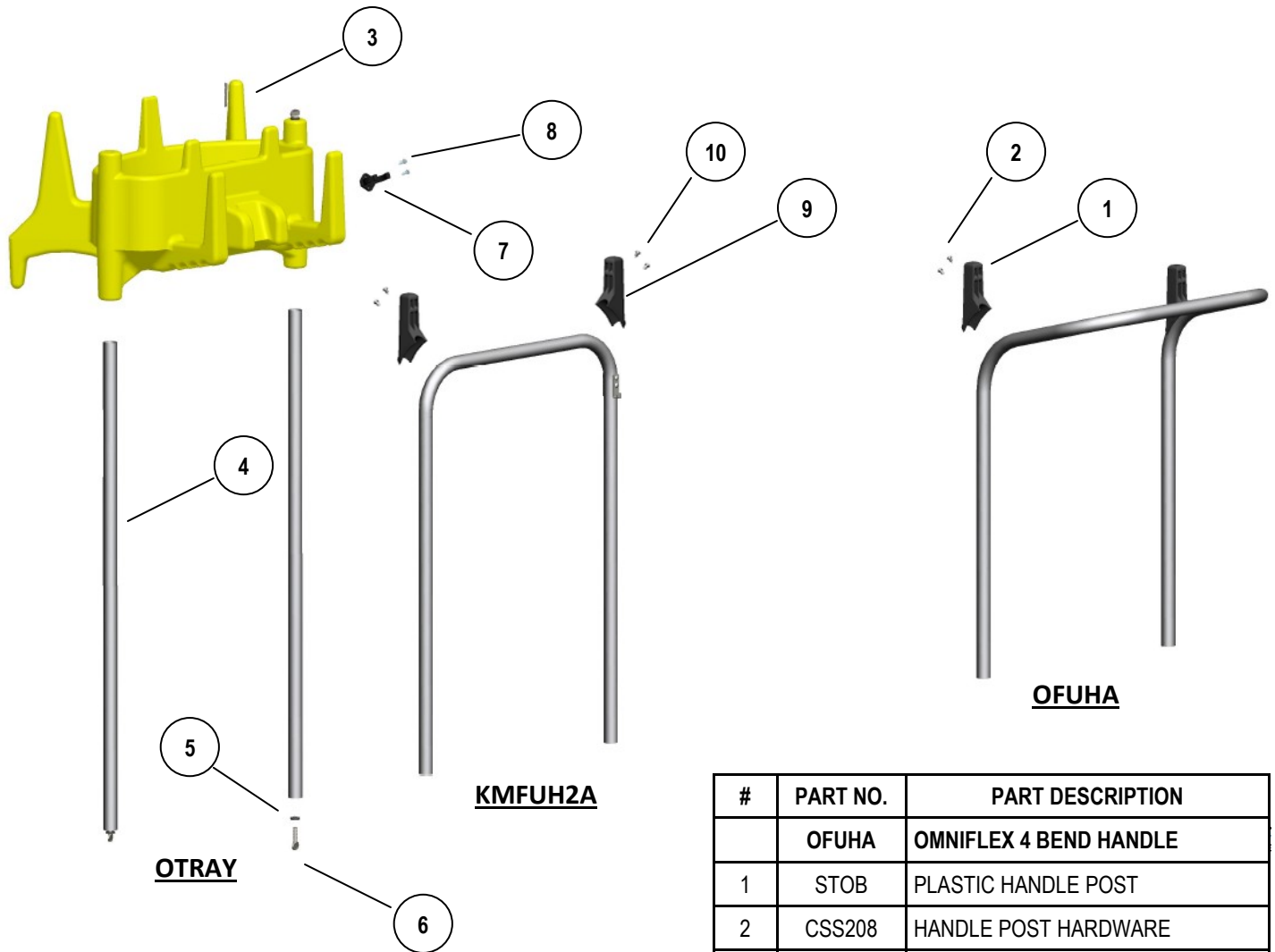
[P/N: KMFBASIC]



#	PART NO.	PART DESCRIPTION
1	KMFYEL	OMNIFLEX TROLLEY YELLOW
1	KMFBLK	OMNIFLEX TROLLEY BLACK
2	KMFSH	OMNIFLEX SPIGOT HANDLE BLACK
3	KMB20	OMNIFLEX SPIGOT BROWN PLASTIC
4	CSS214	10-14X 3/4 SCREW FOR SPIGOT
5	KMFCSTR3	LOCKING CASTER
6	CSS302	3/8-16 X 2 3/4 HEX SCREW WHEEL
7	WH5KMF2	5 IN DIA REAR WHEEL
8	CSS207	WHEEL SPACER
9	CSS311	3/8-16 NYLON LOCK NUT

OMNIFLEX HANDLE ASSEMBLIES

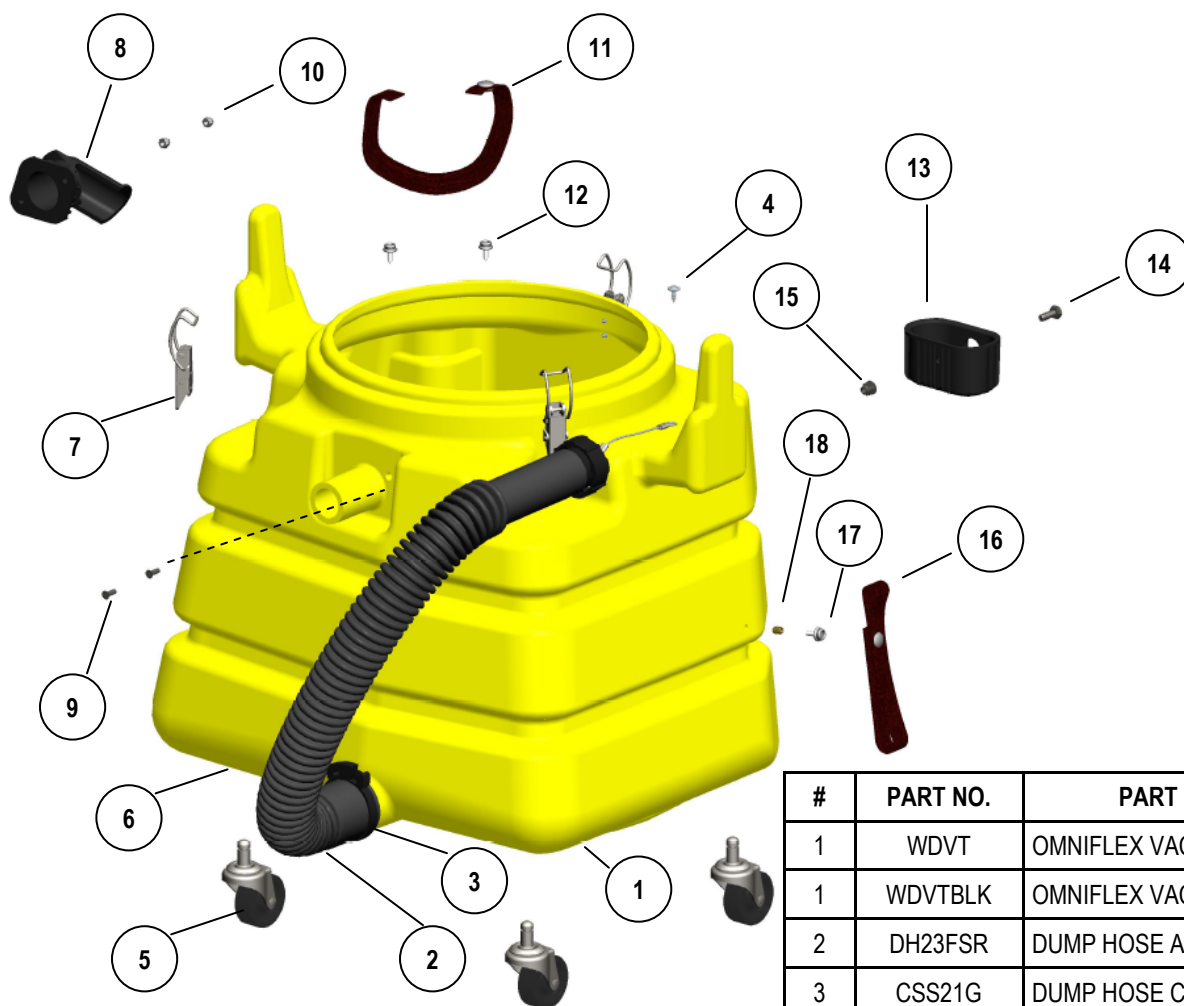
[P/N: OTRAY, KMFUH2A, OFUHA]



#	PART NO.	PART DESCRIPTION
	OFUHA	OMNIFLEX 4 BEND HANDLE
1	STOB	PLASTIC HANDLE POST
2	CSS208	HANDLE POST HARDWARE
	OTRAY	OMNIFLEX SUPER TRAY
3	STRAY	PLASTIC TRAY YELLOW
4	KMFHP	SUPER TRAY HANDLE POST
5	CSS306	HANDLE THUMB SCREW WASHER
6	CSS151	THUMB SCREW (ALL HANDLES)
7	CSS14	PLASTIC CLIP
8	CCSS17	PLASTIC CLIP HARDWARE
	KMFUH2A	OMNIFLEX STRAIGHT HANDLE
9	STOB	PLASTIC HANDLE POST
10	CSS208	HANDLE POST HARDWARE

VACUUM TANK ASSEMBLY (ELECTRICAL CORD REEL MODEL)

[P/N: WDVTA (YELLOW) OR WDVTABLEK (BLACK)]



NOTES:

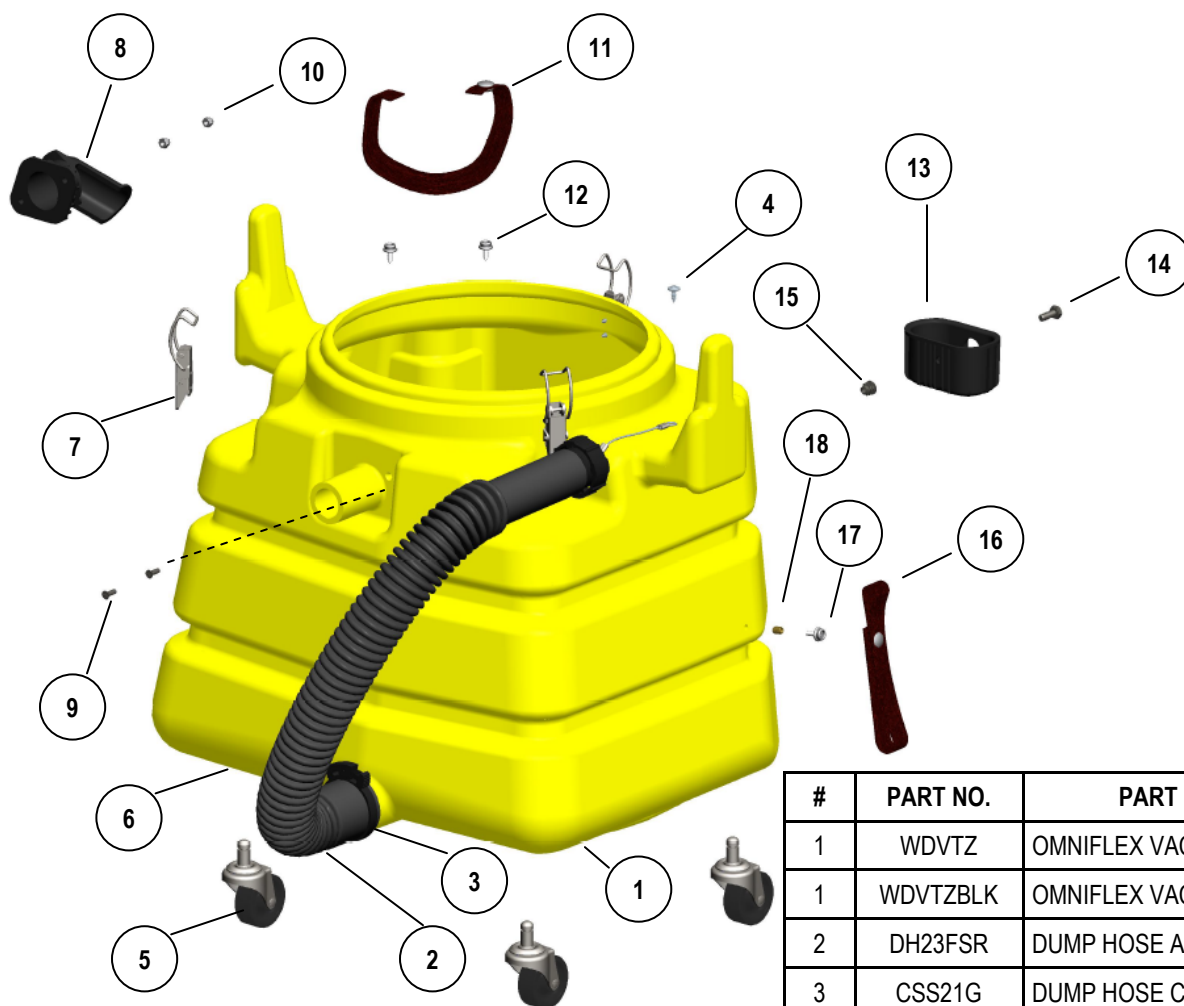
* OCSTR-TC - 4 THREADED CASTER CONVERSION KIT
OCSTR-TR - 2 THREADED CASTER REPLACEMENT KIT

** DH17GR - REPLACEMENT DUMP HOSE FOR YELLOW
VAC TANK VERION

#	PART NO.	PART DESCRIPTION
1	WDVT	OMNIFLEX VAC TANK YELLOW
1	WDVTBLK	OMNIFLEX VAC TANK BLACK
2	DH23FSR	DUMP HOSE ASSEMBLY**
3	CSS21G	DUMP HOSE CLAMP
4	CSS208	DUMP HOSE STRAP SCREW
5	KMFCSTR5	THREADED CASTER*
6	CSS213	CASTER INSERT
7	DVCL	HANDLE THUMB SCREW WASHER
8	OFVTD	INLET DEFLECTOR
9	CSS209	DEFLECTOR SCREWS
10	CCSS179	DEFLECTOR NUTS
11	SUBSS9	WAND SECURING STRAP
12	CSS20	STRAP HARDWARE
13	WDVTC	PLASTIC TOOL CUP
14	CSS88	TOOL CUP SCREW
15	KF017	TOOL CUP INSERT
16	SUBSS11HD	VAC TANK SECURING STRAP
17	CSS147	MALE STRAP SNAP
18	CSS145	STRAP INSERT

VACUUM TANK ASSEMBLY (NO CORD REEL MODEL)

[P/N: WDVTAZ (YELLOW) OR WDVTABLKZ (BLACK)]



NOTES:

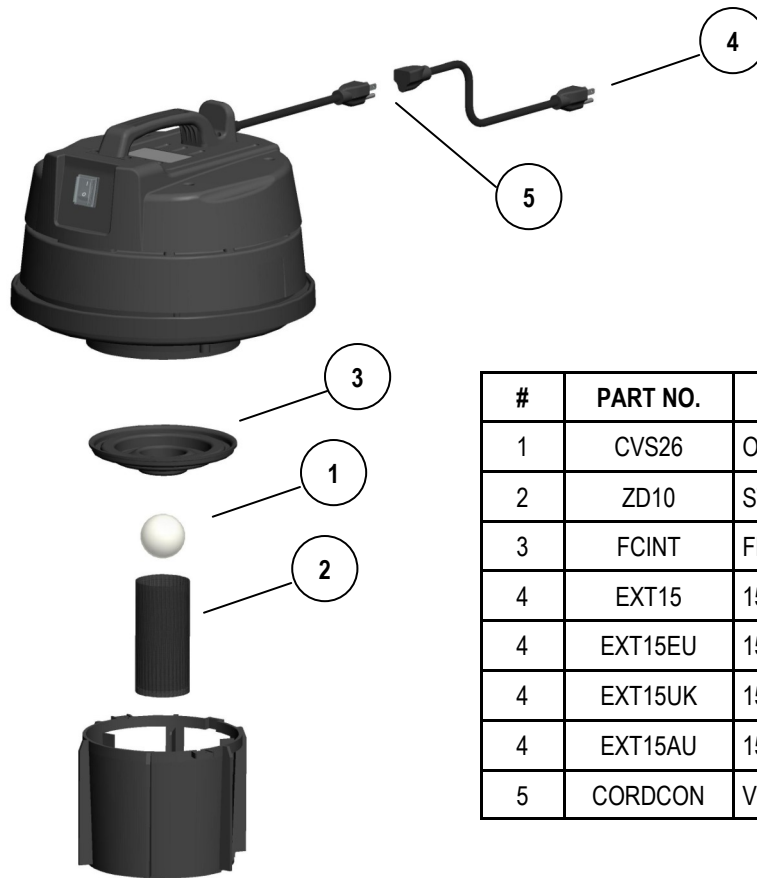
* OCSTR-TC - 4 THREADED CASTER CONVERSION KIT
OCSTR-TR - 2 THREADED CASTER REPLACEMENT KIT

** DH17GR - REPLACEMENT DUMP HOSE FOR YELLOW
VAC TANK VERION

#	PART NO.	PART DESCRIPTION
1	WDVTZ	OMNIFLEX VAC TANK YELLOW
1	WDVTZBLK	OMNIFLEX VAC TANK BLACK
2	DH23FSR	DUMP HOSE ASSEMBLY**
3	CSS21G	DUMP HOSE CLAMP
4	CSS208	DUMP HOSE STRAP SCREW
5	KMFCSTR5	THREADED CASTER*
6	CSS213	CASTER INSERT
7	DVCL	HANDLE THUMB SCREW WASHER
8	OFVTD	INLET DEFLECTOR
9	CSS209	DEFLECTOR SCREWS
10	CCSS179	DEFLECTOR NUTS
11	SUBSS9	WAND SECURING STRAP
12	CSS20	STRAP HARDWARE
13	WDVTC	PLASTIC TOOL CUP
14	CSS88	TOOL CUP SCREW
15	KF017	TOOL CUP INSERT
16	SUBSS11HD	VAC TANK SECURING STRAP
17	CSS147	MALE STRAP SNAP
18	CSS145	STRAP INSERT

VAC MOTOR HEAD ASSEMBLY (NO CORD REEL MODEL)

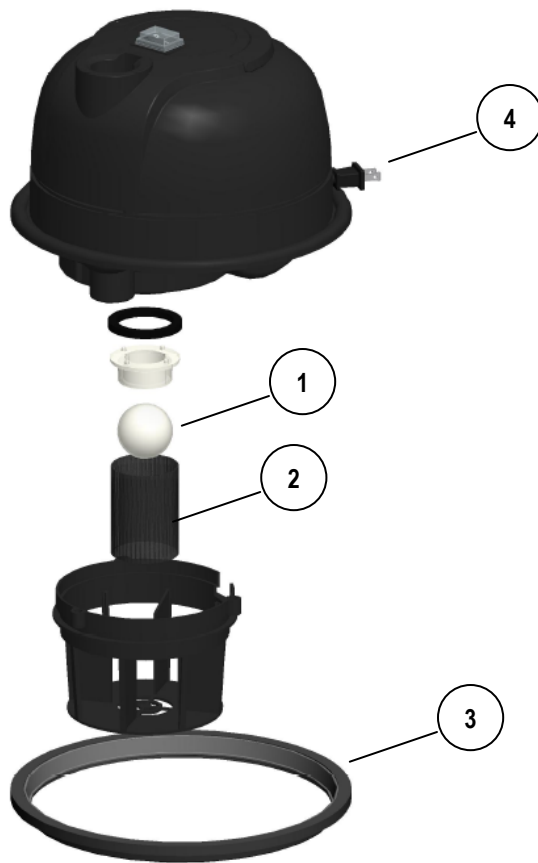
[P/N: VM-UL-AWDZ OR VMAWDZ240VEU (240V EUROPE),
VMAWDZ240VUK (240V UK), VMAWDZ240VAUS (240V AUSTRALIA)]



#	PART NO.	PART DESCRIPTION
1	CVS26	OMNIFLEX FLOAT BALL
2	ZD10	STAINLESS STEEL FLOAT CAGE
3	FCINT	FLOAT CAGE PLASTIC INTERFACE
4	EXT15	15 FT 120V EXTENSION CORD
4	EXT15EU	15 FT 240V EXTENSION CORD EUROPEAN
4	EXT15UK	15 FT 240V EXTENSION CORD UK
4	EXT15AU	15 FT 240V EXTENSION CORD AUSTRALIA
5	CORDCON	VELCRO CORD CONNECTOR (OPTIONAL)

VAC MOTOR HEAD ASSEMBLY (CORD REEL MODEL)

[P/N: VMAWD, VMAWD240VEU (240V EUROPE), VMAWD240VUK (240V UK),
VMAWD240VAUS (240V AUSTRALIA)]



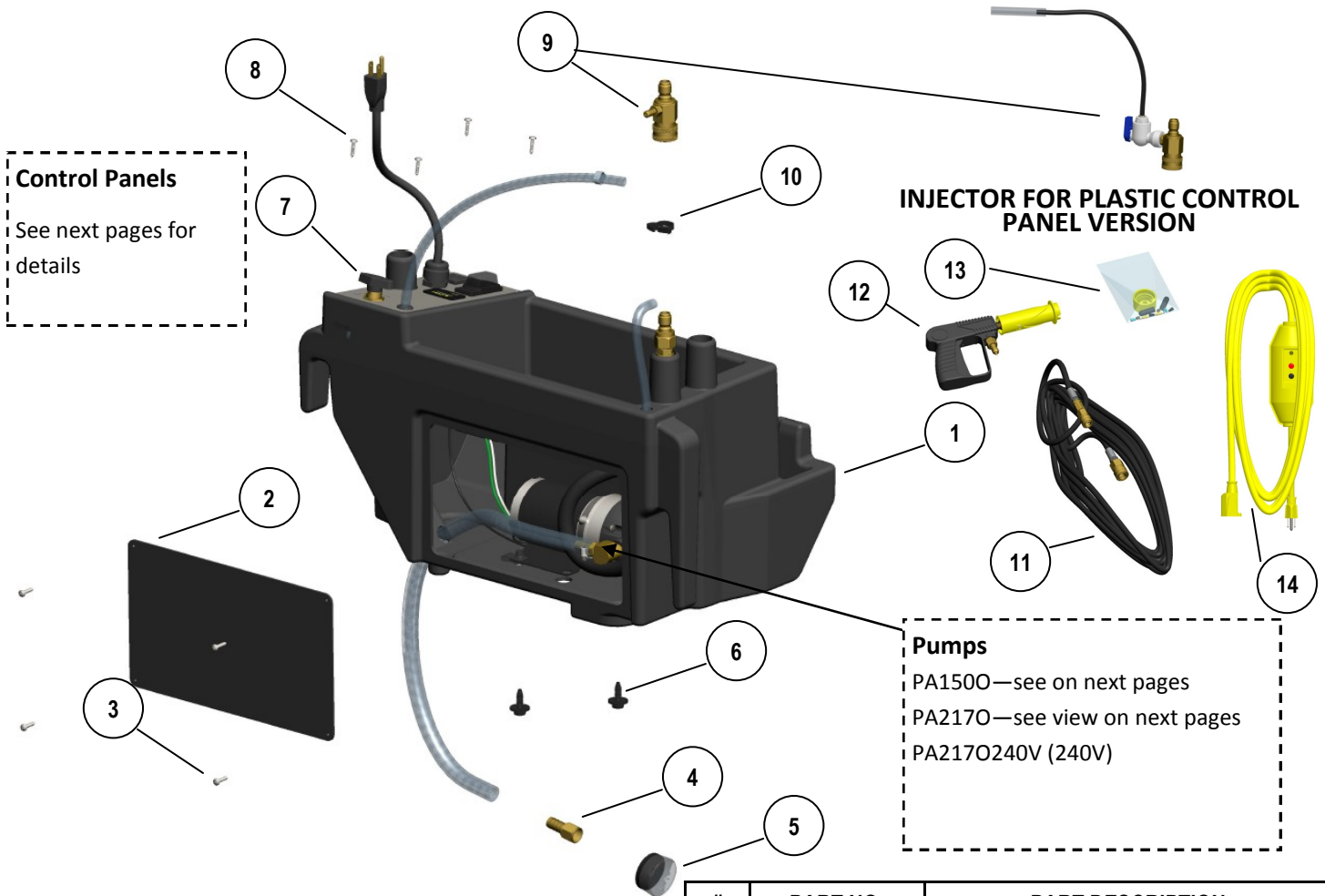
#	PART NO.	PART DESCRIPTION
1	CVS26	OMNIFLEX FLOAT BALL
2	FCAGE	S/S FLOAT CAGE
3	VMGSKT	VAC MOTOR HEAD GASKET*
4	OP2PR	PLUG REPLACEMENT KIT

NOTES:

* VMGSKTR - VAC MOTOR GASKET REPLACEMENT KIT

OMNIFLEX PUMPBOX ASSY (1-PC ROTOMOLD MODEL)

[P/N: OSU15, OSU50, OSU50240VEU (240V EUROPE), OSU50240VUK (240V UK), OSU50240VAUS (240V AUSTRALIA)]



NOTE:

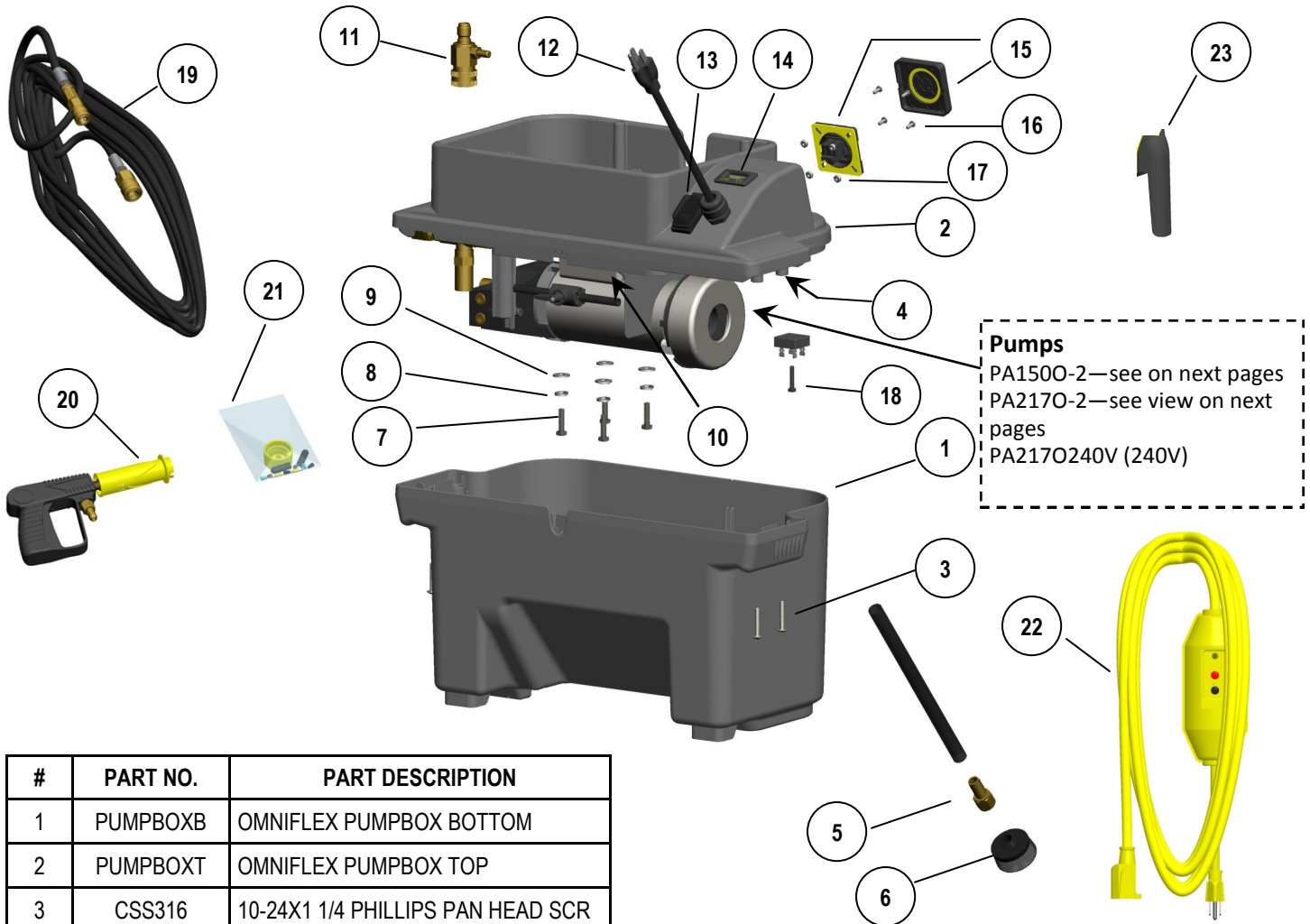
* SPPBOXO240VEU (240V EUROPE), SPPBOXO240VUK (240V UK), SPPBOXO240VAUS (240V AUSTRALIA)

#	PART NO.	PART DESCRIPTION
11	PH45	45 FT 500 PSI PRESSURE HOSE
11	PH25	25 FT 150 PSI PRESSURE HOSE
12	SUBGAKW	SPRAY GUN
13	MTIPSNEW	METERING TIPS PACK
14	GFCI25	25 FT 14 GA GFCI CORD 125V

#	PART NO.	PART DESCRIPTION
1	PUMPBOXW	PUMPBOX PART (PLASTIC PANEL)
1	PUMPBOX	PUMPBOX PART (METAL PANEL)
2	PUMPBOXC	PUMPBOX PLASTIC COVER PLATE
3	CSS17A	COVER PLATE SCREWS
4	CPS90	WATER LINE END BRASS BARB
5	MFILT	WATER LINE FILTER
6	CSS07	PUMP MOUNTING SCREWS
7	SPPBOXO120	120V PLASTIC CONTROL PANEL ASY
7	SPPBOXO240V*	240V PLASTIC CONTROL PANEL ASY
7	SPPBOX1C	METAL CONTROL PANEL ASY
8	CSS17A	CONTROL PANEL SCREWS
9	CPS12JQC	CHEMICAL INJECTOR
9	SUBINJU	INJECTOR ASSY FOR PLASTIC PANEL
10	CSS21E	CHEMICAL LINE CLAMP

OMNIFLEX PUMPBOX ASSY (2-PC HOUSING MODEL)

[P/N: OSU15, OSU50, OSU50240VEU (240V EUROPE), OSU50240VUK (240V UK), OSU50240VAUS (240V AUSTRALIA)]

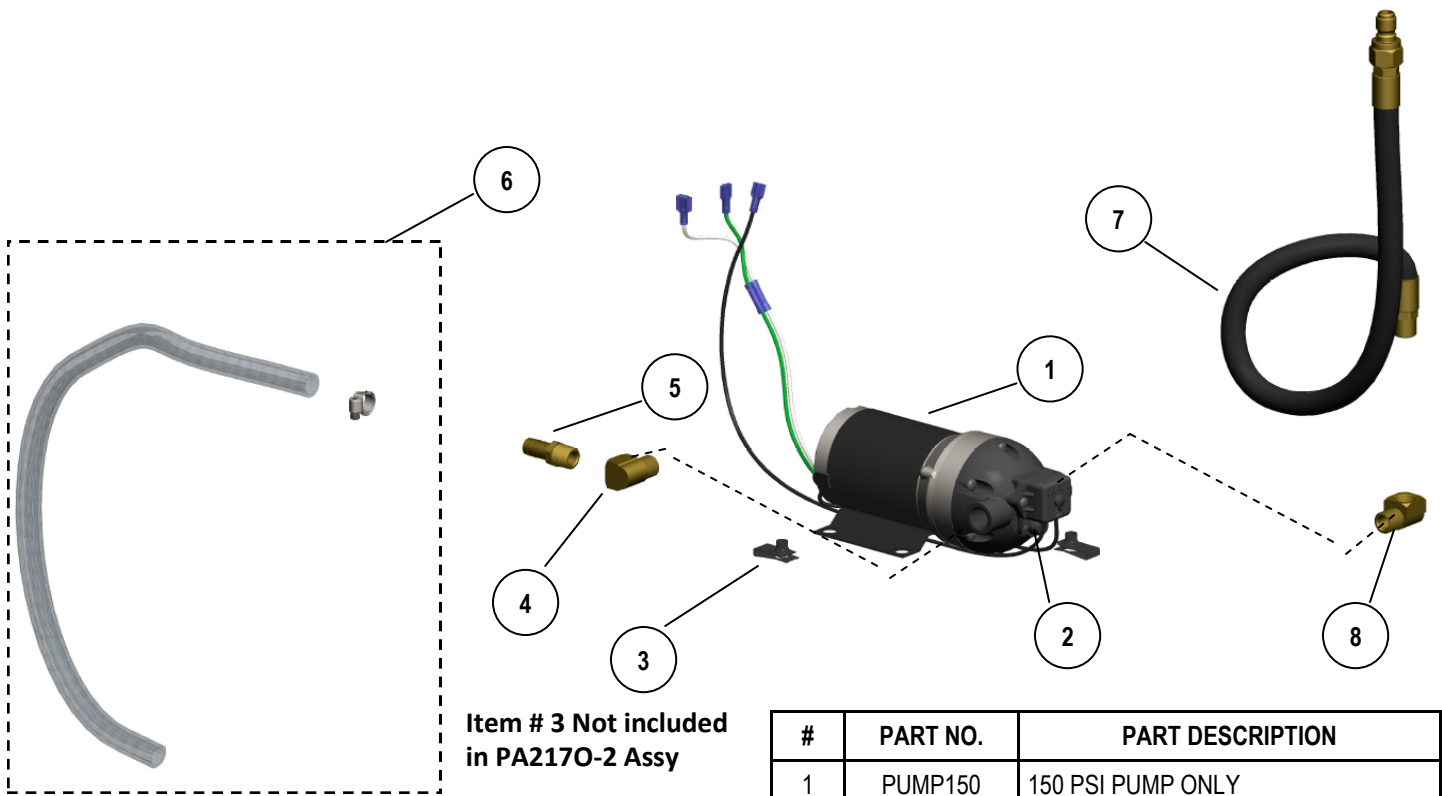


#	PART NO.	PART DESCRIPTION
1	PUMPBOXB	OMNIFLEX PUMPBOX BOTTOM
2	PUMPBOXT	OMNIFLEX PUMPBOX TOP
3	CSS316	10-24X1 1/4 PHILLIPS PAN HEAD SCR
4	CSS317	PUMPBOX INSERT
5	CPS90	WATER LINE END BRASS BARB
6	MFILT	WATER LINE FILTER
7	CSS88	PUMP MOUNTING BOLTS
8	CSS133	5/16 SPLIT WASHER
9	CSS44	FLAT WASHER
10	KF017	PUMP MOUNTING INSERT 1/4 IN
11	CPS12JQC	CHEMICAL INJECTOR
12	PC1	POWER CORD WITH S. RELIEF 120V
12	CES20EU	50 FT RCD CORD W/FREE WIRE END
12	CES20UK	50 FT RCD CORD W/FREE WIRE END
12	CES20AUS	50 FT RCD CORD W/FREE WIRE END
13	5ACBS	250V RATED 5A BREAKER SWITCH
14	HMETER	HOUR METER FOR PUMP

#	PART NO.	PART DESCRIPTION
15	CSS314	ELEC RECEPTACLE W/COVER 120V
15	CES29WRE	240V ELEC RECEPTACLE EUROPE
15	CSS314UK	240V ELEC RECEPTACLE UK
15	CSS314AUS	240V ELEC RECEPTACLE AUSTRALIA
16	CSS183	#6 ELEC RECEPTACLE SCREW
17	CSS184	#6 NUT FOR RECEPTACLE
18	CSS206	NYLON SCREW FOR RECTIFIER
19	PH45	45 FT 500 PSI PRESSURE HOSE
19	PH25	25 FT 150 PSI PRESSURE HOSE
20	SUBGAKW	SPRAY GUN
21	MTIPSNEW	METERING TIPS PACK
22	GFCI25	25 FT 14 GA GFCI CORD 125V
23	OHORN	CORD WRAP HORN

150 PSI PUMP ASSY 120V ONLY (1-PC ROTOMOLD MODEL)

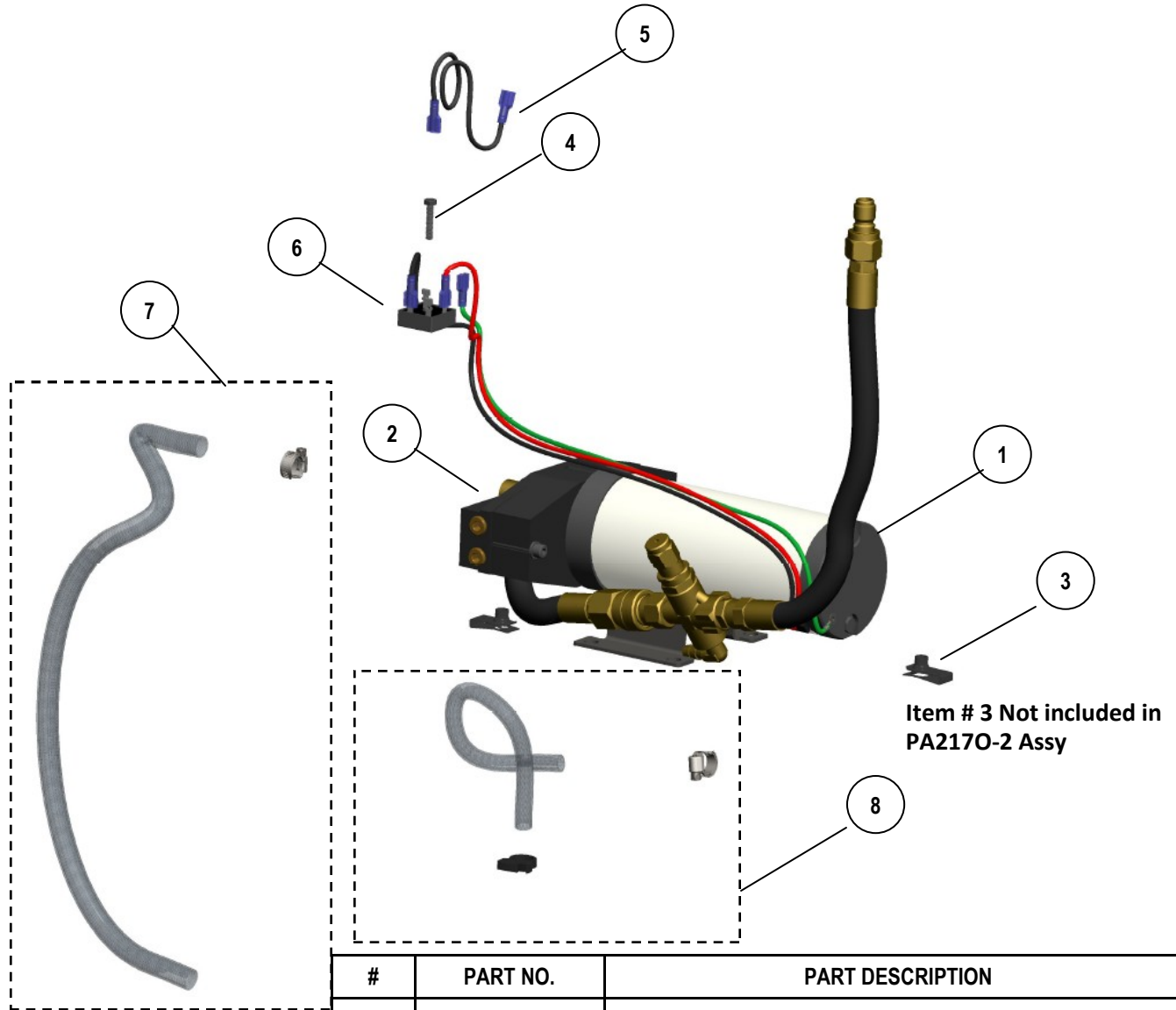
[P/N: PA150O, PA150O-2]



#	PART NO.	PART DESCRIPTION
1	PUMP150	150 PSI PUMP ONLY
2	PS150	PUMP PRESSURE SWITCH REPLACE
3	CSS08	PUMP MOUNTING U-NUT
4	CPS64	90 DEG 3/8 MALE X 3/8 FEMALE
5	CPS20	3/8 X 1/2 HOSE BARB
6	WLOMNI	WATER LINE AND CLAMP
7	PHASM	150 PSI PULSE HOSE
8	CPS64	90 DEG 3/8 MALE X 3/8 FEMALE

500 PSI PUMP ASSEMBLY

[P/N: PA217O (1-PC ROTOMOLD MODEL), PA217O-2 (2-PC MODEL), PA217O240V (240V)]

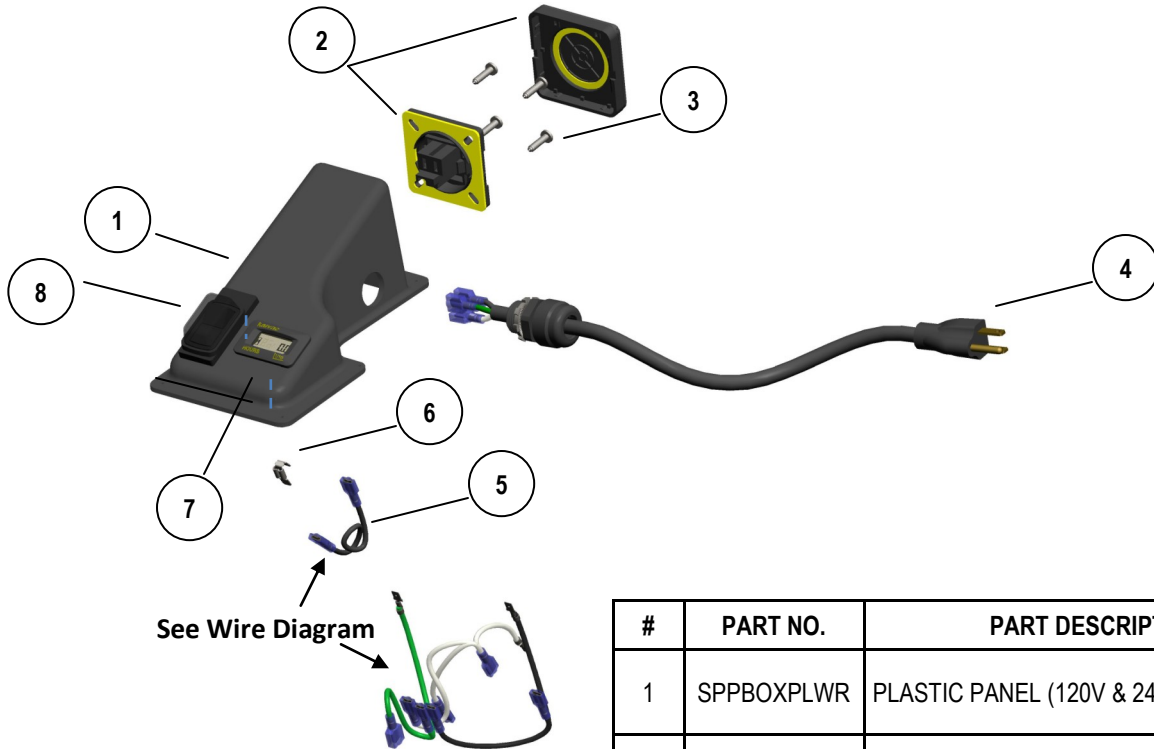


#	PART NO.	PART DESCRIPTION
1	PMA217	500 PSI MOTOR REPLACE—RECTIFIER & BRKT INCLUDED
1	PUMP217230V	500 PSI PUMP REPLACEMENT 240V
2	PUMPSPARE217	PUMP HEAD ONLY REPLACEMENT
3	CSS08	PUMP MOUNTING U-NUT
4	CSS206	RECTIFIER MOUNTING SCREW
5	JWB	CONNECTOR JUMPER WIRE
6	RECT217	500 PSI RECTIFIER
7	WLOMNI	WATER LINE & CLAMP
8	RLOMNI	RETURN LINE & CLAMP

CONTROL PANEL ASSEMBLIES

[P/N: SPPBOXO120 (120V), SPPBOXO240VEU, SPPBOXO240VUK, SPPBOXO240VAUS (240V)]

NOTE: This assembly does not apply for the 2-piece housing Pumpbox model.

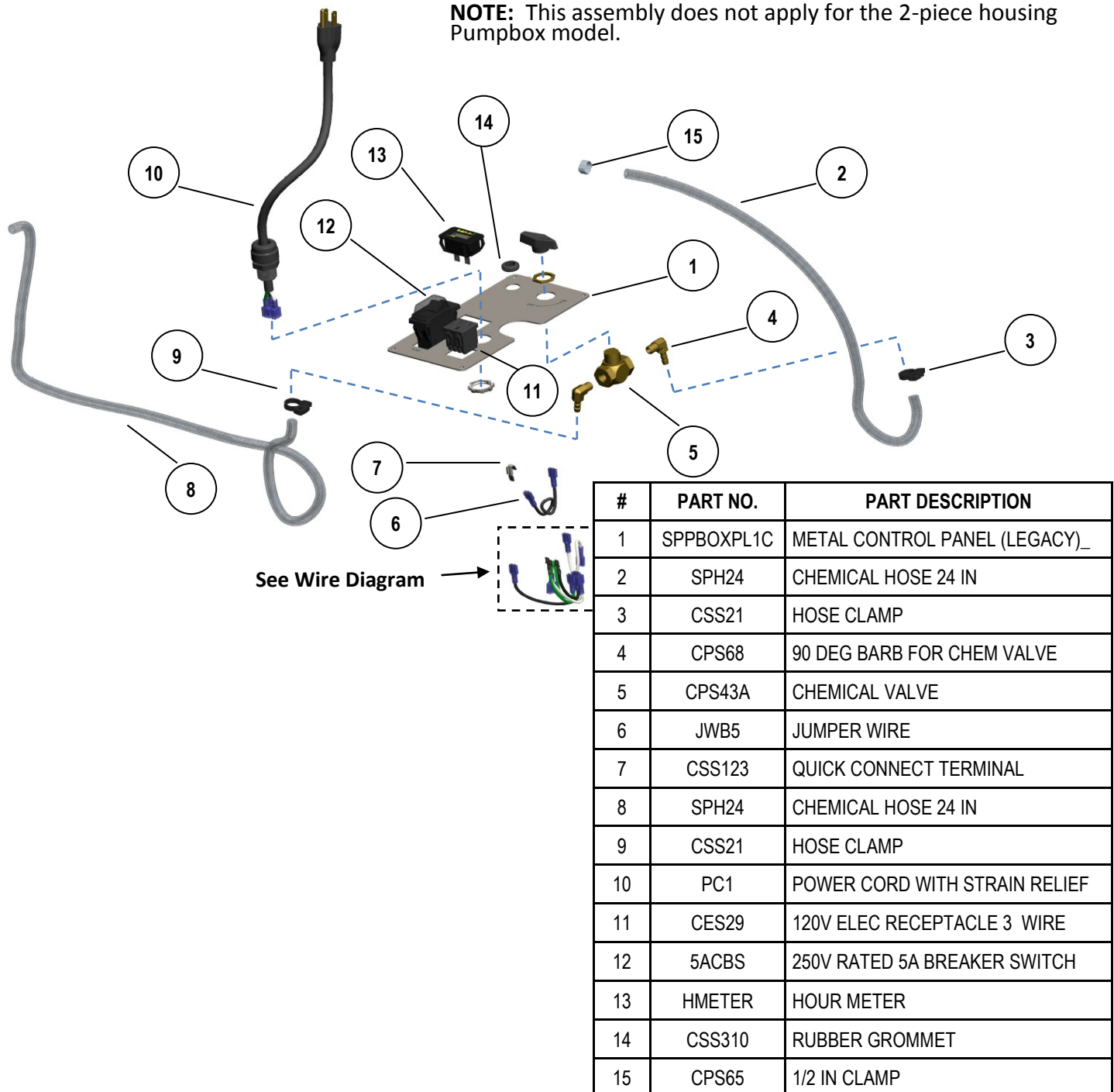


#	PART NO.	PART DESCRIPTION
1	SPPBOXPLWR	PLASTIC PANEL (120V & 240V)
2	CSS314	120V ELEC RECEPTACLE 3 WIRE
2	CES29WRE	240V ELEC RECEPTACLE EUROPE
2	CSS314UK	240V ELEC RECEPTACLE UK
2	CSS314AUS	240V ELEC RECEPTACLE AUSTRALIA
3	CSS17A	#8 SCREW FOR RECEPTACLE
4	PC1	POWER CORD WITH STR RELIEF 120V
4	CES20EU	50 FT RCD CORD W/FREE WIRE END
4	CES20UK	50 FT RCD CORD W/FREE WIRE END
4	CES20AUS	50 FT RCD CORD W/FREE WIRE END
5	JWB5	JUMPER WIRE
6	CSS123	QUICK CONNECT TERMINAL
7	HMETER	HOUR METER
8	5ACBS	250V RATED 5A BREAKER SWITCH

CONTROL PANEL ASSEMBLIES

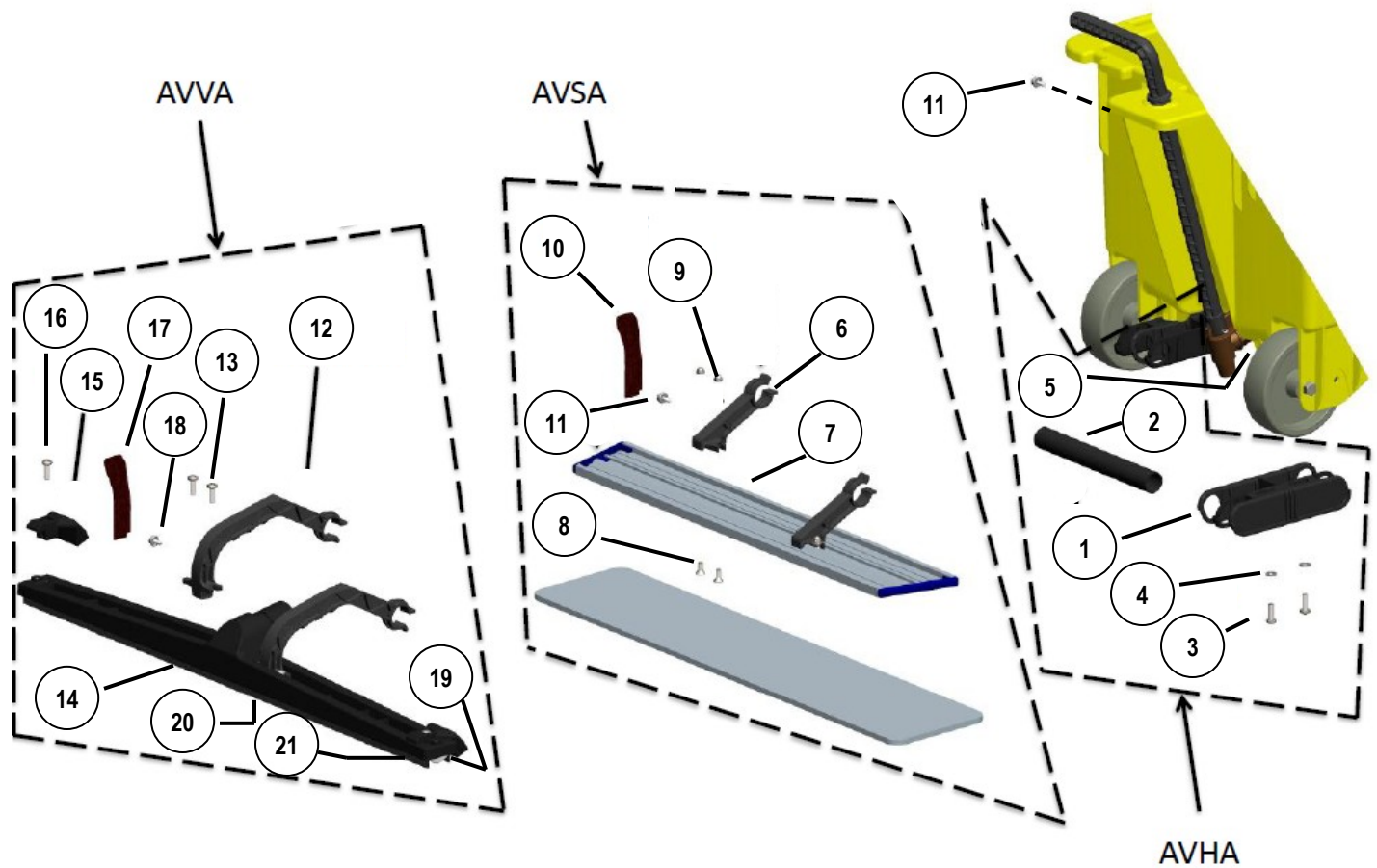
[P/N: SPPBOX1C (FOR METAL CONTROL PANEL LEGACY MODELS)]

NOTE: This assembly does not apply for the 2-piece housing Pumpbox model.



AUTOVAC ACCESSORY ASSEMBLIES

[P/N: AVAC]



#	PART NO.	PART DESCRIPTION
	AVHA	AUTOVAC HITCH ASSEMBLY
1	AVB	MOUNTING BRACKET
2	AVH	AUTOVAC CYLINDRICAL HITCH
3	CSS187	1/4-20 PAN HEAD SCREW FOR HITCH
4	CSS133	5/16 SPLIT WASHER FOR HITCH
5	KF017	1/4 IN. INSERTS FOR HITCH
	AVSA	AUTOVAC SPREADER ASSEMBLY
6	AVMFARM	SPREADER PLASTIC ARM BLACK
7	AVMFH	MICROFIBER PAD HOLDER
8	CSS190	ARM MOUNTING SCREW
9	CSS102	ACORN NUT FOR ARM
10	SUBSSA	SNAP STRAP FOR SPREADER
11	CSS20	SNAP STUD

#	PART NO.	PART DESCRIPTION
	AVVA	AUTOVAC VACUUM ASSEMBLY
12	AVVARM	PLASTIC VACUUM ARM
13	CSS191	#12-24X5/8 SCREW FOR ARM
14	KAUTO28P	28" SQUEEGEE HEAD ASSEMBLY
15	AVVP	PLASTIC VAC CORD PLOW
16	CSS191	#12-24X5/8 SCREW FOR PLOW
17	SUBSSVA	VAC ASSY SNAP STRAP
18	CSS20	SNAP STUD
19	STEELC	AUTOVAC WHEEL REPLACEMENT
20	STEELCW	AUTOVAC CTR WHEEL REPLACE
21	CVA03BK	AUTOVAC SQUEEGEE BLADE