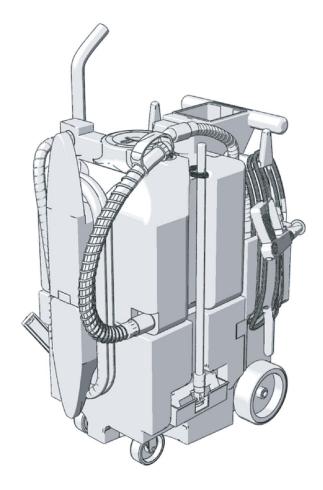
KaiVac®1700 Series Operator and Parts Manual





CLICK TO ORDER PARTS

shop.monsterjanitorial.com



Read First

INSTALL DATE

Please fill out card for future recor	ds
Install date	
Serial No	

Read this manual prior to operation. This machine will operate at its optimal efficiency if:

- The machine is operated as described in this manual.
- The machine is maintained properly and regularly-per maintenance instructions.
- The machine is maintained with manufacturer parts only.

Carefully unpack and inspect your new KaiVac cleaning machine for shipping damage. Each unit is tested and thoroughly inspected before shipping. For instructions regarding shipping damage, contact Kaivac, Inc. immediately. All returns must have a Return Authorization Number (RAN), which is available by calling the Kaivac, Inc. Customer Service Department. Remember to protect your investment by registering your Warranty online at www.kaivac.com or mailing/faxing in the form on page ii.

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Limited Warranty Protection Plan

The KaiVac has been engineered and tested to provide long lasting performance. This warranty covers defects in workmanship or materials under normal use and service from the date of purchase.

Kaivac, Inc. warrants the following components to be free from defects in materials and workmanship for these time periods:

- 1.) Extended Warranty for end users who use only Kaivac chemicals for the life of the machine.
 - 5 years on rotationally molded parts
 - 3 years on other parts (excluding wear items)
 - 1 year on labor
- 2.) Standard Warranty (for approved non-Kaivac chemicals)
 - 1 year parts and labor
- 3.) Chemicals that have not been approved by Kaivac. (If uncertain, please call Kaivac to check.)
 - No warranty

All KaiVac replacement parts are guaranteed for 90 days from the date of installation. Normal wear items such as wheels, hoses, seals, gaskets, cords, casters, squeegees and GFCI are excluded from warranty coverage.

All warranty claims must be accompanied by a Return Authorization Number (RAN), which is available by calling the Kaivac, Inc. Customer Service Department. No returns will be accepted without a RAN.

This warranty does not apply to return freight costs, damage or defect caused by accident, negligence, misuse, fire or repair done by anyone other than a Kaivac authorized repair center. In no event shall Kaivac, Inc. be liable for incidental or consequential damages, or any damages to persons or property.

Please Note: Under no circumstances will the seller be liable for any loss, damage, expenses or consequential damages arising in connection with the use or inability to use seller's product. Kaivac, Inc. reserves the right to make changes or improvements to its equipment without notice. Some states do not allow the exclusion or limitation of incidental or consequential damages. This warranty is in lieu of any other warranty expressed or implied, including any warranty of merchantability or fitness for a particular purpose.

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 C	Code
	Phone Number	Fax	
	Date Purchased// I would like to receive upda Email address:	ted information Yes	No
	KaiVac® 1550 (KaiZen [™])	☐ KaiVac® 1750	☐ KaiVac® 1220
	KaiVac® 1720	☐ KaiVac® 2150	☐ KaiVac® 1250
	Serial Number	·	
	Тур	e of Business	
	School/University Hospital/Health Care Contract Cleaner	☐ Industrial☐ Office☐ Other☐	
	Intended Use	es (check all that ap	ply):
Floor S Kitcher	tripping Stairwo	ng Around Machinery ell Cleaning and Shower Room y Cleaning	Classroom Cleaning Other

Thank you for registering for our warranty program. As our way of saying thanks, we'd like to send you a free microfiber KaiTowel. $^{\text{\tiny TM}}$

Please return completed forms to:

Kaivac, Inc. 401 S. Third Street Hamilton, OH 45011

Or Fax to: (513) 887-4601

Introduction

Inspection

Carefully unpack and inspect your new KaiVac cleaning machine 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, Inc. Customer Service Department.

Warnings

DO NOT operate with a frayed, worn or damaged electrical cord.

DO NOT use to pick up flammable or combustible materials.

DO NOT run the pump without water in the water tank.

DO NOT use hot water.

DO NOT remove the float shutoff.

ALWAYS test chemicals for compatibility on surfaces to be cleaned.

ALWAYS winterize your Kaivac equipment between uses if it will be exposed to freezing temperatures.

Grounding Instructions

THE KAIVAC MUST BE GROUNDED. If it should malfunction or stop working, grounding provides a path of least resistance for the electrical current and reduces the risk of electrical shock. The KaiVac is equipped with a ground fault circuit interrupter (GFCI) to further reduce danger of electric shock. It must be maintained and tested regularly. An equipment grounding cord and plug is included with the unit. The plug must be inserted in an appropriate outlet that has been properly installed and grounded in accordance with all local codes and ordinances. Cutting off the ground wire or using a cord with an ungrounded plug will void the warranty on the unit, and Kaivac, Inc. will NOT accept responsibility for the unit.

Improper connection of the equipment grounding cord can result in the risk of electrical shock. Ask a qualified electrician or service person to check the outlet grounding if you are unsure. Do not modify the plug provided with the KaiVac. If it will not fit the outlet, have a properly grounded outlet installed by a qualified electrician.

Safety Precautions

Equipment Warning

Read all instructions to ensure safe operation of the KaiVac.

Training

- Proper training is required before using the KaiVac. Contact your authorized Kaivac distributor for training information.
- Instruction placards are attached to each KaiVac and should not be removed.
- These placards show proper cleaning procedures and safety precautions.

Equipment Use

- Use the equipment for the purposes specified by the manufacturer. Do not use the equipment for any other purpose.
- See the S-I-M-P-L-E operation section for proper use of equipment.

Spray Gun

• Never point the spray gun at people.

Prevention of Electrocution

- Use the ground fault circuit interrupter (GFCI) with the KaiVac at all times.
- Test the GFCI before each use.
- Do not spray liquid from the KaiVac onto electrical outlets or on any electrical devices.

Personal Protection

Wear gloves, eye protection and ear protection when operating the KaiVac.

Machine Integrity

- Do not run the pump dry. This will void the machine warranty.
- Do not run hot water through the pump. This can cause pump cavitation and will void the warranty.
- Always be sure the water tank and water line filters are clear of debris. Running the pump with clogged filters can cause pump damage.
- Replace any damaged cords before use.

Winterize Your Kaivac Equipment

- Your Kaivac machinery should be winterized between uses if it is to be exposed to freezing temperatures.
- To winterize your machine:
 - Pour 1/2 gallon of windshield wiper fluid into the empty water tank.
 - Aim the spray gun into the water tank.
 - Run the pump and spray the gun until the fluid begins running through.

Chemical use

- Only use chemicals approved for use with the KaiVac. Use of non-Kaivac chemicals may cause machine damage and will reduce warranty periods. Turn chemical line off when not in use.
- Keep the appropriate chemical MSDS on hand at all times.
- Cleaning chemicals should not be put in the water tank (with the exception of KaiDri in small amounts). Chemicals in the water tank can harm operator and machine because:
 - Chemicals in the water tank must pass through the pump, which may cause premature pump failure.
 - Use of chemicals in the water tank voids the warranty.
 - Chemicals in the water tank will be aerosolized and may harm the operator.

Electrical

- Connect to a properly grounded outlet only.
- Do not pull the KaiVac by the cord or use the cord as a handle.
- Do not close a door on the cord or pull the cord around sharp edges or corners.
- Do not run over the cord.
- Keep the cord away from heated surfaces.
- Turn off the unit before unplugging.
- Do not pull on the cord to unplug. Grasp the plug at the outlet and pull.

Prevention of Water Damage to Buildings

The KaiVac is to be used on water resistant building surfaces only. These include concrete, terrazzo, ceramic tile and quarry tile.

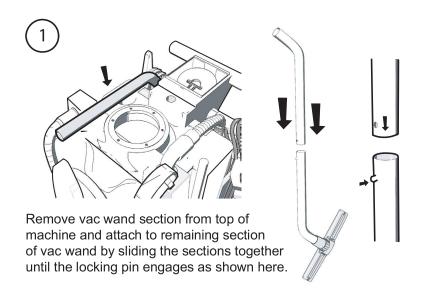
The KaiVac may be used for stripping on vinyl composite tile floors, but daily cleaning of resilient flooring using the KaiVac is not recommended.

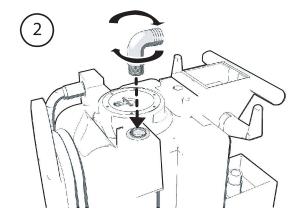
Never overflow the water tank or the vacuum recovery tank.

Discontinue use if any leaks occur in the KaiVac.

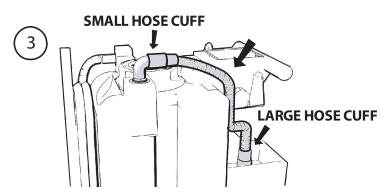
CAUTION: Prior to cleaning, always inspect area to ensure that the surfaces to be cleaned are water- safe. In addition, check for poor construction, damaged walls and floors, missing or damaged tiles or grout, missing or insufficient caulk, and loose wall coverings. If problems are discovered, resolve them prior to cleaning in order to avoid any harm that may result from exposure to water or cleaning solution.

Out of Box Setup Instructions

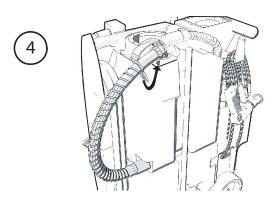




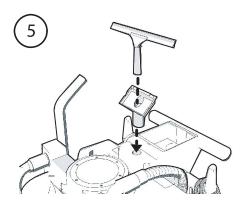
After removing machine from container, Attach the plastic elbow to the vac tank as shown above.



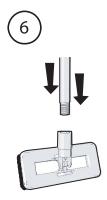
Attach vac motor hose to elbow and vac motor inlet as shown above.



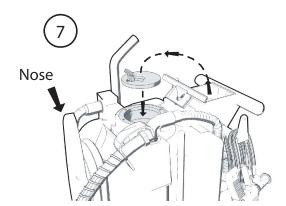
Attach dump hose to retainer bolt with rubber strap on dump hose as shown above.



Remove the tools from the vac tank and place them in the appropriate locations as shown above.



Place the brush head onto the telescoping handle located on the left side of machine as shown above.



Make sure all tools are removed from vac tank and replace vac lid on vac tank as shown above. Place tools in tote bag and hang bag over nose of machine.

Preparing your KaiVac for use

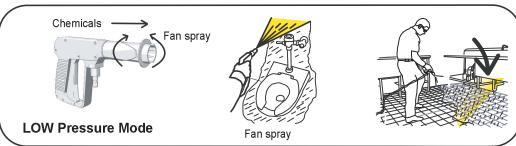
1. Fill machine with clean, cool water.	
Prepare the cleaning solution you will be using by attaching the chemical feed line and cap to the top of your chemical bottle and selecting the proper metering tip. (See placards for metering tip information.)	
Check machine for all tools and supplies needed to complete task.	
4. Check all hoses and spray lines for damage prior to use. If damage is found, do not continue until proper repairs are completed.	The same of the sa
5. Plug in machine and test GFCI (Ground Fault Circuit Interrupter) to ensure it is working properly. You are now ready.	Reset

Operating your KaiVac using the S-I-M-P-L-E Process

Set-up



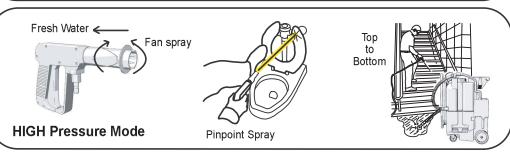
nject chemicals



Manual brush (optional)



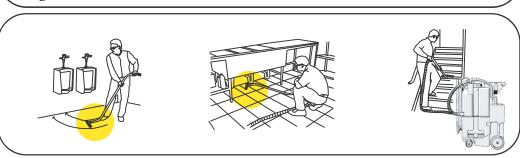
Pressure wash and rinse



Loop spray line



Extract and dry



Machine Maintenance



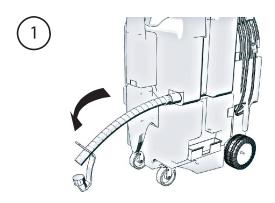
Always make sure machine is unplugged before lifting electric cover assembly.

Item

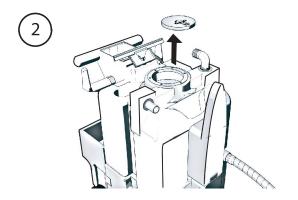
Procedure

Floor Squeegee	 Check condition of rubber squeegee blades and wheels on the floor tool. Rough floor surfaces will cause the blades and wheels to wear out more quickly. Replace as necessary.
Spray Gun	 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 nozzle with lithium grease.
Pressure Hose	 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.
Water Tank	 Check condition of filter in water tank. Clean as needed. Empty the water tank to prevent mildew and bacteria growth. Empty tank by dipping the vacuum hose onto the water tank and transferring the water to the vacuum tank.
Vacuum Tank	 Empty and flush vacuum tank. Clean and disinfect. Check the float shutoff screen to be sure it is not plugged up. A plugged filter screen restricts airflow and results in reduced suction.
Leaks	 Be alert for leaks around hoses, fittings, spray wand, tanks or elsewhere. Discontinue use until leaks are repaired.
Electrical System	 The ground fault circuit interrupter (GFCI) must be tested before each use. Electric cords must be inspected for tears or cuts in the insulation.

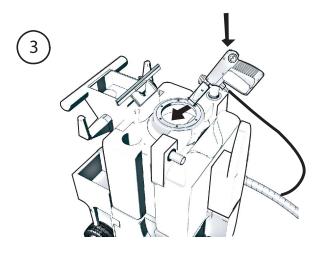
Vac Tank Cleanout Instructions



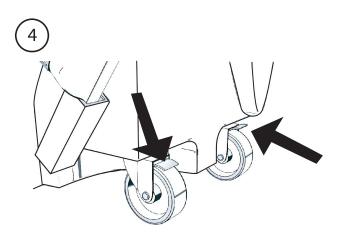
Disconnect dump hose and empty contents into proper location.



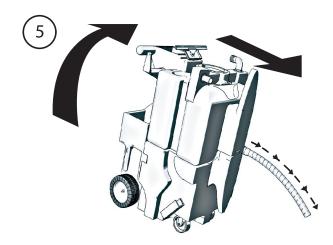
After dumping is complete, remove vac lid from vac tank.



Using pressure gun or other water source, rinse inside of tank thoroughly.



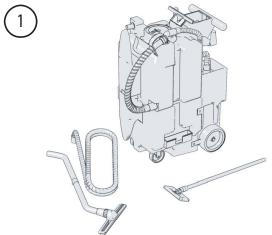
After tank has been rinsed, lock the front caster wheels by pressing down on the locks as shown above.



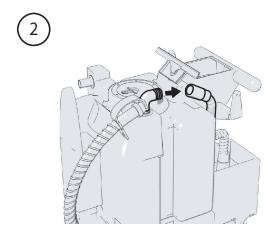
After caster wheels have been locked, tip the machine to the left and slightly forward to allow the remaining water to drain.

Re-attach dump hose and unlock wheels.

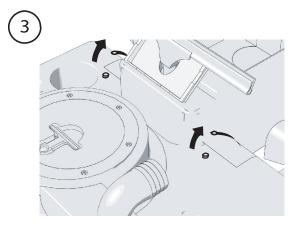
Vac Tank Removal Instructions



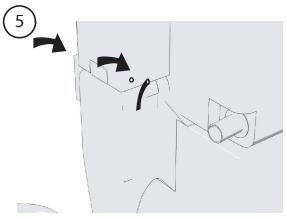
Remove vac hose, vac wand, and brush before removing vac tank.



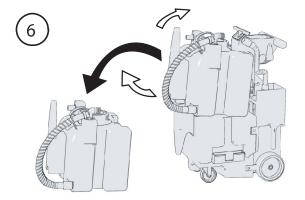
Disconnect vac inlet hose from 90 degree fitting on vac tank.



Un-snap straps holding the vac tank to the water tank upper assembly.



Un-snap straps holding the vac tank to the water tank lower assembly.

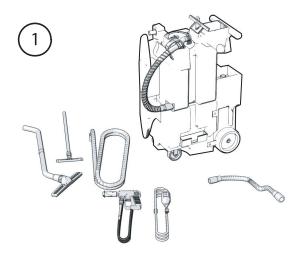


Slightly pull the bottom section of the vac tank out while tipping it backwards.

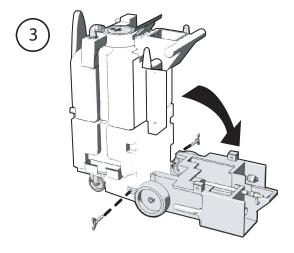
Lift and pull the vac tank away from the unit.

Repeat the steps backwards to replace tank.

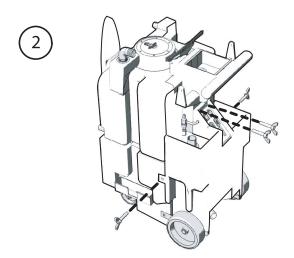
Black Box Removal Instructions



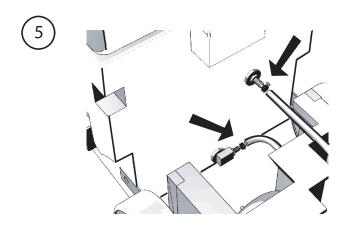
Remove all hoses, cords, and tools prior to black box removal.



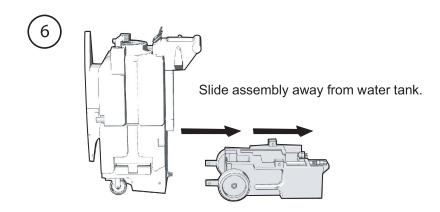
Tilt the black box assembly away from machine utill it rests on the floor. Next, remove the 2 axle strap wing bolts on either side of the machine behind the wheels.



Loosen and remove the 4 wing and thumb bolts located at the top of the control panel and on the left and right of the black box mid section.



Locate and disconnect the water line and return line behind the black box on the machine.



Troubleshooting



Always make sure machine is unplugged before lifting electric cover assembly.

Area	Problem	Possible Cause	Solution
Electrical	No power to pump or vac motor.	1. Machine not plugged in. 2. Switch not "on." 3. GFCI tripped. 4. Building circuit overloaded. 5. Switch wires loose. 6. Connections loose.	1. Plug machine in. 2. Check switches for "on." 3. Test and reset GFCI. 4. Check and reset circuit. 5. Disconnect power and check for loose wire. 6. Disconnect power and check for loose wire under panel.
	Electrical burning smell.	Vac motor brushes worn. Vac motor hung up. Pump motor hung up.	Remove vac motor and repair. Release pressure on hose and jog pump switch, or replace.
Vacuum System	No/Weak vacuum.	 Vac tank full. Squeegee blades or wheels worn. Float shutoff screen dirty. Float ball stuck. Damaged hose. Dump hose plug missing. Access lid not tight. Vacuum hose plugged. Too much liquid in vac hose. Vac hose still wrapped. Muffler plugged. Leak in vac tank. 	 Empty vac tank. Replace wheels or blades and check periodically. Wipe off float screen to clean. Tap float and release/clean. Cut and repair/replace. Contact dealer and replace. Tighten lid hand tight. Flush hose to remove debris. Allow air in when vacuuming. Unwrap vac hose fully. Remove HEPA filter and clean. If repairable, clean and dry affected area and seal with silicone.
	Moisture from exhaust.	Vac tank full. Float shutoff missing. Excessive foam in vac tank.	Dump vac tank. Replace. Use defoamer.
Blow Dry	No air flow.	1. Hose disconnected.	1. Reconnect hose.
System	Moisture from nozzle.	1. Water in blow hose.	1. Dry blow line.
	Suction, not blow action.	Vacuum hose connected to vac tank.	Reconnect to vac motor exhaust hose.
DVD System	No power.	Power cord not connected Power switch not on.	Plug cord into DVD player. Turn switch on DVD player on.
(optional)	No picture.	1. Screen is blank.	1. Close and re-open lid. Play.
	No audio.	1. No sound from player	Check volume control knob.

Troubleshooting



Always make sure machine is unplugged before lifting electric cover assembly.

Area	Problem	Possible Cause	Solution
High Pressure System	No water from pump or low pressure.	 Out of water. Gun nozzle plugged. Air in pump (vapor lock). Gun orifice missing. Water tank filter plugged. In-line bowl filter plugged. Bowl filter lid loose. Pressure hose damaged. Quick disconnect leaking. Injector plugged. 11. Pulse hose damaged. 12. Regulator failed. 13. Hose kinked. 14. Seals in pump need replaced.	 Fill water tank. Remove orifice with Allen wrench and clean. Use power prime technique. Replace orifice. Clean tank and filter. Remove filter cover and clean. Gently tighten bowl cover. Repair or replace. Tighten or replace. Remove safety cap from chemical and blow small amounts of compressed air into line. Repair or replace. Replace. Unkink and check for damage Remove and replace seals.
	Bad fan pattern or pinpoint pattern on gun.	Debris in nozzle. Orifice damaged.	Remove orifice with Allen wrench and clean. Remove and replace.
Chemical Injection System	No chemical flow.	 Out of chemical. Safety cap not secure. Chemical valve "off." Safety cap plugged. Spray gun in wrong mode. Metering tip plugged. Injector plugged. Air entering system. Injector installed backwards. 	 Refill chemical. Check safety cap / tighten. Check on / off valve. Replace cap. Make sure gun nozzle is pulled out away from gun chemical mode. Check metering tip for clog. Remove safety cap from chemical and blow small amounts of compressed air into line. Check for air entering system around chemical lines or injector. If fluttering or pulsing sound can be heard while spraying or when machine is running it is possible that your injector is in backwards. Remove and reinstall.

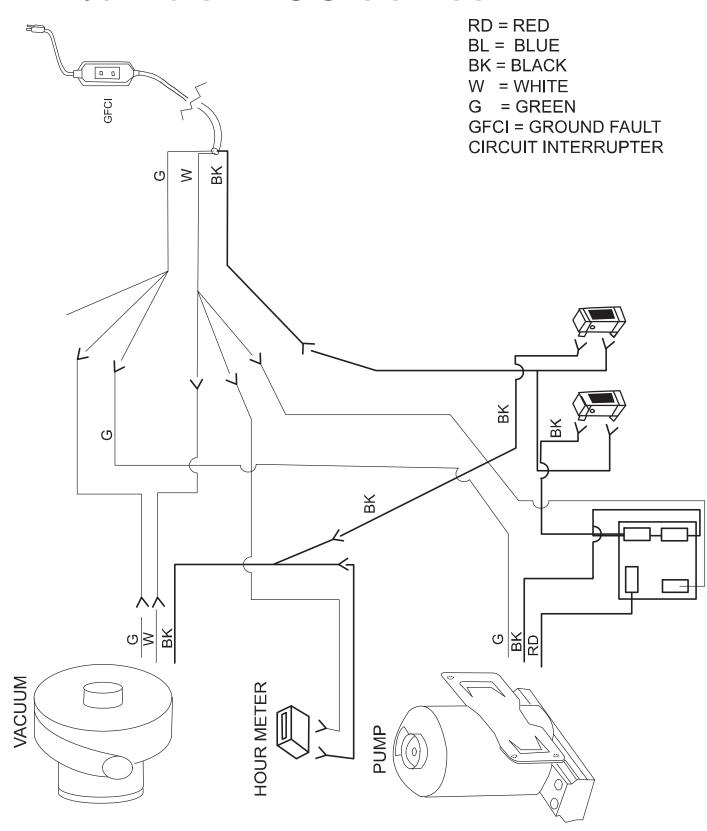
Troubleshooting



Always make sure machine is unplugged before lifting electric cover assembly.

Area	Problem	Possible Cause	Solution
Chemical Injection	Not enough chemical flow.	Metering tip plugged. Wrong metering tip.	Remove and clean. Check and replace per chart.
System Con't.	Chemical line blows off safety cap.	1. Debris in injector.	Remove safety cap from chemical and blow small amounts of compressed air into line.
	Water backflows into chemical bottle.	Bad seat on injector check valve. Bad safety cap.	 Check injector o-ring or replace. Replace safety cap.
Dump System	Dump hose will not empty tank.	 Dump hose plug not removed. Clog in bottom of tank. 	Remove plug. Tip dump contents, remove debris.
	Dump hose leaks.	 Hose cut. Clamp loose. Dump plug bushing missing. Plug missing. 	 If leak is less than 4" from tank side, cut and reattach, or replace. Tighten hose clamp. Replace bushing. Replace plug.
Wheels and Casters	Wheels won't roll, or they rub.	 Flat tires. Debris wrapped around axle. Bearings tight. Wheels too loose on axle. Bearings falling out. 	 Inflate tires to 30 p.s.i. Check for debris on axle. Grease bearings. Remove wheel, add washers to take up slack. Replace bearing assembly.
Squeegee	Floor streaks.	1. Worn blades or wheels.	1. Replace wheels and / or blades.
Head	Squeegee head doesn't easily rotate when installed on wand.	Brass ring on wand not in groove. Coupling nut too tight.	Loosen coupling nut and reposition head on groove. Loosen 1/2 turn.
	Head won't stay on wand.	Coupling nut cracked. Brass ring worn.	1. Replace. 2. Replace.
	Premature blade wear.	1. Squeegee wheels worn.	1. Check wheels for wear / replace.
	Sucks to the floor too tightly.	1. Squeegee wheels worn.	1. Check wheels for wear / replace.

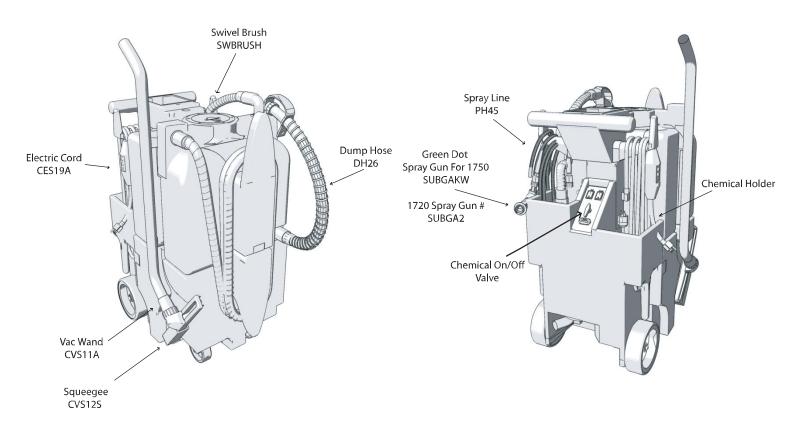
Wiring Diagram Kaivac 1700 series



Kaivac Tool Arrangement

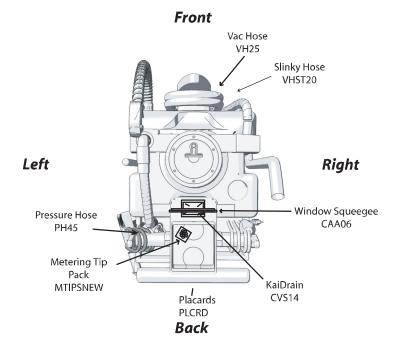
Front Right View

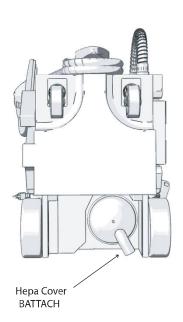
Rear Right View

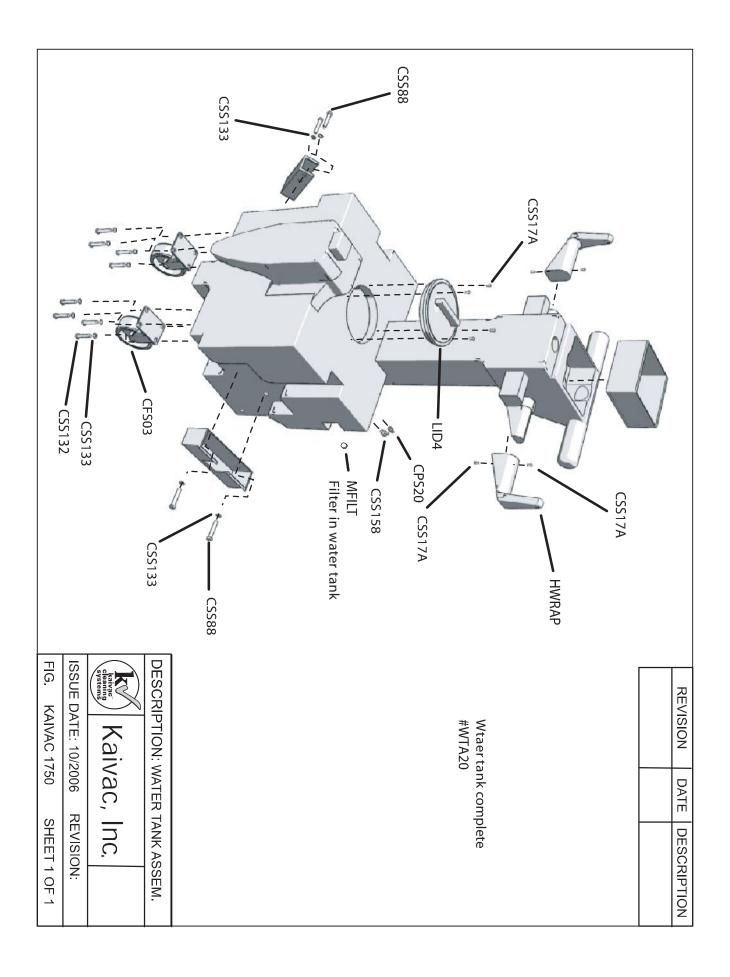


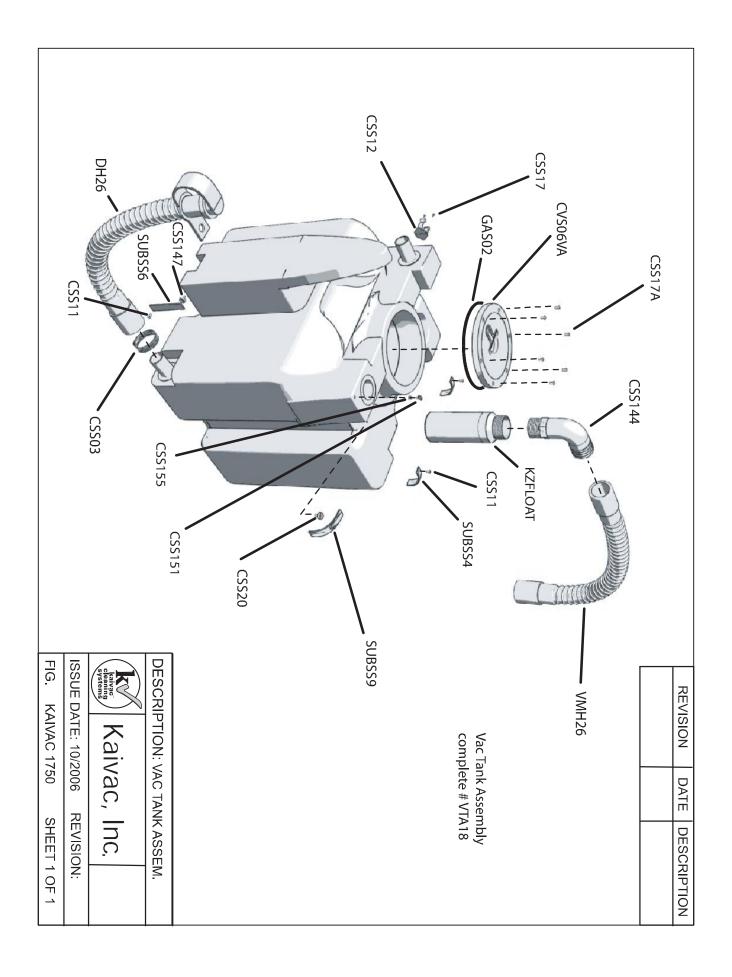
Overhead View

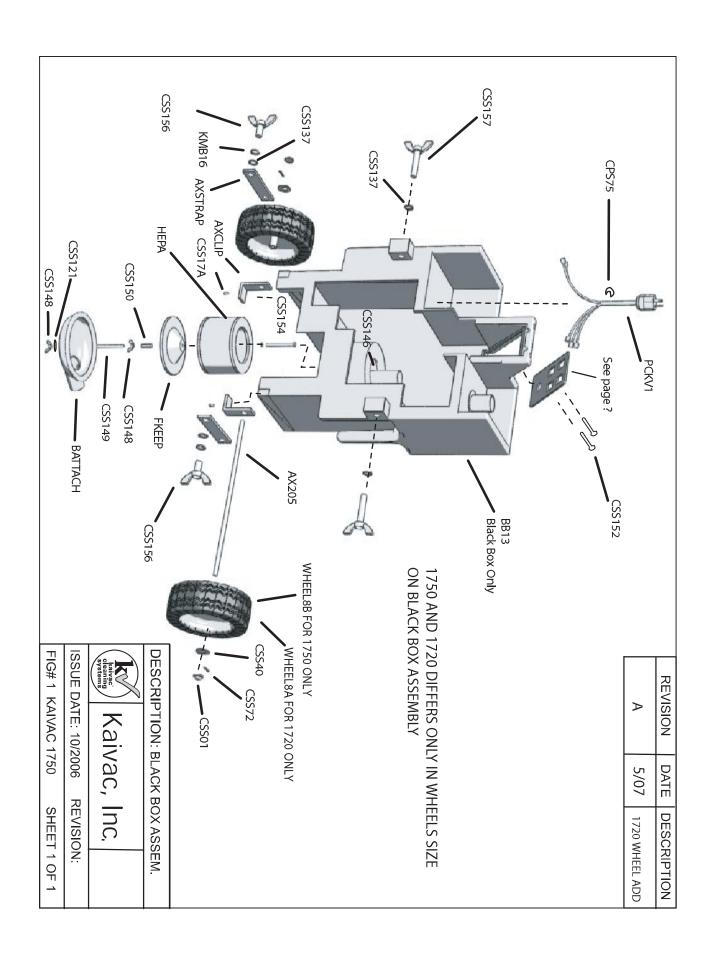
Bottom View

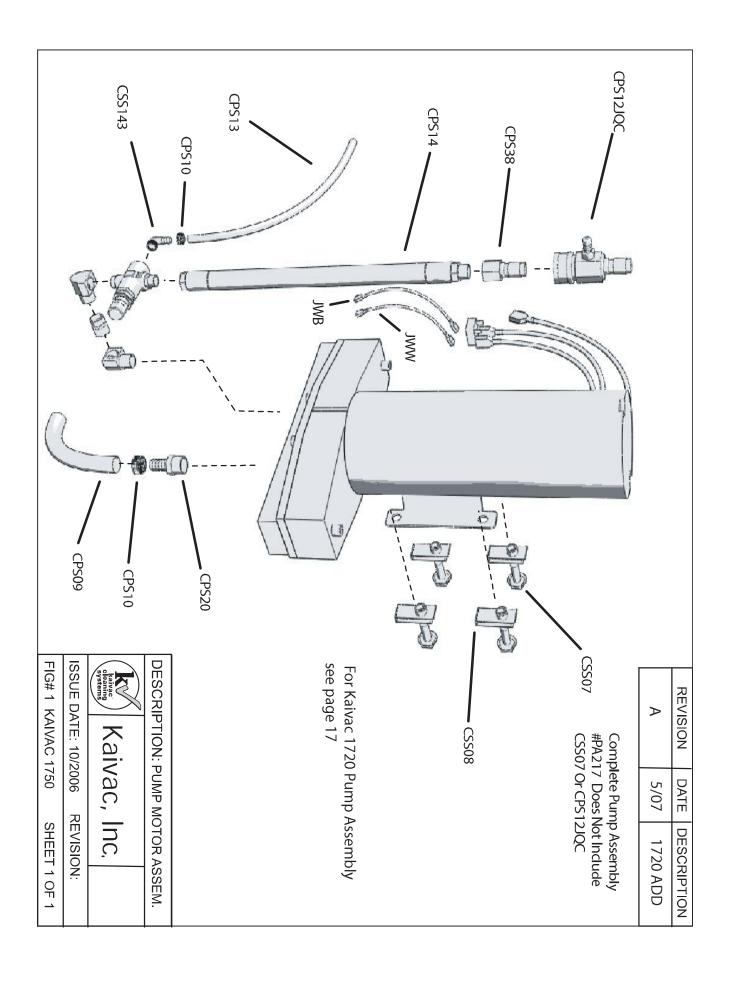


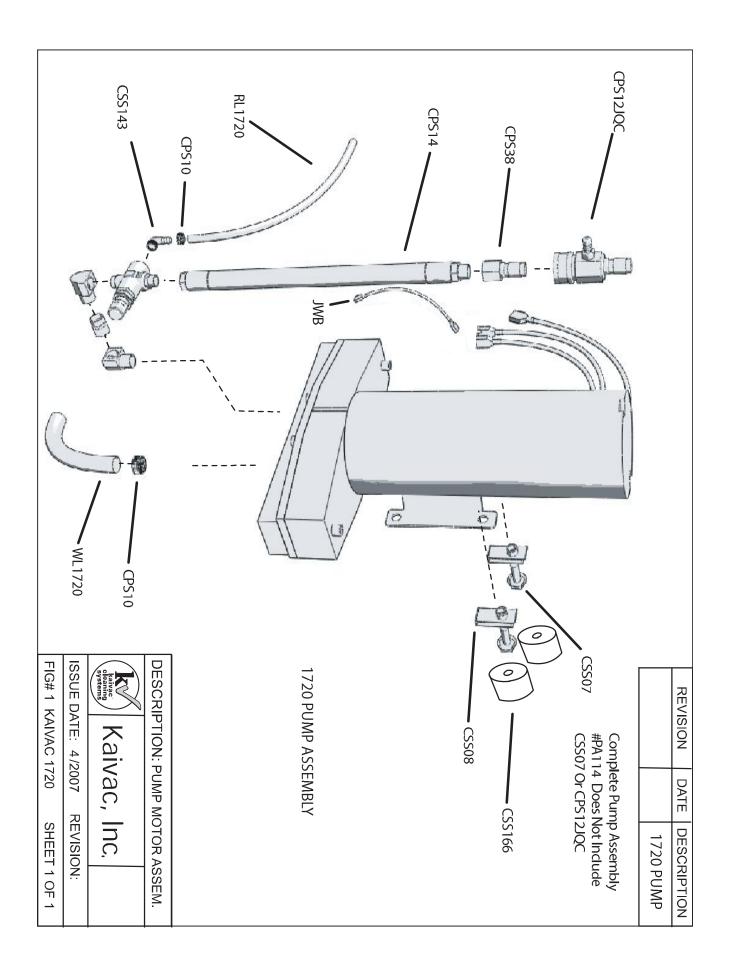


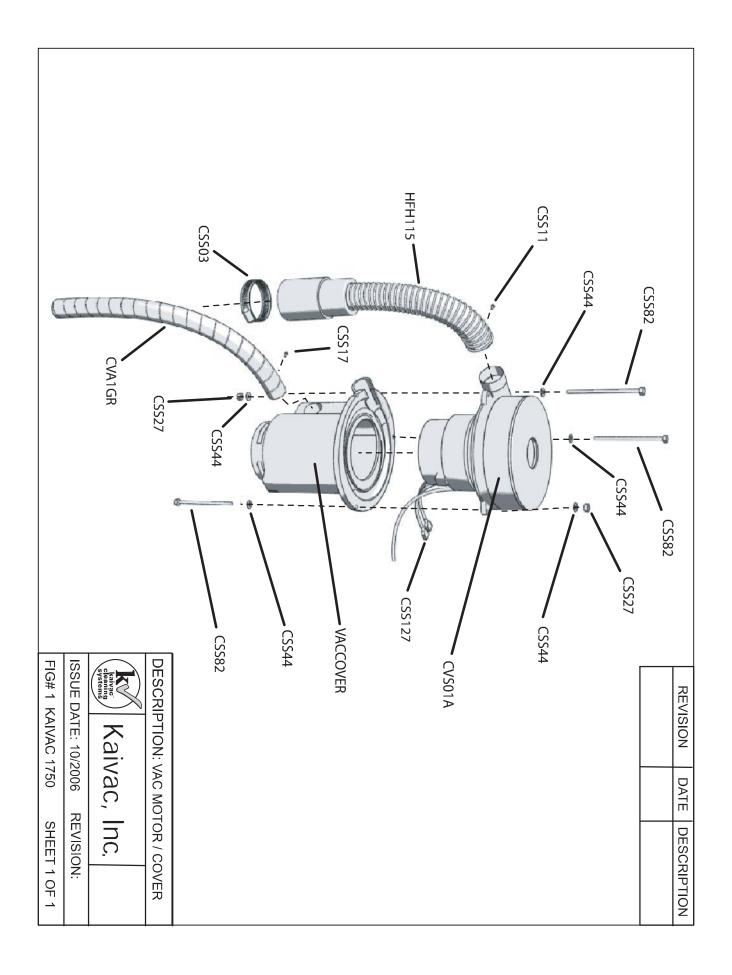


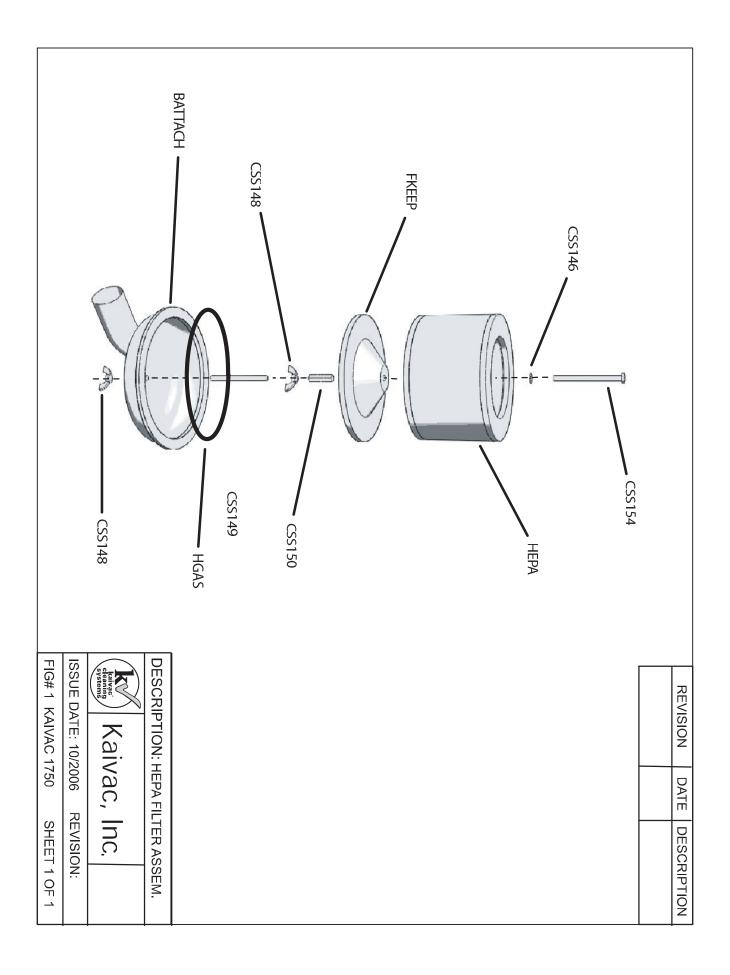


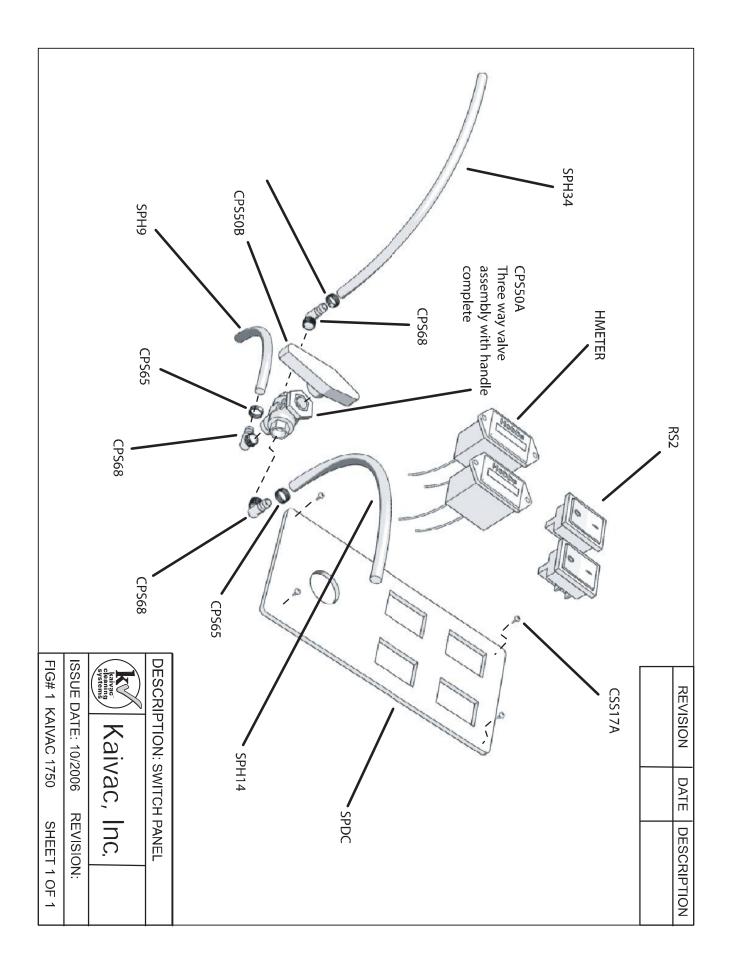












PART#	PART DESCRIPTION	
	WATER TANK ASSEMBLY	
CSS17A	SST SCREW 3/4"	
HWRAP	HOSE WRAP EAR	
CSS17A	SST SCREW 3/4"	
LID4	4" LID	
CPS20	1/2" BRASS BARB	
CSS142	3/8" BRASS BARB	
CSS158	3/8" HOSE BARB 90 DEG.	
MFILT	MUSHROOM FILTER IN WATER TANK	
CSS88	1/4 - 20 X 3/4" SST SCREW	
CSS133	5/16 SPLIT LOCK WASHER	
CSS133	5/16 SPLIT LOCK WASHER	
CSS132	5/16 - 18 X 1" BUTTON HEAD SCREW	
CSS133	5/16 SPLIT LOCK WASHER	
CSS88	1/4 - 20 X 3/4" SST SCREW	
WTY20	WATER TANK ONLY	
CSS17A	SST SCREW 3/4"	
	VAC TANK ASSEMBLY	
CSS144	1 1/4 NPT X 1 1/2 HOSE BARB	
VMH26	VAC MOTOR HOSE 26" 1 1/2" DIA	
KZFLOAT	FLOAT SHUT OFF	
CSS11	SELF TAP SCREW	
SUBSS4	4" SNAP AND STRAP	
SUBSS11	11" SNAP AND STRAP	
CSS20	SNAP STUD	
CSS151	THUMB SCREW	
CSS155	1/2 - 20 ZP NUT	
CSS03	1 9/16 - 2 1/2 HOSE CLAMP	
DH26	DUMP HOSE W/MOLDED CUFFS	
SUBSS6	6" SNAP AND STRAP	
CSS147	MALE SNAP	
CSS12	#15 TOOL CLAMP	
CSS17	#8 FLAT HEAD SCREW	
GAS02	LID GASKET	
CVS06VA	6" BLACK LID	
CSS17A	SST SCREW 3/4"	

PART#	PART DESCRIPTION	
	BLACK BOX ASSEMBLY FOR 1750	
PCKV1	22" POWER CORD W/PLUG	
SPDC	PANEL PLATE ONLY	
CSS157	3/8 -16 X 3" STUD	
CSS152	THUMB SCREW	
BB13	BLACK BOX ONLY	
AX205	AXLE 20.5" X 1/2" DIA	
WHEEL8B	FLAT FREE TIRE 8"	
CSS40	1/2" DIA WASHERS	
CSS72	COTTER PIN 1/8 DIA	
CSS01	1/2" PUSH CAP NUT	
CSS156	3/8" X 3/4" WING NUT YELLOW	
FKEEP	FILTER KEEPER	
CSS148	WING NUT	
BATTACH	BLOW ATTACH COVER	
CSS148	WING NUT	
CSS149	THREADED STUD	
CSS150	1/4" COUPLING	
HEPA	HEPA FILTER	
CSS17A	SST SCREW	
CSS146	STEEL PUSH REATINER 1/4"	
AXCLIP	AXLE CLIP	
AXSTRAP	AXLE STRAP	
CSS137	3/8 SPLIT LOCK WASHER	
KMB16	3/8 FLAT WASHER	
CSS152	3/8-16 X 1.25" STUD	
CSS156	3/8" X 3/4" WING NUT YELLOW	
CPS75	CLAMP	
	PUMP MOTOR ASSEMBLY	
6660-		
CSS07	5/16 -18 X 1 HEX HEAD	
CSS08	5/16 - U-NUT	
CPS20	3/8 X 1/2 HOSE BARB	
CPS10	7/16 X 25/32 HOSE CLAMP	
CPS09	WIRE REINFORCED HOSE 6"	
CSS143	3/8 90 DEG. BARB	
CPS10	7/16 X 25/32 HOSE CLAMP	
CPS13	3/8 WIRE REINFORCED HOSE	
CPS14	PILSE HOSE	
CPS38	3/8 QD PLUG	
CPS12JQC	QUICK CONNECT INJECTOR	

PART#	PART DESCRIPTION	
	BLACK BOX ASSEMBLY FOR 1720	
PCKV1	22"POWER CORD W/PLUG	
SPDC	PANEL PLATE ONLY	
CSS157	3/8 -16 X 3"STUD	
CSS152	THUMB SCREW	
BB13	BLACK BOX ONLY	
AX205	AXLE 20.5"X 1/2"DIA	
WHEEL8A	TIRE 8"	
CSS40	1/2"DIA WASHERS	
CSS72	COTTER PIN 1/8 DIA	
CSS01	1/2" PUSH CAP NUT	
CSS156	3/8"X 3/4"WING NUT YELLOW	
FKEEP	FILTER KEEPER	
CSS148	WING NUT	
BATTACH	BLOW ATTACH COVER	
CSS148	WING NUT	
CSS149	THREADED STUD	
CSS150	1/4"COUPLING	
HEPA	HEPA FILTER	
CSS17A	SST SCREW	
CSS146	STEEL PUSH REATINER 1/4"	
AXCLIP	AXLE CLIP	
AXSTRAP	AXLE STRAP	
CSS137	3/8 SPLIT LOCK WASHER	
KMB16	3/8 FLAT WASHER	
CSS152	3/8-16 X 1.25" STUD	
CSS156	3/8"X 3/4"WING NUT YELLOW	
CPS75	CLAMP	
	PUMP MOTOR ASSEMBLY	
CSS07	5/16 -18 X 1 HEX HEAD	
CSS08	5/16 - U-NUT	
CSS166	RUBBER STANDOFF	
CPS10	7/16 X 25/32 HOSE CLAMP	
WL1720	WATER LINE	
CSS143	3/8 90 DEG. BARB	
CPS10	7/16 X 25/32 HOSE CLAMP	
RL1720	3/8 WIRE REINFORCED HOSE	
CPS14	PILSE HOSE	
CPS38	3/8 QD PLUG	
CPS12JQC	QUICK CONNECT INJECTOR	