# SOLO VACUUM

## **INTRODUCTION**

# OPERATING & MAINTENANCE INSTRUCTIONS

#### **READ THIS BOOK**

This operator's book has important information for the use and safe operation of this machine. Read this book carefully before starting the machine. Keep this book and tell all operators to read the book. If you do not follow the instructions, you can cause an injury or damage equipment, furniture or buildings.

For new books write to:

Pacific Steamex, Inc. 2259 S. Sheridan Muskegon, MI 49442-6252

Carefully inspect all components to ensure that there is no concealed freight damage. If such damage is discovered, file a "CONCEALED DAMAGE REPORT" immediately with the delivering carrier. The contents of this manual are based on the latest product information available at the time of publication. Pacific Steamex reserves the right to make changes or improvements to its machines without notice.

# FOR YOUR CONVENIENCE, RECORD THE MACHINE MODEL AND SERIAL NUMBER:

MODEL\_\_\_\_\_\_
SERIAL NUMBER\_\_\_\_\_

### READ AND UNDERSTAND ALL WARNINGS AND INSTRUCTIONS BEFORE USING THIS APPLIANCE!

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

- 1. DO NOT USE THIS VACUUM FOR PICK UP OF WET DEBRIS.
- 2. Do not leave appliance when plugged in. Unplug from outlet when not in use and before servicing.
- 3. Do not use outdoors or on wet surfaces.
- 4. Do not allow to be used as a toy. Close attention is necessary when used by or near children.
- 5. Use only as described in this manual. Use only manufacturer's attachments.
- 6. Do not use with damaged cord or plug. If appliance should not work as it should, has been dropped or damaged, left outdoors, or dropped into water, return it to service center.
- 7. Do not pull or carry by cord, use cord as 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.
- 8. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- 9. Read the instruction manual provided with the battery charger. Keep sparks and flames away from batteries. No Smoking. Charge the batteries in an area with good ventilation.
- 10. Always wear eye protection and protective clothing when working near batteries. Remove all jewelry. Do not put tool or other metal across the battery terminals, or the tops of the batteries.
- 11. Do not short circuit or attempt to disassemble the battery. This may cause leakage of battery fluid, heat generation, bursting and fire.
- 12. Do not over-charge the batteries by exceeding the predetermined charging period specified. Prolonged charging may cause premature battery failure. Handle recharged batteries carefully as they may be hot.
- 13. If batteries leak fluid, change color, shape or change in any other way do NOT use them.
- 14. Do not handle plug, batteries or appliance with wet hands.
- 15. Do not put any objects into opening. Do not use with any opening blocked: keep free of dust, lint, hair and anything that may reduce airflow.
- 16. Keep hair, loose clothing, fingers and all parts of the body away from openings and moving parts.
- 17. Turn off all controls before unplugging.
- 18. Use extra care when cleaning on stairs.
- 19. Do not use to pick up flammable or combustible liquids such as gasoline or use in areas where they may be present.
- 20. Connect to a properly grounded outlet only.
- 21. Do not pick up anything that is burning or smoking, such as cigarettes, matches or hot ashes.
- 22. Do not use without dust bag and/or filters in place.

# **Grounding Instructions**

This machine must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This machine 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 machine - if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

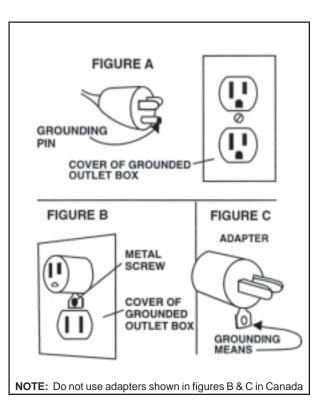
This machine is for use on a nominal 120-volt circuit, and has a grounded plug that looks like the plug illustrated in figure A. A temporary adapter that looks like the adapter illustrated in figures B and C may be used to connect this plug to a 2-pole receptacle as shown in figure B if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet (figure A) can be installed by a qualified electrician. The green colored rigid ear, lug, or the like extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adapter is used, it must be held in place by a metal screw.

NOTE: In Canada, the use of a temporary adapter is not permitted by the Canadian Electrical Code

#### EXTENSION CORDS

Use only three-wire 16/3 or larger gauge approved extension cords that have threeprong grounding type plugs and three-pole receptacles that accept the appliance's plug. Replace or repair any damaged cords or plugs.

When servicing, refer to authorized person only. Use only identical replacement parts.



This manual includes the operating instructions for both the 115V AC machine, the combination 115V AC and 36V DC machine and the 36V DC machine.

WARNING! For the safe operation of this machine follow the instructions given in this booklet and the training given by your supervisor. Failure to do so can result in personal injury and/or damage to machine and property!

DO NOT OPERATE MACHINE IN AN EXPLOSIVE EN-VIRONMENT!

WARNING! NEVER USE THIS MACHINE TO PICK UP VOLATILE OR EXPLOSIVE MATERIALS.

WARNING! DO NOT PICK UP WET MATERIAL WITH THIS MACHINE.

#### **PREPARATION**

To prepare the machine for operation, make sure it is properly assembled. If in doubt, ask your supervisor.

# NOTE: STEPS 1-3 APPLY TO THE MODELS WITH A BATTERY.

1. **Battery**: The machine includes one 36 Volt rechargeable nickel metal hydride battery. THE NEW BATTERY SHOULD BE CHARGED BEFORE USE.

Note: The machine has an automatic switch that senses the battery voltage and shuts the machine down at 28 volts.

2. Battery Charger: It takes 4 to 6 hours to completely charge the battery. The green charge indicator light will turn on when the battery is fully charged. If the battery does not charge, a damaged battery cell is the most likely cause and the battery should be replaced.

To charge the batteries: Allow the batteries to cool <u>before</u> charging. Connect the DC connector on the charger to the DC connector on the machine (Item 13). Connect the AC charger plug to a receptacle that has the correct voltage and is properly grounded.

**3. Battery Installation:** Battery placement is inside the machine. Simply open the black panel located at the end of the machine. Connect the battery connector to the connector of the machine and place the battery in its' compartment.

#### NOTE: STEPS 4 and 5 APPLY TO ALL MODELS.

- 4. **Properly install the vacuum filter bag:** First remove the vacuum housing cover by releasing its' two latches. Push the filter bag inlet over the vacuum inlet cuff located on the inside of this cover. Place the bag and cover into the housing. Refasten the latches. Note: Replace the paper filter bag when full or damaged.
- **5. Insert the vacuum hose assembly** securely into the inlet on the vacuum housing cover. Then attach the wands and selected tool. Four tools are provided with the vacuum: the combination floor tool assembly, upholstery tool, crevice tool and dusting brush.

#### **OPERATION**

#### 1. The vacuum may be operated in two positions:

a) Place the vacuum on your back in a horizontal position. Put your arms through the straps and adjust them to a comfortable working position, or

**b)** The vacuum can remain on the floor and roll along with you as you work.

#### 2. Starting the vacuum:

a) For **115V AC Models** plug the machine's power cable into a properly grounded outlet. Turn the power switch (Item 19) ON and begin your DRY pick up application.

b) For AC/DC Models: The machine can be plugged in or operated as a battery powered unit. For operation on 115V AC current plug the cable in and turn the rocker switch (Item 18) to the ON position. For battery operation remove the cord assembly, then turn the rocker switch ON (its'position will be opposite that used as an AC machine).

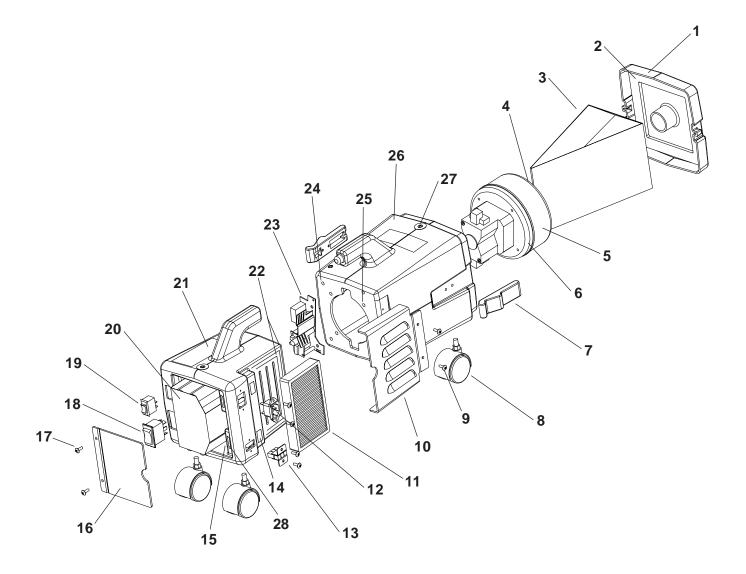
c) For **36V DC Models:** Simply turn the rocker switch (Item 19) ON and begin your DRY pick up application.

#### MAINTENANCE

ALWAYS turn the switch/switches OFF and unplug the machine before performing any service. Remember to disconnect the battery on DC Models. Severe personal injury could result if electrical power is not disconnected.

- 1. Vacuum Filter Bag: If the bag is full or damaged install a new one. If the optional cloth filter bag is being used, it must be emptied when full and checked for any rips or holes. Replace if necessary.
- 2. **Power Cord:** Check for nicks, cuts or damage. Report these to your supervisor for correction.
- **3. Casters:** Remove any strings or debris that may restrict the free movement of the casters. Wipe the treads clean.
- **4. Tools:** Inspect the tools, hose and wands to ensure there is no obstruction of air flow. Remove any debris.
- **5.** Vacuum Inlet Filter: The inlet filter is located within the vacuum housing on the vacuum motor. It is constructed of foam attached to a plastic mounting ring. Slide the filter off and clean by shaking or vacuuming. Replace if there are any rips, tears or if it can't be cleaned.
- 6. Exhaust Filter: Simply open the black exhaust cover located on the side of the machine. Remove the filter and clean by shaking, vacuuming or washing with water. Replace if there are any rips, tears or if it can't be cleaned.
- Battery: Inspect for any leakage or changes (like color or shape); if observed, replace the battery. Store the batteries between the temperatures of -4°F to +86°F for longer life.
- **8. Vacuum Motor:** Have the vacuum motor inspected annually by a factory authorized service technician. If the carbon brushes are worn, they should be replaced. This service will prolong the life of the motor.

# SOLO VACUUM



# PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY.	ITEM	PART NO.	DESCRIPTION	QTY.
1	632320	Cover, Vac. Housing	1	19	911089	Switch, Rocker(AC&DC Models)	1
2	633421	Gasket	1		*S519PB	Switch Blank (AC/DC Models)	1
3	630620	Paper Filter Bags, 10 Pack	1	***20	Battery Assembly:		
	630621	Cloth Filter Bag			631305	Battery, 36VDC, 4.5 AH	1
4	633301	Filter, Inlet-Final Foam	1		631306	Battery, 36VDC, 3.8 AH	1
5	655204	Vacuum Motor, 115V AC Motor	1		Plug/Connector Assembly:		
	650901	Carbon Brush, 115V AC Motor	2		632425	Connectors, Red	2
	***635203	Vac. Motor, 36VDC	1		632426	Connector, Black	1
	***620904	Carbon Brush	2		632002	Clamp, Plug	2
6	633403	Gasket, Motor Mount	1		W324D	Screws	2
7	222001	Clamp, Machine	2		W144D	Nuts	2
	W515D	Screws for Clamps	4	21	634221	Housing, Motor	1
	W440D	Nuts for Clamps	4		***653402	Gasket/Padding (Inside)	3
8	639720	Caster, Swivel	4	22	633420	Gasket/Padding	2
9	W136D1	Screws for Filter Cover	2	*23	632423	Control-36VDC/115VAC	1
10	632322	Cover, Filter	1		632424	Control-36VDC/240VAC	1
11	633320	Filter, Exhaust-Foam	1		962146	Screw, 10-32x1.5PHP	2
12	632422	Connector, Male Power	1		638220	Spacers-Board	2
	W136D1	Screws for Connector	2	**23	911220	Shutoff Switch	1
***13	*13 Charge Plug Assembly-Models with Batteries:			630822	Bracket-Cut Off Switch	1	
	630821	Bracket, Charge Plug	2		514750	Insulator-Circuit	1
	W136D1	Screws	2		W324D	Screws-Switch to Bracket	3
	632425	Connectors, Red	2		W144D	Nuts-Switch to Bracket	3
	632426	Connector, Black	1		W380D	Screw-Bracket to Housing	1
13	636620	Plate, Plug Cover-Elec.Only	1	24	962089	Screws-Connect Housings	4
	W136D1	Screws	2	25	W380D	Screws-Motor Mounting	4
14	639402	Velcro	6		*W380D	Screws-Motor Mounting	2
15	630820	Bracket, Wire Clamp (Inside)	1		** W380D	Screws-Motor Mounting	3
	W136D1	Screws for Bracket	2	26	634220	Housing, Vacuum	1
16	632321	Cover, Battery	1	27	Hardware for Shoulder Straps:		
17	W136D1	Screw	2		962057	Screw, 10-24x3/8 PHP	3
*18	*911154	Switch (AC/DC Models)	1		W401D	Washer	3
	221390	Blank Switch (AC & DC Models)	1		632001	Clip-Shoulder Strap	3
			28	639430	Velcro-dual lock	2	

## NOT SHOWN:

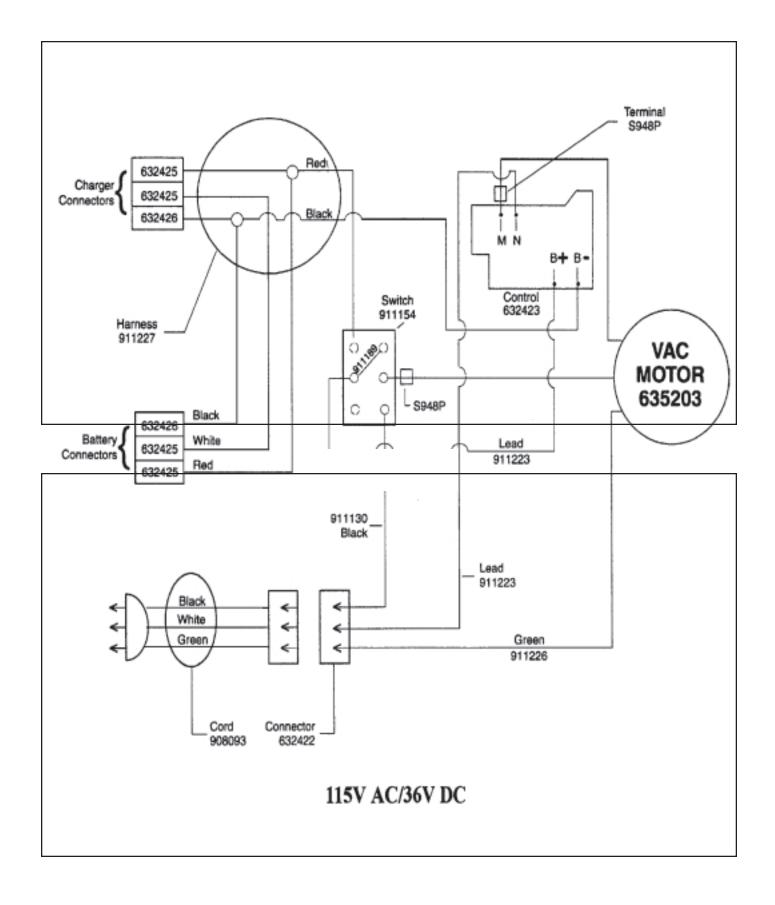
PART NO.	DESCRIPTION	QTY.		
908093	Cord Assembly	1		
638520	Shoulder Strap	1		
TOOLS:				
634020	Holder, Accessory Tools	1		
634120	Hose-Vacuum	1		
632420	Cuff, Swivel Hose	1		
609041	Tube-Bent Wand Top	1		
639802	Wand-Telescoping	1		
608813	Tool, Combo. Floor	1		
638802	Tool, 3" Dusting	1		
638803	Tool, Upholstery	1		
638804	Tool, Crevice	1		
***Charger Assembly:				
632409	Charger, 36VDC, 120VAC	1		
632410	Charger, 36VDC, 240VAC	1		
Plug/Connector Asm See Item 20 above				

\* AC/DC MODELS

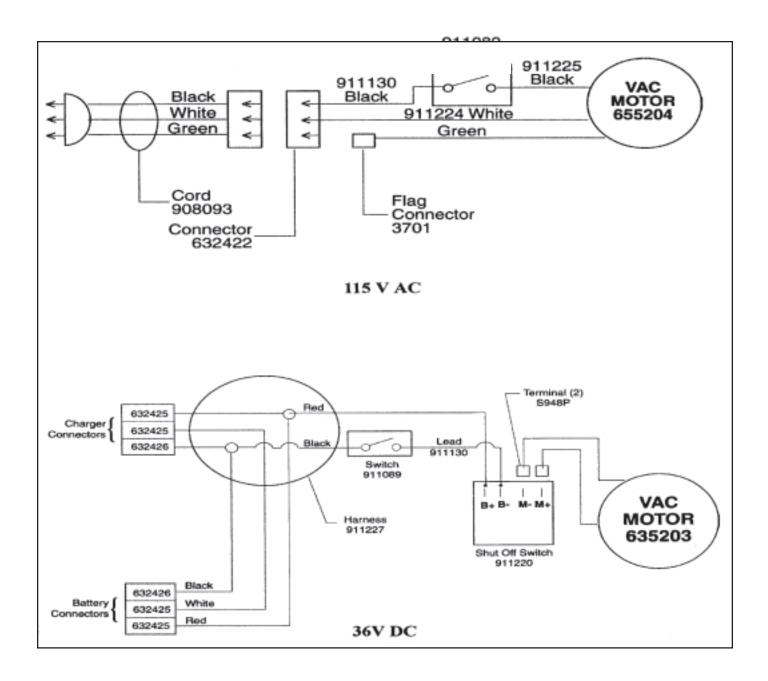
\*\* DC MODELS

\*\*\* BOTH AC/DC AND DC MODELS

## WIRING DIAGRAM



## WIRING DIAGRAM



## WARRANTY POLICY SOLO VACUUM

The **Pacific Steamex** Inc. Solo Vacuum has been manufactured, tested and inspected in accordance with specific engineering requirements and is WARRANTED to be free from defects in workmanship and materials as follows:

Five (5) years – Rotational molded components. One (1) year – All other components unless excluded below.

One (1) year – All other components unless excluded below.

This warranty extends to the original user/purchaser and only when used, operated and maintained in accordance with **Pacific Steamex** Inc. Operating and Maintenance instructions.

This warranty does not apply to the following wear parts and accessories of the machine including:

Part Number	Part Name
630620	Paper Bag Filters
630621	Cloth Filter Bags
633301	Inlet Filter
633320	Exhaust Filter
620904	Carbon Brush, DC & AC/DC Motor
650901	Carbon Brush, 115V AC Motor
908093	Cord Assembly
634120	Hose Assembly

Nor does it apply to damage or failure caused by improper use, abuse or neglect. Warranty credit or replacement of return parts including motors, pumps, etc., is subject to incoming inspection of those items.

To secure repair under this warranty, the following procedure should be taken:

- The inoperative machine or warranted parts must be delivered to the authorized dealer with shipping and delivery charges prepaid. If unable to locate the Dealer, you may contact **Pacific Steamex** Inc. at the address listed herein for the location of the nearest **Pacific Steamex** Inc. repair center or agent or for other instructions pertaining to your warranty difficulty.
- Upon compliance with the above warranty procedure, all warranted repairs would be completed at no additional charge or cost to the user.
- Only **Pacific Steamex** Inc. or its authorized dealers and agents may make no charge warranty repairs on this product. All others do so at their own risk.

This warranty limits **Pacific Steamex** Inc. liability to the repair of the product and/or warranted parts replacement and does not include incidental or consequential damages arising from the use of a **Pacific Steamex** Inc. machine whether defective or not.

#### **BATTERY WARRANTY**

In addition to the terms above, any original equipment Pacific Steamex Battery which becomes unserviceable under normal use within a period of ninety (90) days from date of sale to the original user will be repaired or replaced with one of equal specification at our option, F.O.B. any authorized Pacific Steamex Sales or Service Branch, with no charge to user, except transportation costs. After the expiration of the above ninety (90) day period, any battery that fails under normal use will be adjusted to the original user with a new battery of equal specification on a twelve (12) month pro rata asis from the date of purchase. Adjustment will be determined using the then current list price, plus transportation costs.

This warranty is in lieu of all other expressed or implied warranties and is extended to the original purchaser/user.

## PACIFIC STEAMEX, INC. 2259 S. SHERIDAN MUSKEGON, MICHIGAN 49442-6252 1-800-968-1332 FAX 1-800-863-9536