



Electronic Service Manuals

This electronic document is provided as a service to our customers. We do not create the contents of the information contained in this document. Should you have detailed questions pertaining to the information contained in this document, you may contact Michco, or the manufacturer which provided the original information in this electronic deliverable. Michco's only part in this electronic deliverable was the electronic assembly process. By providing this manual on line we are not guaranteeing parts availability.

You may contact Michco through the following methods:

Phone (517) 484-9312 or (800) 331-3339

2011 N. High St. -- Lansing, Michigan -- 48906

Fax: (517) 484-9836

Email: CustServe@Michco.com

Web site: www.Michco.Com

Parts Web site: www.FloorMachineParts.Com

Order Parts on Line at:

www.FloorMachineParts.Com

Directly to Parts & Service:

By Email: **Shop@Michco.com**

By Fax: (517) 702-2041

By Voice: Use numbers above.

Serving the Cleaning Industry Since 1922

Notice: All copyrighted material remains property of original owners, all trademarks are property of respective owners. Manuals are subject to Manufacturer's reproduction limitations. Originals or reproductions were provided by manufacturers through a request. We make no warranty as to the correctness of information provided in this document and you assume all risk. By placing these manuals on line we are not declaring our corporation to be an manufacturer authorized dealer or provider, please check our web site for authorized manufacturers we represent.

INTELLI-VAC 14

INTELLI-VAC 18

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 _____

IMPORTANT SAFETY INSTRUCTIONS

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 leave appliance when plugged in. Unplug from outlet when not in use and before servicing.
2. Do not use outdoors or on wet surfaces.
3. Do not allow to be used as a toy. Close attention is necessary when used by or near children.
4. Use only as described in this manual. Use only manufacturer's attachments.
5. 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.
6. 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.
7. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord
8. Do not handle plug or appliance with wet hands.
9. 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.
10. Keep hair, loose clothing, fingers and all parts of the body away from openings and moving parts.
11. Turn off all controls before unplugging.
12. Use extra care when cleaning on stairs.
13. Do not use to pick up flammable or combustible liquids such as gasoline or use in areas where they may be present.
14. Connect to a properly grounded outlet only.
15. Do not pick up anything that is burning or smoking, such as cigarettes, matches or hot ashes.
16. 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.

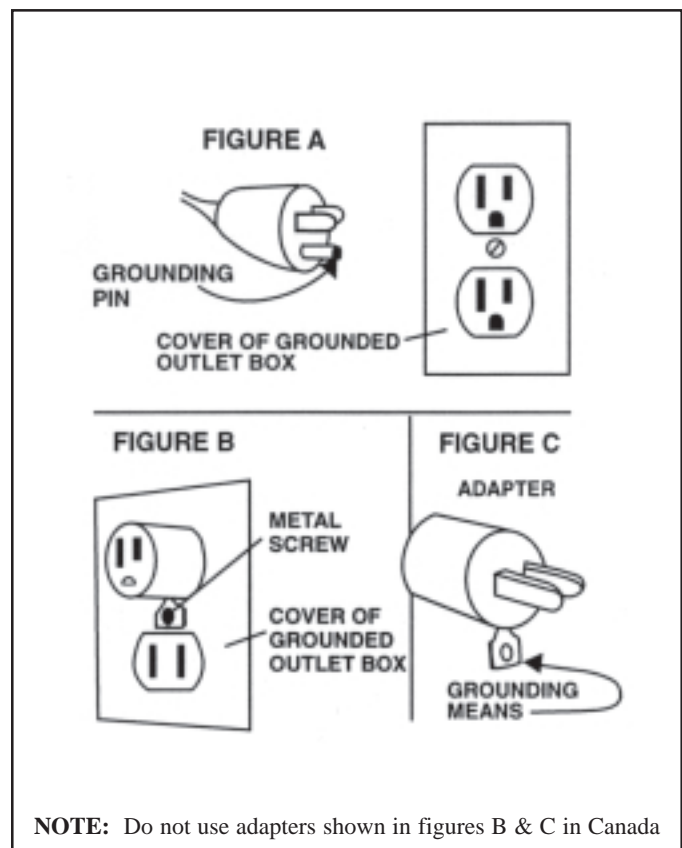
This machine is for use on a nominal 120-volt circuit, and has a grounded plug that looks like the plug illustrated in figure A. A temporary adapter that looks like the adapter illustrated in figures B and C may be used to connect this plug to a 2-pole receptacle as shown in figure B if a properly grounded 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 three-prong 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.



OPERATING PROCEDURES

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 ENVIRONMENT!

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

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

The model shown in this manual is intended for commercial use and for vacuuming dry material only.

ASSEMBLY

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

1. Place the power brush head on a flat surface and latch the swivel neck into the upright and locked position.
2. Turn the lever located on the tank assembly to the left. Insert the tank assembly over the projection ears on the lower unit while keeping the tank in a vertical position. After pushing the tank assembly completely down, turn the lever to the right.
3. Attach the flexible hose to the vacuum tank. The long rigid portion of the flexible hose should be inserted into the lower portion of the vacuum.

OPERATION AS AN UPRIGHT VACUUM

1. **Properly install the filter bag in the vacuum:** Open the vacuum housing door by depressing the latch on the back of the tank assembly and allowing the door to swing open. Place the bag into the opening with the notched portion next to the handle tube.
2. **Plug the machine's power cable into a properly grounded outlet** (see Safety Instructions).
3. **Adjust the brush height** to suit the thickness of the carpet. The adjustment ranges from positions 1 through 4: Position 1 for very low pile carpet and Position 4 for very high pile carpet. Adjust the knob to the highest number position that results in the green light being on and the red light off (reference the "Electronic Power Brush Monitor" section).
4. **Depress the foot pedal to lower the handle to the operating position.**
5. **Turn ON the switch**-the vacuum and brush motors will start. Begin your DRY pick up vacuuming.

OPERATION with ACCESSORIES

1. Properly install the filter bag in the vacuum.
2. Plug the machine's power cable into a properly grounded outlet.
3. Remove the rigid portion of the flexible hose from its retaining hole - first raise it slightly, then pull it toward you. The brush motor will not run when the hose is removed.
4. Attach the crevice or dusting tool to the wand, turn the vacuum ON and begin.
5. Upon completion, reinsert the rigid portion of the hose into its retaining hole.

MAINTENANCE

ALWAYS turn the machine power switch OFF and unplug the machine before performing any service. Severe personal injury could result if electrical power is not disconnected.

AFTER EACH USE:

1. **Inspect the vacuum filter bag.** If the bag is full or damaged install a new one.
2. **Check the cord and plug** for nicks, cuts or damage. Report these to your supervisor for correction. Wrap the electrical cord on the hook provided.
3. **Store the vacuum in a clean dry area.**

FULL BAG INDICATOR

Your machine is equipped with a device that senses when airflow inside the vacuum chamber is restricted. The red light located next to the on/off switch will flash when this condition exists. Restricted airflow can be caused by the following conditions:

- A. **If vacuum filter bag is full; remove and install a new bag.**
- B. **If the bag is not full, there is an obstruction in the system.** Remove the vacuum hose and hold it up to the light; clean out any debris. Next, check the inlet to the power brush housing and clear it of any debris.

ELECTRONIC POWER BRUSH MONITOR

The machine is equipped with a control system that alerts the operator via indicator lights if a problem occurs within the power brush housing. The lighting conditions and what they mean are:

- A. **Green Light Illuminated & Red Light Off** - The brush assembly is working properly.
- B. **Both Red & Green Lights Illuminated** - Lower the brush, the drive belt may be broken, or change the brush strip.
- C. **Red Light Illuminated & Green Light Off** - The brush roller is obstructed and cannot rotate. Turn the power switch off and unplug the machine. Remove any string, debris or other obstruction so that the brush turns freely.

VACUUM INLET FILTER

This machine has a vacuum inlet filter that will require periodic cleaning or replacement. The filter is located within the vacuum housing just above the vacuum motor.

To clean: Simply snap the filter retainer out of the housing, remove the filter and shake or vacuum it. If the filter is worn or uncleanable, replace.

HEPA FILTER (OPTIONAL)

Hepa Models include a hepa filter (Item 38) that will also require periodic cleaning or replacement.

To clean: Remove the cover (Item 41) to access the hepa filter, remove the filter and shake or vacuum it. If the filter is worn or uncleanable, replace.

BRUSH STRIP REPLACEMENT

This machine has a removable brush strip. Replace it if it becomes worn to the point where it no longer contacts the carpet.

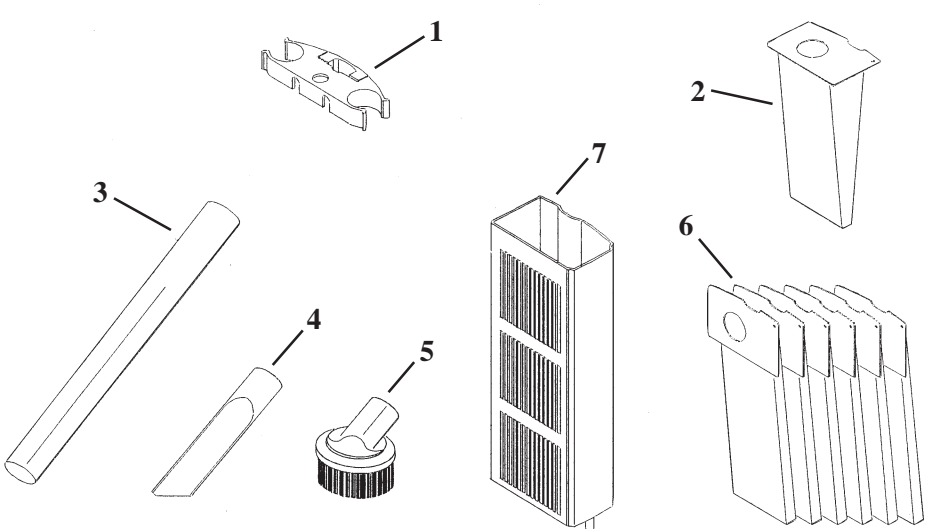
To replace: First remove the three (3) phillips screws that hold the access plate on the bottom of the brush housing. Once the brush roller is exposed, remove the R.H. Support. The brush strip can now slide off - remove and replace with a new one. Be sure the strip is pushed all the way in. Reassemble.

VACUUM MOTOR MAINTENANCE

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 vacuum motor.

The replacement of belts and other repairs to the machine should be performed by a Factory Authorized Service Technician.

ACCESSORIES

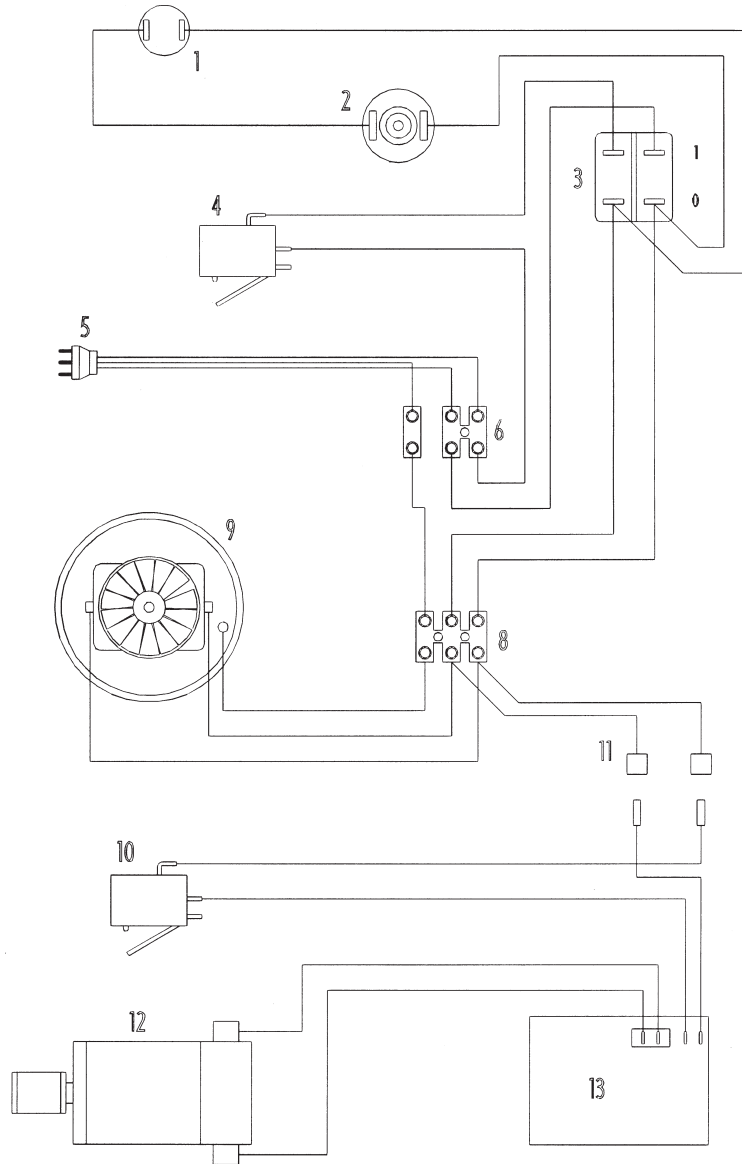


The diagram shows seven accessories: 1. A small metal clip with a hole. 2. A rectangular cloth filter bag. 3. A long, thin cylindrical extension tube. 4. A small crevice tool with a pointed end. 5. A small cylindrical dusting tool with a brush-like top. 6. A pack of ten paper bag filters, each with a hole at the top. 7. A rectangular filter bag cage with a mesh front and a handle at the bottom.

ITEM	PART NO.	DESCRIPTION
1	642101	Tool Mounting Clip
2	640602	Cloth Filter Bag
3	649001	Extension Tube
4	648801	Crevice Tool
5	648802	Dusting Tool
6	640601	Paper Bag Filter, 10 Pack
7	645108	Filter Bag Cage

NOTES

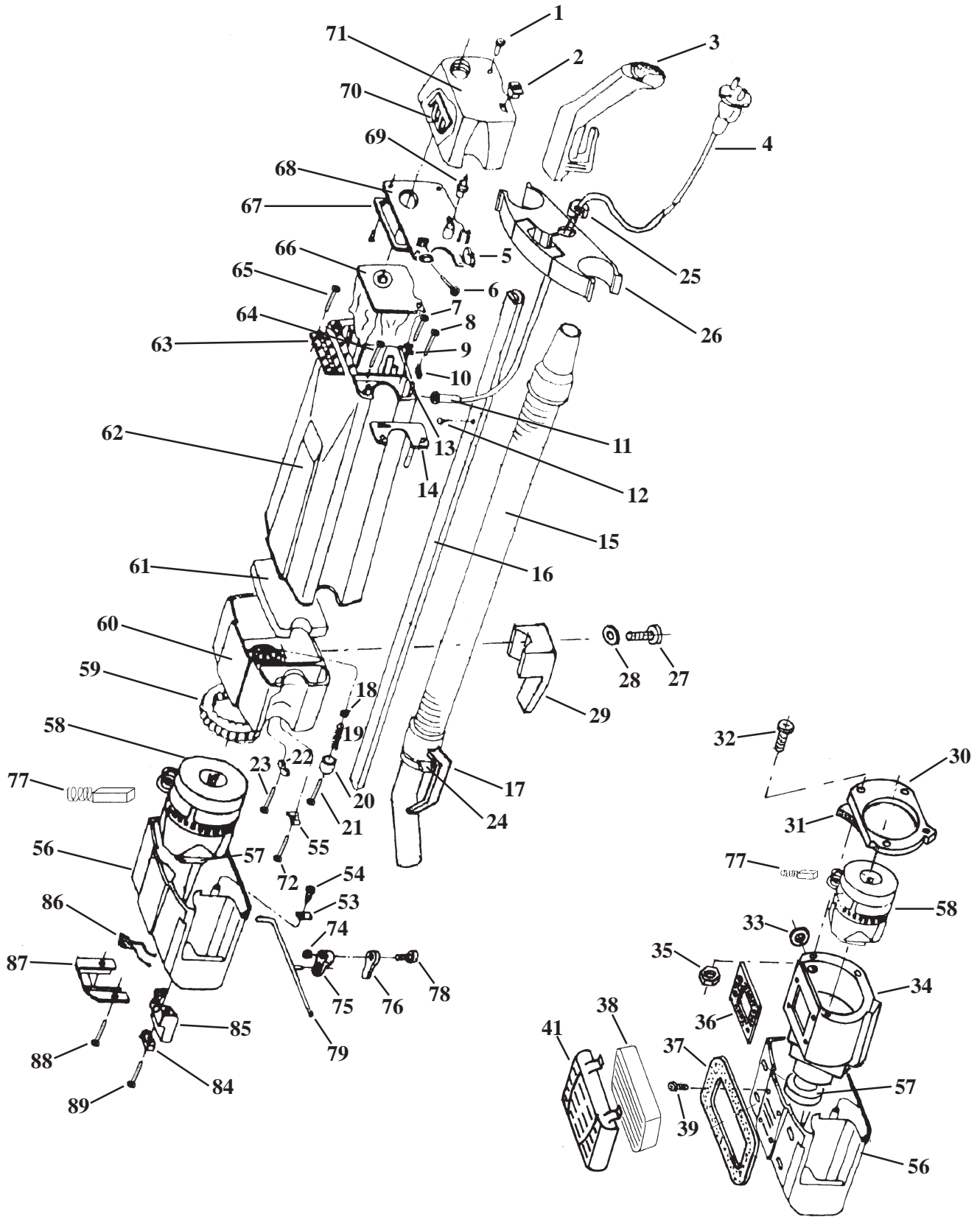
WIRING DIAGRAM



ITEM	PART NO.	DESCRIPTION	QTY.
1	911192	Red Pilot Light	1
2	645106	Depression Lever	1
3	911193	Switch	1
4	911194	Micro Switch	1
5	908080	Cord Assembly	1
6	641301	Terminal Block	1
8	641301	Terminal Block	1
9	625201	Vacuum Motor, 115V	1
	645206	Vacuum Motor, 230V	1

ITEM	PART NO.	DESCRIPTION	QTY.
10	911195	Micro Switch	1
11	642402	Male Connector	1
12	645201	Brush Motor 115V, 14"	1
	645202	Brush Motor 115V, 18"	1
	645205	Brush Motor 230V, 14"	1
13	641302	Board, 115V - 14"	1
	641303	Board, 115V - 18"	1
	645205	Board, 230V - 14"	1

INTELLI-VAC DRAWING 1



HEPA MODELS

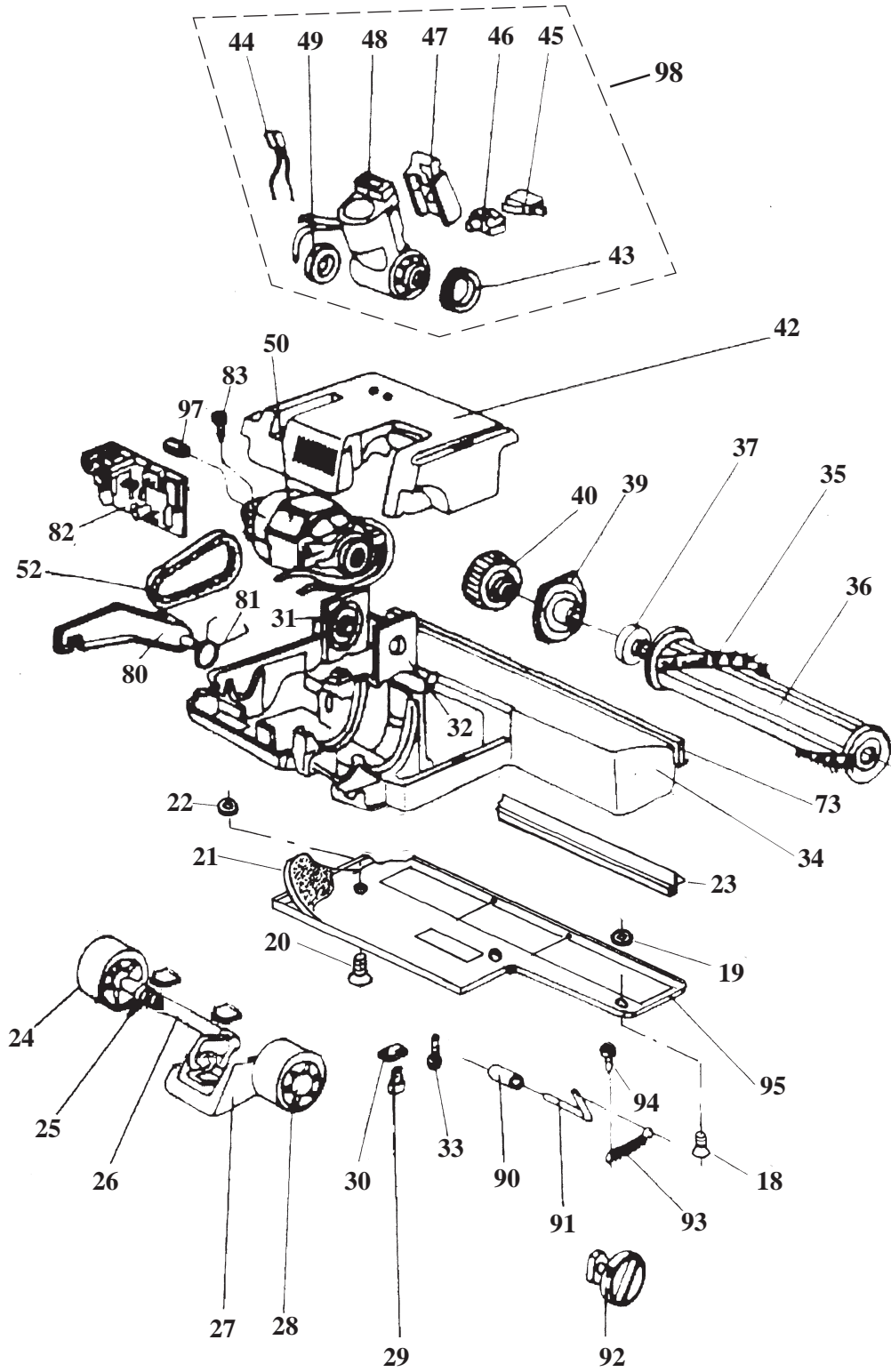
PARTS LIST DRAWING 1

ITEM	PART NO.	DESCRIPTION	QTY.
1	911192	Red Pilot Light 115V	1
2	911193	Switch	1
3	643901	Handle	1
4	908080	Cord Asm	1
5	911194	Micro Switch	1
6	964136	Screw	2
7	964136	Screw	1
8	964136	Screw	2
9	641301	Terminal Block	1
10	642001	Cable Clamp	2
11	647501	Strain Relief, Cable	1
12	964137	Screw	2
13	648401	Rod	1
14	642301	Cover, Elec. Connections	1
15	644101	Flexible Hose w/Couplings	1
16	648501	Handle Tube	1
17	649801	Wand with Clip	1
18	649401	Safety Valve	1
19	648301	Spring, Safety Valve	1
20	642302	Valve Cover	1
21	964138	Screw	1
22	642001	Clip	2
23	964136	Screw	2
24	627201	Retainer, Clip Hose	1
25	648506	Strain Relief/Bushing	1
26	642101	Tool Mounting Clip	1
27	964146	Screw	1
28	980635	Washer	1
29	644502	Cable Hook	1
*30	641501	Cap	1
*31	643405	Gasket	1
*32	964147	Screw	5
*33	640909	Bushing	1
*34	641502	Cap	1
*35	920628	Nut	5
*36	643406	Gasket	1
*37	643407	Gasket	1

ITEM	PART NO.	DESCRIPTION	QTY.
*38	643304	Filter-Hepa	1
*39	964148	Screw	4
*41	642310	Cover, Hepa Filter	1
53	647202	Retainer-Wheel Axle	2
54	964138	Screw	2
55	641301	Terminal Block	1
56	648505	Support, Motor	1
57	643401	Gasket	1
58	625201	Vac Motor 115V	1
	645206	Vac Motor 230V	1
59	643403	Gasket-Vac Motor	1
60	642306	Cover-Vac Motor	1
61	643301	Filter-Secondary	1
62	644203	Housing	1
63	644501	Hinge	1
64	964140	Screw	1
65	964140	Screw	4
66	640601	Paper Bag Filters-10 Pack	1
	640602	Cloth Filter Bag	1
67	643404	Gasket-Bag Cover	1
68	646201	Plate	1
69	645106	Depression Lever	1
70	648303	Spring	1
71	642307	Cover-Vac Tank	1
72	964136	Screw	1
74	920626	Self-Locking Nut	1
75	645102	Lever	1
76	645103	Lever-Tank Release	1
77	640903	Carbon Brush	2
78	964141	Screw	1
79	645104	Lever	1
84	643601	Guard-Connection	1
85	642308	Cover-Connection	1
86	642403	Female Connector	1
87	642309	Cover-Lower Tank	1
88	964136	Screw	2
89	964136	Screw	1

* HEPA MODELS ONLY

INTELLI-VAC DRAWING 2



PARTS LIST DRAWING 2

ITEM	PART NO.	DESCRIPTION	QTY.
18	964149	Screw	1
19	980637	Washer	1
20	964150	Screw	2
21	643409	Gasket	1
22	980636	Washer	2
23	643408	Gasket	1
24	649701	Wheel	2
25	648302	Torsion Spring	1
26	647701	Wheels Axle	1
27	647001	Foot Apedal	1
28	647201	End Clip	2
29	964138	Screw	3
30	647202	Supports - Axle	3
31	648502	Knob, Support Wiring	1
32	648502	Knob, Support Wiring	1
33	964139	Screw	4
34	644201	Housing - Brush 14"	1
	644202	Housing - Brush 18"	1
35	640901	Brush Strip - 14"	1
	640902	Brush Strip - 18"	1
36	642401	Brush Core - 14"	1
	642404	Brush Core - 18"	1
37	902034	Bearing	2
39	648503	Brush Support	2
40	646901	Brush Pulley	1
42	642303	Brush Head Cover	1

ITEM	PART NO.	DESCRIPTION	QTY.
43	641101	Bushing	
44	642402	Male Connector	1
45	911195	Micro Switch	1
46	648504	Stop Brush	1
47	642305	Swivel Neck Cover	1
48	644901	Swivel Neck	1
49	641101	Bushing	
50	645201	Brush Motor 115V - 14"	1
	645202	Brush Motor 115V - 18"	1
52	903017	Belt	1
73	641201	Bumper - 14"	1
	641202	Bumper - 18"	1
80	645105	Lever - Pivot Arm	1
81	648304	Spring	1
82	641302	Electrical Card 115V - 14"	1
	641303	Electrical Card 115V - 18"	1
83	964136	Screw	2
90	647502	Roller - Brush Adjustable	3
91	640502	Wheel Axle	1
92	645001	Knob	1
93	648305	Spring	1
94	964136	Screw	1
95	647901	Shoe - Pick Up, 14"	1
	647902	Shoe - Pick Up, 18"	1
97	646902	Pulley	1
98	644902	Swivel Neck Assembly	

WARRANTY POLICY
PACIFIC STEAMEX INC. LIMITED WARRANTY

The **Pacific Steamex Inc.** Intelli-Vac 14 and Intelli-Vac 18 have 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:

Three (3) years - Vacuum Motor

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:

<u>Part Number</u>	<u>Part Name</u>
908080	Cord Assembly
644101	Flexible Hose with Couplings
640901	Brush Strip-14"
640902	Brush Strip-18"
903017	Belt
643301	Filter
643304	Hepa Filter
640601	Paper Bag Filters
640602	Cloth Filter Bags
641201	Bumper-14"
641202	Bumper-18"
640903	Carbon Brush, Vac Motor

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.

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
800-968-1332

FAX 1-800-863-9536