



Electronic Service Manuals

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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:

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Directly to Parts & Service:

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

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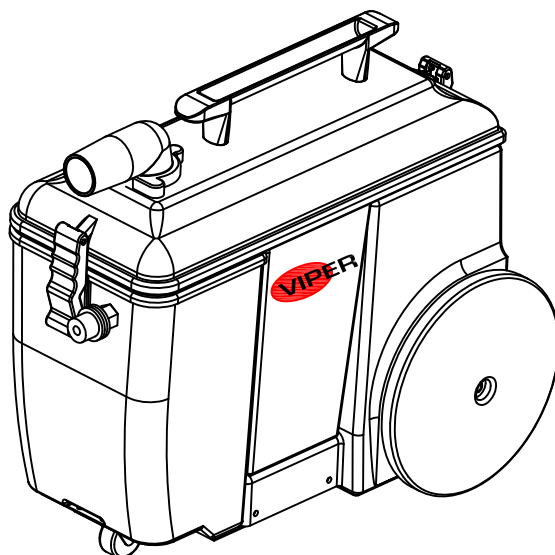
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SPOTTER

OWNERS MANUAL

IMPORTANT: READ OWNERS MANUAL CAREFULLY

Please fill out & return your warranty card!



MODEL# WOLF130

SERIAL# _____

Nilfisk Inc.
9435 Winnetka Avenue North
Minneapolis, MN 55445
www.usviper.com

**VIPER ...exceptional
value**

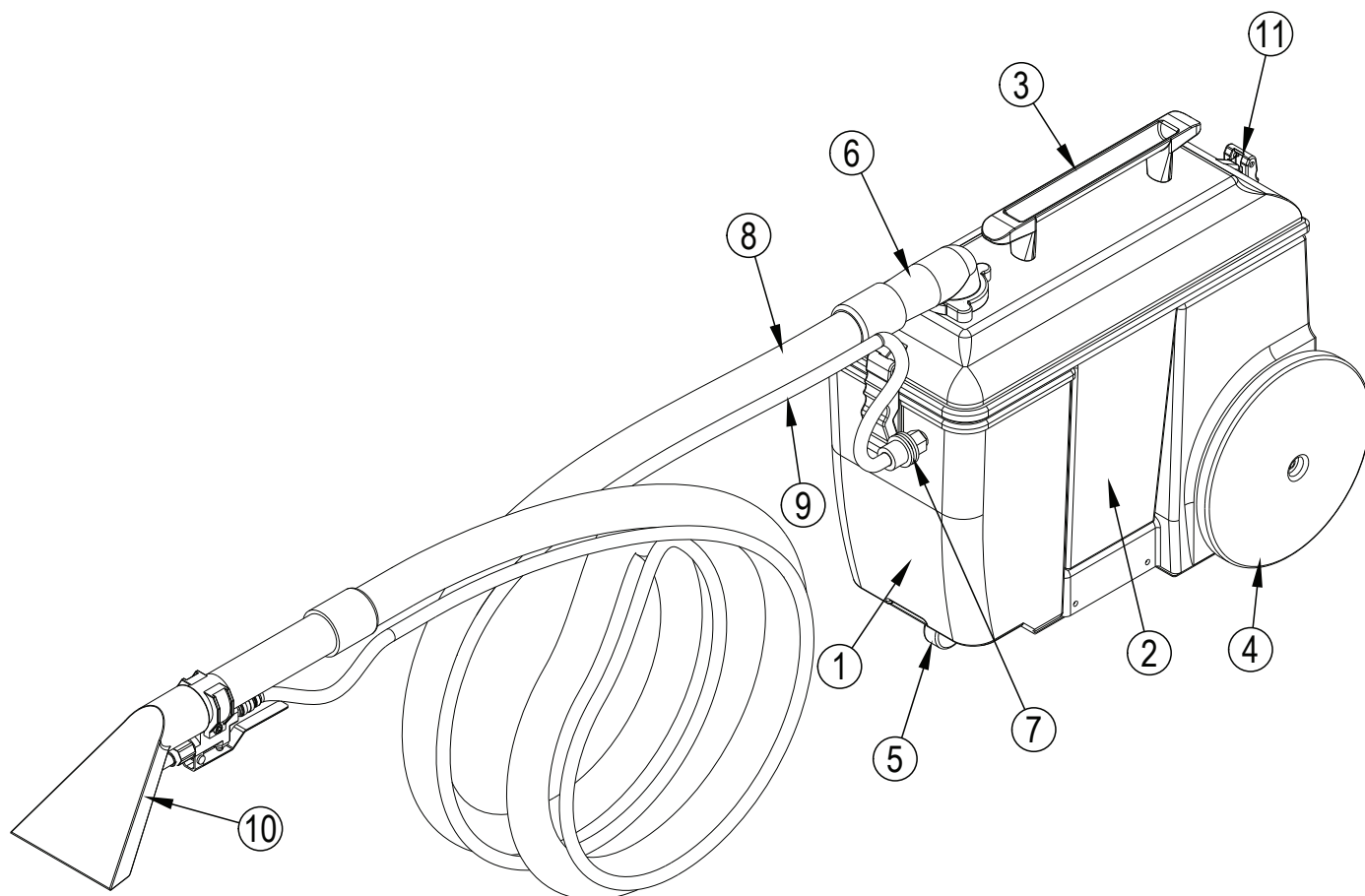
REV 08(04 Dec.2014)
VV68189



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MACHINE COMPONENTS



- 1) Solution Tank
- 2) Recovery Tank
- 3) Handle
- 4) Transport Wheels
- 5) Front Caster
- 6) Vacuum Intake

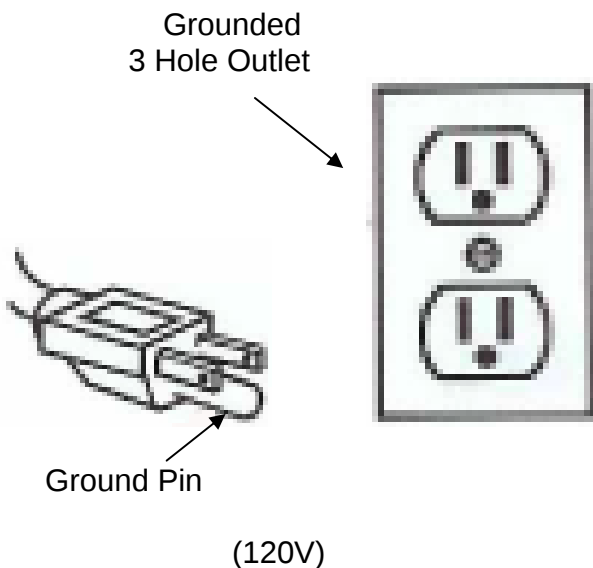
- 7) Solution Coupler
- 8) Vacuum Hose
- 9) Solution Hose
- 10) Hand Tool
- 11) Clamp

SAFETY PRECAUTIONS

GROUNDING INSTRUCTIONS

General – This carpet spotting machine shall be grounded while in use to protect the operator from electric shock. The machine is provided with a three-contact grounding type attachment plug to fit the proper grounding type receptacle. The green (or green & yellow) conductor in the cord is the grounding wire. Never connect this wire to other than the grounding pin of the attachment plug.

This machine is for use on a nominal 120-volt circuit and has a grounding plug that resembles the plug illustrated in figure below. Make sure that the machine is connected to an outlet having the same configuration as the plug. No adapter should be used with this machine.



This machine is intended for commercial use. It is constructed for use in an indoor environment and is not intended for any other use. Use only recommended accessories.

All operators shall read, understand and exercise the following safety precautions:

- 1) Do not operate machine:
 - Unless trained and authorized
 - Unless you have read and understand operators manual
 - In flammable or explosive areas.
 - With damaged or modified cord or plug.
 - If not in proper operating condition.
 - In outdoor areas.
 - In standing water.
 - Without filters in place.
 - With the use of unapproved extension cords.
- 2) Before operating machine:
 - Make sure all safety devices are in place and operate properly.
- 3) When using machine:
 - Mix and handle any chemicals according to manufacturer's recommendations
 - Do not run machine over cord.
 - Do not pull machine by cord or plug.
 - Do not pull cord around sharp edges or corners.
 - Do not unplug by pulling on the cord.
 - Do not stretch cord.
 - Do not handle plug with wet hands.
 - Keep cord away from heated surfaces.
 - Do not pick up flammable materials or reactive metals.
 - Report machine damage or faulty operation immediately.
- 4) Before leaving or servicing machine:
 - Turn off machine.
 - Unplug power cord from outlet.
- 5) When servicing machine:
 - Unplug cord from outlet.
 - Use manufacturer supplied or approved replacement parts.
 - Avoid moving parts. Don't wear loose clothing.

CARPET SPOTTER - SETUP

!!! Read operators manual thoroughly prior to operating or servicing this machine!!!

Carefully check the shipping carton for signs of damage. Report any carton damage to carrier immediately.

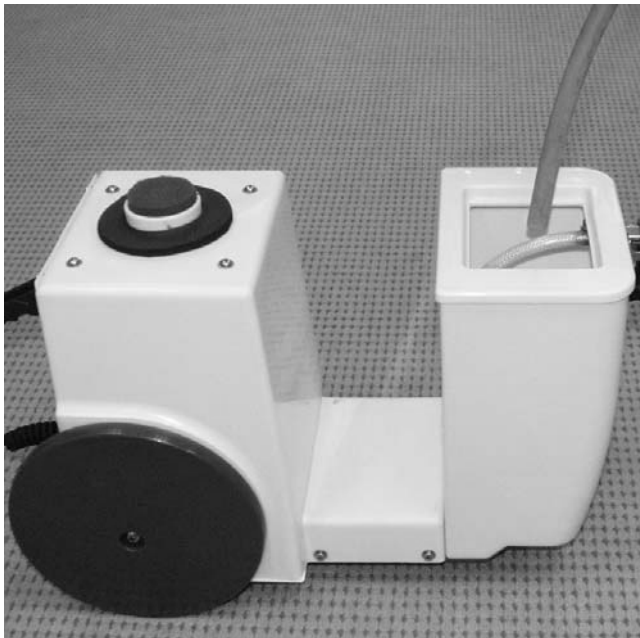
Check carton contents to ensure carton is complete. Contact your distributor if anything is missing.

Contents:

- Carpet Spotter
- Vacuum & Solution hoses
- Hand tool

!!! Read operators manual thoroughly prior to operating or servicing this machine!!!

- 1) Using a hose or bucket, fill tank with a maximum of 1 gallon of water.



!!! Do not use flammable liquids or operate machine in or near flammable liquids or vapors!!!

- 2) Connect the solution hose and vacuum hose to the machine.
- 3) Connect the power cable to a grounded wall outlet. (see grounding instructions)

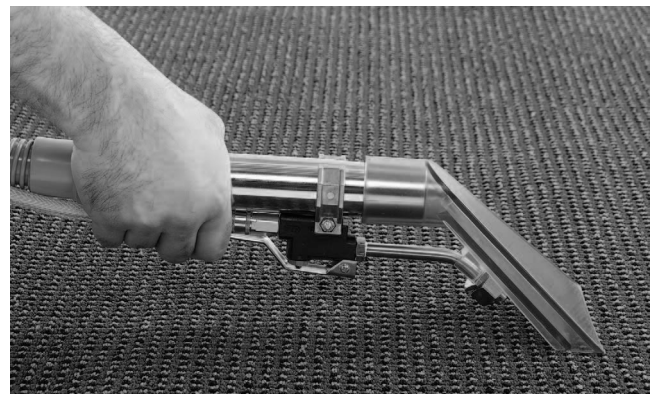
MACHINE OPERATION

PRIOR TO REMOVING SPOTS

- 1) Inspect power cable for damage. Replace cable if damage is found.
- 2) Vacuum carpet to remove debris prior to extracting the spot.

SPOT REMOVAL

- 1) Turn on vacuum / pump switch.
NOTE: Solution will only spray when the spray handle(on the hand tool) is pulled.
- 2) To start cleaning, pull the spray handle (hand tool) and begin to pull the tool backwards over the spot.



- 3) Release spray handle when you have reached the end of the spot. Continue to pull hand tool back for another 4 inches to pick up excess solution.
- 4) Continue until spot is removed.

OPERATING HINTS

- 1) Use cool water only. Hot water may set a stain.
- 2) Continually check for foam buildup in recovery tank. Use a distributor recommended foam control solution.

NOTE: Excessive foam buildup will cause damage to the vacuum motor.

- 3) Repeat extraction path on heavily soiled areas.
- 4) When recovery of the dirty solution ends, or the solution tank is empty, you must drain the recovery tank. (see TANK DRAINING)

DRAINING TANKS

DRAINING SOLUTION TANK

- 1) Turn machine off and unplug from power source.
- 2) Disconnect solution and vacuum hoses from front of machine.
- 3) Unhook clamps on recovery tank and remove recovery tank from machine.
- 4) Carry solution tank to an approved drain, and dump out contents.

DRAINING RECOVERY TANK

- 1) Turn off machine and unplug from power source.
- 2) Unhook clamps on recovery tank and remove recovery tank from machine.
- 3) Carry recovery tank to an approved drain and dump out contents.



- 4) Rinse recovery tank with clean water.
- 5) Reattach recovery tank to the solution tank.

MACHINE MAINTENANCE

To keep the machine performing well for many years, please follow the following maintenance procedures.

!!! Always confirm that the machine is unplugged prior to performing any maintenance or repairs!!!

DAILY MAINTENANCE

- 1) When cleaning operation is complete for the day, drain and rinse the recovery tank thoroughly with clean water.
- 2) Remove remaining solution from solution tank.
- 3) Remove vacuum filter and rinse with clean water.
- 4) Replace filter when dry.



- 5) Remove and inspect spray jet. If necessary, clean jet.

NOTE: Do not clean jet with a pointed object, as it will damage the jets.

- 6) Check brush strip & remove any debris or carpet fibers.
- 7) Check pick up head on hand tool and remove any debris or carpet fibers.
- 8) Clean machine with a nonabrasive cleaner.
- 9) Inspect power cable for any damage. Replace if necessary.

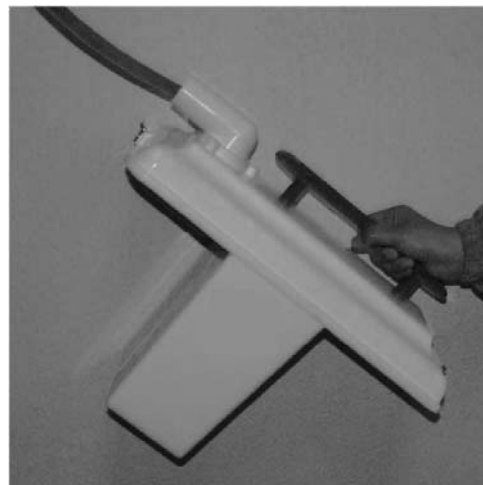
MONTHLY MAINTENANCE

- 1) Flush pump & plumbing with an acetic acid solution to dissolve any chemical buildup.
Mixing Instructions:
 - a) Premix 8 oz. of an acetic acid solution with 1 gallon of water and pour into solution tank.
 - b) Turn vacuum / pump switch on
 - c) Put floor tool head over floor drain and pull solution trigger for one (1) minute.
 - d) Turn machine off and allow remaining solution to sit in machine overnight.
 - e) The following day, spray out remaining solution and flush system again with 1 gallon of clean water.
- 2) Inspect machine for water leaks.
- 3) Check machine for loose or missing nuts, screw and bolts and replace as necessary.

MACHINE STORAGE

- 1) Prior to storing the machine, ensure the solution and recovery tanks are clean and empty of any solution.
- 2) Store machine in upright position in a dry area, with the vacuum hose removed for air circulation.

NOTE: If you are storing the machine in an area which can freeze, be sure both tanks and the solution plumbing are empty of all water and dry!



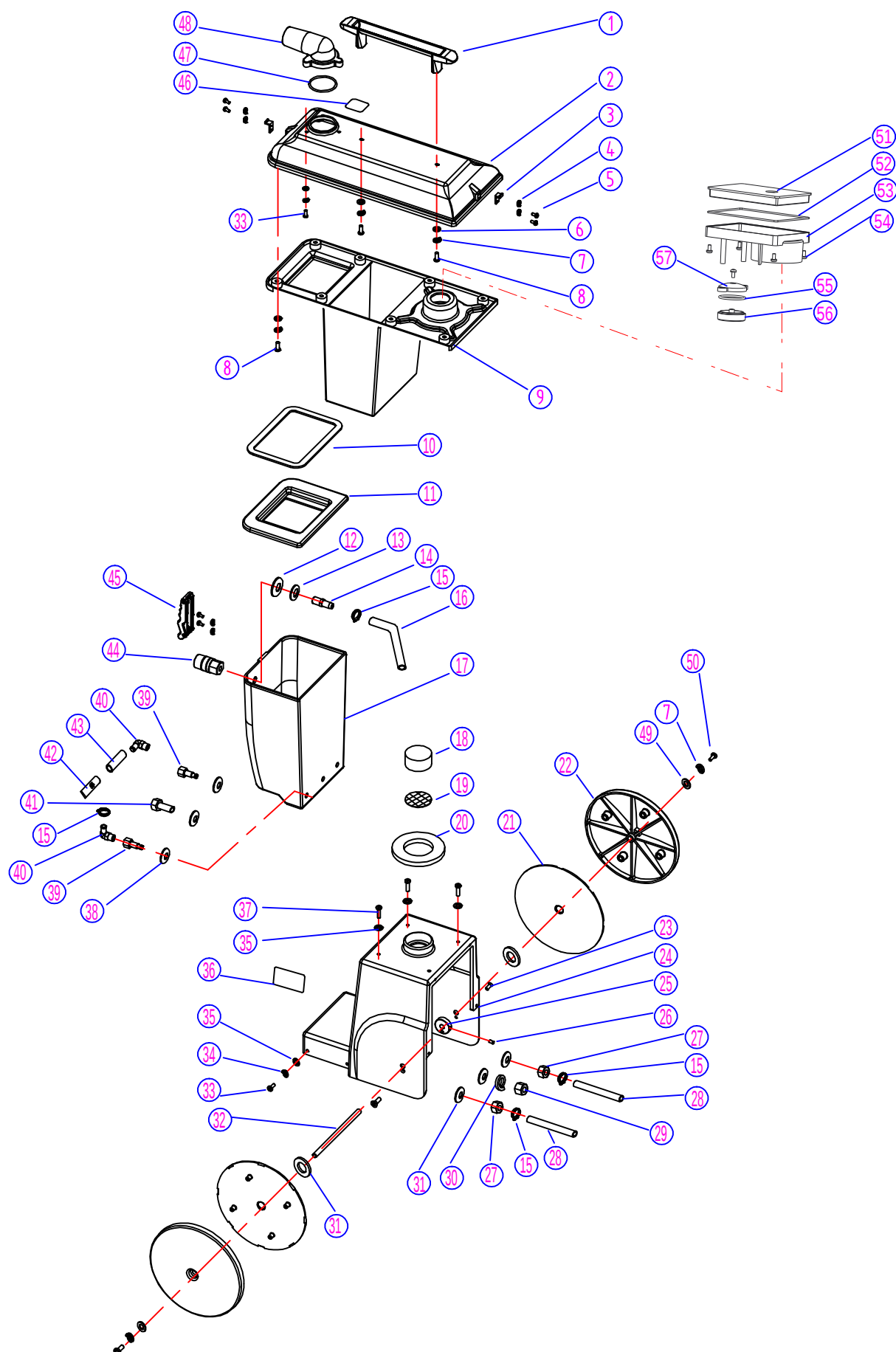
BASIC TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
Machine doesn't work	Not plugged in to power source	Plug into a grounded outlet
	Faulty power cable	Contact Distributor
	Faulty extension power cable	Replace with new extension power cable
	Building circuit breaker tripped	Reset circuit breaker
Solution pump not working	Vacuum / pump switch not on	Turn on switch
	Vacuum / pump switch faulty	Contact Distributor
	Faulty solenoid	Contact Distributor
	Faulty solution pump	Contact Distributor
	Pump overheated	Determine cause and allow 30 minutes for pump to cool
	Loose or broken wiring	Contact Distributor
Vacuum motor not working	Vacuum / pump switch not on	Turn on switch
	Vacuum / pump switch faulty	Contact Distributor
	Vacuum motor thermal overload tripped	Check for obstruction and allow 30 minutes to cool
	Faulty vacuum motor	Contact Distributor
	Worn carbon brushes	Contact Distributor
	Loose or broken wiring	Contact Distributor
Poor pick up	Air leaking around recovery gasket	Ensure recovery lid is firmly tightened
	Vacuum gasket damaged or worn	Replace gasket
	Loose vacuum hose connections	Ensure vacuum hose connections are tight
	Defective vacuum hose	Replace vacuum hose
	Loose vacuum hose cuffs	Ensure cuffs are secure to the housing
	Vacuum hose clogged	Remove obstruction from vacuum hose
Uneven or no solution spray	Solution tank is empty or low	Fill solution tank
	Vacuum / pump switch not on	Turn on switch
	Dirty or plugged spray tips	Clean or replace spray tips
	Improper spray tip size or spray angle	Contact Distributor
	Worn spray tips	Contact Distributor
	Faulty solution pump	Contact Distributor
	Clogged solution tank filter	Clean or replace filter
	Pinched or kinked solution hose	Check for obstructions and kinks and reroute or replace if needed

Technical Specifications:

Gallon Capacity	1 Gal (3.79Ltr)
Cleaning Path	4" (10.2cm)
Pump	30PSI
Vac Motor	2-Stage
Voltage	120V
Waterlift	85" (215.9cm)
Cable	25ft.
Wheels	8" (203.2mm)
Vacuum Hose	8.2ft.
Solution Hose	8.5ft.

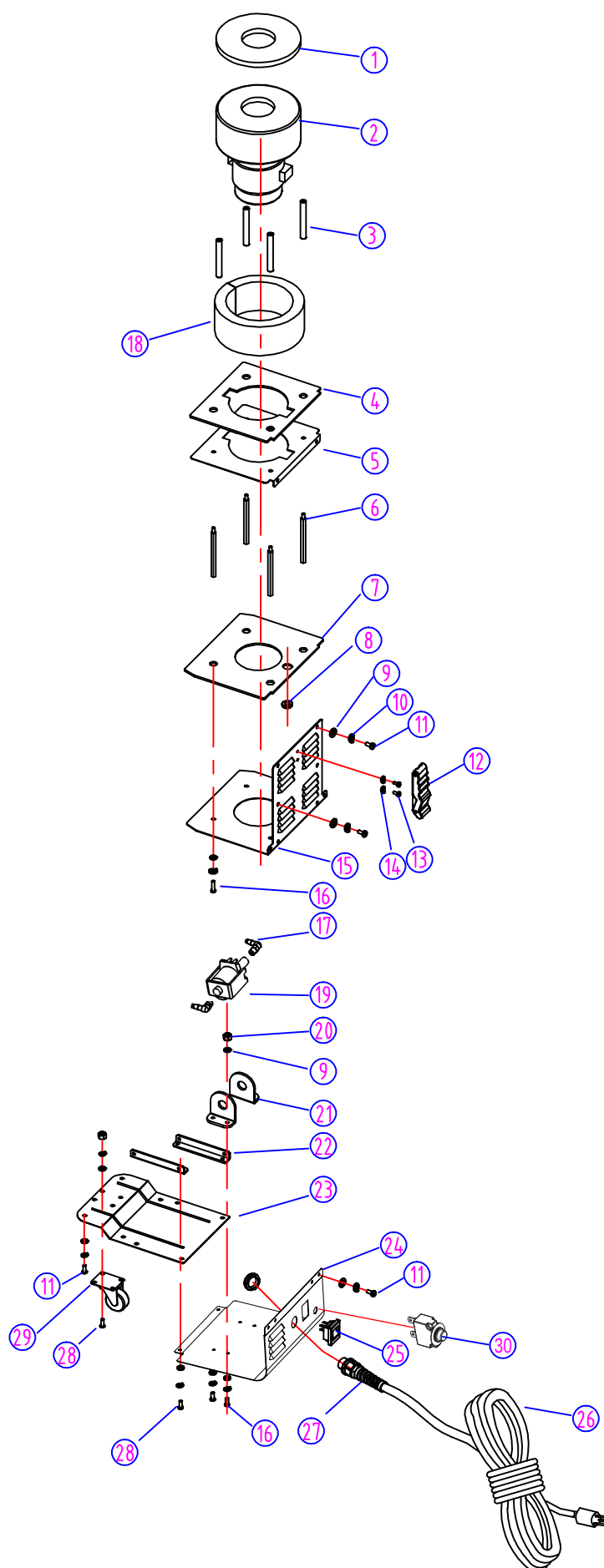
PARTS LIST



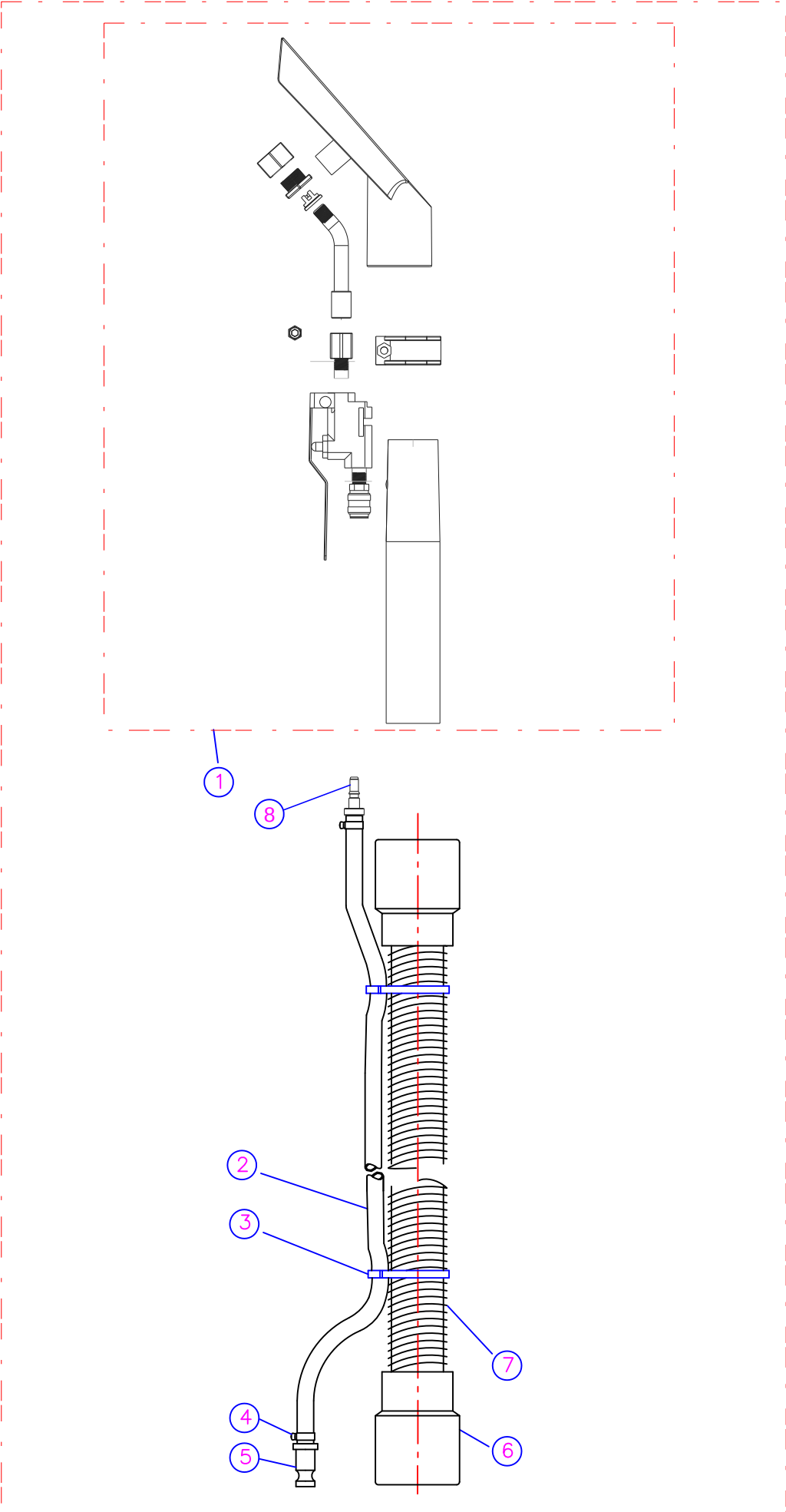
DIA NO.	PART NUMBER	DESCRIPTION	NO. REQ'D
1	VV68104	HANDLE / CORD WRAP	1
2	VV68201-2	COVER, RECOVERY TANK	1
3	VF83109-7	HOOK	2
4	VV20291	WASHER, LOCK, M4	6
5	VV13667	SCREW, PH, M4 X 8	6
6	VF13614	WASHER, PLAIN, M6	10
7	VV13607	WASHER, LOCK, M6	12
8	VF14200	SCREW, PH, M6 X 16	10
9	VV68201-1	RECOVERY TANK	1
10	VV68115	GASKET, RECOVERY TANK	1
11	VV68301-2	COVER, SOLUTION TANK	1
12	VV68130	WASHER, SEAL	1
13	VV20274A	WASHER, PLAIN, M14	1
14	VV68135	BARB, HOSE	1
15	VF46400	CLAMP	4
16	VV68141	HOSE	1
17	VV68301-1	SOLUTION TANK	1
18	VV68113	FILTER, VAC MOTOR	1
19	VV68114	SCREEN	1
20	VV68111	GASKET, SOLUTION TANK, 4"	1
21	VV68127	COVER	2
22	VV68105	WHEEL, 8"	2
23	VF14301	SCREW, M4 X 12	2
24	VV68101	HOUSING	1
25	VV68119	COLLAR	2
26	VF13525	SCREW, M6 X 8	2
27	VV13665	NUT, M10 X 1	2
28	VV68143	HOSE	2
29	VF14005	NUT, M10	1
30	VF13518	WASHER, LOCK, M10	1
31	VF13537	WASHER, PLAIN, M10	5
32	VV68118	AXLE	1
33	VV20501	SCREW, PH, M5 X 14	7
34	VV13601	WASHER, LOCK, M5	7
35	VV13662	WASHER, PLAIN, M5	7
36	VV68204	DECAL, SERIAL	1
37	VV13635	SCREW, PH, M5 X 20	4
38	VV68132	WASHER, SEAL	3
39	VV68128	HOSE BARB	2
40	RD60764	ELBOW, HOSE BARB	2
41	VF13634	BOLT, M10 x 30	1
42	RD10461	SCREEN	1
43	VV68142	HOSE	1
44	RD80208	COUPLER, QUICK CONNECT	1
45	VF83109	CATCH	1
46	VV68308	LABEL, DRAINING	1
47	VV68145	SEALER	1
48	VV68201-3	ELBOW, HOSE BARB	1
49	VF13533	WASHER, PLAIN, M6	2
50	VV60220S1	SCREW, M6 X 16	2

DIA NO.	PART NUMBER	DESCRIPTION	NO. REQ'D
51	VV68205	SUCTION DEVICE TOP	1
52	VV68209	O RING	1
53	VV68206	SUCTION DEVICE BOTTOM	1
54	VA50523	SCREW 4X8	5
55	VF90607	O RING	1
56	VV68208	FLOAT BOTTOM	1
57	VV68207	FLOAT TOP	1

PARTS LIST



DIA NO.	PART NUMBER	DESCRIPTION	NO. REQ'D
1	VV68112	GASKET, VAC MOTOR, 5.75"	1
2	ZD49000A	VACUUM MOTOR, 110V	1
3	VV68116	SPACER, VAC MOTOR	4
4	VV68110	GASKET, VAC MOTOR	1
5	VV68109	MOUNTING PLATE, VAC MOTOR	1
6	VV68117	SPACER, VAC PLATFORM	4
7	VV68120	GASKET, BAFFLE	1
8	YQ60504	RING	1
9	VV13662	WASHER, PLAIN, M5	32
10	VV13601	WASHER, LOCK, M5	28
11	VF14214	SCREW, PH, M5 X 8	12
12	VF83109	CATCH	1
13	VF13666	SCREW, PH, M4 X 6	2
14	VV20291	WASHER, LOCK, M4	2
15	VV68107	BAFFLE & REAR PANEL	1
16	VV20501	SCREW, PH, M5 X 14	16
17	RD60764	BARB, HOSE	2
18	VV68183	SPONGE	1
19	RD50264	PUMP, 110V	1
20	VV13633	NUT, M5	8
21	VV68126	BRACKET, PUMP MOUNTING	2
22	VV68108-2	CONNECTOR	2
23	VV68108-1	BOTTOM MOUNT PLATE	1
24	VV68106	MOUNTING PLATE, SWITCH ASSEMBLY	1
25	VA91346	SWITCH ASSEMBLY	1
26	VV30183	POWER CORD	1
27	VF99008B	CORD STRAIN RELIEF	1
28	VV20509	PH SCREW, M5X10	4
29	VV68123	CASTER, 1.5"	1
30	VF99012	PROTECTOR	1



DIA NO.	PART NUMBER	DESCRIPTION	NO. REQ'D
1	VA86860	HAND TOOL	1
2	VV68148	SOLUTION HOSE	1
3	RD20652	CABLE TIE	8
4	RD11177	CLAMP, HOSE	2
5	RD80784	COUPLER, MALE END	1
6	RD60388	HOSE END	2
7	VV68147	HOSE	1
8	VA80836	CONNECTOR	1
9	VV68153	HAND TOOL KIT	1

WIRING DIAGRAM

