



E88900-00



GENESYS™ 15

15" Floor
Cleaning Machine



Operator and Parts
Manual

TABLE OF CONTENTS

Receiving the Machine	3
Introduction	3
Technical Specifications	4
General Safety Regulations	5
Machine Preparation	6
Operation	7 - 8
Turning Off the Machine.....	9
Daily Maintenance.....	10 - 11
Troubleshooting	12
Adjustments and Replacement.....	13
Parts Diagrams	14 - 31
Electrical Wiring Diagram.....	32
Tool Kits	33
Tool Kit Diagrams.....	34 - 35
Warranty	36

RECEIVING THE MACHINE

Immediately check, when receiving the machine, that all the materials indicated on delivery documents have been received and also that the machine has not been damaged in transit. If it has been damaged, this damage must be immediately reported to the shipper and also to our customer service department. Only acting promptly in this manner will make it possible to receive missing material and to be compensated for damage.

INTRODUCTION

This is an automatic scrubber which, via the mechanical action of the rotating brush and chemical action of a water/detergent solution, can clean many types of hard surfaces. As it advances, it also collects the dirt removed and the detergent solution leaving the floor dry.

The machine must be used only for this purpose. Even the best machines will only work well if used correctly and kept in good working order. We therefore suggest you read this instruction booklet carefully and re-read it whenever difficulties arise while using the machine. Please contact our technical service department if you have any questions about the machine.

TECHNICAL DESCRIPTION	Measurement Unit	GeneSys 15™
Cleaning Width	Inches	15
Brush Diameter	Inches	3.5
Brush Rotation	RPM	800
Brush Motor Power	HP	0.5
Vacuum Motor Power	WATT	800
Vacuum Motor Suction	Inches of Water	77
Solution Tank Capacity	Gallons	3.00
Recovery Tank Capacity	Gallons	3.25
Work Capacity	Ft ² /Hr	10,000
Weight	Pounds	84

GENERAL SAFETY REGULATIONS

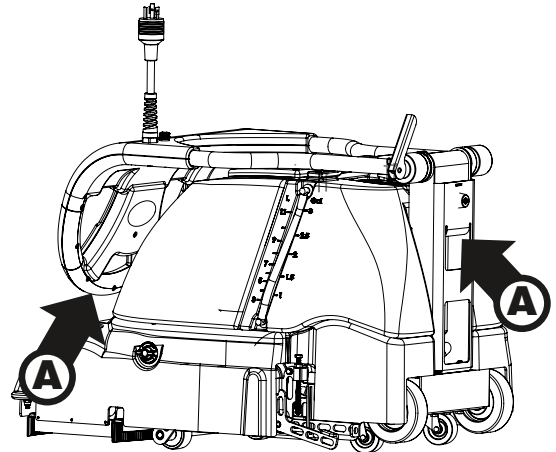
The regulations below must be carefully followed in order to avoid harm to the operator and damage to the machine.

- Read all labels on the machine carefully. Do not cover them for any reason and replace them immediately if they become damaged.
- The machine must be used exclusively by authorized and trained personnel.
- When operating the machine be careful of other people.
- The machine is not designed for cleaning carpets.
- The power cable outlet must be provided with a proper ground.
- Avoid damaging the power cable by crushing, bending, cutting or stressing it.
- Whenever the power cable is damaged, immediately contact a Betco service center.
- Do not mix different types of detergent as this may produce harmful gases.
- Machine storage temperature is between -10°F and 130°F, never store outside under humid conditions.
- Operating conditions: room temperature between 33°F and 100°F with relative humidity between 30% to 95%.
- Only use the machine in closed areas and do not expose it directly to rain.
- Never use the machine in an explosive environment.
- Do not use the machine as a means of transport.
- Never use acidic chemicals which could damage the machine.
- Avoid running the brushes with the machine stopped; this could damage the floor.
- Never vacuum up flammable liquids.
- Do not leave the machine unattended when it is plugged in.
- Do not allow the solution pump to run dry for more than 3 minutes.
- Never use the machine to gather dangerous powders.
- Use a powder fire extinguisher in case of fire. Do not use water.
- Do not hit against shelving or scaffolding.
- The operator must always be equipped with the appropriate personal protective equipment (gloves, shoes, helmet, glasses, etc.)
- The machine is designed to wash and dry floors simultaneously. Signal the presence of wet floors with suitable signs.
- If the machine does not work properly, perform routine maintenance. Otherwise, request the assistance of our technical service department.
- When replacing parts ask for ORIGINAL spare parts from your Authorized Dealer and/or Retailer.
- Always turn off the machine and disconnect the power supply whenever maintenance is performed.
- Never remove guards that require tools for removal.
- ***Never wash the machine with direct or pressurized jets of water or with corrosive substances.***
- Have your equipment service center check the machine once a year.
- To prevent the formation of scale in the solution tank, do not store the machine with detergent solution in the tanks.
- Before using the machine make sure that all doors and covers are positioned as shown in this operating and maintenance manual.
- When your machine is ready to be retired, it must be disposed of properly.
- Use only brushes furnished with the machine or those specified in the user's manual. Use of other brushes can compromise safety.

MACHINE PREPARATION

1. LIFTING THE MACHINE

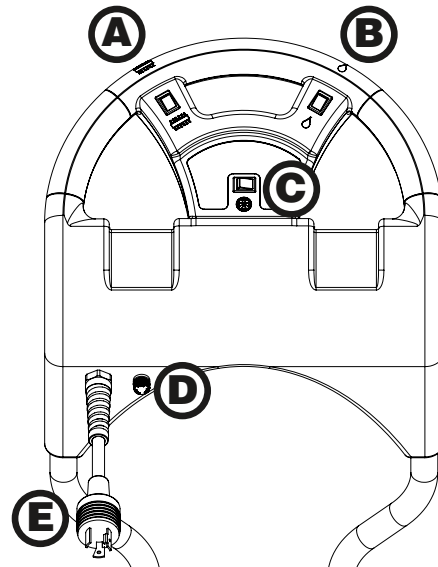
- A. The machine should be lifted using the front of the handle and the handgrip on the rear handle tower.



2. INSTRUMENT PANEL COMPONENTS

The instrument panel components are identified as follows:

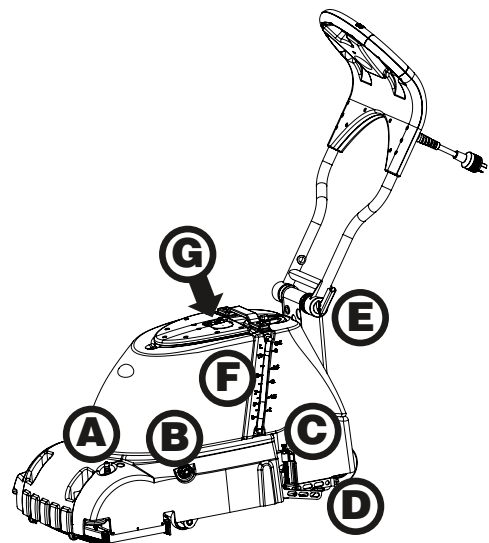
- A. ON/OFF Brush Control
- B. ON/OFF Solution Control
- C. ON/OFF Vacuum Control
- D. Fuse Holder
- E. Electrical Supply Cord



3. MACHINE COMPONENTS

The machine components are identified as follows:

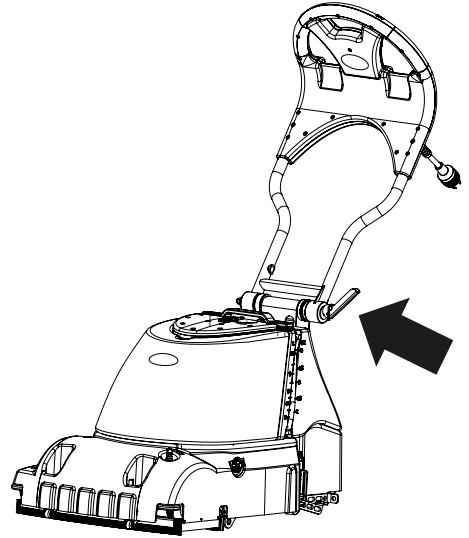
- A. Auxiliary Solution Connection
- B. Solution Flow Control Valve
- C. Head Pressure Adjustment Bolt
- D. Transport Wheel Engagement Lever
- E. Handle Position Locking Device
- F. Solution Level Sight Gauge
- G. Auxiliary Vacuum Connection



OPERATION

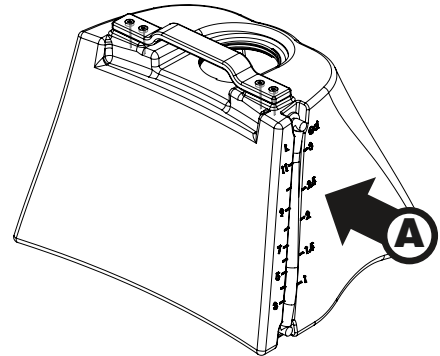
1. HANDLE ADJUSTMENT


- A. Open the cam handle to release the handle locking gears.
- B. Move the handle either up or down to a comfortable operating height or the storage position.
- C. Close the cam handle to lock the gears back into place.



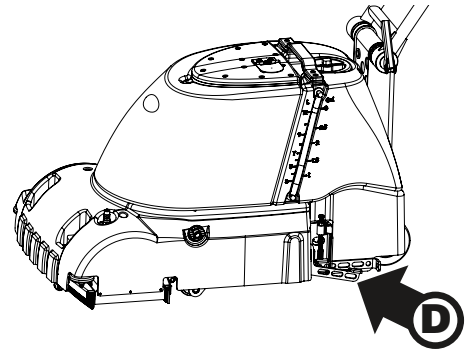
2. MACHINE OPERATION

- A. Fill the solution tank with clean water at a temperature not exceeding 120°F. An operator can check the level of solution in the tank by looking at the sight gauge on the side of the tank.
- B. Add liquid detergent into the tank using the correct concentration and manner specified by the manufacturer. Excess foam could damage the vacuum motor, so be sure to use only the correct amount of detergent.



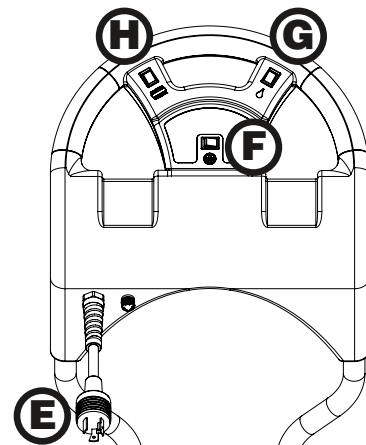
- C.  **To ensure proper operation, 2 ounces of defoaming liquid should be poured into the recovery tank before each use. Defoaming liquid should only be used in the recovery tank, never the solution tank.**

If tank is removed from the machine for remote filling, be sure to press it firmly on the base when returning it to the machine. This is required to ensure that the solution valve on the bottom of the tank properly engages with the solution port on the base.



- D. Release the transport wheels by pressing on the foot lever. This will lower the brush and squeegees onto the floor.

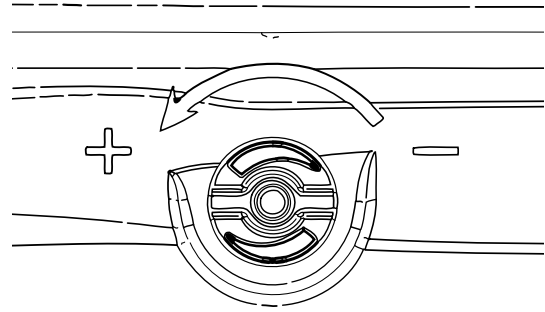
- E. Plug the cord into a standard 120v outlet.
- F. Turn on the Vacuum Switch
- G. Turn on the Water Control Switch
- H. Turn on the Brush Control Switch



OPERATION

3. SOLUTION FLOW CONTROL

- A. The solution flow control valve is located on the left side of the machine.
- B. Turn the knob clockwise to decrease solution flow or turn the knob counter-clockwise to increase the solution flow.
- C. To completely turn off the flow of solution, turn the solution knob clockwise until the valve is closed.

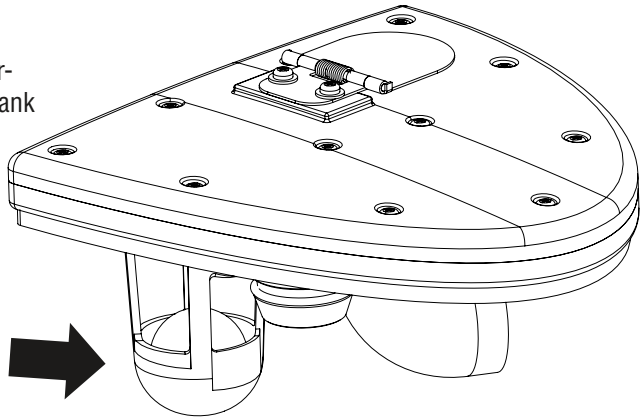


4. FORWARD AND REVERSE MOVEMENT

- A. The machine will scrub and vacuum water in both the forward and reverse directions.

5. OVERFLOW DEVICE

- A. The machine has a float in the recovery tank lid that will stop air-flow to the vacuum motor when the water level in the solution tank is too high.
- B. The recovery tank must be drained when this happens.



6. TOOL KIT OPERATION

- A. Turn the solution control knob clockwise until the valve is completely closed.
- B. Insert the long hose cuff of the vacuum hose into the vacuum port on the clear recovery tank lid.
- C. Connect the solution hose to the auxiliary solution port on the front left of the machine.
- D. Connect the vacuum hose and solution line to the tool or wand being used.
- E. The extension tool is now ready to use.

SHUTTING DOWN THE MACHINE

1. END OF WORK

When shutting down the machine and before performing any type of maintenance:

- A. Turn off the solution control valve.
- B. Turn off the solution control switch, brush drive switch, and vacuum motor switch.
- C. Raise the brush deck off the floor using the foot lever.
- D. Unplug machine from power source.
- E. Remove both tanks from the machine and dump out residual solution.

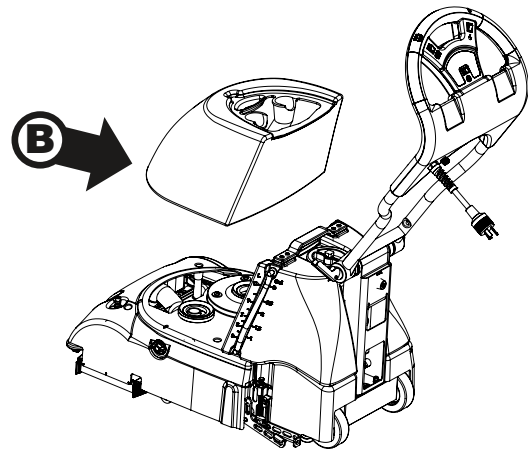
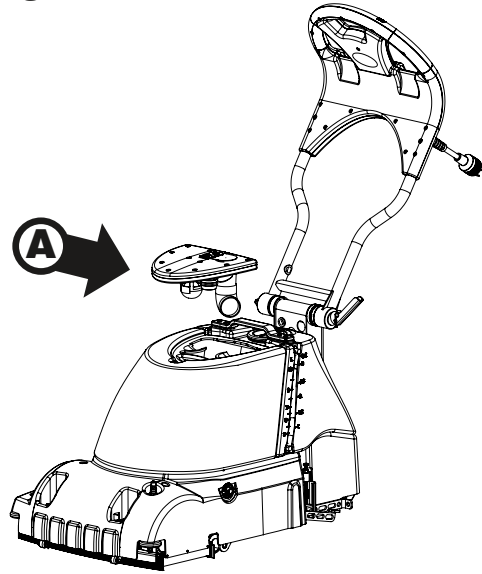


ALWAYS WEAR GLOVES.

DAILY MAINTENANCE

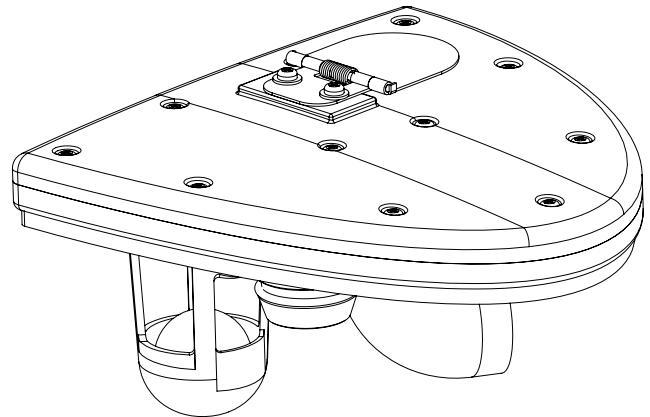
1. CLEAN THE RECOVERY TANK

- A. Remove lid from recovery tank.
- B. Lift tank from machine in a vertical direction.
- C. Rinse the inside of tank with warm water.
- D. Replace tank on machine and replace clear recovery tank lid.



2. CLEAN THE RECOVER TANK LID

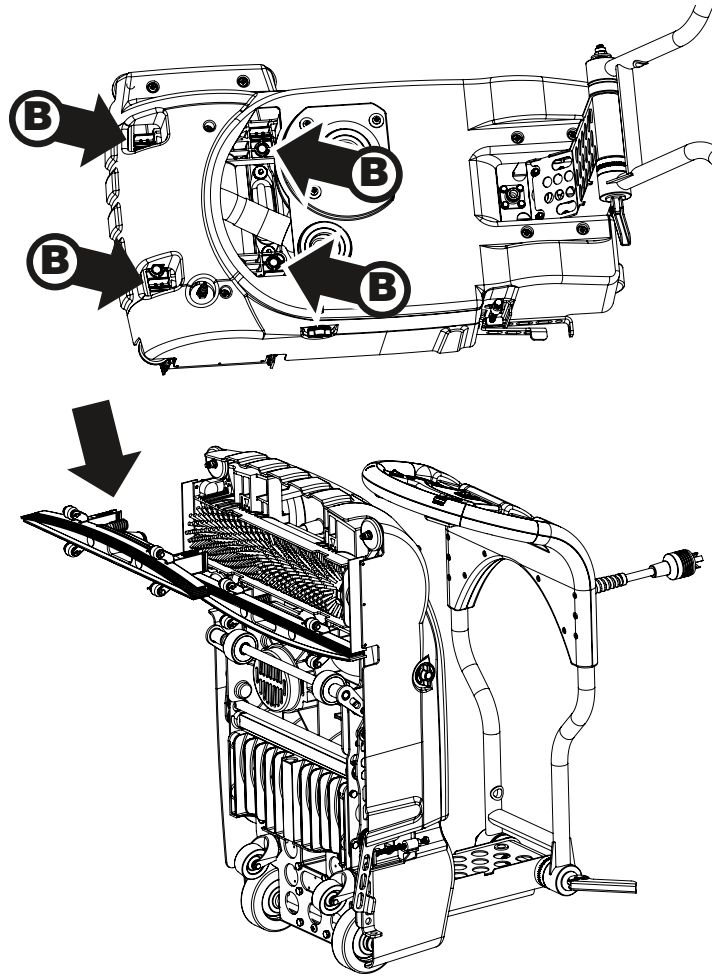
- A. Remove lid from the recovery tank.
- B. Rinse all of the open cavities in the lid and the float ball cage.
- C. Replace lid back on recovery tank.



DAILY MAINTENANCE

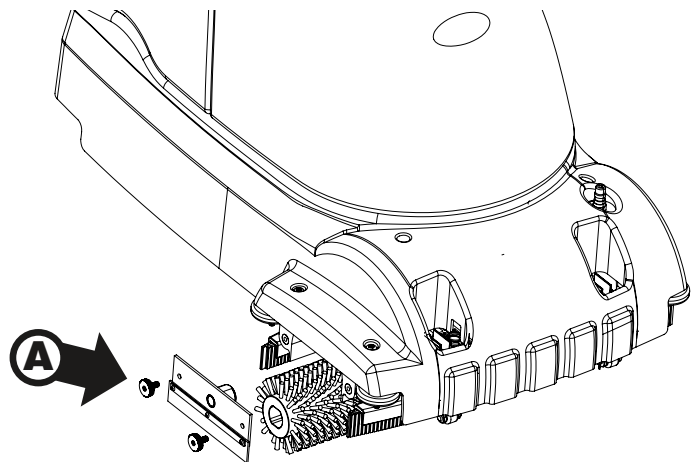
3. CLEAN THE SQUEEGEE ASSEMBLIES

- A. Remove recovery tank from machine.
- B. Release tabs holding squeegee assemblies in place.
- C. Disconnect vacuum hose from squeegee assembly.
- D. Clean squeegee assembly with water.
- E. Connect vacuum hose to squeegee assembly.
- F. Insert tabs back into place.
- G. Replace recovery tank.



4. CLEAN THE BRUSH ASSEMBLY

- A. Remove finger nuts from right side of machine.
- B. Remove right side retaining plate.
- C. Pull brush out from the drive bearing.
- D. Clean brush with water.
- E. Insert brush into the drive bearing.
- F. Replace right side retaining plate.
- G. Tighten finger nuts on retaining plate.



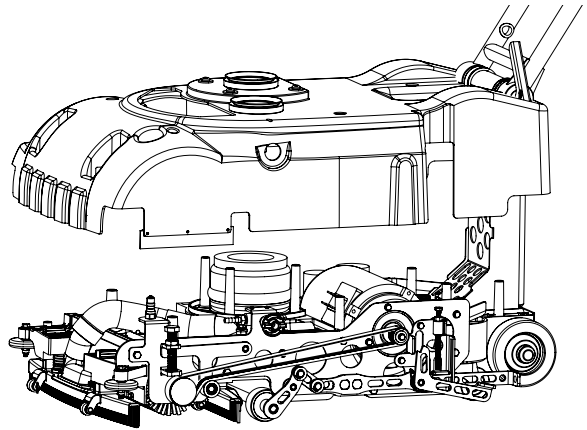
TROUBLESHOOTING GUIDE

PROBLEM	CAUSE	REMEDY
The machine does not turn on	Power cord is unplugged	Plug Cord into 120V outlet
	The fuse is blown	Replace fuse
Insufficient water on brush	Solution valve is closed	Open valve
	No water in solution tank	Fill solution tank with water
	Pump switch is off	Turn the solution switch on
	Blockage in solution tube	Clean or replace the solution line
	The pump is damaged	Repair or replace pump
The machine does not clean well	Brush drive switch is off	Turn on brush drive
	The brush is worn	Replace brush
	Drive belt is loose	Adjust belt tension
The floor is not dry	Vacuum switch is off	Turn the vacuum switch on
	Dirty squeegee blades	Clean the squeegee blades
	Dirty squeegee body	Clean the squeegee body
	Vac hose not attached to shoe	Attach vac hose to the squeegee shoe
	Squeegee blade is worn	Replace squeegee blade
Too much foam is generated	No defoamer in recovery tank	Add defoamer to recovery tank

ADJUSTMENTS AND REPLACEMENT

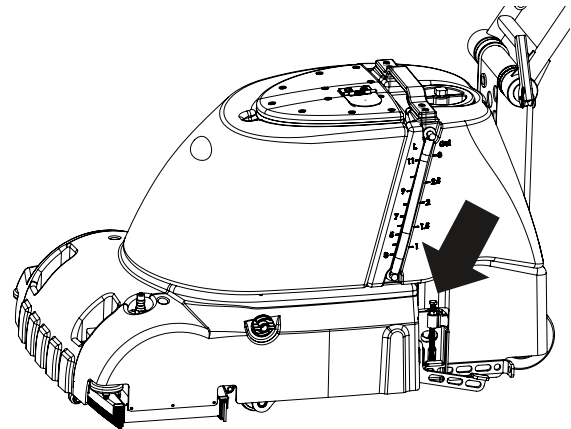
1. BELT TENSION AND REPLACEMENT

- A. Remove the solution tank and recovery tank.
- B. Remove the solution control valve handle.
- C. Remove all of the bolts holding the main shroud to the base.
- D. Loosen the jam nut holding the belt tension bolt in place.
- E. Turn the belt tension bolt in the desired direction to increase or decrease belt tension.
- F. Tighten the jam nut back in place on the tension plate.
- G. Replace the main shroud back on the machine base and tighten all of the bolts.
- H. Replace solution control valve handle.
- I. Replace the solution and recovery tanks.



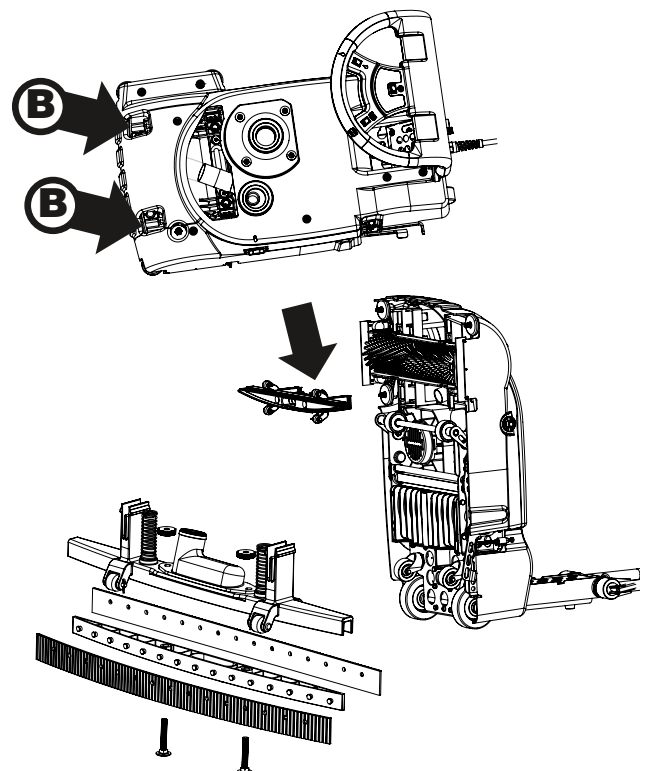
2. HEAD PRESSURE ADJUSTMENT

- A. To increase or decrease the brush pressure, loosen the jam nut holding the head regulator bolt.
- B. Turn the head regulator bolt counterclockwise to increase head pressure or clockwise to decrease head pressure.
- C. Once in the desired position, tighten the jam nut to hold the regulator in place.

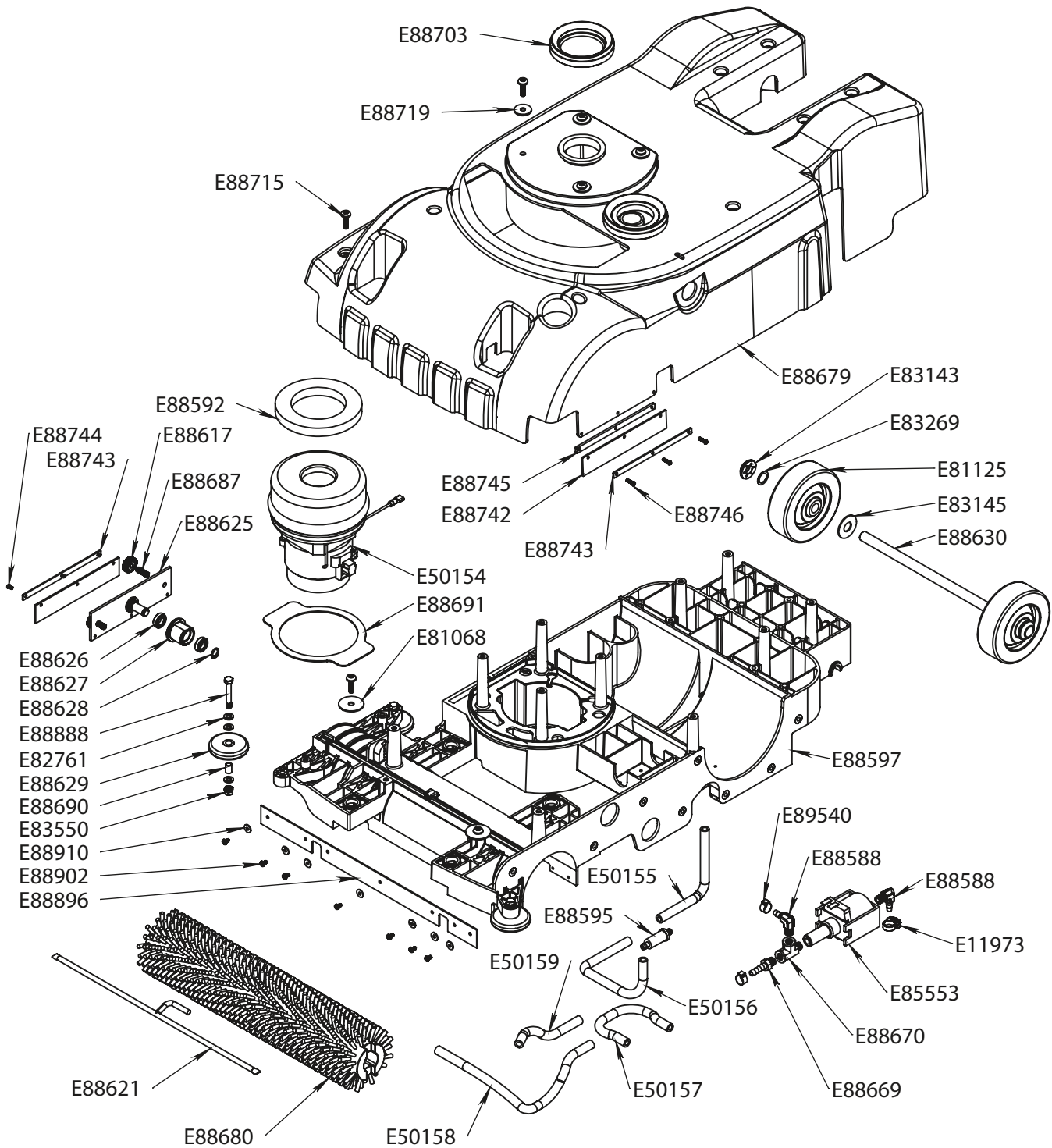


3. SQUEEGEE BLADE REPLACEMENT

- A. Remove recovery tank from machine
- B. Release tabs holding squeegee assemblies in place
- C. Disconnect vacuum hose from squeegee assembly
- D. Loosen the finger nuts from the squeegee assembly
- E. Remove squeegee retainer from inside of the squeegee mount
- F. The squeegee blades are easily removed from the squeegee retainer.
- G. Install new blades onto the squeegee retainer.
- H. Insert the squeegee retainer back into the squeegee mount
- I. Tighten finger nuts to hold the squeegee retainer in place.
- J. Reinstall squeegee assembly into the machine.



UPPER/LOWER BASE DIAGRAM (Before February 2014)

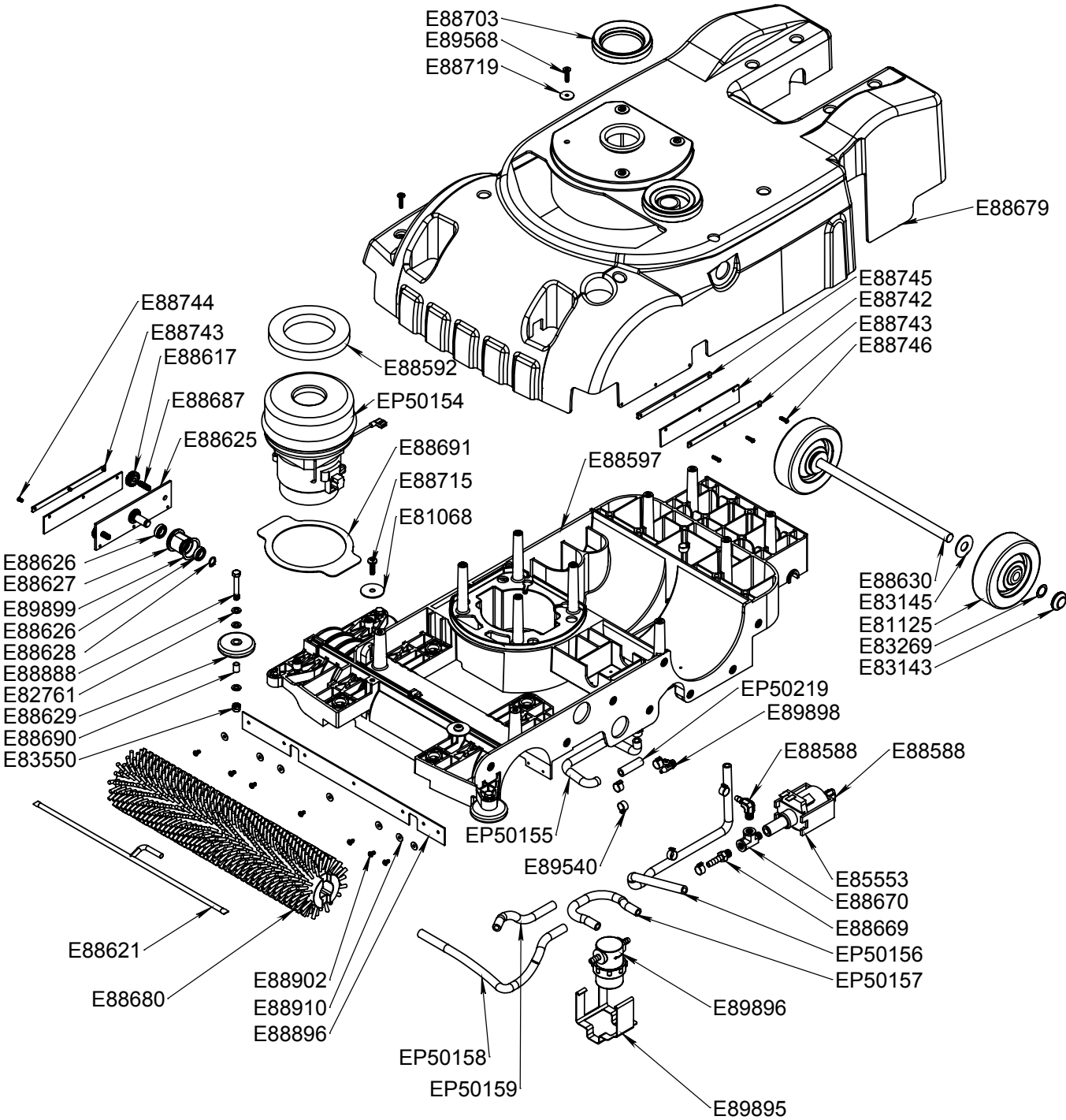


UPPER/LOWER BASE PARTS LISTING

Item#	Part #	Description	Qty.
2	E11973	Hose Clamp, 1/2" OD Hose, Snap Grip, Plastic	3
4	EP50154	Vacuum Motor 120 VAC 800 Watt	1
5	EP50155	Tubing, 1/4" ID x 7/16" OD x 140mm L, Braid Reinforced , PVC	1
6	EP50156	Tubing, 1/4" ID x 7/16" OD x 216mm L, Braid Reinforced , PVC	1
7	EP50157	Tubing, 1/4" ID x 7/16" OD 228mm L, Braid Reinforced , PVC	1
8	EP50158	Tubing, 1/4" ID x 7/16" OD 312 mm L, Braid Reinforced , PVC	1
9	EP50159	Tubing, 1/4" ID x 7/16" OD 133mm L, Braid Reinforced , PVC	1
10	E81068	Washer, Fender, 1/4", Zinc	2
11	E81125	Wheel, 4" OD, 1/2" ID, Non Marking	2
12	E82761	Washer, Flat, M6 x 12 x 1.6, Zinc	9
13	E83143	Axle Cap 0.5"	2
14	E83145	Nylon Washer	2
15	E83269	Washer, Spring, 1/2" ID	2
16	E83550	Nut, Hex, M6, Nylon Lock, Zinc	3
17	E85553	Pump	1
18	E88588	Fitting, Elbow, 1/8" MNPT x 1/4" Barb, Brass	2
19	E88592	Gasket, Upper Vacuum	1
20	E88595	1/4" Inline Filter 130 micron	1
21	E88597	Lower Base	1
22	E88617	Thumb Nut	2
23	E88621	Watering Tube	1
24	E88680	Brush, Grout/Tile	1
25	E88625	Right Side Brush Cover Weldment	1

Item#	Part #	Description	Qty.
26	E88626	Bearing, Ball, M19 OD x M10 ID x M5 T, Sealed	2
27	E88627	Idler End Hub	1
28	E88628	Snap Ring, External, M10, Zinc	1
29	E88629	Wheel - Front Roller	3
30	E88630	Axle, Transport Wheels	1
31	E88669	Fitting, 1/8" MNPT x 1/4" Barb, Hose Barb, Brass	1
32	E88670	Fitting, Tee, Brass 1/8" MNPT x 1/8" FNPT x 1/8" FNPT	1
33	E88679	Upper Frame	1
34	E88687	Set Screw, M6 x 20, SS	2
35	E88690	Bushing - Bumper Wheel	3
36	E88691	Gasket, Vacuum to Frame	1
37	E88703	Gasket, Vacuum-Tank Seal	2
38	E88715	Screw, 1/4" x 3/4", Plastite Pan Head, Zinc	15
39	E88719	Washer, Flat, M6 x M22 x M2, Zinc	4
40	E88742	Splash Guard	2
41	E88743	Band Clamp	2
42	E88744	Screw, M3 x 6, Button Head, Socket, SS	3
43	E88745	Nut Plate	1
44	E88746	Screw, Machine, M3 x 12, Button Head, Socket, SS	3
45	E88888	Bolt, Hex, M6 x 40, Zinc	3
46	E88896	Splash Guard	1
47	E88902	Screw, #6-19 x 0.25, Plastite Pan Head, SS	7
48	E88910	Washer, Flat, SAE #6, SS	7

UPPER/LOWER BASE DIAGRAM (After February 2014)

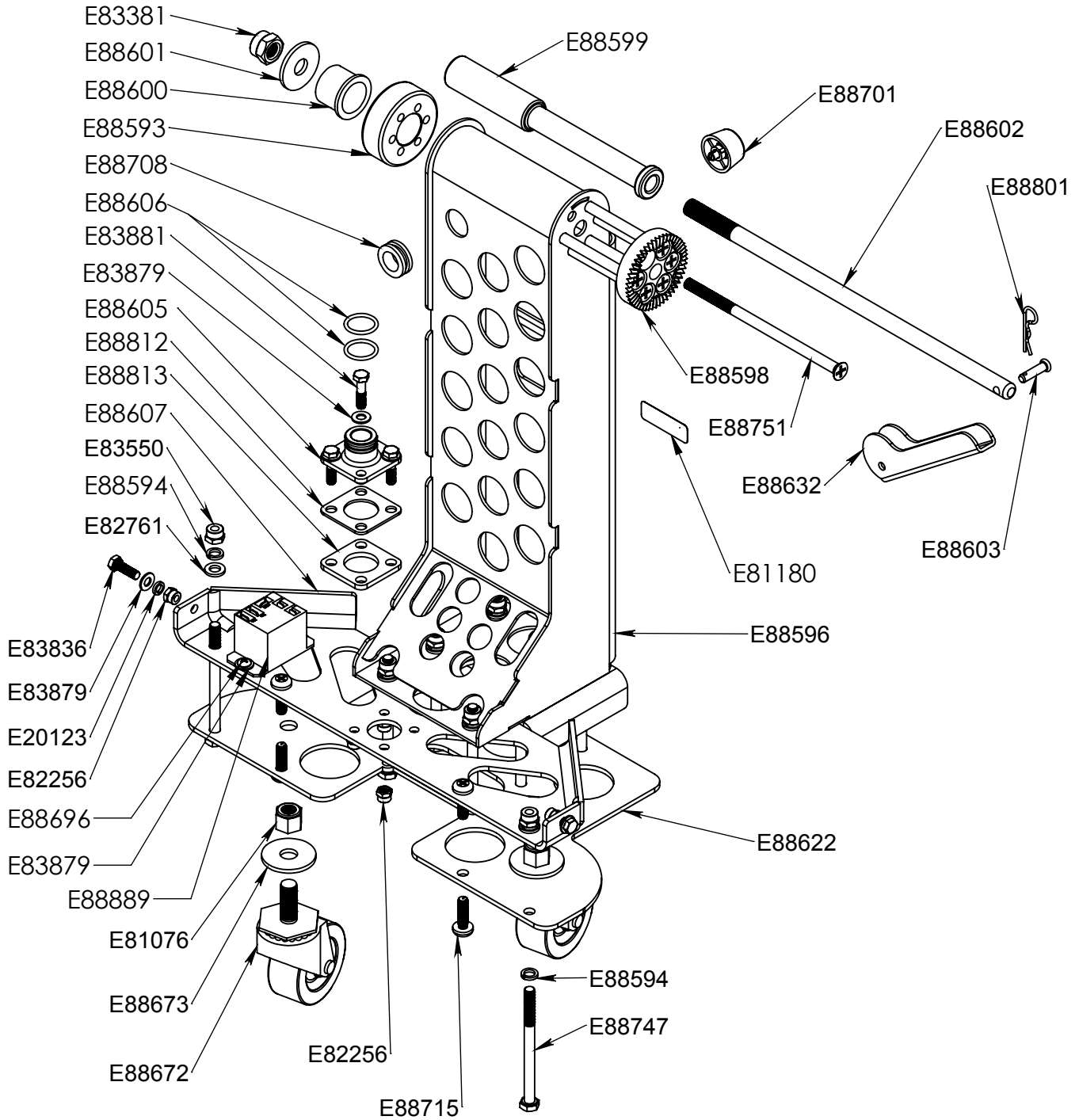


UPPER/LOWER BASE PARTS LISTING

Item#	Part #	Description	Qty.
1	E81068	Washer, Fender 0.25	2
2	E81125	Wheel, 4" OD, 1/2" ID, Non Marking	2
3	E81604	Gasket, 3/4" x 1/4" x 4.0"	2
4	E82761	Flat Washer, M6 x 12 x 1.6	9
5	E83143	Axle Cap 1/2 in	2
6	E83145	Washer, Nylon 1/2" ID X 1.25" OD	2
7	E83269	Spring Washer 1/2 ID	2
8	E83550	Nyloc Hex Nut, M6	3
9	E85553	Pump	1
10	E88588	Fitting, Elbow 1/8 MNPT x 1/4 Barb	2
11	E88592	Gasket, Upper Vacuum	1
12	E88597	Lower Base	1
13	E88617	Thumb Nut	2
14	E88621	Watering Manifold	1
15	E88625	Right Side Brush Cover Weldment	1
16	E88626	Bearing Ball, M19 OD x M10 ID x M5 T, Sealed	2
17	E88627	Idler End Hub	1
18	E88628	External Snap Ring, M10	1
19	E88629	Wheel Front Roller	3
20	E88630	Axle, Transport Wheels	1
21	E88669	Fitting, 1/8" MNPT x 1/4" Barb, Hose Barb, Brass	1
22	E88670	Fitting, Tee, Brass 1/8" MNPT x 1/8" FNPT x 1/8" FNPT	1
23	E88679	Upper Frame	1
24	E88680	Grout Floor Brush 0.125 TUFT - 796 Tufts	1
25	E88687	Set Screw, M6 x 20, SS	2
26	E88690	Bushing - Bumper Wheel	3

Item#	Part #	Description	Qty.
27	E88691	Gasket, Vacuum to Frame	1
28	E88703	Gasket, Vacuum-Tank Seal	2
29	E88715	Screw, 1/4" x 3/4", Plastite Pan Head, Zinc	2
30	E88719	Fender Washer No 8 x 0.75 x 0.05 Zinc	4
31	E88742	Splash Guard	2
32	E88743	Band Clamp	2
33	E88744	Screw, M3 x 6, Button Head, Socket	3
34	E88745	Nut Plate	1
35	E88746	Screw, Machine, M3 x 12, Button Head, Socket, SS	3
36	E88888	Bolt, Hex, M6 x 40, Zinc	3
37	E88896	Splash Guard	1
38	E88902	Screw, #6-19 x 1/4, Plastite Pan Head	7
39	E88910	Flat Washer SAE #6 - SS	7
40	E89540	Odecur Clamp 0.530 OD	8
41	E89568	#8-32 X 0.75 In, Phillips, Truss Head SS	13
42	E89895	Filter Bracket	1
43	E89896	Filter	1
44	E89898	Elbow 0.25 Tube, Barbed	1
45	E89899	Washer, Nylon 1.0 ID X 1.25 OD X 0.06 Thk	1
46	EP50154	VACUUM MOTOR 120 VAC 800 WATT	1
47	EP50155	Tubing, 0.25 ID x 0.438 OD x 140mm L, Braid Reinforced, PVC	1
48	EP50156	Tubing, 1/4" ID x 7/16" OD x 216mm L, Braid Reinforced, PVC	1
49	EP50157	Tubing, 1/4" ID x 7/16" OD 228mm L, Braid Reinforced, PVC	1
50	EP50158	Tubing, 1/4" ID x 7/16" OD 312 mm L, Braid Reinforced, PVC	1
51	EP50159	Tubing, 1/4" ID x 7/16" OD 133mm L, Braid Reinforced, PVC	1
52	EP50219	Tubing, 1/4" ID x 7/16" OD 45mm L, Braid Reinforced, PVC	1

HANDLE BASE DIAGRAM

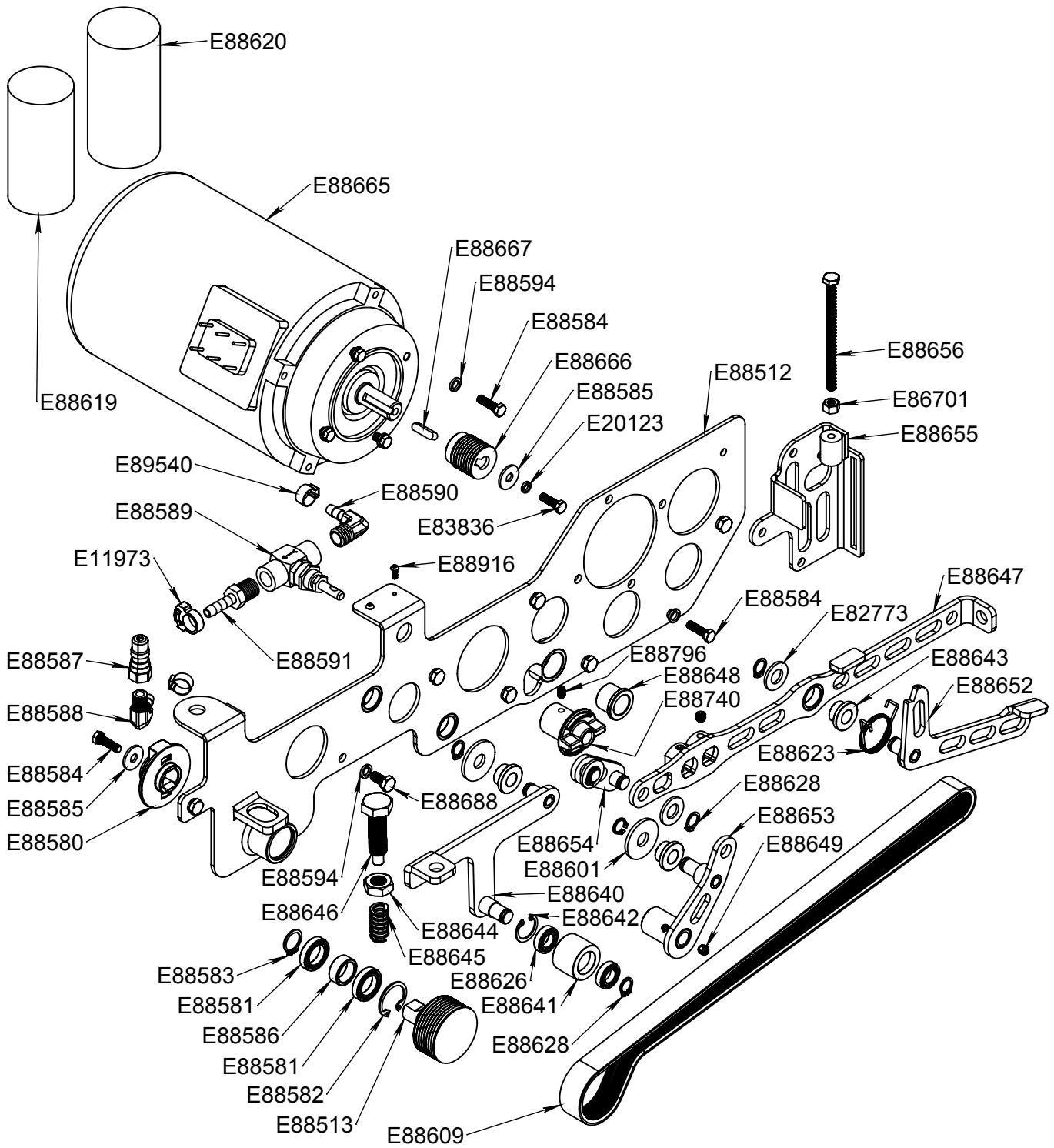


HANDLE BASE PARTS LISTING

Item#	Part #	Description	Qty.
1	E20123	Washer, Split Lock, M5, Zinc	6
2	E81076	Nut, 3/8"-16, Nylon Lock, Grade 5, Zinc	2
3	E81180	Serial Number Decal	1
4	E82256	Nut, M5 x 7, Nylon Lock, Zinc	6
5	E82761	Washer, Flat, M6 x 12 x 1.6, Zinc	8
6	E83381	Nut, M10, Nylon Lock, Zinc	1
7	E83550	Nut, Hex, M6, Nylon Lock, Zinc	8
8	E83836	Bolt, Hex,t M5 x 16, Zinc	2
9	E83879	Washer, Flat M5 x 11 x 1, Zinc	7
10	E83881	Hex Bolt M5 x 20 Zinc	4
11	E88593	Handle Tower Pivot Shaft Hub	1
12	E88594	Washer, Split Lock, M6 Zinc	16
13	E88596	Handle Tower Weldment	1
14	E88598	Handle Adjust Gear	1
15	E88599	Handle Tower Pivot Shaft	1
16	E88600	Bushing, Flange, 20mm ID, 24mm OD, 28mm Flange, 20mm L, Bronze	1
17	E88601	Washer, M10 x 30 x 2.5, Zinc	1
18	E88602	Handle Pivot Rod	1

Item#	Part #	Description	Qty.
19	E88603	Pin, Clevis 3/16 x 0.75, Zinc	1
20	E88605	Male Coupling	1
21	E88606	O-Ring, M16 x 2.00	2
22	E88607	Handle Mounting Plate Weldment	1
23	E88622	Handle Nut Plate	1
24	E88632	Handle Adjustment Cam Lock	1
25	E88672	Caster 2" OD, 3/8" - 16", 1" L Post	2
26	E88673	Washer, Fender 3/8" x 1 1/4" Zinc	3
27	E88696	Screw, #8-32 x 0.375 Thread Forming, Pan Head, Phillips, Zinc	1
28	E88701	Bumper	1
29	E88708	Grommet, EPDM 60 Durometer	1
30	E88715	Screw, 1/4" x 3/4", Plastite Pan Head, Zinc	6
31	E88747	Bolt, Hex, M6 x 80, Zinc	8
32	E88751	Screw, 1/4"-20 x 5" Flat Head, Zinc	6
33	E88801	Cotter Pin, 1/16" Hairpin	1
34	E88812	Male Coupling Shim 1/16"	1
35	E88813	Male Coupling Shim 1/8"	1
36	E88889	Relay 120 VAC 1.5 HP	1

MOTOR DRIVE/LINKAGE DIAGRAM

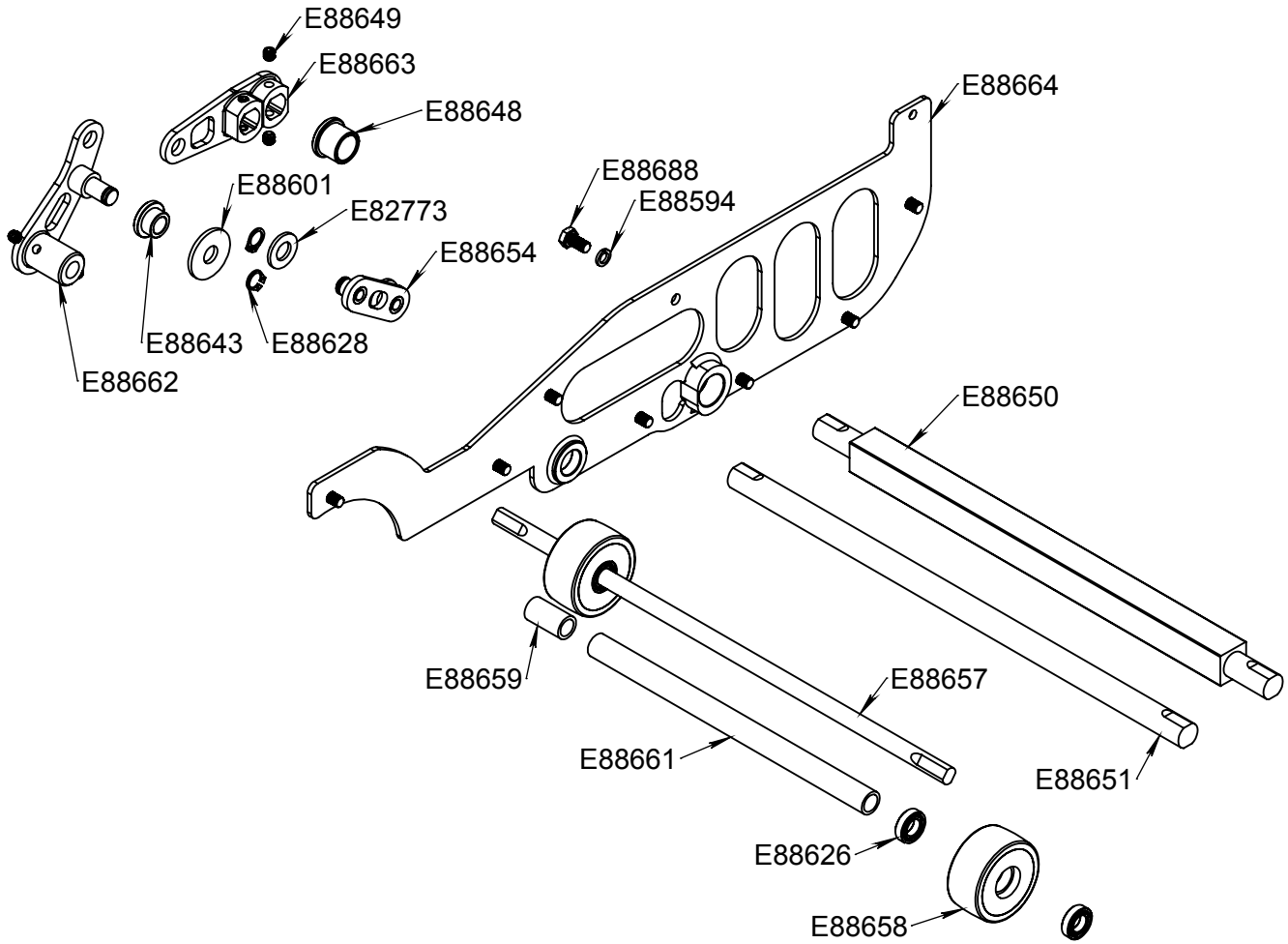


MOTOR DRIVE/LINKAGE PARTS LISTING

Item#	Part #	Description	Qty.
1	E11973	Hose Clamp, 1/2" OD Hose, Snap Grip, Plastic	3
2	E20123	Washer, Split Lock, M5 Zinc	1
3	E82773	Washer, Flat, M10 x 21 x 2, Zinc	3
4	E83836	Hex Bolt M5x16 Zinc	1
5	E86701	Nut, Hex, M6, Zinc	1
6	E88512	Drive Motor Support Weldment	1
7	E88513	Pulley Brush Drive 42.5mm	1
8	E88580	Brush Drive Hub	1
9	E88581	Bearing, Ball, M15 ID x M24 OD x M5 T	2
10	E88582	Snap Ring, Internal, M24 x 1.2, Zinc	1
11	E88583	Snap Ring, External, M15, Zinc	1
12	E83836	Bolt, Hex, M6 x 18, Full Thread, Zinc	6
13	E88584	Bolt, Hex, M6 x 18, Full Thread Zinc	2
14	E88585	Washer, Flat, M6 x18, Zinc	2
15	E88586	Bearing Spacer	1
16	E88587	Quick Disconnect Male	1
17	E88588	Fitting, Elbow, 1/8" MNPT x 1/4" Barb, Brass	1
18	E88589	1/4" Needle Valve	1
19	E88590	Fitting, Elbow, 1/4" MNPT x 1/4" Barb, Brass	1
20	E88591	Fitting, Straight, Brass 1/4" MNPT x 1/4" Barb	1
21	E88594	Washer, Split Lock, M6 Zinc	13
22	E88601	Washer, M10 x 30 x 2.5, Zinc	2
23	E88609	Drive Belt	1
24	E88619	Capacitor, Run	1
25	E88620	Capacitor, Start	1

Item#	Part #	Description	Qty.
26	E88623	Torsion Spring, Foot Pedal Lock	1
27	E88626	Bearing, Ball M-19 OD x M10 ID x M5 Thk, Sealed	1
28	E88628	Snap Ring, External, M10, Zinc	6
29	E88640	Tensioner Linkage Weldment	1
30	E88641	Pulley Idler 27mm	1
31	E88642	Snap Ring, Internal, M19, Zinc	1
32	E88643	Bushing, Flange 10 ID x 15 OD x 10 L, Bronze	3
33	E88644	Hex Jam Nut M12x7 Zinc	1
34	E88645	Spring, Belt Tensioner	1
35	E88646	Tensioner Bolt	1
36	E88647	Foot Pedal Weldment	1
37	E88648	Bushing, Flange 15 ID x 19 OD x 16 L	1
38	E88649	Screw, Set, M6 x 6 Cup Point, Zinc	6
39	E88652	Foot Pedal Latch Weldment	1
40	E88653	Pivot Linkage Lever Weldment	1
41	E88654	Foot Pedal Link Weldment	1
42	E88655	Foot Pedal Bracket Weldment	1
43	E88656	Bolt, Hex, M6 x 90 Full Thread, Zinc, Grade 5	1
44	E88665	Brush Drive Motor	1
45	E88666	Pulley Drive Motor 25mm	1
46	E88667	Key, M4 x M4 x M16, Steel	1
47	E88688	Bolt, M6 x 12, Hex Head, Zinc	8
48	E88740	Knob, Valve	1
49	E88916	Screw, M3 x 8, Button Head, Socket, SS	2
50	E88796	Screw, Set, M5 x 8 Cup Point, Zinc	1

BUSHING PLATE DIAGRAM

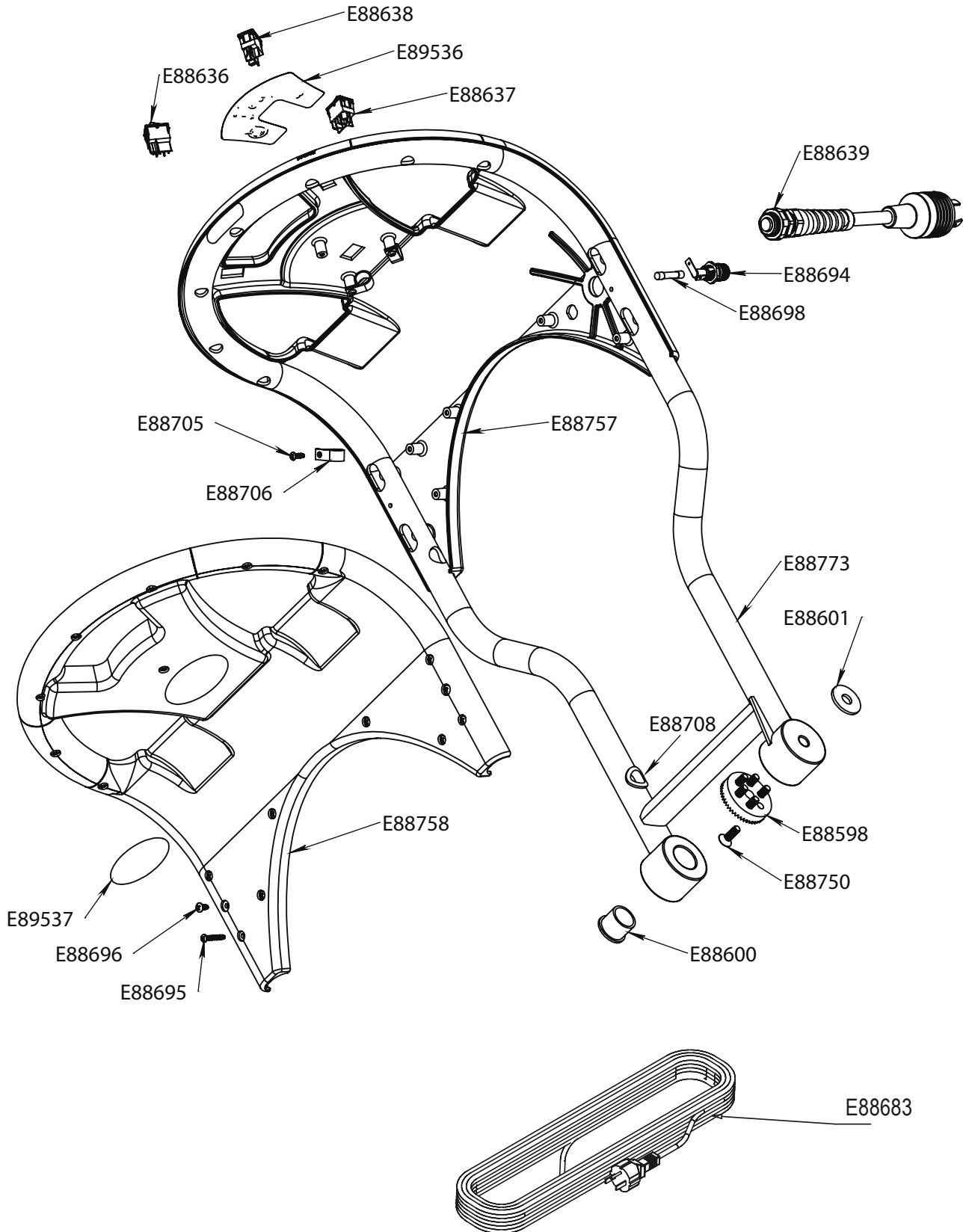


BUSHING PLATE PARTS LISTING

Item#	Part #	Description	Qty.
1	E82773	Washer, Flat, M10 x 21 x 2, Zinc	2
2	E88594	Washer, Split Lock, M6 Zinc	8
3	E88601	Washer, M10 x 30 x 2.5, Zinc	1
4	E88626	Bearing, Ball M-19 OD x M10 ID x M5 Thk, Sealed	4
5	E88628	Snap Ring, External, M10, Zinc	3
6	E88643	Bushing, Flange 10 ID x 15 OD x 10 L, Bronze	1
7	E88648	Bushing, Flange 15 ID x 19 OD x 16 L	1
8	E88649	Screw, Set, M6 x 6 Cup Point, Zinc	6
10	E88650	Foot Pedal Axle	1
11	E88651	Stiffing Rod	1

Item#	Part #	Description	Qty.
12	E88654	Foot Pedal Link Weldment	1
13	E88657	Axle, Front Wheels	1
14	E88658	Front Wheel	2
15	E88659	Spacer, Right Wheel	1
16	E88661	Spacer, Inner Wheel	1
17	E88662	Pivot Linkage Lever Right Weldment	1
18	E88663	Right Lift Arm Weldment	1
19	E88664	Lower Frame Bushing Plate Weldment	1
20	E88688	Bolt, M6 x 12, Hex Head, Zinc	8

HANDLE DIAGRAM

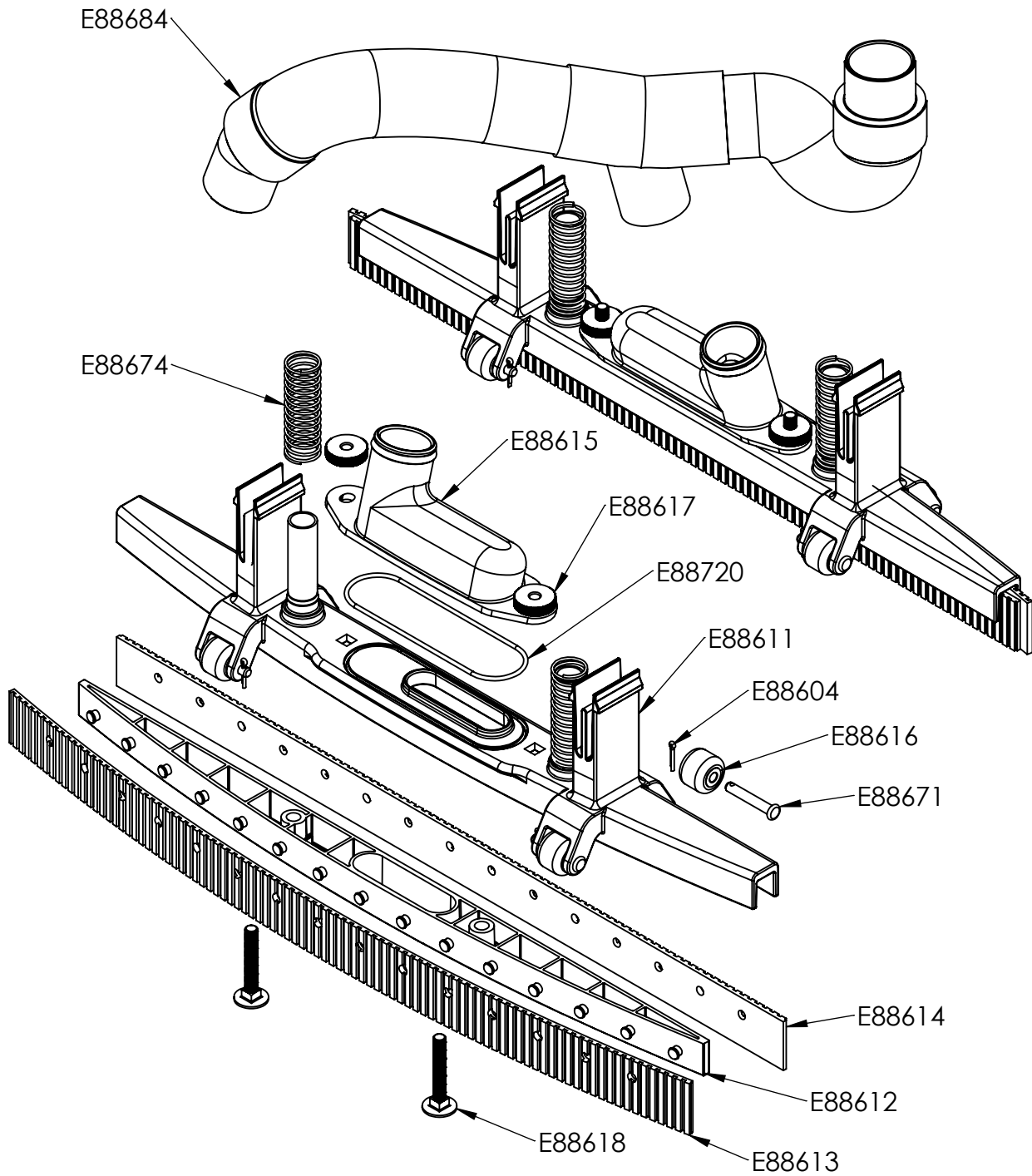


HANDLE PARTS LISTING

Item#	Part #	Description	Qty.
1	E88598	Handle Adjust Gear	1
2	E88600	Bushing, Flange, 20mm ID, 24mm OD, 28mm Flange, 20mm L, Bronze	1
3	E88601	Washer, M10 x 30 x 2.5, Zinc	1
4	E88636	Switch, Clear Illuminated Rocker	1
5	E88637	Switch, Red Illuminated Rocker	1
6	E88638	Switch, Green Illuminated Rocker	1
7	E88639	Cord, Pigtail	1
8	E88694	Fuse Holder, Panel Mount, 20A, 250VAC	1
9	E88695	Screw, #8-18 x 1.00 Plastite, Pan Head, Phillips, Zinc	16
10	E88696	Screw, #8-32 x 0.375 Thread Forming, Pan Head, Phillips, Zinc	2
11	E88698	FUSE 120VAC, 20A	1

Item#	Part #	Description	Qty.
12	E88705	Screw, #8-18 x 0.50 Plastite, Pan Head, Phillips, Zinc	3
13	E88706	Wire Clamp, Plastic, 1/2" ID	3
14	E88708	Grommet, EPDM 60 Durometer	1
15	E88750	Screw, 0.25-20 x 0.75 Flat Socket Head, Zinc	6
16	E88757	Handle Cover - Rear	1
17	E88758	Handle Cover - Front	1
18	E88773	Handle Weldment	1
19	E89536	Decal Handle	1
20	E89537	Decal, Front Handle Cover, Betco	1
21	E88683	Cord, Extension, SJTW, 12ga, 20 A, 50' L, 3 Wire	1

SQUEEGEE/HOSE DIAGRAM

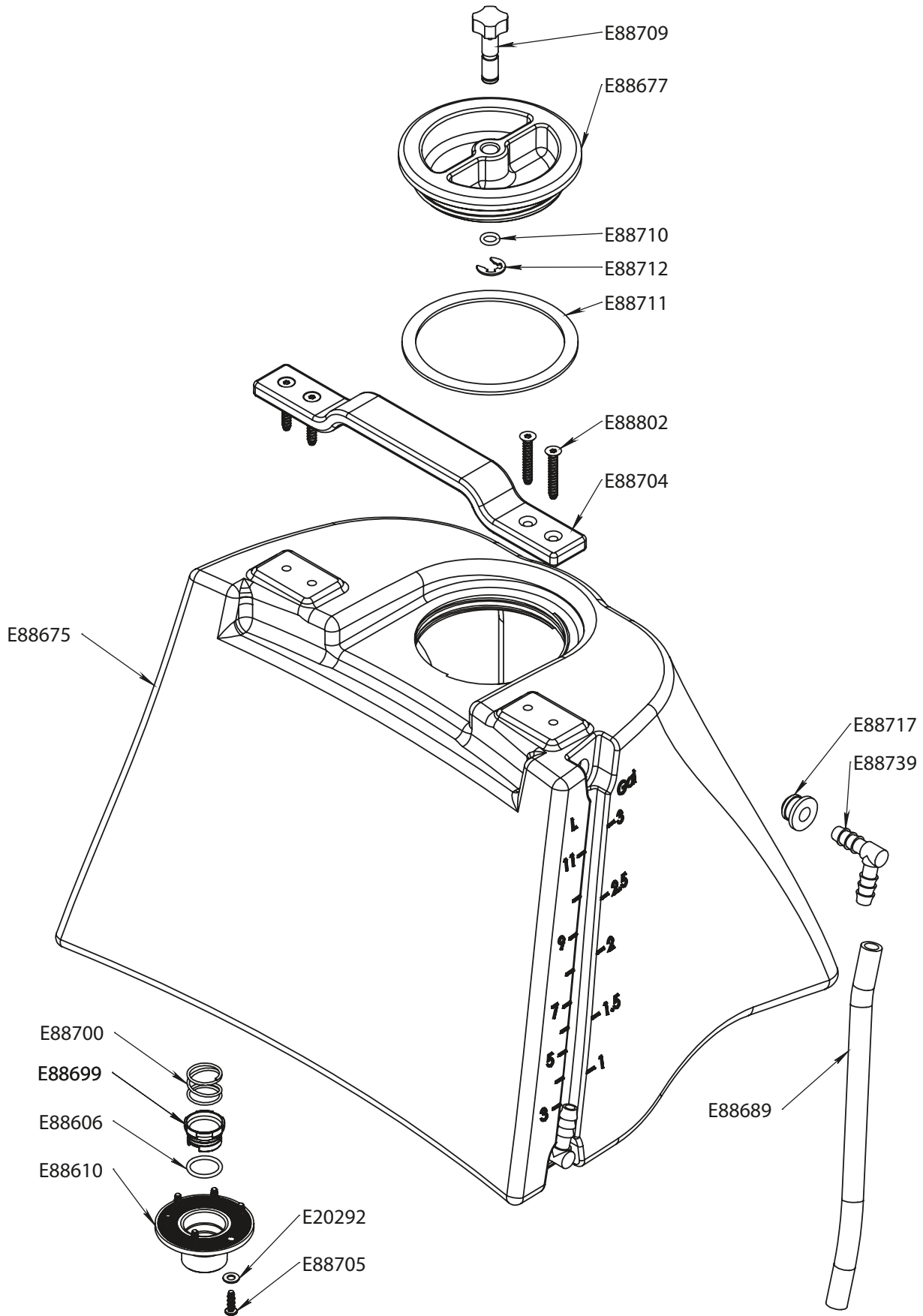


SQUEEGEE/HOSE PARTS LISTING

Item#	Part #	Description	Qty.
1	E88611	Squeegee Shoe Outer	2
2	E88612	Squeegee Shoe Insert	2
3	E88613	Squeegee Blade Outer	2
4	E88614	Squeegee Blade Inner	2
5	E88615	Squeegee Shoe Hose Adaptor	2
6	E88616	Squeegee Wheel	8
7	E88617	Thumb Nut	4

Item#	Part #	Description	Qty.
8	E88618	Bolt, Carriage, M6 x 40, SS	4
9	E88671	Pin, Clevis, .1875 X 1.25, SS	8
10	E88604	Pin, Cotter M2 x 10, Zinc	8
11	E88720	O-Ring, Squeegee Shoe Hose Adaptor	2
12	E88674	Spring, Squeegee	4
13	E88684	Squeegee Hose	1

SOLUTION TANK DIAGRAM

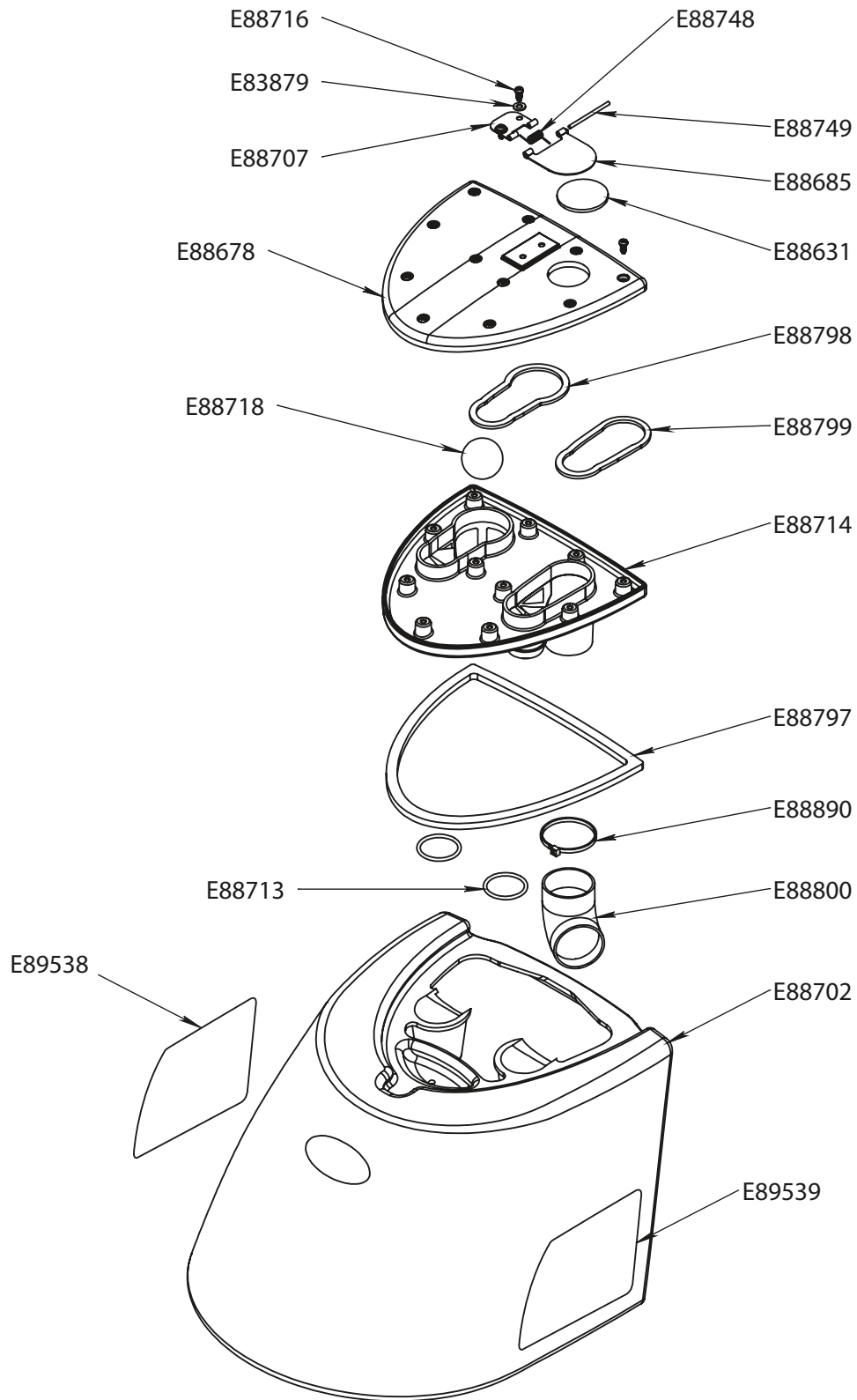


SOLUTION TANK PARTS LISTING

Item#	Part #	Description	Qty.
1	E20292	Washer, Flat, M4 x 9 x 0.8, Zinc	6
2	E88606	O-Ring, M16 x 2.00	2
3	E88610	Female Coupling	1
4	E88677	Solution Tank Cap	1
5	E88689	Tubing, 8mm ID x 12mm OD x 208mm L, Clear	1
6	E88699	Plunger	1
7	E88700	Plunger Spring	1
8	E88675	Tank - Solution	1
9	E88704	Handle - Solution Tank	1

Item#	Part #	Description	Qty.
10	E88705	Screw, #8-18 x 0.50 Plastite, Pan Head, Phillips, Zinc	6
11	E88709	Vent Pin, Cap	1
12	E88710	O-ring, 7.0mm ID x 2.0mm W	1
13	E88711	Gasket, CAP	1
14	E88712	E Clip, 8M x 16 x 1, SS	1
15	E88717	Grommet, M13 x M8	2
16	E88739	Fitting, 8mm x 8mm Barbed, Elbow, Plastic	2
17	E88802	Screw, #10 x 1.25 Plastite, Flat Head, Zinc	4

RECOVERY TANK DIAGRAM

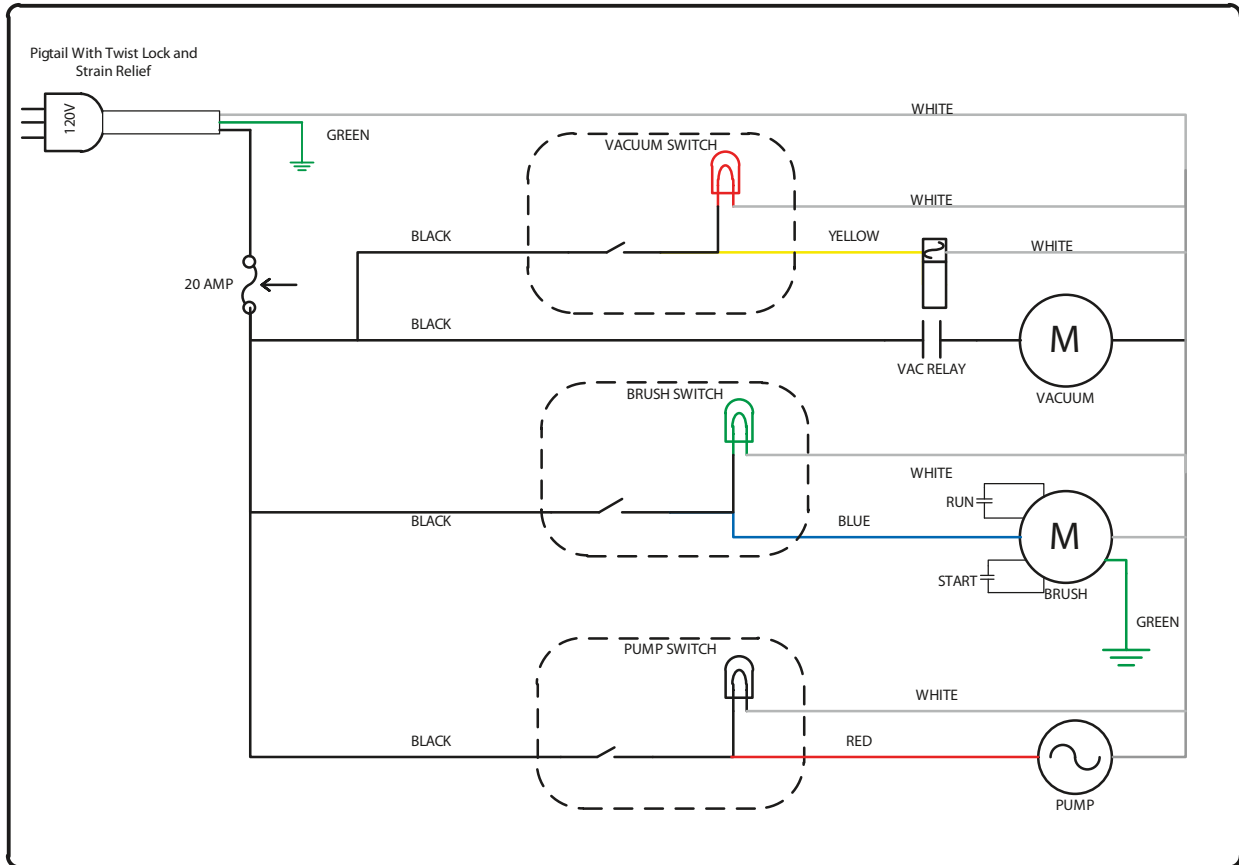


RECOVERY TANK PARTS LISTING

Item#	Part #	Description	Qty.
1	E83879	Washer, Flat M5 x 11 x 1, Zinc	2
2	E88631	Gasket - Hinge Door	1
3	E88702	Tank - Recovery	1
4	E88678	Recovery Tank Upper Window Cover	1
5	E88685	Hinge Door	1
6	E88707	Hinge Mount Plate	1
7	E88713	Recovery Tank Seal	2
8	E88714	Recovery Tank Window Lower	1
9	E88716	Screw, #10 x 3/8", Thread Forming Plastic, Pan Head, Zinc	13
10	E88718	Float Ball 37mm	1

Item#	Part #	Description	Qty.
11	E88748	Hinge Spring	1
12	E88749	DD2 Hinge Pin	1
13	E88797	Gasket, Lid to Tank, 1/4" Foam	1
14	E88798	Gasket, Lid, Upper to Lower, Vacuum 18/8" Neoprene	1
15	E88799	Gasket, Lid, Upper to Lower Solution, 1/8" Neoprene	1
16	E88800	Hose Cuff, Elbow, Recovery Tank Lid Inlet	1
17	E88890	Cable Tie 8x0.14 Plastic	1
18	E89538	Decal, GeneSys 15, Right	1
19	E89539	Decal, GeneSys 15, Left	1

ELECTRICAL WIRING DIAGRAM



ELECTRICAL WIRING PARTS LISTING

Item#	Part #	Description	Qty.
1	E85553	Pump, Oscillating	1
2	E88889	Relay, 120 VAC 1.5 HP	1
3	E88665	Motor, Brush Drive	1
4	E88619	Capacitor, Run, 25 microfarad, 300 VAC, CBB60	1
5	E88620	Capacitor, Start, 150 microfarad, 250 VAC, CD60	1
6	E88639	Cord, Pigtail, Twist Lock ASM w/ Strain Relief	1
7	E88694	Fuse Holder, Panel Mount, 20 A, 250 VAC	1

Item#	Part #	Description	Qty.
8	E88698	Fuse, 120 VAC, 20 A	1
9	E88636	Switch, Clear Illuminated Rocker	1
10	E88637	Switch, Red Illuminated Rocker	1
11	E88638	Switch, Green Illuminated Rocker	1
12	E88683	Cord, Extension, SJTW, 12 ga, 20 A, 50' L, 3 Wire	1
13	E50154	Vacuum Motor ASM 120 VAC 800 Watt	1

TOOL KITS

The following predefined tool kits are available for purchase:

Hard Surface Tool Kit - EP50167

Includes:

- EP50166 - Vacuum and Solution Hose Assembly
- E88974 - 2-Piece Spray Wand Assembly
- EP50172 - Flip Tool Assembly
- E89542 - Mesh Tool Bag

Carpet & Upholstery Tool Kit - EP50168

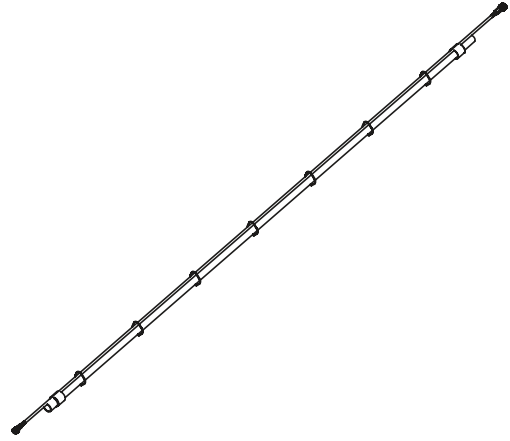
Includes:

- EP50166 - Vacuum and Solution Hose Assembly
- E88974 - 2-Piece Spray Wand Assembly
- E88964 - Carpet Head Assembly
- E85515 - Upholstery Tool Assembly
- E89542 - Mesh Tool Bag

Complete Tool Kit - EP50170

Includes:

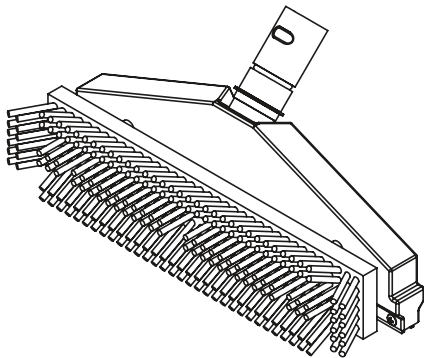
- EP50166 - Vacuum and Solution Hose Assembly
- E88974 - 2-Piece Spray Wand Assembly
- EP50172 - Flip Tool Assembly
- E88964 - Carpet Head Assembly
- E85515 - Upholstery Tool Assembly
- E88976 - Spray Wand Assembly
- E89542 - Mesh Tool Bag



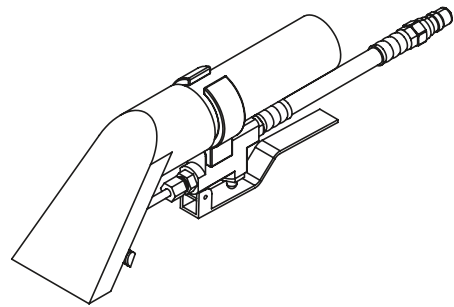
EP50166 - Vacuum and Solution Hose Assembly



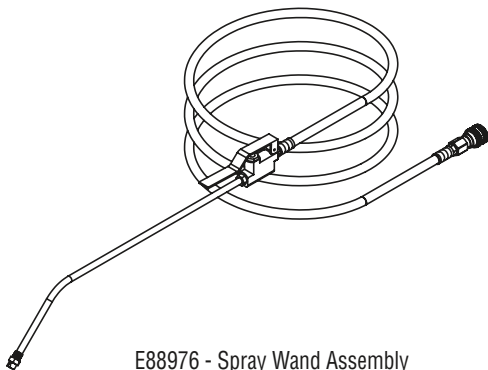
E88974 - 2-Piece Spray Wand Assembly



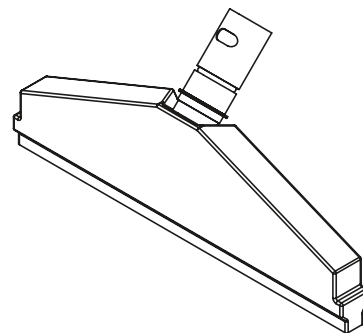
EP50172 - Flip Tool Assembly



E85515 - Upholstery Tool Assembly



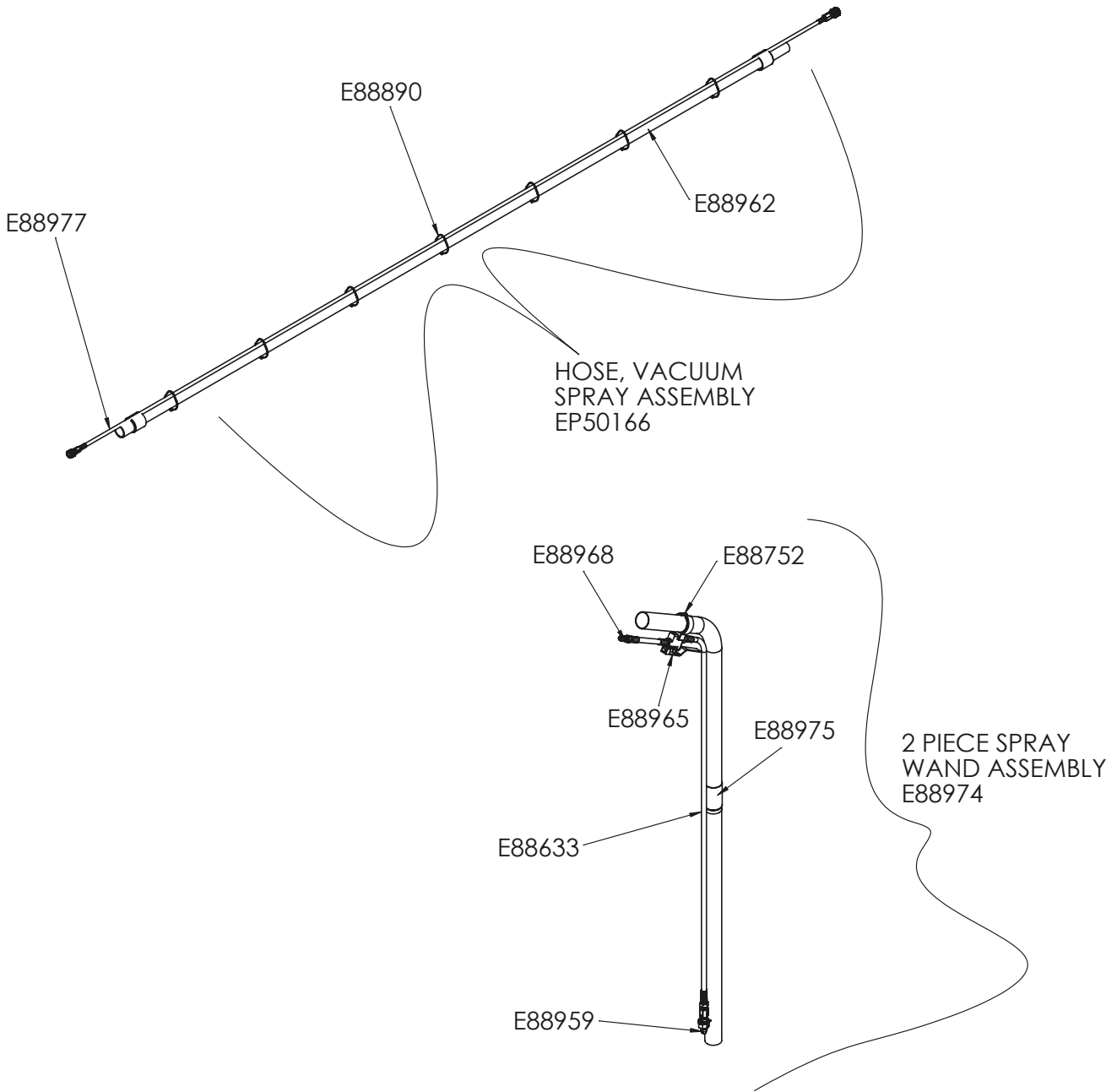
E88976 - Spray Wand Assembly



E88964 - Carpet Head Assembly

TOOL KIT DIAGRAM

Hose Assembly and 2 Piece Wand



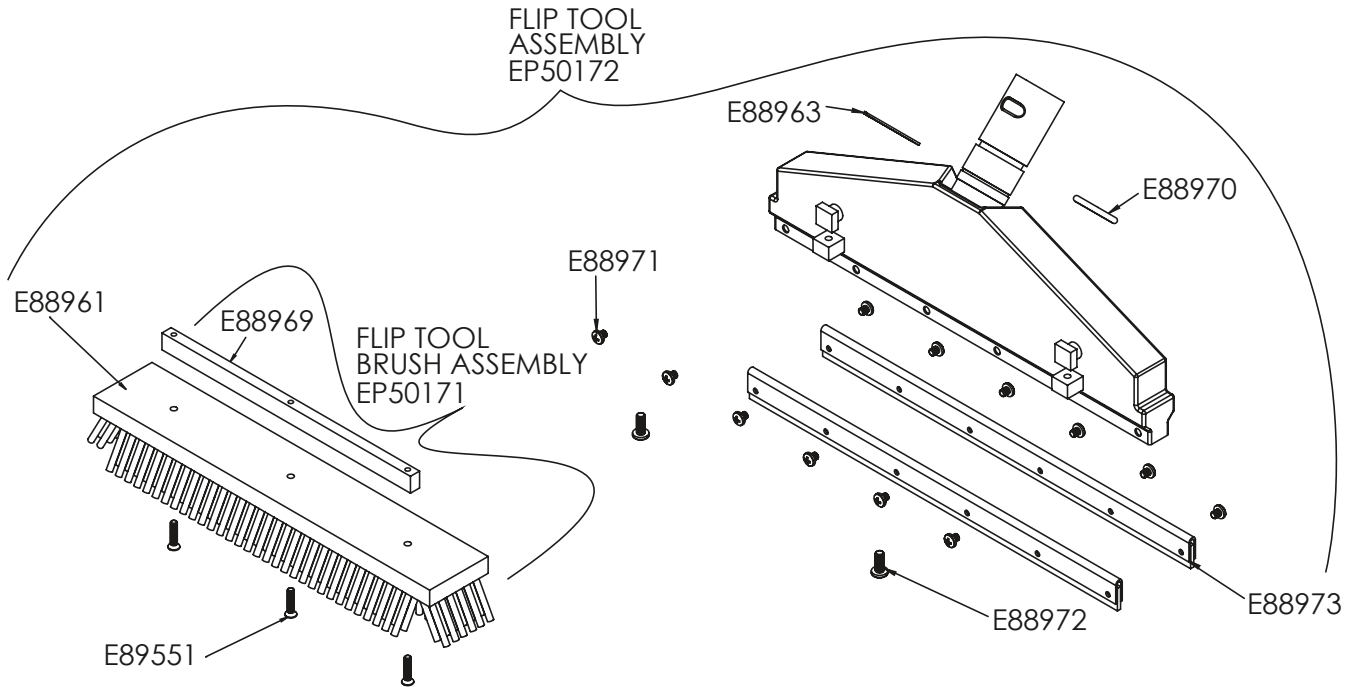
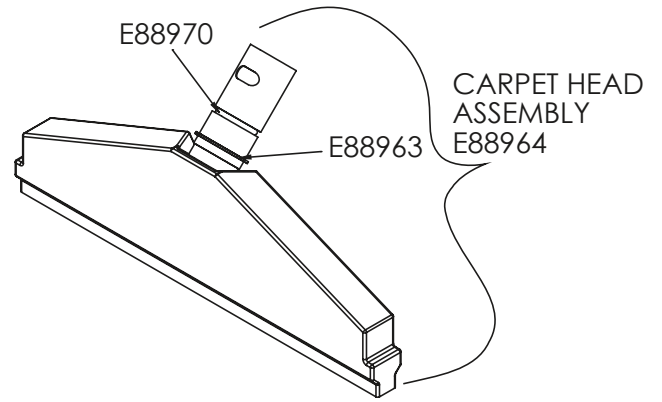
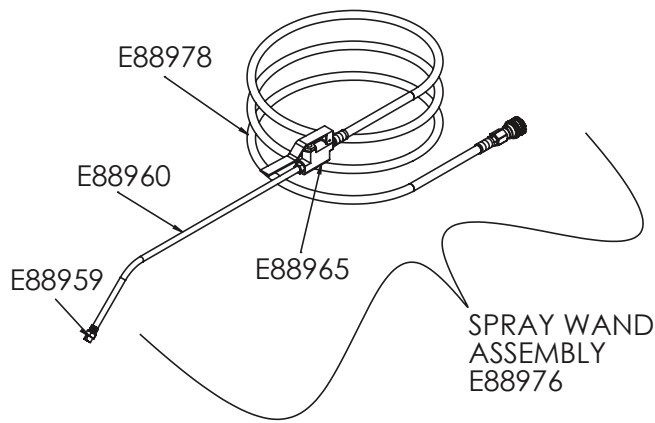
TOOL KIT PARTS LISTING

Part #	Description
E88633	Solution Hose
E88752	Clamp, Solution Valve
E88890	Cable Tie, 8" x 1/8", Plastic
E88959	Spray Jet
E88962	Hose, Vac, 1.5" Dia x 10Ft L, Asm w/ Cuffs
E88965	Trigger Valve

Part #	Description
E88968	Solution Tube and Fitment
E88974	Wand, Vacuum, 2 Piece Assembly
E88975	2-Piece Wand Tube
E88977	Solution Hose, PVC Clear Braided
EP50166	Solution & Vac Hose Assembly

TOOL KIT DIAGRAM

Tool Head



TOOL KIT PARTS LISTING

Part #	Description
E85515	Upholstery Tool
E88959	Spray Jet
E88960	Extension, Spray Wand
E88961	Brush, Flip Tool
E88963	Retaining Ring
E88964	Carpet Head Assembly
E88965	Trigger Valve
E88969	Mounting Bar, Brush
E88970	O-Ring

Part #	Description
E88971	Screw, Squeegee Mount
E88972	Screw, Brush Mount
E88973	Squeegee Blade
E88976	Spray Wand Assembly
E88978	Solution Hose, Spray Wand
E89551	Screw, Brush Mount Bar"
EP50171	Brush Assembly, Complete
EP50172	Complete Flip Tool Assembly With Brush

BETCO US WARRANTY POLICY

10 year coverage

Subject to the conditions stated below, Betco warrants parts and labor on rotationally molded polyethylene tanks/housings and injection molded vacuum head assemblies to be free from defects in materials and workmanship for a period of ten years to the original purchaser.

3 Year Coverage

Subject to the conditions stated below, Betco warrants parts and labor on all other Betco components to be free from defects in materials and workmanship for a period of three years to the original purchaser.

1 Year Coverage

Subject to the conditions stated below, Betco offers a limited warranty on parts and labor on the following equipment: parts and accessories to be free from defects in materials and workmanship for a period of one year to the original purchaser.

- PowerUp™ 14 Upright Vacuum: #E29990-00
- Bac Pac Lite Vacuum: #85903-00
- FiberPRO® Floor Dryer: #85507-00
- WORKMAN™ Series Vacuums: #85024-00, #85025-00, #83012-00, #85027-00
- All Tools and Accessories
- All Battery Chargers
- All Batteries are pro-rated for 1 year

Allowable Travel Time Warranty Reimbursement:

Eligible equipment: All battery and propane powered equipment products. Warranty period: 90 days from date of sale to the original purchaser. A maximum 180 mile round trip at 50 cents per mile will be allowed for warranty consideration.

Propane Machine Warranty:

Kawasaki engines are warranted by Kawasaki for a period of 2 years against manufacturer defects. All other components (except wear items)* are warranted by Betco for a period of 3 years.

***Wear Items exempt from Warranty consideration include but may not be limited to: power cords, transport wheels, vacuum bags, belts, squeegee blades, pad drivers, clutch plates, handle grips, filters, screens, throttle cables, brushes and carbon brushes.**

Subject to the conditions and exceptions stated in this warranty, Betco warrants the Betco products to be free from defects in material and workmanship, under normal use and service, for the periods listed under the warranty policy to the original purchaser. At any time during the warranty period, Betco will furnish replacement parts for the Betco parts to the original purchaser. Such parts will be furnished and charged including transportation costs, to the original owner through any Betco authorized Service Distributor. If the original part is returned within the warranty policy period from date of delivery for inspection by Betco and is found to be defective the owner will be credited for the cost of replacement parts plus shipping and handling. Replacement parts that have become defective through wear or abuse are not included in this warranty.

This warranty does not apply to damage or defect caused by accident, misuse, negligence, fire, or to any Betco product which has been serviced or repaired by other than an authorized Betco Service Distributor or Betco factory personnel. This warranty is void if products are used for any purpose other than that which was intended. There are no other warranties expressed or implied. In no event shall Betco be liable for incidental or consequential damages or any damage to person or property. (Please note some states do not allow the exclusion or limitations for incidental and consequential damages).

