



# Electronic Service Manuals

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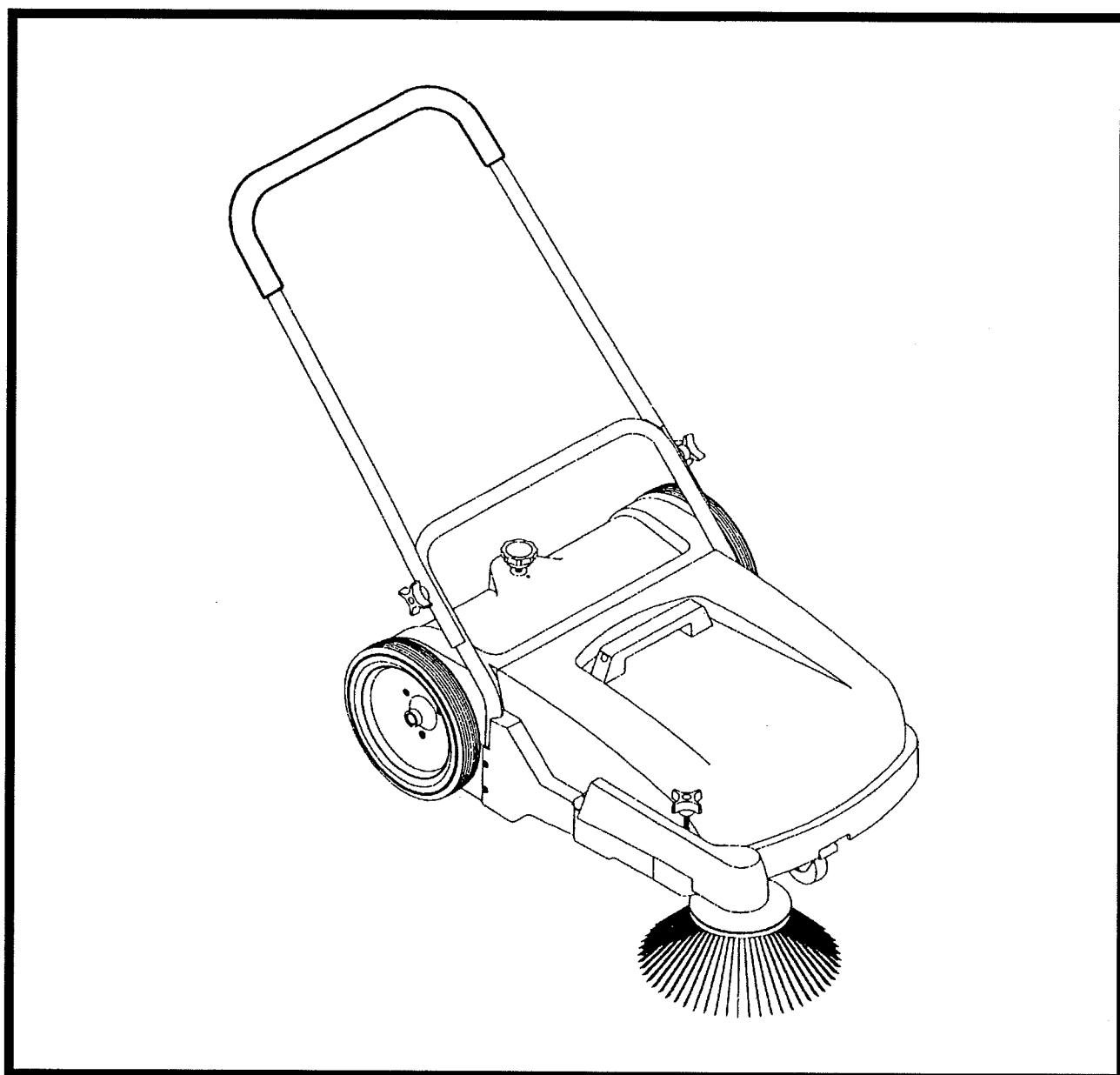
**Serving the Cleaning Industry Since 1922**

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**Kleen Sweep® 27**

**Model: C89000-00**

■ OPERATION ■ SERVICE ■ PARTS ■ CARE



Revised 8/01

***Minuteman***®

# ASSEMBLY INSTRUCTIONS

## Unpacking Instructions

This unit is packed with a sidearm assembly and sidebroom inside the hopper. Refer to page 2 of the Parts Manual for assembly and adjustment.

## Operation

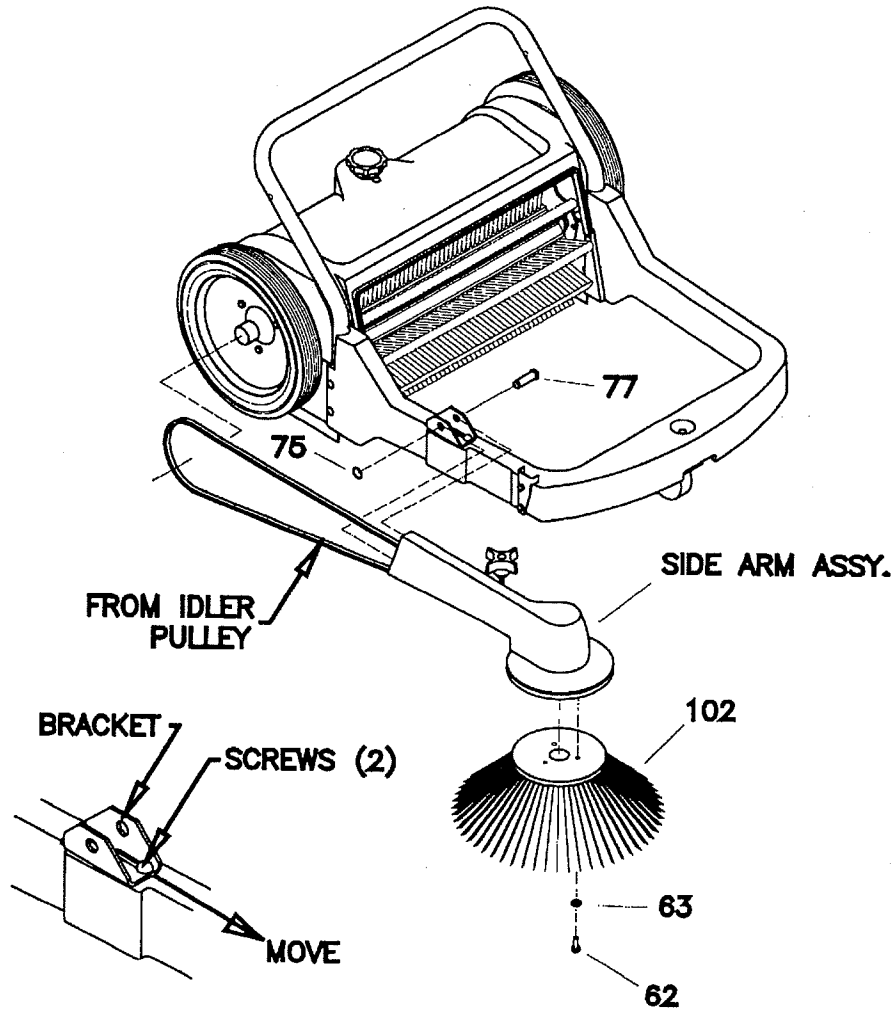
This unit works with two brushes the disc type sidebroom brings the dirt and waste from the side into the path of the main broom. The main broom turns against the direction of the travel and throws the dirt into the collection hopper. Both brushes are driven by the wheels. The main broom sweeps forward while traveling forward and does not sweep in reverse. The sidebroom assembly will rotate in both directions depending on forward or backward motion. The main broom assembly is a split core design (Refer to page 4 Item #45 of the Parts Manual). When replacing broom assembly both halves should be replaced together.

## Adjusting Main Broom

Refer to page 3 of the Parts Manual for height adjustment information. The broom should be adjusted so that the bristles just make contact with the surface to be swept. Increased brush pressure to the surface **does not** enhance sweeping capability. Additionally, placing the bristles too close to the surface will increase the forces needed to operate the machine and may shorten the life of the bristles.

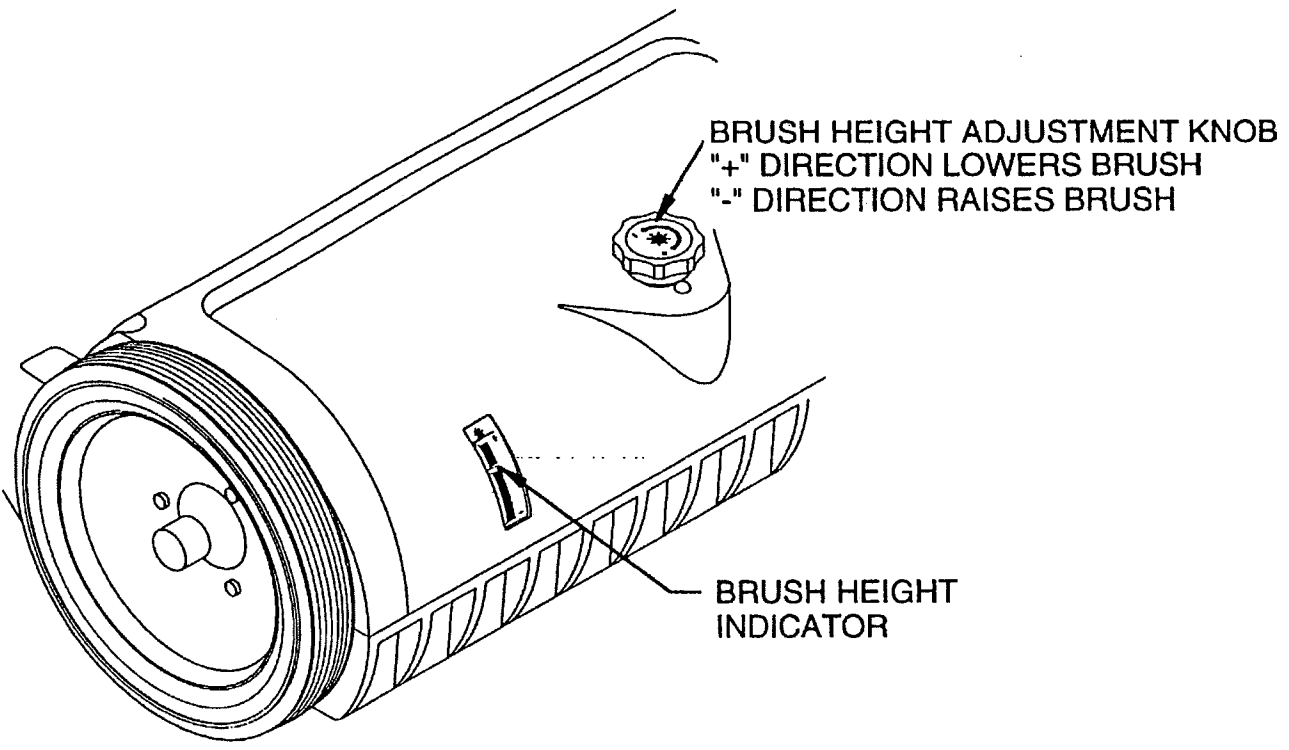
## Sidearm Assembly Adjustment

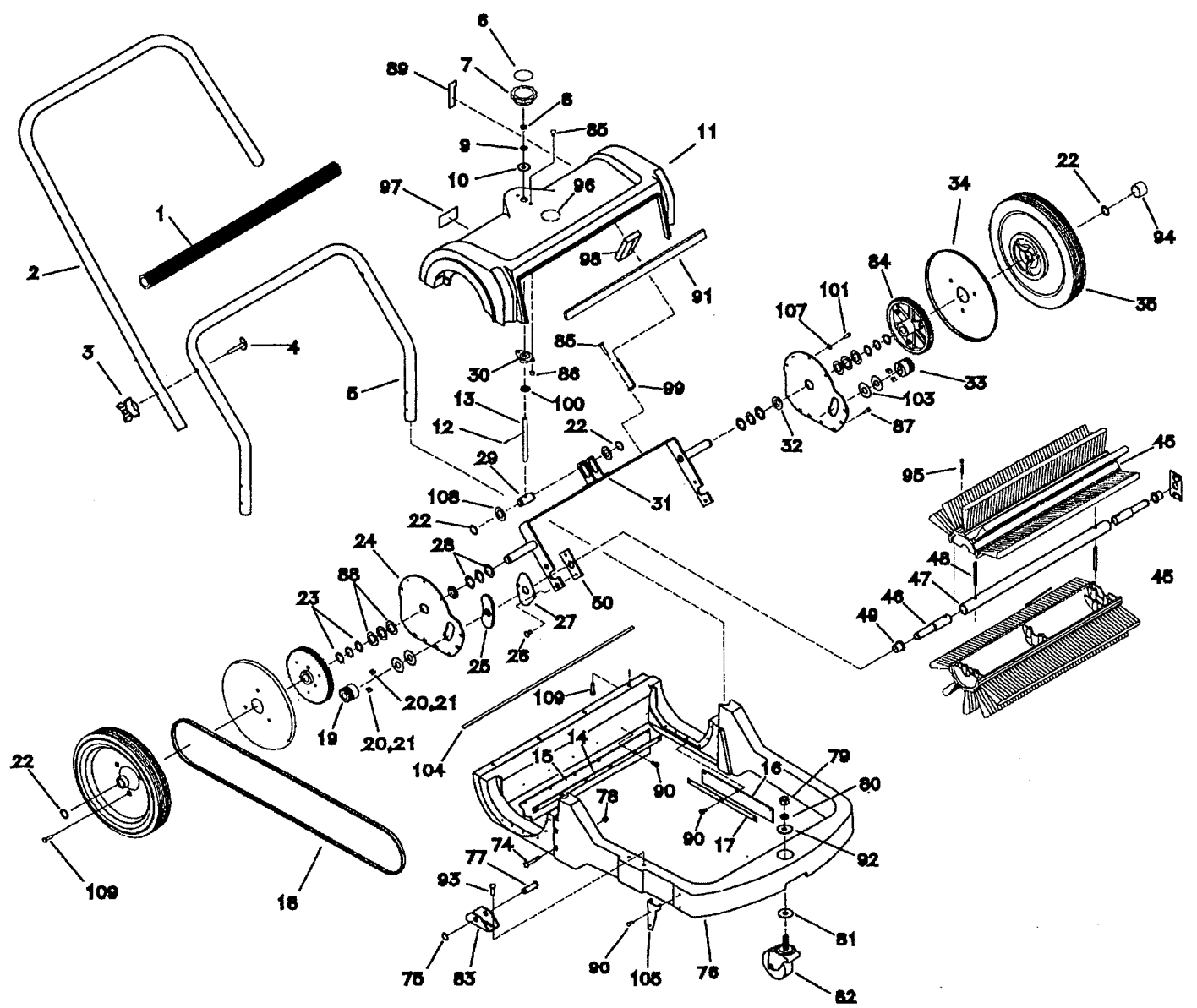
The sidearm assembly should be adjusted so that the bristles deflect slightly from the surface to be swept.



## ASSEMBLY INSTRUCTIONS

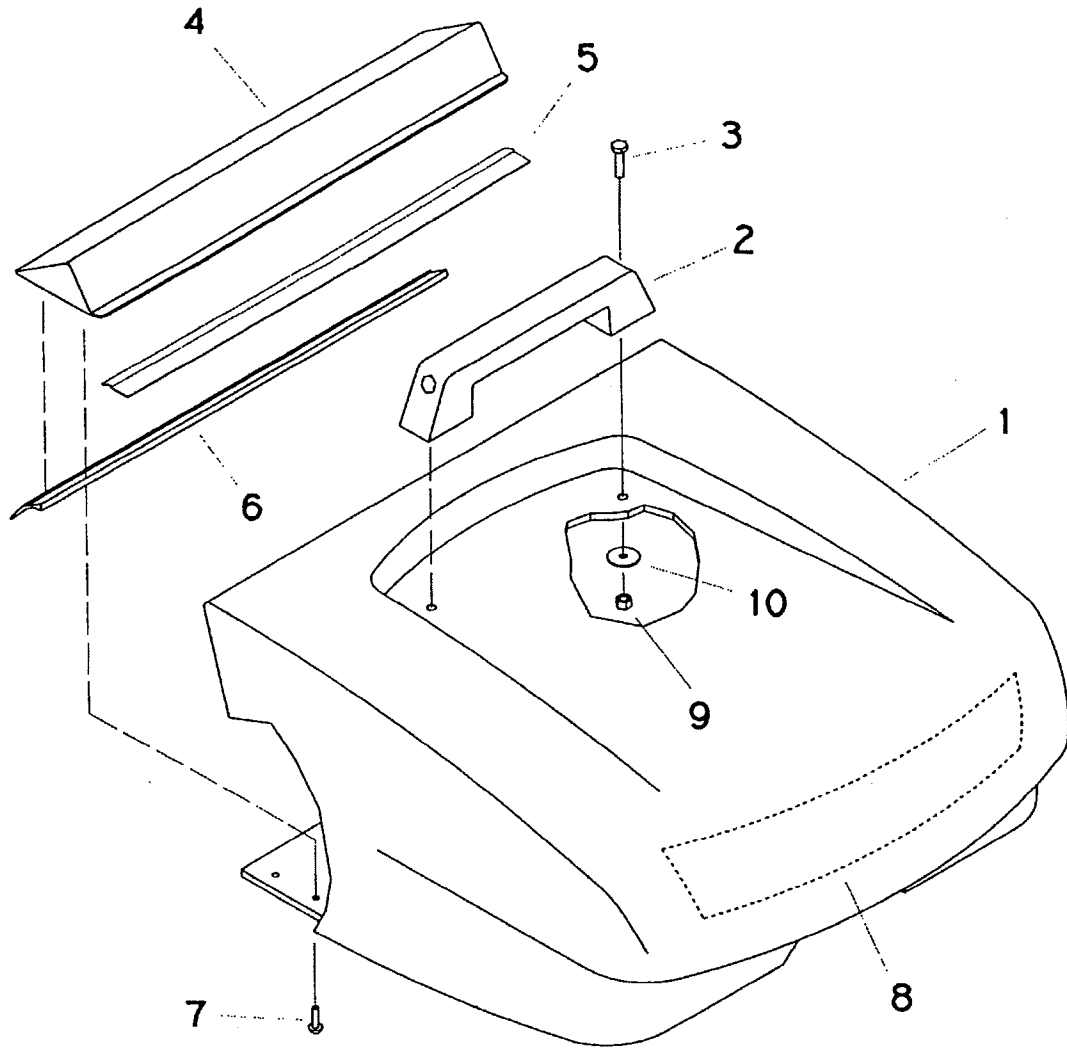
1. Mount the side broom (102) to the brush plate on the side arm assembly using (3) hex head bolts (62) with flat washers (63).
2. Position the v-belt from the side arm assembly around the pulley attached to the backside of the right wheel. In order to do this it will be necessary to twist the v-belt. The lower loop of the v-belt should be coming from the idler pulley (not from the broom pulley).
3. Attach the side arm assembly to the hinge bracket on the frame by aligning the bushing in the side arm with the holes in the sides of the hinge bracket and inserting a pin (77). Secure the pin in place by inserting a retaining ring (75) into the groove in the pin.
4. Check for proper rotation and operation of the side broom. The broom should rotate counterclockwise when the sweeper is pushed forward - if not the v-belt was installed incorrectly. If the belt slips the tension can be adjusted by loosening the 2 screws that attach the hinge bracket to the frame, move the bracket forward, then re-tighten the screws.





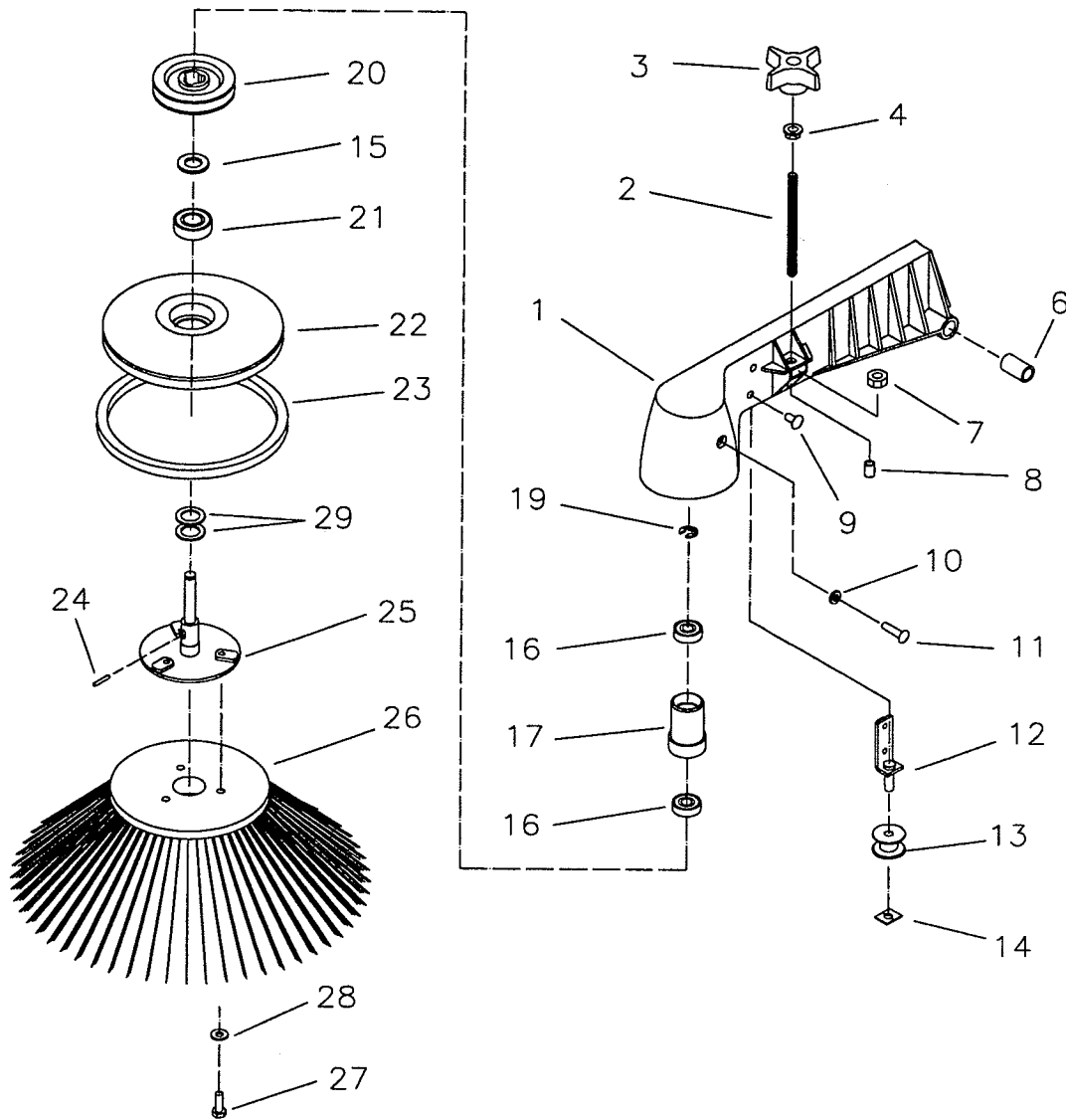
# Parts List

Item	Part No.	Qty.	Description	Item	Part No.	Qty.	Description
1	360108	1	Handle Sleeve	48	711645	2	Roll Pin .187 x 2.5
2	850038	1	Upper Handle	49	850007	2	Flanged - Oilite Bearing
3	350139	2	Knob 5/16 Thread	50	850023	2	Bearing Plate
4	69-516-32	2	BLT-Cont HD 5/16 x 2.0	74	710588	4	SCR-MC 1/4-20 x 1.75 STPL
5	850022	1	Lower Handle	75	711713	1	Retaining Ring- E Ext .50
6	715520	1	Decal Brush Pressure - Knob	76	850002MCH	1	Frame - Flipper
7	760034	1	Knob, Adj. 3/8 x 16 Thread	77	850055	1	Pin
8	711391	1	Nut-Hex Jam 3/8-16 STPL	78	711373	4	Nut-Nyloc 1/4-20
9	711523	1	WSR-Wave .37 x .68 x .02	79	711334	1	Nut-Hex 1/2-13 STPL
10	711507	1	WSR-Flat .37 x 1.12 x .06	80	711547	1	WSR-Helical 1/2
11	850003	1	Cover - Flipper	81	711510	1	WSR-Flat .50 x 1.37 x .10
12	711614	1	.125 Roll Pin	82	850044	1	Caster 1/2-13 Threaded Stud
13	850049	1	3/8-16 Thread Rear Adj. Rod	83	850011	1	Hinge Bracket
14	850029	1	Rear Skirt Retainer	84	59-26-CP	2	Plastic Wheel Gear
15	850026	1	Rear Skirt	85	712822	2	SCR-THMS 10-24 x .50
16	850034	2	Side Skirt	86	712638	2	Nut-Hex 10-24 SS Nyloc
17	850036	2	Side Skirt Retainer	87	711109	20	SCR-ST B 12 x .50 PL
18	41-052	1	V-Belt	88	711517	6	WSR-Flat .77 x 1.37 x .03
19	74-78-RB	1	Right Pinion	89	715519	1	Decal, Brush Adj. Height
20	74-80-A	4	Dowel Pin	90	711160	14	SCR-HI/LO No. 10 5/8
21	76-37-A	4	Pawl Spring	91	850063	1	Foam Gasket
22	711715	2	Retaining Ring - Ext .75	92	711578	1	WSR-Flat .50 Brass
23	711583	6	WSR-Wave .78 x 1.0 x .02	93	711148	2	SCR-ST-B 14 x .87 PL
24	850033	2	Side Plate	94	850028	2	Hub Cap
25	850053	2	Felt PS Back Die Cut	95	711162	6	SCR HI/LO No. 10 x 1.5 PL
26	712560	4	SCR-MC 1/4-20 x .5 SS Nyloc	96	715501	1	Decal, Made in USA
27	850052	2	Felt Mounting Plate	97	715029	1	Decal, Serial Name Plate
28	946-121620	6	Fiber Washer	98	850057	1	Foam Strip
29	850004	1	Adjustment Shaft	99	850058	1	Brush Height Indicator
30	450068	1	No. 160 2BLT Flg Brg w/3/8B	100	711515	1	WSR-Flat .44 x .87 x .07
31	850040	1	Yoke Weldment	101	711125	8	SCR-ST-B No. 10 x .5 NI
32	850054	2	Flange - Oilite Bearing	103	850051	4	WSR-Nylon 1.5 x .62 x .031
33	74-79-LB	1	Left Pinion	104	850062	1	.125 x .312 Foam Gasket
34	850031PTD	2	Dust Cover	105	850059	1	Guide Plate
35	850045	2	Wheel Assembly	107	711566	8	WSR-Flat .259 x .5 x .07
45	850041	2	1/2 Brush Core w/Bristle	108	711517	2	WSR-Flat .75 x 1.38 x .03
46	850005	2	Brush Tube Pin	109	711149	10	SCR HI/LO #14 x 1
47	850006	1	Brush Tube				



**HOPPER ASSY**  
**P.N. 850048PB**

Item	Part No.	Qty.	Description
1	850001	1	Collection Hopper
2	460000	1	Handle
3	711204	2	BLT-HH 1/4-20 x 3/4 STPL
4	850025	1	Dust Ramp
5	850060	1	Dust Flap Brace
6	850016MCH	1	Hopper Flap
7	711160	6	SCR-HI/LO No. 10 x .75 PL
8	715518	1	Decal - Kleen Sweep 27
9	711377	2	Nut-Center Lock 1/4-20
10	711519	2	WSR-FLAT .25 x 1.01 x .06



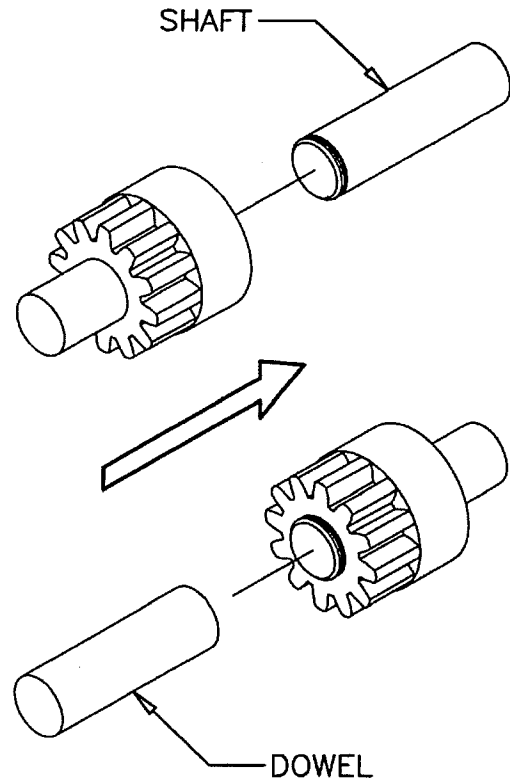
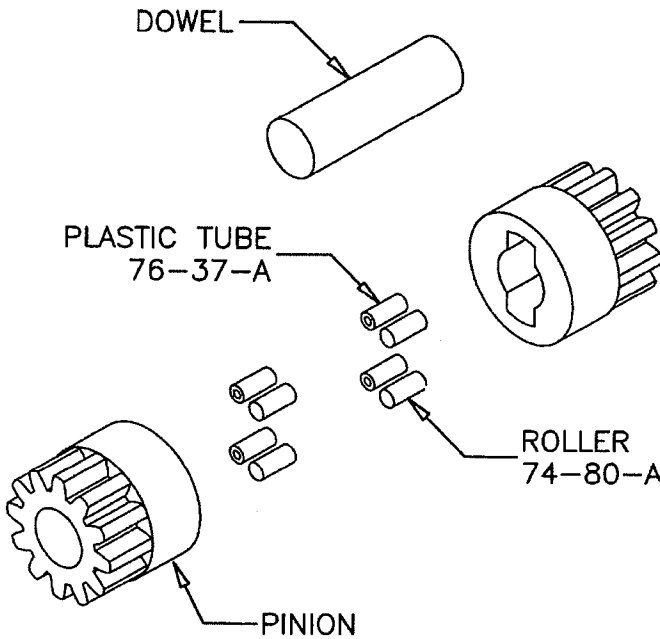
## SIDE ARM ASSY P.N. 850046

Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
1	850032	1	Molded Side Arm	16	850042	2	Bearing 6000 Seal
2	850050	1	Threaded Rod	17	850008	1	Bearing Sleeve
3	350139	1	Knob 5/16 Thread	18			
4	711379	1	Nut-Flanged Wizz 5/16-18	19	711717	1	Retaining E-Ring
5				20	850024	1	Front Pulley
6	850015	1	Bushing	21	850043	1	Bearing 6003 Seal
7	711319	1	Nut-Hex 5/16 - 18 STPL	22	850013PTD	1	Front Brush Cover
8	840059	1	Cap - Thread Cover	23	850027	1	Rubber Ring
9	710178	2	SCR-MC 1/4-20 x .50 STPL	24	711615	1	Roll Pin (.125 x .75)
10	711544	1	WSR-Helical 1/4	25	850009	1	Brush Plate Weldment
11	711149	7	SCR-ST HI/LO No. 14 x 1.0	26	850018	1	Side Broom
12	850010	1	Idler Bracket	27	711204	3	Bolt-HH 1/4 - 20 x .75
13	850020	1	Idler Pulley	28	711505	3	WSR-Flat .28 x .62 x .75
14	75-80-A	1	Shaft Retainer	29	711513	2	WSR-Flat .689 x 1.06 x .029
15	711527	1	WSR-Flat .63 x 1.12 x .09				

# HOW TO RE-INSTALL PINIONS

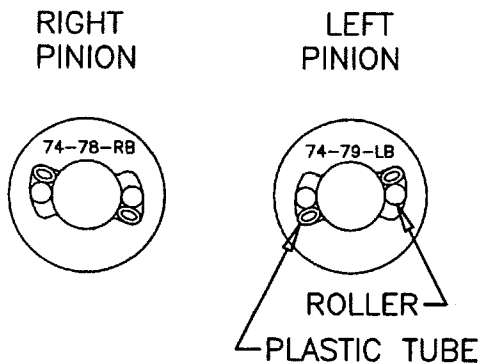
If for some reason you have found it necessary to remove the pinions, you should carefully follow these instructions. All parts must be clean before assembling.

1. To assist you, we suggest using a piece of wood doweling or plastic material 5/8" diameter, 2" long as shown. Each pinion is different as indicated by the part number and must be returned to the correct side of the shaft.
4. Pinion with part number 74-79 LB is to be replaced on the left side of the shaft. Part number 74-78 RB is for the right side. Line up the pinion (leaving the dowel in place) with the shaft as shown.



2. Insert the wooden dowel into the pinion.
3. Identify your pinion part number and insert the metal rollers. Place the plastic tubing in the cavity between the metal roller and the wall of the cavity. You may have to force the plastic tubing into this space but it is resilient and is supposed to fit tightly.

5. Push the pinion onto the shaft which will force the dowel to back out of the pinion. This will leave the rollers and plastic tubes in their proper position.
6. Apply a coating of grease on the outside of the wheel gear teeth. Do not grease inside pinions this will cause pawl springs to be ineffective.



**NOTE!** The right and left side are determined from the operators position.

## LIMITED WARRANTY

Minuteman International, Inc. warrants to the original purchaser/user that this product is free from defects in workmanship and materials under normal use and service for a period of one year from date of purchase. In addition, Minuteman International, Inc. will, at its option, honor labor warranty claims for the first 12 months from date of sale, provided such claims are submitted through and approved by factory authorized repair stations. Minuteman International, Inc. will, at its option, repair or replace without charge, except for transportation costs, parts that fail under normal use and service when operated and maintained in accordance with the applicable operation and instruction manuals.

This warranty does not apply to normal wear, or to items whose life is dependent on their use and care, such as belts, cords, switches, hoses, rubber parts, electrical motor components or adjustments. Parts not manufactured by Minuteman International, Inc. such as engines, batteries, battery chargers, hydraulic pumps, and tires are covered by and subject to the warranties and/or guarantees of their manufacturers. Please contact Minuteman International, Inc. for procedures in warranty claims against these manufacturers.

**Special warning to purchaser** — Use of replacement filters and/or prefilters not manufactured by Minuteman International, Inc. or its designated licensees, will void all warranties expressed or implied.

A potential health hazard exists without exact original equipment replacement.

All warranted items become the sole property of Minuteman International, Inc. or its original manufacturer, whichever the case may be.

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This limited warranty is applicable only in the U.S.A. and Canada, and is extended only to the original user/purchaser of this product. Customers outside the U.S.A. and Canada should contact their local distributor for export warranty policies. Minuteman International, Inc. is not responsible for costs or repairs performed by persons other than those specifically authorized by Minuteman International, Inc. This warranty does not apply to damage from transportation, alterations by unauthorized persons, misuse or abuse of the equipment, use of non-compatible chemicals, or damage to property, or loss of income due to malfunctions of the product.

If a difficulty develops with this machine, you should contact the dealer from whom it was purchased.

This warranty gives you specific legal rights, and you may have other rights which vary from state to state. Some states do not allow the exclusion or limitation of special, incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions and limitations may not apply to you.

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