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Illustrated Parts List Manual

For Commercial Use Only



Wide Area Vacuum Cleaner

CATALOG NO.

93031

For Operation & Maintenance see L3031AB

Specifications

CATALOG NO.	93031
SERIES	B
CLEANING PATH (WIDTH)	30"
HP – BRUSH MOTOR	½ HP
HP – VAC MOTOR	2 X 1 HP
VOLTS	230V
AMPS	15
CERTIFICATION	Pending

TABLE OF CONTENTS (L3031 MANUAL)

<u>DESCRIPTION</u>	<u>PAGE(S)</u>
Full Assembly Exploded View	4
Full Assembly Parts List	7
Brush Assembly.....	9
Handle Assembly Exploded View	10
Handle Assembly Parts List	11
Wiring Diagram.....	12

PERFORMANCE FEATURES:

- Advanced Styling With Durable Construction
- Clean Air Filtration
- 30" Wide Cleaning Path
- Height-Adjustable Folding Handle
- 4-Row Chevron Brush (28" Long x 3" Diameter)
- PMDC Brush Motor, ½ HP, 2600 RPM
- (2) Ametek Vacuum Motors:
 1 HP, 98 CFM, 63" Waterlift
- 4 Stage "Clean Air" Filtration:
 Stage 1: Disposable Paper Bag
 Stage 2: High Efficiency Reusable Cloth Bag
 Stage 3: Vacuum Motor Intake Filter
 Stage 4: Motor Exhaust Filter Cartridge
- Rotationally Molded Housing and Lid
- 10" Diameter, 125 Lb. Rated Main Wheels
- 5 Foot-operated Brush Height Adjustment Levels
- Easy Access Poly-V Drive Belt
- Stainless Steel Brush Shoe
- 75 Foot Power Cord

Long-term buyer protection warranties

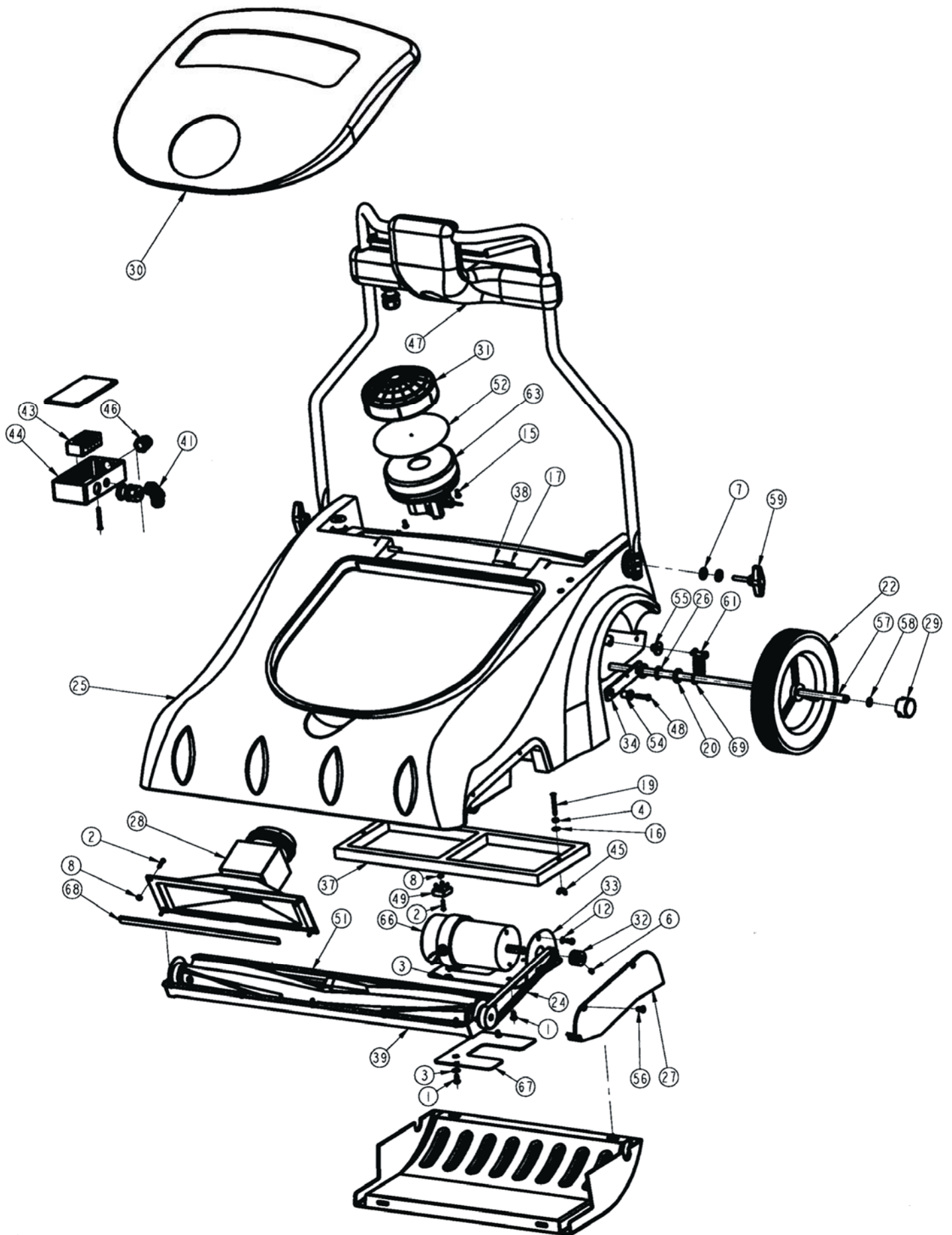
Tornado® Standard Warranty Program*	
<p>Warranties do not cover components subject to normal wear or abuse and misuse, and have other limitations not specified here. For full details, contact your Authorized Tornado Distributor, Service Center, or the Tornado Technical Service Department.</p> <p>Tornado sales and service representatives are not authorized to waive or alter the terms of this warranty, or to increase the obligations of Tornado under the warranty.</p>	<p>10 Years: <i>All plastic tanks and rotationally-molded bodies^{1) 2)}</i></p>
	<p>2 Year: <i>Parts on all Tornado and Tornado/Karcher cleaning equipment^{1) 2) 3)}</i></p>
	<p>1 Year: <i>Labor on all Tornado and Tornado/Karcher cleaning equipment²⁾</i></p>
	<p>1 Year: <i>Warranty on batteries and chargers, one year pro-rated.</i> ** 6 Month Warranty on Gel Batteries <i>All battery warranties are handled by the battery manufacturer, please call customer service for more information.</i></p>

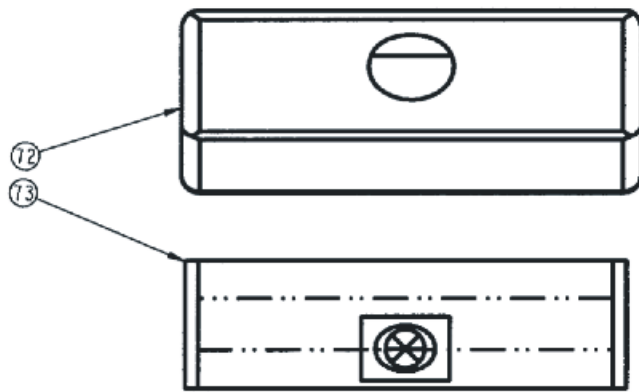
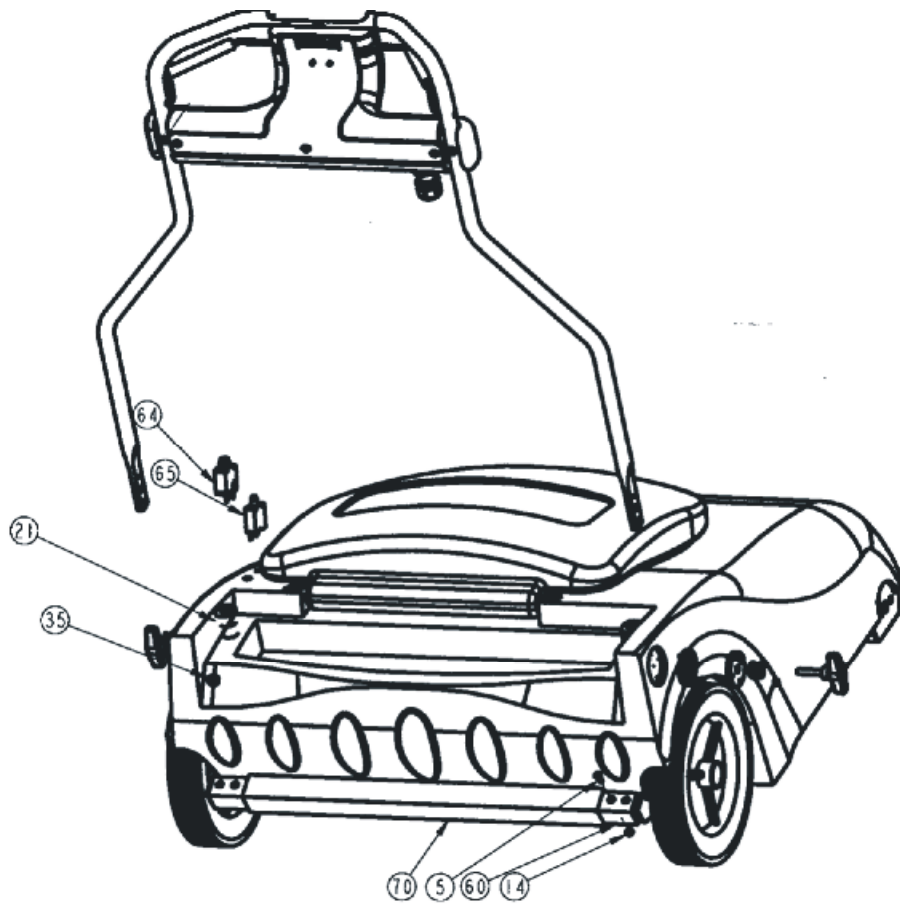
Thank you for choosing Tornado products. We are proud to offer the most complete line of commercial and industrial cleaning equipment in the industry. Our reputation for quality, innovation and durability is unsurpassed.

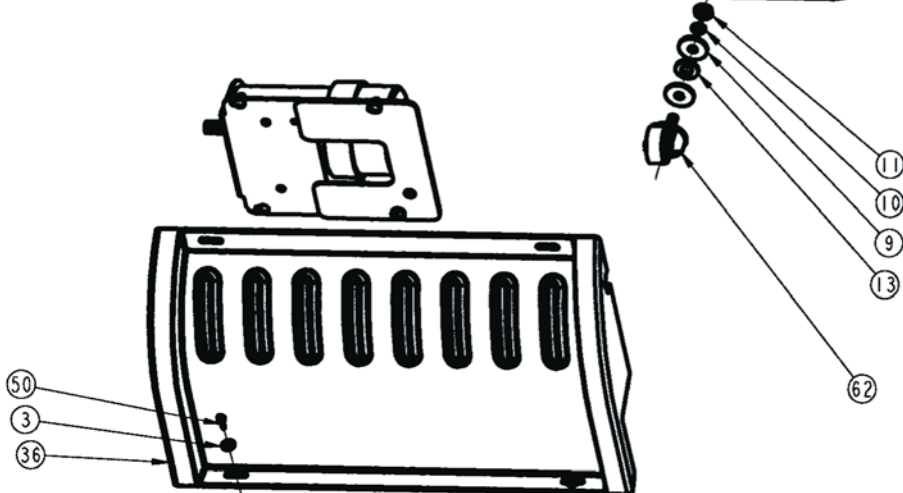
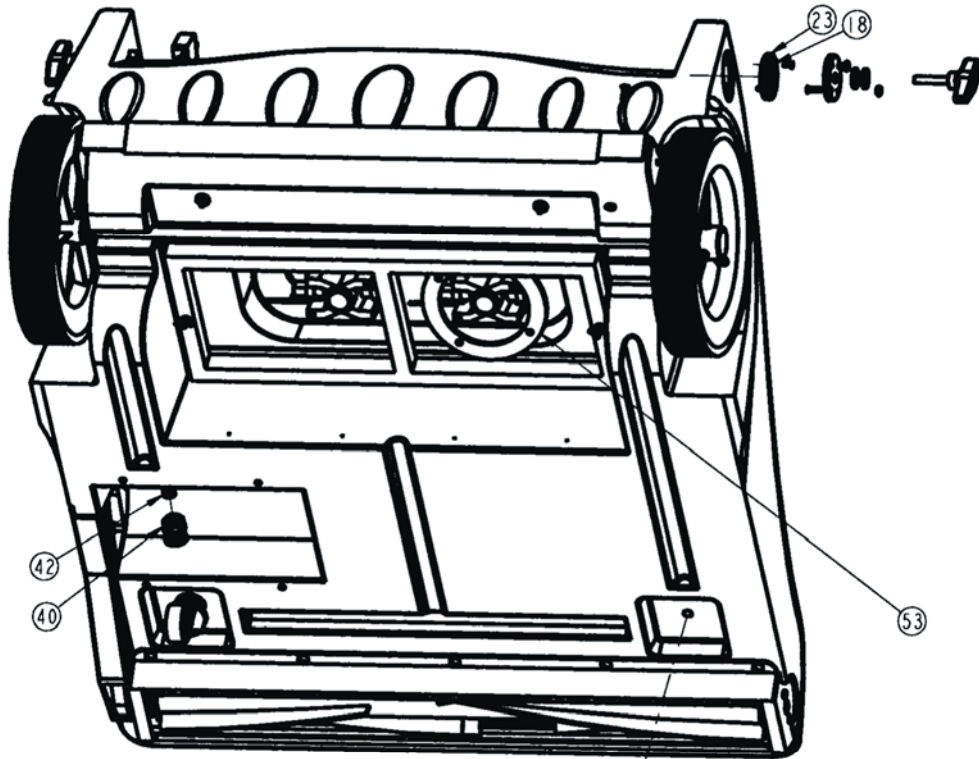
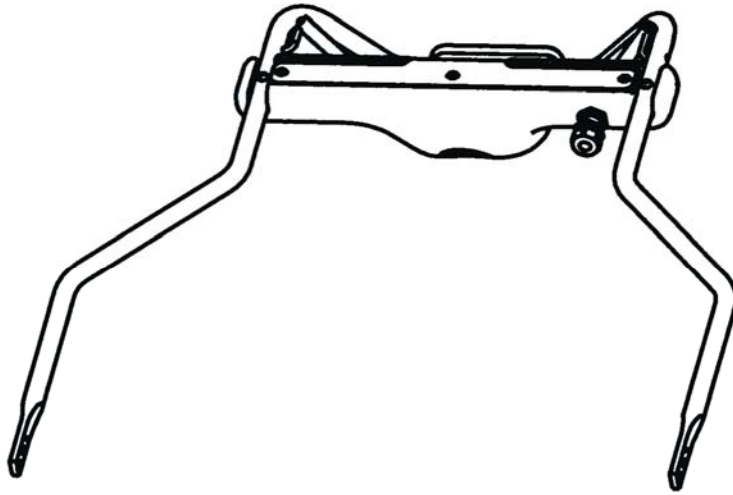
Effective January 1st, 2005. Terms subject to change without notice.
 Windshear™ Blower-Dryer, Insulation Blowers, T191, T201, T12/1, CV 30, CV 38, CW 50, CW 100, Pro PAC Vacs, Duo-Upright Carpetkeepers™, Gas & Electric Pressure Washers, and all chargers are warranted for 1 (one) year for both parts and labor.
 Warranties on all riding sweepers including the ICC1, KM 100/100 R, KMR 1250, and KMR 1700 are 24 months parts/6 months labor OR 1000 hours of operation, whichever comes first. Warranties on the 75/140 & 90/140 are 24 months parts/12 months' labor OR 1,000 hours of operation whichever comes first.
 All non-wear item parts purchased after warranty expiration are warranted for 90 days.
 Warranty starts from the date of sale to the consumer or, at Tornado's discretion, 6 months after dealer purchased the unit from Tornado, whichever comes first.

Note: Tornado, The Latest Dirt, Floorkeeper, Carpetkeeper, Carpetrinser, Carpetrinser/Dryer, Headmaster, Taskforce, PAC-VAC, T-Lite, Glazer, Windshear, Max-Vac, CV 30, CV 38, and Trot-Mop are trademarks of Tornado Industries.

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FULL ASSEMBLY PARTS LIST

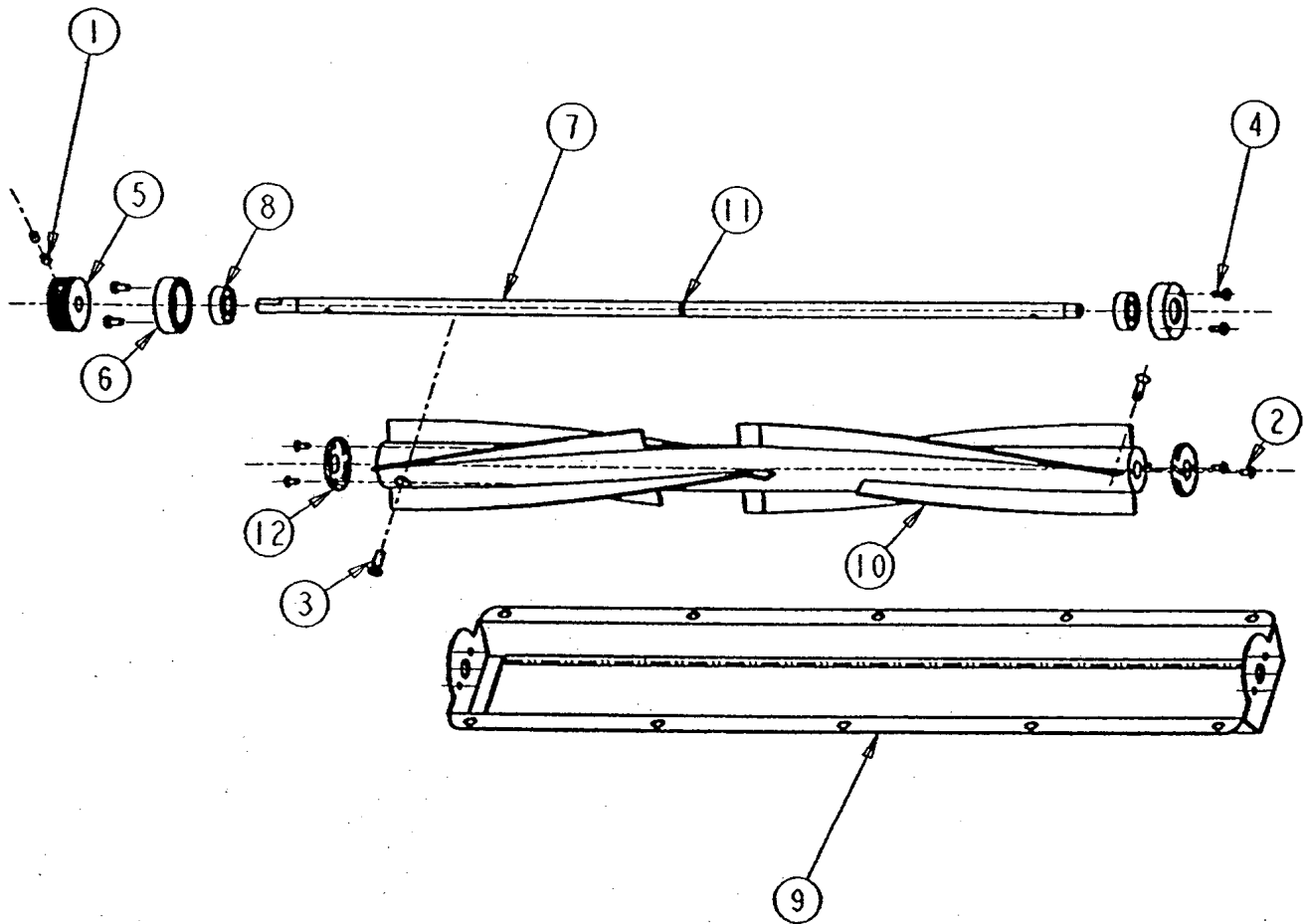
<u>ITEM</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	16	00086	SCREW - PHILLIPS ROUND HEAD MACHINE 1/4-20 X 1/2
2	5	00600	SCREW - SLOTTED ROUND HEAD MACHINE #8-32 X 3/4
3	10	00851	WASHER - PLAIN 1/4
4	4	01604	NUT – FINISHED HEX
5	4	01993	SCREW - PHILLIPS FLAT HEAD MACHINE #10-24 X 3/4
6	1	02011	SET SCREW, BRUSH PULLEY
7	4	02658	WASHER - PLAIN 5/16
8	5	02956	NUT – HEX. LOCK (KEPS) *8-32
9	4	03321	WASHER - PLAIN .391
10	2	03536	WASHER - LOCK 3/8"
11	2	05025	NUT – HEX. LOCK JAM
12	2	07870	WASHER - LOCK (I/T) 1/4"
13	2	10373	WASHER - PLAIN .500
14	4	10894	NUT – HEX. LOCK (P/T)
15	8	11240	SCREW - PHILLIPS PAN HEAD TAPTITE #10-24 X 1/2
16	2	11385	WASHER SEALING
17	2	15357	SPRING - LATCH RELEASE
18	8	15475	SCREW – PHILLIPS FLAT HEAD MACHINE #8-32 X 3/8
19	4	16433	SCREW – PHILLIPS FLAT HEAD MACHINE #10-32 X 1-3/4
20	4	16581	WASHER – PLAIN 1/2"
21	4	18793	STRAIN RELIEF (LIQ.TITE)
22	2	19797	WHEEL 10" PLASTIC HUB 125 LB
23	2	19798	BRACKET GROOVED HANDLE
24	2	19802	BELT, BRUSH DRIVE-POLY
25	1	19814	CHASSIS, MAIN - ROTO MOLDED
26	2	19818	SPRING, 1/2 CURVED (VEND)
27	1	19819	COVER, BELT ROTO-MOLDED
28	1	19822	INTAKE DUCT
29	2	19831	HUB CAP, WHEEL WAV
30	1	19832	LID, MOLDED (WAV)
31	2	19834	FILTER VAC. MTR. INTAKE
32	1	19835	PULLEY, BRUSH DRIVE MOTOR
33	1	19836	MOUNT, BRUSH MOTOR (STEEL)
34	2	19841	ARM , WHEEL PIVOT - 3/16 X 1
35	1	19850	SWITCH, ON/OFF
36	1	19854	COVER EXHAUST .13" NOM. THK
37	1	19855	FILTER, WAV EXHAUST
38	2	19864	PIN, LID HINGE STEEL .340"
39	1	19870	ASS'Y – BRUSH
40	1	19875	FITTING STRAIGHT (BLK PLSTC)
41	1	19876	FITTING, ELBOW (FOR CABLE)

FULL ASSEMBLY PARTS LIST - CONTINUED

42	1	19878	CONDUIT - CABLE 10" LG.
43	1	19879	BLOCK TERMINAL
44	2	19880	BOX - ELECTRICAL
45	1	19975	NUT - WING (10-32) ZINC PL
46	1	19977	STRAIN RELIEF (PLACTIC)
47	1	19984	ASS'Y HANDLE
48	2	19999	SCREW - PHILLIPS ROUND HEAD MACHINE 1/4-20 X 1-1/8
49	4	24185	RECTIFIER 60 AMP
50	1	30018	SCREW - THUMB W/ SHOULDER #10-32 X 1/2"
51	2	30077	GASKET - SHOE (POLY FOAM)
52	2	30088	FILTER - PRE
53	2	30089	GASKET - MOTOR (POLY FOAM)
54	2	30461	SLEEVE PIVOT .5"(.25"ID)
55	2	30464	SLEEVE PIVOT (LRG).312"ID
56	2	30467	SCREW - PHIL. FLAT HD MACH
57	2	30491	ASS'Y AXLE WHEEL
58	2	30507	SNAP RING 1/2" EXTERNAL
59	1	30558	KNOB - HANDLE ADJ.(BLACK)
60	2	30595	PEDAL - FOOT ADJ. (STEEL)
61	2	30617	SCREW - SOCKET HD SHOULDER 5/16 DIA. X 1-1/2"
62	1	31209	WHEEL, CASTER
63	2	31306	MOTOR VACUUM (230V)
64	1	31364	CIRCUIT BREAKER
65	1	31366	CIRCUIT BREAKER
66	1	32442	MOTOR - BRUSH 230VDC
67	1	32456	PLATE - MOTOR COVER (WAV)
68	2	80605	GASKET MAT'L - NEOPRENE
69	1	30466	SPRING TENSION
70	1	30596	COVER PEDAL
71	1	31070	CORD - POWER (230V) 50' INTER. HARM. - CEE 7/7 PLUG
72	1	19816	BAG, CLOTH
73	4	90701	BAG - PAPER, DISPOS - 10 PACK
(74)	1	18706	WIRE TIES 15" BLACK
(75)	1	30008	DECAL, WIRING
(76)	1	30017	WIRING HARNESS - MAIN BODY
(77)	1	30078	GASKET - HOOD 54" (L-200)
(78)	1	30442	DECAL REPLACEMENT PARTS
(79)	1	30618	DECAL - CARPET LEVEL

() ITEMS NOT SHOWN

* ITEM TO BE USED WHERE APPLICABLE

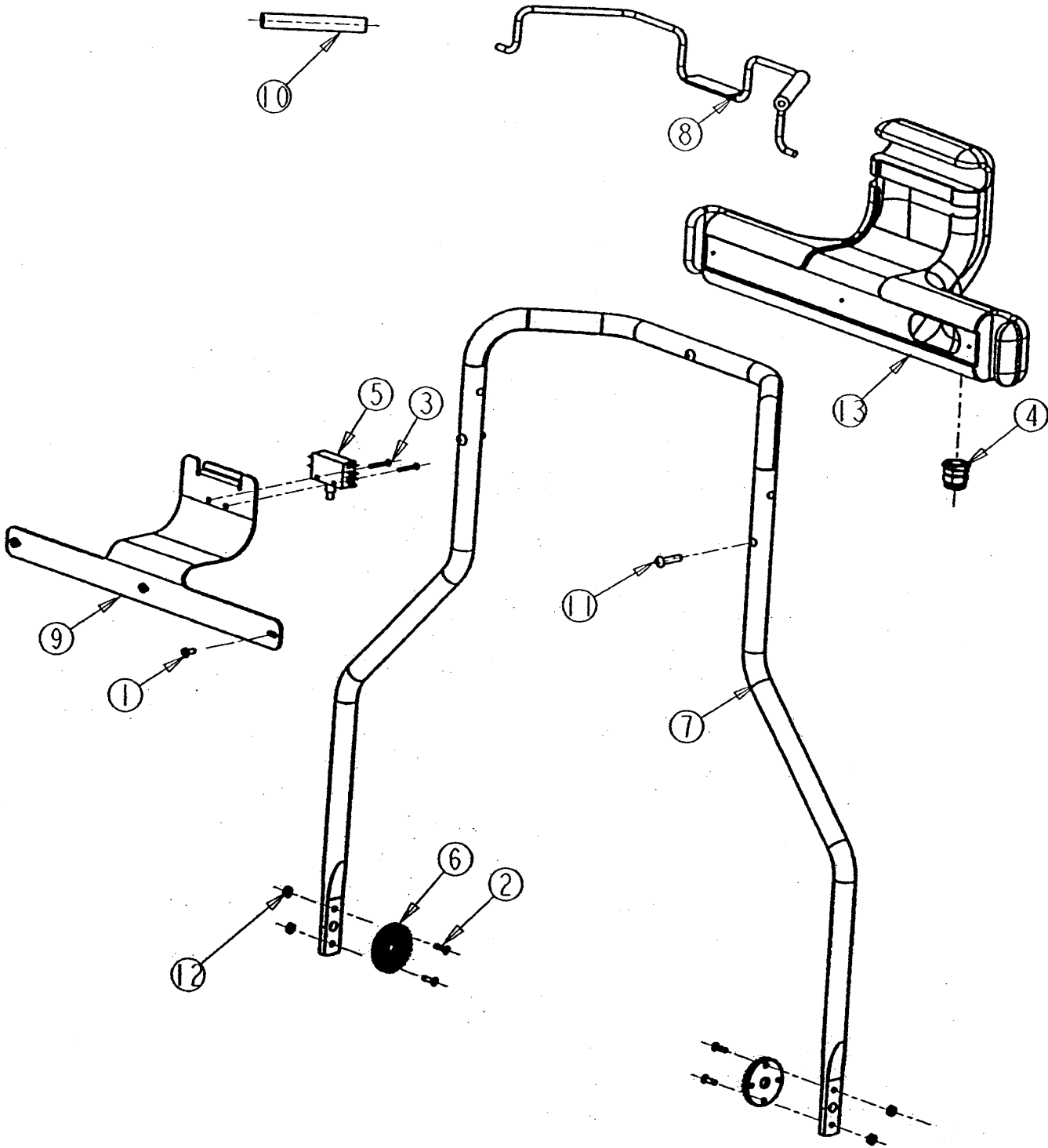


BRUSH ASSEMBLY PARTS LIST

(REF. DRAWING 19870)

<u>ITEM</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	2	02011	SET SCREW, BRUSH PULLEY
2	4	07535	SCREW #8-15 X .50 LG. (SHEET METAL)
3	2	11276	SCREW 1/4-20 X 7/8" LG. FLAT HEAD
4	4	16142	SCREW #10-32 X 1/2" LG. PAN HD (PHIL)
5	1	19804	BRUSH PULLEY
6	2	19805	BLOCK, BRUSH BEARING
7	1	19808	AXLE, WAV BRUSH
8	2	19809	BEARING, WAV BRUSH
9	1	19810	SHOE, WAV BRUSH MOUNT
10	1	19811	BRUSH 20" WAV
11	1	19838	"O" RING
12	2	19848	THREAD GUARD

HANDLE ASSEMBLY
(DRWG. P/N 30873)



HANDLE ASSEMBLY PARTS LIST

(REF. DRAWING 30873)

<u>ITEM</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	3	03660	#10-24 X 7/16" PAN HEAD SCREW
2	4	05769	#8-32 X 5/8" FLAT HEAD SCREW
3	2	06686	#6-32 X 3/4" PAN HEAD SCREW
4	1	18793	STRAIN RELIEF, CONTROL PANEL
5	1	19357	SWITCH, BRUSH
6	2	19798	BRACKET, HANDLE ADJUSTMENT
7	1	19829	HANDLE, MAIN STEEL TUBE
8	1	19849	TRIGGER, BRUSH SWITCH
9	1	19869	COVER, CONTROL PANEL
10	2	19971	FOAM GRIP TRIGGER
11	3	19999	1/4-20 X 1-1/8" ROUND HEAD SCREW
12	4	30074	HEX NUT LOCK
13	1	19813	CONTROL PANEL, WAV
(14)	1	19996	WIRE HARNESS

* ITEMS TO BE USED WHERE APPLICABLE

() ITEMS NOT SHOWN

ELECTRICAL SCHEMATICS
WIDE AREA VACUUM

