SERVICE PARTS LIST

BULLETIN NO.
54-40-1600

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS

CORDLESS 18 VOLT SAWZALL®

REVISED BULLETIN	DATE
	Sept. '98

CATALOG NO. 6515-20	STARTING SERIAL NO. 971A	WIRING INSTRUCTION 58-01-0790

EXAMPLE: 00/0 Component Parts (Small #) Are Included When Ordering The Assembly (Large #).

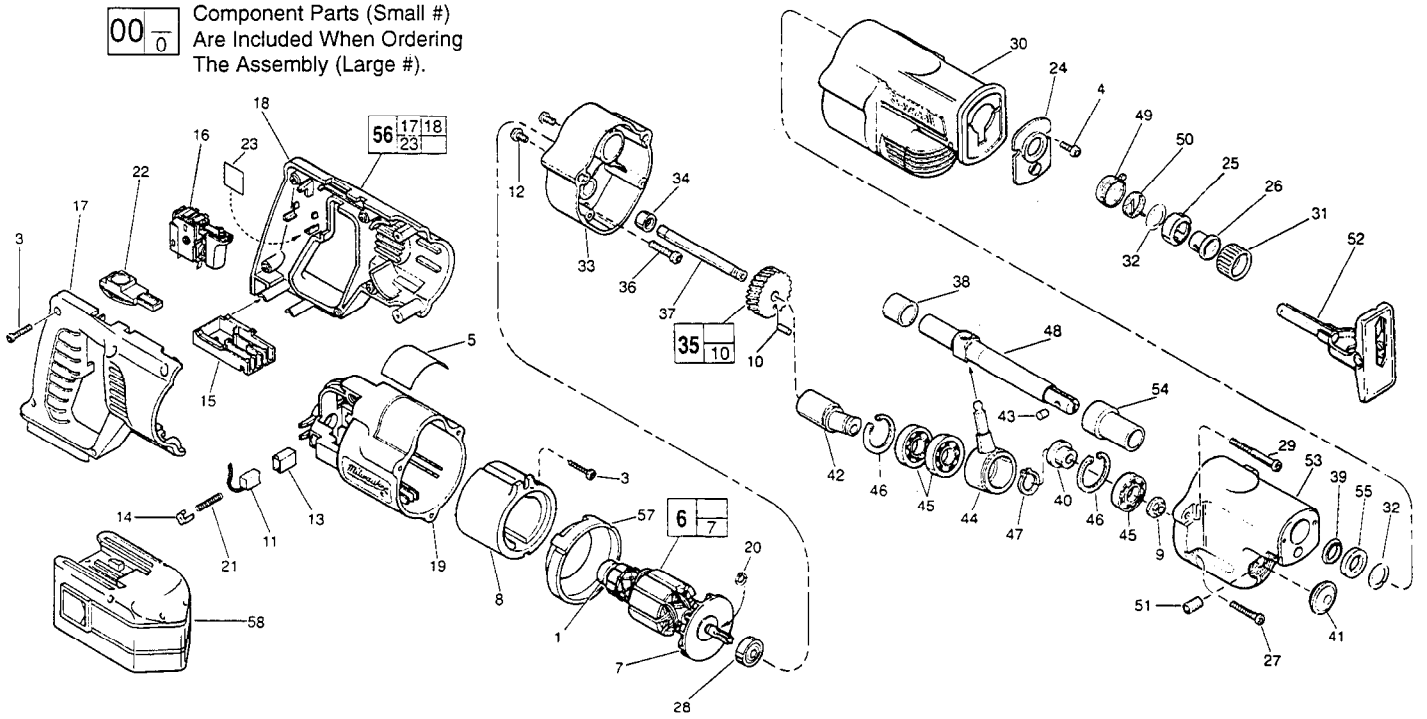


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	02-04-5130	Ball Bearing	(1)
3	06-82-7261	6-19 x 11/16" Pan Hd. Slt. Plastite T-15	(8)
4	06-95-0075	6-32 x 3/8" Truss Hd. Taptite T-10 Screw	(2)
5	12-20-1425	Service Nameplate Kit	(1)
6	16-01-1090	Armature	(1)
7	22-84-0830	Fan Assembly	(1)
8	18-01-0050	Field	(1)
9	06-55-3790	5/16-24 Spinlock Hex Nut	(1)
10	06-65-0606	3/16" x 1/2" Drivelok Pin	(1)
11	22-18-0975	Carbon Brush Assembly-Right	(1)
11A	22-18-0970	Carbon Brush Assembly-Left (Not Shown)	(1)
12	06-82-7252	8-32 x 3/8" Pan Hd. Taptite T-20	(2)
13	22-20-0860	Brush Tube	(2)
14	22-32-0400	Brush Spring Clip	(2)
15	22-56-0230	Connector Block	(1)
16	23-66-2351	Switch Assembly	(1)
17	31-44-0750	Handle Half-Right	(1)
18	31-44-0755	Handle Half-Left	(1)
19	31-50-0961	Motor Housing	(1)
20	34-60-0650	External Retaining Ring	(1)
21	40-50-8840	Brush Spring	(2)
22	45-24-0201	Lock Off Slide	(1)
23	10-15-0175	Wiring Instruction Label	(1)
24	44-86-0615	Seal Retainer	(1)
25	42-50-0075	Cam Collar	(1)
26	45-22-0080	Sleeve	(1)
27	06-82-5346	8-32 x 3/4" Pan Hd. Taptite T-20	(2)
28	02-04-0911	Ball Bearing	(1)
29	05-88-8301	K50 x 60mm Pan Hd. PT T-20	(2)
30	45-12-0510	Gear Case Insulator	(1)
31	31-15-0075	Plastic Collar	(1)
32	45-88-8576	Washer	(2)
33	28-28-2080	Diaphragm	(1)
34	02-50-2150	Needle Bearing	(1)
35	32-40-2345	Intermediate Gear Assembly	(1)
36	05-88-8307	K50 x 22mm Pan Hd. PT T-20	(1)
37	42-12-0180	Axle-Wobble Shaft	(1)
38	42-24-0620	Rear Spindle Bearing	(1)
39	45-06-0475	Poly-Pak Seal	(1)
40	45-36-1450	Spacer	(1)
41	42-52-0380	Bearing Cap	(1)
42	36-92-0740	Wobble Shaft	(1)
43	44-60-0625	Pin	(1)
44	30-72-0111	Wobble Plate	(1)
45	02-04-1510	Ball Bearing	(3)
46	34-80-2600	Internal Retaining Ring	(2)
47	34-60-1315	External Retaining Ring	(1)
48	38-50-6005	Reciprocating Spindle	(1)
49	31-15-0510	Spring Cover	(1)
50	40-50-0160	Torsion Spring	(1)
51	06-83-3150	5/16-18 x 1/2" Hex Socket Hd. Set Screw	(1)
52	45-16-0615	Pivot Shoe Assembly	(1)
53	28-14-2180	Gear Case	(1)
54	42-24-0615	Forward Spindle Bearing	(1)
55	45-06-0500	Felt Seal	(1)
56	31-44-0775	Handle Kit	(1)
57	31-05-0080	Baffle	(1)
	49-96-0070	5/32" Hex Key	(1)
	23-94-5890	Leadwire Assy.-Black (See 58-01-0790)	(1)
	23-94-5895	Leadwire Assy.-White (See 58-01-0790)	(1)
58	48-11-2200	18 Volt Battery (Accessory)	(1)
58A	31-50-1486	Battery Housing Kit (Contains 58B Thru 58E, 58G, 58H)	(1)
58B	31-50-1480	Housing-Top (Not Shown)	(1)
58C	31-50-1485	Housing-Bottom (Not Shown)	(1)
58D	10-20-0370	Logo Label (Not Shown)	(1)
58E	10-15-0640	Nameplate/Warning Label (Not Shown)	(1)
58F	06-82-7336	#4 x 3/4" Plastite T-15 (Not Shown)	(5)
58G	44-20-0445	Battery Latch-Right (Not Shown)	(1)
58H	44-20-0440	Battery Latch-Left (Not Shown)	(1)
58J	40-50-0820	Latch Spring (Not Shown)	(2)

FIG.	NOTES:
11,11A,13	Remove Brushes And Brush Tubes To Prevent Damage When Installing Or Removing Armature From Motor Hsg.

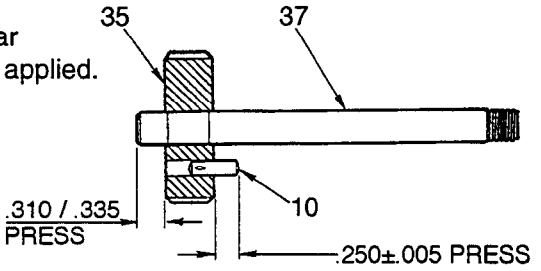
SEE REVERSE SIDE FOR IMPORTANT SERVICE NOTES

MILWAUKEE ELECTRIC TOOL CORPORATION
13135 W. LISBON RD., BROOKFIELD, WI 53005

Drwg. 1

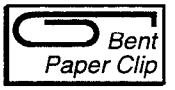
FIG.	LUBRICATION
33	Place 3/4 oz. of type "L" grease, No. 49-08-4175, in diaphragm cavity near needle bearing.
53	Place 2-3/4 oz. of type "L" grease, No. 49-08-4175, in mechanism cavity of gear case.
55	Saturate with lightweight oil before assembly.

FIG.	NOTES
9	Apply thread locking compound to threads of spinlock hex nut. Torque to 145in./lbs.-185 in./lbs.
9,10,35,37	Axle should extend .285 min. beyond intermediate gear after seating torque to spinlock hex nut (not shown) is applied.
	Pin is to be pressed into gear as shown.
20	Seal side faces commutator.
20,28,45	Press bearings to shaft shoulders.
33,38	Press rear spindle bearing flush to .030 below bearing boss of diaphragm.
34	Press bearing flush (±.005) to diaphragm surface.
39	O-ring of seal towards rear of tool.
45,46	Retaining rings are to be installed with the beveled side away from the bearings.
53,54	Press forward spindle bearing flush to .030 below bearing boss of gear case.



REMOVING THE KEYLESS QUIK-LOK BLADE CLAMP

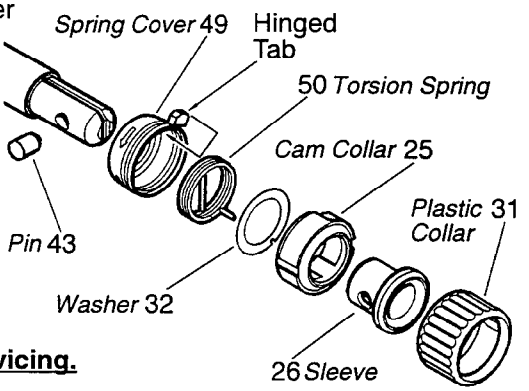
25,26,31,32, 43,48,49,50 To remove keyless blade clamp, pry or press off plastic collar. Pop up the hinged tab on spring cover. Rotate cam collar until it stops fully open. While holding cam collar, insert Sawzall blade to push pin partially out. Insert a rigid wire-like instrument, like a paper clip with a slight bend on the end. Locate the pin area on inside slot and twist the paper clip to remove the pin from spindle. (Use of a strong magnet may also remove the pin from the spindle.



Clean all parts before reassembly.

25,43 If cam collar or pin is replaced, coat pin with powdered graphite.

31,49 **Always replace plastic collar and spring cover when servicing.**



REASSEMBLY OF THE KEYLESS QUIK-LOK BLADE CLAMP

25,26,31,32, 43,48,49,50 To reassemble keyless blade clamp, place sleeve (26) in cam collar (25) then place washer (32) on sleeve (26). Insert spring leg of torsion spring (50) into hole on cam collar (25) and slot in washer (32). Cover up with spring cover (49).

Facing the front end of the tool, position reciprocating spindle with the pin hole facing up. Slide keyless blade clamp assembly onto the spindle with slot in cam collar (25) toward the left. Rotate the assembly in the direction of the arrows, approximately 205º. A ground pin may be used to keep the slot and sleeve hole in alignment until hole in spindle is reached. Use a pliers to hold assembly and remove ground pin. Pin (43) can now be inserted into clamp. Snap clamp to assure proper functioning before adding plastic collar (31). Fold hinged tab on spring cover (49) into slot on cam collar (25) as shown. Tab must be present to assure proper function. Slide plastic collar (31) onto assembly. Rotate plastic collar (31) until keyways line up and slide plastic collar (31) over snap in spring cover (49).