



# SERVICE PARTS LIST

**BULLETIN NO.**  
**54-40-5200**

<b>SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS</b>		<b>REVISED BULLETIN</b>	<b>DATE</b>
<b>D.I. SAWZALL® with QUIK-LOK® BLADE CLAMP</b>			July '97
<b>CATALOG NO.</b>	<b>6509-21</b>	<b>STARTING SERIAL NO.</b>	<b>962A</b>
			<b>WIRING INSTRUCTION</b>
			<b>58-01-0276</b>

**EXAMPLE:**



Component Parts (Small #)  
Are Included When Ordering  
The Assembly (Large #).

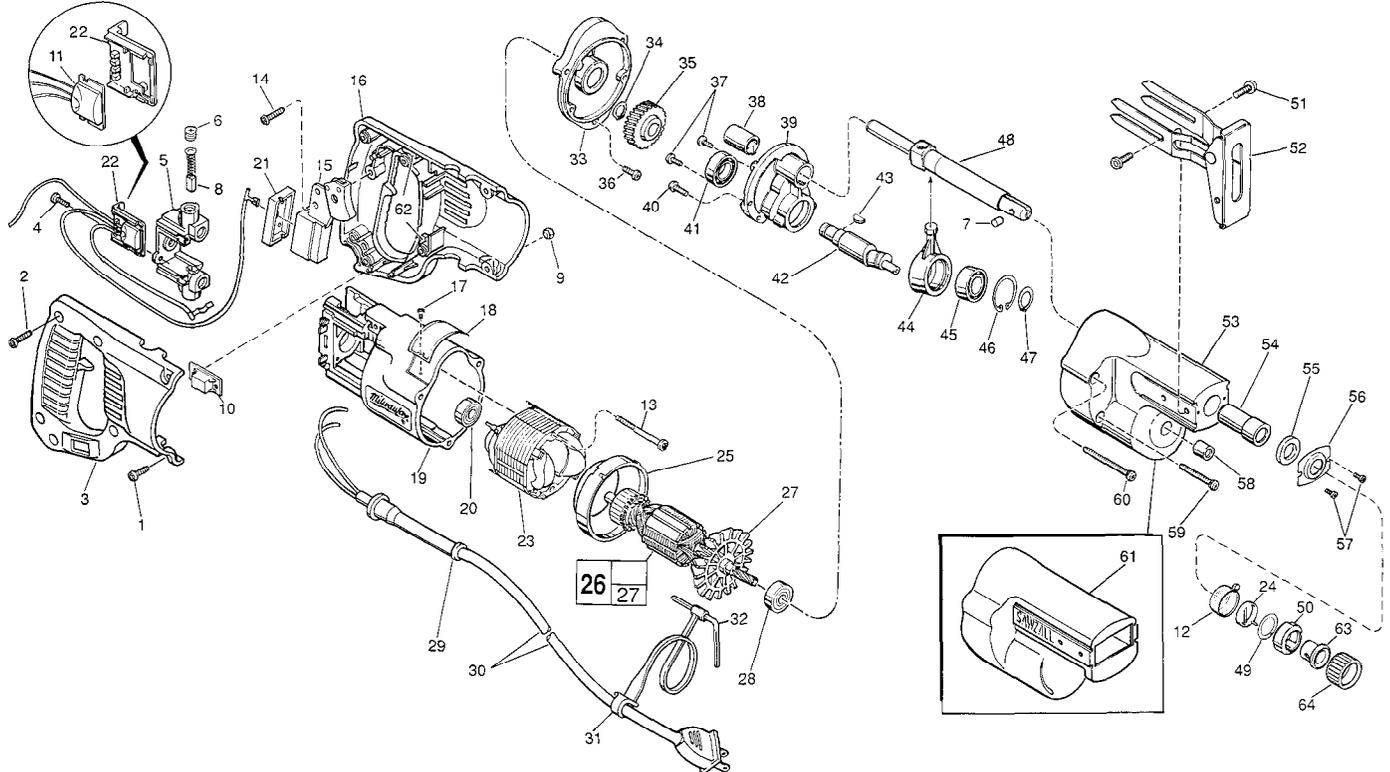


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	06-82-2390	8-32 x 1-1/4" Slotted Pan Hd. T-20 Screw	(2)
2	06-82-7270	8-16 x 5/8" Pan Hd. Plastite T-20 Screw	(5)
3	31-44-1651	Right Handle Half	(1)
4	06-82-7240	6-19 x 1/2" Pan Hd. Slit. Plastite T-15 Screw	(2)
5	22-22-1380	Brush Holder Assembly	(1)
6	23-44-0190	Brush Retaining Cap	(2)
7	44-60-0625	Pin	(1)
8	22-18-0910	Carbon Brush Assembly	(2)
9	06-55-0835	Hex Nut	(2)
10	31-53-0120	Plug	(1)
11	14-20-3015	Remote Electronic Assembly	(1)
12	31-15-0510	Spring Cover	(1)
13	06-82-7410	8-16 x 1-7/8" Pan Hd. Plastite T-20 Screw	(2)
14	06-82-7270	8-16 x 5/8" Pan Hd. Plastite T-20 Screw	(1)
15	23-66-1490	Variable Speed Switch	(1)
16	31-44-1656	Left Handle Half	(1)
17	06-72-1720	Nameplate Rivet	(2)
18	12-99-1740	Service Nameplate	(1)
19	31-50-0020	Motor Housing	(1)
20	02-04-0845	Ball Bearing	(1)
21	45-12-0470	Dust Shield	(1)
22	43-72-0176	Heat Sink Holder	(1)
23	18-31-0200	120 V. Field	(1)
24	40-50-0160	Torsion Spring	(1)
25	31-05-0055	Baffle	(1)
26	16-30-0425	120 V. Armature	(1)
27	22-84-0531	Fan Assembly	(1)
28	02-04-0911	Ball Bearing	(1)
29	44-76-0210	Cord Protector	(1)
30	22-64-0408	Cord Set	(1)
31	48-66-4080	Key Holder	(1)
32	49-96-0070	5/32" Socket Wrench	(1)
33	28-28-0350	Diaphragm	(1)
34	34-60-0920	External Retaining Ring	(1)
35	32-40-1920	Intermediate Gear	(1)
36	05-88-8306	K50 x 22mm Fil. Hd. PT T-20 Screw	(1)
37	06-95-0075	6-32 x 3/8" Truss Hd. Taptite Screw	(2)

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
38	42-24-0250	Rear Spindle Bearing	(1)
39	28-72-1002	Bearing Plate	(1)
40	06-82-3056	8-32 x 1/2" Fil. Hd. Taptite T-20 Screw	(2)
41	02-04-1510	Ball Bearing	(1)
42	36-92-0720	Wobble Shaft	(1)
43	06-42-1200	Woodruff Key	(1)
44	30-72-0060	Wobble Plate	(1)
45	02-04-1510	Ball Bearing	(1)
46	34-80-2355	Internal Retaining Ring	(1)
47	34-60-1200	Retaining Ring	(1)
48	38-50-5405	Reciprocating Spindle	(1)
49	45-88-8576	Washer	(1)
50	42-50-0075	Cam Collar	(1)
51	06-95-6270	10-24 x 1/2" Pan Hd. Taptite Sems Screw	(4)
52	45-16-0485	Pivot Shoe Assembly	(1)
53	28-14-1780	Gear Case	(1)
54	42-24-0320	Spindle Bearing	(1)
55	45-06-0300	Felt Seal	(1)
56	44-86-0370	Seal Retainer	(1)
57	06-95-0050	4-40 x 3/16" Pan Hd. Taptite Screw	(2)
58	02-50-1640	Needle Bearing	(1)
59	06-82-3154	8-32 x 1-3/8" Fil. Hd. Taptite T-20 Screw	(2)
60	05-88-8305	K50 x 54mm Fil. Hd. PT T-20 Screw	(2)
61	45-12-0305	Gear Case Insulator	(1)
62	14-46-1001	Foam Slug Kit - 10 Slugs	(2)
63	45-22-0080	Sleeve	(1)
64	31-15-0075	Plastic Collar	(1)

**SEE REVERSE SIDE FOR  
IMPORTANT SERVICE NOTES**

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

**FIG. LUBRICATION**

- 53 Place 1/2 oz. of type "A" grease, No. 49-08-0800, in gearing cavity near diaphragm.
- 53 Place 2-1/2 oz. of type "B" grease, No. 49-08-0600, in cavity in front of bearing plate.

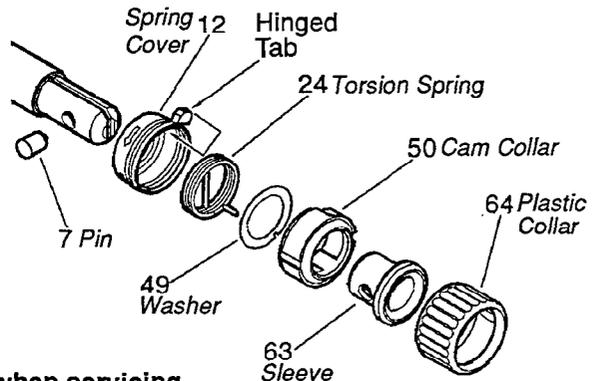
**FIG. NOTES**

- 20 Seal side faces commutator.
- 20,28,41,45 Press bearings to shaft shoulders.
- 38,39 Press rear spindle bearing flush to  $\pm .030$  from back face in bearing plate.
- 45,46 Retaining ring is to be installed with the beveled side away from the bearing.
- 53,54 Press forward spindle bearing .020 to .030 below exterior surface of gear case.
- 58 Needle bearing is to be pressed from the open end flush to  $\pm .030$  to back of bearing boss of gear case.
- 62 After routing wires, place one foam slug in each location shown on the front page. Center slugs on screw bosses and push down until flush with top of handle half.

**REMOVING THE KEYLESS QUIK-LOK BLADE CLAMP**

7,12,24,48,  
49,50,63,64

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.**

7,50

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

12,64

**Always replace plastic collar and spring cover when servicing.**

**REASSEMBLY OF THE KEYLESS QUIK-LOK BLADE CLAMP**

7,12,24,48,  
49,50,63,64

To reassemble keyless blade clamp, place sleeve (63) in cam collar (50) then place washer (49) on sleeve (63). Insert spring leg of torsion spring (24) into hole on cam collar (50) and slot in washer (49). Cover up with spring cover (12).

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 (50) toward the left. Rotate the assembly in the direction of the arrows, approximately 205°. 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 (7) can now be inserted into clamp. Snap clamp to assure proper functioning before adding plastic collar (64). Fold hinged tab on spring cover (12) into slot on cam collar (50) as shown. Tab must be present to assure proper function. Slide plastic collar (64) onto assembly. Rotate plastic collar (64) until keyways line up and slide plastic collar (64) over snap in spring cover (12).