



# SERVICE PARTS LIST

**BULLETIN NO.**  
**54-40-5210**

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN	DATE
<b>SAWZALL®</b>			June 2006
CATALOG NO.	<b>6509-20</b> <b>6509-22</b>	STARTING SERIAL NO.	<b>A17A</b>
		WIRING INSTRUCTION <b>58-01-0276</b>	



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

**SEE REVERSE SIDE FOR  
IMPORTANT SERVICE NOTES**

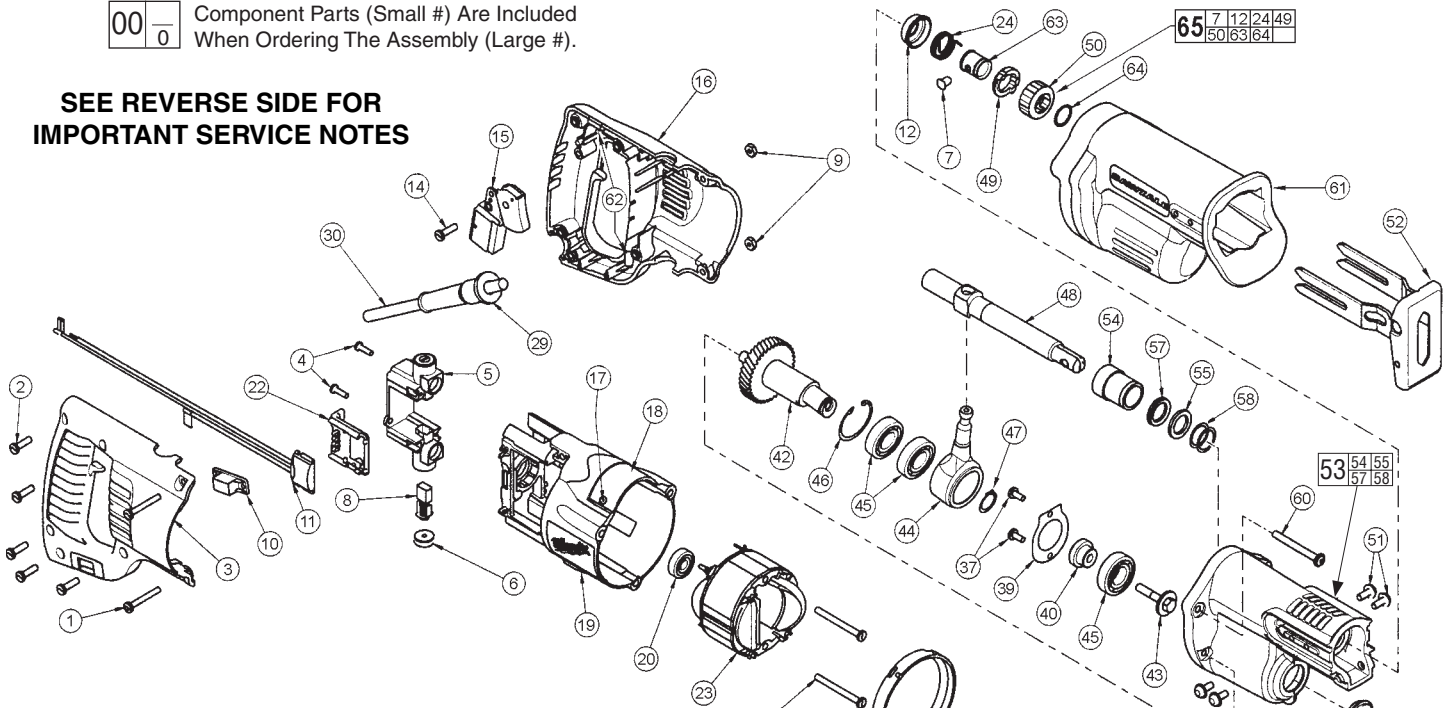


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	06-82-2390	8-32 x 1-1/4" Slotted Pan Hd. T-20 Screw	(2)
2	06-82-7270	8-16 x 5/8" Pan Hd. Plastite T-20 Screw	(5)
3	31-44-1651	Right Handle Half	(1)
4	06-82-7240	6-19 x 1/2" Pan Hd. Slit. Plastite T-15 Screw	(2)
5	22-22-1385	Brush Holder Assembly	(1)
6	23-44-0125	Brush Retaining Cap	(2)
7	44-60-0626	Lock Pin	(1)
8	22-18-0926	Carbon Brush Assembly	(2)
9	06-55-0835	Hex Nut	(2)
10	31-53-0120	Plug	(1)
11	14-20-3000	Remote Electronic Assembly	(1)
12	31-15-0511	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	23-66-1970	Variable Speed Switch	(1)
16	31-44-1656	Left Handle Half	(1)
17	06-72-1710	Nameplate Rivet	(2)
18	12-99-1755	Service Nameplate	(1)
19	31-50-0020	Motor Housing	(1)
20	02-04-0845	Ball Bearing	(1)
21	06-82-7252	8-32 x 3/8" Pan Hd. Slit. Taptite T-20	(2)
22	43-72-0176	Heat Sink Holder	(1)
23	18-31-0515	120 V. Field	(1)
24	40-50-0161	Torsion Spring	(1)
25	31-05-0055	Baffle	(1)
26	16-30-0570	120 V. Armature	(1)
27	22-84-0531	Fan Assembly	(1)
28	02-04-0915	Ball Bearing	(1)
29	44-76-0210	Cord Protector	(1)
30	22-64-0408	Cord Set	(1)
31	48-66-4080	Key Holder (Not Shown)	(1)
32	49-96-0070	5/32" Hex Key (Not Shown) Use on #51	(1)
33	* 28-28-1000	Diaphragm	(1)
34	* 45-06-0725	Foam Seal	(2)
35	42-52-0380	Bearing Cap	(1)
36	05-88-8309	K50 x 35mm Round Washer Hd. PT T-20	(1)
37	06-82-7253	8-32 x 3/8" Pan Hd. Slit. Taptite T-20	(2)
38	42-24-0620	Rear Spindle Bearing	(1)
39	44-86-0055	Bearing Retainer	(1)
40	45-36-1440	Spacer	(1)
41	02-50-2150	Needle Bearing	(1)
42	36-92-1000	Wobble Shaft Assembly	(1)
43	06-75-0285	1/4-28 Washer Head Screw	(1)
44	30-72-0085	Wobble Plate	(1)
45	02-04-1510	Ball Bearing	(3)

**\* NOTE:**

Early production runs of the 6509-20/22 Sawzalls used a vented diaphragm (33) that required the use of two foam seals (34). If your tool has the vented diaphragm, continue to use the two foam seals.

**When REPLACING the diaphragm (33), the service replacement part does not have vent holes. The use of the two foam seals (34) is not necessary!**

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
46	34-80-2600	Internal Retaining Ring	(1)
47	34-60-1315	Retaining Ring	(1)
48	38-50-6005	Reciprocating Spindle	(1)
49	42-50-0077	Rear Cam	(1)
50	42-50-0076	Front Cam	(1)
51	06-95-6270	10-24 x 1/2" Pan Hd. Taptite Sems Screw	(4)
52	45-16-0800	Pivot Shoe Assembly	(1)
* 53	28-14-0996	Gear Case	(1)
* 54	-----	Front Spindle Bearing	(1)
* 55	-----	Felt Seal	(1)
* 57	-----	Seal	(1)
* 58	-----	Washer	(2)
59	06-82-5363	8-32 x 1" Washer Hd. Taptite T-20	(2)
60	05-88-0302	K50 x 60mm Round Washer Hd. PT T-20	(2)
61	45-12-1000	Gear Case Insulator	(1)
62	14-46-1001	Foam Slug Kit - 10 Slugs	(2)
63	45-22-0081	Sleeve	(1)
64	34-60-3680	External Retaining Ring	(1)
65	14-46-1011	Steel Quik-Lok Blade Clamp Kit	(1)

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**FIG. LUBRICATION**

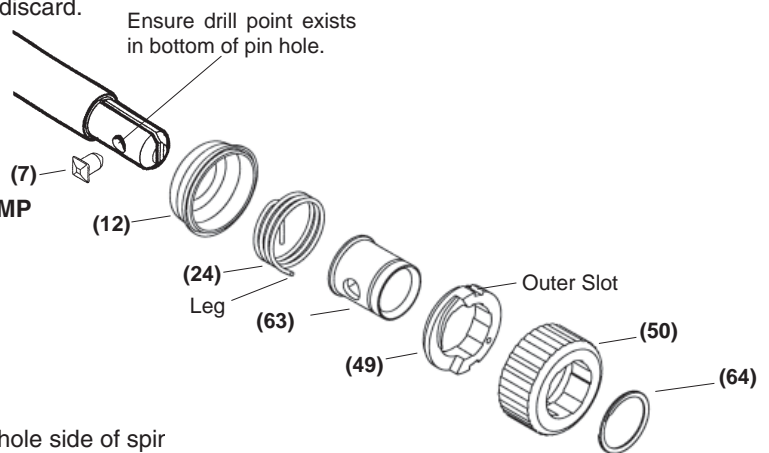
- 53 Place 1/2 oz. of type "Y" grease, No. 49-08-5270, in gearing cavity near diaphragm.
- 53 Place 2-1/2 oz. of type "L" grease, No. 49-08-4175, in cavity in front of bearing plate.

**FIG. NOTES**

- 20 Seal side faces commutator.
- 20,28,41,45 Press bearings to shaft shoulders.
- 38,39 Press rear spindle bearing flush to -.030 from front exterior face in diaphragm boss.
- 43 Torque to 80 in./lbs. to 120 in./ lbs.
- 45,46 Retaining ring is to be installed with the beveled side away from the bearing.
- 53,54 Press front spindle bearing flush to .015 below exterior surface of gear case.
- 33,41 Needle bearing is to be pressed from the open end flush to -.015 to face of bearing boss of diaphragm.
- 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 STEEL QUIK-LOK® BLADE CLAMP**

- Remove external retaining ring (64) and pull front cam (50) off.
- Pull lock pin (7) out and remove remainder of parts and discard.



**REASSEMBLY OF THE STEEL QUIK-LOK® BLADE CLAMP**

- Coat new lock pin with powdered graphite.
- Hold tool in a vertical position.
- Place spring cover (12) onto spindle.
- Slide torsion spring (24) onto spindle with spring leg on hole side of spir
- Slide sleeve (63) onto spindle aligning hole on sleeve with hole in spindle.
- Slide rear cam (49) over sleeve until it bottoms on sleeve shoulder, ensure spring leg inserts into hole in rear cam.
- Rotate rear cam in the direction of the arrows located on spring cover until there is clearance for lock pin (7) to be inserted into sleeve/spindle holes. Insert lock pin.
- Align front cam (50) inner ribs with rear cam outer slots and slide front cam onto sleeve until it bottoms. Retaining ring (64) groove should be completely visible.
- Attach retaining ring by separating coils and inserting end of ring into groove, then wind remainder of ring into groove. Ensure ring is seated in groove.
- Blade clamp should rotate freely. During normal usage, debris may not allow blade clamp to rotate freely. The use of spray lubricant can help free blade clamp. In extreme conditions, follow these instructions to remove, clean and reassemble blade clamp.