

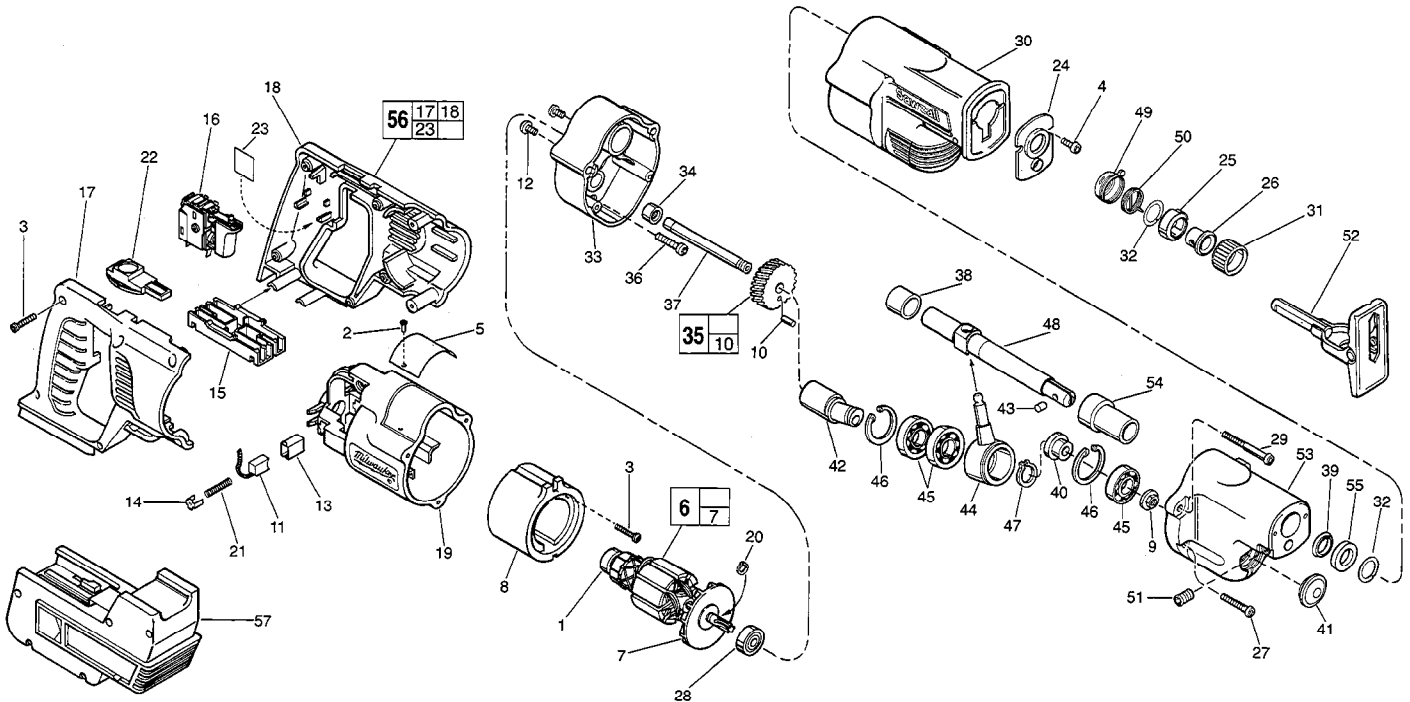
# SERVICE PARTS LIST

**BULLETIN NO.**  
**54-40-1575**

|  |         |                     |            |
|--|---------|---------------------|------------|
| SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS |         | REVISED BULLETIN    | DATE       |
| <b>CORDLESS 18 VOLT SAWZALL®</b>                       |         |                     | Mar. '97   |
| CATALOG NO.  | 6516-21 | STARTING SERIAL NO. | 918A       |
|  |         | WIRING INSTRUCTION  | 58-01-0790 |

00 0

**EXAMPLE:**  
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)      |
| 2    | 06-72-1720 | Nameplate Rivet                           | (2)      |
| 3    | 06-82-7261 | 6-19 x 11/16" Pan Hd. Slit. Plastite T-15 | (8)      |
| 4    | 06-95-0075 | 6-32 x 3/8" Truss Hd. Taptite T-10 Screw  | (2)      |
| 5    | 12-99-1930 | Service Nameplate                         | (1)      |
| 6    | 16-01-0090 | 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   | 22-56-0200 | Connector Block                           | (1)      |
| 16   | 23-66-2350 | Switch                                    | (1)      |
| 17   | -----      | Handle Half-Right                         | (1)      |
| 18   | -----      | Handle Half-Left                          | (1)      |
| 19   | 31-50-0960 | Motor Housing                             | (1)      |
| 20   | 34-60-0650 | External Retaining Ring                   | (1)      |
| 21   | 40-50-8840 | Brush Spring                              | (2)      |
| 22   | 45-24-0205 | Lock Off Slide Assembly                   | (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)      |

| FIG. | PART NO.   | DESCRIPTION OF PART                     | NO. REQ. |
|------|------------|---|----------|
| 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   | 31-44-0690 | Handle Kit                              | (1)      |
| 57   | 48-11-2100 | 18 Volt Battery (Accessory)             | (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)      |

**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

**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.

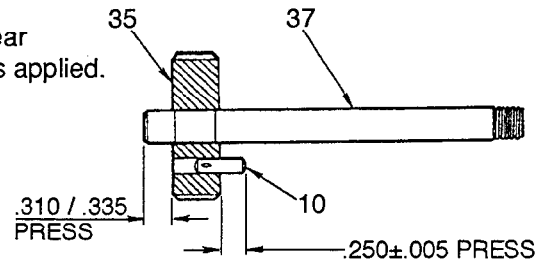
9,10,35,37

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.

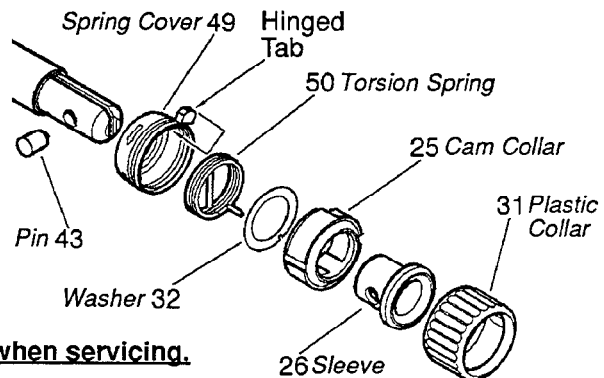
45,46 Retaining rings are to be installed with the beveled side away from the bearings.

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.



**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 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 (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).