

SPECIAL SERVICE NOTE:

Early production (Series 1) of Sawzall 6536-21 with serial break 'A' will have a 'Red' spindle seal (45-06-0115) and two steel washers (45-88-8577).

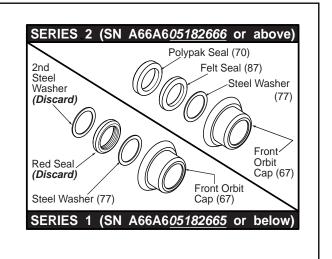
'Red' spindle seal No. 45-06-0115 is obsolete with no direct replacement.

When servicing Series 1 (A) revision Sawzalls (SN A66A605182665 or less) with worn out / damaged 'Red' spindle seal, the following needs to be done:

- use the existing front orbit cap No. 44-86-0035.
- use <u>one</u> of the existing steel washers (discard the second washer).
- discard worn out / damaged 'Red' spindle seal.

To Assemble

- place one steel washer (45-88-8577) inside front orbit cap.
- place felt seal (45-06-0501) inside front orbit cap. (Soak in lightweight bushing oil prior to assembly).
- place / press polypak seal (45-06-0475) inside front orbit cap. (O-ring of polypak seal must face mechanism - toward rear of tool).



LUBRICATION: Lightly coat o-rings with lubrication for ease of installation onto assembled orbit pockets. Place 3.2 oz. (80 grams ± 8 grams) of type "T" grease (Cat. No. 49-08-4290), in mechanism cavity of gear case. Place .8 oz. (20 grams ± 2 grams) of type "T" grease (Cat. No. 49-08-4290), in lower needle bearing-gear train cavity of diaphragm.

BULLETIN NO. 54-40-7580 May 2005

- 40,58 Apply a thin coat of type "T" grease (Cat. No. 49-08-4290) between gear and metal plate.
- 65 Pin to be coated with graphite prior to assembly.
- 87 Soak in lightweight bushing oil prior to assembly.

REMOVING THE STEEL QUIK-LOK® BLADE CLAMP-

- Remove external retaining ring (44) and pull front cam (53) off.
- Pull lock pin (65) 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.

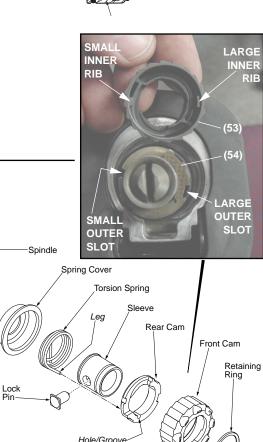
FIG.

29,41

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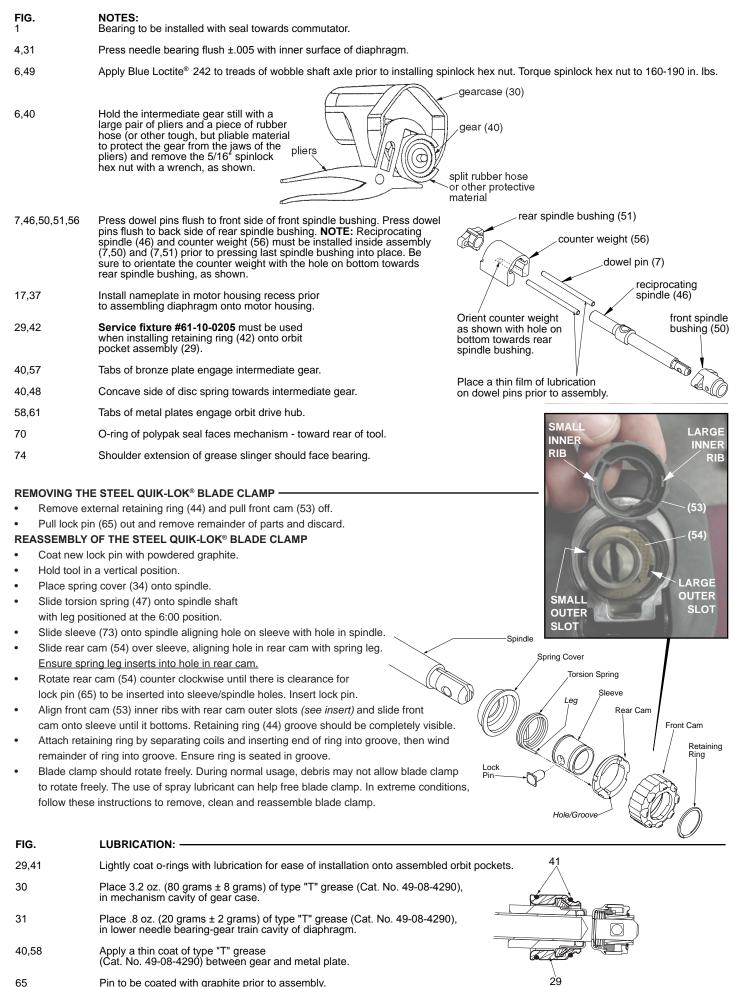
31

- Place spring cover (34) onto spindle.
- Slide torsion spring (47) onto spindle shaft with leg positioned at the 6:00 position.
- Slide sleeve (73) onto spindle aligning hole on sleeve with hole in spindle.
- Slide rear cam (54) over sleeve, aligning hole in rear cam with spring leg. Ensure spring leg inserts into hole in rear cam.
- Rotate rear cam (54) counter clockwise until there is clearance for lock pin (65) to be inserted into sleeve/spindle holes. Insert lock pin.
- Align front cam (53) inner ribs with rear cam outer slots (see insert) and slide front cam onto sleeve until it bottoms. Retaining ring (44) 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.

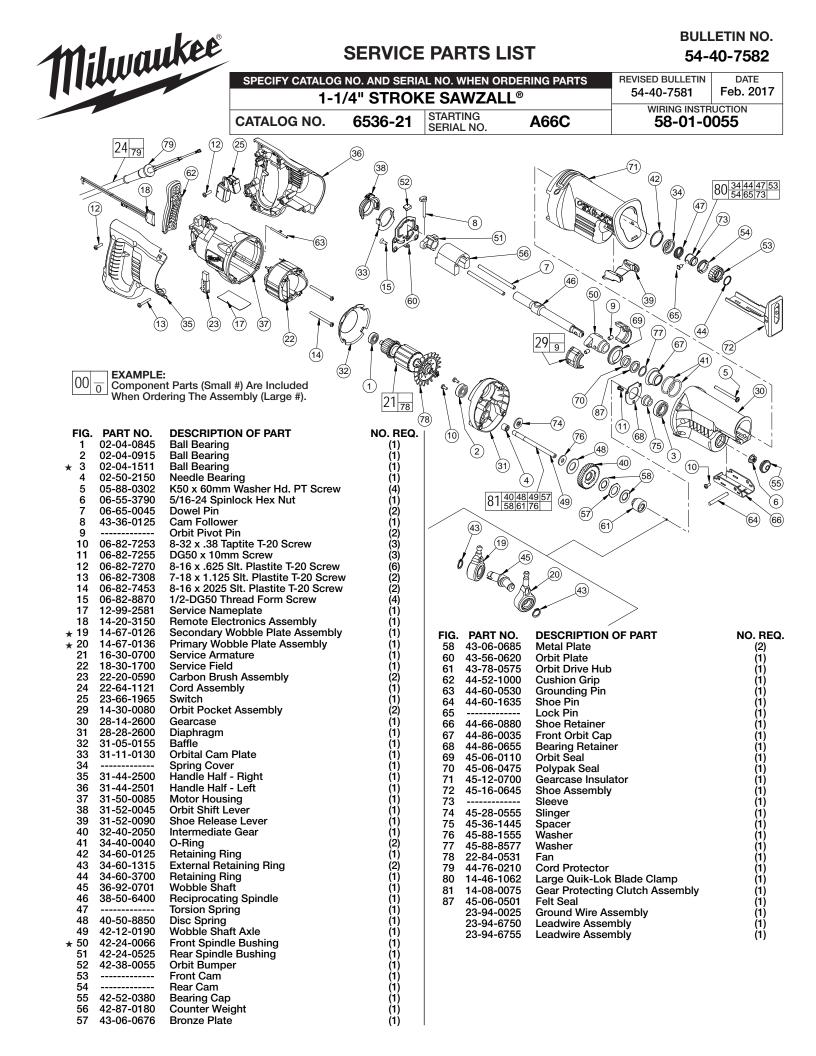


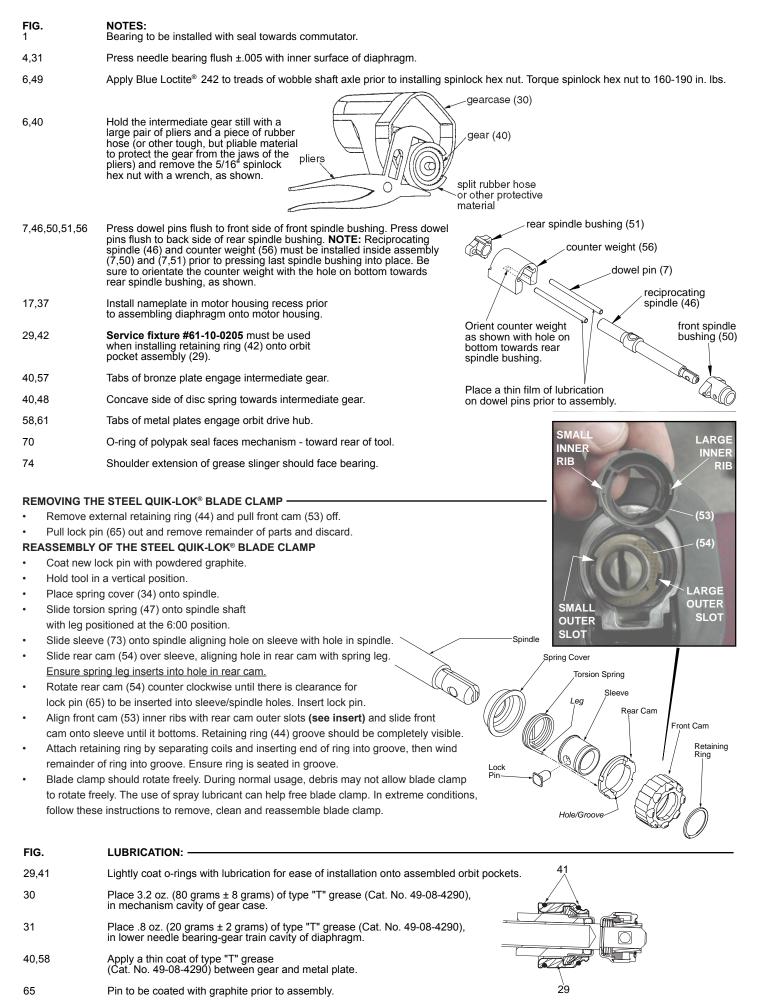
PAGE 2 O

		ukee	© ® S	ERVICE F	PARTS LIST			LETIN NO. - 40-7581
1			SPECIFY CA		ERIAL NO. WHEN ORDERI	NG PARTS	REVISED BULLETIN 54-40-7580	DATE Feb. 2017
"			CATALOG NO.	6536-21	STARTING SERIAL NO.	A66B	WIRING INSTR 58-01-0	055
	EXAMPLE:	19 62 3 3 4 12 12 12 12 12 12 12 12 12 12	25 (1) (1) (1) (1) (1) (1) (1) (1)	36 38 52 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		293		73 54 53 72
FIG. 1 2 3 4 5 6 7 8 9 10 112 13 14 5 7 18 9 20 12 22 24 5 9 30 13 23 34 5 6 7 8 9 10 112 13 14 5 7 18 9 20 12 23 24 5 9 30 13 23 34 5 6 7 8 9 10 112 13 14 5 7 18 9 20 12 23 24 5 9 30 13 23 34 5 6 7 8 9 10 112 13 14 5 7 18 9 10 12 13 14 14 14 14 14 14 14 14 14 14 14 14 14	PART NO. 02-04-0845 02-04-0915 02-04-1510 02-50-2150 06-65-0045 43-36-0125 06-82-7253 06-82-7253 06-82-7255 06-82-7255 06-82-7253 06-82-7253 06-82-7253 06-82-7253 06-82-7253 12-99-2581 14-20-3150 14-67-0125 14-67-0125 14-67-0125 14-67-0125 14-67-0135 16-30-0700 18-30-1700 12-90-2581 14-20-0590 22-64-1121 23-66-1965 14-30-0080 28-28-2600 31-05-0155 31-11-0130 31-44-2500 31-44-2501 31-52-0045 31-52-0045 31-52-0045 31-52-0045 31-52-0045 31-52-0040 34-40-0125 34-60-1315 34-60-3700 36-92-0701 38-50-6400 40-50-8850 42-12-0190 42-24-0655 42-52-0380 43-06-0676	5/16-24 Spin Dowel Pin Cam Followe Orbit Pivot P 8-32 x .38 Ta DG50 x 10m 8-16 x .625 \$ 7-18 x 1.125 8-16 x 2025 1/2-DG50 Th Service Nam Remote Elec Secondary V	ing Washer Hd. PT Screw lock Hex Nut in ptite T-20 Screw m Screw Slt. Plastite T-20 Screw Slt. Plastite T-20 Screw read Form Screw eplate tronics Assembly /obble Plate Assembly ble Plate Assembly oly Assembly Plate - Right - Left - Right - Left - Right - Left - g g Spindle - g g Spindle - g - spindle - spindl	NO. REQ. (1) (1) (1) (1) (1) (1) (2) (1) (2) (1) (2) (3) (3) (3) (6) (3) (3) (6) (4) (1) (1) (1)		4 4 4 4 4 4 4 4 4 4 4 4 4 4	Attor PART PART Blade Clamp Clutch Assembly bbly	NO. REQ. (2) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1

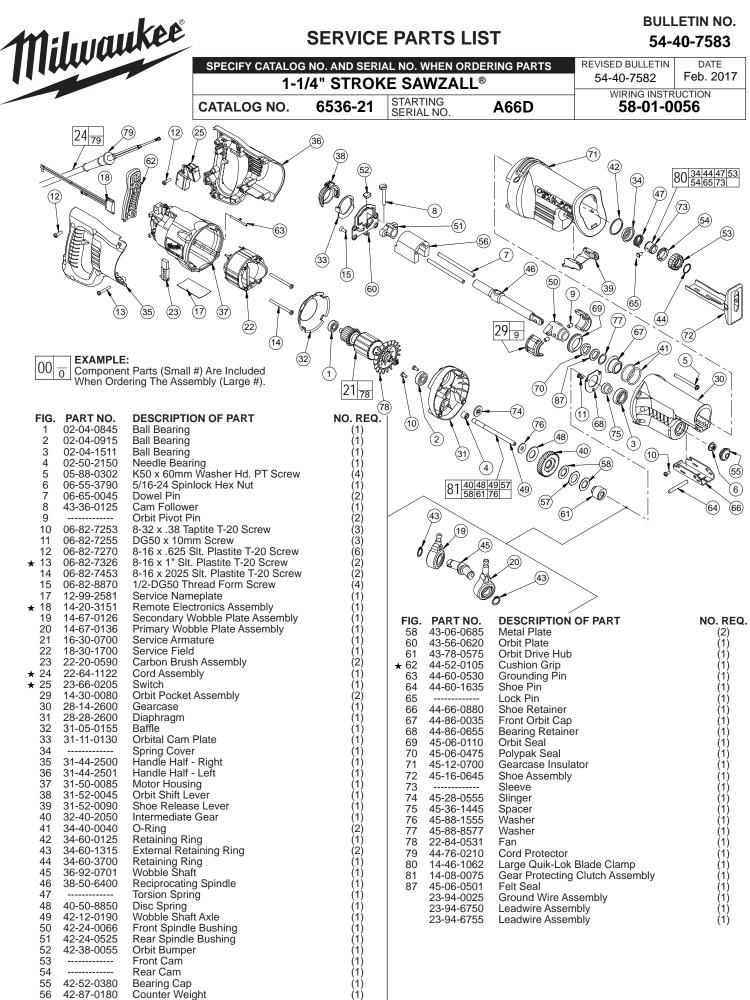


- 1 in to be coated with graphite phor to assembly
- 87 Soak in lightweight bushing oil prior to assembly.



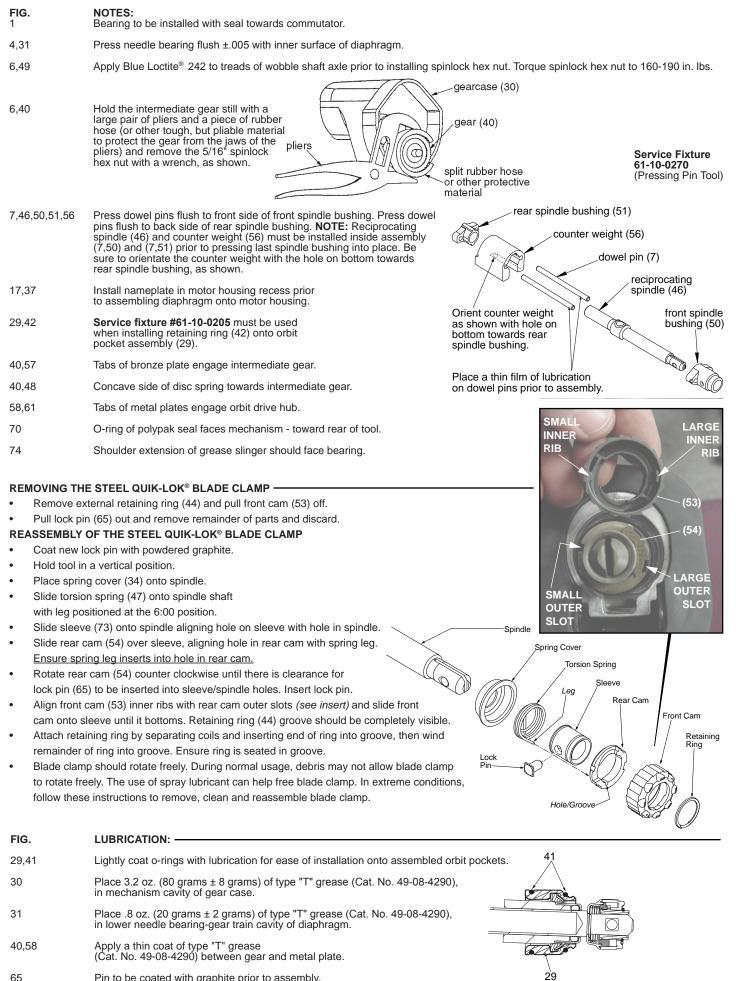


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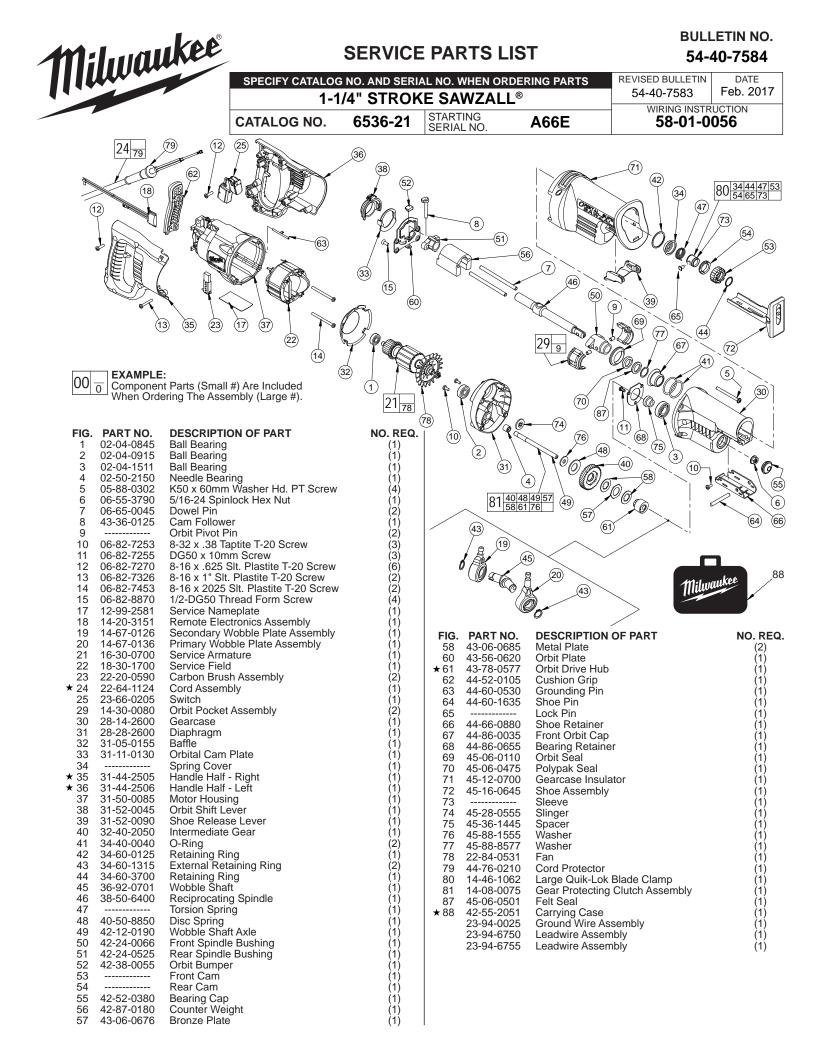


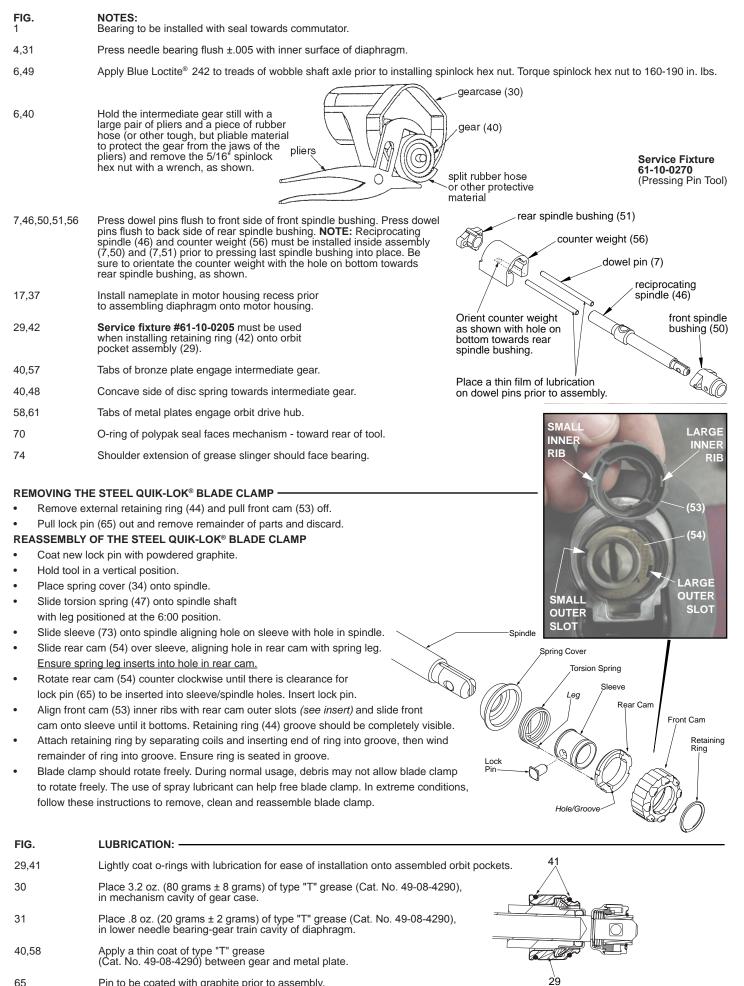
(1)

57 43-06-0676 Bronze Plate



- 65 Pin to be coated with graphite prior to assembly.
- 87 Soak in lightweight bushing oil prior to assembly.





- 65 Pin to be coated with graphite prior to assembly.
- 87 Soak in lightweight bushing oil prior to assembly.

Milwaukee		SERVICE	E PARTS LIS	бТ		LETIN NO. 4 0-7585
111111111	SPECIFY CATALOG		AL NO. WHEN ORDE		REVISED BULLETIN 54-40-7584	DATE Feb. 2017
	CATALOG NO.	6536-21	STARTING SERIAL NO.	A66F	WIRING INSTR	
Image: Constrained state stat		38 38 52 33 15 60 32 1 21 ₇₈		299	71 42 34 47 47 9 39 65 65 44 00 00 67 67 44	80 <u>34 44 4753</u> 546573 73 54 53 73 54 53 73 54 53 73 54 53
1 02-04-0845 Ball Bearing 2 02-04-0915 Ball Bearing 3 02-04-1511 Ball Bearing 4 02-50-2150 Needle Bear 5 05-88-0302 K50 x 60mm 6 06-55-3790 5/16-24 Spir 7 06-65-0045 Dowel Pin 8 43-36-0125 Cam Follows 9	ring Washer Hd. PT Screw lock Hex Nut er in aptite T-20 Screw In Screw Slt. Plastite T-20 Screw Plastite T-20 Screw read Form Screw replate ctronics Assembly Vobble Plate Assembly Vobble Plate Assembly bly mbly chassembly bly mbly Plate r - Right - Left ng ever se Lever - Gear ng aining Ring ng ft Axle e Bushing e Bushing er	$\begin{array}{c} 2 & 1 & 78 \\ \hline \textbf{NO. REQ.} \\ (1) \\ (1) \\ (1) \\ (1) \\ (2) \\ (3) \\ (3) \\ (3) \\ (6) \\ (2) \\ (2) \\ (4) \\ (1) \\ (2) \\ (2) \\ (4) \\ (1) \\ $		4 4 4 4 4 4 4 4 4 4 4 4 4 4	of PART	NO. REQ. (2) (1) (1) (1) (1) (1) (1) (1) (1

FIG. NOTES:

- Bearing to be installed with seal towards commutator.
- Press needle bearing flush ±.005 with inner surface of diaphragm. 4,31
- 6,49 Apply Blue Loctite® 242 to treads of wobble shaft axle prior to installing spinlock hex nut. Torque spinlock hex nut to 160-190 in. lbs.
- Hold the intermediate gear still with a large pair of pliers and a piece of rubber 6,40 hose (or other tough, but pliable material to protect the gear from the jaws of the pliers) and remove the 5/16" spinlock pliers hex nut with a wrench, as shown.
- gearcase (30) gear (40) C split rubber hose \cap

(H

or other protective material

Orient counter weight

as shown with hole on

Place a thin film of lubrication

Spindle

bottom towards rear

spindle bushing.

rear spindle bushing (51)

counter weight (56)

dowel pin (7)

reciprocating

front spindle

bushing (50)

spindle (46)

Service Fixture 61-10-0270 (Pressing Pin Tool)

- Press dowel pins flush to front side of front spindle bushing. Press dowel 7.46.50.51.56 pins flush to back side of rear spindle bushing. NOTE: Reciprocating spindle (46) and counter weight (56) must be installed inside assembly (7,50) and (7,51) prior to pressing last spindle bushing into place. Be sure to orientate the counter weight with the hole on bottom towards rear spindle bushing, as shown.
- Install nameplate in motor housing recess prior 17,37 to assembling diaphragm onto motor housing.
- 29,42 Service fixture #61-10-0205 must be used when installing retaining ring (42) onto orbit pocket assembly (29).
- 40.57 Tabs of bronze plate engage intermediate gear.
- 40,48 Concave side of disc spring towards intermediate gear.
- 58.61 Tabs of metal plates engage orbit drive hub.
- 70 O-ring of polypak seal faces mechanism - toward rear of tool.
- 74 Shoulder extension of grease slinger should face bearing.

REMOVING THE STEEL QUIK-LOK® BLADE CLAMP -

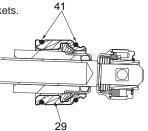
- Remove external retaining ring (44) and pull front cam (53) off.
- Pull lock pin (65) out and remove remainder of parts and discard.

REASSEMBLY OF THE STEEL QUIK-LOK® BLADE CLAMP

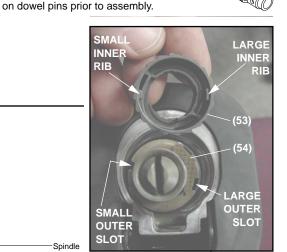
- Coat new lock pin with powdered graphite.
- Hold tool in a vertical position.
- Place spring cover (34) onto spindle.
- Slide torsion spring (47) onto spindle shaft with leg positioned at the 6:00 position.
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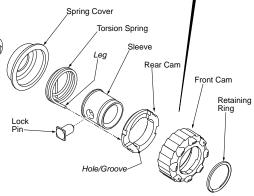
FIG. LUBRICATION: ·

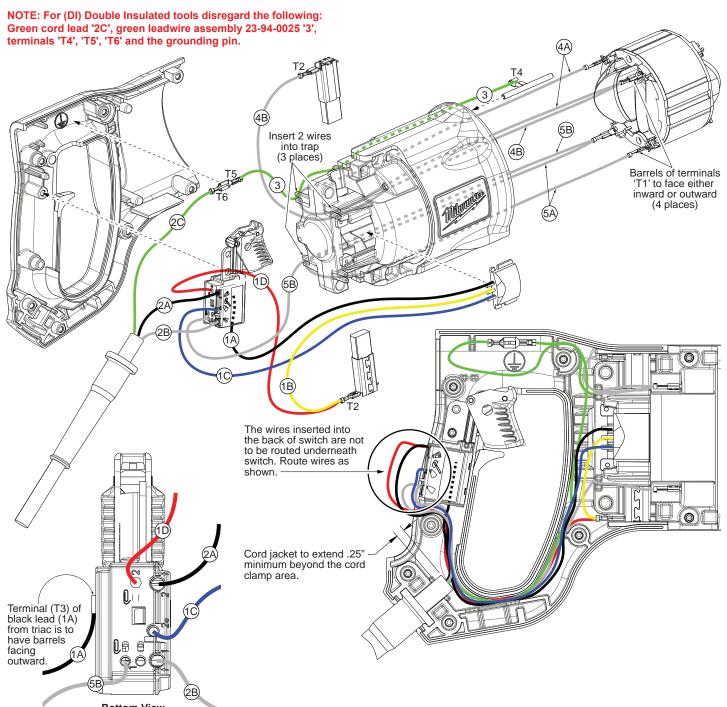
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87 Soak in lightweight bushing oil prior to assembly.







Bottom View of Switch

	WIRING SPECIFICATIONS								
Wire No.	Wire Color	Origin or Part No.	Ga.	Length	Terminals, Connectors and End Wire Preparation				
1A	Black	TRIAC			Component of Switch Ass	sembly 23-66-4245.			
1B	Yellow	TRIAC			Component of Switch Ass	sembly 23-66-4245.			
1C	Blue	TRIAC			Component of Switch Ass	sembly 23-66-4245.			
1D	Red	TRIAC			Component of Switch Ass	sembly 23-66-4245.			
2A	Black	Cord Assembly	16	4.00	Strip .340 and tin.				
2B	White	Cord Assembly	16	3.25	Strip .340 and tin.				
2C	Green	Cord Assembly	16	11.25	Strip .19 for T6.	trip .19 for T6.			
3	Green	23-94-0025	18	7.00	Strip each end .190 for Te	T4 and T5.			
4A	White	23-94-6750	18	2.90	Strip one end .19 for T2.	Strip both .15 and join for T1.			
4B	White	23-94-6750	18	5.00	Strip one end .15 for T1.				
5A	White	23-94-6755	18	9.25	Strip one .320 and tin.	Strip both 15 and join for T1			
5B	White	23-94-6755	18	5.00	Strip one end .15 for T1.	Strip both .15 and join for T1.			
	BULK LEAD WIRE - BULLETIN 58-01-0003								

NOTE:

All leads must be held to \pm 1/8". All lead lengths are before stripping.

TEF	TERMINAL DESCRIPTION						
Code	Part No.	Qnty.					
T1	1 23-74-1060						
T2	23-74-0017	2					
T3	23-74-0010	1					
T4	23-74-0605	1					
T5	23-74-0105	1					
T6	23-74-1095	1					

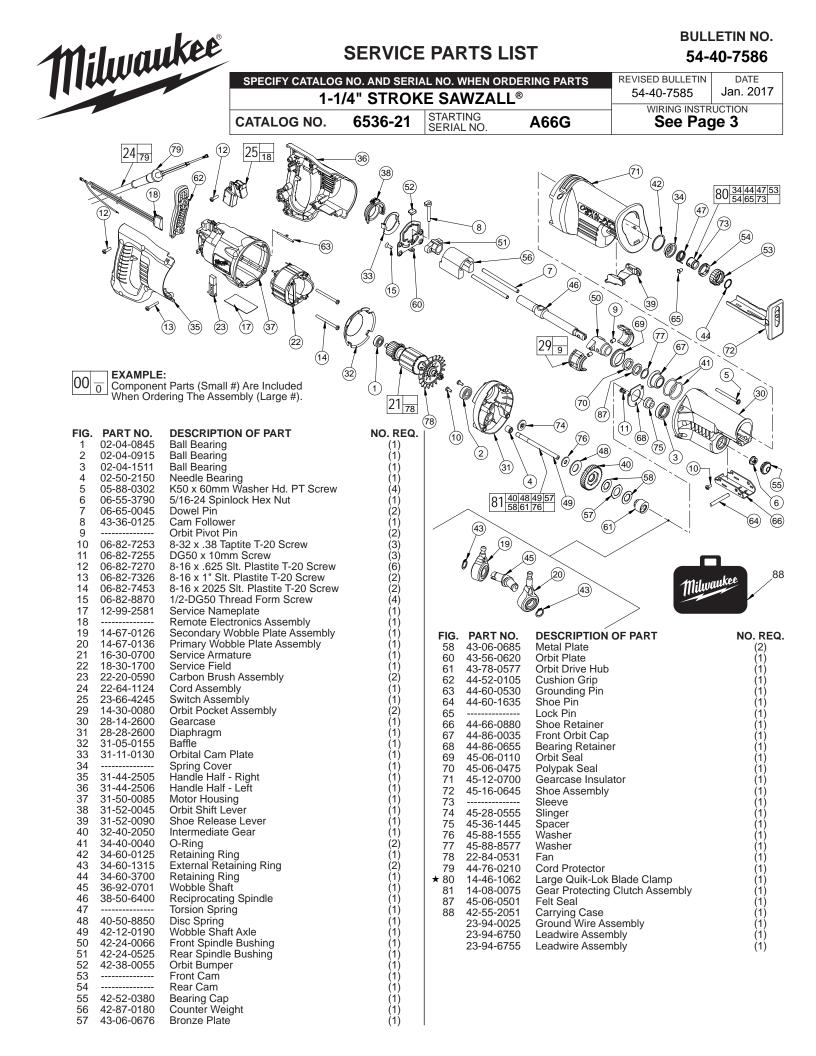


 FIG.
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- 6,40 Hold the intermediate gear still with a large pair of pliers and a piece of rubber hose (or other tough, but pliable material to protect the gear from the jaws of the pliers) and remove the 5/16" spinlock hex nut with a wrench, as shown.
- gearcase (30) gear (40)

(H

top of spindle

46

12:00

6:00

split rubber hose or other protective material

Orient counter weight

as shown with hole on

Place a thin film of lubrication

on dowel pins prior to assembly.

SMALL

INNER

SMALL

OUTER

SLOT

34

65

47

leq

hole

73

54

RIB

bottom towards rear

spindle bushing.

rear spindle bushing (51)

counter weight (56)

dowel pin (7)

reciprocating

front spindle

bushing (50)

LARGE

INNER

(53)

(54)

LARGE

OUTER

53

44

SLOT

RIB

spindle (46)

Service Fixture 61-10-0270 (Pressing Pin Tool)

- 7,46,50,51,56 Press dowel pins flush to front side of front spindle bushing. Press dowel pins flush to back side of rear spindle bushing. **NOTE:** Reciprocating spindle (46) and counter weight (56) must be installed inside assembly (7,50) and (7,51) prior to pressing last spindle bushing into place. Be sure to orientate the counter weight with the hole on bottom towards rear spindle bushing, as shown.
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REMOVING THE STEEL QUIK-LOK® BLADE CLAMP -

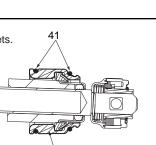
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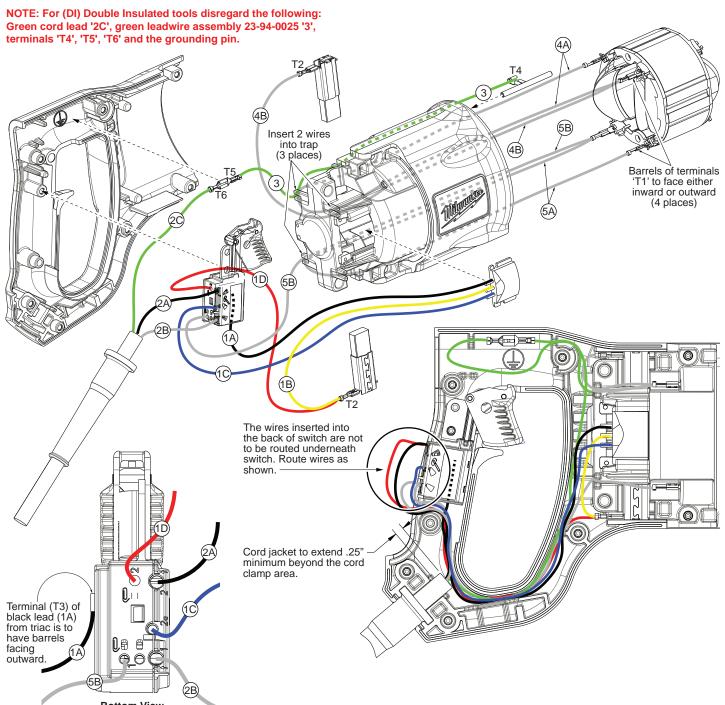
REASSEMBLY OF THE STEEL QUIK-LOK[®] BLADE CLAMP

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FIG. LUBRICATION: -

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Bottom View of Switch

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1B	Yellow	TRIAC			Component of Switch Ass	embly 23-66-4245.		
1C	Blue	TRIAC			Component of Switch Ass	embly 23-66-4245.		
1D	Red	TRIAC			Component of Switch Ass	embly 23-66-4245.		
2A	Black	Cord Assembly	16	4.00	Strip .340 and tin.			
2B	White	Cord Assembly	16	3.25	Strip .340 and tin.			
2C	Green	Cord Assembly	16	11.25	Strip .19 for T6.			
3	Green	23-94-0025	18	7.00	Strip each end .190 for T4 and T5.			
4A	White	23-94-6750	18	2.90	Strip one end .19 for T2.	Strip both .15 and join for T1.		
4B	White	23-94-6750	18	5.00	Strip one end .15 for T1.			
5A	White	23-94-6755	18	9.25	Strip one .320 and tin.	Chris heth 45 and isis for T4		
5B	White	23-94-6755	18	5.00	Strip one end .15 for T1.	Strip both .15 and join for T1		

NOTE: All leads must be held to $\pm 1/8$ ".

All lead lengths are before stripping.

	TERMINAL DESCRIPTIO						
	Code	Qnty.					
ſ	T1	4					
	T2	2					
	T3	23-74-0010	1				
	T4	23-74-0605	1				
	T5	23-74-0105	1				
	T6	23-74-1095	1				

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