



SERVICE PARTS LIST

BULLETIN NO.
54-40-2720

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN	DATE
M18 FUEL ONE KEY SAWZALL® Reciprocating Saw			Feb. 2017
CATALOG NO.	2721-20	STARTING SERIAL NO.	H31A
			WIRING INSTRUCTION SEE PAGE 5

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

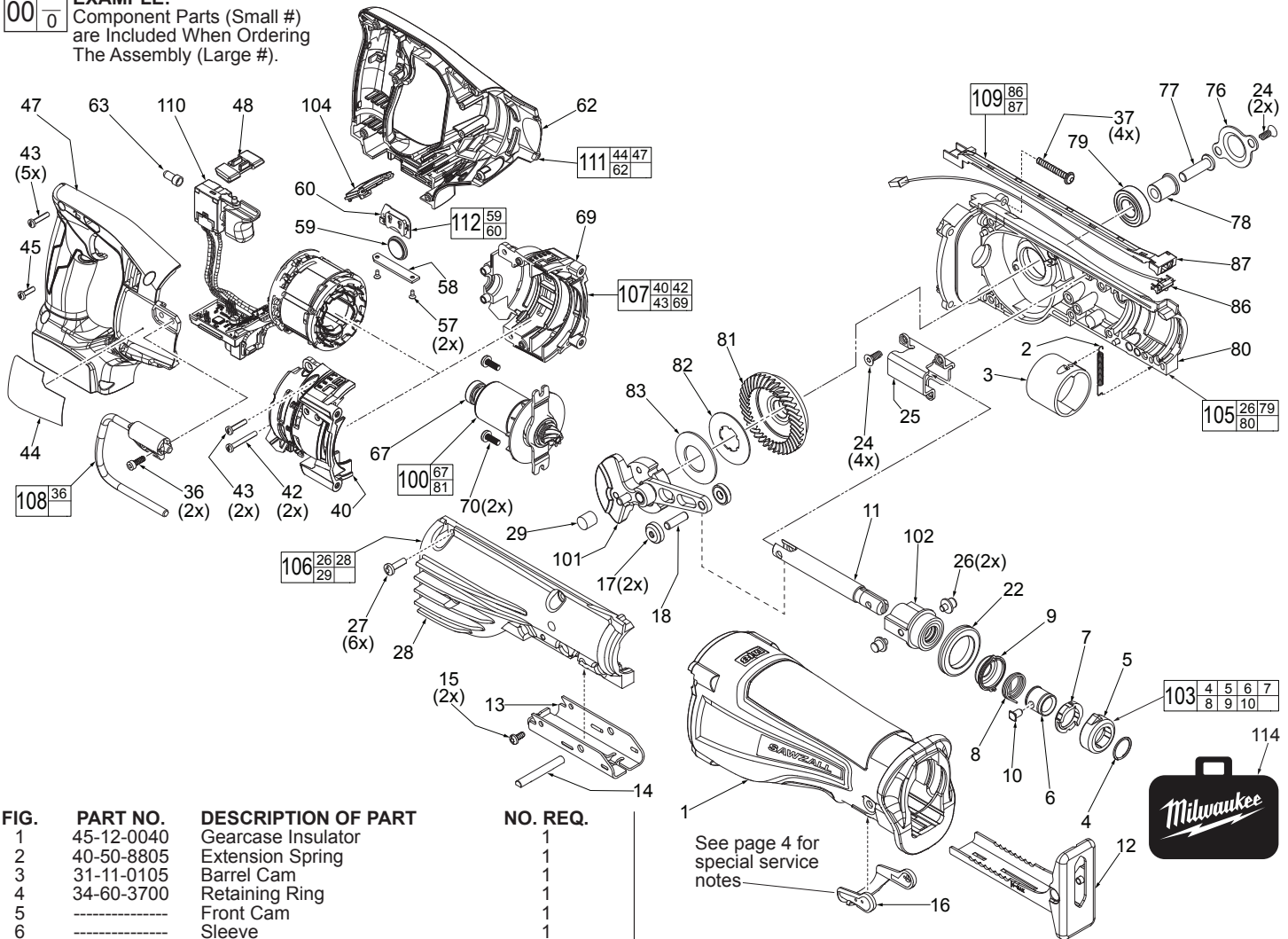
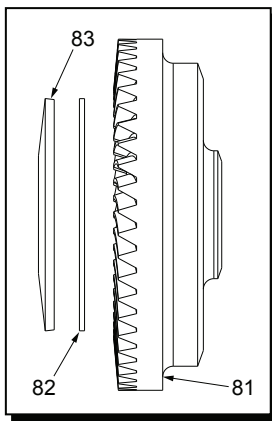
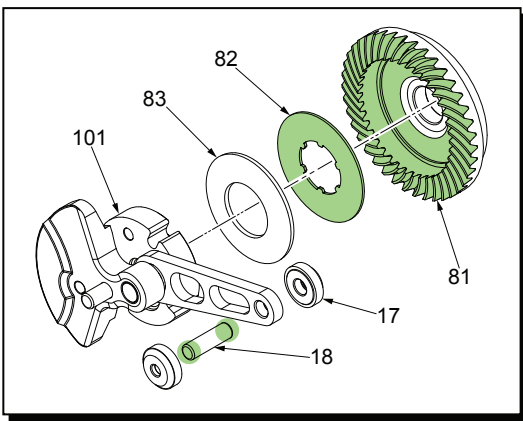


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	45-12-0040	Gearcase Insulator	1
2	40-50-8805	Extension Spring	1
3	31-11-0105	Barrel Cam	1
4	34-60-3700	Retaining Ring	1
5	-----	Front Cam	1
6	-----	Sleeve	1
7	-----	Rear Cam	1
8	-----	Torsion Spring	1
9	-----	Spring Cover	1
10	-----	Lock Pin	1
11	38-50-0076	Spindle	1
12	45-16-0135	Shoe Assembly	1
13	44-86-0225	Shoe Retainer	1
14	44-60-1635	Shoe Pin	1
15	06-82-7253	8-32 x 3/8" Pan Hd. Taptite T-20 Screw	2
16	31-15-2015	Shoe Release Lever	1
17	42-40-2052	Rollers	2
18	06-65-0145	Pin - Connecting Rod	1
22	45-06-0230	'H' Seal	1
24	06-82-8890	1/2-DG50 Thread Form T-25 Screw	6
25	43-56-0045	Orbit Slot	1
26	06-65-0135	Pivot Pin	2
27	06-82-5411	10-24 x 0.625 Pan Hd. Taptite T-25 Scr.	6
28	-----	Gearcase Halve - Right	1
29	02-50-1640	Needle Bearing	1
36	05-78-0910	M4 x 12mm Fillister Hd. Screw	2
37	05-88-8309	M5 x 35mm Pan Hd. Taptite T-20 Screw	4
40	-----	Motor Cage - Right	1
42	06-82-7290	6-19 x 1-1/8" Pan Hd. Plast. T-15 Scr.	2
43	06-82-7261	6-19 x 11/16" Pan Hd. Plast. T-15 Scr.	7
44	12-20-0078	Service Nameplate	1
45	06-82-7240	6-19 x 1/2" Pan Hd. Plast. T-15 Screw	1
47	-----	Handle Halve - Right	1
48	42-42-0195	Lockoff Shuttle	1
57	05-81-1100	M2.6 x 6mm Flat Head Phillips Screw	2
58	31-15-0013	Coin Cell Cover	1
59	50-11-0020	3V Coin Cell Battery (CR 2032)	1
60	-----	Bluetooth PCBA	1
62	-----	Handle Halve - Left	1

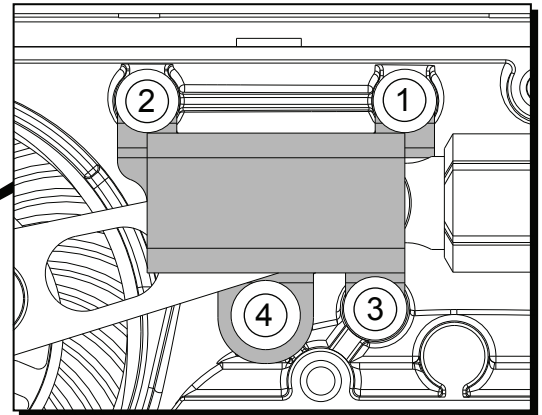
See page 4 for special service notes

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
63	22-56-0150	Closed End Connector	1
66	23-94-0082	High Voltage Wire (See page 5)	1
67	02-04-0645	Ball Bearing	1
69	-----	Motor Cage - Left	1
70	06-82-5324	10-24 x 1/2" Pan Hd. Tapt. T-25 Screw	2
76	44-66-0280	Bearing Retaining Plate	1
77	06-08-0017	Drive Hub Bolt (Left Hand Thread)	1
78	42-40-0076	Spacer	1
79	02-04-1516	Ball Bearing	1
80	-----	Gearcase Halve - Left (w/ locating pins)	1
81	-----	Bevel Gear	1
82	43-06-0025	Metal Plate	1
83	40-50-0595	Disc Spring	1
100	14-50-0515	Rotor Assembly	1
101	14-09-1000	Crankshaft Assembly	1
102	14-86-0105	Front Bushing Assembly	1
103	14-46-1064	Quik-Lok® Blade Clamp Kit	1
104	45-24-0062	Speed Selector Assembly	1
105	14-30-0185	Gearcase Halve - Left Assembly	1
106	14-30-0180	Gearcase Halve - Right Assembly	1
107	14-50-0215	Motor Cage Assembly	1
108	14-36-0340	Rafter Hook Assembly	1
109	22-09-2600	LED and Tray Assembly	1
110	14-20-0057	Electronics Assembly	1
111	14-34-0016	Handle Halve Assembly	1
112	22-09-2757	Bluetooth PCBA with Battery	1
114	42-55-2720	Carrying Case	1



Concave side of disc spring (83) must face toward metal plate (82) and bevel gear (81).

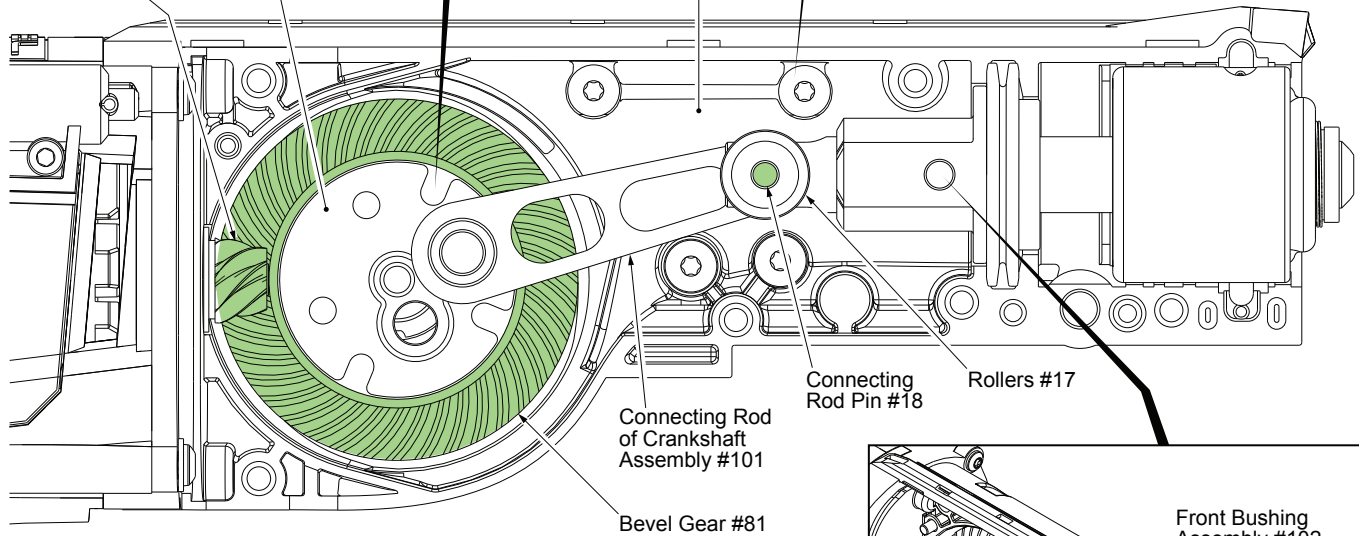
When securing the orbit slot (25), tighten screws (24) in the order shown.



Pinion Gear of Rotor Assembly #100

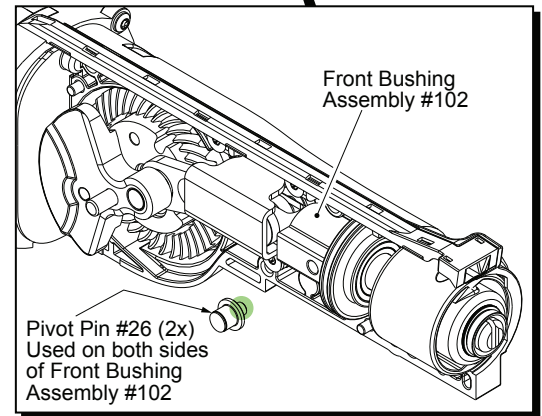
NOTE: Counter Weight of Crankshaft Assembly #101 has been removed for clarity (to reveal pinion gear)

NOTE: Orbit Slot #25 has been removed from this view for clarity (to reveal Connecting Rod Pin #18 and Rollers #17)

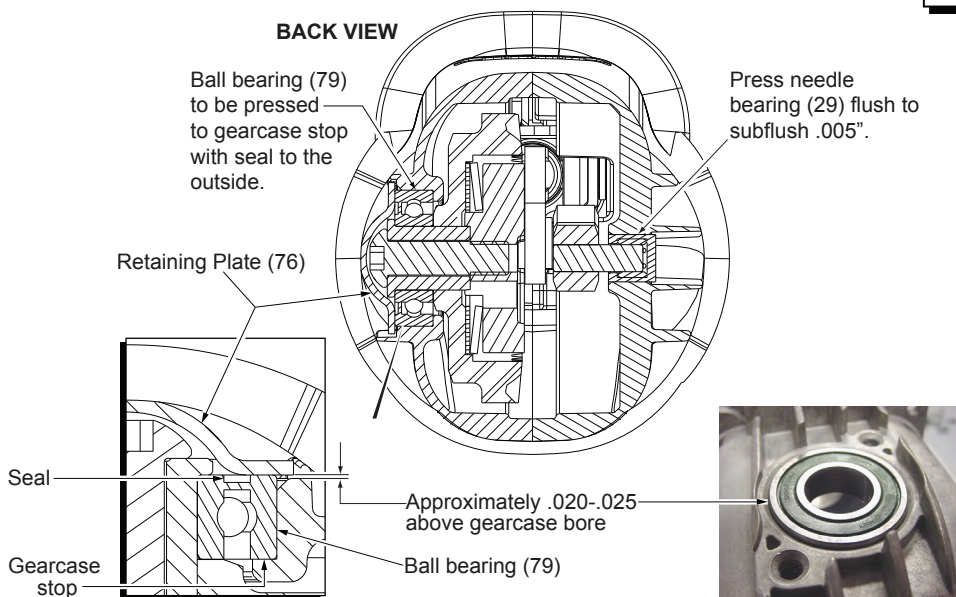


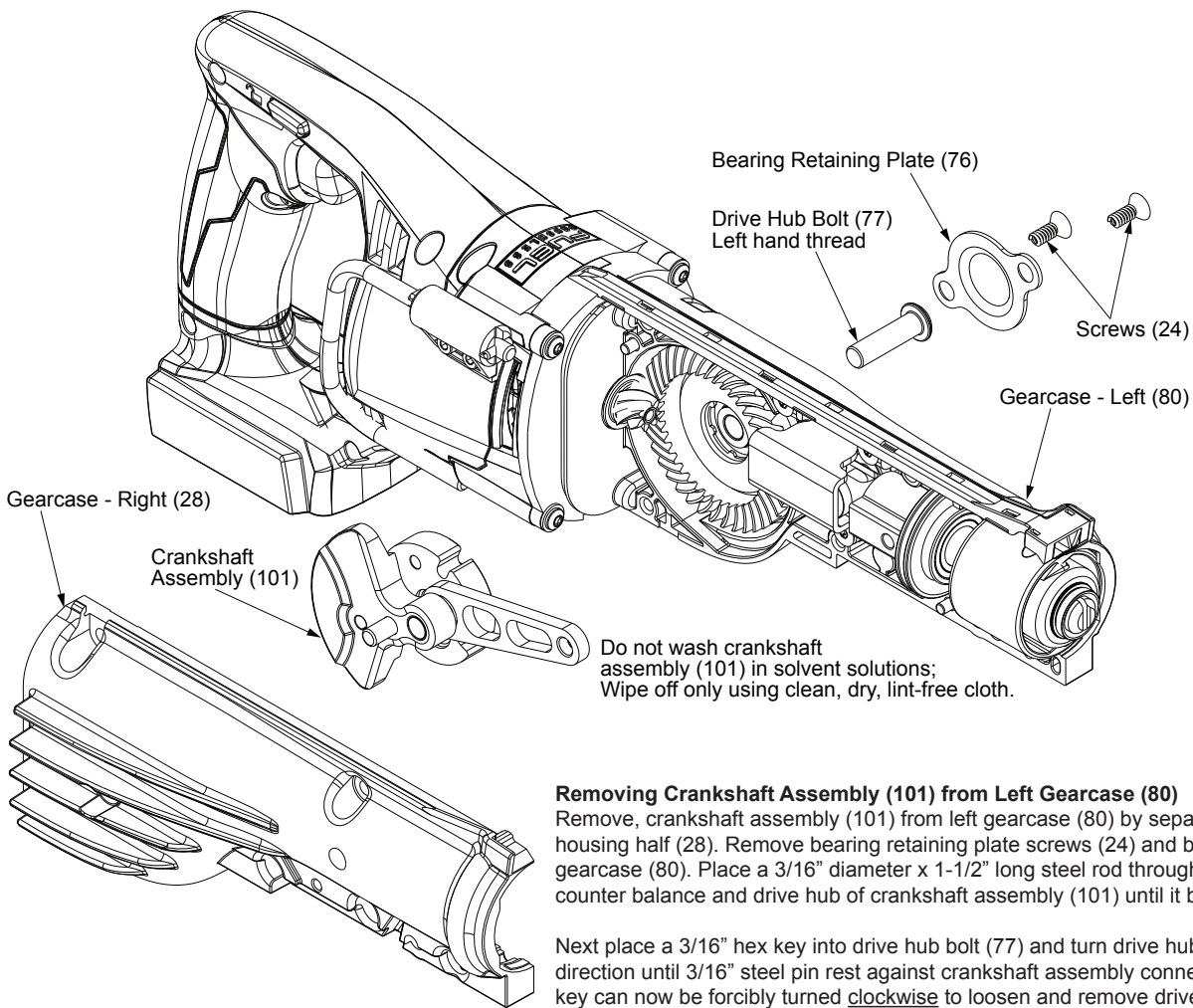
LUBRICATION: Type 'L' Grease
No. 49-08-4175 (16 oz. tub)

- Place 30g ±3g (approx. 1 ounce) on top of gear (81) and pinion gear of rotor assembly (100), being sure to cover the middle of the gear and all teeth.
- Place 15g ±3g (approx. .5 ounce) to the area where the gear (81) and the connecting rod of crank shaft assembly (101) interface.
- Coat both sides of the metal clutch plate (82).
- Lightly coat both pivot pins (26) where connections go into holes of front bushing assembly (102).
- Lightly coat both ends of pin (18) prior to installing rollers (17).



BACK VIEW





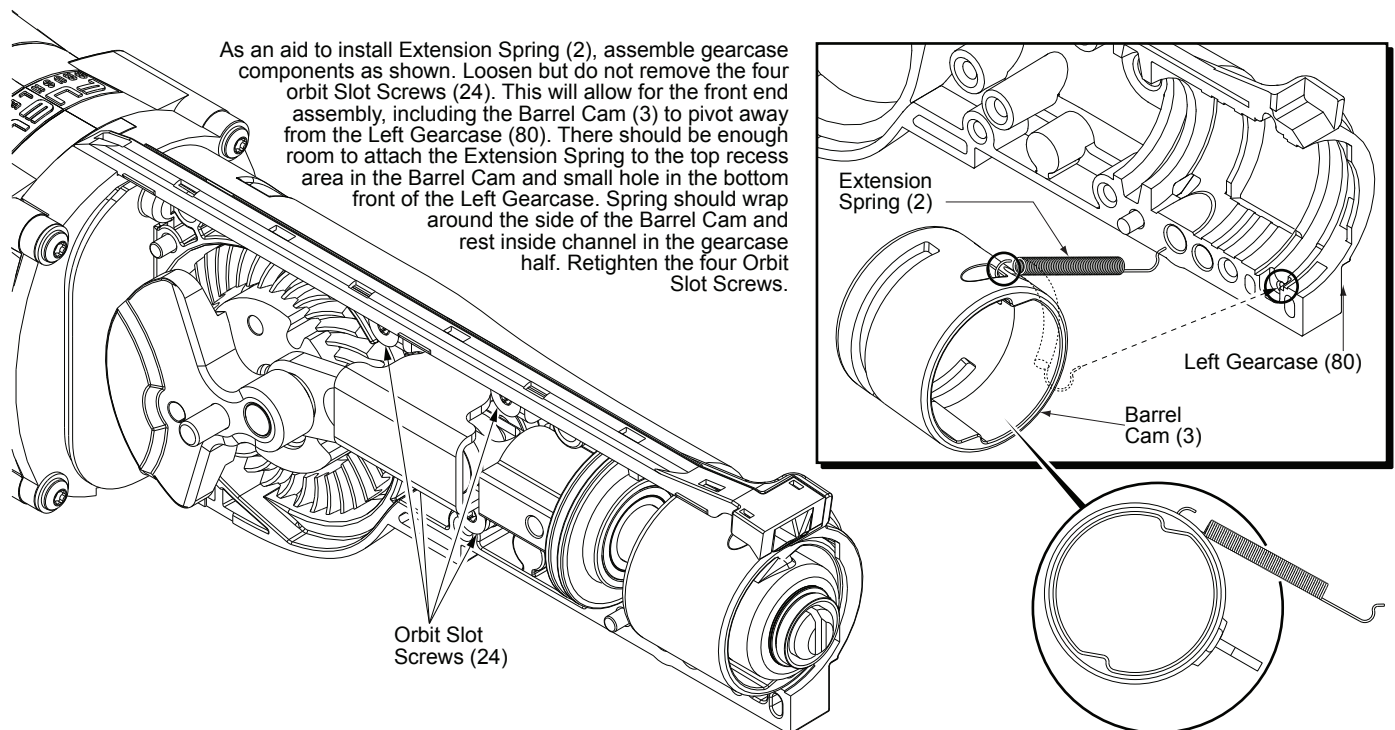
Removing Crankshaft Assembly (101) from Left Gearcase (80)

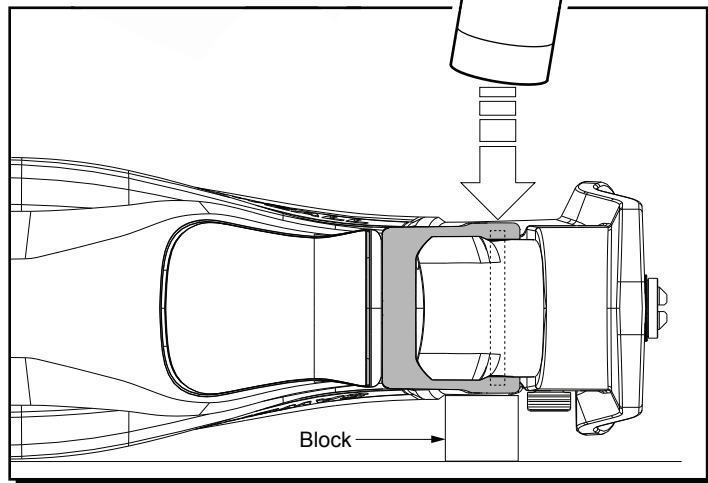
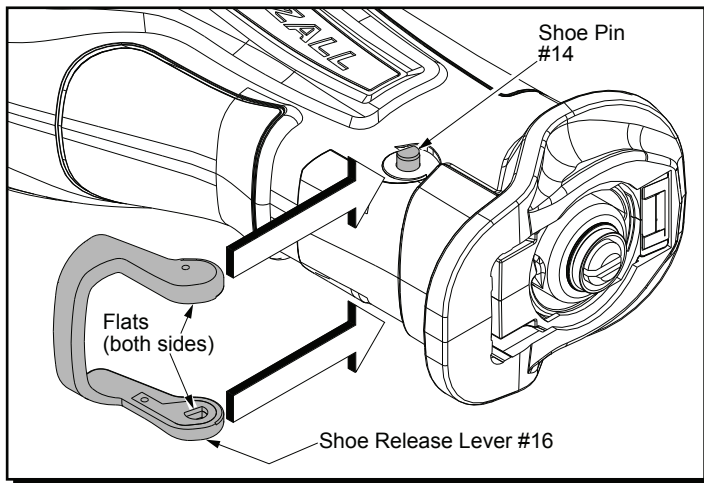
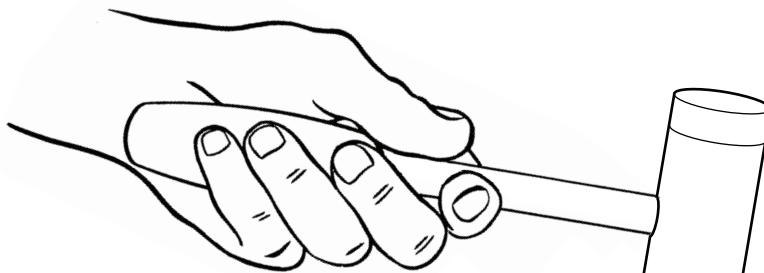
Remove crankshaft assembly (101) from left gearcase (80) by separating / removing right housing half (28). Remove bearing retaining plate screws (24) and bearing plate (76) from left gearcase (80). Place a 3/16" diameter x 1-1/2" long steel rod through the holes found in the counter balance and drive hub of crankshaft assembly (101) until it bottoms out.

Next place a 3/16" hex key into drive hub bolt (77) and turn drive hub bolt slowly in a clockwise direction until 3/16" steel pin rest against crankshaft assembly connecting rod. The 3/16" hex key can now be forcibly turned clockwise to loosen and remove drive hub bolt (77).

Reinstalling Crankshaft Assembly (101) into Left Gearcase (80)

To reinstall drive hub bolt (77) to crankshaft assembly (101) apply Blue Loctite® (44-20-0090) to threads of drive hub bolt (77) and insert through spacer (78) aligning threads of drive hub bolt (77) with internal threads of crankshaft assembly hub. Use a 3/16" hex key to turn the drive hub bolt (77) slowly in a counter clockwise direction until 3/16" steel pin rest against crankshaft assembly connecting rod (See 'Removing Crankshaft Assembly' instructions above). Using an inch pound torque wrench and a 3/16" hex key, torque drive hub bolt (77) to 210-240 in. lbs. or bolt can be tightened using a ft. lbs. torque wrench to 17-20 ft. lbs.





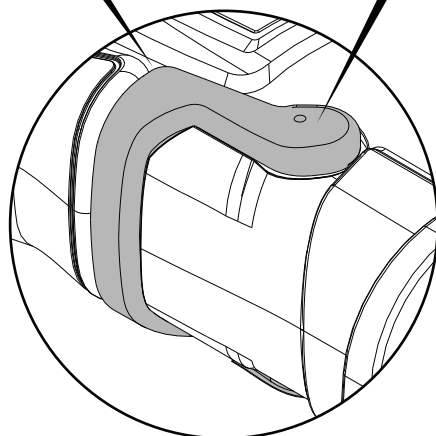
To properly install the Shoe Release Lever #16 onto the Shoe Pin #14 do the following:

Insert the shoe pin through the hole in the gearcase insulator. Center the shoe pin with equal amounts of the pin protruding from each side of the tool.

Rotate the shoe pin so the flats of the pin will align with the flats in the shoe release lever cavities.

The shoe release lever is stiff but flexible. Place the shoe release lever over the gearcase insulator. Lift one end of the shoe release lever onto the shoe pin (with flats aligned) and press into place.

Pull the other end of the shoe release lever over the other side of the pin and press in place.



Place the tool on its side on a hard flat surface. Place a small wood block approximately 1-1/8" thick under the tool, between the hard surface and the shoe release lever, directly beneath the pin.

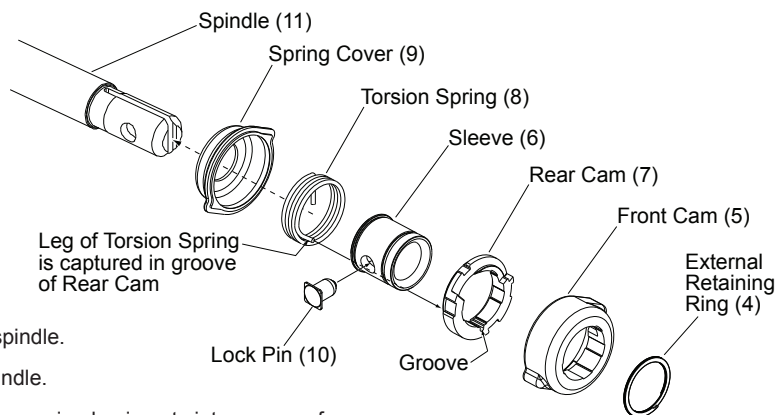
With a rubber mallet, strike the shoe release lever several times to completely seat the lever onto the pin and to assure that the pin is properly centered within the gearcase.

REMOVING THE STEEL QUIK-LOK® BLADE CLAMP -

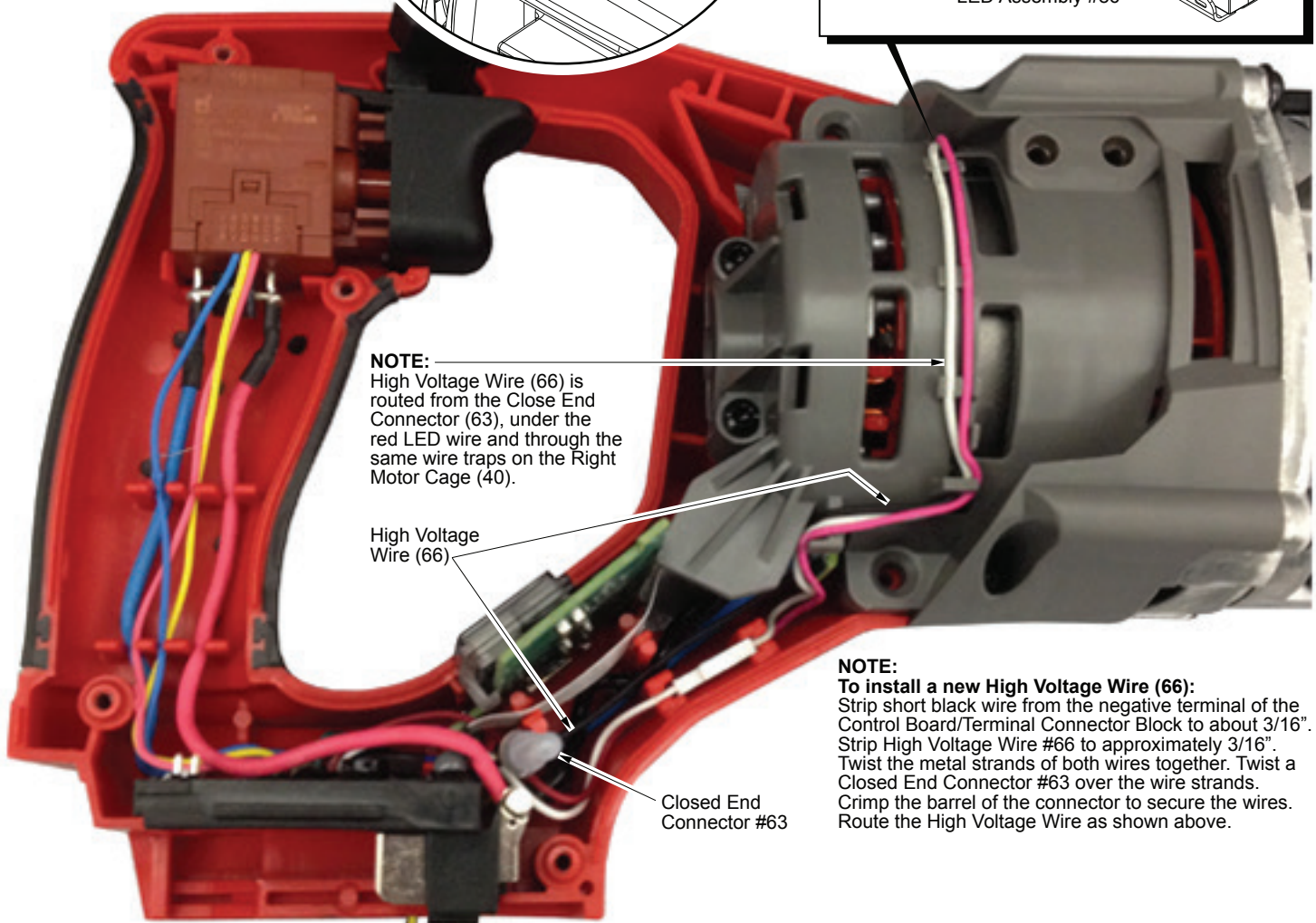
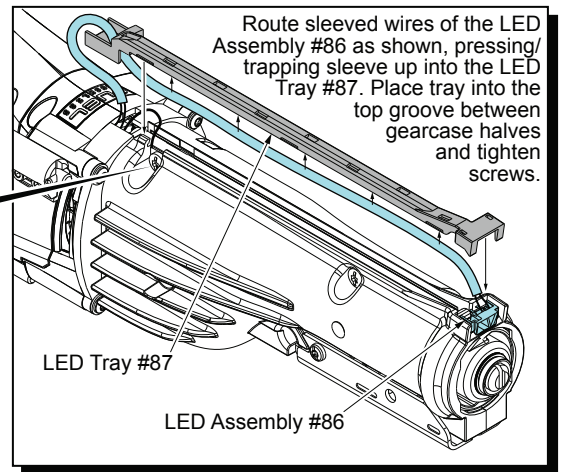
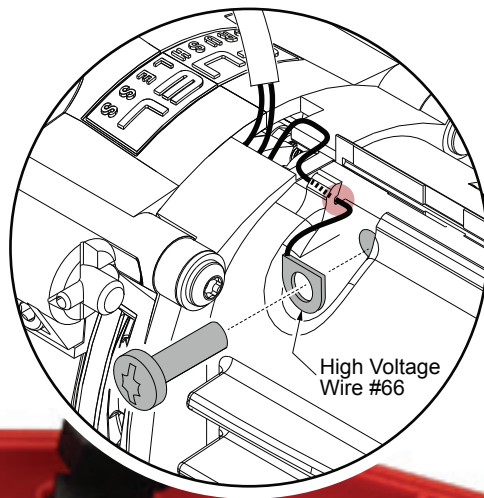
- Remove external retaining ring (4) and pull front cam (5) off.
- Pull lock pin (10) out and remove remainder of parts and discard.

REASSEMBLY OF THE STEEL QUIK-LOK® BLADE CLAMP

- Coat new lock pin with powdered graphite.
- Hold tool in a vertical position.
- Place spring cover onto spindle.
- Slide torsion spring (8) onto spindle with spring leg on hole side of spindle.
- Slide sleeve (6) onto spindle aligning hole on sleeve with hole in spindle.
- Slide rear cam over sleeve until it bottoms on sleeve shoulder, ensure spring leg inserts into groove of cam.
- Rotate rear cam in the direction of the arrows located on spring cover until there is clearance for lock pin (10) to be inserted into sleeve/spindle holes. Insert lock pin.
- Align front cam (5) inner ribs with rear cam outer slots and slide front cam onto sleeve until it bottoms. Retaining ring groove should be completely visible.
- Attach retaining ring (4) 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.



Prior to installing the LED and Tray Assembly #109, route High Voltage Wire #66 around and through the Motor Cage Assembly #107 as shown. Secure to the Gearcase Halve #80 with Screw #27.



NOTE:
High Voltage Wire (66) is routed from the Close End Connector (63), under the red LED wire and through the same wire traps on the Right Motor Cage (40).

High Voltage Wire (66)

Closed End Connector #63

NOTE:
To install a new High Voltage Wire (66):
Strip short black wire from the negative terminal of the Control Board/Terminal Connector Block to about 3/16". Strip High Voltage Wire #66 to approximately 3/16". Twist the metal strands of both wires together. Twist a Closed End Connector #63 over the wire strands. Crimp the barrel of the connector to secure the wires. Route the High Voltage Wire as shown above.

Bluetooth PCBA with Battery (112), No. 22-09-2757

Order replacement battery No. 50-11-0020, 3V Coin Cell Battery (CR 2032)

