



SERVICE PARTS LIST

BULLETIN NO.
54-40-2655

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN	DATE
M18 FUEL™ 6-1/2" Circular Saw			July 2025
CATALOG NO. 2833-20	SERIAL NO. N96A	WIRING INSTRUCTION See Page 3-4	

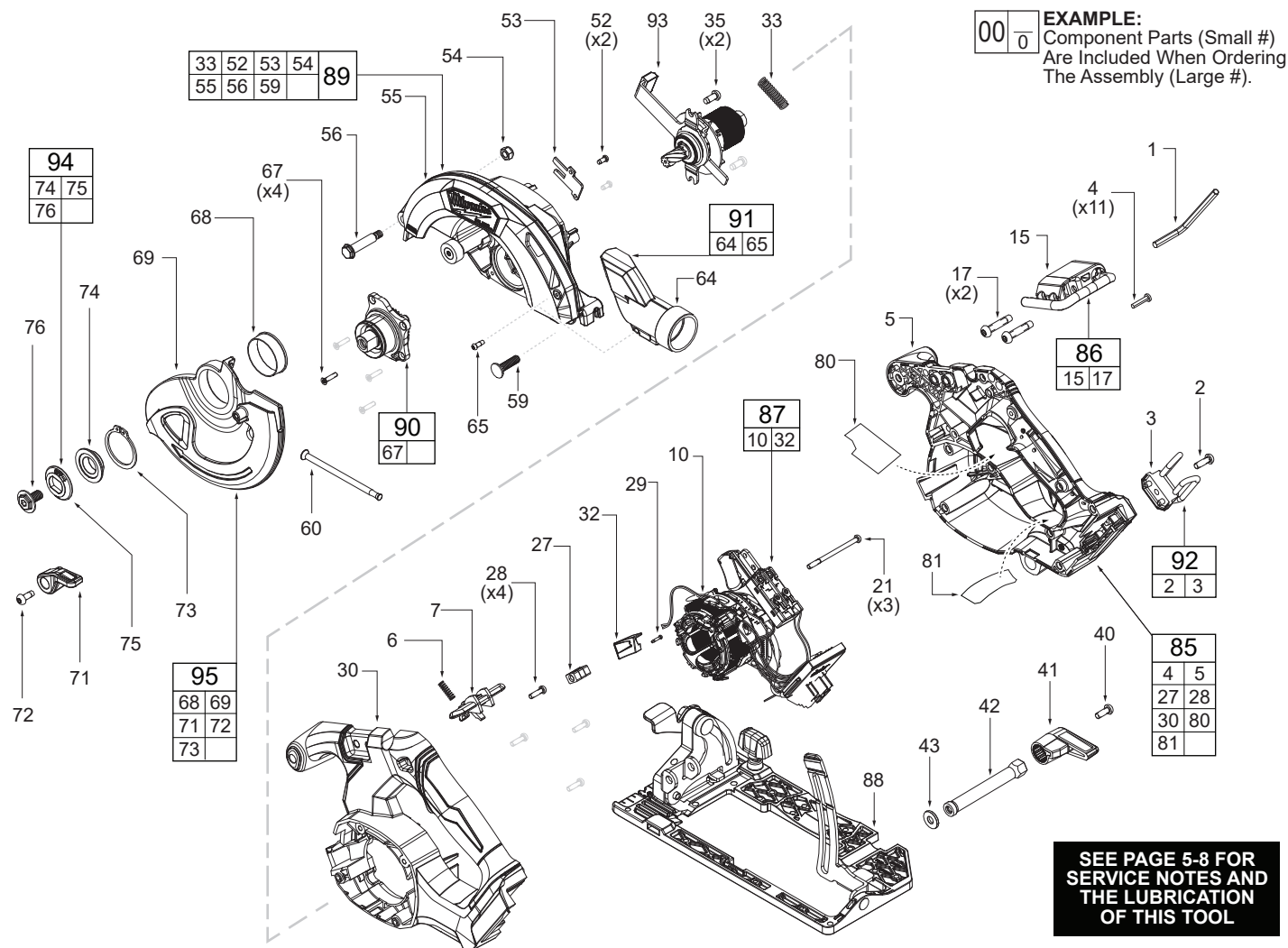


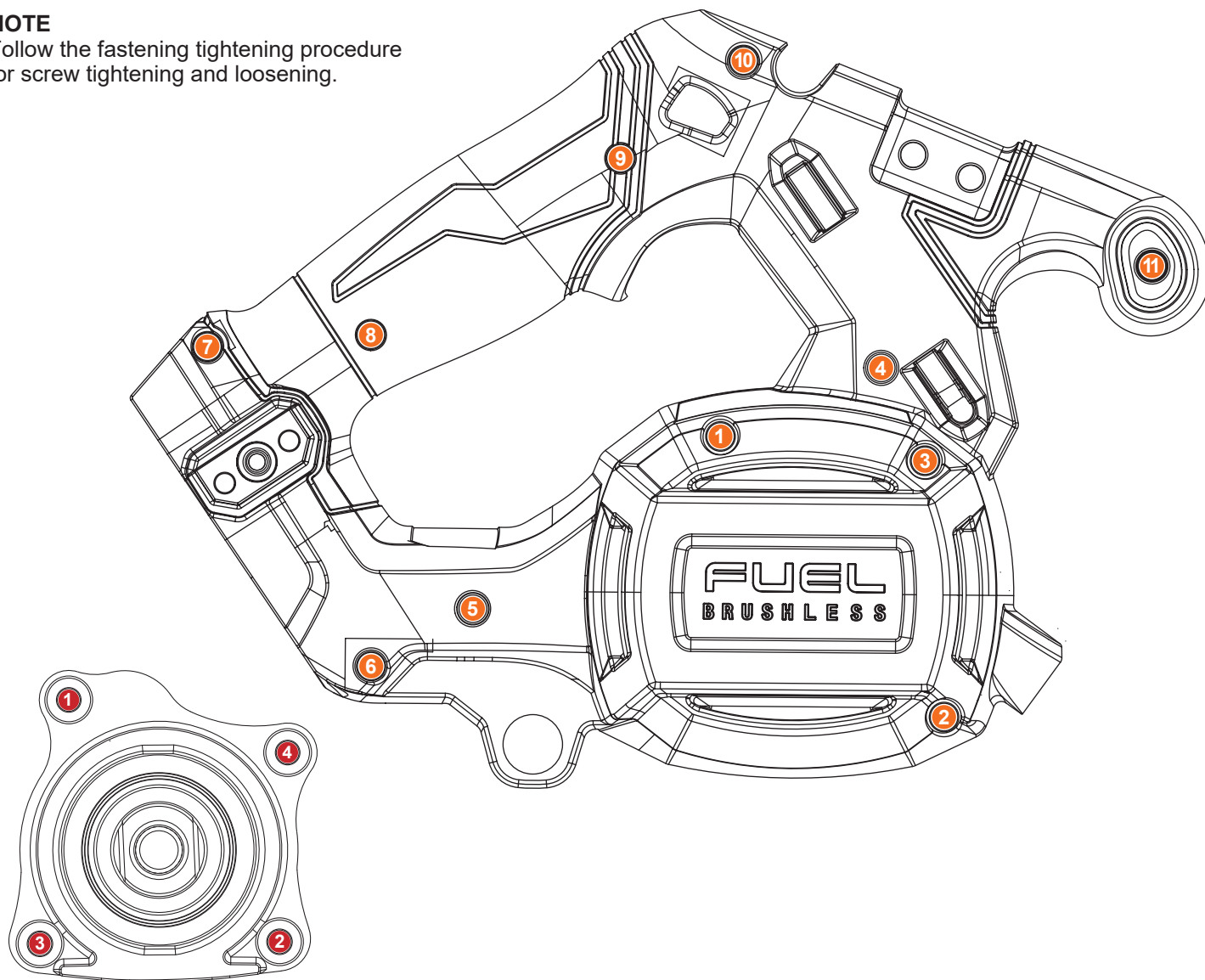
FIG. PART NO.	DESCRIPTION OF PART	NO. REQ.
1 49-96-0600	3/16" Hex Key	(1)
2 -----	M5 x 0.8 Pan Hd. Torx T-25 Screw	(1)
3 -----	Belt Hook Framer	(1)
4 -----	#6-19 Pan Hd. Torx T-15 Screw	(11)
5 -----	Handle Cover	(1)
6 40-50-1760	Safety Button Spring	(1)
7 31-15-0178	Safety Button	(1)
10 -----	PCBA and Stator	(1)
15 -----	Saw Hook Housing	(1)
17 -----	M6 x 28mm Pan Hd. Torx T-30 Screw	(2)
21 05-74-0265	M4 x 58.5mm Pan Hd. Torx T-20 Screw	(3)
27 -----	Retention Rubber	(3)
28 -----	M4 x 14mm Pan Hd. Torx T-20 Screw	(4)
29 45-88-0229	M2 x 10mm Pan Hd. Torx T-6 B Screw	(1)
30 -----	Handle Support	(1)
32 -----	Work Light Assembly	(1)
33 -----	Shaft Lock Spring	(1)
35 05-74-1030	M5 x 12mm Pan Hd. Torx T-25 S Taptite Screw	(2)
40 05-78-0032	M5 x 13mm Pan Hd. Torx T-25 M Screw	(1)
41 44-20-0619	Depth Lock Lever	(1)
42 45-08-0195	Depth Shaft	(1)
43 05-90-0068	Washer Flat	(1)
52 -----	M3.5 x 8mm Pan Hd. Torx T-10 S Taptite Screw	(2)
53 -----	Shaft Lock Spring Retention Plate	(1)
54 -----	M6 x 6mm Hexagon Nut	(1)
55 -----	Gearcase	(1)
56 -----	Pivot Shoulder Bolt	(1)
59 -----	Carriage Bolt	(1)

FIG. PART NO.	DESCRIPTION OF PART	NO. REQ.
60 40-50-0045	Spring Guard	(1)
64 -----	Dust Extraction Nozzle	(1)
65 -----	M3.5 x 10mm Pan Hd. #2 B Taptite Screw	(1)
67 -----	M3.5 x 15mm Flat Hd. Torx T-10 B Screw	(4)
68 42-24-0119	Bushing Sleeve	(1)
69 28-41-0041	Lower Guard	(1)
71 44-20-0621	Lower Guard Lever	(1)
72 06-82-5314	#10-24 Pan Hd. Torx T-25 S Taptite Screw	(1)
73 34-60-1033	External Retaining Ring	(1)
74 43-34-0790	Inner Flange	(1)
75 43-34-0044	Outer Flange	(1)
76 42-60-0367	Flange Bolt	(1)
80 12-20-0174	Service Nameplate	(1)
81 10-22-2833	Warning Label	(1)
85 31-44-0614	Handle Kit	(1)
86 42-92-0601	Housing Hook Assembly	(1)
87 14-20-0479	PCBA and Stator Assembly	(1)
88 31-15-0377	Shoe Assembly	(1)
89 28-14-0056	Gearcase Assembly	(1)
90 36-66-0129	Output Shaft and Gear Assembly	(1)
91 31-01-0202	Dust Kit	(1)
92 42-92-0605	Belt Hook Kit	(1)
93 16-01-0210	Rotor Assembly	(1)
94 14-46-0991	Blade Bolt Kit	(1)
95 14-46-0992	Lower Guard Kit	(1)
96 49-22-1005	Rip Fence (Not Shown)	(1)

HOUSING SCREWS - FASTENING ORDER

NOTE

Follow the fastening tightening procedure for screw tightening and loosening.



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SCREW TORQUE SPECIFICATIONS

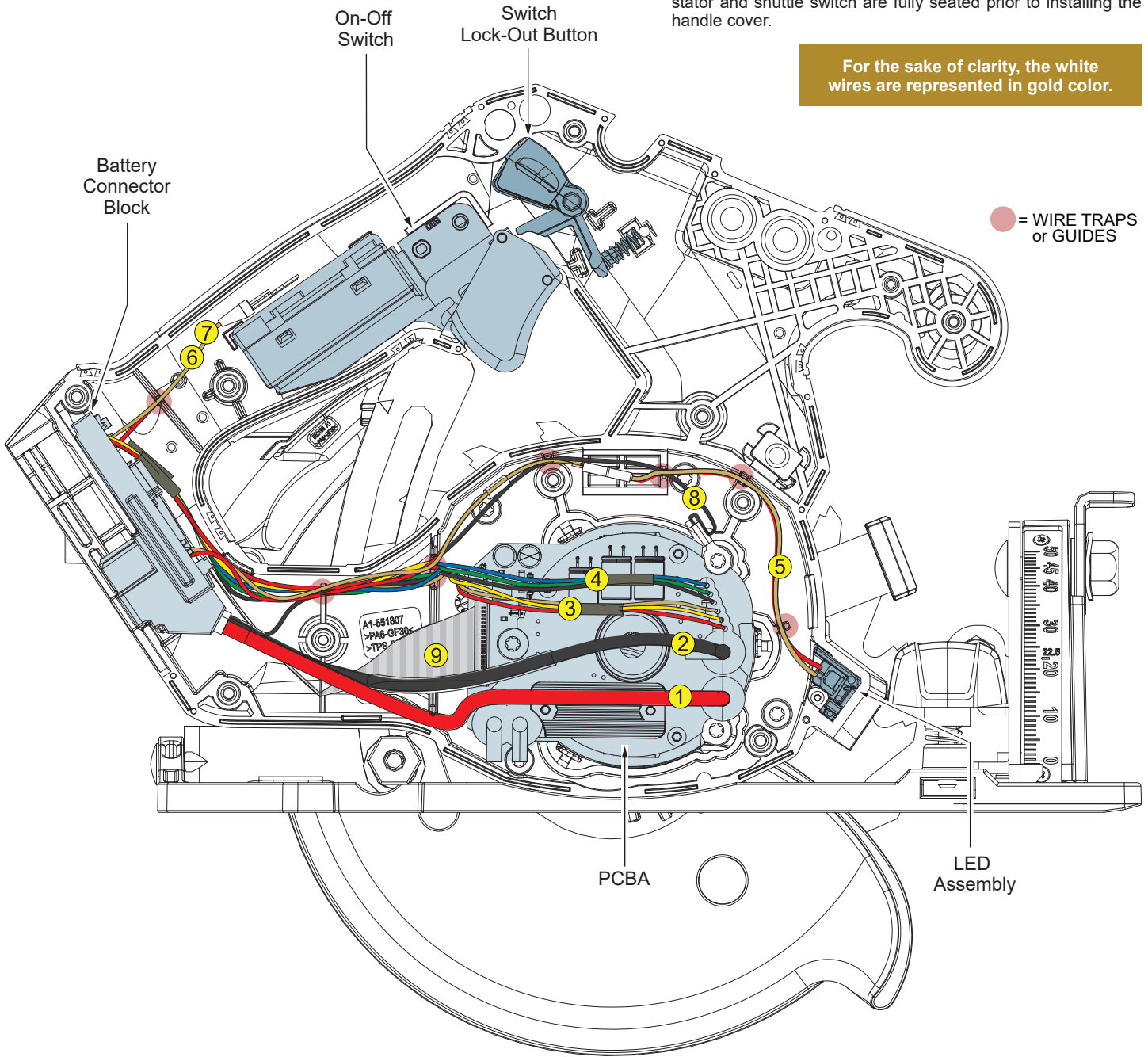
FIG.	PART NO.	DESCRIPTION OF FASTENER	WHERE USED	SEAT TORQUE	
				(kgf-cm)	(lb-in)
2	-----	M5 x 0.8 Pan Hd. Torx T-25 Screw	Belt Hook	28 ± 4	24 ± 3.5
4	-----	#6-19 Pan Hd. Torx T-15 Screw	Handle Cover	16 ± 1.5	14 ± 1.3
17	-----	M6 x 28mm Pan Hd. Torx T-30 Screw	Saw Hook Housing	20 ± 2	17 ± 1.7
21	05-74-0265	M4 x 58.5mm Pan Hd. Torx T-20 Screw	Stator	23 ± 3	19 ± 2.6
28	-----	M4 x 14mm Pan Hd. Torx T-20 Screw	Handle Support	23 ± 2	19 ± 1.7
29	45-88-0229	M2 x 10mm Pan Hd. Torx T-6 B Screw	Handle Support	3 ± 0.5	2.6 ± 0.4
35	05-74-1030	M5 x 12mm Pan Hd. Torx T-25 Screw	Bearing Retaining Plate	32 ± 3	28 ± 2.6
40	05-78-0032	M5 x 13mm Pan Hd. Torx T-25 M Screw	Depth Lock Lever	35 ± 4	30 ± 3.5
42	48-05-0195	Depth Shaft	Shoe Assembly	40 ± 4	35 ± 3.5
52	-----	M3.5 x 8mm Pan Hd. Torx T-10 Screw	Shaft Lock Spring Retention Plate	6 ± 1	5.2 ± 0.9
56	-----	Pivot Shoulder Bolt	Gearcase	22 ± 2	19 ± 1.7
65	-----	M3.5 x 10mm Pan Hd. #2 B Screw	Dust Extraction Nozzle	10 ± 1	8.7 ± 0.9
67	-----	M3.5 x 15mm Flat Hd. Torx T-10 Screw	Output Bearing Hub	19 ± 1.5	16.5 ± 1.3
72	06-82-5314	#10-24 Pan Hd. Torx T-25 S Screw	Lower Guard Lever	35 ± 4	30 ± 3.5
76	42-60-0367	Flange Bolt	Outer Flange	12 ± 1	10 ± 0.9

WIRING

Be sure that all wires of the electronics assembly are routed as shown, being careful to push down completely into wire traps. Be sure that the trigger switch, PCBA, battery connector block, stator and shuttle switch are fully seated prior to installing the handle cover.

For the sake of clarity, the white wires are represented in gold color.

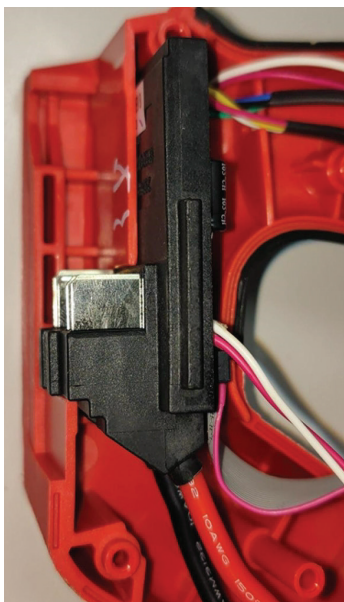
● = WIRE TRAPS or GUIDES



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WIRING SPECIFICATIONS

Wire No.	Wire Color	Description
1	Red	Connect with PCBA (Control Board) and Battery Connector Block
2	Black	Connect with PCBA (Control Board) and Battery Connector Block
3	Group: White, Yellow, Red	Connect with PCBA (Control Board) and Battery Connector Block
4	Group: Blue, Green, Black	Connect with PCBA (Control Board) and Battery Connector Block
5	Group: Red, White	Connect with LED Assembly and Battery Connector Block
6	White	Connect with On/Off Switch and Battery Connector Block
7	Red	Connect with On/Off Switch and Battery Connector Block
8	Black	Connect with Stator (below PCBA) and Battery Connector Block
9	Gray Ribbon Wire	Connect with PCBA (Control Board) and Battery Connector Block



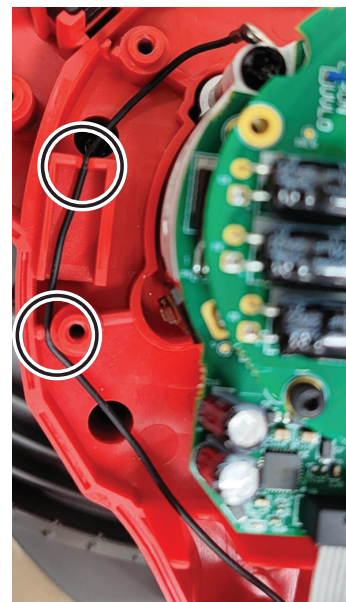
1) Install the Power Supply Board into the Handle Support (30).



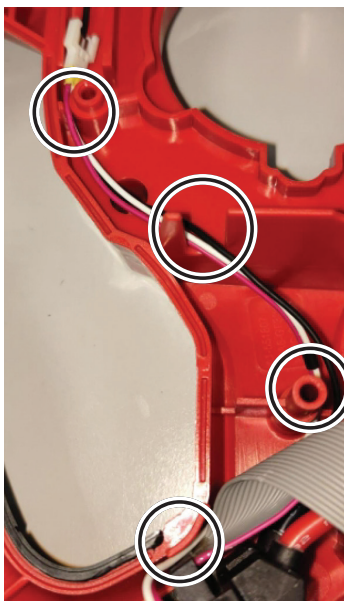
2) Press the Switch Wire into the groove of the Handle Support.



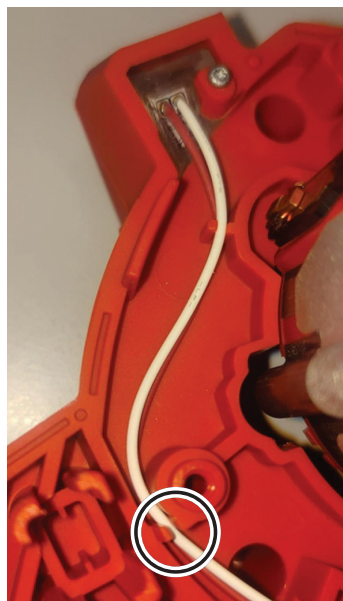
3) Press the thin black Ground Wire into the groove of the Handle Support.



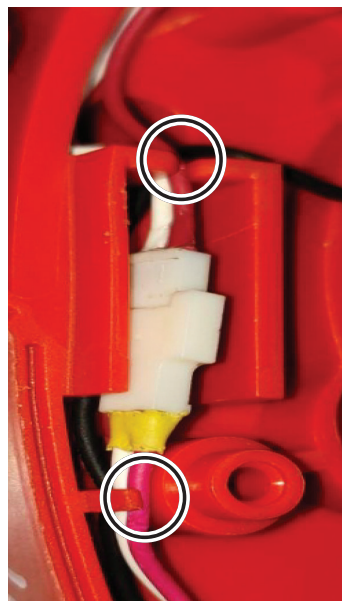
4) Press the thin black Ground Wire into the 2 grooves of the Handle Support shown above.
NOTE: The Connecting Terminal will later go above this black wire.



5) Push LED wire into the gap of the Housing, around the right side of screw column, pass through the gap and press into groove at left of next screw column



6) Push LED wire into groove.



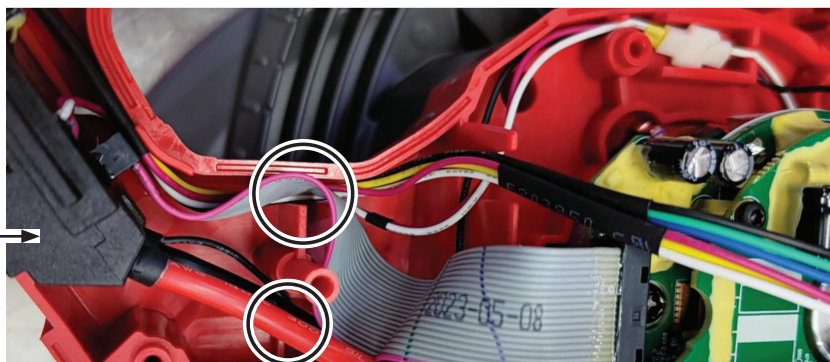
7) The Connecting Terminal fits into housing as shown - with its wires pushed into grooves on both ends.



8) The thin blue and green wires get inserted into the housing groove and passed through the gaps

Battery Supply Block

9) The widest ribbon wire is first passed vertically through the gap and then the excess is bent downward. The red and black wires are placed on the other side of the screw column.



LUBRICATION INSTRUCTIONS

● Type "J" Grease #49-08-4220

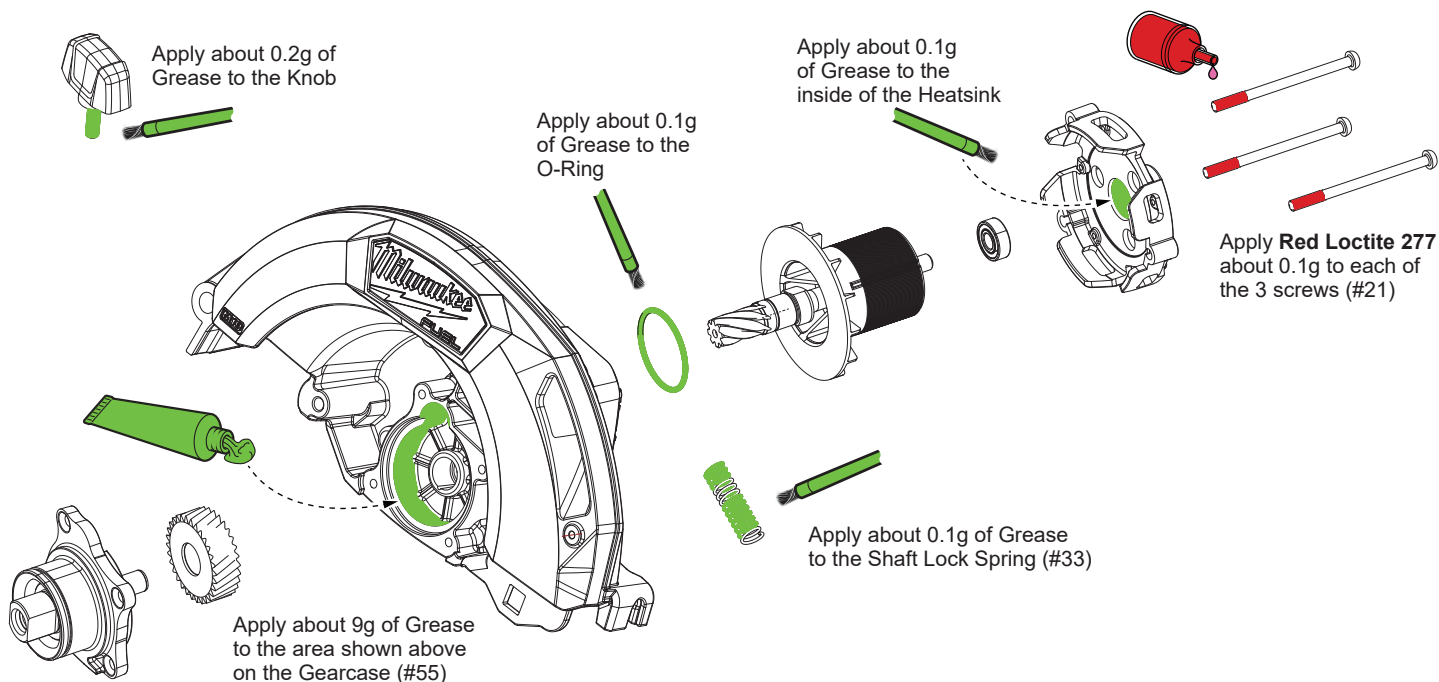
NOTE

Regarding parts to be lubricated:
Apply a light coating of grease to all highlighted parts shown prior to installation.

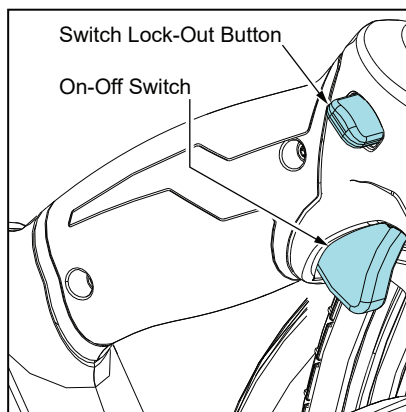
● Red Loctite® 277 #44-22-0050

NOTE

Regarding parts to receive thread locking sealant:
Place one to two drops of the recommended Loctite® thread locking sealant (or the equivalent) to the threads of parts shown prior to installation.



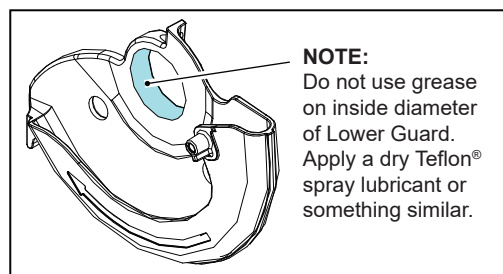
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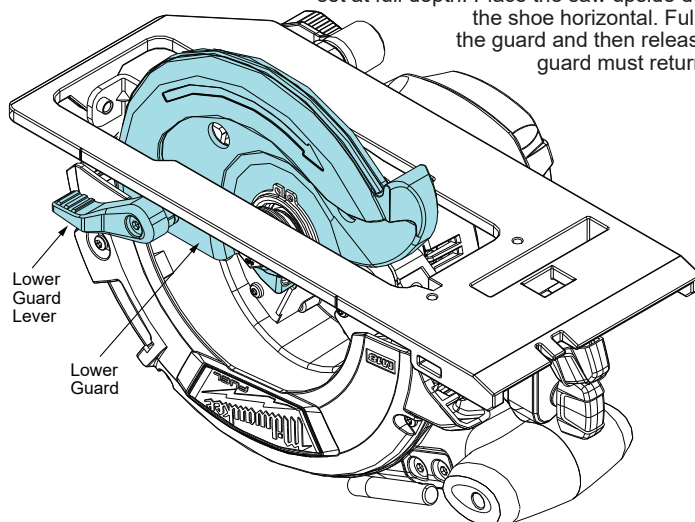
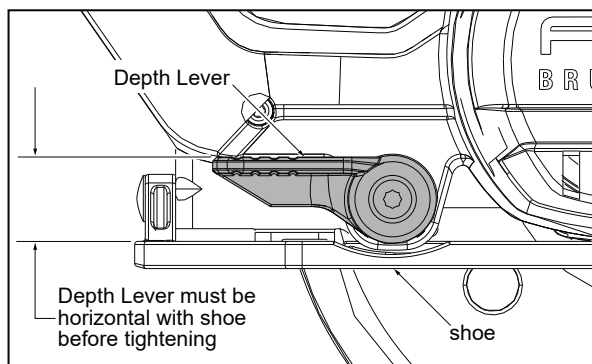
Functionally check Switch Lock-Out by attempting to turn on tool by applying a reasonable amount of force, up to 8 lbs., to the switch trigger. The tool must not turn on.

Release trigger. Actuate the lock-out lever and apply a reasonable amount of force to the switch trigger. The tool must turn on. While the trigger is still in the "ON" position, release the lock-out. Release the trigger. The tool must stop and the lock-out lever must again prevent the actuation of the Switch.

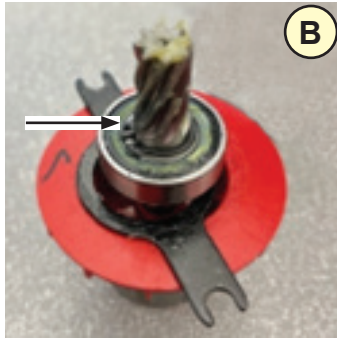
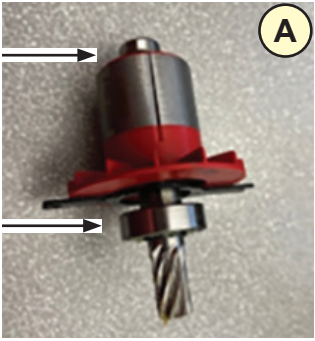
Repeat the switch check two more times.



Functionally check the Lower Guard, with the saw set at full depth. Place the saw upside down with the shoe horizontal. Fully retract the guard and then release it. The guard must return briskly.

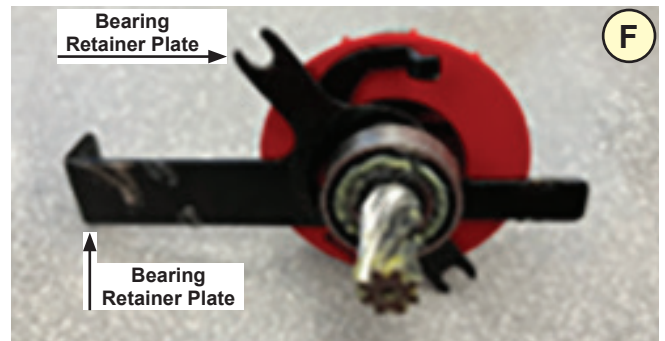
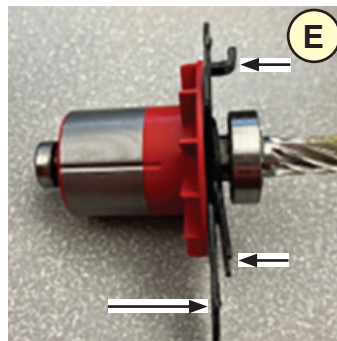
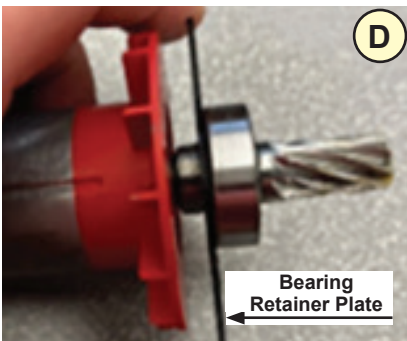


ROTOR SHAFT INSTALL



1) Ensure both bearings are installed onto the rotor shaft {A}, and that the large bearing has a retaining ring installed to prevent axial movement {B}.

2) The shaft lock lever shown above {C} is to be installed between the bearing retainer plate and the rotor fan as shown in {D and E}.



NOTE - Orientation of Lever to Plate is important – Spring Leg of Lever must be oriented correctly relative to Retainer Plate. Spring Leg must be oriented towards the gear side of the Rotor Shaft as shown in {F}

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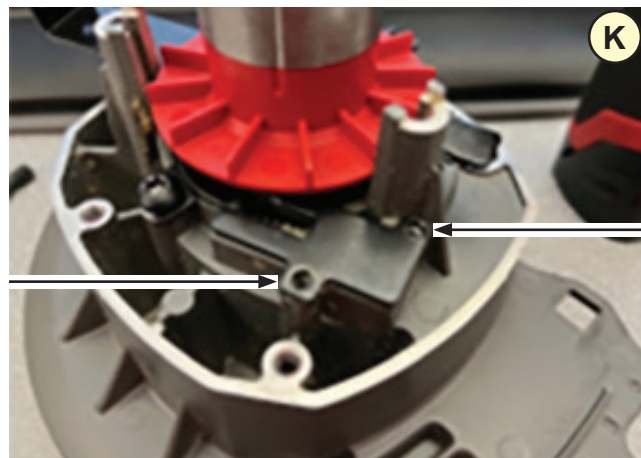
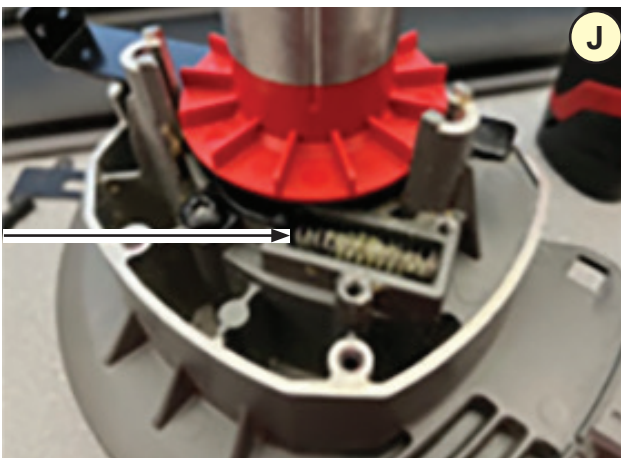
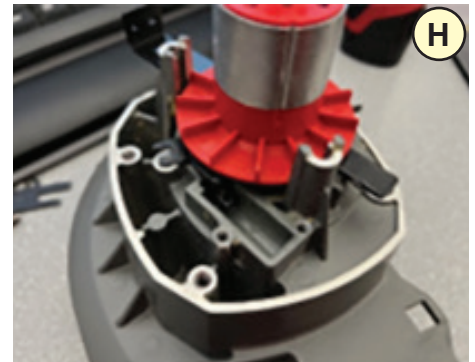
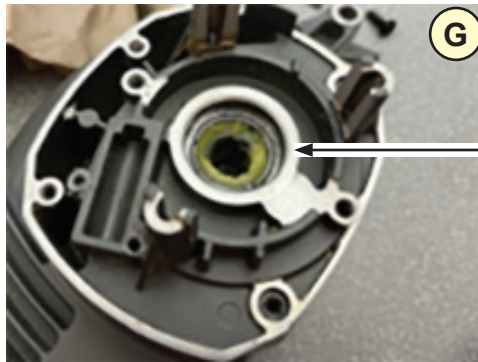
3) Ensure O-ring is installed in bearing pocket of gearcase as shown in {G}.

4) Push/wiggle rotor shaft into gearcase – bearing fit will be tight into pocket, but push and wiggle until it seats fully. {H}

5) Fasten down the two bearing plate screws.

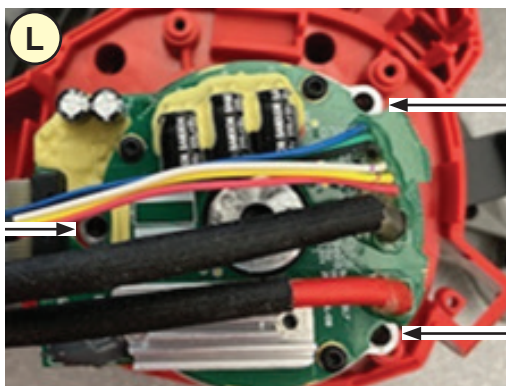
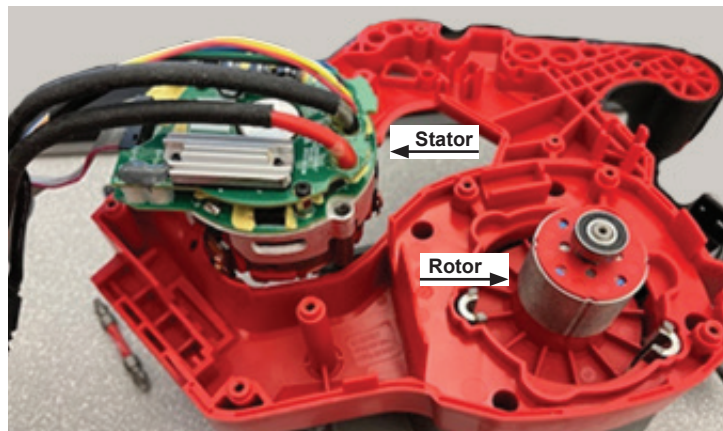
6) Add grease to shaft lock spring and install in pocket – insert end shown in image first. {J}

7) Set spring cover in place and fasten down with two screws. {K}



STATOR INSTALL

- 1) Place stator over rotor.
CAUTION: Magnetic force will pull the stator downwards.
- 2) Ensure the stator is aligned on the rotor and the top bearing on the rotor shaft is aligned with the bearing pocket.
- 3) Slide the three stator screws into their holes in the stator {L}
 - Ensure the ground wire is installed onto the top-right screw {M}
 - Tighten each 1-2mm at a time, working around in a circle to prevent the stator from being twisted on installation.
 - Torque to spec.
- 4) Proceed with wire routing and remainder of installation.

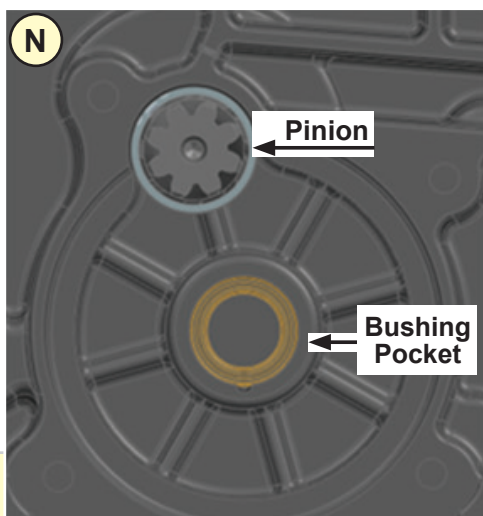


OUTPUT HUB INSTALL

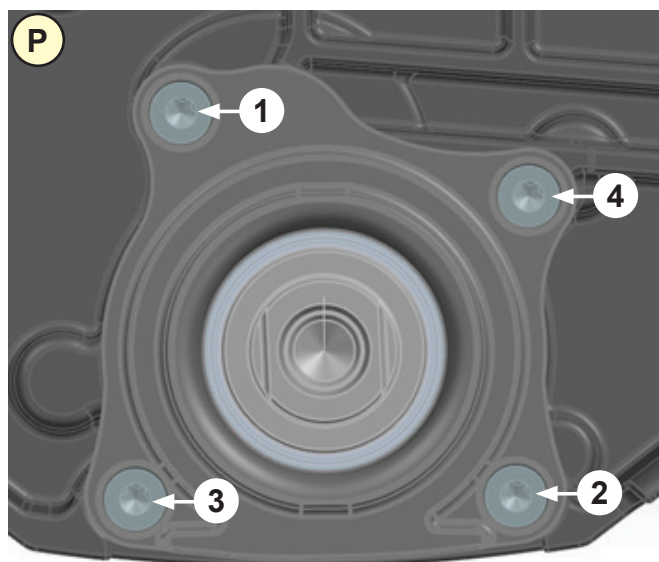
- 1) Ensure gearcase has been properly filled with grease. {N}
 - Fully clean all components.

NOTE – DO NOT use solvents on or around the bearings and seals, it could potentially damage them.

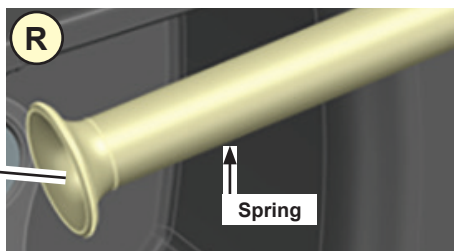
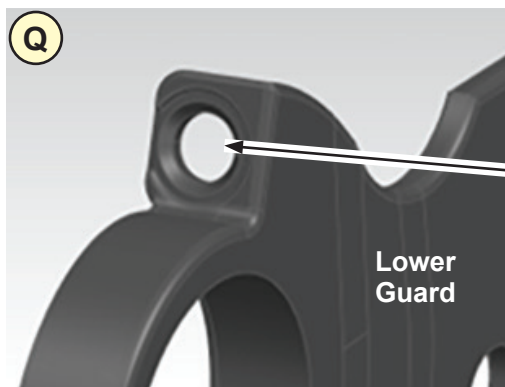
 - Fill quantity is 9.4g of Type "J" grease.
 - Ensure there is sufficient grease spread around the teeth of both gears.
- 2) Install output hub into tool – wiggling back and forth, or rotation of the output shaft may be required to install.
- 3) Install the four screws to the required torque spec – snug all four screws up, then tighten to spec to ensure the hub stays straight.
 - Tighten in a cross-pattern {P}
- 4) Install lower guard according to provided instructions



Ensure sufficient grease is spread in bushing pocket and around pinion teeth; also spread grease on gear teeth before installation.

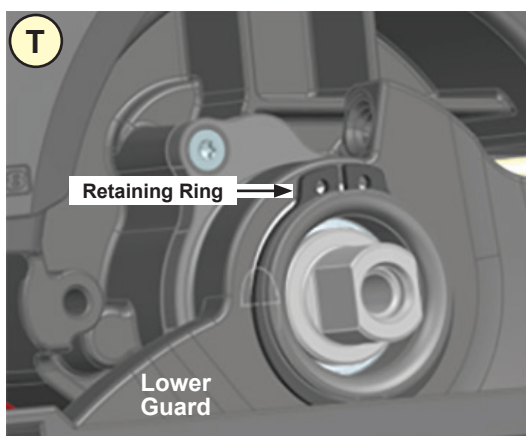
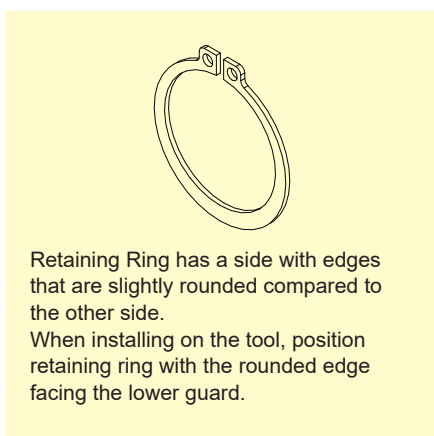
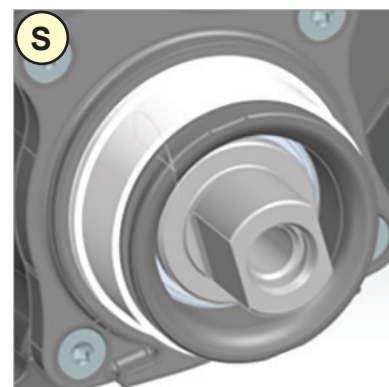


LOWER GUARD INSTALL



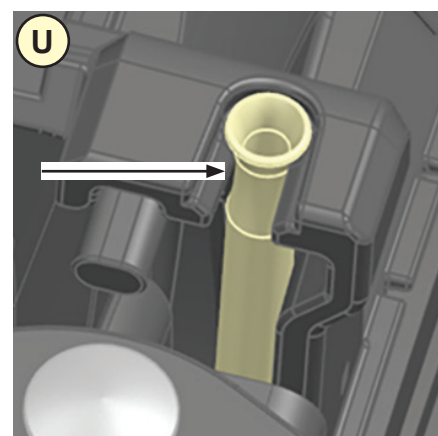
1) Install Spring onto Lower Guard. {Q,R}

2) Install the white Lower Guard Bushing into the Output Hub with the shoulder inwards towards the Output Hub. {S}

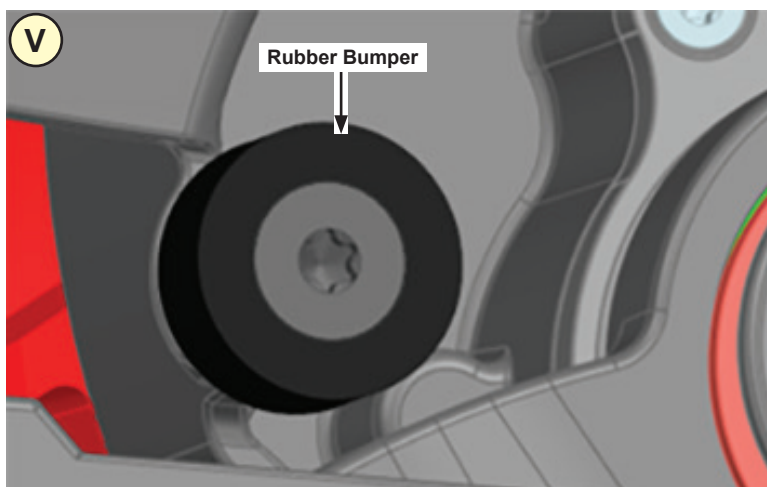


3) Install Lower Guard onto Bushing.

4) Install external Retaining Ring; ensure it is fully seated within the groove on the Output Hub. {T}



5) Push Spring into slot in Gearcase; ensure it is fully seated. Push the narrow section of the Spring through the slot to prevent damage to the Spring. {U}



6) Place the rubber bumper on the shoulder screw, retract the lower guard slightly, then install the screw into the threaded hole in the gearcase. {V}



7) Install the lower guard retraction lever onto the guard. {W}

8) Reinstall the blade bolt and flanges.