



# SERVICE PARTS LIST

BULLETIN NO.  
54-27-2475

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN	DATE
<b>M12™ Brushless 1-1/4" - 2" Copper Tubing Cutter</b>			Mar. 2024
CATALOG NO.	2479-20	SERIAL NO.	P34A
		WIRING INSTRUCTION <b>SEE PAGES 4 &amp; 5</b>	

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

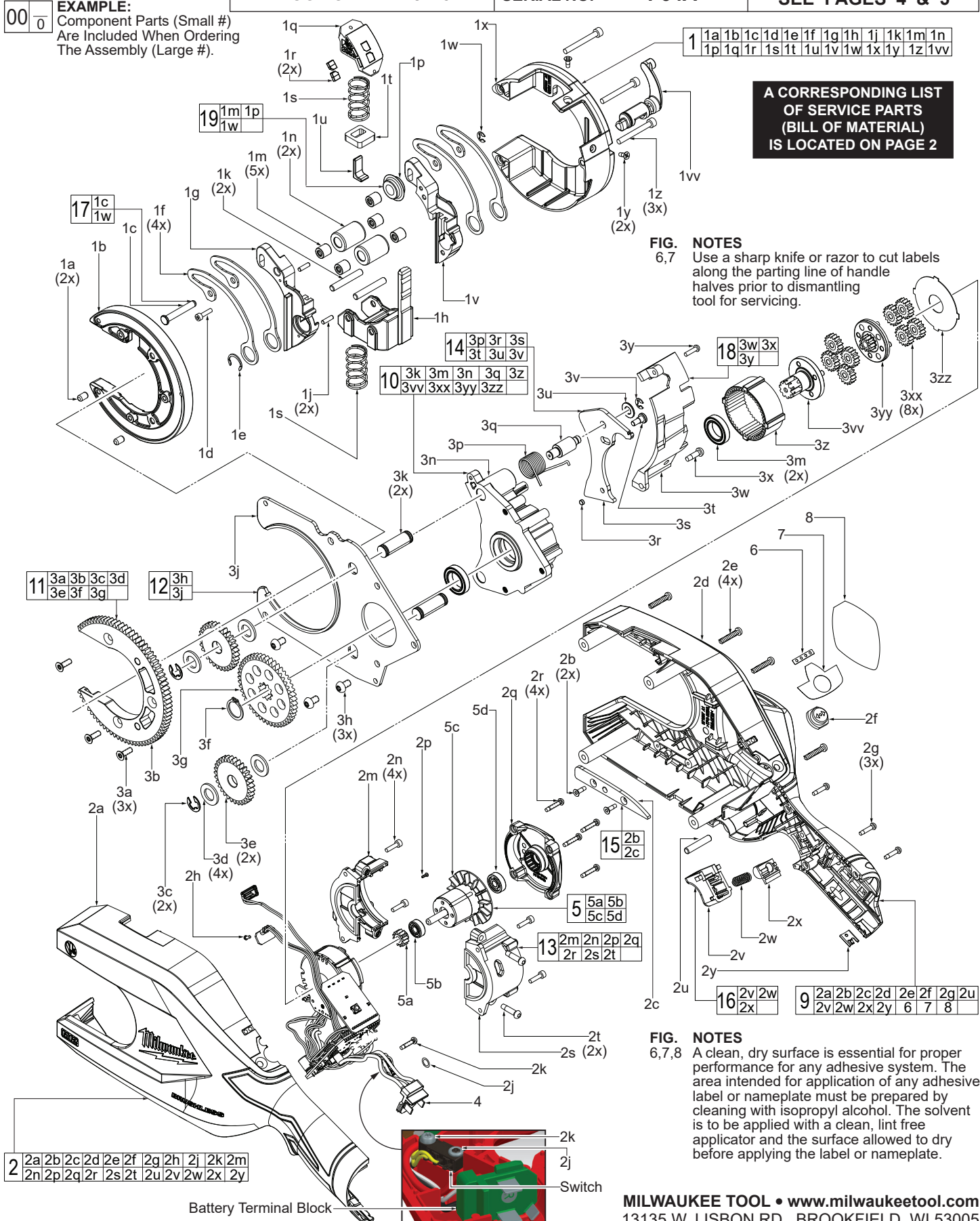


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.	FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	14-29-0064	2" Cutting Head Service Assembly	(1)	3a	05-78-0013	M4 x 12mm Flat Hd. T-20 Mach. Screw	(3)
1a	-----	Pin	(2)	3b	-----	Output (Carriage) Gear	(1)
1b	-----	Head Support	(1)	3c	42-70-5268	E-Ring	(2)
1c	-----	Cutting Wheel Axle	(1)	3d	45-88-0841	Flat Washer	(4)
1d	06-82-9647	M3 x 12mm Cap Hd. Hex Dr. Mach. Sc.	(1)	3e	-----	Idler Gear	(2)
1e	-----	Retaining Clip	(1)	3f	42-70-5272	C-Ring	(1)
1f	-----	Cutting Spring	(4)	3g	-----	Input Gear	(1)
1g	-----	Carriage - Right	(1)	3h	-----	M5 x 8mm Pan Hd. T-25 Mach. Screw	(3)
1h	-----	Roller Carriage with Stem	(1)	3j	-----	Spur Gear Plate	(1)
1j	-----	Pin	(2)	3k	-----	Idler Gear Pin	(2)
1k	-----	Roller Pin	(2)	3m	-----	Deep Groove Ball Bearing	(2)
1m	-----	Needle Roller Bearing	(5)	3n	-----	Gearbox	(1)
1n	-----	Large Roller	(2)	3p	40-50-0954	Torsion Spring	(1)
1p	-----	Cutting Wheel	(1)	3q	-----	Locking Plate Pin	(1)
1q	-----	Upper Spring Holder	(1)	3r	-----	Magnet	(1)
1r	-----	Magnet	(2)	3s	-----	Reset Lever	(1)
1s	-----	Carriage Spring	(2)	3t	05-80-0137	M4 x 6mm w/Boss Pan Hd. Phillips Scr.	(1)
1t	-----	Locking Plate	(1)	3u	45-88-0327	Washer	(1)
1u	-----	Lifter	(1)	3v	34-60-0770	E-Ring	(1)
1v	-----	Carriage - Left	(1)	3w	-----	Opening Cover	(1)
1w	34-60-0770	E-Ring	(1)	3x	05-88-1360	M4 x 13.5mm Pan Hd. T-20 ST Screw	(1)
1x	-----	Head Cover	(1)	3y	05-74-0501	M3 x 12mm Pan Hd. T-10 Mach. Scr.	(1)
1y	05-78-0088	M3 x 8mm Flat Hd. ST #2 Phillips Scr.	(2)	3z	-----	Ring Gear	(1)
1z	05-74-0258	M4 x 35mm Cap Hd. Hex Dr. Mach. Sc.	(3)	3vv	-----	Carrier Shaft	(1)
1vv	-----	Cam Shaft	(1)	3xx	-----	Planet Gear	(8)
2	-----	Handle Halve and Motor Housing Assy.	(1)	3yy	-----	Sun Gear	(1)
2a	-----	Handle/Housing Halve - Support	(1)	3zz	-----	Flat Washer	(1)
2b	-----	M3 x 10mm Flat Hd. T-10 ST Screw	(2)	4	14-20-0223	Stator/Electronics Service Assembly	(1)
2c	-----	Fixing Plate	(1)	5	14-50-2479	Rotor Service Assembly	(1)
2d	-----	Handle/Housing Halve - Cover	(1)	5a	-----	Motor Pinion	(1)
2e	45-04-1000	M4 x 18mm Pan Hd. T-15 Tapt. Screw	(4)	5b	-----	Ball Bearing	(1)
2f	-----	Rubber Mode Selector Button	(1)	5c	-----	Rotor	(1)
2g	06-82-1080	M3 x 14mm Pan Hd. T-10 ST Screw	(3)	5d	-----	Ball Bearing	(1)
2h	-----	M2 x 5mm Pan Hd. T-6 Machine Screw	(1)	6	10-22-1680	LED Label	(1)
2j	34-40-0089	O-Ring	(1)	7	10-22-1681	Mode Selector Label	(1)
2k	-----	M3 x 14mm Pan Hd. T-10 ST Screw	(1)	8	12-20-0808	Service Nameplate	(1)
2m	-----	Motor Housing Halve - Support	(1)	9	31-44-1014	Handle Halve/Motor Hsg. Service Kit	(1)
2n	-----	M3 x 12mm Cap Hd. Hex Dr. Mach. Sc.	(4)	10	14-29-0066	Gearbox Service Assembly	(1)
2p	05-71-0080	M1.7 x 5mm Pan Hd. ST Phillips Screw	(1)	11	14-46-0561	Gear Service Kit	(1)
2q	-----	Back Cap	(1)	12	14-67-0334	Spur Plate Service Kit	(1)
2r	-----	M3 x 16mm Pan Hd. T-10 ST Screw	(4)	13	14-38-0760	Motor Housing Service Kit	(1)
2s	-----	Motor Housing Halve - Cover	(1)	14	14-46-0562	Reset Lever Service Kit	(1)
2t	05-81-0066	M4 x 16mm Pan Hd. T-15 ST Screw	(2)	15	14-46-0563	Fixing Plate Service Kit	(1)
2u	-----	Pin	(1)	16	14-46-0564	Trigger Service Kit	(1)
2v	-----	Trigger	(1)	17	14-46-0568	Axle and E-Ring Service Kit	(1)
2w	40-50-0104	Switch Spring	(1)	18	14-46-0569	Opening Cover Service Kit	(1)
2x	-----	Spring Housing	(1)	19	48-38-4257	Cutting Wheel with Bearing Assembly	(1)
2y	42-70-0058	Housing Connection Clip	(1)			(Accessory - Set of 2)	

## SCREW TORQUE SPECIFICATIONS

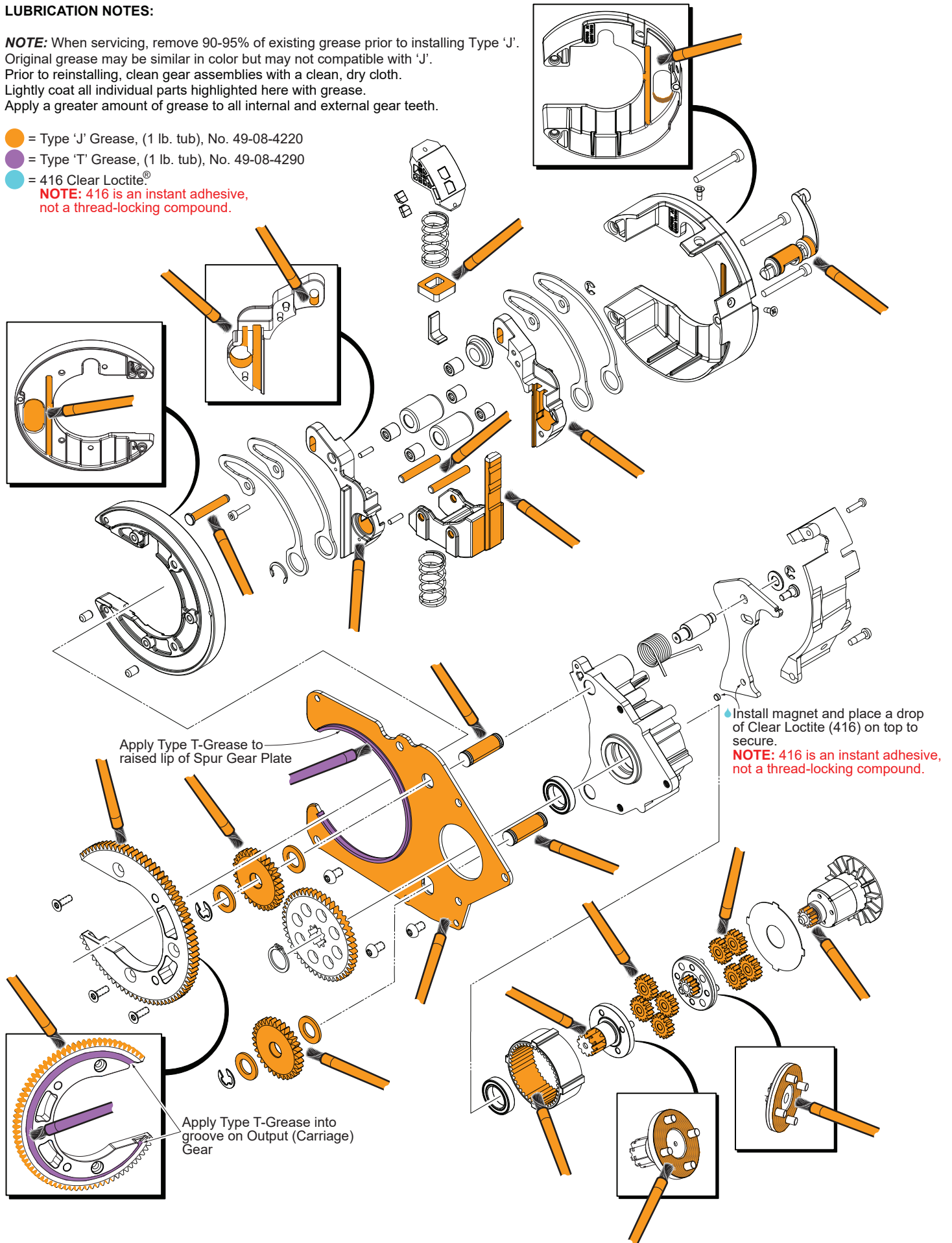
FIG.	PART NO.	DESCRIPTION OF FASTENER	WHERE USED	SEAT TORQUE	
				(lb-in)	(kgf-cm)
1d	06-82-9647	M3 x 12mm Cap Hd. Hex Dr. Mach. Screw	Carriage - Right	13.0±1.3	15±1.5
1y	-----	M3 x 8mm Flat Hd. ST #2 Phillips Screw	Head Cover	4.3±0.4	5±0.5
1z	05-74-0258	M4 x 35mm Cap Hd. Hex Dr. Mach. Screw	Head Cover	22.5±2.6	26±3
2b	-----	M3 x 10mm Flat Hd. T-10 ST Screw	Fixing Plate	9.5±0.9	11.2±1.1
2e	45-04-1000	M4 x 18mm Pan Hd. T-15 Tapt. Screw	Handle/Housing Halve - Cover	13.8±1.3	16±1.6
2g	06-82-1080	M3 x 14mm Pan Hd. T-10 ST Screw	Handle/Housing Halve - Cover	8.6±0.8	10±1
2h	-----	M2 x 5mm Pan Hd. T-6 Machine Screw	Hall Head Sensor Board	2.6±0.8	3±1
2k	-----	M3 x 14mm Pan Hd. T-10 ST Screw	Switch	4.3±0.4	5±0.5
2n	-----	M3 x 12mm Cap Hd. Hex Dr. Mach. Screw	Motor Housing Halves	7.8±0.8	9±1
2p	05-71-0080	M1.7 x 5mm Pan Hd. ST Phillips Screw	Hall Lever Sensor Board	1.5±0.1	1.75±0.1
2r	-----	M3 x 16mm Pan Hd. T-10 ST Screw	Back Cap	8.6±0.8	10±1
2t	05-81-0066	M4 x 16mm Pan Hd. T-15 ST Screw	Motor Housing Halve - Cover	21.6±1.7	25.2±2
3a	05-78-0013	M4 x 12mm Flat Hd. T-20 Mach. Screw	Output Gear	30.3±3.4	35±4
3h	-----	M5 x 8mm Pan Hd. T-25 Mach. Screw	Spur Gear Plate	32.9±3.2	38±3.8
3t	05-80-0137	M4 x 6mm w/Boss Pan Hd. Phillips Screw	Reset Lever	19.0±1.9	22±2.2
3x	05-88-1360	M4 x 13.5mm Pan Hd. T-20 ST Screw	Opening Cover	9.5±0.8	11±1
3y	05-74-0501	M3 x 12mm Pan Hd. T-10 Mach. Screw	Opening Cover	8.6±0.8	10±1

## LUBRICATION NOTES:

**NOTE:** When servicing, remove 90-95% of existing grease prior to installing Type 'J'. Original grease may be similar in color but may not be compatible with 'J'. Prior to reinstalling, clean gear assemblies with a clean, dry cloth. Lightly coat all individual parts highlighted here with grease. Apply a greater amount of grease to all internal and external gear teeth.

- = Type 'J' Grease, (1 lb. tub), No. 49-08-4220
- = Type 'T' Grease, (1 lb. tub), No. 49-08-4290
- = 416 Clear Loctite®

**NOTE:** 416 is an instant adhesive,  
not a thread-locking compound.



**Electronics Assembly**

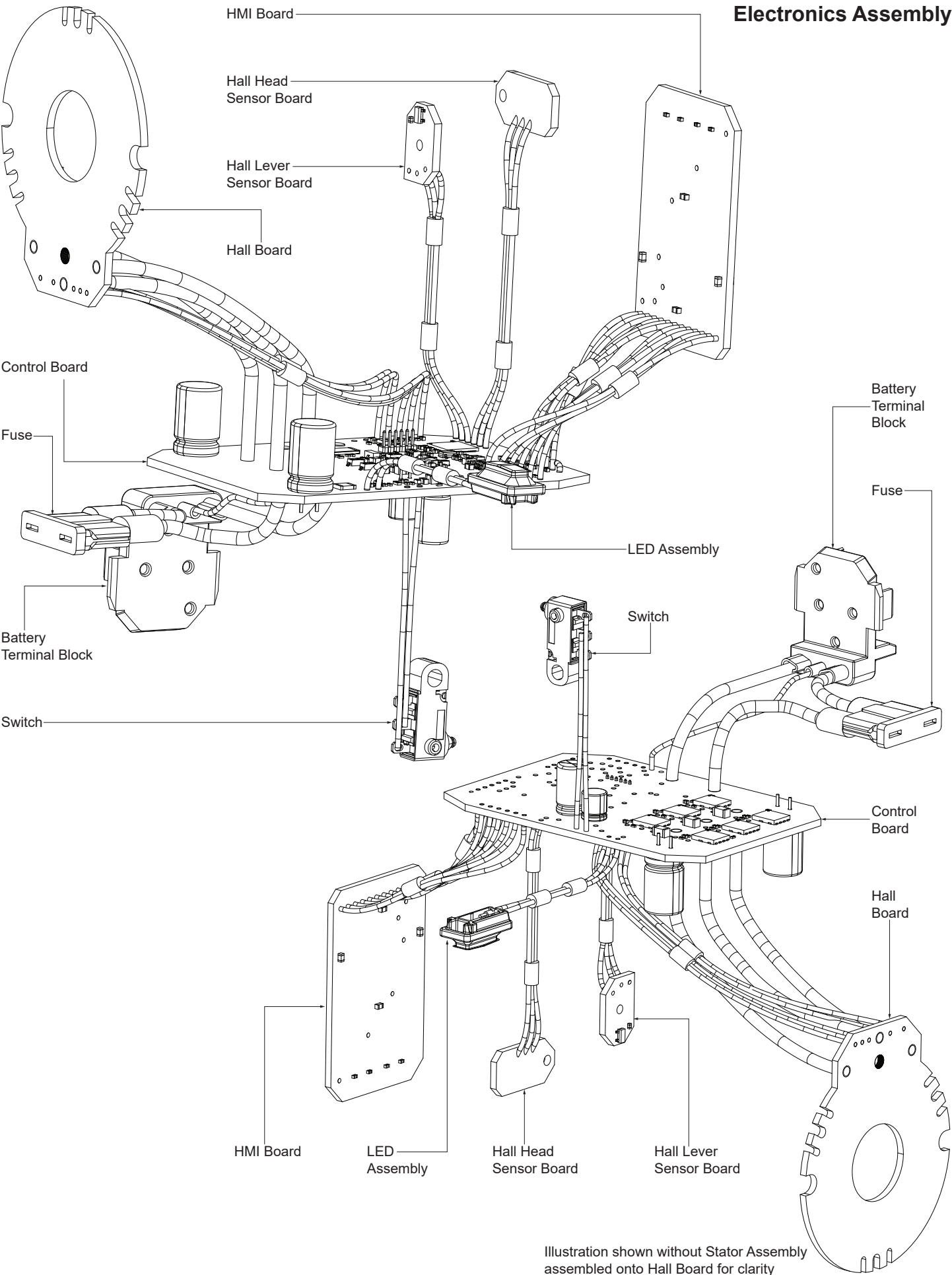
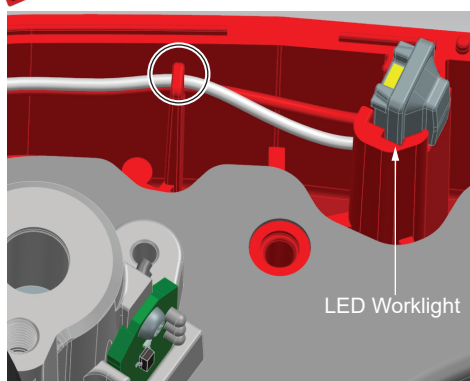
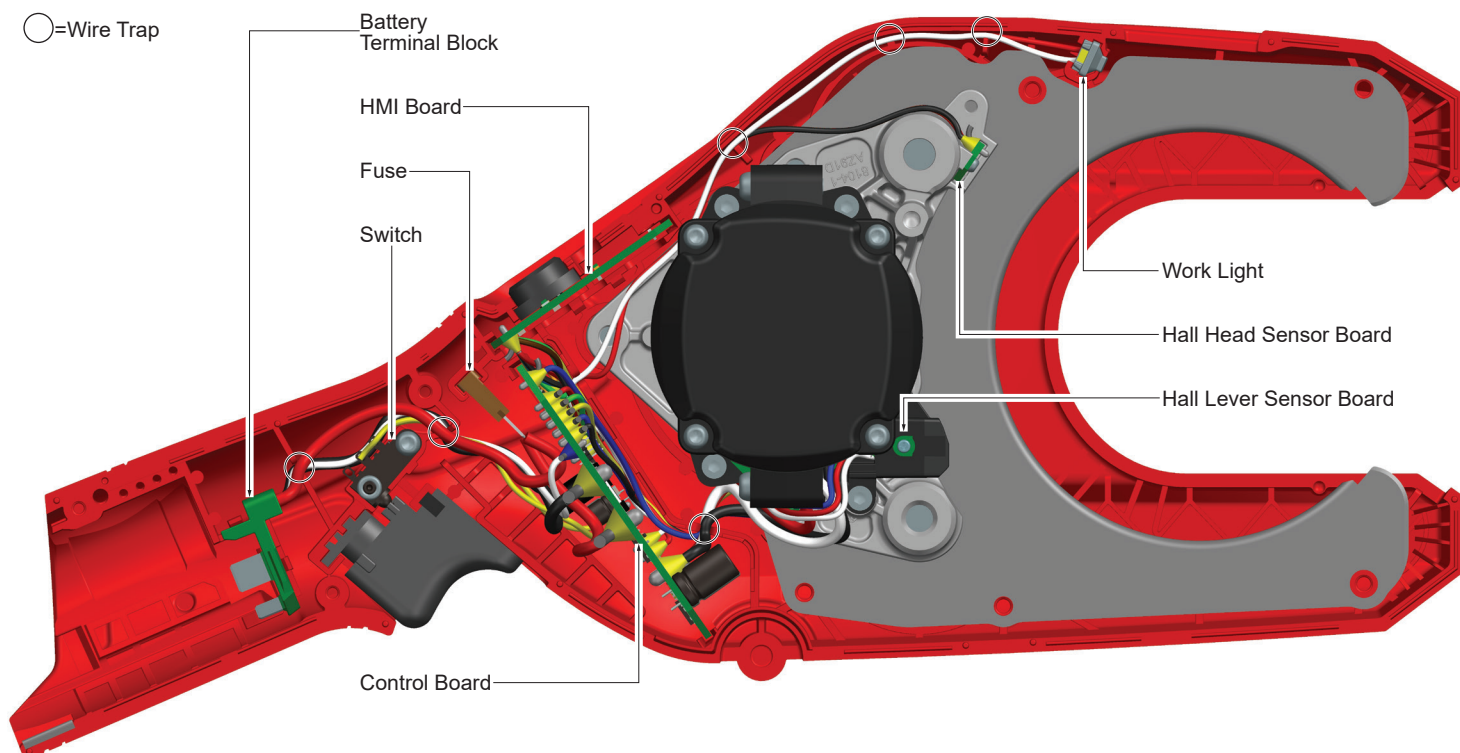
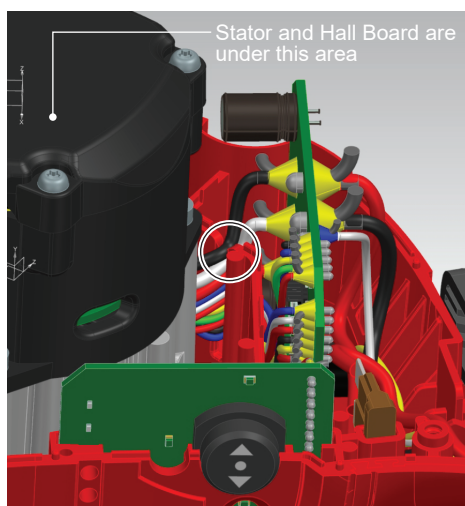


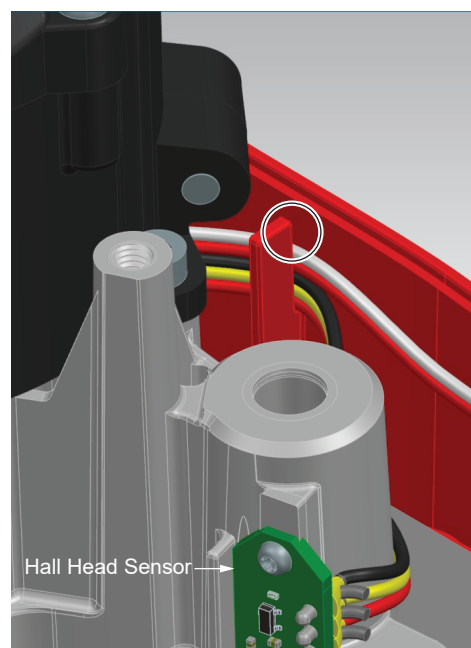
Illustration shown without Stator Assembly  
assembled onto Hall Board for clarity



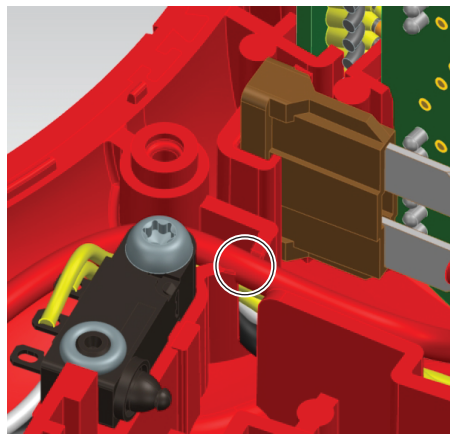
LED Worklight wire routing sequence. Place red in the bottom of trap with the white wire on top.



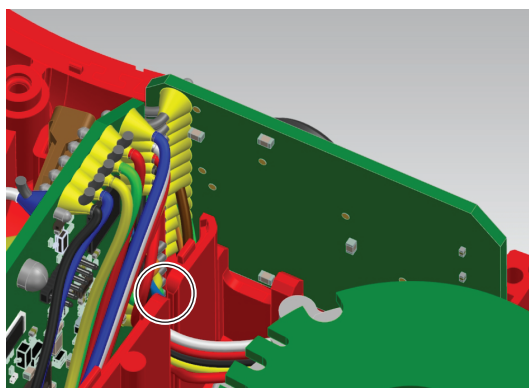
Stator and Hall Board wire routing sequence. Place thin wires in the bottom of trap and thick wires on top. NOTE: Stator and Hall Board are concealed under motor housing halves and cover.



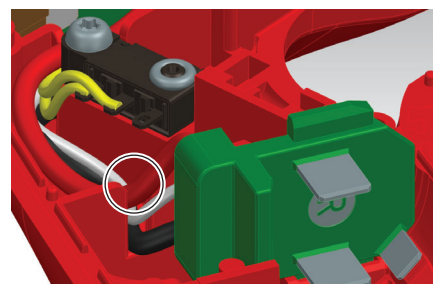
Hall Head Sensor wire routing sequence. Place red wire in bottom of trap followed by yellow wire and black wire. Place LED wires on top as shown.



Switch and Battery Terminal Block wires are routed as shown. Place red wire from terminal block on bottom of trap followed by black and white from terminal block. Next place the two yellow switch wires. Install the red terminal block wire on top to secure all wires in trap.



Hall Head and Worklight wire routing: red wire on the bottom, followed by yellow, black, red with white on top.



Battery Terminal Block wire routing sequence is black on the bottom, followed by the white wire. Place the red wire on top.