



# SERVICE PARTS LIST



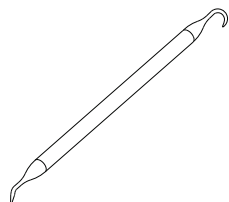
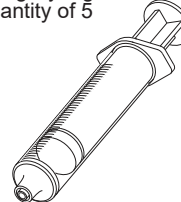
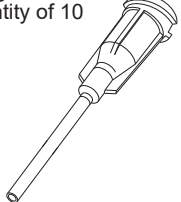
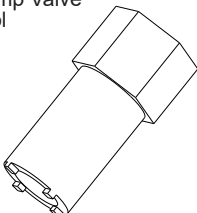
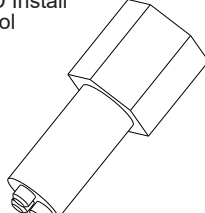
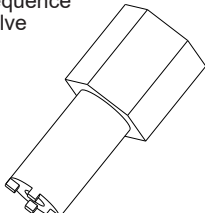
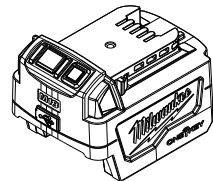
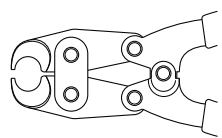
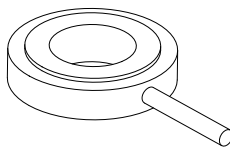
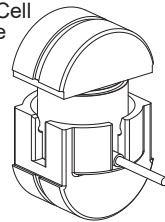
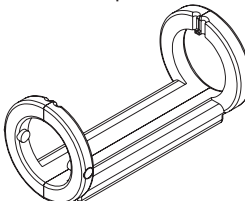
BULLETIN NO.  
54-47-2910


SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN	DATE
<b>M18™ FORCELOGIC™ 12T Latched Linear Crimper</b>			Dec 2022
CATALOG NO. <b>2878-20</b>	STARTING SERIAL	<b>M37A</b>	
		WIRING INSTRUCTION <b>SEE PAGE 6</b>	


<b>BEST PRACTICES</b>	<b>PAGE 1</b>	<b>TORQUE SPECIFICATIONS</b>	<b>PAGE 3</b>
<b>SERVICE TOOLS / FIXTURES</b>	<b>PAGE 1</b>	<b>SERVICE WIRING DIAGRAM</b>	<b>PAGE 6</b>
<b>SERVICE PARTS EXPLODED VIEW</b>	<b>PAGE 2-5</b>	<b>LUBRICATION INSTRUCTIONS</b>	<b>PAGE 7</b>


- BEST PRACTICES when Servicing FORCELOGIC™ Tools**
- **Caution:** Always assume Hydraulic tool is under pressure, before starting any repair procedures, manually engage the relief valve. Confirm no hydraulic pressure remains.
  - **Important!** The pressure sensor is a monitoring device that is calibrated with the electronics assembly. **Always** replace pressure sensor and electronics assembly **as a set!**
  - **Always** wear P.P.E. (Personal Protective Equipment) when working with hydraulic fluid.
  - **Do not** use Hammers or Impact tools.
  - **Do not** use sharp metal objects on seals or sealing surfaces.
  - **Always** use recommended service tools and fixtures.
  - **Always** ensure new hydraulic parts are free of burrs or defects.
  - **Always** establish a clean work area free of dirt and debris.
  - **Always** insure that clean parts are used prior to assembly.
  - **Always** follow proper torque specifications.
  - **Always** confirm repair by testing on verification fixtures.
  - **Always** use appropriate hydraulic oil, MILWAUKEE FORCELOGIC™ Hydraulic Oil, No. 49-32-0110.
  - **Always** remove battery pack before changing or removing accessories. Only use accessories specifically recommended for this tool. Others may be hazardous. *For a complete listing of accessories, go online to [www.milwaukeetool.com](http://www.milwaukeetool.com) or contact a local MILWAUKEE distributor.*

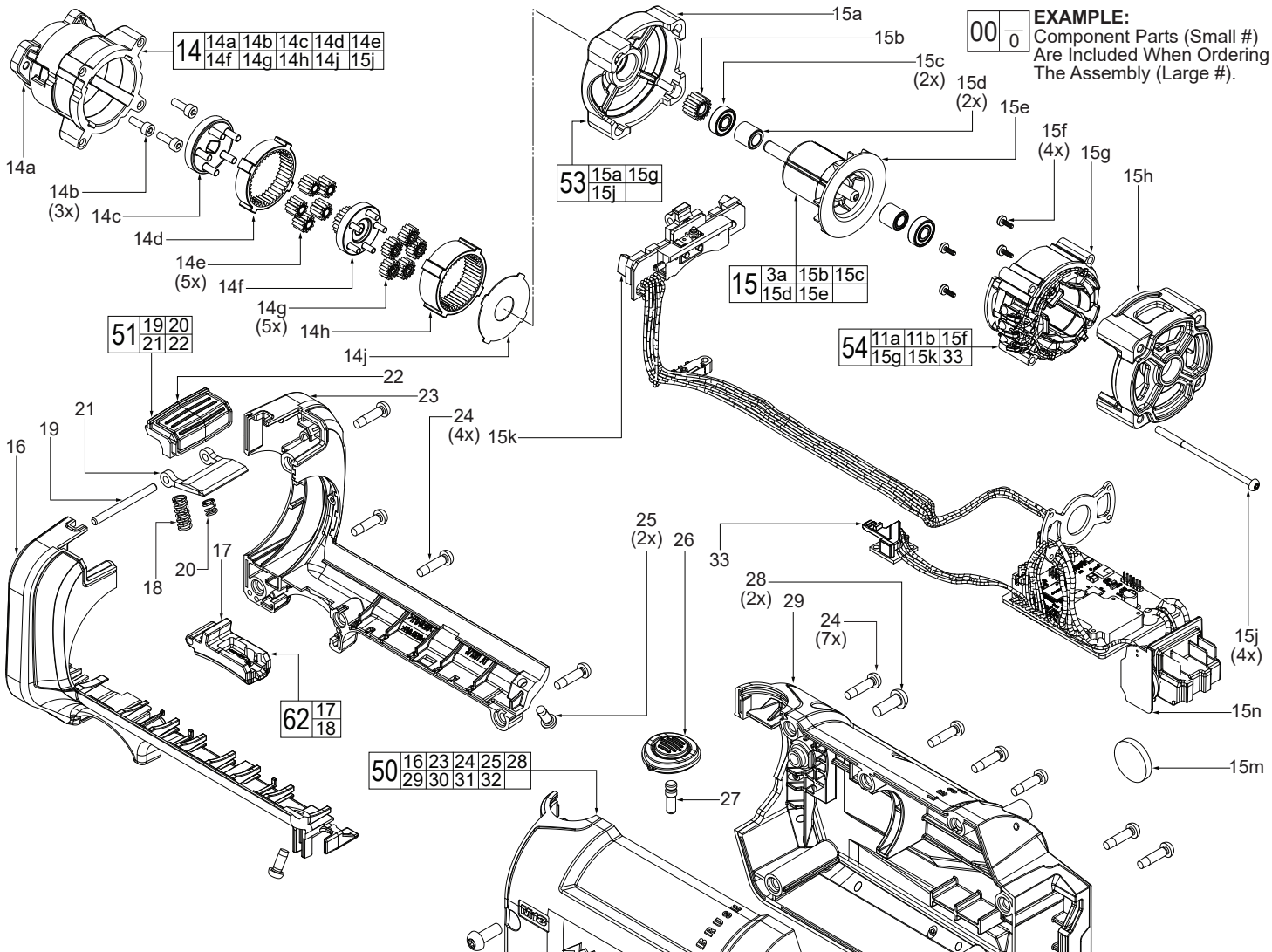
## SERVICE TOOLS / FIXTURES

Indicator  <b>61-50-0020</b>	Fill Bottle  <b>61-50-0040</b>	Seal Pick Tool  <b>61-50-0050</b>	Filling Syringe Quantity of 5  <b>61-50-0100</b>	Filling Needle Quantity of 10  <b>61-50-0110</b>
Dump Valve Tool  <b>61-60-0025</b>	BD Install Tool  <b>61-60-0035</b>	Sequence Valve  <b>61-60-0045</b>	One Key™ Adaptor  <b>2700-20</b>	Crimping Service Tool  <b>61-60-0265</b>
Load Cell  <b>61-50-0205</b>	Load Cell Fixture  <b>61-60-0510</b>	Service Wrap Fixture  <b>61-60-0550</b>		

 Service Videos are available to aid in repair and maintenance of M18™ FORCELOGIC™ Tools.

 Verification Procedures are covered in service videos as well as repair guides.

 Repair Guides are available that illustrate/explain any special assembly, settings or procedures.

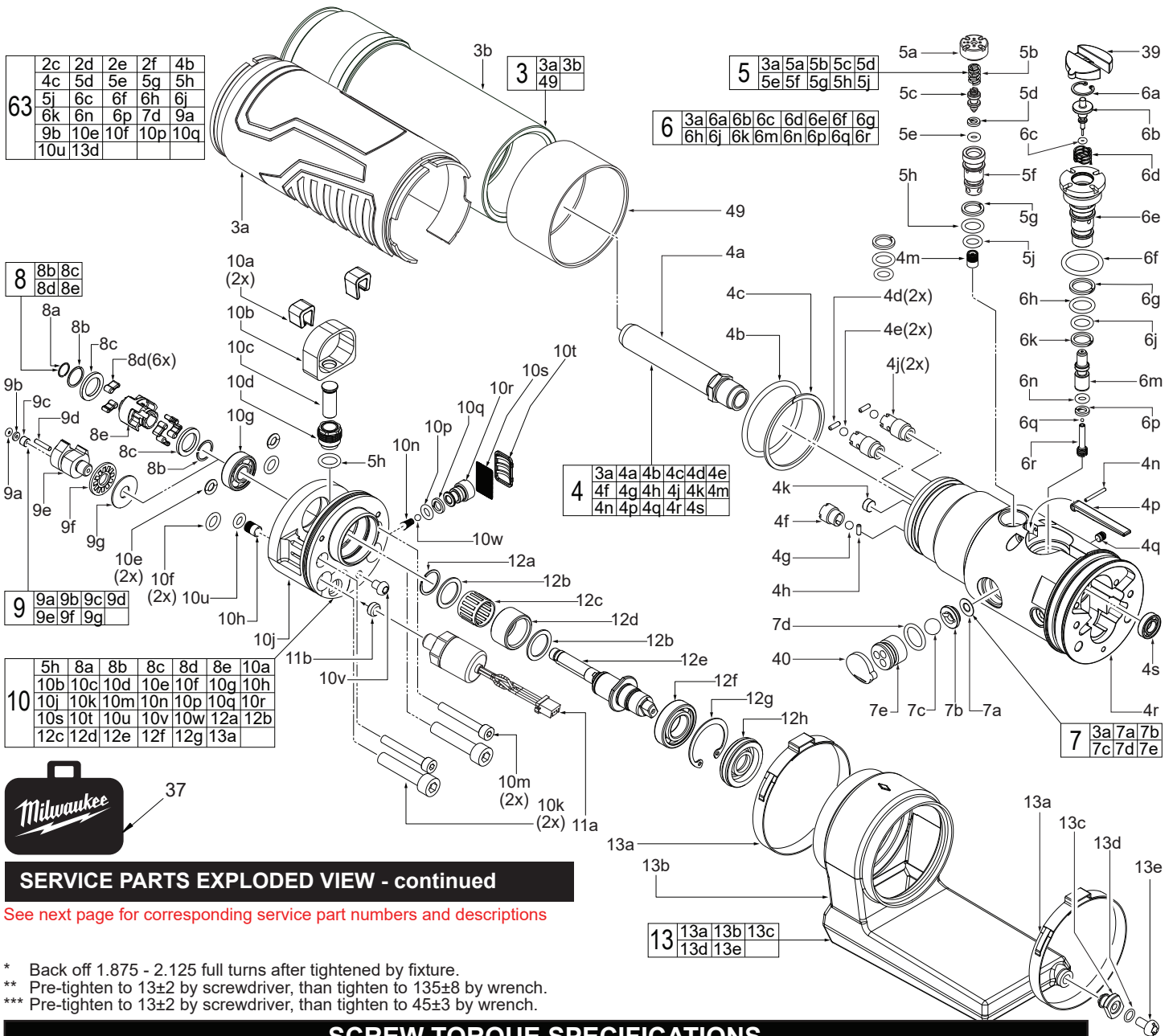


Service Verification Specification 24500-25500 lbs

### SERVICE PARTS EXPLODED VIEW

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
14	14-30-0106	Gearcase Service Kit	(1)
14a	-----	Gearcase	(1)
14b	05-84-0100	M3 x 9mm Cap Hd. Machine Screw	(3)
14c	-----	Carrier	(1)
14d	-----	2nd Ring Gear	(1)
14e	-----	2nd Planet Gear	(5)
14f	-----	2nd Sun Gear	(1)
14g	-----	1st Planet Gear	(5)
14h	-----	1st Ring Gear	(1)
14j	-----	Flat Washer	(1)
15	14-50-0036	Rotor Service Kit	(1)
15a	-----	Front Motor Mount	(1)
15b	-----	Motor Pinion	(1)
15c	-----	Ball Bearing	(2)
15d	-----	Sleeve	(2)
15e	-----	Rotor	(1)
15f	05-88-0106	M2 x 5.5mm Pan Hd. PT T-8 Screw	(4)
15g	-----	Stator	(1)
15h	-----	Rear Motor Mount	(1)
15j	05-74-0118	M3 x 62mm Pan Hd. T-10 Mach. Screw	(4)
15k	-----	PCBA	(1)
15m	-----	3V Coin Cell Battery (CR2032)	(1)
15n	-----	Coin Cell PCBA	(1)
16	-----	Trigger Collar - Left	(1)
17	-----	Trigger	(1)
18	-----	Trigger Spring - Long	(1)
19	-----	Release Trigger Pin	(1)
20	-----	Trigger Spring - Short	(1)
21	-----	Release Trigger	(1)
22	-----	Reverse Button	(1)
23	-----	Trigger Collar - Right	(1)
24	-----	M4 x 16mm Pan Hd. ST T-20 Screw	(11)

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
25	-----	M4 x 10mm Pan Hd. Tapt. T-20 Screw	(2)
26	-----	Manual Release Button Holder	(1)
27	-----	Manual Release Button Insert	(1)
28	05-78-0032	M5 x 13mm Pan Hd. T-25 Mach. Screw	(2)
29	-----	Right Handle Halve - Cover	(1)
30	-----	Left Handle Halve - Support	(1)
31	-----	Coin Cell Door	(1)
32	-----	M2.6 x 6mm Flat Hd. ST Phillips Screw	(2)
33	-----	Bluetooth Lens	(1)
34	-----	Hook Ring Service Kit	(1)
34a	-----	Hook Ring	(1)
34b	-----	M6 x 16mm Flat Hd. T-30 ST Screw	(4)
34c	-----	M3 x 10mm Flat Hd. T-10 ST Screw	(2)
49	-----	Retention Band	(1)
50	31-44-0349	Handle/Trigger Collar Service Kit	(1)
51	31-92-0216	Reverse Trigger Service Kit	(1)
52	49-90-0047	Hook Ring Service Kit	(1)
53	44-34-0096	Motor Mount Service Kit	(1)
54	14-20-0322	Electronics w/ Pressure Sensor Svc. Kit	(1)
62	31-92-0212	Trigger Service Kit	(1)



**SERVICE PARTS EXPLODED VIEW - continued**

See next page for corresponding service part numbers and descriptions

- \* Back off 1.875 - 2.125 full turns after tightened by fixture.
- \*\* Pre-tighten to 13±2 by screwdriver, than tighten to 135±8 by wrench.
- \*\*\* Pre-tighten to 13±2 by screwdriver, than tighten to 45±3 by wrench.

SCREW TORQUE SPECIFICATIONS				SEAT TORQUE	
				(kgf-cm)	(lb-in)
FIG.	PART NO.	DESCRIPTION OF FASTENER	WHERE USED		
1r	-----	M4 x 12mm Flat Hd. T-20 Machine Scr.	Spring Cap (1q)	36±4	31.2±3
1s	-----	M3 x 11mm Cap Hd. Shoulder Screw	Spring(1v), Pin Release Bottom (1y)	15.5±2	13.4±1
1t	-----	M3 x 6mm Pan Hd. T-10 Machine Scr.	Pin Release Bottom (1y)	2.5±0.5	2.1±.05
1x	-----	Shoulder Screw	Spring(1v), Pin Release Bottom (1y)	15.5±2	13.4±1
1yy	-----	M4 x 10.75 Cap Hd. Machine Screw	Clevis (1j)	6.0±1	5.2±1
3b	-----	Cylinder	Manifold (4r)	695±5	603±4
4a	-----	Inner Cylinder	Manifold (4r)	525±6	455±5
4f	-----	Return Valve Check Seat	Manifold (4r)	250±15	217±13
4j	-----	Prefill Valve Check Seat	Manifold (4r)	170±10	147±8
5a	-----	Sequence Valve Cap	Manifold (4r)	207±13	180±11
5e	-----	Manual Dump Pilot Valve Sleeve	Manifold (4r)	200±12	173±10
6r	-----	Retainer Dump Valve	Manifold (4r)	Manually Tighten	
7e	-----	Lock Screw	Manifold (4r)	203±13	176±11
10d	-----	Pump Sleeve	Pump Body (10j)	75±5	65±4
10k	05-88-0051	M6 x 30mm Cap Hd. Machine Screw	Pump Body (10j)	**	
10m	05-88-0031	M4 x 30mm Cap Hd. Machine Screw	Pump Body (10j)	***	
10r	-----	Intake Seat	Pump Body (10j)	45±3	39±2
10v	-----	M4 x 5mm Pan Hd. T-20 Machine Scr.	Pump Body (10j)	15±3	13±2
11a	-----	Pressure Sensor	Pump Body (10j)	204±13	177±11
13e	-----	M4 x 8mm Pan Hd. T-25 Machine Scr.	Fill Plug (13c)	15±3	13±2
14b	05-84-0100	M3 x 9mm Cap Hd. Machine Screw	Gearcase (14a)	12±2	10±1
15f	05-88-0106	M2 x 5.5mm Pan Hd. PT T-8 Screw	PCBA Mounting Plate (15k)	3±0.5	2.6±0.5
15j	05-74-0118	M3 x 62mm Pan Hd. T-10 Mach. Screw	Rear Motor Mount (15h)	14±2	12±1
24	-----	M4 x 16mm Pan Hd. ST T-20 Screw	Right Handle Halve - Cover (29)	19±3	16±2
25	-----	M4 x 10mm Pan Hd. Tap. T-20 Screw	Trigger Collars (16,23)	19±3	16±2
28	05-78-0032	M5 x 13mm Pan Hd. T-25 Mach. Screw	Handle Halves (29,30)	40±6	34±5
32	-----	M2.6 x 6mm Flat Hd. ST Phillips Screw	Coin Cell Door (31)	2.5±0.5	2.1±.05
34b	-----	M6 x 16mm Flat Hd. T-30 ST Screw	Hook Ring (34a)	30±5	26±4
34c	-----	M3 x 10mm Flat Hd. T-10 ST Screw	Hook Ring (34a)	8±1	6.9±1

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.	FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
3	14-12-0113	Cylinder Service Kit	(1)	10k	05-88-0051	M6 x 30mm Cap Hd. Machine Screw	(2)
3a	-----	Rubber Cylinder Boot	(1)	10m	05-88-0031	M4 x 30mm Cap Hd. Machine Screw	(2)
3b	-----	Cylinder	(1)	10n	-----	Intake Spring	(1)
4	45-76-0062	Manifold Service Assembly	(1)	10p	-----	O-Ring	(1)
4a	-----	Inner Cylinder	(1)	10q	-----	Large Outer Back-Up Washer	(1)
4b	34-40-0081	O-Ring	(1)	10r	-----	Intake Seat	(1)
4c	45-88-0164	Back-Up Washer	(1)	10s	-----	Intake Seat Screen	(1)
4d	-----	Holder Pin	(2)	10t	-----	Screen Holder	(1)
4e	-----	4mm Ceramic Ball	(2)	10u	34-40-0038	O-Ring	(1)
4f	-----	Return Valve Check Seat	(1)	10v	-----	M4 x 5mm Pan Hd. T-20 Machine Scr.	(1)
4g	-----	4mm Steel Ball	(1)	10w	-----	3mm Steel Bal	(1)
4h	-----	Holder Pin	(1)	11a	-----	Pressure Sensor	(1)
4j	-----	Prefill Valve Check Seat	(1)	11b	-----	Crush Washer	(1)
4k	-----	Magnet	(1)	12a	-----	Retaining Ring	(1)
4m	-----	Check Valve Reverse Flow	(1)	12b	-----	Flat Washer	(2)
4n	-----	Release Lever Pin	(1)	12c	-----	Needle Bearing	(1)
4p	-----	Release Lever	(1)	12d	-----	Race-Roller Bearing	(1)
4q	-----	Seal Plug	(1)	12e	-----	Cam Shaft	(1)
4r	-----	Manifold	(1)	12f	-----	Ball Bearing	(1)
4s	-----	Ball Bearing	(1)	12g	44-86-0051	Retaining Ring	(1)
5	45-80-0017	Sequence Valve Assembly	(1)	12h	45-06-0022	Rubber Shaft Seal	(1)
5a	-----	Sequence Valve Cap	(1)	13	14-46-0217	Bladder Service Kit	(1)
5b	-----	Wave Spring	(1)	13a	31-17-0034	Ear Clamp	(2)
5c	-----	Poppet - 2 Way Valve	(1)	13b	-----	Bladder	(1)
5d	45-88-0034	Back-Up Ring	(1)	13c	-----	Fill Plug	(1)
5e	-----	O-Ring	(1)	13d	34-40-0051	O-Ring	(1)
5f	-----	Sequence Valve Short Sleeve	(1)	13e	-----	M4 x 8mm Pan Hd. T-25 Machine Scr.	(1)
5g	-----	Back-Up Washer	(1)	37	48-22-8280	Contractor Bag	(1)
5h	34-40-0037	O-Ring	(2)	39	-----	Manual Dump Valve Cushion	(1)
5j	-----	O-Ring	(1)	40	-----	Burst Disc Valve Cushion	(1)
6	31-92-0036	Dump Valve Service Assembly	(1)	63	45-06-0054	Seal/Ring/Washer Service Kit	(1)
6a	-----	Stop Ring	(1)				
6b	-----	Manual Dump Pin	(1)				
6c	34-40-0044	O-Ring	(1)				
6d	-----	Wave Spring	(1)				
6e	-----	Manual Dump Pilot Valve Sleeve	(1)				
6f	-----	O-Ring	(1)				
6g	-----	Large Outer Back-Up Ring	(1)				
6h	-----	O-Ring	(1)				
6j	34-40-0037	O-Ring	(1)				
6k	-----	Back-Up Washer	(1)				
6m	-----	Poppet Dump Valve	(1)				
6n	-----	O-Ring	(1)				
6p	-----	Large Inner Back-Up Ring	(1)				
6q	-----	1.5mm Steel Ball	(1)				
6r	-----	Retainer Dump Valve	(1)				
7	14-14-0015	Burst Disc Service Kit	(1)				
7a	43-06-0027	Burst Disc	(1)				
7b	-----	Disc Spacer	(1)				
7c	-----	8mm Steel Ball	(1)				
7d	-----	O-Ring	(1)				
7e	-----	Lock Screw	(1)				
8	45-44-0014	Sprocket Service Assembly	(1)				
8a	42-36-0062	Retaining Ring	(1)				
8b	-----	Retaining Ring	(2)				
8c	-----	Flat Washer	(2)				
8d	-----	Drive Pawl	(6)				
8e	-----	Sprocket	(1)				
9	31-94-0018	Rotary Valve Service Kit	(1)				
9a	34-40-0049	O-Ring	(1)				
9b	-----	Back-Up Washer	(1)				
9c	-----	Disc Shear Seal	(1)				
9d	-----	Dowel Pin	(1)				
9e	-----	Rotary Valve	(1)				
9f	-----	Thrust Bearing	(1)				
9g	-----	Thrust Washer	(1)				
10	44-70-0036	Pump Service Assembly	(1)				
10a	-----	A Guide Piston Retainer	(2)				
10b	-----	Retainer Cam Shaft	(1)				
10c	-----	Piston	(1)				
10d	-----	Pump Sleeve	(1)				
10e	-----	O-Ring	(2)				
10f	34-40-0028	O-Ring	(2)				
10g	-----	Ball Bearing	(1)				
10h	-----	High Pressure Check Valve w/ Screen	(1)				
10j	-----	Pump Body	(1)				



**SERVICE PARTS EXPLODED VIEW - continued**

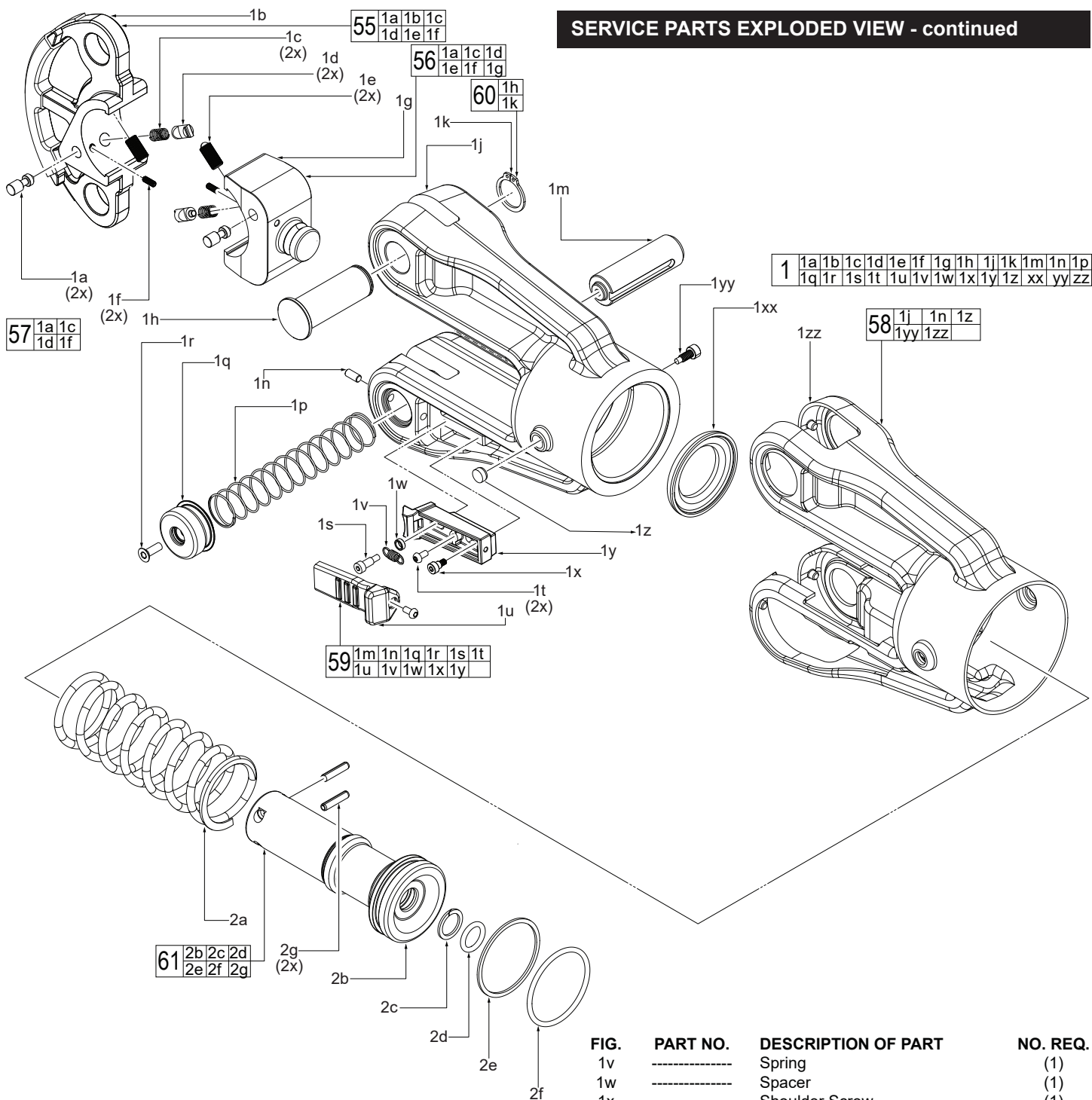
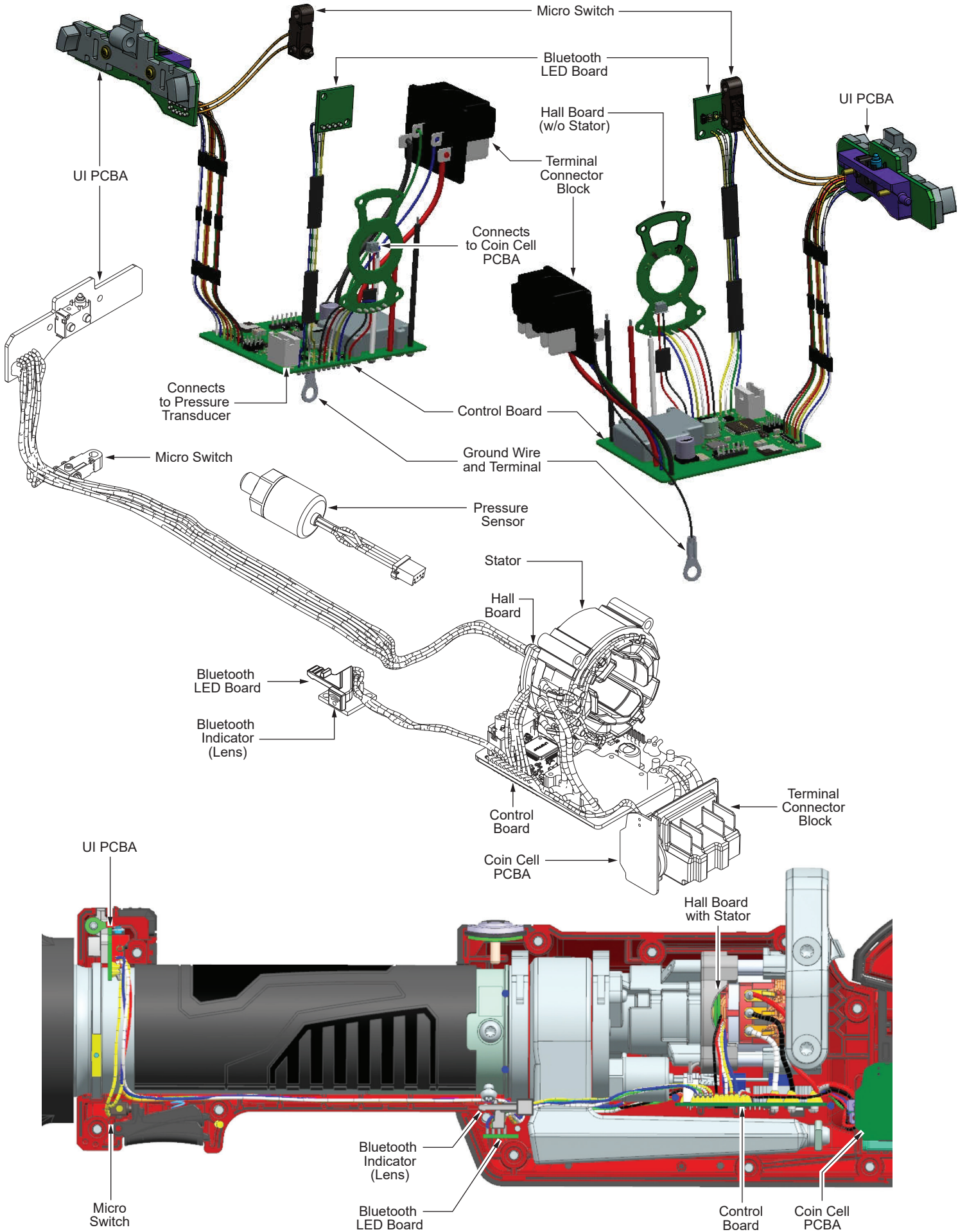


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	31-01-0068	Head Service Assembly	(1)
1a	-----	Die Retention Button	(2)
1b	-----	Nest with Overmold	(1)
1c	-----	Die Spring	(2)
1d	-----	Die Retention Pin	(2)
1e	-----	Ball Plunger	(2)
1f	-----	M3 x 8mm Set Screw	(2)
1g	-----	Ram Head	(1)
1h	-----	Fixed Pin	(1)
1j	-----	Clevis	(1)
1k	-----	Retaining Ring	(1)
1m	-----	Removable Pin	(1)
1n	-----	Retention Pin	(1)
1p	-----	Spring	(1)
1q	-----	Spring Cap with Overmold	(1)
1r	-----	M4 x 12mm Flat Hd. T-20 Machine Scr.	(1)
1s	-----	M3 x 11mm Cap Hd. Shoulder Screw	(1)
1t	-----	M3 x 6mm Pan Hd. T-10 Machine Scr.	(2)
1u	-----	Pin Release Cover with Overmold	(1)

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1v	-----	Spring	(1)
1w	-----	Spacer	(1)
1x	-----	Shoulder Screw	(1)
1y	-----	Pin Release Bottom	(1)
1z	-----	Rubber Plug	(1)
1xx	-----	Stop Ring	(1)
1yy	-----	M4 x 10.75 Cap Hd. Machine Screw	(1)
1zz	-----	Rubber Boot	(1)
2	14-12-0111	Ram Service Kit	(1)
2a	-----	Return Spring	(1)
2b	-----	Ram	(1)
2c	-----	Back-Up Washer	(1)
2d	-----	O-Ring	(1)
2e	-----	Back-Up Washer	(1)
2f	-----	O-Ring	(1)
2g	-----	Roll Pin	(2)
55	31-15-0192	Nest Service Assembly	(1)
56	14-12-0103	Ram Head Service Assembly	(1)
57	43-04-0010	Die Retention Service Kit	(1)
58	31-01-0068	Head Service Assembly	(1)
59	14-47-0111	Latch Service Kit	(1)
60	14-47-0151	Fixed Pin Service Kit	(1)
61	14-12-0111	Ram Service Kit	(1)

# SERVICE WIRING DIAGRAM



## LUBRICATION INSTRUCTIONS



### 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.



### NOTE

Regarding parts to be lubricated: Apply a light coating of grease to all highlighted parts shown prior to installation. Reference the key below for grease types.

### LUBRICATION:

- = White Lithium Grease (150ml tube), 49-08-0035
- = Type S2 Grease (7 oz. tube), 49-08-5265
- = 263 Red Loctite® 44-22-0050
- = 243 Blue Loctite® 44-22-0095

Use  
*Milwaukee*  
**FORCELOGIC™**  
Hydraulic Oil  
Cat. No. 49-32-0110  
(1 L, 1.06 Qt.)

