








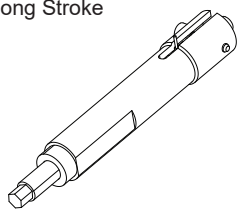
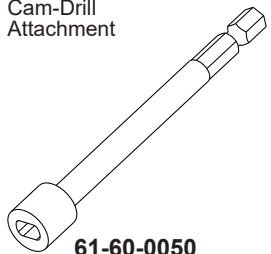
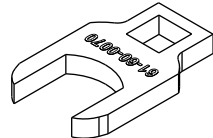
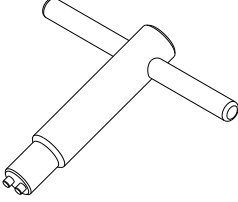
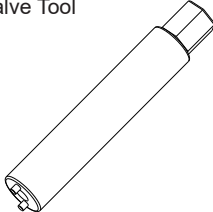
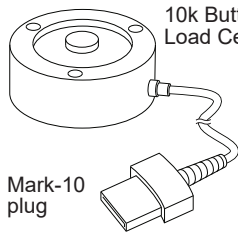
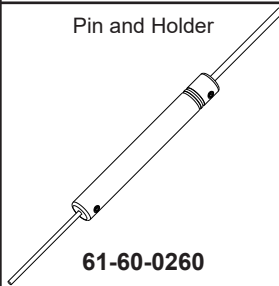

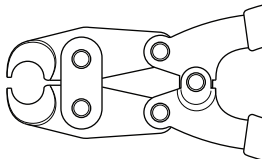
SERVICE PARTS LIST

BULLETIN NO.
54-47-0330

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN	DATE
M18™ FORCELOGIC™ 6T Utility Crimper			Nov. 2021
CATALOG NO.	2977-20	STARTING SERIAL NO.	L33A
		WIRING INSTRUCTION SEE PAGE 5	

BEST PRACTICES	PAGE 1	SERVICE PARTS EXPLODED VIEW	PAGE 2-4
SERVICE TOOLS / FIXTURES	PAGE 1	SERVICE WIRING DIAGRAM	PAGE 5
TORQUE SPECIFICATIONS	PAGE 2	LUBRICATION INSTRUCTIONS	PAGE 6

- 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 or contact a local MILWAUKEE distributor.

SERVICE TOOLS / FIXTURES				
Indicator  61-50-0020	Fill Bottle  61-50-0040	Seal Pick Tool  61-50-0050	Filling Syringe Quantity of 5  61-50-0100	Filling Needle Quantity of 10  61-50-0110
Manual Load Assembly Long Stroke  61-60-0040	Cam-Drill Attachment  61-60-0050	Pressure Sensor Crowfoot Wrench  61-60-0070	Relief Valve Wrench  61-60-0090	Main Stage Release Valve Tool  61-60-0100
10k Button Load Cell  Mark-10 plug 61-60-0210	Pin and Holder  61-60-0260	One Key™ Adapter  2700-20	Crimping Service Tool  61-60-0265	

 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 PARTS EXPLODED VIEW

EXAMPLE:
 00 | 0 | Component Parts (Small #)
 Are Included When Ordering
 The Assembly (Large #).

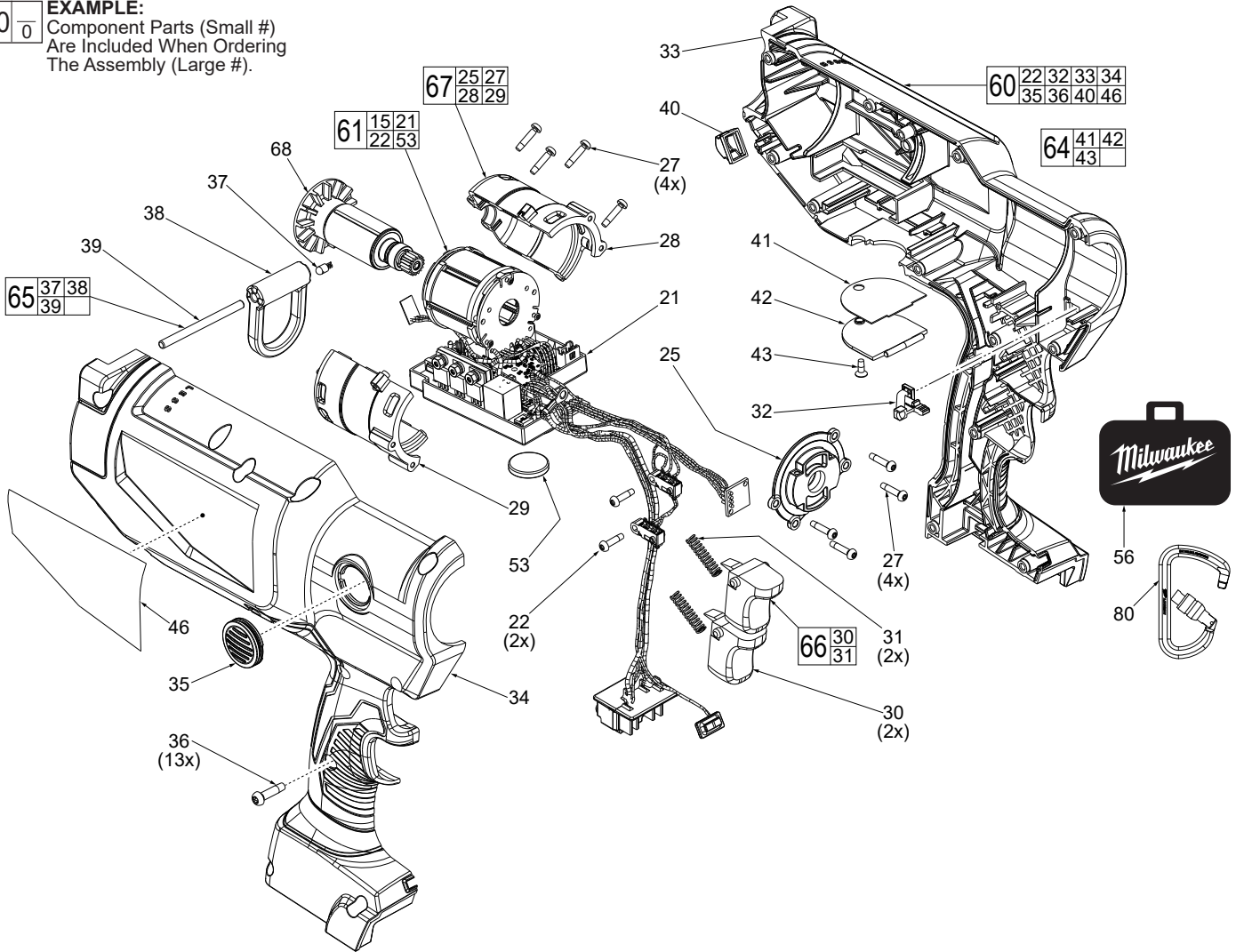


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
21	-----	PCBA/Stator Assembly	(1)
22	06-82-1087	M3 x 12mm Pan Hd. ST T-10 Screw	(2)
25	-----	Motor Plate	(1)
27	06-82-1080	M3 x 16mm Pan Hd. ST T-10 Screw	(8)
28	-----	Motor Insulator Cover	(1)
29	-----	Motor Insulator Support	(1)
30	-----	Trigger	(2)
31	-----	Spring	(2)
32	-----	Bluetooth Lens	(1)
33	-----	Handle Support	(1)
34	-----	Handle Cover	(1)
35	42-42-0016	Manual Return Button	(1)
36	06-82-4003	M4 x 16mm Pan Hd. ST T-20 Screw	(13)
37	-----	Steel Cap Assembly	(1)
38	-----	Lifting Ring	(1)
39	-----	Lift Pin	(1)
40	-----	Indicator LED Window	(1)
41	-----	Anti-Static Seal	(1)
42	-----	Coin Cell Door	(1)
43	05-78-0088	M3 x 8mm Flat Hd. ST Phillips Screw	(1)
46	12-20-0237	Service Nameplate	(1)
53	-----	3 V Coin Cell Battery (CR 2032)	(1)
56	48-22-8279	Utility Bag	(1)
60	14-34-0136	Service Handle Kit	(1)
61	14-20-0466	Service Electronics Assembly	(1)
64	42-92-0091	Service Coin Cel Door Kit	(1)
65	14-47-0222	Service Lift Ring Kit	(1)
66	31-92-0032	Service Trigger Kit	(1)
67	31-50-0732	Service Motor Insulator Kit	(1)
68	16-07-0023	Service Rotor Assembly	(1)
80	42-70-0027	Carabiner	(1)

TORQUE SPECIFICATIONS *Red denotes Critical Torque				
FIG.	PART NO.	PART or WHERE USED	SEAT TORQUE	
			(KG/CM)	(IN/LBS)
2a	06-82-0041	Screw, Roller/Carrier Assembly	14-16	12-14
2g	06-82-0050	Screw, Lock Pin Cap	40*-80**	35*-69**
2k	06-87-0010	Thumb Screw, Clevis Pin	4	3.4
2m	06-83-0012	Socket Set Screw, Clevis Assembly	4	3.4
5e	-----	Release Valve Seat	80*-100**	69*-87**
12f	-----	Fill Plug Screw	15	13
13c	-----	Pump Sleeve	15*-50**	13*-43**
13f	-----	Intake Seat	45	39
15	-----	Pressure Sensor	204	177
19	-----	Screw, Gearcase	7-10	6-8.6
20	05-81-0015	Screw, Gearbox Assembly	12	10.4
22	06-82-1087	Screw, Micro Switches	5	4.3
23	05-88-0051	Screw, Pump Body/Cam Shaft Assy.	15*-135**	13*-117**
24	05-88-0031	Screw, Pump Body/Cam Shaft Assy.	42-45	36-39
27	06-82-1080	Screw, Motor Insulator	3.5	3
27	06-82-1080	Screw, Motor Plate	7	6.8
36	06-82-4003	Screw, Handle Cover	17	14
43	-----	Screw, Coin Cell Door	4	3.4
44	05-88-0041	Ground Screw, Pump Body	15	13

* = Pre-tighten with hand screw driver
 ** = Tighten with torque wrench



Service Verification Specification 4350-4850 lbs

GREEN PART NUMBERS ARE COMPONENTS OF KITS AND NOT AVAILABLE AS INDIVIDUAL SERVICE PARTS. THE GREEN NUMBERS ARE LISTED HERE AS AN AID TO IDENTIFY SIMILAR LOOKING PARTS.

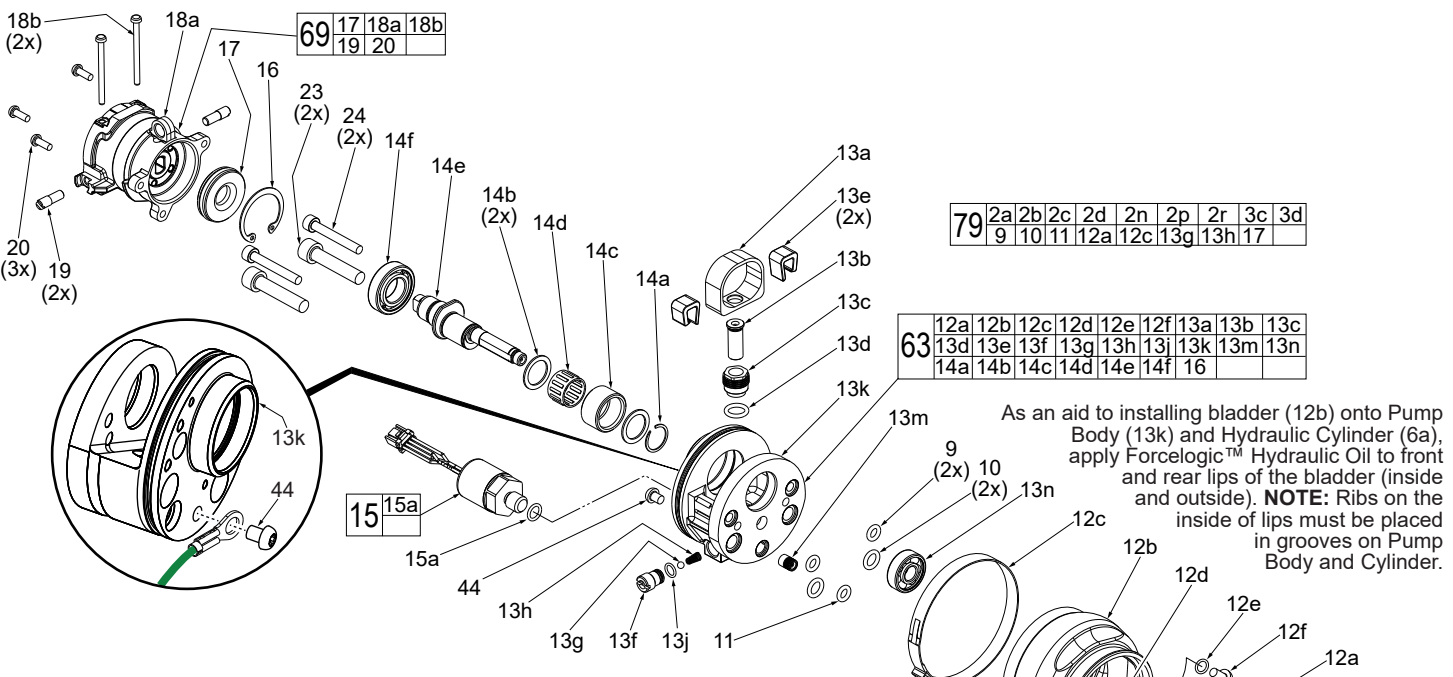


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
4a	-----	Relief Valve Adjuster	(1)
4b	34-40-0037	O-Ring	(1)
4c	40-50-1006	Relief Valve Spring	(1)
4d	-----	Relief Valve Plunger	(1)
4e	-----	2.0mm Ball	(1)
5a	06-65-0031	Pin	(1)
5b	44-10-0023	Release Lever	(1)
5c	-----	Release Valve Pin	(1)
5d	34-40-0044	O-Ring	(1)
5e	-----	Release Valve Seat	(1)
5f	-----	Serrated Seal Washer	(1)
5g	45-88-0034	Back Up washer	(1)
5h	34-40-0048	O-Ring	(1)
5j	-----	Spring Cap	(1)
5k	-----	Spring	(1)
6a	-----	Hydraulic Cylinder	(1)
6b	-----	4.0mm Seal Plug	(1)
6c	-----	Ball Bearing	(1)
6d	-----	Dowel Pin	(1)
6e	-----	Shear Seal Disc	(1)
6f	45-88-0036	Back Up Washer	(1)
6g	34-40-0049	O-Ring	(1)
6h	-----	Rotary Valve	(1)
6j	-----	Thrust Bearing	(1)
6k	-----	Thrust Washer	(1)
7	-----	Retaining Ring	(1)
8a	-----	Retaining Ring	(2)
8b	-----	Lock Ring Washer	(2)
8c	-----	Drive Pawl	(6)
8d	-----	Sprocket	(1)
9	34-40-0058	O-Ring	(2)
10	34-40-0028	O-Ring	(2)
11	34-40-0038	O-Ring	(1)
12a	31-17-0024	Ear Clamp - Cylinder Side	(1)
12b	42-14-0023	Bladder	(1)
12c	31-17-0034	Ear Clamp - Pump Side	(1)
12d	-----	Fill Plug	(1)
12e	34-40-0051	O-Ring	(1)
12f	-----	Fill Plug Screw	(1)
13a	-----	Cam Shaft Retainer	(1)
13b	-----	Piston	(1)
13c	-----	Pump Sleeve	(1)
13d	34-40-0037	O-Ring	(1)
13e	-----	Piston Retainer	(2)
13f	-----	Intake Seat	(1)
13g	-----	3.0mm Ball	(1)
13h	-----	Intake Spring	(1)
13j	34-40-0051	O-Ring	(2)
13k	-----	Pump Body	(1)
13m	-----	High Pressure Check Valve	(1)
13n	-----	Ball Bearing	(1)
14a	-----	Retaining Ring	(1)
14b	-----	Thrust Washer	(2)
14c	-----	Roller Bearing Race	(1)

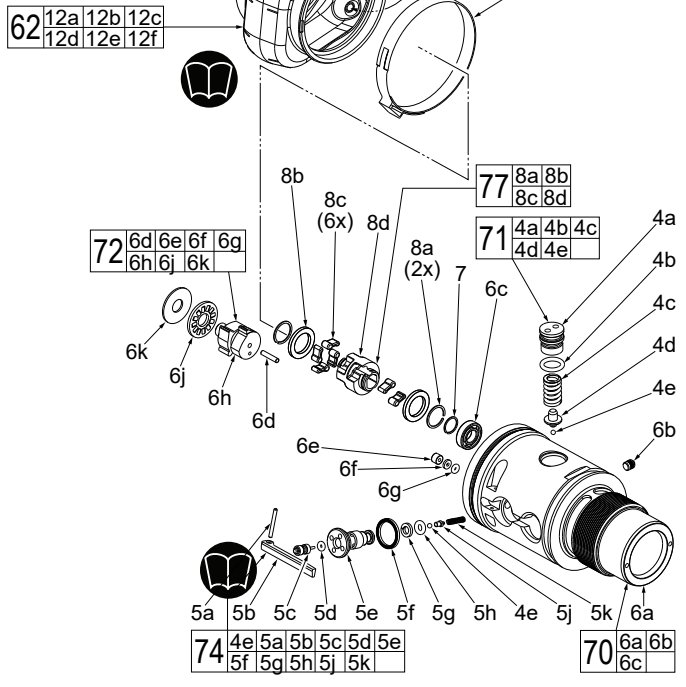


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
14d	-----	Roller Bearing Cage	(1)
14e	-----	Cam Shaft	(1)
14f	-----	Ball Bearing	(1)
15	-----	Pressure Sensor	(1)
15a	-----	O-Ring	(1)
16	44-86-0051	Retaining Ring	(1)
17	45-06-0022	Shaft Seal	(1)
18a	-----	Gear Case with Gearing	(1)
18b	44-60-0056	Motor Mount Pin	(2)
19	-----	Screw	(2)
20	05-81-0015	M3 x 6mm Pan Hd. Phillips Screw	(3)
23	05-88-0051	M6 x 30mm Socket Hd. Cap Screw	(2)
24	05-88-0031	M4 x 30mm Cap Hd. Hex Recess Scr.	(2)
44	05-88-0041	M4 x 5mm T-15 Ground Screw	(1)
62	14-46-0201	Service Bladder Kit	(1)
63	42-54-0171	Pump Body and Camshaft Assembly	(1)
69	14-29-0201	Service Gearbox Assembly	(1)
70	14-12-0700	Service Cylinder Assembly	(1)
71	31-94-0200	Service Relief Valve Assembly	(1)
72	31-94-0205	Service Shear Valve Kit	(1)
74	31-94-0210	Service Release Valve Kit	(1)
77	45-44-0100	Service Sprocket Assembly	(1)
79	14-46-0204	Service Maintenance Kit	(1)

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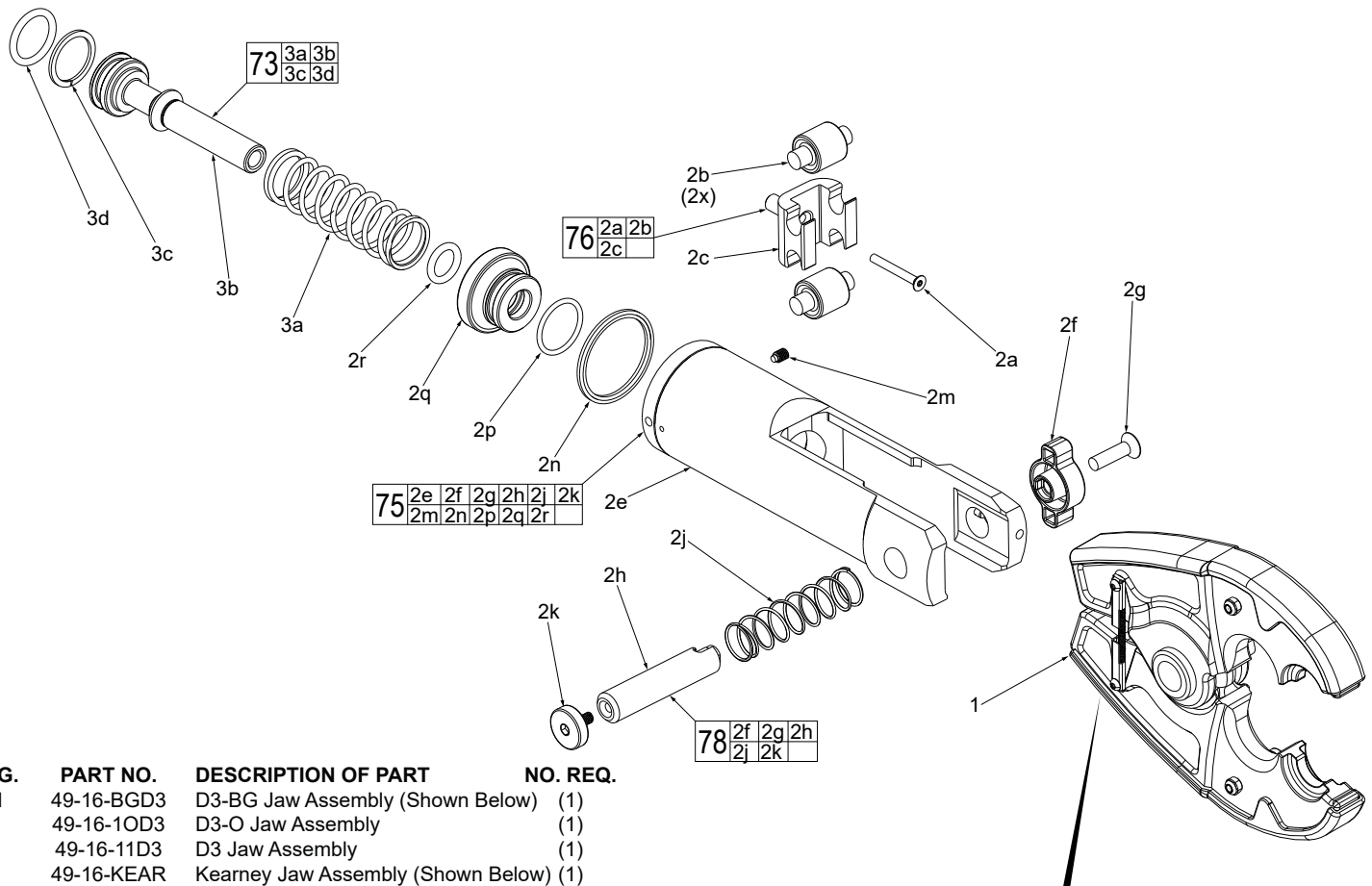
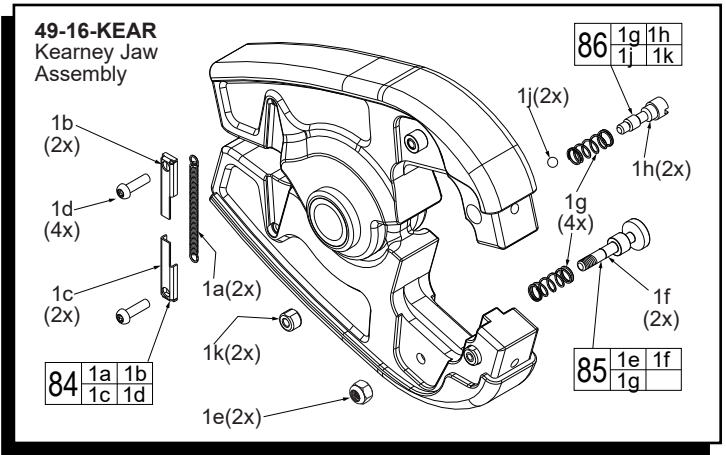
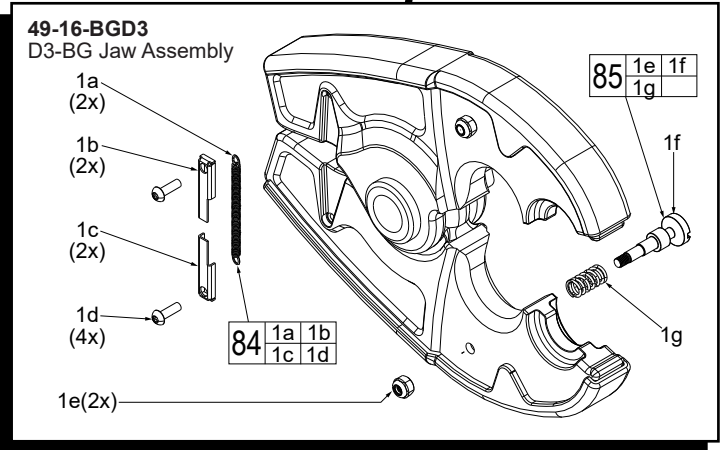


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	49-16-BGD3	D3-BG Jaw Assembly (Shown Below)	(1)
	49-16-1OD3	D3-O Jaw Assembly	(1)
	49-16-11D3	D3 Jaw Assembly	(1)
	49-16-KEAR	Kearney Jaw Assembly (Shown Below)	(1)
	49-16-2772	McM CU/AL Cutting Jaw Assembly	(1)
	49-16-2773	477 ACSR Cutting Jaw Assembly	(1)
	49-16-2777	EHS Guy Wire Cutting Jaw Assembly	(1)
	49-16-2778	Fine Strand Wire Cutting Jaw Assembly	(1)
1a	-----	Outer Spring	(2)
1b	-----	Left Spring Cover	(2)
1c	-----	Right Spring Cover	(2)
1d	-----	Spring Mount Sprew	(4)
1e	-----	Lock Nut	(2)
1f	-----	Die Pin Post	(2)
1g	-----	Die Pin Spring	(2)
1h	-----	Kearney Die Pin	(2)
1j	-----	Kearney Detent Ball	(2)
1k	-----	Kearney Die Pin Cap	(2)
2a	06-82-0041	M3 x 25mm Flat Hd. T-8 Machine Scr.	(1)
2b	-----	Roller	(2)
2c	-----	Roller Carrier	(1)
2e	-----	Clevis with Pin	(1)
2f	31-12-0018	Lock Pin Cap	(1)
2g	06-82-0050	Clevis Pin Cap Screw	(1)
2h	44-60-0042	Lock Pin	(1)
2j	40-50-0036	Lock Pin Spring	(1)
2k	06-87-0010	Thumb Screw	(1)
2m	06-83-0012	Socket Set Screw	(1)
2n	34-40-0053	Quad Ring	(1)
2p	34-40-0011	O-Ring	(1)
2q	-----	Bushing Ram	(1)
2r	34-40-0034	O-Ring	(1)
3a	-----	Ram Spring	(1)
3b	-----	Plunger	(1)
3c	45-88-0029	Back Up Washer	(1)
3d	34-40-0036	O-Ring	(1)
73	44-82-0015	Service Ram Kit	(1)
75	28-25-0010	Service Clevis Kit	(1)
76	44-96-0050	Service Roller and Carrier Assembly	(1)
78	44-60-0043	Service Clevis Pin Kit	(1)
84	43-90-0250	Jaw Spring and Cover Kit (Set of 1)	(2)
85	44-60-0071	W Die Pin Kit (Set of 1)	(2)
86	44-60-0016	Kearney Die Pin Kit (Set of 1)	(2)





Pay close attention to the position of the ear clamp lugs that secure the front and rear of the bladder. See page 6 for additional reference.

Pressure Indicator

Control Board

Ground Screw (44) secures to Pump Body here

Bluetooth Board

Coin Cell Battery

Dump Switch

Pressure Sensor

Coin Cell

Bluetooth Light

Main Switch

Worklight LED

Battery Terminal Block

Bluetooth Board

Coin Cell

Worklight LED

Pressure Indicator

Bluetooth Light

Control Board

Hall Board

Dump Switch

Main Switch

As an aid to reassembly, take notice of wire routings and position in wire guides and traps while dismantling tool.

Be sure that all components of electronics kit are seated firmly and squarely in housing recesses.

Avoid pinched wires, be sure that all wires and sleeves are pressed completely down in wire traps.

Prior to securing housing cover onto the housing support, be sure that there are no interferences.

Before installing the battery, check for proper functionality of shuttles and triggers.

Install battery and depress switch triggers to assure tool is operating properly.

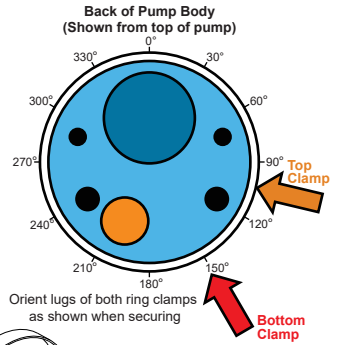
LUBRICATION INSTRUCTIONS

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:

- = Type S2 Grease (7 oz. tube), 49-08-5265
- = Type GE 00 Urethyn Grease (2.8 oz. tube), 49-08-5355
- = Dielectric Type X Grease, 49-08-5000
- = FORCELOGIC™ Hydraulic Oil, 49-32-0110
- = 277 Red Loctite®, 44-22-0050
- = 242 Blue Loctite®, 44-22-0090
- = 7649 Loctite® Primer, 44-22-0125



NOTE:
Coat inside cavity of cylinder with grease

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

Apply a drop of Loctite Primer along with a drop of Red Loctite to the threads of Screw (2a).

