



SERVICE PARTS LIST

BULLETIN NO.
54-47-0366

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN	DATE
M18™ FORCE LOGIC™ 6T Inline Crimper/Cutter			June 2023
CATALOG NO. 2978-20	STARTING SERIAL NO. L36B	WIRING INSTRUCTION SEE PAGE 6	

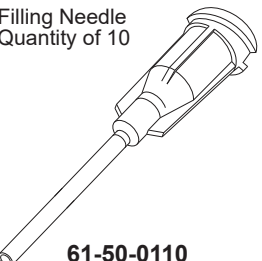
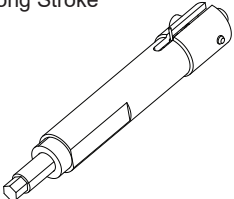
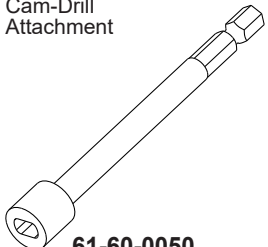
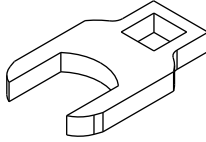
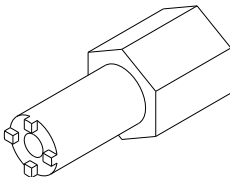
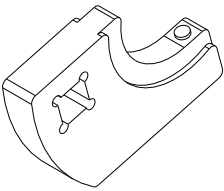
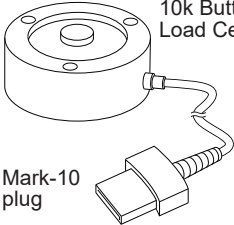
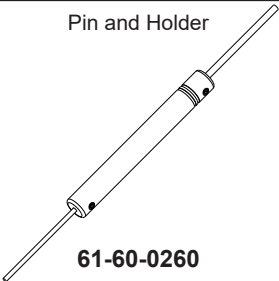
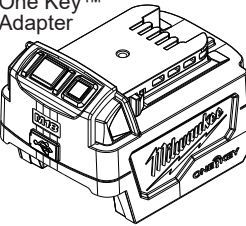
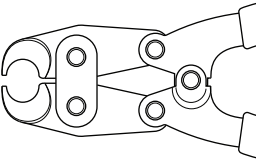
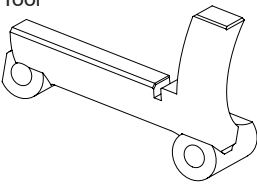
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BEST PRACTICES when Servicing FORCE LOGIC™ Tools

- **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 FORCE LOGIC™ 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	Crowfoot Wrench  13mm and 16mm	Manual Release Valve Installation Tool  61-60-0415	Cylinder Torque Tool  61-60-0435
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	UI Board Alignment Tool  61-60-0425



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



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



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

MILWAUKEE TOOL • www.milwaukeetool.com
13135 W. Lisbon Road, Brookfield, WI 53005
Drwg. 1

SERVICE PARTS EXPLODED VIEW

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

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
16	-----	O-Ring	(1)
17	-----	Pressure Sensor	(1)
22a	-----	Gearcase Housing	(1)
22b	05-74-0117	M3 x 14mm Pan Hd. T-10 Mach. Screw	(3)
22c	-----	Carrier	(1)
22d	-----	2nd Ring Gear	(1)
22e	-----	2nd Planet Gear	(5)
22f	-----	2nd Sun Gear	(1)
22g	-----	1st Planet Gear	(5)
22h	-----	1st Ring Gear	(1)

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
22j	-----	Flat Washer	(1)
22k	-----	Motor Mount	(1)
24	-----	Rear Motor Mount	(1)
25	05-74-0118	M3 x 62mm Pan Hd. T-10 Mach. Screw	(4)
27a	06-82-7210	M3 x 16mm Pan Hd. Tapt. T-10 Screw	(9)
27b	06-82-7336	M3 x 20mm Pan Hd. ST T-10 Screw	(1)
27c	-----	Housing Cover	(1)
27d	28-12-0012	Clevis Cover	(1)
27e	-----	Trigger	(1)
27f	-----	Lanyard Latch Ring	(1)
27g	-----	Steel Cap assembly	(1)
27h	-----	Lanyard Pin	(1)
27j	-----	Bluetooth Lens	(1)
27k	05-74-0145	M2.6 x 6mm Flat Hd. Phillips ST Screw	(2)
27m	-----	Coin Cell Cover	(1)
27n	-----	Housing Support	(1)
27p	-----	Spring	(1)

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
27q	-----	Switch Button	(1)
27r	-----	Pin	(1)
27s	42-42-0132	Manual Release Button, Rubber	(1)
27t	-----	Trigger Spring	(1)
27u	06-82-5315	M3 x 26.5mm Pan Hd. T-10 Mach. Scr.	(1)
27v	12-20-0256	Service Nameplate	(1)
28	-----	Coin Cell PCBA	(1)
29	-----	3V Coin Cell Battery	(1)
61	14-47-0222	Hook Ring Kit	(1)
62	14-34-0147	Housing Kit	(1)
64	44-34-0096	Motor Mount Kit	(1)
65	14-50-0036	Rotor Assembly	(1)
66	14-20-0329	Electronic Assembly	(1)
68	31-92-0123	Electric Dump Trigger Kit	(1)
69	22-09-0056	Coin Cell Kit	(1)
70	31-92-0121	Run Trigger Kit	(1)
71	14-29-0049	Gear Case Kit	(1)



Service Verification Specification 4350-4850 lbs

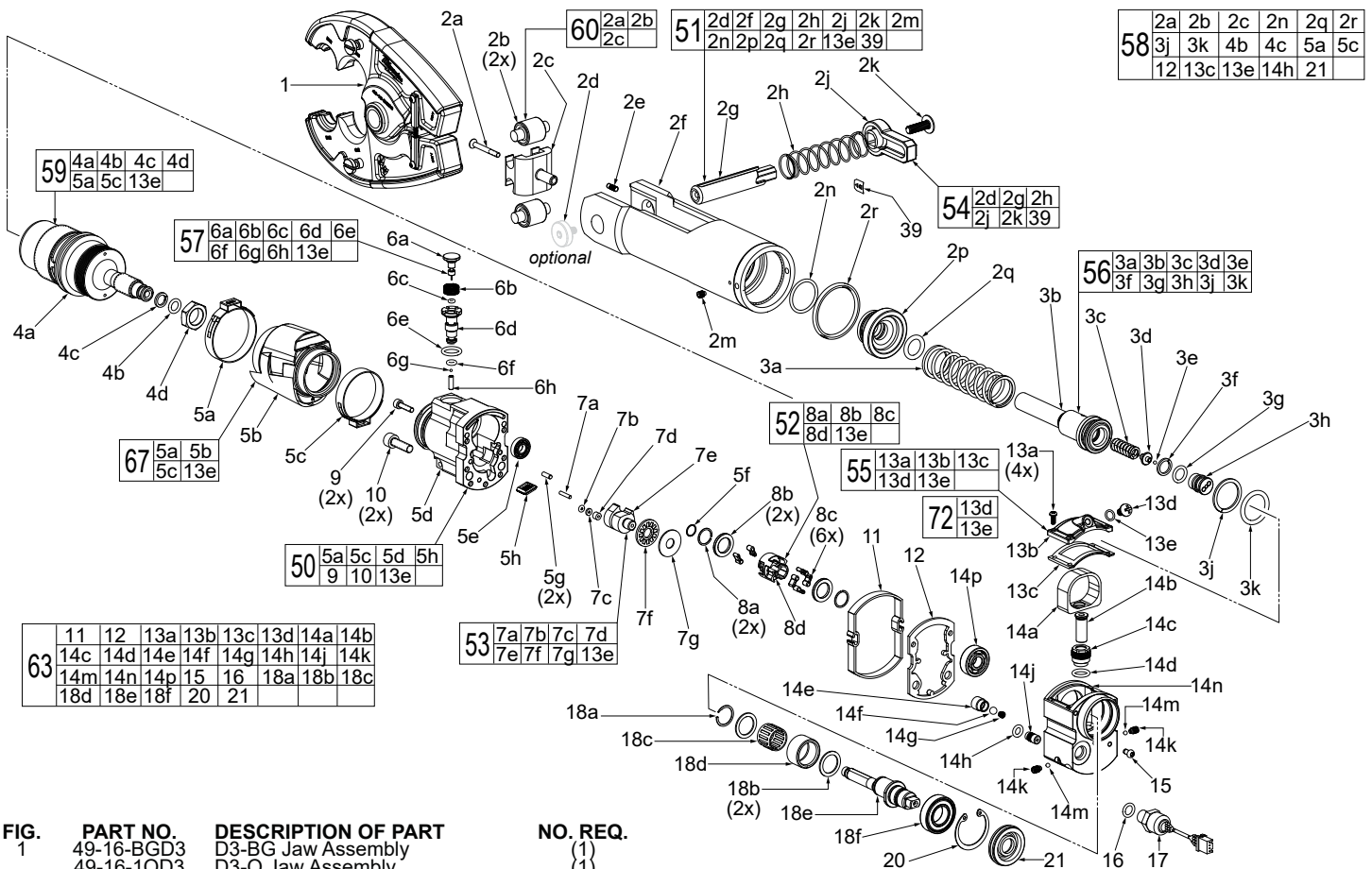


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	49-16-BGD3	D3-BG Jaw Assembly	(1)
	49-16-10D3	D3-O Jaw Assembly	(1)
	49-16-11D3	D3 Jaw Assembly	(1)
	49-16-KEAR	Kearney Jaw Assembly	(1)
	49-16-2772	McM CU/AL Cutting Jaw Assembly	(1)
	49-16-2773	477 ACSR Cutting Jaw Assembly	(1)
	49-16-2777	EHS Guy Wire Cutting Jaw Assembly	(1)
	49-16-2778	Fine Strand Wire Cutting Jaw Assembly	(1)
	06-82-0041	M3 x 25mm Flat Hd. T-8 Mach. Screw	(1)
2a	-----	Roller	(2)
2b	-----	Roller Carrier	(1)
2c	-----	Thumb Screw (optional)	(1)
2d	06-87-0010	Clevis with Knurled Pin	(1)
2f	-----	Clevis with Knurled Pin	(1)
2g	28-25-0016	Clevis Pin	(1)
2h	40-50-0477	Spring	(1)
2j	44-10-0081	Lever	(1)
2k	05-74-0141	M5 x 16mm PWH T-25 Mach. Screw	(1)
2m	05-74-0142	M4 x 5mm Hex Recess Set Screw	(1)
2n	-----	O-Ring	(1)
2p	-----	Bushing	(1)
2q	-----	O-Ring	(1)
2r	-----	Quad Ring	(1)
3a	-----	Ram Spring	(1)
3b	-----	Ram	(1)
3c	-----	Relief Valve Spring	(1)
3d	-----	Plunger	(1)
3e	-----	2mm Steel Ball	(1)
3f	-----	Backup Washer	(1)
3g	-----	O-Ring	(1)
3h	-----	Relief Valve Adjuster	(1)
3j	-----	Backup Ring	(1)
3k	-----	O-Ring	(1)
4a	-----	Hydraulic Cylinder	(1)
4b	-----	O-Ring	(1)
4c	-----	Backup Washer	(1)
4d	-----	Hex Nut	(1)
5a	-----	Ear Clamp-Cylinder	(1)
5b	-----	Rubber Bladder	(1)
5c	-----	Ear Clamp-Cylinder	(1)
5d	-----	Manifold with Ball Bearing and Pin	(1)
5f	42-36-0062	Retaining Ring	(1)
5g	-----	Pin	(2)
5h	-----	Screen	(1)
6a	-----	Release Valve Pin	(1)
6b	-----	Wave Spring	(1)
6c	-----	O-Ring	(1)
6d	-----	Release Valve Seat	(1)
6e	-----	O-Ring	(1)
6f	-----	O-Ring	(1)
6g	-----	1.5mm Steel Ball	(1)
6h	-----	Ball Retainer	(1)
7a	-----	Dowel Pin	(1)
7b	-----	O-Ring	(1)
7c	-----	Backup Washer	(1)
7d	-----	Shear Seal Disc	(1)
7e	-----	Rotary Valve	(1)
7f	-----	Needle Bearing	(1)
7g	-----	Thrust Washer	(1)

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
8a	-----	Retaining Ring	(2)
8b	-----	Flat Washer	(2)
8c	-----	Drive Pawl	(6)
8d	-----	Sprocket	(1)
9	05-74-0113	M3 x 12mm Pan Hd. T-10 Mach. Screw	(2)
10	05-74-0114	M5 x 15mm Pan Hd. T-25 Mach. Screw	(2)
11	44-86-0033	Pump Gasket Retainer	(1)
12	43-40-0061	Rubber Cap Gasket	(1)
13a	05-88-0080	M2.5 x 6mm Pan Hd. TP T-10 Screw	(4)
13b	-----	Pump Body Cap	(1)
13c	43-40-0062	Pump Gasket	(1)
13d	05-78-0126	M4 x 5mm Pan Hd. Tapt. T-20 Screw	(1)
13e	34-40-0051	O-Ring	(1)
14a	-----	Cam Shaft Retainer	(1)
14b	-----	Piston	(1)
14c	-----	Pump Sleeve	(1)
14d	-----	O-Ring	(1)
14e	-----	Check Valve	(1)
14f	-----	4.5mm Steel Ball	(1)
14g	-----	Intake Spring	(1)
14h	-----	O-Ring	(1)
14j	-----	Outlet Check Valve	(1)
14k	05-74-0143	M4 x 6mm Hex Recess Set Screw	(2)
14m	-----	2.5mm Steel Ball	(1)
14n	-----	Pump Body	(1)
14p	-----	Ball Bearing	(1)
15	05-74-0144	M3 x 5mm Pan Hd. T-10 Mach. Screw	(2)
16	-----	O-Ring	(1)
17	-----	Pressure Sensor	(1)
18a	-----	Retaining Ring	(1)
18b	-----	Flat Washer	(2)
18c	-----	Needle Bearing	(1)
18d	-----	Race-Roller Bearing	(1)
18e	-----	Cam Shaft	(1)
18f	-----	Ball Bearing	(1)
20	44-86-0051	Retaining Ring	(1)
21	45-06-0022	Rubber Shaft Seal	(1)
39	-----	Logo Label	(1)
50	14-46-0244	Manifold Kit	(1)
51	28-25-0013	Clevis Assembly	(1)
52	45-44-0014	Sprocket Assembly	(1)
53	31-94-0018	Share Valve Assembly	(1)
54	44-60-0172	Clevis Pin Kit	(1)
55	42-54-0012	Oil Filling Kit	(1)
56	14-12-0027	Ram Kit	(1)
57	31-94-0101	Release Valve Assembly	(1)
58	14-46-0279	Maintenance Kit	(1)
59	14-12-0102	Cylinder Kit	(1)
60	44-96-0050	Roller and Carrier Kit	(1)
63	44-70-0024	Pump Body Assembly	(1)
67	14-46-0311	Bladder Kit	(1)
72	14-46-0221	Oil Filling Screw and O-Ring Kit	(1)

SERVICE PARTS EXPLODED VIEW

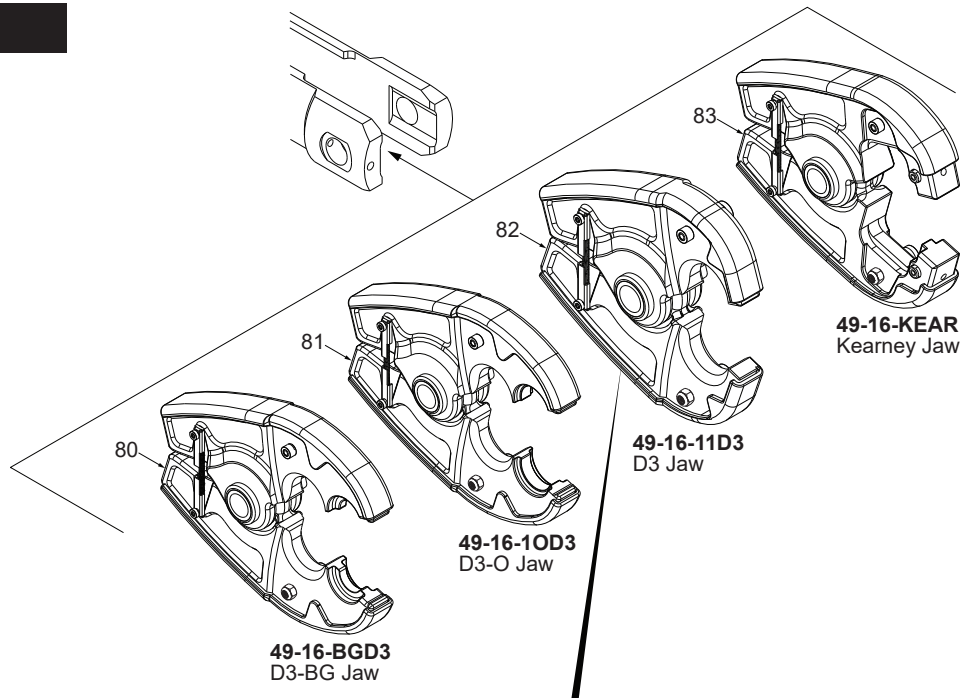
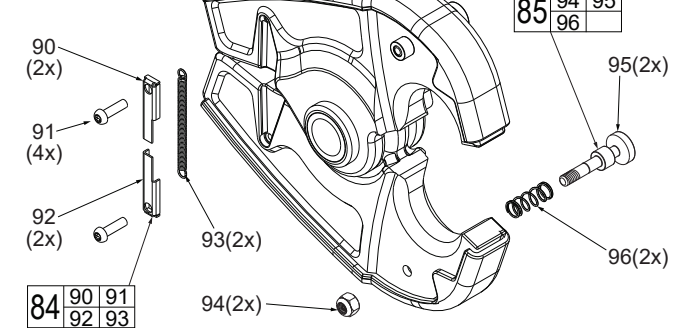
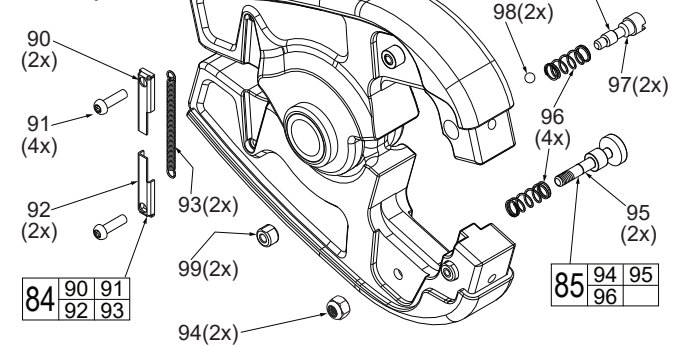


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
80	49-16-BGD3	D3-BG Jaw	(1)
81	49-16-1OD3	D3-O Jaw	(1)
82	49-16-11D3	D3 Jaw	(1)
83	49-16-KEAR	Kearney Jaw	(1)
84	43-90-0250	Jaw Spring and Cover Kit (Set of 1)	(2)
85	44-60-0071	W Die Pin Kit (Set of 1)	(2)
86	44-60-0016	Kearney Die Pin Kit (Set of 1)	(2)
90	-----	Left Spring Cover	(2)
91	-----	Spring Mount Screw	(4)
92	-----	Right Spring Cover	(2)
93	-----	Outer Spring	(2)
94	-----	Lock Nut	(2)
95	-----	Die Pin Post	(2)
96	-----	Die Pin Spring	(2)
97	-----	Kearney Die Pin	(2)
98	-----	Kearney Detent Ball	(2)
99	-----	Kearney Die Pin Cap	(2)
100	44-60-0043	Clevis Pin Upgrade Kit	(1)

49-16-1OD3
D3-O Jaw Assembly
Shown

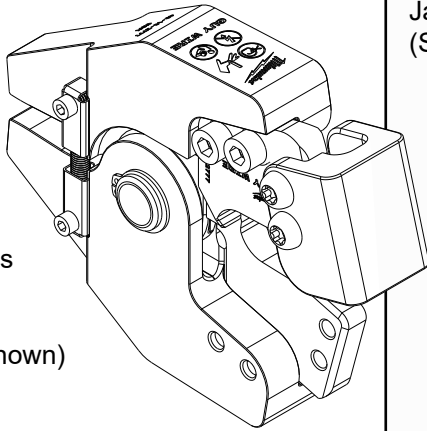


49-16-KEAR
Kearney Jaw
Assembly



SERVICE PARTS EXPLODED VIEW

EHS Guy Wire
Jaw Assemblies
49-16-2772
49-16-2773
49-16-2777 (Shown)



49-16-2777
EHS Guy Wire
Jaw Assembly
(Shown)

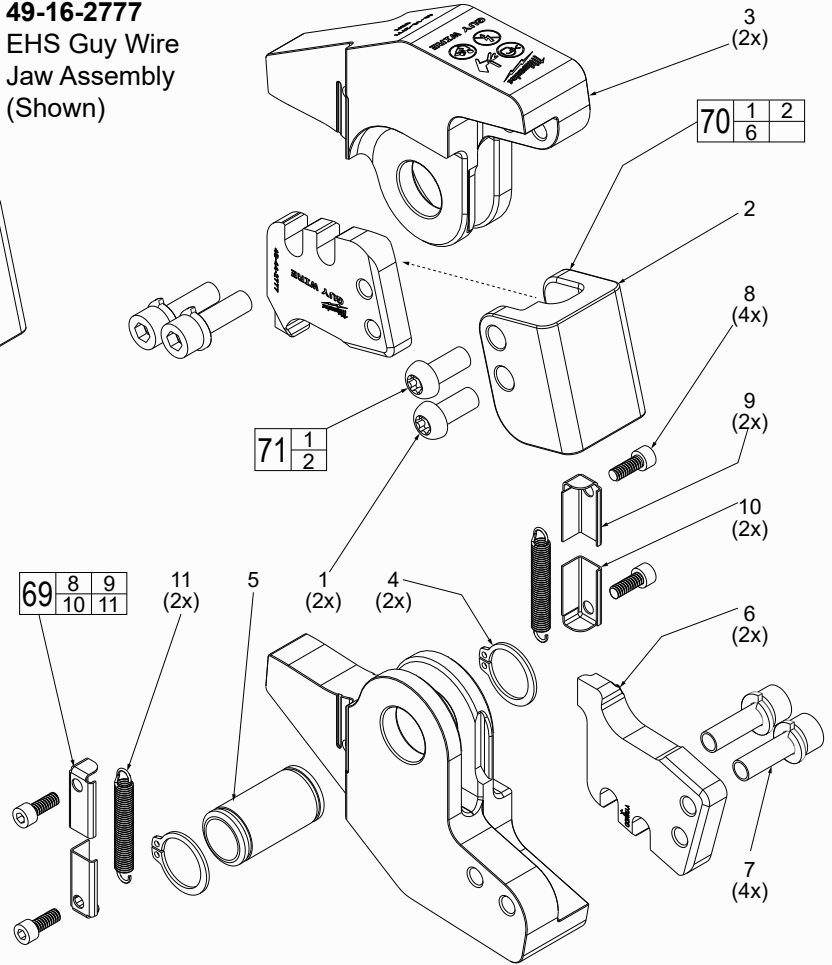


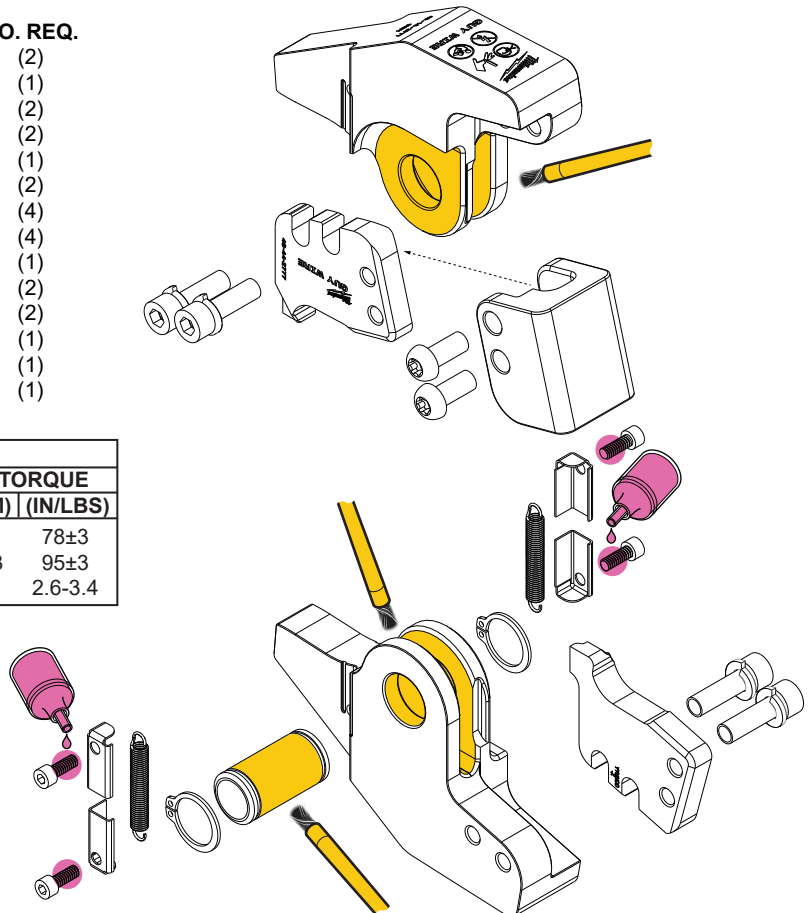
FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	05-81-0132	M6 x 14mm Pan Hd. T-30 Mach. Screw	(2)
2	-----	Blade Retainer	(1)
3	-----	Guy Wire Jaw	(2)
4	44-86-0042	Retaining Ring	(2)
5	-----	Hollow Pin	(1)
6	-----	Guy Wire Blade	(2)
7	05-74-0001	M6 x 20mm Blade Mount Screw	(4)
8	-----	Spring Mounting Screw	(4)
9	-----	Left Spring Cover	(1)
10	-----	Right Spring Cover	(2)
11	-----	Outer Spring	(2)
69	14-46-0018	Jaw Spring and Cover Service Kit	(1)
70	48-44-2777	EHS Replacement Blade Kit	(1)
71	44-86-2777	Blade Retainer Kit	(1)

TORQUE SPECIFICATIONS			SEAT TORQUE	
FIG.	PART NO.	PART or WHERE USED	(KG/CM)	(IN/LBS)
1	05-81-0132	Screw, Blade Retainer	90±3	78±3
7	05-74-0001	Screw, Guy Wire Blade	110±3	95±3
8	-----	Screw, Left and Right Spring Covers	3-4	2.6-3.4

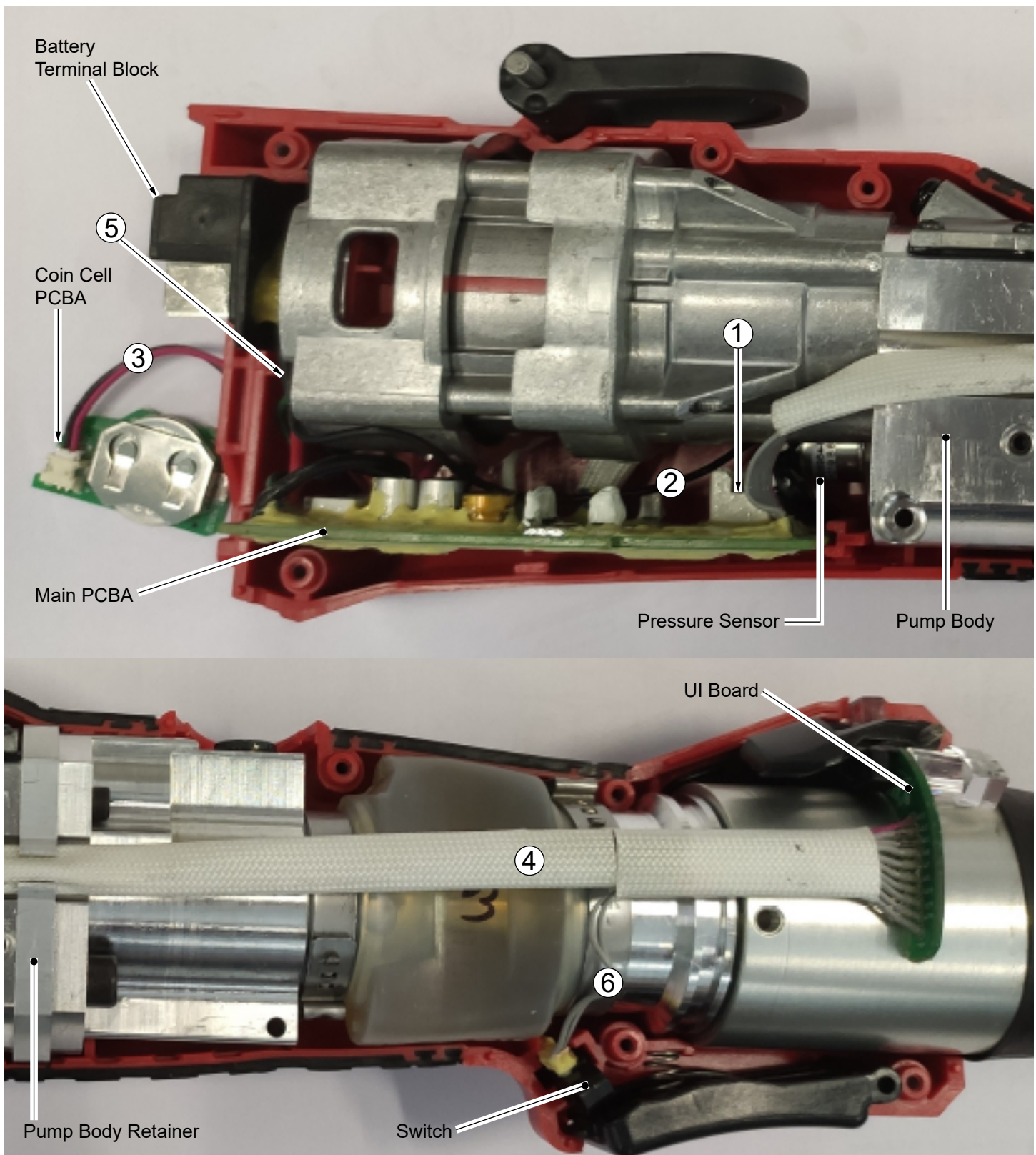
LUBRICATION:

● = Type S2 Grease (7 oz. tube), 49-08-5265

● = 277 Red Loctite®, 44-22-0050



SERVICE WIRING



- | | | |
|-------------------------|----------------------|--|
| 1. Pressure Sensor Wire | N/A | From Pressure Sensor to Main PCBA. |
| 2. HV Wire | Black | From Pump Body to Main PCBA. |
| 3. Coin Cell Wire | Red/Black | From Main PCBA to Coin Cell PCBA |
| 4. UI Board Wire | N/A | From Main PCBA via Pump Body Retainer to UI Board. |
| 5. Terminal Wire | Blue/Red/Green/Black | From Main PCBA to Battery Terminal Block |
| 6. Switch Wire | Gray | From Switch to Main PCBA. |

LUBRICATION INSTRUCTIONS

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

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.

Note: Put SF7088 Loctite on 360° for the first 50% of the threads. Before locknut is tightened, wipe away any excess loctite.

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

LUBRICATION:

- = Type S2 Grease (7 oz. tube), 49-08-5265
- = Type GE 00 Urethyn Grease (2.8 oz. tube), 49-08-5355
- = Type J Grease (1 lb.), 49-08-4220
- = Dielectric Type X Grease, 49-08-5000
- = FORCELOGIC™ Hydraulic Oil, 49-32-0110
- = 277 Red Loctite®, 44-22-0050
- = 243 Blue Loctite®, 44-22-0095
- = 263 Red Loctite®, 44-22-0130
- = SF7088 Loctite®, 44-22-0025
- = 7649 Loctite® Primer, 44-22-0125

TORQUE SPECIFICATIONS

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
2k	05-74-0141	Screw, Pin Lever	40* 78**	35* 68**
2m	05-74-0142	Set Screw, Rear of Clevis Assy.	4***	3.5
3h	-----	Release Valve Adjuster	50-60	44-52
4a	-----	Cylinder	375-400	326-348
4d	-----	Hex Nut M12x1.0	210-235	183-204
6d	-----	Relief Valve Seat	50* 70**	44* 61**
9	05-74-0113	Screw, Pump Body M3	13-17	11-15
10	05-74-0114	Screw, Pump Body M5	15* 50**	13* - 44**
13a	05-88-0080	Screw, Pump Cover	5-7*	4-6*
13d	05-78-0126	Screw, Bladder/Fill	12-17	10-15
14c	-----	Pump Sleeve	47-53*	41-46*
14e	-----	Intake Seat	42-48	37-42
14k	05-74-0143	Screw, check ball	10-14	9-12
15	05-74-0144	Ground Screw, Pump Body	10-12	9-10
17	-----	Pressure Sensor	201-207	175-180
22b	05-74-0117	Screw, Manifold	9-12	8-10
25	05-74-0118	Screw, Gear Box	12-17	10-15
27a	06-81-7210	Screw, Handle Cover M3x16	9-15	8-13
27b	06-82-7336	Screw, Handle Cover M3x20	2-3	2-3
27u	05-74-0145	Screw, Handle Cover M3x26.5	9-15	8-13

* = Pre-tighten with hand screw driver

** = Tighten with torque wrench

*** = Loosen 90 deg after torqued