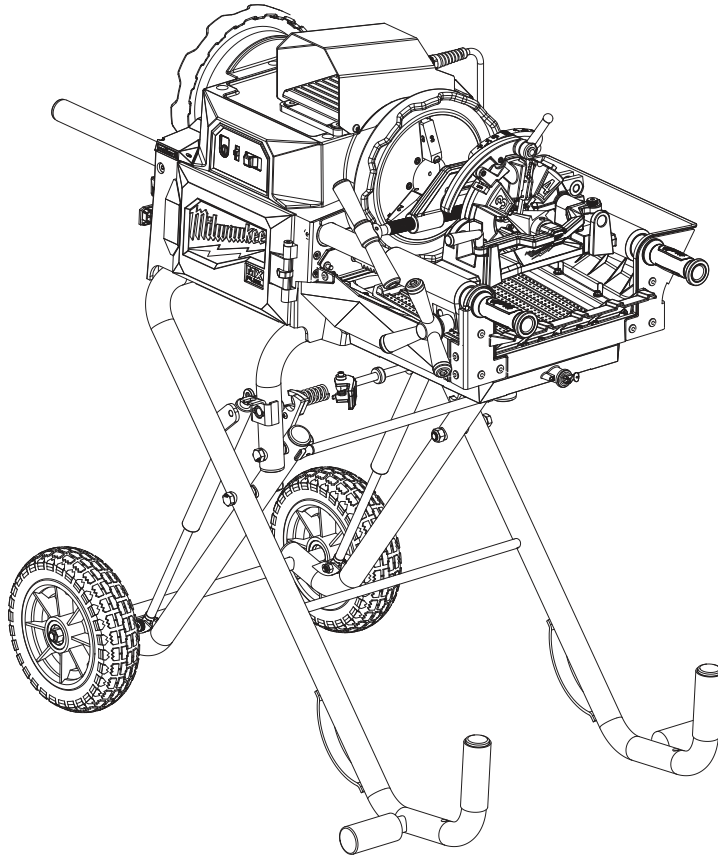




SERVICE PARTS LIST

BULLETIN NO.
54-27-F512

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN	DATE
MX FUEL™ Pipe Threading Machine			Apr. 2024
CATALOG NO. MXF512	SERIAL NO. N31A	WIRING INSTRUCTION See Page 9	



POWER DRIVE ASSEMBLY	PAGES 2-5
SCREW TORQUE CHARTS	PAGE 5
ACCESSORY CARRIAGE ASSEMBLY	PAGE 6
OIL RESERVOIR/SHROUD ASSEMBLY	PAGE 7
CART ASSEMBLY	PAGE 8
WIRE ROUTING	PAGE 9

This product is to be serviced **ONLY** by personnel authorized by MILWAUKEE TOOL. Do **NOT** attempt to purchase parts and install them yourself. Installation by anyone other than an authorized MILWAUKEE personnel could void your warranty.

For service, parts, or inquiries, contact us:

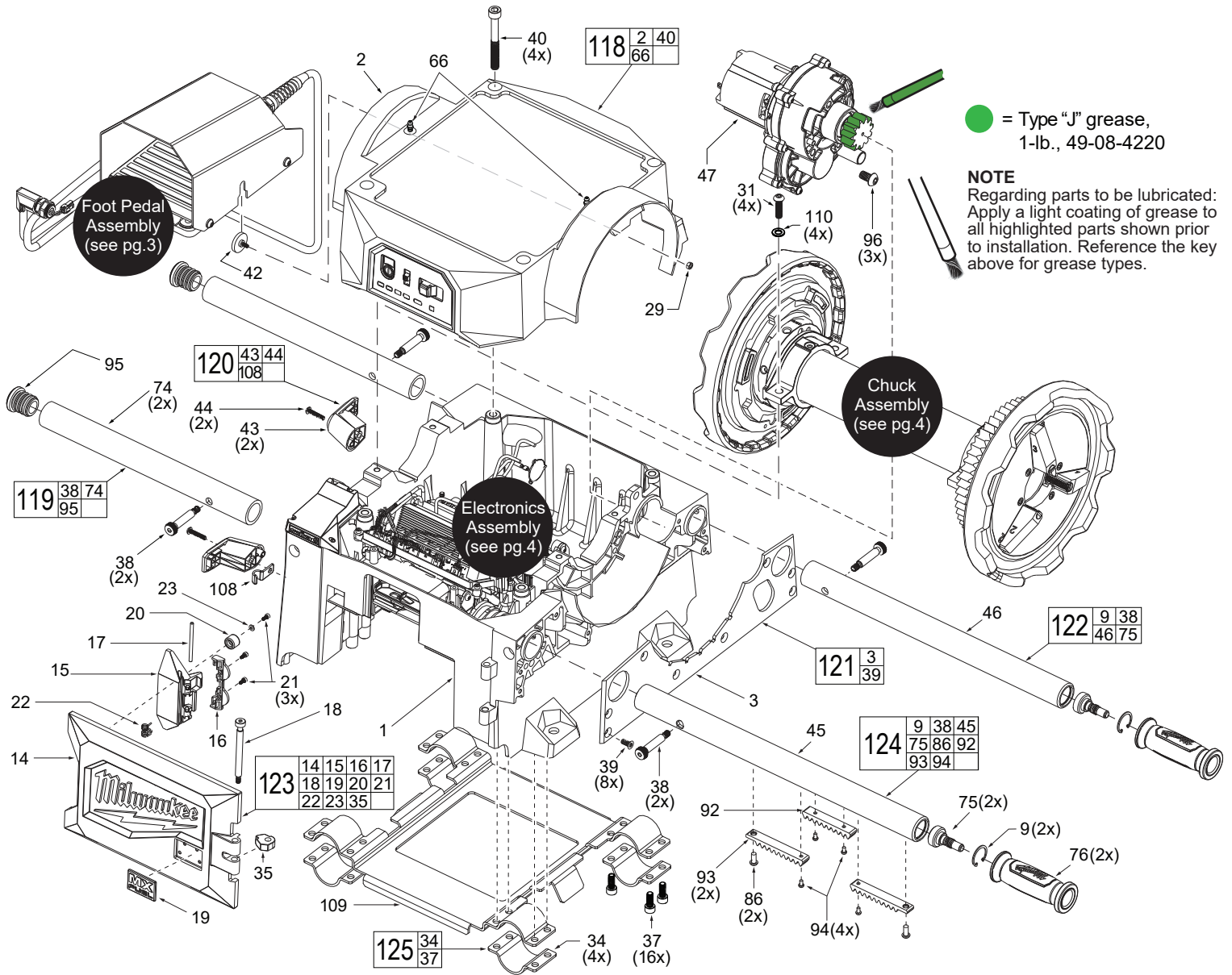
- Customer Service at 1.800.SAWDUST (1.800.729.3878)
- E-Service tool repair at: www.milwaukeetool.com/e-service
- Find a local authorized MILWAUKEE service location at Milwaukeetool.com
- Find a MILWAUKEE *factory* Service Center Location or MILWAUKEE *factory* Central Repair Center at Milwaukeetool.com. Send the following, posted paid and insured:
 - Your name, address, and phone number
 - Description of the issues
 - Copy of the proof of purchase
 - Tool, charger, and batteries involved with the issues

MILWAUKEE *factory* Central Repair Centers:

MILWAUKEE TOOL
Central Repair
1401 Sycamore Avenue
Greenwood, MS 38930

MILWAUKEE TOOL
Central Repair
2198 Southtech Drive
Greenwood, IN 46143

MXF Power Drive Assembly



● = Type "J" grease,
1-lb., 49-08-4220

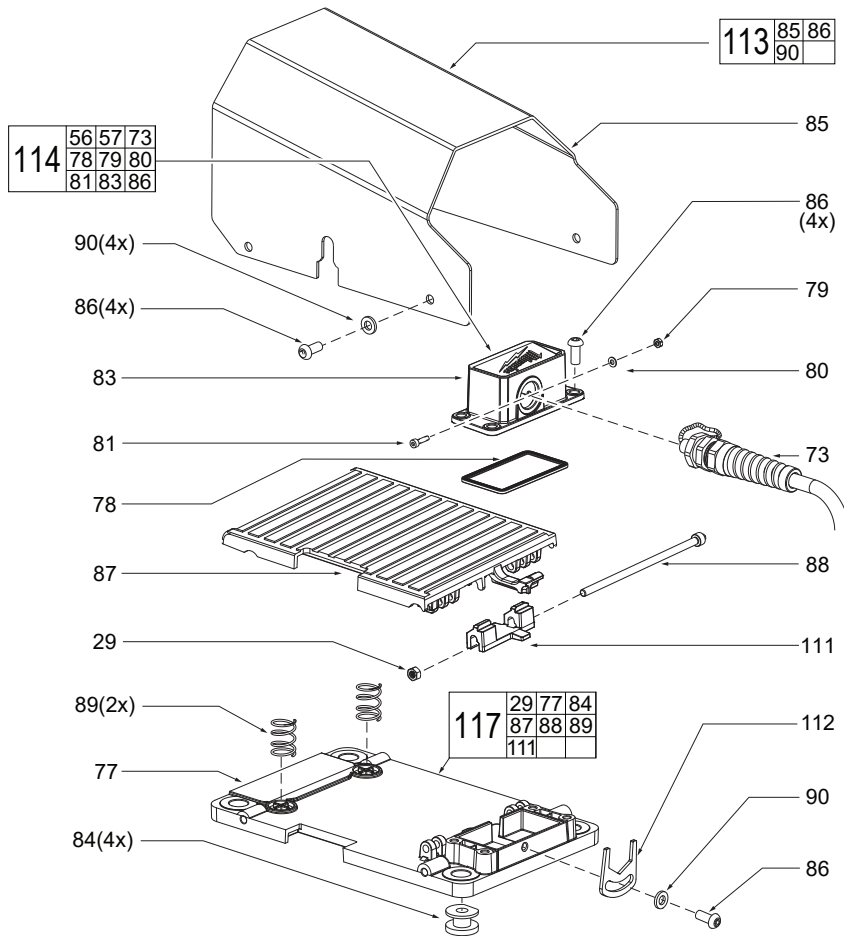
NOTE
Regarding parts to be lubricated:
Apply a light coating of grease to
all highlighted parts shown prior
to installation. Reference the key
above for grease types.

MXF Power Drive Assembly

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.	FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	44-66-7080	Base Housing	(1)	45	-----	Accessory Arm (Drive Side)	(1)
2	-----	Top Housing	(1)	46	-----	Accessory Arm	(1)
3	-----	Front Frame	(1)	47	14-29-8810	Gearbox Assembly	(1)
9	34-60-7120	Retaining Ring	(2)	66	-----	Drive Tube Grease Zerk	(2)
14	-----	Battery Door	(1)	74	-----	Roll Grooving Arm	(2)
15	-----	Paddle Door Latch	(1)	75	-----	Acc Arm Press Inserts	(2)
16	-----	Spring and Pin Cover	(1)	76	31-44-0260	Lift Handle	(2)
17	-----	Latch Pin	(1)	92	-----	Rack Part 2	(1)
18	05-83-0060	Battery Door Bolt	(1)	93	-----	Rack Part 1	(2)
19	-----	MX Badge	(1)	94	05-81-0166	M4x.7 PH T20 Screw	(4)
20	-----	Battery Door Bumper	(1)	95	31-12-9060	Roll Grooving Arm Cap	(2)
21	05-86-0689	M3.5x8 screw	(3)	96	05-86-0674	M10x18 BH Screw	(3)
22	-----	Latch Spring	(1)	108	-----	Strain Relief Hook	(1)
23	45-88-8987	Bumper Washer	(1)	109	44-66-7255	Mounting Plate	(1)
31	44-20-0067	M8x30 BH screw	(4)	110	45-88-0311	Washer	(4)
34	-----	Cart Mounts	(4)	113	05-55-0037	M5 Nylon Nut	(1)
35	44-20-7260	Battery Door Bumper	(1)	118	14-46-9468	Top Housing Service Kit	(1)
37	06-82-9730	M8x20 Screw	(16)	119	14-46-9470	Roll Grooving Arm Service Kit (Set of 1)	(2)
38	05-83-0050	M8x1.25 Shoulder Bolt	(4)	120	14-46-9476	Cord Wrap Service Kit (Set of 1)	(2)
39	05-86-0672	M6x14 FH Screw	(8)	121	14-46-9478	Front Face Housing Service Kit	(1)
40	05-86-0680	M10x85 Top Housing Screw	(4)	122	14-46-9472	Accessory Arm Service Kit	(1)
42	06-14-0230	Foot Pedal Mounting Bolt	(1)	123	14-20-9145	Battery Door Service Assembly	(1)
43	-----	Cord Wrap Hook	(2)	124	14-46-9474	Accessory Arm Drive Side Service Kit	(1)
44	06-82-9643	M5x25 BH Screw	(2)	125	14-46-9480	Cart Mount Service Kit (Set of 1)	(4)

MXF Power Drive Assembly

Foot Pedal Assembly



Foot Pedal Assembly

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.	FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
29	05-55-0160	M5 Nut	(1)	86	06-82-9725	M6x1 PH Screw	(11)
73	-----	Foot Pedal Wiring Assembly	(1)	87	-----	Foot Pedal	(1)
77	-----	Foot Pedal Base Plate	(1)	88	-----	Foot Pedal Pin	(1)
78	65-34-3185	Foot Pedal Inner Seal	(1)	89	-----	Foot Pedal Compression Spring	(2)
79	06-55-3855	M3x.5 Hex Nut	(1)	90	45-88-8986	Washer	(5)
80	45-88-9005	Washer	(1)	111	-----	Foot Pedal Stop Plate	(1)
81	06-82-9647	M3x.5 Hex Screw	(1)	112	31-15-8975	Foot Pedal Locking Tab	(1)
83	-----	Foot Pedal Cover	(1)	113	14-46-9482	Foot Pedal Guard Service Kit	(1)
84	-----	Foot Pedal Bumper	(4)	114	14-46-9484	Foot Pedal Cover Service Kit	(1)
85	-----	Foot Pedal Guard	(1)	117	14-46-9466	Foot Pedal Base Plate Service Assy	(1)

MXF Power Drive Assembly

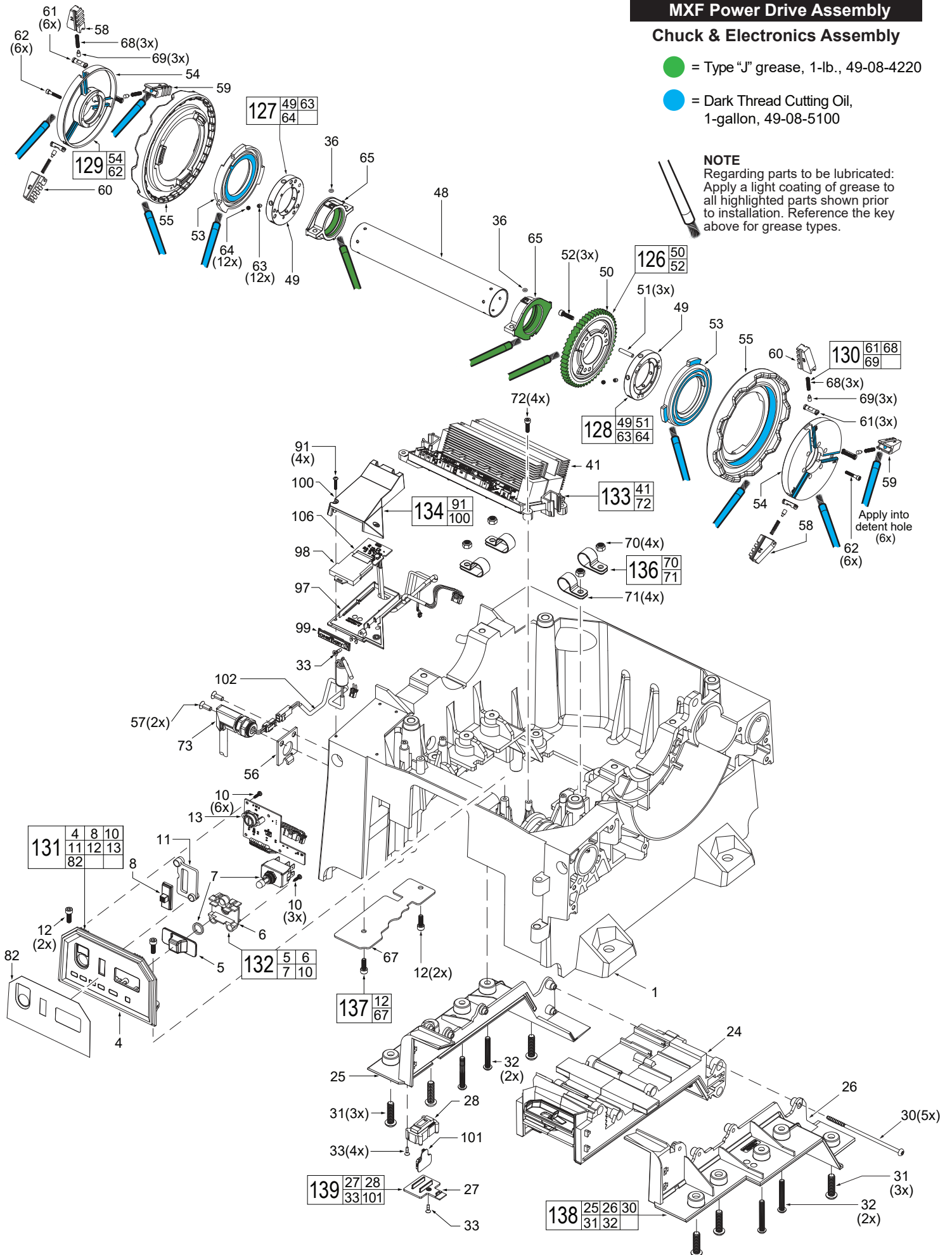
Chuck & Electronics Assembly

● = Type "J" grease, 1-lb., 49-08-4220

● = Dark Thread Cutting Oil, 1-gallon, 49-08-5100

NOTE

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



Chuck & Electronics Assembly

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.	FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	44-66-7080	Base Housing	(1)	61	-----	Jaw Insert	(6)
4	-----	UI Plate	(1)	62	05-86-0683	M6x1 Screw	(12)
5	-----	Switch Slider	(1)	63	05-86-0673	Set Screw	(12)
6	-----	Switch Mounting Plate	(1)	64	05-86-0677	Set Screw	(12)
7	23-66-8950	Toggle Switch	(1)	65	42-40-7047	Bushing	(2)
8	-----	Speed Selector	(1)	67	-----	Wire Routing Cover	(1)
10	14-20-0199	M3x10 Screw	(9)	68	-----	Jaw Insert Spring	(6)
11	-----	Speed Selector Retaining Plate	(1)	69	-----	Jaw Insert Pin	(6)
12	05-86-0685	M5x15 Screw	(4)	70	05-55-3005	M6X1 Lock Nut	(4)
13	-----	UI Board Assy.	(1)	71	-----	Wire Trap	(4)
24	31-06-2215	Battery Rail	(1)	72	05-86-0679	M4x.7 Screw	(4)
25	-----	Right Battery Housing	(1)	73	-----	Foot Pedal Wiring Assy	(1)
26	-----	Left Battery Housing	(1)	82	-----	UI Label	(1)
27	-----	Coin Cell Cover	(1)	91	06-82-9642	M3x.5 BH Screw	(4)
28	-----	Coin Cell Pocket	(1)	97	42-92-3506	OKC Base Cover	(1)
30	05-88-0087	M5x2.24 PH T20 Screw	(5)	98	14-20-0291	OKC Card Service Kit	(1)
31	44-20-0067	M8x1.25 BH Screw	(6)	99	44-66-7076	OKC Nameplate	(1)
32	06-81-0093	M6x1 BH Screw	(4)	100	-----	OKC Housing Cover	(1)
33	05-81-0233	M3x1.058 FH T10 screw	(4)	101	-----	PCB Assembly for Coin Cell	(1)
36	34-40-8015	O-Ring	(2)	102	23-66-8970	Trigger Extension Wire Assy.	(1)
41	-----	PCB Assembly	(1)	106	14-20-9115	OKC Host Board	(1)
48	45-76-0860	Drive Tube	(1)	126	14-46-9494	Driven Gear Service Kit	(1)
49	-----	Drive Hub	(2)	127	14-46-9492	Drive Hub Back Service Kit	(1)
50	-----	Gear	(1)	128	14-46-9490	Drive Hub Front Service Kit	(1)
51	-----	Drive Pin	(3)	129	14-46-9496	Jaw Plate Service Kit (Set of 1)	(2)
52	05-86-0688	M8x1 Screw	(3)	130	14-46-9498	Jaw Insert Service Kit (Set of 1)	(6)
53	44-66-7071	Front Scroll Plate	(2)	131	14-20-9150	UI Plate Service Assembly	(1)
54	44-66-7070	Front Jaw Plate	(2)	132	14-20-9155	UI Switch Service Assembly	(1)
55	45-94-0390	Hand Wheel	(2)	133	14-46-9500	PCB Kit	(1)
56	-----	Foot Pedal Mounting Bracket	(1)	134	14-46-9505	OKC Housing Cover Service Kit	(1)
57	06-82-9710	M5x.8 FH Screw	(2)	136	14-46-9510	Wire Trap Service Kit (Set of 1)	(4)
58	43-56-2575	Jaw #2	(2)	137	14-46-9512	Wire Routing Cover Service Kit	(1)
59	43-56-2570	Jaw #1	(2)	138	14-46-9514	Battery Housing Service Kit	(1)
60	43-56-2580	Jaw #3	(2)	139	14-46-9516	Coin Cell Service Kit	(1)

MXF Power Drive Assembly

SCREW TORQUE SPECIFICATIONS

FIG.	PART NO.	WHERE USED	SEAT TORQUE	
			(kgf-cm)	(lb-in)
7	23-66-8950	UI Switch Assy	8-10	7-9
10	14-20-0199	UI Switch Assy	6-8	5-7
12	05-86-0685	User Interface to Housing Base	13-17	11-15
12	05-86-0685	Foot Pedal Wire Routing Cover	23-35	20-30
18	05-83-0060	Battery Door Assembly	81-115	70-100
21	05-86-0689	Battery Door Assembly	6-8	5-7
27a	05-81-0233	Coin Cell Kit	6-8	5-7
30	05-88-0087	Battery Housing Kit	15-20	13-17
31	44-20-0067	Battery Housing Kit	92-115	80-100
31	44-20-0067	Chuck Assembly	179-213	155-185
32	06-81-0093	Battery Housing Kit	46-58	40-50
33	05-81-0233	Coin Cell Kit	6-8	5-7
37	06-82-9730	Cart Mount Kit	167-207	145-180
38	05-83-0050	Arm Kit	184-230	160-200
39	05-86-0672	Side Housing	71-98	62-85
40	05-86-0680	Top Housing	161-207	140-180
42	06-14-0230	Foot Pedal	21-25	18-22
44	06-82-9643	Cord Wrap Kit	46-69	40-60
52	05-86-0688	Chuck Gear	461-691	400-450
57	06-82-9710	Foot Pedal	6-8	5-7
62	05-86-0683	Chuck Jaw Plate	115-150	100-130
63	05-86-0673	Chuck Assembly	86-115	75-100
64	05-86-0677	Chuck Assembly	86-115	75-100
66	43-33-0055	Top Housing	35-40	30-35
70	05-55-3005	Wire Trap Kit	23-35	20-30
72	05-86-0679	PCB Assembly	9-13	8-11
73	22-64-5275	Foot Pedal	35-40	30-35
81	06-82-9647	Foot Pedal Cover	7-9	6-8
86	06-82-9725	Foot Pedal Guard	69-81	60-70
88	44-60-5295	Foot Pedal Cover	45-51	39-44
91	06-82-9642	OKC Housing Cover	6-8	5-7
94	05-86-0675	Arm Kit	23-29	20-25
96	05-86-0674	Gearbox	161-202	140-175
99a	05-81-0233	OKC Nameplate	6-8	5-7

Accessory Carriage Assembly

SCREW TORQUE SPECIFICATIONS

FIG.	PART NO.	WHERE USED	SEAT TORQUE	
			(kgf-cm)	(lb-in)
5	05-86-0668	Die Head	124-153	108-133
18	44-60-7080	Auto Release Lever	23-29	20-25
23	06-82-9646	Die Scroll	41-50	36-43
27	05-86-0667	Die Adjustment	23-29	20-25
32	05-83-0040	Reamer Arm	46-58	40-50
57	08-90-4507	Carriage	138-173	120-150
58	06-82-9645	Carriage	60-71	52-62

Oil Reservoir/Shroud Assembly

SCREW TORQUE SPECIFICATIONS

FIG.	PART NO.	WHERE USED	SEAT TORQUE	
			(kgf-cm)	(lb-in)
3	06-14-0310	Pump Cover	29-37	25-32
10	08-90-4510	Oil Pump Housing	58-69	50-60
13	06-74-1095	Oil Pump Housing	29-37	25-32
14	08-90-4506	Oil Reservoir Cover	58-69	50-60
19	06-82-9644	Oil Reservoir	6-9	5-8
22	05-86-0671	Oil Reservoir Cover	15-20	13-17

Cart Assembly

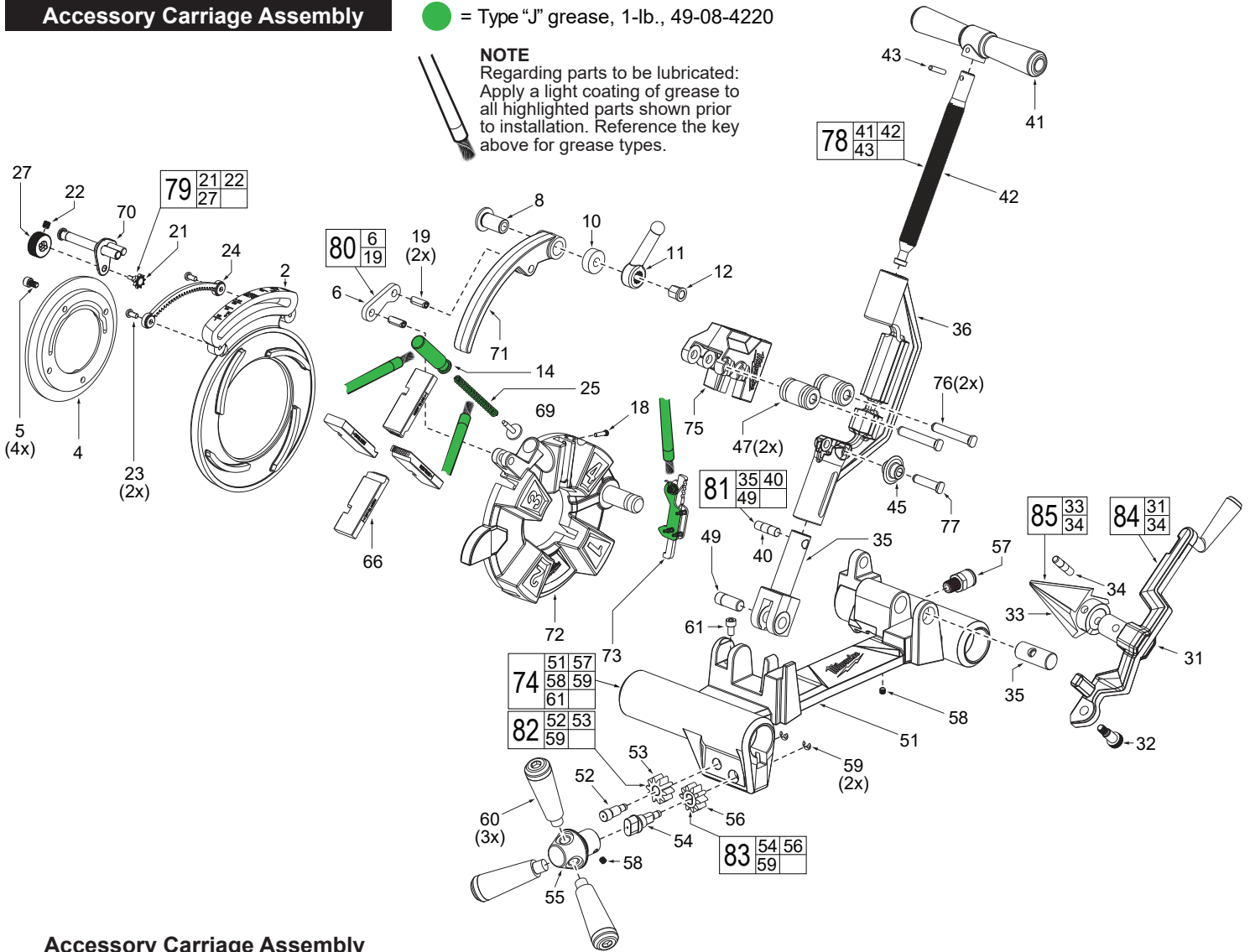
SCREW TORQUE SPECIFICATIONS

FIG.	PART NO.	WHERE USED	SEAT TORQUE	
			(kgf-cm)	(lb-in)
3	-----	Cart Handle	138-173	120-150
19	-----	Gas Spring	230-265	200-230
20	-----	Gas Spring	230-265	200-230
25	-----	Cart Handle	46-69	40-60
26	-----	Wheel Weldment	69-81	60-70
28	-----	Wheels	184-242	160-210

Accessory Carriage Assembly

● = Type "J" grease, 1-lb., 49-08-4220

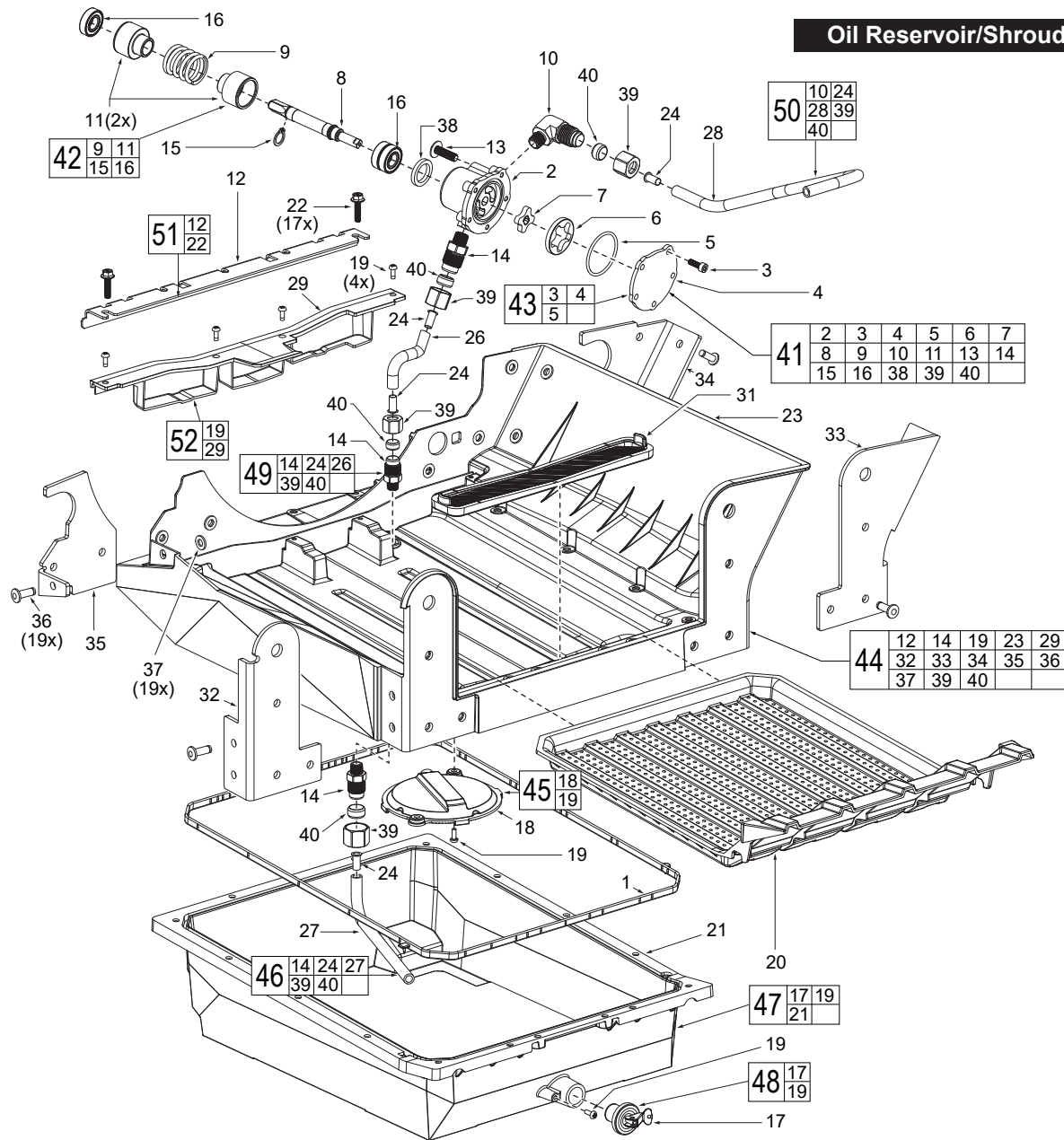
NOTE
Regarding parts to be lubricated:
Apply a light coating of grease to all highlighted parts shown prior to installation. Reference the key above for grease types.



Accessory Carriage Assembly

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.	FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
2	44-66-7078	Die Scroll Plate	(1)	50	44-60-5505	Reamer Carriage Pin	(1)
4	44-66-7077	Die Head Oil Plate	(1)	51	-----	Carriage Base	(1)
5	05-86-0668	M6x10 Screw	(4)	52	-----	Idler Pin	(1)
6	-----	Locking Arm Linkage	(1)	53	-----	Rack System Idler Pinion	(1)
8	42-40-0793	Die Locking Bushing	(1)	54	-----	Handle Hub Pin	(1)
10	42-40-7105	Bushing	(1)	55	43-78-0645	Handle Hub	(1)
11	44-60-5283	Die Locking Pin	(1)	56	-----	Rack System Driver Pinion	(1)
12	44-40-7105	Flange Nut	(1)	57	08-90-4507	3/8-to-1/4 Adapter	(1)
14	44-60-5281	Quick Release Pin	(1)	58	06-82-9645	M6x6mm Set Screw	(3)
18	44-60-7080	Auto Release Assembly Pin	(1)	59	44-90-5270	5x.6mm E-Ring	(2)
19	44-60-5395	M8x20 Coil Pin	(2)	60	43-98-7040	Carriage Handle	(3)
21	-----	Die Adjustment External Gear	(1)	61	05-86-1050	M8x1.25 Screw	(1)
22	-----	Adjustment Knob	(1)	66	-----	Universal 1-2" NPT Dies	(1)
23	06-82-9646	M5x10mm Screw	(2)	69	40-50-9275	Die Head Compression Spring	(1)
24	32-60-7045	Die Adjustment Internal Gear	(1)	70	14-02-0110	Die Lock Service Assembly	(1)
25	40-50-3310	Autorelease Compression Spring	(1)	71	14-02-0115	Die Lock Arm Service Assembly	(1)
27	-----	M5x5mm Set Screw	(1)	72	14-02-0120	Die Carrier Service Assembly	(1)
31	-----	Reamer Arm	(1)	73	14-02-0125	Auto Release Service Assembly	(1)
32	05-83-0040	M81.25x13 Shoulder Bolt	(1)	74	14-02-0130	Carriage Service Kit	(1)
33	-----	Reamer Cone	(1)	75	14-02-0135	Sliding Cutter Service Assembly	(1)
34	-----	Reamer Pin	(1)	76	14-02-0140	Roller Cutter Service Assembly	(1)
35	-----	Cutter Arm	(1)	77	14-02-0145	Cutter Wheel Service Assembly	(1)
36	43-40-0940	Cutter Frame	(1)	78	14-02-0150	Cutter Handle Service Assembly	(1)
40	-----	Slider Pin	(1)	79	14-46-9452	Die Adjustment Service Kit	(1)
41	-----	Cutter Handle	(1)	80	14-46-9454	Locking Arm Linkage Service Kit	(1)
42	-----	Cutter Threaded Rod	(1)	81	14-46-9456	Cutter Arm Service Kit	(1)
43	44-60-5287	Cutter Handle Pin	(1)	82	14-46-9458	Idler Pin Service Kit	(1)
45	-----	15 Degree Cutter	(1)	83	14-46-9460	Driver Pinion Service Kit	(1)
47	42-40-0795	Cutter Bushing	(2)	84	14-46-9462	Reamer Arm Service Kit	(1)
49	-----	Cutter Carriage Pin	(1)	85	14-46-9464	Reamer Cone Service Kit	(1)

Oil Reservoir/Shroud Assembly




Oil Reservoir/Shroud Assembly

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.	FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	45-76-0047	Oil Reservoir Seal	(1)	26	-----	Oil Reservoir Tube	(1)
2	-----	Oil Pump Housing	(1)	27	-----	Filter Housing Tube	(1)
3	06-14-0310	M4x12mm Bolt	(5)	28	-----	Carriage Tube	(1)
4	-----	Pump Cover	(1)	29	-----	Oil Catch	(1)
5	-----	Oil Pump O-Ring	(1)	31	43-31-4020	Oil Filter	(1)
6	-----	Out Rotor	(1)	32	-----	Front Hanger Bracket	(1)
7	-----	In Rotor	(1)	33	-----	Front Hanger Bracket	(1)
8	-----	Spline Drive Shaft	(1)	34	-----	Rear Hanger Bracket	(1)
9	-----	Pump Retaining Spring	(1)	35	-----	Rear Hanger Bracket	(1)
10	08-90-4510	3/8x1/8 Elbow Adapter	(1)	36	06-72-1820	Oil System Rivet	(19)
11	-----	Pump Bearing Cup	(2)	37	45-88-9030	Washer	(19)
12	42-92-7220	Reservoir Cover Stiffener	(1)	38	-----	O-Ring	(1)
13	06-74-1095	M6x20mm Bolt	(1)	39	05-55-3085	Compression Fitting Nut	(4)
14	08-90-4506	3/8x1/8 Male Adapter	(3)	40	05-59-2050	Compression Fitting Sleeve	(4)
15	-----	Retaining Ring	(1)	41	14-02-0100	Pump Service Assembly	(1)
16	-----	Ball Bearings	(3)	42	14-46-9435	Pump Retaining Service Kit	(1)
17	-----	5/8" Plug	(1)	43	14-46-9437	Pump Seal Service Kit	(1)
18	-----	Oil Filter House	(1)	44	14-02-0105	Oil Reservoir Cover Service Assembly	(1)
19	06-82-9644	M4x12mm Screw	(7)	45	14-46-9440	Oil Filter House Service Kit	(1)
20	44-66-7095	Oil Filter Tray	(1)	46	14-46-9442	Tube Filter Housing Service Kit	(1)
21	-----	Oil Reservoir	(1)	47	14-46-9444	Oil Reservoir & Plug Service Kit	(1)
22	05-86-0671	M5x20mm Screw	(17)	48	14-46-9446	Plug Expansion Service Kit	(1)
23	-----	Oil Reservoir Cover	(1)	49	14-46-9448	Oil Reservoir Tube Service Kit	(1)
24	-----	3/8 Adapter Seal	(4)	50	14-46-9450	Oil Carriage Tube Service Kit	(1)

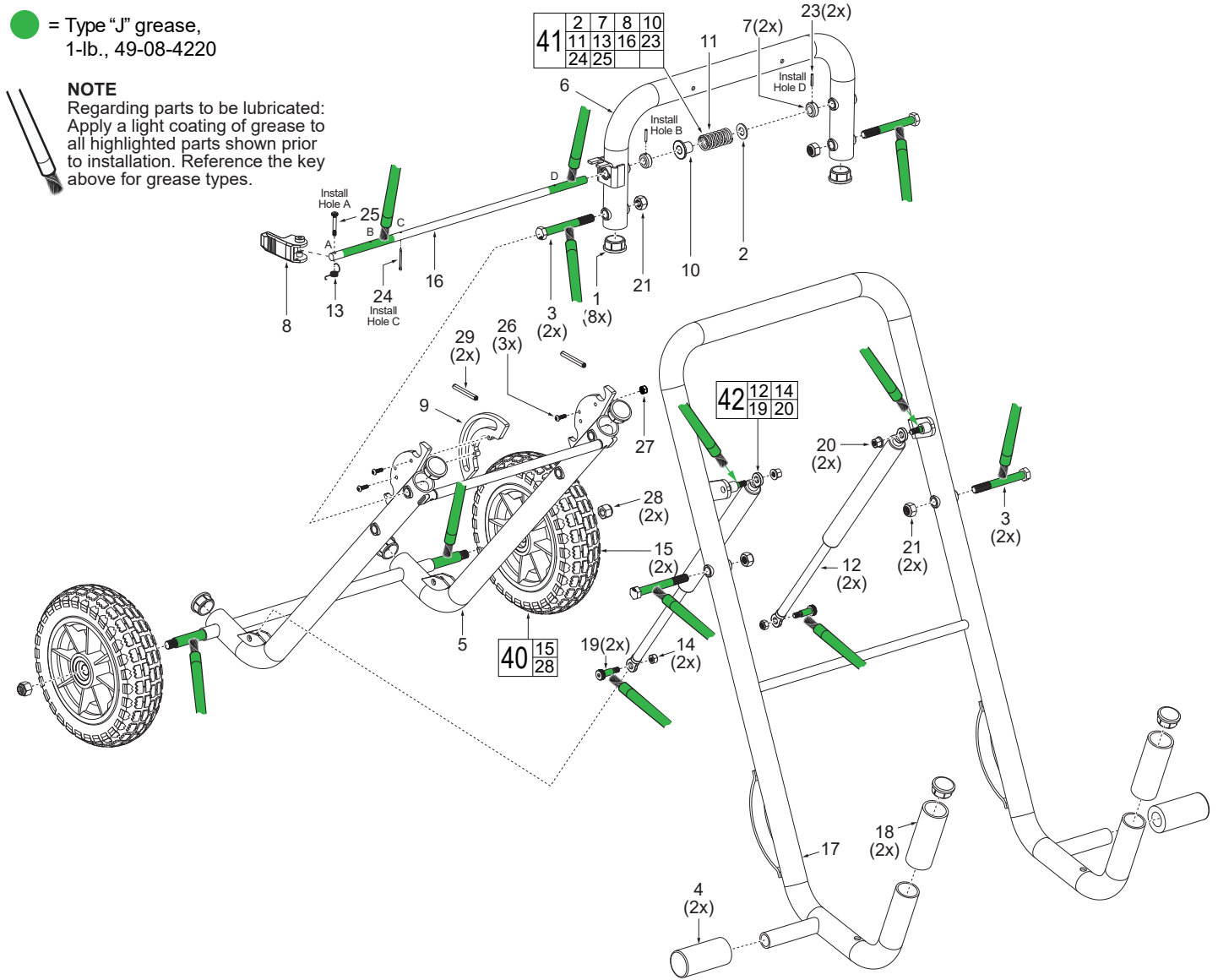
MXF Cart Assembly

*Threader Cart Service Assembly 14-38-7015 consists of all parts shown below.

 = Type "J" grease, 1-lb., 49-08-4220

NOTE

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



Cart Assembly

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.	FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	14-46-9720	Tube Cap	(8)	17	-----	Cart Handle Assembly	(1)
2	-----	Washer	(1)	18	14-46-9730	Cart Handle Grip	(2)
3	-----	M10x1.5mm Shoulder Screw	(4)	19	-----	Bolt	(2)
4	14-46-9725	Rubber Foot	(2)	20	-----	M8x1.25 Lock Nut	(2)
5	-----	Wheel Weldment	(1)	21	-----	M12x1.25 Lock Nut	(4)
6	-----	Locking Tube Weldment	(1)	23	-----	Pin	(2)
7	-----	Bushing	(2)	24	-----	Cotter Pin	(1)
8	-----	Lock Handle	(1)	25	-----	M5x35mm Bolt	(1)
9	-----	Back Lock Plate	(1)	26	-----	M5x.8 BH Bolt	(3)
10	-----	Lock Spring Stop	(1)	27	-----	Lock Release Ramp	(1)
11	-----	Lock Spring	(1)	28	-----	1/2" Nut	(2)
12	-----	Gas Spring	(2)	29	-----	Coil Pin	(2)
13	-----	Lock Handle Torsion Spring	(1)	40	14-46-9735	Wheel w/Nut Service Kit (Set of 1)	(2)
14	-----	M8 Lock Nut	(2)	41	14-46-9740	Lock Component Service Kit	(1)
15	-----	Breaker Wheel	(2)	42	14-46-9745	Gas Spring Service Kit	(1)
16	-----	Lock Shaft	(1)	*	14-38-7015	Threader Cart Service Assembly	(1)

Wire Routing

Install the electronics assembly as shown. Route wires around screw bosses and into wire traps. Be sure all components are seated squarely and firmly in place. Be sure there is no interference when installing the housing cover.

