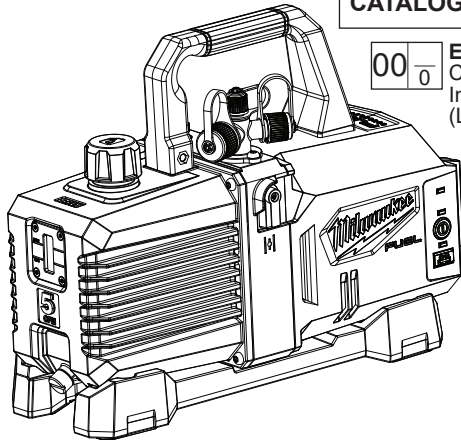




# SERVICE PARTS LIST

**BULLETIN NO.**  
54-05-2940

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN	DATE
<b>M18 FUEL™ 5 CFM VACUUM PUMP</b>			Apr. 2023
CATALOG NO.	<b>2941-20</b>	SERIAL NO.	<b>N48A</b>
		WIRING INSTRUCTION <b>See Page 4</b>	



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

**SEE THE NEXT PAGE FOR THE CORRESPONDING LIST  
OF SERVICE PARTS AND SERVICE ASSEMBLIES**

**70** **32** **66a** **66b** **66c** **66d** **66e** **66f** **66g** **66h** **66i**  
**66k** **66m** **66n** **66p** **66q** **66r** **66s** **66t** **66u**

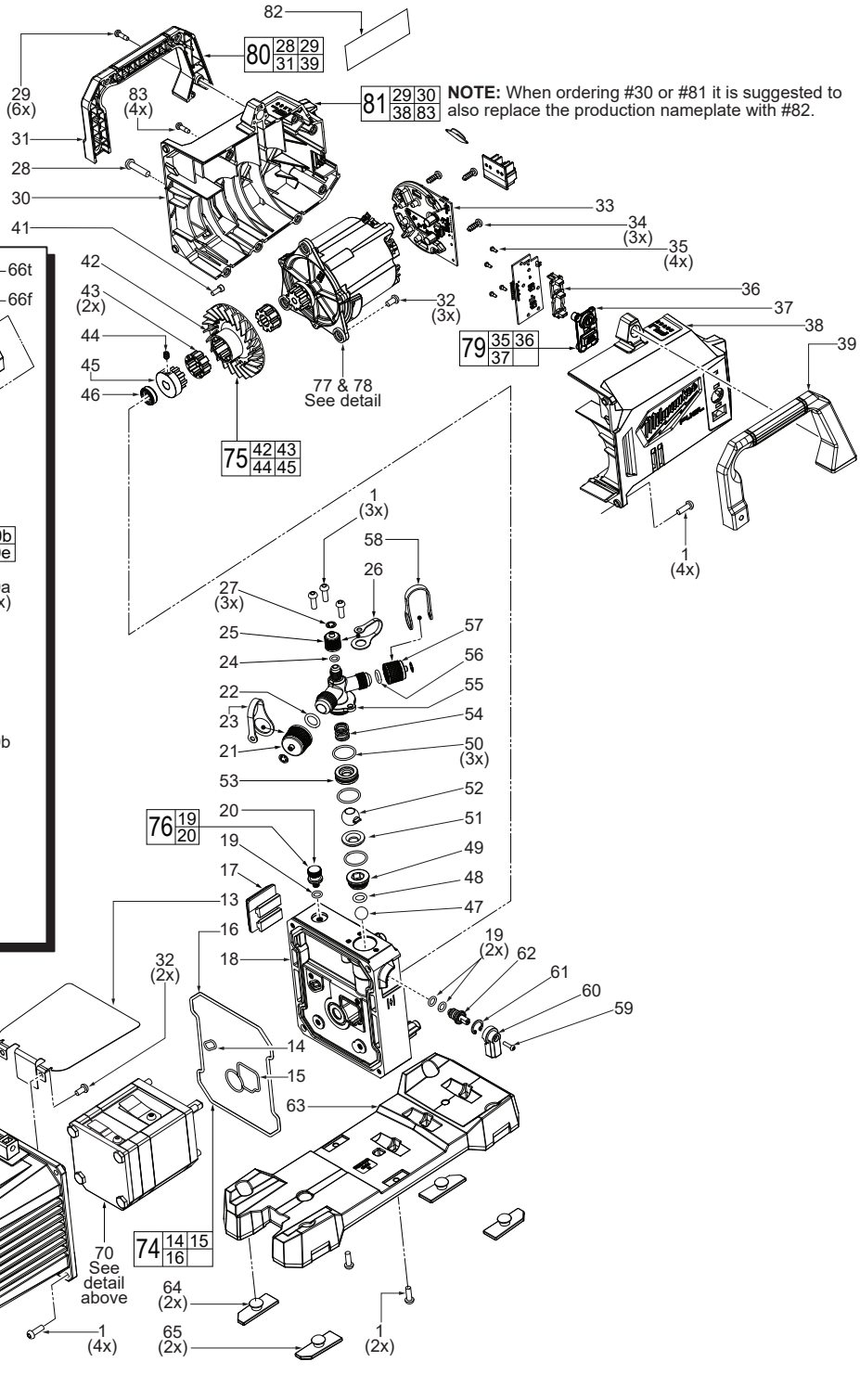
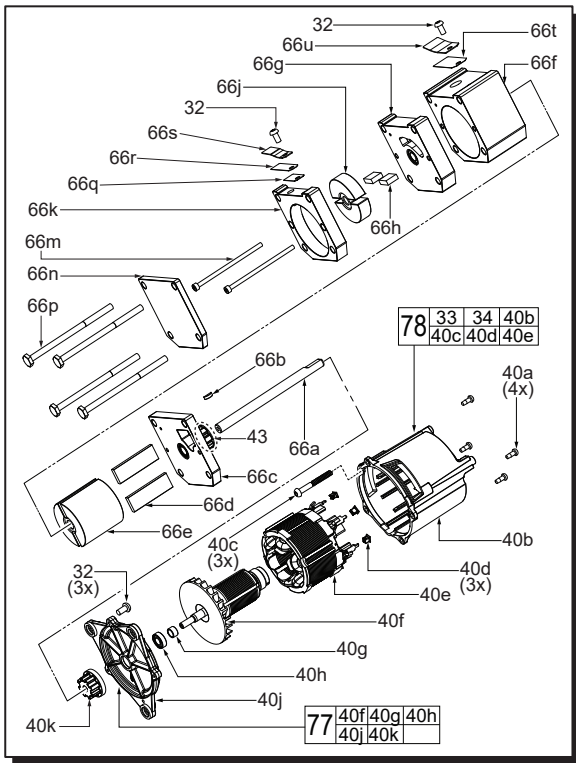
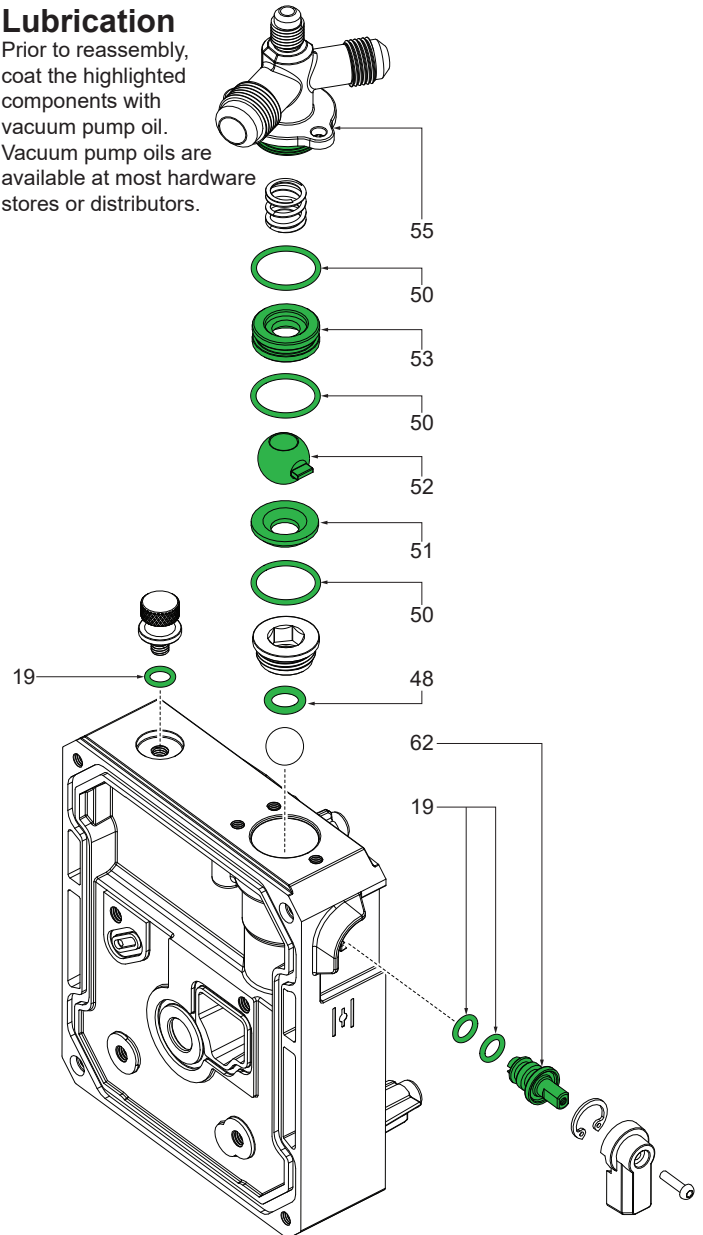


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	05-74-0510	M5 x 15mm Pan Hd. T-25 Machine Screw	(13)
2	-----	M3 x 7mm Flat Hd. T-10 Machine Screw	(4)
3	-----	Sight Glass Cover	(1)
4	-----	Sight Glass	(1)
5	-----	Sight Glass Gasket	(1)
6	31-12-0046	Drain Plug	(1)
7	34-40-0204	Drain Plug O-Ring	(1)
8	45-76-0031	Pump Housing	(1)
9	-----	Cap Body	(1)
10	-----	Filter Element	(1)
11	-----	Exhaust Filter	(1)
12	-----	Oil Fill Cap	(1)
13	31-05-0022	Oil Baffle	(1)
14	43-44-0133	Gas Ballast Hole Gasket	(1)
15	43-44-0132	Pump Body Inlet Gasket	(1)
16	43-44-0131	Pump Housing Gasket	(1)
17	42-38-0067	Bumper	(1)
18	31-01-0074	Trestle	(1)
19	34-40-0214	Ball Valve Shaft O-Ring	(3)
20	31-94-0027	Gas Ballast Valve	(1)
21	30-16-0014	1/2 FL Cap	(1)
22	34-40-0213	1/2 FL Cap O-Ring	(1)
23	45-56-0029	1/2 FL Cap Strap	(1)
24	34-40-0212	1/4 FL Cap O-Ring	(1)
25	30-16-0012	1/4 FL Cap	(1)
26	45-56-0028	1/4 FL Cap Strap	(1)
27	34-80-0028	External Push-In Retaining Ring	(3)
28	05-74-0509	M6 x 25mm Pan Hd. T-30 Machine Screw	(1)
29	05-74-0508	M4 x 13.5mm Pan Hd. T-20 ST Screw	(6)
30	43-62-0034	Housing Cover	(1)
31	43-62-0032	Grip - Cover Side	(1)
32	05-74-0507	M5 x 10mm Pan Hd. T-25 Machine Screw	(7)
33	-----	PCBA	(1)
34	05-74-0506	M5 x 14mm Pan Hd. T-20 ST Screw	(3)
35	05-74-0505	M2.5 x 6mm Pan Hd. Taptite T-8 Screw	(4)
36	43-62-0056	Light Pipe	(1)
37	14-34-0043	Pad Style Button	(1)
38	31-44-0224	Housing Support	(1)
39	43-62-0019	Grip - Support Side	(1)
40a	-----	M4 x 10mm Pan Hd. T-20 ST Screw	(4)
40b	-----	Motor Housing	(1)
40c	-----	M5 x 42mm Pan Hd. T-25 ST Shoulder Scr.	(3)
40d	-----	Silicon Isolator	(3)
40e	-----	Stator	(1)
40f	-----	Rotor	(1)
40g	-----	Spacer	(1)
40h	-----	Front Bearing	(1)
40j	-----	Motor Mounting Plate	(1)
40k	-----	Motor Coupler	(1)
41	05-74-0503	M4 x 10mm Cap Hd. T-20 Machine Screw	(1)
42	42-90-0052	Coupler Fan	(1)
43	42-90-0051	Coupler Sleeve	(2)
44	05-74-0502	M5 x 8mm Set Screw	(1)
45	42-90-0051	Shaft Coupler	(1)
46	22-09-0031	Skeleton Oil Seal	(1)
47	02-02-0112	AL Hollow Ball	(1)
48	34-40-0211	Ball Plug O-Ring	(1)
49	31-53-0018	Ball Plug	(1)
50	34-40-0210	PTFE Disk O-Ring	(3)
51	31-88-0016	Lower Ball Disk	(1)
52	31-44-0014	Ball Valve	(1)
53	31-88-0015	Upper Ball Disk	(1)
54	45-88-0104	Spring	(1)
55	45-76-0054	Manifold	(1)
56	34-40-0209	3/8 FL Cap O-Ring	(1)
57	30-16-0010	3/8 FL Cap	(1)
58	45-56-0027	3/8 FL Cap Strap	(1)
59	05-74-0501	M32 x 12mm Pan Hd. T-10 Machine Screw	(1)
60	31-44-0204	Ball Valve Knob	(1)
61	34-80-0027	Internal Retaining Ring	(1)
62	20-60-0010	Ball Valve Shaft	(1)
63	45-24-0081	Pedestal	(1)
64	44-34-0071	Rubber Foot - Left Side	(2)
65	44-34-0070	Rubber Foot - Right Side	(2)
66a	-----	Rotor Shaft	(1)
66b	-----	Woodruff Key	(1)
66c	-----	Plate - S1	(1)
66d	-----	Vane 1	(2)

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
66e	-----	Rotor 1	(1)
66f	-----	Plate - S2	(1)
66g	-----	Plate - S3	(1)
66h	-----	Vane 2	(2)
66j	-----	Rotor 2	(1)
66k	-----	Plate - S4	(1)
66m	-----	M4 x 82mm Screw	(2)
66n	-----	Plate - S5	(1)
66p	-----	M6 x 105mm Hex Hd. Machine Screw	(4)
66q	-----	Stage 2 Valve Spacer	(1)
66r	-----	Stage 2 Reed Valve	(1)
66s	-----	Stage 2 Valve Limiter	(1)
66t	-----	Stage 1 Reed Valve	(1)
66u	-----	Stage 1 Valve Limiter	(1)
70	14-46-0497	Pump Service Assembly	(1)
71	14-46-0508	Drain Plug Service Kit	(1)
72	14-46-0509	Sight Glass Service Kit	(1)
73	14-46-0507	Vent Cap Service Kit	(1)
74	14-46-0506	Gasket Service Kit	(1)
75	14-46-0498	Pump Side Fan & Hub Service Kit	(1)
76	14-46-0504	Gas Ballast Knob Service Kit	(1)
77	14-46-0499	Pump Rotor & Hub Service Kit	(1)
78	14-46-0502	Electronics Service Assembly	(1)
79	14-46-0503	Button Service Kit	(1)
80	14-46-0512	Pump Handle Service Kit	(1)
81	14-46-0511	Pump Housing Service Kit	(1)
82	12-20-0583	Service Nameplate	(1)
83	05-81-1210	M4 x 22mm Pan Hd. ST T-20 Screw	(4)

## Lubrication

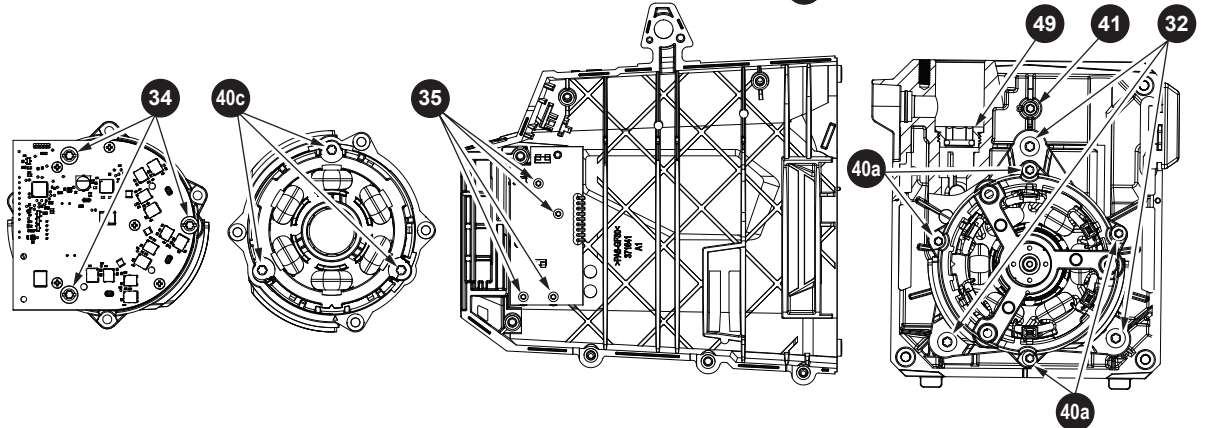
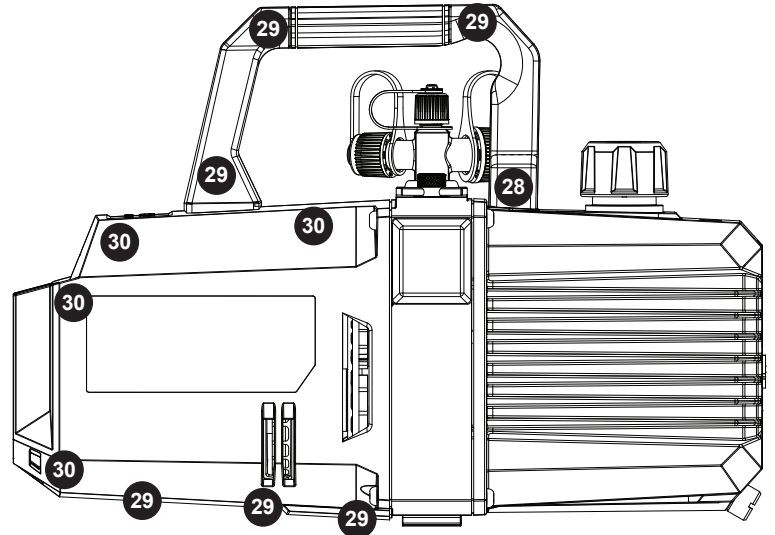
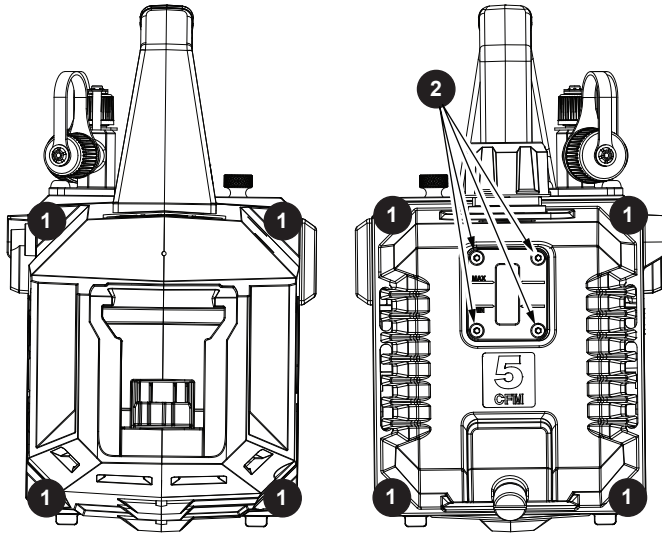
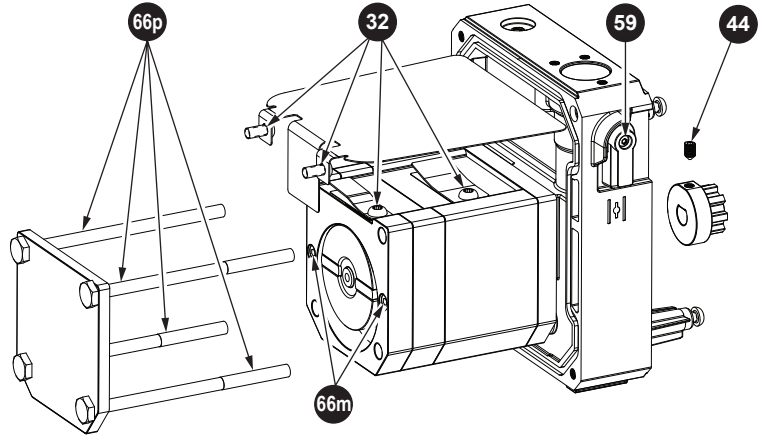
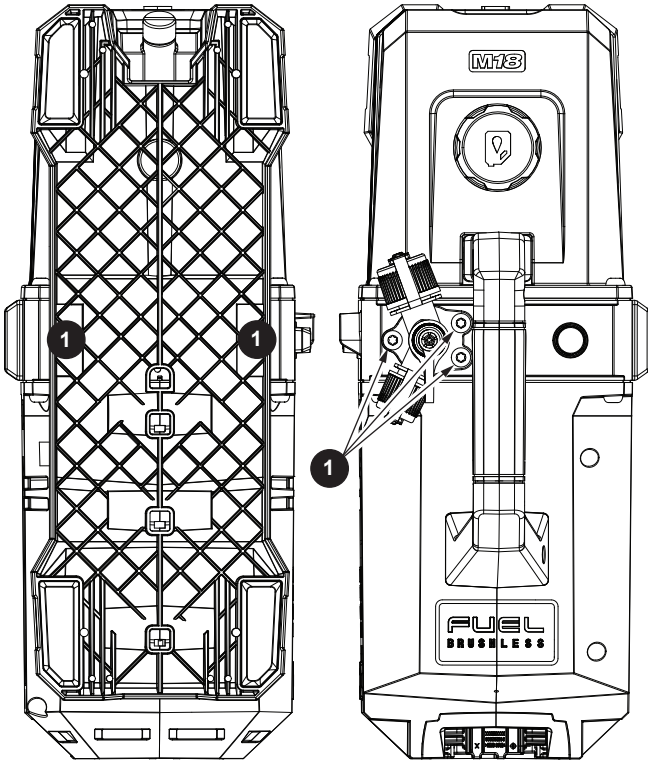
Prior to reassembly, coat the highlighted components with vacuum pump oil. Vacuum pump oils are available at most hardware stores or distributors.

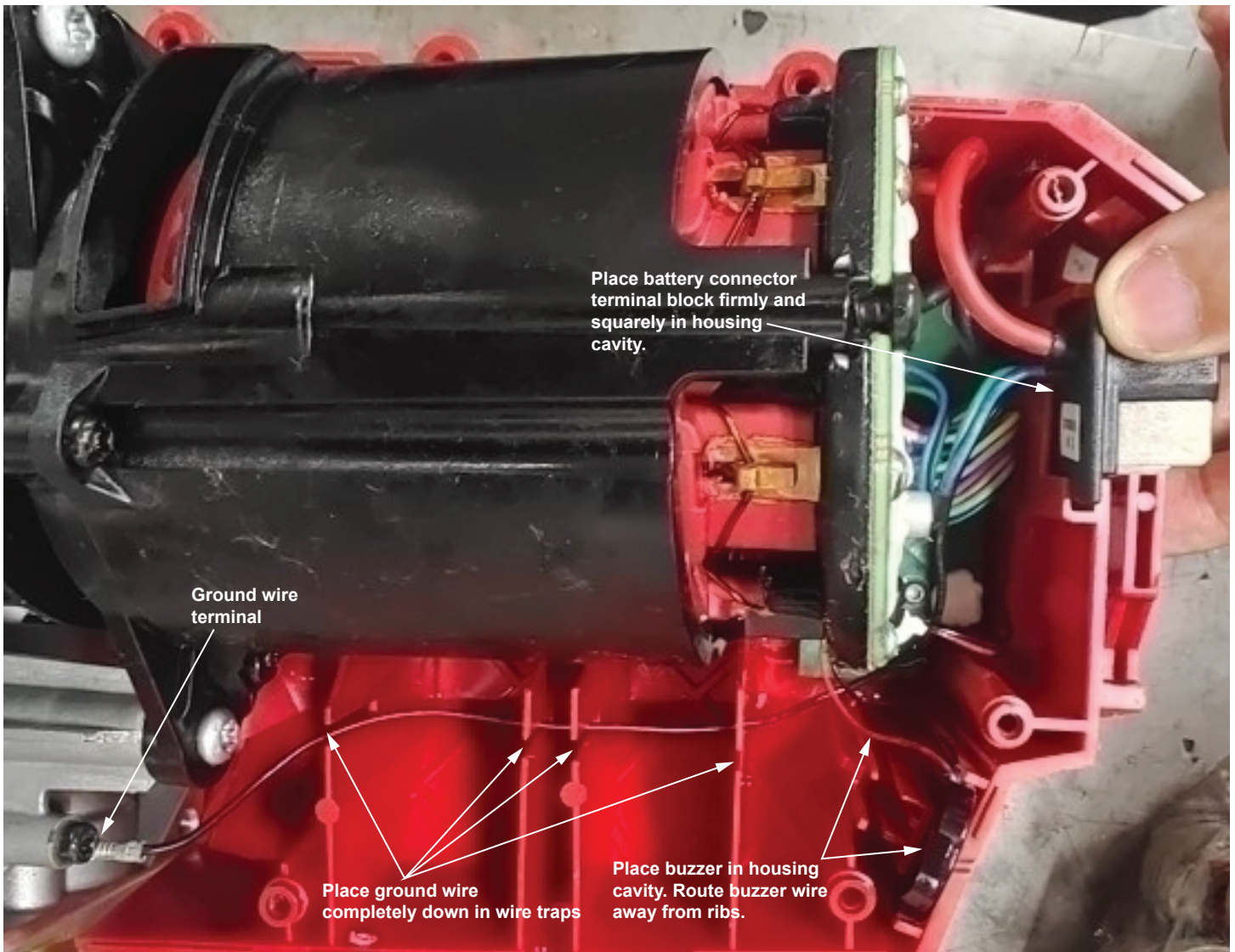


# Screw Torque Specifications

## SCREW TORQUE SPECIFICATIONS

FIG.	PART NO.	WHERE USED	SEAT TORQUE																																																							
			(kgf-cm)	(lb-in)																																																						
1	05-74-0510	Several areas, see illustration.	18±2	15.6±1																																																						
2	-----	Sight Glass Service Kit	4.5±1	3.9±1																																																						
28	05-74-0509	Pump Housing/Pump Handle	35±2	30.3±1																																																						
29	05-74-0508	Pump Housing/Pump Handle	10±2	8.6±1																																																						
32	05-74-0507	Several areas, see illustration.	20±2	34	05-74-0506	PCBA	9.5±1	8.2±1	35	05-74-0505	Button Service Kit	4.5±0.5	3.9±0.5	40a	-----	Electronics Service Assembly	9±1	7.8±1	40c	-----	Electronics Service Assembly	15±2	13±1	41	05-74-0503	Trestle	12±1	10.4±1	44	05-74-0502	Shaft Coupler	10±2	8.6±1	49	31-53-0018	Ball Plug used in Trestle	15±2	13±1	59	05-74-0501	Ball Valve Knob	12±1	10.4±1	66m	-----	Pump Service Assembly	20±2	17.3±1	66p	-----	Pump Service Assembly	180±18	156±15	83	05-81-1210	M4 x 22mm Pan Hd. ST T-20 Screw	10±2	8.6±1
34	05-74-0506	PCBA	9.5±1	8.2±1																																																						
35	05-74-0505	Button Service Kit	4.5±0.5	3.9±0.5																																																						
40a	-----	Electronics Service Assembly	9±1	7.8±1																																																						
40c	-----	Electronics Service Assembly	15±2	13±1																																																						
41	05-74-0503	Trestle	12±1	10.4±1																																																						
44	05-74-0502	Shaft Coupler	10±2	8.6±1																																																						
49	31-53-0018	Ball Plug used in Trestle	15±2	13±1																																																						
59	05-74-0501	Ball Valve Knob	12±1	10.4±1																																																						
66m	-----	Pump Service Assembly	20±2	17.3±1																																																						
66p	-----	Pump Service Assembly	180±18	156±15																																																						
83	05-81-1210	M4 x 22mm Pan Hd. ST T-20 Screw	10±2	8.6±1																																																						





## Wiring

