

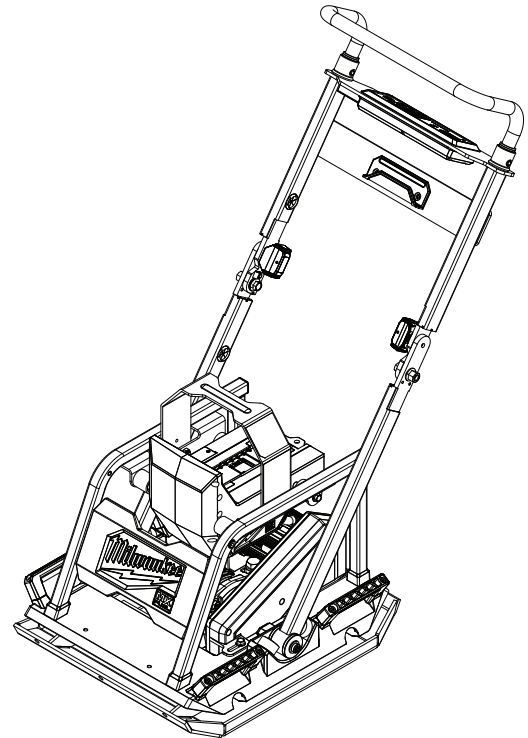


# SERVICE PARTS LIST

**BULLETIN NO.**  
**54-20-0040**

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN	DATE
<b>MX FUEL™ 20" PLATE COMPACTOR</b>			Nov. 2023
CATALOG NO.	<b>MXF220</b>	SERIAL NO.	<b>N35A</b>
		WIRING INSTRUCTION <b>SEE PAGES 10, 11 &amp; 12</b>	

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Only maintenance, service, repairs, and replacements of parts as defined in the Operator's Manual should be performed by the user.

All other repairs are to ONLY be performed by personnel authorized by MILWAUKEE TOOL. Do not attempt to install other parts; this could void your tool 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](http://www.milwaukeetool.com/e-service)
- Find a local authorized MILWAUKEE service location at [Milwaukeetool.com](http://Milwaukeetool.com)
- Find a MILWAUKEE factory Service Center Location or MILWAUKEE factory Central Repair Center at [Milwaukeetool.com](http://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

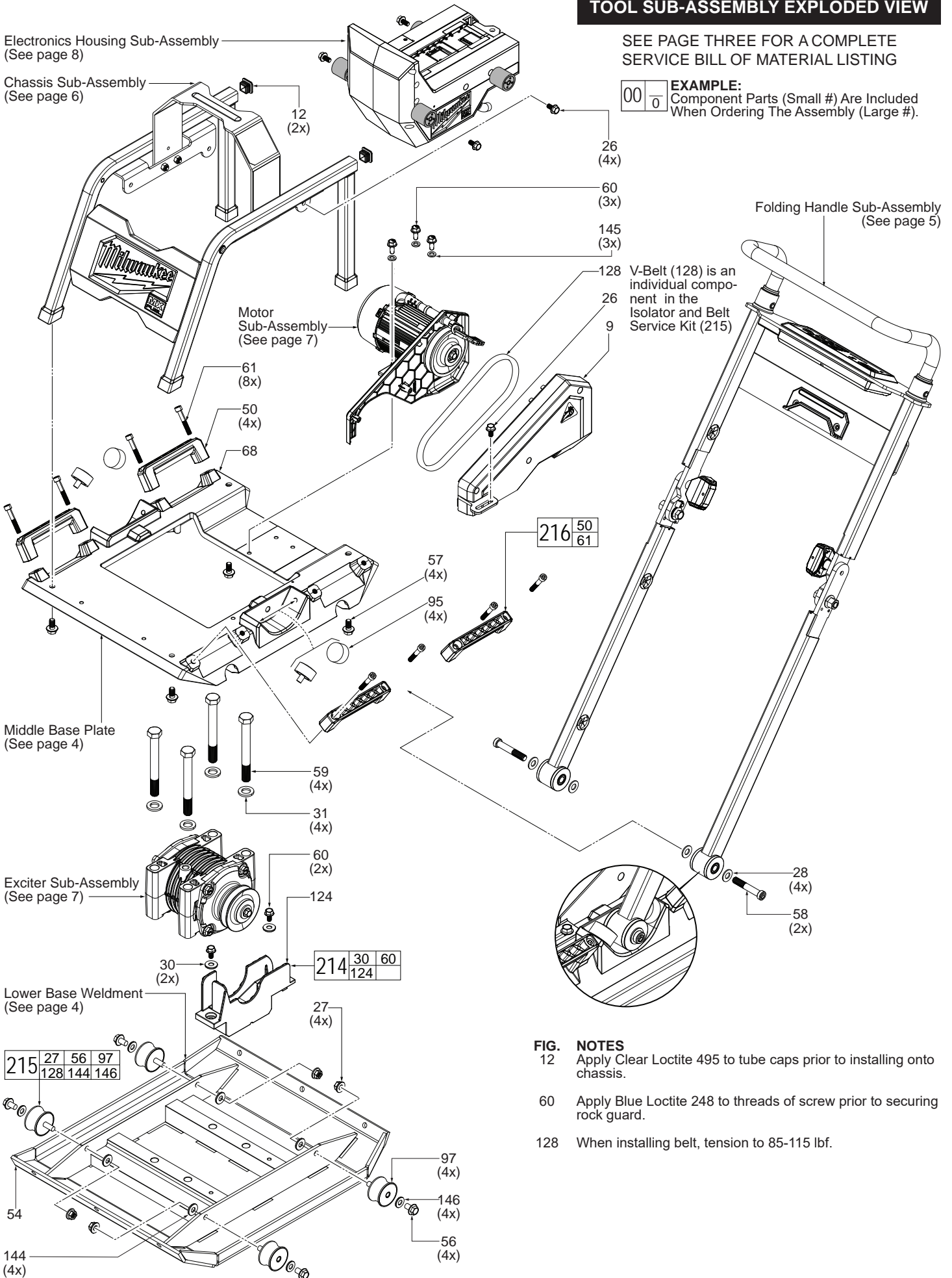
# TOOL SUB-ASSEMBLY EXPLODED VIEW

Electronics Housing Sub-Assembly  
(See page 8)

Chassis Sub-Assembly  
(See page 6)

SEE PAGE THREE FOR A COMPLETE  
SERVICE BILL OF MATERIAL LISTING

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



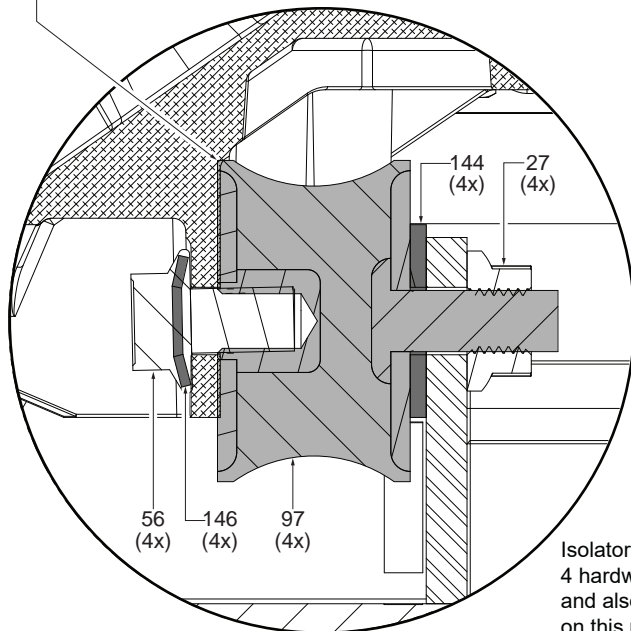
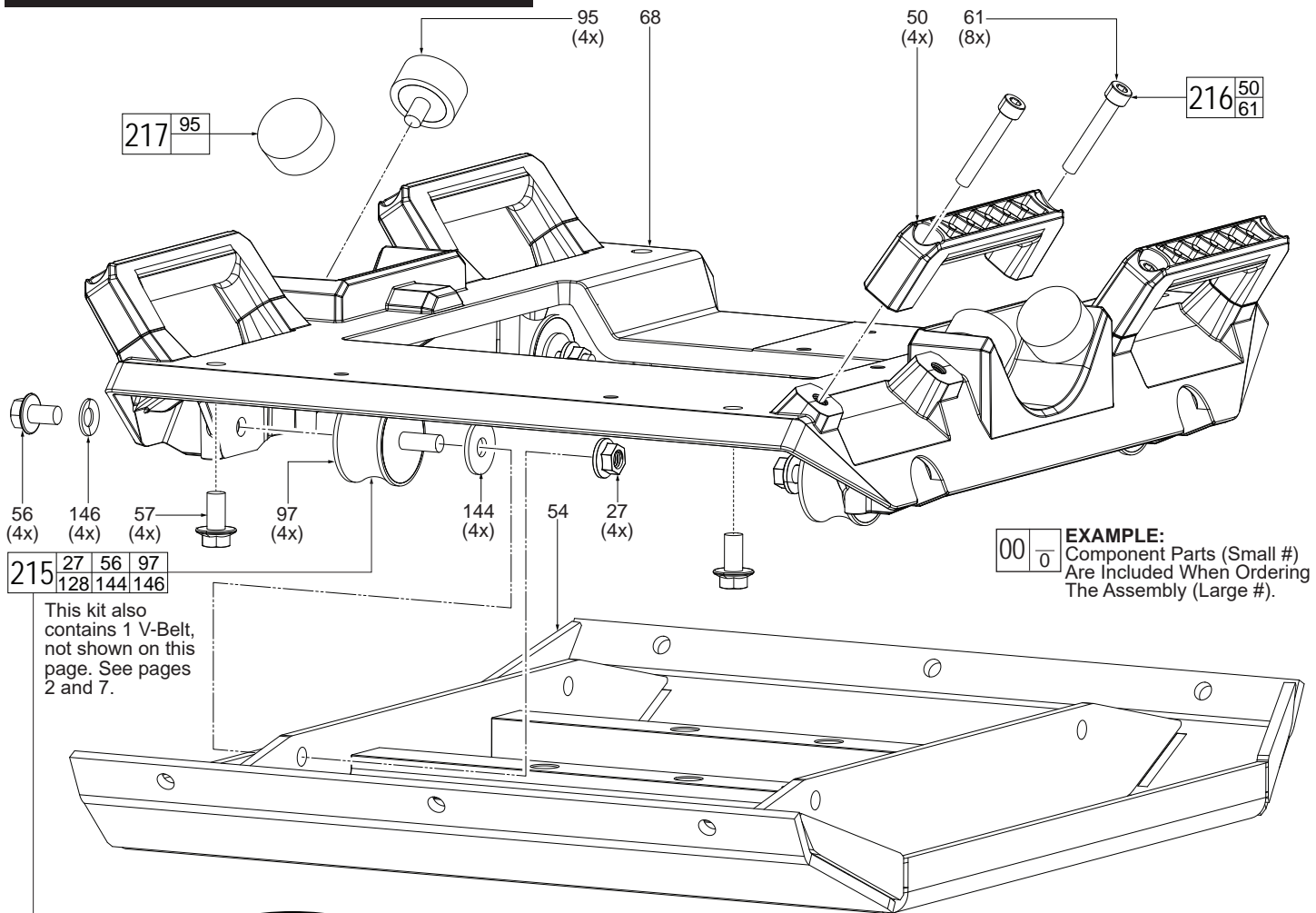
**FIG. NOTES**

- 12 Apply Clear Loctite 495 to tube caps prior to installing onto chassis.
- 60 Apply Blue Loctite 248 to threads of screw prior to securing rock guard.
- 128 When installing belt, tension to 85-115 lbf.

## SERVICE BILL OF MATERIAL (BOM) LISTING

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.	FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1		O-Ring	(3)	94		Rotary Shaft Lip Seal	(1)
2	31-21-0375	Access Door - Interface Kit	(1)	95	42-38-9025	Rubber Bumper - 3/16"x1-1/2" - Type 3	(4)
3	42-42-4010	Arm Button	(1)	96		Rubber Bumper - 35 x 35mm - Type 2	(4)
4		PCBA	(1)	97		Rubber Bumper - 50 x 30mm - Type 2	(4)
5		3V Coin Cell Battery (CR2032)	(1)	98	42-40-7095	Rubber Bumper - Handle	(4)
6		Battery Ejector	(1)	99	06-81-0098	M4 x 16mm Hex Hd. Screw	(2)
7		Hinge Pivot Bearing	(2)	100	06-82-1077	M5 Set Screw	(2)
8		Belt Guard - Back	(1)	103	31-86-0380	M8 x 5mm Spacer	(2)
9		Belt Guard - Cover	(1)	104		Pivot Latch Spring Holder	(1)
10		Expandable Grommet	(3)	105		Spring	(2)
11	05-90-0705	Cap Washer - Type B	(2)	106		Spring	(2)
12		Tube Cap	(2)	107		Spring	(1)
13		M8 x 1.25 x 20mm Carriage Bolt	(4)	108		M3 x 8mm Pan Hd. ST T-10 Screw	(12)
14	31-15-8960	Coin Cell Door Kit	(1)	110		M5 x 16mm Pan Hd. ST T-25 Screw	(2)
15		Compression Spring	(2)	111		M5 x 22mm Pan Hd. ST T-25 Screw	(8)
16		Cylindrical Roller Bearing	(2)	112	05-74-7070	M3 x 14mm ST T-10 Screw	(3)
17		Ejection Spring Holder	(1)	113		M3 x 16mm ST Non-Return TP Screw	(8)
18		Electronics Housing Cover Assembly	(1)	114		Switch Boot - Direction	(1)
19		Electronics Housing Support Assembly	(1)	115		Switch Boot - Speed	(1)
20		Enclosure	(1)	116		Taper Pin	(2)
21		Enclosure Cap	(1)	117		Terminal Block Assembly	(1)
22		Exciter Cover - Drive End	(1)	118	22-56-9115	Terminal Cover - Motor Wire Kit	(1)
23		Exciter Cover - Free End	(1)	119	22-56-9110	Terminal Cover - UI Wire Kit	(1)
24	28-28-7225	Exciter Housing	(1)	120	43-70-0080	Hinge Pivot Thrust Bearing	(1)
25		Exciter Shaft - Small Mass	(1)	121	44-94-6205	Tie Rod	(1)
26	06-75-7105	M8 x 16mm Flanged Hex Bolt	(9)	122		Harting PCB - Tool Side	(1)
27	05-55-2880	Flanged Hex Nut	(4)	123		Lock-Off Lever Torsion Spring	(1)
28	45-88-9045	Flat Washer	(4)	124		Rock Guard	(1)
30	05-90-0320	Flat Washer	(6)	125		UI Bezel with Label	(1)
31	05-90-0315	Flat Washer	(4)	126		UI Support	(1)
32	43-40-1010	Frame Weldment - Left Side	(1)	127		Handle Isolation - Lower Assembly	(1)
33	43-40-1015	Frame Weldment - Right Side	(1)	128	42-25-2595	V-Belt	(1)
34	31-10-9110	Front Logo Plate Assembly	(1)	129	10-20-5406	Warning Label	(2)
35		Front Metal Rail	(2)	130	10-20-5409	Warning Label	(1)
36		Front Rubber Boot - Chassis	(2)	131	10-20-5408	Warning Label	(1)
37		G2 Control Board Assembly	(1)	132	45-88-9095	M4 Washer	(2)
39	22-90-0285	Grommet - UI Interface	(1)	133		Wire Clamp - Motor Wires	(2)
41	42-40-7090	Lower Handle Bushing	(2)	134		Wire Trap - Cover	(1)
42		Heavy Pulley - Exciter	(1)	135		Handle Isolation - Upper Assembly	(1)
43		Heavy Pulley - Motor	(1)	136		Friction Ring	(4)
45	34-80-7020	Internal Retaining Ring	(2)	137		O-Ring	(4)
46		Knob with CollarAlt	(2)	138		Cross Pin	(2)
48	44-04-2135	Left Leg Assembly	(1)	139		Upper Handle Isolator	(2)
49		Lever Lock Out	(1)	140		UI Housing Gasket	(2)
50		Lift Handle	(1)	141		Drop Off Screw	(1)
51	44-66-7120	Lift Plate	(1)	142	23-78-1245	Nylon Cable Tie	(3)
52	42-74-0120	Lock Bar	(1)	143	12-20-9860	Service Nameplate	(1)
53	44-90-9010	Loop Clamp	(2)	144		M10 Flat Washer	(4)
54	43-62-8505	Lower Base Weldment	(1)	145		M8 Bellville Washer	(3)
55	05-81-0132	M6 x 14mm Pan Hd. T-30 Mach. Scr.	(3)	146		M10 Bellville Washer	(4)
56	06-75-7075	M10 x 16mm Hex Flange Hd. Bolt	(8)	200	42-28-2775	Chassis Rubber Boot Svc. Kit (Set of 2)	(1)
57	06-75-7090	M10 x 20mm Hex Flange Hd. Bolt	(12)	201	42-36-8560	Lift Plate Service Kit	(1)
58		M12 x 70mm Cap Hd. Hex Dr. Mach.	(2)	202	44-66-7240	Front Logo Plate Service Kit	(1)
59	06-75-7085	M16 x 140mm Hex Head Mach. Screw	(4)	203	31-12-9085	Chassis Tube Cap Service Kit (Set of 2)	(1)
60	05-74-7050	M8 x 20mm Hex Washer Hd. Screw	(5)	205	44-66-7240	Exciter Cover - Free End Service Assy.	(1)
61	06-75-7080	M8 x 50mm Cap Hd. Hex Dr. Mach. Sc.	(8)	206	44-66-7245	Exciter Cover - Drive End Service Assy.	(1)
62	05-74-7075	M4 x 20mm Pan Hd. T-20 Mach. Screw	(4)	207	14-46-9665	Bolt/Washer Service Kit (Set of 4)	(1)
63	05-81-0105	M3 x 10mm Flat Head T-10 Mach. Scr.	(2)	208	14-46-9670	Exciter Pulley Service Kit	(1)
64	05-55-3160	M12 Flanged Locknut	(2)	210	14-46-9675	Motor Service Kit	(1)
65	05-74-7095	M12 x 1.75-45 FHCS	(2)	211	14-32-0305	Belt Guard Service Kit	(1)
66	06-97-5505	M6 Lock Washer	(2)	212	14-46-9685	Label Service Kit	(1)
67	06-75-7120	M6 x 8mm Hex Drive Cap Hd. Screw	(2)	213	14-46-9705	Motor Pulley Service Kit	(1)
68	44-66-7125	Middle Base Plate	(1)	214	14-46-9940	Rock Guard Service Kit	(1)
69	23-30-0945	Motor	(1)	215	14-46-9660	Isolator and Belt Service Kit	(1)
71		MX Battery Interface - Cover	(1)	216	14-46-9650	Lift Handle Service Kit (Set of 1)	(1)
72		MX Battery Interface - Support	(1)	217	14-46-9655	Handle Bumper Service Kit (Set of 4)	(1)
73	23-94-9920	Wire Assembly	(1)	218	14-46-9645	Handle Isolator Service Kit (Set of 1)	(2)
75		Neutral Button	(1)	219	14-46-9975	Handle Knob Service Kit (Set of 1)	(2)
76		M8 Locknut with Nylon Insert	(4)	220	14-46-9605	Electronics Housing Isolator Service Kit	(1)
77		One-Key Card Door	(1)	221	14-46-9610	Electronics Housing Doors Service Kit	(1)
79	34-40-8050	O-Ring	(2)	222	14-46-9615	Electronics Housing Halves Service Kit	(1)
80	43-96-5480	Parallel Key - 3/16" x 3/16" x 3/4"	(2)	223	14-46-9620	Main PCB Service Kit	(1)
81		Coin Cell PCBA	(1)	224	14-50-7035	One-Key Tool Side Service Assembly	(1)
82		HMIUI PCBA	(1)	225	14-20-9195	Battery Rail Service Assembly	(1)
83		One-Key Card PCBA	(1)	226	14-46-9625	UI Button Service Kit	(1)
84		Pin - Lock Off Lever	(1)	227	14-46-9630	UI Support Service Kit	(1)
85		Pivot Bushing	(2)	228	14-20-9200	UI Bezel Service Assembly	(1)
86		Pivot Latch	(1)	229	14-46-9710	UI PCBA Service Kit	(1)
87		Pivot Shaft	(2)	230	14-46-9635	UI Wire Strain Relief Service Kit	(1)
89		M5 x 115mm Pan Hd. Plastite T-25 Scr.	(5)	231	43-62-7260	Upper Handle Service Assembly	(1)
90		Rear Metal Rail	(2)				
91		Rear Rubber Boot - Chassis	(2)				
92		Release Lever	(1)				
93	44-04-2130	Right Leg Assembly	(1)				

# COMPACTOR PLATE SERVICE ASSEMBLY

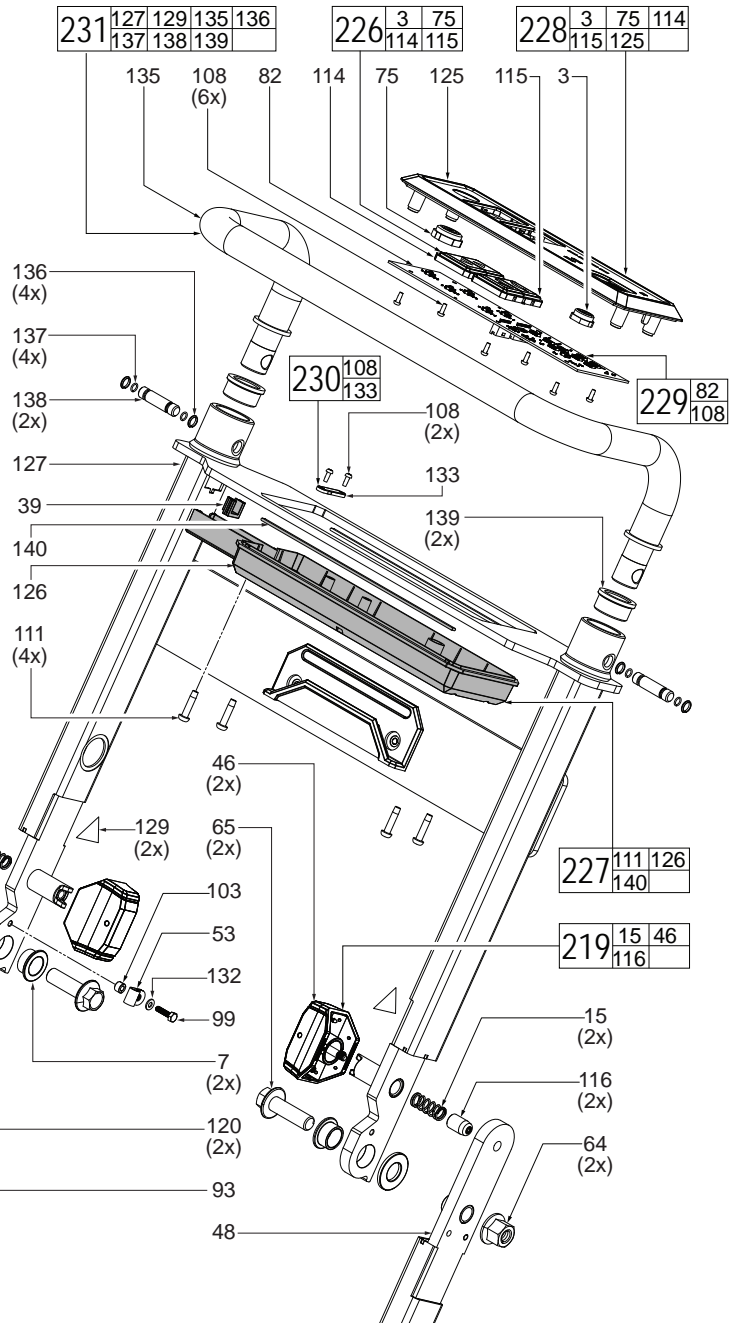


Isolator and Belt Service Kit (215) contains a set of 4 hardware components (27, 56, 97, 144 and 146) and also includes 1 V-Belt (128). V-Belt not shown on this page, see pages 2 and 7.

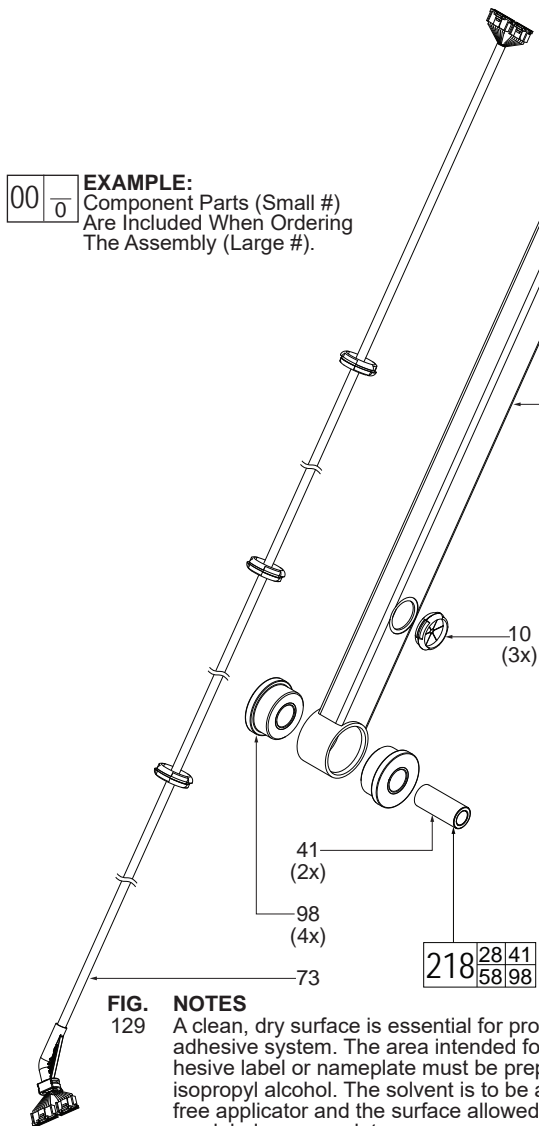
FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
27	05-55-2880	M10 Flanged Hex Nut	(4)
50	-----	Lift Handle	(4)
54	43-62-8505	Lower Base Weldment	(1)
56	-----	M10 x 16mm Hex Flange Bolt	(4)
57	06-75-7090	M10 x 20mm Hex Wash. Mach. Scr.	(4)
61	06-75-7080	M8 x 1.25 x 50mm Cap Hd. Hex Drive	(8)
68	44-66-7125	Middle Base Plate	(1)
95	-----	Rubber Bumper - Type 3	(4)
97	-----	Rubber Bumper - Type 2	(4)
128	42-25-2595	V-Belt (Not shown on this page)	(1)
144	-----	M10 Flat Washer	(4)
146	-----	M10 Bellville Washer	(4)
215	14-46-9660	Isolator and Belt Service Kit	(1)
216	14-46-9650	Lift Handle Service Kit (Set of 1)	(1)
217	14-46-9655	Handle Bumper Service Kit (Set of 4)	(1)

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
3	42-42-4010	Arm Button	(1)
7	-----	Hinge Pivot Bearing	(2)
10	-----	Expandable Grommet	(1)
15	-----	Compression Spring	(2)
39	22-90-0285	Grommet - UI Interface	(1)
41	42-40-7090	Lower Handle Bushing	(2)
46	-----	Knob with CollarAlt	(2)
48	44-04-2135	Left Leg Assembly	(1)
53	44-90-9010	Loop Clamp	(1)
64	05-55-3160	M12 Flanged Locknut	(2)
65	05-74-7095	M12 x 1.75-45 FHCS	(2)
73	23-94-9920	Wire Assembly	(1)
75	-----	Neutral Button	(1)
82	-----	HMIUI PCBA	(1)
93	44-04-2130	Right Leg Assembly	(1)
98	42-40-7095	Rubber Bumper - Handle	(4)
99	06-81-0098	M4 x 16mm Hex Hd. Screw	(2)
103	31-86-0380	M8 x 5mm Spacer	(1)
108	-----	M3 x 8mm Pan Hd. ST T-10 Screw	(8)
111	-----	M5 x 22mm Pan Hd. ST T-25 Screw	(4)
114	-----	Switch Boot - Direction	(1)
115	-----	Switch Boot - Speed	(1)
116	-----	Taper Pin	(2)
120	43-70-0080	Hinge Pivot Thrust Bearing	(1)
125	-----	UI Bezel with Label	(1)
126	-----	UI Support	(1)
127	-----	Handle Isolation - Lower Assembly	(1)
129	10-20-5406	Warning Label	(2)
132	-----	M4 Washer	(2)
133	-----	Wire Clamp - Motor Wires	(1)
135	-----	Handle Isolation - Upper Assembly	(1)
136	-----	Friction Ring	(4)

## FOLDING HANDLE SERVICE ASSEMBLY



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

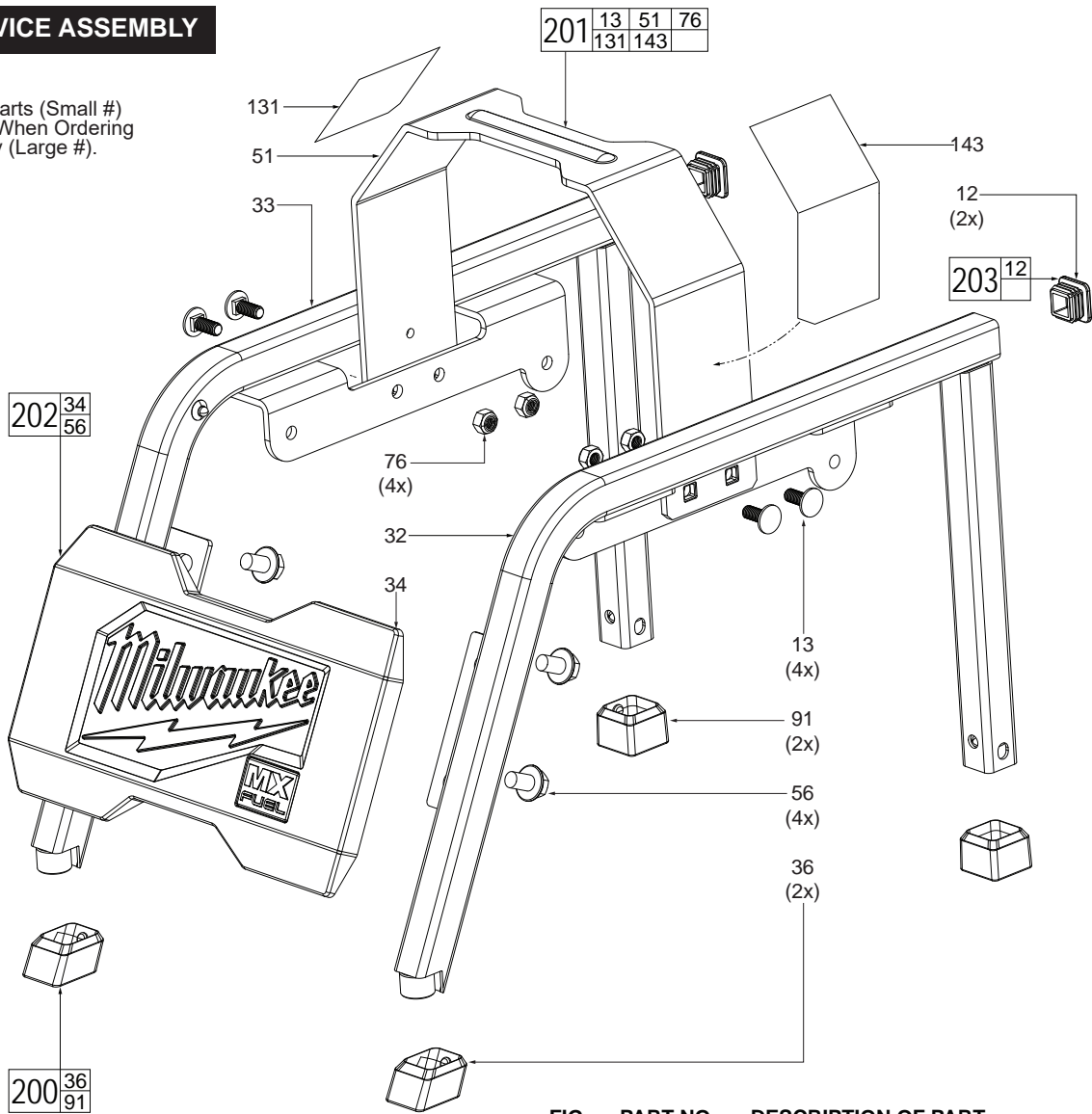


**FIG. NOTES**  
129 A clean, dry surface is essential for proper performance for any adhesive system. The area intended for application of any adhesive label or nameplate must be prepared by cleaning with isopropyl alcohol. The solvent is to be applied with a clean, lint free applicator and the surface allowed to dry before applying any label or nameplate.

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
137	-----	O-Ring	(4)
138	-----	Cross Pin	(2)
139	-----	Upper Handle Isolator	(2)
140	-----	UI Housing Gasket	(2)
218	14-46-9645	Handle Isolator Service Kit (Set of 1)	(2)
219	14-46-9975	Handle Knob Service Kit (Set of 1)	(2)
226	14-46-9625	UI Button Service Kit	(1)
227	14-46-9630	UI Support Service Kit	(1)
228	14-20-9200	UI Bezel Service Assembly	(1)
229	14-46-9710	UI PCBA Service Kit	(1)
230	14-46-9635	UI Wire Strain Relief Service Kit	(1)
231	43-62-7260	Upper Handle Service Assembly	(1)

# CHASSIS SERVICE ASSEMBLY

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

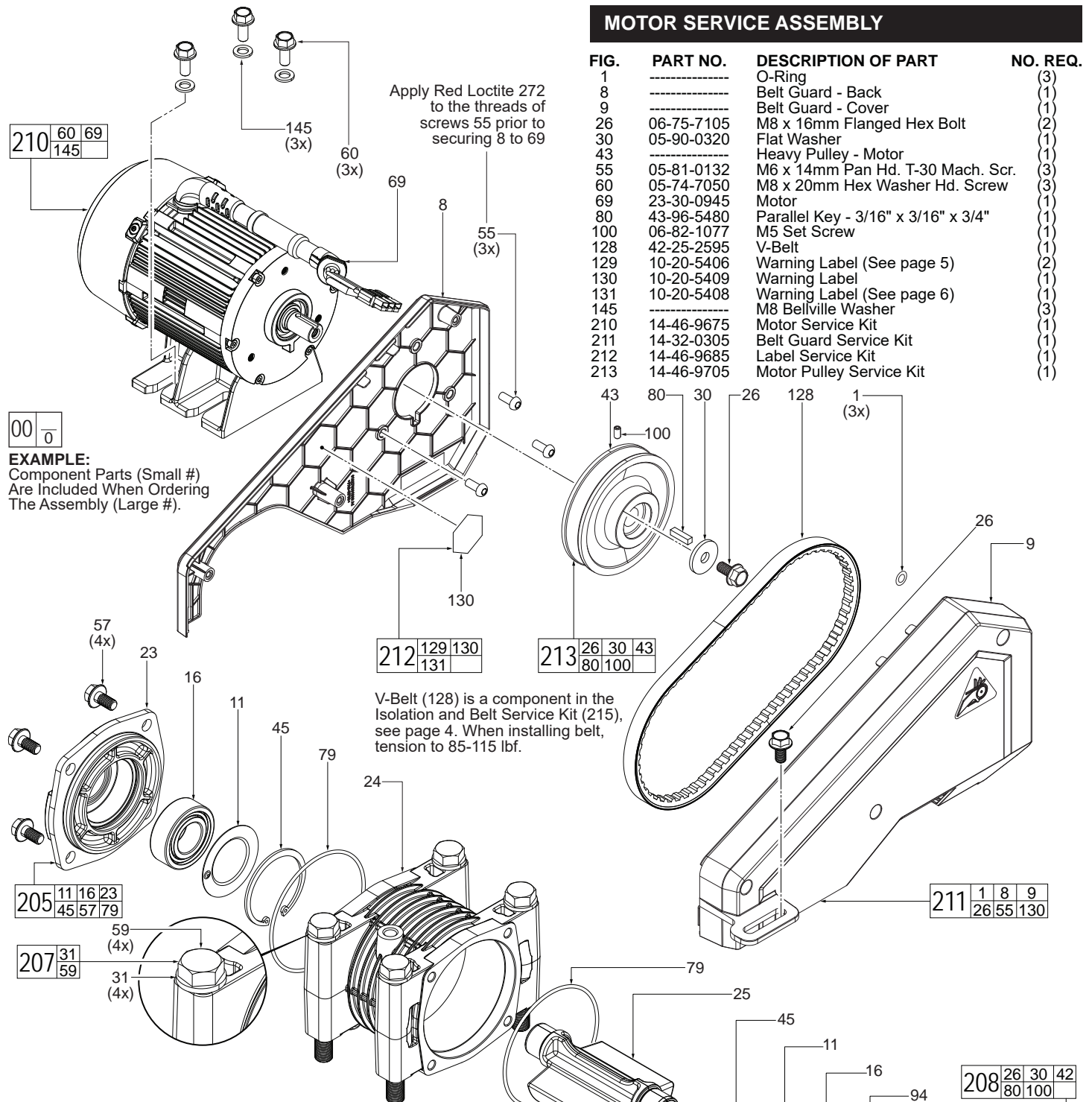


**FIG. 12 NOTES**  
 Apply Clear Loctite 495 to tube caps prior to installing onto chassis.

131,143 A clean, dry surface is essential for proper performance for any adhesive system. The area intended for application of any adhesive label or nameplate must be prepared by cleaning with isopropyl alcohol. The solvent is to be applied with a clean, lint free applicator and the surface allowed to dry before applying any label or nameplate.

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
12	-----	Tube Cap	(2)
13	-----	M8 x 1.25 x 20mm Carriage Bolt	(4)
32	43-40-1010	Frame Weldment - Left Side	(1)
33	43-40-1015	Frame Weldment - Right Side	(1)
34	31-10-9110	Front Logo Plate Assembly	(1)
36	-----	Front Rubber Boot - Chassis	(2)
51	44-66-7120	Lift Plate	(1)
56	06-75-7075	M10 x 16mm Hex Flange Hd. Bolt	(4)
76	-----	M8 Locknut with Nylon Insert	(4)
91	-----	Rear Rubber Boot - Chassis	(2)
131	10-20-5408	Warning Label	(1)
143	12-20-9860	Service Nameplate	(1)
200	42-28-2775	Chassis Rubber Boot Svc. Kit (Set of 2)	(1)
201	42-36-8560	Lift Plate Service Kit	(1)
202	44-66-7140	Front Logo Plate Service Kit	(1)
203	31-12-9085	Chassis Tube Cap Service Kit (Set of 2)	(1)

## MOTOR SERVICE ASSEMBLY



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

210	60	69
	145	

212	129	130
	131	

213	26	30	43
	80	100	

205	11	16	23
	45	57	79

207	31
	59

211	1	8	9
	26	55	130

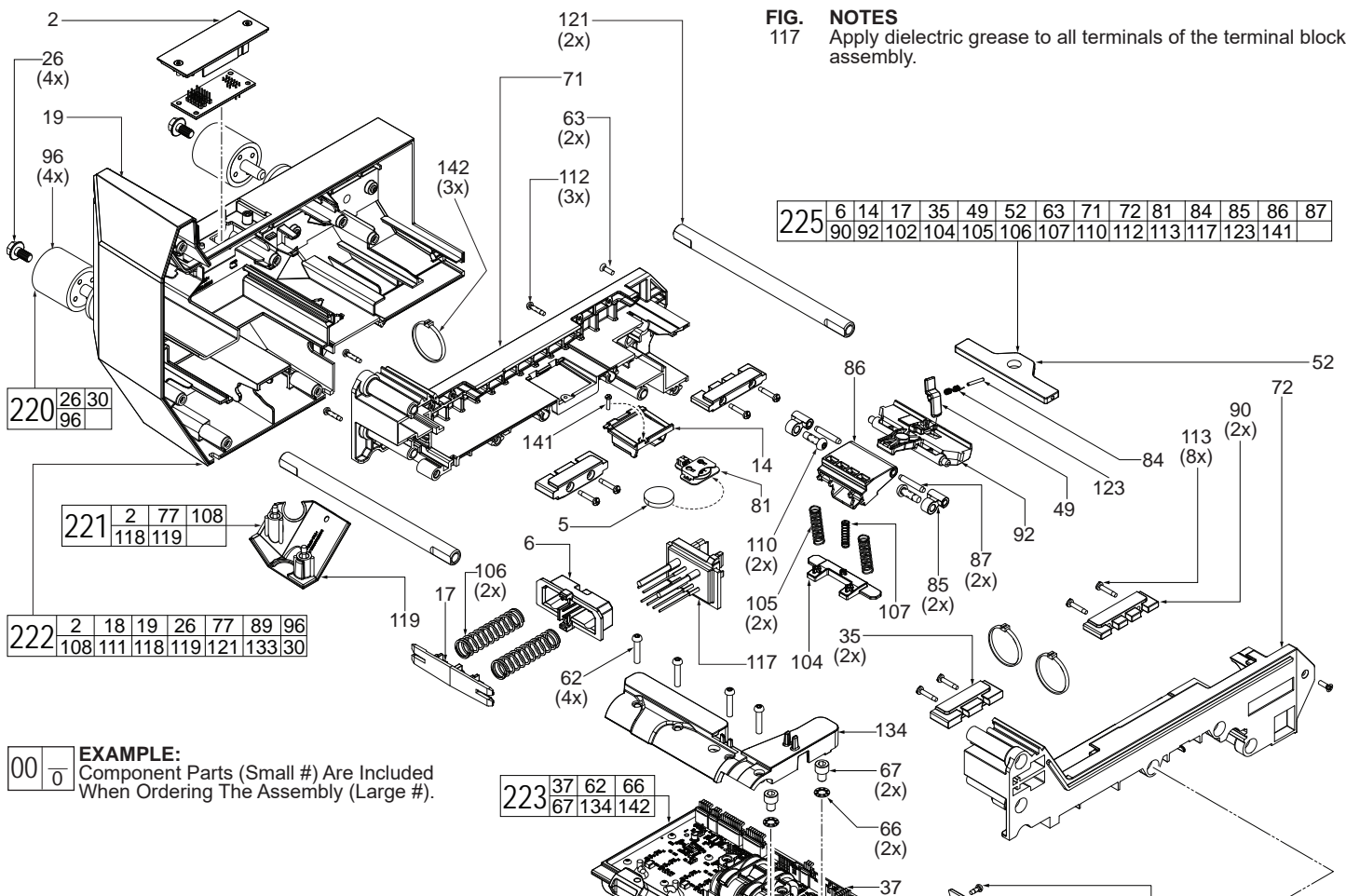
208	26	30	42
	80	100	

206	11	16	22	45
	57	79	94	

## EXCITER SERVICE ASSEMBLY

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
11	05-90-0705	Cap Washer - Type B	(2)
16	-----	Cylindrical Roller Bearing	(2)
22	-----	Exciter Cover - Drive End	(1)
23	-----	Exciter Cover - Free End	(1)
24	28-28-7225	Exciter Housing	(1)
25	36-18-0715	Exciter Shaft - Small Mass	(1)
26	06-75-7105	M8 x 16mm Flanged Hex Bolt	(1)
30	05-90-0320	Flat Washer	(1)
31	05-90-0315	Flat Washer	(4)
42	-----	Heavy Pulley - Exciter	(1)
45	34-80-7020	Internal Retaining Ring	(2)
57	06-75-7090	M10 x 20mm Hex Flange Hd. Bolt	(8)
59	06-75-7085	M16 x 140mm Hex Head Mach. Screw	(4)
79	34-40-8050	O-Ring	(2)
80	43-96-5480	Parallel Key - 3/16" x 3/16" x 3/4"	(1)
94	-----	Rotary Shaft Lip Seal	(1)
100	06-82-1077	M5 Set Screw	(1)
205	44-66-7240	Exciter Cover - Free End Service Assy.	(1)

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
206	44-66-7245	Exciter Cover - Drive End Service Assy.	(1)
207	14-46-9665	Bolt/Washer Service Kit (Set of 4)	(1)
208	14-46-9670	Exciter Pulley Service Kit	(1)



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

## ELECTRONIC SERVICE ASSEMBLY

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
2	31-21-0375	Access Door - Interface Kit	(1)
5	-----	3V Coin Cell Battery (CR2032)	(1)
6	-----	Battery Ejector	(1)
14	31-15-8960	Coin Cell Door Kit	(1)
17	-----	Ejection Spring Holder	(1)
18	-----	Electronics Housing Cover Assembly	(1)
19	-----	Electronics Housing Support Assembly	(1)
20	-----	Enclosure	(1)
21	-----	Enclosure Cap	(1)
26	06-75-7105	M8 x 16mm Flanged Hex Bolt	(4)
30	05-90-0320	Flat Washer	(4)
35	-----	Front Metal Rail	(2)
37	-----	G2 Control Board Assembly	(1)
49	-----	Lever Lock Out	(1)
52	42-74-0120	Lock Bar	(1)
62	05-74-7075	M4 x 20mm Pan Hd. T-20 Mach. Screw	(4)
63	05-81-0105	M3 x 10mm Flat Head T-10 Mach. Scr.	(2)
66	06-97-5505	M6 Lock Washer	(2)
67	06-75-7120	M6 x 8mm Hex Drive Cap Hd. Screw	(2)
71	-----	MX Battery Interface - Cover	(1)
72	-----	MX Battery Interface - Support	(1)
77	-----	One-Key Card Door	(1)
81	-----	Coin Cell PCBA	(1)
83	-----	One-Key Card PCBA	(1)
84	-----	Pin - Lock Off Lever	(1)
85	-----	Pivot Bushing	(2)
86	-----	Pivot Latch	(1)
87	-----	Pivot Shaft	(2)
89	-----	M5 x 115mm Pan Hd. Plastite T-25 Scr.	(5)
90	-----	Rear Metal Rail	(2)
92	-----	Release Lever	(1)
96	-----	Rubber Bumper - 35 x 35mm - Type 2	(4)
104	-----	Pivot Latch Spring Holder	(1)
105	-----	Spring	(2)
106	-----	Spring	(2)
107	-----	Spring	(1)
108	-----	M3 x 8mm Pan Hd. ST T-10 Screw	(4)
110	-----	M5 x 16mm Pan Hd. ST T-25 Screw	(2)
111	-----	M5 x 22mm Pan Hd. ST T-25 Screw	(4)
112	05-74-7070	M3 x 14mm ST T-10 Screw	(3)
113	-----	M3 x 16mm ST Non-Return TP Screw	(8)
117	-----	Terminal Block Assembly	(1)
118	22-56-9115	Terminal Cover - Motor Wire Kit	(1)

**FIG. NOTES**  
117 Apply dielectric grease to all terminals of the terminal block assembly.

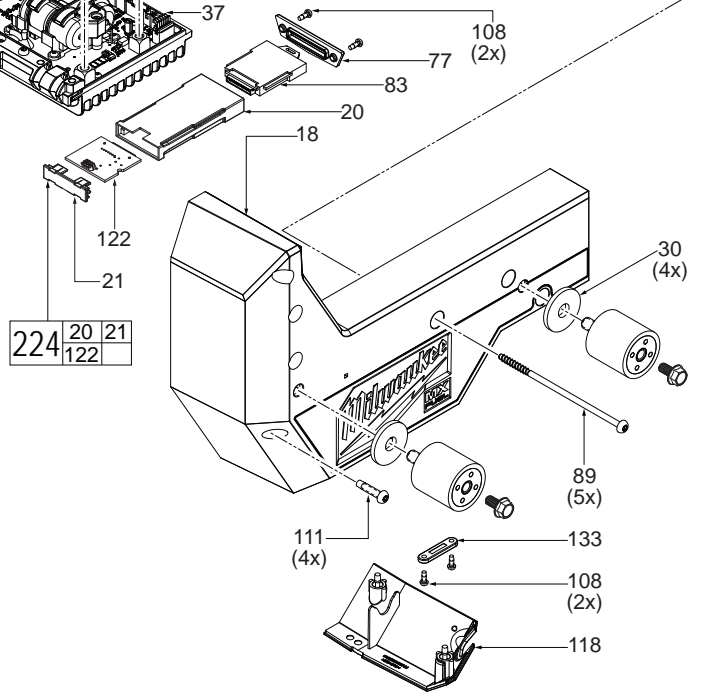


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
119	22-56-9110	Terminal Cover - UI Wire Kit	(1)
121	44-94-6205	Tie Rod	(2)
122	-----	One-Key PCB - Tool Side	(1)
123	-----	Lock-Off Lever Torsion Spring	(1)
133	-----	Wire Clamp - Motor Wires	(1)
134	-----	Wire Trap - Cover	(1)
141	-----	Drop Off Screw	(1)
142	23-78-1245	Nylon Cable Tie	(3)
220	14-46-9605	Electronics Housing Isolator Service Kit	(1)
221	14-46-9610	Electronics Housing Doors Service Kit	(1)
222	14-46-9615	Electronics Housing Halves Service Kit	(1)
223	14-46-9620	Main PCBA Service Kit	(1)
224	14-50-7035	One-Key Tool Side Service Assembly	(1)
225	14-20-9195	Battery Rail Service Assembly	(1)

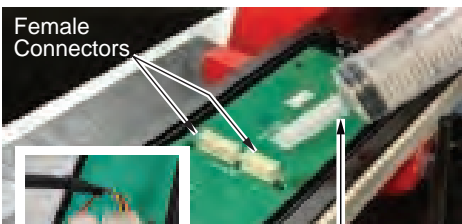
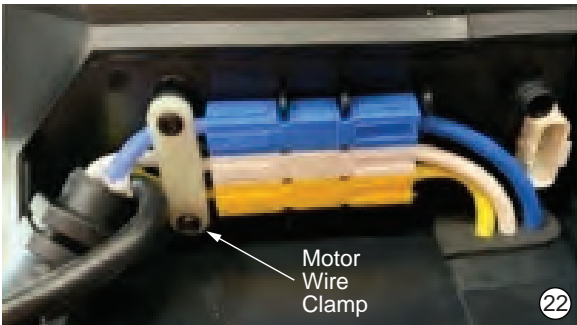
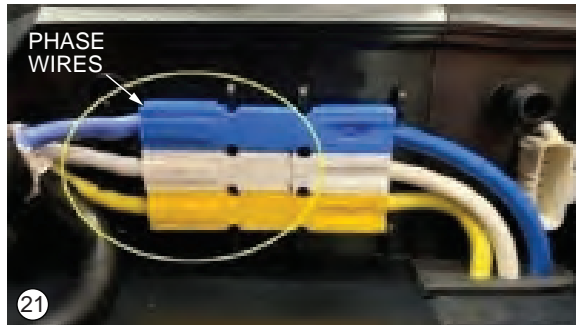
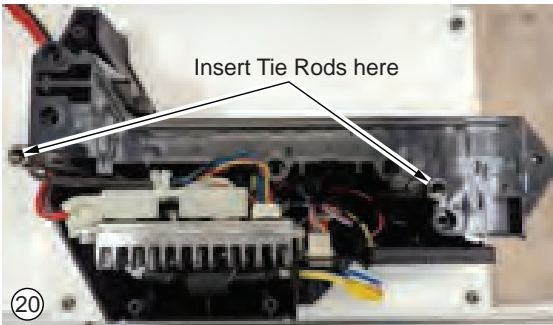
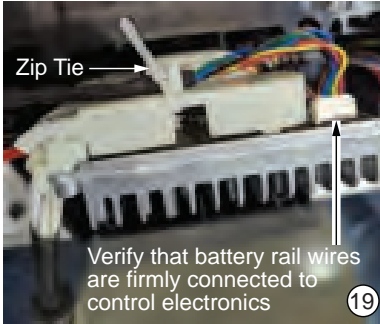
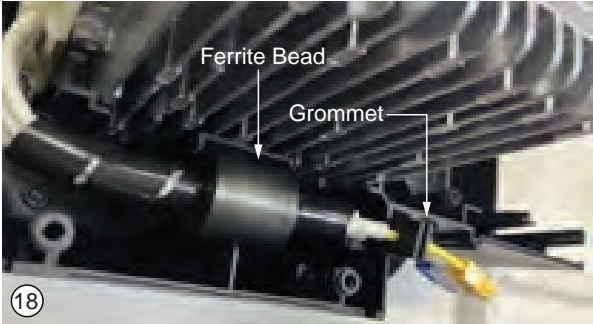
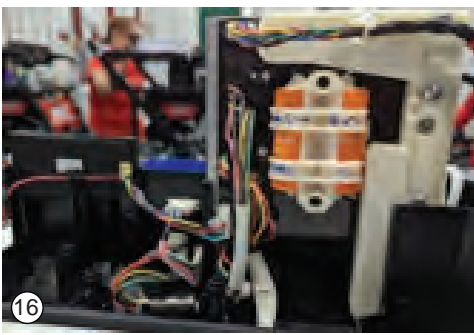


# SCREW TORQUE SPECIFICATIONS

FIG.	PART NO.	DESCRIPTION OF FASTENER	WHERE USED	SEAT TORQUE	
				(kgf-cm)	(in-lbs)
<b>COMPACTOR PLATE SERVICE ASSEMBLY</b>					
27	05-55-2880	M10 Flanged Hex Nut	Lower Base Weldment / Rubber Bumper Type 2	408-477	354-414
56	-----	M10 x 16mm Hex Flange Bolt	Rubber Bumper - Type 2	529-633	459-549
57	06-75-7090	M10 x 20mm Hex Wash. Mach. Scr.	Middle Base Plate / Chassis	274-315	237-273
60	05-74-7050	M8 x 20mm Hex Washer Hd. Screw	Rock Guard / Lower Base Weldment	274-315	237-273
61	06-75-7080	M8 x 1.25 x 50mm Cap Hd. Hex Drive	Lift Handle / Middle Base Plate	305-326	264-282
95	-----	Rubber Bumper - Type 3	Middle Base Plate	Hand Tighten	
<b>FOLDING HANDLE SERVICE ASSEMBLY</b>					
58	-----	M12 x 70mm Cap Hd. Hex Dr. Mach.	Right and Left Leg Assy. / Middle Base Plate	321-368	278-319
65	05-74-7095	M12 x 1.75-45 FHCS	R & L Leg Assy. / Handle Isolation - Lower Assy.	306-408	265-354
99	06-81-0098	M4 x 16mm Hex Hd. Screw	Loop Clamp / Handle Isolation - Lower Assy.	9-11	7.8-9.5
108	-----	M3 x 8mm Pan Hd. ST T-10 Screw	HMIUI PCBA / UI Bezel	6-8	5.2-6.9
111	-----	M5 x 22mm Pan Hd. ST T-25 Screw	UI Support / UI Bezel	26-30	22-26
<b>CHASSIS SERVICE ASSEMBLY</b>					
13	-----	M8 x 1.25 x 20mm Carriage Bolt	Right and Left Frame Weldment / Lift Plate	274-315	237-273
56	06-75-7075	M10 x 16mm Hex Flange Hd. Bolt	Right and Left Frame Weldment / Front Logo Plate	274-315	237-273
<b>MOTOR SERVICE ASSEMBLY</b>					
9	-----	Belt Guard - Cover	Belt Guard Back	26-30	22-26
26	06-75-7105	M8 x 16mm Flanged Hex Bolt	Motor Spindle	274-315	237-273
26	06-75-7105	M8 x 16mm Flanged Hex Bolt	Belt Guard Cover / Middle Base Plate	40-46	34-39
55	05-81-0132	M6 x 14mm Pan Hd. T-30 Mach. Scr.	Belt Guard Back / Motor	48-60	41-52
60	05-74-7050	M8 x 20mm Hex Washer Hd. Screw	Motor / Middle Base Plate	274-315	237-273
100	06-82-1077	M5 Set Screw	Heavy Pulley - Motor	34-57	29-49
<b>EXCITER SERVICE ASSEMBLY</b>					
26	06-75-7105	M8 x 16mm Flanged Hex Bolt	Exciter Shaft	274-315	237-273
57	06-75-7090	M10 x 20mm Hex Flange Hd. Bolt	Exciter Cover-Free End / Exciter Housing	500-550	434-477
57	06-75-7090	M10 x 20mm Hex Flange Hd. Bolt	Exciter Cover-Drive End / Exciter Housing	500-550	434-477
59	06-75-7085	M16 x 140mm Hex Head Mach. Screw	Exciter Housing / Lower Base Weldment	1670-1843	1449-1599
100	06-82-1077	M5 Set Screw	Heavy Pulley - Exciter	34-57	29-49
<b>ELECTRONICS SERVICE ASSEMBLY</b>					
2	31-21-0375	Access Door - Interface Kit	Electronics Housing Support	4-7	3.4-6.0
26	06-75-7105	M8 x 16mm Flanged Hex Bolt	R & L Frame Weldment / Rubber Bumper-Type 2	241-465	209-403
62	05-74-7075	M4 x 20mm Pan Hd. T-20 Mach. Screw	Wire Trap Cover / G2 Control Board Assembly	11-17	9-14
63	05-81-0105	M3 x 10mm Flat Head T-10 Mach. Scr.	Battery Interface Cover / Battery Interface Support	5-7	4.3-6.0
67	06-75-7120	M6 x 8mm Hex Drive Cap Hd. Screw	G2 Control Board Assembly	57-69	49-59
89	-----	M5 x 115mm Pan Hd. Plastite T-25 Scr.	Electronics Housing Cover / Batt. Interface Support	22-28	19-24
96	-----	Rubber Bumper - 35 x 35mm - Type 2	Electronics Housing Support and Cover	Hand Tighten	
108	-----	M3 x 8mm Pan Hd. ST T-10 Screw	One Key Card Door and Wire Clamp	4-6	3.4-5.2
110	-----	M5 x 16mm Pan Hd. ST T-25 Screw	Pivot Bushing	22-28	19-24
111	-----	M5 x 22mm Pan Hd. ST T-25 Screw	Electronics Housing Cover	22-28	19-24
112	05-74-7070	M3 x 14mm ST T-10 Screw	Battery Interface Cover	11-16	9-13
113	-----	M3 x 16mm ST Non-Return TP Screw	Front and Rear Metal Rails	11-16	9-13
118	22-56-9115	Terminal Cover - Motor Wire Kit	Electronics Housing Cover	11-16	9-13
119	22-56-9110	Terminal Cover - UI Wire Kit	Electronics Housing Support	11-16	9-13
141	-----	Drop Off Screw	Coin Cell Door Kit	4-7	3.4-6.0

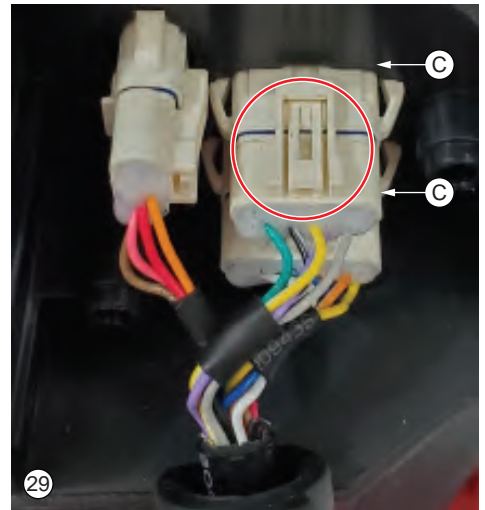
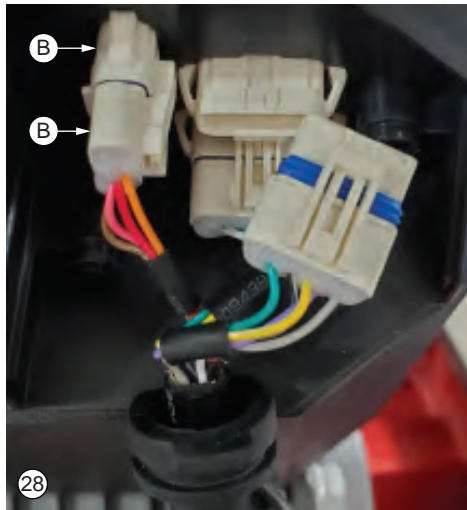
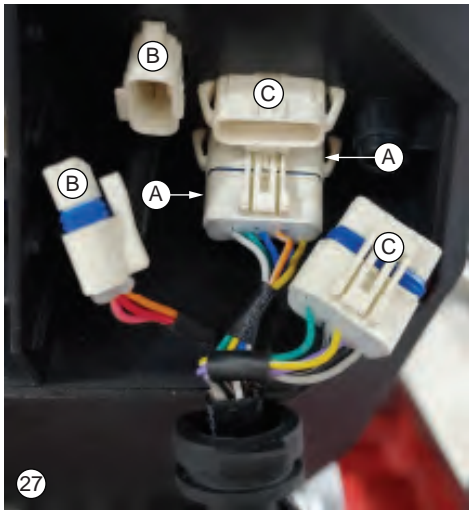
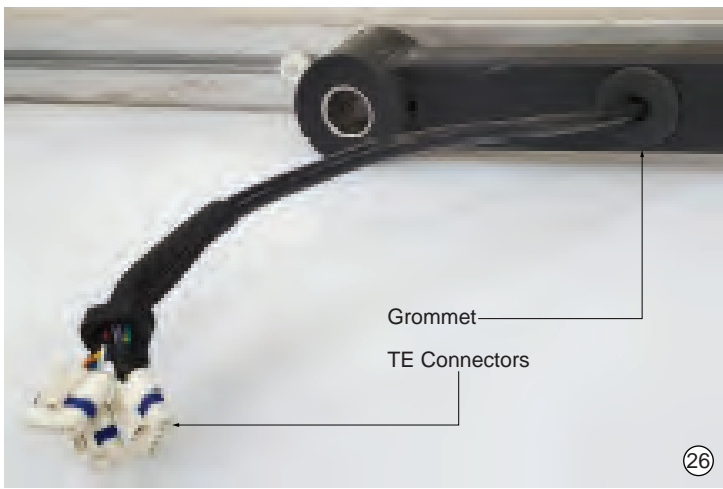


1. Verify that the 3V coin cell is oriented as shown in coin cell PCBA.
2. Verify battery rail red and black wire terminals are connected to the control electronics and wires are routed in grooves.
3. Direct phase wires toward groove in wire trap.
4. Verify wires are not pinched under wire trap cover. Fill female connector with dielectric grease. Be sure to cover all pins.
5. Place PCBA in slot provided in housing.
6. Pull rework PCBA through opening in housing as shown.
7. Locate PCBA on pins.
8. Zip-tie small ferrite bead in housing as shown.
9. Verify 4 pin connector is fully seated and visible on opposite side. (Green, yellow, brown, Purple).
10. Verify 6 pin connector is fully seated and visible on opposite side. (White, black, yellow, green, blue, red).
11. Verify 4 pin connector is fully seated and visible on opposite side. (Tan, pink, red, orange).
12. Verify 6-pin motor wire connector is fully seated and visible in housing slot. (Pink, black, white, blue, yellow, orange).
13. Insert one key card into one key host board as shown.
14. Insert one key host board in slot of housing as shown.
15. Fill female connector with dielectric grease to cover all pins.



16. Verify one key host board wires are fully connected to control board.
17. Verify one key card host board wires are fully plugged into coin cell board.
18. Verify phase wires are routed in housing as shown. Be sure ferrite bead is placed in housing cavity and grommet is in housing slot.
19. Zip-tie battery rail wires to wire trap cover, routing as shown, and trim excess zip-tie material. Verify battery rail wire is connected to control electronics.
20. Insert tie-rods and verify no wires will be pinched by screws before placing cover side on top.
21. Verify phase wires are in order shown.

22. Install motor wire clamp.
23. Verify hall wire connector is fully connected.
24. Fill female connectors with dielectric grease.
- 24a. Install male connectors onto female connectors. Be sure connectors are fully seated.
25. Install wire clamp with wire as shown.



26. Pull the TE connector end of harness through hole in tube. Add grommet as shown.

27. Join TE connector 'A' with electronics connector 'A'.

28. Join TE connector 'B' with electronics connector 'B'.

29. Join TE connector 'C' with electronics connector 'C'.

Once all three handlebar connectors are installed onto the electronics housing connectors, be sure all three are seated firmly together and that the small tabs are fully engaged.

When uninstalling a connector from that same housing be sure to avoid damage to the connector. There is a small tab that needs to be depressed to disengage.

30. Thread wire harness through handle tubing, installing grommets as shown. (Verify JST connectors go toward hand grip and TE connectors go toward bottom).

Secure wire harness with wire clamp and screw.