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# PA-17 POT

User Manual

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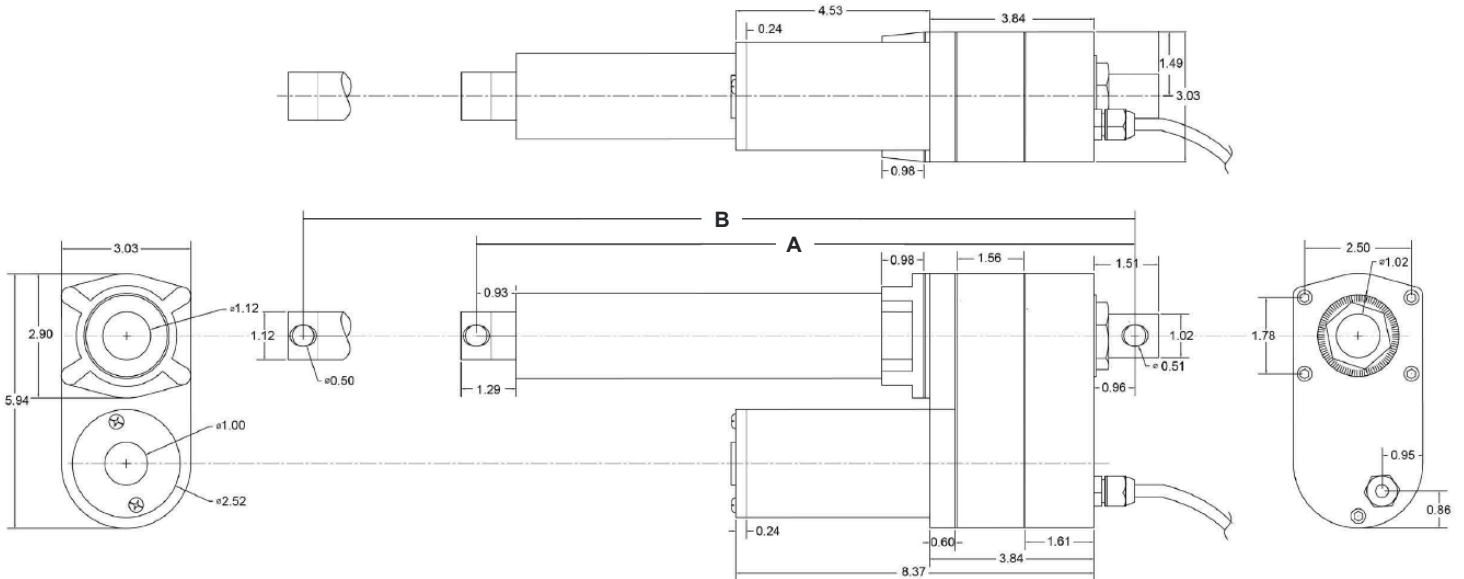
# Specifications

Load (LBS)		No Load Current (A)				Full Load Current (A)				Speed (inch/sec)	
Dynamic	Static	12VDC	24VDC	36VDC	48VDC	12VDC	24VDC	36VDC	48VDC	No Load	Full Load
450	900	3.5	1.8	1.2	0.9	20.0	10.0	6.7	5.0	1.34	1.12
850	1700	3.5	1.8	1.2	0.9	20.0	10.0	6.7	5.0	0.66	0.55
2000	4000	3.5	1.8	1.2	0.9	20.0	10.0	6.7	5.0	0.33	0.27

<b>Stroke</b>	1" to 24"
<b>Limit Switch</b>	Internal - Adjustable
<b>Limit Switch Feedback</b>	Customizable
<b>Screw Type</b>	ACME Screw
<b>Motor Type</b>	Brushed DC Motor
<b>Connector Type</b>	See Page 5
<b>Wire Length</b>	40" (customizable)
<b>Housing Material</b>	Steel No. 45
<b>Rod Material</b>	Stainless Steel 304
<b>Gear Material</b>	Powder Metallurgy Steel Alloy
<b>Color (Shaft)</b>	Black
<b>Color (Motor End)</b>	Black
<b>Noise</b>	<70dB
<b>Duty Cycle</b>	25% (5 minutes on, 15 minutes off)
<b>Operational Temperature</b>	-25°C to 65°C (-13°F to 149°F)
<b>Protection Class</b>	IP65
<b>Feedback Options</b>	Potentiometer (See page 6)
<b>Certifications</b>	See Page 7
<b>Mounting Brackets</b>	Customizable

# Dimensions

Dimensions in inches



## Hole to Hole

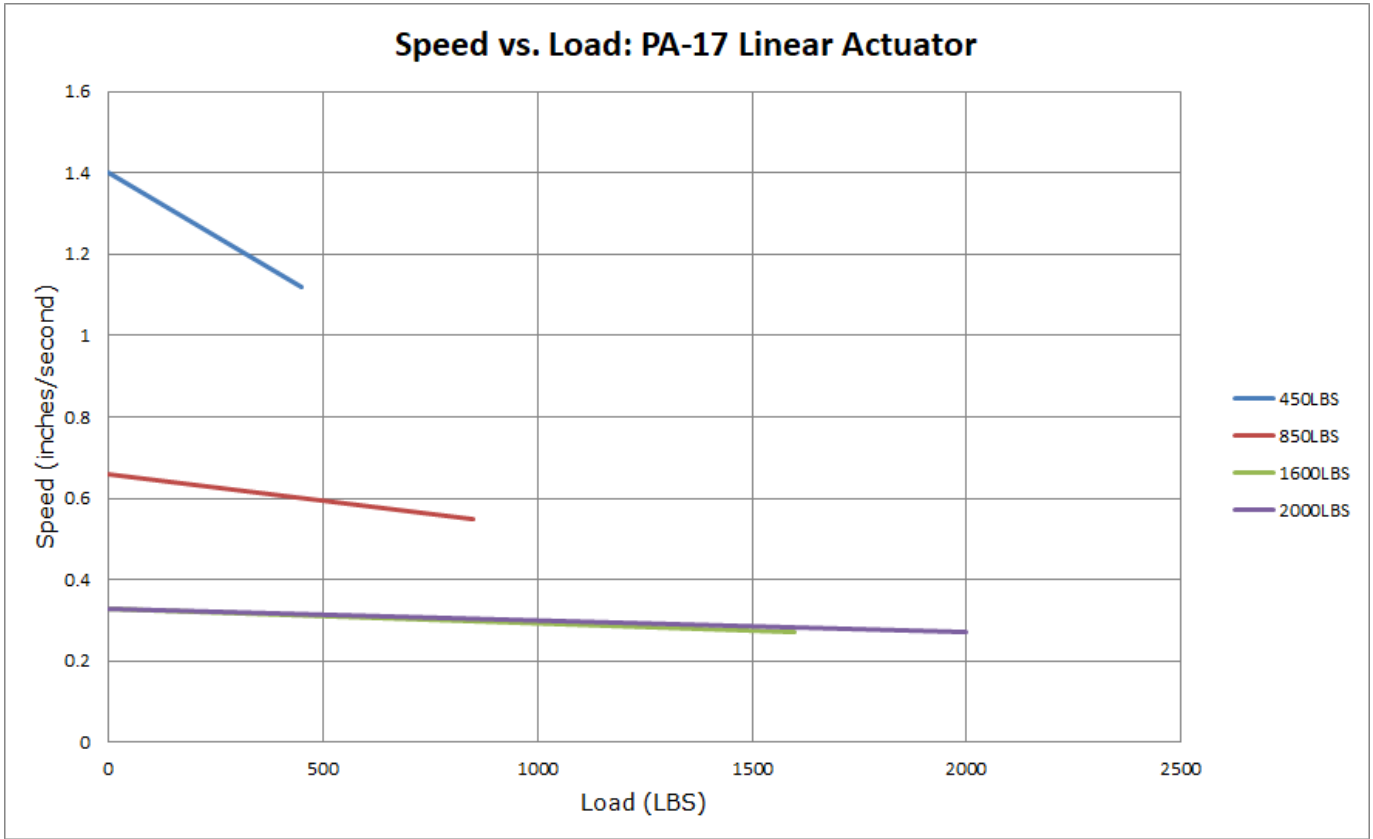
PA-17 POT	Stroke	1	2	3	4	6	8	9	10	12	14	16	18	20	22	24
	A	10.87	11.87	12.87	13.87	15.87	17.87	18.87	19.87	21.87	23.87	25.87	27.87	29.87	31.87	33.87
B	11.87	13.87	15.87	17.87	21.87	25.87	27.87	29.87	33.87	37.87	41.87	45.87	49.87	53.87	57.87	

### For Stroke Length ≤ 24"

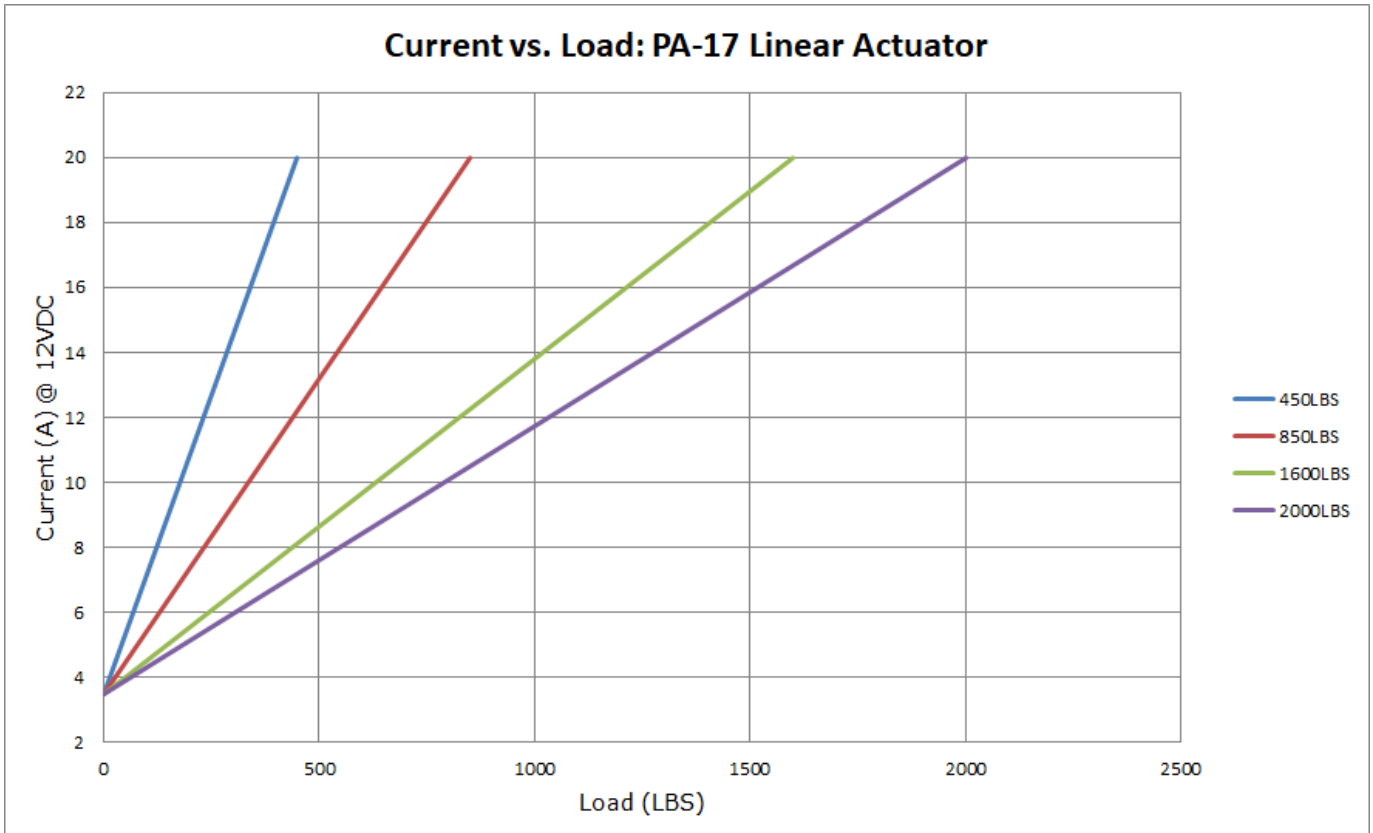
A = Stroke Length + 9.87"

B = Stroke Length x 2 + 9.87"

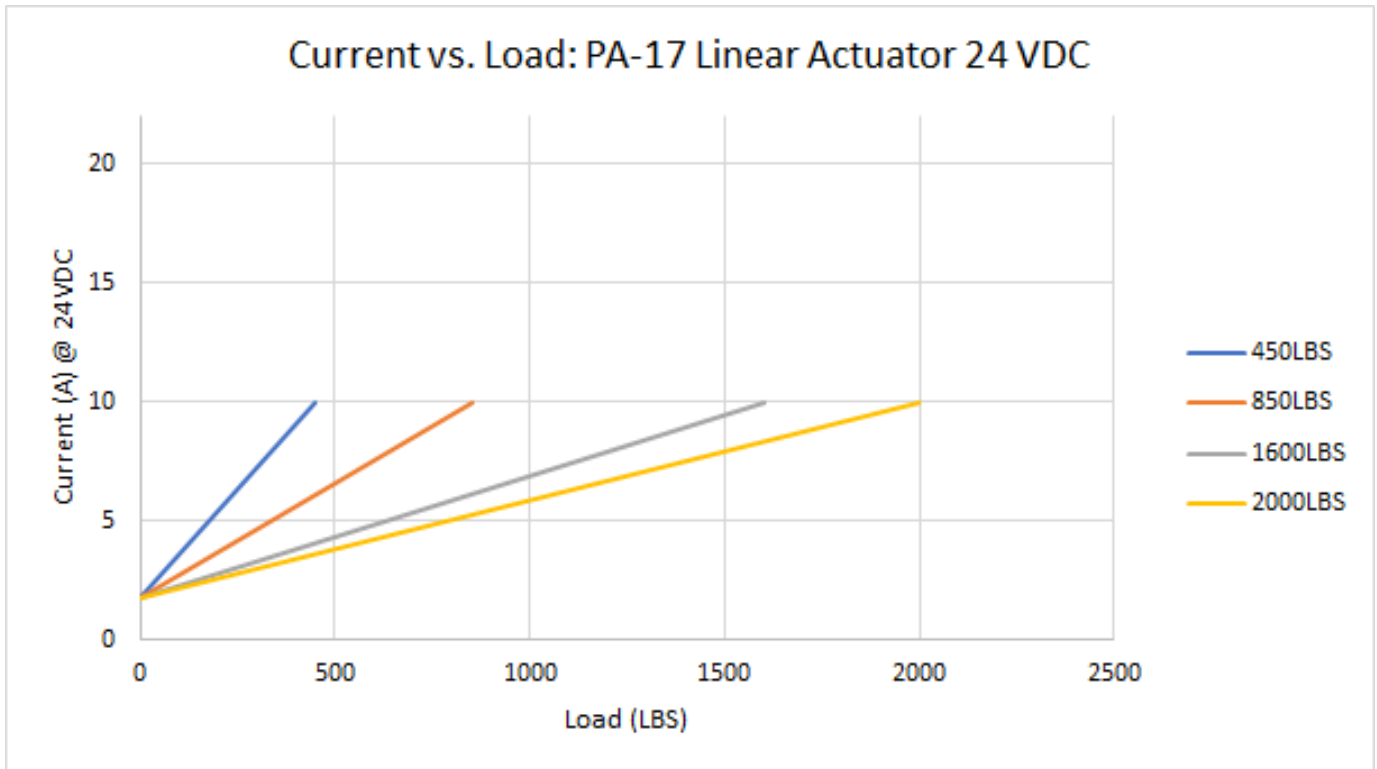
# Speed vs Load



# Current vs Load



# Current vs Load (Cont.)

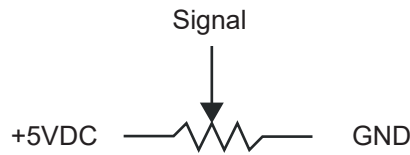


# Connectors & Feedback

## Potentiometer Specifications

\*For Stroke Length up to 24" The PA-17 POT will come with tinned wire leads without connectors.

Motor		Potentiometer		
Red	Black	Red/Blue	Yellow	White
M+ (Extend)	M- (Retract)	Wiper	10K ohm	0K ohm
15 AWG	15 AWG	22 AWG	22 AWG	22 AWG



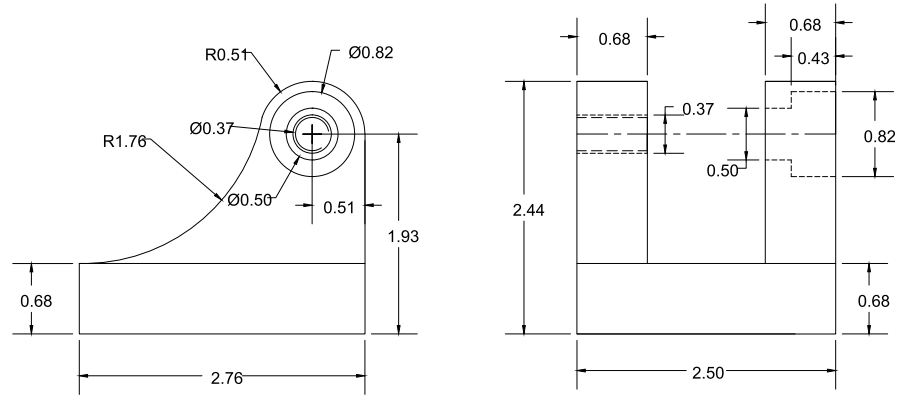
Resistance*	Number of Turns	Tolerance
0-10kΩ	10	+/- 5%

\*Actual resistance value may vary within the 0-10kΩ range based on stroke length.

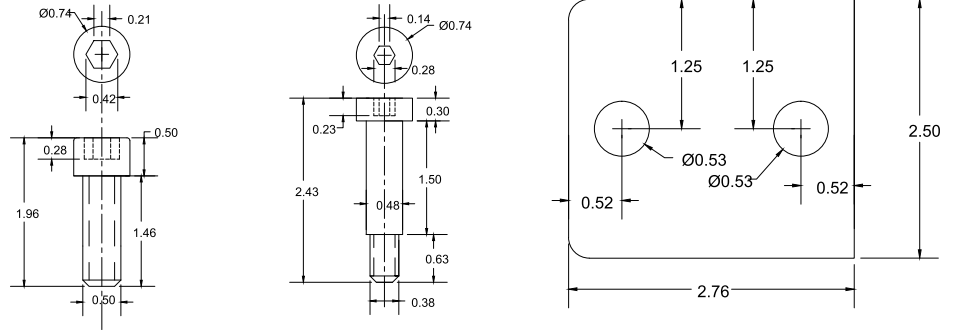
# Mounting Brackets

(Dimensions in inches)

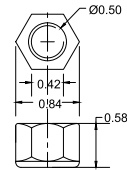
## BRK-17



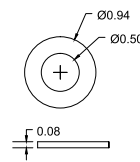
Bolt SAE 0.5" x 13 NC



Nut SAE 0.5" x 13 NC



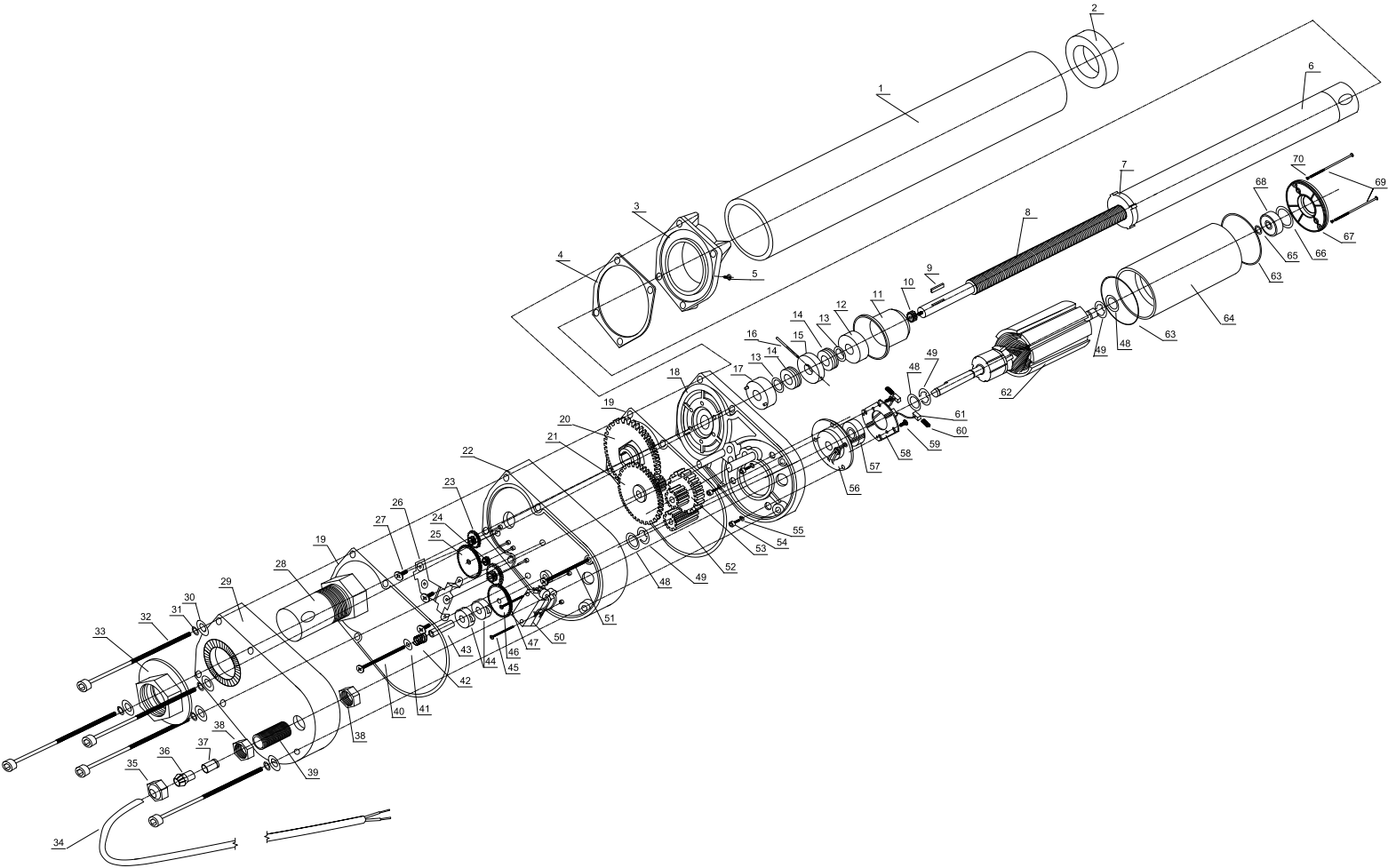
Thread SAE 3/8" x 16 NC





# Internal Components

Please note, potentiometer is not shown. Please contact our sales staff for more information.



# Internal Descriptions

Item	Description	Qty
1	Actuator Case	1
2	Case Top Cap	1
3	Case Base Support	1
4	Case Base Gasket	1
5	Case Base Screw	1
6	Shaft With Mounting Hole	1
7	Shaft Guide	1
8	Treaded Shaft Drive	1
9	Shaft Gear Lock	1
10	Limit Switch Gear	1
11	Shaft Bearing Enclosure	1
12	Shaft Top Bearing Holder	1
13	Washer	2
14	Shaft Ball Bearing	2
15	Shaft Holder	1
16	Shaft Holder Lock	1
17	Shaft Bearing Bottom Support	1
18	Actuator Base	1
19	Actuator Base Gasket	2
20	Shaft Gear Wheel	1
21	Intermediate Gear	1
22	Limit Switch Base	1
23	Limit Switch Gear 1	1
24	Limit Switch Gear 2	1
25	Limit Switch Gear 3	1
26	Limit Switch Gear Support	1
27	Limit Switch Gear Support Screw	3
28	Actuator Bottom Mount	1
29	Actuator Bottom Case	1
30	Actuator Base Screw Gasket	5
31	Actuator Base Screw O-Ring	5
32	Actuator Base Screw	5
33	Actuator Bottom Mount Nut	1
34	Power Cable	1
35	Power Cable Lock Screw	1

Item	Description	Qty
36	Power Cable Lock	1
37	Power Cable Sleeve	1
38	Power Cable Nut	2
39	Base Cable Sleeve	1
40	Limit Switch Trigger Screw	1
41	Limit Switch Trigger Washer	1
42	Limit Switch Trigger Spring	1
43	Limit Switch Trigger Support	1
44	Limit Switch Trigger	2
45	Limit Switch Screw	2
46	Limit Switch Gear 5	1
47	Limit Switch Gear 4	1
48	Motor Washer	3
49	Motor Locking Washer	3
50	Limit Switch	2
51	Base Holding Screw	1
52	Motor Gear	1
53	Motor Intermediate Gear	1
54	Motor Base Screw	3
55	Motor Base Screw Washer	3
56	Motor Bottom Cap	1
57	Motor Bottom Bearing	1
58	Brush Holder PCB	1
59	Brush Holder PCB Screw	2
60	Motor Brush Spring	2
61	Motor Brush	2
62	Electric Motor Rotor	1
63	Motor Case O-Ring	2
64	Motor Case and Stator	1
65	Motor O-Ring	1
66	Motor Top Spring Washer	1
67	Motor top Cap	1
68	Motor Top Bearing	1
69	Motor Case Screw	2
70	Motor Case Screw Washer	2