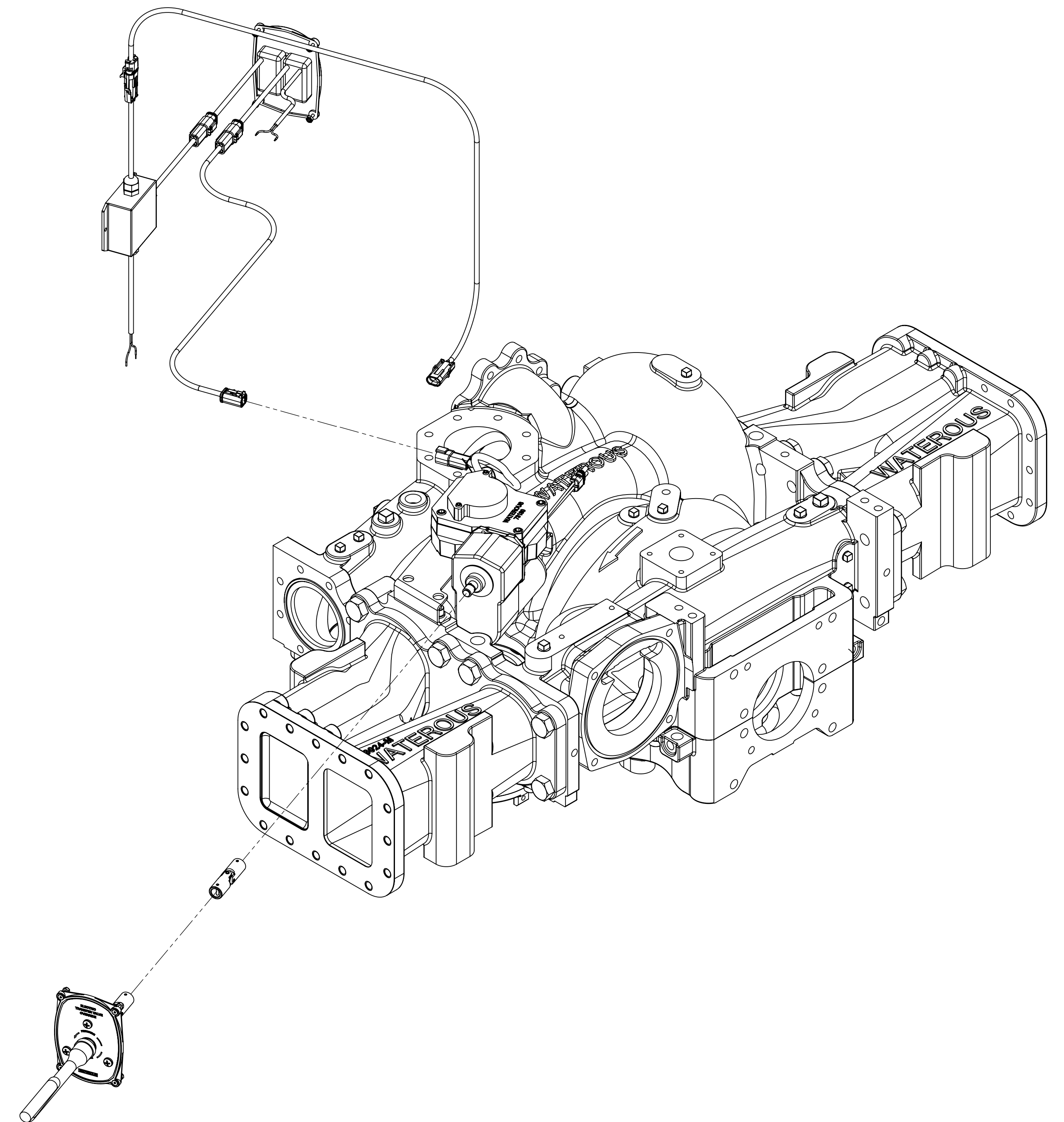
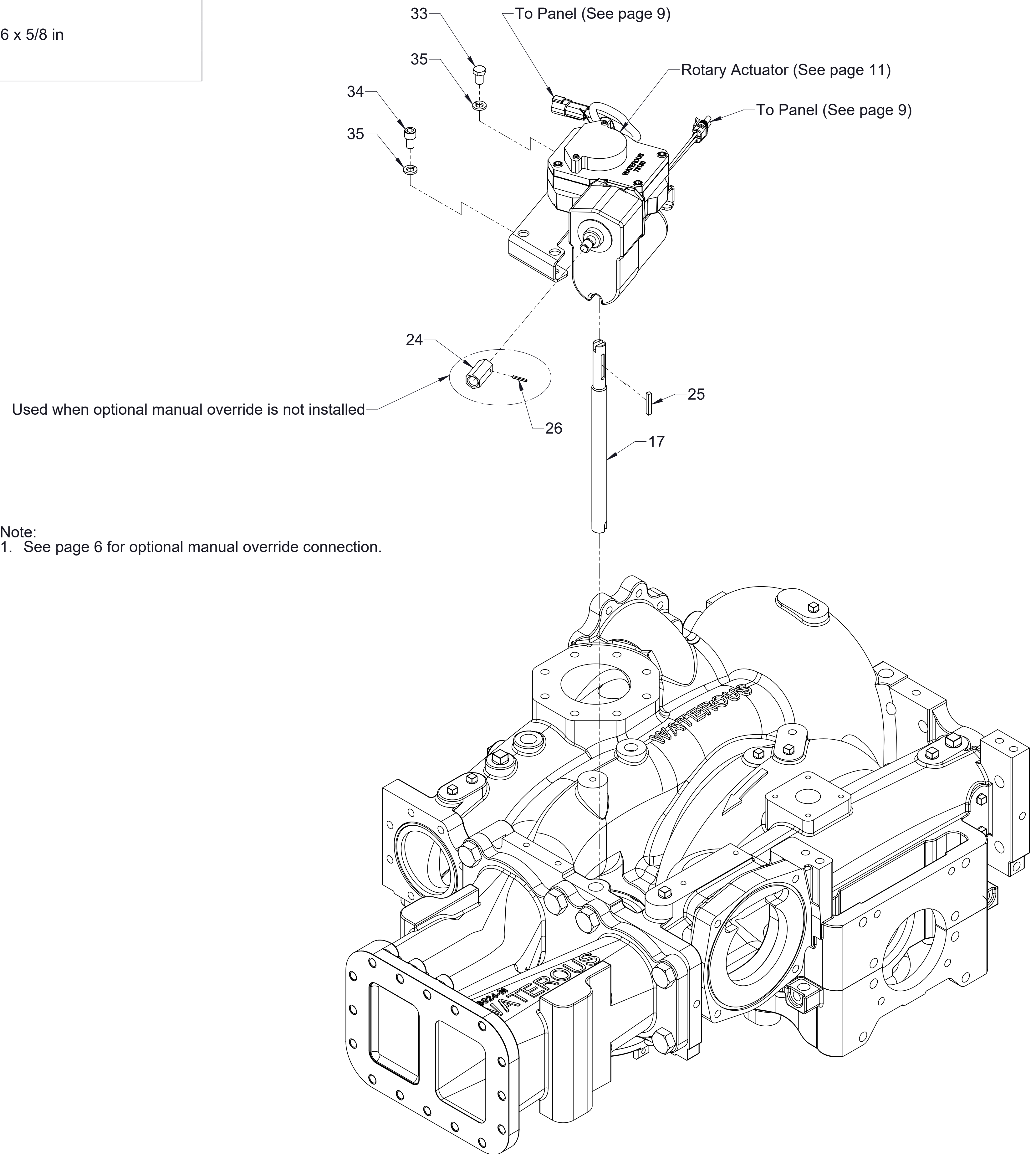


## Transfer Valve Actuator Service parts List

Components	See Page
Electric Actuator, Top Mounted	2
Electric Actuator, Bottom Mounted	3
Manual Actuator, Top Mounted	4
Manual Actuator, Bottom Mounted	5
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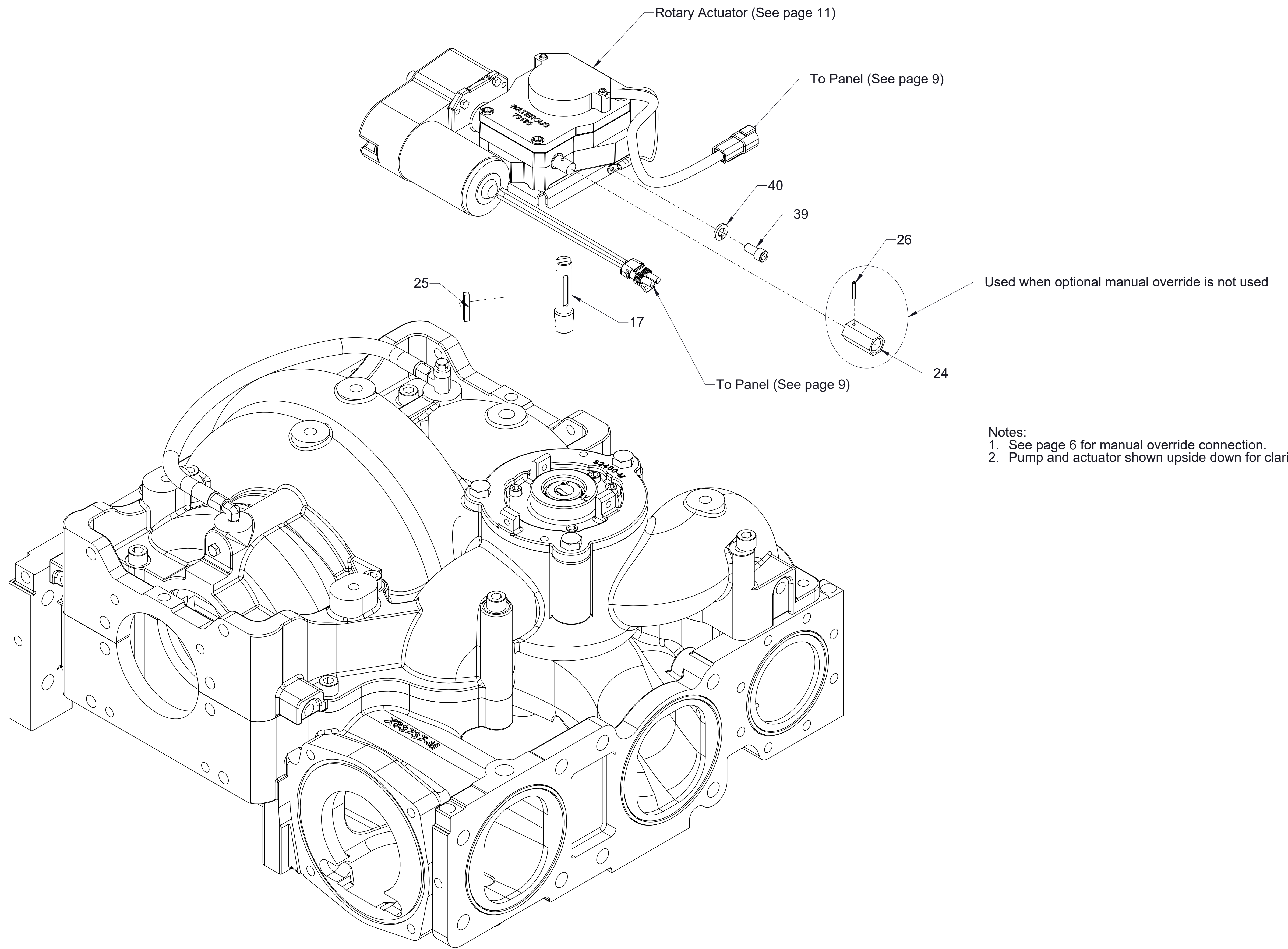


Ref No.	Description
17	Shaft-Extension, Top Mounted
24	Nut-Adapter
25	Key-Square, 3/16 x 1-1/4 in
26	Pin-Spirol, 1/8 x 3/4 in
33	Screw-Hex Hd, 3/8-16 x 5/8 in
34	Screw-Cap, Hex Soc Hd, 3/8-16 x 5/8 in
35	Washer-Lock, 3/8 in



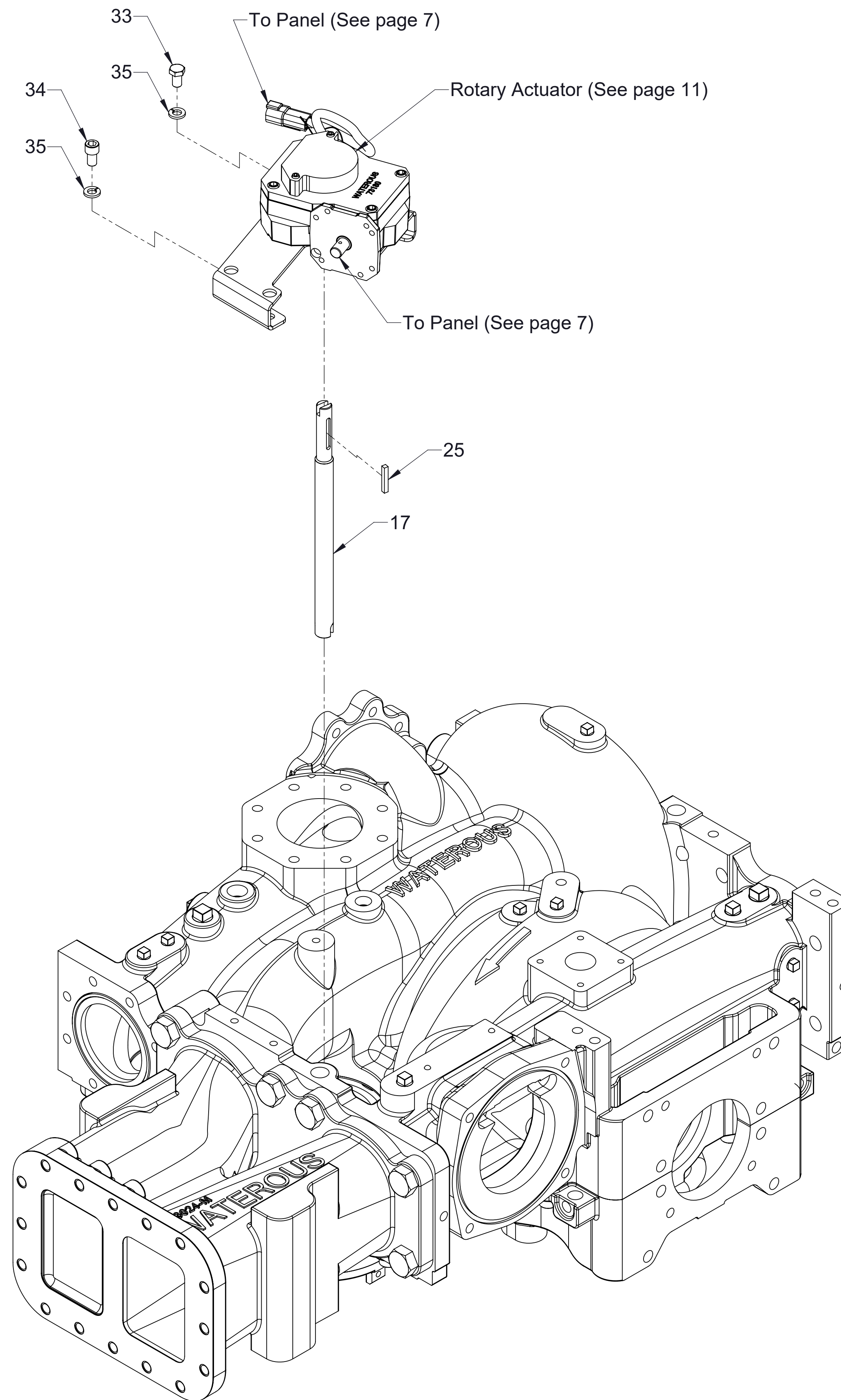
**Electric Actuator, Top Mounted**

Ref No.	Description
17	Shaft-Extension, Bottom Mounted
24	Nut-Adapter
25	Key-Square, 3/16 x 1-1/4 in
26	Pin-Spirol, 1/8 x 3/4 in
39	Screw-Cap, Hex Soc Hd, 5/16-18 x 5/8 in
40	Washer-Lock, 3/8 in



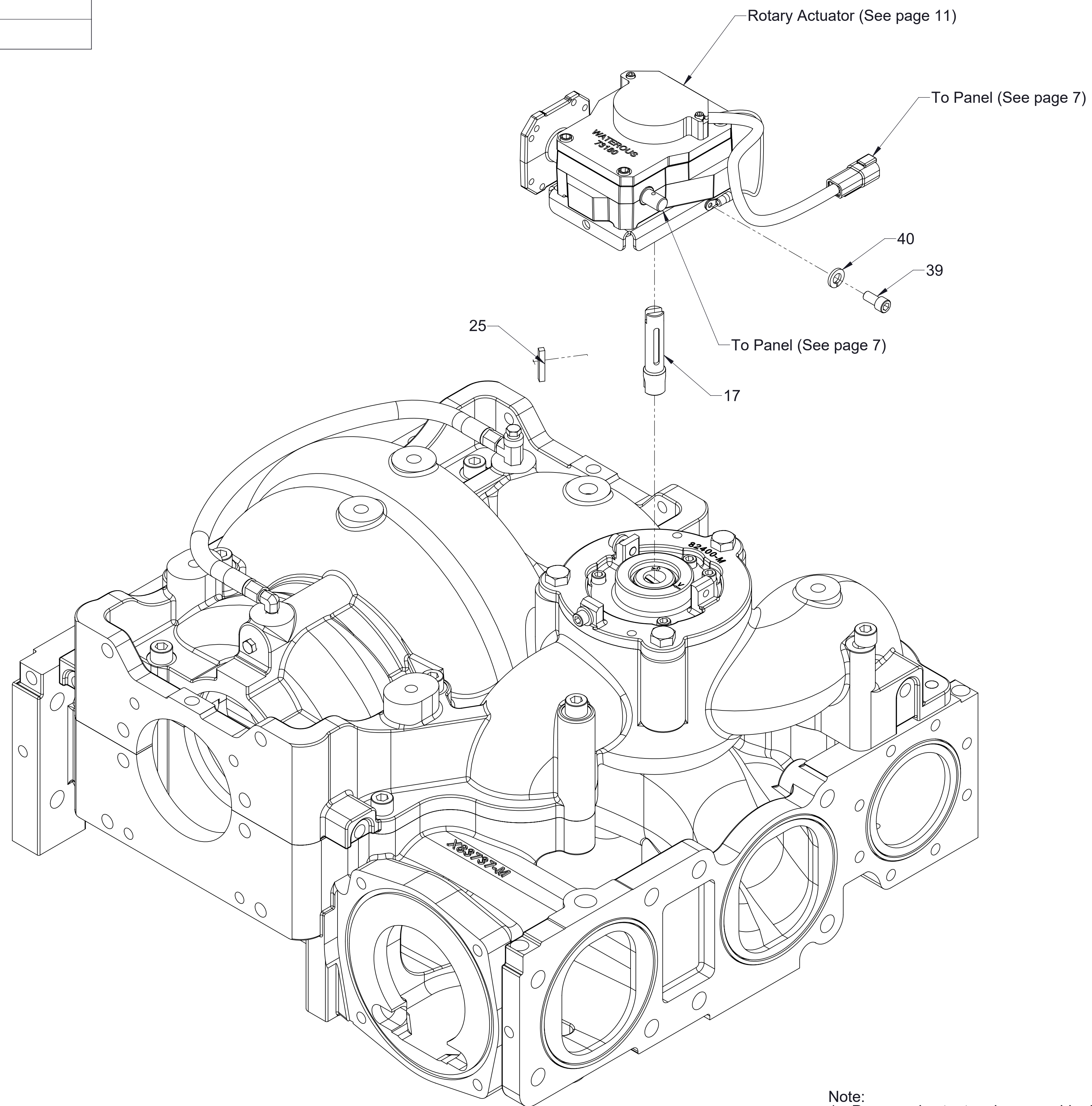
**Electric Actuator, Bottom Mounted**

Ref No.	Description
17	Shaft-Extension, Top Mounted
25	Key-Square, 3/16 x 1-1/4 in
33	Screw-Hex Hd, 3/8-16 x 5/8 in
34	Screw-Cap, Hex Soc Hd, 3/8-16 x 5/8 in
35	Washer-Lock, 3/8 in



**Manual Actuator, Top Mounted**

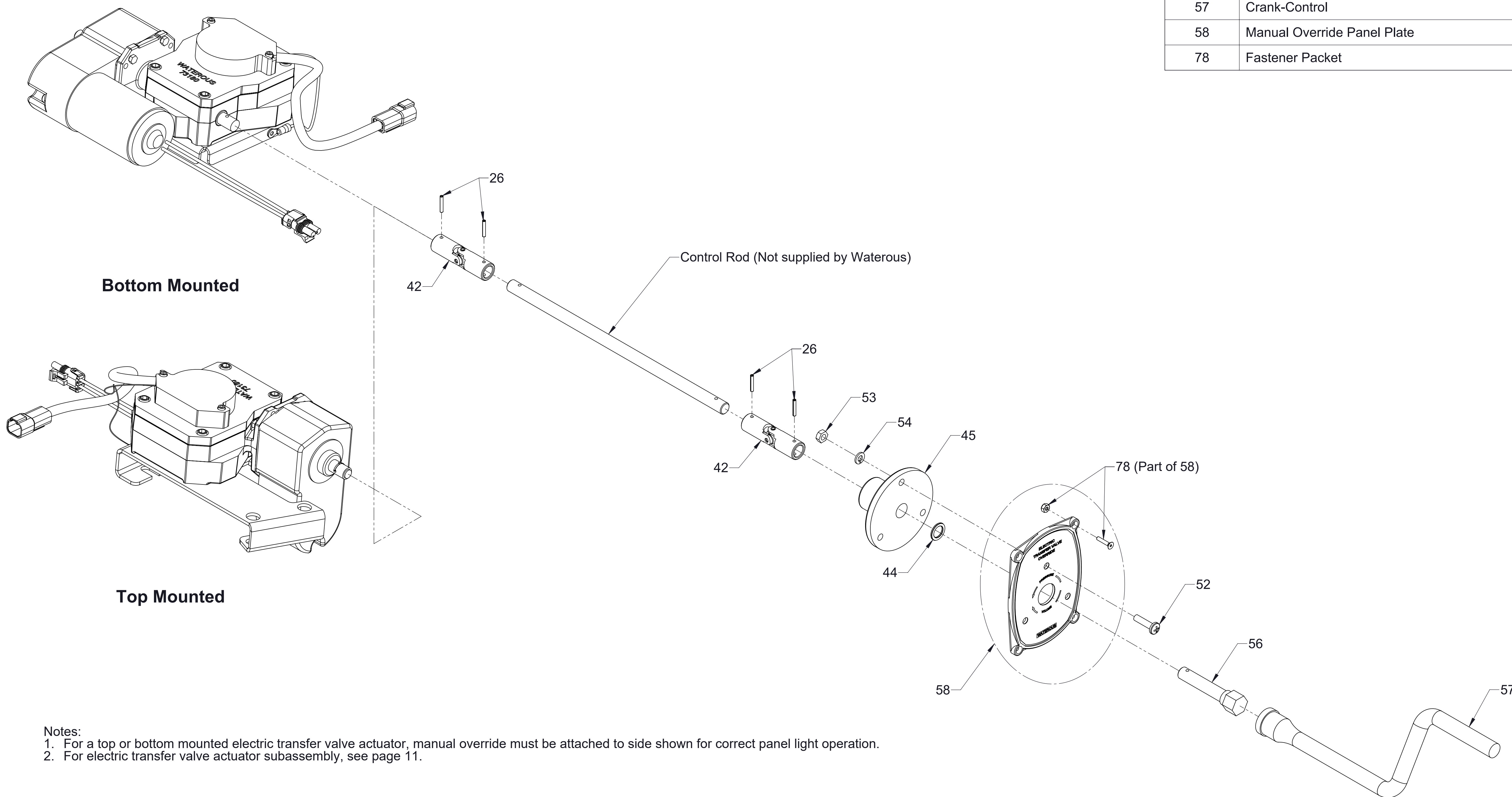
Ref No.	Description
17	Shaft-Extension, Bottom Mounted
25	Key-Square, 3/16 x 1-1/4 in
39	Screw-Cap, Hex Soc Hd, 5/16-18 x 5/8 in
40	Washer-Lock, 3/8 in



Note:  
1. Pump and actuator shown upside down for clarity.

### Manual Actuator, Bottom Mounted

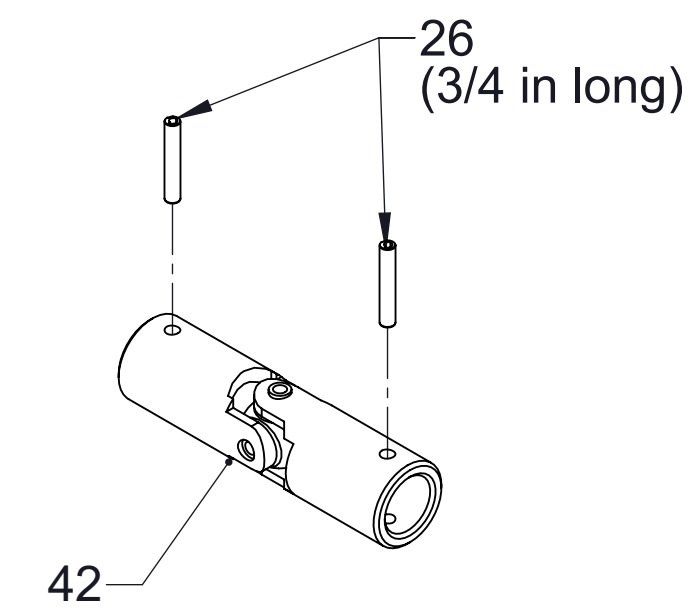
Ref No.	Description
26	Pin-Spirol, 1/8 x 3/4 in
42	Joint-Universal
44	Bearing-Thrust
45	Body-Remote
52	Screw-Machine, Pan Hd, 1/4-20 x 1 in
53	Nut-Hex, Machine, 1/4-20
54	Washer-Lock, 1/4 in
56	Shaft-Remote, Manual Override
57	Crank-Control
58	Manual Override Panel Plate
78	Fastener Packet



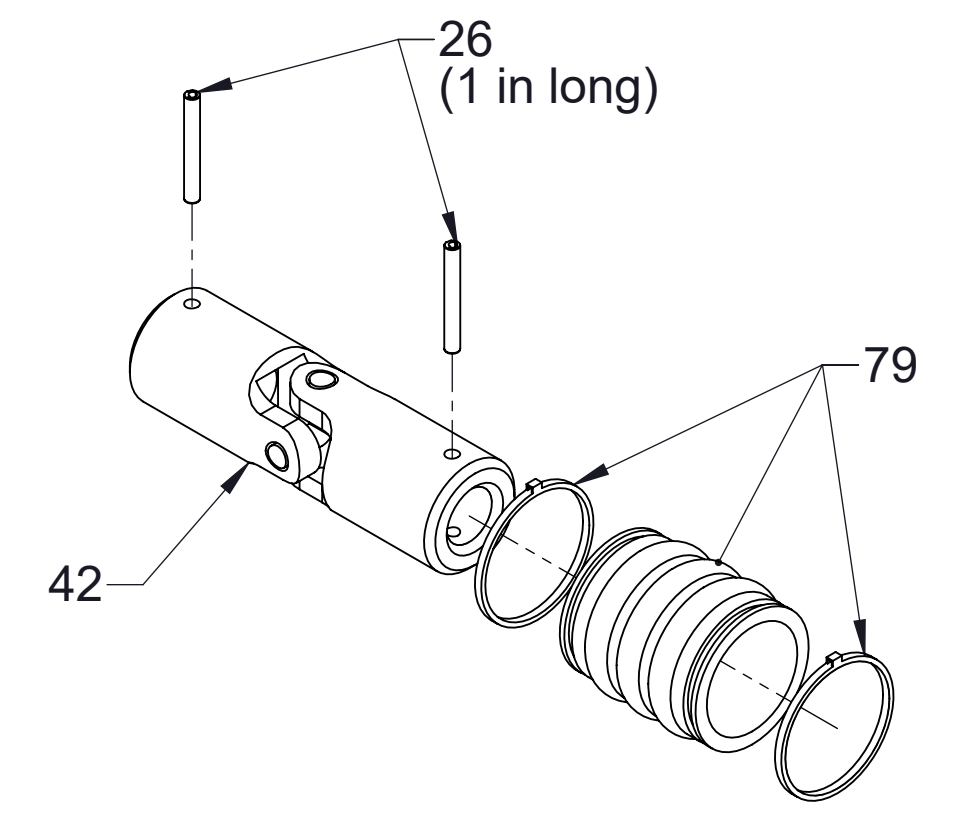
Notes:  
 1. For a top or bottom mounted electric transfer valve actuator, manual override must be attached to side shown for correct panel light operation.  
 2. For electric transfer valve actuator subassembly, see page 11.

**Optional Manual Override for Electric Actuators**  
 Note: Parts shipped loose by Waterous.

Ref No.	Description
26	Pin-Spirol, 1/8 x 3/4 in or 1 in
37	Panel Wiring Assembly (Manual)
42	Joint-Universal
43	Shaft-Remote
44	Bearing-Thrust
45	Body-Remote
46	Handle-Discharge Valve
51	Pin-Spring, 3/16 x 1 1/4 in
52	Screw-Machine, Pan Hd, 1/4-20 x 1 in
53	Nut-Hex, Machine, 1/4-20
54	Washer-Lock, 1/4 in
76	Cable-Encoder Extension
78	Fastener Packet
79	U-Joint Boot (Includes Cable Ties)

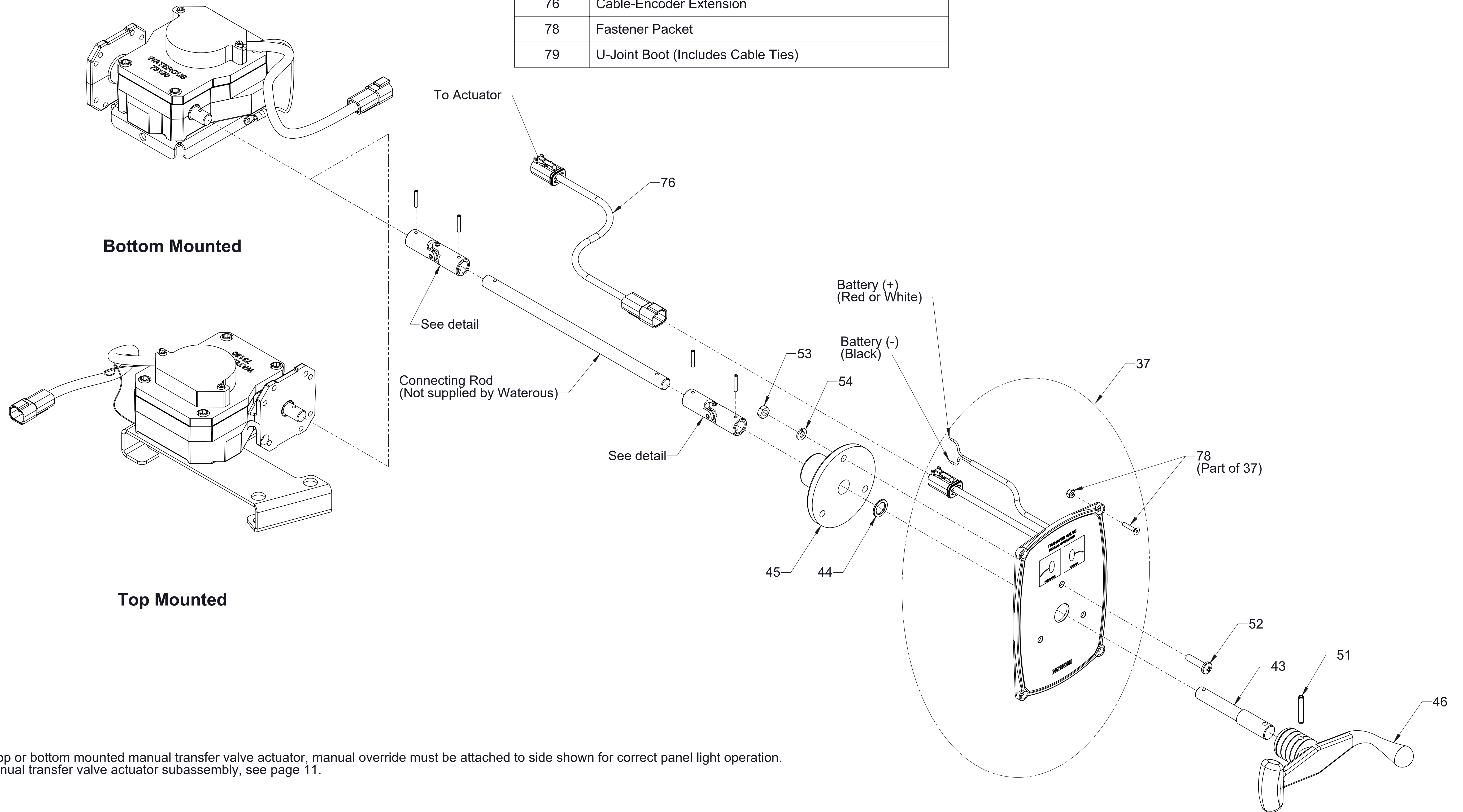


Standard Configuration



Optional Configuration with Sealing boot

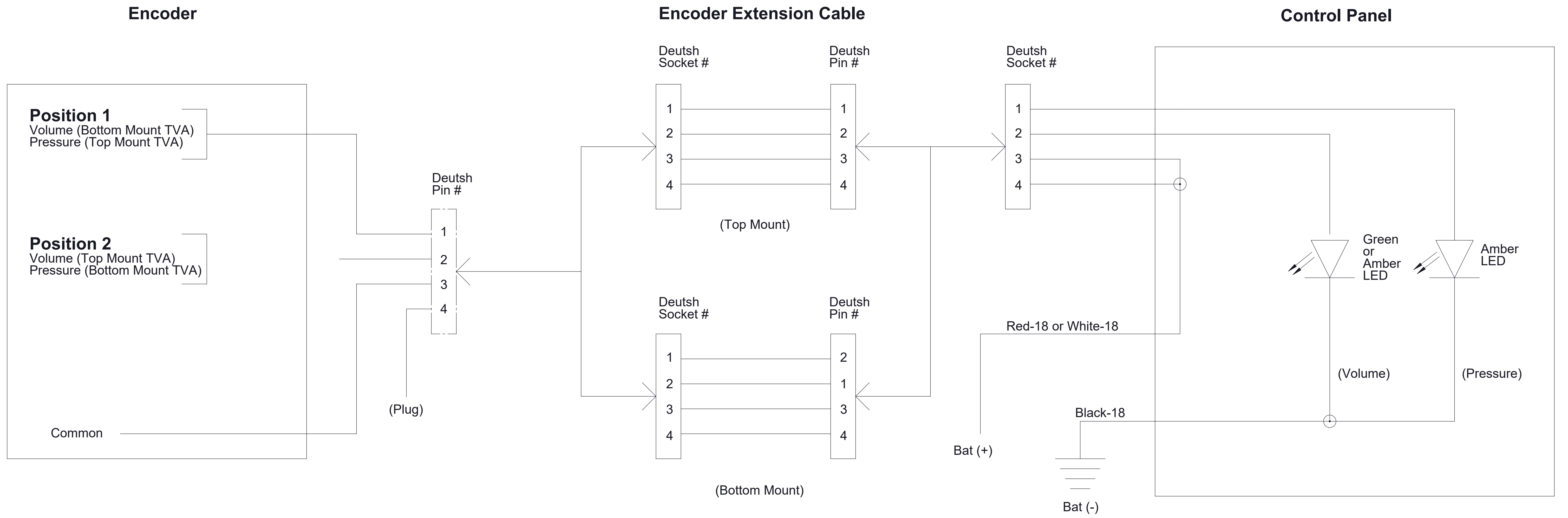
U-Joint Detail



Notes:

1. For a top or bottom mounted manual transfer valve actuator, manual override must be attached to side shown for correct panel light operation.
2. For manual transfer valve actuator subassembly, see page 11.

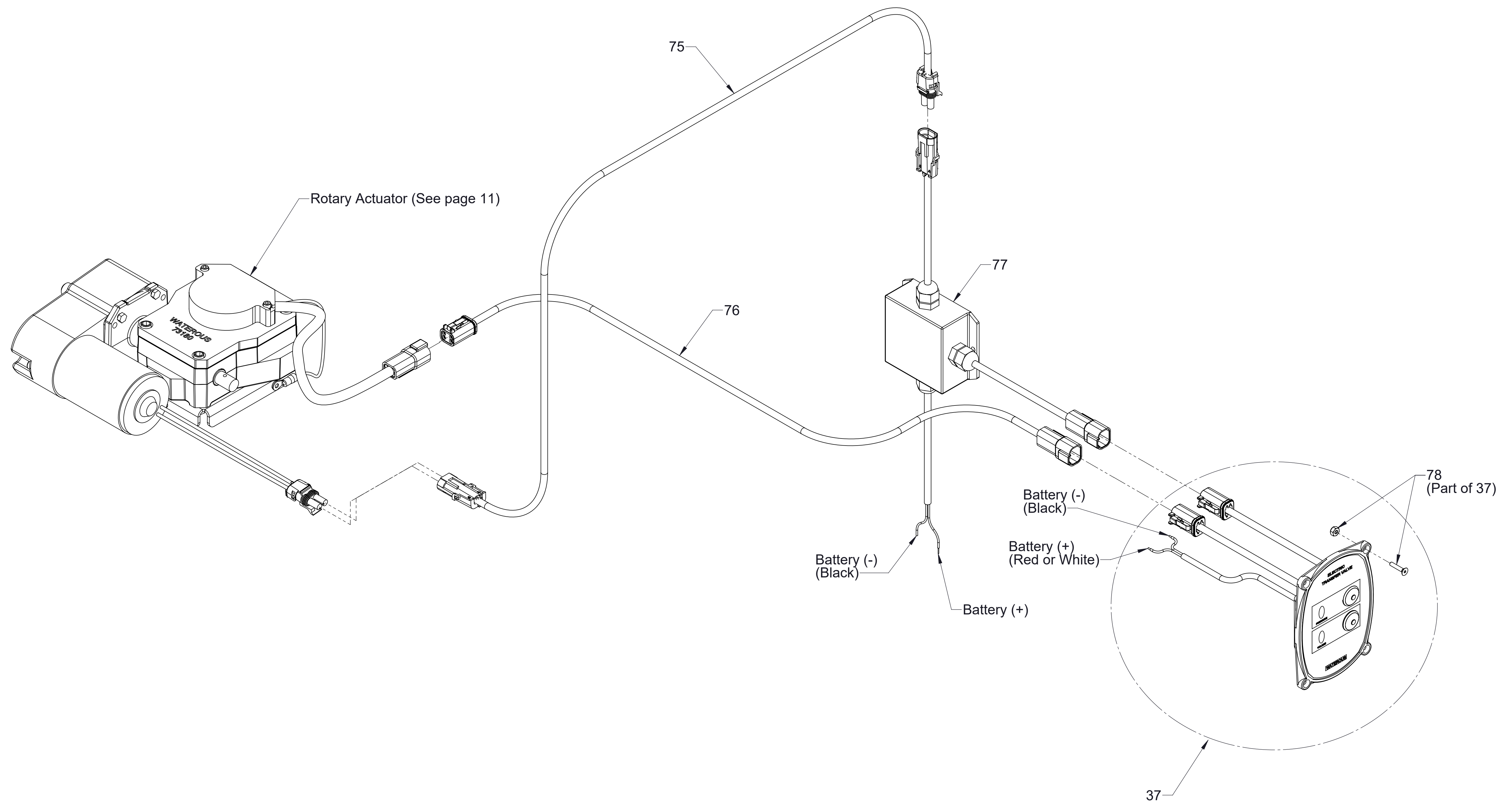
Manual Actuator Panel Connection



**Manual Actuator Panel Wiring**

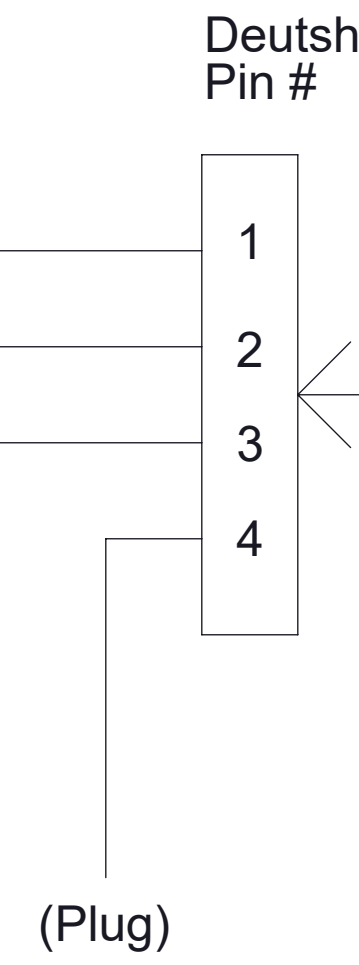
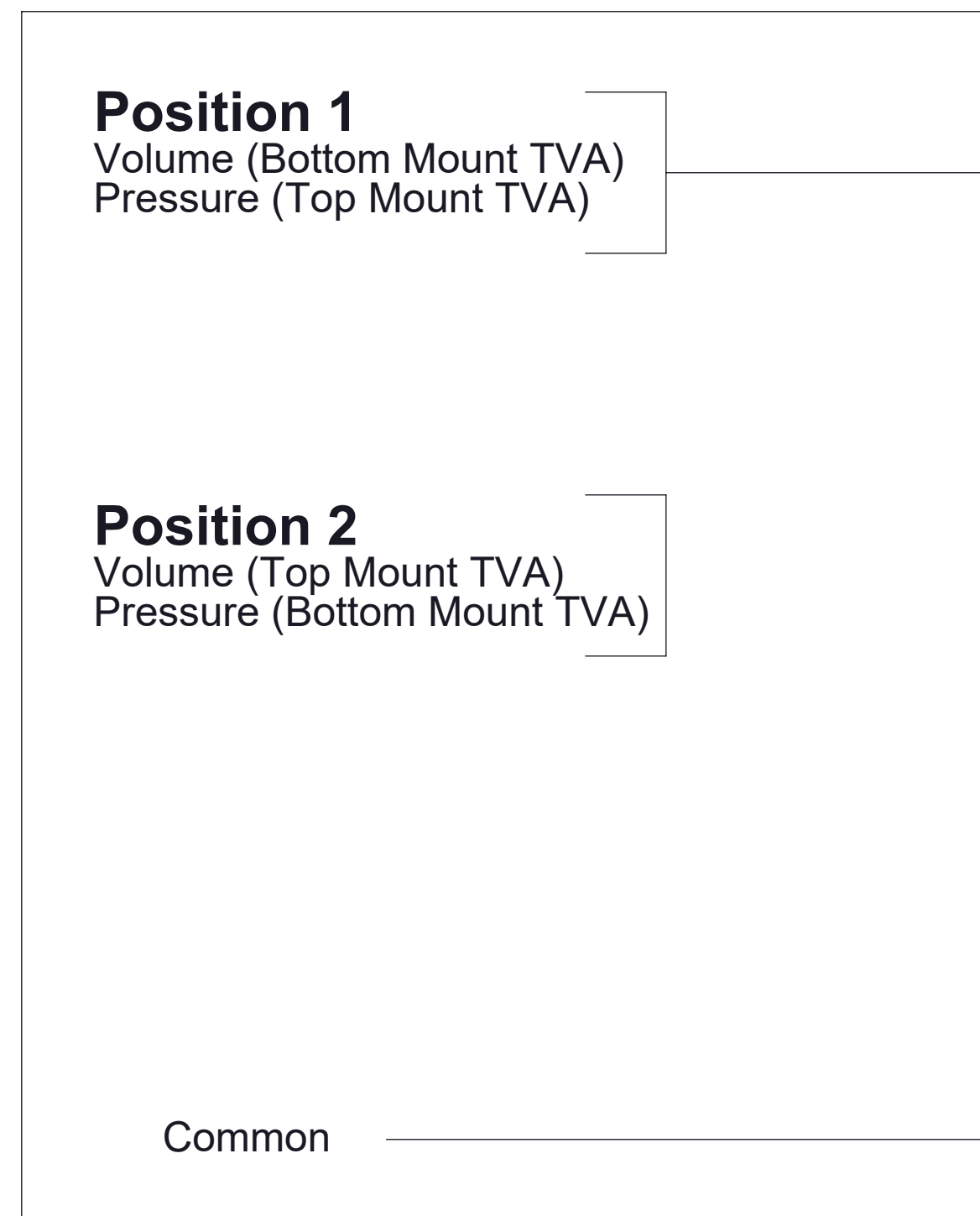


Ref No.	Description
37	Panel Wiring Assembly
75	Wire-Motor Extension
76	Cable-Encoder Extension
77	Module-Power Relay, 12V or 24V
78	Fastener Packet

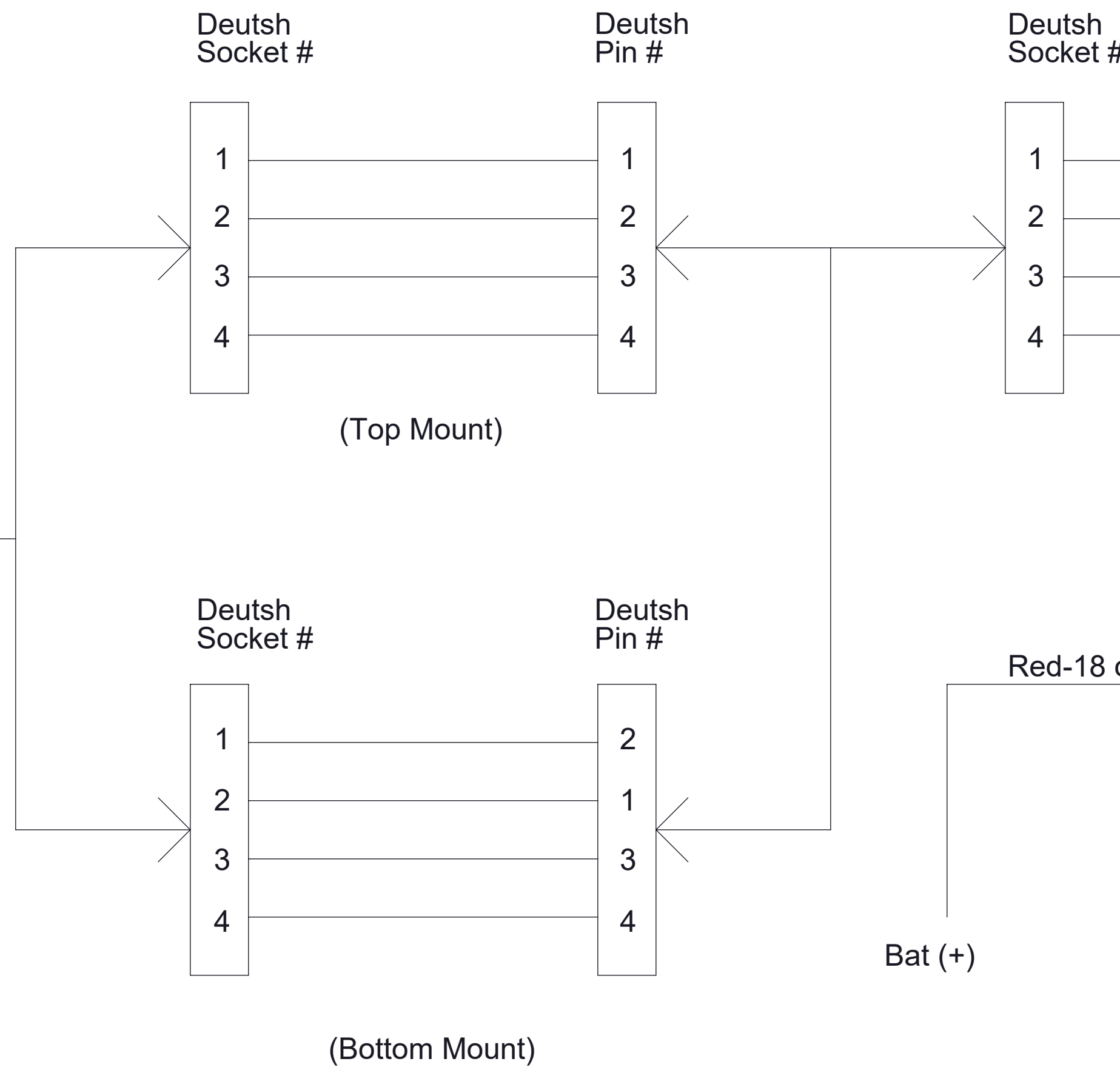


**Electric Actuator Panel Connection**

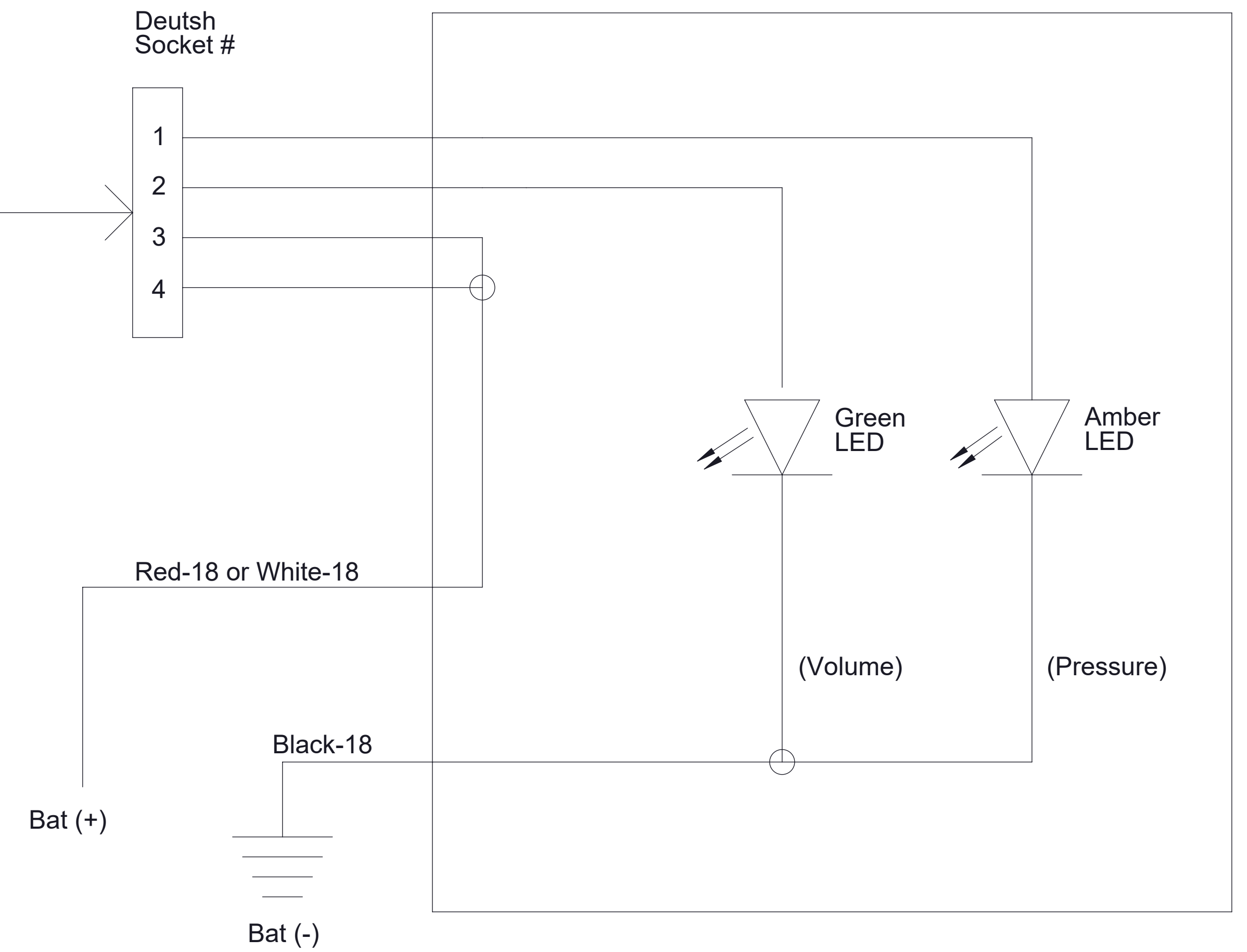
### Encoder



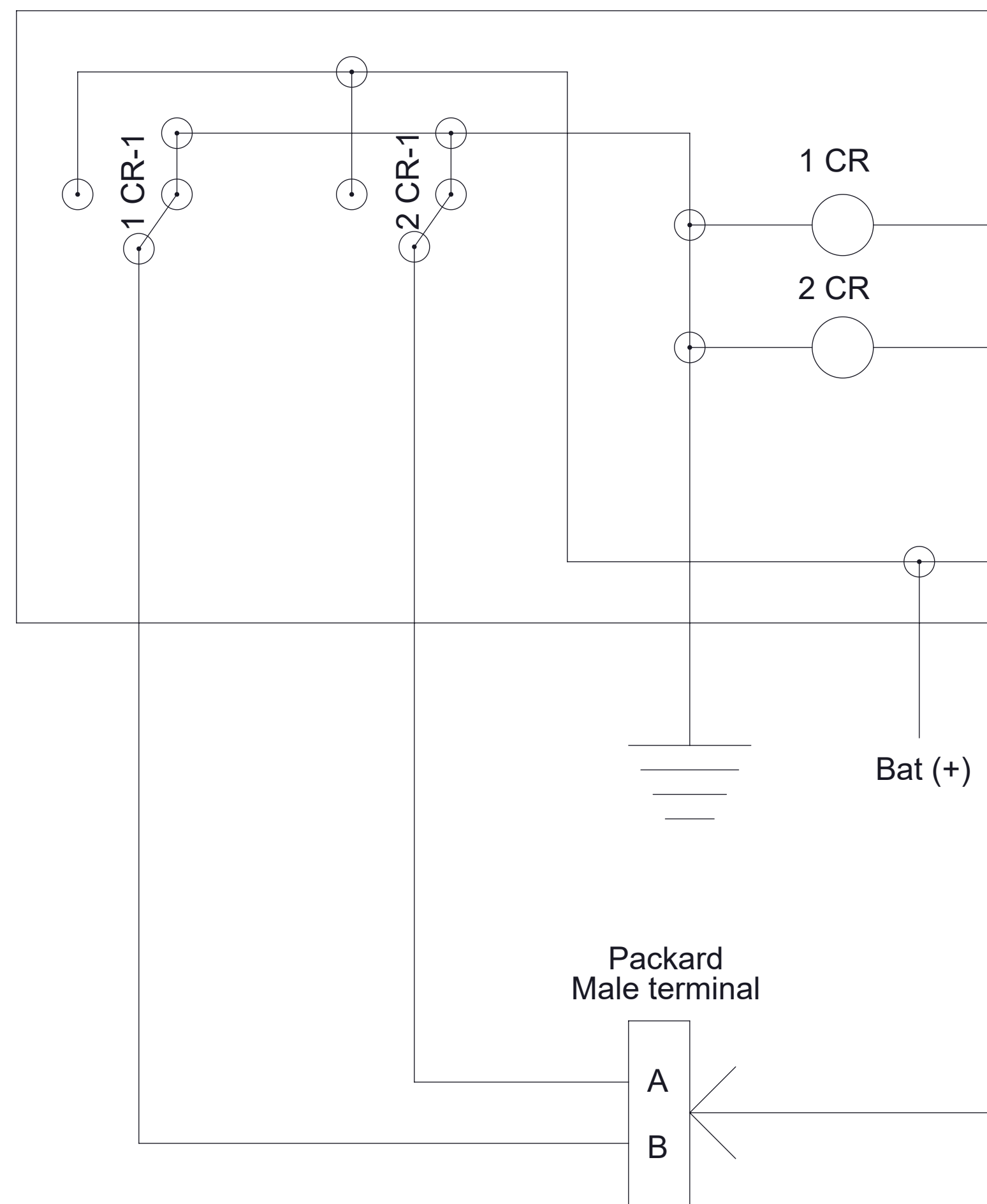
### Encoder Extension Cable



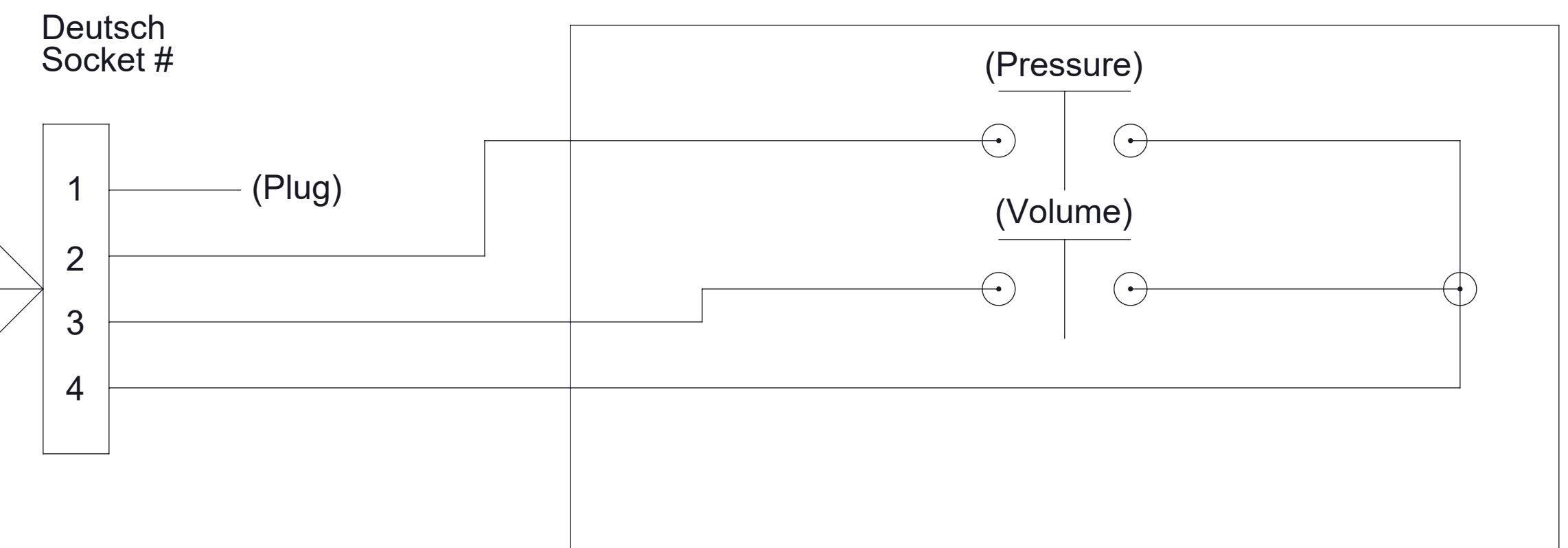
### Control Panel LED Module



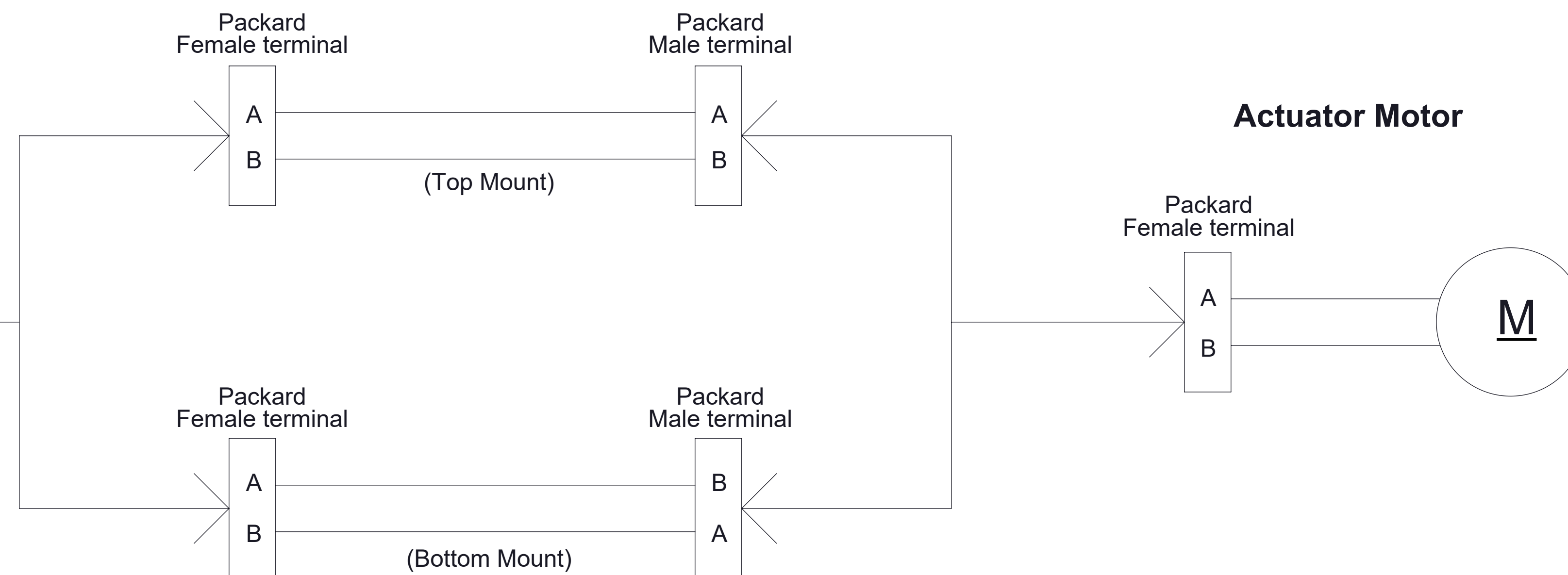
### Power Relay Module



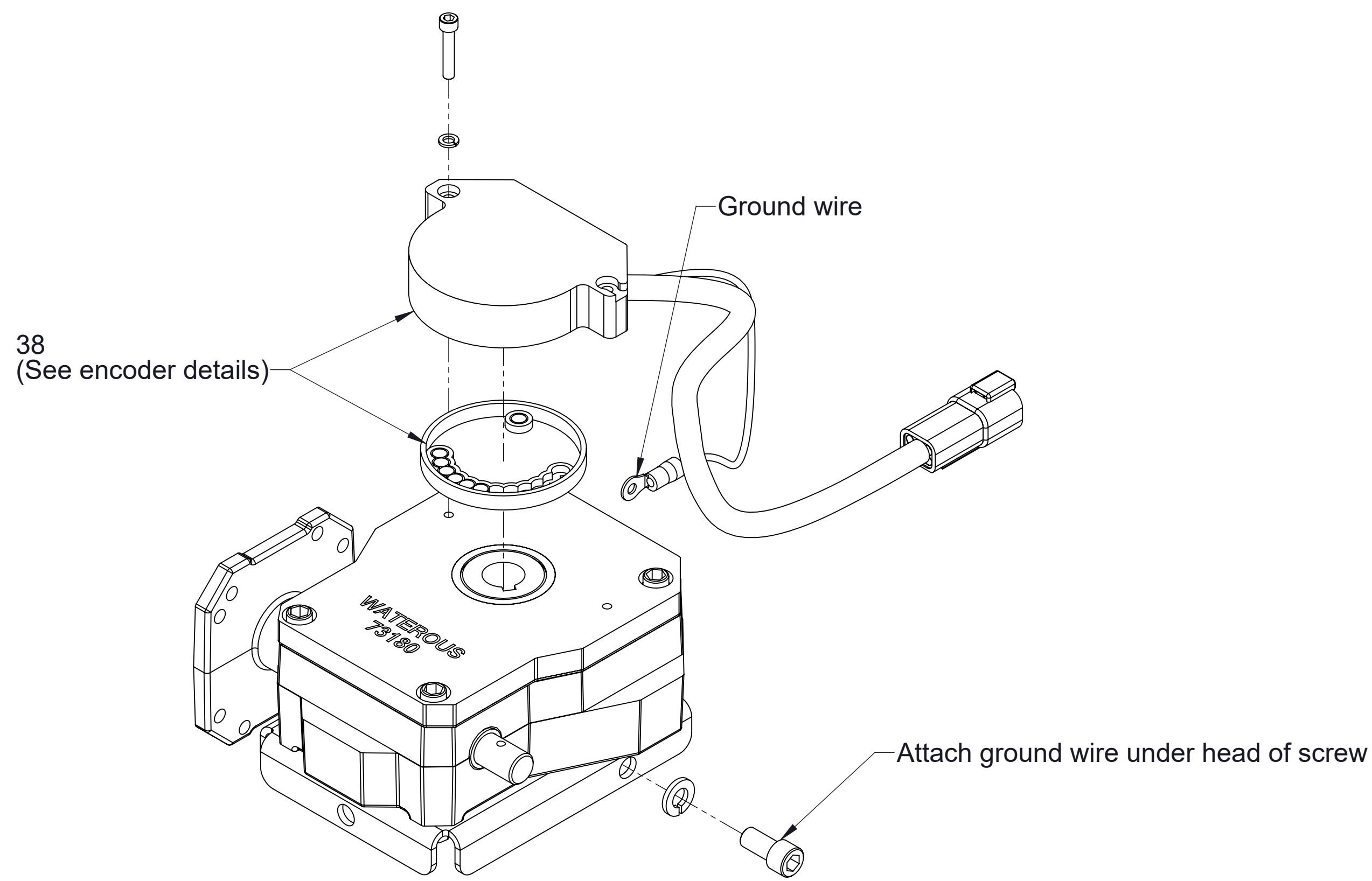
### Control Panel Push Button Module



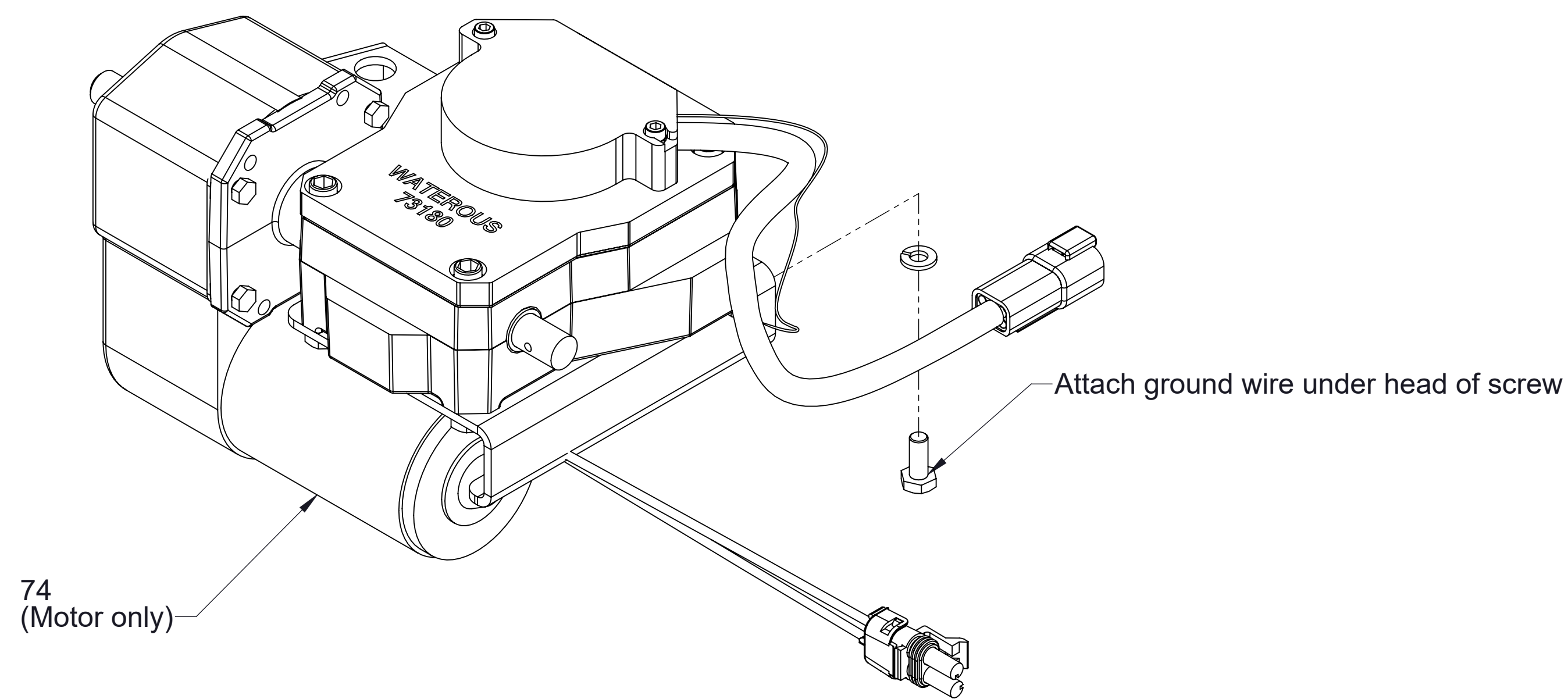
### Motor Extension Cable



Ref No.	Description
38	Rotary Encoder Replacement Kit
70	Actuator Subassembly
74	Motor Replacement Kit

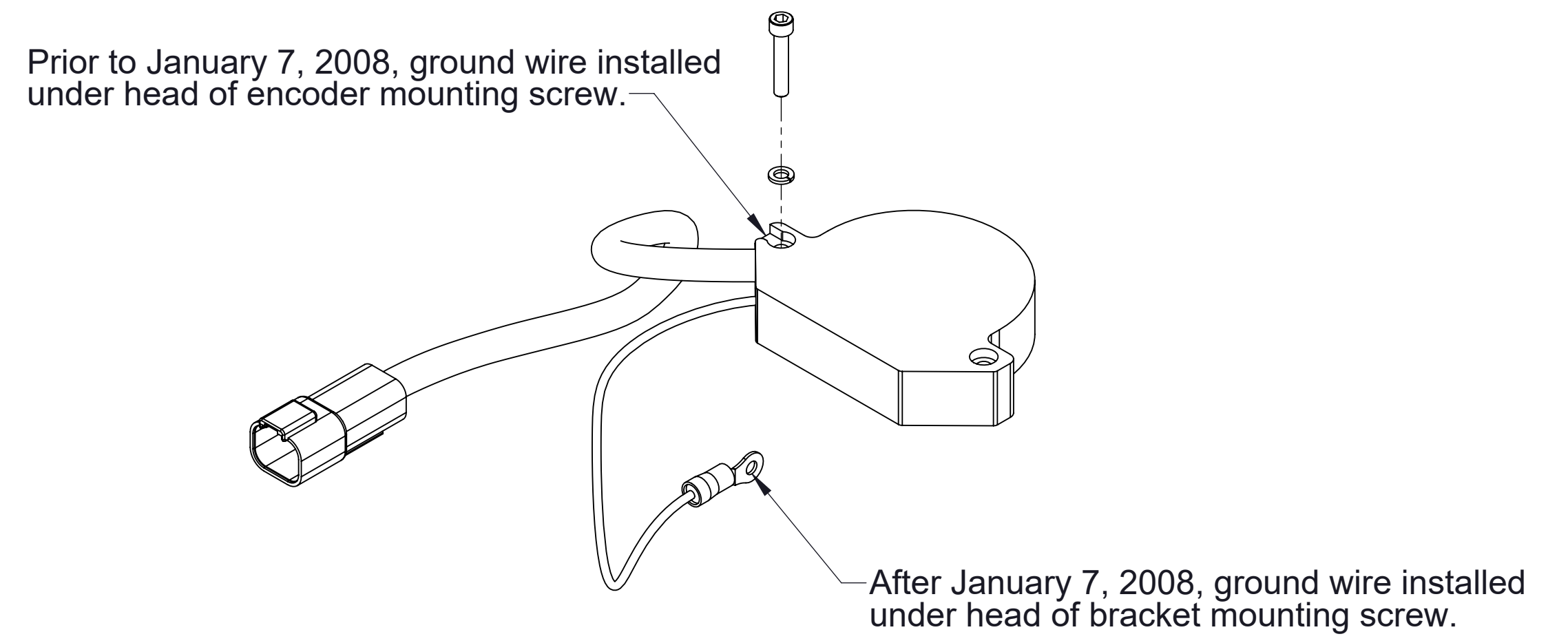


**70**  
Manual actuator subassembly  
(Bottom mounted shown)

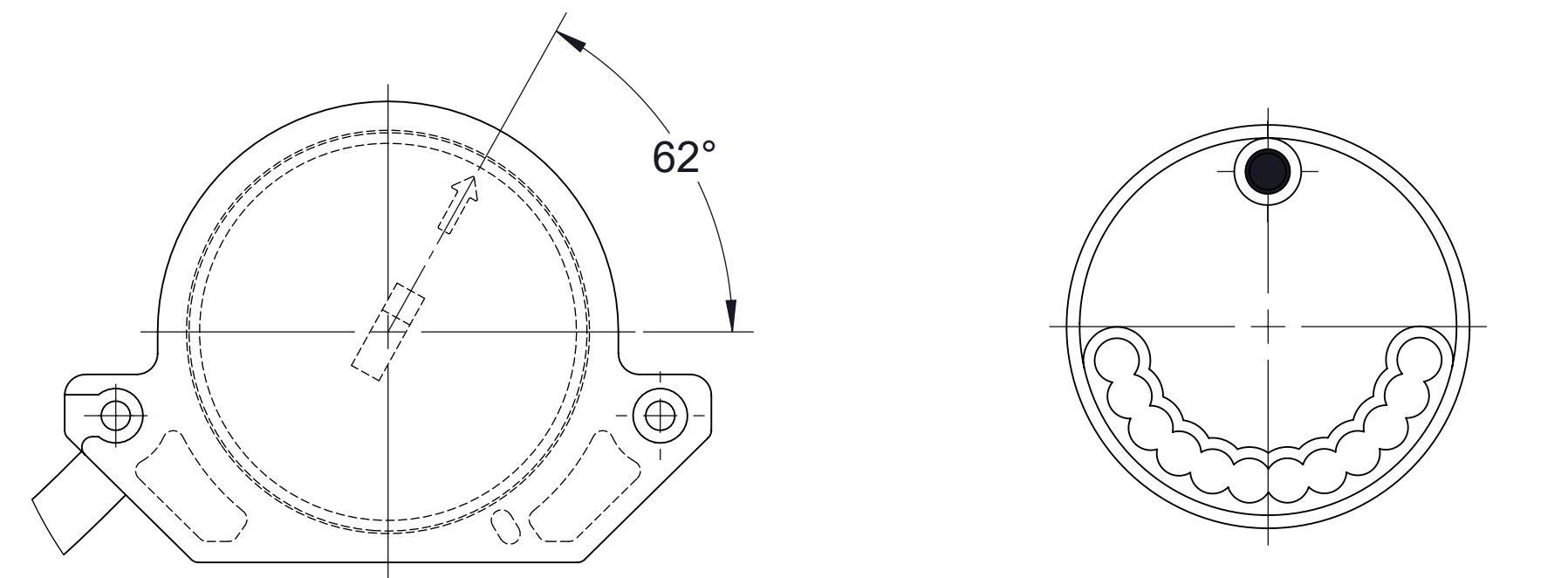


**70**  
Electric actuator subassembly  
(Top mounted shown)

74  
Motor  
Replacement Kit



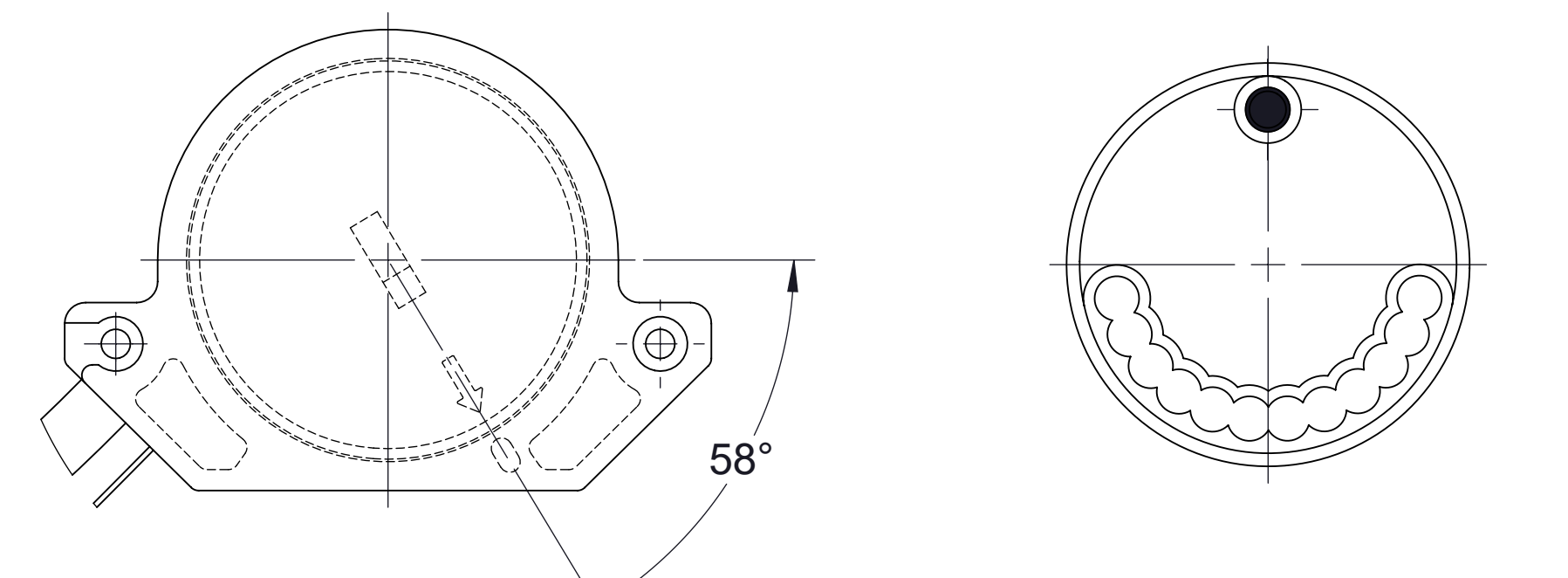
**Encoder Ground Wire Detail**



(Viewed from top)  
**Rotor Position**

**Rotor Magnet Position**

**Bottom Mounted Actuator Encoder Detail**



(Viewed from top)  
**Rotor Position**

**Rotor Magnet Position**

**Top Mounted Actuator Encoder Detail**

**Available Repair Subassemblies**