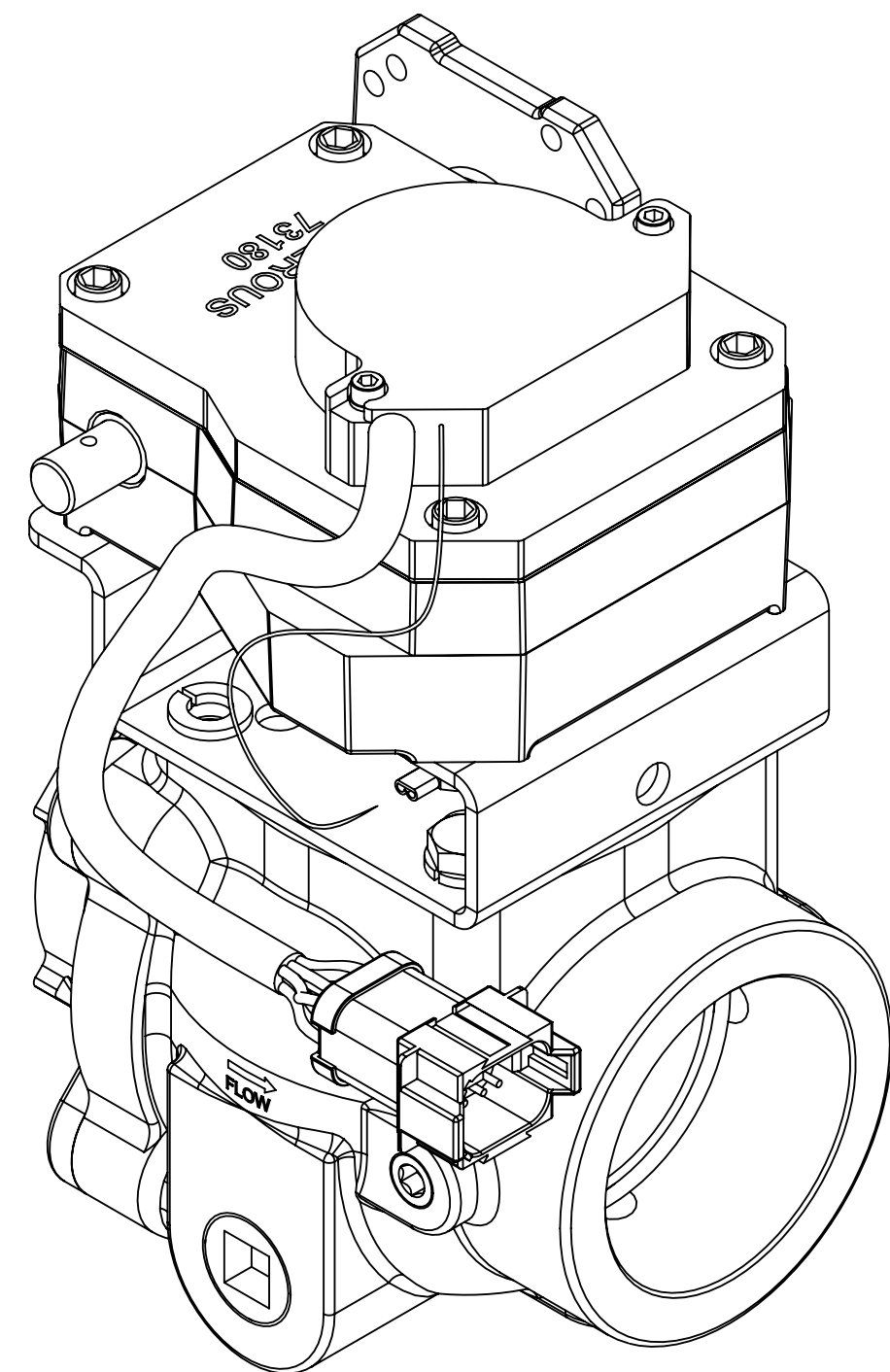
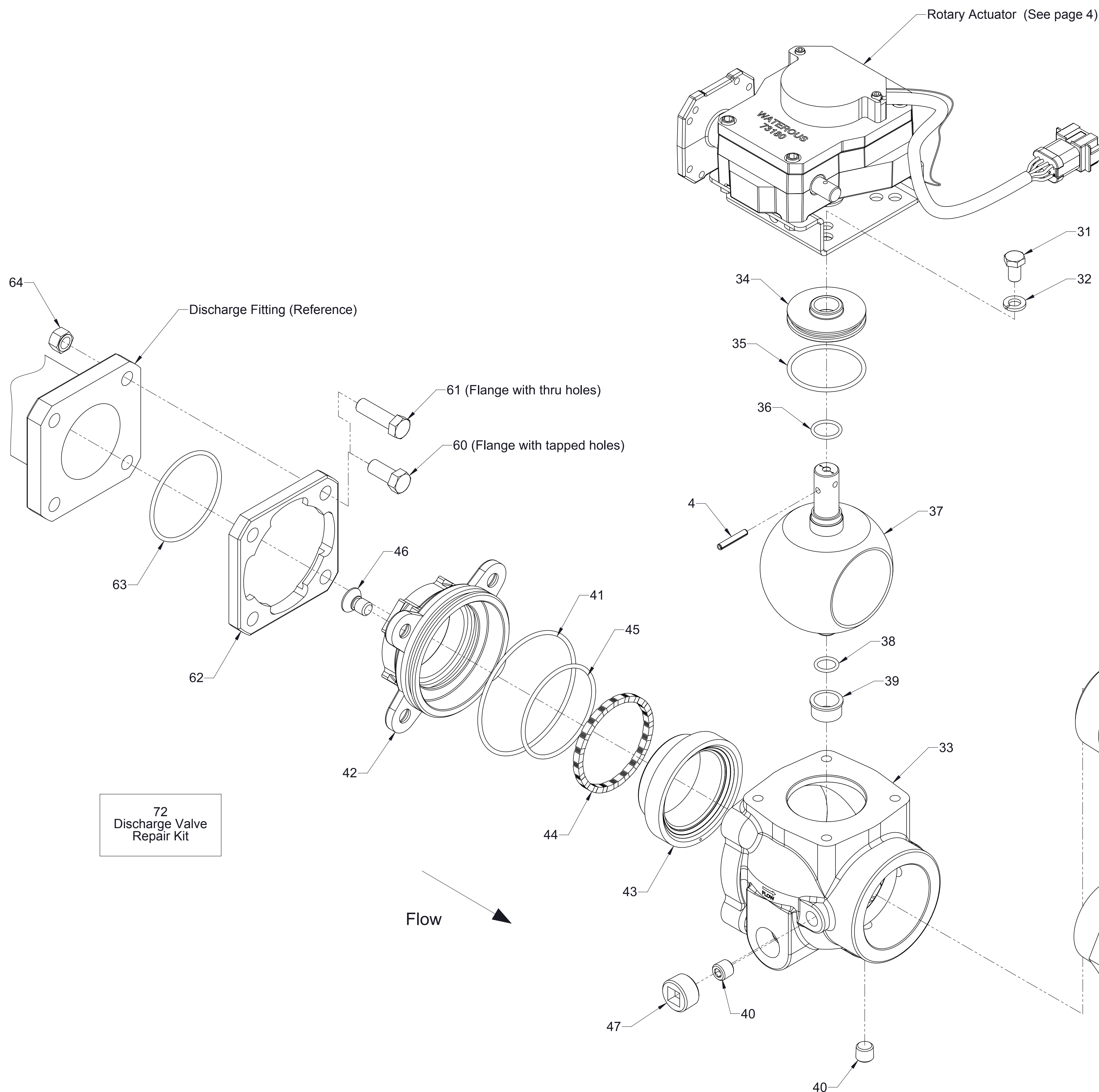


## 2-1/2 in. Full Flow Discharge Valve Assembly with Manual Rotary Actuator

### Service Parts List

Components	See Page
2-1/2 in. Full Flow Ball Valve	2
Cables and Panel Components	3
Available Repair Subassemblies	4

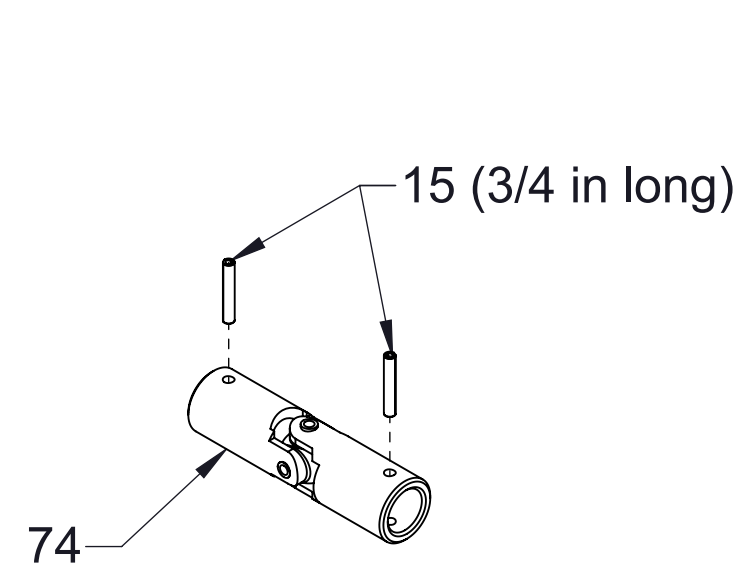




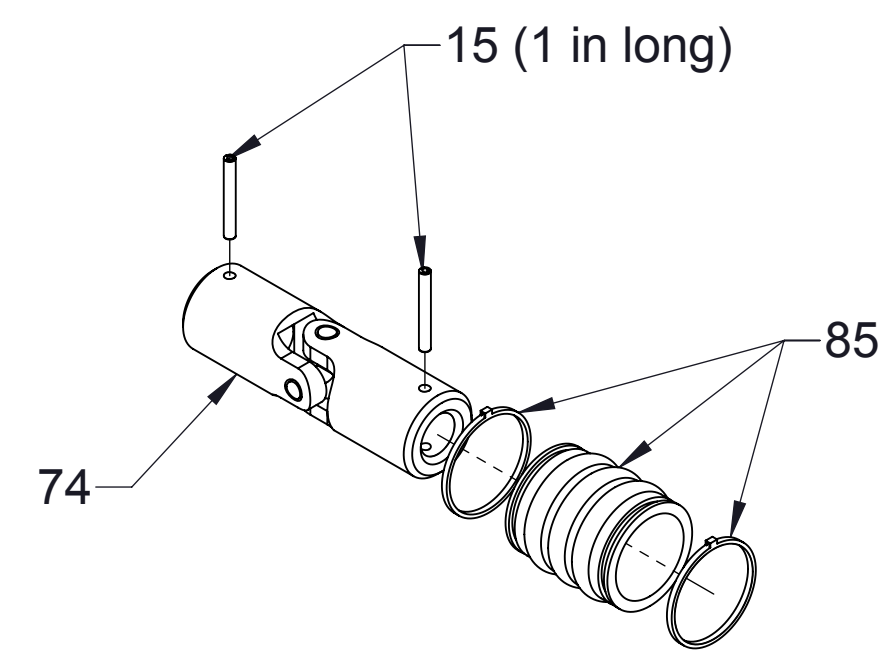
Ref No.	Description
4	Pin-Spring, 3/16 x 1-1/8 in
31	Screw-Hex Hd, 3/8-16 x 5/8 in
32	Washer-Lock, 3/8 in
33	Body-Valve, Discharge (2.5 FF)
34	Bushing-Stem, Upper (2-1/2 FF)
35	O-Ring, 2-1/8 x 2-3/8 in
36	O-Ring, 3/4 x 15/16 in
37	Ball-Discharge, Valve (2.5 FF)
38	O-Ring, 9/16 x 3/4 in
39	Bushing-Lower Stem
40	Plug-Pipe, Headless, 1/4 NPT
41	O-Ring, 3-7/8 X 4-1/8 in
42	Retainer-Seal (2-1/2 FF)
43	Seal-Valve, Ball (2-1/2 FF)
44	Spring-Wave
45	O-Ring, 2-7/8 x 3-1/8 in
46	Screw-Machine, Flat Head Socket, 7/16-14 x 3/4 in
47	Plug-Pipe, Headless, 3/4 NPT
60	Screw-Hex Hd, 7/16-14 x 1 in (See note 1)
61	Screw-Hex Hd, 7/16-20 x 1-1/2 in
62	Flange-Mounting
63	O-Ring, 2-3/4 x 3 in
64	Nut-Hex, 7/16-20 (Used only with 61)
65	Nipple-Pipe, 2-1/2 NPT x 10 in (See note 2)
66	Adapter-Hose, 2-1/2 (See note 2)
67	Nipple-Hose, 2-1/2 Double Male (See note 2)
72	Discharge Valve Repair Kit

Notes:  
 1. Reference number 60, Hex Hd Screw, 7/16-14 x 1 in. used instead of reference number 61, Hex Hd Screw, 7/16-20 x 1-1/2 in. when discharge flange has tapped mounting holes.  
 2. Reference number 65, 66, and 67 may have been furnished by either Waterous or original equipment manufacturer.

2-1/2 in Full Flow Ball Valve

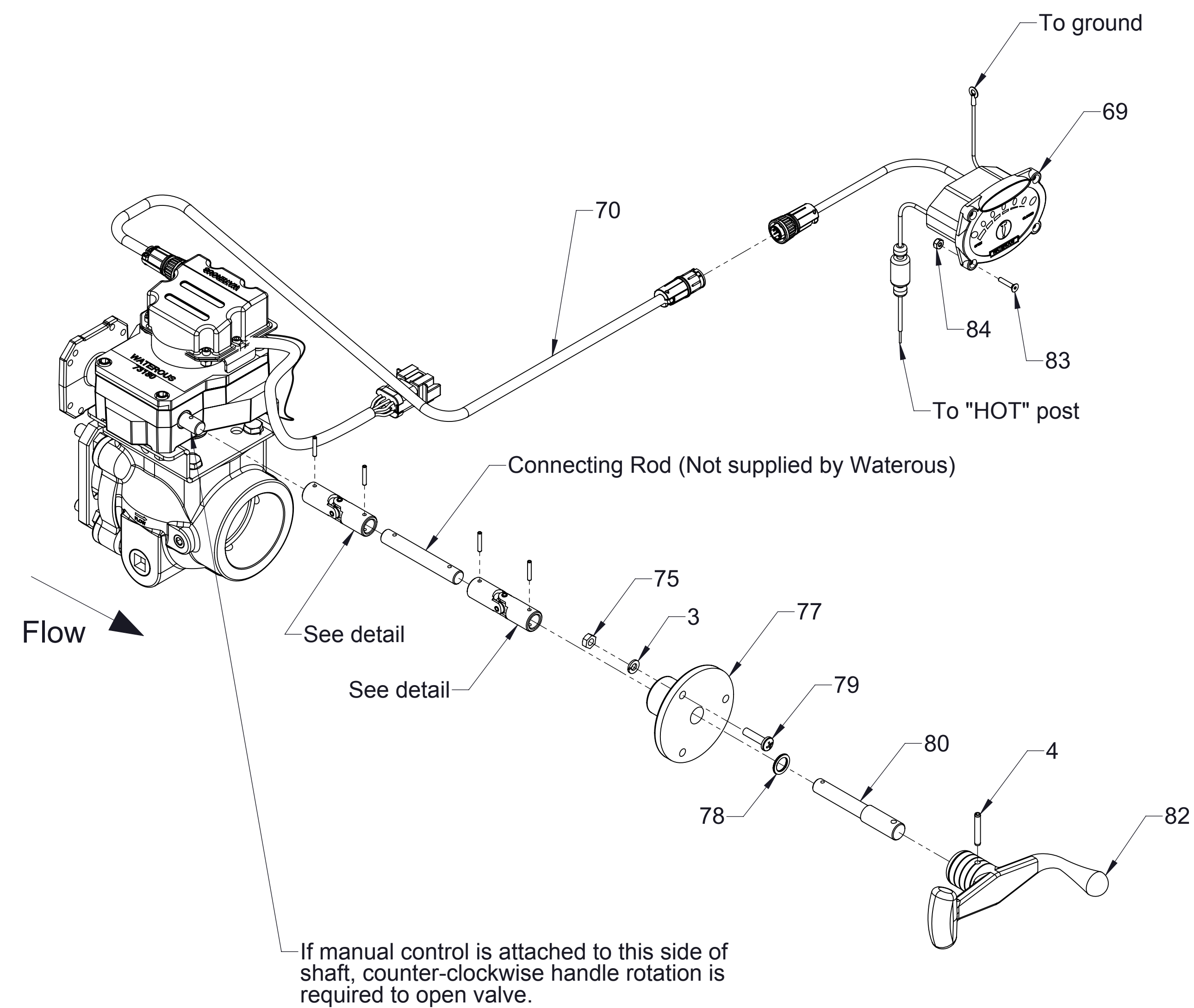


**Standard Configuration**

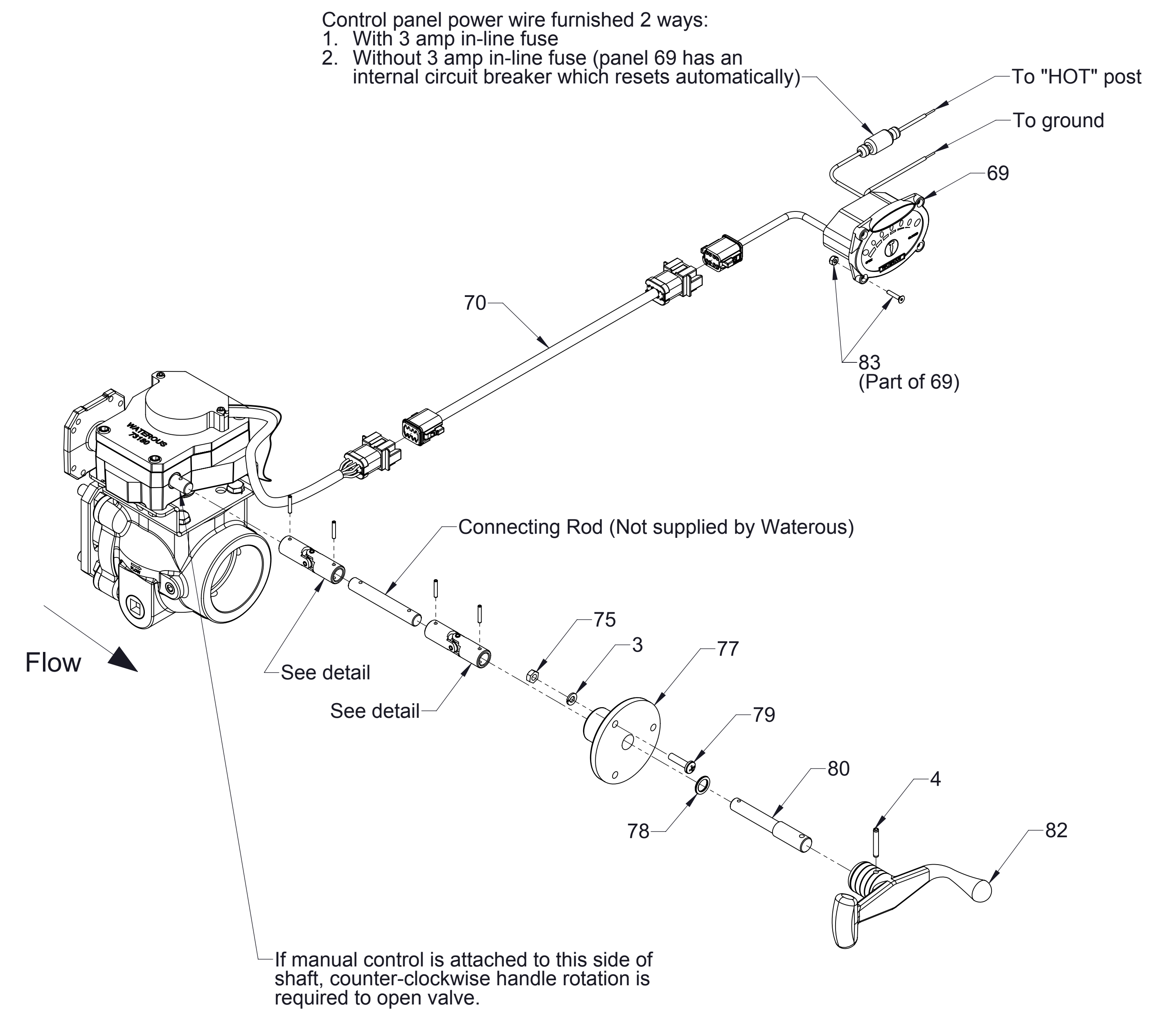


**Optional Configuration with Sealing Boot**

**U-Joint Detail**



**Valves built prior to November 6, 2006**

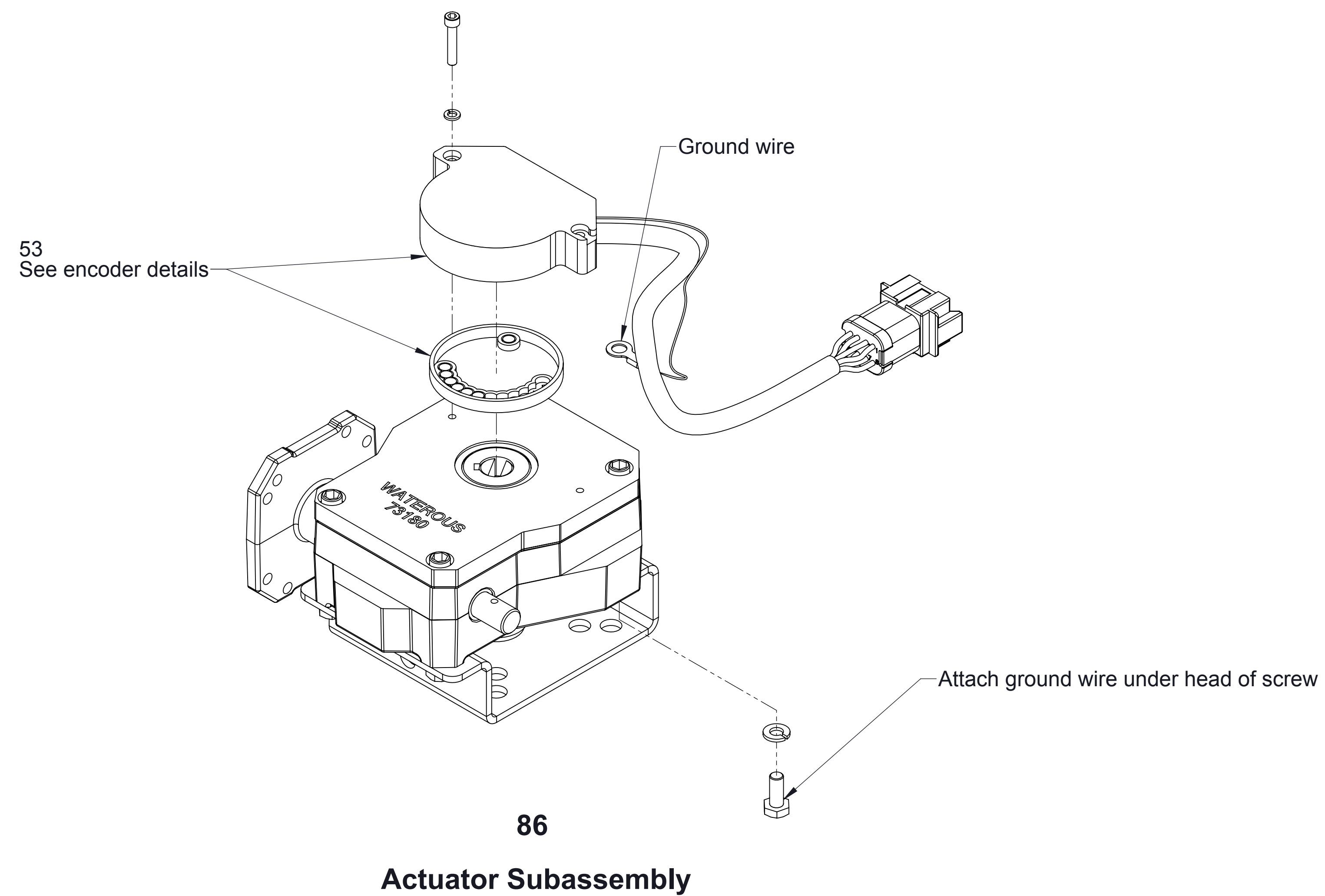


**Valves built After November 6, 2006**

**Cables and Panel Components**

Ref No.	Description	Ref No.	Description
3	Washer-Lock, 1/4 in	78	Bearing-Thrust
4	Pin-Spring, 3/16 x 1 1/4 in	79	Screw-Machine, Pan Hd, 1/4-20 x 1 in
15	Pin-Spirol, 1/8 x 3/4 in or 1/8 x 1 in	80	Shaft-Remote
69	LED Panel Wiring Assembly	82	Handle-Discharge Valve
70	Wire Assembly-Switch Extension	83	Screw-Machine, Flat Hd, Hex Soc, #6-32 x 3/4 in (Prior to November 6, 2006)
74	Joint-Universal	83	Control Panel Mounting Hardware (Includes (4) Socket Hd Screws, #6-32 x 3/4 in and (4) Nylok Nuts, #6-32) (After November 6, 2006)
75	Nut-Hex, Machine, 1/4-20	84	Nut-Hex, Nylok, #6-32 (Prior to November 6, 2006)
77	Body-Remote	85	U-Joint Boot (Includes cable ties)

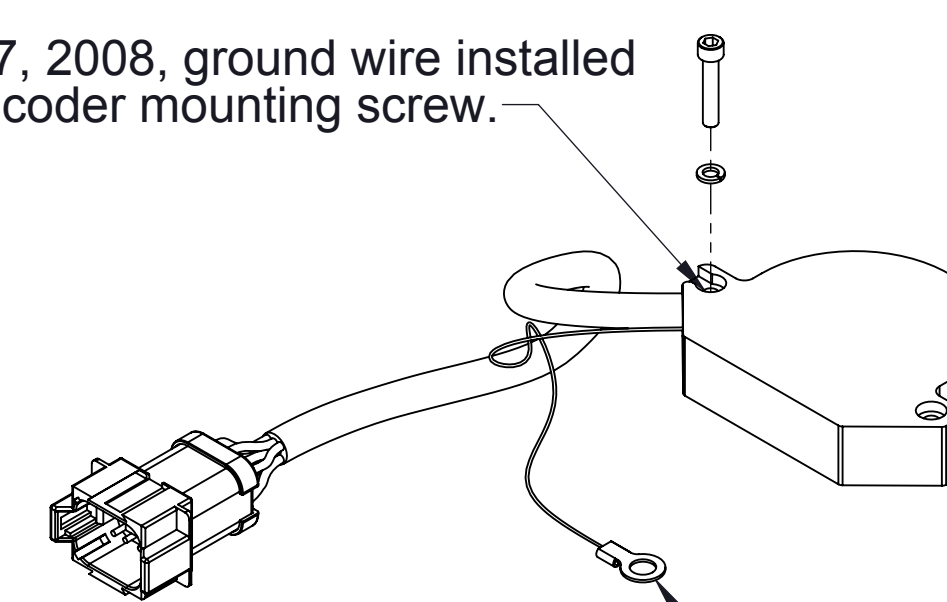
Ref No.	Description
53	Rotary Encoder replacement Kit
86	Actuator Subassembly
87	Valve and Actuator Subassembly



53  
Rotary Encoder  
Replacement Kit

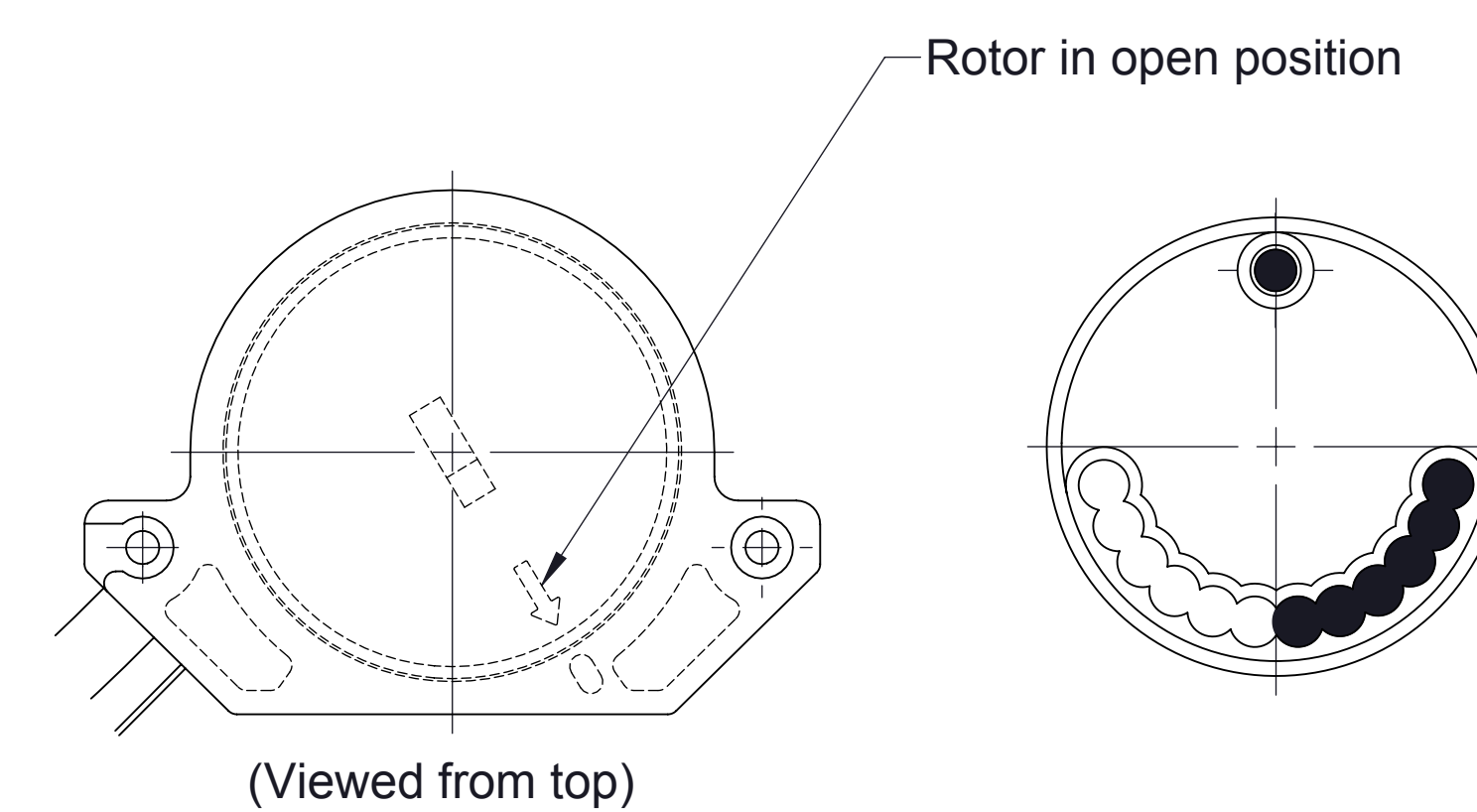
**Encoder Details**

Prior to January 7, 2008, ground wire installed under head of encoder mounting screw.



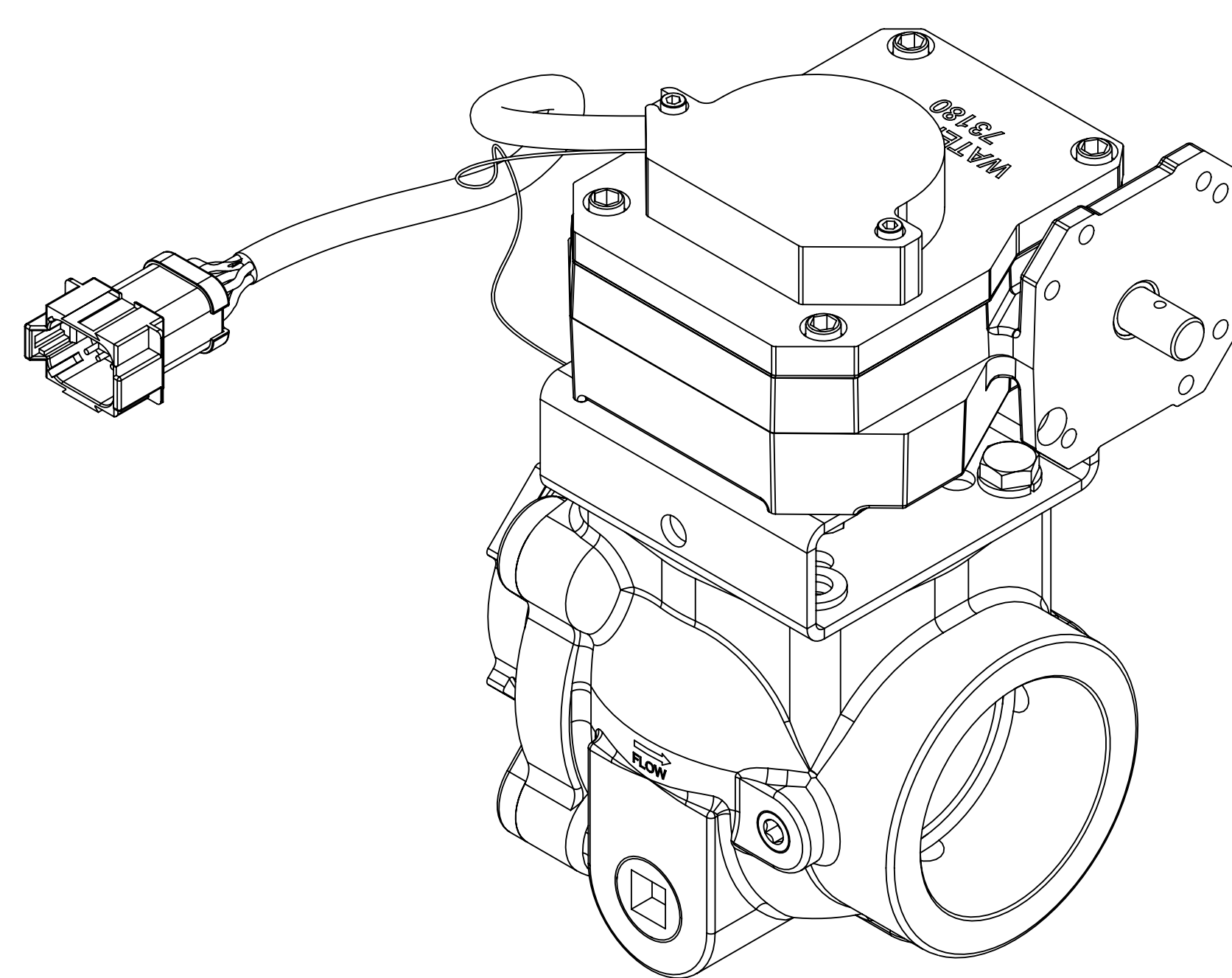
After January 7, 2008, ground wire installed under head of mounting bracket, see 86.

**Encoder Ground Wire Detail**



**Rotor Position**

**Rotor Magnet Positions**



87  
**Valve and Actuator Subassembly**

**Available Repair Subassemblies**