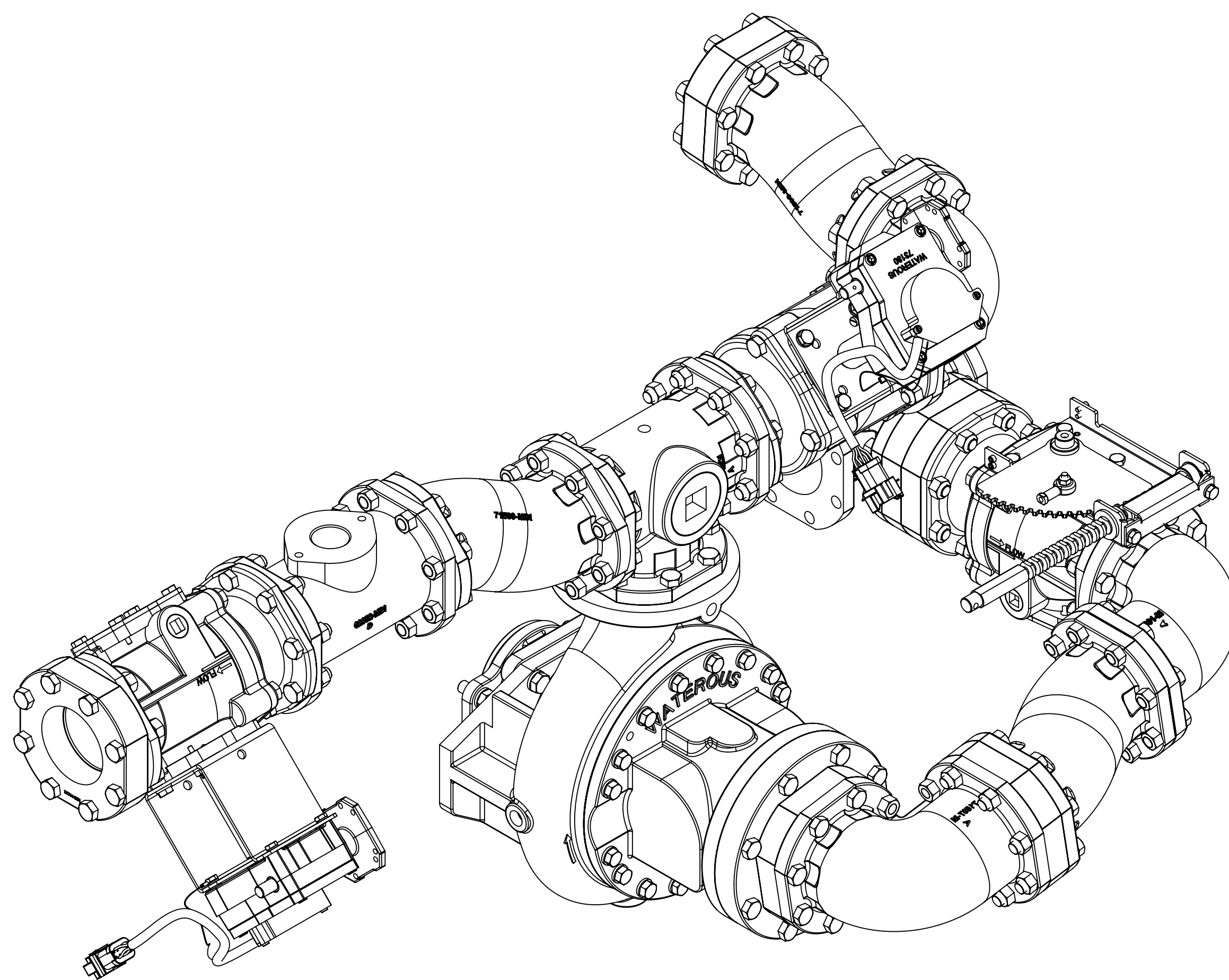
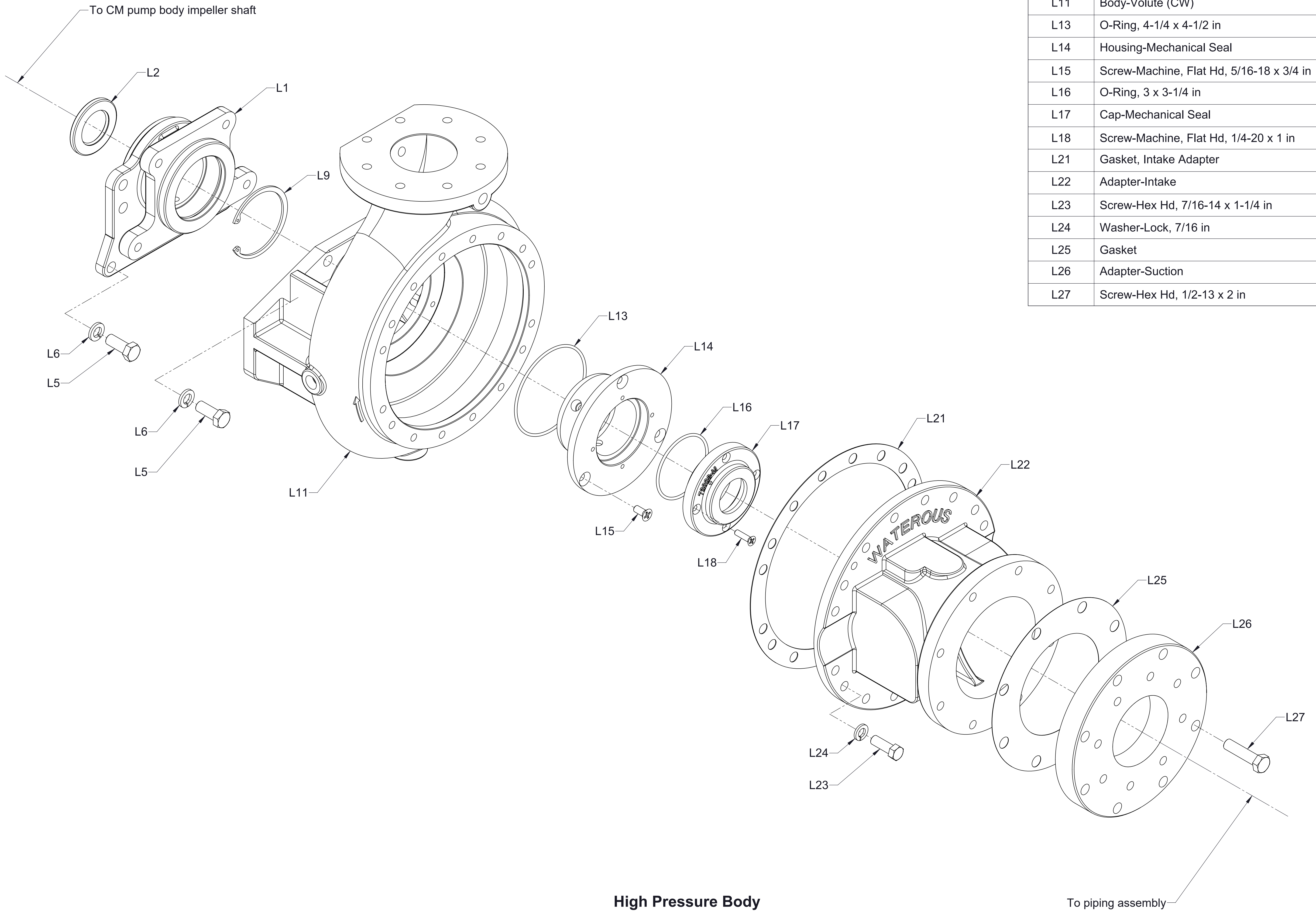


## CM and CMU/CGV High-Rise Pump High Pressure Body and Piping Service Parts List

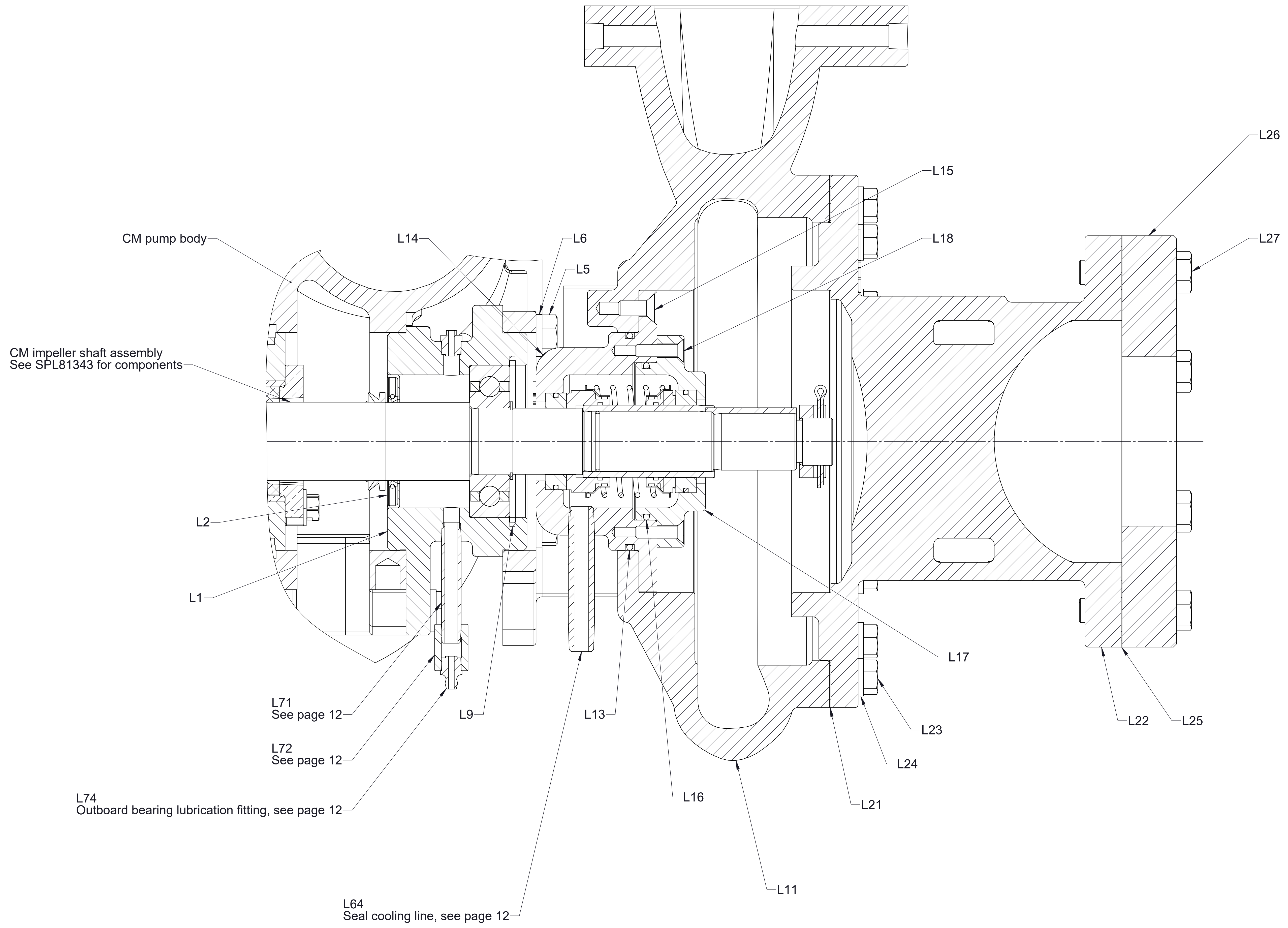
Index:					
Components	Assembly Number	See Page			
		Intake Piping	Discharge Piping	High Pressure Body	Cross-Section View of High Pressure Body
Elbow from CM/CMU pump discharge, no discharge valves	81344-1A	4	5	2	3
Tee from CM/CMU pump discharge, one discharge valve	81344-1B	6	7		
Tee from CM/CMU pump discharge, two discharge valves	81344-1C	8	9		
Tee from CM/CMU pump discharge, two discharge valves	81344-1D	8	10		
Tee from CM pump discharge, no discharge valves	81344-1E	8	11		
Seal Cooling Line		12 and 13			
Outboard Bearing Lubrication					
Drain and Vent Piping	Components	14			
	Open and Closed positions	15			



Note: When ordering parts, please supply pump serial number.

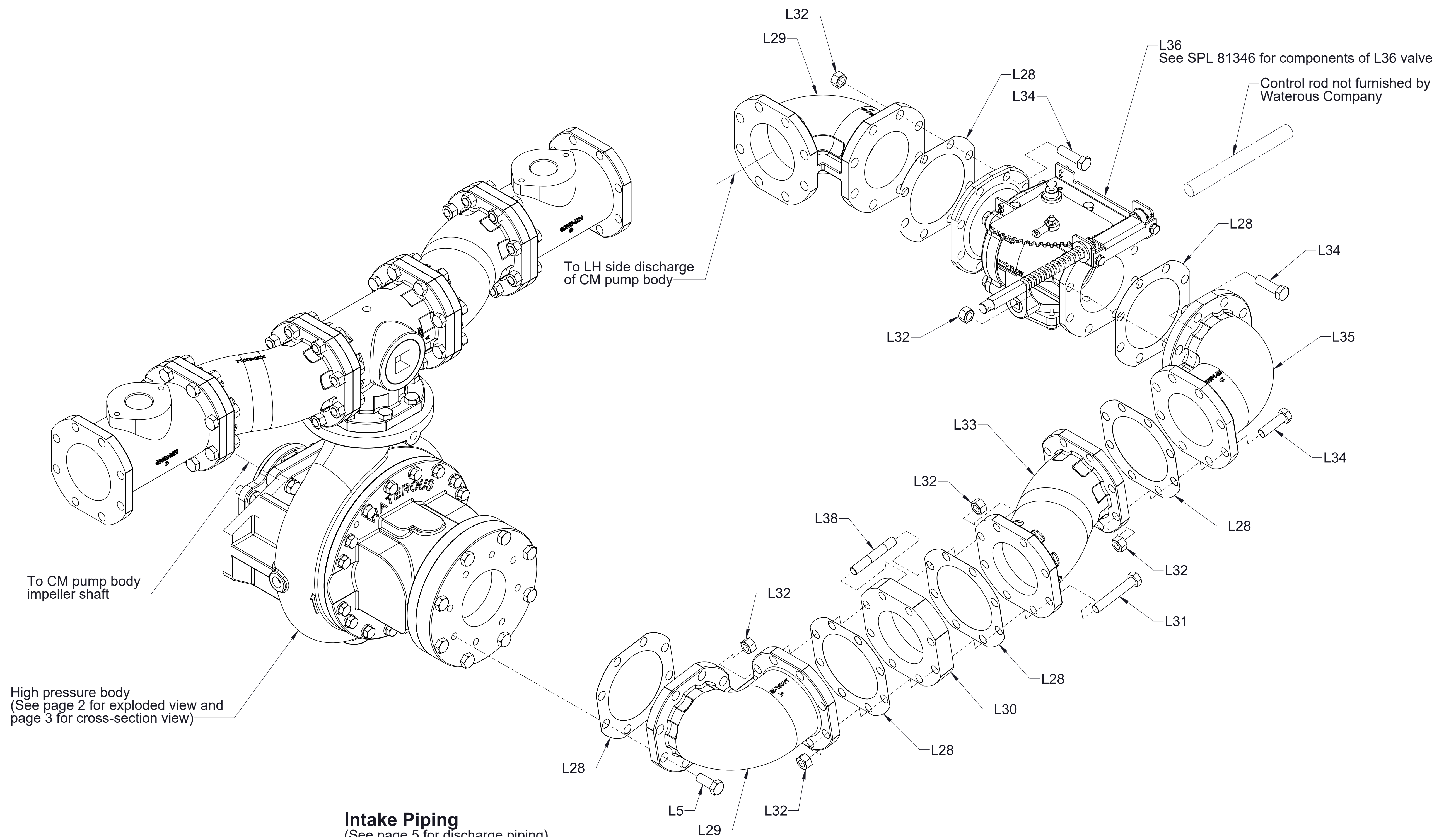


Ref No.	Description
L1	Adapter
L2	Seal-Oil, 1-5/8 x 2-3/4 in
L5	Screw-Hex Hd, 1/2-13 x 1-1/4 in
L6	Washer-Lock, 1/2 in
L9	Ring-Retaining, Internal, 3-5/32 in Bore Dia
L11	Body-Volute (CW)
L13	O-Ring, 4-1/4 x 4-1/2 in
L14	Housing-Mechanical Seal
L15	Screw-Machine, Flat Hd, 5/16-18 x 3/4 in
L16	O-Ring, 3 x 3-1/4 in
L17	Cap-Mechanical Seal
L18	Screw-Machine, Flat Hd, 1/4-20 x 1 in
L21	Gasket, Intake Adapter
L22	Adapter-Intake
L23	Screw-Hex Hd, 7/16-14 x 1-1/4 in
L24	Washer-Lock, 7/16 in
L25	Gasket
L26	Adapter-Suction
L27	Screw-Hex Hd, 1/2-13 x 2 in



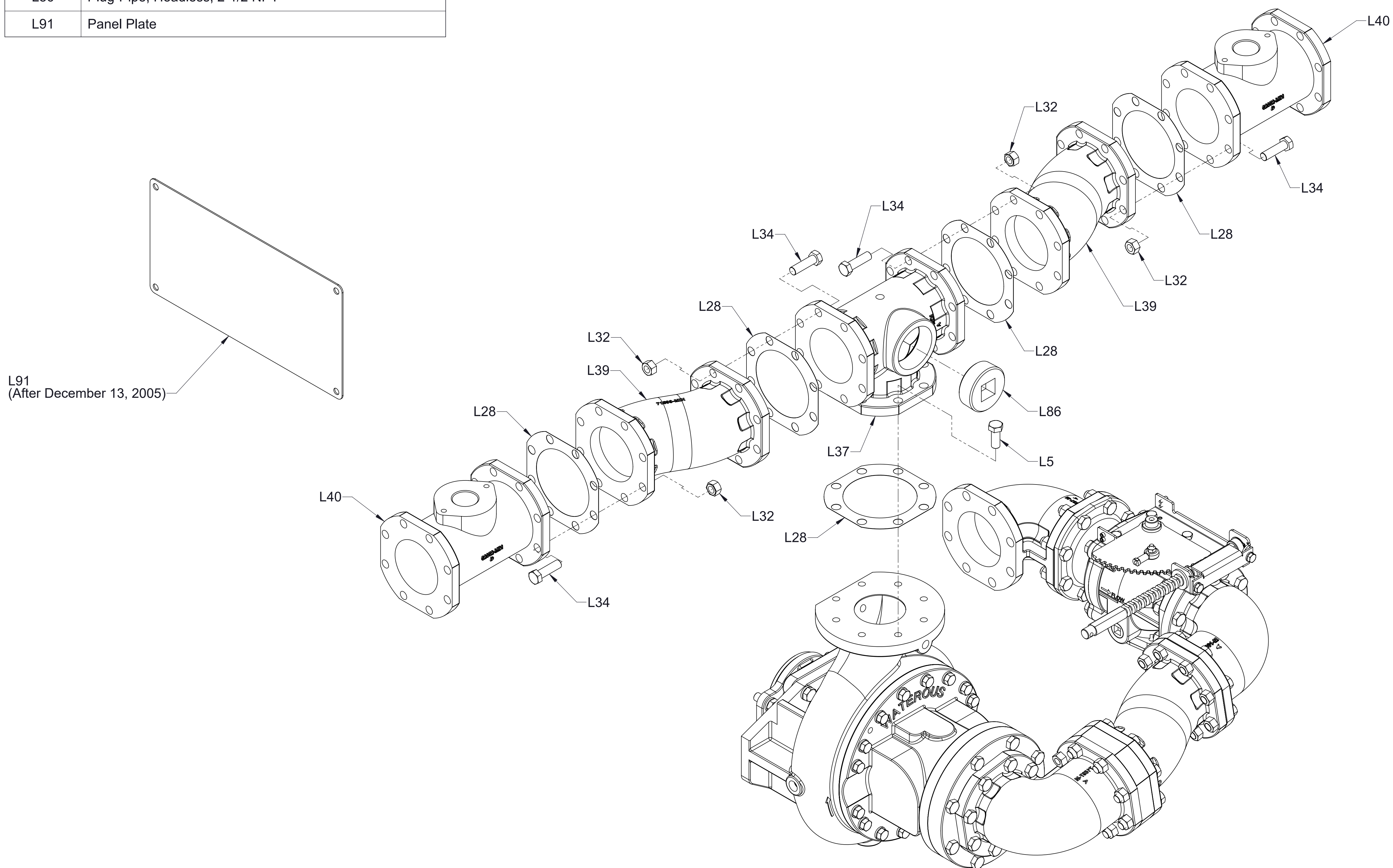
**Cross-Section View of High Pressure Body**  
(See page 2 and 12 for Bill Of Materials)

Ref No.	Description
L5	Screw-Hex Hd, 1/2-13 x 1-1/4 in
L28	Gasket-Flange, 3-1/2, 8-Bolt
L29	Elbow-Flanged
L30	Spacer
L31	Screw-Hex Hd, 1/2-20 x 3 in
L32	Nut-Hex, 1/2-20
L33	Extension-Discharge
L34	Screw-Hex Hd, 1/2-20 x 1-3/4 in
L35	Elbow-Flanged
L36	Intake Ball Valve Assembly
L38	Stud-UNF x UNF, 1/2 x 3-1/4 in



**Intake Piping**  
(See page 5 for discharge piping)  
Assembly 81344-1A

Ref No.	Description
L5	Screw-Hex Hd, 1/2-13 x 1-1/4 in
L28	Gasket-Flange, 3-1/2, 8-Bolt
L32	Nut-Hex, 1/2-20
L34	Screw-Hex Hd, 1/2-13 x 1-3/4 in
L37	Tee-Flanged
L39	Extension-Discharge
L40	Extension-Flow Meter
L86	Plug-Pipe, Headless, 2-1/2 NPT
L91	Panel Plate

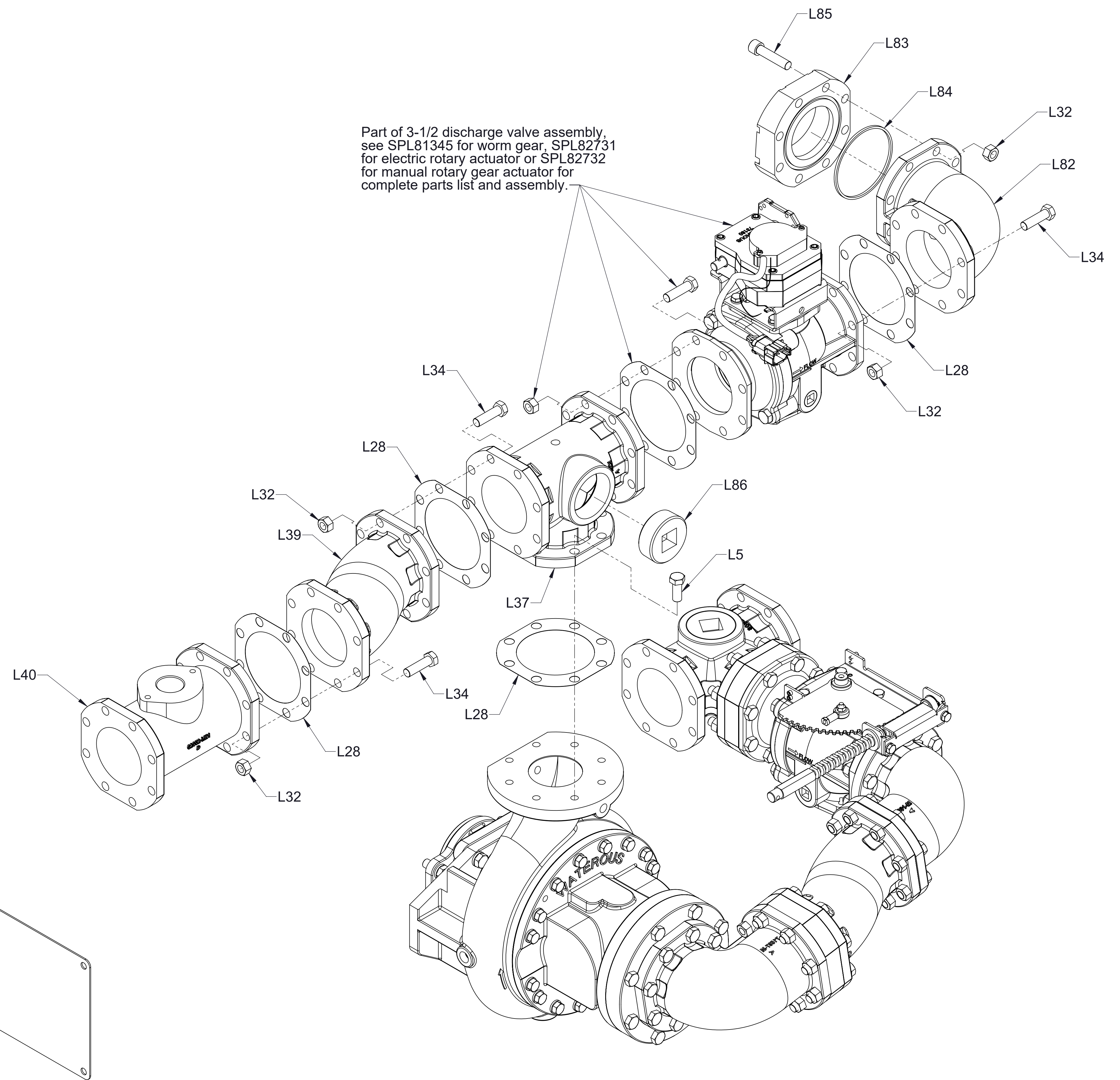


**Elbow from CM Discharge (Discharge Piping),  
no discharge valves (see page 4 for intake piping)**

Assembly 81344-1A



Ref No.	Description
L5	Screw-Hex Hd, 1/2-13 x 1-1/4 in
L28	Gasket-Flange, 3-1/2, 8-Bolt
L32	Nut-Hex, 1/2-20
L34	Screw-Hex Hd, 1/2-20 x 1-3/4 in
L37	Tee-Flanged
L39	Extension-Discharge
L40	Extension-Flow Meter
L82	Elbow-Flanged
L83	Flange-Tapped, 3 NPT
L84	Gasket - Flange, Discharge
L85	Screw-Cap, Hex Soc Hd, 1/2-20 x 2-1/4 in
L86	Plug-Pipe, Headless, 2-1/2 NPT
L91	Panel Plate

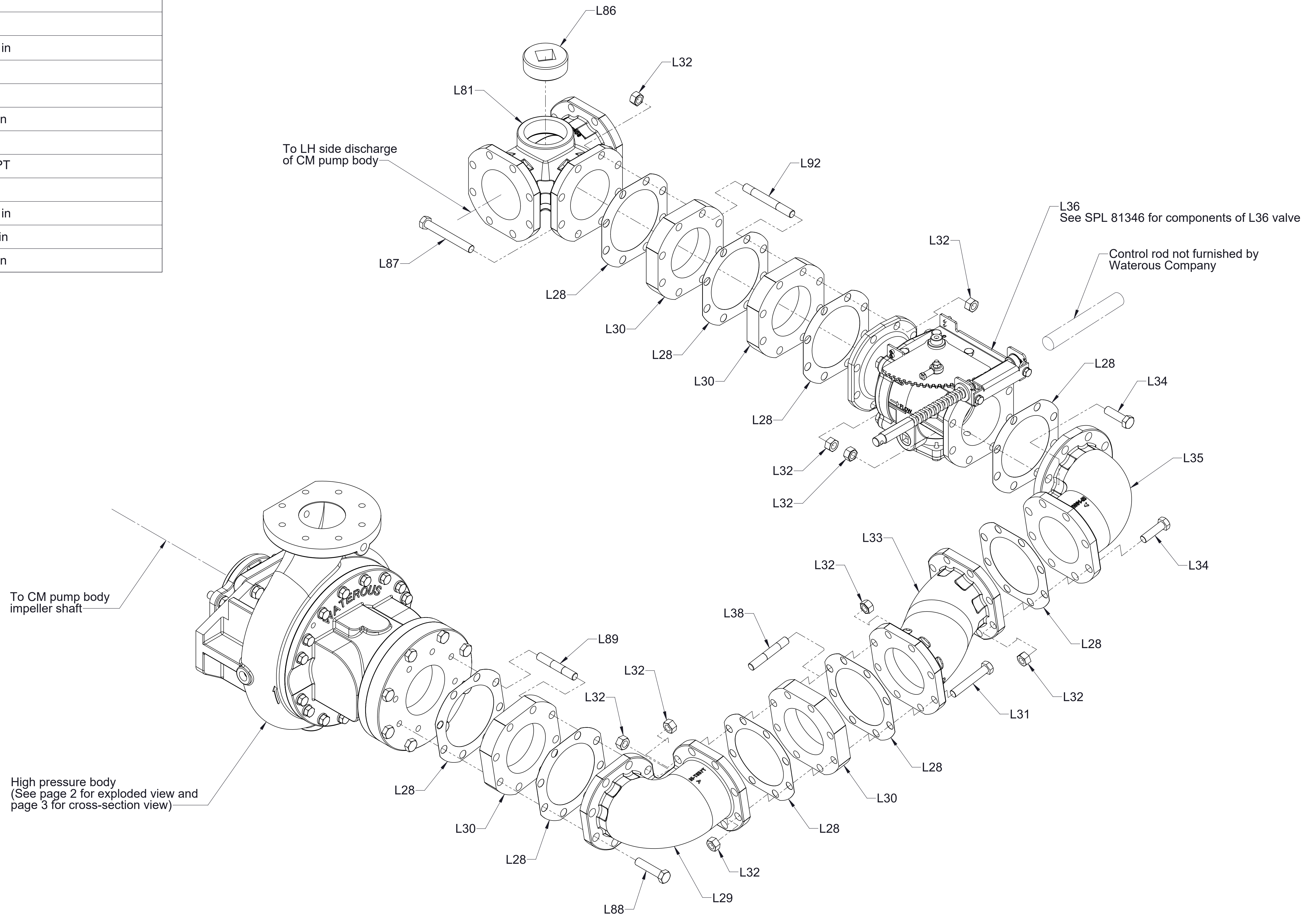


L91  
(After December 13, 2005)

**Tee from CM Discharge (Discharge Piping),  
one discharge valve (see page 6 for intake piping)**

Assembly 81344-1B

Ref No.	Description
L28	Gasket-Flange, 3-1/2, 8-Bolt
L29	Elbow-Flanged
L30	Spacer
L31	Screw-Hex Hd, 1/2-20 x 3 in
L32	Nut-Hex, 1/2-20
L33	Extension-Discharge
L34	Screw-Hex Hd, 1/2-20 x 1-3/4 in
L35	Elbow-Flanged
L36	Intake Ball Valve Assembly
L38	Stud-UNF x UNF, 1/2 x 3-1/4 in
L81	Tee-Flanged
L86	Plug-Pipe, Headless, 2-1/2 NPT
L87	Screw-Hex Hd, 1/2-20 x 4 in
L88	Screw-Hex Hd, 1/2-13 x 2-1/4 in
L89	Stud-UNC x UNF, 1/2 x 3-1/4 in
L92	Stud-UNF x UNF, 1/2 x 4-1/4 in

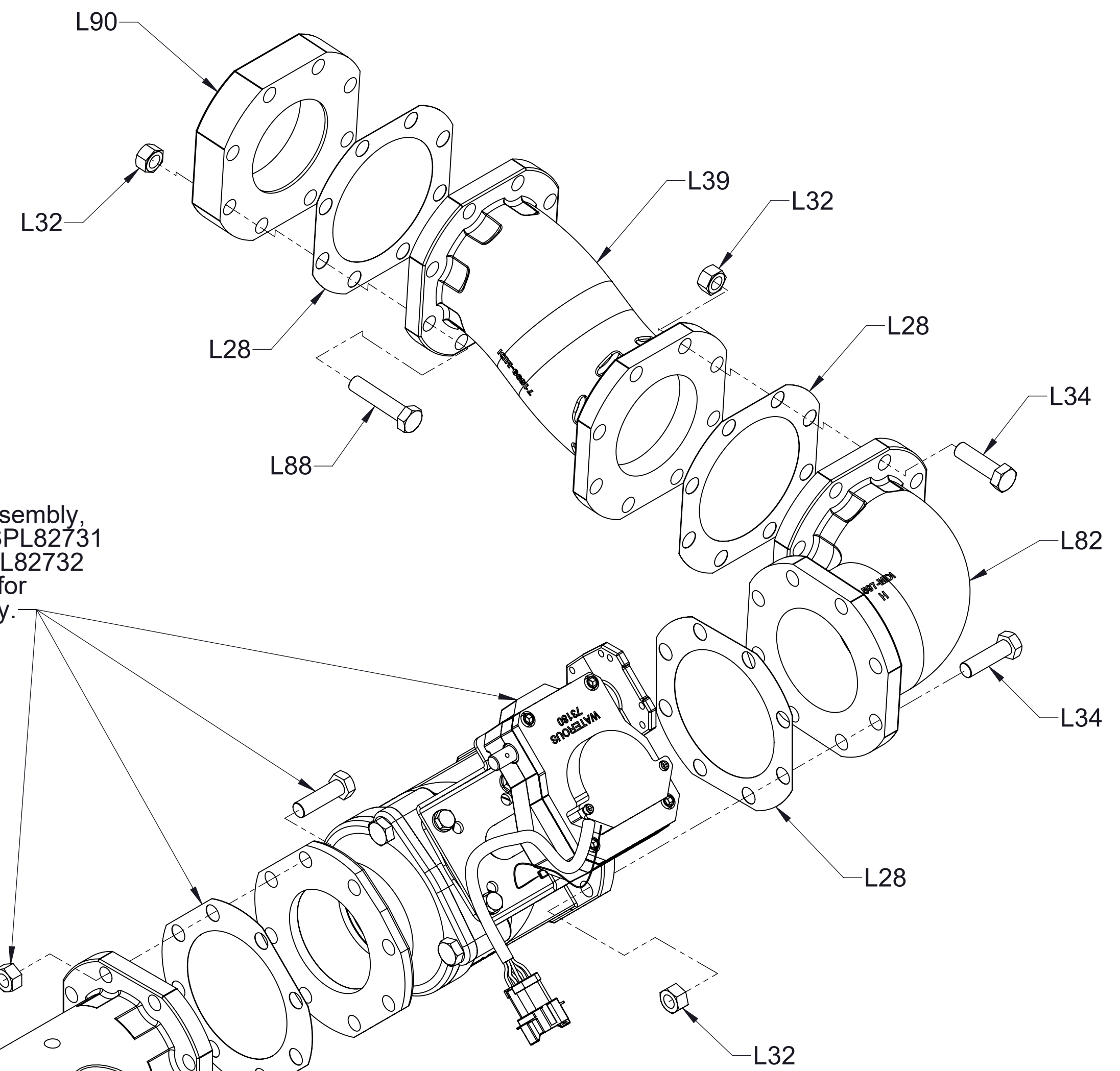


### Intake Piping

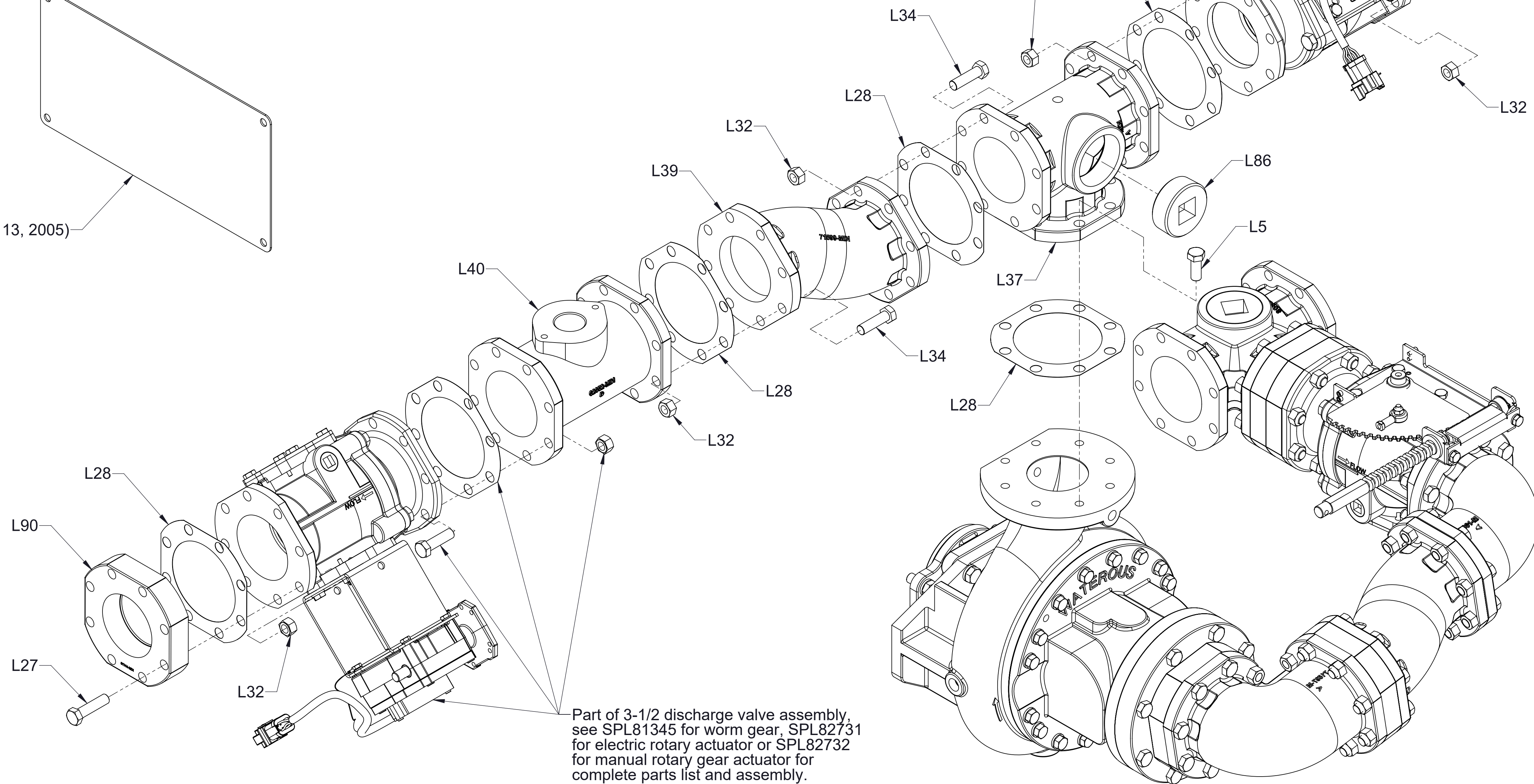
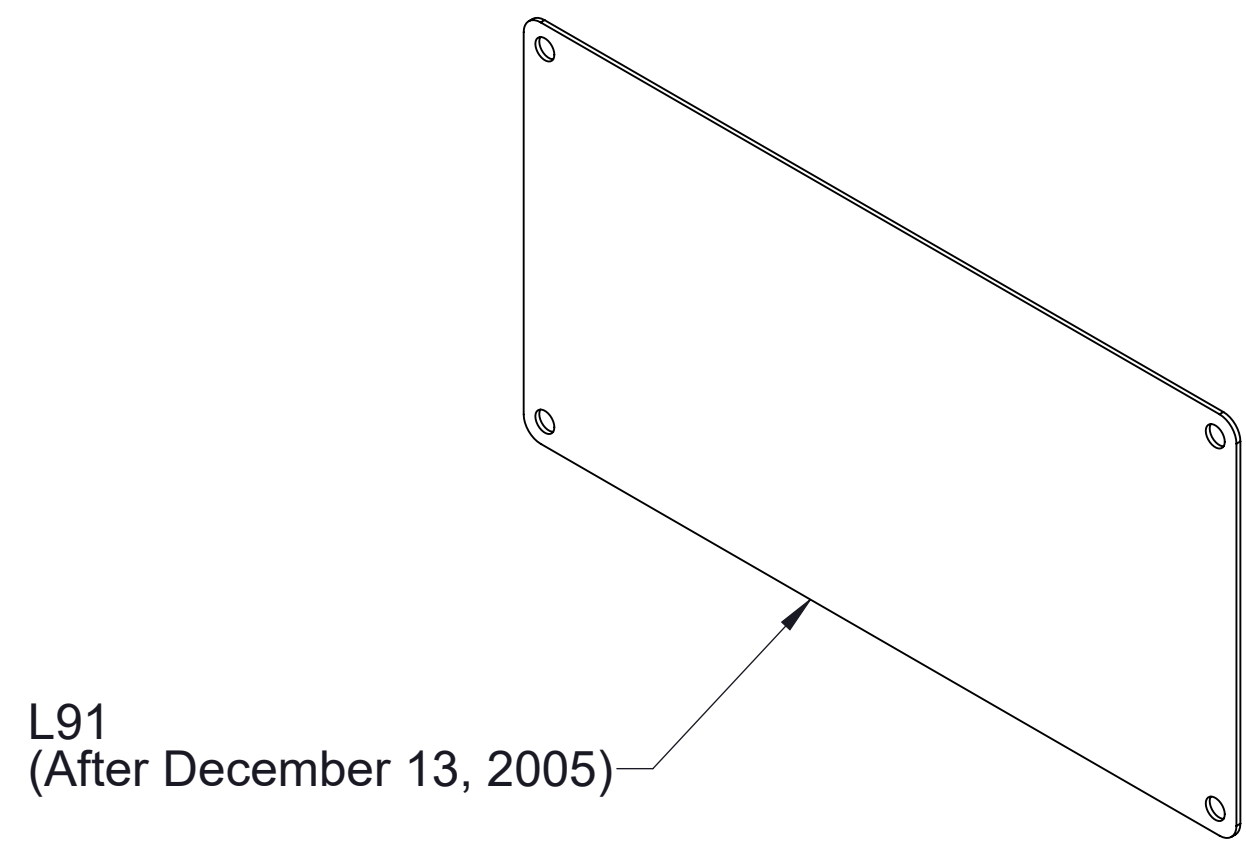
Assembly 81344-1C (See page 9 for discharge piping)  
 Assembly 81344-1D (See page 10 for discharge piping)  
 Assembly 81344-1E (See page 11 for discharge piping)



Ref No.	Description
L5	Screw-Hex Hd, 1/2-13 x 1-1/4 in
L27	Screw-Hex Hd, 1/2-13 x 2 in
L28	Gasket-Flange, 3-1/2, 8-Bolt
L32	Nut-Hex, 1/2-20
L34	Screw-Hex Hd, 1/2-20 x 1-3/4 in
L37	Tee-Flanged
L39	Extension-Discharge
L40	Extension-Flow Meter
L82	Elbow-Flanged, Angle Compensated
L86	Plug-Pipe, Headless, 2-1/2 NPT
L88	Screw-Hex Hd, 1/2-13 x 2-1/4 in
L90	Flange-Tapped, 3 NPT
L91	Panel Plate



Part of 3-1/2 discharge valve assembly, see SPL81345 for worm gear, SPL82731 for electric rotary actuator or SPL82732 for manual rotary gear actuator for complete parts list and assembly.

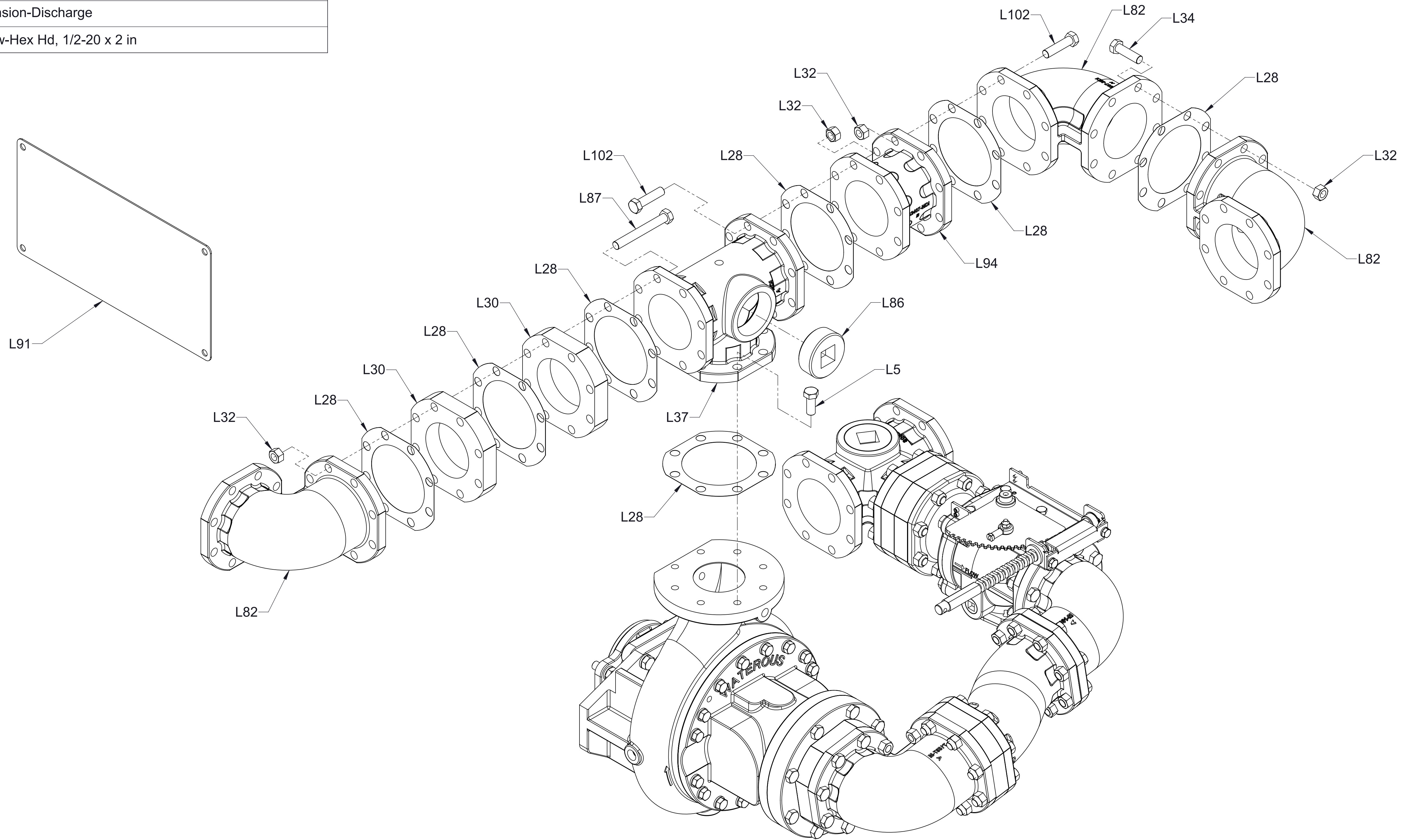


Part of 3-1/2 discharge valve assembly, see SPL81345 for worm gear, SPL82731 for electric rotary actuator or SPL82732 for manual rotary gear actuator for complete parts list and assembly.

**Tee from CM Discharge (Discharge Piping),  
two discharge valves (see page 8 for intake piping)**

Assembly 81344-1C

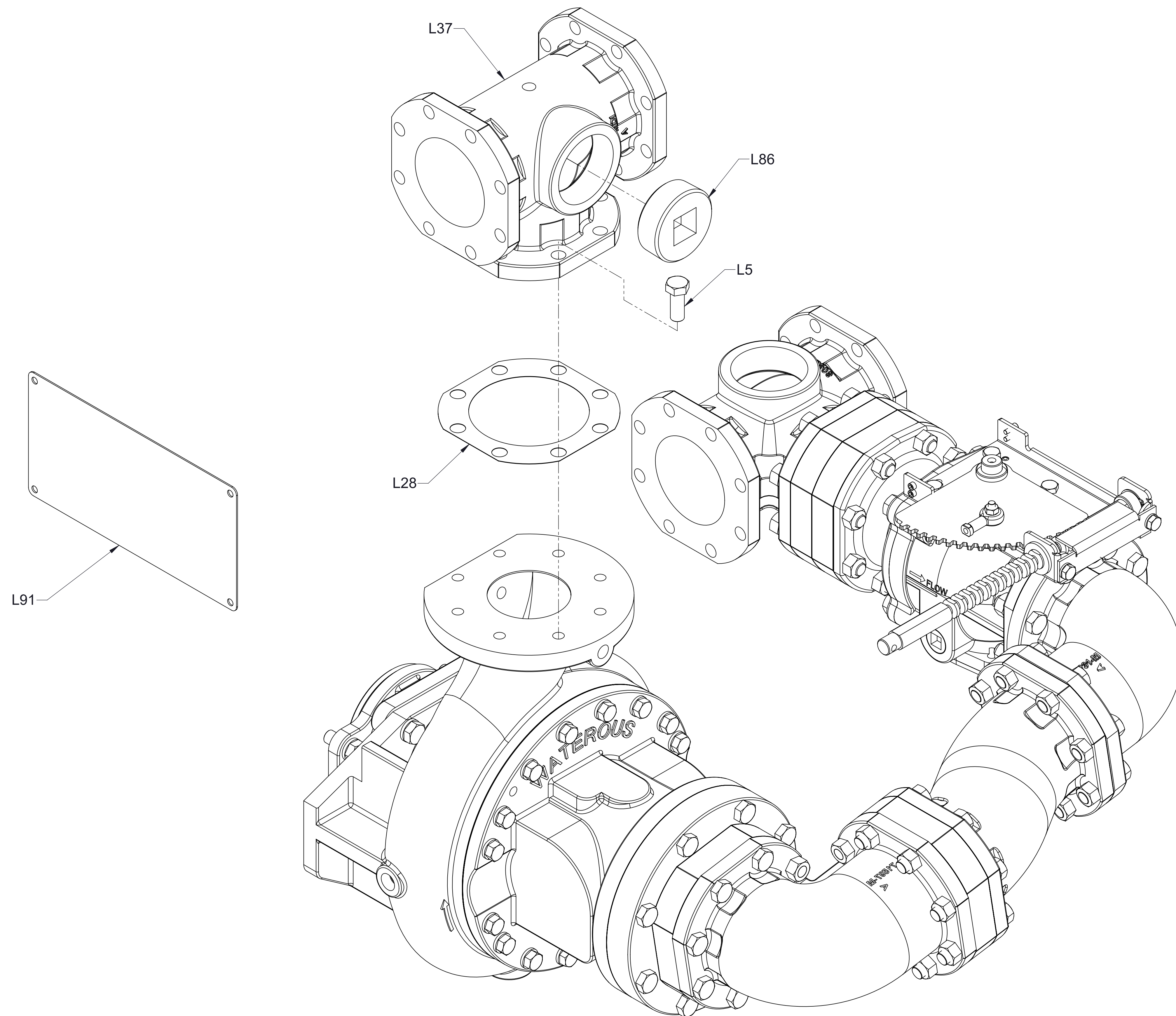
Ref No.	Description
L5	Screw-Hex Hd, 1/2-13 x 1-1/4 in
L28	Gasket-Flange, 3-1/2, 8-Bolt
L30	Spacer
L32	Nut-Hex, 1/2-20
L34	Screw-Hex Hd, 1/2-20 x 1-3/4 in
L37	Tee-Flanged
L82	Elbow-Flanged
L86	Plug-Pipe, Headless, 2-1/2 NPT
L87	Screw-Hex Hd, 1/2-20 x 4 in
L91	Panel Plate
L94	Extension-Discharge
L102	Screw-Hex Hd, 1/2-20 x 2 in



**Tee from CM Discharge (Discharge Piping),  
two discharge valves (see page 8 for intake piping)**

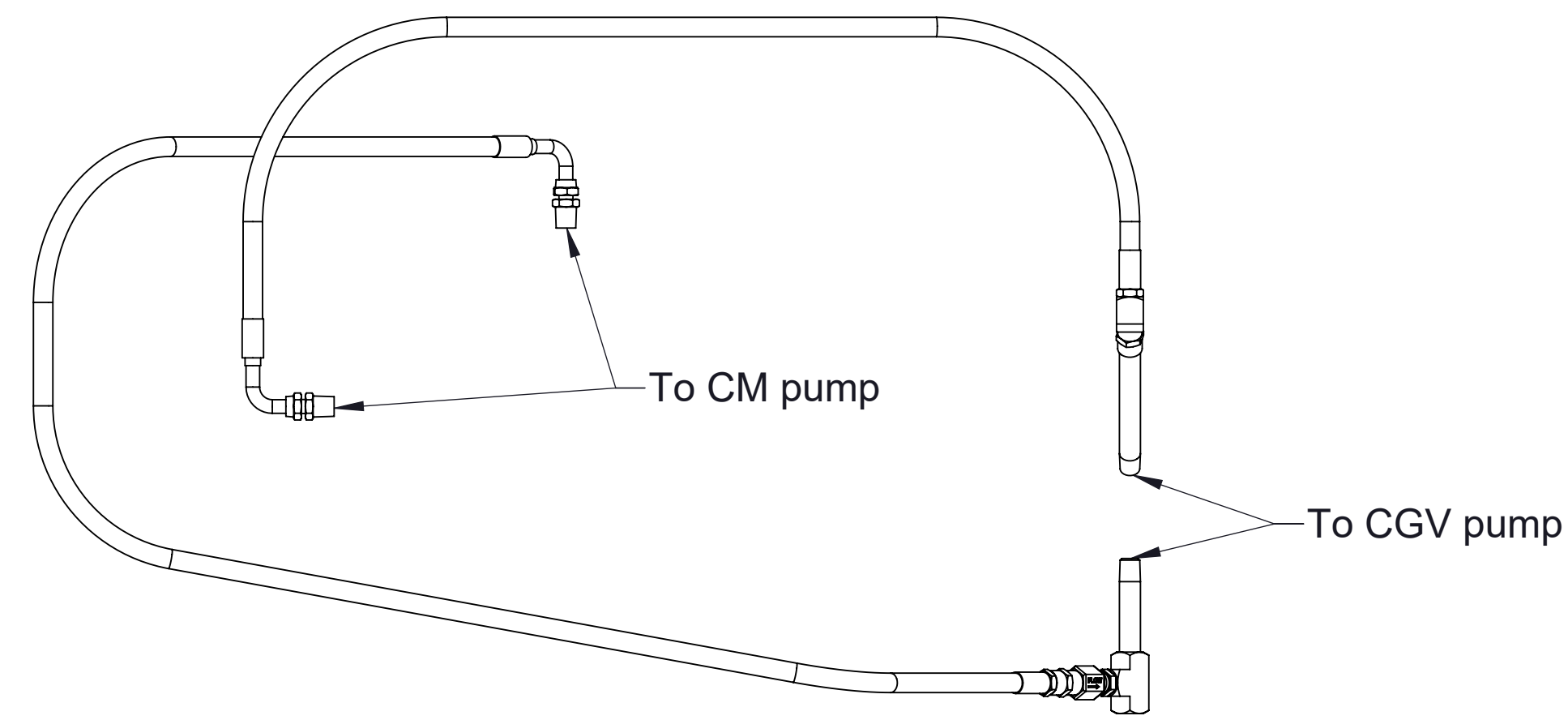
Assembly 81344-1D

Ref No.	Description
L5	Screw-Hex Hd, 1/2-13 x 1-1/4 in
L28	Gasket-Flange, 3-1/2, 8-Bolt
L37	Tee-Flanged
L86	Plug-Pipe, Headless, 2-1/2 NPT
L91	Panel Plate

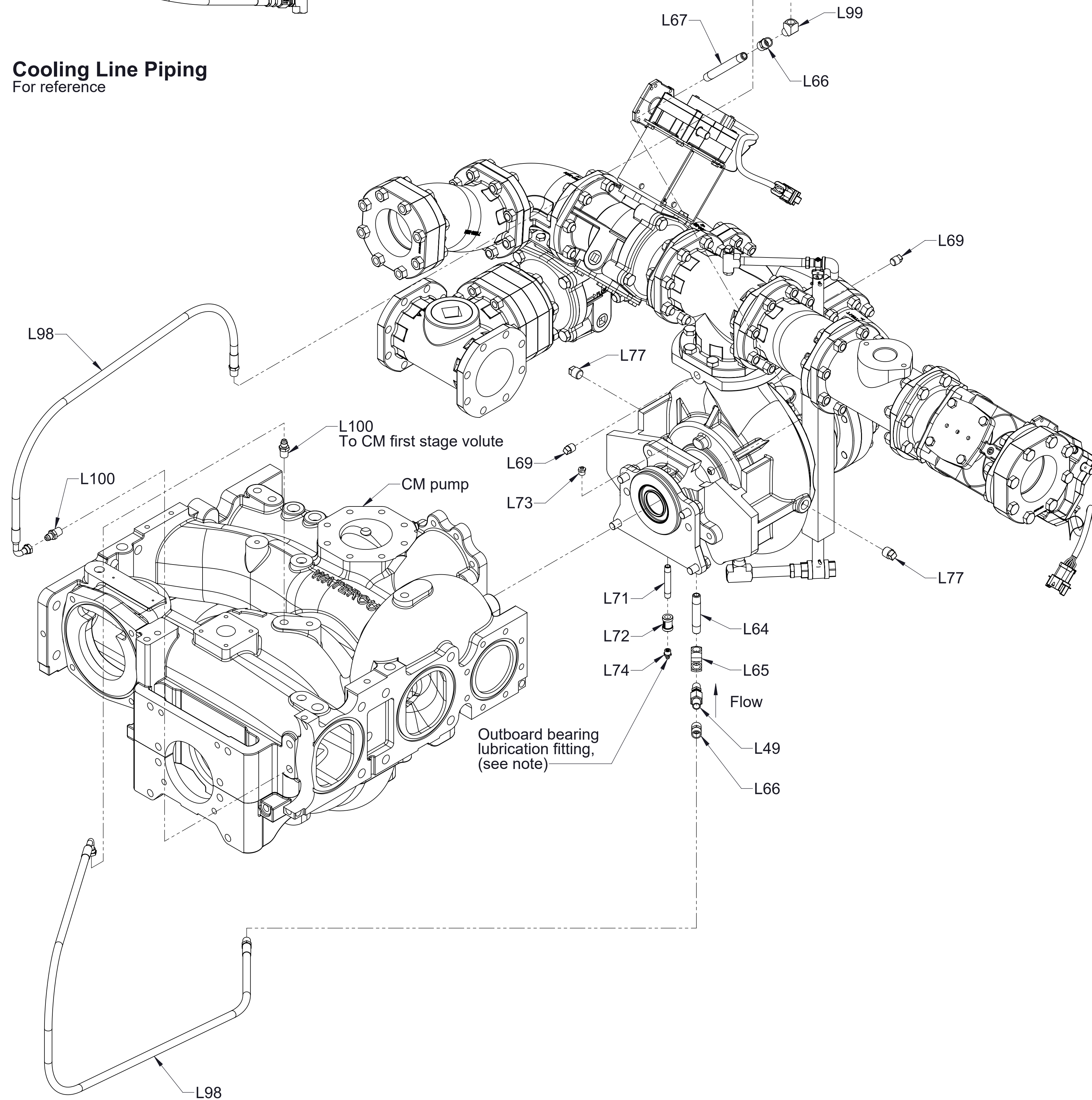


**Tee from CM Discharge (Discharge Piping),  
no discharge valves (see page 8 for intake piping)**

Assembly 81344-1E



**Cooling Line Piping**  
For reference

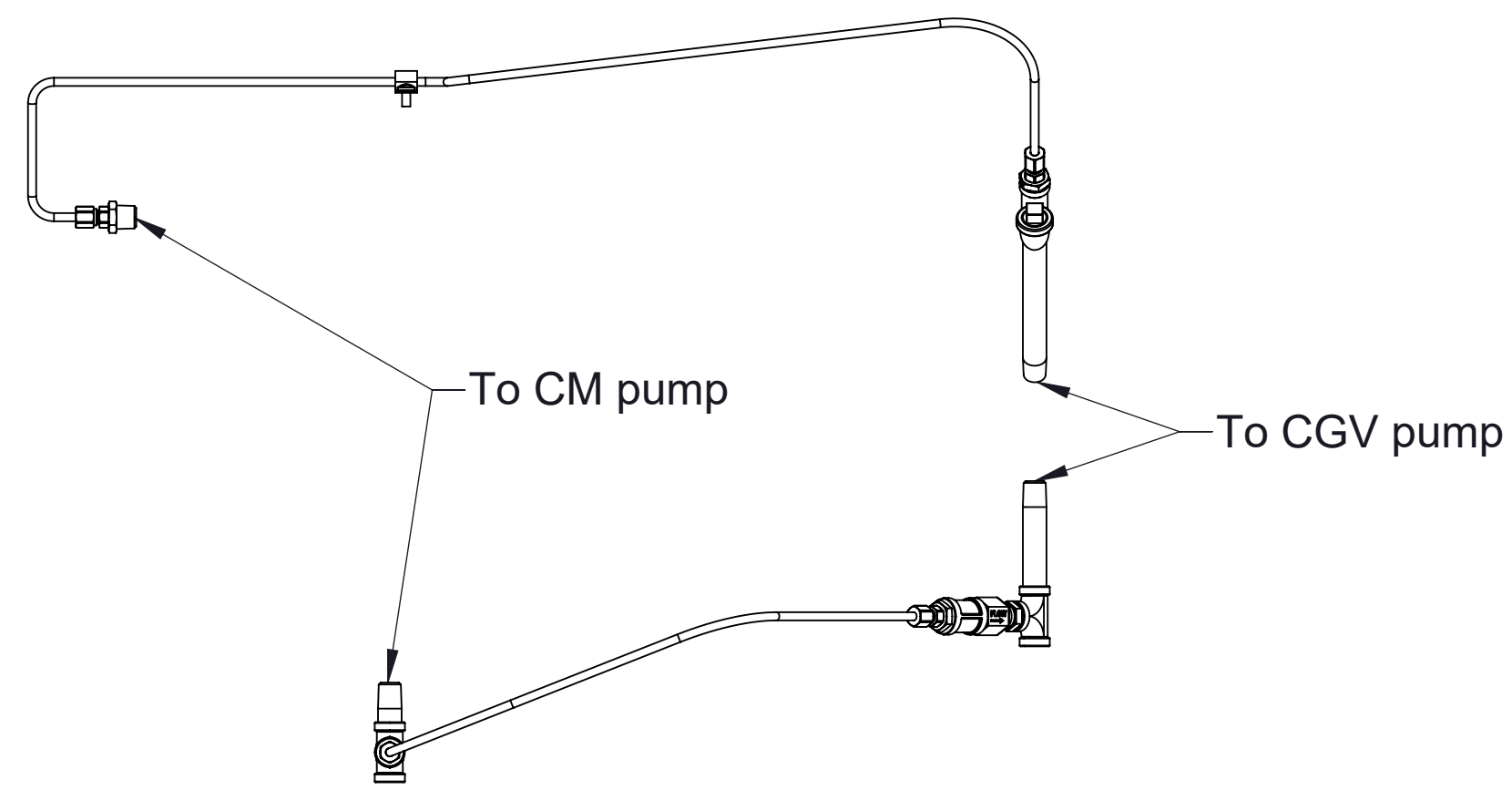


Ref No.	Description
L49	Valve-Ball Check
L64	Nipple-Pipe, 1/4 NPT x 3 in
L65	Tee-Pipe, 1/4 NPT
L66	Coupling-Hex, 1/4 NPT
L67	Nipple-Pipe, 1/4 NPT x 5 in
L69	Plug-Pipe, Square Hd, 1/4 NPT
L71	Nipple-Pipe, 1/8 NPT x 2-1/2 in
L72	Coupling-Pipe, 1/8 NPT
L73	Fitting-Lube, Relief
L74	Fitting-Lubrication
L77	Plug-Pipe, Square Hd, 3/8 NPT
L98	Hose Assembly, 1/2 NPT x 1/4 FJIC, 90°
L99	Elbow-Street, 45°, 1/4 NPT
L100	Adapter-1/4 NPT x 1/4 MJIC

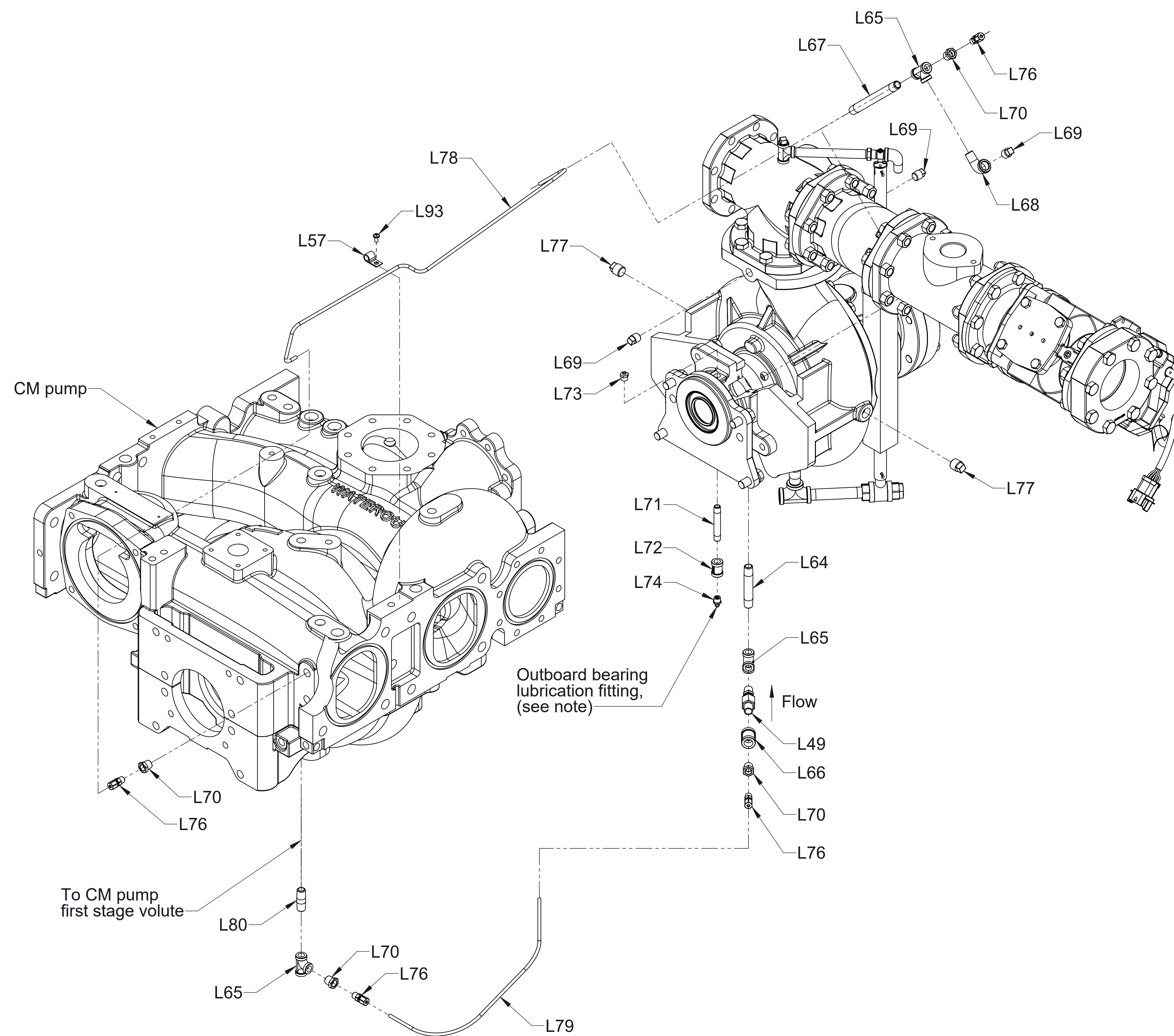
**Outboard Bearing Lubrication**

Add a good quality, medium consistency, ball bearing grease into fitting L74 until it comes out of relief fitting L73.

**Seal Cooling Line Piping and Outboard Bearing Lubrication**  
(After November 25, 2013)



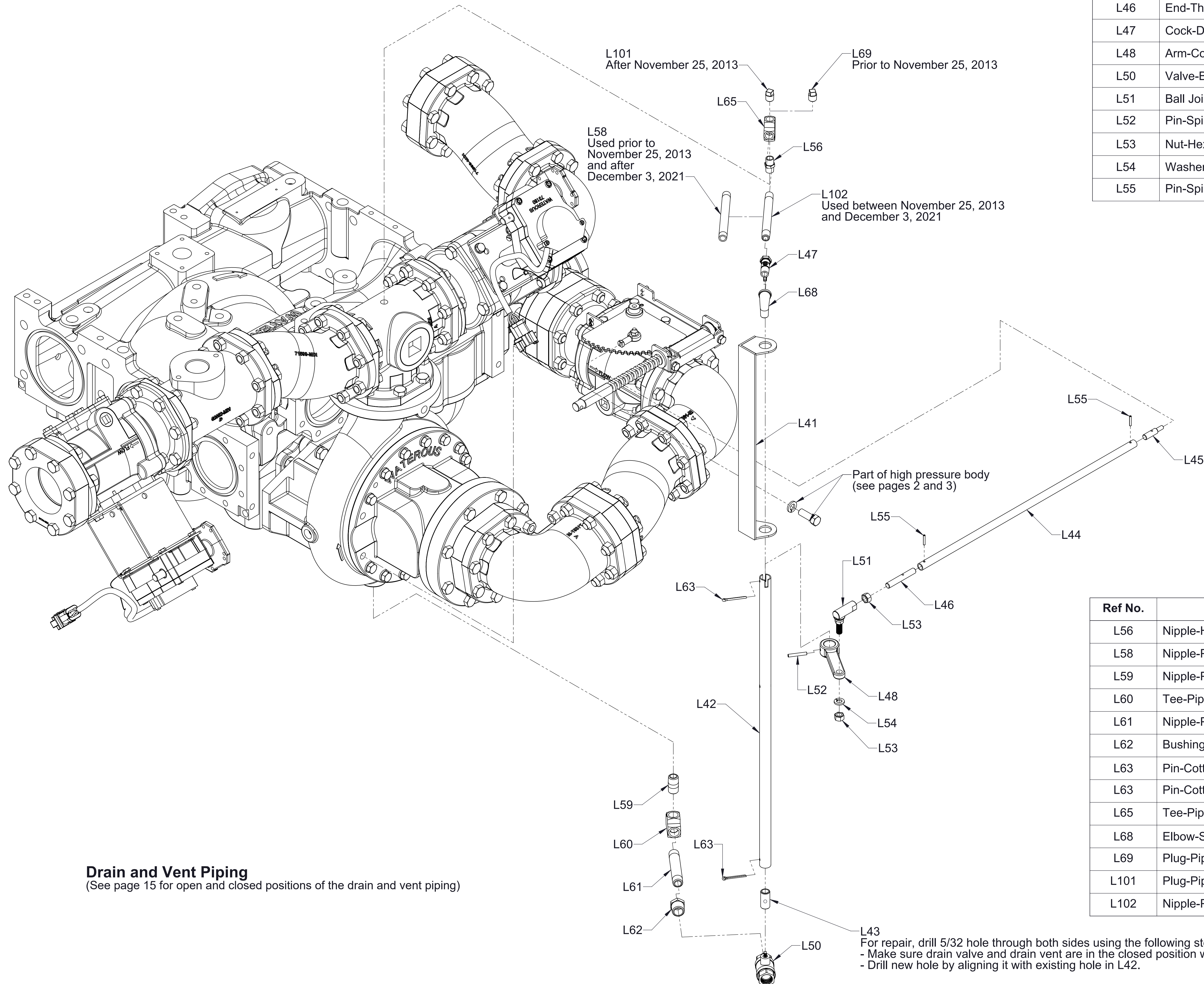
**Cooling Line Piping**  
For reference



Ref No.	Description
L49	Valve-Ball Check
L57	Clamp-Wire
L64	Nipple-Pipe, 1/4 NPT x 3 in
L65	Tee-Standard, Pipe, 1/4 NPT
L66	Coupling-Pipe, 1/4 NPT
L67	Nipple-Pipe, 1/4 NPT NPT x 5-1/2 in
L68	Elbow-Street, 90°, 1/4 NPT
L69	Plug-Pipe, Square Hd, 1/4 NPT
L70	Bushing-Reducing, Pipe, 1/4 x 1/8 NPT
L71	Nipple-Pipe, 1/8 NPT x 2-1/2 in
L72	Coupling-Pipe, 1/8 NPT
L73	Fitting-Lube, Relief
L74	Fitting-Lubrication
L76	Adapter-Straight, Compression, 3/16 Tube X 1/8 MNPT
L77	Plug-Pipe, Square Hd, 3/8 NPT
L78	Tube, 3/16 x 28-3/4 in
L79	Tubing, 3/16 x 15-1/4 in
L80	Nipple-Pipe, 1/4 NPT x 1-1/2 in
L93	Screw-Machine, Pan Hd, #10-24 x 3/8 in

**Outboard Bearing Lubrication**  
Add a good quality, medium consistency, ball bearing grease into fitting L74 until it comes out of relief fitting L73.

**Seal Cooling Line Piping and Outboard Bearing Lubrication**  
(Prior to November 25, 2013)

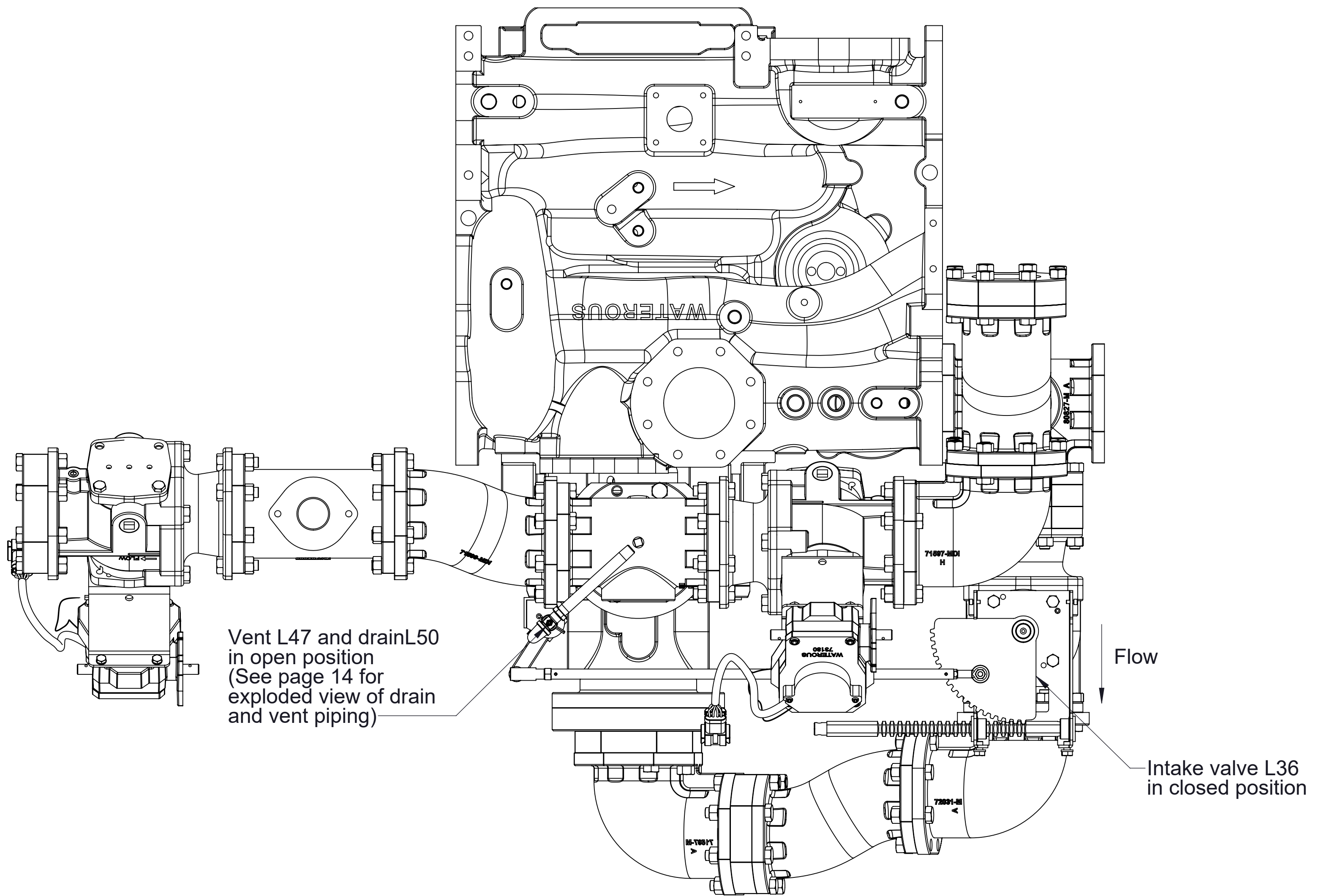


**Drain and Vent Piping**  
 (See page 15 for open and closed positions of the drain and vent piping)

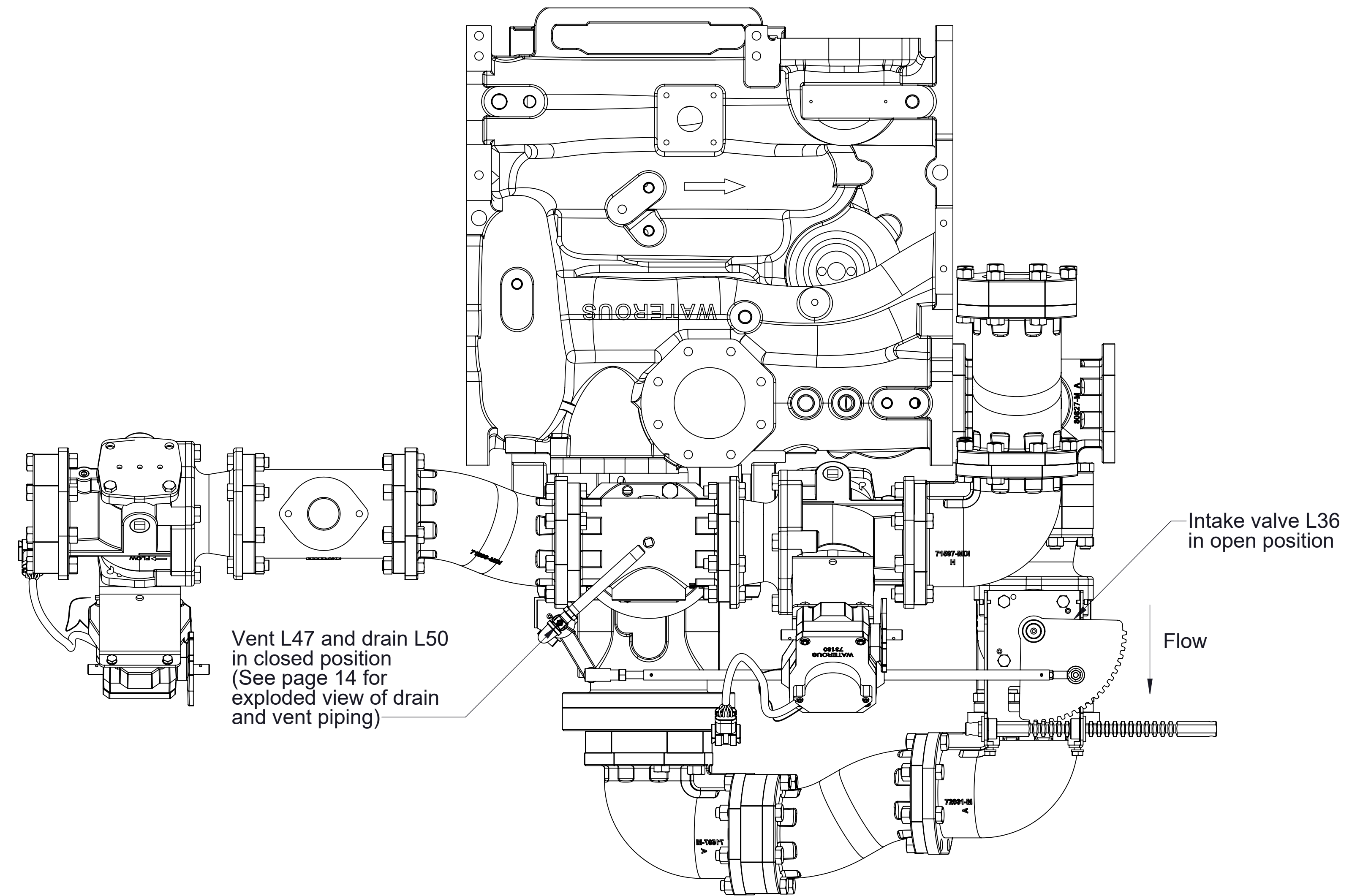
Ref No.	Description
L41	Support-Drain Rod
L42	Tube-Operating
L43	End-Tube
L44	Tube-Actuator
L45	End-Threaded, 1/4-28
L46	End-Threaded, 3/8-24
L47	Cock-Drain, 1/4 NPT
L48	Arm-Control
L50	Valve-Ball, 1/2 in
L51	Ball Joint, 3/8-24
L52	Pin-Spirol, 3/16 x 1-1/4 in
L53	Nut-Hex, 3/8-24
L54	Washer-Lock, 3/8 in
L55	Pin-Spirol, 1/8 x 3/4 in

Ref No.	Description
L56	Nipple-Hex, 1/4 NPT
L58	Nipple-Pipe, 1/4 NPT x 5 in
L59	Nipple-Pipe, 3/8 NPT x 1-1/2 in
L60	Tee-Pipe, 3/8 NPT
L61	Nipple-Pipe, 3/8 NPT x 3-1/2 in
L62	Bushing-Reducing, Pipe, 1/2 x 3/8 NPT
L63	Pin-Cotter, 1/8 x 1-1/4 in
L63	Pin-Cotter, 3/32 x 1-1/4 in (Prior to September 23, 2019)
L65	Tee-Pipe, 1/4 NPT
L68	Elbow-Street, 90°, 1/4 NPT
L69	Plug-Pipe, Square Hd, 1/4 NPT
L101	Plug-Pipe, Square Hd, 1/4 NPT
L102	Nipple-Pipe, 1/4 NPT x 5 in

L43  
 For repair, drill 5/32 hole through both sides using the following steps:  
 - Make sure drain valve and drain vent are in the closed position with CGV valve open.  
 - Drill new hole by aligning it with existing hole in L42.



**Intake Valve Closed**



**Intake Valve Open**

**Drain and Vent Piping**  
Open and closed positions