

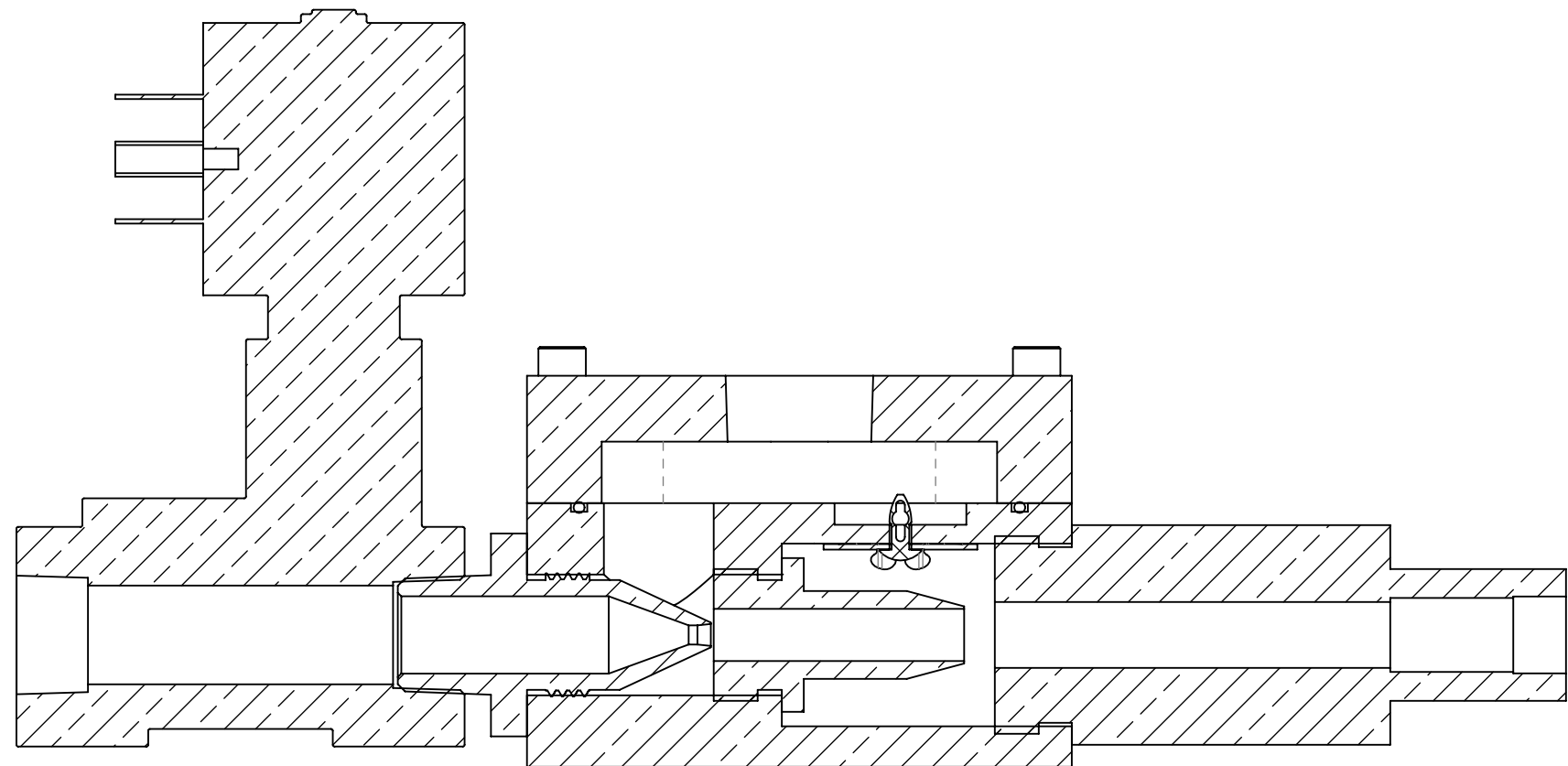
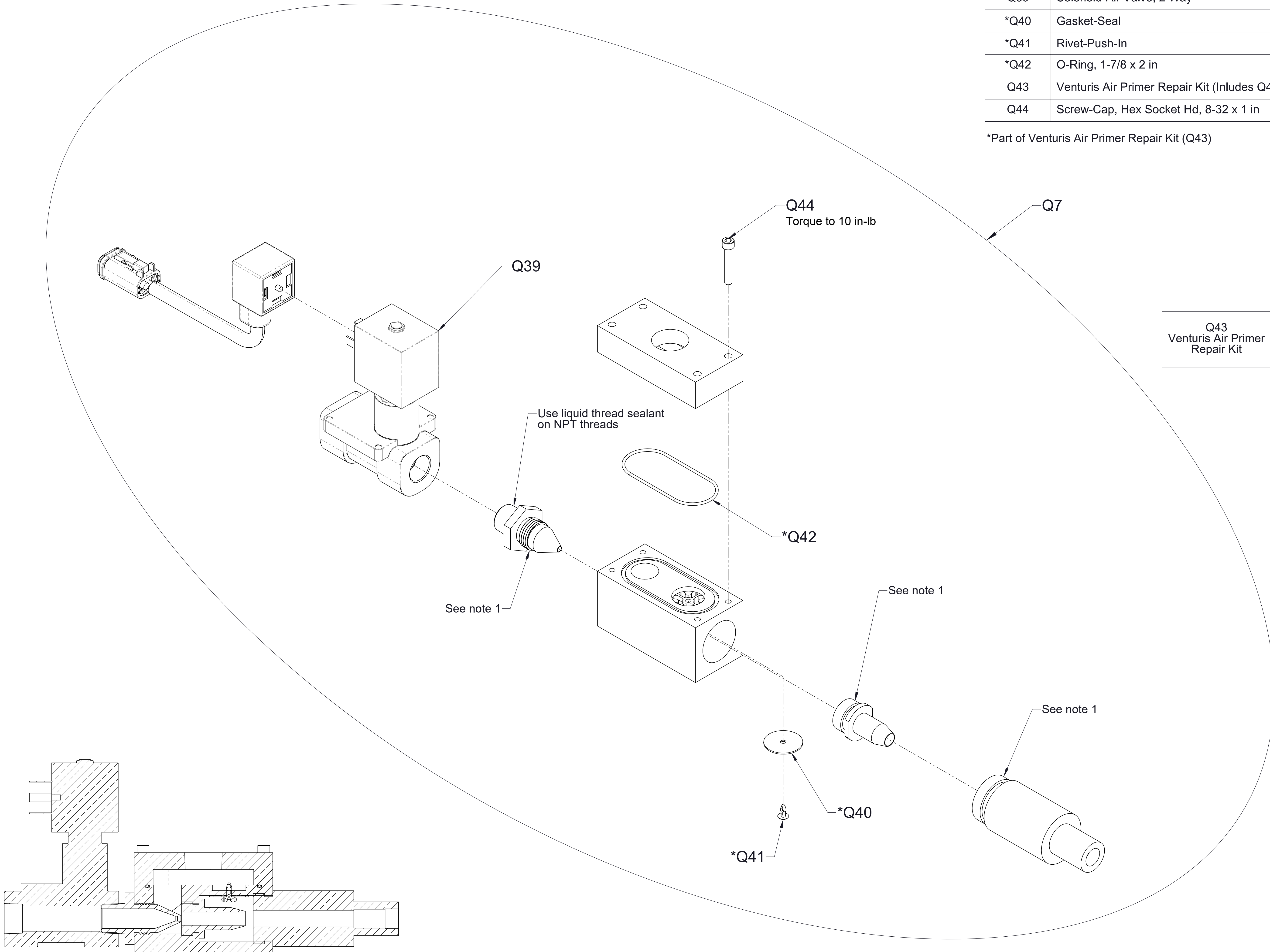
Venturis Air Primer Service Parts List

Air Primer	See Page
Components	2
Mounting on Transmission or PTO	3

Components	Pump Model	Transmission Model	Priming Valve Mounting	See Page					
				Valve and Piping	Solenoid (Multiple Valves)	Panel Activation			Optional Components
						Push-Button	Rocker Switch	Oversize Push-Button	
Priming Valve	CM, CMU	All	4-Bolt	4	12	13	14	15	16
	CS, CSU	All	4-Bolt	5					
	CGVG, CM (Inverted)	All	3/8 NPT Nipple Mounted	6					
	CXS, ESU1 (Dual Intake)	C20, C22 (Pump on Front (Input Shaft) Side)	4-Bolt	7					
		C20, C22 (Pump on Rear (Output Shaft) Side)	4-Bolt	7					
		D, K, PA, T	4-Bolt	8					
	S101	All	4-Bolt	9					
	CG, CL, CX, CP-2, CP-3, CR, CZ, S100, HLU, ESU1	All	3/8 NPT Nipple Mounted	10					
	ESU1 (Inverted Dual Intake)	C22 (Pump on Front or Rear)	4-Bolt	11					

Ref No.	Description
Q7	Venturis Air Primer Subassembly
Q39	Solenoid-Air Valve, 2 Way
*Q40	Gasket-Seal
*Q41	Rivet-Push-In
*Q42	O-Ring, 1-7/8 x 2 in
Q43	Venturis Air Primer Repair Kit (Includes Q40, Q41, Q42)
Q44	Screw-Cap, Hex Socket Hd, 8-32 x 1 in

*Part of Venturis Air Primer Repair Kit (Q43)

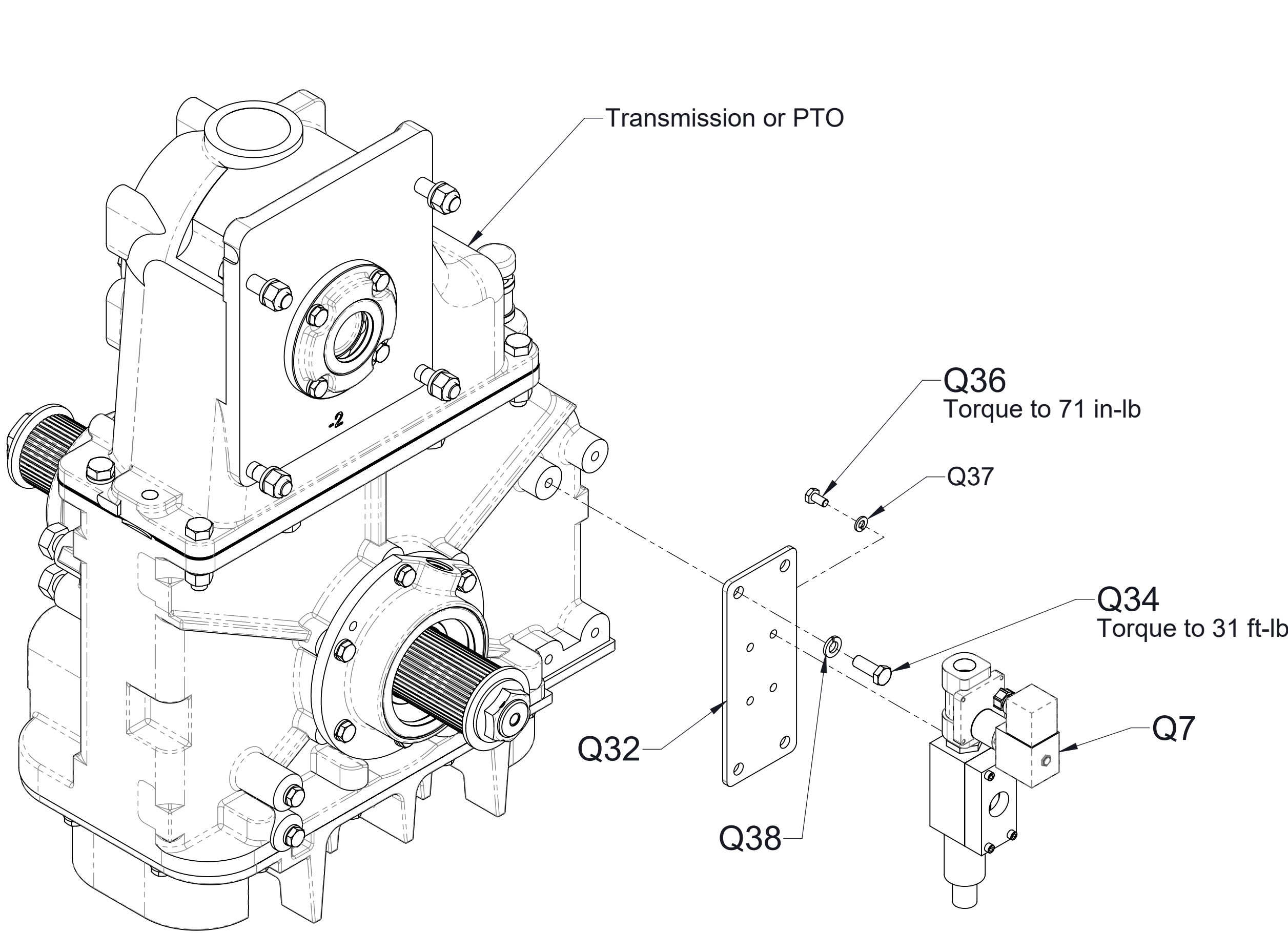


Cross-Section View

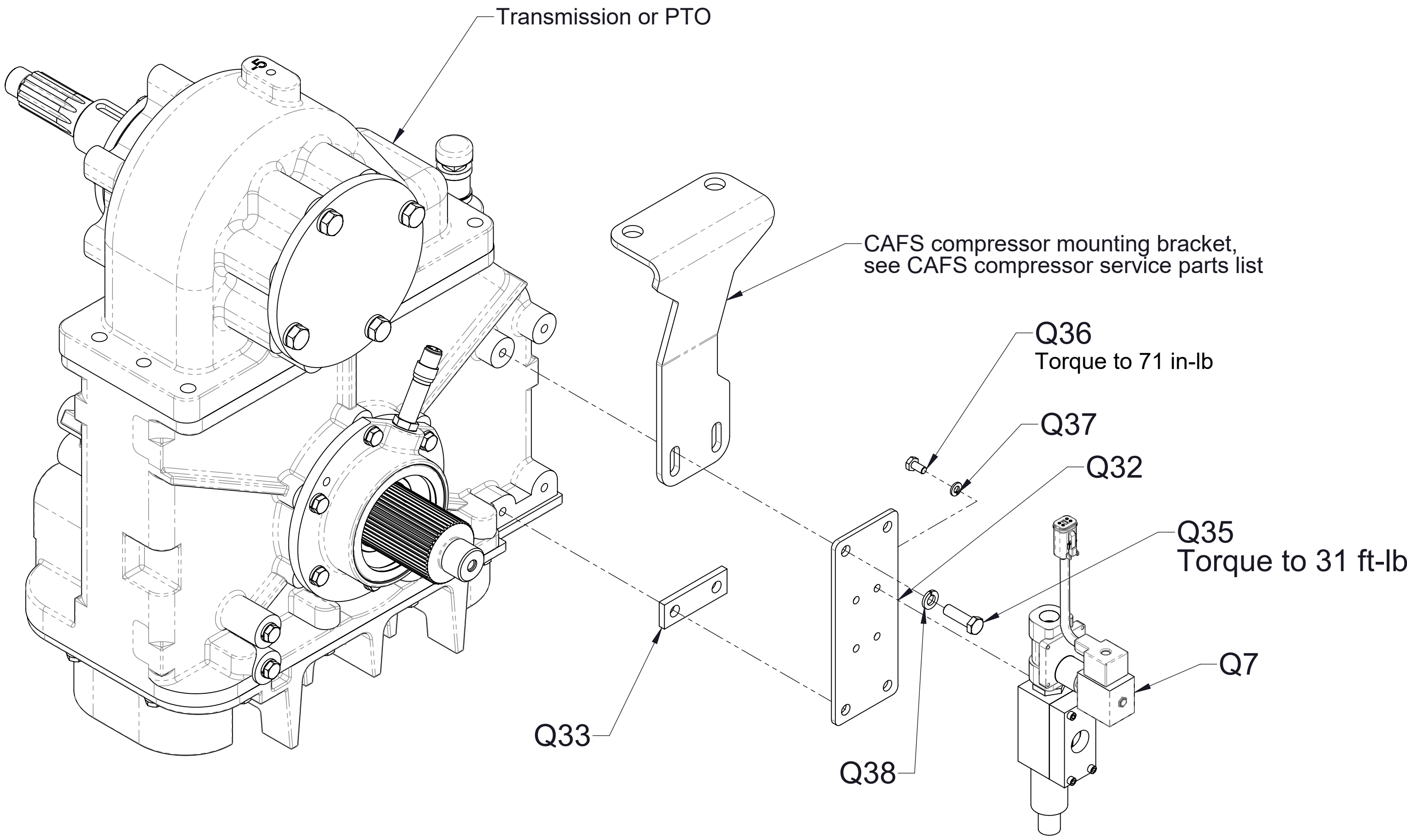
Air Primer

Note:
1. Clean threads and apply Loctite #242 (blue) to threads.

Ref No.	Description
Q7	Venturis Air Primer Subassembly
Q32	Bracket-Mounting, Air Primer
Q33	Spacer-Bracket, Primer
Q34	Screw-Hex Hd, 3/8-16 x 1 in
Q35	Screw-Hex Hd, 3/8-16 x 1-1/4 in
Q36	Screw-Hex Hd, 1/4-20 x 1/2 in
Q37	Washer-Lock, 1/4 in
Q38	Washer-Lock, 3/8 in



Mounting on Transmission or PTO



Mounting on PTO with CAFS Compressor

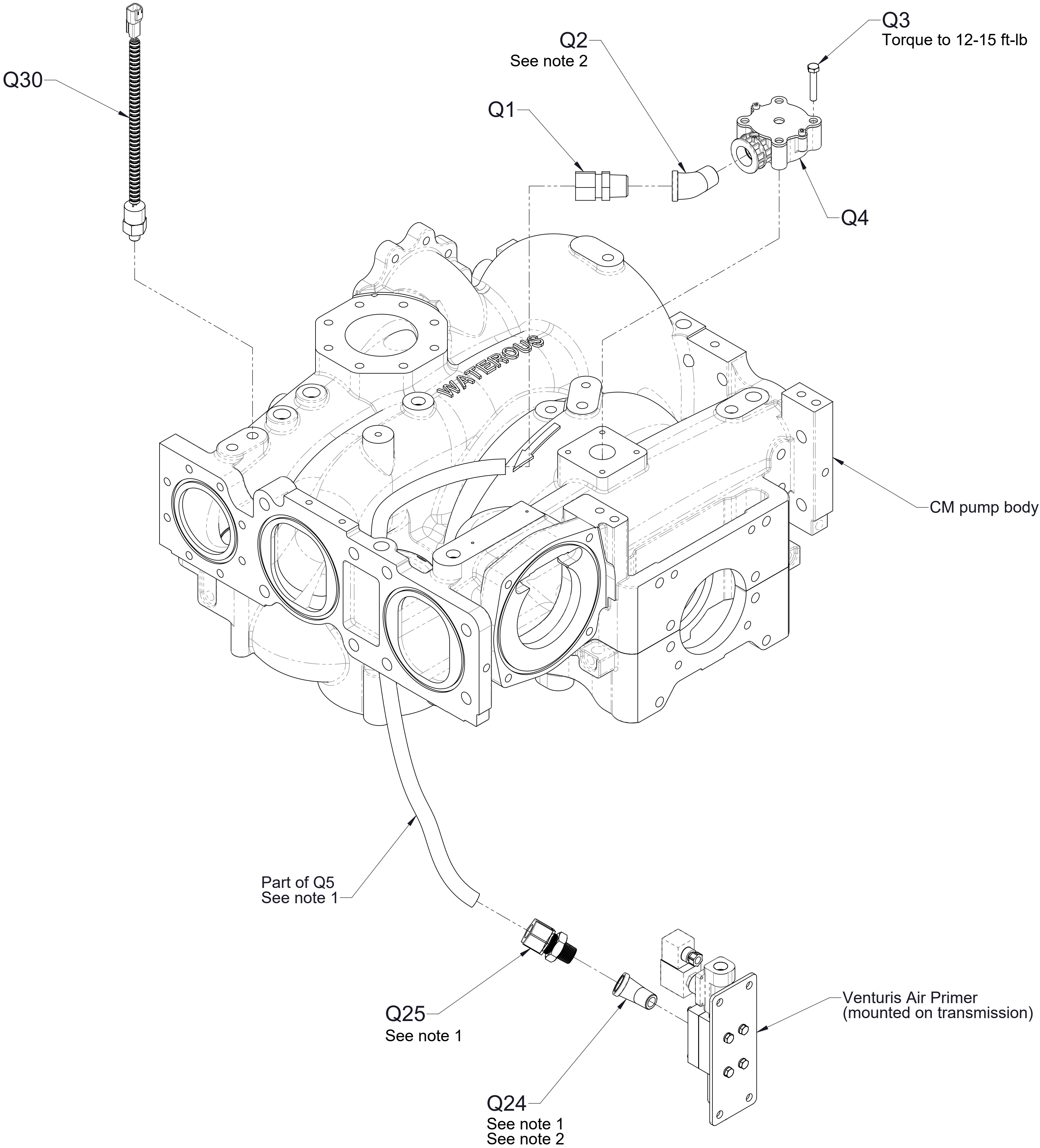
Ref No.	Description
Q1	Fitting-Tube, Compression, 3/4 Tube OD X 3/4 MNPT
Q2	Elbow, Street, 45°, 3/4 NPT
Q3	Screw-Hex Hd, 5/16-18 x 1-3/4 in
Q4	Priming Valve Subassembly
Q5	Priming Hose Repair Kit
Q8	Priming Valve Repair Kit
Q24	Elbow, Street, 45°, 1/2 NPT
Q25	Fitting-Compression Tube, 3/4 in Tube O.D x 1/2 MNPT
Q30	Switch-Pressure

Q5

Priming Hose Repair Kit

Q8

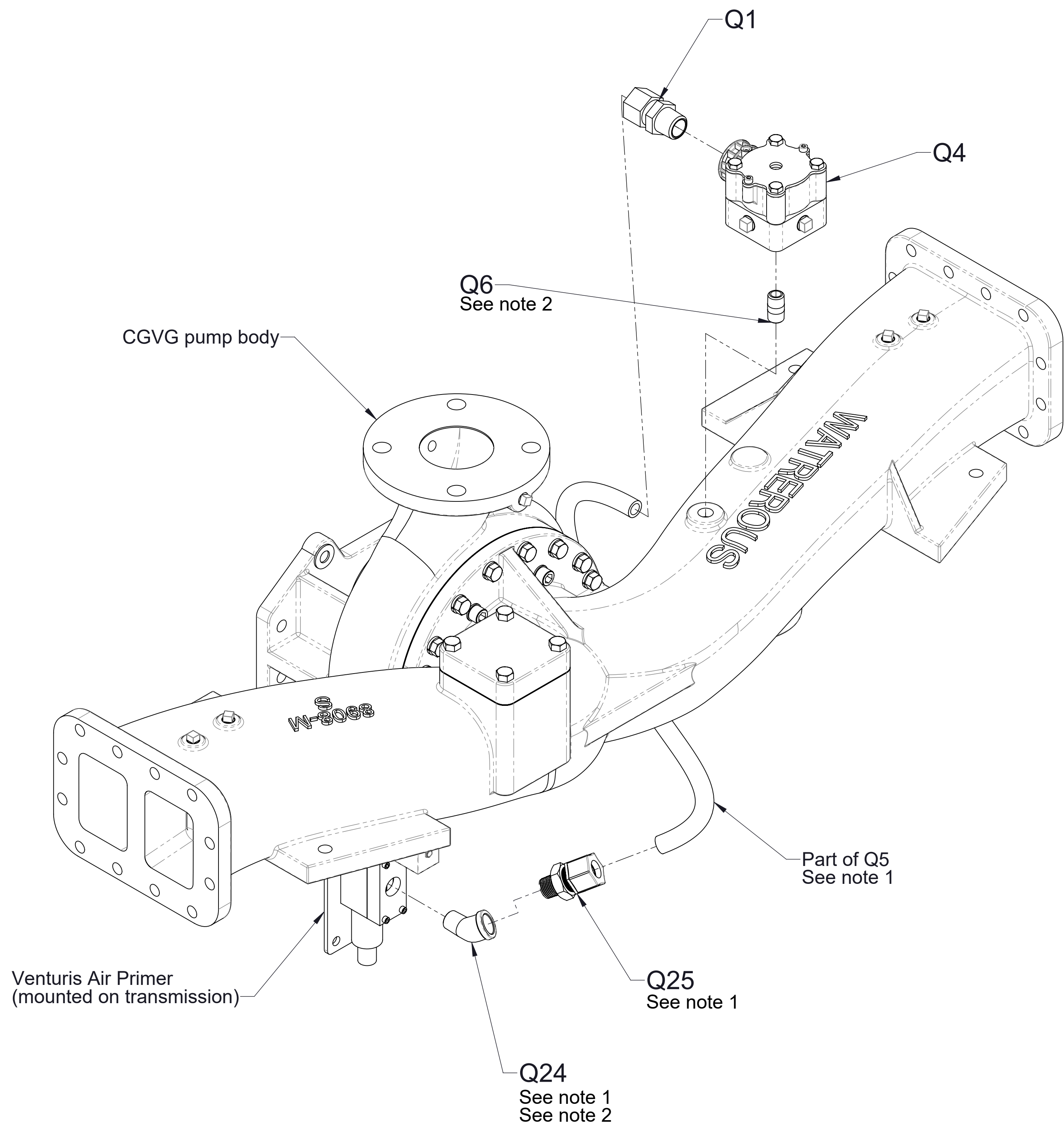
Priming Valve Repair Kit



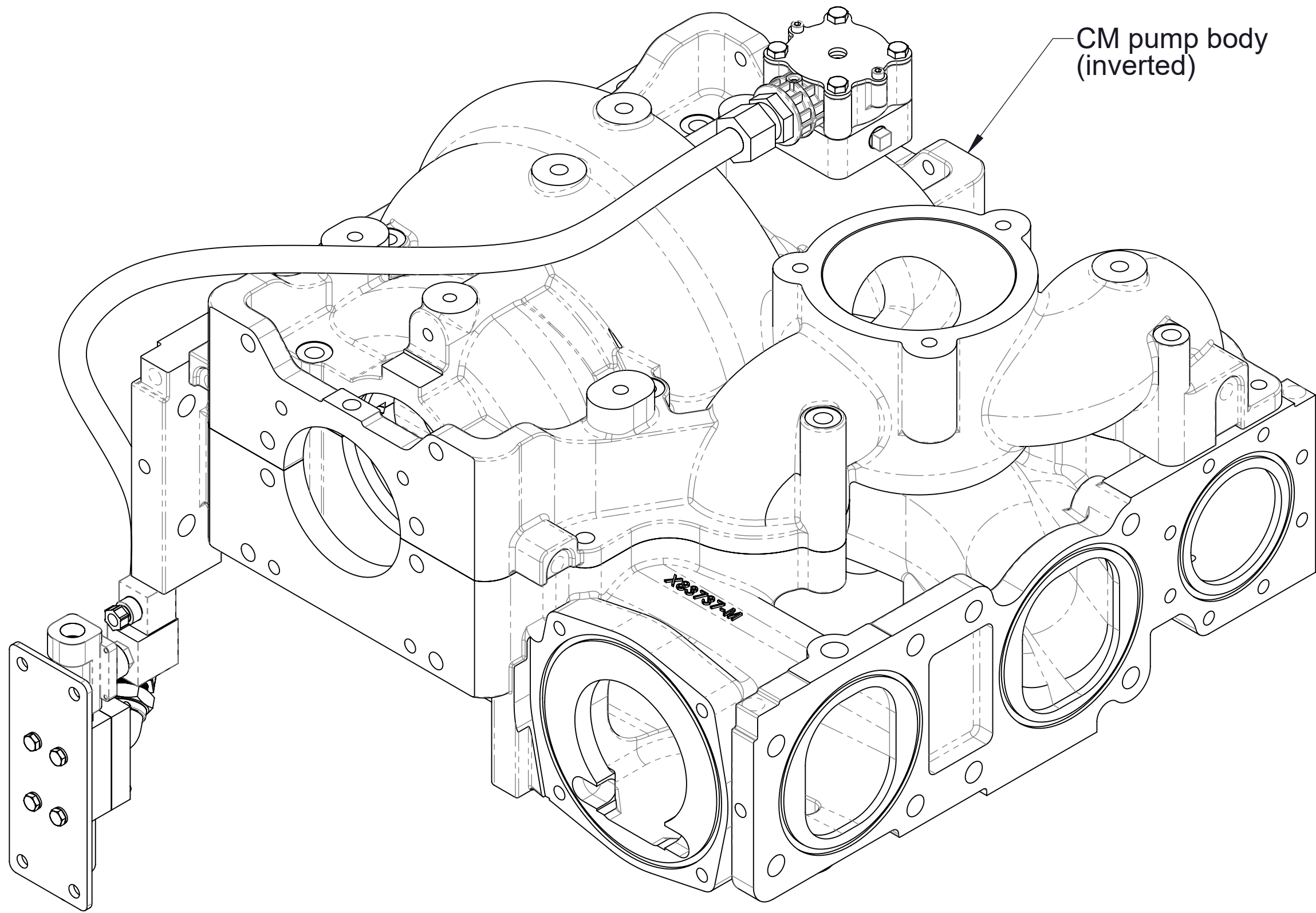
CM, CMU Pump Models

Notes:
1. If Venturis air primer is not mounted on the transmission (separately mounted), Waterous does not furnish the hose and fittings to connect to air primer.
2. Use Teflon thread tape on threads.

Ref No.	Description
Q1	Fitting-Tube, Compression, 3/4 Tube OD X 3/4 MNPT
Q4	Priming Valve Subassembly
Q5	Priming Hose Repair Kit
Q6	Nipple-Pipe, 3/8 NPT x 1-1/2 in
Q8	Priming Valve Repair Kit
Q24	Elbow, Street, 45°, 1/2 NPT
Q25	Fitting-Compression Tube, 3/4 in Tube O.D x 1/2 MNPT



CGVG Pump Model
(Inverted CM, CMU Pump Models)



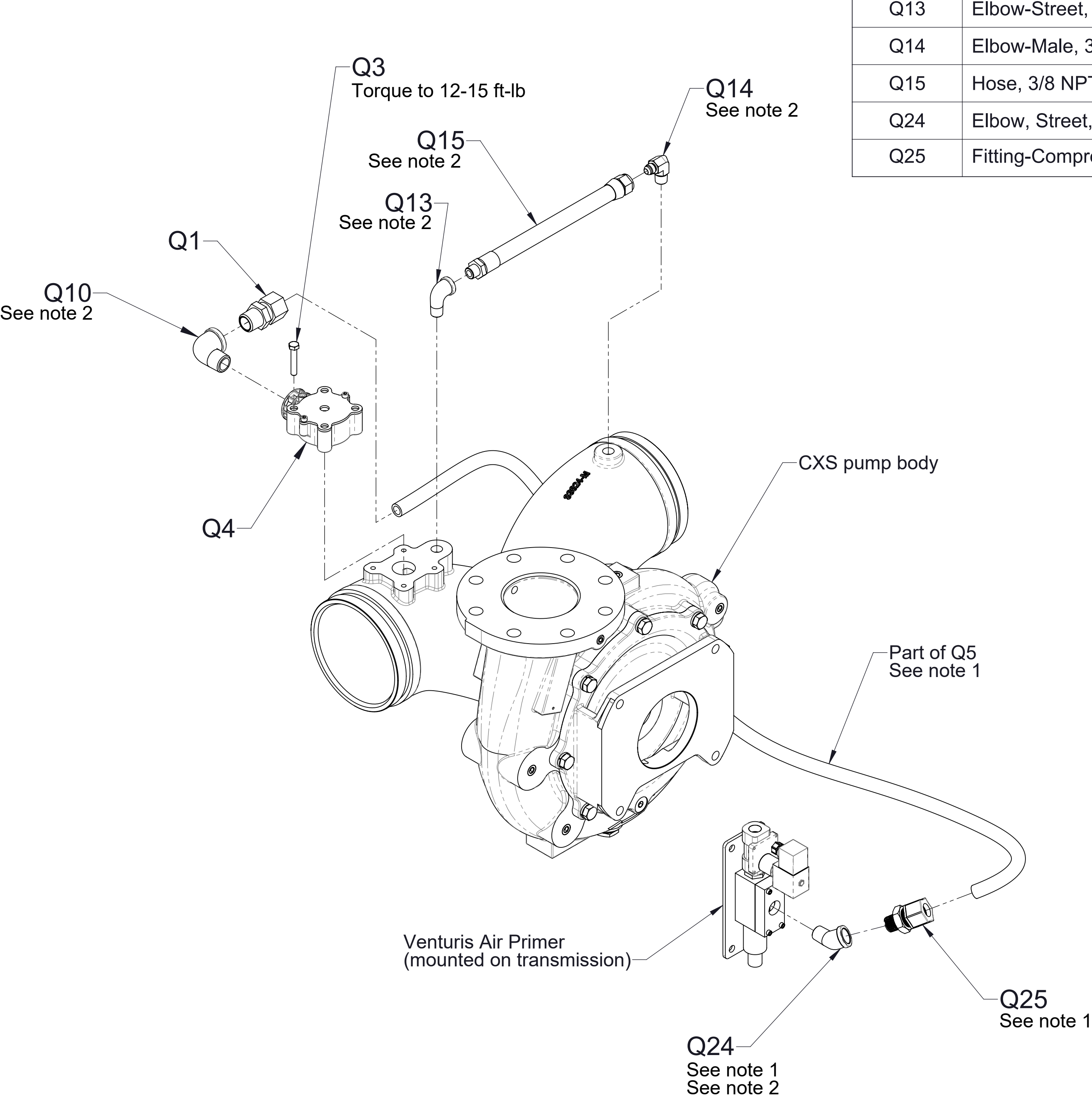
Inverted CM, CMU Pump Models
(Shown for reference)

Q5
Priming Hose
Repair Kit

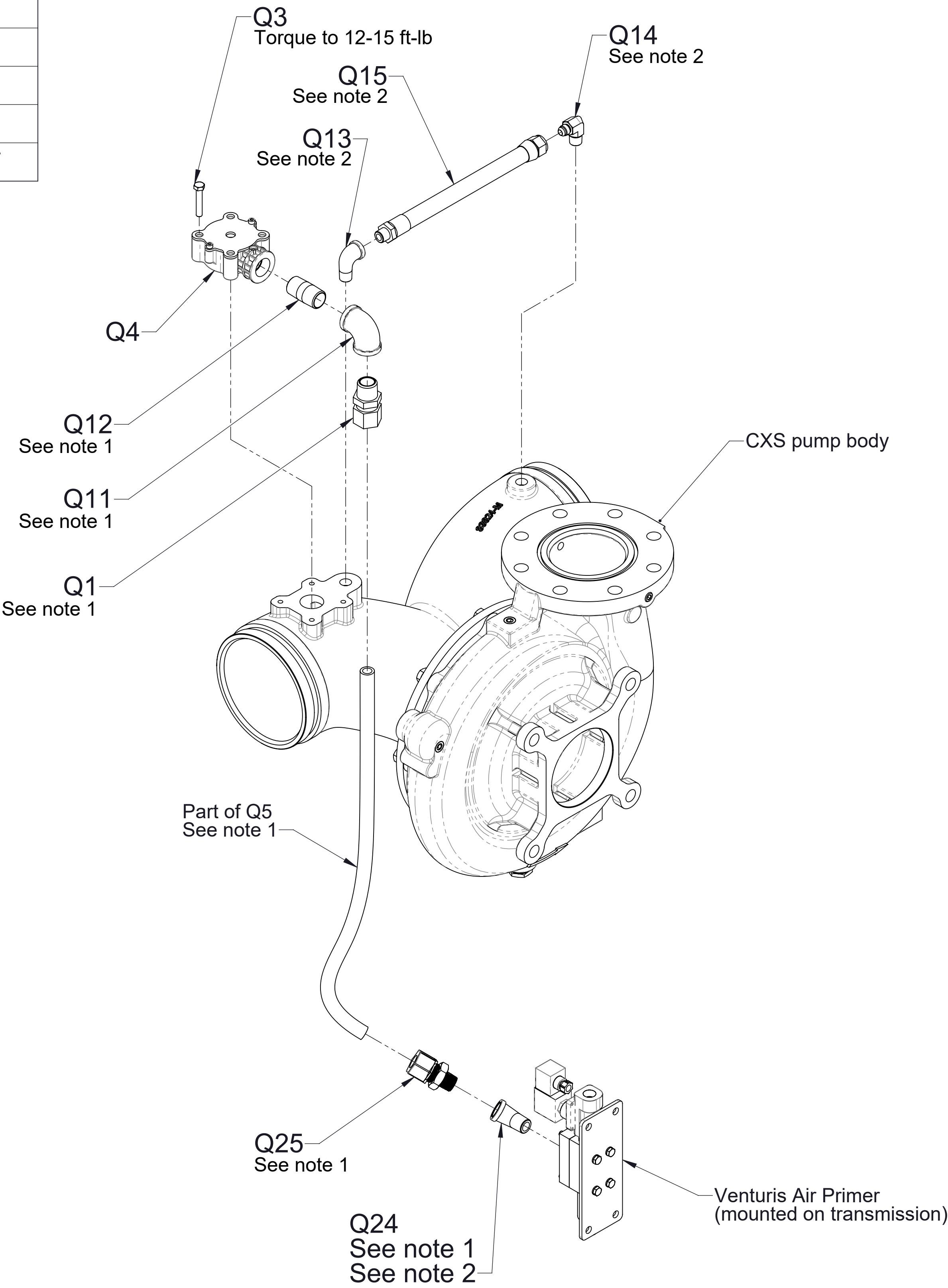
Q8
Priming Valve
Repair Kit

Notes:
1. If Venturis air primer is not mounted on the transmission (separately mounted), Waterous does not furnish the hose and fittings to connect to air primer.
2. Use Teflon thread tape on threads.

Ref No.	Description
Q1	Fitting-Tube, Compression, 3/4 Tube OD X 3/4 MNPT
Q3	Screw-Hex Hd, 5/16-18 x 1-3/4 in
Q4	Priming Valve Subassembly
Q5	Priming Hose Repair Kit
Q8	Priming Valve Repair Kit
Q10	Elbow-Street, 90°, 3/4 NPT
Q11	Elbow-Standard, 90°, 3/4 NPT
Q12	Nipple-Pipe, 3/4 NPT x 2 in
Q13	Elbow-Street, 90°, 3/8 NPT
Q14	Elbow-Male, 3/8 NPT x 3/8 Flare
Q15	Hose, 3/8 NPT x 12 in
Q24	Elbow, Street, 45°, 1/2 NPT
Q25	Fitting-Compression Tube, 3/4 in Tube O.D x 1/2 MNPT



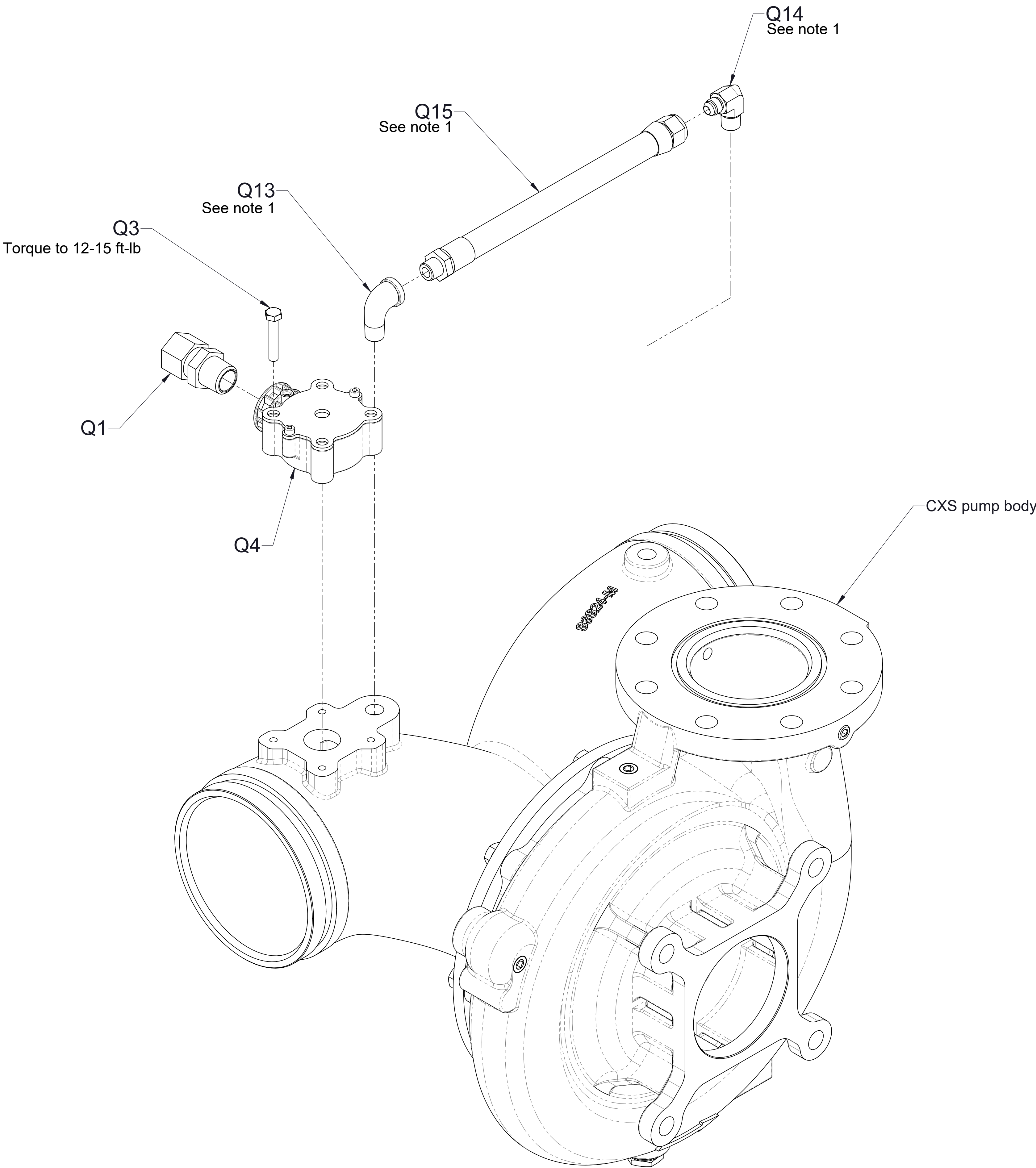
**CXS or ESU1 (Dual Intake) Pump Model
Mounted on Rear (Output Shaft) Side of C20, C22 Transmission**
(CXS shown)



**CXS or ESU1 (Dual Intake) Pump Model
Mounted on Front (Input Shaft) Side of C20, C22 Transmission**
(CXS shown)

Notes:
1. If Venturis air primer is not mounted on the transmission (separately mounted), Waterous does not furnish the hose and fittings to connect to air primer.
2. Use Teflon thread tape on threads.

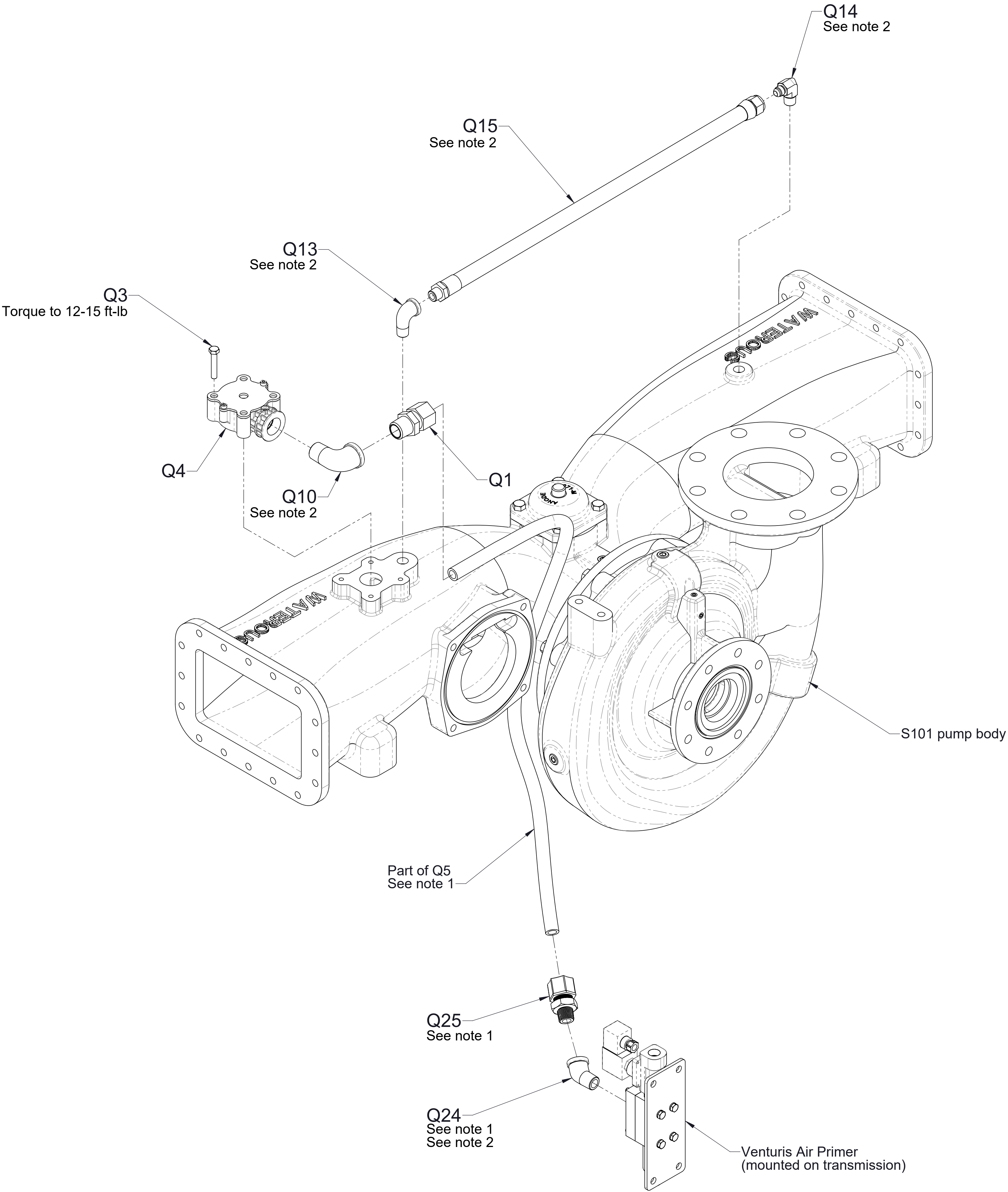
Ref No.	Description
Q1	Fitting-Tube, Compression, 3/4 Tube OD X 3/4 MNPT
Q3	Screw-Hex Hd, 5/16-18 x 1-3/4 in
Q4	Priming Valve Subassembly
Q8	Priming Valve Repair Kit
Q13	Elbow-Street, 90°, 3/8 NPT
Q14	Elbow-Male, 3/8 NPT x 3/8 Flare
Q15	Hose, 3/8 NPT x 12 in



CXS or ESU1 (Dual Intake) Pump Model
D, K, PA or T Transmissions
(CXS shown)

Note:
1. Use Teflon thread tape on threads.

Ref No.	Description
Q1	Fitting-Tube, Compression, 3/4 Tube OD X 3/4 MNPT
Q3	Screw-Hex Hd, 5/16-18 x 1-3/4 in
Q4	Priming Valve Subassembly
Q5	Priming Hose Repair Kit
Q8	Priming Valve Repair Kit
Q10	Elbow-Street, 90°, 3/4 NPT
Q13	Elbow-Street, 90°, 3/8 NPT
Q14	Elbow-Male, 3/8 NPT x 3/8 Flare
Q15	Hose, 3/8 NPT x 26 in
Q24	Elbow, Street, 45°, 1/2 NPT
Q25	Fitting-Compression Tube, 3/4 in Tube O.D x 1/2 MNPT

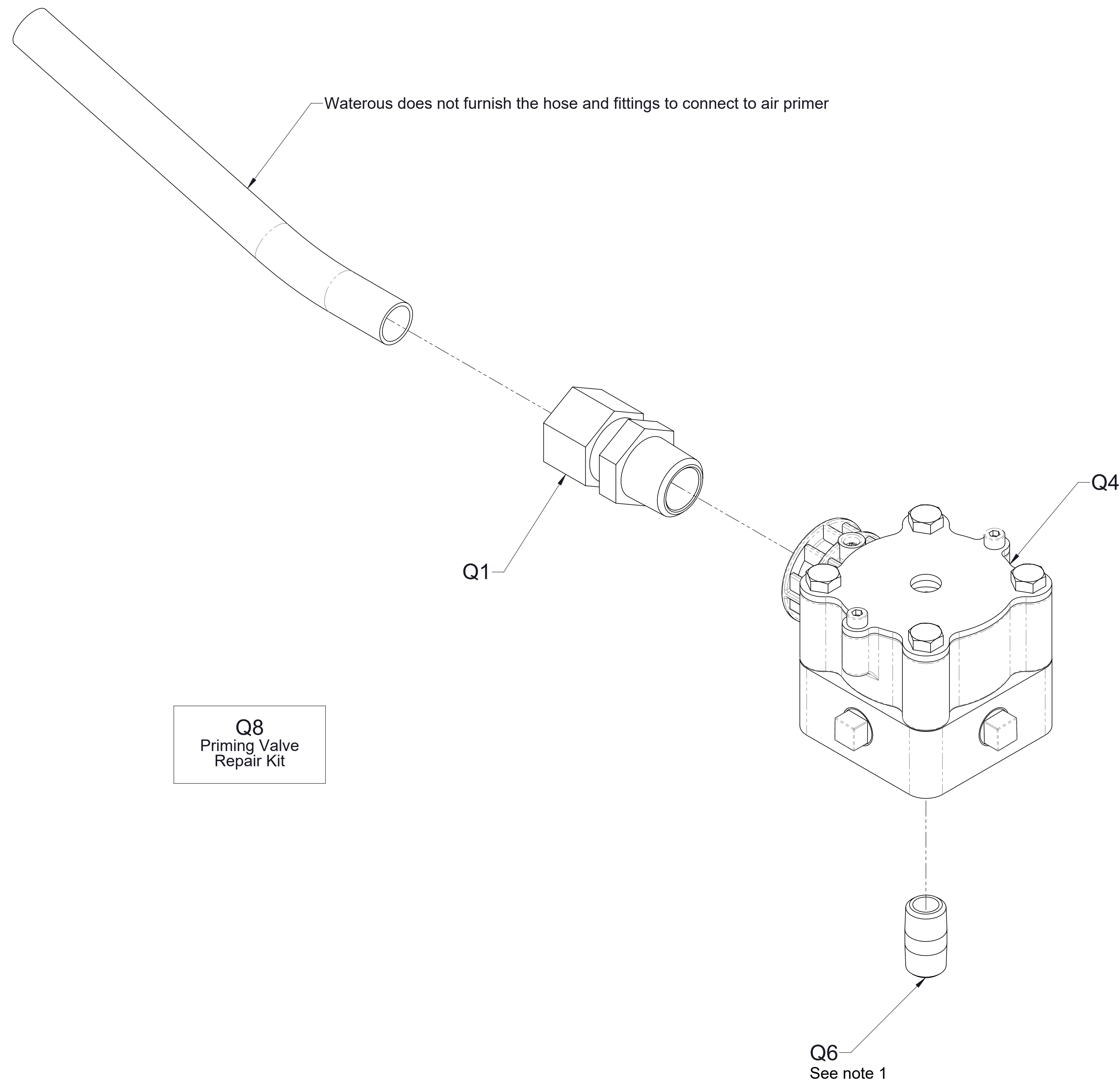


Notes:

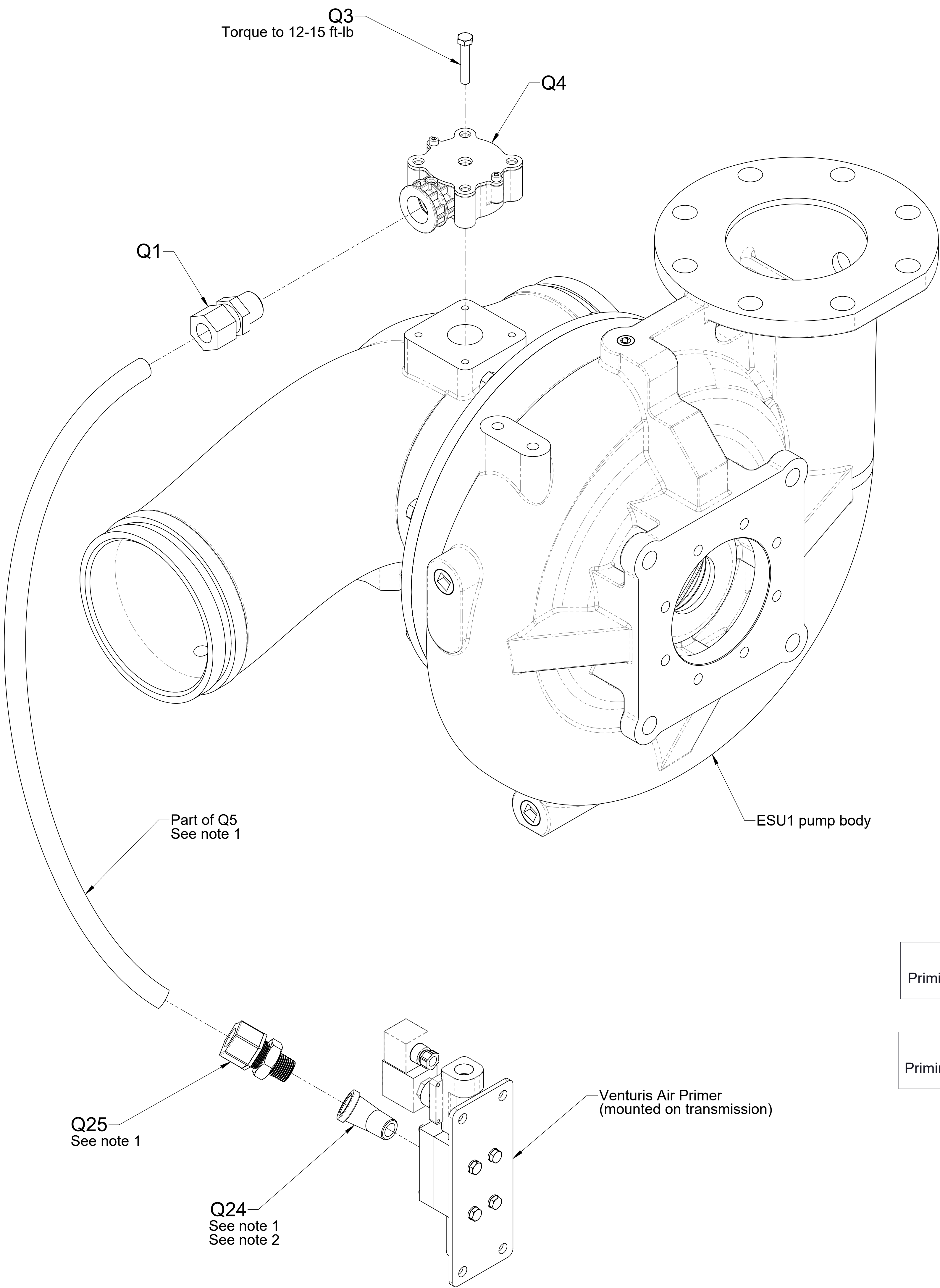
1. If Venturis air primer is not mounted on the transmission (separately mounted), Waterous does not furnish the hose and fittings to connect to air primer.

2. Use Teflon thread tape on threads.

Ref No.	Description
Q1	Fitting-Tube, Compression, 3/4 Tube OD X 3/4 MNPT
Q4	Priming Valve Subassembly
Q6	Nipple-Pipe, 3/8 NPT x 1-1/2 in
Q8	Priming Valve Repair Kit



Note:
1. Use Teflon thread tape on threads.



Ref No.	Description
Q1	Fitting-Tube, Compression, 3/4 Tube OD X 3/4 MNPT
Q3	Screw-Hex Hd, 5/16-18 x 1-3/4 in
Q4	Priming Valve Subassembly
Q5	Priming Hose Repair Kit
Q8	Priming Valve Repair Kit
Q24	Elbow, Street, 45°, 1/2 NPT
Q25	Fitting-Compression Tube, 3/4 in Tube O.D x 1/2 MNPT

Q5
Priming Hose Repair Kit

Q8
Priming Valve Repair Kit

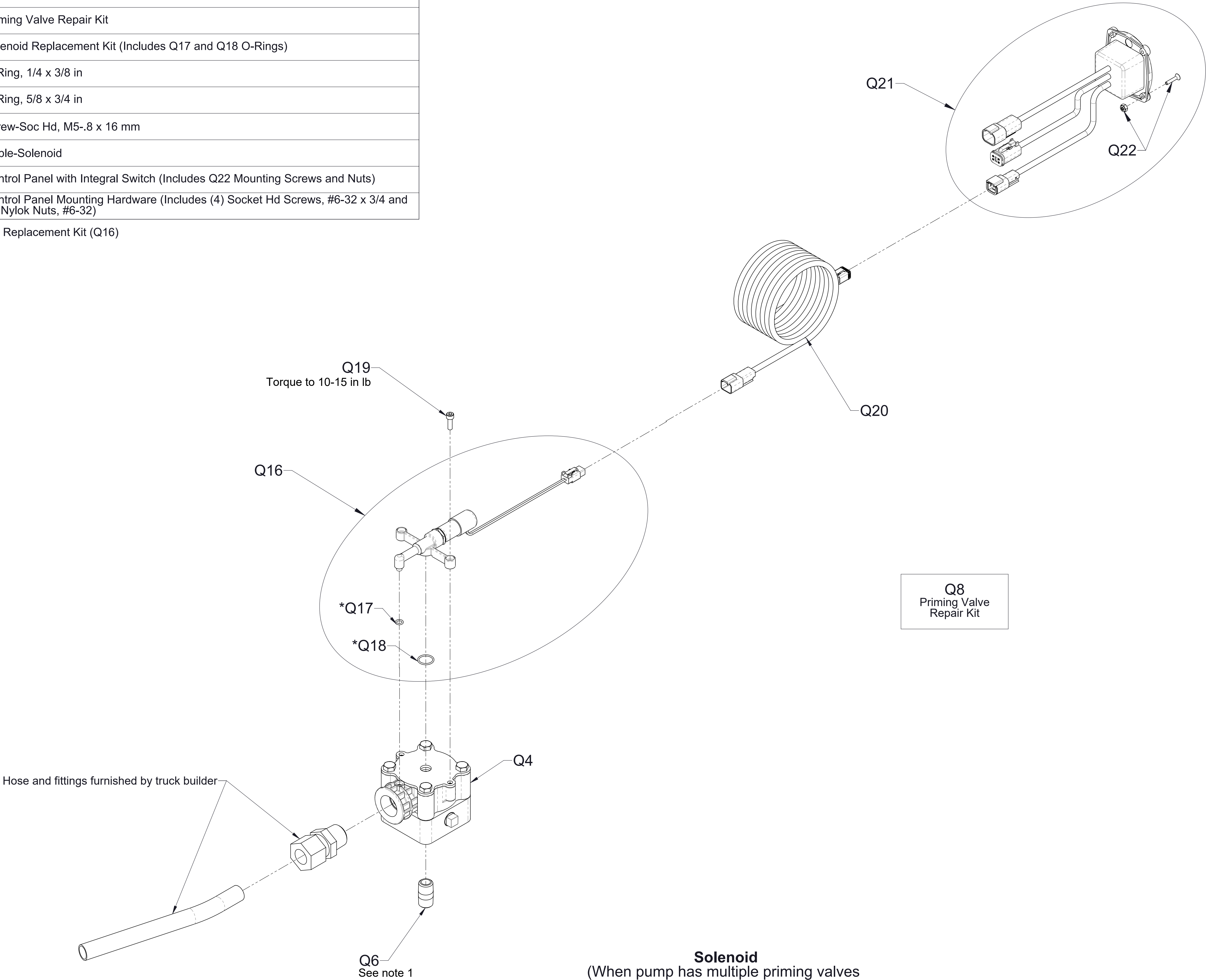
- Notes:
1. If Venturis air primer is not mounted on the transmission (separately mounted), Waterous does not furnish the hose and fittings to connect to air primer.
 2. Use Teflon thread tape on threads.

ESU1 (Inverted Dual Intake) Pump Model
Mounted Front (Input Shaft) Side or Rear (Output Shaft) Side of C22 Transmission

(Front (input shaft) side shown)

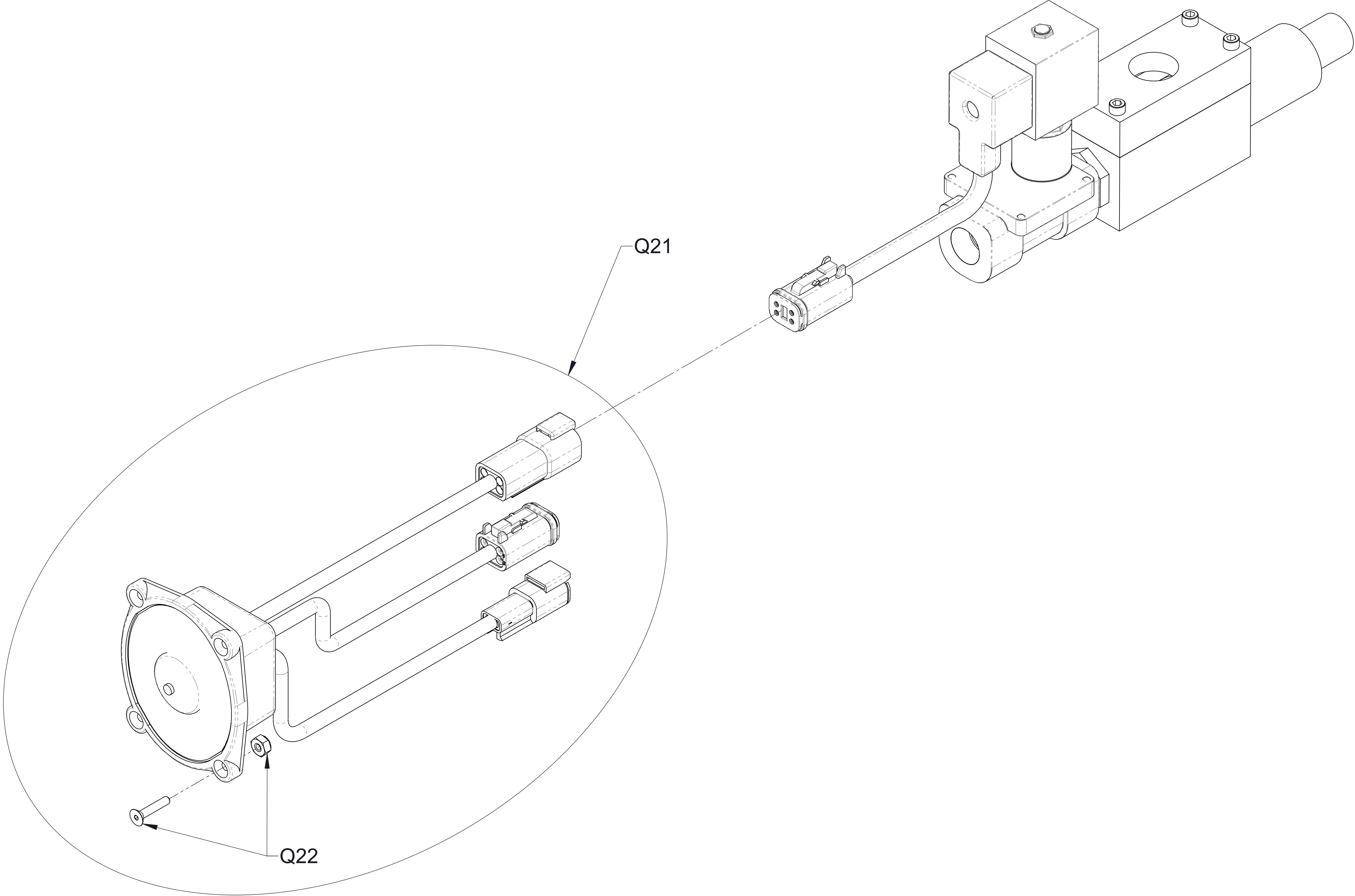
Ref No.	Description
Q4	Priming Valve Subassembly
Q6	Nipple-Pipe, 3/8 NPT x 1-1/2 in
Q8	Priming Valve Repair Kit
Q16	Solenoid Replacement Kit (Includes Q17 and Q18 O-Rings)
*Q17	O-Ring, 1/4 x 3/8 in
*Q18	O-Ring, 5/8 x 3/4 in
Q19	Screw-Soc Hd, M5-.8 x 16 mm
Q20	Cable-Solenoid
Q21	Control Panel with Integral Switch (Includes Q22 Mounting Screws and Nuts)
Q22	Control Panel Mounting Hardware (Includes (4) Socket Hd Screws, #6-32 x 3/4 and (4) Nylok Nuts, #6-32)

*Part of Solenoid Replacement Kit (Q16)



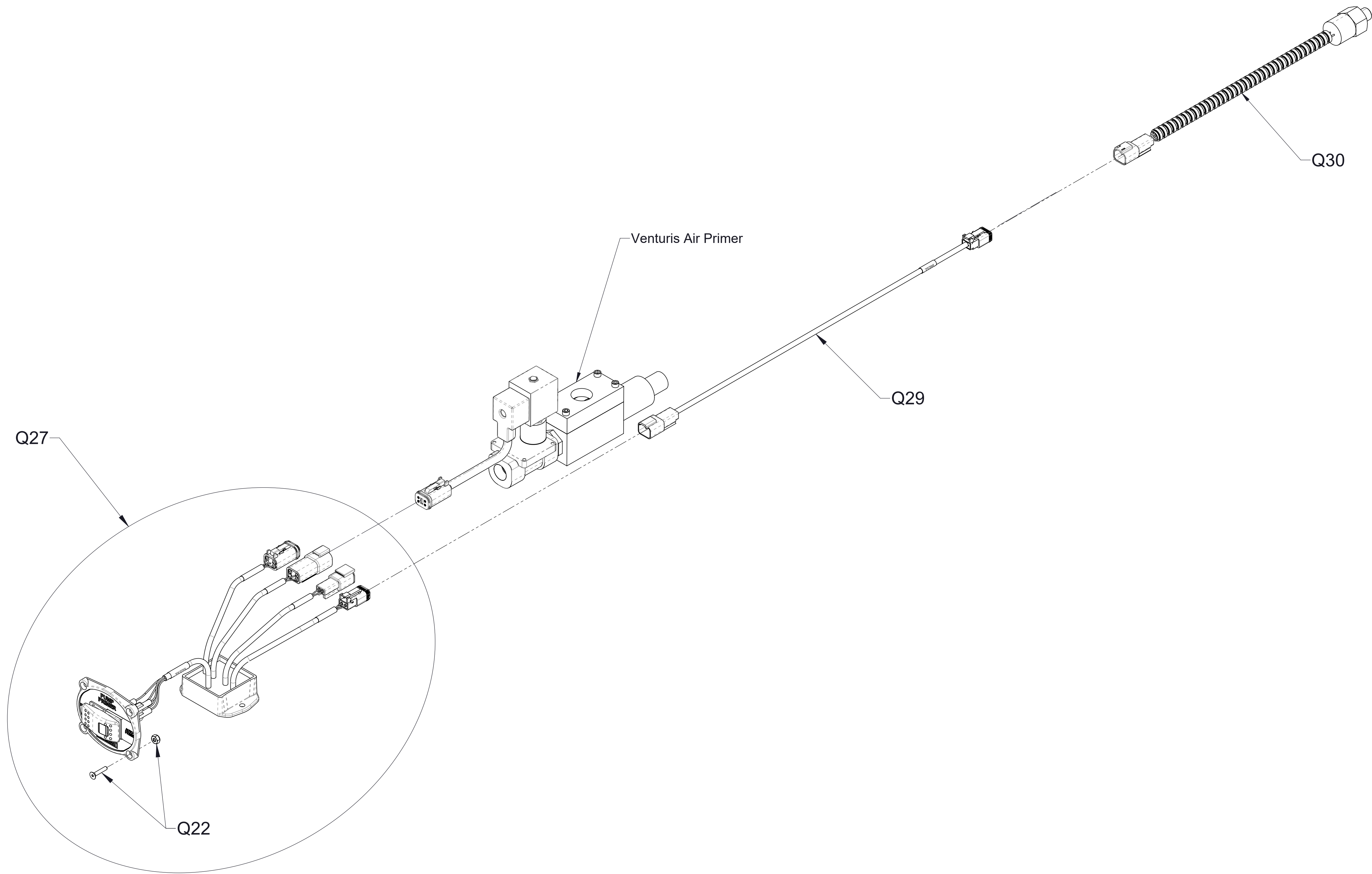
Note:
1. Use Teflon thread tape on threads.

Ref No.	Description
Q21	Control Panel with Integral Switch (Includes Q22 Mounting Screws and Nuts)
Q22	Control Panel Mounting Hardware (Includes (4) Socket Hd Screws, #6-32 x 3/4 and (4) Nylok Nuts, #6-32)

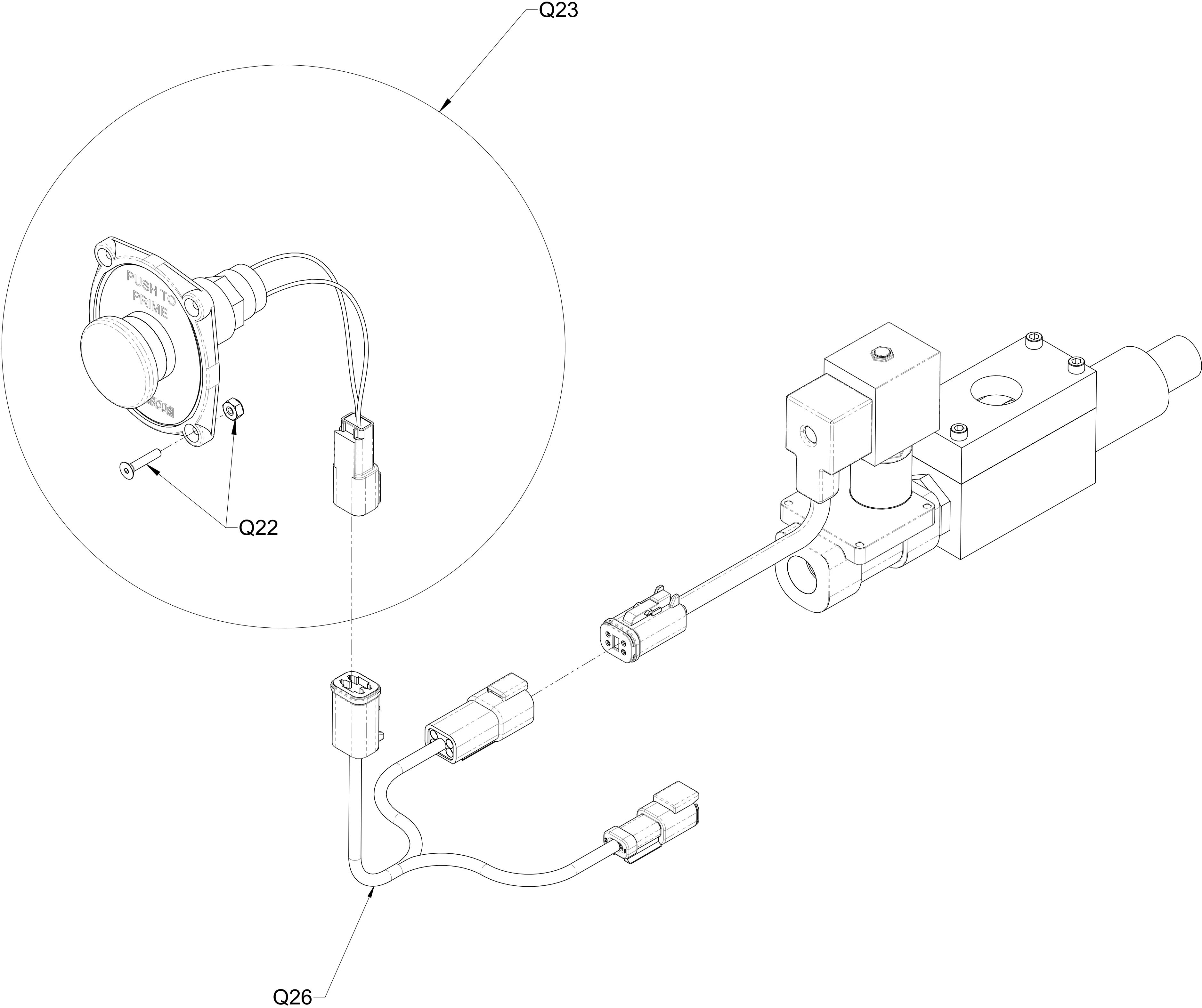


Push-Button Panel Activation

Ref No.	Description
Q22	Control Panel Mounting Hardware (Includes (4) Socket Hd Screws, #6-32 x 3/4 and (4) Nylok Nuts, #6-32)
Q27	Control Panel with Rocker Switch (Includes Q22 Mounting Screws and Nuts)
Q29	Cable-Pressure Switch
Q30	Switch-Pressure

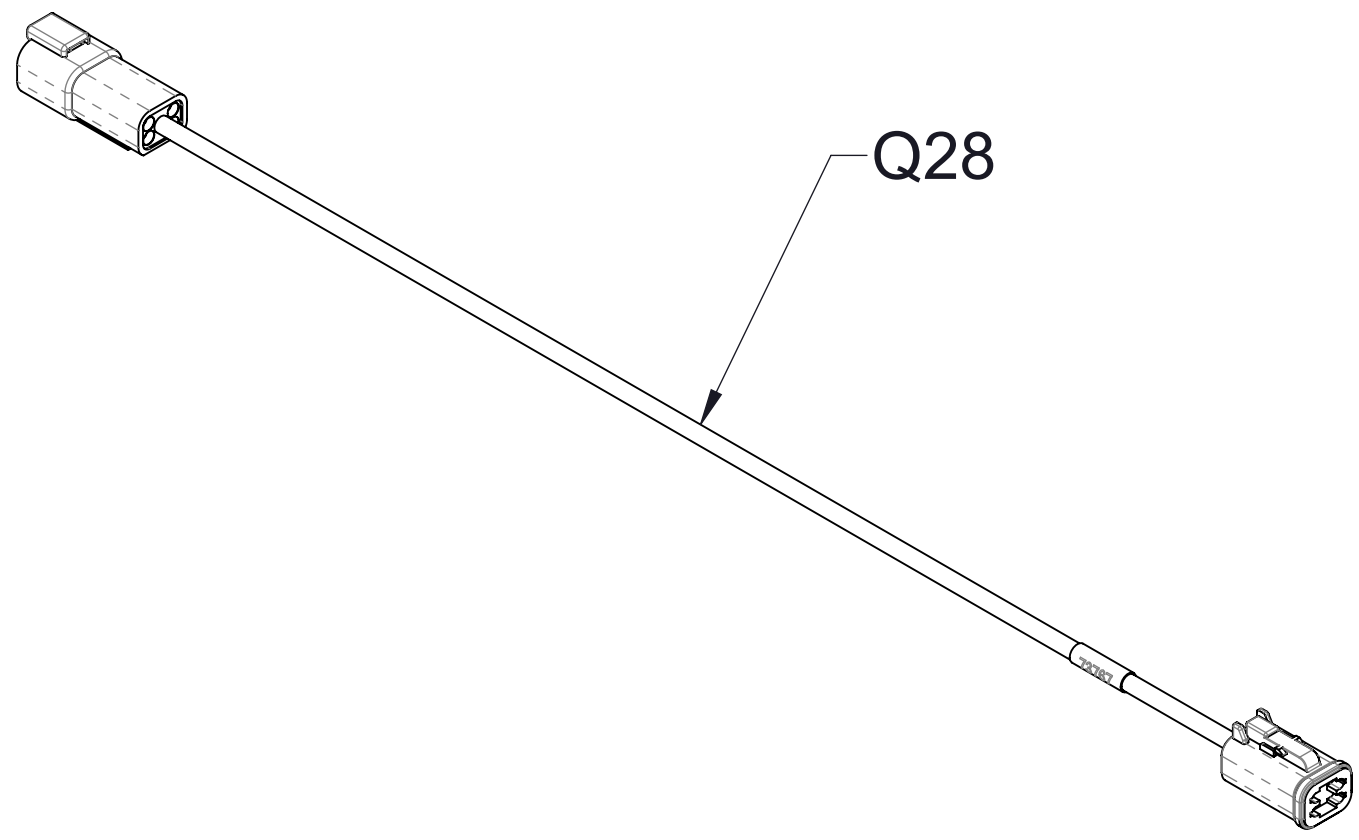


Ref No.	Description
Q22	Control Panel Mounting Hardware (Includes (4) Socket Hd Screws, #6-32 x 3/4 and (4) Nylok Nuts, #6-32)
Q23	Control Panel with Oversize Push-Button (Includes Q22 Mounting Screws and Nuts)
Q26	Cable-Y Splitter

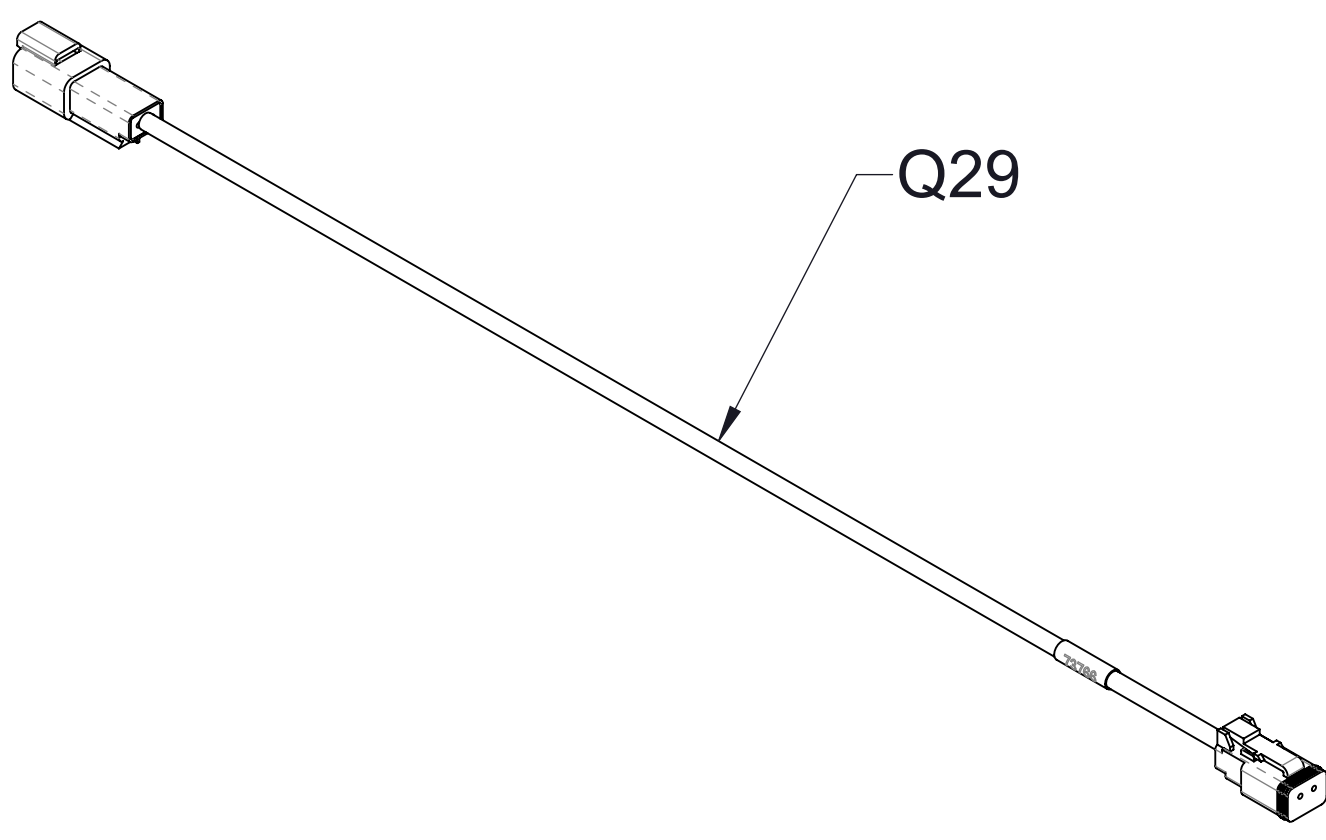


Oversize Push-Button Panel Activation
Used after April 10, 2024

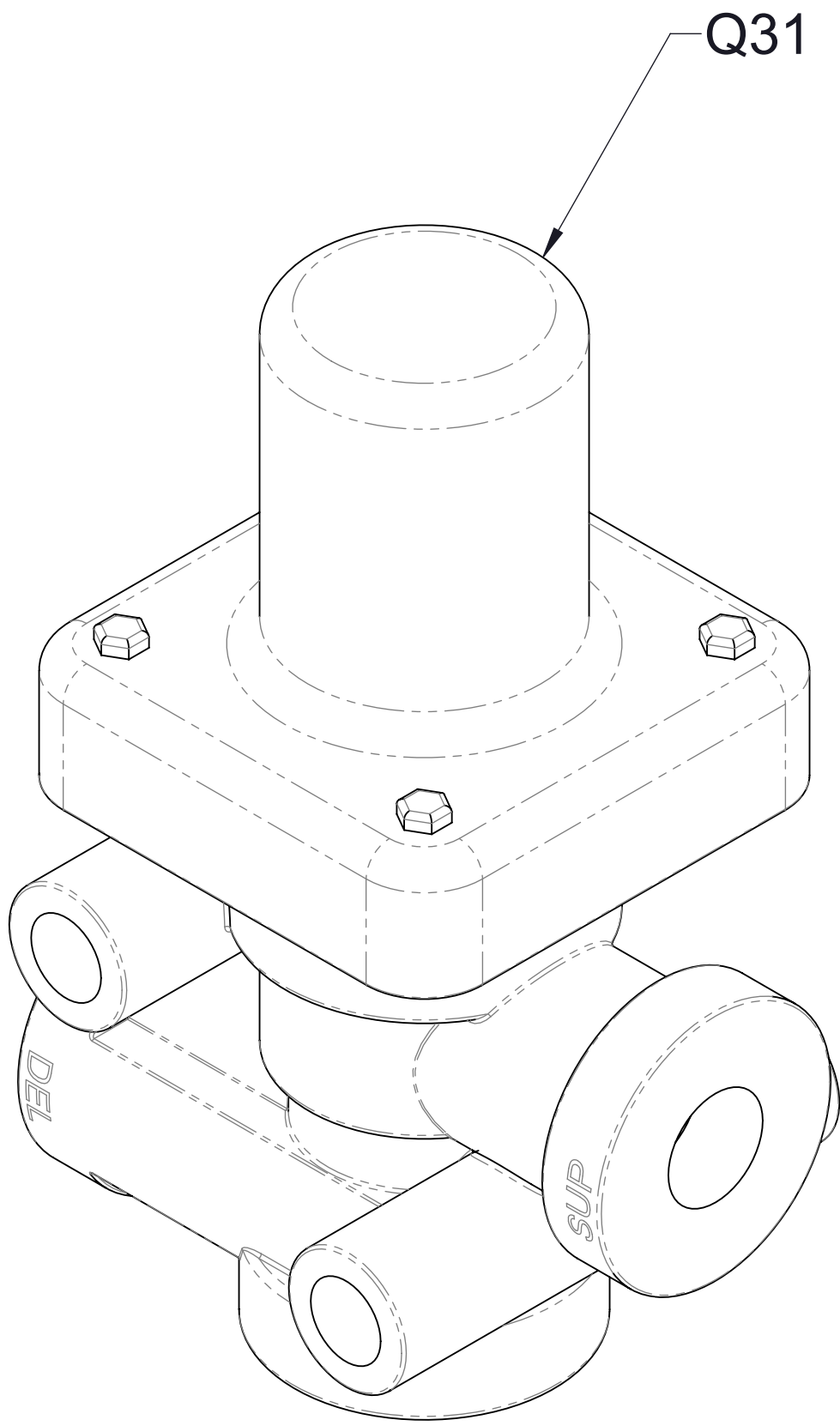
Ref No.	Description
Q28	Extension Cable-Panel to Solenoid
Q29	Extension Cable-Pressure Switch
Q31	Valve-Pressure Protection



Panel to Solenoid Extension Cable



Pressure Switch Extension Cable



Pressure Protection Valve

Optional Components