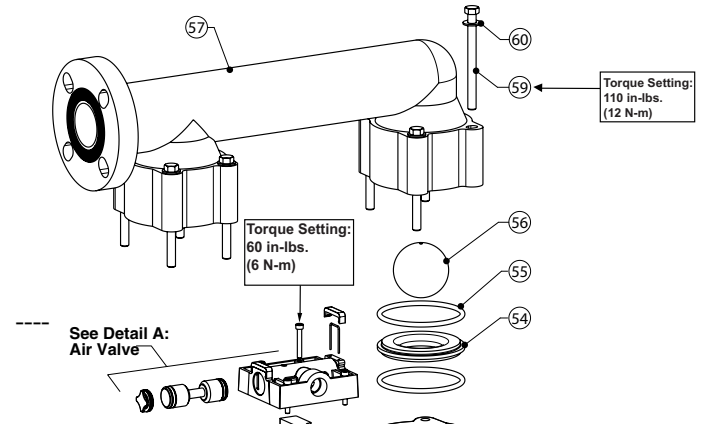
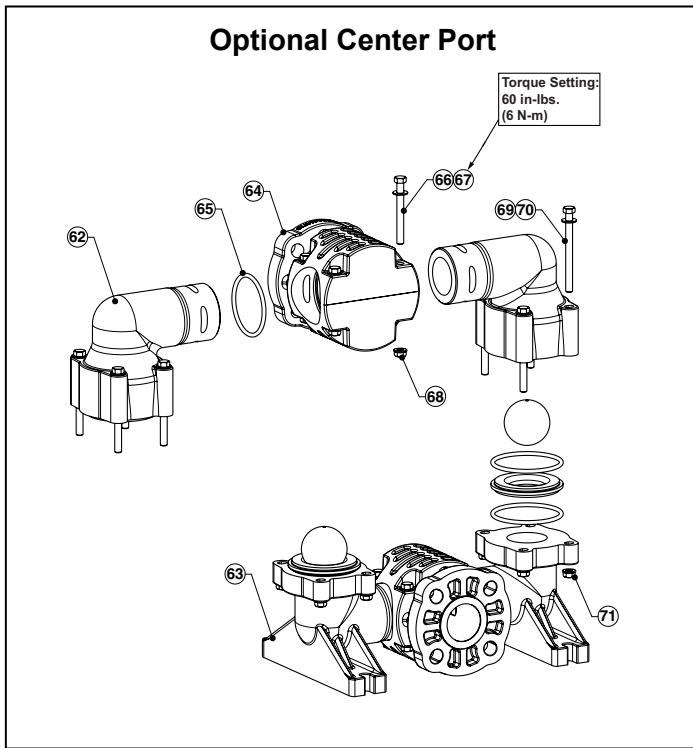
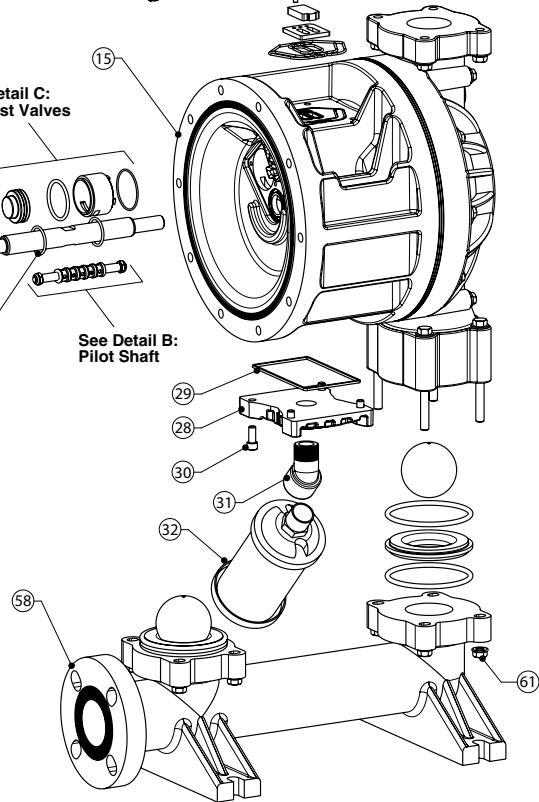
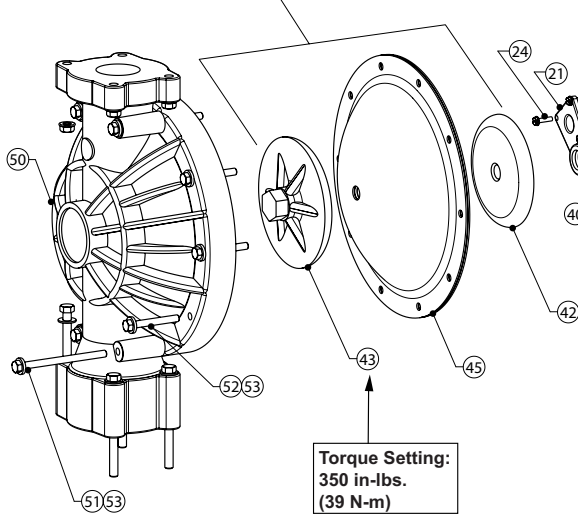


Composite Repair Parts Drawing



Shown with Versa-Dome Diaphragms
See Detail D for PTFE Bonded Diaphragms
See Detail E for PTFE 2-Piece Diaphragms



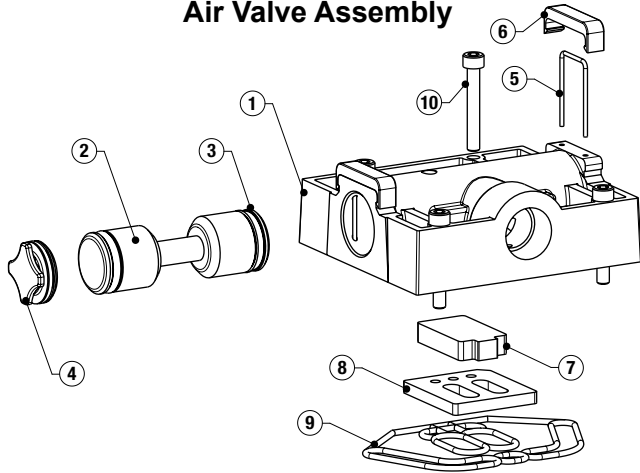
3: EXP VIEW

Torque Settings	
Manifold Bolts	50 in-lbs (5.6 N-m)
Water Chamber Bolts	100 in-lbs (11.3 N-m)
Diaphragm Plates — Rubber	40 ft-lbs (54 N-m)
Diaphragm Plates — PTFE	50 ft-lbs (68 N-m)
Air Valve Cap Screws	25 in-lbs (2.8 N-m)
Muffler Plate Cap Screws	30 in-lbs (3.4 N-m)

Composite Repair Parts Drawing - Detail Views

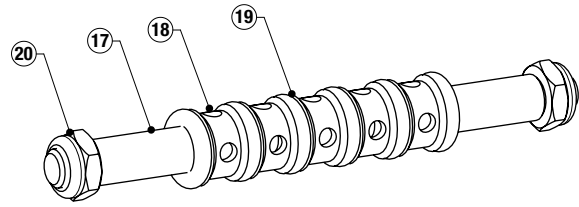
Detail A

Air Valve Assembly



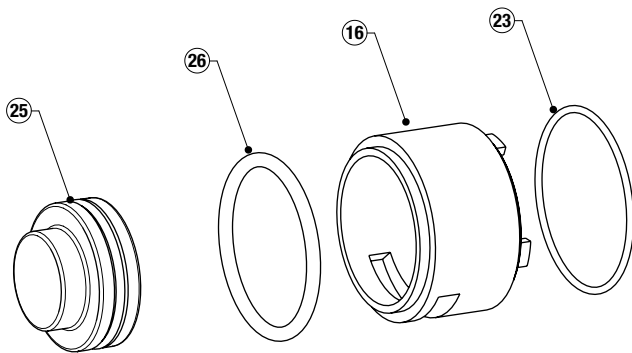
Detail B

Pilot Shaft Assembly



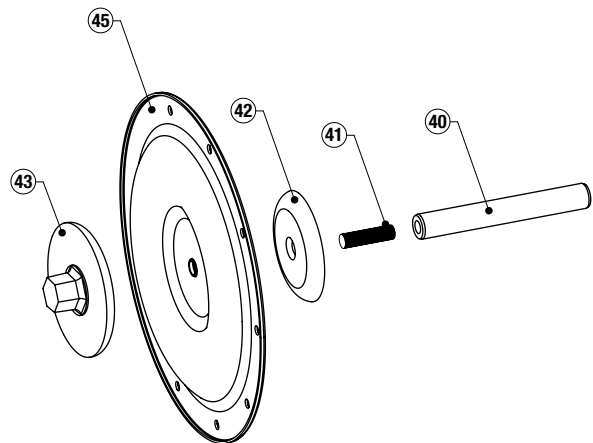
Detail C

Exhaust Valve Assembly



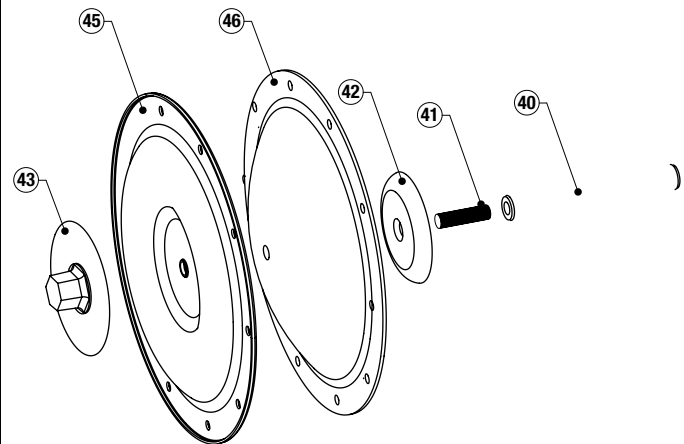
Detail D

PTFE Bonded Diaphragms



Detail E

PTFE 2-Piece Diaphragms



3: EXP VIEW

Composite Repair Parts List

AIR VALVE ASSEMBLY					
Item	Description	Qty	Standard: Polypropylene		
	Air Valve Assembly (Includes items 1-10)	1	E200		
1	Valve Body	1	E200A		
2	Valve Spool Assembly	1	E200B ASY (Includes U-Cups)		
3	Valve Spool U-Cup	2	P98-104A		
4	End Cap Assembly	2	E500D ASY (Includes O-Rings)		
5	End Cap Staple	2	E500F		
6	Staple Retainer	2	E200L		
7	Air Diverter	1	E200G		
8	Valve Insert	1	E200H		
9	Valve Gasket	1	E200J		
10	Valve Cap Screw	4	P24-209		
AIR END ASSEMBLY					
Item	Description	Qty	Standard: Polypropylene		
15	Center Section	1	E201A		
16	Bushing	2	E201MB		
17	Pilot Shaft	1	E203A		
18	Pilot Shaft Spacer	5	P24-106P		
19	Pilot Shaft O-Ring	6	P24-107		
20	Stop Nut	2	P24-108		
21	Shaft Retainer – Left	1	E201B-L ASY (Includes O-Rings)		
22	Shaft Retainer – Right (not shown)	1	E201B-R ASY (Includes O-Rings)		
23	Exhaust Sleeve O-Ring	2	560.013.360		
24	Shaft Retainer Screw	2	10-050		
25	Exhaust Valve	2	E202 ASY		
26	Shaft Retainer O-Ring	2	E201B-5		
27	Retainer Plate Seal	2	P34-403		
28	Muffler Plate	1	E201H		
29	Muffler Plate Gasket	1	E200J-1		
30	Muffler Plate Cap Screw	4	E201G		
31	Muffler Elbow	1	PE201N		
32	Muffler	1	V20AEM		
DIAPHRAGM ASSEMBLY					
Item	Description	Qty	DOME	Fusion	PTFE 2-Piece
40	Main Shaft	1	P24-103	P24-103F	P24-102
41	Diaphragm Shaft Stud	2	N/A	N/A	V221F
42	Inner Diaphragm Plate	2	V226B SV226B V226BTC 226BN	N/A	V221TI SV221TI V221TITC V221TINP
43	Outer Diaphragm Plate	2	PV226B KV226B	N/A	PV221TO KV221TO
45	Diaphragm	2	V227BN V227N V227ND V227VT V227TPEXL V227TPEFG	V227F	V227TF
46	Back-up Diaphragm	2	N/A	N/A	V227TFB
WET END ASSEMBLY					
<i>Option 1: Kynar</i>					
50	Water Chamber	2	PV235		KV235
51	Water Chamber Bolt (long)	8	E235A		E235A
52	Water Chamber Bolt (short)	12	SV186A		SV186A
53	Water Chamber Washer	20	SV250C		SV250C
54	Valve Seat	4	PV240		KV240
55	Valve Seat O-Ring	8	V258BN V258ND V258TES V258TEV V258VT V258XL		
56	Valve Ball	4	V241BN V241N V241ND V241P V241TF V241TPEXL V241TPEFG V241VT		
Port Option 1: Side Port					
57	Discharge Manifold	1	PV236		KV236
58	Inlet Manifold	1	PV237 SV251A		SV251A
60	Manifold Washer	16	SV302GA		SV302GA
61	Manifold Nut	16	SV251B		SV251B
Port Option 2: Center Port					
62	Manifold Discharge Elbow	2	PV236E		KV236E
63	Manifold Inlet Elbow	2	PV237E		KV237E
64	Manifold Tee	2	PV288		SV302GA
68	Manifold Tee Nut	8	SV251B		SV251B
69	Manifold Bolt	16	SV251A		SV251A
70	Manifold Washer	16	SV302GA		SV302GA
71	Manifold Nut	16	SV251B		SV251B

3: EXP VIEW

Material Codes - The Last 3 Digits of Part Number

000.....Assembly, sub-assembly; and some purchased items	364.....EPDM Rubber Color coded: BLUE
010.....Cast Iron	365.....Neoprene Rubber Color coded: GREEN
015.....Ductile Iron	366.....Food Grade Nitrile
020.....Ferritic Malleable Iron	368.....Food Grade EPDM
080.....Carbon Steel, AISI B-1112	371.....Philthane (Tuftane)
110.....Alloy Type 316 Stainless Steel	374.....Carboxylated Nitrile
111.....Alloy Type 316 Stainless Steel (Electro Polished)	375.....Fluorinated Nitrile
112.....Alloy C	378.....High Density Polypropylene
113.....Alloy Type 316 Stainless Steel (Hand Polished)	379.....Conductive Nitrile
114.....303 Stainless Steel	408.....Cork and Neoprene
115.....302/304 Stainless Steel	425.....Compressed Fibre
117.....440-C Stainless Steel (Martensitic)	426.....Blue Gard
120.....416 Stainless Steel (Wrought Martensitic)	440.....Vegetable Fibre
148.....Hardcoat Anodized Aluminum	500.....Delrin® 500
150.....6061-T6 Aluminum	502.....Conductive Acetal, ESD-800
152.....2024-T4 Aluminum (2023-T351)	503.....Conductive Acetal, Glass-Filled
155.....356-T6 Aluminum	506.....Delrin® 150
156.....356-T6 Aluminum	520.....Injection Molded PVDF Natural color
157.....Die Cast Aluminum Alloy #380	540.....Nylon
158.....Aluminum Alloy SR-319	542.....Nylon
162.....Brass, Yellow, Screw Machine Stock	544.....Nylon Injection Molded
165.....Cast Bronze, 85-5-5-5	550.....Polyethylene
166.....Bronze, SAE 660	551.....Glass Filled Polypropylene
170.....Bronze, Bearing Type, Oil Impregnated	552.....Unfilled Polypropylene
180.....Copper Alloy	555.....Polyvinyl Chloride
305.....Carbon Steel, Black Epoxy Coated	556.....Black Vinyl
306.....Carbon Steel, Black PTFE Coated	558.....Conductive HDPE
307.....Aluminum, Black Epoxy Coated	570.....Rulon II®
308.....Stainless Steel, Black PTFE Coated	580.....Ryton®
309.....Aluminum, Black PTFE Coated	600.....PTFE (virgin material) Tetrafluorocarbon (TFE)
313.....Aluminum, White Epoxy Coated	603.....Blue Gylon®
330.....Zinc Plated Steel	604.....PTFE
332.....Aluminum, Electroless Nickel Plated	606.....PTFE
333.....Carbon Steel, Electroless Nickel Plated	607.....Envelon
335.....Galvanized Steel	608.....Conductive PTFE
337.....Silver Plated Steel	610.....PTFE Encapsulated Silicon
351.....Food Grade Santoprene®	611.....PTFE Encapsulated FKM
353.....Geolast; Color: Black	632.....Neoprene/Hytrel®
354.....Injection Molded #203-40 Santoprene® Duro 40D +/-5; Color: RED	633.....FKM/PTFE
356.....Hytrel®	634.....EPDM/PTFE
357.....Injection Molded Polyurethane	635.....Neoprene/PTFE
358.....Urethane Rubber (Some Applications) (Compression Mold)	637.....PTFE, FKM/PTFE
359.....Urethane Rubber	638.....PTFE, Hytrel®/PTFE
360.....Nitrile Rubber Color coded: RED	639.....Nitrile/TFE
363.....FKM (Fluorocarbon) Color coded: YELLOW	643.....Santoprene®/EPDM
	644.....Santoprene®/PTFE
	656.....Santoprene® Diaphragm and Check Balls/EPDM Seats
	661.....EPDM/Santoprene®
	666.....FDA Nitrile Diaphragm, PTFE Overlay, Balls, and Seals
	668.....PTFE, FDA Santoprene®/PTFE

- Delrin and Hytrel are registered tradenames of E.I. DuPont.
- Nylatron is a registered tradename of Polymer Corp.
- Gylon is a registered tradename of Garlock, Inc.
- Santoprene is a registered tradename of Exxon Mobil Corp.
- Rulon II is a registered tradename of Dixon Industries Corp.
- Ryton is a registered tradename of Phillips Chemical Co.
- Valox is a registered tradename of General Electric Co.



RECYCLING

Warren Rupp, manufacturer of Versamatic, is an ISO14001 registered company and is committed to minimizing the impact our products have on the environment. Many components of Versamatic® AODD pumps are made of recyclable materials. We encourage pump users to recycle worn out parts and pumps whenever possible, after any hazardous pumped fluids are thoroughly flushed. Pump users that recycle will gain the satisfaction to know that their discarded part(s) or pump will not end up in a landfill. The recyclability of Versamatic products is a vital part of Warren Rupp's commitment to environmental stewardship.