NOMAD™

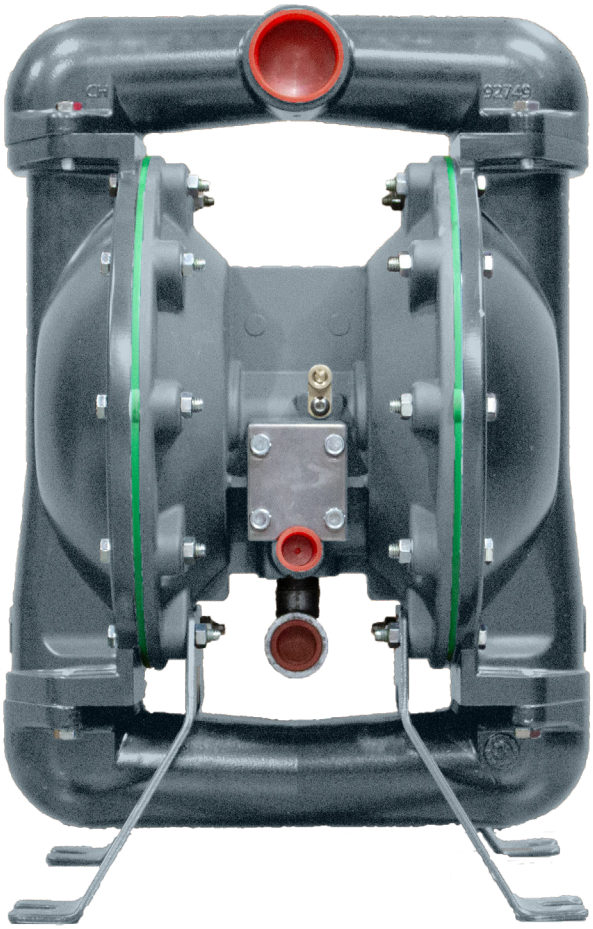
PUMPS • PARTS • PASSION

MODEL: N66615X-XXX-C Metallic

Assembly, Installation and Operation Manual

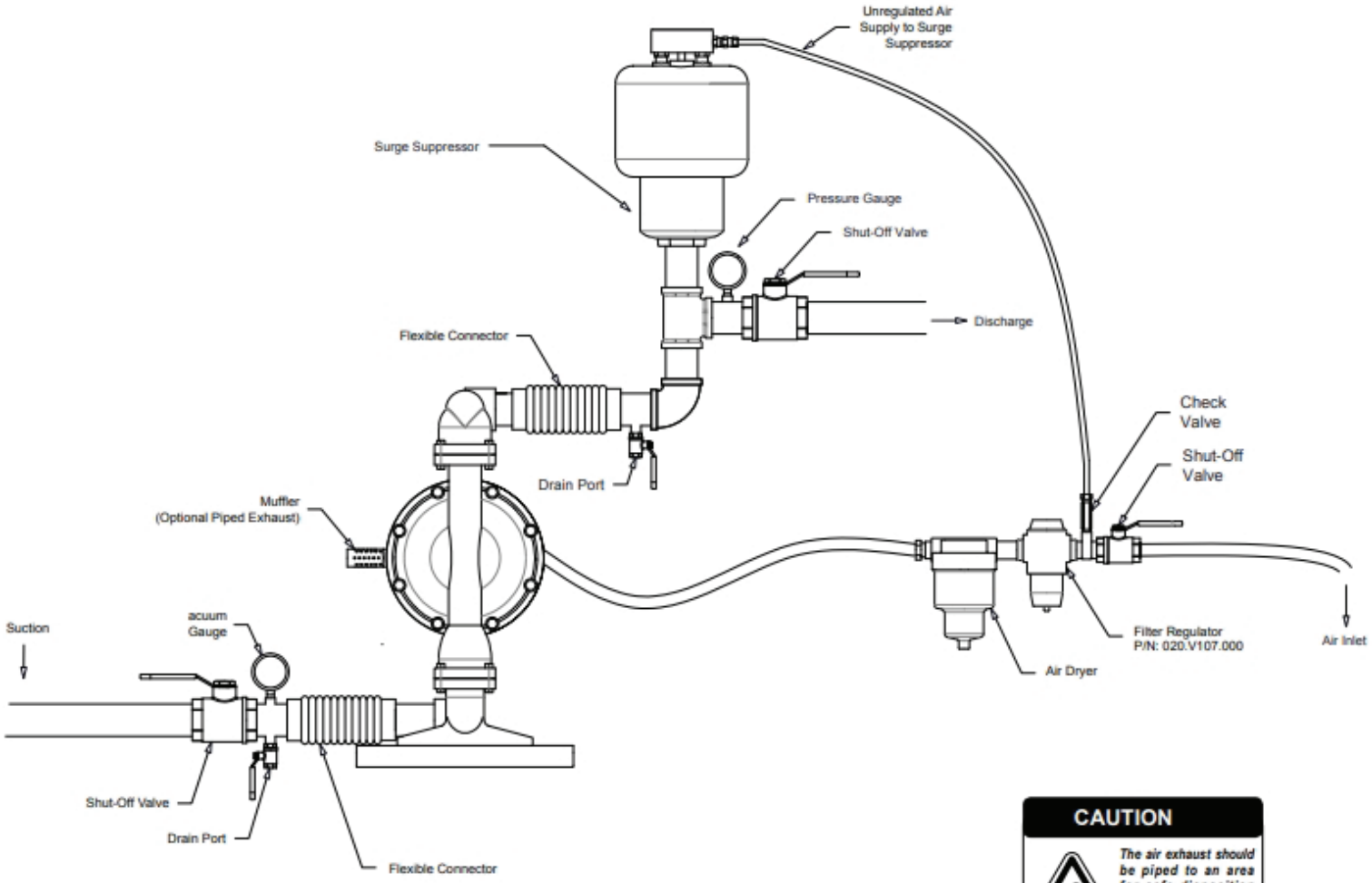
ALUMINUM AND STAINLESS STEEL

OPTA FLO™



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Recommended Installation Guide



Installation And Start-Up
Locate the pump as close to the product being pumped as possible. Keep the suction line length and number of fittings to a minimum. Do not reduce the suction line diameter.

Air Supply
Connect the pump air inlet to an air supply with sufficient capacity and pressure to achieve desired performance. A pressure regulating valve should be installed to insure air supply pressure does not exceed recommended limits.

Air Valve Lubrication
The air distribution system is designed to operate WITHOUT lubrication. This is the standard mode of operation. If lubrication is desired, install an air line lubricator set to deliver one drop of SAE 10 non-detergent oil for every 20 SCFM (9.4 liters/sec.) of air the pump consumes. Consult the Performance Curve to determine air consumption.

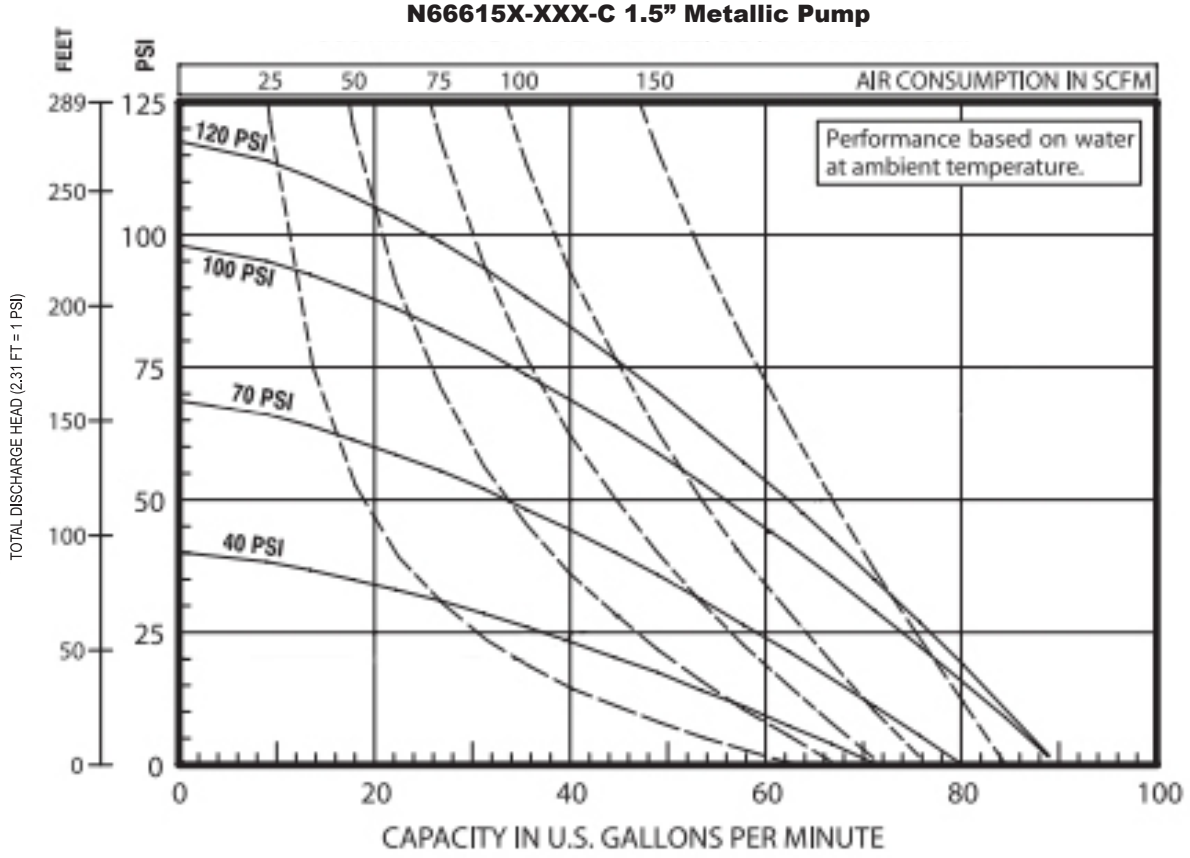
Air Line Moisture
Water in the compressed air supply may cause icing or freezing of the exhaust air, causing the pump to cycle erratically or stop operating. Water in the air supply can be reduced by using a point-of-use air dryer.

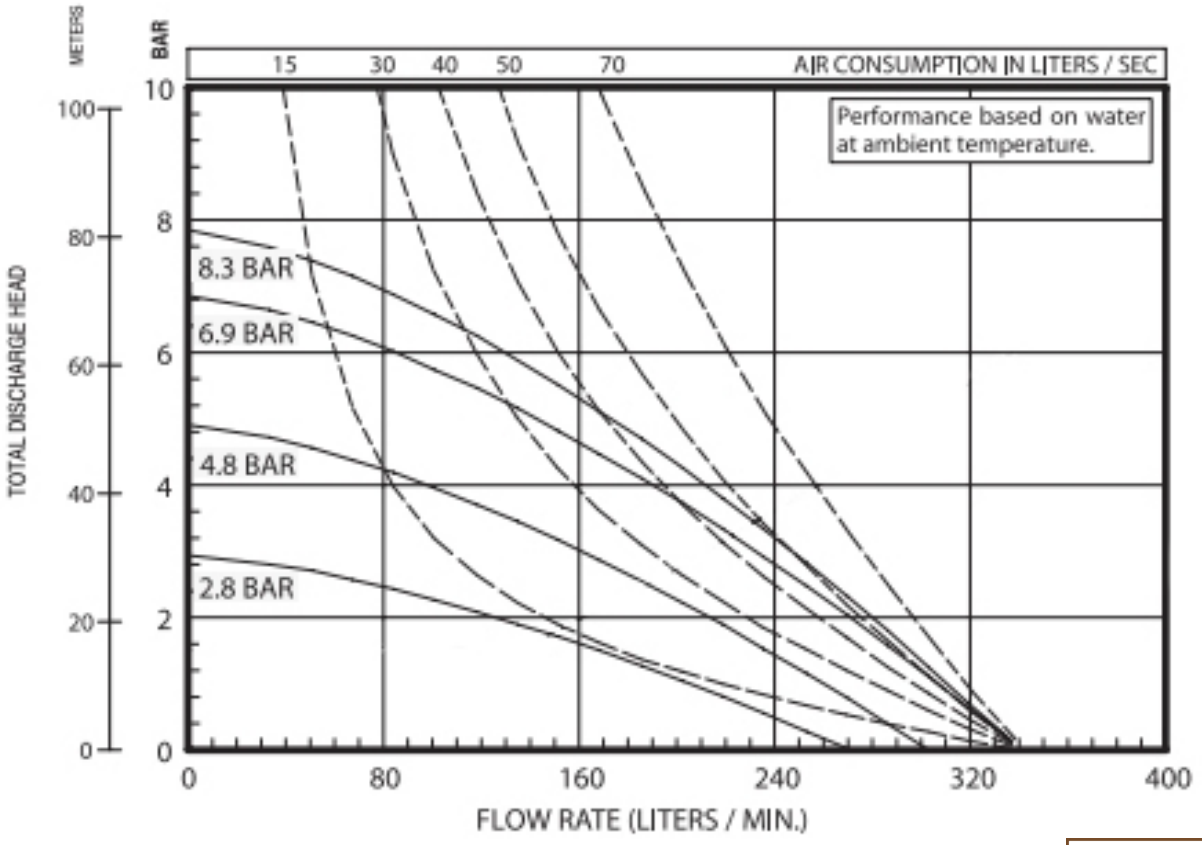
Air Inlet And Priming
To start the pump, slightly open the air shut-off valve. After the pump primes, the air valve can be opened to increase air flow as desired. If opening the valve increases cycling rate, but does not increase the rate of flow, cavitation has occurred. The valve should be closed slightly to obtain the most efficient air flow to pump flow ratio.

Preformance Curves

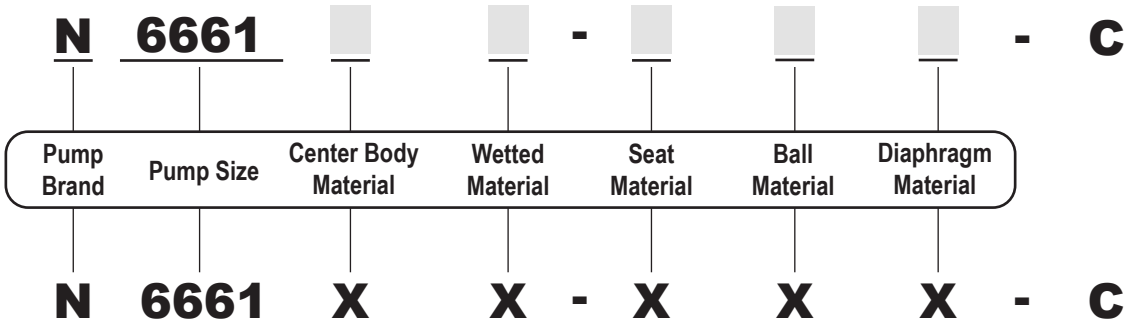
PERFORMANCE CURVES

N66615X-XXX-C 1.5” Metallic Pump





Explanation of Pump Nomenclature



Pump Brand:

NOMAD

Pump Size:

1.5”

Pump Center Body Material:

5 - Aluminum

Wetted Material:

0 - Aluminum

1 - Stainless Steel

Seat Material:

1 - Aluminum

2 - Stainless Steel (316)

4 - PVDF

Ball Material:

2 - Buna

3- Viton

4 - PTFE

A - Stainless Steel (316)

C - Hytrel

E - Santoprene

Diaphragm Material:

1 - Neoprene-

2 - Buna

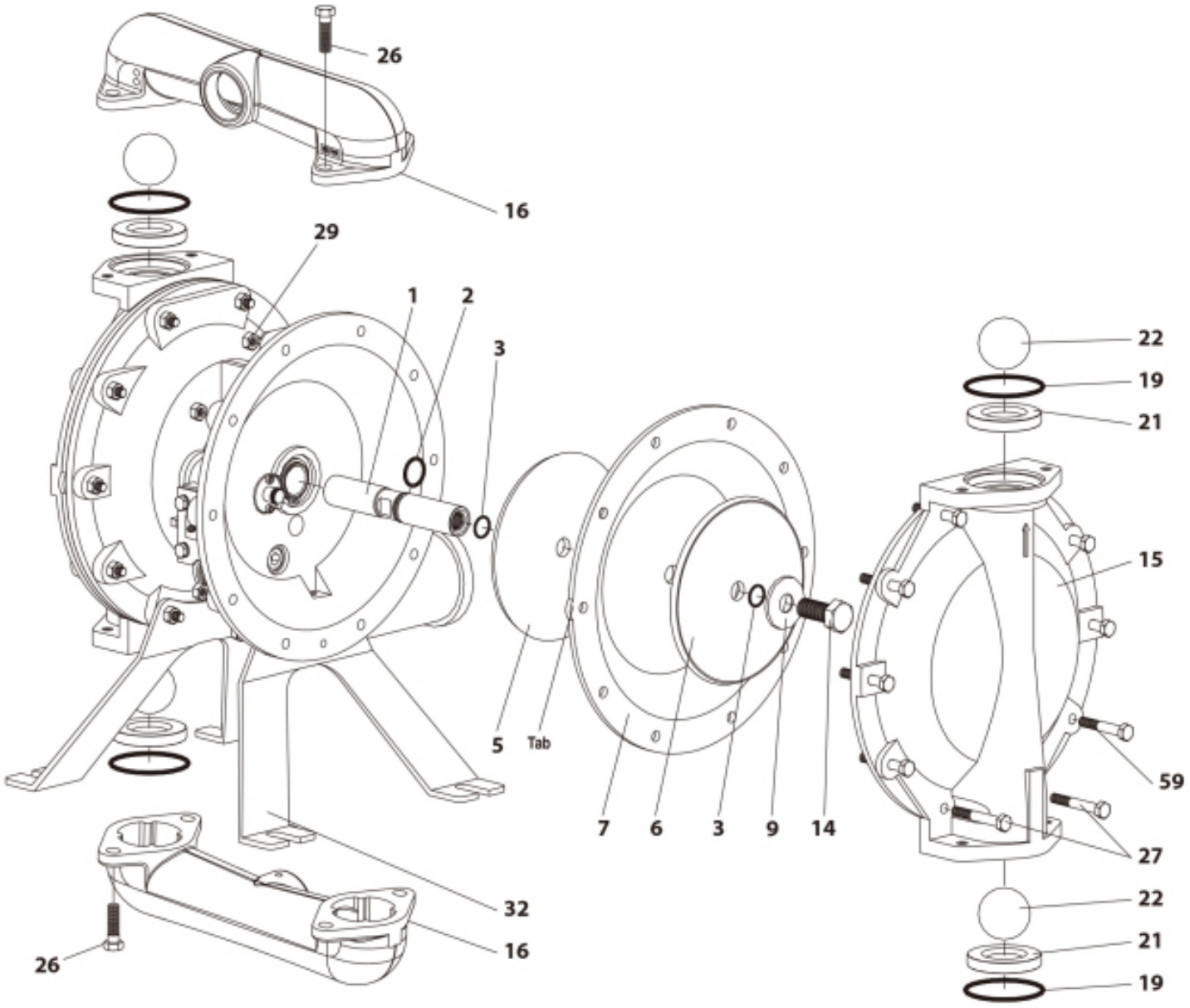
3 - Viton

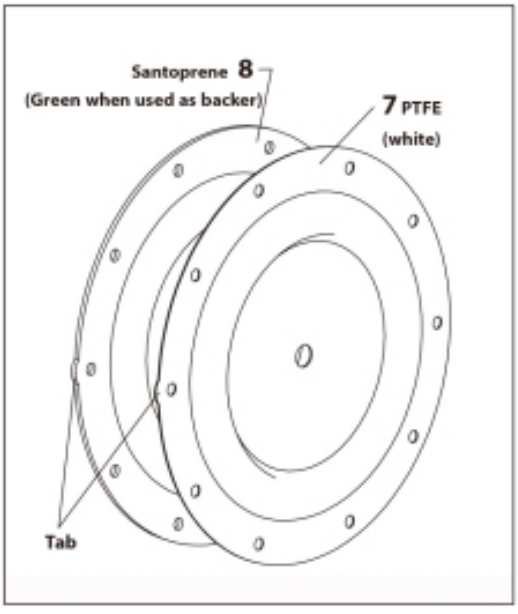
4 - PTFE / Santoprene

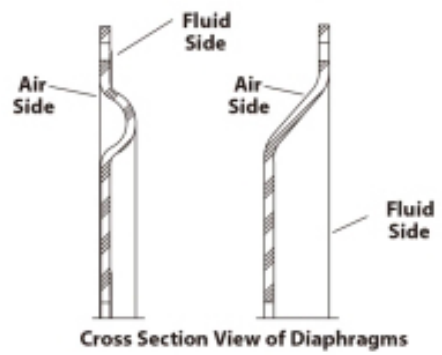
9 - Hytrel

B - Santoprene

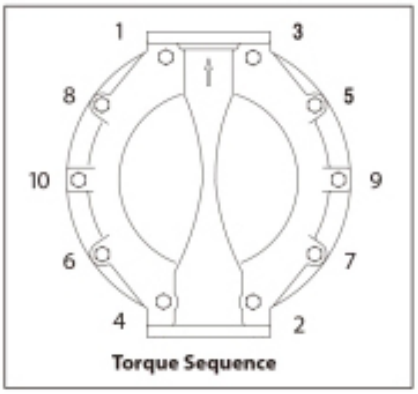
Parts List N666150-XXX-C Fluid Section







Cross Section View of Diaphragms



Torque Sequence

Figure 2

Parts List N666151-XXX-C Fluid Section

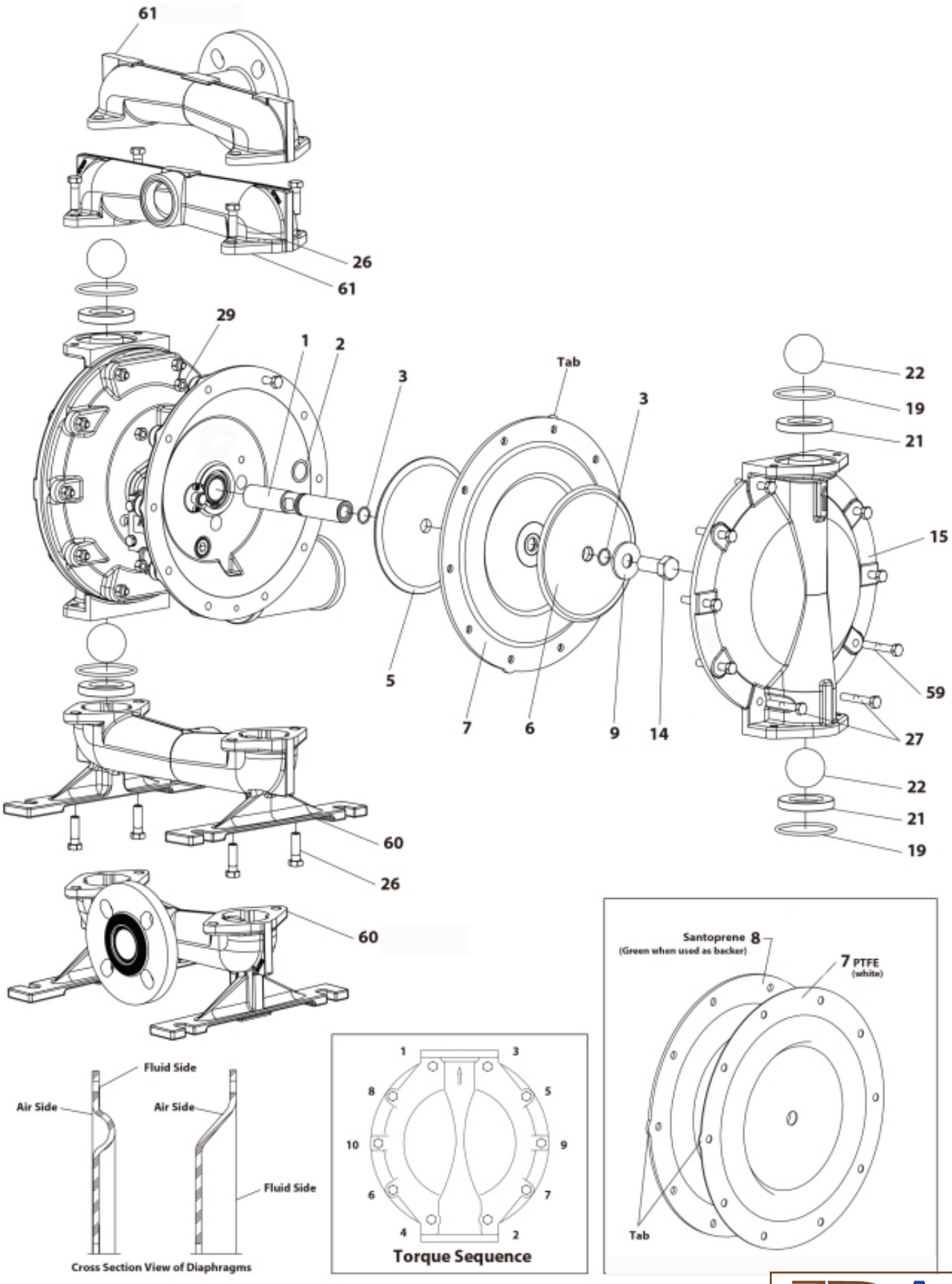


Figure 3

Parts List N66615X-XXX-C Fluid Section

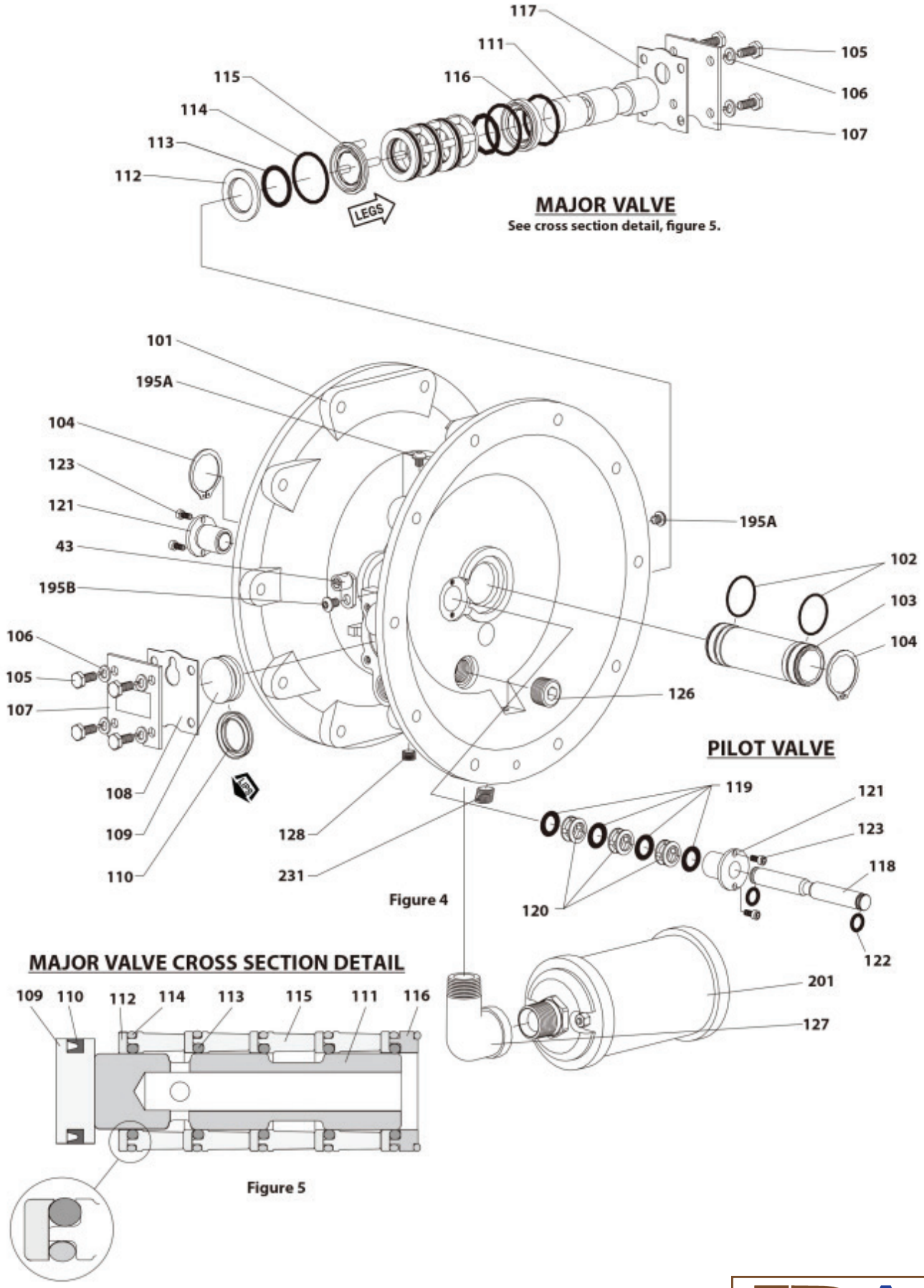
Item	Part Number	Description	Qty	Mtl
N666150-XXX-C Pump Parts List Aluminum				
1	N98720-1	Rod	1	[C]
1	N48489819	Rod	1	[C]
2	NY330-11	O-Ring	1	[B]
3	NY325-16	O-Ring (1/16" x 3/4" OD)	4	[B]
3	NY328-16	O-Ring (1/16" x 3/4" OD)	4	[T]
5	NN948496673	Inner Piston	2	[C]
6	N92752	Outer Piston	2	[SS]
7	N92755-1	Diaphragm	2	[N]
7	N92755-2	Diaphragm	2	[B]
7	N92755-3	Diaphragm	2	[T]
7	N94617	Diaphragm	2	[T/Sp]
7	N94615-9	Diaphragm	2	[H]
7	N94615-A	Diaphragm	2	[Sp]
8	N94616	Backup Diaphragm	2	[Sp]
9	N93065	Washer (0.630" ID)	2	[SS]
14	NY5-107-T	Screw (5/8" -18 x 1-1/2")	2	[SS]
15	N92750	Liquid Chamber	2	[A]
16	N92749	Manifold	2	[A]
19	NY325-342	O-Ring	4	[B]
19	N95910	O-Ring	4	[T]
19	NY327-342	O-Ring	4	[V]
Seat OptionsN666150-XXX-C				
21				
1XX	N92760	Valve Seat	4	[A]
2XX	N96849	Valve Seat	4	[SS]
3XX	N97171-1	Valve Seat	4	[P]
8XX	N99171-2	Valve Seat	4	[SH]
Ball Options N666150-XXX-C				
22				
X2X	N92757-2	Valve Ball	4	[B]
X3X	N92757-3	Valve Ball	4	[V]
X4X	N92757-4	Valve Ball	4	[T]
XCX	N92757-C	Valve Ball	4	[H]
XEX	N92757-A	Valve Ball	4	[SP]
26	NY6-66-C	Bolt (3/8"-16 x 1-1/4")	8	[C]
27	NY6-510-C	Bolt (5/16" -18 x 2 -1/4")	4	[C]
29	NY12-5-C	Nut (5/16"-18)	20	[C]

Item	Part Number	Description	Qty	Mtl
N666151-XXX-C Pump Parts List Aluminum				
1	N98720-1	Rod	1	[C]
1	N48489819	Rod	1	[C]
2	NY330-11	O-Ring	1	[B]
3	NY325-16	O-Ring (1/16" x 3/4" OD)	4	[B]
3	NY328-16	O-Ring (1/16" x 3/4" OD)	4	[T]
5	NN948496673	Inner Piston	2	[C]
6	N92752	Outer Piston	2	[SS]
7	N92755-1	Diaphragm	2	[N]
7	N92755-2	Diaphragm	2	[B]
7	N92755-3	Diaphragm	2	[T]
7	N94617	Diaphragm	2	[T/Sp]
7	N94615-9	Diaphragm	2	[H]
7	N94615-A	Diaphragm	2	[Sp]
8	N94616	Backup Diaphragm	2	[Sp]
9	N93065	Washer (0.630" ID)	2	[SS]
14	NY5-107-T	Screw (5/8" -18 x 1-1/2")	2	[SS]
15	N97621	Liquid Chamber	2	[SS]
19	NY325-342	O-Ring	4	[B]
19	N95910	O-Ring	4	[T]
19	NY327-342	O-Ring	4	[V]
Seat OptionsN666151-XXX-C				
21				
1XX	N92760	Valve Seat	4	[A]
2XX	N96849	Valve Seat	4	[SS]
3XX	N97171-1	Valve Seat	4	[P]
8XX	N99171-2	Valve Seat	4	[SH]
Ball Options N666150-XXX-C				
22				
X2X	N92757-2	Valve Ball	4	[B]
X3X	N92757-3	Valve Ball	4	[V]
X4X	N92757-4	Valve Ball	4	[T]
XCX	N92757-C	Valve Ball	4	[H]
XEX	N92757-A	Valve Ball	4	[SP]
26	NY6-66-T	Bolt (3/8"-16 x 1-1/4")	8	[SS]
27	NY6-510-T	Bolt (5/16" -18 x 2 -1/4")	4	[SS]
29	NY12-5-S	Nut (5/16"-18)	20	[SS]
32	N92759-1	Leg	2	[SS]

Material Code

[A] = Aluminum
[B] = Buna
[C] = Carbon Steel
[Co] = Copper
[CP] = Composite PTFE
[V] = Viton
[H] = Hytrel
[K] = Kynar
[SP] = Santoprene
[SS] = Stainless Steel
[T] = PTFE

Parts List N66615X-XXX-C Air Motor Section



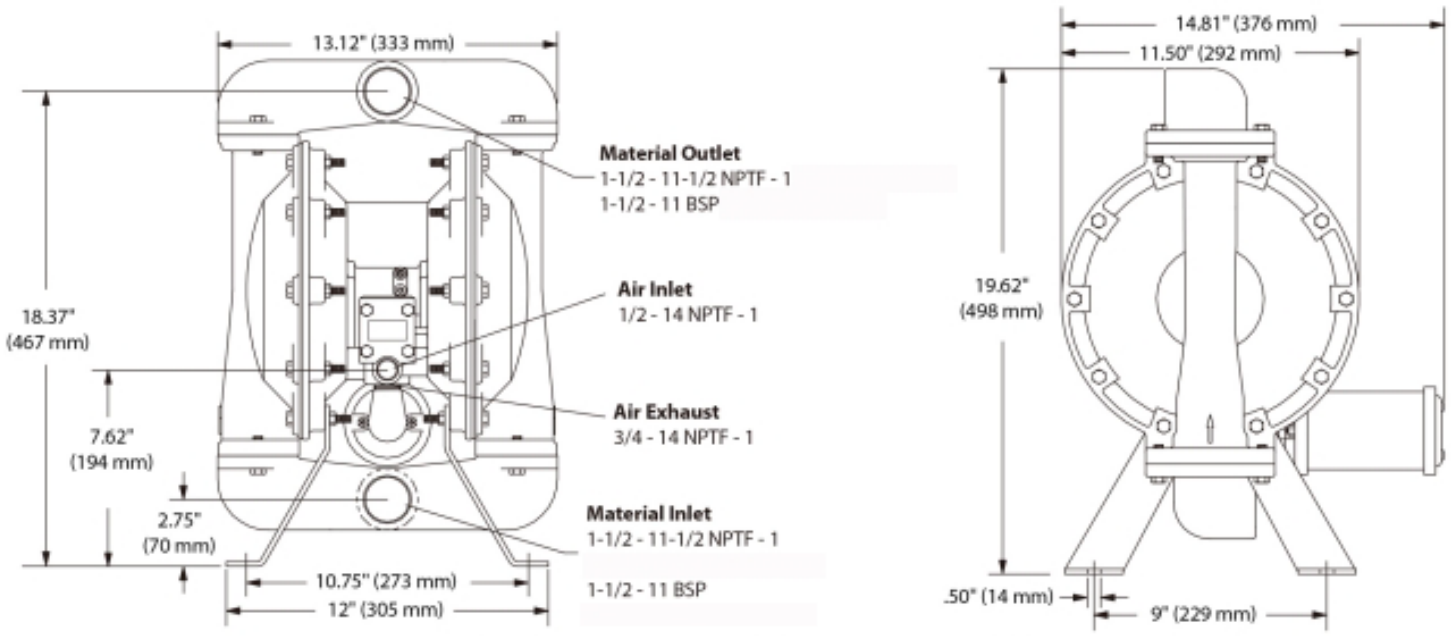
Parts List N66615X-XXX-C Air Motor Section

Item	Part Number	Description	Qty	Mtl
N66615X-XXX-C Air Motor Parts List				
101	N94744	Center Section	1	[A]
102	NY325-24	O-Ring	2	[B]
103	N94528	Sleeve	1	[D]
104	NY145-26	Retaining Ring	2	[C]
105	N93860	Screw	8	[C]
105	NY6-42-T	Screw	8	[SS]
106	NY14-416-T	Lockwasher (1/4")	8	[SS]
107	N93707-1	Plate	2	[SS]
108	N92878	Gasket (with Notch)	1	[B/NY]
109	N92011	Piston	1	[D]
110	NY186-51	U-Cup	1	[B]
111	N92005	Spool	1	[A]
112	N92877	Washer (1.557" o.d.)	5	[Z]
113	NY325-214	O-Ring	5	[B]
114	NY325-126	O-Ring	6	[B]
115	N92876	Spacer	4	[Z]
116	N92006	Spacer	1	[Z]
117	N92004	Gasket	1	[B/NY]
118	N93309-2	Pilot Rod	1	[C]
119	N93075	O-Ring	4	[U]
120	N115959	Spacer	3	[Z]
121	N98723-2	Sleeve Brushing	2	[Bz]
122	N94820	O-Ring	2	[U]
123	NY154-41	Screw (#8-32 x 3/8")	4	[C]
126	NY227-5-L	Pipe Plug (1/2 -14 N.P.T. x 17/32")	1	[C]
127	NY43-5-C	90° Street Elbow (3/4 -14 N.P.T.)	1	[C]
128	NY227-2-L	Pipe Plug (1/8 -27 N.P.T. x 1/4")	1	[C]
195A	N94987	Button Head Screw (1/4" -20 x 1/4")	3	[SS]
195B	N94987-1	Button Head Screw (1/4" -20 x 3/4")	1	[SS]
201	N350-568	Muffler	1	
231	NY17-51-S	Pipe Plug (1/4 - 18 NPFT x 0.41")	2	[SS]
	Not Shown	Grease Packet		

Material Code

[A] = Aluminum
[B] = Buna
[Bz] = Bronze
[C] = Carbon Steel
[D] = Acetal
[Ny] = Nylon
[SS] = Stainless Steel
[U] = Polyurethane
[Z] = Zinc

Dimensional Data



Dimensions shown are for reference only, they are displayed in inches and millimeters (mm).

Figure 6

Troubleshooting

Low output volume, erratic flow or no flow.

- Check air supply.
- Check for plugged outlet hose.
- Check for kinked (restrictive) outlet material hose.
- Check for kinked (restrictive) or collapsed inlet material hose.
- Check for pump cavitation – suction pipe should be sized at least as large as the inlet thread diameter of the pump for proper flow if high viscosity fluids are being pumped. Suction hose must be a non-collapsing type, capable of pulling a high volume.
- Check all joints on the inlet manifolds and suction connections. These must be air tight.
- Inspect the pump for solid objects lodged in the diaphragm chamber or the seat area.

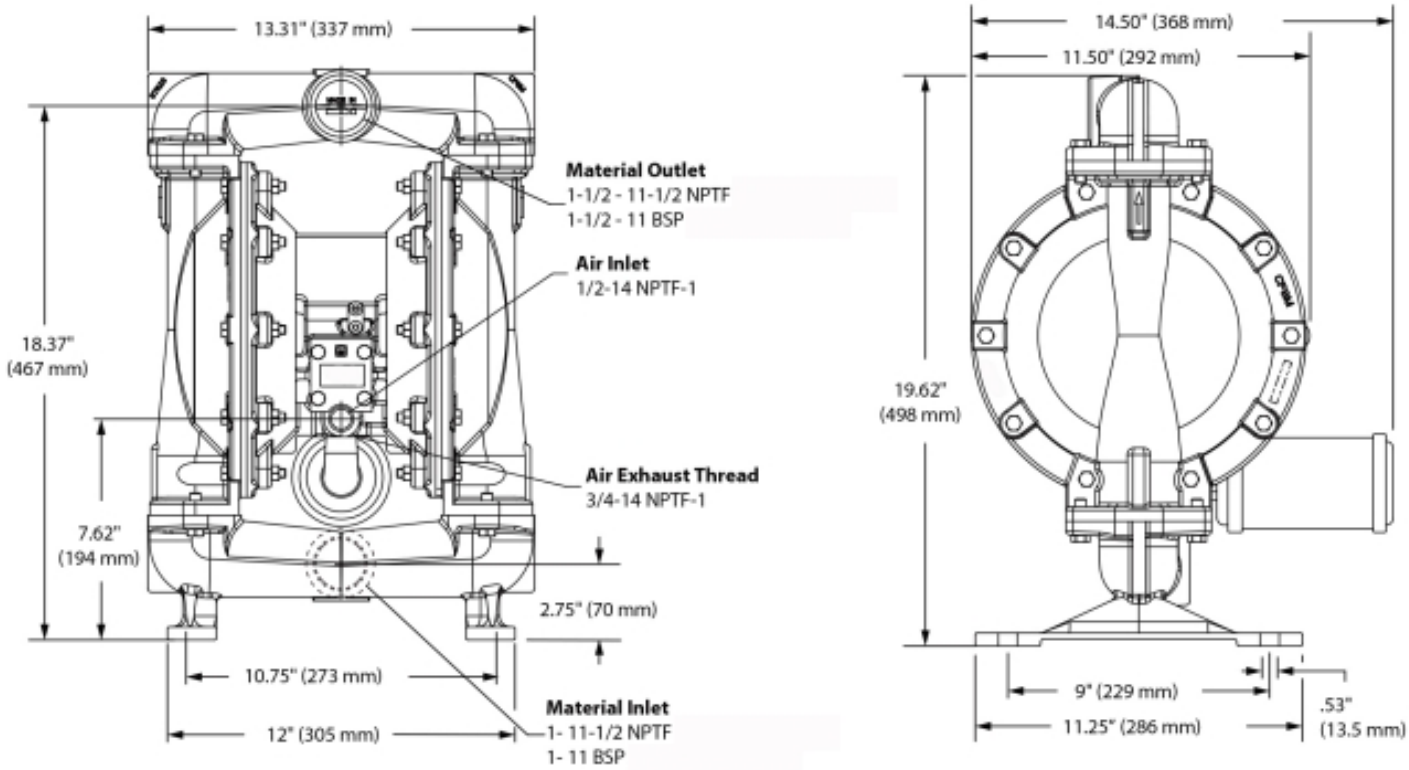
Product discharged from exhaust outlet.

- Check for diaphragm rupture.
- Check tightness of (14) diaphragm screw.

Air bubbles in product discharge.

- Check connections of suction plumbing.
- Check “O” rings between intake manifold and fluid caps.
- Check tightness of (14) diaphragm screw.

Dimensional Data



Dimensions shown are for reference only, they are displayed in inches and millimeters (mm).

Figure 7

JDA Global LLC

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Henderson, NV 89014 USA

