

INCLUDING: OPERATION, INSTALLATION & MAINTENANCE

2" DIAPHRAGM PUMP

1:1 RATIO (METALLIC)

READ THIS MANUAL CAREFULLY BEFORE INSTALLING, OPERATING OR SERVICING THIS EQUIPMENT.

It is the responsibility of the employer to place this information in the hands of the operator. Keep for future reference.

PUMP DATA

MODEL see model description chart
 Pump Type..... Metallic Air operated Diaphragm Pump
 Material see Model description Chart
 Weight..... BQG350P-xxxx 30KG

Maximum Air Inlet Pressure..... 0.83Mpa

Maximum Material Inlet Pressure..... 0.07Mpa

Maximum Outlet Pressure..... 0.83Mpa

Maximum Flow Rate..... 548.8lpm

Maximum Particle Size..... 6.4mm

Maximum Temperature limits (diaphragm /ball/seat material)

Neoprene..... -18°C --- 93°C

Buna..... -12°C --- 82°C

Polypropylene..... 2°C --- 66°C

Santoprene..... -40°C --- 107°C

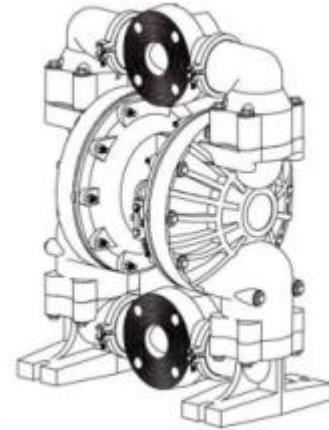
Teflon..... 4°C --- 107°C

Viton..... -40°C - 177°C

Dimensional Data..... See Page 8

Noise Level @ 0.5Mpa, 60c.p.m. 75dba (A)

Notice: Certain combinations may not be recommended, if
 have questions, consult the representative or the
 factory.

**Model Description Chart**

BQG350 XXXXX	
<u>Fluid Cap&Mainfold</u>	
A-Aluminum	
G-Stainless Steel	
P-Polypropylene	
<u>Seat Material</u>	
A-Aluminum	G- Stainless Steel
P-Polypropylene	
S-Santoprene	T-Teflon
<u>Ball Material</u>	
N-Neoprene	
T-Teflon PTFE	
V-Viton	
S-Santoprene	
<u>Diaphragm Material</u>	
N-Neoprene	S-Santoprene
T-Teflon PTFE	
V-Viton	
<u>Centor body Material</u>	
A-Aluminum	
P-Plastic	

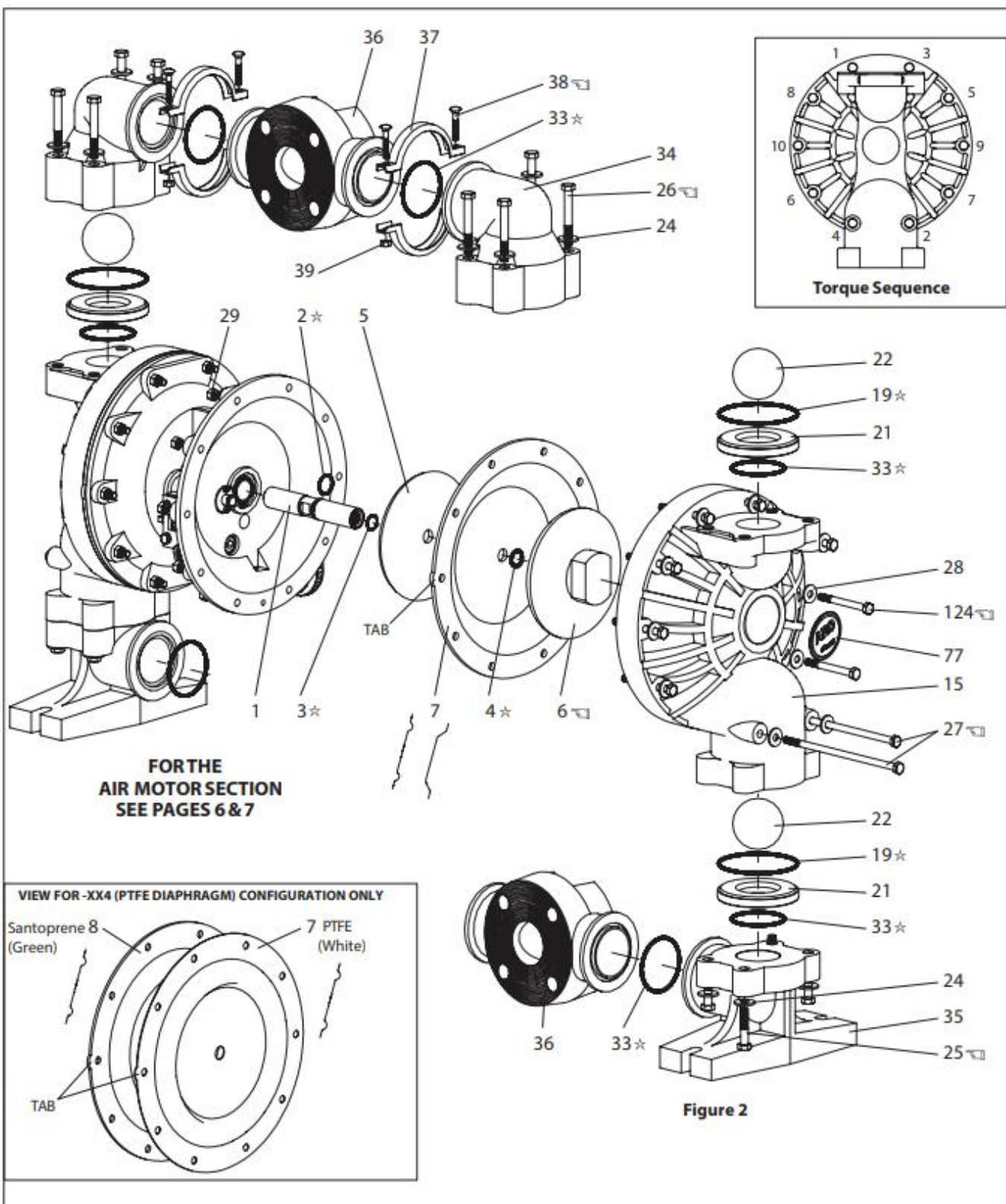


Figure 2

Item	Description (size)	Qty	Part No.	[Mtl]
101	Motor Body (6662BX-XXX-C)	(1)	94744	[A]
	(6662BX-XXX-C)	(1)	94742	[CI]
✓ 102	O" Ring (1/16" x 1 1/4" o.d.)	(2)	Y325-24	[B]
□ 103	Sleeve	(1)	94528	[D]
✓ 104	Retaining Ring, TruArc (1-5/32" i.d.)	(2)	Y145-26	[C]
105	Screw (1/4"-20 x 5/8")	(8)	Y6-42-T	[SS]
106	Lockwasher (1/4")	(8)	Y14-416-T	[SS]
107	Plate	(2)	93707-1	[SS]
✓ 108	Gasket (with notch)	(1)	92878	[B/NY]
□ 109	Piston	(1)	92011	[D]
✓ 110	"U" Cup (3/16" x 13/8" o.d.)	(1)	Y186-51	[B]
□ 111	Spool (6662BX-XXX-C)	(1)	92005	[A]
	(6662BX-XXX-C)	(1)	93047	[C]
□ 112	Washer (1.557" o.d.)	(5)	92877	[Z]
✓ 113	"O" Ring (small) (1/8" x 1-1/4" o.d.)	(5)	Y325-214	[B]
✓ 114	"O" Ring (large) (3/32" x 1-9/16" o.d.)	(6)	Y325-126	[B]
□ 115	Spacer	(4)	92876	[Z]

Item	Description (size)	Qty	Part No.	[Mtl]
□ 116	Spacer	(1)	92006	[Z]
✓ 117	Gasket	(1)	92004	[B/NY]
118	Pilot Rod	(1)	93309-2	[C]
✓ 119	"O" Ring (1/8" x 3/4" o.d.)	(4)	93075	[U]
120	Spacer	(3)	115959	[Z]
121	Sleeve Bushing	(2)	98723-2	[Bz]
✓ 122	"O" Ring (3/32" x 9/16" o.d.)	(2)	94820	[U]
✓ 123	Screw (#8-32 x 3/8")	(4)	Y154-41	[C]
126	Pipe Plug (1/2 14 N.P.T. x 17/32")	(1)	Y227-5-L	[C]
127	90° Street Elbow (3/4 14 N.P.T.)	(1)	Y43-5-C	[C]
128	Pipe Plug (1/8-27 N.P.T. x 1/4")	(1)	Y227-2-L	[C]
195	Button Head Screw (1/4"-20 x 1/4")	(3)	94987	[SS]
201	Muffler	(1)	93139	[P]
231	Pipe Plug (6662BX-X only)	(2)	Y17-51-S	[SS]
✓	Key-Lube "O" Ring Lubricant	(1)	93706-1	
	Key-Lube Packets (10)		637175	

AIR MOTOR SECTION SERVICE

Service is divided into two parts – 1. Pilot Valve, 2. Major Valve. **GENERAL REASSEMBLY NOTES:**

- Air Motor Section Service is continued from Fluid Section repair.
- Inspect and replace old parts with new parts as necessary. Look for deep scratches on metallic surfaces, and nicks or cuts in "O" rings.
- Take precautions to prevent cutting "O" rings upon installation.
- Lubricate "O" rings with Key-Lube grease.
- Do not overtighten fasteners, refer to torque specification block on view.
- Re-torque fasteners following restart.

PILOT VALVE DISASSEMBLY

1. Remove (104) retaining ring.
2. Remove (123) screws and (122) "O" rings.
3. Remove (118) piston rod, (121) sleeve bushing, (119) "O" rings and (120) spacers from the (101) motor body.
4. Remove (103) sleeve and (102) "O" rings.

PILOT VALVE REASSEMBLY

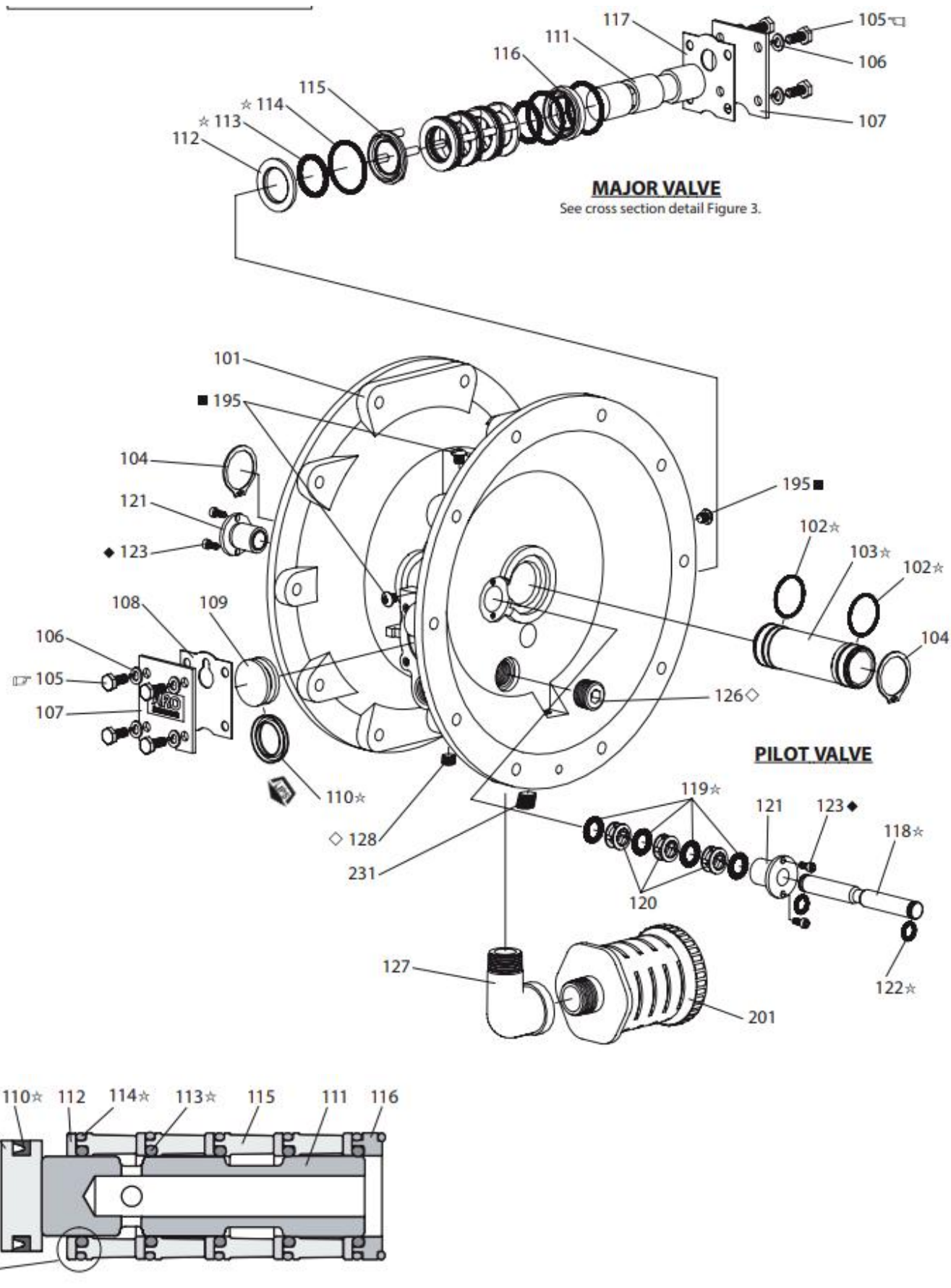
1. Replace two (102) "O" rings if worn or damaged and install (103) sleeve.
2. Install one of the (121) sleeve bushings, (119) "O" rings, (120) spacers and the remaining (121) bushing.
3. Carefully push (118) pilot rod into bushings etc. and retain on each end with the two (122) "O" rings, retain with (123) screws.
4. Replace (104) retaining rings.

MAJOR VALVE DISASSEMBLY

1. Remove (107) plate (or leg depending on model), (108 and 117) gaskets.
2. On the side opposite the air inlet, push on the inner diameter (111) spool. This will force the (109) piston out. Continue pushing the (111) spool and remove. Check for scratches and gouges.
3. Reach into the air section (exhaust side) and remove (116) spacer, (115) spacers, (113) "O" rings, (114) "O" rings, (112) washers, etc. Check for damaged "O" rings.

MAJOR VALVE REASSEMBLY

1. Replace (112) washer, (114) "O" ring and (113) "O" ring onto (115) spacer and insert etc.
NOTE: Be careful to orient spacer legs away from blocking internal ports.
2. Lubricate and carefully insert (111) spool.
3. Install (117) gasket and (107).
4. Lubricate and install (110) packing cup and insert (109) piston into (air inlet side) cavity, the (110) packing cup lips should point outward.
5. Install (108) gasket and replace (107).



All dimensions are given in inches and millimeters (mm).

