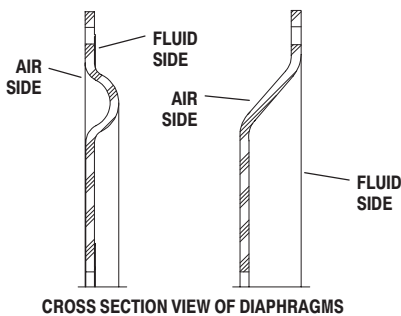
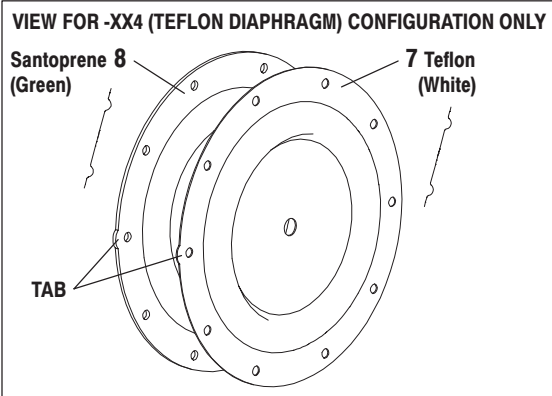


FOR THE AIR MOTOR SECTION SEE PAGES 6 & 7



TORQUE REQUIREMENTS

NOTE: DO NOT OVERTIGHTEN FASTENERS

(6) Diaphragm Nut 65 - 70 ft. lbs (88.1 - 94.9 Nm), apply Loctite 271 to threads.

(25, 26, 27 and 124) Fluid Caps/Manifold bolts 120 - 140 in. lbs. (13.6 - 15.8 Nm), apply Loctite Nickel Antizeize to threads.

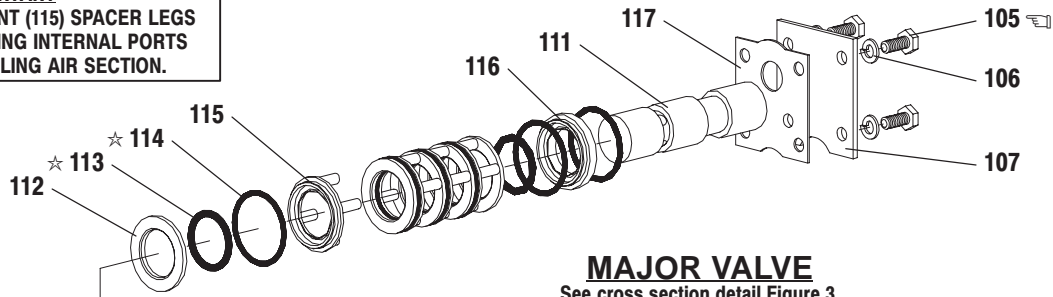
(38) Bolts 40 - 45 in. lbs (4.5 - 5.1 Nm).

LUBRICATION / SEALANTS

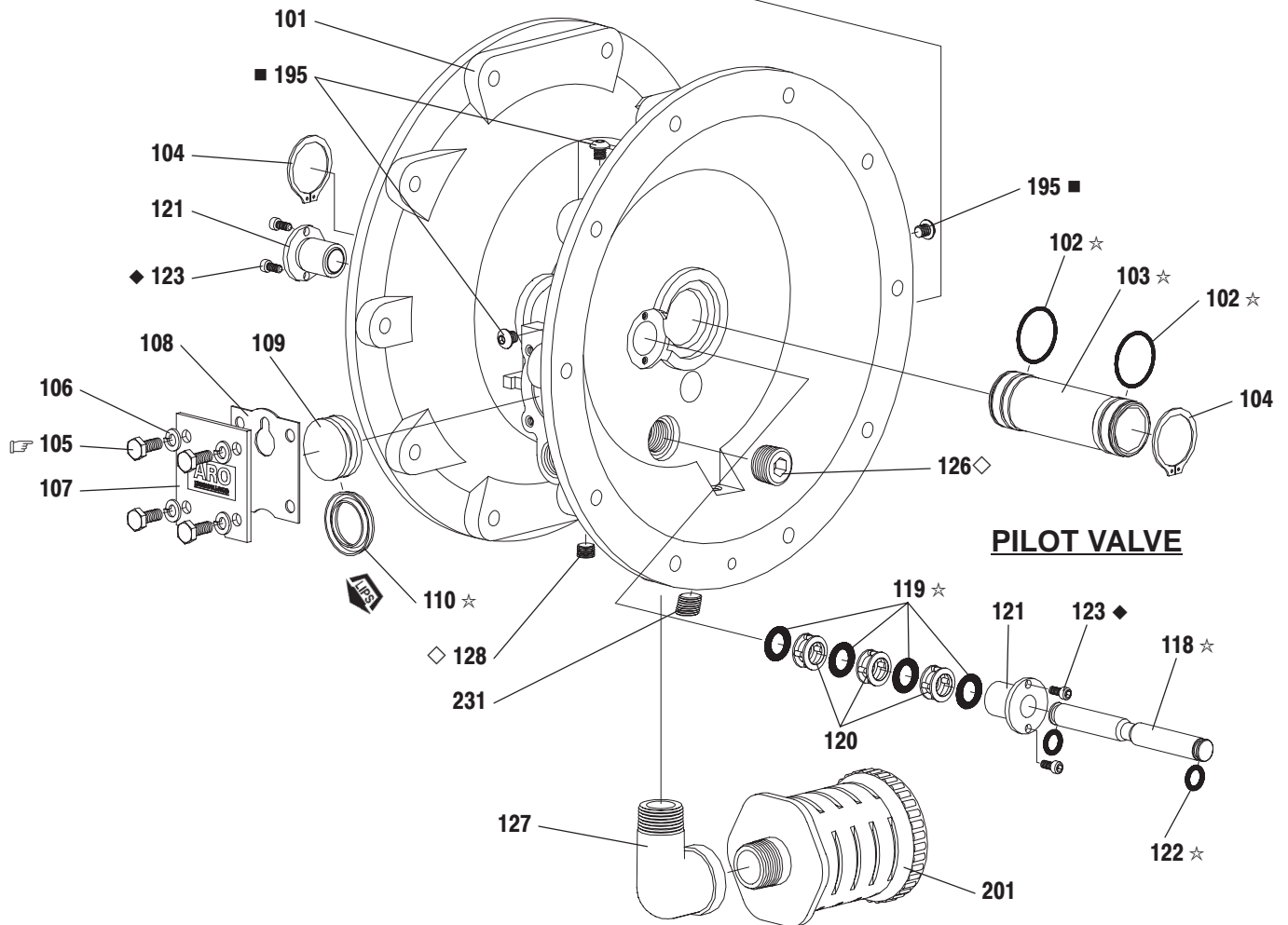
☆ Apply Key-Lube grease to all "O" rings, "U" Cups & mating parts

COLOR CODE		
MATERIAL	DIAPHRAGM COLOR	BALL COLOR
E.P.R.	Blue (-)	Blue (+)
HYTREL	Cream	N/A
NEOPRENE	Green (-)	Green (+)
NITRILE	Black	Red (+)
POLYURETHANE	N/A	Red
SANTOPRENE	Cream	Cream
SANTOPRENE (Backup)	Green	N/A
T.F.E. (Teflon)	White	White
VITON	Yellow (-)	Yellow (+)
	(-) STRIPE	(+) DOT

IMPORTANT
BE CERTAIN TO ORIENT (115) SPACER LEGS
AWAY FROM BLOCKING INTERNAL PORTS
WHEN REASSEMBLING AIR SECTION.



MAJOR VALVE
See cross section detail Figure 3.



PILOT VALVE

MAJOR VALVE CROSS SECTION DETAIL

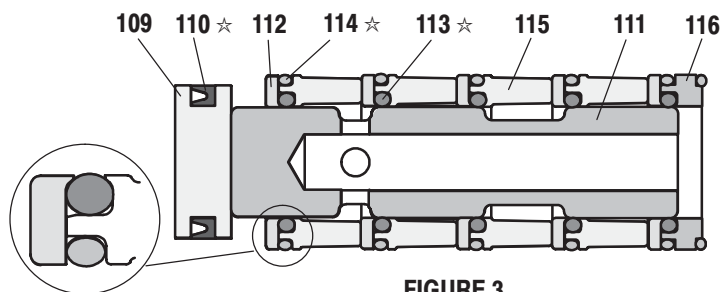


FIGURE 3

TORQUE REQUIREMENTS
NOTE: DO NOT OVERTIGHTEN FASTENERS
(105) 40 - 50 in. lbs (4.5 - 5.6 Nm),
apply Loctite Nickel Antiseize to threads.

LUBRICATION / SEALANTS

- ☆ Apply Key-Lube to all "O" rings, "U" Cups & mating parts.
- ◆ Apply Loctite 271 to threads.
- ◇ Apply pipe sealant to threads.
- Apply Dri-Loc 204 to threads.

TROUBLE SHOOTING

Product discharged from exhaust outlet.

- Check for diaphragm rupture.
- Check tightness of diaphragm nut.

Air bubbles in product discharge.

- Check connections of suction plumbing.
- Check "O" rings between intake manifold and fluid caps.
- Check tightness of diaphragm nut.

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 vacuum.
- Check all joints on the inlet manifolds and suction connections. These must be air tight.
- Inspect the pump for solid objects logged in the diaphragm chamber or the seat area.

DIMENSIONAL DATA

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

