

PARTS LIST / 66615X-X-C FLUID SECTION

★ 637124-XX Fluid Section Service Kits include: BALLS (see Ball Option, refer to -XX in chart below), DIAPHRAGMS (see Diaphragm Option, refer to -XX in chart below), 93706-1 Key-Lube grease packet, plus items: 2, 3, 9 and 19.

SEAT OPTIONS				BALL OPTIONS											
"21"				★ "22" (1-3/4" dia.)											
-XXX	Seat	Qty	[Mtl]	-XXX	Ball	Qty	[Mtl]	-XXX	Ball	Qty	[Mtl]	-XXX	Ball	Qty	[Mtl]
-1XX	92760	(4)	[A]	-X1X	92757-1	(4)	[N]	-X8X	92757-8	(4)	[U]	-XAX	94804	(4)	[SS]
-2XX	92776	(4)	[SS]	-X2X	92757-2	(4)	[B]	-XCX	92757-C	(4)	[H]	-XEX	92757-A	(4)	[Sp]
-3XX	92924	(4)	[P]	-X3X	92757-3	(4)	[V]								
-4XX	94514	(4)	[K]	-X4X	92757-4	(4)	[T]								
-5XX	95676	(4)	[C]	-X5X	92757-5	(4)	[E]								
-8XX	93266	(4)	[SH]	-X6X	92757-6	(4)	[D]								

MATERIAL CODE	
[A]	Aluminum
[B]	Nitrile
[C]	Carbon Steel
[CI]	Cast Iron
[Co]	Copper
[D]	Acetal
[E]	E.P.R.
[H]	Hydrel
[K]	Kynar PVDF
[N]	Neoprene
[P]	Polypropylene
[SH]	Hard Stainless Steel
[Sp]	Santoprene
[SS]	Stainless Steel
[T]	Teflon PTFE
[U]	Polyurethane
[V]	Viton

DIAPHRAGM OPTIONS													
-XXX	★ Service Kit	★ "7"			★ "8"			★ "3" (1/16" x 3/4" o.d.)			★ "19" (1/8" x 2-3/4" o.d.)		
-XXX	-XX = (Ball) -XX = (Diaphragm)	Diaphragm	Qty	[Mtl]	Diaphragm	Qty	[Mtl]	"O" Ring	Qty	[Mtl]	"O" Ring	Qty	[Mtl]
-XX1	637124-X1	92755-1	(2)	[N]	-----	---	---	Y325-16	(4)	[B]	Y325-230	(4)	[B]
-XX2	637124-X2	94615-G	(2)	[B]	-----	---	---	Y325-16	(4)	[B]	Y325-230	(4)	[B]
-XX3	637124-X3	92755-3	(2)	[V]	-----	---	---	Y328-16	(4)	[T]	Y327-230	(4)	[V]
-XX4	637124-X4	94617	(2)	[T]	94616	(2)	[Sp]	Y328-16	(4)	[T]	Y220-230	(4)	[T]
-XX5	637124-X5	92755-5	(2)	[E]	-----	---	---	Y328-16	(4)	[T]	92761	(4)	[E]
-XX9	637124-X9	94615-9	(2)	[H]	-----	---	---	Y328-16	(4)	[T]	Y327-230	(4)	[V]
-XXB	637124-XB	94615-A	(2)	[Sp]	-----	---	---	Y328-16	(4)	[T]	92761	(4)	[E]

WETTED PARTS OPTIONS												
Item	Description (size)	Qty	Aluminum 6661X0-X, 6661XA-X			Stainless Steel 6661X1-X, 6661XB-X			Cast Iron 6661X2-X, 6661XC-X			
			N.P.T.F.		BSP	N.P.T.F.		BSP	N.P.T.F.		BSP	
			Part No.	Part No.	[Mtl]	Part No.	Part No.	[Mtl]	Part No.	Part No.	[Mtl]	
15	Fluid Cap	(2)	92750	92750	[A]	92773	92773	[SS]	92778	92778	[CI]	
16	Manifold	(2)	92749	92749-1	[A]	92774	92774-1	[SS]	92777	92777-1	[CI]	

HARDWARE OPTIONS						
Item	Description (size)	Qty	Carbon Steel 6661X0-, 1-, 2-		Stainless Steel 6661XA-, B-, C-	
			Part No.	[Mtl]	Part No.	[Mtl]
5	Plate (air side)	(2)	92752	[C]	92775	[SS]
26	Bolt (3/8" - 16 x 1-1/4")	(8)	Y6-66-C	[C]	Y6-66-T	[SS]
27	Bolt (5/16" - 18 x 2-1/4")	(4)	Y6-510-C	[C]	Y6-510-T	[SS]
29	Nut (5/16" - 18)	(20)	Y12-5-C	[C]	Y12-5-S	[SS]
32	Leg	(2)	92759	[C]	92759-1	[SS]
59	Bolt (5/16" - 18 x 2")	(16)	93608	[C]	Y6-59-T	[SS]

637155
ABRASION RESISTANT
CONVERSION KIT
Includes:
93266 (4) [SH] Seat
92757-8 (4) [U] Ball

COMMON PARTS									
Item	Description (size)	Qty	Part No.	[Mtl]	Item	Description (size)	Qty	Part No.	[Mtl]
<input type="checkbox"/> 1	Rod	(1)	98720-1	[C]	★ 9	Washer (0.630" i.d.)	(2)	93065	[SS]
★ 2	"O" Ring (3/32" x 1" o.d.)	(1)	Y330-117	[B]	14	Screw (5/8" - 18 x 1-1/2")	(2)	Y5-107-T	[SS]
<input type="checkbox"/> 6	Plate (fluid side)	(2)	92775	[SS]	43	Ground Lug (see page 7)	(1)	93004	[Co]
	(models 6661X0 only)	(2)	92752	[C]					

Service Note: Part no. 98931-T installation tool is available separately for use with items 1 and 2.

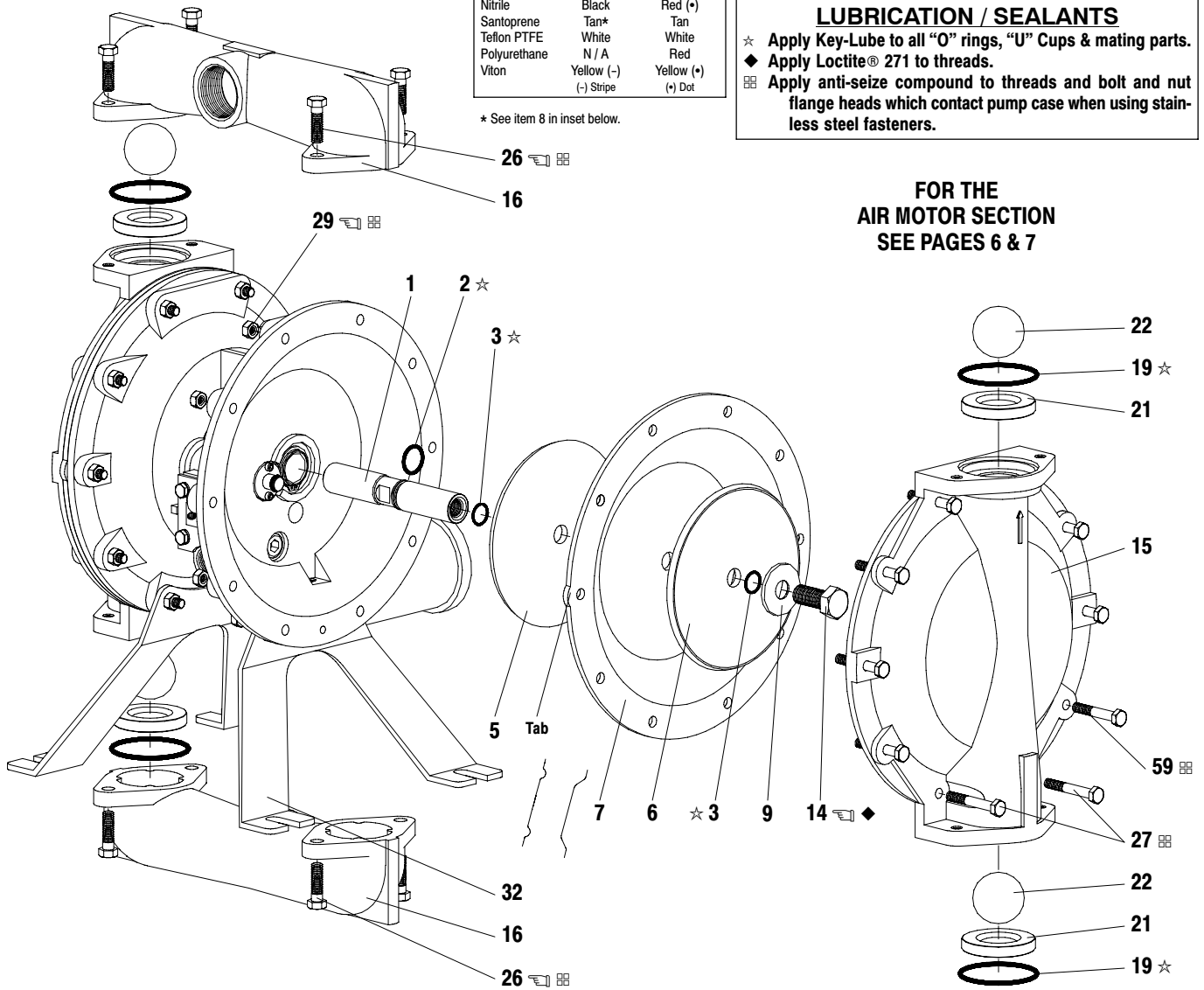
"Smart Parts", keep these items on hand in addition to the service kits for fast repair and reduction of down time.

PARTS LIST / 66615X-X-C FLUID SECTION

COLOR CODE		
Material	Diaphragm Color	Ball Color
Acetal	N / A	Orange
E.P.R.	Blue (-)	Blue (+)
Hytre	Cream	Cream
Neoprene	Green (-)	Green (+)
Nitrile	Black	Red (+)
Santoprene	Tan*	Tan
Teflon PTFE	White	White
Polyurethane	N / A	Red
Viton	Yellow (-)	Yellow (+)
	(-) Stripe	(+) Dot

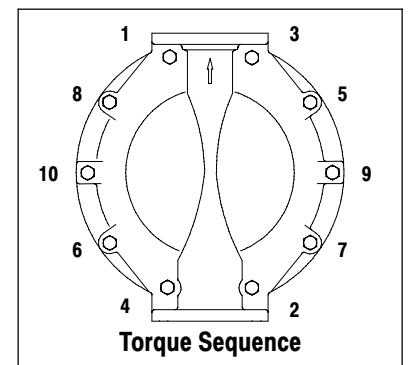
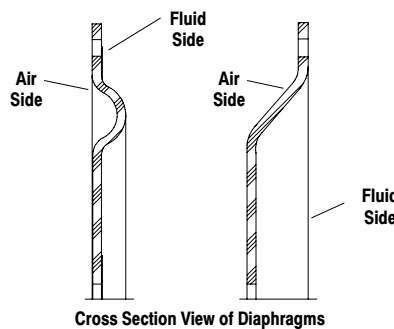
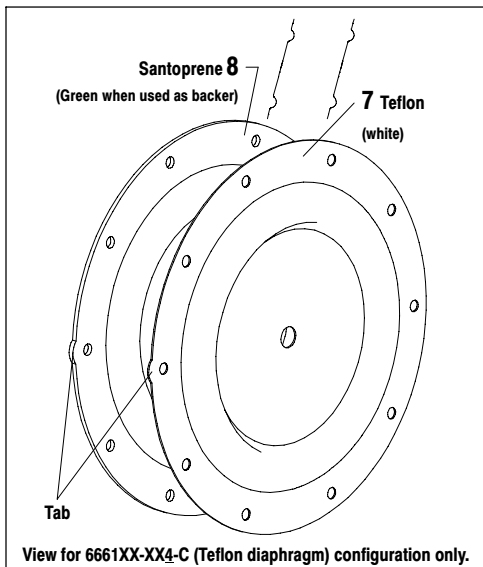
TORQUE REQUIREMENTS
NOTE: DO NOT OVERTIGHTEN FASTENERS.
(14) Diaphragm screw, 65 - 70 ft lbs (88.1 - 94.9 Nm).
(26) Bolts, 120 - 140 in. lbs (13.6 - 15.8 Nm).
(29) nuts, 120 - 140 in. lbs (13.6 - 15.8 Nm).

LUBRICATION / SEALANTS
 ☆ Apply Key-Lube to all "O" rings, "U" Cups & mating parts.
 ◆ Apply Loctite® 271 to threads.
 ☒ Apply anti-seize compound to threads and bolt and nut flange heads which contact pump case when using stainless steel fasteners.



**FOR THE AIR MOTOR SECTION
SEE PAGES 6 & 7**

Figure 2



PARTS LIST / 66615X-X-C AIR SECTION

✓ Indicates parts included in 637118-C Air Section Service Kit.

SERVICE KIT NOTE: Service Kit 637118-C is a general repair kit for all 1" and larger ARO diaphragm pump air motors. It contains extra "O" rings and extra parts that may not be needed to service this model.

Item	Description (size)	Qty	Part No.	[Mtl]
101	Motor Body (66615X-X, 66617X-X)	(1)	94744	[A]
	(66616X-X, 66618X-X)	(1)	94742	[C]
✓ 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 / Lockwasher (1/4" - 20 x 5/8") (models 6661X0-X, 6661X1-X, 6661X2-X)	(8)	93860	[C]
	Cap Screw (1/4" - 20 x 5/8") (models 6661XA-X, 6661XB-X, 6661X5C-X)	(8)	Y6-42-T	[SS]
106	Lockwasher (1/4") (models 6661XA-X, 6661XB-X, 6661XC-X only)	(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 1-3/8" o.d.)	(1)	Y186-51	[B]
□ 111	Spool (models 66615X-X, 66617X-X)	(1)	92005	[A]
	(models 66616X-X, 66618X-X)	(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 P.T.F. 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 P.T.F. x 1/4")	(1)	Y227-2-L	[C]
197	Button Head Screw (1/4" - 20 x 1/4")	(2)	94987	[SS]
198	Button Head Screw (1/4" - 20 x 3/8")	(1)	94987-1	[SS]
201	Muffler	(1)	350-568	
231	Pipe Plug (1/4 - 18 N.P.T. x 0.41") (models 66616X-X and 66618X-X only)	(2)	Y17-51-S	[SS]
✓	Key-Lube "O" Ring Lubricant	(1)	93706-1	
	10 Pak of Key-Lube	(10)	637175	
✓	Service Kits include: Y212-101 (2) Screws (#10 - 32 x 1/4") used on units mf'd between 8/90 and 4/92 to retain the pilot bushing.			

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.
- Do not over-tighten 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 reinstall (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.

MATERIAL CODE

- | | | |
|--------------------|-----------------|------------------------|
| [A] = Aluminum | [C] = Cast Iron | [SS] = Stainless Steel |
| [B] = Nitrile | [D] = Acetal | [U] = Polyurethane |
| [Bz] = Bronze | [Ny] = Nylon | [Z] = Zinc |
| [C] = Carbon Steel | | |

MAJOR VALVE DISASSEMBLY

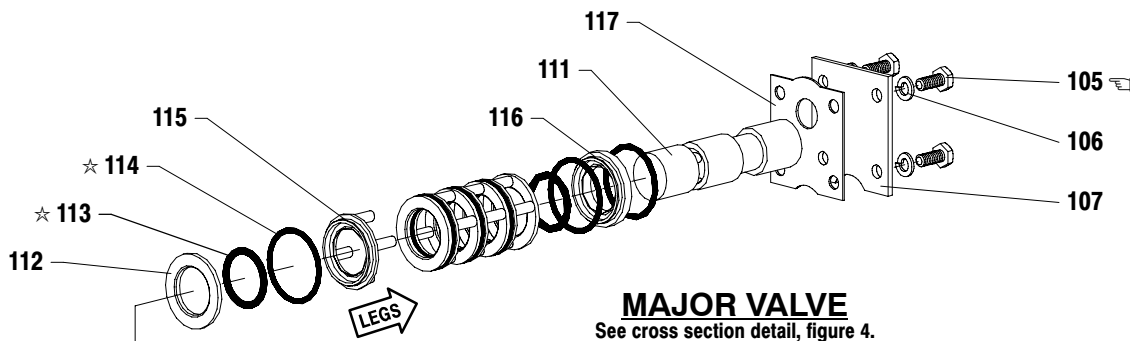
1. Remove (107) plate (or leg depending on model), (108 and 117) gaskets.
2. On the side opposite the air inlet, push on the inner diameter of (111) spool. This will force the (109) piston out. Continue pushing the (111) spool and remove. Check for scratches and gouges.
3. Reach into the air section (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).

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PARTS LIST / 66615X-X-C AIR SECTION



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

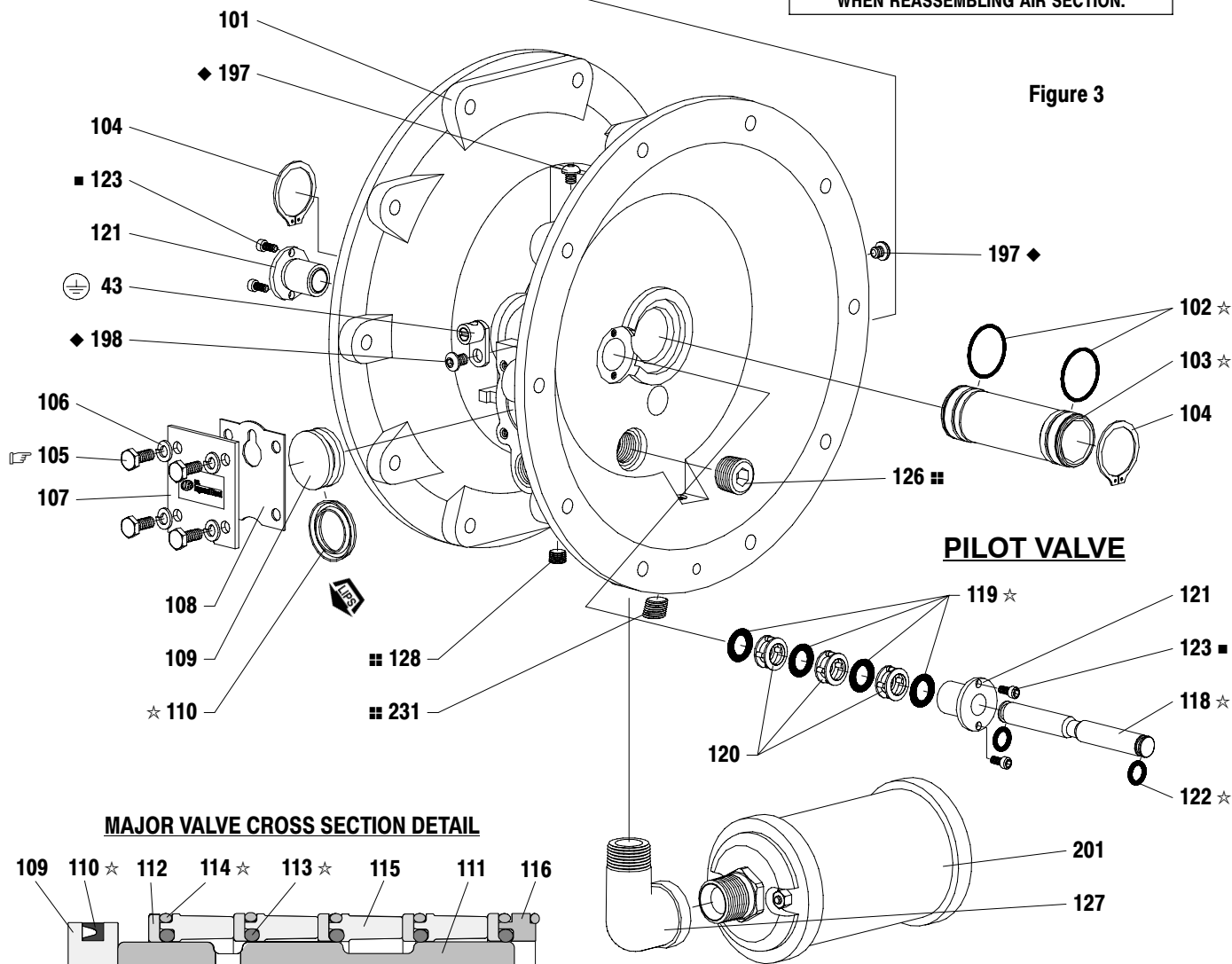


Figure 4

TORQUE REQUIREMENTS
 NOTE: DO NOT OVERTIGHTEN FASTENERS.
 (105) 40 - 50 in. lbs (4.5 - 5.6 Nm).

LUBRICATION / SEALANTS

- ★ Apply Key-Lube to all "O" rings, "U" Cups & mating parts.
- Apply Loctite 262 to threads.
- ◆ Apply Loctite 271 to threads.
- ▣ Apply Loctite 572 to threads.