

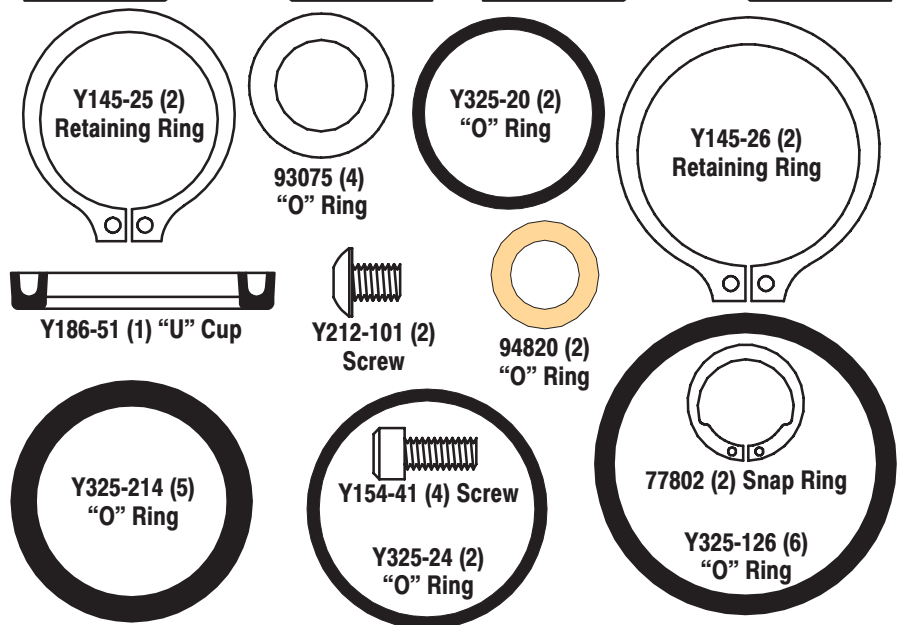
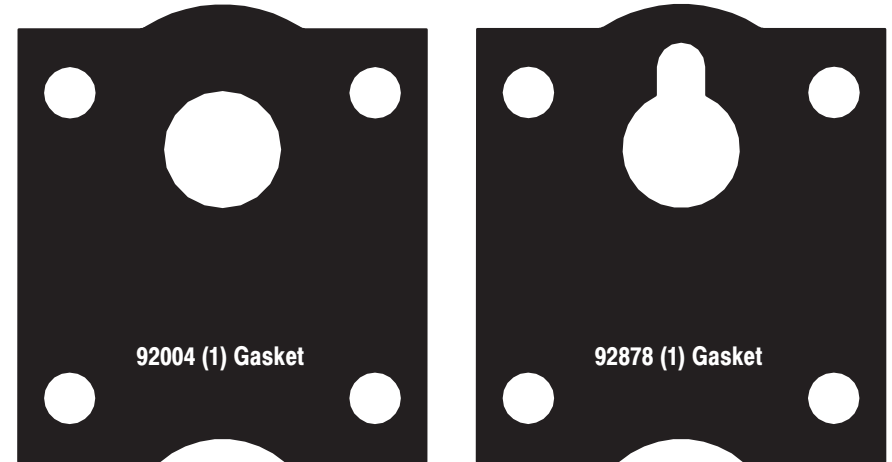
SERVICE KIT

637118-C

PARTS IDENTIFICATION

Air Section Repair Kit for 1" and larger Diaphragm Pumps.

RELEASED: 10-3-97
REVISED: 10-5-05
(REV. D)



PARTS LIST / AIR MOTOR 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 your model.

Item	Description (size)	Qty	Part No.	Mtl	Item	Description (size)	Qty	Part No.	Mtl
43	Ground Lug	(1)			✓ 114	"O" Ring (3/32" x 1-9/16" o.d.)	(6)	Y325-126	[B]
101	Motor Body (includes items 195)	(1)			115	Spacer	(4)		
✓ 102	"O" Ring (1" models)	(2)	Y325-20	[B]	116	Spacer	(1)		
	"O" Ring (1-1/2" and 2" models)	(2)	Y325-24	[B]	✓ 117	Gasket	(1)	92004	[B/Ny]
103	Sleeve	(1)			118	Pilot Rod	(1)		
✓ 104	Retaining Ring (1" models)	(2)	Y145-25	[C]	✓ 119	"O" Ring (1/8" x 3/4" o.d.)	(4)	93075	[U]
	Ret. Ring (1-1/2" and 2" models)	(2)	Y145-26	[C]	120	Spacer	(3)		
105	Screw / Washer (1/4" - 20 x 5/8")	(8)			121	Sleeve Bushing	(2)		
	Cap Screw (1/4" - 20 x 5/8")	(8)			✓ 122	"O" Ring (3/32" x 9/16" o.d.)	(2)	94820	[U]
106	Lockwasher (1/4")	(7)			✓ 123	Screw (#8 - 32 x 3/8")	(4)	Y154-41	[C]
107	Leg	(2)			124	Stud (5/16" - 18 x 1-3/4")	(16)		
	Plate	(2)			128	Pipe Plug (1/8 - 27 N.P.T. x 1/4")	(1)		
✓ 108	Gasket (with notch)	(1)	92878	[B/Ny]	195	Button Head Screw (1/4" - 20 x 1/4")	(2)		
109	Piston	(1)			196	Button Head Screw (1/4" - 20 x 3/8")	(1)		
✓ 110	"U" Cup (3/16" x 1-3/8" o.d.)	(1)	Y186-51	[B]	201	Muffler	(1)		
111	Spool	(1)			✓	Key-Lube®, "O" ring lubricant	(1)	93706-1	
112	Washer (1.557" o.d.)	(5)				Service Kits include: Y212-101(2) screws (#10 - 32 x 1/4") used on units manufactured between 8/90 and 4/92 to retain the pilot bushing.			
✓ 113	"O" Ring (1/8" x 1-1/4" o.d.)	(5)	Y325-214	[B]					

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 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, (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.

Key-lube® is a registered trademark of Key Industries.

MATERIAL CODE

[B] = Nitrile [Ny] = Nylon
[C] = Carbon Steel [U] = Polyurethane

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 packing cup lips should point outward.
5. Install (108) gasket and replace (107).

PARTS LIST / AIR MOTOR SECTION

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

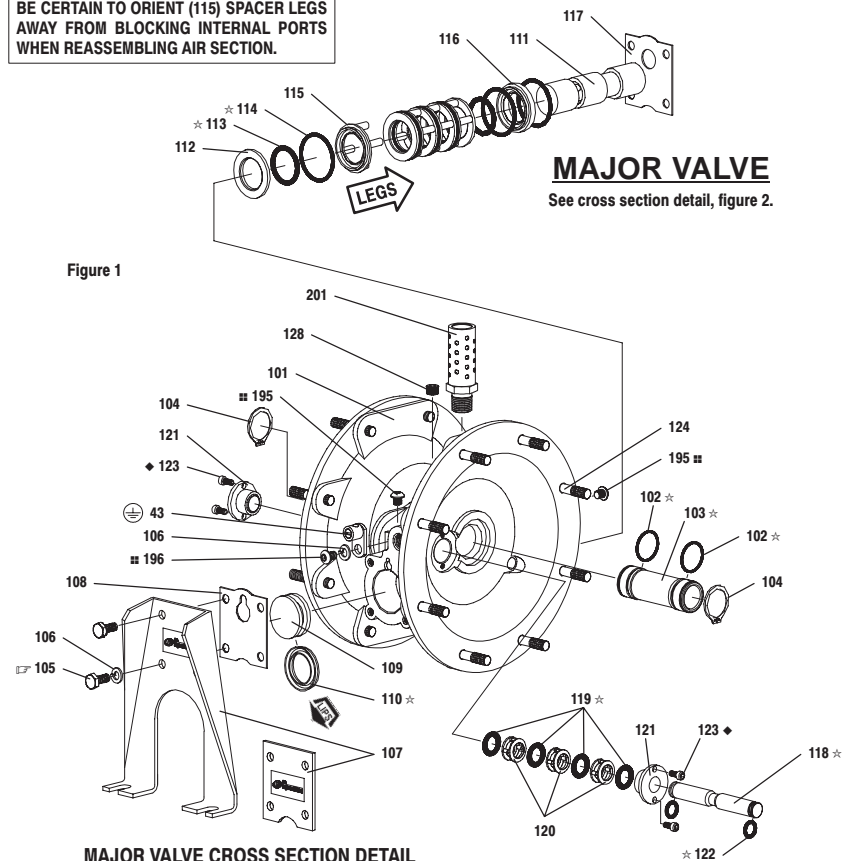


Figure 1

MAJOR VALVE

See cross section detail, figure 2.

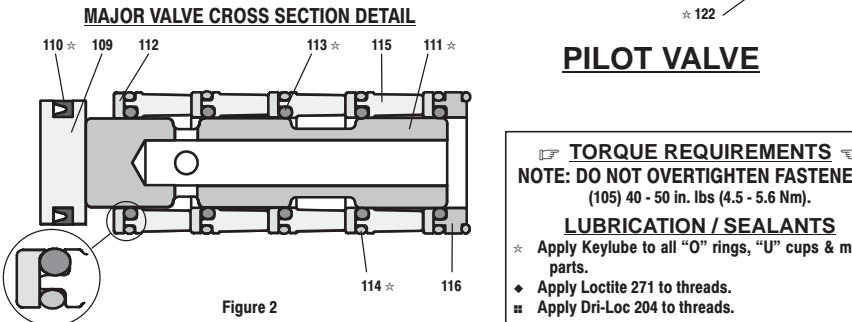


Figure 2

PILOT VALVE

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

LUBRICATION / SEALANTS

- ★ Apply Keylube to all "O" rings, "U" cups & mating parts.
- ◆ Apply Loctite 271 to threads.
- Apply Dri-Loc 204 to threads.