

OPERATOR'S MANUAL

INCLUDING: OPERATION, INSTALLATION & MAINTENANCE

67355-X

67357-X

RELEASED: 7-14-04

REVISED: 2-7-12

(REV. 02)

SOLENOID ACTUATED PUMP KITS FOR DIAPHRAGM PUMPS

SOLENOID ACTUATED PUMP KITS

67355-() for 1" diaphragm pumps (PE10X-X-X).

67357-() for 2" non-metallic diaphragm pumps (PE20P-X-X), (PE20X-X-X-B).

67357-() for 3" diaphragm pumps (PE30X-X-X-C).

GENERAL DESCRIPTION

ARO solenoid actuated diaphragm pump kits allow the cycle rate of the pump to be controlled electronically. When the solenoid is energized, the pump strokes and dispenses the fluid in one chamber. When the solenoid is de-energized, the pump strokes in the opposite direction, dispensing the fluid in the other chamber.

By providing continuous ON - OFF signals to the solenoid, the fluid transfer rate may be increased or decreased remotely.

Some parts of the pump must be replaced with those included in these kits to enable solenoid actuation.

6735X-() SOLENOID KIT INSTALLATION

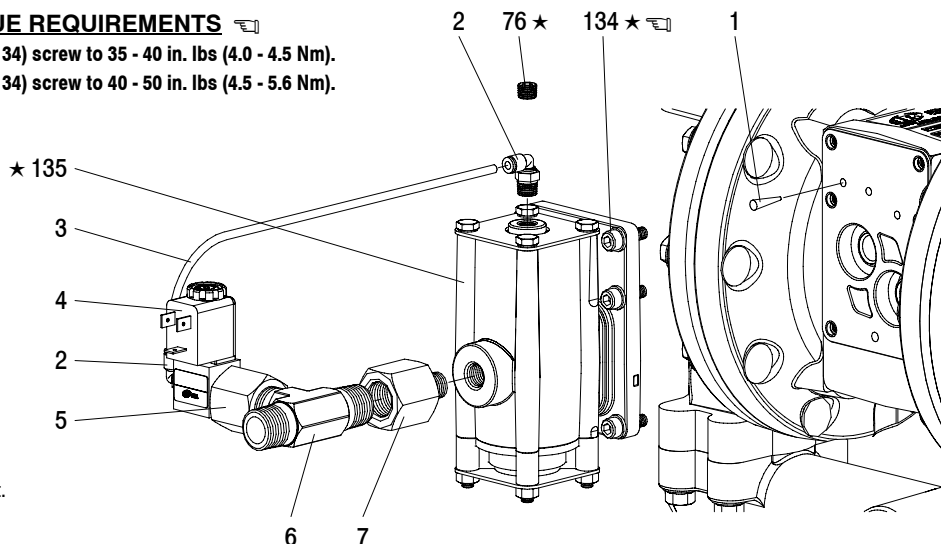
1. Remove (134) bolts from the major valve and remove (135) valve block.
2. Place (1) plug in pilot hole.
3. Attach (135) valve block to (101) motor body, using (133) washers and (134) bolts. NOTE: See "Torque Requirements", figures 1 and 2.
4. Thread CAT33P-()-() valve assembly into air supply port.
5. Remove (76) pipe plug from top of valve block and replace with (2) 90° male fitting.
6. Connect (4) valve with (2) 90° male fitting, using (3) tube.

67355-X SOLENOID KIT (1" Diaphragm Pumps)

TORQUE REQUIREMENTS

PE10P-X, PE10R-X: Torque (134) screw to 35 - 40 in. lbs (4.0 - 4.5 Nm).

PE10A-X, PE10S-X: Torque (134) screw to 40 - 50 in. lbs (4.5 - 5.6 Nm).



★ Not included in 67355-() kit.

Figure 1

PARTS LIST

Item	Description (size)	Qty	Part No.	Item	Description (size)	Qty	Part No.
1	Carrot Plug (67355-X)	(1)	96316	5	Reducing Bushing (1/8 N.P.T. x 1/2 N.P.T.)	(1)	Y167-9
	(67357-X)	(1)	96317	6	Male Pipe Tee (1/2 - 14 N.P.T.F.)	(1)	96306
2	90° Male Fitting (1/8 - 27 N.P.T x 5/32" o.d. tube)	(2)	59756-4	7	Reducing Bushing		
3	Tubing (5/32" o.d. x 12" long)	(1)	94981- (■)		67355-X (1/4 N.P.T. male x 1/2 N.P.T. female)	(1)	Y167-5
4	Valve (6735X-1, 24 VDC)	(1)	CAT33P-024-D		67357-X (3/4 N.P.T. male x 1/2 N.P.T. female)	(1)	Y45-109-C
	(6735X-2, 120 VAC)	(1)	CAT33P-120-A	8	CHW Wiring (not shown)	(1)	CHW
	(6735X-3, no coil ◇)	(1)	CAT33P-000-N				

◇ See page 2 for coil options.

■ 94981-XXX-X bulk tubing (100' long).

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67357-X SOLENOID KIT (2" Diaphragm Pumps)

TORQUE REQUIREMENTS

PE20P-X: Torque (134) screw to 35 - 40 in. lbs (4.0 - 4.5 Nm).

★ Not included in 67357-() kit.

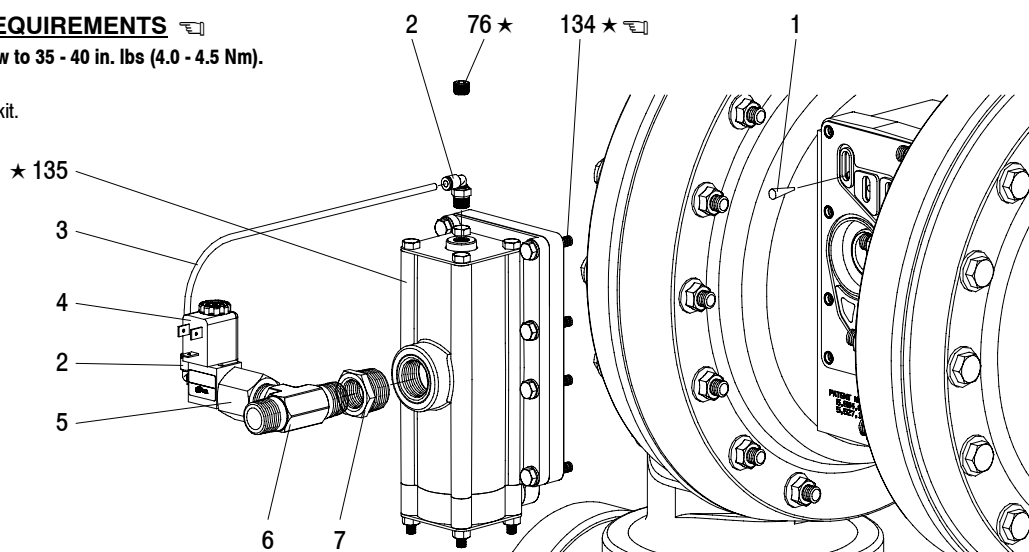


Figure 2

DISPLACEMENT PER CYCLE

	Gallons	Ounces	in. ³	cc	Liters	Specific Gravity = 1.000	
						Grams	Kg
1" Non-Metallic	0.262	33.529	60.522	992	0.992	992	0.992
1" Metallic	0.249	31.866	57.519	942	0.942	942	0.942
2" Non-Metallic	1.400	179.164	323.400	5299	5.299	5299	5.299

2 strokes per complete cycle - 1" metallic will displace 0.1245 gallons per stroke.

COIL OPTIONS

	50 / 60 Hz	DC
116218-31	12	
116218-33	120	
116218-35	240	
116218-37		5
116218-38	24	12
116218-39	48	24