

Air Powered Diaphragm Pump

Model No.: RP8411

AEROPRO
ENGINEERED FOR PROFESSIONALS



IMPORTANT:

Read this Instruction Manual carefully and understand it completely, basic precaution should be strictly followed to prevent the damage to the tool and injury to the operator. Retain this manual for further reference. And you should pay more attention to the Technical Data.



2013

QUICK START GUIDE:

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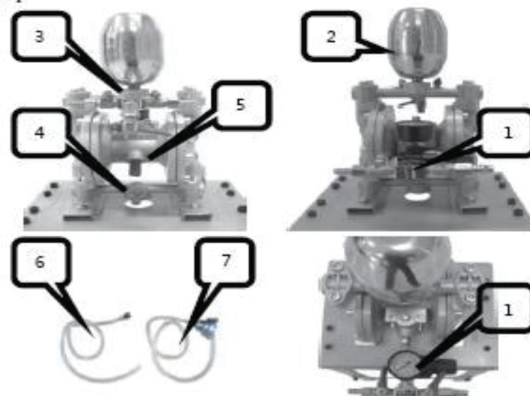
1 Important safety instructions

Forbids to use oxygen and inflammable gas as air source in order to avoid the fire and explosion

Safe operation

1. Before using the diaphragm pumps, please read it carefully and strictly comply with this specification requirements.
2. This product is only used by staff who is familiar with its use for operation.
3. In the process of operation, diaphragm pump should be placed smooth and firm.
4. In the use of the diaphragm pump, try to reduce the usage of the line accessories, keep the original specification; For example, when configurate hard line, should add a short but bending resistance hose in joint, in order to reduce failure rate.
5. This pump in the submerged operation, pipe need another match (diameter greater than 2.5 mm) And exhaust pipe must be above the water surface, otherwise it will reduce the workload and reduce output.
6. When this pump use dangerous, flammable or poisonous liquid, make sure that vent position is safe.
7. The operation site should avoid such as steam, solvents, acid, alkaline gas, when these gases into the diaphragm pump pressure chamber, can make the internal parts to loss the product life.
8. After completion of work, first discharge flow, and gave up the ghost, and then immediately use cleaning solution cleaning.
9. Any fastening, adjustment and maintenance on the diaphragm pump, the tool must be right, and should comply with standardized operation.
10. Forbidden to change the structure of the diaphragm pump

Warning: Working pressure can never be more than 8 kg, otherwise it will seriously affect the service life of the pump



2 Important parts recognition and function

item number	name	Function information
1	Air inlet switch assembly	Connect power supply, control the diaphragm pump inlet pressure size
2	storage vat	Storage pressure solution
3	Discharge valve assembly	The left and right valve connect coating delivery pipe, (size :1/4" 19) the below valve connect pressure tube,
4	fluid inlet	Connect filter assembly feed tube
5	Noise elimination filter components	reduce noise emission in operation
6	pressure relief pipe	After work return from pressure relief pipe
7	filter assembly	Connect the diaphragm pump feed inlet, filtered paint is sucked by the pump body

3. Technical Data

pressure ratio	1 : 1
volume	450 ML
Normal working pressure	3.5-5bar
Max air consumption	3.6 m ³ /h (5bar)
Min air consumption	2.4 m ³ /h (3.5bar)
Max flow rate	450L/h (5bar)
Min flow rate	400L/h (3.5bar)
air inlet	G 1/4 " 19 牙
air hose	Ø7.6mm
Paint inlet/outlet	Ø5mm/Ø8mm
Pump body (size)	32X37X80cm
the weight of the pump	7.6 Kg
application	<p>used for PU coating, UV coating, and other special painting uniform transfer.</p> <p>2 in the operations, it can be connected gun</p> <p>3Ink circulation, feed</p> <p>4 all kinds of corrosive liquid, with particles, high viscosity, easy wave hair, inflammable, explosive, poisonous liquid, ceramic slurries, fruit pulp, tanker warehouse oil recovery</p>

4 Standard Accessories

Item number	Name	Quantity
1	Diaphragm Pump	1
2	Inlet Switch assembly	1
3	Support Plate	1
4	Support leg	4
5	Support leg diaphragm	2
6	Hex Nut (l)	4
7	Hex Bolt (M8*25)	4
8	Hexagon socket head cap screws(M8)	12
9	Hexagon spanner(5#,6#)	2
10	Pressure Pipe	1
11	Filter assembly	1
12	Specification	1
13	Certification	1

5 Installation

Before installation, check whether standard accessories is complete or not , if any mistake please contact with dealers

1. Fix four support leg in the support plate with cylinder head screw;



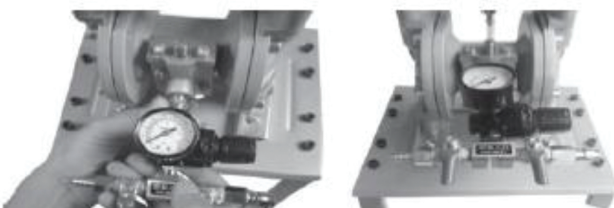
2. fix two support leg diaphragm in support leg with socket cylinder head screw , keep support leg stability



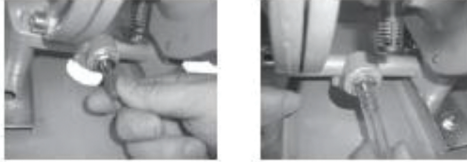
3. place the diaphragm pump on support plate, fix diaphragm pump in the support plate with M8X25 hex bolt, hex nut



4. Tighten the inlet valve assembly interface to the diaphragm pump inlet joint, ensure that the inlet valve assembly level



5 Remove seal set from the diaphragm pump, insert filter assembly feed tube to diaphragm pump paint inlet



6 connected the pressure tube to the discharge valve assembly, and screw down , complete the installation



7. Operation

note: working pressure can't be more than 8 kg, otherwise it will seriously affect the service life of the pumps. Before using , the air source shall be filtered , then connect to the products, thus clean air has been guaranteed.

(1) the operation steps are as follows:

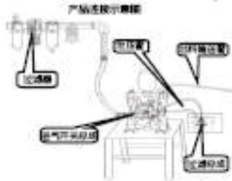
step 1: connect the paint pipe with discharge valve assembly;

Step 2: put filter assembly feed pipe and pressure pipe into the container;

Step 3: check the discharge valve assembly and inlet switch assembly. They should keep closed;

Step4: connect the diaphragm pump inlet switch assembly and air source;

Step5: open the air inlet switch assembly, make sure the pump normal operation, when the paint tank is full of solution, stop running and then open the discharge valve assembly, exhaust the air inside the pump , and then enter the working station.



(2) adjust diaphragm pump work pressure,

clockwise rotation is increasing pressure; counterclockwise rotation is reducing pressure;



(3) complete the operation, the solution in the pump must be drained away:

(first closed discharge valve, open the pressure relief valve, exhaust the solution , close



inlet switch assembly, last begin cleaning procedures.

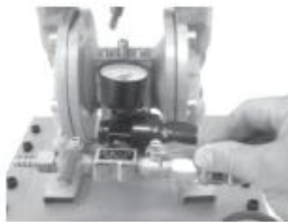
6. Cleaning procedure

Make sure that after complete the operation , clean the machine immediately, otherwise the solidified spraying fluid influences the performance and life of the equipment.

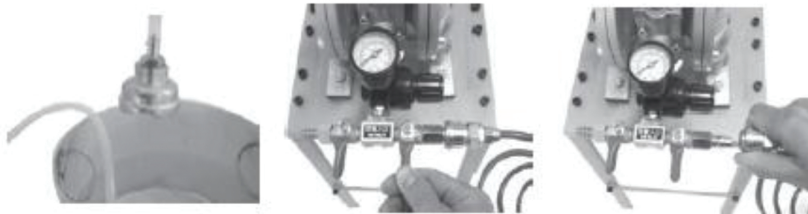
1, put filter assembly and pipe in the container into the container with cleaning solution ;



2. open the diaphragm pump inlet switch assembly, make the pump work five to ten minutes;



3 take the filter assembly from a container, make the machine run properly, exhaust the cleaning solution in the pump, close inlet switch assembly, disconnect air source, finish cleaning.



7 Daily maintain

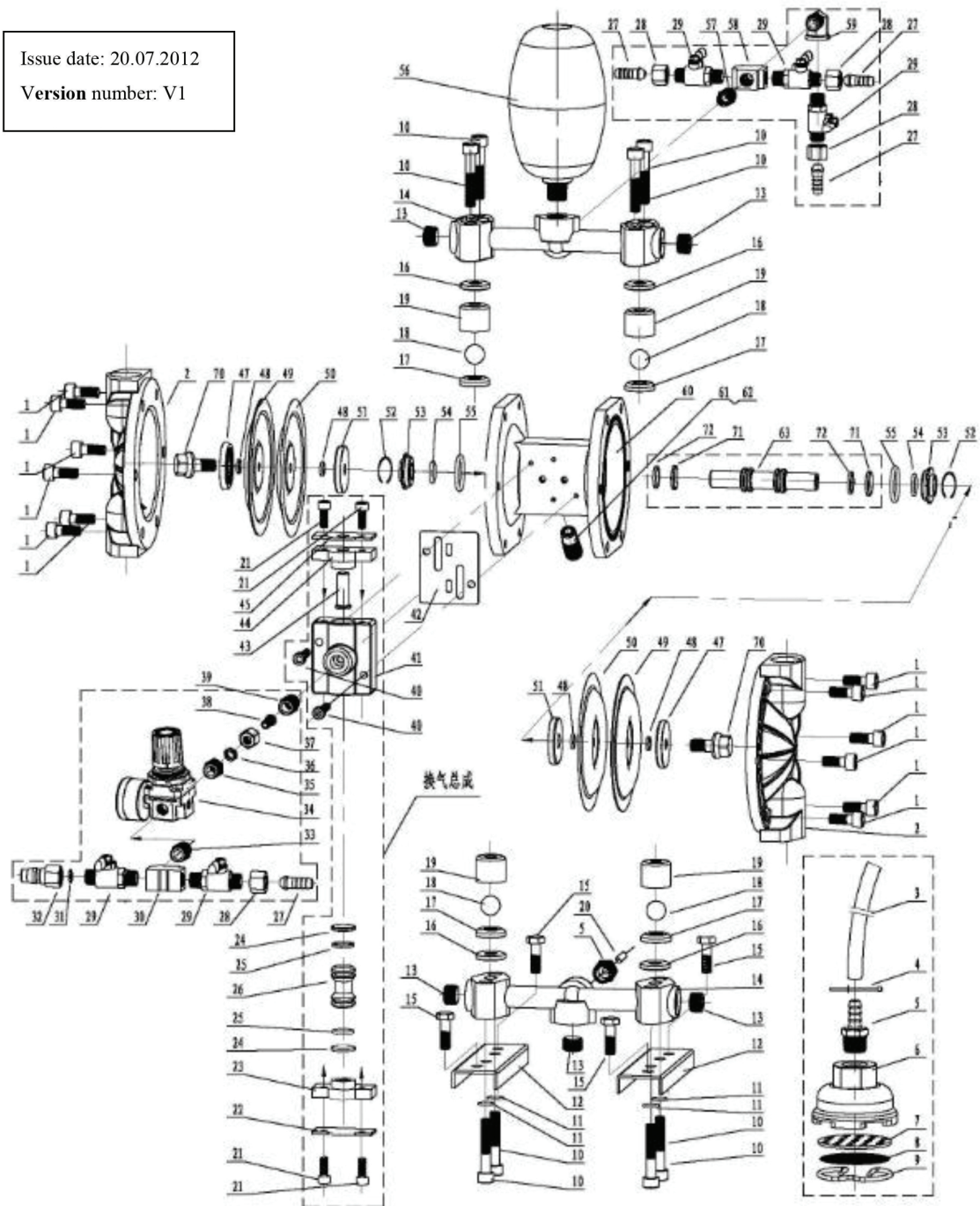
The service life of equipment is closely linked with daily maintenance . Therefore, you must keep the following aspects in mind:

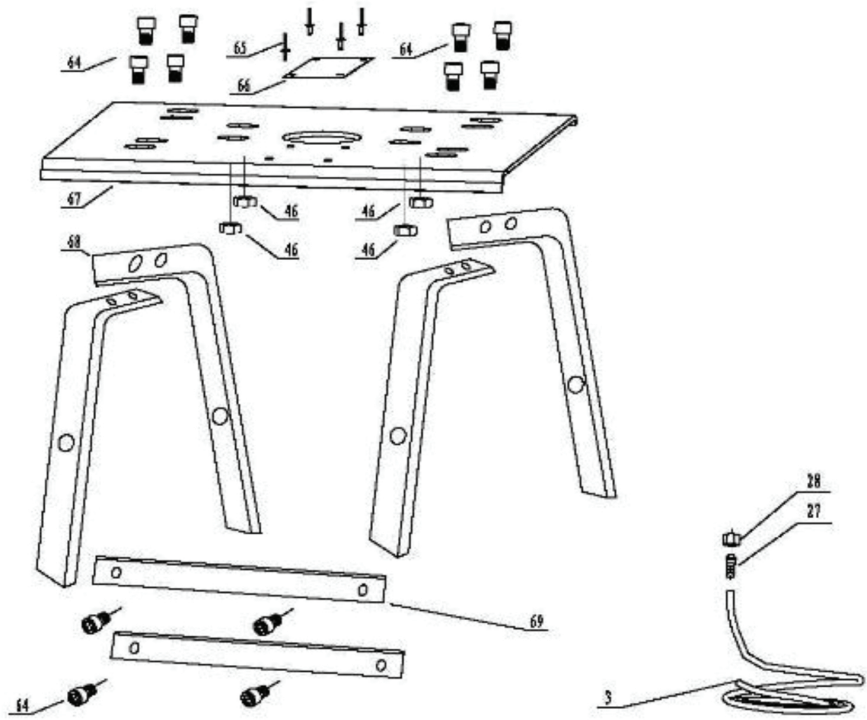
- 1, first use, please read product manual carefully;
- 2, every time before operation, must check whether the connection is reliable or not;
- 3, every time complete the operation, must clean products and parts thoroughly .

※ RP8411 Exploded view

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※ RP8411 Parts list

No.	Description	Qty.	No.	Description	Qty.	No.	Description	Qty.
1.	Bolt	12	25	Rubber sealing washer	2	49	Main diaphragm leaf	2
2.	End cap	2	26	Plastic piston	1	50	Attached diaphragm	2
3.	Air release hose	2	27	Air inlet plug	5	51	Collar insert	2
4.	Collar belt	2	28	Screw	5	52	Flexibility collar	2
5.	Fluid Inlet	2	29	Valve body	5	53	Shaft sleeve	2
6.	Filter seat	1	30	Air inlet seat	1	54	O-ring 13.7*2.4	2
7.	Filter washer	1	31	Switch washer	1	55	O-ring 24.5*3.1	2
8.	Filter	1	32	Jap. air inlet	1	56	Material pot	1
9.	Spring	1	33	Air inlet	1	57	Outlet plug	1
10.	Screw	8	34	Adjuster	1	58	Air inlet plug	1
11.	Spring washer	4	35	Air inlet	1	59	Air hose connector	1
12.	Fix board	2	36	Thin nut	1	60	Foundation mass	1
13.	Sealing plug	5	37	Nut	1	61	Muffer	1
14.	Fix seat	2	38	Air inlet nozzle	1	62	Porous plug	1
15.	Bolt 8*25	4	39	Gauge connector	1	63	Main shaft	1
16.	Washer	4	40	Bolt M6*30	2	64	Bolt M8*12	12
17.	Valve seat	4	41	Air adjust seat	1	65	Rivet 3*7	4
18.	Steel ball	4	42	Air adjust washer	1	66	Logo	1
19.	Ball seat	4	43	Piston pole	1	67	Backing plate	1
20.	Sealing cover	1	44	Sealing cover I	1	68	Standing leg	4
21.	Bolt	4	45	Board cover I	1	69	Supporting plate	2
22.	Board cover II	1	46	Nut C	4	70	Screw M8*20	2
23.	Sealing cover II	1	47	Collar outside	2	71	Washer	2
24.	Main shaft washer	2	48	Collar washer	4	72	Washer	2