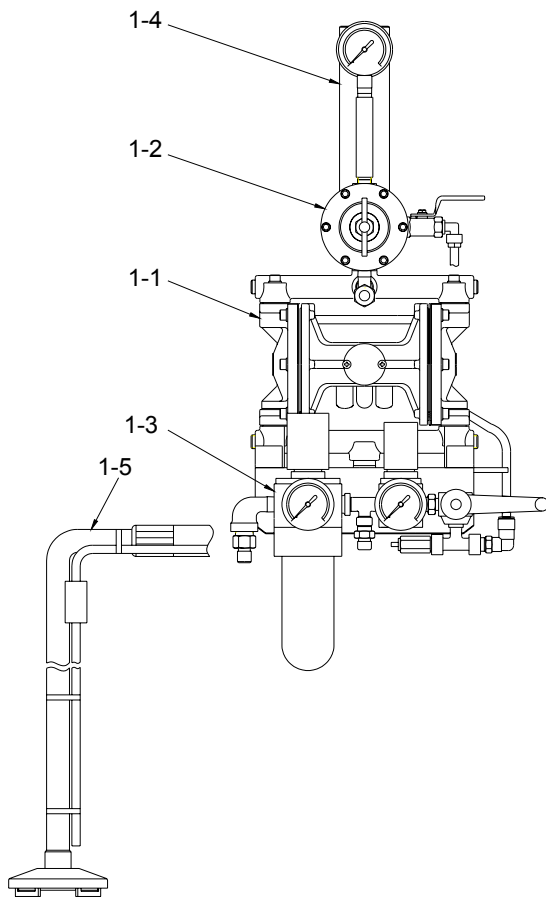


No.	Problems	Causes	Remedies
1	Pump does not operate.	Air pressure is not supplied to the unit.	Check air compressor and hoses. Check emergency valve.
		Air operating valve does not operate.	Push reset button of air operating valve. *1
		Packings inside air operating valve are worn or damaged.	Replace packing with repair service kit. *2
		Exhaust holes of air operating valve are blocked.	Clean. *3
		Pump operating air pressure is too low.	Increase supplied air pressure.
			Increase air pressure at <b>Air Regulator (G)</b> .
		<b>Diaphragm Set (2-5)</b> of pump is worn or damaged.	Replace. *4
		Pump frozen (supplied air contains too much moisture).	Eliminate air moisture by using a dryer or water trap.
		<b>Ball (2-3)</b> sticks on intake or exhaust valve.	Clean. *4
Packing on rod of pump is worn or damaged or <b>Y-shaped Packing (2-13)</b> is installed in the incorrect direction.	Replace. *5		
2	Pump operation unstable. Fluid output is low. Fluid does not come out during pump operation.	Pump operating air pressure is too low.	Increase supplied air pressure.
			Increase pump operating air pressure at <b>Air Regulator (G)</b> .
		<b>Fluid Filter (5-4)</b> or <b>Suction Filter (6-5)</b> are clogged.	Clean or replace.
		<b>Suction Hose Set (E)</b> is clogged.	Clean or replace.
		Exhaust holes of air operating valve are blocked.	Clean. *3
		Pump frozen (supplied air contains too much moisture).	Eliminate air moisture by using a dryer or water trap.
		<b>Intake Valve (2-12)</b> or <b>Exhaust Valve (2-2)</b> are worn or damaged or paint is built up.	Clean or replace. *4
		<b>Ball (2-3)</b> sticks on intake or exhaust valve.	Clean. *4
		<b>O-ring (2-14)</b> or <b>Y-shape Packing (2-13)</b> on Rod of pump or oilless bearing are worn or damaged.	Replace. *4
		<b>Diaphragm set (2-5)</b> of pump is damaged.	Replace. *4
		Fluid or air passage inside pump is clogged.	Clean.
		<b>Diaphragm (3-12)</b> of fluid regulator is worn or damaged.	Replace. *4
		<b>Seat (3-5)</b> of fluid regulator is worn or damaged or paint is built up.	Clean or replace. *4
Fluid contains air.	See below <b>No.3</b> .		

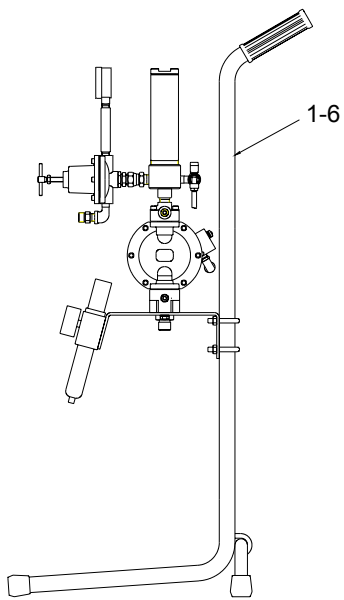
No.	Problems	Causes	Remedies
3	Paint contains air.	Air has not been released.	Refer to <b>5-2. Preparing spraying</b> on page 11.
		<b>Suction Hose Set</b> (D) or fluid inlet joint of pump are loose.	Tighten.
		<b>Lower Adaptor</b> (2-24) is loose.	Tighten <b>Bolts</b> (2-15). *6
		<b>Diaphragm Set</b> (2-5) is damaged.	Replace. *4
		<b>Nut</b> (2-7) is loose.	Tighten. *3
		<b>O-ring</b> (2-9) is worn or damaged.	Replace. *3
		Fluid contains air by over agitating.	
4	Pulsation or variance within spray pattern.	Fluid pressure is too low.	Increase fluid pressure at <b>Fluid Regulator</b> (A) or <b>Air regulator</b> (G).
		<b>Fluid Filter</b> (5-4) or <b>Suction Filter</b> (6-5) are clogged.	Clean or replace.
		<b>Intake Valve</b> (2-12) or <b>Exhaust Valve</b> (2-2) is worn or damaged or paint is built up.	Clean and replace. *4
		Exhaust hole of air operating valve is blocked.	Clean. *3
		Fluid or air is leaking.	Find leak and fix.
5	Paint leaks from fluid hose or joint.	Fluid hose or joint is loose or damaged.	Tighten or replace.
		Paint builds up on seat of fluid joint.	Clean or replace.
	Paint leaks from between <b>Upper Adaptor</b> (2-16) or <b>Lower Adaptor</b> (2-24) and <b>Pump Body</b> (2-21).	Adaptor is loose.	Tighten <b>Bolts</b> (2-15). *6
		<b>Seat Packing</b> (2-1) of pump is worn or damaged	Replace. *4
	Paint leaks from between <b>Cover</b> (2-22) and <b>Pump Body</b> (2-21).	<b>Cover</b> (2-22) is loose.	Tighten <b>Bolts</b> (2-23). *6
		<b>Diaphragm Set</b> (2-5) of pump is damaged.	Replace. *4
	Paint leaks from <b>Fluid Filter Set</b> (J).	<b>Cylinder</b> (5-1) is loose.	Tighten.
		<b>Packing</b> (5-5 and 5-6) is worn or damaged.	Replace.
	Paint leaks from <b>Fluid Regulator</b> (A).	<b>Diaphragm Cap</b> (3-19) is loose.	Tighten <b>Bolts</b> (3-17). *7
		<b>Joint</b> (3-1) is loose or damaged or paint is built up on seat of joint.	Tighten, replace or clean.
		<b>Diaphragm</b> (3-12) is worn or damaged.	Replace. *4
		<b>O-ring</b> (3-4) is worn or damaged.	Replace. *4

No.	Problems	Causes	Remedies
6	Air leaks from air hose or joint.	Air hose or fitting is loose or damaged.	Tighten or replace.
	Air leaks from <b>Air Operating Valve</b> (2-17).	<b>Air Operating Valve</b> (2-17) is not installed stably.	Tighten <b>Bolts</b> (2-18). *3
		Packing inside air operating valve is damaged.	Replace packing with repair service kit. *2
		Air operating valve itself is damaged.	Replace. *4
	Air leaks from between <b>Cover</b> (2-22) and <b>Pump Body</b> (2-21).	<b>Cover</b> (2-22) is loose.	Tighten <b>Bolts</b> (2-23) *3
		<b>Diaphragm Set</b> (2-5) of pump is damaged.	Replace. *4
	Air leaks from air regulator.	Air regulator is damaged.	Replace.
		Air regulator is installed in the incorrect direction.	Reinstall.

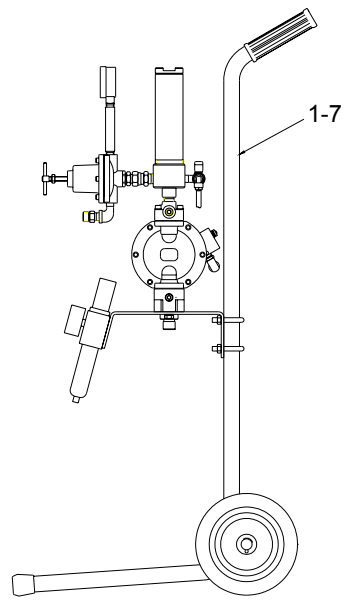


DPS-904N (Wall Mount)

No	Description	Qty
1-1	Diaphragm Pump	1
1-2	Fluid Regulator	1
1-3	Air regulator Set	1
1-4	Fluid Filter Set	1
1-5	Suction Hose Set	1
1-6	Stand Set	1
1-7	Cart Set	1

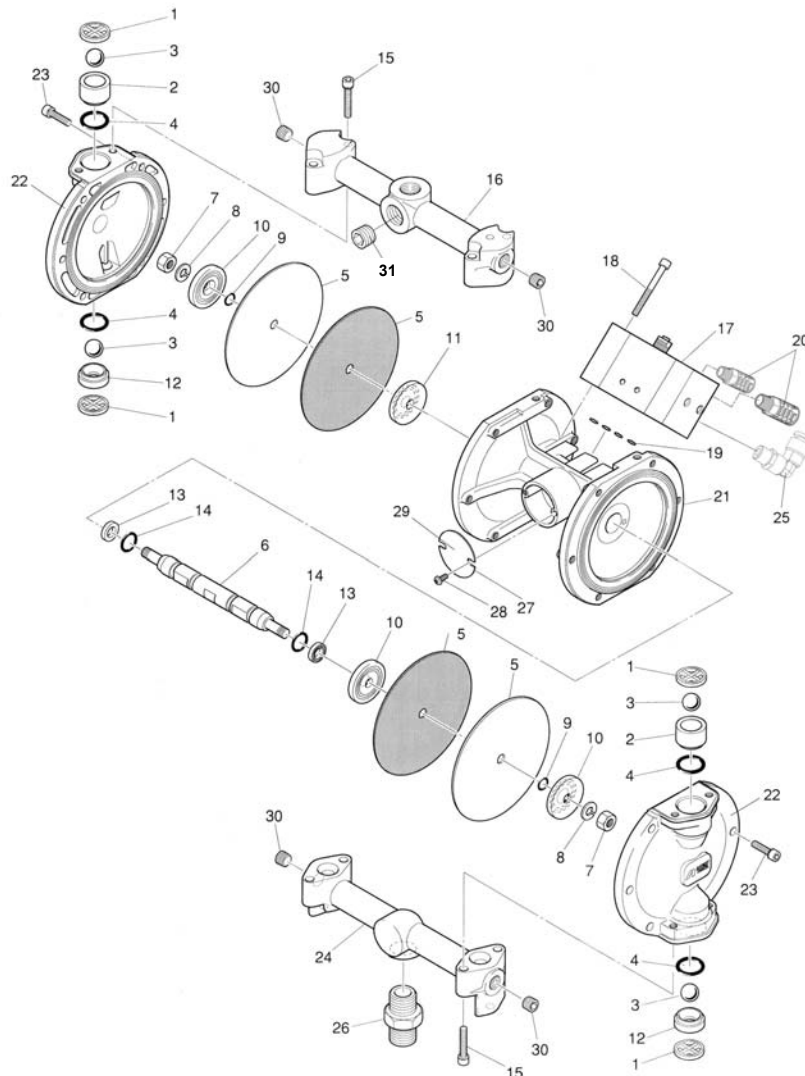


DPS-901N (Stand Mount)



DPS-903N (Cart Mount)

## Diaphragm pump, DDP-90DN

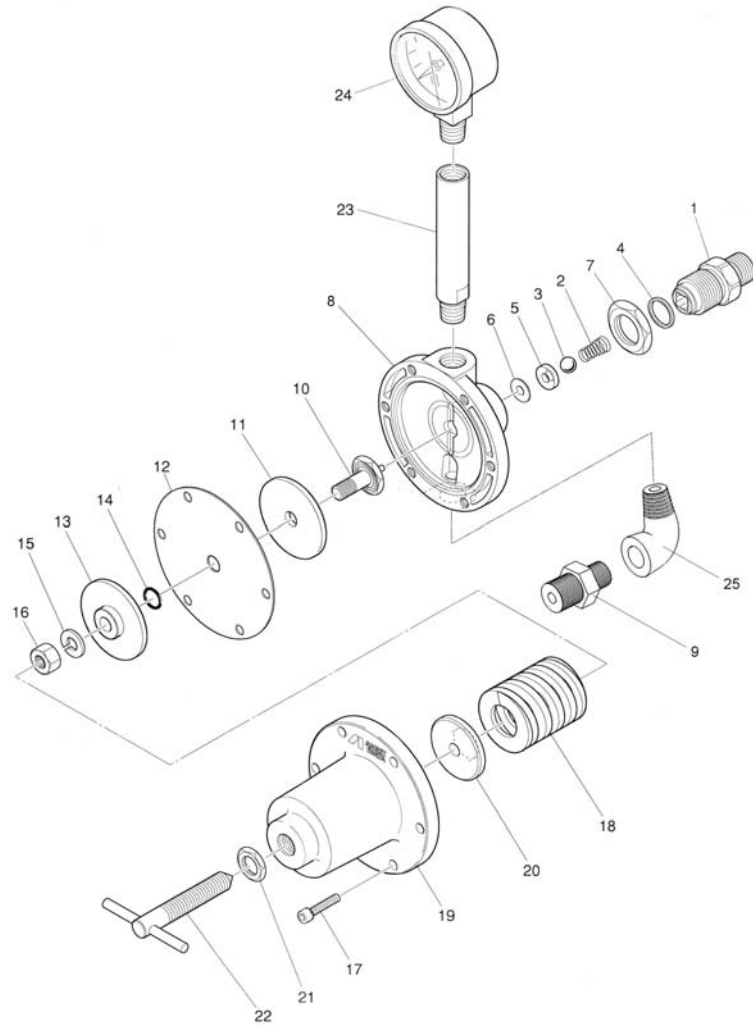


No	Description	Qty
■ 2-1	Seat packing	4
■ 2-2	Exhaust valve	2
■ 2-3	Ball	4
■ 2-4	O-ring	4
■ 2-5	Diaphragm set	2
2-6	Rod	1
2-7	Nut	2
2-8	Spring washer	2
■ 2-9	O-ring	2
2-10	Diaphragm holder (Fluid)	2
2-11	Diaphragm holder (Air)	2
■ 2-12	Intake valve	2
■ 2-13	Y-packing	2
■ 2-14	O-ring	2
2-15	Bolt	8

No	Description	Qty
2-16	Adaptor (upper)	1
2-17	Air operating valve	1
2-18	Bolt	2
2-19	O-ring	4
2-20	Muffler	2
2-21	Main body	1
2-22	Cover	2
2-23	Bolt	12
2-24	Adaptor lower	1
2-25	Push-in elbow	1
2-26	Fluid inlet joint	1
2-27	Blanking cover	1
2-28	Screw	2
2-29	Model plate	1
2-30	Plug	4
2-31	Plug	1

\*Repair service kit of diaphragm pump includes "■" marked parts.

## Fluid regulator, PR-5N

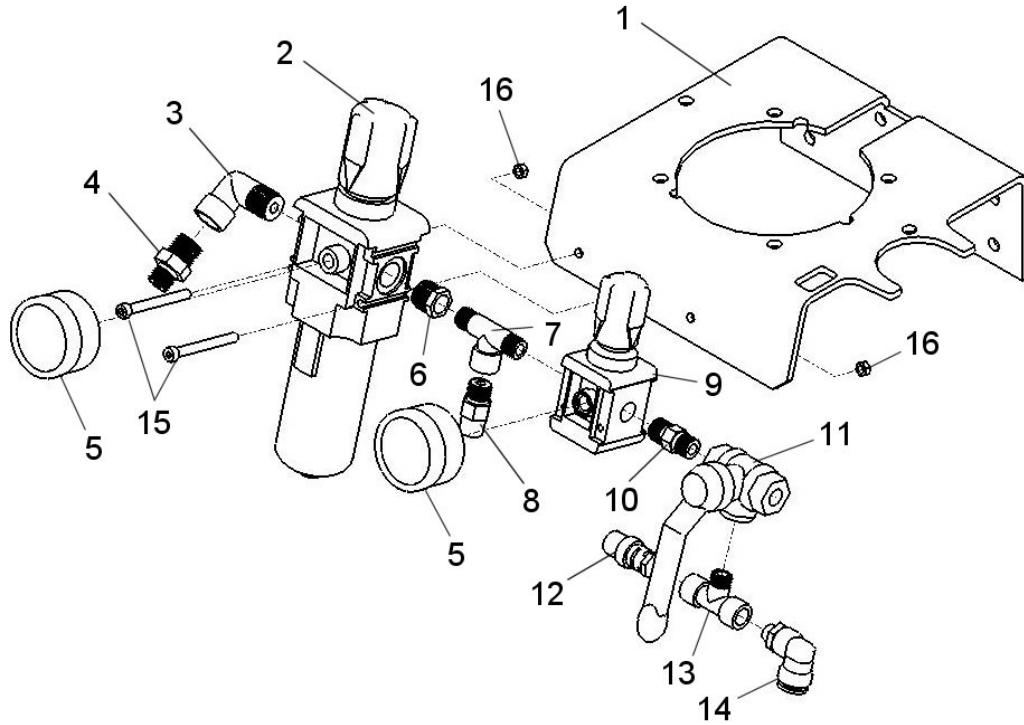


No	Description	Qty
▲ 3-1	Fluid inlet joint	1
▲ 3-2	Valve spring	1
▲ 3-3	Ball	1
▲ 3-4	O-ring	1
▲ 3-5	Seat	1
▲ 3-6	Packing	1
3-7	Locking nut	1
3-8	Regulator body	1
3-9	Fluid outlet joint	1
3-10	Diaphragm bolt	1
3-11	Diaphragm holder	1
▲ 3-12	Diaphragm	1
3-13	Spring holder	1

No	Description	Qty
▲ 3-14	O-ring	1
3-15	Spring washer	1
3-16	Nut	1
3-17	Bolt	6
3-18	Spring	1
3-19	Diaphragm cap	1
3-20	Spring holder	1
3-21	Nut	1
3-22	Handle set	1
3-23	Pipe	1
3-24	Pressure gauge	1
3-25	Elbow joint	1

\*Repair service kit of fluid regulator includes “▲” marked parts.

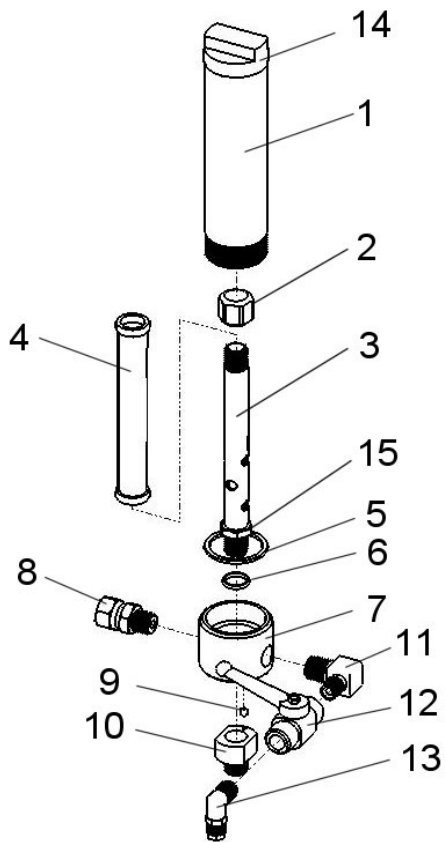
## Pump base set



No	Description	Qty
4-1	Pump base	1
4-2	Air filter regulator	1
4-3	Elbow joint	1
4-4	Air outlet joint	1
4-5	Pressure gauge	2
4-6	Reducer	1
4-7	Tee joint	1
4-8	Air inlet joint	1

No	Description	Qty
4-9	Air regulator	1
4-10	Nipple	1
4-11	3-way ball valve	1
4-12	Pop-off valve	1
4-13	Tee joint	1
4-14	Push-in elbow	1
4-15	Bolt	2
4-16	Nut	2

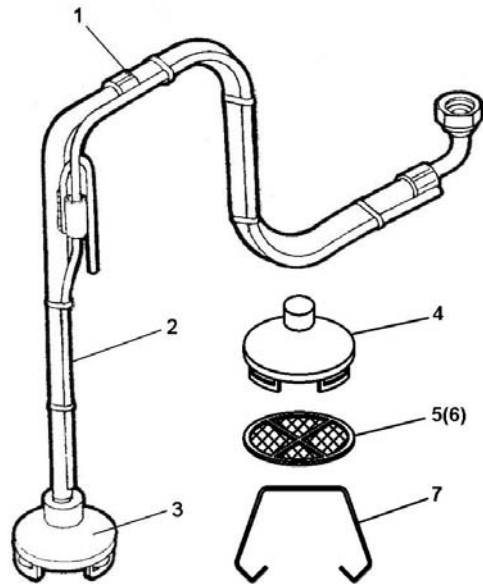
## Fluid filter set



No.	Description	Qty
5-1	Cylinder	1
5-2	Cap nut	1
5-3	Filter bolt	1
5-4	Filter 100 mesh	1
5-5	Packing	1
5-6	Packing	1
5-7	Filter body	1
5-8	Swivel joint	1
5-9	Spring pin	1
5-10	Filter adaptor	1
5-11	Elbow joint	1
5-12	2-way ball valve	1
5-13	Elbow hose joint	1
5-14	Filter plug	1
5-15	Locking nut	1

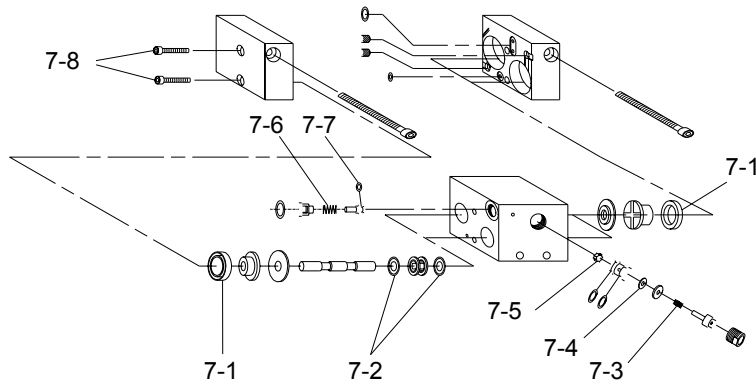


### Suction hose set



No.	Description	Qty
6-1	Suction Hose Set	1
6-2	Circulation Tube	1
6-3	Filter Set	1
6-4	Filter Cover	1
6-5	Filter 50mesh	1
6-6	Filter 100mesh (Option)	1
6-7	Filter Spring	1

### Air operating valve



No.	Description	Qty
7-1	Piston Packing	4
7-2	Spool Packing	12
7-3	Reset Valve Spring (1)	1
7-4	Reset Valve Packing	1
7-5	Reset Valve	1
7-6	Reset Valve Spring (2)	1
7-7	O-ring	1
7-8	Bolt	4