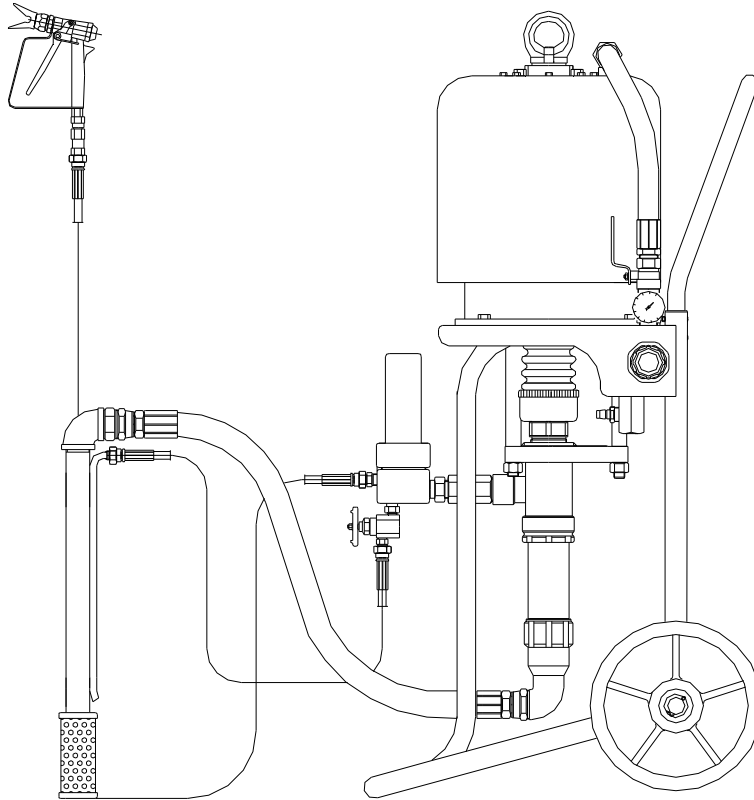


**MODEL DP-6390/DP63C (63:1)**  
**PNEUMATIC AIRLESS PAINT PUMP**  
**INSTRUCTION MANUAL**



# CATALOGUE

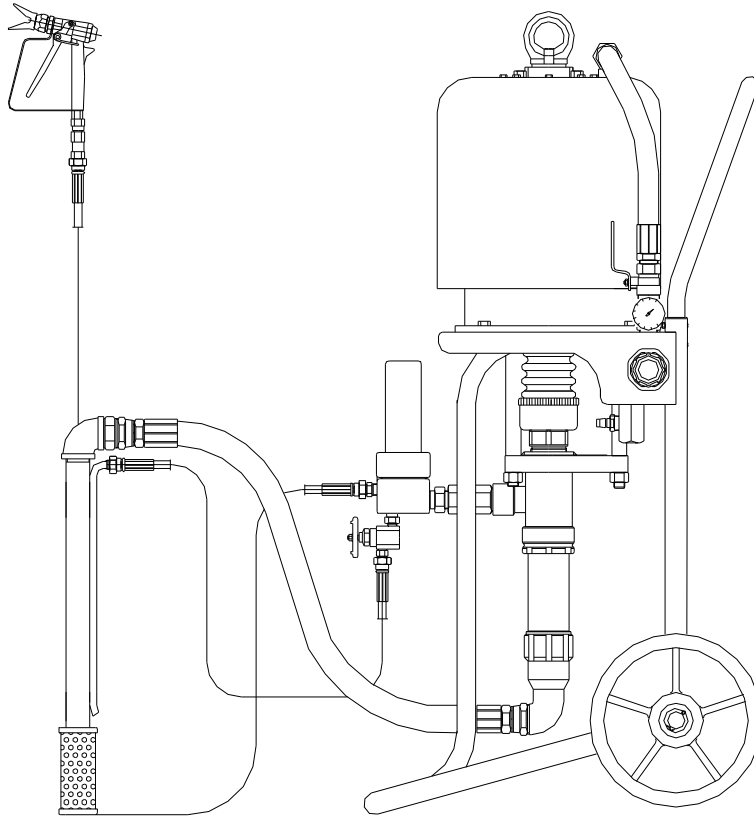
USAGE

TROUBLE AND MAINTENANCE

WARNINGS

SPARE PARTS LIST

# DP6390/DP63C AIRLESS PUMP



## SPECIFICATION

1. FLUID PRESSURE RATIO	63: 1
2. DELIVERY	28L/MIN
3. MAX. DISCHARGE PRESSURE	378BAR
4. AIR PRESSURE RANGE	0.3-0.6MPA

# USAGE

1. To check every connection of the airless pump for the tightness. If loosed, the connection should be screwed tight.

2. To connect the inlet air hose. Generally the diameters of the inlet hoses shouldn't be less than 20mm. If the air source is far away from the airless pump, the diameters of the inlet hoses shouldn't be less than 25mm. Also to confirm every airway hose and valve connector clean to connect the air source hoses.

3. To connect the paint spray hose. Firstly to connect the high pressure paint hose, swivel nipple and spray gun tightly, then with the paint outlet of the main unit. A piece of 10 meters paint hose is equipped with the main unit. For the general paintings of low viscosity, the length of high pressure 1/4" Paint hose can be equipped for 100-150 meters; for high quality painting such as thick film type, the length of 1/4" paint hose can be 50 meters or so. When the painting field is 50 meters away from the pump and the viscosity of painting is thick, 3/8" paint hose should be chosen. And the section hose close to the spray gun should be 1/4" for the flexible operation..

There are two kinds of paint hoses; 5 meters and 10 meters. These two kinds paint hose can be connected by middle nipple.

4. To pour lubricant. The lubricant should be often poured into the oil cup of the paint pump before the start-up and the process of the operation

(plant oil and 20' machine oil).

5. To choose the tip. The different tips should be chosen according to the types of the paintings, the requirement of the painting, the size of the object to be painted.

6. To clean the paintings. The uncleanly paintings should be filtered before the painting with the filter net of 60 meshes or 100 meshes. The deposited painting should be often or continuously agitated during the spraying.

7. To start the airless pump. The input pressure should be within 0.3MPa-0.6MPa. The suitable input pressure should be chosen according to the types of paintings. After the cycle for 1-2 minutes under the empty loading pressure, the air inlet ball valve and spray gun should be shut. When the load resistance of the airless pump is balanced with the pulls of the air motor, the cycle of hydraulic pump can be stopped gradually and the spray can be started.

9. To use the switch tip. When the spray is not smooth or the spray width is transformed, there must be something blocked in the tip. To spray the blocks only by revolving the switch tip counterclockwise  $180^{\circ}$  . When it's hard to revolve the switch tip, firstly to loose the tip connection nut to release the pressure of the gun body, then to spray the blocks only by revolving the switch tip counterclockwise  $180^{\circ}$  . Forcely revolving or knocking is forbidden under the pressure.

10. After the painting, firstly to exhaust the painting completely, then put the suction hose into the solvent barrel to cycle the pump until the pump become clean.

11. To twist the paint hose and spray gun on the main unit in order not to be damaged.

## **TROUBLE AND MAINTENANCE**

The general troubles can be into two kinds: air system and painting hydraulic system

Air system troubles:

1. Air motor does not work. To check if the air source is connected or not and the pressure regulation valve is turned on or not.
2. Air motor works abnormally. To check the air source (0.3MPa-0.6MPa), the pressure regulation valve can be regulated right. And to check the spring of manifold is effective or not, and O ring in the valve is sealed tightly or not
3. Air motor sounds abnormally, insufficient pressure and bad atomization. The seals of cylinder and manifold, valve and plate are worn badly.
4. Sudden stop during the spray. To check the exhaust system (spray gun and paint hose) to be blocked or not. To check the connection nut is loose or not.

### Painting hydraulic system troubles:

1. If the air motor cycles normally, the exhaust of paintings is not normal.  
Please check the painting barrel whether the barrel is empty or not, and check all the exhaust system and filtering net whether they are blocked or not. And check whether the V gasket in the painting pump is loose or worn seriously.
2. After the exhaust valve and the spray gun are closed, the air motor still cycles due to the following troubles:
  - a. The V gasket in the painting pump is worn. Please replace the new sealing.
  - b. The pump valve, suction valve and exhaust valve are damaged, please replace the seat ring and the steel ball.
3. If the painting and solvent come out from the lubricant cup, the V gasket in the pump must be worn seriously and should be replaced.  
When replacing the V gasket, please also replace all the gaskets in the painting pump. Remark: the cowhide gaskets must soaked in the plant oil completely before the replacement.
4. During the maintenance, all the non-metal gaskets are forbidden to wash and soak in the strong organic solvent.

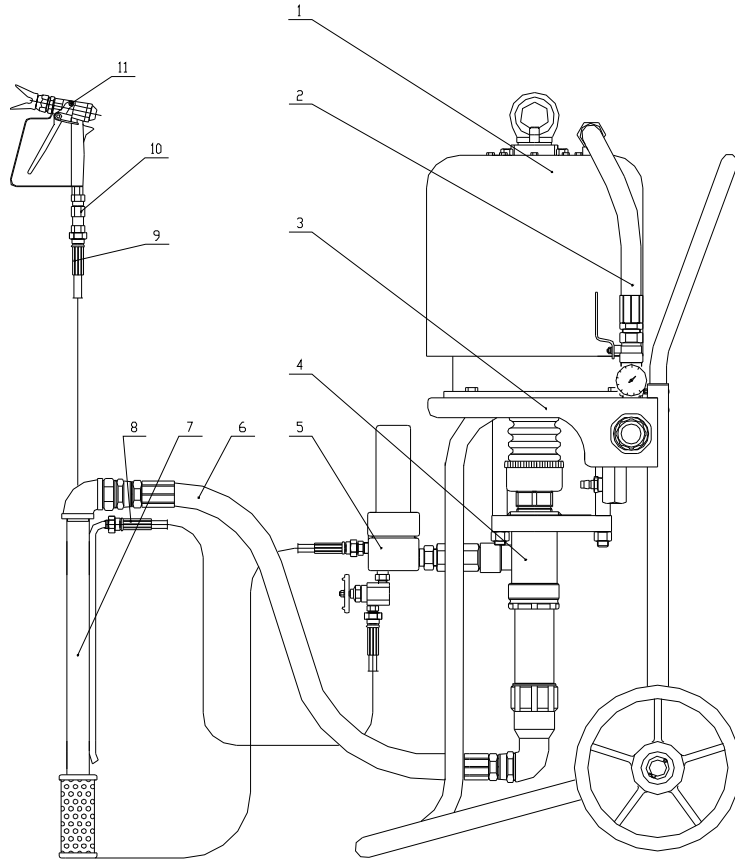
# WARNINGS

1. This airless pump is a high-pressure industry equipment.
2. Never point to other people or yourself with the spray gun when spraying.
3. The high pressure painting can inject the skin, which can cause serious injuries.
4. If the high pressure painting injected the skin, please go to the professional hospital for cure.
5. This airless pump must be worked in the rated working pressure.
6. The spark can cause the fire and explosion, the fire is forbidden in the painting area.
7. This airless pump must be grounded during the usage to avoid the static electricity.
8. Before the cleaning and maintenance, the air source must be closed and the painting pump must be exhausted.



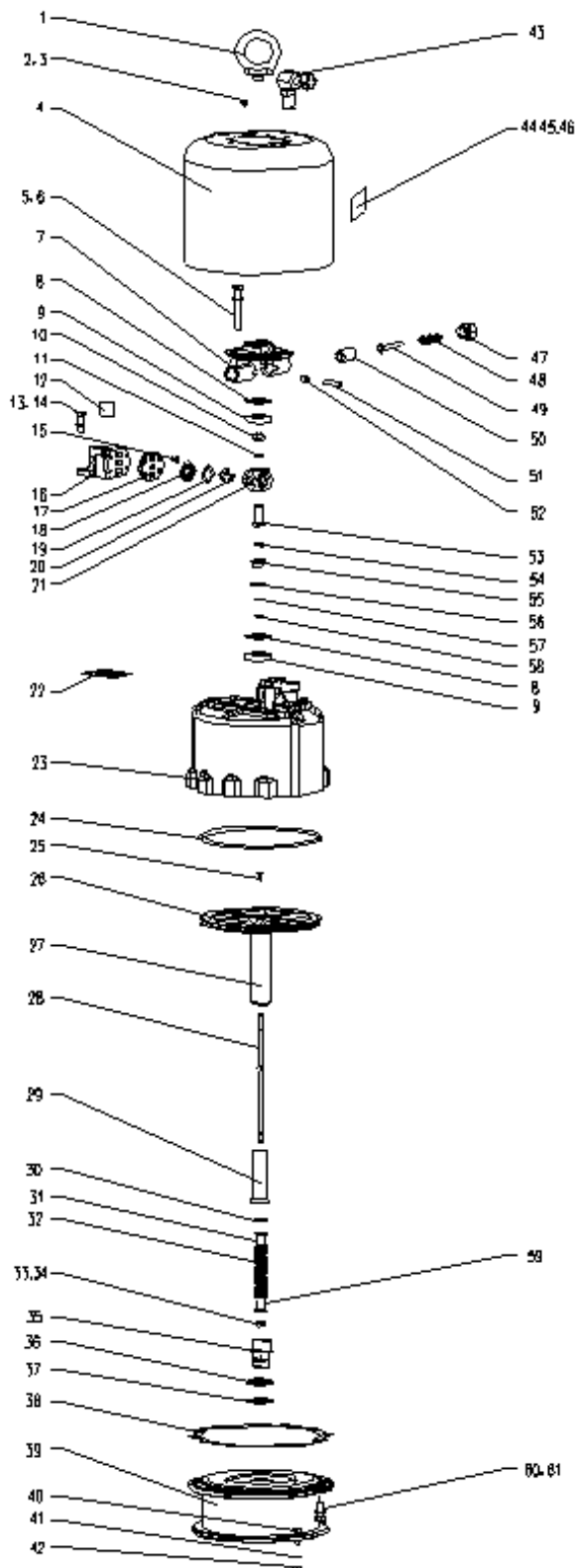
# DP63C

## AIRLESS PUMP



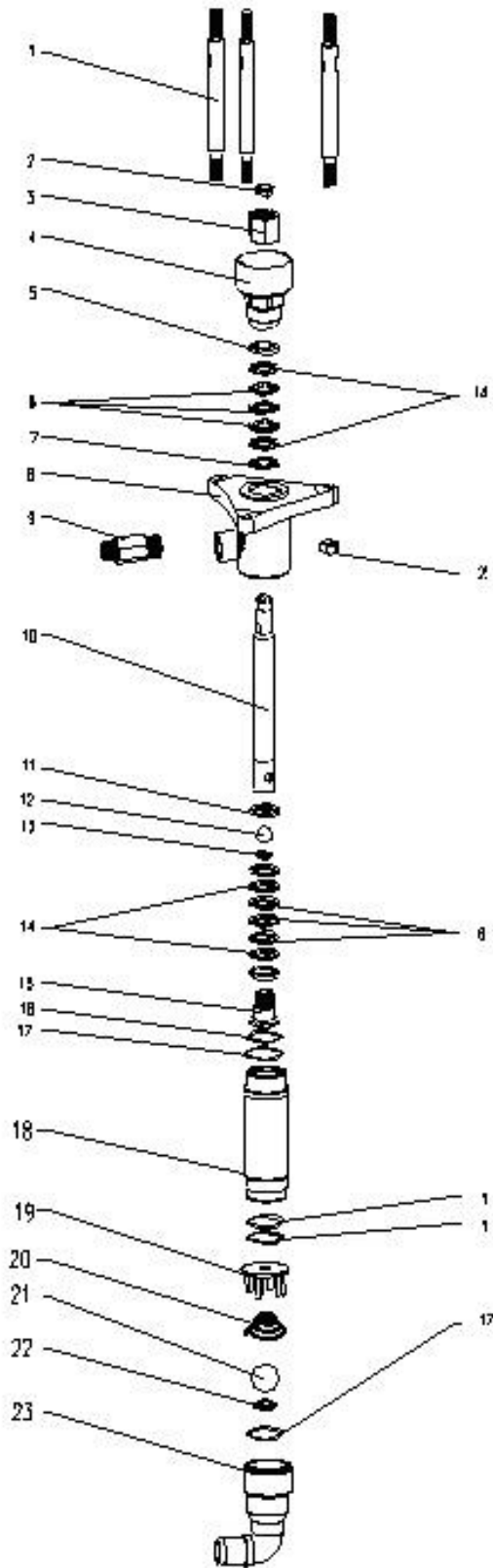
No.	Drawing No.	Description	Qty
1	DP63C.001.000	Air motor	1
2	DP63C.002.000	Air regulator kit	1
3	DP63C .003.000	Cart	1
4	DP63C.001.000	Painting pump	1
5	DP63C.003.000	Surge tank filter	1
6	DP63C.006.000	Suction hose kit	1
7	DP63C .007.000	Suction cup	1
8	DP63C .008.000	Painting recycle hose	1
9	DP63A.006.000	High pressure painting hose kit	1
10	P8180 attached 1.000	Swivel nipple 1/4(M)X1/4(F)	1
11	P8180.000.000	Spray gun	1

## DP63C AIR MOTOR PART DRAWING



No.	Drawing No.	Description	Qty
1	3A.001.014	Ring	1
2	GB/T5781-2000	Screw M6×10	8
3	GB93-87	Washer 6	8
4	5A.001.006	Shield	1
5	3C.001.008	Screw	4
6	GB93-87	Lockwasher 10	4
7	3A.001.016	Housing	1
8	3A.001.013	Regulation gasket	2
9	3A.001.012	Rubber gasket	2
10	3A.001.032	Nut	1
11	GB93-87	Coasket 10	1
12	JB/ZQ4446-1997	Bolt R3/4	1
13	GB/T5781-2000	Bolt M10×40	4
14	GB93-87	Coasket 10	4
15	GB/T819.2-1997	Screw M6×13	8
16	3C.001.004	Manifold	2
17	3C.001.005	Plate	2
18	3A.001.010	Valve	2
19	GB/T3452.1-1992	O-ring	2
20	3A.001.011	Spring	2
21	3A.001.033	Housing	1
22	3A.001.008	Gasket	2
23	3C.001.003	Cylinder	1
24	GB/T3452.1-1992	O-ring	1
25	GB/T171-1985	Screw M6×12	3
26	3C.001.002	Piston	1
27	3C.001.001	Leather	1
28	5A.001.004	Trip rod	1
29	5A.001.008	Sliding tube	1
30	5A.001.007	Regulation gasket	1
31	3A.001.022	Rod spring tube	1
32	3A.001.003	Rod spring	1
33	GB/T889.2-2000	Nut M10×1.25	1
34	GB/T91-2000	Pin 2.5×25	1
35	3C.001.006	Slud	1
36	GB/T110708.1-2000	seal Y55×45×8	1
37	5A.001.009	Cowhide gasket	1
38	3A.001.020	Gasket(base)	1
39	5A.001.001	Base	1
40	GB/T5780-2000	Bolt M10×30	4
41	GB/T93-1987	Lockwasher 10	4
42	GB/T6170-2000	Nut M10	4
43	3C.009.000	Union	1
44	3C.001.007	Emblem	1
45	3A.001.037	Warning plate	1
46	3A.001.038	Trademark plate	1
47	3A.001.026	Retainer	2
48	3A.001.027	Lock spring	2
49	3A.001.028	Guide	2
50	3A.001.029	Plunger	2
51	3A.001.031	Roller	2
52	3A.001.030	Axle	2
53	3A.001.017	Hub	1
54	3A.001.035	Copper tube	1
55	3A.001.034	Seal seal	1
56	3A.001.007	Copper gasket	1
57	3A.001.036	Cowhide gasket	1
58	GB/T110708.1-2000	Seal Y18×10×6.3	1
59	3C.001.009	Rod spring tube	1
60	GB5780-2000	Bolt M12×40	12
61	GB93-87	Coasket 12	12

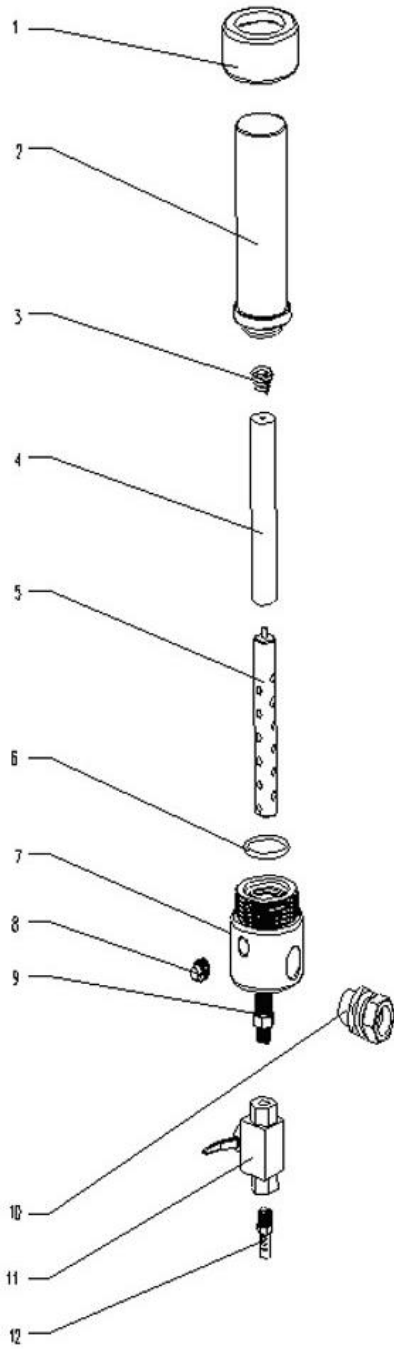
DP-6390C 63:1 PUMP HOUSING PART DRAWING



DP-63C 63:1  
PUMP HOUSING PART DRAWING

No.	Drawing No.	Description	Qty
1	3C.005.015	tie rod	3
2	3A.005.002	coupling	2
3	3A.005.001	coupling nut	1
4	3C.005.002	gland (F)	1
5	3A.005.014	gasket (M)	2
6	3A.603.206	V-packing	6
7	3A.005.015	gasket (F)	2
8	3C.015.000	pump housing	1
9	3A.005.005	ripple	1
10	3C.005.005	O/Rod	1
11	3C.005.013	washer	1
12	GB/T308-2000	ball 7/8	1
13	3A.005.007	gasket	1
14	3A.603.205	V-packing	8
15	3C.005.011	piston	1
16	3C.005.014	O-ring	2
17	3C.005.003	O-ring	4
18	3C.005.012	housing	1
19	3C.005.010	spring support	1
20	3C.005.009	spring	1
21	GB/T308-2000	ball #35	1
22	3C.005.008	O-ring	1
23	3C.005.007	suction housing	1

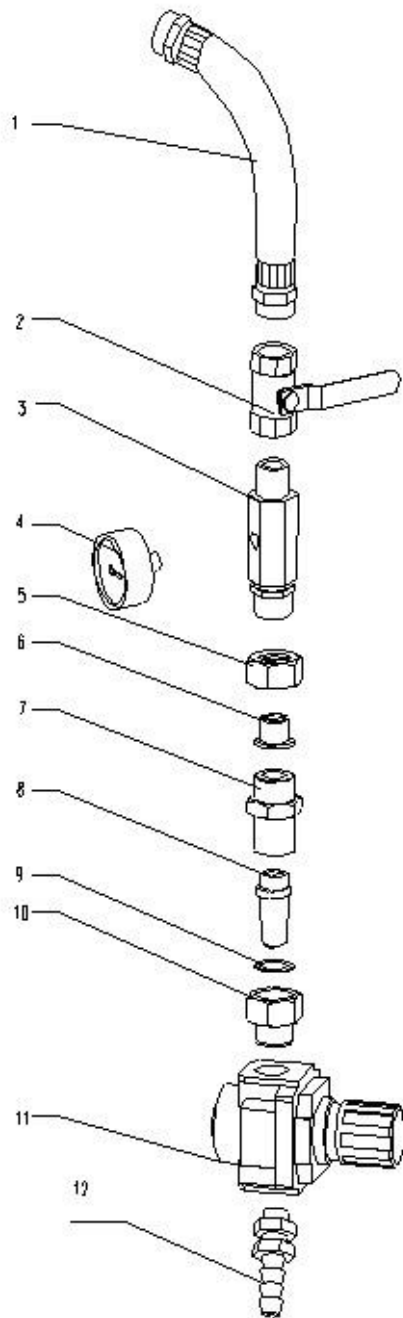
**DP6390C 63:1 SURGE TANK FOR NO PULSE DURING PAINTING**



**DP63C SURGE TANK**

No	Drawing No	Description	Qty
1	3A.004.004	ring	1
2	3A.004.001	bowl	1
3	3A.004.002	spring	1
4	3A.012.000	filter	1
5	3A.004.003	support	1
6	3A.404.804	O-ring	2
7	3A.004.005	manifold	1
8	3A.004.008	retainer	1
9	3A.004.006	nipple	2
10	3A.013.000	nipple	1
11	3C.014.000	ball valve	1
12	3C.004.001	nipple	1

**DP6390C 63:1 AIR REGULATOR VALVE ASSEMBLY**



**DP63C AIR REGULATOR ASSY**

No.	Drawing No.	Description	Qty
1	3C D12.000	air supply hose	1
2	Q11F-16c	ball valve	1
3	3A.002.002	manifold	1
4	Y-60	pressure gauge	1
5	3C.002.004	nut	1
6	3C.002.005	nipple	1
7	3C.002.003	filter hose nipple	1
8		muffler	1
9	3C.002.002	O-ring	2
10	3C.002.001	nipple	1
11	AR5000-10	air regulator	1
12	PM-600(SUS)	hose nipple	1