

# Instruction manual

This instruction manual includes important warnings, cautions and operations. Before use, be sure to read and fully understand this instruction manual. This product is exclusively for coating purpose. Do not use it for other purposes. The operator shall be fully conversant with the requirements stated within this instruction manual. **Keep** this instruction manual in an appropriate place for immediate reference.



## ■ Pressurized container PC-18D, PC-18DT

### ■ 1. Specifications

PC-18D/DT (for water-base paints): Inner surface is fluorine-coated, other wet surfaces are stainless steel.

	Max. Operating Pressure MPa(kgf/cm <sup>2</sup> )	Ambient Temperature °C	Viscosity Range	Air hose Connection IN side	Air hose Connection OUT side	Fluid hose connection	Width×Height mm	Mass kg
PC-18D	2.0	0.04 [3.5]	5~40	G1/4	G1/4	G3/8	150 X 345	1250
PC-18DT			~300cP					1200

### ■ 2. Safety precautions

#### WARNING

**Wear protective gear.**

- Be sure to wear protective gear such as proper glasses, mask and gloves during operation if not, paint or solvent can enter eyes or lungs.

**Pay attention to ventilation.**

- Use it in a well-ventilated site.
- Use it in a well-ventilated or narrow site can cause organic solvent poisoning by sprayed paints or volatile solvents.
- If you feel something wrong with your body during operation, immediately see a doctor.

**Operating site must be strictly free from origins of explosions and fires.**

- Never use in a flammable site. Especially the following can cause ignitions or spark: open the such as cigarettes, electrical equipment such as stoves, lamps and heaters.

**Be careful about rupture.**

- Take special care not to drop it. Never use it with even the slightest damage.
- If lower outside reinforcing sleeve of container becomes loose, it can damage the bottom of the container, causing danger. If the sleeve becomes loose, immediately stop operation and contact the shop which sold it to you (refer to figure on page 2).
- Such product can rupture due to reduced ability to withstand pressure.
- Use it at lower than max. operating pressure. If not, product can become damaged, causing great danger.
- Always keep safety valve clean. A dirty safety valve can cause failure, creating higher than max. operating pressure on the inside and damaging product.
- Before removing container lid, be sure to turn off supply air and release pressure inside container by release valve.
- If you remove container which is under pressure, liquid in container and parts can fly, causing great danger.

**Never after setting pressure.**

- Never after setting pressure of safety valve. Safety valve is designed to leak air at 0.34MPa. If you after setting pressure, higher than max. operating pressure is put in container, causing damage of product.
- Be sure to use genuine parts when replacing parts. If not, it can cause inferior performance and damage product.

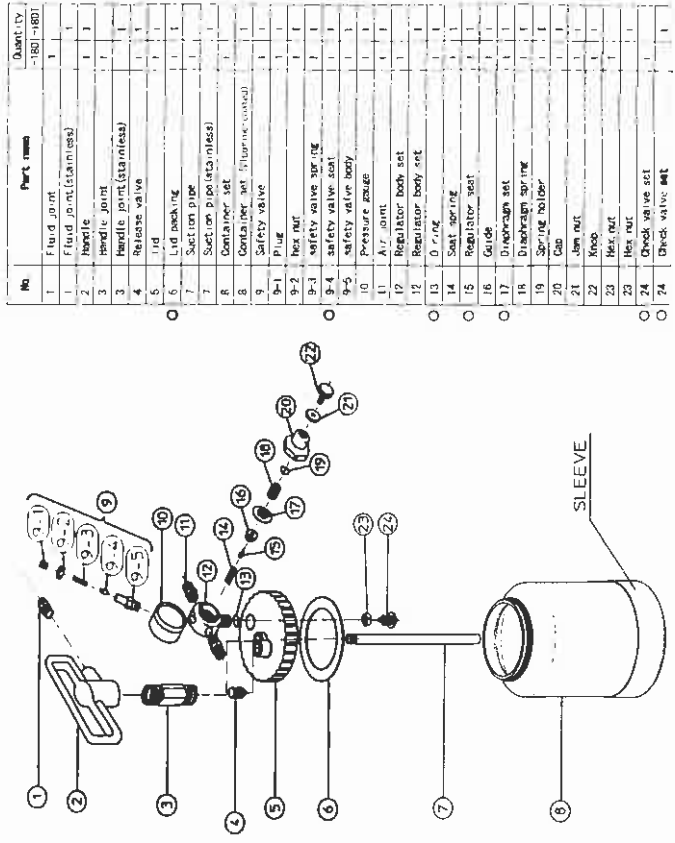
**Be careful about grounding.**

- Securely ground spray gun, workpieces and container containing paint and solvent. Insufficient grounding can cause explosion or fire due to static spark.

**When exchanging paint and solvent during cleaning, be sure to use metallic container which receives them, and be sure to ground the container.**

- Never use it for food industry.
- Do not use it for food industry. If done, foreign matter mixed with parts can cause health problems since it does not use materials which are suitable for food.
- Never use halogenated hydrocarbon liquids such as trichloroethane and tetrachloroethane. If done, it can cause chemical reaction with product and cause cracks.

### ■ 3. Parts list



No	Part name	Quantity
1	Fluid joint	1
2	Fluid joint (stainless)	1
3	Handle	1
4	Handle joint	1
5	Handle joint (stainless)	1
6	Release valve	1
7	Lid	1
8	Lid bushing	1
9	Section pipe	1
10	Section pipe (stainless)	1
11	Container set	1
12	Container set (flaming resistant)	1
13	Safety valve	1
14	Plug	1
15	Hex nut	1
16	safety valve spring	1
17	safety valve seat	1
18	safety valve body	1
19	Pressure gauge	1
20	Air joint	1
21	Regulator body set	1
22	Regulator body set	1
23	O ring	1
24	Seat spring	1
25	Regulator seat	1
26	Guide	1
27	Diaphragm set	1
28	Diaphragm spring	1
29	Spring holder	1
30	Cap	1
31	Hex nut	1
32	Hex nut	1
33	Hex nut	1
34	Hex nut	1
35	Check valve set	1
36	Check valve set	1

### 4. Preparation

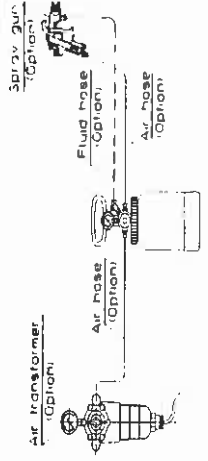
**Important** Indicates notes which we ask you to observe. They are helpful to achieve full performance and function of product.

- When you want to decrease pressure, be sure to loosen adjusting screw of air regulator (turn it counter-clockwise) and open release valve. Pressure in container will become higher than pointer of pressure gauge shows, depending on check valve.
- Take care so that setting pressure of air regulator does not exceed 0.34MPa (kgf/cm<sup>2</sup>).
- Safety valve is designed to leak air at 0.34MPa (kgf/cm<sup>2</sup>).
- Fill paint up to 80% of full capacity.
- If filling volume is too high, paint may spill over.

### CAUTION

As the inner surface of container for PC-18DT is coated with fluorinated resin, do not rub it with hard metal such as wire brush. And do not use with fluorine-based solvents. If done, it can damage fluorinated resin and reduce non-stickiness as well as cleaning efficiency.

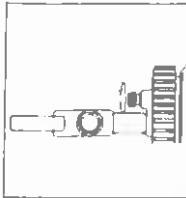
- Refer to below drawing, and connect air hose and fluid hose to pressurized container and spray gun.
- Remove container set and fill with paint.
- Check that packing is fitted to inside of lid and firmly screw in container.



## 5. How to use



- Job 1 Supply air from air transformer to pressurized container and set fluid pressure using air regulator
- Job 2 Adjust atomizing air pressure with air transformer at air supply source
- Job 3 Carefully refer to instruction manual of spray gun and start spraying.



- Job 1 When you interrupt a job or replenish paint, be sure to turn off air supply to spray gun and pressurized container, open release valve and release pressure in pressurized container
- Job 2

## 6. Maintenance and inspection



### WARNING

Be careful about injuries.

- Before maintenance and inspection, be sure to turn off air supply, open release valve and release pressure. Pressure may remain in container by check valve even if pressure gauge shows 0MPa. If you remove container which is under pressure, liquid in container and parts may splash and fly, causing great danger.



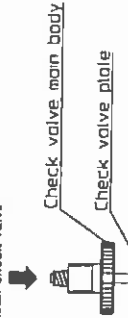
#### 6-1 Daily inspection

- Gradually increase pressure of air regulator and check that safety valve activates (air leaks) between 0.3MPa and 0.34MPa. If something goes wrong with safety valve, contact the shop which sold it to you.
- Check if lid packing is deformed, damaged or dry. If it is deformed or damaged, replace it with new one.
- Fully clean thread section of container set so that paint or dust will not build up on.

#### 6-2 Weekly inspection

- Job 1 Turn check valve set counterclockwise and remove it from lid set.
- Job 2 Refer to below drawing, push stem at the top of check valve set with a finger and open valve plate.
- Job 3 Clean contact area between valve seat and plate with brush soaked with solvent.

Clean check valve



#### 6-3 Semi-annual inspection

- Overhaul and replace consumable parts with new ones. Refer to [3. parts list] for consumable parts.
- Check if container set is deformed or damaged. Never use deformed or damaged parts and immediately replace such parts with new ones.
- Check during daily operation if liquid or air leaks. If liquid or air leaks, inspect all above items and firmly tighten lid if nothing goes wrong.

#### 6-4 Remove fluid joint

- When you want to remove air regulator, remove fluid joint with high torque or apply heat to connecting section and disassemble since high strength adhesive has been applied to thread section of fluid joint.

## 7. Problems and remedies

Problems	Causes	Remedies
Paint does not come out.	<ul style="list-style-type: none"> <li>① Paint clogs</li> <li>② Container is not pressurized</li> <li>③ Paint viscosity is too high.</li> <li>④ Check valve is stuck with paint</li> </ul>	<ul style="list-style-type: none"> <li>① Clean paint passages</li> <li>② Air is not supplied Increase air pressure at air regulator</li> <li>③ Dilute paint</li> <li>④ Clean (Refer to [6. Maintenance and inspection])</li> </ul>
Air leaks	<ul style="list-style-type: none"> <li>① Release valve is opened.</li> <li>② Safety valve operates</li> <li>③ Lid packing is damaged.</li> <li>④ Connection is loose</li> <li>⑤ Inside of air regulator is damaged</li> </ul>	<ul style="list-style-type: none"> <li>① Close it.</li> <li>② Reduce pressure at air regulator to less than 0.34MPa</li> <li>③ Replace it</li> <li>④ Tighten leaky section</li> <li>⑤ Replace air regulator set as a set.</li> </ul>
Paint leaks	<ul style="list-style-type: none"> <li>① Container set is damaged.</li> <li>② Connection is loose.</li> <li>③ Too much paint in container</li> <li>④ Check valve is out of order.</li> <li>⑤ Lid packing is damaged</li> </ul>	<ul style="list-style-type: none"> <li>① Replace container set</li> <li>② Tighten leaky section.</li> <li>③ Reduce its volume to 80% of full capacity.</li> <li>④ Disassemble and replace parts if necessary</li> <li>⑤ Replace lid packing</li> </ul>