

INSTRUCTION MANUAL

**Spray Gun
W-400WB**

和文取扱い、裏面にあります

Important

This manual contains **IMPORTANT WARNINGS** and **INSTRUCTIONS**. Equipment in this manual is exclusively for painting purposes. Do not use for other purposes. The operator shall be fully conversant with the requirements stated in this instruction manual including important warnings, cautions and operation and correct handling. Read and understand the instruction manual before use and retain for reference.

CE II 2GX

This Anest-Iwata spray gun kit complies to ATEX regulations 94/92C, II 2 GX. Suitable for use in Zones 1 and 2. X marking: Any static electricity discharge from the spray gun is to be diverted to the grounded the conductive air hose as stratified.

Be sure to observe warnings and cautions in this instruction manual. If not, it can cause paint ejection and serious body injury by drawing organic solvent. Be sure to observe following **▲** marked items which are especially important.

- ▲ WARNING** Indicates a potentially hazardous situation which, if not avoided, may result in serious injury or loss of life.
- ▲ CAUTION** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or property damage.
- Important** Indicates notes which we ask you to observe. The safety precautions in this instruction manual are the minimum necessary conditions. Follow national and local regulations regarding the prevention, electricity and safety as well as your own company regulations.

Important specifications

Max. Pressure	0.68MPa / 6.8bar / 98PSI
Nozzle level	75.0dB(A)
Spray condition	Recommended
Measuring point	1m backwards from gun, 1.6 m height
Min. Temperature	5°C ~ 40°C
Atmosphere	5°C ~ 43°C
Air · Fluid	

Main specifications

Model	Type of feed	Nozzle orifice φ mm (in)	Air cap set	Recommended condition			Air & fluid connection	Mass g (lbs)
				※1 Atomizing air pressure MPa (bar / PSI)	Fluid output ml/min	Air consumption l/min (cfm)		
W-400WB-141G	Gravity	1.4 (0.055)	WB1	0.18 (1.8 / 26)	160	230 (8.1)	Air G1/4 (NPS1/4)	360 (0.84)
W-400WB-142G		WB2		160	390 (13.7)	Fluid M18 x 1.5		

※1 Atomizing air pressure means air pressure at gun inlet when trigger is pulled and air flows

Safety precautions

WARNING

Fire and explosion

1. **Spark and open flames are strictly prohibited.** Parts can be highly flammable and can cause fire. Avoid any ignition sources such as smoking, open flames, electrical goods, etc. Never use the following **HALOGENATED HYDROCARBON SOLVENTS** which can cause cracks or dissolution on gun body (aluminum) by chemical reaction:
 - unsuitable solvents: methyl chloride, dichloromethane, 1,2-dichloroethane, carbon tetrachloride, trichloroethylene, 1,1,1-trichloroethane
 (Be sure that all fluids and solvents are compatible with gun parts. We are ready to supply a material list used in the product.)
2. **Securely ground spray gun by using air hose with built-in ground wire.** Ground wire: less than 1MΩ. Check the earth stability periodically. If not, insufficient grounding can cause fire and explosion due to static electric sparking.

Improper use of equipment

1. Never point gun toward people or animal. If done, it can cause inflammation of eyes and skin or bodily injury.
2. Never exceed maximum operating pressure and maximum operating Temperature.
3. Be sure to release air and fluid pressure before cleaning, disassembling or servicing. If not, remaining pressure can cause bodily injury due to improper operation or scattering cleaning liquid. Then remove trigger toward you.
4. Tip of fluid needle set has a sharp point. Do not touch the tip of fluid needle during maintenance for the protection of the human body.

Protection of human body

1. Use in a well-ventilated site by using spray booth. If not, poor ventilation can cause organic solvent poisoning and catch fire.
2. Always wear protective gear (safety glasses, mask, gloves). If not, cleaning liquid, etc. can cause inflammation of eyes and skin. If you feel something wrong with eyes or skin, immediately see a doctor.
3. Wear earplugs if necessary.
4. Noise level can exceed 80dB(A), depending on operating conditions and painting site. If operators pull the trigger many times during operation, it may cause carpal tunnel syndrome. Be sure to take a rest if you feel tired.

Other precautions

1. Never alter this spray gun. If done, it can cause insufficient performance and failure.
2. Enter working area of other equipment (robots, reciprocators, etc.) after machines are turned off. If not, contact with them can cause injury.
3. Never spray foods or chemicals through this gun. If done, it can cause accident by corrosion of fluid passages or adversely affect health by mixed foreign matter.
4. If something goes wrong, immediately stop operation and find the cause. Do not use again until you have solved the problem.

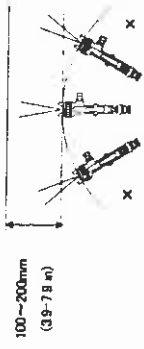
How to connect

CAUTION

- Use clean air filtered through air dryer and air filter. ... if not, dirty air can cause painting failure.
- If you use this gun for the first time after purchasing, clean fluid passages spraying thinner and remove rust preventive oil. If not, remaining preventive oil can cause painting failure such as fish eyes.
- Firmly fix hose or container to spray gun. ... if not, disconnection of hose and drop of container can cause bodily injury.
- Job1. Connect an air hose to air nipple tightly.
- Job2. Connect an applicable cup, FCG-GR-M (Option), to fluid nipple lightly.
- Job3. Flush the gun fluid passage with a compatible solvent.
- Job4. Pour paint into container, test spray and adjust fluid output as well as pattern width.

How to operate

Suggested air pressure is 1.0 to 2.0bar (14 to 29 PSI). Recommended paint viscosity differs according to paint property and painting conditions. 12 to 23 sec. / Ford cup#4 is recommendable. Keep fluid output as small as possible to the extent that the job will not be hindered. It will lead to better finishing with fine atomization. Set the spray distance from the gun to the work piece as near as possible within the range of 100-200 mm (3.9-7.9 in).



The gun should be held so that it is perpendicular to the surface of the work piece at all times. Then, the gun should move in a straight and horizontal line. Moving the gun causes uneven painting.

Maintenance and inspection

WARNING
 -First, release air and pressure fully according to item No. 3 of "Important" or WARNING on page 2.
 -Tip of fluid needle set has a sharp point. Do not touch the tip of needle valve at the maintenance for protection of the human body.
 -Be careful not to damage the tip of fluid nozzle or must not put your hand on it.
 -Only an experienced person who is fully conversant with the equipment can do maintenance and inspection.

CAUTION

-Never use commercial or other parts instead of ANEST IWATA original spare parts.
 -Never immerse the whole gun into liquid such as thinner.
 -Never soak air cap set in solvent for extended period even if cleaning. It may cause defective pattern.
 -Never damage holes of air cap, fluid nozzle and fluid needle.

Important
 1 Incomplete cleaning can fall pattern shape and uniform particles. Especially clean fully and promptly two-component paint after use.
 2 Soaking whole spray gun in solvent may cause spray gun malfunction. Also soaking air cap set lead for extended period.
 3 During disassembly, do not scratch seal surface.
 (1) Remove fluid nozzle after removing fluid needle set or while keeping fluid needle pulled in order to protect seal section.
 (2) Be careful when handling tip of fluid needle set since it is sharp.
 Disassemble fluid set, guide set as follows as possible.
 4 If you try to adjust fluid needle packing set too much, fluid needle set will not move smoothly, resulting in paint leakage from tip of fluid nozzle. Try to adjust carefully while pulling trigger and containing movement of fluid needle set.
 When you tighten it too much, fluid fully loosen it and then tighten it again carefully.
 5 If you try to fit air valve spring and air valve to gun body set without fluid needle set, air valve will not be fitted correctly and top packing inside fluid set, guide set will be damaged.
 6 If pattern set, knob or air set, knob is not fully opened, tip of it can contact and damage fluid nozzle and cause seizure of thread.

Parts replacement standard
 Replace if it is crushed or deformed.
 Replace if it is deformed or worn out.
 Replace them if leakage does not stop after fully observing fluid nozzle and fluid needle set.
 If you replace fluid nozzle or fluid needle set, only, fully match them and confirm that there is no leakage.

Fluid nozzle-fluid needle set combination	
Fluid nozzle	Fluid needle set
Orifices φ mm (in)	Mark
φ 1.4 (0.055)	400WB/14
	200T15

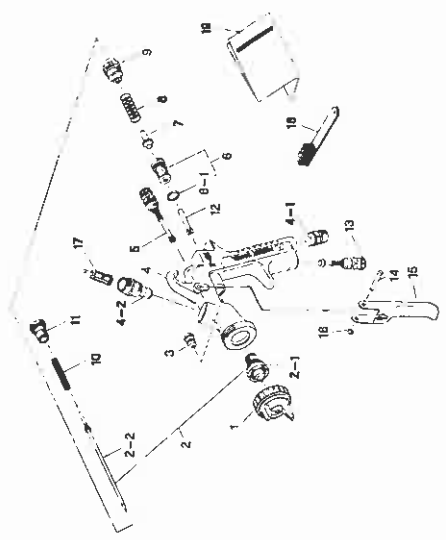
Parts list

When ordering parts, specify gun's model, part name with ref. No. and marked No. of air cap set, fluid nozzle and fluid needle.
 When replacing fluid nozzle or fluid needle for pressure feed application, please order nozzle needle set.

Parts list

No	Description	Qty
1	Air cap set	1
2	Fluid nozzle-fluid needle set	1
3-1	Fluid nozzle	1
3-2	Fluid needle set	1
4	Needle packing set	1
4-1	Body set	1
4-2	Air valve	1
5	Trigger set	1
6	Fluid trigger	1
7	Fluid trigger	1
8	Fluid trigger	1
9	Air valve spring	1
10	Fluid set guide	1
11	Fluid needle spring	1

◆ Marked parts are wearable parts



Troubleshooting

Spray Pattern	Problems	Remedies
	1 Air enters between fluid nozzle and tapered seat of gun body 2 Air is drawn from fluid needle packing set. 3 Air enters at fluid container (filling nut or fluid hose joint).	1 Remove fluid nozzle to clean seat. If it is damaged, replace nozzle. 2 Tighten fluid needle packing set. 3 Fully tighten paint section.
	1 Paint buildup on air cap partially clogs horn holes. Air pressure from both horns differs.	1 Remove obstructions from horn holes with attached brush. But do not use metal objects to clean horn holes.
	1 Paint buildup or damage on fluid nozzle circumference and air cap center. 2 Fluid nozzle is not properly fixed.	1 Remove obstructions. Replace if damaged. 2 Remove fluid nozzle and clean seal section. 3 Add paint to increase viscosity. 4 Tighten fluid set, knob to reduce fluid output. Or turn pattern set, valve set clockwise.
	1 Paint velocity too low. 2 Fluid output too high.	1 Add thinner to reduce viscosity. 2 Turn fluid set, valve knob counter-clockwise to increase fluid output.
	1 Paint velocity is too high. 2 Fluid output is too low.	1 Clean or replace fluid nozzle and fluid needle set. 2 Replace fluid nozzle and fluid needle set. 3 Clean air cap set.
	1 Fluid nozzle and fluid needle set are not seated properly. 2 The fine-stage travel of trigger (when only air discharges) decreases. 3 Paint buildup inside air cap set.	1 Clean or replace fluid nozzle and fluid needle set. 2 Replace fluid nozzle and fluid needle set. 3 Clean air cap set.

Problem	Where it occurred	Parts to be checked	Cause				Remedy			
			R1	R2	R3	R4				
Air leaks (from tip of air cap)	Air valve set	Air valve	• Dirt or damage on seat							
			• Dirt or damage on fluid needle set							
			• Wear on air valve spring							
Paint leaks	Fluid nozzle	O-ring	• Damage or deteriorated							
			• Dirt, damage, wear on seat							
			• Loose fluid needle set, knob							
			• Wear on needle spring							
			• Insufficient tightening							
Paint does not flow	Tip of gun	Paint filter	• Dirt or damage on seat							
			• Needle does not return due to packing set too tight							
			• Needle does not return due to paint buildup on fluid needle							
			• Wear							
			• Insufficient tightening							

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