

INSTRUCTION MANUAL (For Overseas Sales)

Automatic Spray Gun for Ceramic

WA-200-Z



Our products are produced as per international standards ISO9001

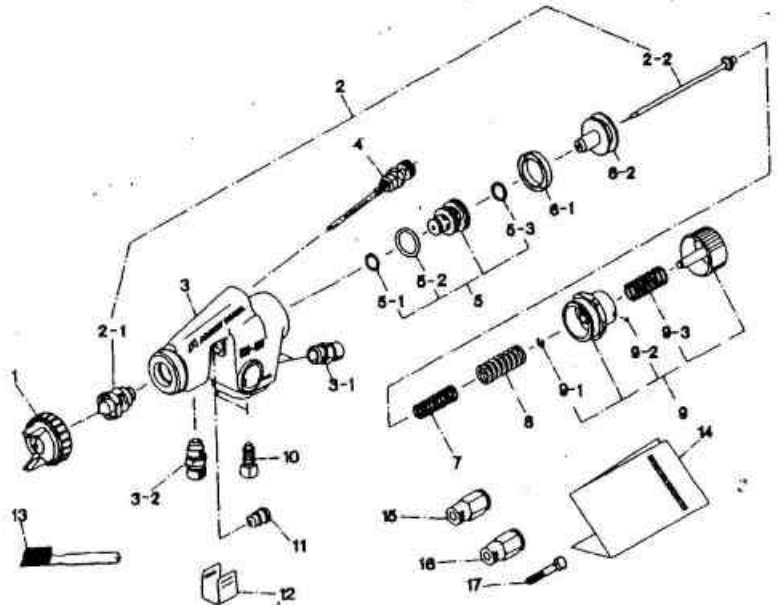
Main Specifications	Maximum Working Pressure	6.8 bar (98 PSI)
	Noise level (LAeqT)	79.0 dB(A)
	Temperature range	5~40 °C

Model	Type of feed	Nozzle orifice φ mm(in)	Air cap set	※1 Atomizing air pressure bar(PSI)	Fluid output ml/min	Air consumption l/min(cfm)	Pattern width mm(in)	Weight g(lbs)
WA-200-201ZP	Pressure	2.0(0.079)	R1Z	3.5 (50)	760	500 (17.7)	370 (14.6)	470 (1.04)
WA-200-251ZP		2.5(0.098)						

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

PARTS LIST

No.	Description	Q'ty
1	Air cap set	1
◆ 2	Fluid nozzle-fluid needle set	1
3	Body set	1
3-1	Air nipple	2
3-2	Fluid nipple	1
4	Air adj. valve set	1
5	Air valve seal	1
5-1	O ring	1
5-2	O ring	1
◆ 5-3	O ring	1
◆ 6-1	Piston packing	1
6-2	Piston	1
7	Needle spring	1
8	Piston spring	1
9	Fluid adj. set	1
9-1	Stop ring	1
9-2	Ball	1
9-3	Fluid adj. spring	1
◆ 10	Bolt set	2
◆ 11	Fluid needle packing set	1
12	Cover	1
13	Brush	1
14	Instruction manual	1
15	Half union for φ 8	1
16	Half union for φ 8	1
17	Bolt	1



How to use "Bolt(No.17)"

Screw bolt(No.17) into piston and pull piston out paying attention that piston packing is not damaged.

When ordering parts, specify gun's model, part name with ref. No. and marked No. of air cap set, fluid nozzle and fluid needle.  
◆Marked parts are wearable parts.

Fluid nozzle-fluid needle set combination

Fluid nozzle		Fluid needle set
Orifice φ mm(in)	Mark	Mark
φ 2.0(0.079)	W200/20Z	Non-mark
φ 2.5(0.098)	W200/25Z	(Common parts)

## SAFETY WARNINGS



### FIRE OR EXPLOSION HAZARD

1. Fluid and solvents can be highly flammable or combustible.
  - Use in well-ventilated spray booth.
  - Avoid any ignition sources such as smoking, open flames, electrical hazard etc.
2. NEVER use HALOGENATED HYDROCARBON SOLVENTS (1.1.1 TRICHLORINE, ETHYL CHLORIDE etc.), which can chemically react with aluminum and zinc parts and cause an explosion. Be sure that all fluids and solvents used are chemically compatible with aluminum and zinc parts.
3. To reduce the risk of static sparking, grounding continuity to the spray equipment and object being sprayed must be maintained.



### MISUSE HAZARD

1. NEVER point gun in the direction of human body.
2. NEVER exceed the maximum safe working pressure of the equipment.
3. ALWAYS release air and fluid pressures before cleaning, disassembling or servicing. For emergency stop and prevention of unintended operation, a ball valve installation near the gun to stop air supply is recommended.



### HAZARD CREATED WHILE COATING MATERIALS ARE ATOMIZED AND SPRAYED

1. Toxic vapors produced by spraying certain materials can create intoxication and serious damage to health.
  - Use the gun in well-ventilated areas.
  - Always wear protective eye wear, gloves, respirator etc. to prevent the toxic vapor hazard, solvents and paint from coming into contact with your eyes or skin.
2. Noise level mentioned in main specifications was measured at 1.0 m behind the tip of the gun, 1.6 m height from floor.
  - Wear earplugs if required.



### OTHER HAZARDS

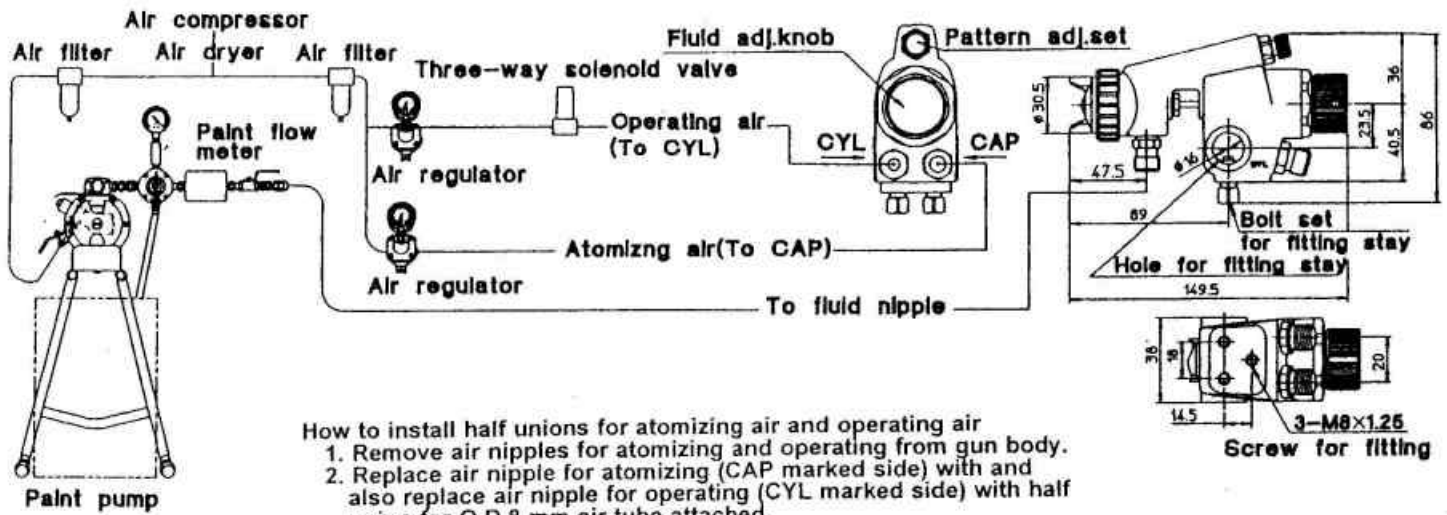
1. NEVER modify this product for any applications.
2. NEVER enter working areas of robots, reciprocators, conveyors, etc., unless machines are switched off.
3. NEVER spray foods or chemicals through the spray gun.
4. If something goes wrong, immediately stop operation and find the cause. Never use till you have solved the problem.

## INSTALLATION

### IMPORTANT

This gun should be operated by adequately trained operators only. Ensure that the gun has not been damaged during transportation. Clean dry air should be supplied to the gun.

1. Fit the gun to a stand or fitting stay, aim at spraying direction and secure it firmly with fixing bolts.
2. Connect atomizing air hose to atomizing air nipple (CAP marked side) and operating air hose to operating air nipple (CYL marked side) tightly.
3. Connect fluid hose to fluid nipple tightly.
4. Flush the gun fluid passage with a compatible solvent.
5. Pour paint into container, test spray and adjust fluid output as well as pattern width.



- How to install half unions for atomizing air and operating air
1. Remove air nipples for atomizing and operating air from gun body.
  2. Replace air nipple for atomizing (CAP marked side) with and also replace air nipple for operating (CYL marked side) with half union for O.D.8 mm air tube attached.
  3. Be sure to connect half unions to gun body tightly.

## HOW TO OPERATE

1. Adjust operating air pressure from 3 to 4 bar (43 to 57 PSI).

### NOTE:

Valve orifice inside three-way solenoid valve should be minimum  $\phi$  4 mm (0.157 in) and also operating air hose length should be within 10 m (32.8 ft) with the inner diameter more than  $\phi$  6 mm (0.236 in) to avoid delayed operation and any kind of failure.

2. Although atomizing air pressure varies according to spray conditions, pulling the piston of the gun with the pattern adj. set fully opened, adjust it normally 2.5 to 4 bar (36 to 57 PIS).
3. Set the spray distance from the gun to the work piece as near as possible within the range of 200~250 mm (7.9 to 9.8 in).

## MAINTENANCE AFTER PAINTING



### WARNING

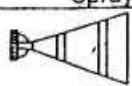

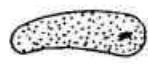



- TURN OFF AIR AND COATING MATERIALS TO THE GUN AND RELEASE PRESSURE BY SUPPLYING ONLY OPERATING AIR PRESSURE BEFORE DISASSEMBLING, CLEANING OR SERVICING.
- PAY ATTENTION WHEN DISASSEMBLING SPRAY GUN SINCE YOU MUST TOUCH SHARP PARTS.
- DO NOT DISASSEMBLE WITHOUT RECEIVING ENOUGH KNOWLEDGE AND EDUCATION.

1. Pour remaining paint into another container and then clean paint passages and air cap. Spray a small amount of thinner to clean paint passages. Incomplete cleaning will cause adverse pattern shape and particles. Clean fully and promptly two-component paint after use.
2. Clean other sections with attached brush soaked with thinner and waste cloth.
3. Clean paint passages fully before disassembly. Use ring spanner, box wrench or optional exclusiv spanner (code 03538600) to remove fluid nozzle.
4. Remove fluid nozzle after removing fluid needle set or while keeping fluid needle pulled in order to protect seat section.
5. While keeping fluid needle set inserted, tighten fluid needle packing set by hand. Then tighten gradually by spanner. Adjust packing set while pulling trigger and watching movement of fluid needle set since too much tightening will slow down movement of fluid needle and result in leakage from tip of nozzle. If tightened too much, turn counterclockwise to the sufficient position without struck needle and fluid leakage.
6. Turn pattern adj. knob counterclockwise to fully open. And then tighten pattern adj. guide into gun body.



### 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 DAMAGE HOLES OF AIR CAP, FLUID NOZZLE AND FLUID NEEDLE.

Spray Pattern	Problems	Remedies
 Fluttering	1. Air enters between fluid nozzle and tapered seat of gun body. 2. Air is suctioned from fluid needle packing.	1. Remove fluid nozzle to clean seat. If it is damaged, replace nozzle. 2. Tighten fluid needle packing.
 Crescent	1. Paint buildup on air cap partially clogs horn holes. Air pressure from both horns differs.	1. Remove obstructions from horn holes. But do not use metal objects to clean horn holes.
 Inclined	1. Paint buildup on air cap partially clogs horn hole or air cap center hole, or causes damage. 2. Loose fluid nozzle.	1. Remove obstructions. Replace if damaged. 2. Remove fluid nozzle and clean seated section.
 Split	1. Paint viscosity too low. 2. Fluid output too high.	1. Add paint to increase viscosity. 2. Adjust fluid adj. knob or pattern adj. knob.
 Heavy Center	1. Paint viscosity too high. 2. Fluid output too low.	1. Reduce viscosity. 2. Increase fluid output.
 Spit	1. Fluid nozzle and fluid needle set are not seated properly. 2. The first-stage travel of piston (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.

R1 : retighten    R2 : adjust    R3 : clean    R4 : replace parts

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

## ANEST IWATA Corporation

3176, Shinyosida-Cho, Kohoku-ku, Yokohama, 223-8501, Japan.

Cord. 03533622