

INSTRUCTION MANUAL

Automatic Spray Gun WRA-M200T10LV6

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.

Be sure to observe warnings and cautions in this instruction manual.
If not, it can cause paint ejection and serious bodily 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 fire prevention, electricity and safety as well as your own company regulations.

Important specifications

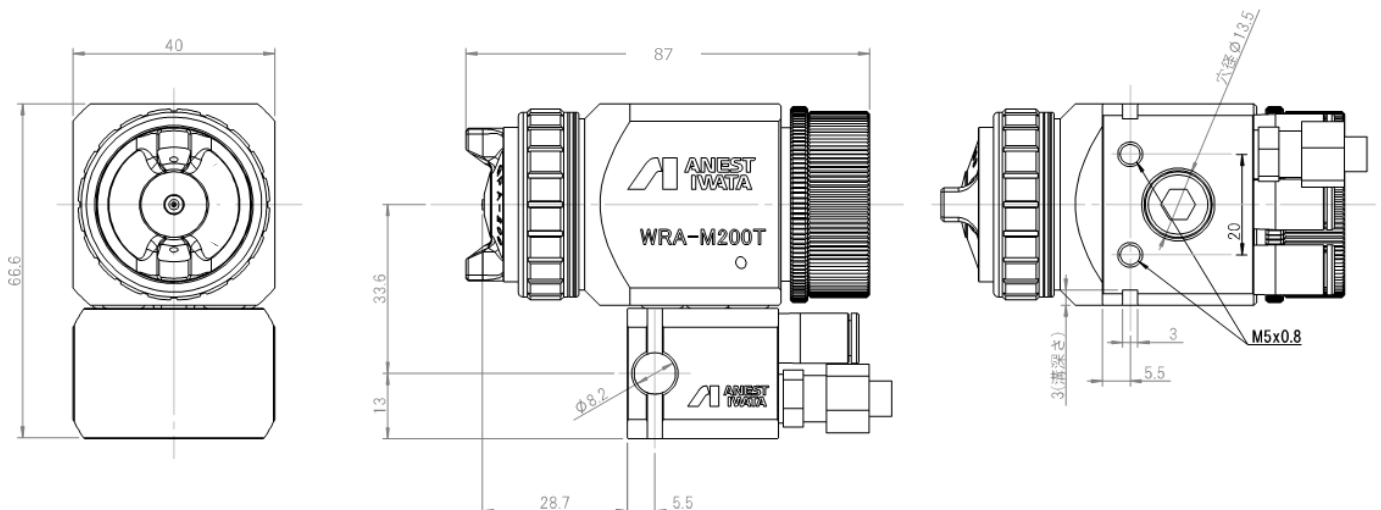
Max. Pressure	0.68 MPa / 6.8 bar / 98.6 PSI	
Noise level	76.9 dB (A)	
	Spray condition : Recommended	Measuring point : 1m backwards from gun, 1.6 m height
Max. Temperature	Atmosphere : 5°C~40°C Air • Fluid : 5°C~43°C	

Main specifications

Model	Type of feed	Nozzle orifice φmm (in)	Air cap Ass'y Mark	Recommended condition			Air consumption l/min (cfm)	Spray distance mm(in)	Pattern width mm(in)	Mass g (lbs)
				※1 Air pressure MPa (bar /PSI)		Fluid output ml/min				
				Atomizing air	Fan air					
WRA-M200T10LV6	Pressure	1.0 (0.039)	LPH-200-LV6	0.10 (1.0 / 14.5)	0.10 (1.0 / 14.5)	120	200 (7.1)	200 (7.9)	250 (9.8)	400 (0.88)

※1 Air pressure means air pressure at gun inlet when air valve is opened and air flows.

※2 Paint viscosity is 12(s/NK-2)



Safety precautions

⚠ WARNING

Fire and explosion

1. Spark and open flames are strictly prohibited.

Paints can be highly flammable and can cause fire.
Avoid any ignition sources such as smoking, open flames, electrical goods, etc.

2. Never use the following HALGOGENATED 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)

3. Securely ground spray gun.

Use air hose with built-in ground wire or use grounded gun stay. Ground resistance : 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 pressures before cleaning, disassembling or servicing.

If not, remaining pressure can cause bodily injury due to improper operation or scattering cleaning liquid.

In order to release pressure, first stop supply of compressed air, fluid and thinner to automatic spray gun.

Next, supply only piston operating air and exhaust fluid by operating fluid needle, which results in automatic supply stop of all compressed air.

4. Tip of fluid needle set has a sharp point.



Protection of human body

1. Use in a well-ventilated site by using spray booth.

If done, it can cause inflammation of eyes and skin or bodily injury.

2. Never exceed maximum operating pressure and maximum operating Temperature.

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.

If not, cleaning liquid, etc. can cause inflammation of eyes and skin.

Noise level can exceed 80dB(A), depending on operating conditions and painting site



Other precautions

1. Never alter this spray gun.

If done, it can cause insufficient performance and failure.

2. Enter working areas 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.

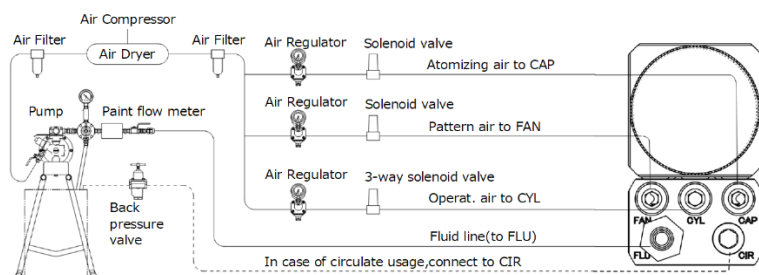
If not, remaining preventive oil can cause painting failure such as fish eyes.

-Use three-way solenoid valve of more than $\phi 4$ inner dia. cross-sectional area and air hose of over $\phi 6$ inner dia. and less than 10m length.

If not, small dia. of solenoid valve and longer air hose between three-way solenoid valve and gun can cause delay in operation.

-Firmly fix hose to spray gun. · · · If not, disconnection of hose and drop of container can cause bodily injury.

- Job 1** Fit the gun to fitting stay, aim at spraying direction and fix it.
- Job 2** Connect atomizing air hose to atomizing air side (Cap marked side) and operating air hose to operating air side(CYL marked side).
- Job 3** Connect fluid hose to fluid inlet tightly.
- Job 4** supply thinner to automatic gun. Spray and clean fluid passage with thinner.
- Job 5** supply paint to automatic gun and test spray and adjust air volume, fluid output and pattern width as necessary.



Important

When using the circulate method, connect the paint hose with the following method. Please do the same way when changing the entrance of the paint route to the opposite side.

Job 1

Screw the supplied screw into the paint plug and pull it out from the automatic gun.

Job 2

Remove the plug in the manifold, attach the half union, connect the paint hose.

Maintenance and inspection

⚠ WARNING

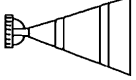
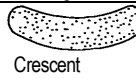
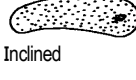

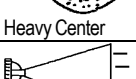
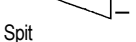
- First release air and pressure fully according to item No. 3 of "Improper use of equipment" of WARNING on page 2.
- Tip of fluid needle set has a sharp point. Do not touch the tip of needle valve at the maintenance for protection of the human body.
- Be careful not to damage the tip of fluid nozzle 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 a fluid nozzle and fluid needle.

Step-by-step procedure	Important
1. Pour remaining paint to another container. Clean fluid passages and air cap set. Spray a small amount of thinner to clean fluid passages.	1. Incomplete cleaning can fail pattern shape and uniform particles. Especially clean fully and promptly two-component paint after use.
2. Clean each section with brush soaked with thinner and wipe out with waste cloth.	2. Soaking whole spray gun in solvent may cause spray gun malfunction. Also soaking air cap set itself for extended period. When cleaning, never scratch each hole of air cap set and fluid nozzle, and fluid needle set.
3. Before disassembly, fully clean fluid passages.	3. During disassembly, do not scratch seat section.
(1)Disassemble fluid nozzle. Use ring spanner, box wrench or optional exclusive spanner (code No.035386000) to disassemble fluid nozzle.	(1)Remove fluid nozzle after removing fluid needle set or while keeping fluid needle pulled, in order to protect seat section.
(2)Disassemble fluid needle set. Remove fluid adj. set and pull out fluid needle set from gun body. Pay attention so that spring does not suddenly fly out since fluid adj. set is strongly pushed by fluid needle spring and piston spring.	(2)Pull fluid needle set after loosening fluid needle packing set to protect fluid needle packing set.

Where to inspect	Parts replacement standard
1. Each hole passage of air cap and fluid nozzle	Replace if it is crushed or deformed.
2. Packing and O ring	Replace if it is deformed or worn out.
3. Leakage from seat section between fluid nozzle and fluid needle set	Replace them if leakage does not stop after fully cleaning 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.

Spray Pattern	Problems	Remedies
 Fluttering	1. Air enters between fluid nozzle and tapered seat of gun body. 2. Air enters at fluid hose joint.	1. Remove fluid nozzle to clean seat. If it is damaged, replace nozzle. 2. Fully tighten joint section.
 Crescent	1. Paint buildup on air cap partially clogs horn holes. Air pressure from both horns differs.	1. Please remove obstacles adhering to the horn holes with resin brush But do not use metal objects to clean horn holes.
 Inclined	1. Paint buildup or damage on fluid nozzle circumference and air cap center. 2. Fluid nozzle is not properly fitted.	1. Remove obstructions. Replace if damaged. 2. Remove fluid nozzle and clean seat section.
 Split	1. Paint viscosity too low. 2. Fluid output too high.	1. Add paint to increase viscosity. 2. Tighten fluid adj. knob to reduce fluid output. Lower the Fan air.
 Heavy Center	1. Paint viscosity is too high. 2. Fluid output is too low.	1. Add thinner to reduce viscosity. 2. Turn fluid adj. valve knob counter-clockwise to increase fluid output.
 Spit	1. Fluid nozzle and fluid needle set are not seated properly. 2. Paint buildup inside air cap set.	1. Clean or replace fluid nozzle and fluid needle set. 2. Clean air cap set.

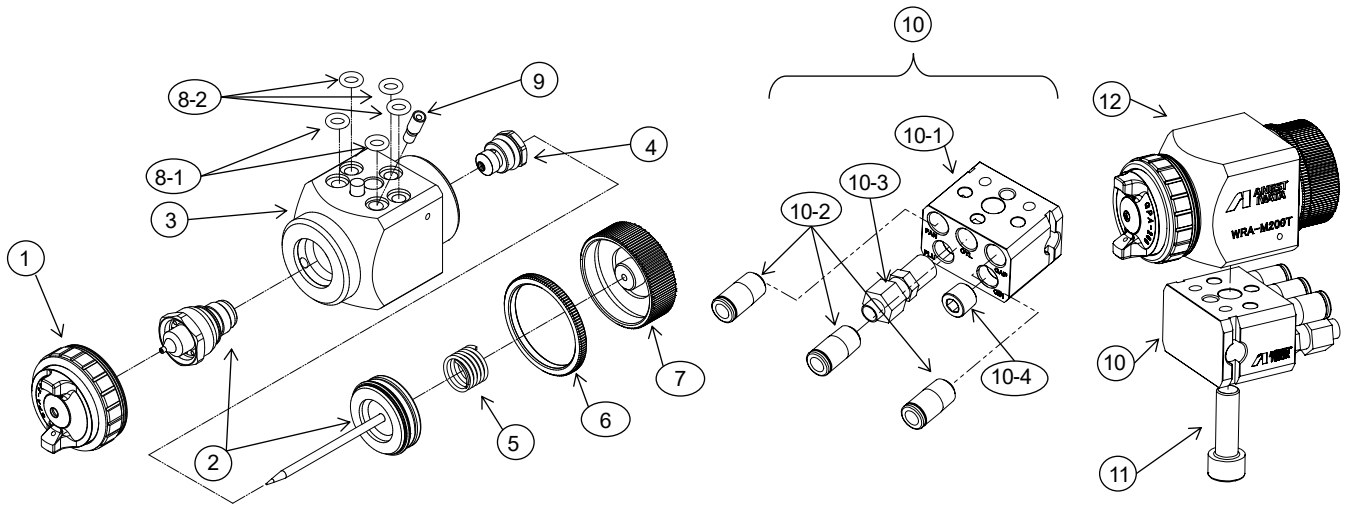
R1 : retighten R2 : adjust R3 : clean R4 : replace parts

Problem	Where it occurred	Parts to be checked	Cause	Remedy			
				R1	R2	R3	R4
Paint leaks	Fluid nozzle	Fluid nozzle ~ fluid needle	* Dirt or damage, wear on seat surface			○	○
			* Wear on needle spring				○
	Fluid needle packing	Fluid needle packing ~ packing seat	* Insufficient tightening	○			
			* Needle does not return due to paint buildup on fluid needle. * Wear		○	○	○
Paint does not flow	Tip of gun	Tip hole of nozzle	* Clogged			○	
		Fluid adj. knob.	* Insufficient opening		○		
		Paint filter	* Clogged			○	○

How to operate

- Job 1** Suggested air pressure is 2.9 to 3.9 bar (42.1 to 56.6 PSI)
- Job 2** Recommended paint viscosity differs according to paint property and painting conditions. 10 to 25 sec/NK/2 cup is recommendable
- Job 3** Set the spray distance from the gun to the work piece as near as possible within the range of 150-250 mm (5.9- 9.8in)

Parts list



No.	Description	Q'ty	No.	Description	Q'ty
1	Air cap assy	1	9	Fluid plug	1
2 ◆	Nozzle Piston assy	1	10	Manifold assy	1
3	Body assy	1	10-1	Manifold	1
4 ◆	Fluid needle packing assy	1	10-2	Air joint (for $\phi 6$)	3
5	Piston Spring	1	10-3	Hose Nipple	1
6	Jam Nut	1	10-4	Plug	1
7	Piston Cover	1	11	Bolt	1
8-1 ◆	O-ring(white)	2	12	Auto Gun (※)	1
8-2 ◆	O-ring(black)	3	13	Instruction manual	1

◆Marked parts are wearable parts.
 (※) Assy of No.1~9

Fluid nozzle –fluid needle set combination

Model	Fluid nozzle		Fluid needle set mark
	Orifice ϕ mm(in)	Mark	
WRA-M200T10LV6	1.0 (0.039)	200LV/10	WRA12

ANEST IWATA Corporation

3176, Shinyoshida-cho, Kohoku-ku,
 Yokohama, 223-8501, Japan
<https://www.anest-iwata.co.jp>

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