

ANEST IWATA Europe S.r.l.
46, Corso Vigevano 10155, Torino II
Direct Tel. +39 011 - 22 74 402
Fax +39 011 - 22 74 000
info@anest-iwataeu.com
www.anest-iwataeu.com

ANEST IWATA Italia S.r.I.
46, Corso Vigevano 10155, Torino (Italy)
Tel. diretto -39 011 - 24 80 868 - Fax: +39 011 - 85 19 44
info@anest-iwata.it
www.anest-iwata.it

ANEST IWATA Iberica
Calle de Les Teixidores, 3-5
09918 - Baddona (Barcelona)
Teil.-3-9 4932 20 59 93. - Fax.-34 933 20 59 65
into @anest-iwata.es
www.anest-iwata.es

WWW.allest-invalues

WW.allest-invalues

WWW.allest-invalues

WWW.allest

# **European Sales Branches:**

ANEST IWATA Scandinavia
Ögärdesvägen 6C, 433 30 PARTILLE - Sweden
Tel. +46 (0)31 - 340 28 60 - Fax +46 (0)31 - 340 28 69
info@anest-iwata.se

ANEST IWATA France
25 rue de Madrid - 38070 St Quentin Fallavier - France
76t. +33 (0)4 - 74 94 59 69 - Fax +33 (0)4 - 74 94 39 99
info @anest-iwata.fr

www.anest-iwata.fr

ANEST IWATA U.K.

| ANEST IWATA U.K. | Unit 10 Little for Road - Eaton Socon | St. Neots - CAMBRIDGESHRE | FET9 &LH | Tot: +44 (0) +480 405419 Fax: +44 (0) +480 217610 | www.anest-iwata.co.uk | www.anest-iwata.co.uk



**Instruction Manual** 

# **W 200 WB SPRAY GUN**



Before use, adjustment or maintenance, it is important to read this instruction manual very carefully. This manual must be stored in a safe place for any future reference that may be ne



This ANEST IWATA spray guns kit complies to ATEX regulations 94/9/EC, protection level:

**(€ €** x II 2G X II 2 G X Suitable for using Zones 1 and 2.

X marking: Any static electricity discharge from the spray gun is to be diverted to the ground via the conductive air hose as stipulated.

IMPORTANT
This spray gun should be operated only by an adequately trained operator, for safe use and maintenance of the equipment. Any misuse or handling other than those indicated in this Instruction Manual is not covered by guarantee. ANEST IWATA disclaims all responsibility for any accident or damage caused by failure to observe the operational and safety procedures in this manual. In the interest of user friendliness, this manual contains information in a brief and concise form. For any additional information you may require regarding spray gun operations, or if any missing parts or any damage during transportation is found, please contact your nearest ANEST IWATA Company (see last cover page).

If not, it can caus	ve warnings and cautions in this instruction manual. $e$ paint ejection and serious bodily injury by drawing organic solvent. $lpha$ marked items which are especially important.
<b>⚠</b> 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 mini- mum necessary conditions. Follow national and local regulations regarding fire prevention, electricity and safety as well as your own company regulations.

### IMPORTANT SPECIFICATIONS

Max. Pressure:	6.8 bar (98 PSI)	Max. Temperature:	
Noise Level (LAeqT)	76.8 dB (A)	Atmosphere	5 ~ 40 °C
Spray conditions	Recommended	Air and fluid	5 ~ 43 °C
Measuring point	1m backwards from gun, 1,6 m height	Air connection:	G 1/4"
		Fluid connection:	G 3/8"

# TECHNICAL SPECIFICATIONS

								-
Model	Nozzle orifice	Air pressure	Air	Fluid output	Pattern	Air cap	Weight	l
		at gun inlet	consumption		width			ı
	mm (in)	bar (PSI)	I/min (cfm)	ml/min	mm (in)		g (lbs)	l
High T.E.C. W200 WE	3 Pressure feed							l
W200-WB-081P	0.8 (0.031)	1.6 (23)	340 (12)	200	360 (14.2)	WB1		l
W200-WB-101P	1.0 (0.039)	1.0 (23)	340 (12)	250	360 (14.2)	WDI		l
W200-WB-121P	1.2 (0.047)			300	380 (15.0)		380	l
High T.E.C. W200 WE	3 Suction feed						(0.84)	l
W200-WB-162S	1.6 (0.063)	0.0 (00)	400 (45)	170	315 (12.4)		]	l
W200-WB-182S	1.8 (0.071)	2.0 (29)	430 (15)	200	330 (13.0)	WB2		l

Manufactured by:

ANEST IWATA Corporation 3176,Shinyoshida-cho, Kohoku-ku, Yokohama, 223-8501 Japan

# SAFETY WARNINGS

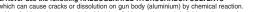


#### FIRE OR EXPLOSION HAZARD

1. Sparks 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.







Be sure that all fluids and solvents are compatible with gun parts.
 We can supply a list of materials used to manufacture the product.

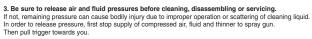
3. Securely ground spray gun by using air hose with built-in ground wire. Ground wire : Less than  $1M\Omega$  Check the earth stability periodically. If not, insufficient grounding can cause fire and explosion due to static electric sparking.



#### IMPROPER USE OF EQUIPMENT

1. Never point gun towards people or animals. If done, it can cause inflammation of eyes and skin or bodily injury.

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





**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

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.

Noise level can exceed 85 dB(A), depending on operating conditions and painting site

4.If operators pull the trigger many times during operation, it may cause carpal tunnel syndrome. Rest if you feel any discomfort in your hand.



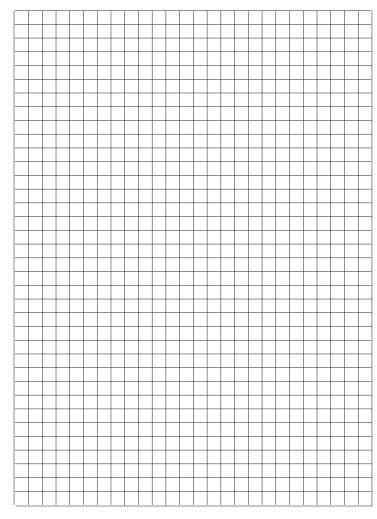
#### OTHER PRECAUTIONS

Never alter this spray gun.

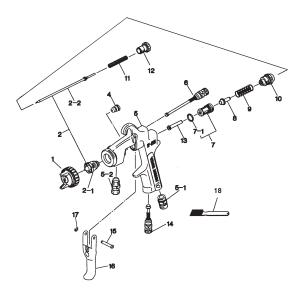
If done, it can cause insufficient performance and failure

2. Enter working areas of other equipment (robots, reciprocators, etc.) after machines have been turned off. If not, contact with them can cause injury.

# **COMMENTS**



# **SPARE PARTS LIST**



#### PARTS LIST

DESCRIPTION	REF.PART
AIR CAP SET	1
NOZZLE+ NEEDLE SET	2 •
FLUID NOZZLE	2-1 •
FLUID NEEDLE SET	2-2 •
NEEDLE PACKING CARTRIDGE	4 •
BODY SET	5
AIR NIPPLE	5-1
FLUID NIPPLE	5-2
PATTERN ADJ. SET	6
AIR VALVE SEAT SET	7
O RING	7-1 •
AIR VALVE	8 •
AIR VALVE SPRING	9
FLUID ADJ. GUIDE	10
FLUID NEEDLE SPRING	11
FLUID ADJ. KNOB	12
AIR VALVE SHAFT	13 •
AIR ADJ. SET	14
TRIGGER STUD	15
TRIGGER	16
E STOPPER	17
BRUSH	18

# FLUID NOZZLE-FLUID NEEDLE SET

Fluid r	Fluid needle	
Orifice mm(in)	Mark	set -Mark
0.8 (0.031)	200WB/08	40012
1.0 (0.039)	200WB/10	40012
1.2 (0.047)	200WB/12	40012
1.6 (0.063)	400WB/16	20015
1.8 (0.071)	400WB/18	20020

 Marked parts are wearable parts.

NOTE: 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/and fluid needle for pressure feed application, please

#### OTHER PRECAUTIONS

- 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

# **HOW TO CONNECT** ■



#### CAUTION

- Use clean air filtered through air dryer and air filter. If not, dirty air can cause painting failure.
- When 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
- 1. Connect an air hose to air nipple tightly.
- 2. Connect a fluid hose or a container to fluid nipple tightly.
- 3. Flush the gun fluid passage with a compatible solvent.
- 4. 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 2.0 bar (14 to 29 PSI)

Recommended paint viscosity differs according to paint property and painting conditions. 15 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\_250 mm (3.9\_9.8 in).

100-250 mm 3.9-9.8 in

The gun should be held so that it is perpendicular to the surface of the workpiece at all times. Then, the gun should move in a straight

and horizontal line. Arcing the gun causes uneven painting.

# MAINTENANCE AND INSPECTION



#### WARNING

- First release air and fluid pressure fully according to item No. 3 of "Improper use of equipment" of WARNING on
- First release air and fluid 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 during maintenance for protection of the human body.
  Be careful not to damage the tip of the fluid nozzle or put your hand on it.
  Only an experienced person who is fully conversant with the equipment can do maintenance and inspection.



- 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 or fluid needle.

Step-by-step procedure	Important
Pour remaining paint to another container. Clean fluid passages and air cap set.	Incomplete cleaning can fail pattern shape and uniform particles.
Spray a small amount of thinner to clean fluid passages.	Especially clean fully and promptly after use with two-component paint.
2.Clean each section with brush soaked with thinner and wipe out with waste cloth.	Soaking whole spray gun in solvent may cause spray gun malfunction.     When cleaning, never scratch any holes of air cap set, fluid nozzle, or fluid needle set.
Before disassembly, fully clean fluid passages.	During disassembly, do not scratch seat section.
(1) 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.	(2) Be careful when handling tip of fluid needle set since it is sharp.
You do not need to remove fluid adj. guide set from gun body.	Disassemble fluid adj. guide set as little as possible.
Remove fluid adj. knob and fluid needle spring, then pull out fluid needle	
spring, and then pull out fluid needle set from back of fluid adj. guide set.	
4. The fluid needle packing set, must be adjusted while the fluid needle set is inserted. Tighten fluid needle packing seat by hand and then tighten further by spanner 1/6 turn (60-degrees). When you remove needle packing set, do not leave plastic piece of needle packing set in the plastic piece of whether the plastic piece of the plastic pie	If you tighten 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 it carefully while pulling trigger and confirming movement of fluid needle set. When you tighten it too much, first loosen it and then tighten it again carefully.
5.In order to assemble air valve, first assemble air valve & air valve spring	If you try to fit air valve spring and air valve to gun body set without fluid
& fluid adj. guide set together. Next, insert fluid needle set into fluid adj. guide set,	needle set, air valve will not be fitted correctly and packing inside fluid
then fit it to gun body set and screw fluid adj. guide set.	adj. guide set will be damaged.
6.Turn pattern adj. knob counterclockwise to fully open.	If pattern adj.Knob is not fully opened, tip of it can brush against and
Then tighten pattern adj. set or air adj. set.	damage fluid nozzle and cause seizure of thread.
Where to inspect	Parts replacement standard
Each hole passage of air cap and fluid nozzle	Replace if it is crushed or deformed.
2. Packings and O rings	Replace if it is deformed or worn out.
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 only, fully
	match them and confirm that there is no leakage.

# TROUBLESHOOTING

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

# PROBLEMS AND REMEDIES

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