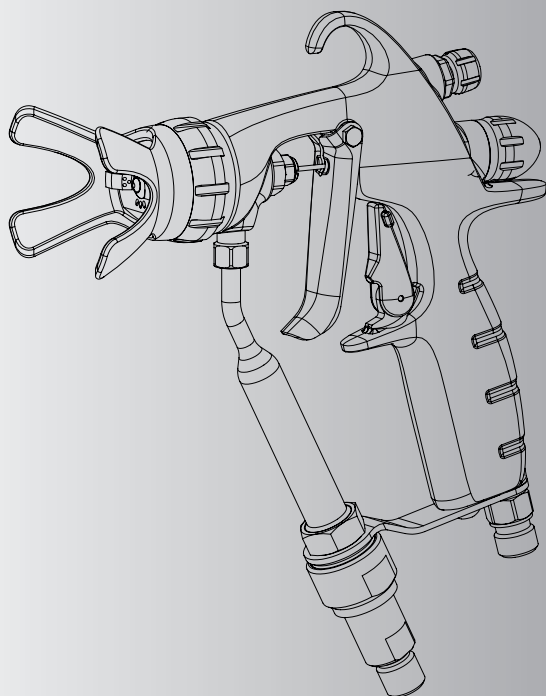


# INSTRUCTION MANUAL



GB

## MSGGS-200 MULTI SPRAY GUN





Dear Customer,

We thank you for the preference you gave us and we are glad to count you among our customers. We hope the use of this equipment will satisfy you and your staff.

ANEST IWATA MSGS-200 Multi Spray Gun combines the advantages of Airless Technology (speed, low overspray) with the advantages of Conventional Technology (excellent finishing) resulting in a product with High Transfer Efficiency and Excellent Finish Quality.

## 1. IMPORTANT INFORMATIONS





IMPORTANT	
	This manual is an integral part of multi spray gun and must to be read carefully before starting ANY ACTIVITY involving the use, adjustment and maintenance of the equipment, including its handling. This manual must be stored in a safe place for any future 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.
CE  II 2G X	This Anest IWATA multi spray guns complies to ATEX regulations 94/9/CE, protection level: II 2 G X Suitable for using Zones 1 and 2. X marking: Any static electricity should be discharged from the spray gun and needs to be diverted to the ground via a conductive air hose not included.















### ALWAYS OBSERVE WARNINGS AND CAUTIONS IN THIS MANUAL

WARNING	HAZARD LEVEL	CONSEQUENCE
WARNING	Potentially hazardous situation	DEATH OR SERIOUS INJURY
IMPORTANT	Potentially hazardous situation	PROPERTY DAMAGE

## 2. SAFETY WARNING

 WARNING	FIRE AND EXPLOSION HAZARDS
	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.
	SECURELY GROUND MULTI SPRAY GUN BY USING AIR HOSE WITH BUILT-IN GROUND WIRE Ground wire : Less than 1MΩ. Check the earth stability periodically. Securely ground pump, Multi Spray gun, workpiece and containers containing paint or solvent. Be sure to use fluid hose with built-in ground wire to have continuous grounding between pump and Multi Spray gun. Use conductive container containing paint or solvent. If not, insufficient grounding can cause fire and explosion due to static electric sparking.
	NEVER USE THE FOLLOWING HALOGENATED HYDROCARBON SOLVENTS which can cause cracks or dissolution on gun body (aluminium) 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 can supply a list of materials used to manufacture the product.

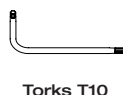
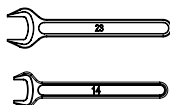
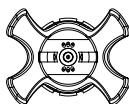
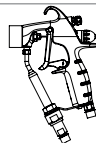
 WARNING	IMPROPER USE OF THE EQUIPMENT
	NEVER POINT MULTI SPRAY GUN TOWARDS PEOPLE OR ANIMALS. NEVER PULL TRIGGER OF GUN WHEN HUMAN BODY OR FINGERS COME NEAR TIP OF NOZZLE TIP. If done, it can cause inflammation of eyes and skin or bodily injury. If you feel any abnormality during operation, consult a medical doctor immediately

 <b>WARNING</b>	<b>IMPROPER USE OF THE EQUIPMENT</b>
	<p><b>NEVER EXCEED MAXIMUM OPERATING PRESSURE AND MAXIMUM OPERATING TEMPERATURE.</b> Use at more than max. operating pressure can cause explosion of Multi Spray gun resulting in great danger.</p>
	<p><b>BE SURE TO RELEASE AIR AND FLUID PRESSURE BEFORE CLEANING, DISASSEMBLING OR SERVICING.</b> 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 fluid and thinner to Multi Spray gun.</p>
 <b>WARNING</b>	<b>PROTECTION OF HUMAN BODY</b>
	<p><b>USE IN A WELL-VENTILATED SITE BY USING SPRAY BOOTH.</b> If not, poor ventilation can cause organic solvent poisoning and catch fire. If you feel any abnormality during operation, consult a medical doctor immediately.</p>
	<p><b>ALWAYS WEAR PROTECTIVE GEAR (safety glasses, mask, gloves.)</b> 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.</p>
	<p><b>WEAR EARPLUGS IF NECESSARY.</b> Noise level can exceed 85 dB(A), depending on operating conditions and painting site.</p>
	<p><b>BE SURE TO STOP PUMP, REDUCE AIR AND FLUID PRESSURE DOWN TO 0 AND SECURELY APPLY SAFETY LOCK OF MULTI SPRAY GUN BEFORE FIT OR REMOVE NOZZLE TIP.</b> Emission of paint or solvent during operation can cause great danger.</p>
	<p><b>NEVER TRY TO STOP LEAKS BY HAND, WHEN PAINT LEAKS.</b> In case of leaks, stop pump immediately and reduce paint pressure down to 0 pressure. High pressure paint emitted through small hole can pierce an iron plate and can cause severe injury since paint can enter human body directly through eyes, mouth or skin. It is very dangerous. If you feel any abnormality or receive any injury, consult a medical doctor immediately</p>
	<p>Pulling trigger many times during operation, may cause carpal tunnel syndrome. <b>ALWAYS REST, IN CASE OF TIREDNESS.</b></p>
 <b>WARNING</b>	<b>OTHER PRECAUTIONS</b>
	<p><b>NEVER ALTER THIS MULTI SPRAY GUN.</b> If done, it can cause insufficient performance and failure.</p>
	<p><b>DO NOT ENTER WORKING AREAS WHERE ROBOTS, RECIPROCATORS, ETC. ARE USED, UNTIL THEY HAVE BEEN TURNED OFF.</b> Otherwise they could cause injury.</p>
	<p><b>NEVER USE THIS GUN TO SPRAY FOODS OR CHEMICALS.</b> Otherwise foreign substance, could cause corrosion of fluid passages which could adversely affect health.</p>
	<p><b>SECURELY CONNECT FLUID HOSE.</b> If hose is disconnected during operation, hazardous hose movement and paint ejection will cause severe bodily injury.</p>
	<p><b>IF SOMETHING GOES WRONG, IMMEDIATELY STOP OPERATION AND FIND THE CAUSE. Do not use again until you have solved the problem.</b></p>
	<p><b>NEVER USE SPARE PARTS THAT ARE NOT ANEST IWATA ORIGINALS.</b></p>
 <b>WARNING</b>	<b>BURST OF FLUID HOSE</b>
	<p><b>NEVER USE CRACKED, DAMAGED, BENT OR CRUSHED FLUID HOSE.</b> High pressure paint emitted from small hole can pierce an iron plate and cause great danger.</p>
	<p><b>NEVER BEND FLUID HOSE WITH A RADIUS OF LESS THAN PERMITTED BEND RADIUS.</b> Contact us, or the shop who sold the hose to you, about permitted bend radius. Never put heavy things on it in order not to damage the hose. If done, hose can explode causing great danger.</p>

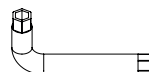
### 3. BOX CONTENTS



Before use the Multi Spray Gun, make sure that it has not been damaged during transport or storage and also check that all the following contents are inside the box.



Torks T10

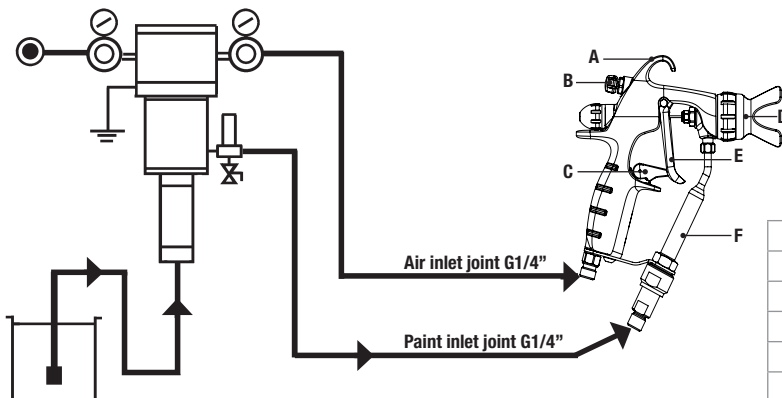


### 4. IMPORTANT SPECIFICATIONS

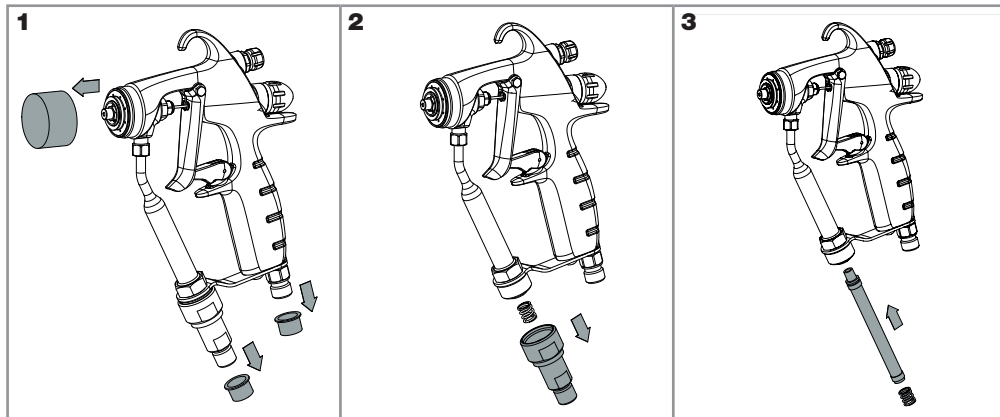
Max. operating fluid pressure:	250 bar	Mass:	594 gr	MAX. TEMPERATURE RANGE	
Max. operating air pressure:	7.0 bar	Air connection:	G1/4"	Atmosphere	5-40 C
Noise Level (LAeqT):	69 dB(A)	Fluid connection:	G1/4"	Air-Fluid	5-43 C°

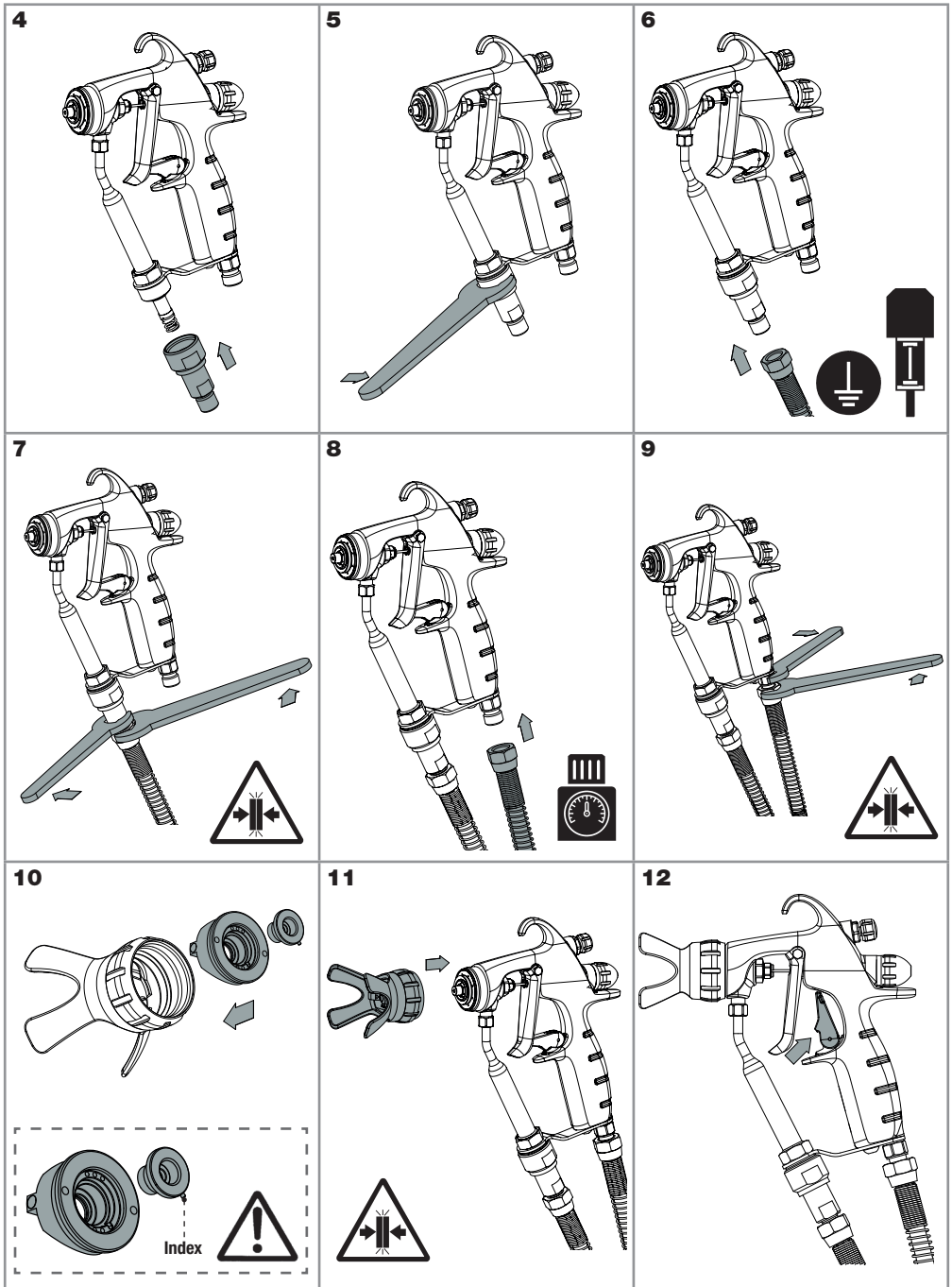
**AI-HVLP:** For HVLP compliance, the maximum air inlet pressure must not exceed 14.5 psi (1bar) to maintain 10 psi (0.68 bar) or less, in the air cap. (Tested with the gun control fully closed and the pressure gauge for air inlet, fitted to the gun handle).

### 5. INSTALLATION SCHEME & FUNCTIONAL DESCRIPTION



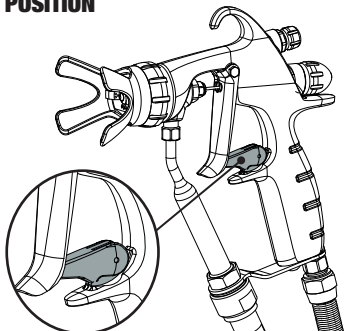
### 6. SETUP OF THE GUN



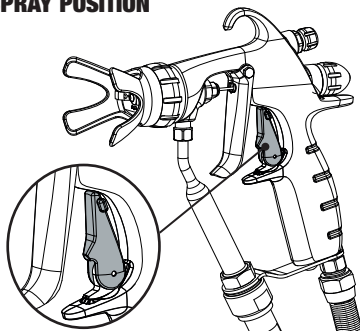


## 7. TRIGGER LOCK

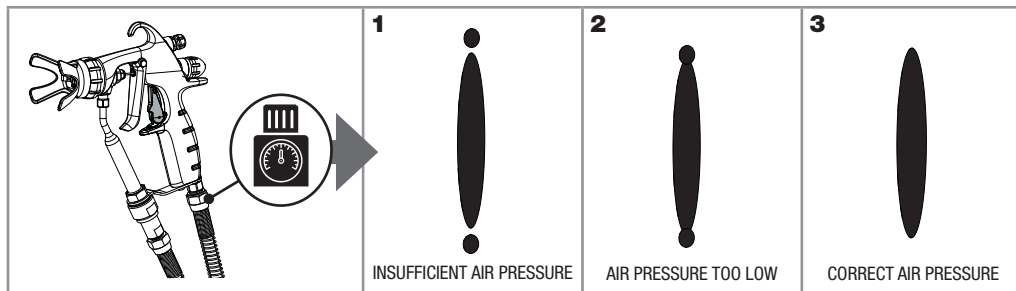
### LOCK POSITION



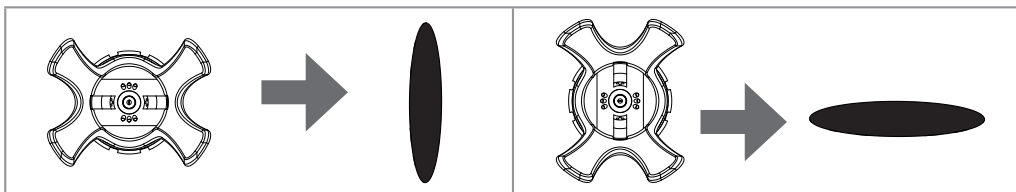
### SPRAY POSITION



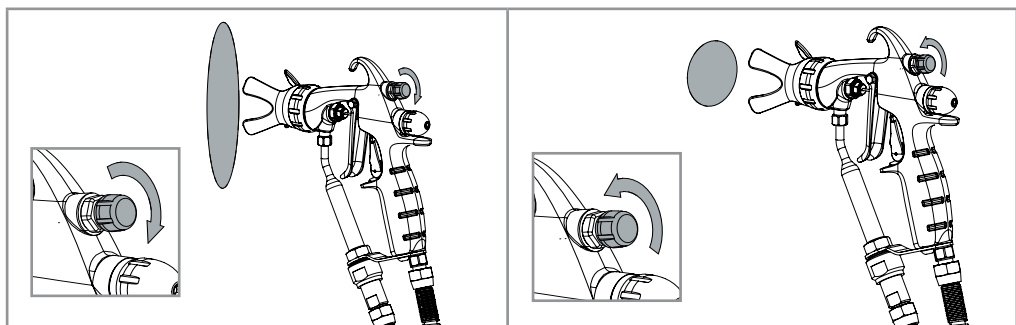
## 8. FLUID PATTERN SHAPE SETUP



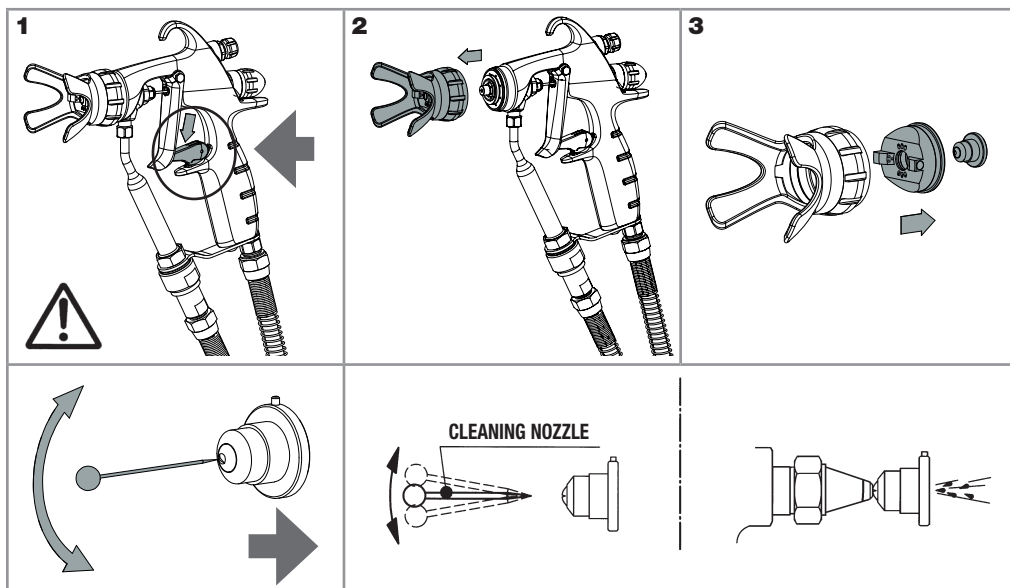
## 9. AIR CAP POSITIONING FOR SPRAY DIRECTION







## 10. PATTERN ADJUSTMENT

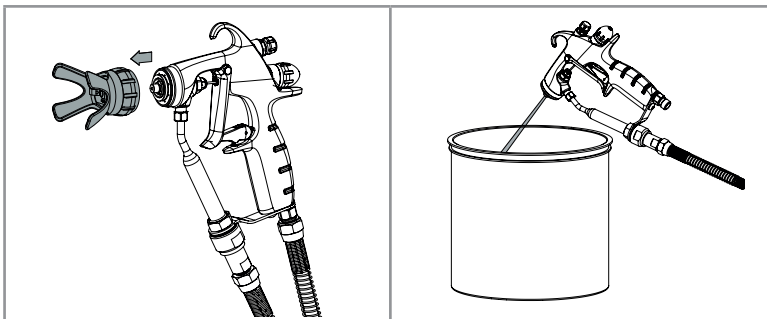


## 11. NOZZLE TIP CLEANING

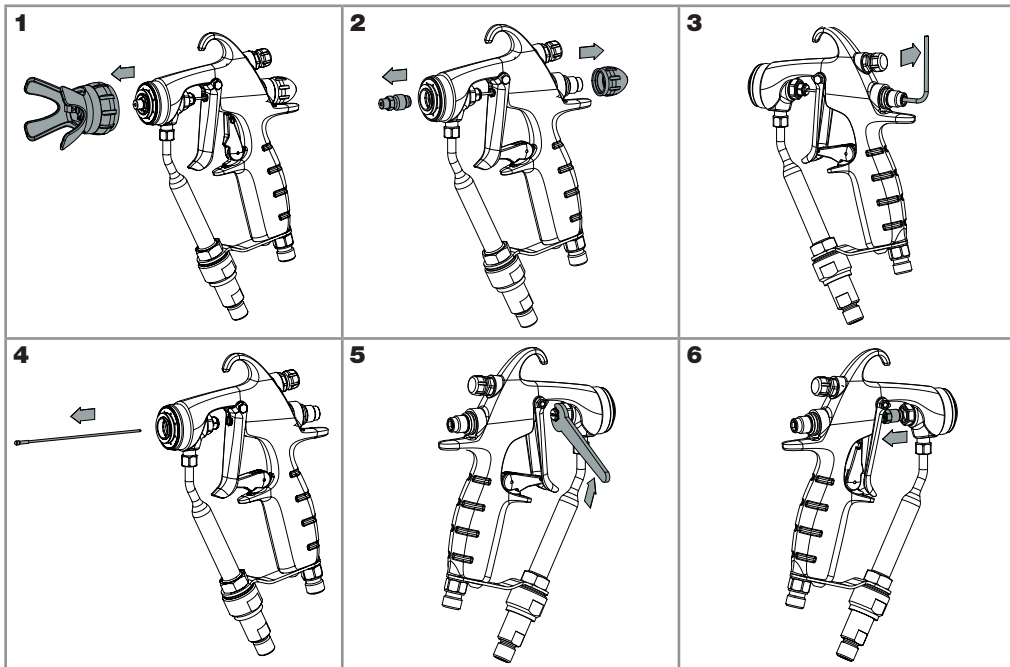


## 12. CLEANING AND MAINTENANCE OPERATIONS

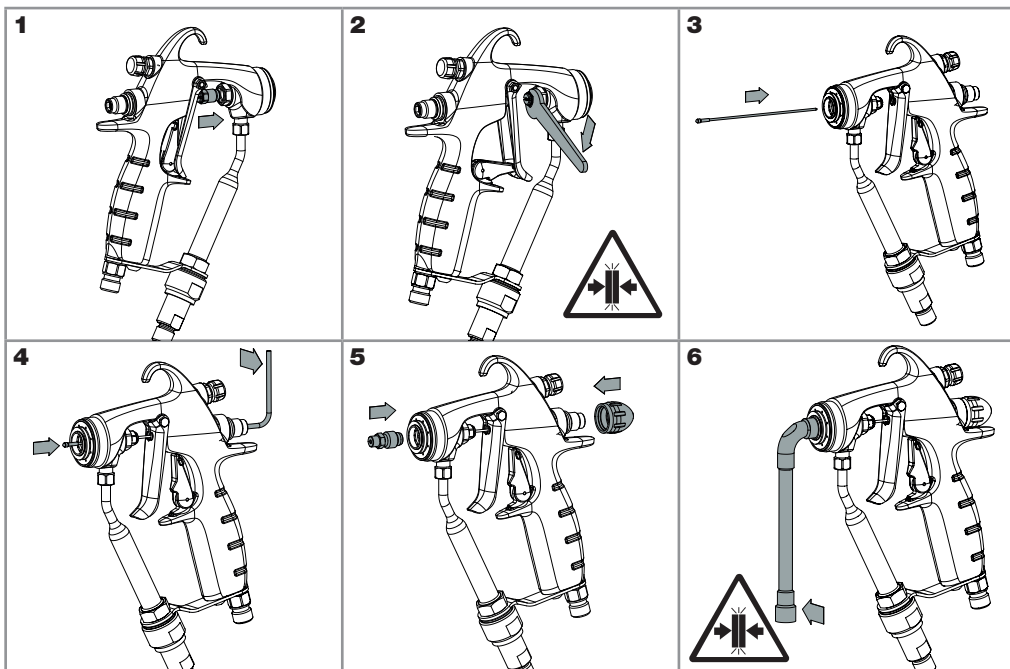
 <b>WARNING</b>	
	<p>FULLY CLEAN AFTER EACH USE TO ENSURE LONGER LIFETIME OF THE SPRAY GUN AND GOOD PERFORMANCE AT NEXT USE.</p>
	<p>BEFORE DISASSEMBLING AND MAINTENANCE OPERATIONS, BE SURE ALWAYS TO STOP PUMP, REDUCE AIR AND FLUID PRESSURE DOWN TO 0 AND TO APPLY SAFETY LOCK TO MULTI SPRAY GUN.</p>
	<p>DURING CLEANING, ALWAYS WEAR PROTECTIVE CLOTHING SUCH AS GLASSES, MASK OR GLOVES TO AVOID SERIOUS INJURY CAUSED BY PAINT OR SOLVENT WHICH COULD COME INTO CONTACT WITH EYES OR BE INHALED.</p>



## 12.1 DISASSEMBLING OF FLUID NOZZLE, NEEDLE & NEEDLE PACKING

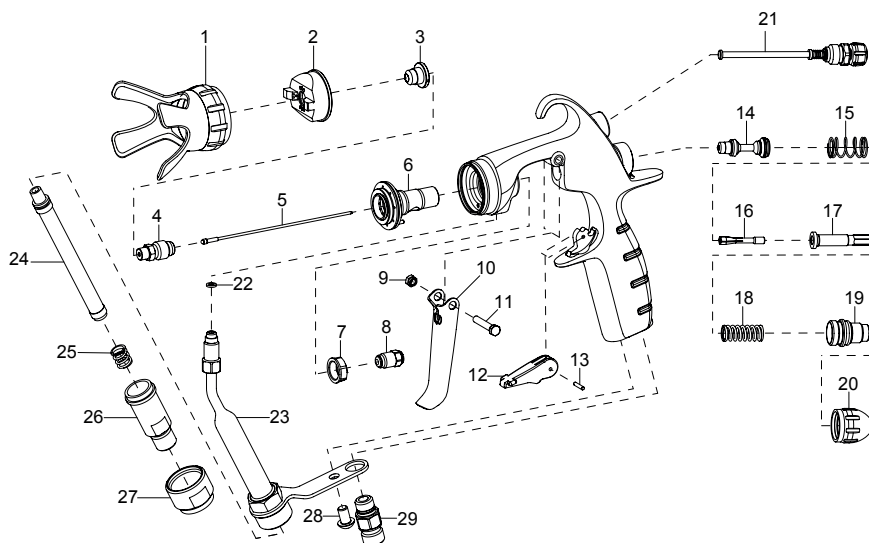


## 12.2 REASSEMBLING OF NEEDLE PACKING, NEEDLE & FLUID NOZZLE





## 13. SPARE PARTS LIST



Ref.	Description
1	Air Cap Ring
2	Air Cap Set
3	Nozzle Tip
4	Fluid Nozzle
5	Fluid Needle
6	Nozzle Holder
7	Hexagon Nut
8	Needle Packing Set
9	Trigger Nut
10	Trigger
11	Trigger Stud
12	Safety Lock
13	Pin
14	Air Valve
15	Air Valve Spring

Ref.	Description
16	Collets
17	Needle Bushing
18	Needle Spring
19	Air Valve Guide
20	Plug
21	Pattern Adjustment
22	Packing
23	Filter Holder
24	Filter
25	Filter Spring
26	Fluid Nipple
27	Protection Plug
28	Screw
29	Air Nipple M6x10
	Instruction Manual

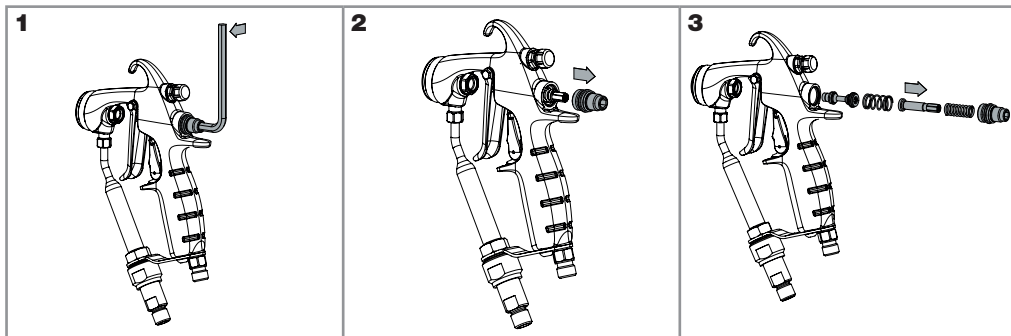
## 14. EXTRAORDINARY MAINTENANCE

### IMPORTANT

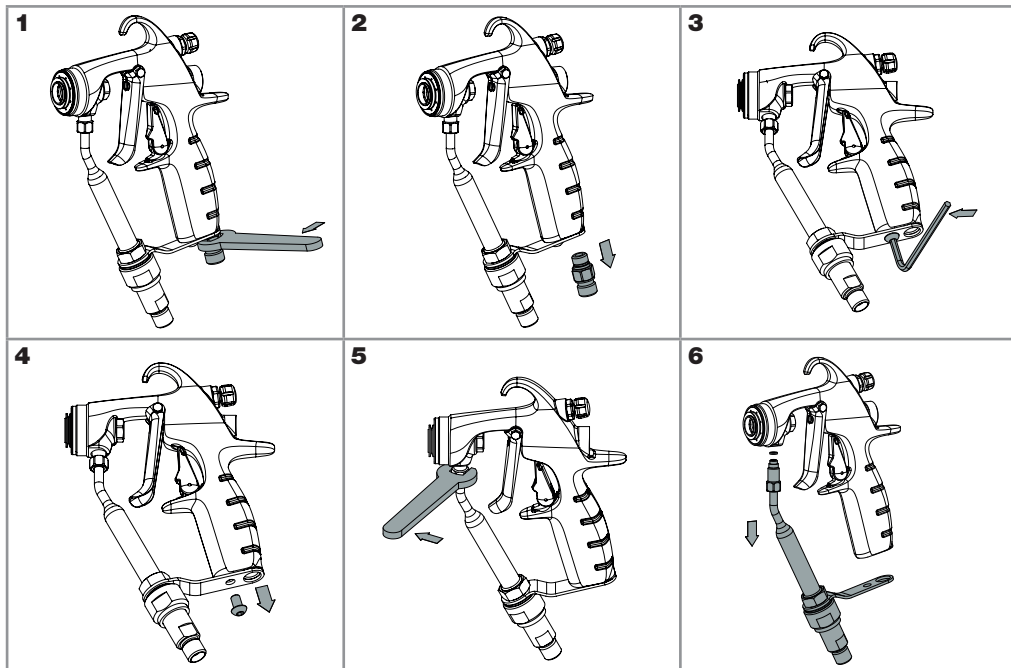


BEFORE TO DISASSEMBLE AIR VALVE, IT IS OBLIGATORY TO DISASSEMBLE NOZZLE TIP, NEEDLE SET AND NEEDLE PACKING AS DESCRIBED ON SECTION 12.1

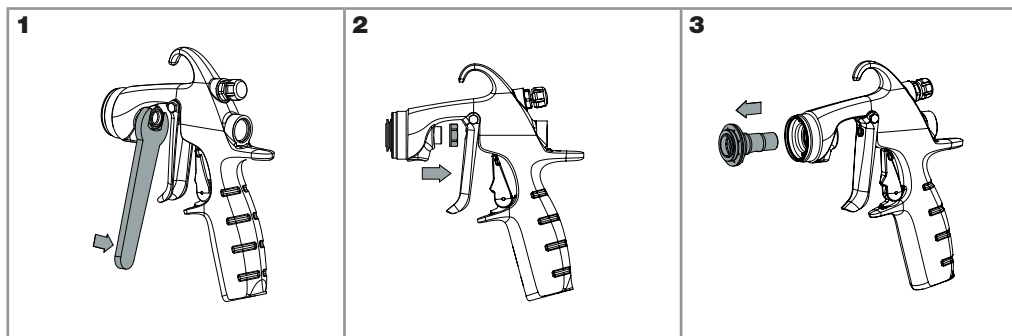
### 14.1 DISASSEMBLING OF AIR VALVE



### 14.2 DISASSEMBLE OF FILTER SECTION



## 14.3 DISASSEMBLE OF NOZZLE HOLDER



## 15. NOZZLE TIP SELECTION CHART

Description	Orifice (inch)	Angle°
MST-0725TR	0,007	25
MST-0735TR	0,007	35
MST-0740TR	0,007	40
MST-0925TR	0,009	25
MST-0940TR	0,009	40
MST-0950TR	0,009	50
MST-0965TR	0,009	65
MST-1125TR	0,011	25
MST-1140TR	0,011	40
MST-1150TR	0,011	50
MST-1165TR	0,011	65
MST-1325TR	0,013	25
MST-1340TR	0,013	40
MST-1350TR	0,013	50
MST-1365TR	0,013	65
MST-1515TR	0,015	15
MST-1525TR	0,015	25
MST-1540TR	0,015	40
MST-1550TR	0,015	50
MST-1565TR	0,015	65
MST-1825TR	0,018	25
MST-1840TR	0,018	40
MST-1850TR	0,018	50

## 16. PROBLEMS AND REMEDIES

PROBLEM	WHERE IT OCCURRED	WHERE TO CHECK	CAUSE	TIGHTEN	ADJUST	CLEAN	REPLACE
Air leaks	Each joint connection	All joints, connections	Weak tightening	X			
			Damaged				X
			Dirty			X	
	Air cap	Gun Body Air valve	Damaged				X
			Dirty			X	
			Worn				X
		Air valve spring	Weak spring				X
Fluid leaks	Each joint connection	All joints, connections	Weak tightening	X			
			Damage on seat				X
			Dirty			X	
	Fluid nozzle Air cap set holes	Fluid Nozzle Nozzle Holder	Weak tightening	X			
			Damaged				X
		Needle spring	Weak spring				X
		Air cap set	Damaged				X
			Dirty			X	
			Weak tightening	X			
	Fluid needle packing set	Fluid needle packing	Worn				X
		Fluid needle	Worn				X
		Fluid needle packing	Weak tightening	X			
Small or no fluid output	Fluid supply route	Fluid pressure	Pressure too low		X		
		Filter set	Clogged			X	X
		Filter hose	Clogged			X	X
	Tip of gun	Fluid nozzle	Clogged			X	
		Safety lock	Locked		X		
		Paint viscosity	Viscosity too high		X		
Paint resi- due buildup on air cap set	Air cap set	Air cap holes	Clogged			X	
			Deformed or damaged				X
			Paint build-up			X	
		Air cap, fluid nozzle	Deformed or damaged passages				X
		Fluid nozzle	Clogged			X	
			Worn or damaged				X
Incomplete pattern	Same as above	Same as above	Same as above				
	Atomizing air route	Atomizing air pressure	Too low (tails occur)		X		
			Too high (heavy at both ends of spray pattern)		X		

**17. DECLARATION OF CONFORMITY****DECLARATION OF CONFORMITY**

We **ANEST IWATA Europe s.r.l.** - Corso Vigevano, 46 - 10155 Torino - Italy declare, under our sole responsibility, that the product:

**MSGS-200 MULTI SPRAY GUN**

to which this declaration relates, is in conformity with European ATEX Directive 94/9/CE for use in zone 1 and zone 2 and Machinery Directive 2006/42/CE.

According with the following international requirements:

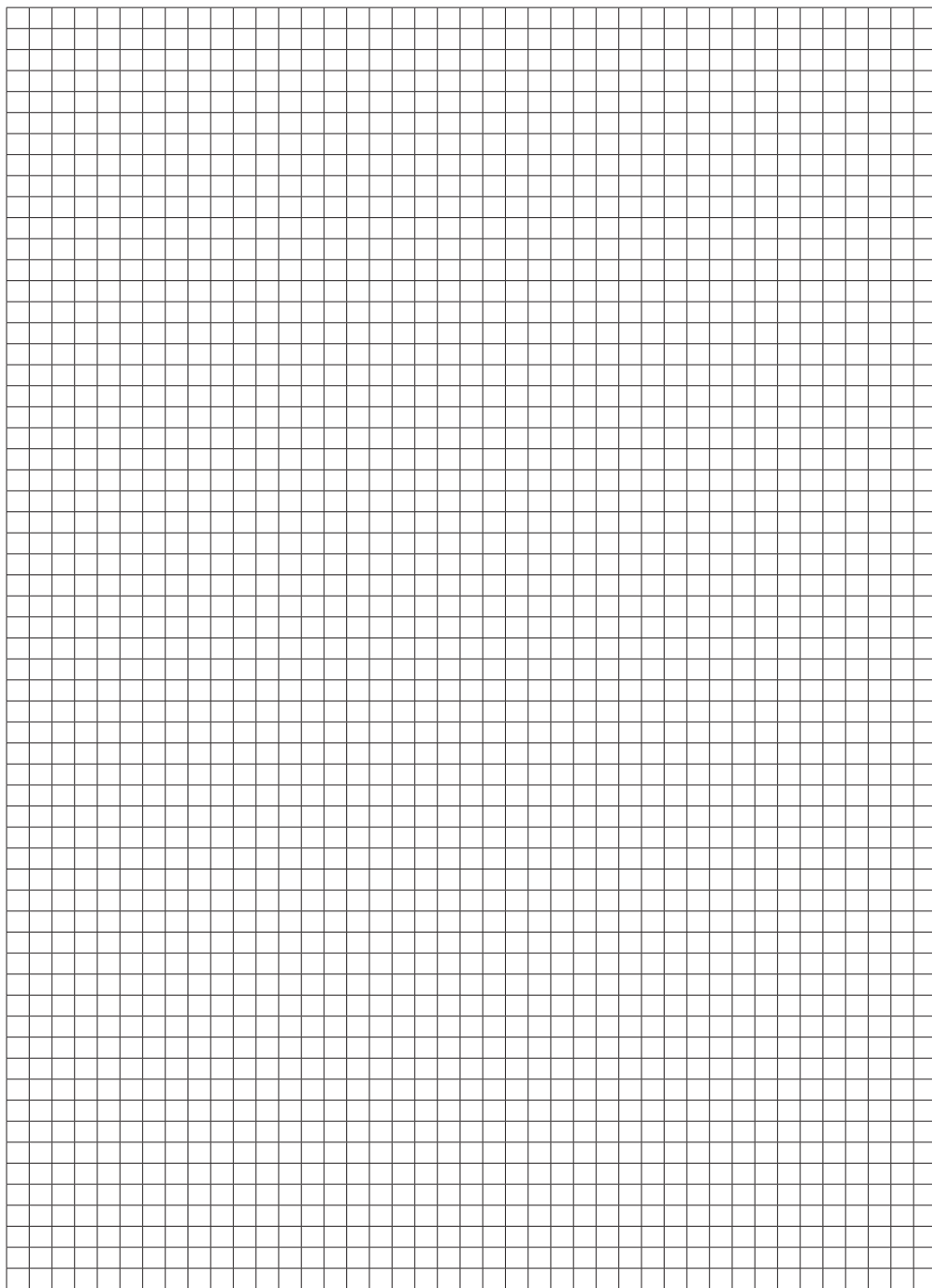
**EN 1127-1:2008, EN 13463-1:2009, EN ISO 12100:2010 and EN 1953:2010.**

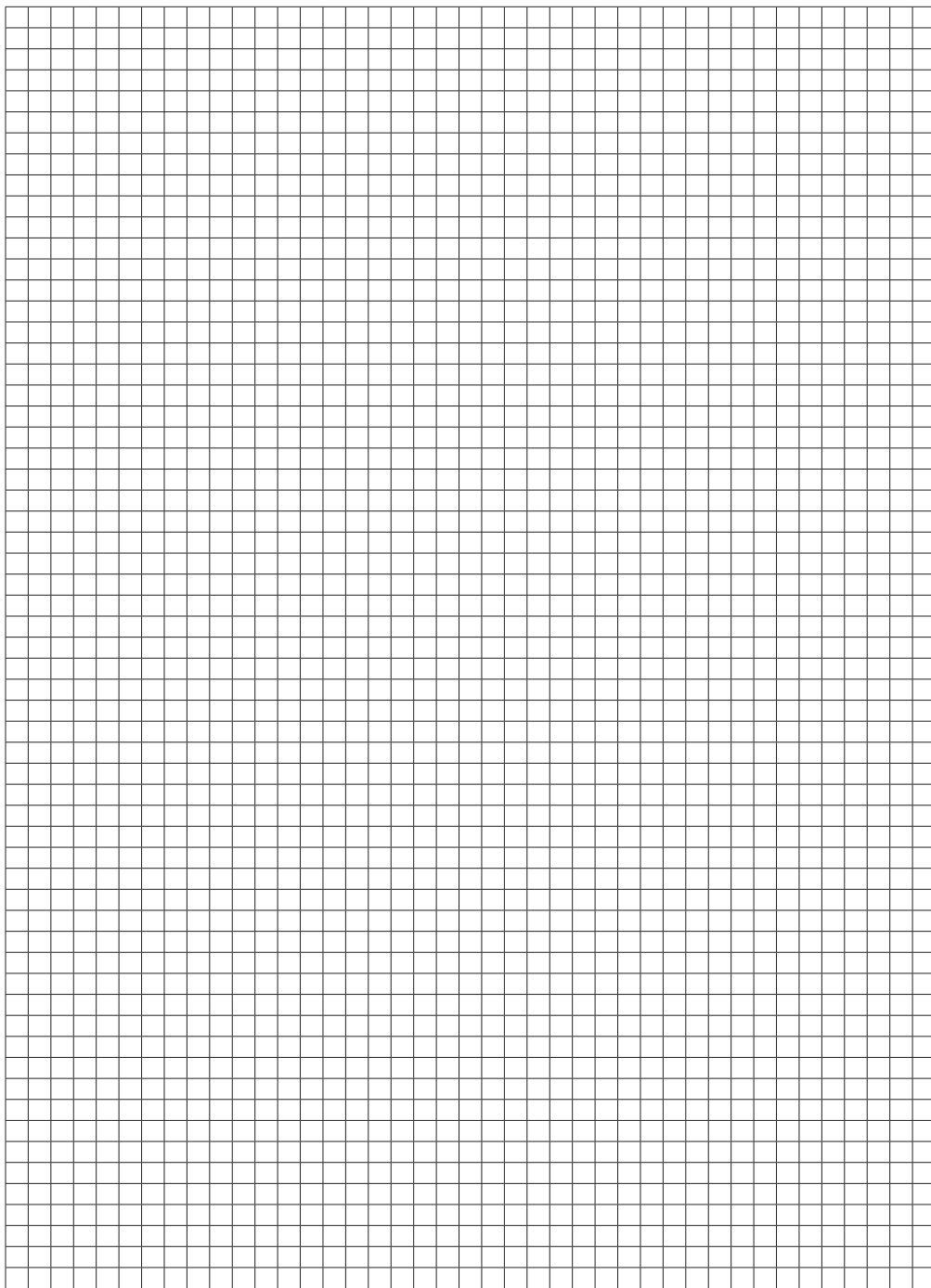
Name and position of issuer: **Mr. Marco G. VICENTINI, Managing Director**

Signature:

A handwritten signature in black ink, appearing to read 'Marco G. Vicentini'.

Date: **01.04.2015**





**ANEST IWATA Europe S.r.l.**

Corso Vigevano, 46 - 10155, Torino (IT)

Direct Tel. +39 011 - 22 74 402

Fax +39 011 - 22 74 000

[info@anest-iwataeu.com](mailto:info@anest-iwataeu.com)

[www.anest-iwataeu.com](http://www.anest-iwataeu.com)

**EUROPEAN SALES BRANCHES:****ANEST IWATA Italia S.r.l.**

Tel. diretto +39 011 - 24 80 868 - Fax: +39 011 - 85 19 44

[info@anest-iwata.it](mailto:info@anest-iwata.it)

[www.anest-iwata.it](http://www.anest-iwata.it)

**ANEST IWATA Iberica**

Tel.: +34 93 32 05 993 - Fax.: +34 93 32 05 965

[info@anest-iwata.es](mailto:info@anest-iwata.es)

[www.anest-iwata.es](http://www.anest-iwata.es)

**ANEST IWATA Deutschland**

Telefon: +49 (0)341 241 44 30 - Fax: +49 (0)341 252 55 95

[info@anest-iwata.de](mailto:info@anest-iwata.de)

[www.anest-iwata.de](http://www.anest-iwata.de)

**ANEST IWATA France**

Tél. +33 (0)4 - 74 94 59 69 - Fax +33 (0)4 - 74 94 34 39

[info@anest-iwata.fr](mailto:info@anest-iwata.fr)

[www.anest-iwata.fr](http://www.anest-iwata.fr)

**ANEST IWATA U.K.**

Tel.: +44 (0) 1480 40 54 19 - Fax: +44 (0) 1480 21 76 10

[enquiries@anest-iwata.co.uk](mailto:enquiries@anest-iwata.co.uk)

[www.anest-iwata.co.uk](http://www.anest-iwata.co.uk)

**ANEST IWATA Scandinavia**

Tel. +46 (0)31 - 340 28 60 - Fax +46 (0)31 - 340 28 69

[info@anest-iwata.se](mailto:info@anest-iwata.se)

[www.anest-iwata.se](http://www.anest-iwata.se)

**ANEST IWATA Polska**

Tel: +48 61 657 88 50 - Mobile: +48 883 395 007

[info@anestiwata.com.pl](mailto:info@anestiwata.com.pl)

[www.anest-iwata.pl](http://www.anest-iwata.pl)

**ANEST IWATA Corporation**

3176, Shinyoshida-cho, Kohoku-ku  
Yokohama, 223-8501 JAPAN - MJ351-02\_HDM