

# ALG-7 TE WB - ALG-72 TE WB AIRLESS SPRAY GUN

GB

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 necessary.

This ANEST IWATA Airless spray guns kit complies to ATEX regulations 94/9/EC.

Protection level: II 2 G X Suitable for using Zones 1 and 2.

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

# IMPORTANT

This Airless 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 Airless 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).

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.

<u></u> ₩ARNING	Indicates a potentially hazardous situation which, if not avoided, may result in serious injury or loss of life.
<b>⚠</b> 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:	250 bar (3600 PSI)	Max. Temperature:	
Noise Level (LAeqT)	62.9 dB (A)	Atmosphere	5 ~ 40 °C
Spray conditions:	Used nozzle tip NT-3005	Air and fluid	5 ~ 43 °C
	Fluid pressure 100 bar (1440 PSI)		
Tested with water		Measuring point: 1m backware	ds from gun, 1.6 m height

# TECHNICAL SPECIFICATIONS

Model	Max. Operating pressure bar (PSI)	Use	Fluid Output ml/min.	Fluid Hose connection	Filter	Mass g (lbs)
ALG-7 TE WB	250 (3600)	General	Ref. to 4. selection of nozzle tip accor-	G 1/4"	100 mesh	440 (0.97)
ALG-72 TE WB	230 (0000)	General	ding to kind of paint		(built in)	415 (0.91)

# SAFETY WARNINGS



## FIRE OR EXPLOSION HAZARD

#### 1. Sparks and open flames are strictly prohibited.

Paint can be highly flammable and can cause fire.

Avoid any ignition sources such as smoking, open flames, electrical goods, etc.

## 2. Securely ground Airless spray gun by using fluid hose with built-in ground wire.

Ground wire: Less than  $1M\Omega$ . Check the earth stability periodically.

Securely ground pump, Airless spray gun, workpiece and containers containing paint. Be sure to use fluid hose with built-in ground wire to have continuous grounding between pump and Airless spray gun. Use conductive container containing paint. If not, insufficient grounding can cause fire and explosion due to static electric sparking.

#### 3. Never use the following HALGOGENATED HYDROCARBON SOLVENTS

which can cause cracks or dissolution on our 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 are compatible with gun parts.

We can supply a list of materials used to manufacture the product.



## IMPROPER USE OF EQUIPMENT

#### 1. Never point Airless spray oun towards people or animals.

Never pull trigger of gun when human body or finger 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.

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

Use at more than max. operating pressure can cause explosion of Airless spray gun resulting in great danger.

## 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.

In order to release pressure, stop supply of air and fluid pressure to Airless spray gun.





## 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. If you feel any abnormality during operation, consult a medical doctor immediately.

# 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. Be sure to stop pump, reduce fluid pressure down to 0 bar and securely apply safety lock of Airless spray gun before you fit or remove nozzle tip.

Emission of paint during operation can cause great danger.

### 5. Never try to stop leaks by hand, when paint leaks.

In case of leaks, stop pump immediately and reduce fluid pressure down to 0 bar.

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 eye, mouth or skin. It is very dangerous. If you feel any abnormality or receive any injury, consult a medical doctor immediately

## 6. If operators pull the trigger many times during operation, it may cause carpal tunnel syndrome.

Rest if you feel any discomfort in your hand.

# 7. High stress caused from the pulsations of flow gun during painting operation for long time, may cause carpal tunnel syndrome. In the case of discomfort for your hand stop painting operation for a short break. It is recommendable to damp the pulsations emitted from pump, by using

damping components placed on the inlet connection(s) of the equipment or through the use of antipulsation hose.



## **BURST FLUID HOSE**

#### 1. Never use cracked, damaged, bent or crushed fluid hose.

High pressure paint emitted from small hole can pierce an iron plate and cause great danger.

## 2. Never bend fluid hose with a radius of less than permitted bend radius.

Contact the shop who sold the hose to you, or us, 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.

















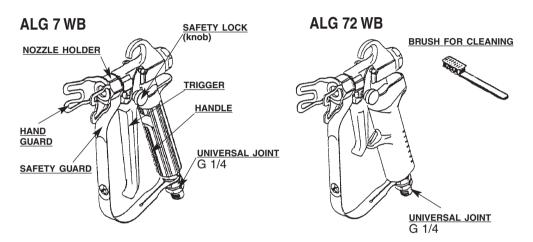




## OTHER PRECAUTIONS

- 1. Never alter this Airless 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.
- 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.
- Securely connect fluid hose.
  - If hose is disconnected during operation, hazardous hose movement and paint ejection will cause severe bodily injury.
- 5. If something goes wrong, immediately stop operation and find the cause. Do not use again until you have solved the problem.

# NAME OF COMPONENTS AND CHECKING THE PRODUCT



- When you open the package, be sure to check that all goods are included and are in good condition.
- If there is any damage or missing components, do not use the product to avoid danger and immediately contact the distributor who sold it to you.
- Always keep caution plates (warning display) clean and in good condition. If they are damaged or missing, replace with new ones.

# **PAINTING JOB**

## CONNECT FLUID HOSE

#### WARNING

Always firmly connect fluid hose.



If hose is disconnected during operation, hazardous hose movement and fluid ejection will cause severe bodily iniurv.

If fluid leaks from hose, never try to stop it by hand. Stop pump immediately and reduce fluid pressure down to 0 bar.



Fluids or solvent can enter in human body directly through eye, mouth or skin. It is very dangerous. If you feel any abnormality or receive any injury, consult a medical doctor immediately.

## CAUTION

Before using a new Airless gun for the firts time, clean fluid passages inside it. If not, rust preventive oil inside Airless gun can cause failure.

## FITTING OR REMOVING NOZZLE TIP OR FREE PATTERN TIP (each tip optional).

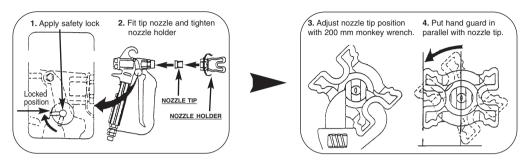
\*Refer to 4 and prepare nozzle tip separately.



#### WARNING

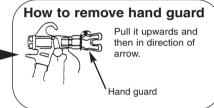
Be sure to stop pump, reduce fluid pressure down to 0 bar and securely apply safety lock of Airless spray gun before you fit or remove nozzle tip.

## WHEN USING NOZZLE TIP



## WHEN USING FREE PATTERN TIP

- 1. Apply safety lock
- 2. Remove hand guard
- 3. Remove nozzle holder and fit free pattern tip
- 4. Fit hand guard



## **PAINTING JOB**



#### WARNING

During painting, be sure to wear protective gear such as glasses, mask or gloves to avoid serious injury caused by paint or solvent which might enter your eyes or you might inhale.



## ATTENTION

As fluid pressure increases, paint mist becomes finer and finishing becomes better. But on the other hand, high pressure can be dangerous and precipitate corrosion of equipment and nozzle tip. Adjust pressure as low as possible, whilst still maintaining a satisfactory finish.

# **CLEANING AND MAINTENANCE**

Fully clean after each use with compatible cleaning liquid, to ensure longer lifetime of the spray gun and good performance in the next job.



#### WARNING

During painting, be sure to wear protective gear such as glasses, mask or gloves to avoid serious injury caused by paint or solvent which might enter your eyes or you might inhale.

Be sure to stop pump and reduce fluid pressure down to 0 bar before disassembling Airless spray gun.

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.

Process	Where to clean	How to clean	Remarks
1	Nozzle tip	Remove nozzle tip from Airless spray gun and clean it.	
2	Inside of gun body	Clean inside of Airless spray gun with cleaning liquid which is compatible with paint being used.	
3	Filter set	Remove No.12 handle from gun body.     Remove and clean No.11 filter set.	

# SELECTION OF NOZZLE TIP ACCORDING TO KIND OF PAINT

<Numbering system>

-Pattern width 25 cm at 30cm spray distance.

Fluid output 0.7ml/sec/cm of width at fluid pressure 98 bar/1421PSI.

NT - 25 07

Use nozzle tip with large figures of last 2 digits when you spray paints of high viscosity or easily clogged.

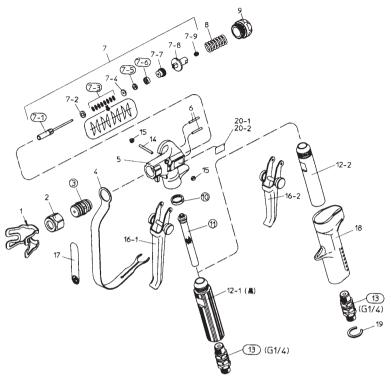
USAGE	KIND OF PAINT	<b>MODEL</b> (NT-0000)	REMARKS
Shipbuilding	Rubber chloride paint, Ship-bottom paint	2507-4009	Commonly used
	Tar epoxy paint	3011-4013	Last two digits are large due to high viscosity.
	Zinc rich paint (organic)	2507-4009	Commonly used
	Zinc rich paint (non-organic)	3019-4016	Last two digits are large because it is easy to clog.
Construction	Water base (emulsion paint), Ready mixed paint	2505-4007	Commonly used
Steel frame	Anti-corrosive paint	1507-2513	First two digits are small, and last two digits are large, for angle iron.
Woodwork	Clear lacquer, Synthetic resin varnish	1503-3005	Commonly used
Common metal	Lacquer, Melamine	1504-4007	Commonly used

# PROBLEMS AND REMEDIES

**IMPORTANT**: As for \* marked items, ask our distributor to remedy it for you. Incorrect remedy cannot achieve satisfactory performance.

Problem	Cause	Remedies
Paint does not come out.	Nozzle tip is clogged.	Clean nozzle tip and remove foreign matter from hole by needle.
	Paint is not fed.	Inspect pump.
	Filter set [11] is completely clogged.	Clean or replace.
Paint comes out	Pump pressure is low.	Increase pump pressure.
weakly.	Filter set [11] is clogged.	Clean or replace.
-	Nozzle tip is worn or number of nozzle	Replace with new tip or proper sized tip.
	tip is too large. (Pump capacity is small	
	compared with nozzle tip being used.)	
Paint does not	Pump pressure is too high.	Reduce paint pressure down to 250 bar (3.600 PSI)
stop smoothly.	Paint sticks to needle packing [7-6].	Disassemble,clean or replace parts.*
(Paint leaks from	Paint sticks to needle seat [6].	Disassemble,clean or replace parts.*
the gun tip).	Seat between needle bar set [7-1]	Disassemble,clean or replace parts.*
	and nozzle gland set [3] is worn.	
Paint leaks from	Needle packing seat [7-7] is loose.	Tighten needle spring holder [7-8].
needle spring seat	Wear or damage of needle packing [7-6]	Disassemble,clean or replace parts.*
[9] or needle seat [6].	Wear or damage of needle bar set [7-1]	Disassemble,clean or replace parts.*
Paint leaks from univer- sal joint [13]	Wear of packing in universal joint	Replace universal joint.

# SPARE PARTS LIST |

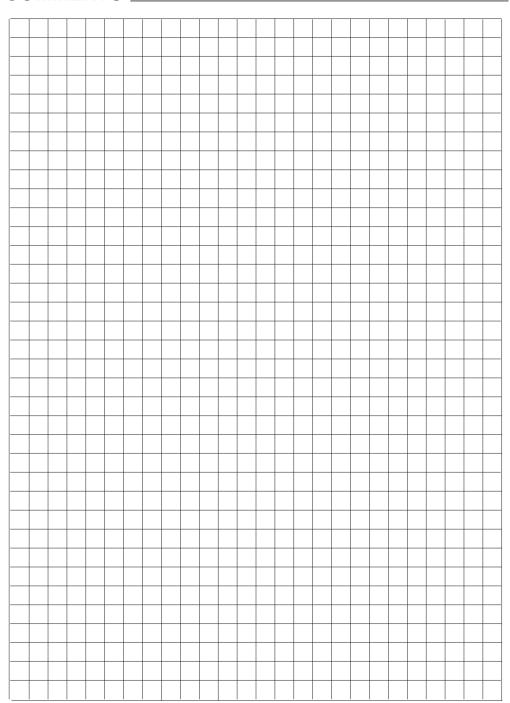


# Marked parts are consumable parts

DESCRIPTION	REF.PART
HAND GUARD	1
NOZZLE HOLDER	2
NOZZLE GLAND SET	3
SAFETY GUARD	4
GUN BODY	5
NEEDLE SEAT	6
NEEDLE SET	7
NEEDLE BAR SET	7-1
SPRING HOLDER	7-2
SPRING WASHER	7-3
PACKING HOLDER	7-4
SUB PACKING	7-5
NEEDLE PACKING	7-6
NEEDLE PACKING SEAT	7-7
NEEDLE SPRING HOLDER	7-8
SCREW	7-9
NEEDLE SPRING	8
NEEDLE SPRING SEAT	9

DESCRIPTION	REF.F	ART
PACKING	10	•
FILTER SET	11	•
HANDLE (grooved, black)	12-1	for ALG 7 TE WB
HANDLE (round, silver)	12-2	for ALG 72 TEWB
UNIVERSAL JOINT (G 1/4")	13	•
TRIGGER STUD	14	
HEX. CAP NUT	15	
TRIGGER SET (4 fingers)	16-1	ALG 7 TE WB
TRIGGER SET (2 fingers)	16-2	ALG 72 TE WB
CAUTION PLATE	17	
OUTER HANDLE	18	ALG 72 TE WB
SNAP RING	19	ALG 72 TE WB
NAME PLATE	20-1	ALG 7 TE WB
NAME PLATE	20-2	ALG 72 TE WB

# **COMMENTS**



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