

## USE and MAINTENANCE INSTRUCTION MANUAL

- **AZ3 HTE P.A.S.**  
with Pressurized Cup 600ml

**Concept**  
AZ3 HTE P.A.S.

## GRAVITY SPRAY GUN Series



en

it

fr

es

pt







de

se



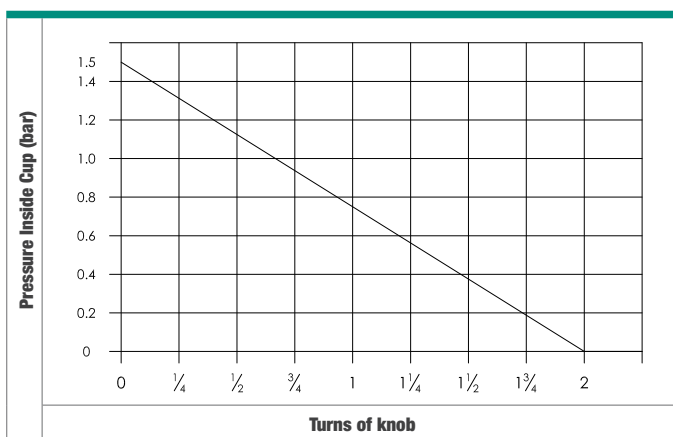
## TECHNICAL DATA



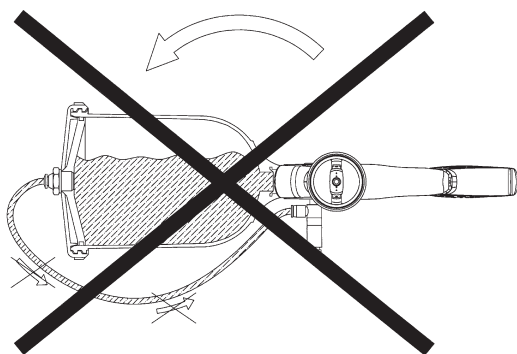
Technical	 Ø mm	 No.	 bar	 ml/min	 Nm <sup>3</sup> /min	 mm
AZ3 HTE P.A.S.	1.3	HTE-P1	2.5	190	286	270
	1.5			160		320
	1.8			396		380
	2.0			410		400

## DIAGRAM TO ILLUSTRATE PRESSURE REGULATION INSIDE CUP

Refer Chapter 5.5 "HOW TO ADJ. PRESSURE INSIDE CUP"



## IMPORTANT INFORMATION



**CAUTION** Do not lay the gun down. The air regulator can be damaged if paint flows backwards.

**ATTENZIONE** Non capovolgere la pistola. Altrimenti il regolatore aria potrebbe essere danneggiato dal flusso di ritorno della vernice.

**AVERTISSEMENT** Ne pas renverser le pistolet. Autrement le régulateur d'air, pourrait être endommagé du flux de retour de la peinture.

**PRECAUCIÓN** No vuelques la pistola. El regulador de aire podría ser dañado del flujo de retorno de la pintura.

**ATENÇÃO** Não deitar a pistola. O regulador de ar pode ser danificado com o regresso da pintura.

**VORSICHT** Bitte die pistole nicht im befüllten zustand auf die seite legen. Das luftreguliertventil kann durch rückfliessendes material beschädigt werden.

**VARNING** Läggs ej ned pistolen på sidan. Luftregulatorn kan skadas av att färg kommer in i luftslagen.

**GB** Do not open the lid while pulling the trigger.

**IT** Non aprire il coperchio mentre si preme il grilletto.

**FR** Ne pas ouvrir le couvercle de godet quand on appuie sur la gachette.

**ES** No abra la tapa al tiempo que tira del gatillo.

**PT** Não abra a tampa enquanto a puxar o gatilho.

**DE** Nicht oeffnen waehrend der Abzugsbuegel betaetigt wird.

**SV** Öppna inte locket med avtryckaren intryckt.



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.

This AIRGUNSA spray guns kit complies to ATEX regulations 2014/34/EU.



Protection level: II 2G 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.



**ALWAYS observe WARNINGS and CAUTIONS in this instruction manual.**

Symbol	WARNING	Hazard level	Consequence
	<b>WARNING</b>	Potentially hazardous situation	Death or serious injury
	<b>CAUTION</b>	Potentially hazardous situation	Minor to moderate injury
	<b>IMPORTANT</b>	Potentially hazardous situation	Property damage

## 1. TECHNICAL SPECIFICATIONS

Max. working air pressure:	7.0 bar (100 PSI)
Max. air pressure inside cup:	1.5 bar (21.76 PSI)
Weight g (lbs): (without cup)	730 (1.61)
Noise level (LAeqT)*:	77.6 dB(A)
Air Connection	G1/4"
Fluid Connection	G1/4"
Max. Temperature range:	Atmosphere 5 ~ 40 °C / Air-Fluid 5 ~ 43 °C
* Measuring point: 1m backwards from gun, 1.6 m height.	

## 2. SAFETY WARNING FIRE AND EXPLOSION



- Never use the following HALOGENATED HYDROCARBON SOLVENTS:** which can cause cracks or dissolution of gun body (aluminium) due to chemical reaction. UNSUITABLE SOLVENTS: methyl chloride, dichloromethane, 1,2-dichloroethane, carbon tetrachloride, trichloroethylene, 1,1,1-trichloroethane
- Sparks and open flames are strictly prohibited.** Paints can be highly flammable and can cause fire. Do not expose to open flames, electrical goods, cigarettes etc.
- Securely ground spray gun using conductive air hose.** (Less than 1MΩ)  
Always ensure that the spray gun is earthed correctly.

## PROTECTION OF HUMAN BODY



- Use in a well-ventilated site, using a spray booth.**  
Poor ventilation can cause organic solvent poisoning and fire.
- Always wear protective gear (safety glasses, mask, gloves) to avoid inflammation of eyes and skin.**  
In case of any physical discomfort, immediately seek medical advice.
- Wear earplugs if necessary.**  
Noise level can exceed 85 dB(A), depending on operating conditions and painting site.
- Pulling the trigger many times during operation, may cause carpal tunnel syndrome.** Always rest, in case of tiredness.

## IMPROPER USE



- Never point gun towards people or animals.**
- Never exceed maximum working pressure or maximum operating Temperature**
- Always release air and fluid pressure before cleaning, disassembling or servicing.** Otherwise, remaining pressure can cause bodily injury due to improper operation or scattering of cleaning liquid.
- Tip of fluid needle set has a sharp point.**  
Do not touch the tip during maintenance to avoid accidents.
- Never use this gun to spray foods or chemicals.** Otherwise, foreign substance, could cause corrosion of fluid passages which could adversely affect health.
- Never alter this spray gun,** to avoid insufficient performance and damage.
- If something goes wrong, immediately stop operation and find the cause.** Do not use again, until you have solved the problem.
- Do not enter working areas, where robots, reciprocators, etc. are used, until they have been turned off.** Otherwise, they could cause injury.

## 3. HOW TO CONNECT



### CAUTION

- Use clean air filtered through air dryer and air filter.
  - When using this gun for the first time after purchase, adjust fluid needle packing set, spray cleaner to clean fluid passages and remove rust preventive oil.
  - Firmly fix cup to spray gun, to avoid that disconnection of it, can cause bodily injury.
- Firmly connect an air hose to air nipple G1/4" (17).
  - Firmly connect a suitable cup to fluid nipple G1/4" (15).
  - Flush fluid passages with a compatible cleaner.
  - Pour paint into container, test spray, adjust fluid output and pattern width.

## 4. HOW TO OPERATE

- Suggested atomizing air pressure is 2.0 to 3.0 bar (29 to 44 PSI) at gun inlet.
- Paint viscosity differs according to paint property and painting conditions.
- Set the spray distance from the gun to the work piece, as near as possible within the range of 100-200 mm (3.9-7.9 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.

## 5. MAINTENANCE AND INSPECTION

### CAUTION



Before carrying out maintenance and inspection **ALWAYS** observe warning indications.

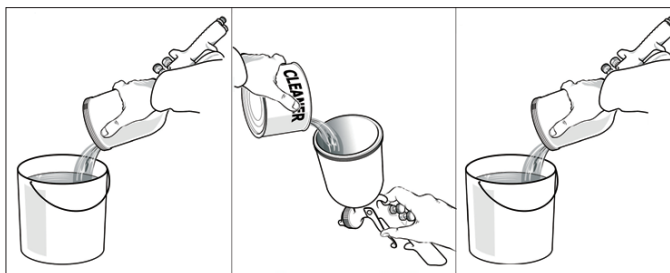
- Never use spare parts that are not AIRGUNSA originals.
- Never damage fluid nozzle tip, fluid needle or air cap holes.
- Never immerse the spray gun completely in liquids such as thinner.

### 5.1 CLEANING PROCEDURE

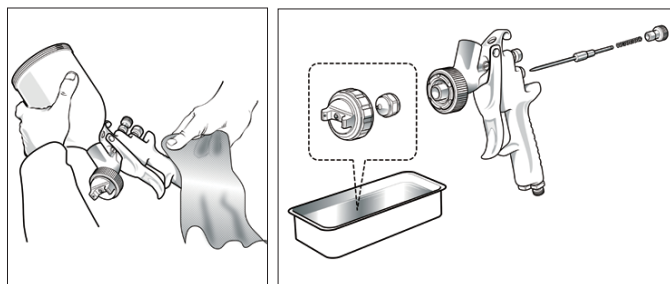


The fluid passages of the gun, must be cleaned thoroughly after each use, especially after use with bi-component paints. Incomplete cleaning can cause defective pattern shape.

- Never soak air cap set (1) in cleaning liquid for an extended period, even when cleaning.
  - Never use metal brush to clean the gun.
1. Drain remaining paint from spray gun and cup, into a suitable container.
  2. Pour cleaner into cup.
  3. Unscrew air cap (1) by 2 turns, to allow atomizing air to back flush, fluid passages of the gun.
  4. Pull trigger (13) and make sure, that atomizing air enters cup.
  5. Leave cleaner for a few seconds, then empty it into suitable waste container.



6. Repeat procedure above, until spray gun is clean.
7. Remove air cap (1) and cup from gun, then clean each section with brush soaked with cleaner and wipe out with waste cloth.



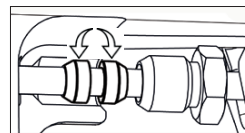
8. DRY ALL PARTS completely and apply spray gun lubricant to each thread.

### 5.2 MAINTENANCE

#### BEFORE DISASSEMBLY, CLEAN FLUID PASSAGES.

- Disassemble fluid nozzle (2), while keeping fluid needle (9) pulled (triggering) in order to protect its seat section.
- Disassemble fluid needle set (9). (only when strictly necessary)
- Remove the fluid adj. knob (6) and needle spring (8), extracting the spring and fluid needle set (9), from the back of fluid adj. guide (7) set still assembled on the gun body.
- Adjustment of the needle packing set, must always be carried out with fluid needle (9) still assembled, tightening the nut with a properly spanner, making sure that excessive tightening does not impede movement of fluid needle (9), resulting in paint leaking from fluid nozzle tip (2).

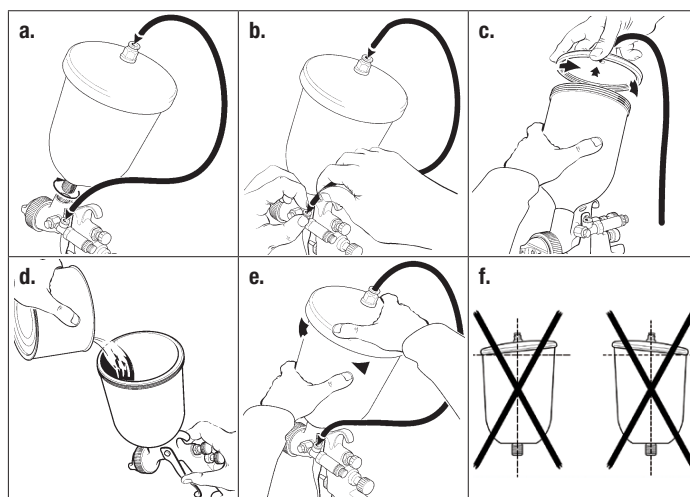
- When you remove needle packing nut (10), don't leave the two plastic parts of needle packing set in the gun body.
- Try to adjust it carefully while pulling trigger and confirming movement of fluid needle set (9).
- If you tighten it too much, repeat operation.



- Disassembly of pattern adjustment set (5) and/or air adjustment set (14). In order to disassemble pattern adj. set (5) and/or air adj. set (14), turn manually turn the hexagon knob of the adjustment counter-clockwise to open it completely and unscrew the hexagon face with a spanner turning it counter-clockwise.
- To reassemble pattern adjustment set (5) and/or air adjustment set (14), reverse the procedure.

**IMPORTANT:** Before reassembling pattern adjustment set and/or air adjustment set, make sure that these operations are carried out with the adjustment fully open.

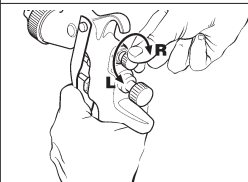
### 5.3 HOW TO FILL THE CUP



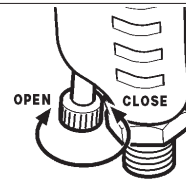
### 5.4 HOW TO ADJUST SPRAY PATTERN

#### PATTERN ADJUSTMENT (for all models)

Left turn (L)= LARGE pattern  
Right turn (R)= SMALL pattern

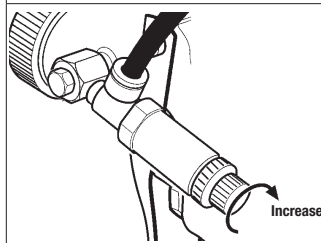


#### AIR FLOW ADJUSTMENT

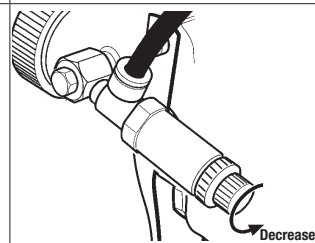


### 5.5 HOW TO ADJUST PRESSURE INSIDE CUP

Turn the knob clockwise to increase pressure inside cup.



Turn the knob counter-clockwise to reduce pressure inside cup.



## 6. TROUBLESHOOTING

### GUN DOES NOT SPRAY



- Fluid adj. knob (6) closed. Check and adjust.
- Tip hole of nozzle (2) obstructed. Check and clean.
- Paint filter obstructed. Check and clean.
- Non drip obstructed. Check and clean.

### INTERMITTENT SPRAY PATTERN



- Air escapes from fluid nozzle. Check , clean & replace if necessary.
- Air escapes from fluid needle packing (10). Tighten.
- Air escapes from cup joint. Tighten.
- Dirt inside air cap (1). Clean.

### DEFECTIVE SPRAY PATTERN



- Dirty nozzle (2) or air cap (1). Clean carefully.
- Nozzle (2) or air cap (1) has been damaged. Replace if damaged.
- Fluid nozzle (2) is loose. Tighten.
- Paint viscosity too high or too low. Dilute paint or increase viscosity
- Fluid output too high or too low. Adjust fluid adj. knob (6) to reduce or increase.

### LEAKING



- Fluid nozzle (2), needle set (9) or gun body, dirty, damaged or worn on seat. Clean or replace if necessary.
- Dirt inside air cap (1). Clean.
- Loose fluid adj. knob (6). Adjust.
- Fluid needle spring (8) is worn. Replace.
- Loose fluid nozzle (2). Tighten.
- Needle packing set (10) loose, too tight, dirty or worn. Adjust, clean or replace.

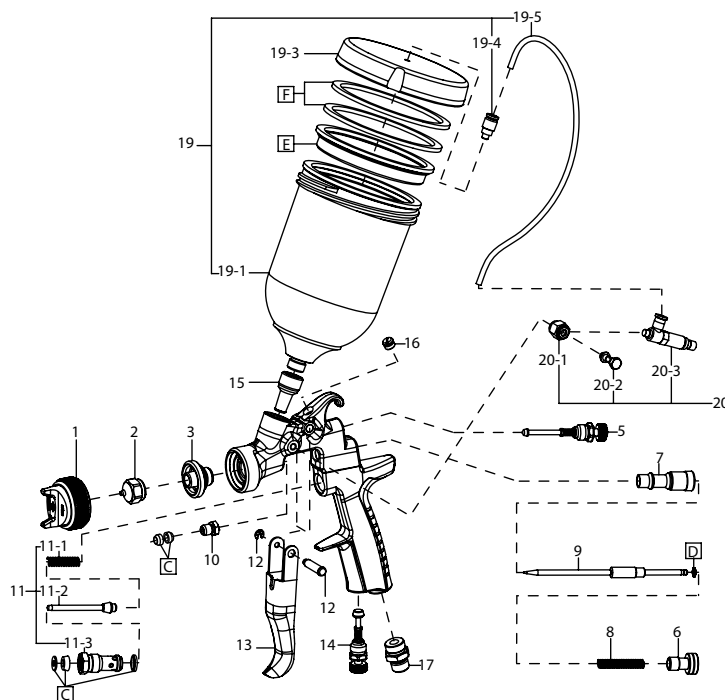
### AIR ESCAPES FROM AIR CAP

- Air valve (11-2), air valve seat (11-3) or air valve spring (11-1) dirty or damaged. Clean or replace if necessary.

### 6.1 INSPECTION & REPLACEMENT STANDARD

WHERE TO INSPECT	REPLACEMENT PART
a. Each hole passage of air cap (1) and fluid nozzle (2).	Replace if it is crushed or deformed.
b. Packing and O ring	Replace if it is deformed or worn out.
c. Leakage from seat section between fluid nozzle (2) and fluid needle set (9).	Replace them if leakage does not stop after fully cleaning fluid nozzle (2) and fluid needle set (9).  If you replace fluid nozzle (2) or fluid needle set (9) only, fully match them and confirm that there is no leakage.

## 7. SPARE PARTS LIST



REF.	DESCRIPTION	
1	AIR CAP SET	
2	FLUID NOZZLE	
3	NOZZLE HOLDER	▲
5	PATTERN ADJUSTMENT SET	
6	FLUID NEEDLE ADJ. KNOB	
7	FLUID NEEDLE GUIDE	▲
8	NEEDLE SPRING	
9	FLUID NEEDLE	
10	NEEDLE PACKING NUT	
11	AIR VALVE SET	
11-1	AIR VALVE SPRING	
11-2	AIR VALVE	
11-3	AIR VALVE SEAT	
12	TRIGGER STUD	
13	TRIGGER	
14	AIR ADJUSTMENT SET	
15	THREADED BUSHING	▲
16	PLUG	
17	AIR NIPPLE	▲
19	PRESSURIZED GRAVITY CUP SET (600ml)	
19-1	PRESSURIZED CUP	
19-3	LID	
19-4	STRAIGHT MALE ADAPTOR	
19-5	AIR HOSE	
20	PRESSURE REGULATOR SET	
20-1	ORIENTING RING	
20-2	BANJO STEM SINGLE	
20-3	PRESSURE REGULATOR	
C	PACKING SET	
D	SLIDE RING SET	
E	NON DRIP	
F	LID PACKING	

▲ Remove the following parts, only in case of repair and by qualified personnel.