

**AZ1 HTE 2P Pressure**  
**AZ1 HTE 2S Suction**

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 ARJUNSA spray gun 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 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.**

	Potentially hazardous situation	Death or serious injury
	Potentially hazardous situation	Minor to moderate injury
	Potentially hazardous situation	Property damage

**1. TECHNICAL SPECIFICATIONS**

Max. working air pressure: 7.0 bar (100 PSI) Air connection: G 1/4" M  
Noise Level (1Aeq): 77,6 dB (A) Flare connection: G 3/8" M  
Max. Temperature range: 5 - 40 °C Weight (g) (lbs): 475 (1.05)  
\* Measuring point: in backwards flow gun, 1.5m height. \*\* Weight without cap.

Nozzle size	Air Cap	Air inlet pressure (bar/lbs)	Fluid Outlet (ml/min)	Air Consumption (liters/min)	Pattern Width (mm)
1.0 (0.039)					230 (9.09)
1.5 (0.059)					220 (8.66)
1.5 (0.059)	HTE-P0	2.0 (29)	200 (7.07)	184 (6.64)	240 (9.45)
1.8 (0.071)					240 (9.45)
2.0 (0.079)					240 (9.45)
2.5 (0.098)					250 (9.45)
3.0 (0.118)					250 (9.45)
3.5 (0.138)					250 (9.45)
<b>AZ1 HTE 2P Pressure model with Long Pattern</b>					
1.0 (0.039)					330 (12.5)
1.2 (0.047)					400 (15.7)
1.5 (0.059)					415 (14.88)
1.8 (0.071)					430 (16.14)
2.0 (0.079)					430 (16.14)
2.5 (0.098)					430 (16.14)
3.0 (0.118)					430 (16.14)
3.5 (0.138)					430 (16.14)
<b>AZ1 HTE 2S Suction model with 1/4" Aluminium pin lock cup</b>					
1.6 (0.063)					175 (6.59)
1.8 (0.071)					184 (6.64)
1.8 (0.071)					184 (6.64)
2.0 (0.079)					184 (6.64)
2.5 (0.098)					184 (6.64)
3.0 (0.118)					184 (6.64)
3.5 (0.138)					184 (6.64)

**2. SAFETY WARNING**

- FIRE AND EXPLOSION**
- 
- Never use the following HALOGENATED HYDROCARBON SOLVENTS: when car cable crimps or dissolution of any body (especially due to their catalytic effect on UNSUITABLE SOLVENTS: methyl ethyl ketone, acetone, methanol, 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, cigarette, etc.
- Securely ground spray gun using conductive air hose. (Less than 10mA)
- 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 engine, 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 clothing that is necessary.
- Do not use the spray gun for cleaning or painting.
- Do not use the spray gun for cleaning or painting.
- Do not use the spray gun for cleaning or painting.

**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.

**3. HOW TO USE**

- Use clean air filtered through air dryer and air filter.
- When using this gun for the first time after purchase, adjust fluid needle passing set (10). Spray cleaner to clean fluid passages and remove rust preventive oil.
- Firmly fit hose or container to spray gun. To avoid disconnection of hose or container, that can cause bodily injury.
- Firmly connect an air hose to air nipple G1/4" (7).
- AZ1 HTE 2P model: Firmly connect the fluid hose or optional paint tube G3/8" T-4538 M (19) to fluid nipple G3/8" (12).
- AZ1 HTE 2S model: Firmly connect 1/4" aluminium pin lock cup AG-1 (16) to fluid nipple G3/8" (12).
- Flush fluid passages with a compatible cleaner.
- Four 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 43 PSI).
- Recommend hand-pump sprayers 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 100-250 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. Along the gun causes uneven painting.

**5. MAINTENANCE AND INSPECTION**

Before carrying out maintenance and inspection ALWAYS observe WARNING indications.

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

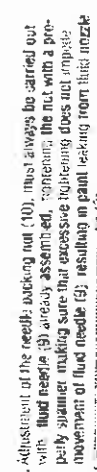
**5.1 CLEANING PROCEDURE**

- 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.

- Obtain remaining paint from spray gun and cap into a suitable container.
- Pour cleaner into container.
- Unscrew air cap (1) by 2 turns to allow atomizing air to back flush fluid passages of the gun.
- Pull trigger (13) and make sure that atomizing air enters cup.
- Leave cleaner for a few seconds, then empty it into suitable waste container.
- Repeat procedure above until spray gun is clear.
- Remove air cap (1) and dip from gun then clean each section with brush soaked with cleaner and wipe out with waste cloth.
- ONLY ALL PARTS completely and apply spray gun lubricant to each thread.

**5.2 MAINTENANCE PROCEDURE**

- Before disassembly, fully clean fluid passages.
- Disassemble fluid nozzle (2), while keeping fluid needle set (9) pulled (triggering) in order to protect its seat section.
- Disassemble fluid needle set (9) (only when strictly necessary).
- Remove fluid adj. knob (6) and needle spring (8), extracting the spring and fluid needle set (9), from the back of fluid cap, guide set (7) still assembled on the gun body (5).
- Adjustment of the needle packing set (10), must always be carried out with fluid needle (9) already 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 to (2).



- Try to adjust it carefully while pulling trigger and continuing 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 the adj. knob of the adjustment counter-clockwise. To open it completely and unscrew the hexagon face with a spanner turning it counter-clockwise.
- To assemble 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 INSPECTION & REPLACEMENT STANDARD**

WHERE TO INSPECT

- Each bolt, passage of air cap (1) Replace if it is crushed or deformed and fluid nozzle (2).
- Packing and O ring Replace if it is deformed or worn out
- Leakage from seat section between fluid nozzle (2) and fluid needle set (9). Replace them if leakage stops 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.

**DECLARATION OF CONFORMITY**

We, ARJUNSA s.r.l. - Zoccolato, 46 - 10150 - Umbria - Italy declare, as our sole responsibility, that the product:

**AZ1 HTE 2P & AZ1 HTE 2S CONCEPT SPRAY GUN**

to which this declaration relates, is in conformity with European ATEX Directive 94/9/EC for use in zone 1 and zone 2 and Machinery Directive 2006/42/EC. According with the following international requirements EN 13271 - EN 285-2 and EN 1853

Name and position of issuer: ARJUNSA s.r.l. - Zoccolato, 46 - 10150 - Umbria - Italy  
Signature: \_\_\_\_\_  
Date: 30/10/2012

## 6. TROUBLESHOOTING

### GUN DOES NOT SPRAY



- Fluid ad. knob (4) closed
- Tip hole of nozzle (2) obstructed
- Paint filter obstructed
- Non drip obstructed

- Check and adjust
- Check and clean
- Check and clean
- Check and clean

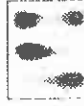
### INTERMITTENT SPRAY PATTERN



- Air escapes from fluid nozzle (2)
- Air escapes from fluid needle packing (10)
- Air escapes from fluid hose joint or fluid cup joint
- Dirt inside air cap (1)

- Check, clean & replace if necessary
- Tighten
- Tighten
- Clean

### DEFECTIVE SPRAY PATTERN



- Dirty nozzle (2) or air cap (1)
- Nozzle (2) or air cap (1) has been damaged
- Fluid nozzle (2) is loose
- Paint viscosity too high or too low
- Fluid output too high or too low

- Clean carefully
- Replace if damaged
- Tighten
- Dilute paint or increase viscosity
- Adjust fluid ad. knob (6) to reduce or increase

### LEAKING



- Fluid nozzle (2) needle set (9) or gun body dirty, warped or worn or seal
- Dirt inside air cap (1)
- Loose fluid ad. knob (6)
- Fluid needle spring (8) is worn
- Loose fluid nozzle (2)
- Needle packing set (10) loose
- Too tight, dirty or worn

- Clean or replace if necessary
- Clean
- Adjust
- Replace
- Tighten
- Adjust, clean or replace
- Too tight, dirty or worn

### AIR ESCAPES FROM AIR CAP

- Air valve (11-2), air valve seal (11-3) or air valve spring (11-1) dirty or damaged
- Air valve seat set or ring damaged or worn

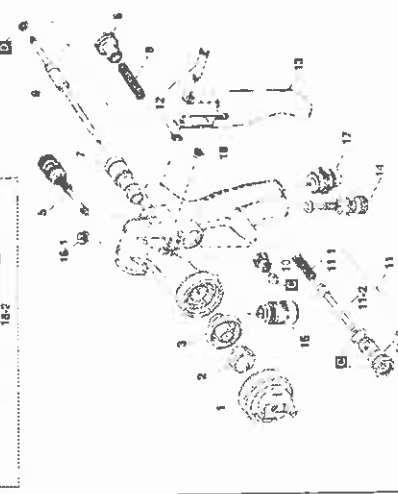
- Clean or replace if necessary
- Replace

## 7. SPARE PARTS LIST

18 - AG-1 - 1L Pin Lock Cup (for suction model AZ1HTE 2S)



19 - Paint Tube (optional) for pressure model AZ1HTE 2P



DESCRIPTION	Ref.
Air cap	Ref. 1
Fluid nozzle	Ref. 2
Nozzle holder	Ref. 3
Paint tube (optional)	Ref. 5
Paint needle adjustment knob	Ref. 6
Fluid adjustment guide	Ref. 7
Fluid needle spring	Ref. 8
Fluid needle spring set	Ref. 9
Needle packing nut	Ref. 10
Air valve set	Ref. 11
Air valve Spring	Ref. 11-1
Air valve	Ref. 11-2
Air valve seal	Ref. 11-3
Trigger stud	Ref. 12
Trigger	Ref. 13
Air adjustment set	Ref. 14
Fluid nipple G3/8"	Ref. 15
Screw	Ref. 16
Plug	Ref. 16-1
Air nipple G1/4	Ref. 17
Paint tube (optional) - AZ1HTE 2P;	Ref. 18
Packing set	Ref. 19
Slide ring set	Ref. 20
AG-1 - 1L Pin Lock cup for AZ1HTE 2S	Ref. 18-1
AG-1 - 1L Pin Lock cup set	Ref. 18-2
1 L container	Ref. 18-3
Suction tube	Ref. 1
Paint tube	Ref. 1
LED packing set	Ref. 1

NOTE: When replacing parts, specify gun model part items with ref. No. and marked fu. of air cap set, fluid nozzle and fluid needle.