# HIGH QUALITY SPRAY GUN

This manual contains IMPORTANT WARNINGS and INSTRUCTIONS Read and understand the instruction manual before use and retain for reference.

Main specifications | Maximum Working Pressure | 6.8 bar(98PSI) | Nosie level(LAeqT) | 74.8dB(A) | 5-40 |

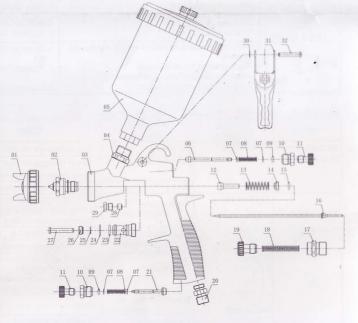
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Model	Type of feed	Nozzle orifice Air cap set	※Air pressure	Air consumption	Fluid output	Pattern width	Spary distance	Weight		
		Φ mm(in)	(in)	bar(psi)	1/min(cfm)	ml/min	mm(in)	mm(in)	g(ibs)	
K-100-1S	Suction	1.0		2.5-5bar (36-70Psi)	75(2.6)	85	120(4.7)	160(6.2)		
K-100-2S		1.3	PC-600SL		145(5.1)	150	160(6.3)	185(7.2)	605 (1.34) 525 (1.16)	
K-100-3S		1.5	3 "		225(7.9)	175	175(6.9)	200(7.8)		
K-100-1G	Gravity	1.0	PC-400GL		75(2.6)	95	130(5.1)	160(6.2)		
K-100-2G		1.3			145(5.1)	160	175(6.9)	185(7.2)		
K-100-3G	4 4	1.5			225(7.9)	200	190(7.5)	200(7.8)		
K-200-1S	7 -	1.3(0.051)	PC-1000SL		195(6.9)	140	160(6.3)	185(7.2)		
K-200-2S	C N	1.5(0.059)			230(8.1)	170	180(7)	200(7.8)	870(1.92	
K-200-3S	Suction	1.8(0.071)	PC-1000SL		250(8.9)	195	200(8)	220(8.6)		
K-200-4S		2.0(0.079)		2.5-5bar (36-70Psi)	290(0.3)	230	220(9)	235(9.0)		
K-400-1G		1.3(0.051)			195(6.9)	140	160(6.3)	185(7.2)		
K-400-2G	Gravity	1.5(0.059)	PC-600GP		230(8.1)	170	180(7)	200(7.8)	670(1.48	
K-400-3G		1.8(0.071)	PC-600GP				250(8.9)	195	200(8)	220(8.6)
K-400-4G		2.0(0.079)		E I be alter to	290(0.3)	230	220(9)	235(9.0)		

<sup>\*</sup>Atomizing air pressure means air pressure at gun inlet when trigger is puiled and air flows.

## PARTS LIST

NO.	DESCRIPTION
1	Air cap set
2	Fluid nozzle
3	Gun body
4	Fluid joint
. 5	Cup
6	Pattern valve
7	E-stoper
8	Pattern spring
9	O-ring
10	Pattern vavle seat
11	Pattern knob
12	vavle
13	Valve spring
14	Sealed-ring
15	O-ring
16	Fluid needle
17	Needle adjust seat
18	Needle spring
19	Needle adjust knob
20	Air inlet
21	Air valve pin
22	Valve guide
23	O-ring
24	Valve gasket
25	Valve shaft washer
26	Valve screw
27	Valve shaft
28	Needle packing plastic
29	Needle packing screw
30	E-stoper
31	Trigger
32	Trigger pin



When ordering parts, specify gun's model, part name with ref. No. and marked No. of air cap set, fluid nozzle and fluid needle.

# SAFETY WARNINGS

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- 1. Fluid and solvents can be highly flammable or combustible.
  - Use in well-ventilated spray booth.
  - Avoid any ignition sources such as smoking, open flames, electrical hazard, etc.



- 2. NEVER use HALOGENATED HYDROCARBON SOLVENTS
- (1.1.1 TRICHLORINE, ETHYL CHLORIDE, etc.),

which can chemically react with aluminum and zinc parts and cause an explosion. Be sure that all fluids and solvents used are chemically compatible with aluminum and zinc parts.

To reduce the risk of static sparking, grounding continuity to the spray equipment and object being sprayed must be maintained.



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- 1. NEVER point gun in the direction of human body.
- 2. NEVER exceed the maximum safe working pressure of the equipment.
- ALWAYS release air and fluid pressures before cleaning, disassembling or servicing.For emergency stop and prevention of unintended operation, a ball valve installed near the gun to stop air supply is recommended.



# A HAZARD CREATED WHILE COATING MATERIALS ARE ATOMIZED AND SPRAYED

- Toxic vapors produced by spraying certain materials can create intoxication and serious damage to health.
- Use the gun in well-ventilated areas.
- Always wear protective eyewear, gloves, respirator, etc., to prevent the toxic vapor hazard, solvents and paint from coming into contact with your eyes or skin.
- Noise level mentioned in main specifications was measured at 1.0 m behind the tip of the gun, 1.6 m height from floor.
- Wear earplugs if required.





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- 1. NEVER modify this product for any applications.
- 2. NEVER enter working areas of robots, reciprocators, conveyors, etc., unless machines are switched off.
- 3. NEVER spray foods or chemicals through the spray gun.
- 4. If something goes wrong, immediately stop operation and find the cause. Never use till you have solved the problem.

## INSTALLATION

**IMPORTANT** 

This gun should be operated by adequately trained operators only. Ensure that the gun has not been damaged during transportation. Clean, dry air should be supplied to the gun.

- 1. Connect an air hose to air nipple tightly.
- 2. Connect an applicable cup, 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.

## ■ MAINTENANCE AFTER PAINTING

#### A WARNING

-TURN OFF AIR AND COATING MATERIALS TO THE GUN AND RELEASE PRESSURE BY TRIGGERING THE GUN BEFORE DISASSEMBLING. CLEANING OR SERVICING.

-PAY ATTENTION WHEN DISASSEMBLING SPRAY GUN SINCE YOU MUST TOUCH SHARP PARTS.

-DO NOT DISASSEMBLE WITHOUT RECEIVING ENOUGH KNOWLEDGE AND EDUCATION.

- 1. Pour remaining paint into another container and then clean paint passages and air cap. Spray a small amount of thinner to clean paint passages. Incomplete cleaning will cause adverse pattern shape and particles. Clean fully and promptly two-component paint after use.
- 2.Clean other sections with attached brush soaked with thinner and waste cloth.
- Clean paint passages fully before disassembly. Use ring spanner, box wrench or optional exclusive spanner to remove fluid nozzle.
- 4. Remove fluid nozzle after removing fluid needle set or while keeping fluid needle pulled in order to protect seat section.
- 5. While keeping fluid needle set inserted, tighten fluid needle packing set by hand. Then tighten gradually by spanner.

Adjust packing set while pulling trigger and watching movment of fluid needle set since too much tightening will slow down movement of fluid needle and result in leakage from tip of nozzle.

If tightened too much turn counterclockwise to the sufficient position without stuck needle and fluid leakage.

6. Turn pattern adj.knob counterclockwise to fully open. And then tighten pattern adj. guide into gun body.

### **△** CAUTION

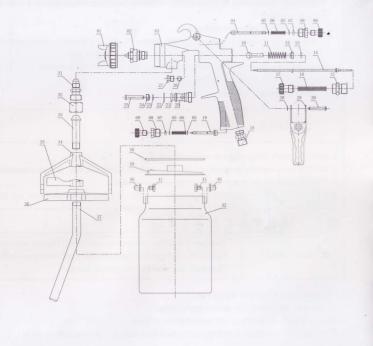
-NEVER USE COMMERCIAL OR OTHER PARTS INSTEAD OF THE ORIGINAL SPARE PARTS.

-NEVER IMMERSE THE WHOLE GUN INTO LIQUID SUCH AS THINNER.

-NEVER DAMAGE HOLES OF AIR CAP. FLUID NOZZLE AND FLUID NEEDLE.

## **PARTS LIST**

NO.	DESCRIPTION					
1	Air cap set					
2	Fluid nozzle					
3	Gun body					
4	Pattern valve pin					
5	E-stoper					
6	Pattern spring					
7	O-ring					
8	Pattern adjust seat					
9	Pattern adjust knob					
10	Valve					
11	Valve spring					
12	Sealed-ring					
13	O-ring					
14	Fluid needle					
15	Needle adjust seat					
16	Needle spring					
17	Needle adjust knob					
18	Air inlet					
19	Air valve pin					
20	Valve guide					
21	O-ring					
22	Valve gasket					
23	Valve shaft washer					
24	Valve screw					
25	Valve shaft					
26	Needle packing plastic					
	Needle packing screw					
28	E-stoper .					
29	Trigger,					
30	Trigger pin					
31	Fluid joint					
32						
33	Cup connecter					
34	Bracket					
35	Wrench					
36	Cup cover					
37	Fluid pipe					
38	Cover gasket					
39						
40	Rivet sheath					
41	Rivet					
42	Cup					



### HOW TO OPERATE

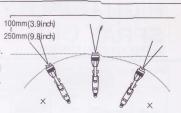
Suggested air pressure is 2.0 to 3.0 bar (28 to 43 psi).

Recommended paint viscosity differs according to paint property and painting conditions. 15 to 23 sec. / Ford #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 workpiece 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 work piece at all times. Then, the gun should move in a straight and horizontal line. Arcing the gun causes uneven painting.



## TROUBLESHOOTING

Spray Pattern	Problems	Remedies		
	Air enters between fluid nozzle and tapered seat of gun body.	Remove fluid nozzle to clean seat.  If it is damaged, replace nozzle.		
Fluttering	2. Air is suctioned from fluid needle packing.	2. Tighten fluid needle packing.		
Crescent	Paint buildup on air cap partially clogs horn holes.     Air pressure from both horns differs.	Remove obstructions from born holes.  But do not use metal objects to clean horn holes.		
Inclined	Paint buildup on air cap partally clogs horn hole or air cap center hole, or causes damage.     Loose fluid nozzle.	Remove obstructions,     Replace if damaged,     Remove fluid nozzle and clean seated section.		
Split	Paint viscosity too low.     Fluid output too high.	1. Add paint to increase Viscosity. 2. Adjust fluid adj. knob or pattern adj. knob.		
Heavy Center	Paint viscosity too high.     Fluid output too low.	Reduce viscosity.     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.		

R1:retighten R2: adjust R3 : clean R4 : replace parts

Problem	Where it	Parts to be	Cause		Remedy			
1 10010111	occurred	checked		R1	R2	R3	R4	
Air leaks (from	Air valve set	Air valve	* Dirt or damage on seat			0	0	
tip of air cap)		Air valve seat set	* Dirt or damage on seat			0	0	
			* Wear on air valve spring				0	
		O ring	* Damage or deteriorated				0	
	Fluid nozzle	Fluid nozzle- fluid needle set	* Dirt, damage, wear on seat			0	0	
Paint leaks			* Loose fluid needle adj. knob		0			
			* Wear on needle spring	_			0	
		Fluid nozzle- gun body	* Insufficient tightening	0				
			* Dirt or damage on seat			0	0	
	Fluid nozzle- packing se	Fluid nozzle-	* Needle does not return due to packing set too tight		0		0	
		* Needle does not return due to paint buildup on fluid needle		0	0			
	Fluid needle	Needle packing set- needle set	* Wear	0			0	
		Packing seat	* Insufficient tightening	0				
Paint does not	Tip of gun	Fluid adj. knob	* Insufficient opening		0			
flow		Tip hole of nozzle	* Clogged			0		
		Paint filter	* Clogged			0	0	