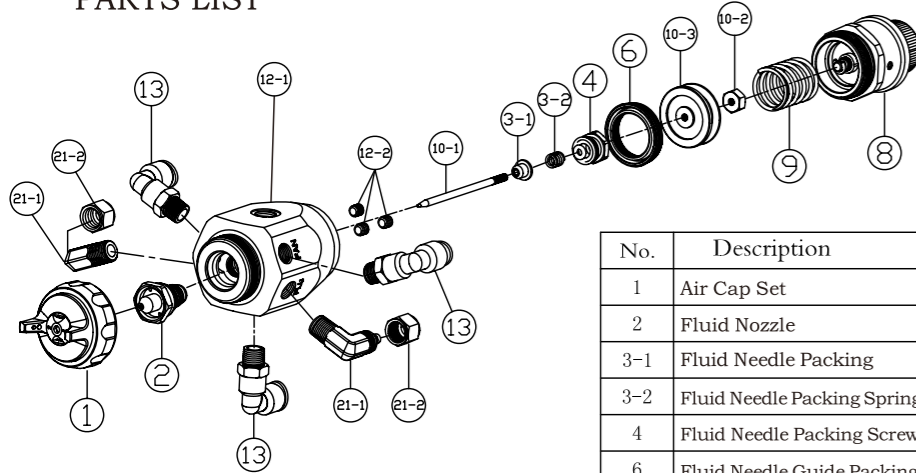


PARTS LIST



No.	Description	Q'ty
1	Air Cap Set	1
2	Fluid Nozzle	1
3-1	Fluid Needle Packing	1
3-2	Fluid Needle Packing Spring	1
4	Fluid Needle Packing Screw	1
6	Fluid Needle Guide Packing	1
8	Fluid Adjusting Knob Guide Set	1

No.	Description	Q'ty
9	Needle Spring	1
10-1	Fluid Needle	1
10-2	Fluid Needle Fixed Screw	1
10-3	Footstock	1
12-1	Gun Body	1
12-2	Seal Bolt	3
13	Air Quick Coupler	3
21-1	Fluid Connector	2
21-2	Fluid Connector Sack Cap	2

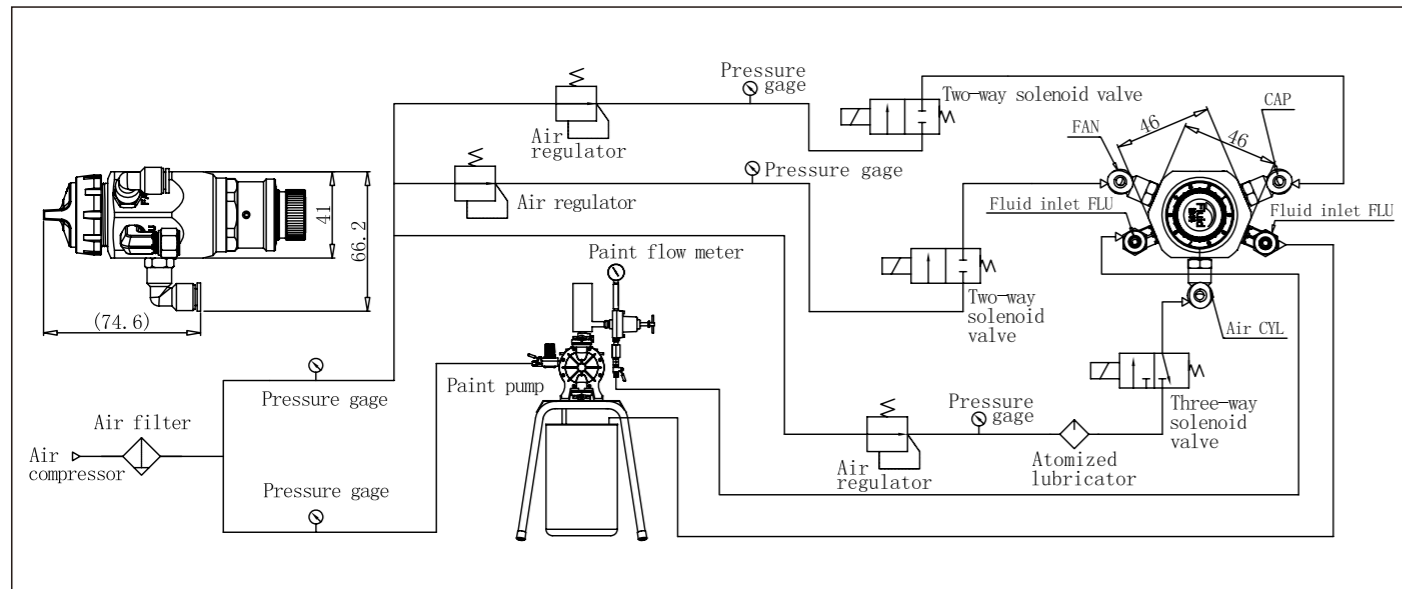
Prior to operation read the operating instructions carefully.

OPERATION

The AUTOMATIC SPRAY GUN has been designed as an AIR OPERATED TOOL, and in the interests of safety must only be used for the purpose for which it has been designed. The tool should on no account be used for any other purpose for whatever reason, this could result in danger to the operator and those within the immediate working area. Whenever possible there should be air filters and air regulators in the system as diagram. Check fittings and hoses regularly for signs of fraying, or accidental damage. Replace any worn items before continuing to operate the Automatic Spray Gun. Connector atomizing air hose to atomizing air connector (CAP marked) and operating air hose to operating air connector (CYL marked) tightly. Connect fluid hose to fluid connector (FLU marked) tightly.

ADJUSTMENT

Valve orifice inside two-way or three-way solenoid valve should be minimum $\phi 4\text{mm}$ (0.157 in). Operating air hose should be within 10 m (32.8 ft) and its inner diameter not less than 6mm (0.236 in) to avoid delayed operation and any failure. Adjust operating air pressure from 3 to 4 bar (43 to 57 psi). Normally adjust atomizing or fan air pressure 2.2~2.7 bar (31~38 psi) with RAR-110/RAR-210. The recommended spray distance to object is 15~20 cm (5.9~7.9 in) for RAR-110; 20~25 cm (7.9~9.8 in) for RAR-210. The recommended material viscosity is 15~23 seconds/Ford#4. It varies according to material properties and spraying conditions. Material should be filtered through 60~90 mesh filter before use.



SERVICING

- Clean air cap set, fluid nozzle and fluid needle with brush after each operation.
- Do not submerge complete automatic spray gun in solvents.
- Do not damage holes of air cap set and fluid nozzle.
- Flush the gun material passage with a compatible solvent.
- Ensure the material and air supply are disconnected before effecting any work on the Automatic Spray Gun.

PERSONAL PROTECTIVE EQUIPMENT

The use of breathing mask is recommended at all times when spraying. The noise level may exceed 85 dB (A) when the spray gun is being used, a sound absorber protection is also recommended. Always wear goggles and gloves when spraying or cleaning.

SAFETY

Never allow untrained or unauthorized persons to operate this automatic spray gun. Never exceed the recommended air pressure. Never use matches, smoke or operate a spray gun in the vicinity of a naked flame. Do not spray food or chemicals through the automatic spray gun. Use only original spare parts. Do not use the following solvents. 1.1.1-Trichloroethane and Methylene Chloride. These solvents can chemically react with aluminium used in automatic spray guns possibly causing an explosion. Do not use these solvents for equipment cleaning or flushing. Automatic spray gun should never be stored in acid laden cleaners. If in doubt consult the material supplier.

Model	Type of feed	Nozzle orifice ϕ mm	Atomizing air pressure MPa (bar)	Air consumption l/min	Fluid output ml/min	Pattern width ± 20 mm	Air cap set	Approx weight g
RAR-110-P08 (V/W)	Pressure	0.8	0.29 (3.0)	270	150	190	E2P	486
RAR-110-P10 (V/W)		1.0	0.29 (3.0)	270	200	220	E2P	
RAR-110-P10 (V/W)		1.0	0.24 (2.5)	145	180	200	E2	
RAR-110-P13 (V/W)		1.3	0.24 (2.5)	260	250	230	H2	
RAR-110-P15 (V/W)		1.5	0.24 (2.5)	260	270	245	H2	505
RAR-110-P18 (V/W)		1.8	0.24 (2.5)	190	310	240	N2	
RAR-210-P12 (V/W)		1.2	0.29 (3.0)	530	500	400	G2P	
RAR-210-P15 (V/W)		1.5	0.29 (3.0)	330	270	340	K2	
RAR-210-P18 (V/W)		1.8	0.29 (3.0)	330	330	340	K2	
RAR-210-P20 (V/W)		2.0	0.29 (3.0)	360	400	320	R2	
RAR-210-P25 (V/W)		2.5	0.29 (3.0)	360	500	330	W2	486
RAR-110-P08 (V/W)		0.8	0.29 (3.0)	250	150	80	C21	
RAR-110-P10 (V/W)		1.0	0.29 (3.0)	250	200	90	X4	
RAR-210-P08 (V/W)		0.8	0.29 (3.0)	380	300	110	C21	
RAR-210-P10 (V/W)	1.0	0.29 (3.0)	380	350	130	C21	505	

RAR-110 Spray distance: 200mm. Paint Viscosity: 20±1seconds/RV-2. The hose's caliber of fluid inlet, air inlet and CYL inlet are 6X4mm.
RAR-210 Spray distance: 250mm. Paint Viscosity: 20±1seconds/RV-2. The hose's caliber of fluid inlet, air inlet and CYL inlet are 6X4mm.

TROUBLE -SHOOTING

TROUBLE	CAUSE	SOLUTION
Fluttering	a. Insufficient material in cup. b. Dry or worn fluid needle packing set or loose fluid needle packing screw. c. Loose or damaged fluid nozzle.	a. Refill material. b. Lubricate or replace fluid needle packing set or tighten fluid needle packing screw. c. Tighten or replace fluid nozzle.
Crescent	a. Material store-up on air cap.	a. Clean air cap with proper objects. b. Clogged air holes must not be cleaned with metal objects.
Heavy top or bottom	a. Material store-up on air cap. b. Dirty or damaged fluid nozzle.	a. Clean or replace air cap. b. Clean or replace fluid nozzle.
Split	a. Material too thin or not enough. b. Atomizing air pressure too high.	a. Increase material viscosity. b. Reduce air pressure.
Heavy center	a. Material too thick or too much. b. Atomizing air pressure too low.	a. Reduce material viscosity. b. Increase air pressure.
Material drips from fluid nozzle	a. Obstructions between fluid nozzle and fluid needle. b. Worn fluid nozzle or needle.	a. Clean fluid needle and fluid nozzle in thinner. b. Replace parts.
Material leaks from needle packing screw	a. Loose fluid needle packing screw. b. Dry or worn fluid needle packing.	a. Tighten fluid needle packing screw, check fluid needle for free movement. b. Lubricate or replace needle packing.