



AOM SPRAY EQUIPMENT  
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## **HVLP SPRAY GUN**

**Model No. R200**



*Read this Instruction Manual carefully and understand it completely, basic precaution should be strictly followed to prevent the damage to the tool and injury to the operator. Retain this manual for further reference. And you should pay more attention to the Technical Data.*



### **CONTAIN:**

- ◆ Description
- ◆ Specification and Technical Data
- ◆ Important Safety Instruction
- ◆ Instructions for Operation
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- ◆ Troubleshooting/Repairs
- ◆ Parts List

## Description

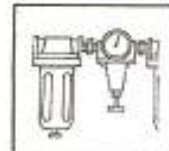
HVLP (High Volume, Low Pressure) spray gun can be operated at less than 10 psi at the nozzle. Outstanding characteristic of fine atomization creating a smooth finish with minimum overspray. Stainless steel needle and nozzle with adjustable fluid, pattern and air control accommodate a variety of coatings. Precise air cap set made by FANUC ROBODRILL machining center. New ergonomic designed handle for comfortable grip.

## ◆ Specifications And Technical Data

Item No.	RP8612/R200S
Air Inlet	1/4"
Type of Feed	Suction
Standard Dia of Nozzle	1.5mm
Optional Dia of Nozzle	1.3-2.5mm
Recommended air pressure	2.0-3.5bar (29 – 51psi)
Max. pressure of air	6.2 bar (90psi)
Paint Cup Capacity	1000cc
Avg. Air Consumption	84.3-109.6 l/min (3.0-3.9cfm)
Pattern Width	180-250mm (7.09-9.84")

## Important Safety Instructions

1. For toxic vapors produced by spraying certain materials can create intoxication and serious damage to health. Always wear safety glasses, gloves and respirator to prevent the toxic vapor hazard, solvent and pointing paint coming into contact your eyes or skin. (see fig 1)
2. Never use oxygen, combustible or any other bottle gas as a power source or would cause explosion and serious personal injury. (see fig 2)
3. Fluid and solvent can be highly flammable or combustible. Please Use the tool only in well-ventilated area, and avoid any ignition sources, such as smoking, open flames and decrial hazard. (see fig 3)
4. Disconnect tool from air supply hose before doing tool maintenance and during non-operation, for emerge stop and prevention of unintended operation, a ball valve near the gun to air supply is recommend.
5. Use clean, dry and regulate compressed air rated at 3.0–4.0bar, never exceed maximum permissive operating pressure 6.2 bar (90psi) (see fig 4)
6. Never use homogenate hydrocarbon solvent, which can chemically react with aluminum and zinc parts and chemically compatible with Alum. and zinc pats.
7. Never point gun at you and others at any time.
8. Before operating the tool, make sure all the screws & caps are securely tightened in case of leaking:



9. Before painting, do inspection for free movement of trigger and nozzle to insure tool can operate well.
10. Never modify this tool for any other applications. Only use parts, nozzles and accessories recommended and accessories recommended by manufacturer.

## Instructions For Operation

### Preparation

1. After unpacking the product, inspect carefully for any damage that may have occurred during transit. Make sure to tighten fittings, bolts, etc., before putting unit into service.
2. Thoroughly mix and thin paint in accordance with the paint manufacturer's instructions. Most materials will spray readily if thinned properly.
3. Strain material through filter, cheese cloth or a paint strainer.
4. Fill the canister about  $\frac{3}{4}$  full and start the air compressor.

**WARNING** DO NOT EXCEED Maximum Pressure of Spray Gun or any other parts in the compressor system.

5. After Connect the gun to air supply, please make sure that the fluid cap, container and air hose have been connected tightly with spray gun.
6. Set up a piece of cardboard or other scrap material to use as a target and adjust for best spray pattern.

**WARNING** Never aim or spray at yourself or anybody else which would cause serious injury.

7. Test the consistency of the material by making a few strokes on a cardboard target. If material still appears too thick, add a small amount of thinner. THIN WITH CARE! Do not exceed paint manufacturer's thinning recommendations.

### Adjustment

The desired pattern and fine atomization can be easily obtained by regulating the Pattern Adjusting Knob, Fluid (PAINT) Adjusting Knob.

**PATTERN ADJUSTMENT:** Turning Pattern Adjusting Knob to the right until tight will make spray pattern round, or turning left make spray pattern ellipse.

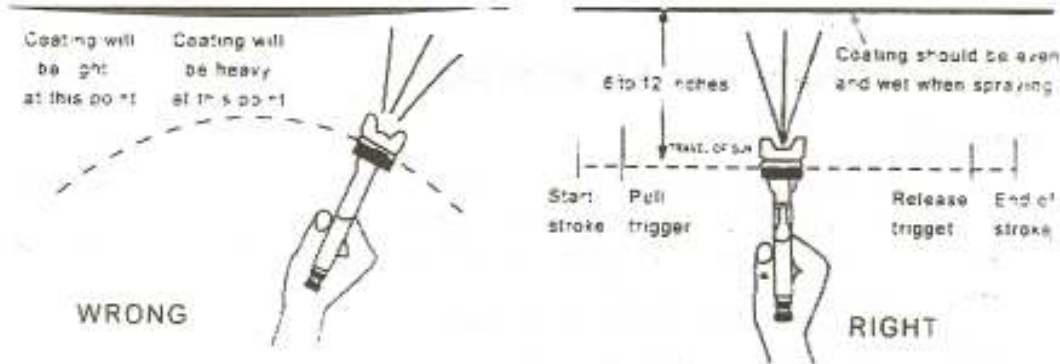
**Fluid (PAINT) ADJUSTMENT:** Turn the Paint Adjusting Knob clockwise will decrease the volume of fluid output and counter-clockwise will increase fluid output.

### Operation

1. Begin spraying. Always keep the gun at right angles to the work.
2. Keep the nozzle about 6 to 12 inches from the work surface. Grip the gun keeping perpendicular with spraying area then move it parallel for several times. Stopping gun movement in mid-stroke will cause a build up of paint and result in runs. Do not fan the gun from side to side while painting. This will cause a build-up of paint in the center of the stroke and an insufficient coating at each end.
3. Trigger the gun properly. Start the gun moving at the beginning of the stroke **BEFORE SQUEEZING THE TRIGGER** and release the trigger **BEFORE STOPPING GUN MOVEMENT** at the end of the stroke. This procedure will blend each stroke with the next without showing overlap or unevenness.
4. The amount of paint being applied can be varied by the speed of the stroke, distance from the surface and adjustment of the fluid control knob.
5. Overlap strokes just enough to obtain an even coat.

**NOTE:** Two thin coats of paint will yield better results and have less chance of runs than one heavy layer.

6. Use a piece of cardboard as a shield to catch overspray at the edges of the work to protect other surfaces.



## ◆ Maintenance

**Incomplete cleaning could cause function failures and a degradation of the fan form.**

1. Remove any remaining paint by pouring it into another container.
2. Disassemble the spray gun making sure to remove the needle before disassembling the nozzle to avoid damage to the housing of the nozzle closure.
3. Clean all the paint passages and the nozzle. Clean the other components using a brush soaked in solvent.
4. Reassemble the spray gun and spray a small quantity of solvent to eliminate all the residues in the paint passages.






### **WARNING:**

**NEVER USE METAL OR OTHER OBJECTS THAT COULD DAMAGE THE HOLES IN THE NOZZLE AND CAP. NEVER IMMERSE THE SPRAY GUN COMPLETELY IN SOLVENT. NEVER USE COMPONENTS OR PARTS THAT ARE NOT MANUFACTURER ORIGINALS.**

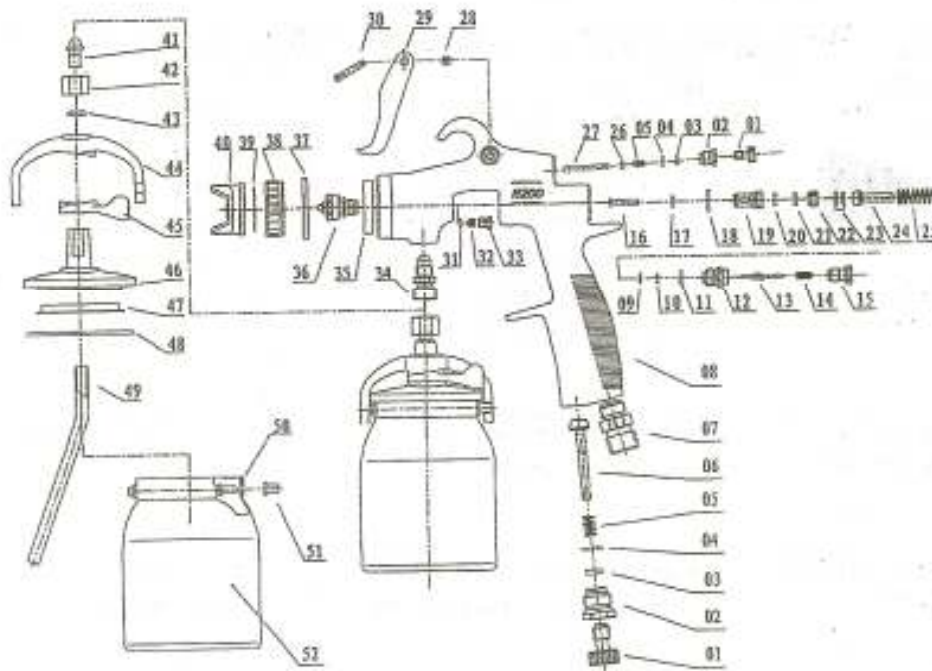
### **Storing**

- When not using spray gun, turn the fluid adjustment knob counter-clockwise to open which will reduce spring tension on needle fluid tip.
- Spray gun **MUST BE** well cleaned and lightly lubricated.

## ◆ Trouble shooting

Symptom	Problems	Solution
<b>Fluttering or spitting</b> 	<ol style="list-style-type: none"> <li>1. Material level too low.</li> <li>2. Container tipped too far.</li> <li>3. Loose fluid inlet connection.</li> <li>4. Loose or damaged fluid tip/seat.</li> <li>5. Dry or loose fluid needle packing nut.</li> <li>6. Air vent clogged</li> </ol>	<ol style="list-style-type: none"> <li>1. Add material into container.</li> <li>2. Hold more upright.</li> <li>3. Tighten.</li> <li>4. Adjust or replace.</li> <li>5. Lubricate and or tighten.</li> <li>6. Clear vent hole.</li> </ol>
<b>Pattern is arc.</b> 	<ol style="list-style-type: none"> <li>1. Worn or loose Fluid nozzle.</li> <li>2. Material build up on Air cap.</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten or replace Fluid nozzle.</li> <li>2. Remove obstructions from holes, but don't use metal objects to clean it.</li> </ol>
<b>Pattern is not Evenly spread.</b> 	<ol style="list-style-type: none"> <li>1. Material build up on Air cap.</li> <li>2. Fluid nozzle dirty or worn.</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean or replace Air cap.</li> <li>2. Clean or replace Fluid nozzle.</li> </ol>
<b>The center of Pattern too narrow.</b> 	<ol style="list-style-type: none"> <li>1. Material too thin or not enough.</li> <li>2. Atomization air pressure too high.</li> </ol>	<ol style="list-style-type: none"> <li>1. Regulate material viscosity.</li> <li>2. Reduce air pressure.</li> </ol>
<b>Pattern width of fan-sharp is not enough.</b> 	<ol style="list-style-type: none"> <li>1. Material too thick.</li> <li>2. Atomization air pressure too low.</li> </ol>	<ol style="list-style-type: none"> <li>1. Regulate material viscosity.</li> <li>2. Increase air pressure.</li> </ol>
<b>Air leaking from air cap without pulling trigger</b>	<ol style="list-style-type: none"> <li>1. Sticking air valve stem</li> <li>2. Contaminate on air valve or seat</li> <li>3. Worn or damaged air valve or seat</li> <li>4. Broken air valve spring</li> <li>5. Bent valve stem</li> </ol>	<ol style="list-style-type: none"> <li>1. Lubricate</li> <li>2. Clean</li> <li>3. Replace</li> <li>4. Replace</li> <li>5. Replace</li> </ol>
<b>Fluid leaking from packing nut</b>	<ol style="list-style-type: none"> <li>1. Packing nut loose</li> <li>2. Packing worn or dry</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten, but do not restrict needle</li> <li>2. Replace or lubricate (non-silicone oil)</li> </ol>
<b>Excessive overspray</b>	<ol style="list-style-type: none"> <li>1. Too high atomization pressure</li> <li>2. Too far from work surface</li> <li>3. Improper stroking (arcing, gun motion too fast)</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce pressure</li> <li>2. Adjust to proper distance</li> <li>3. Move at moderate pace, parallel to surface.</li> </ol>
<b>Will not spray</b>	<ol style="list-style-type: none"> <li>1. No pressure at gun</li> <li>2. Fluid control not open enough</li> <li>3. Fluid too heavy</li> </ol>	<ol style="list-style-type: none"> <li>1. Check air lines</li> <li>2. Open fluid control</li> <li>3. Thin fluid or change to pressure feed system.</li> </ol>

## ◆ Parts List



NO.	Description	NO.	Description	NO.	Description
1	Air Adjustment Knob	19	Needle Sleeve	37	Gun body Gasket
2	Air Adjustment Seat	20	Valve Stem Ox hide Washer	38	Air Cap Nut
3	O-ring 3.3x1.5	21	O-ring 4.5x1.2	39	Air Cap Washer
4	Flat Gasket	22	Needle Sleeve Nut	40	Air Cap
5	Air Inlet Spring	23	Foam Washer	41	Paint Inlet Plug
6	Air Inlet Valve Stem	24	Spring Core	42	Plug Nut
7	Air Inlet Plug	25	Valve Spring	43	Thin Nut
8	Gun Body	28	Snap Retainer d=2.5	44	Hanger
9	Flat Gasket	27	Pattern Needle	45	Fasten Handle
10	O-ring 4.5x1.8	28	Snap Retainer d=2.5	46	Cup Cover
11	O-ring 8.7x1.85	29	Trigger	47	Cup Gasket
12	Paint Adjustment Seat	30	Trigger Pin	48	Protect Ring
13	Paint Needle	31	Needle Foam Washer	49	Sucker
14	Paint Needle Spring	32	Y Type Sealing Gasket	50	Cup Pin
15	Paint Adjustment Knob	33	Guide Bolt	51	Cup Retainer
16	Valve Stem	34	Paint Inlet Plug	52	Cup
17	O-ring 8.5x1.2	35	Gun body Washer	53	
18	O-ring 10.7x1.8	36	Nozzle	54	