Integrated Paving Concepts Inc.

Rapid Sprayer Gun 3 Operations Manual



Includes:

1 – RSG 3

2 - 4 mm tips

1 – 6 mm tip

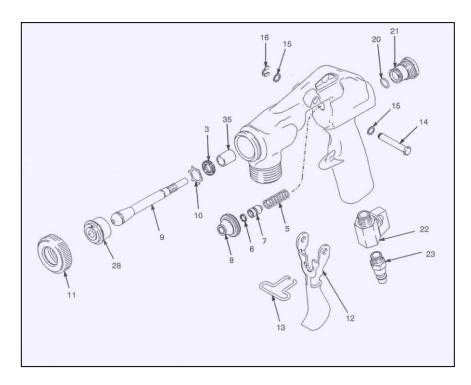
1 – 8mm tip

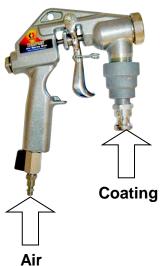
The Rapid Sprayer Gun 3 (RSG3) is used with the Rapid Sprayer 2 (RS2) to aid in the installation StreetBond coatings. Its durable proven design will provide you with many years of service with minimal amount of maintenance.

Operation

When the RSG3 is triggered, the needle is pulled back from the tip to allow the pump to push coating up and through the coating inlet where it mixes with pressurized air. The amount of air from the tip is determined by the gun regulator (found on the RS2) which controls how fine, or how dense, the coating will be. The size of the tip will dictate the amount of coating exiting the gun. It is important to remember that when a larger-sized tip is used, both the pump and gun regulator need to be increased so that more coating is allowed to flow. For proper operation of gun, ensure needle nut remains tight.

No.	Description	
3	U-cup seal, 0.375" dia. shaft	
5	Compression spring	
6	O-ring	
7	Needle guide	
8	Needle nut	
9	Needle	
10	Retaining ring	
11	Tip retaining ring	
12	Trigger	
13	Trigger lock	
14	Clevis pin w/groove	
15	Washer	
16	Retaining ring	
20	O-ring	
21	Plug	
22	Air Flow Valve	
23	Hose fitting	
28	Tip 4mm, 6mm or 8mm (5/32",1/4" or 5/16)	
35	Sleeve bearing, 0.375" dia. shaft	





Operation – Cont'd

Adjustments

Adjustments to the pump and gun regulator are necessary to ensure proper consistency in the spray pattern. This can be achieved by spraying the coating back into the hopper until the desired spray pattern is achieved.

Pump Regulator



The pump regulator controls how fast the pump pushes coating out of the gun.

The pump regulator should generally

Gun Regulator



The gun regulator controls how much air disperses the coating.

The gun air pressure should

	be set around:	generally be set around:
4mm Tip	30 – 40 psi	30 – 40 psi
6mm Tip	55 – 65 psi	40 – 55 psi
8mm Tip	60 – 75 psi	60 – 75 psi

^{*}The above pressure rates do not take into account environmental factors such as ambient temperature where coating will be mixed thicker or thinner; nor does it factor in wind conditions.

Cleaning & Maintenance

Clean Gun

- 1. When finished using sprayer and gun, pump remaining coating into bucket and turn off pump.
- 2. Pour clean water into hopper and use brush to remove as much coating as possible.
- 3. Cycle the water through the system making sure that both the gun hose and the recycle hose are thoroughly flushed of coating.
- 4. Spray out the water using gun. <u>Turn off air and pump, relieve pressure in gun</u>. Remove gun and place in clean water.
- 5. Remove and clean tip retaining ring and tip with clean water and a wire brush.
- 6. Flush out rest of gun in water until clean.
- 7. When dry, apply a small amount of oil (or WD-40) to air fitting, coating inlet cam-lock and internal shaft. Reassemble.



Additional Gun Cleaning

If the air is not flowing out of the gun, it is possible for coating to travel through the needle assembly and down into the air chamber. If you suspect coating has entered the needle, a deeper clean will be required.

1. Unscrew and clean needle nut and remove needle assembly.









- 2. Remove and clean compression spring and needle guide.
- 3. Ensure all air and coating passageways are clear of any material as this will improve the performance and extend the life of the gun. Pay extra attention to the needle and the coating inlet chamber.

Safety

Safety Procedures

- 1. Always wear safety goggles when using this equipment.
- 2. Use equipment only in well ventilated area.
- 3. Compressor and pump noise can damage hearing over extended periods of use. Always wear hearing protection.
- 4. Check all fasteners on the gun periodically to ensure all are tight.
- 5. All operators must be properly trained and employ safe working and operating practices as outlined in this manual and the safety instructions that come with the StreetBond coating products.
- 6. Do not trigger gun with air valve shut off. It is important to keep a small amount of air flowing through air line and gun to prevent material from backing up needle assembly and air system when triggered.

Pressure Relief Procedure

It is important to <u>relieve pressure whenever you stop spraying; connecting / disconnecting hoses or gun or if jammed.</u> To relieve pressure:

- 1. Shut off air source.
- 2. Shut off power source.
- 3. Ensure air valve is open all the way.
- 4. Pull trigger on gun to relieve pressure.

Trouble Shooting

Problem	Cause	Solution
Material will not flow out of gun	Not enough coating	Increase pump regulator pressure
	Not enough air	Open air flow valve all the way; Increase gun regulator pressure
	Trigger adjustment set too low	Rotate trigger nut clockwise
	Air flow needle blocked	Use thin wire to clear blockage; Replace needle
	Gun is plugged	Turn off pump, release pressure, remove nozzle and clean out blockage
	Hose blocked	Turn off pump, remove hose and clear blockage
Gun will not shut off	Worn nozzle and/or needle	Replace nozzle or needle
	Nozzle retaining ring not on all the way	Clean and tighten completely
	Debris in gun passage	Relieve pressure and clean
Coating leaking behind chamber	Damaged fluid seal	Relieve pressure and replace u-cup seal
Needle nut won't adjust	Dirty / stripped threads	Clean threads / replace needle
	Gun is triggered	Adjust when trigger is not pulled
	Trigger nut set at maximum	Rotate trigger nut counter-clockwise

Integrated Paving Concepts Inc. is committed to providing the best possible after-market service. If you require parts or service, please visit www.ipcinstaller.com. If you have any other questions please call IPC Support at 1-800-688-5652 or +001 604 574-7510 outside North America.