

Important warnings for use of airless spray equipment



**Handle as you would a loaded firearm!
High pressure can cause extremely serious injury
Observe all warnings**

- Before operating any airless spray machine, read and follow all the safety warnings and instructions relating to the usage of the equipment.
- Do not attempt to alter or modify any part of the equipment. An authorised service agent should carry out all service procedures.

Read, Learn and Follow the pressure relief procedure and understand all warnings

WARNING

**Do not use halogenated solvents in airless spray systems.
Most airless spray guns, and some system components
have aluminium parts and may explode.**

DON'T TAKE CHANCES.

**Cleaning agents, coatings, adhesives and some paints
contain halogenated hydrocarbon solvents.
Consult your material supplier to be sure.**

Fluids under pressure from spray or leaks can penetrate the skin and cause extremely serious injury.

- Never point the spray gun at anyone or any part of the body.
- Never put your hands or fingers over the spray tip. Do not use a rag or any other material over your fingers as the paint will penetrate through the material and into the hand.
- Never try to detect or stop leaks with your hand or body.
- Never try to "blow back" paint; these are not air spray sprayers.
- Always have the gun tip guard in place when spraying.
- Always lock the trigger when you stop spraying.
- Always follow the pressure relief procedure for your machine before cleaning or removing the spray tip or servicing any system components.
- Always remove the tip from the gun when cleaning it.
- Always tighten all fluid connections before each use.
- Always ensure safety devices are operating properly before each use.

If any material appears to penetrate the skin, get **Emergency Help At Once, Do Not Treat as a Simple Cut.**

How to achieve a good spray technique

Good spray gun technique is at the core of any spray paint operation. Operator skill and efficiency is as important as good equipment and good paint. Good spray technique is a skill that can be quickly learned following these simple instructions.

If you're not familiar with spraying techniques, we recommend that you study this section of the catalogue and practice the proper technique on pieces of cardboard or suitable surface.

1. Hold the spray gun 305 – 380mm (12 -15 inches) away from the work surface. Move the spray gun parallel to the work piece and at right angle to the surface. (See Figure 1)

2. Do not wave the spray gun. This is called arching. Instead, hold the spray gun at a distance of 305 – 380mm (12 -15 inches) perpendicular to the work. (See Figure 2)

3. Adjust pressure control knob so that paint is completely atomised from the spray gun. Insufficient pressure will result in "tailing". (See Figure 3)

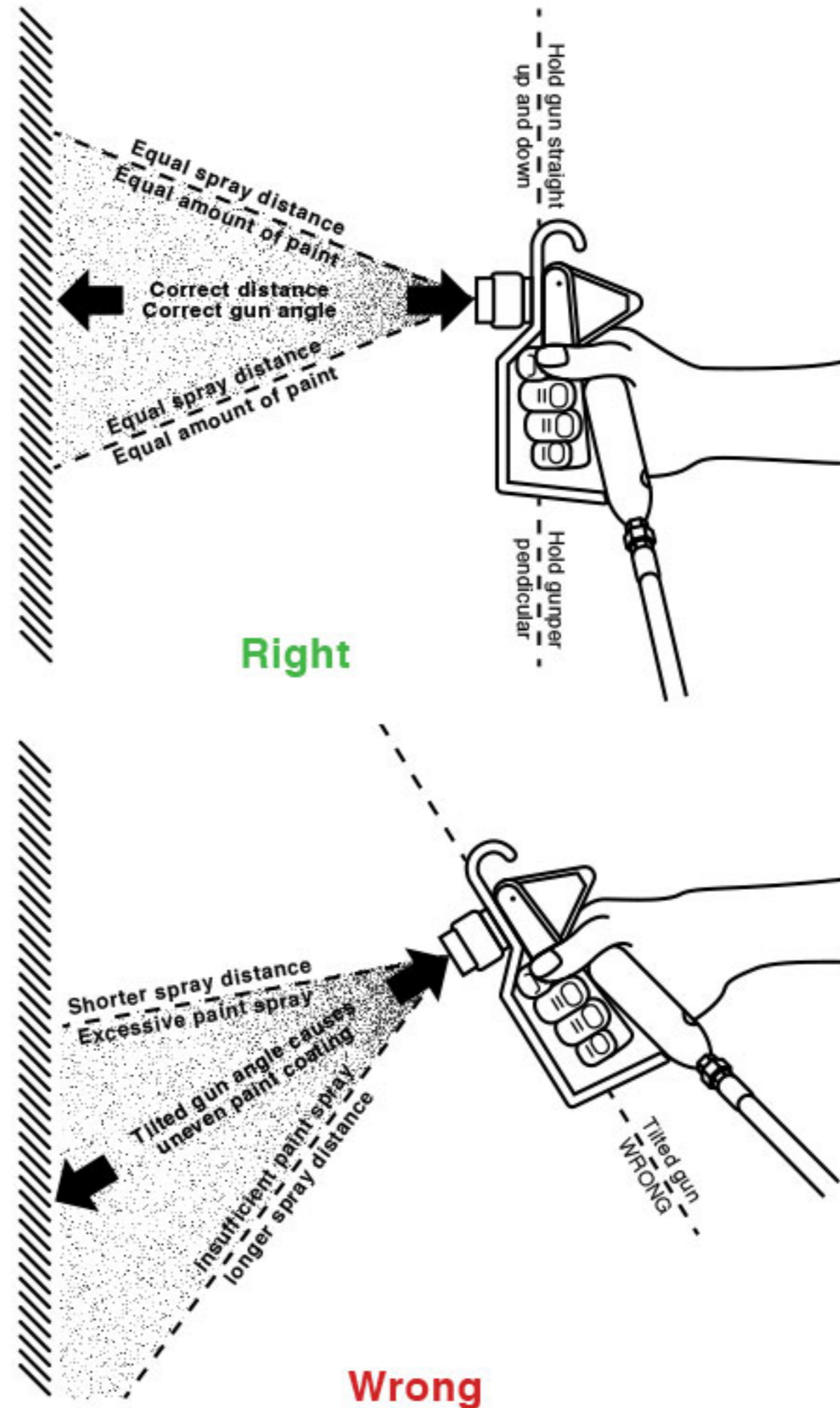
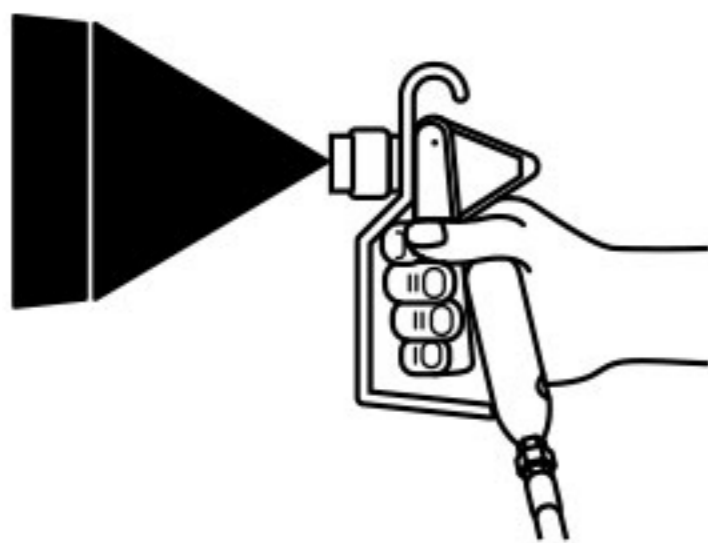


Figure 1

Good Pattern



Tailing

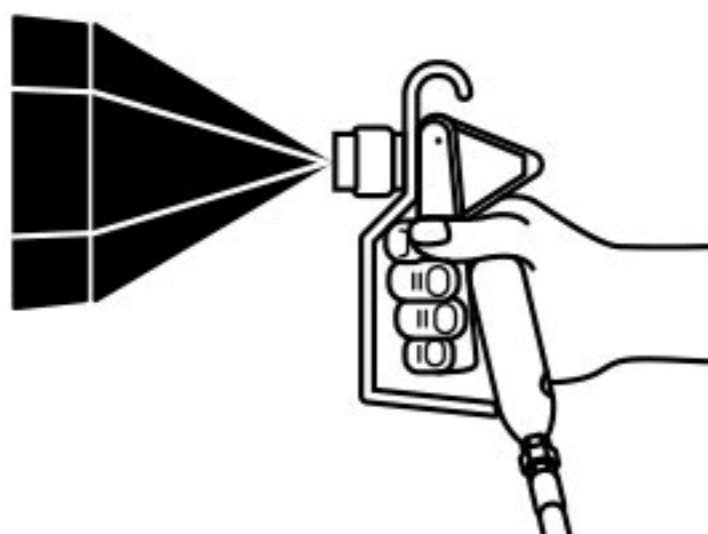


Figure 3

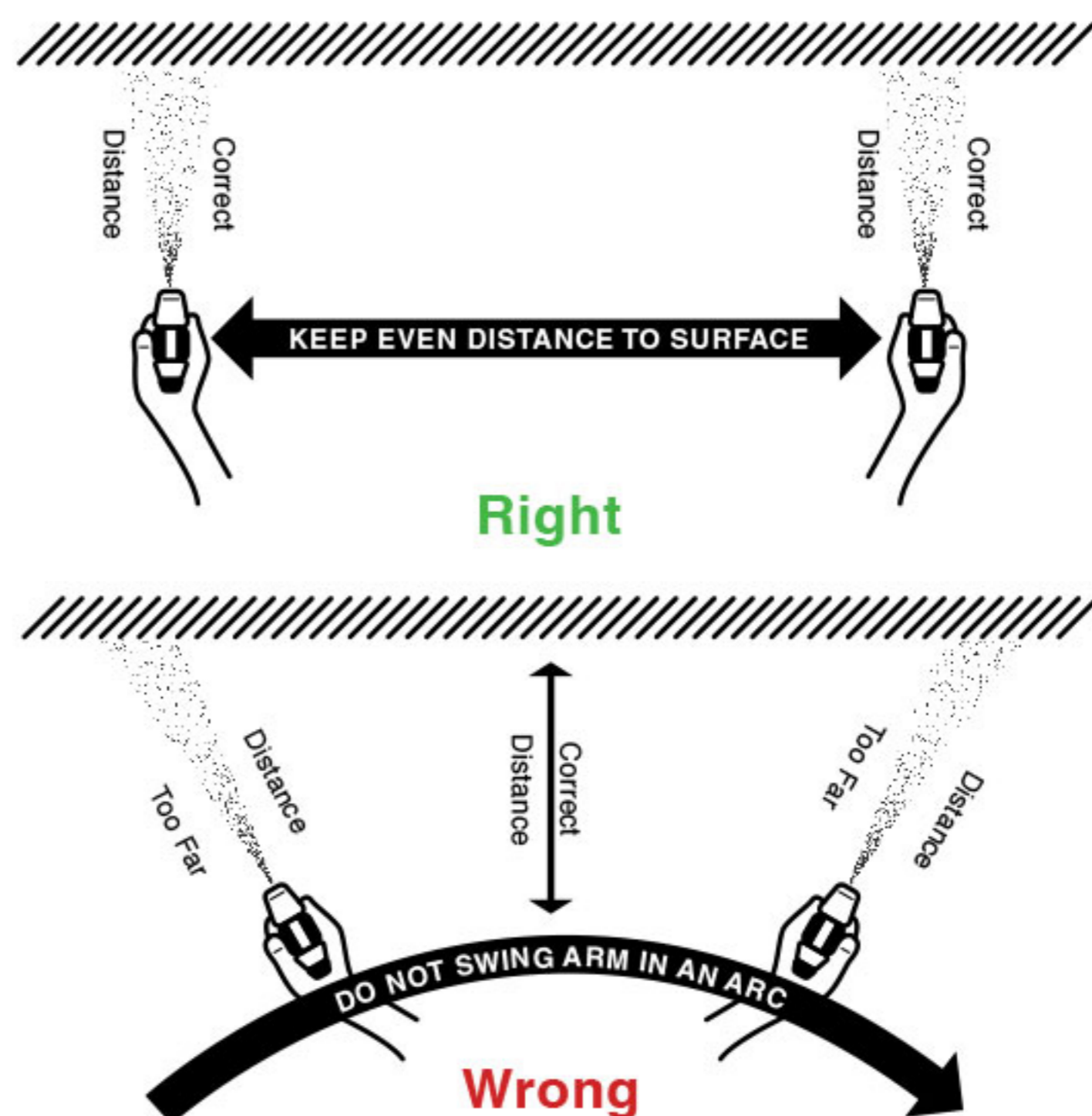
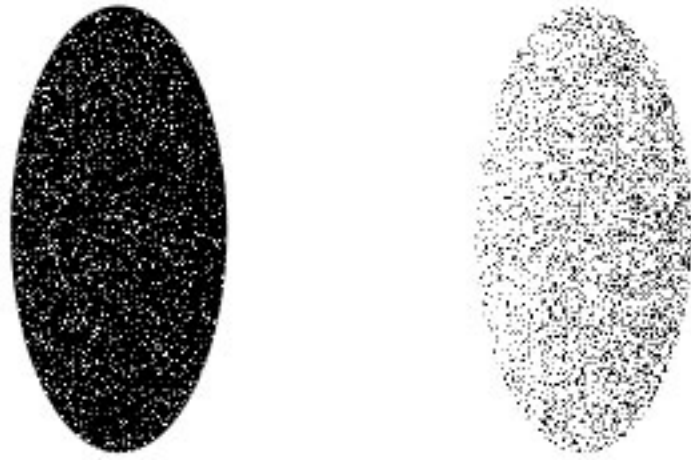


Figure 2

How to spray airless

Good Pattern **Poor Pattern**



4. Too much pressure will result in excess fog and overspray, excessive tip wear, and increased sprayer wear and tear. (See Figure 4)

Always use the lowest pressure possible to obtain desirable results. Test the spray pattern on a piece of cardboard or other surface.

5. It is important to “trigger” the gun after gun movement (arm movement) has started and release the trigger (shut off) before gun movements ends. Gun movement is always longer than the actual (spray) stroke. This way paint thickness and blending occurs over the entire surface. (See Figure 5)

6. Overlap the previous pass by half the width of the spray pattern. Aim toward the bottom of the previous pass. Spray with uniform strokes from left to right to left, holding stroke speed, distance, lapping and triggering as uniform as possible. (See Figure 6)

7. Slow gun movement or holding the gun too close will result in an overly wet coat that is likely to run or sag. Holding the gun too far away will cause excessive fog, overspray and a thin grainy coat.

8. To spray “inside” and “outside” corners, aim the spray at the centre of the corner, so that the pattern is evenly divided. (See Figure 7)

Fog, Oversupply

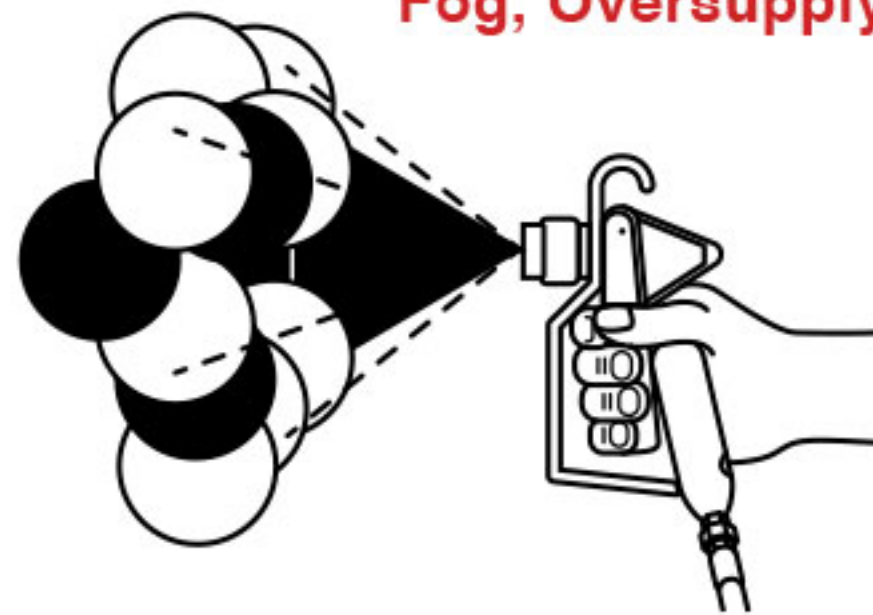


Figure 4

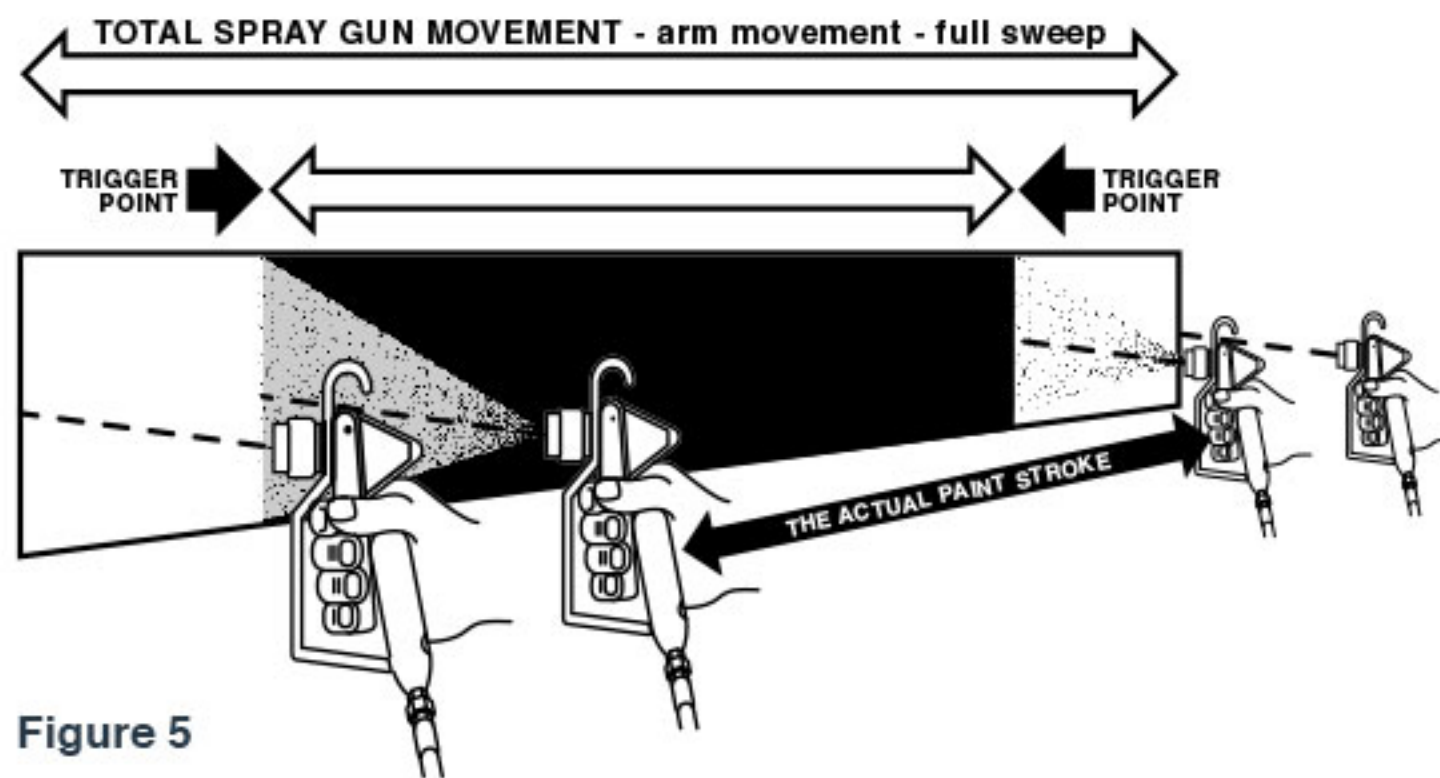


Figure 5

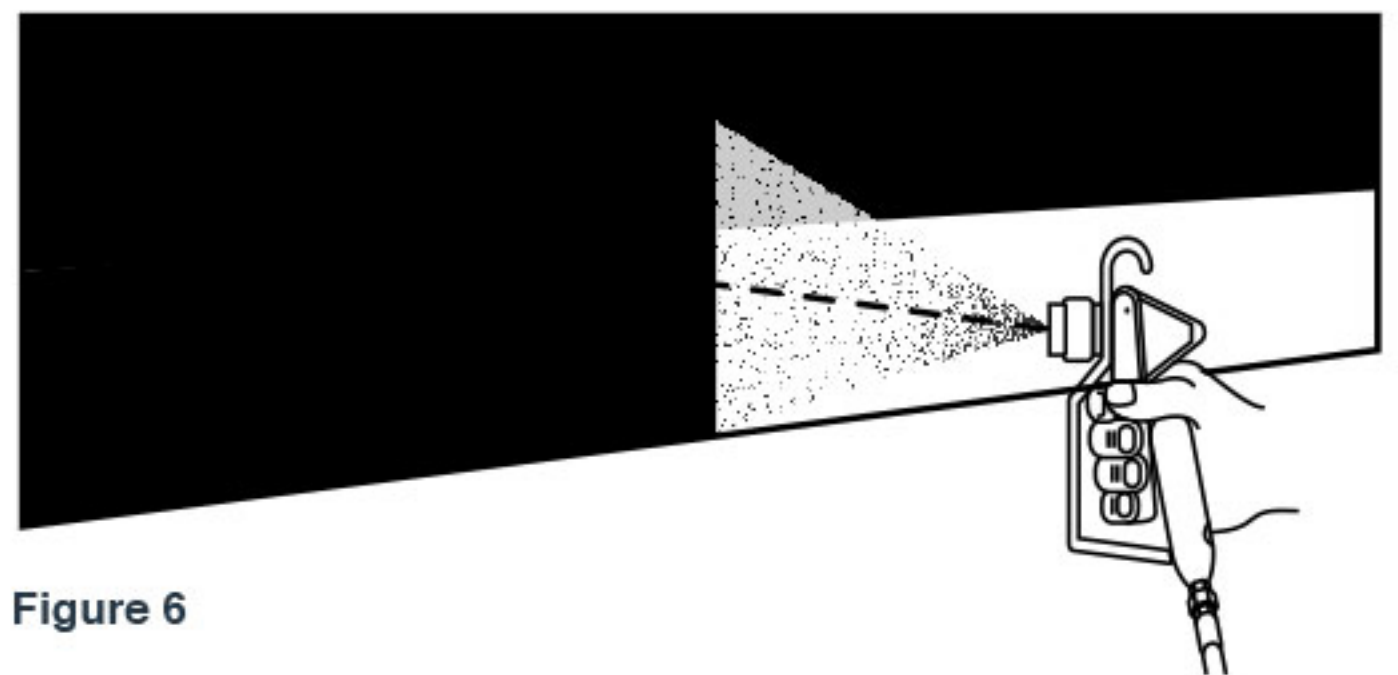


Figure 6

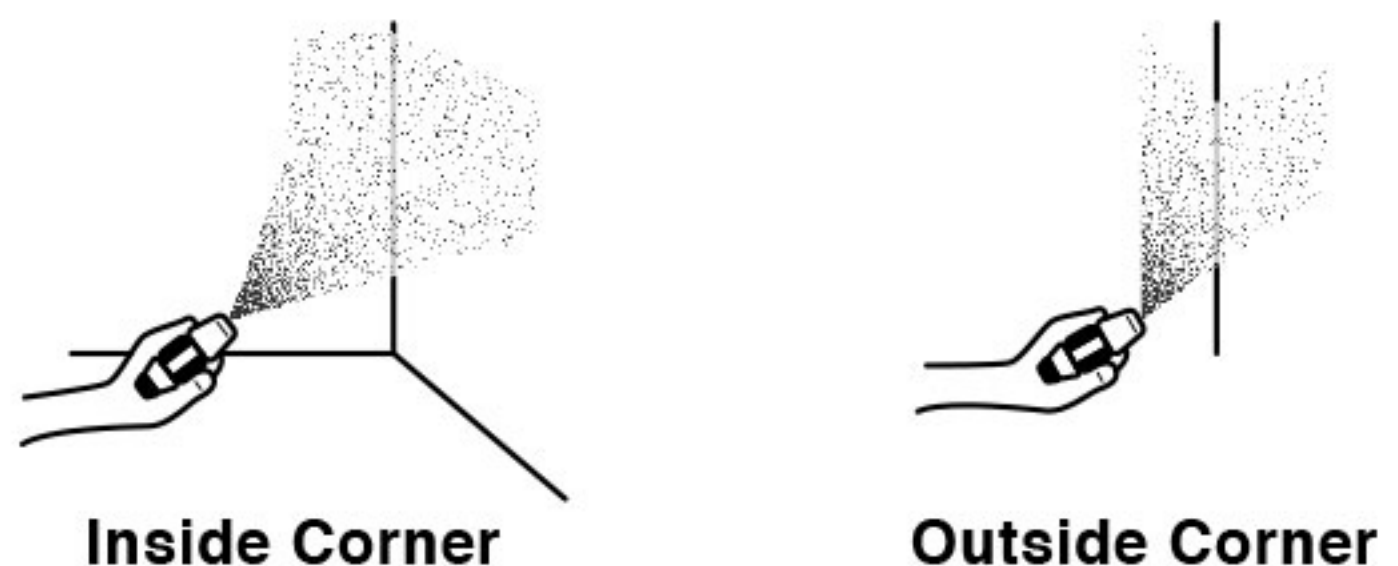


Figure 7

Airless Spray Tip Selection Guide

Tip Identification

The first digit is the fan width - the number is half the fan width, e.g., 5 means a 10" fan. The second and third digits are for the orifice size and is measured in thousandths of an inch, e.g., 17 = 0.017 inch – the higher the number, the larger the tip.

Rev Tip Fan With		Orifice Size												
mm	inches	.009	.011	.013	.015	.017	.019	.021	.023	.025	.027	.029	.031	.035
102-152	4-6	209	211	213	215	217	219	221	223	225	227	229		
152-203	6-8	309	311	313	315	317	319	321	323	325	327			335
203-254	8-10	409	411	413	415	417	419	421	423	425	427	431	431	
254-305	10-12		511	513	515	517	519	521	523	525	527	531	531	535
305-356	12-14			613	615	617	619	621	623	625	627	631	631	635
356-406	14-16				715	717		721						
406-457	16-18				815		819	821					831	
Gun Filter C = Course – 60 mesh F = Fine – 100 mesh			F	F	F, C	C	C	C	C					Remove Filter
Wood Interior	Lacquer, Varnish		○	○										
	Sealer				○									
	Enamel				○									
Wood Exterior	Exterior Stain				○	○								
	Vinyl, Acrylic, Latex						○	○						
Masonry	Vinyl, Oil Base Alkyd				○	○								
	Latex, Acrylic				○	○	○	○						
	Block Filler							○	○	○	○	○	○	
	Elastomer							○	○	○	○	○	○	○
Ceiling	Hi Build, Mil White							○	○					
Structural Steel	Heavy Coatings							○	○	○	○	○	○	

Not all tip sizes are kept in stock – always check for availability

○ Suitable for this material application

RESOURCES

Anest Iwata Australia
1300 277 729 www.anest-iwata.com.au

Troubleshooting Guide

RESOURCES

Airless Troubleshooting Guide

Fault	Cause	Remedy
Air pressure does not rise	Air source valve is not open	Fully open it
	Air regulator is not closed	Tighten
	Insufficient air pressure of air source	Replace air compressor
Plunger pump does not operate	Air source valve is not open	Fully open it
	Air regulator is not closed	Tighten
	Plunger pump fails	Remove each clog. Disassemble air motor
Plunger pump stops and fluid pressure doesn't rise (air pressure rises)	Filter (fluid intermediate filter) is clogged	Clean filter
	Upper V packing's are tightened too much	Loosen it
Plunger pump operates and fluid pressure doesn't rise	Intake hose is not in paint	Put it in paint
	Ball in suction tube sticks	Remove intake hose set and push ball up by bar from connection
	Filter (intake hose set) is clogged	Clean filter
Plunger pump operates and fluid pressure rises, paint doesn't come out	Safety lock on airless gun is not unlocked	Unlock safety lock
	Nozzle tip is clogged	Clean Tip
	Filter (intermediate / gun filter) is clogged	Clean filter
Plunger pump doesn't stop operation	Drain valve is not closed	Close drain valve
	Insufficient paint	Replenish paint
	Air is drawn	Securely connect intake hose set
	Air remains in paint passages	Loosen drain valve and release air
	Paint leaks from thinner cup	Tighten or replace upper V packing
	Ball in suction tube sticks to seat	Remove intake hose set and push ball up with bar from connection
	Leakage from fluid passages	Tighten
	Scratch or dust on ball or seat	Disassemble, clean and replace
Vibration appears (spray pattern becomes large or small)	Filter (intermediate / gun filter) is clogged	Clean filter
	Nozzle tip is worn	Replace
	Lower V packing is worn	Tighten or replace
	Intake joint is loosened	Tighten
	Scratch or dust on valve shaft	Disassemble, clean or replace
	Seated surface on valve shaft or packing on exhaust side is worn	Replace
Air pressure cannot be adjusted by air regulator	Rubber valve on air regulator is damaged	Replace