

Thank you for purchasing a National Machinery product. Manufactured to a high standard this product will, if used according to these instructions and properly maintained, give you years of trouble free performance.

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS AND CAUTIONS. USE THIS PRODUCT CORRECTLY, WITH CARE AND FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. PLEASE KEEP INSTRUCTIONS SAFE FOR FUTURE USE.

1. SAFETY INSTRUCTIONS

- 3 Familiarise yourself with the application and limitations of this product, as well as the potential hazards.
- p **WARNING!** Disconnect the spray gun from the air supply before changing accessories, servicing or performing any maintenance.
- 3 Maintain the spray gun in good condition (use an authorised service agent).
- 3 Replace or repair damaged parts. *Use recommended parts only. Non-authorized parts may be dangerous and will invalidate the warranty.*
- 3 Keep the spray gun clean for best and safest performance.
- 3 Ensure the air system is capable of supplying enough air for the spray gun's air consumption.
- 3 Wear approved safety respiratory protection, safety eye goggles and latex gloves to protect against the harmful effects of paint spray.
- 3 Remove ill fitting clothing. Remove ties, watches, rings, and other loose jewellery, and tie back long hair.
- 3 Locate the spray gun in an adequate working area, keep area clean and tidy and free from unrelated materials, and ensure there is adequate ventilation and lighting.
- 3 Keep children and unauthorised persons away from the working area.
- 3 When not in use ensure the air supply is turned off.
- 3 Avoid unintentional starting.
- 7 **DO NOT** point spray gun at yourself, other persons or animals.
- 7 **DO NOT** carry the by the hose, or yank the hose from the air supply.
- 7 **DO NOT** use the spray gun for any purpose other than for which it is designed.
- 7 **DO NOT** allow untrained persons to operate the spray gun.
- 7 **DO NOT** operate the spray gun if any parts are missing or damaged as this may cause failure and/or personal injury.
- 7 **DO NOT** direct air from the air hose at yourself or others.
- 3 When not in use disconnect the spray gun from the air supply.

2. DESCRIPTION & SPECIFICATION

The NA2000 is a suction feed spray gun which has adjustable air, fluid and spread controls.

SPECIFICATION

NA2000 Suction Spray Gun

Air pressure, max.116psi (8 bar)

Air consumption, max. . . .7cfm (200 litres/min)

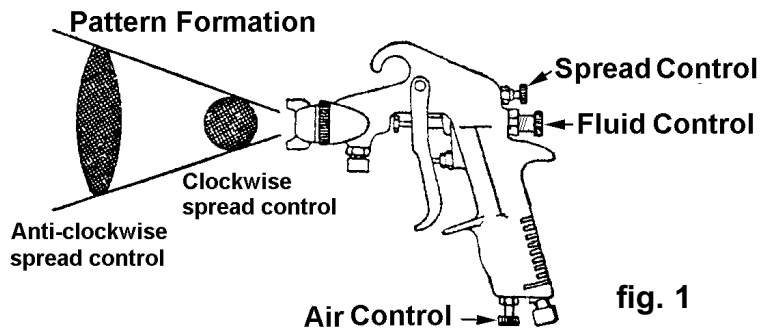
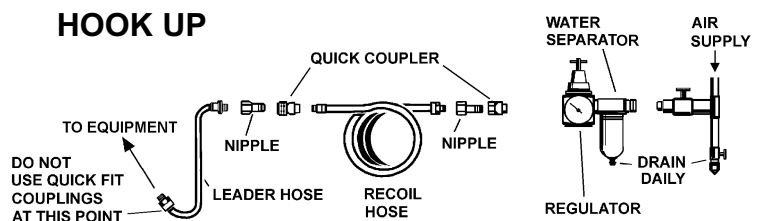


fig. 1

3. AIR SUPPLY

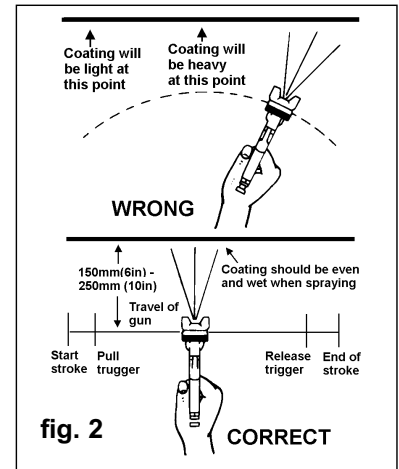
- 3.1. Ensure the air valve is in the "off" position before connecting to the air supply.
- 3.2. You will require a minimum air pressure of 65psi/4.5 bar to operate the gun.
- p **WARNING! Ensure air supply is clean and does not exceed 116psi/8 bar. Too high an air pressure or unclean air will shorten the life of the gun due to excessive wear and may be dangerous, possibly causing damage and/or personal injury.**
- 3.3. Drain the air supply tank daily. Water in the air line will damage the gun and contaminate the paint.
- 3.4. Clean the air inlet filter screen weekly. For recommended hook-up, see diagram to right.
- 3.5. Line pressure should be increased to compensate for unusually long air hoses (over 8 metres). The minimum hose diameter should be 10mm I.D. and fittings must have the same inside dimensions.
- 3.6. Keep hose away from heat, oil and sharp edges. Check hoses for wear, and make certain that all connections are secure.
- 3.7. The input connection on the gun is 1/4" BSP.



4. OPERATING INSTRUCTIONS

4.1. GENERAL

- 4.1.1. For best results, it is important to handle the gun correctly. It should be held perpendicular to the surface being sprayed and moved parallel with it. Start the stroke before squeezing the trigger and release the trigger before finishing the stroke. This will enable you to accurately control the gun and material (fig. 2).
- 4.1.2. Spray from a distance of 200 to 250mm depending on fluid and air pressure (3 - 4.5 bar). The material deposited should always be even and wet. Each stroke must overlap the preceding stroke to obtain a uniform finish. To reduce over-spray and obtain maximum efficiency, spray with the lowest possible air pressure.
- 4.1.3. Controlling the fan spray and the fluid
- The amount of fluid and spread can be controlled by regulating the control screws (fig.1).
 - As the width of the spray is increased more material must be allowed to pass through the gun to obtain the same coverage on the increased area.
 - The direction of the fan spray, either horizontal or vertical, is obtained by turning the air nozzle to the desired position then tightening the retaining ring.



5. MAINTENANCE & CLEANING

Disconnect from the air supply before attempting any maintenance or cleaning. When reassembling after maintenance, take care when screwing parts together. Always hand assemble to avoid cross-threading, using tools only for the final tightening. If a part cannot easily be turned by hand, check that you have the correct part or unscrew, realign and try again. **DO NOT** use excessive force when reassembling.

5.1. Spray gun

- 5.1.1. Immerse *only the front end of the gun* in solvent (fig. 3), until the solvent just covers the fluid connection.
- 5.1.2. Use a bristle brush and solvent to wash off accumulated paint.
- 5.1.3. Do not immerse the entire gun in solvent. This will cause packing to dissolve and dry out. Dirty solvent may also clog the narrow passages in the gun.
- 5.1.4. Wipe the outside of the gun with a solvent dampened rag.
- 5.1.5. Lubricate the gun daily with a light machine oil. Be sure to lubricate the fluid needle packing, air valve packing, side port control packing and trigger pivot point. Do not use lubricants containing silicone.
- 5.1.6. When finished spraying, flush the gun through with clean thinners.



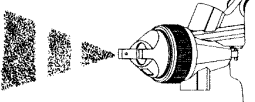

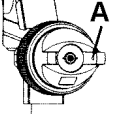

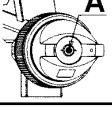


fig. 3

5.2 Air nozzle, fluid nozzle and needle assembly

- 5.2.1. To clean the nozzles, soak in solvent to dissolve any dried material, then blow clean with air. Handle all nozzles carefully and do not make any alterations in the gun.
- 5.2.2. If you need to probe the holes in the nozzles, be sure to use a tool that is softer than brass; do not use metal instruments.
- 5.2.3. Adjust the fluid needle valve so that when the gun is triggered, air flow occurs before fluid flow.

6. TROUBLESHOOTING

THE PROBLEM	THE CAUSE	THE SOLUTION
Poor atomization / heavy centre pattern 	Fluid flow is too high for the pressure and air flow.	<ol style="list-style-type: none"> Increase air pressure by adjusting regulator and increase air flow by air control. Reduce paint flow with fluid control. Paint may be too thick. If so, dilute it.
Heavy atomization poor centre pattern 	Air pressure and air quantity too high for paint flow	<ol style="list-style-type: none"> Reduce air pressure by adjusting regulator. Reduce air flow by air control and increase paint flow with fluid control.
Intermittent spray pattern 	Air entering the fluid supply	<ol style="list-style-type: none"> Tighten the connection between the gun and the cup. Tighten fluid nozzle with gun spanner. Needle packing passing air - tighten packing screw or replace O-ring. Check whether paint pot is empty or air hole in lid is blocked.
Heavy right or left side pattern  	One of the horn holes may be blocked (A). In order to check it, turn the air cap 180°, if the faulty pattern is now upside down the hole must be cleaned	<ol style="list-style-type: none"> Place the air cup in solvent. Clean hole with compressed air or with a wooden toothpick. DO NOT use a metal probe which will damage the hole.
Top heavy or bottom heavy pattern  	Possible paint build-up between fluid nozzle and air cap.	<ol style="list-style-type: none"> Clean the air cap and the fluid nozzle, check also that they match correctly. Check needle for damage.