For most jobs, **point the gun** at right angles to the surface. In windy conditions, angle the gun to spray into the wind and cover the area with vertical strokes.

To ensure even coverage at the start and end of each stroke, start the gun moving just before you squeeze the trigger and release the trigger just before the gun stops.

Paint corners and edges with vertical strokes, positioning the gun so that the corner or edge is roughly in the centre of the spray fan.

If the spray tip should become blocked, reverse the tip so that the arrow points towards you and spray into a suitable metal container until the paint flows freely once more. The tip can then be returned to its normal spray position.

## **EQUIPMENT CARE**

Keep the equipment clean. Even if you are taking only a short break, clean it out thoroughly. Regularly remove the tip and seal for cleaning. Remember that in cold weather paint will thicken

Place the suction tube in the paint, switch ON and turn up the pressure slightly.

When bubbles no longer appear, turn the prime valve to SPRAY. Then trigger the gun to expel any solvent in the hose. Once paint flows freely, turn the pump OFF. Refit the spray tip with the arrow pointing in the spray direction and switch ON. Test the spray pattern on a piece of cardboard, turning up the pressure just enough to totally atomise the paint.

#### **BASIC TECHNIQUES**

Paint the area in horizontal or vertical strokes, each overlapping its predecessor by about 25%. For the best results, always move the gun at a steady, even pace parallel to the surface. Keep the gun at a

distance of about 300mm.

and greater pressure may be needed. In warm or hot weather, paint will dry quicker. If using a twopack paint ALWAYS consult the manufacturer before use, as weather conditions can drastically change the way it behaves.

Damaged hoses are potentially dangerous so handle them with care and coil them neatly, without kinks, for storage. Never push the equipment beyond its design limits. If it will not do what you want with reasonable ease and speed, assume you have the wrong tool for the job. Contact your local HSS Hire for advice. When not in use, store the equipment somewhere clean, dry and safe from thieves.

#### **FINISHING OFF**

Switch the unit OFF and release any pressure via the spray gun before turning the prime valve to PRIME and engaging the gun's trigger lock. Remove the spray tip and soak it in the appropriate solvent.

Place the suction tube into a container of a suitable solvent and hold the bleed line over the paint container. Turn the pressure to minimum then switch the unit ON to recapture the paint still in the system. Once solvent starts to flow out of the bleed line quickly transfer it to the solvent container. Then simply clip the bleed line to the suction tube and allow to circulate for a few minutes. Next, clean the spray gun and hose. Set the prime valve to spray and 'pump' the remaining paint back into its can, keeping the gun in contact with the container at all times. Once the solvent appears at the nozzle, continue

Once the solvent appears at the nozzle, continue pumping into the solvent container for a few minutes to flush out any remaining paint.

That done, set the prime valve to PRIME, remove the suction tube from solvent, let the unit pump until nearly dry, then switch OFF.

You should **now repeat the above procedure using fresh solvent** before cleaning up the spray - tip with a soft brush and refitting it.

If water was used as the solvent, pump some airless corrosion check solution, available from your local HSS Hire, through the system. This will prevent corrosion of the machine and the solidifying of paint during storage. Collect everything together and give the unit a final clean up ready for return, to your local HSS Hire.



#### ... have you been trained

The law requires that personnel using this equipment must be competent and qualified to do so. Training available at HSS Training Solutions **0845 766 7799** 

#### ...any comments?

If you have any suggestions to enable us to improve the information within this guide please e-mail your comments or write to the Safety Guide Manager at the address below e-mail: safety@hss.com

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591/03

Operating & Safety Guide 591





# Portable Airless Spray

Portable yet powerful piston airless unit



#### **GENERAL SAFETY**

For advice on the safety and suitability of this equipment contact your local HSS Hire.

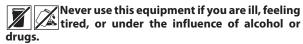
There is a serious risk of personal injury if you do not follow all instructions laid down in this guide.

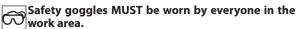
The hirer has a responsibility to ensure that all necessary risk assessments have been completed prior to the use of this equipment.

This equipment should only be used by an operator who has been deemed competent to do so by his/her employer.

This equipment should be used by an able bodied, competent adult who has read and understood these instructions. Anyone with either a temporary or permanent disability, should seek expert advice before using it.

Keep children, animals and bystanders away from the work area. Cordon off a NO GO area using cones and either barriers or tape, available for hire from your local HSS Hire.





Some materials when sprayed contain substances which when inhaled can be harmful to health. A suitable mask must be worn when using this equipment. Respiratory protective equipment is available from your local HSS Hire.

Wear practical, protective clothing, gloves and footwear. Avoid loose garments and jewellery that could catch in moving parts, tie back long hair.

Never lift or move this equipment by its power supply cable.

Always switch OFF and unplug the equipment when not in use.

**Ensure the work area is well lit and ventilated,** if in doubt, ask about lighting and ventilation equipment at your local HSS Hire.

Airless spray equipment can cause serious injury, so take care. Never point the gun at anyone and always engage the trigger safety lock when not actually spraying.

If spraying flammable materials, DO NOT work near sources of ignition. Keep a minimum distance of 15m from such hazards. Do not work near flammable gases or liquids, petrol or paint thinner fumes for example. Keep combustible materials at a safe distance - at least 15m from such hazards. If working above ground-level, work from a suitable, stable platform, an access tower for



# **Injection Warning**

Never let the jet from the gun, or a leak from a hose or joint touch you. Airless spray units operate at a pressure high enough to inject fluid through the skin. If you are injected, seek IMMEDIATE medical attention at the nearest Accident & Emergency Unit. Remember to take the paints container or, better still, the COSHH information sheet (available from the supplier/manufacturer) with you. Failure to do so could result in serious permanent disability

example. Never work from ladders or steps.

Never leave the unit running and unattended. Make sure you know how to switch this machine OFF before you switch it ON in case you get into difficulty.

Always disconnect the machine from its power supply before making adjustments to it. Check that you have removed all spanners before restarting.

Make sure that everyone is warned of what you are doing.

Check the condition of the equipment before use. If it shows signs of damage or excessive wear, return it to your local HSS Hire.

## **ELECTRICAL SAFETY**

The Portable Airless Spray Units require a 110V 16amp power supply, obtainable from a 110V generator or from the mains via a suitable transformer. Never connect 110V units directly to the 230V mains electricity supply.

If the equipment fails, or if its power supply cable or plug becomes damaged, return it. Never try to repair it yourself.

It is preferable to extend the paint hose rather than use an extension lead. However, if an extension lead must be used contact your local HSS Hire for advice.

**Extension leads should be fully unwound and loosely coiled, away from the equipment.** Never run them through water, over sharp edges or where they could trip someone.

Keep the equipment dry, using electrical equipment in very damp or wet conditions can be dangerous.

To reduce the risk of electric shock, always use a RCD suitable RCD (Residual Current-Operated Device) available from your local HSS Hire. Or power the equipment from a mains circuit with a built in RCD. Ensure the spray unit and power socket are switched OFF before plugging into the power supply.

#### **GETTING STARTED**

It is essential to familiarise yourself with all the controls before starting. Hold the spray gun in a suitable container and squeeze the trigger, this will release any pressure stored within the unit and safeguard the user against the risk of an accident.

#### **Pressure Relief**

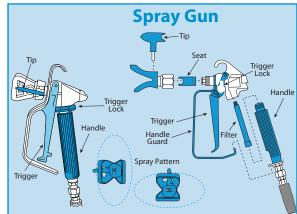
Always relieve the pressure before performing any maintenance, such as, removing the spray tip or if leaving the unit unattended.

To do this, switch OFF and unplug the unit, set the

To do this, switch OFF and unplug the unit, set the primer switch to 'spray', then release the guns safety catch and discharge the spray gun into the metal container, keeping it in contact with the container's sides at all times.

**Tighten all hose connections with a pair of spanners,** check that the maximum hose length has not been exceeded, maximum 60m.

**Engage the gun's trigger lock then remove the spray tip** by turning the arrow 90 degrees from the direction of spray and simply pulling it out.



Ensure the tip is suitable for the material you wish to spray and the guns filter is the correct grade, (see table). If in doubt, contact your local HSS Hire for advice.

To replace the filter, depending on model you may have to unhook the handle guard first.

**Next, unscrew the handle** (filter cover). The filter can be removed by hand, turning it clockwise (it has a left-hand thread). **Fit the new filter** by reversing the removal instruction and tightening the handle with a suitable spanner.

Turn the pressure control anti-clockwise to its lowest setting and pour two drops of seal lubricant into the oil cup, at the front of the unit.

With the ON/OFF switch in the OFF position, plug the unit into a suitable power supply, making sure both unit and socket are at least 7.5m from the spraying area.

Spray Tip & Filter Sizes			
Paint	Min	Max	Mesh
Type	/in	/in	
Varnish	0.009	0.011	150
Gloss Paint	0.011	0.013	100
Undercoat	0.013	0.015	100
<b>Emulsion Paint</b>	0.015	0.019	60
Masonry (non cement based)	0.019	0.025	30

**Flush out the system** with solvent appropriate to the paint you will be using. Water for emulsions, white spirit for oil based paints etc.

Insert the suction and return tube in a metal bucket, containing 2.25 litres of the correct solvent.

Turn the prime valve to PRIME (see illustration) and switch the unit ON, allow the solvent to circulate until all air bubbles are expelled from the return tube, then turn the unit OFF.

Now trigger the gun into the bucket keeping the trigger guard in contact with the edge of the container. Turn the prime valve to SPRAY, switch the unit ON and allow the solvent to flush through the hose and gun.

**With the trigger still pulled, switch the unit OFF.** Release the trigger, engage the trigger lock and place the gun somewhere safe.

Switch the unit ON and check for leaks as the system pressurises. If there is a leak, switch the unit OFF and release any pressure via the spray gun, before turning the prime valve to PRIME. Isolate the unit from the power supply, then contact your local HSS Hire for advice.

If there are no leaks, **release any pressure via the spray gun** before turning the prime valve to PRIME. Lift the suction hose out of the solvent and allow to pump to run until nearly dry, then switch OFF.

Prepare the paint according to the manufacturer's instructions in either a metal bucket or its own container.