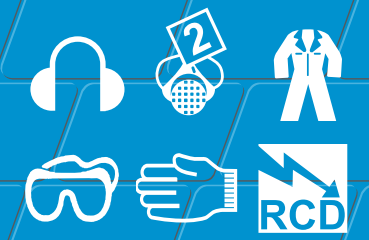


# Portable HVLP Turbine Spray

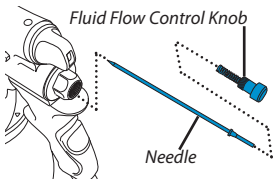
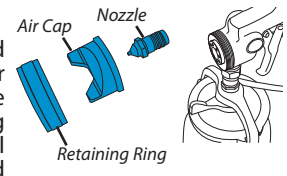
HVLP sprayer ideal for gloss work, varnishes and can be used externally for timber stains



Code 61416

### CHANGE FLUID SET

To change to a different fluid set loosen and remove the Air Cap. Unscrew and remove the Nozzle. Whenever tightening or loosening the nozzle, pull the trigger all the way and hold it to prevent damage to the seating surfaces of the Needle and Nozzle.



Unscrew the Fluid Control Knob all the way and remove it, together with the spring. Pull out the Needle through the back of the Gun. Replacement is the opposite of removal.

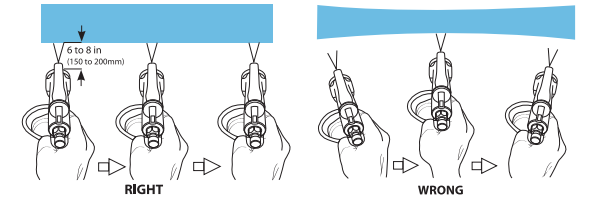
### BASIC TECHNIQUES

The gun will normally need to be adjusted before each use. First adjust the Fluid Control Knob. Turn anti-clockwise for more fluid, clockwise for less fluid. A good starting point would be about 2-1/2 turns out from closed.

Test the spray pattern and atomization on a test piece. Hold about 20cm (8 inches) away. Turn the Pattern Adjustor knob for the desired pattern.

Adjust the Speed Control knob on the turbine to control the air volume. Generally, it is best to use the minimum air volume which will achieve satisfactory atomization. The point is to get the droplet size as small as possible while still having the desired coverage. Too much air will only cause overspray mist and waste paint. If the Speed Control knob is at maximum and the atomization is still not satisfactory, the atomization can also be controlled by thinning the paint. One can also use a different fluid set (the needle, nozzle and air cap).

Keep the gun about 150 to 200mm away from the surface. Do not swing the arm in an arc. Rather, keep the gun perpendicular to the surface and move in a parallel motion. Make sure the gun is already in motion before triggering and release the trigger while the gun is still in motion. Overlap 50% with each stroke.



To ensure even coverage at the beginning and end of each strip, start the gun moving before you trigger it and keep it moving after the trigger has been released. To spray edges and corners, simply run the gun along the edge/corner, keeping this in the centre of the spray pattern.

For most jobs, hold the gun at right-angles to the surface being painted. In windy conditions, though, angle the gun to spray into the wind and tackle the area in vertical strips.

### TROUBLESHOOTING

Correctly set, the spray-gun should produce a uniform, symmetrical spray pattern. If the pattern is misshapen, rotate the air-cap and try again.

If the defect rotates with the cap, remove the air-cap assembly and clean it. If that doesn't work, the nozzle may be defective so return the equipment to HSS Hire.

### TECHNICAL SPECIFICATIONS

Power Output	1400W
Turbine	3 stage
Airflow	2800 L/min
Max Working Pressure	0.41 bar (6 psi)
Turbine Dimensions (LxWxH)	325 x 250 x 325mm
Net Weight	8.5 kgs ( 18.7 Lbs)

### EQUIPMENT CARE

#### CLEANING UP

Always clean the gun at the end of the day or when changing colours or if the spray tip gets blocked.

To clean, switch OFF and depressurize the system, then unscrew the nozzle and wash it thoroughly in the appropriate solvent, using small cleaning brush. Take care to avoid damage to the air cap holes.

Never attempt to clear blocked nozzles using a pin or other metal objects.

Remove the needle and clean. Clean the paint carrying orifices of the gun. Do not allow solvent to enter the air carrying orifices of the gun. Therefore point the gun down while cleaning the paint orifices.

Never soak the entire gun in solvent.

Never turn the spray gun upside down or on its side when spraying.

Do not remove the paint cup while the machine is running.

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 equipment for the job. Contact HSS Hire for advice.

Do not use the unit continuously. Switch off and leave it to cool for about ten minutes in every hour.

Never expose the equipment and/or corrosive chemicals.

Keep the equipment clean - you will find this less of a chore if you clean it regularly, rather than wait until the end of the hire period.

Damaged hoses are dangerous so handle them with

care and coil them neatly, without kinks, for storage.

When not in use, store the equipment somewhere clean, dry and secure.

### FINISHING OFF

Turn off the turbine and disconnect the small air hose from the top of the paint-cup to release the internal pressure.

Empty the paint-cup and rinse out with the appropriate solvent.

Reset the system for spraying, this time using an appropriate solvent rather than paint.

With the air adjuster turned down, flush the system through by spraying the solvent into a suitable container, repeating the process until the solvent emerges clean.

That done, clean the outside of the unit and spraygun using a cloth dipped in the appropriate solvent.

If using cellulose thinners or white-spirit, always work in a well ventilated area, away from possible ignition sources. And do not smoke.

Finally, disconnect all air-hoses and carefully coil them ready for return.



... have you been trained  
The law requires that personnel using this type of equipment in the workplace must be competent and qualified to do so. Training is available at HSS Training 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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Web Site: <http://www.hss.com>

## GENERAL SAFETY

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

Never use this equipment if you are ill, feeling tired, or under the influence of alcohol or drugs.

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

Wear goggles and a face-mask suitable for the material you are spraying. If in doubt, contact either the material's manufacturer or HSS Hire for advice.

This equipment generates potentially harmful noise levels. To comply with Health & Safety at Work regulations, ear defenders must be worn by everyone in the vicinity.

Ensure the work area is well lit and well ventilated. Never spray at or near electrical fittings or equipment.

Always ensure fire extinguishing equipment is readily available and properly maintained.

Never spray highly flammable materials.

Always switch off, unplug and depressurise the equipment before changing paints, cleaning filters and so on. Never leave it switched on and unattended.

Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.

Do not operate the tool when it is dirty or wet. Dust or dampness on the surface of the tool make it more difficult to hold and, under unfavourable conditions, may lead to electric shocks.

Make sure you know how to switch this machine off before you switch it on in case you get into difficulty.

Never leave the machine unsupervised.

Avoid accidental starting. Ensure the switch is in the off position before plugging in. Carrying tools with your finger on the switch or plugging in tools that have the

## TOXIC FLUID HAZARD

Hazardous fluid or toxic fumes can cause serious injury or death if splashed in eyes or on skin, inhaled or swallowed. Know the hazards of the fluid you are using. Store & dispose of hazardous fluid according to manufacturer, local & national guidelines.

switch on invites accidents.

Do not overreach. Keep a proper footing and balance at all times. This enables better control of the power tool in unexpected situations.

Never point the spray gun at anyone or any part of the body.

Never put your hand or fingers over the fluid nozzle.

Never try to stop or deflect leaks with your hand, body, or rag.

Do not try to repair or modify the equipment. If this tool can't do what you expect or fails to work return to HSS Hire.

## DANGER!

### EXPLOSION RISK FROM HALOGENATED HYDROCARBON SOLVENTS

Never use halogenated hydrocarbon solvents in this machine. Contact with aluminum parts may cause an explosion. Some of the most common of these solvents are: Carbontetrachloride, Chlorobenzene, Dichloroethane, Dichloroethyl Ether, Ethylbromide, Ethylchloride and Tetrachloethane.

## ELECTRICAL SAFETY

The HSS Portable HVLV Turbine Spray is designed to plug straight into a standard 230V 13 amp power socket.

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

Keep cables out of harm's way, and clear of the work area.

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.

Always remove the plug from the current socket before undertaking any type of intervention on the HSS Portable HVLV Turbine Spray or if it is left unattended.

Always switch off the machine before removing plug.

Always when unplugging pull the plug, not the supply cord.

To reduce the risk of electric shock, always use a RCD suitable RCD (Residual Current-Operated Device) available from HSS Hire.

Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.

Ensure the machine and power socket are switched OFF before plugging into the power supply.

Never carry or pull the equipment by its flex and hoses.

Do not touch the supply cord in the event of it becoming damaged while working. Disconnect the supply cord plug from the socket.

## GETTING STARTED

Never use the HSS Portable HVLV Turbine Spray until you have fully read and understood this User Guide and the machine has been properly set up using the information it contains. Use of this machine for operations different from intended could result in a hazardous situation.

This HSS Portable HVLV Turbine Spray uses a controlled cone of high volume, low pressure air created by the gun which can spray with very little waste and overspray. This high efficiency delivery absolutely minimizes air pollution emissions associated with paint spraying. Media which are traditionally sprayed by high pressure compressor driven paint sprayers can be sprayed by this technology. The paint drying times are even quicker because the air from the turbine is naturally warm.

Prevent static sparking fire/explosion. Vapors created when spraying can be ignited by sparks. To reduce the risk of fire, always locate the turbine at least 6mtr (20ft) away from spray area. Do not plug in or unplug any electrical cords in the spray area. Doing so can cause sparks which can ignite any vapors still in the air. Follow the coating & solvent manufacturers safety warnings and precautions.

Before using the turbine spray inspect the machine thoroughly. Check the hose is in good condition. Check the hose for cuts, leaks, abrasions, or bulging. If any damage exists, return the unit to HSS Hire.

It is highly recommended to ground the sprayer and other components in the system to reduce the risk of static sparking, fire or explosion which can result in serious bodily injury and property damage.

Prepare the surface you are spraying and the material to be sprayed according to the material manufacturer's instructions.

Remember to use a slower drying reducer than you would normally use with a conventional air sprayer. The warm air of the turbine causes faster drying times. Usually one step slower will do.

For Automotive finishes, reduce and catalyze according to the paint manufacturer's instructions, just remember to use one step slower reducer.

For Industrial finishes, reduce and catalyze according to the paint manufacturer's instructions. If there are no reduction instructions, add reducer step by step until the proper consistency is found. Droplets off the stir stick should be about one second apart.

## WARNING

Universal motors, like the one used in this turbine, by their nature create sparks at the commutator.

So remember, whenever spraying flammable media, keep the turbine at least 6mtr (20ft) away from the spraying area.

With the unit disconnected from its power source, screw the air-hose hand-tight onto the turbine's air outlet.

Connect the other end of the air-hose to the spraygun. Simply pull back the quick-release connector's outer sleeve, push the hose onto the gun's air-inlet and let the sleeve snap back into place.

Fill the paint cup. Now allow the turbine to warm up by turning it on for a few minutes before beginning spraying. This will make adjusting the gun easier. Adjust the gun on a test surface, then begin spraying.

## IDENTIFIER

