

# IMPORTANT USER GUIDANCE ENVIROGARD SC15 WATER MISTING CANNON

## READ ALL THE INSTRUCTIONS BEFORE USING THE EQUIPMENT

**General Specification:** The SC15 is designed for outdoor areas where dust and odour suppression is required – typically demolition, recycling, construction applications and for agriculture. The system integrates a 1140 Litre water bowser, 4 kVA key start generator, mist pump and spray cannon on a twin axle trailer approved for public roads.

The spray cannon produces a fine water mist and airflow from the fan will propel this up to 15 metres horizontally or 8 metres vertically (in still air). The system can operate self-sufficiently for 4 hours before the water tank requires replenishment.

The spray cannon's manual turntable allows a near 360 degree arc of rotation so the fan can easily be turned to face in the desired direction; manual tilt allows vertical throw to be adjusted from -15 to +60°.

Optionally the unit may be powered from the customer's own site power instead of the on-board generator. On request the unit can be supplied with a spray-bar fitted at the rear of the trailer.

The SC15 is a "roll up, switch on" hire product available from *Envirogard*.

**1. INSTALLATION:** the SC15 Bowser is equipped with a standard 50mm coupling, 12v road lights, and should be towed into place.

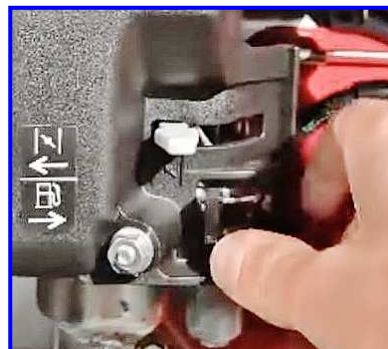
- When choosing a position for the unit check there is nothing which can obstruct the fan intake or discharge. Don't locate the unit where material can be entangled or drawn into the fan – it might be discharged at high speed. The spray cannon is capable of rotating nearly 360° so ensure there are no obstructions close by – maintain at least 1 metre clearance.
- Park the trailer on a firm surface so the trailer is secure, stable and level within 10°. Apply the hand brake and chock the wheels before decoupling.
- The fan head unit is equipped with a supplementary detent pin with R-clip for use in transit (only); remove this first. Set the desired vertical angle of the fan by first grasping the fan casing, pull out the locking knob, tilt the fan to the desired angle, then release the knob to lock the fan position once again.
- Similarly rotate the fan so it points where you want it to; release the knob to lock position once again.
- Fill the bowser with clean (preferably drinking quality) water - max. capacity is 1140 Litres. Water temperature should be lower than 25°C to maintain a good hygiene standard; at higher temperatures regularly re-fresh and / or sanitise tank.



**2. OPERATION:** the SC15 is powered by a Honda electric-start petrol generator equipped with isometer (Bender insulation monitor) automatic fault protection.

- Check oil and fuel level before starting – ensure generator is always turned off and is cool before re-fuelling.
- To start the generator open the fuel valve and set the choke lever (see photos adjacent), then rotate the ignition switch to "Start". Release once the engine fires and gradually return the choke lever so the engine runs smoothly.

Do not crank the starter motor continuously for more than 10 seconds; if the start battery is flat rotate the ignition switch to "ON" and use the recoil start.



- The spray controls are on the side of the fan. Select FAN & rotate the speed control to achieve the desired throw - the fan will take a few seconds to spool up.



Once it has - select PUMP and within a few seconds a fine water mist will be ejected. Adjust fan speed and vertical tilt to achieve the throw required.

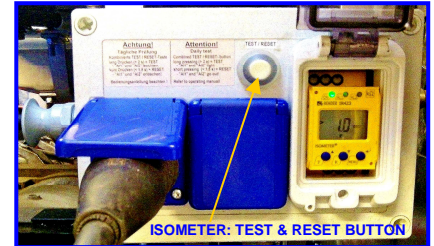


In case of emergency press Emergency Stop Button located on top of machinery cabinet !

- After use switch off the equipment by reversing the previous steps. Turn the generator ignition to “Off” & close the fuel valve.
- It is recommended that you disconnect any water supply to the bowser. Opening the drain valve at the rear of the trailer and unscrewing the water filter housing allows the tank to drain empty of water and is important if the water temperature is sustained above 25°C as bacteria can multiply quickly in warm temperatures. Draining the unit of water is an absolute necessity during frost conditions
- Users must be aware of the risk of Legionnaires’ disease; to mitigate this risk leave the equipment empty of water when not in use. When in use completely empty and refill the bowser regularly using clean potable water (rather than always topping up a part-full bowser); use water kept below 25°C.
- If contaminated water has been introduced to the bowser, or if water in the bowser is sustained at temperatures above 25°C, clean and sanitise the tank and water circuit with a chlorine based agent such as Milton.

**In-use routine maintenance:**

- An in-line water filter is located under the drawbar just forward of the water tank; this will gradually block if your supply contains suspended solids. Periodically unscrew the filter housing, remove the filter mesh, clean in water and re-install.
- If the water jet is uneven clean the nozzles – unscrew & rinse in water; if in a “hard water” area (water with a high calcium carbonate content) you may need to soak the nozzles in an anti-scale solution; rinse in clean water before re-fitting.
- Check generator oil daily before use & top up as required; change oil every 100 hours - capacity 1.1 litre 10W30 oil.
- Check the isometer daily by pressing the “Test” button for more than 2 seconds – during a successful test the power supply to the fan/pump will disconnect; briefly press again to reset. If pressing the test button fails to disconnect the power do not use the equipment - ask for advice from the supplying hire depot.



**Trouble-Shooting:**

<u>Problem</u>	<u>Cause / Solution</u>
Generator won't start ?	Reset emergency-stop button, check ignition is “ON”, check oil and petrol level are sufficient, check H.T. lead is connected to spark plug.
Fan won't start ?	Turn fan speed-control towards maximum. Re-set isometer test button.
Mist Pump won't start / Mist Cycles On-Off	Dry-run protection stops mist pump when water level is too low in tank – replenish water bowser. Pump is frozen !!! Allow to defrost.
Mist Pump on but little or no water mist	In line filter or nozzles blocked – clean.
Machine suffers excess vibration ?	Imbalanced fan due to debris build up on fan blade, or damage to fan blade. Stop machine & remove debris; in case of damage to blade contact supplier.

3. **WARNINGS:** Ensure the petrol generator is turned off and is cool before re-fuelling; in the event of a fuel spillage do not restart the generator until residues have been cleaned up. Check engine oil daily, top up as required.

Keep clear of fan inlet and outlet and never remove the fan guards. The SC15 discharges a plume of air and water mist at speed - don't walk inside the plume within 2 metres of the discharge nozzle; always wear eye protection. This machine works with clean water - avoid using dirty or untreated water; do not use stagnant, fetid water.

The SC15's trailer is equipped with a 50mm ball coupling and 12v road lights – only connect to a vehicle with a corresponding coupling. Use both wheel chocks and hand brake to secure the trailer.

If the machine sustains mechanical damage the equipment must be taken out of service and returned to the supplier.

4. **AFTER USE:** on completion of work empty the bowser. Always clean off the outside of the machine before returning to supplier. Make sure the trailer is left secure with hand brake & wheel chocks deployed so that it cannot roll.

***IMPORTANT: FROST PRECUATIONS - IN THE EVENT OF FROST THIS EQUIPMENT MUST BE COMPLETELY DRAINED OF WATER TO PREVENT DAMAGE FROM ICE FORMATION. OPEN THE TANK-DRAIN VALVE AT THE REAR OF THE TRAILER, AND ALSO UNSCREW THE IN-LINE FILTER (LOCATED UNDER THE MACHINERY CABINET JUST FORWARD OF THE TANK).***

5. **TECHNICAL DATA:**

Horizontal throw 15 metres; vertical throw 8 metres (still air); rotation manual 360°; vertical tilt range -10 to +60°.
Bowser tank capacity: 1140 litres. Mist cannon water consumption: 250 litres / hour.
Power: Fan 1.5kW, Mist pump 1.1kW. Power source: integral 4kVA petrol generator, single phase 50 Hz, 230v.
Noise level dBA: 70-73 @ 10m, 68-69 @ 25m, 62-64 @ 50m.
Trailer Rig Dimension (LxWxH mm) 3400 x 1780 x 1900; Weight tank empty 680 kg, tank full 1820 kg.

**FOR MORE INFORMATION ABOUT OUR RANGE OF DUST CONTROL, AIR FILTRATION AND VACUUM EQUIPMENT SEE OUR WEBSITE [www.envirogard.co.uk](http://www.envirogard.co.uk) OR CONTACT OUR HIRE DEPOTS**

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