

IMPORTANT USER GUIDANCE

VORTEX 440 WATER MISTING CANNON

READ ALL THE INSTRUCTIONS BEFORE USING THE EQUIPMENT

General Specification: The Vortex 440 is a mobile misting fan which discharges a fine mist of "Nebulized" water droplets to suppress airborne fugitive dust and odours. Because water-mists "float" they envelop airborne dust more effectively than water sprays or jets.

The Vortex 440 is an easy to use mobile unit which operates using 110v power and water. The throughput of water can be adjusted to suit the users application, and the smaller droplet size which this misting fan produces compared with a water "spray" means less pooling on the ground.

The Vortex 440 is on wheels so can be easily positioned where convenient to the user, & the discharge can be angled up or down. The Vortex can also be used for cooling purposes, with a de-odouriser to suppress unpleasant smells, or without water misting simply as a ventilator. The Vortex 440 is a "roll up, plug in, and switch on" unit.

1. INSTALLATION: the unit can be used inside and outdoors. Place on a firm level surface and ensure there is nothing to obstruct the fan inlet or discharge. Don't operate where there are loose materials that may be entrained and drawn into the fan - they may be discharged at high speed.

- Set the angle of discharge by pulling out the locking pin, tilt the fan head to the desired angle; re-insert the pin to fix the position.
- Fill the main tank from a supply of clean potable water through the main filler cap (9), or for continuous use connect a water supply hose to the water inlet (4). If using a de-odouriser dose this into the main tank in accordance with its' directions for use.

2. OPERATION: the unit is supplied with a 110v 16 amp fly lead. Connect this to a 110v CTE site supply; if using a generator we recommend one of at least 3KvA to accommodate the start-up current:

- Open the main switch cover (1) and turn on the fan; the fan will spool to its operating speed within a few seconds. Now turn on the water-pump switch.
- Adjust the water flow-regulator (2) to achieve the desired misting effect.
- To switch-off reverse the above procedure; we recommend you disconnect the supply hose from the water inlet (4) – this is an absolute requirement during frost conditions.

Technical Specification Vortex 440

Airflow 5400 M3/hr, Reach 11 metres (no wind), Tilt Range 0 / 15 / 30 / 45 degrees.
 Mist Output 0 – 30 litres/hr, Droplet Size 5 – 30 Microns, Tank Capacity 68 litres.
 Equipt. Dimensions (LxWxH mm) 650 x 560 x 1180, Equipment Weight 41kg (dry).
 Operating Voltage 110v, Current Draw Running 10 Amp, Sound Level 76dBA@ 3m

In-use routine maintenance: the incoming water supply passes through a filter (2) which will gradually block if your supply contains suspended solids (& most supplies do).

- Periodically clean the filter - unscrew the filter cover (2) to rinse the wire screen.
- If you are in a "hard water" area (water with a high calcium carbonate content) soak the wire screen in an anti-scale solution; finally rinse in clean water before re-fitting.
- If operating in temperatures above 30 celcius we recommend you treat the water tank monthly with a mild chlorination agent (e.g. a solution of Milton). Allow this solution to circulate for 1/2 an hour with the water pump switched on, then dispose of the cleansing solution in accordance with its manufacturers instructions.

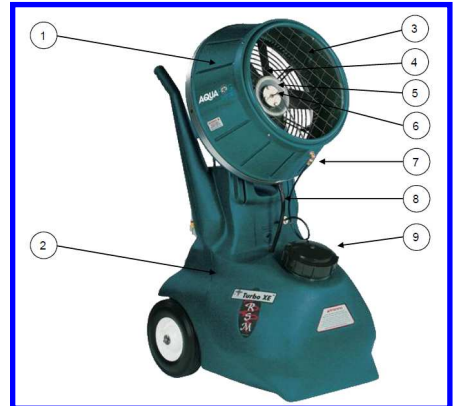
Trouble-Shooting:

Problem	Cause / Solution
Fan does not start ?	Check 110v supply is live, plug is secure in socket & switch is "On".
No Water Mist ?	Ensure water tank is filled, check pump switch is "On", open flow regulator lever.
Machine 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.

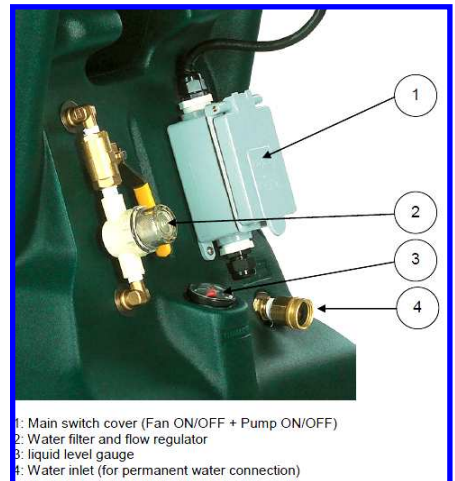
3. WARNINGS: Do not attempt to open the fan casing and NEVER remove the inlet and outlet guards. The fan discharges a jet of high speed air - don't walk within 2 metres of the discharge while it is in operation; always wear eye protection. This machine works best with clean potable drinking water - avoid using dirty or untreated water; do not use stagnant, fetid water. Should the machine sustain mechanical damage the equipment must be taken out of service and returned to the supplier.

4. AFTER USE: on completion of work disconnect machine from power and water supply; always clean off the outside of the machine before returning to supplier. Store in a frost-free environment when not in use.

FOR MORE INFORMATION ABOUT OUR RANGE OF DUST CONTROL, AIR FILTRATION AND VACUUM EQUIPMENT SEE OUR WEBSITE www.envirogard.co.uk OR CONTACT OUR HIRE DEPOTS



Item No.	Description
1	Fan Cowl
2	Main Tank
3	Finger Guard
4	Fan Blades
5	Central Hub
6	Injection Tube
7	Injection Fitting
8	Overflow Pipe
9	Main Filler Cap



1: Main switch cover (Fan ON/OFF + Pump ON/OFF)
 2: Water filter and flow regulator
 3: liquid level gauge
 4: Water inlet (for permanent water connection)

