

USER GUIDANCE: RT HYDROCATCH 1000 **WATER MIST DUST SUPPRESSION UNIT**

READ BEFORE USING THE APPLIANCE



The electric-start engine and H.P. pump deliver up to 15 L/min of water at 200 bar.

GENERAL: RT Hydrocatch is a 1100L diesel-engine powered highway tow trailer equipped with a:

- water mist cannon for dust control (15 - 30m range)
- Jetwash lance for cleaning with 10m hose.
- option to couple a second (auxiliary) mist cannon



The unit can be pre-filled and towed to any area where dust suppression or jet washing is required. The highway approved trailer is equipped with a ring coupling (50mm ball coupling available on request), over run brakes, and road lights. For continuous operation couple a water supply hose to the tank auto-refill point.

PRE-USE CHECKS / FILLING: Visually inspect the trailer, water tank, water-strainer, engine, pump, hoses, jetwash lance and mist cannon before use (see schematic overleaf); if the equipment is damaged do not use it – contact the supplying hire depot.

Ensure the trailer is level and the hand brake is applied; either fill through the tank lid, or connect a clean water supply to the tank refill point (a valve will stop the tank over-filling).

IMPORTANT: ENGINE WILL NOT RUN UNLESS THERE IS SUFFICIENT WATER IN THE TANK.

Once filling is complete ensure the tank lid is securely closed, level the trailer within 15°, and ensure the handbrake is applied; if necessary use wheel chocks as well.

OPERATING INSTRUCTIONS (see schematic overleaf):

1. Daily: check engine oil, fill fuel tank with clean diesel, and open fuel valve below the fuel tank.
2. Weekly: check pump & gearbox lubricant level - oil should reach the mark on the sight glass. Clean water-strainer located at the inlet to the pump.
3. Before engine start: close all output control-valves to prevent water discharge on start-up.
4. Move the engine speed-control lever to “RUN” & press the (red) engine decompression lever.
5. Insert the key and turn clockwise to “Start” – release key when the engine fires.

TO PROTECT THE H.P. PUMP FROM DRY RUNNING THE ENGINE WON'T TURN OVER IF THE WATER LEVEL IN THE BOWSER IS TOO LOW !

A CONTINUOUS AUDIBLE ALARM + ILLUMINATED BLUE LED WARNS OF LOW WATER.

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Setting Hire Standards



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If water tank level gets too low the engine will stop **AND WILL NOT TURN OVER** until the bowser is topped up with water. Switch ignition key to OFF to silence the alarm.

6. Once the engine is running let it warm up for 1-2 minutes then increase the speed. You can now direct the water output using the control-valves on the output manifold. Before activating the mist cannon ensure no one is in the discharge zone immediately in front of the fan (within 3 metres) before opening any valve.
7. **Jetwash**: release the jetwash lance from its stowed position on the frame. Press the trigger on the gun and bleed air out of the hose until air-free water is issuing. Hold the lance in both hands when squeezing the trigger because it will “kick back”. Use only the hose, lance and nozzles supplied with the machine and do not attempt to connect or disconnect hose, lance or nozzle while pressurised.
8. **Misting Cannon**: release the misting fan by pulling out the lock-pin at its base - rotate fan to the desired position - push lock-pin in to secure. Tilt fan to the desired vertical position; release and secure tilt mechanism using handle marked on schematic.

During operation keep clear of the fan intake and its immediate discharge plume; water mist may be ejected at high velocity with a high impact force. Open the mist-cannon control valve and adjust engine speed to alter the output spray; for best economy use the minimum engine speed necessary.

9. **Auxiliary Dust Suppression**: a supplementary roving mist cannon can be connected to the jetwash hose (in place of the lance) – follow separate instructions provided with the supplementary misting units.
10. **TO STOP ENGINE**: close all output valves, reduce engine speed to idle for 3 to 4 minutes, turn the ignition key to OFF and close the fuel valve.

!! IN EMERGENCY: TURN IGNITION KEY TO “O” OR MOVE THROTTLE TO “STOP” !!

Always dissipate residual pressure after use - OPEN the jetwash-hose valve and activate the trigger of the jetwash lance. If the equipment will be unattended secure tow coupling and remove the ignition key to prevent unauthorised use.

Before relocating the trailer ensure the hose is securely stowed, the jetwash lance is retained in its holder, and the cannon is stowed in the transit position (tilt up to maximum incline) with the locking pin secure at the base of the cannon. Before returning to the hire company empty of ALL water. Note that lifting points are for dry-lift (water tank empty) only.

TECHNICAL:

DIMENSIONS:	Trailer Length 3500mm Width 1550mm Height 2150mm Max Authorised Mass: 1500 kg Highway trailer with ring coupling, over-run brakes, and highway DOT lighting.
ENGINE:	Yanmar L100V 6.8kW Diesel, electric + recoil start; fuel tank 5 litres; engine oil SAE10W30.
PUMP:	Max Flow 15 litres/min @ 200 bar / 2900 psi, pump oil SAE10W30, gearbox oil EPA85/140 Output: to Jetwash on 10m hose <u>or</u> Hydrocatch aerial mister (15-30m throw in still air).
HAV's:	Jetwash Lance: Vibration Emission 1.64 ms ² (Equivalent to 5 HSE HAV Points / Hour).



Noise



High Pressure Water



Wear Hearing & Eye Protection

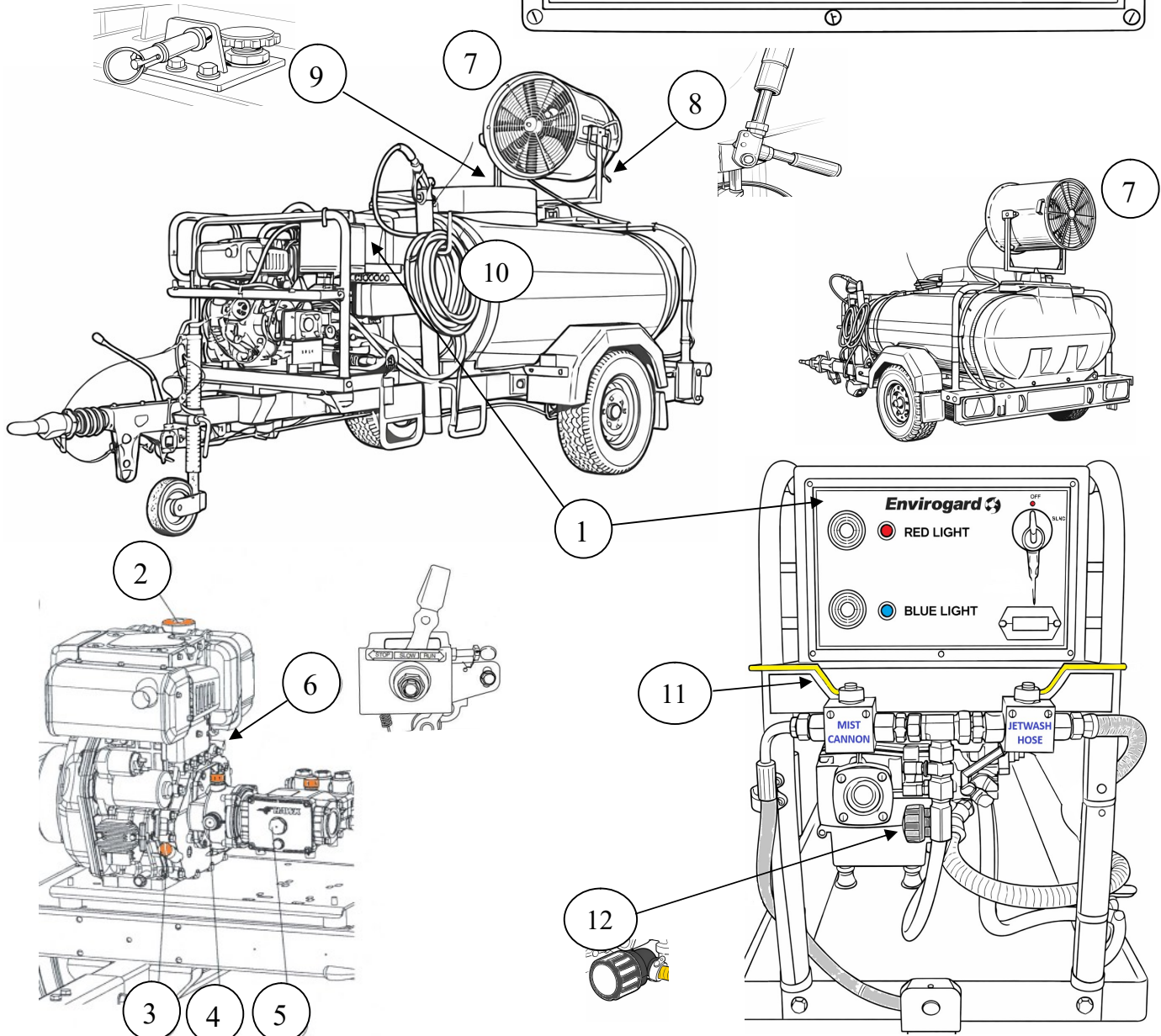
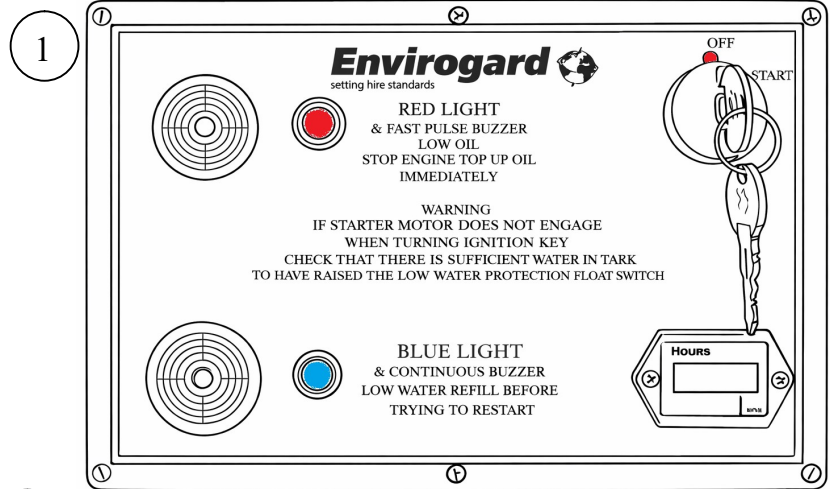
COMMON TROUBLE SHOOTING:

Loss of Pressure: Clean water strainer. Engine speed too low – adjust speed.
Engine Shuts Down: Pump dry-run protection has been activated – fill water tank.
Check fuel & engine-oil level.

FOR MORE INFORMATION ABOUT OUR RANGE OF HIRE EQUIPMENT PLEASE SEE OUR WEBSITE www.envirogard.co.uk

RT HYDROCATCH MIST CANNON & JETWASH BOWSER : QUICK-START INSTRUCTIONS

1. BATTERY BOX & KEY START
2. DIESEL FILL
3. ENGINE OIL CHECK & FILL
4. REDUCTION GEAR BOX
5. HIGH PRESSURE PUMP
6. ENGINE SPEED CONTROL LEVER
7. MISTING FAN
8. FAN TILT LOCK
9. FAN ROTATION LOCK
10. JETWASH LANCE & HOSE
11. OUTPUT CONTROL VALVES
12. IN-LINE WATER STRAINER



TO DISCOURAGE THEFT OF THIS EQUIPMENT USE A TOW-HITCH COUPLING LOCK.

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CAUTIONS / WARNINGS

!! IN EMERGENCY: TURN IGNITION KEY TO “O” AND MOVE THROTTLE TO “STOP” !!

ACTIVATE JETWASH LANCE TO DISSIPATE RESIDUAL PRESSURE.

WHEN NOT USING RT HYDROCATCH - IF LEAVING IT UNATTENDED STOP THE ENGINE AND REMOVE THE IGNITION KEY.

TO DISCOURAGE THEFT ENSURE TOW-HITCH COUPLING IS LOCKED !

This equipment is mobile and can be used and located in many different environments. Users are therefore reminded of the need to ensure that all tasks and locations are risk assessed before activity commences to ensure that all significant hazards are identified with appropriate precautions put in place. Caution: If lifting this equipment note that the integral lifting points are for dry-lift (water tank empty) only.

The RT Hydrocatch is not for use in explosive or flammable atmospheres. The engine will generate exhaust fumes; the machine should be located in well-ventilated areas where exhaust fumes can safely disperse.

This equipment is intended for jetwash cleaning (200 bar) and for generating water mist for dust suppression. This equipment ejects water at high velocity and water jets are dangerous if misused. The jet/spray must not be directed at people, animals, the machine itself, non-waterproof, fragile or electrical equipment, nor power cables. Do not attempt to couple or un-couple tools, hoses or nozzles while the equipment is pressurised.

The equipment should be operated by an able-bodied adult competent in the use of pressure washers up to 200 bar / 2900psi. This equipment must not be used by minors or anybody under the influence of drugs or alcohol. When jet-washing - the work area should be demarcated and you should exclude other people from the high-pressure jetwash zone.

Personal protective clothing must be worn. When operating the RT Hydrocatch use an impact resistant visor (or safety goggles) plus ear defenders as a minimum. Water jets can generate high noise levels and produce a high impact force, so when using the jetwash protective (waterproof) clothing, gloves and boots should be worn in addition. Some jetwash applications may generate an aerosol containing pathogens e.g. guano removal, the cleaning of animal by products etc; the user must assess whether supplementary RPE needs to be used in this situation.

The engine and pump generate noise, the level varies according to engine speed. Typical noise levels in-service are 84 dB(A) @ 7 metres. The jetwash lance is supplied with a 10 metre hose and the mist cannon has a 15 - 30m range so where possible locate the machine away from persons who might be affected by noise. Personnel obliged to work in close proximity to the machine must use hearing protection. If the machine is operating in a wholly or partially enclosed space from which noise cannot readily dissipate Users should consider conducting a noise survey to identify if extended mandatory hearing protection zones are required.

This equipment contains water - do not allow it to freeze !!! If the pump has frozen DO NOT attempt to start the engine; allow to thaw and inspect for damage before use. If possible store indoors during frost; if this is not possible you must introduce anti-freeze (25% solution); operate the engine at low speed to draw it through the pump, hoses, lance and spray nozzles: this will protect down to approx – 5°C. Before next use flush with clean water and collect the antifreeze solution from the end of the jetwash hose (do not dispose of antifreeze to the environment).

Legionella bacteria can grow at temperatures between 20°C and 45°C, particularly in dirty or contaminated water. For this reason always fill the bowser with cold, clean, potable (drinking quality) water only. If you will not be using the equipment for a few days drain it of water; before next use purge the equipment with clean water whilst operating the engine at low speed to minimise production of spray.

If ambient conditions are such that water temperature is sustained above 20°C consider treating the tank and flushing the equipment periodically with a sanitising agent such as Milton. The user's attention is drawn to HSE's guidance on Legionella ACoP L8; depending on your work environment and prevailing temperature it may be necessary for you to include the equipment within your Legionella management programme.

Fuels & Lubricants: diesel fuel is flammable – take care not to cause a fire - top up fuel and check lubricant levels with the machine shut down and in a cold state. If lubricant is required contact the supplying hire depot. Engine oil must be changed every 200 hours, pump oil + gearbox oil every 500



Noise



High Pressure Water



Wear Hearing & Eye Protection

