

PREFACE

- EnviroSaver is an ozone generator designed and built to disinfect washing in cold water. Always follow these instructions carefully. Failure to do so may result in damage to the machine, or even serious bodily injury.
- All installation tests should be performed by a qualified service technician equipped with proper tools.
- In case of a breakdown or damage to electrical and/or mechanical components, only genuine original LSA replacement parts should be used.
- All component replacements should be done by a qualified service technician using only genuine LSA replacement parts in order to avoid improper assembly or adjustment which could cause hazardous conditions.
- Maintenance should be performed on a routine basis to keep the machine running at its optimum.

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Envirosaver

Wall Mount

Weight ----- 17Kg

Cabinet Dimensions

Height ----- 400mm

Width ----- 500mm

Depth ----- 240mm

Power ----- 220V, 50Hz, Single Phase, 2A

Oxygen Generator

Wall Mount

Weight ----- 20Kg

Cabinet Dimensions

Height ----- 400mm

Width ----- 500mm

Depth ----- 240mm

Power -----220V, 50Hz, Single Phase, .8A

Wall Mount Envirosaver

The Envirosaver cabinet is supplied with a wall mount bracket and should always be fixed into either concrete or wall studs using the correct fasteners. Always allow room on either side of cabinet for air flow. When choosing the position to mount the Envirosaver cabinet, consideration should be taken to allow enough room for the Oxygen generator cabinet to be mounted either beside or underneath it. Always allow for the cabinet to be installed with enough room for service access and in a dry and well ventilated area. Install cabinet no further than 4 meters from washer.

Wall Mount Oxygen generator

The Oxygen generator cabinet is supplied with a wall mount bracket and should always be fixed into either concrete or wall studs using the correct fasteners. Always allow room on either side of cabinet for air flow. When selecting a position for the cabinet to be installed allow enough room for service access and in a dry and well ventilated area.

Cable Connection

Washer Panel Mount Female Plug Base

7 Pin (mains/ Start / Stop) – Connection in washer

- Connect cable "**1**" to the Earth connection in the washer
- Connect cable "**2**" to the 220V terminal block in mains supply connection in the washer. Always make sure that the connection to the washer is connected to the switched side of the 220V supply.
- Connect cable "**3**" to the neutral connection block in the washer.
- Connect cable "**4**" to the start relay (Soap Board) in the washer.
- Connect cable "**5**" to the neutral connection block in the washer.
- Cut the neutral supply wire to the main control board in the washer.
- Connect cable "**6**" to the neutral supply side of the cut neutral wire.
- Connect cable "**Z**" cable to the main control board side of the cut neutral wire.

Envirosaver to Washer (1 x cable)

Connect the 6 meter lead with the 7 pin female plug to the Envirosaver cabinet and the other end of the lead with the 7 pin male plug to the Washer.

Oxygen Generator to Envirosaver (1 x cable)

Connect the 1 meter lead with the 3 pin female plug to the Oxygen Generator cabinet and the other end of the lead with the 3 pin male plug to the Envirosaver cabinet.

Ozone Jet Installation

The ozone jet must always be mounted at the lowest point on either the front or rear of the outer drum. When choosing a position to mount the ozone jet you will need a flat surface of no less than 40mm in diameter. Once a position has been selected, drill a 10mm hole 20mm in from the outer edge of the drum. Silicone & pop rivet the jet mounting bracket making sure that the 10mm hole is central to the centre of the mounting bracket. Use Teflon and screw the ozone jet into place.

With washers that have electric heating elements there are some models that are able to have one element removed and a blank fitted in its place. When this is the case the blank can be drilled out and the ozone jet fitted directly into it.

Hose Installation & connection

Envirosaver to Washer

Using the hose clamps provided connect the 8mm hose to the check valve barb located in the Envirosaver cabinet via the 20mm gland provided. Connect the other end of the hose via 20mm gland provided to the ozone jet in the washer.

Oxygen Generator to Envirosaver

Using cable ties connect the 8mm silicone hose via the 25mm corrugated conduit gland provided to the to the pressure switch barb located inside the Envirosaver cabinet.

Washer Parameters

When programming washer for ozone always use the following guidelines:

- Always fill washer with water prior to activating Envirosaver (ozone).
- Always use cold water in Envirosaver (ozone) wash bath.
- Always finish wash cycle with a rinse with no Envirosaver (ozone) in it.

Example of a Standard Envirosaver Wash Cycle

Wash 1.

- Cold water - Low water level – 1 x minute – Detergent
- No Drain
- Activate Envirosaver (ozone) – 15 x minute
- Drain

Rinse 1.

- Cold water – High water level – 1 x minute
- No Drain
- Activate Envirosaver (ozone) – 6 x minutes
- Drain

Rinse 2.

- Cold water – High water level – 2 x minutes – Softener
- Drain with High Spin – 6 x minutes

Example of a Heavy Soiled Envirosaver Wash Cycle

Pre-Wash.

- Cold water - Low water level – 2 x minutes
- Drain

Wash 1.

- Cold water - Low water level – 1 x minute – Detergent
- No Drain
- Activate Envirosaver (ozone) – 8 x minutes
- Drain

Wash 2.

- Cold water - Low water level – 1 x minute – Bleach
- No Drain
- Activate Envirosaver (ozone) – 8 x minutes
- Drain

Rinse 1.

- Cold water – High water level – 1 x minute
- No Drain
- Activate Envirosaver (ozone) – 6 x minutes
- Drain

Rinse 2.

- Cold water – High water level – 2 x minutes – Softener
- Drain with High Spin – 6 x minutes

Testing & Adjustment

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Start the wash program on the washer and allow it to move through to the Envirosaver (ozone) section of the wash bath.

Open the flow gauge needle valve located in the Envirosaver cabinet fully.

Once the Envirosaver (ozone) has been activated check the flow gauge on the oxygen generator cabinet. It will need to be adjusted to approximately 3 Litres.

Once this is achieved the flow gauge in the Envirosaver cabinet will need to be adjusted to between 1 & 1.5 Litres using the needle valve located in the Envirosaver cabinet.

While still running reduce the oxygen flow in the oxygen generator cabinet so that the flow meter reads .25 Litres. Once this is achieved the fault light on the Envirosaver cabinet should be activated (turn red). If this does not occur then adjust the pressure switch located inside the Envirosaver cabinet until the fault light is activated (turns red). The fault light should deactivate (turn green) When the flow gauge in the oxygen generator cabinet is returned to 3 Litres.

When the Envirosaver is operating correctly both the fault lights on the front of the Envirosaver cabinet will remain Green and when in operation both lights on the front of the oxygen generator cabinet will be blue.

If one or two of the fault lights located on the front of the Envirosaver cabinet change to Red and remain red for more than 2 minutes the washer will shut down and the Fault light/s will remain (red).

The upper fault light indicates an electrical fault (no ozone being produced), whereas the lower fault light indicates an oxygen flow fault (no oxygen being produced or a leaking hose).

“Both Fault lights are dead”

- Power to the washer is dead (Check washer)
- 2A fuse is blown (Replace fuse)
- Faulty display board (Replace board)
- Faulty 12V power supply (Replace 12V power supply)

“Upper Fault Light is Red (Electrical Fault)”

- 220V HV power supply has tripped or faulty (Reset or replace power supply)
- Corona discharge cell faulting (Remove & clean or Replace corona discharge)
- Faulty display board (Replace board)
- Faulty relay (Replace relay)

“Lower Fault Light is Red (Pressure Fault)”

- Faulty oxygen generator (Service on oxygen generator)
- Faulty check valve (Replace check valve)
- Faulty pressure switch (Replace pressure switch)
- Split hose (replace hose)

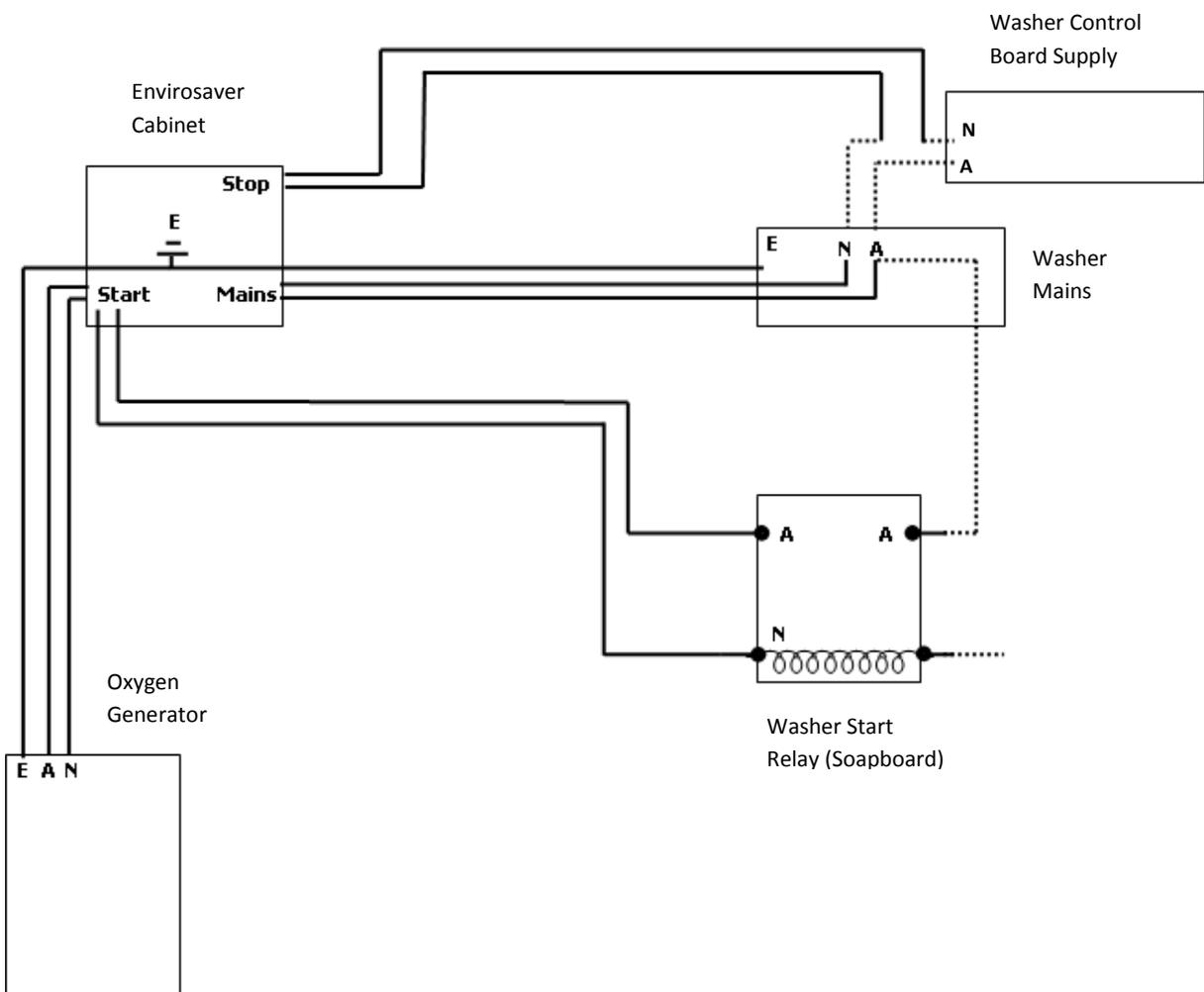
“Both Fault Lights are Green but both Flow Gauges read 0 Litres”

- 2A fuse is blown (Replace fuse)

- Start relay in Envirosaver cabinet faulty (Replace relay)
- Start relay (Soap Board) in the washer faulty (Replace relay or Soap Board)
- Faulty pressure switch (Replace pressure switch)

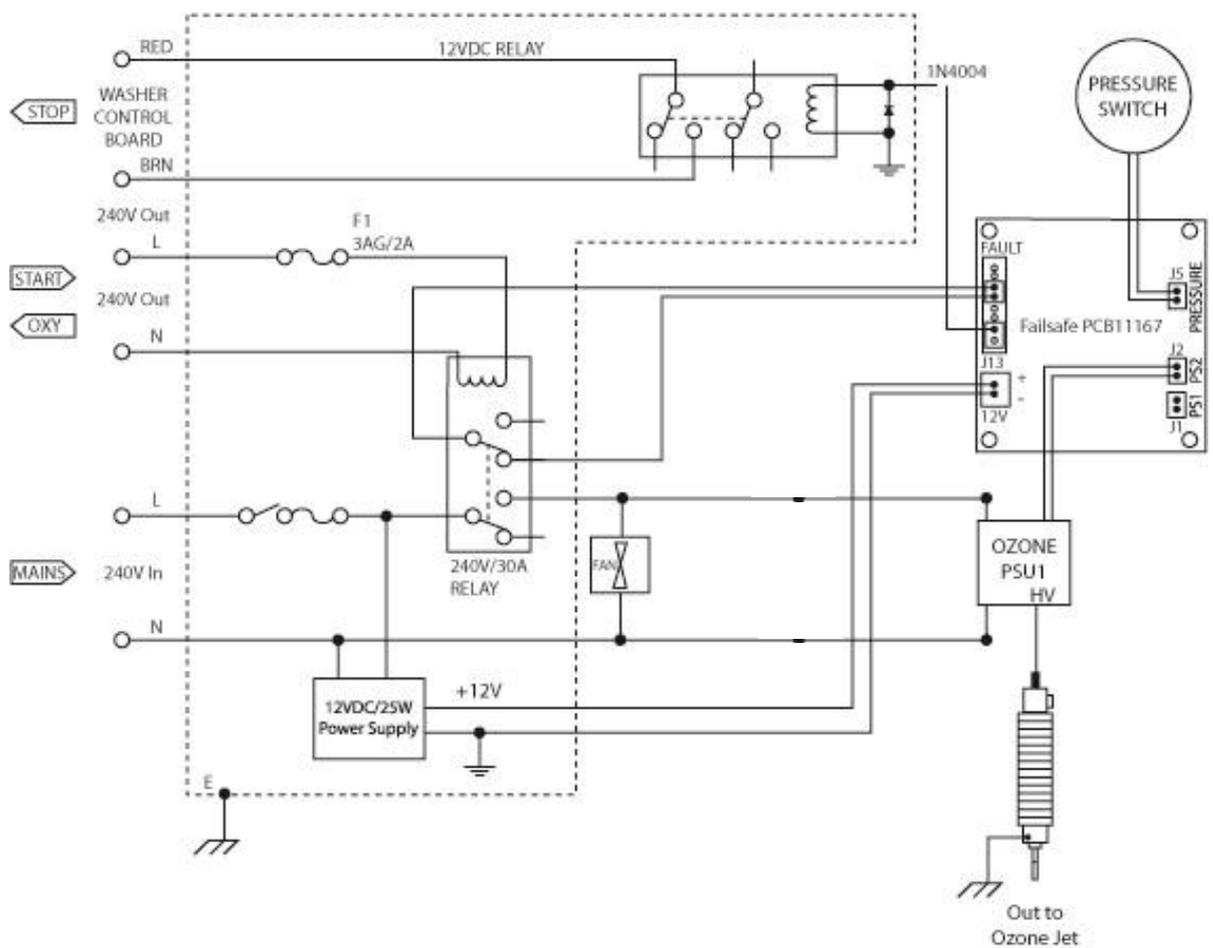
Envirosaver Wiring Diagram

Envirosaver Installation



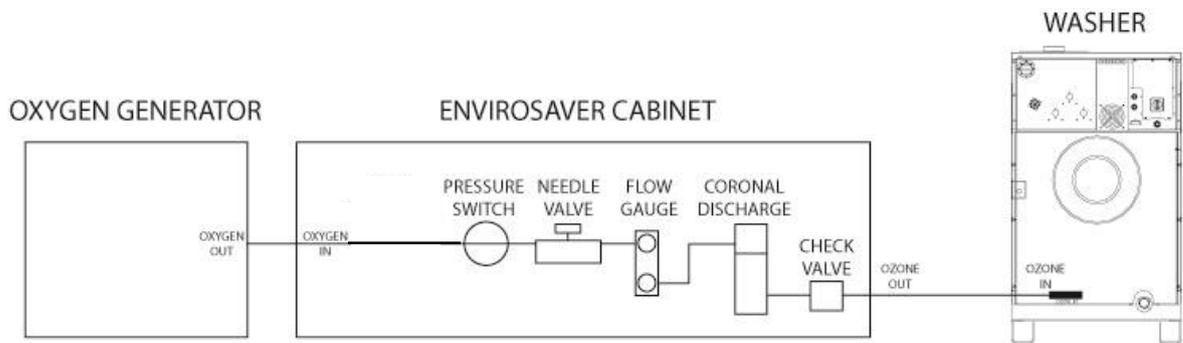
Envirosaver Wiring Diagram

Electrical Envirosaver Cabinet



Envirosaver Air Flow

Envirosaver Installation Air Flow



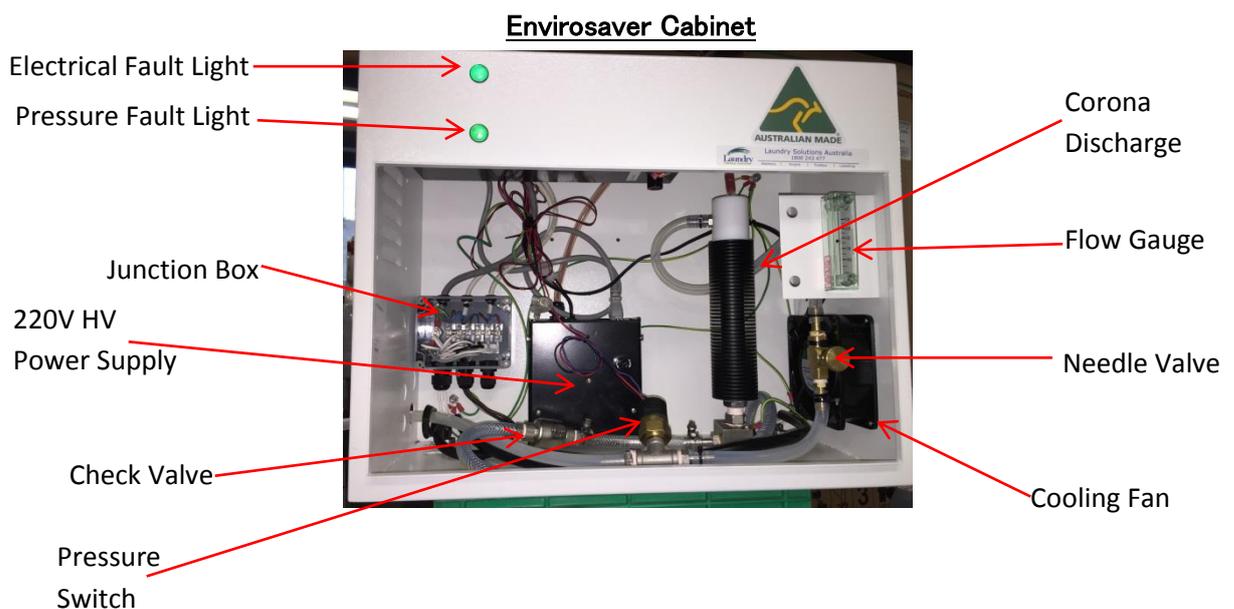
Envirosaver

Monthly

- Clean dust / lint from in and around cabinet.

4 Monthly

- Remove Corona Discharge unit and disassemble. Clean with methylated spirits and dry thoroughly. Reassemble and fit back into cabinet.
- Inspect all hoses for splits or leaks.
- Test check valve is operating without any restrictions.
- Check all wiring and connections.
- While the Envirosaver is operating check all airflow componentry for leaks.
- While the Envirosaver is operating check cooling fan is functioning.
- While the Envirosaver is operating check and adjust if required the flow gauge and the pressure switch. Flow gauge should be set between 1.0 – 1.5 & the pressure switch should be set to activate between 0.0 – 0.5.
- Operate the Envirosaver & simulate both fault lights. For airflow fault adjust oxygen generator to 0.0 (Lower light on Envirosaver cabinet should turn red). For electrical fault remove plug from 240V HV black power pak (Upper light on Envirosaver cabinet should turn red).



Oxygen Generator

Monthly

- Clean the Air Intake Dust Particle Filter.

