

This manual is applicable to Coolon EMP units in the 0036AL or stainless steel enclosure, which currently have breathers/vents fitted.

**Tools Required**

- Drill/driver
- 5mm hex bit
- 4 to 12mm step drill bit (or a 4mm and 12mm drill bit)
- Deburring tool/bit
- High capacity breather valve (provided by Coolon)

**Wear Personal Protective Equipment**

The following is minimum PPE required for this task, additional PPE may be required based on site requirements.



**⚠ ATTENTION:**

The purpose of this procedure is to provide safe work instruction to relieve the potentially trapped hydrogen (H<sub>2</sub>) gas inside the EMP enclosure. Whilst the probability of having a volatile level of hydrogen is extremely low, we urge all operators to follow the outlined procedure as it is designed to allow safe operation even at the highest levels of hydrogen concentration.

Potential hazards	Risk rating	Control measure(s)
Low concentration hydrogen ignition	Low	Gas ignition is an unlikely event. If the gas was ignited it would push the gas out past the seals at the perimeter of the enclosure. A hissing sound may be audible. A operator standing an arm's reach in front of the unit would be safe.
High (maximum) concentration hydrogen ignition	Low	Gas ignition is an unlikely event. The generation of this volume of gas is also very unlikely. If the gas was ignited it would rupture the front of the enclosure deforming the front cover and possibly swinging the cover open. Ignited gas would be directed mainly to the right away from the enclosure when facing the EMP. A loud sound similar to an engine backfire will be audible. A operator standing an arm's reach in front of the unit would be safe.
Electric shock	Low	Site electrical isolation procedures should be following in conjunction with the procedure outlined below.

**Installation Instructions**

**Step 1**

Power down Emergency Pack by switching off its mains supply line. Both Mains supply and Control line should be de-energised.

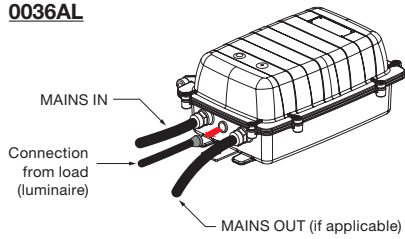
Do not press the TEST BUTTON on the EMP lid.

Emergency Pack will enter Emergency Mode, which turns the EM luminaire ON and "MAINS POWER" LED indicator on the EMP lid OFF, discharging the battery.

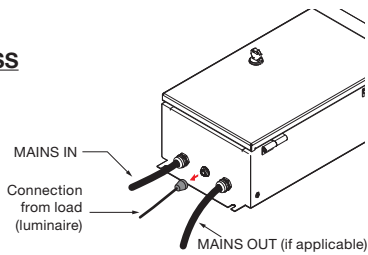
**Step 2**

Disconnect the load from the EMP by removing the twist lock connector.

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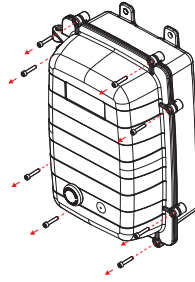
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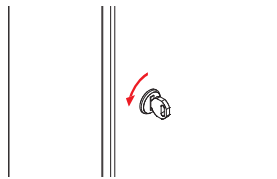
**Step 3**

Open the emergency pack enclosure.

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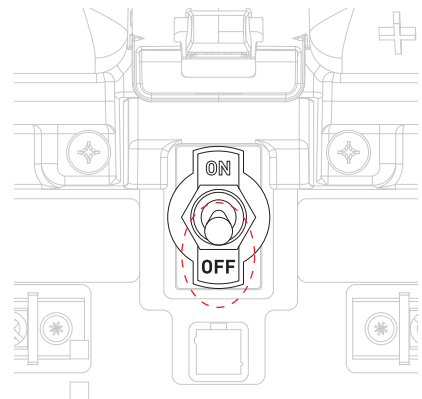


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**Step 4**

Switch the 'Battery Isolation' switch to the OFF position.



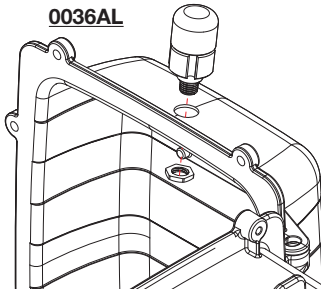
**Step 5**

If convenient remove the top Gore Vent and replace with High Capacity Breather Valve.

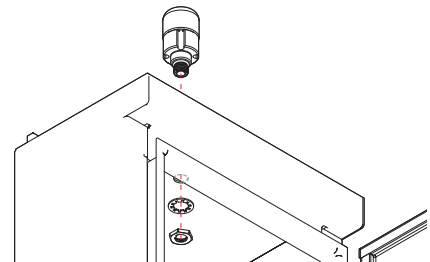
If the Gore vent is located in a hard to reach location it can be left in the enclosure and the High Capacity Breather Valve can be added to the top of the enclosure in a convenient mounting location.

The High Capacity Breather Valve should be mounted on the highest point of the enclosure.

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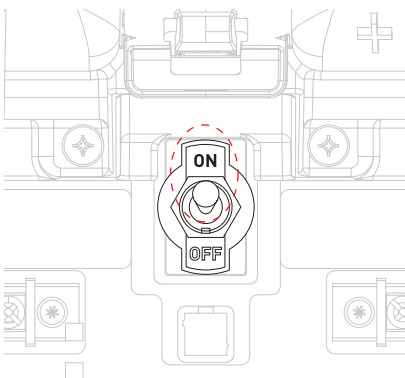


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**Step 6**

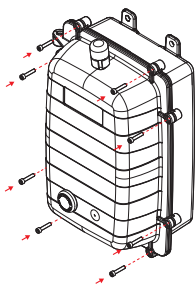
Switch the 'Battery Isolation' switch to the ON position.



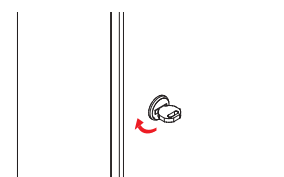
**Step 7**

Close the emergency pack enclosure and reconnect the load.

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**Step 8**

Re-energise the EMP

- 8.1. Allow at least 16 hours of uninterrupted charge time to charge the batteries to a suitable capacity to undertake any in-service test.
- 8.2. Once the batteries are recharged the site may wish to test their capacity by switching of the mains supply and observing a minimum of 90min or EM luminaire operating time.
- 8.3. Should any EMP detect any battery or controller fault once the EMP is re-energised the RED LED indicator on the cover of the EMP will flash on-off indicating the unit requires attention.