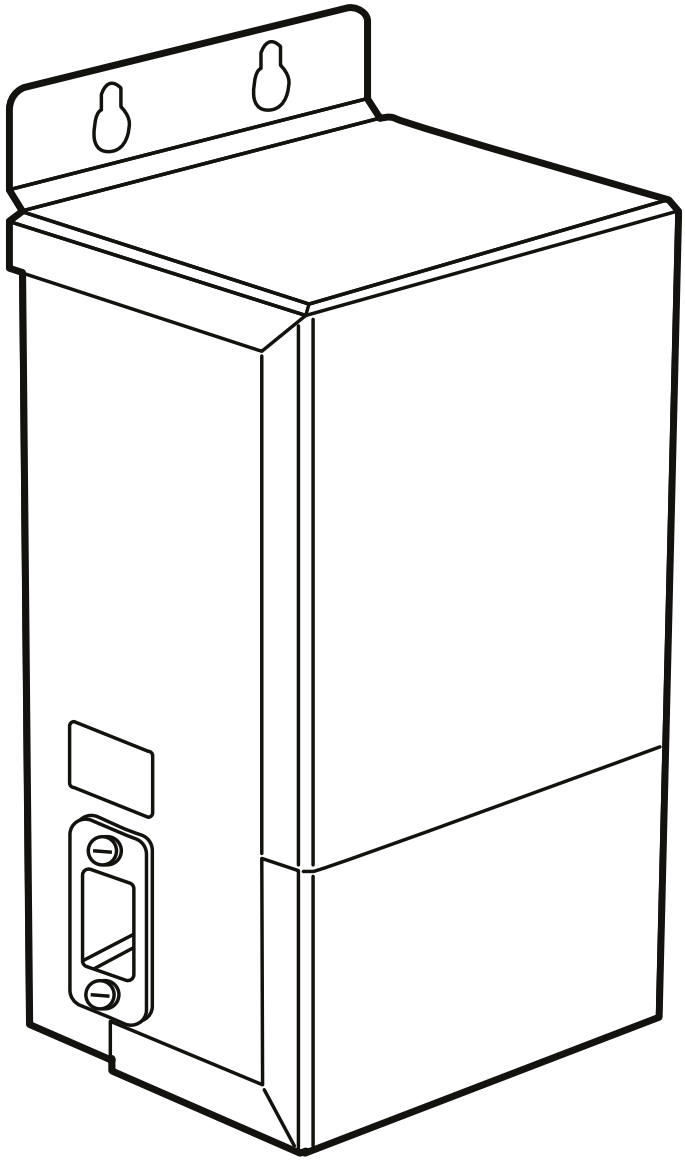
Dual Tap Transformer (06-3200)

Installation Guide



PEAK SCIENTIFIC

Change History

Rev	Comment	Name	Date
5	Update to new format	Liam Couttie	02/09/2021
6	Compatible generators update	Liam Couttie	30/08/2022

How to use this Installation Guide

This document is intended to be used only as a Quick Start Guide, to facilitate safe and correct installation and initial configuration of your Peak Scientific gas generator.

For more extensive user operation directions, we recommend you download the User Manual from the website.

Please visit www.peakscientific.com/downloads to download the full User Manual for your gas generator.

Thank you for selecting Peak Scientific to meet your laboratory gas generation needs, should you require any further assistance or support please do not hesitate to contact Peak Scientific or Peak Partner from which you purchased your generator.

Safety Notices

Peak Scientific Instruments cannot anticipate every possible circumstance which may represent a potential hazard. The warnings detailed within this document detail the most known potential hazards, but by definition cannot be all inclusive. If the user employs an operating procedure, item of equipment or a method of working which is not specifically recommended by Peak Scientific, the user must ensure that the equipment will not be damaged or become hazardous to persons or property.

Symbols

This document uses the following symbols to highlight specific areas important to the safe and proper use of the Generator.

 WARNING	A WARNING notice denotes a hazard. It calls attention to an operating procedure, process or similar, which if not correctly performed or adhered to, could cause personal injury or in the worst case death. Do not proceed beyond a WARNING notice until the indicated conditions are fully understood or met.
 CAUTION	A CAUTION notice denotes a hazard. It calls attention to an operating procedure, process or similar, which if not correctly performed or adhered to, could cause damage to the Generator or the Application. Do not proceed beyond a CAUTION notice until the indicated conditions are fully understood or met.
	Caution, risk of electric shock. Ensure power to the Generator has been removed before proceeding.

Safety Notice to Users


WARNING

These instructions must be read thoroughly and understood before installation and operation of your Peak Generator. Use of the generator in a manner not specified by Peak Scientific MAY impair the SAFETY provided by the equipment.


WARNING

When handling, operating or carrying out any maintenance, personnel must employ safe engineering practices and observe all relevant local health and safety requirements and regulations. The attention of UK users is drawn to the Health and Safety at Work Act 1974, and the Institute of Electrical Engineers regulations.


WARNING

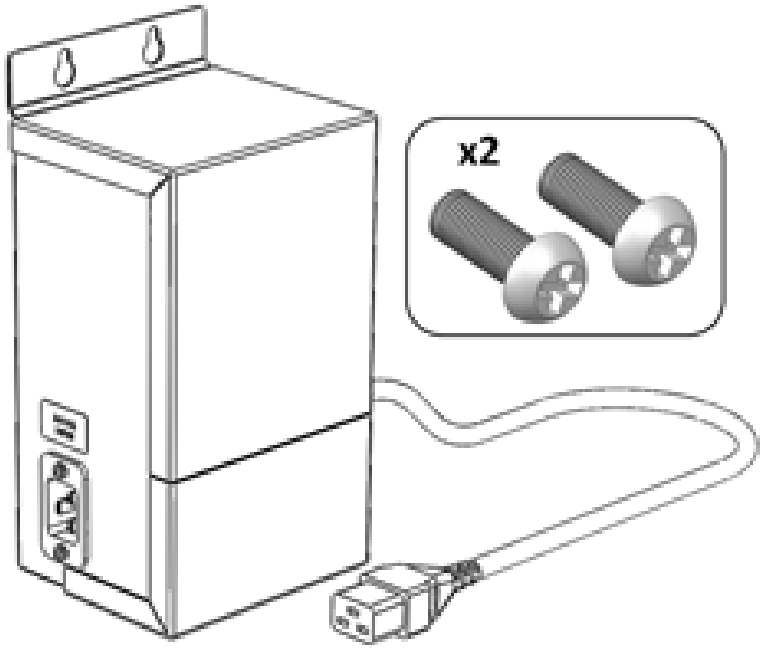
If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

1.

IMPORTANT

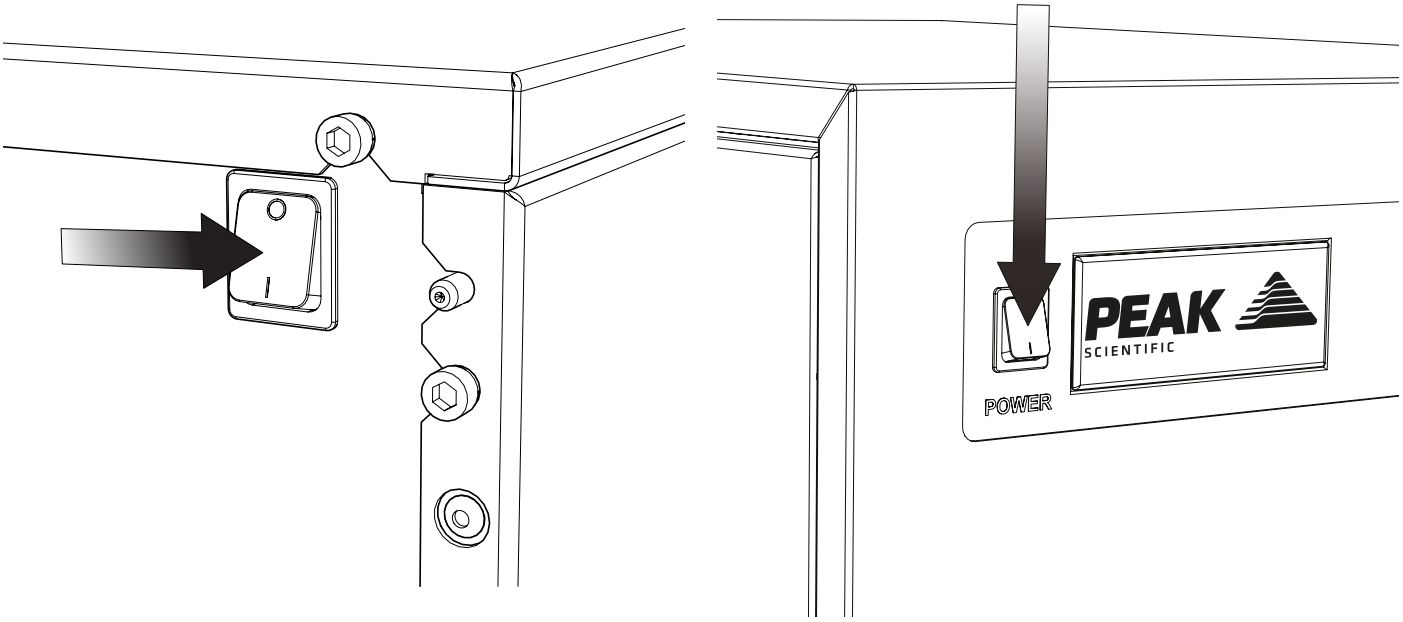
Determine what boost transformer may be required, this is explained in the generator **User Manual**.

2.



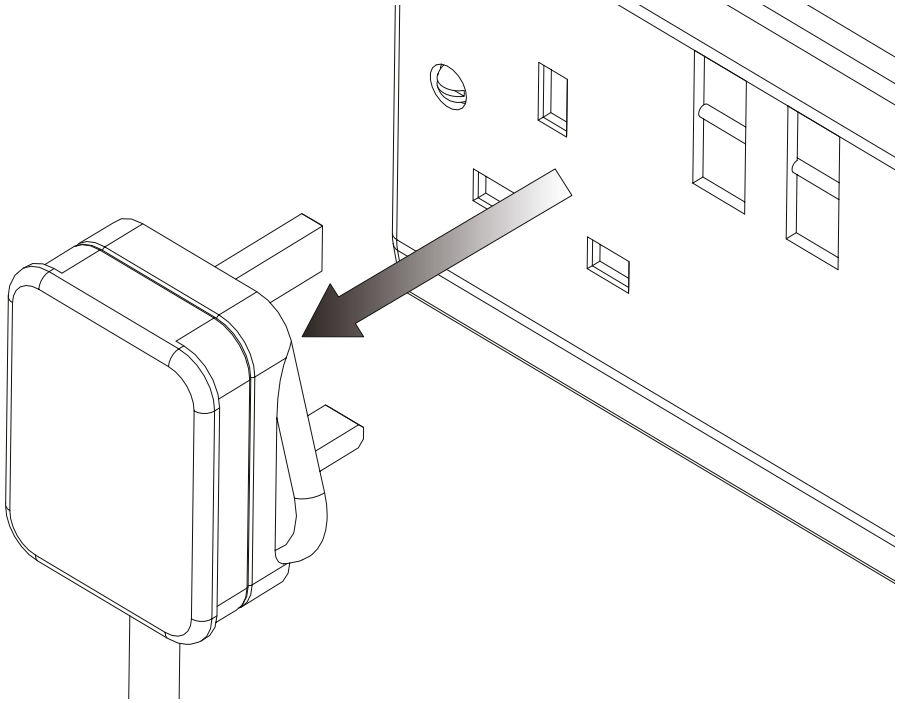
Remove the transformer from all the packaging, ensuring that the two securing screws are retained and not thrown away.

3.



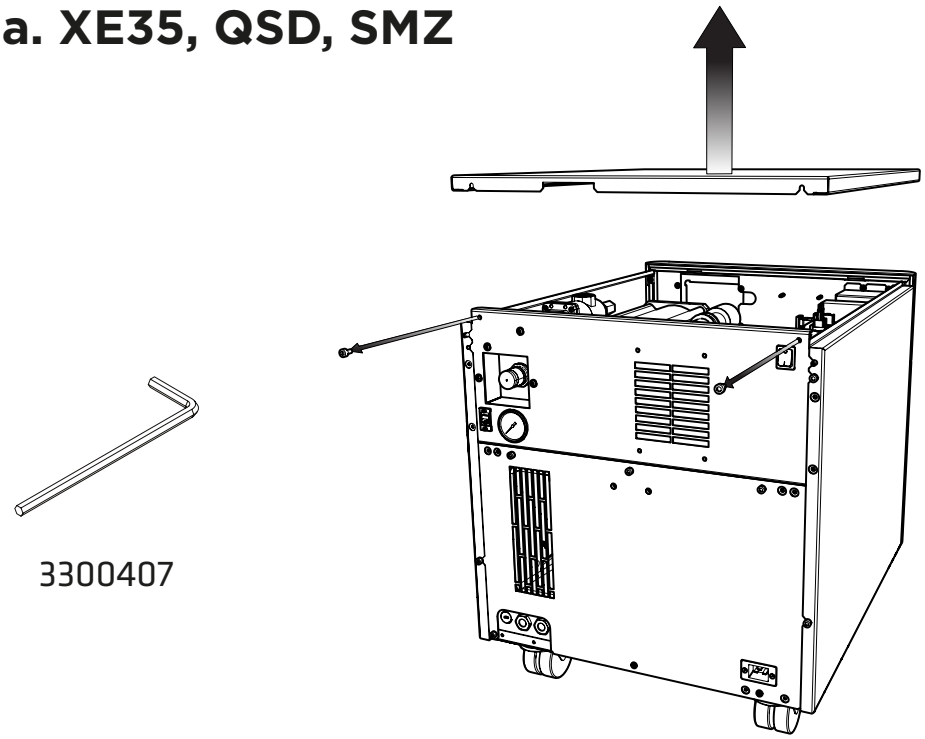
Ensure that the generator to which the transformer is to be fitted is switched OFF by the green rocker switch, located at the front (10 Series, NM32LA, N118LA) or the rear (QSD, SMZ, XE35) of the generator.

4.



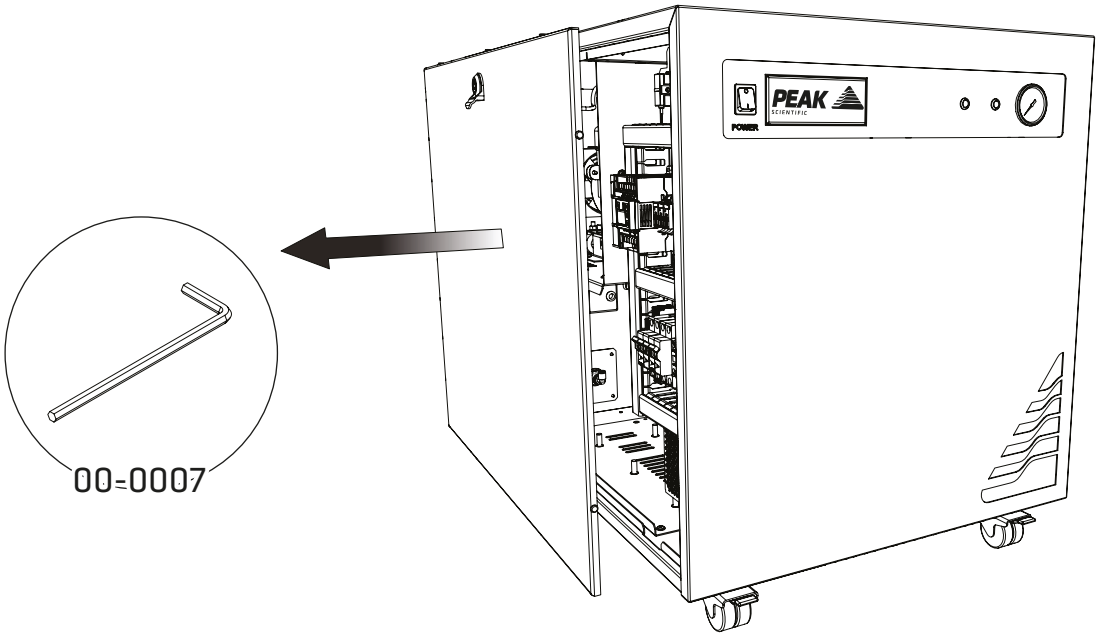
Remove the mains cable from the mains supply socket.

5a. XE35, QSD, SMZ



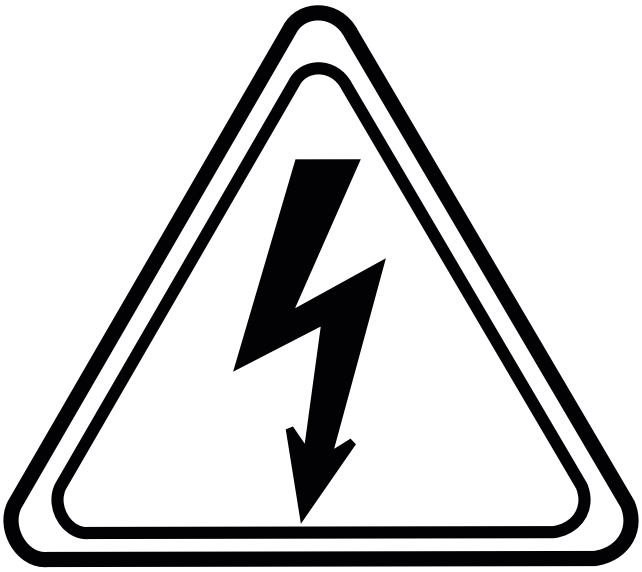
Use the **4mm Hex Key 3300407** to loosen the **two cap screws** fixing the top plate to the rear of the generator, then **tilt up and slide backwards to release the top plate** from the generator.

5b. 10 Series, XE60, SQ24, AE32



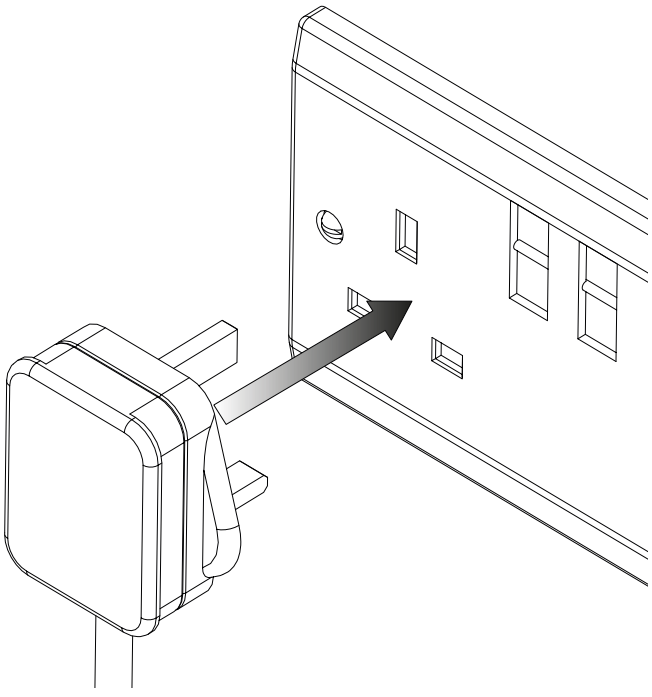
Use the **8mm Hex Key 00-0007** to turn the lock anti-clockwise, and **remove the side door**.

6.



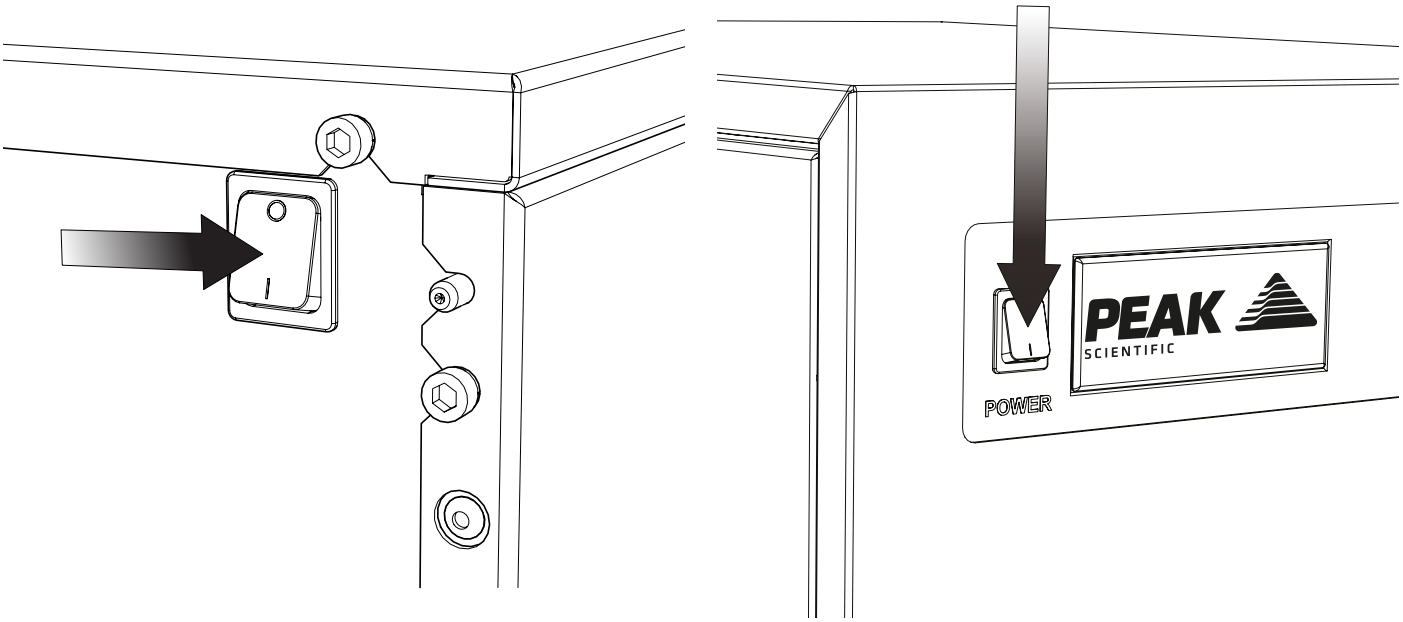
Do not touch anything inside the generator while the side panels are removed and the mains power is connected to the unit.

7.



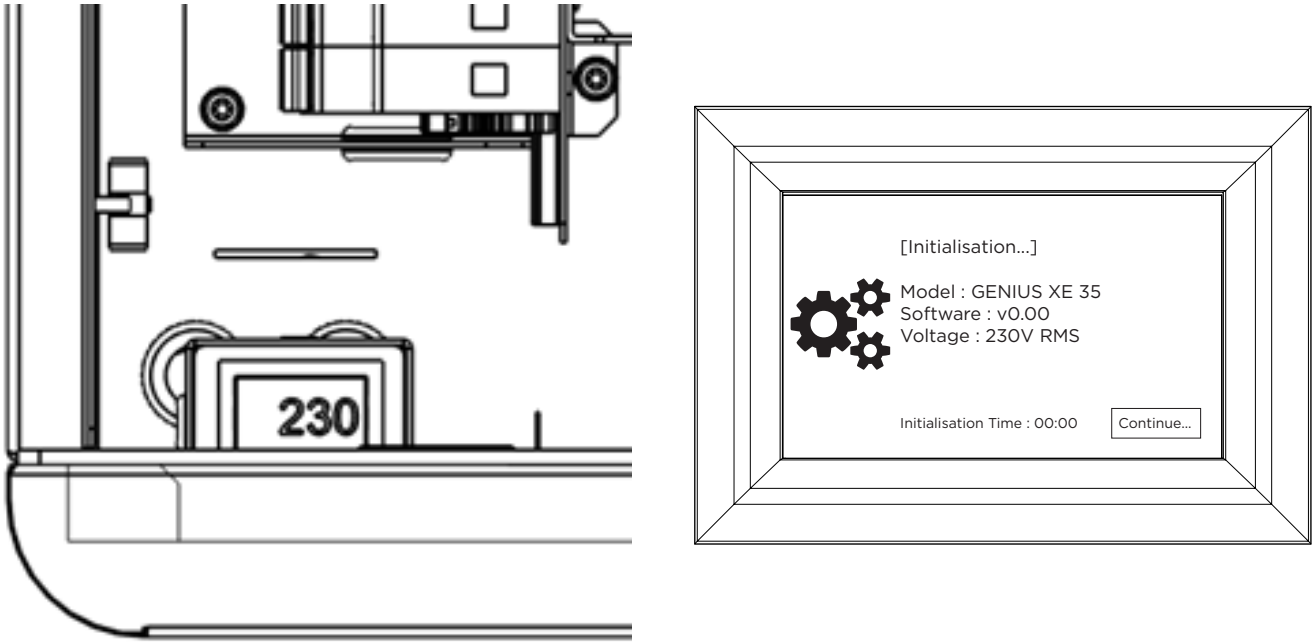
Plug the mains cable into an appropriate 230VAC 50/60Hz single phase power supply.

8.



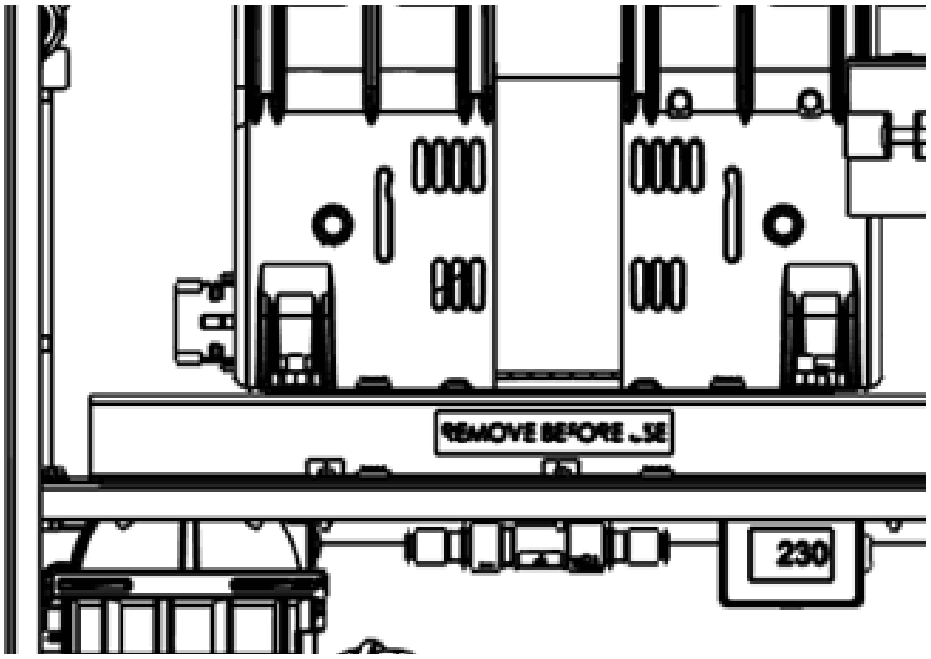
Switch the generator power ON at the switch on the rear/front panel.

9a. XE35



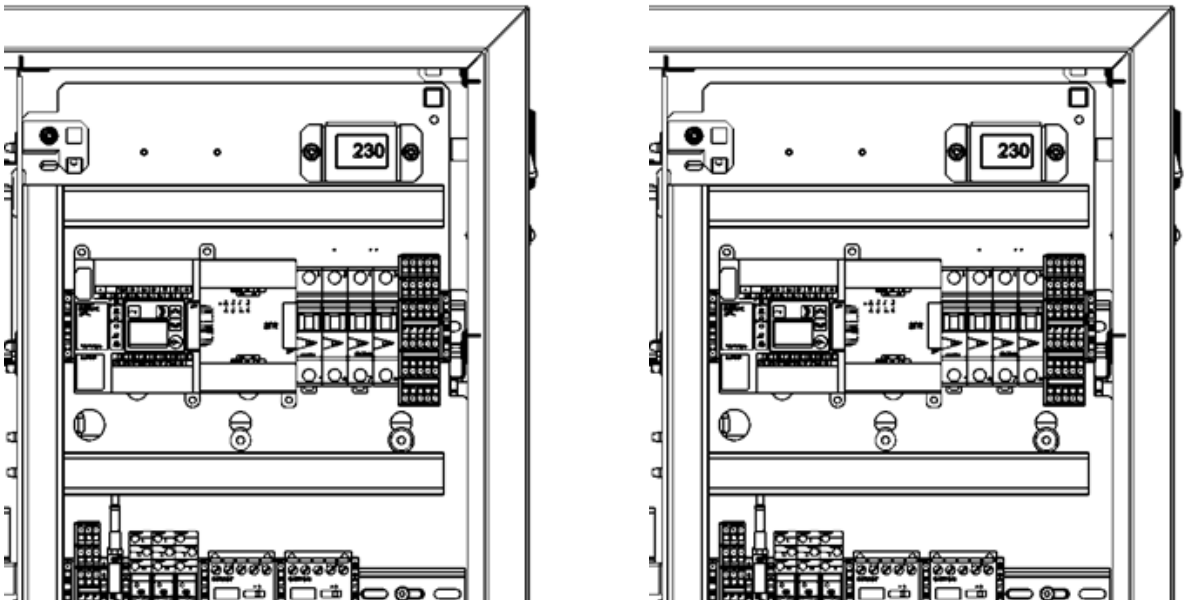
For Genius XE35 the volt meter is located at the top of the genetrator, and is mounted next to the fascia. For Genius XE 35 built pre November 2021 the voltage can be read from the HMI.

9b. 10 Series, NM32LA



For **10 Series** and **NM32LA**, the voltmeter is fitted under the compressor compartment.

9c. N118LA



For the **N118LA**, the voltmeter is located on the control panel.

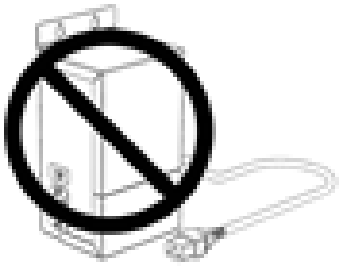
9d. QSD, SMZ, AE32, SQ24, XE60

NOTE

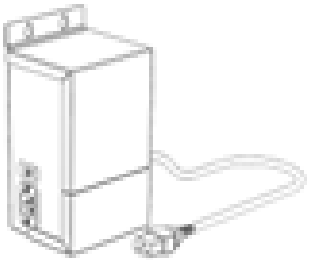
For generators that are not mentioned in steps **9a - 9c**, there is no internal voltmeter. The mains supply voltage should be measured to check whether a boost transformer is required to achieve optimum generator performance. **This should only be carried out by an electrically competent and qualified person to local regulations.**

10.

>=220
<=253 =



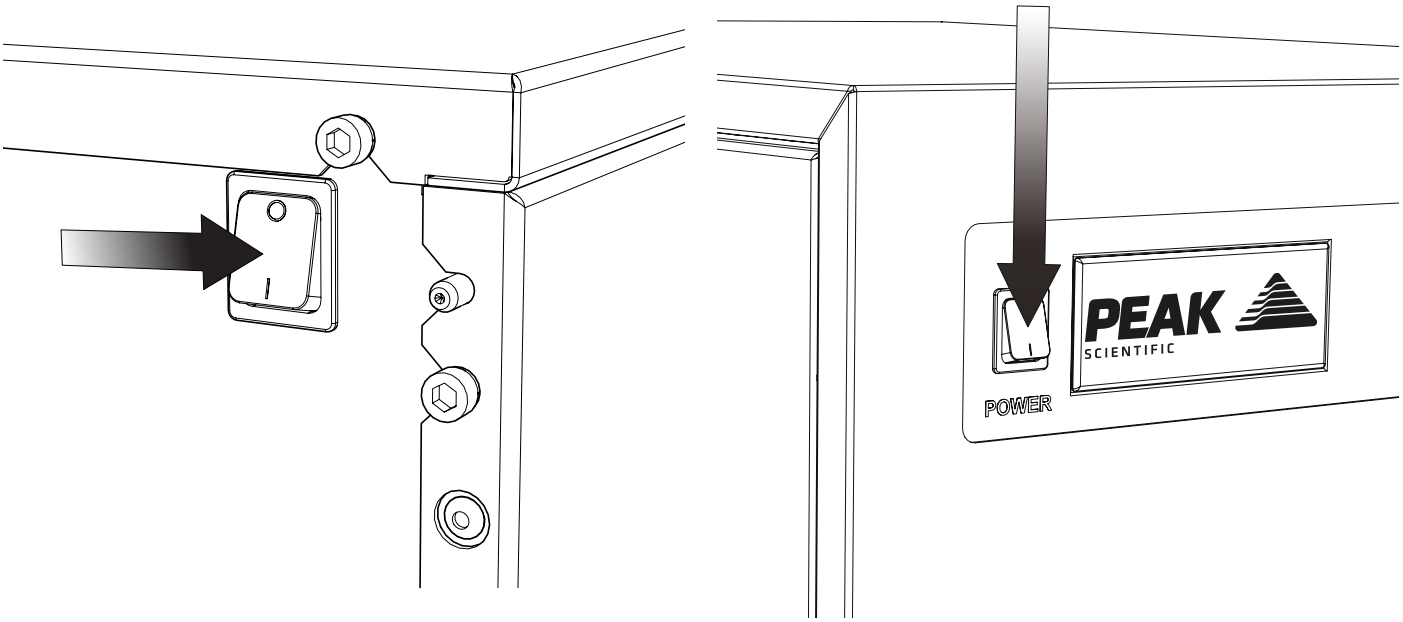
<=219 =



If the voltmeter reads a voltage of between **220V and 253V** the mains supply is sufficient and the **transformer should not be fitted.**

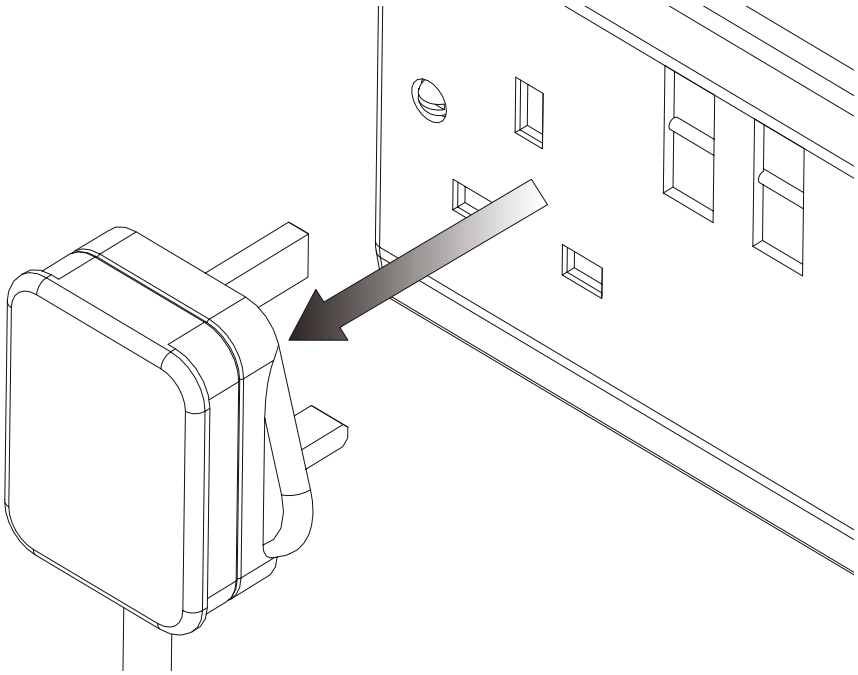
If the voltmeter reads a voltage less than 219V then the transformer is required. Proceed with the installation of the transformer.

11.



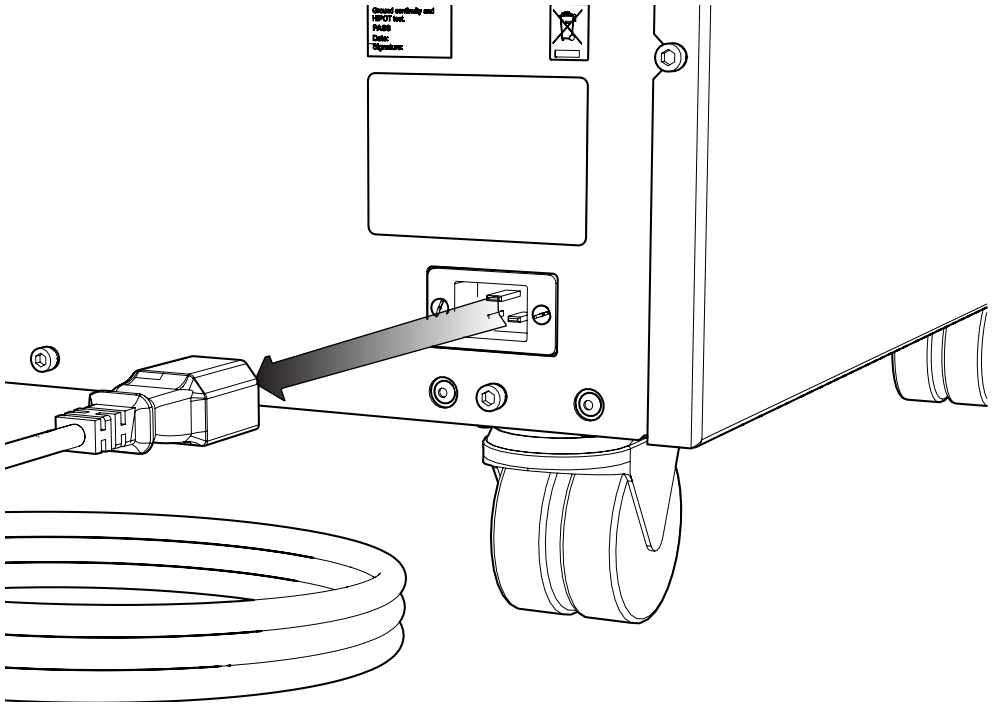
Switch the generator power OFF at the switch on the rear/front panel.

12.



Remove the mains cable completely from the power supply.

13.



Unplug the mains cable from the rear of the generator.

NOTE

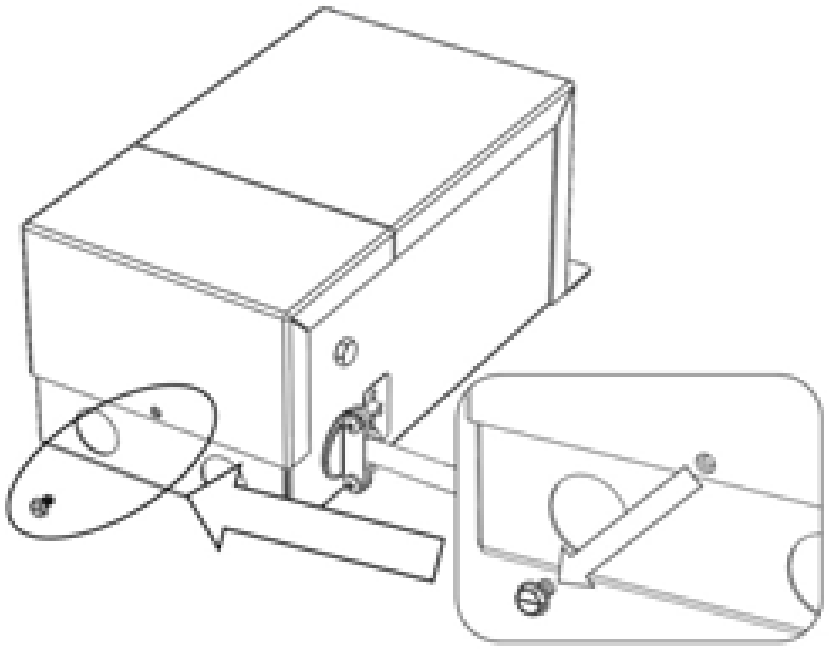
The transformer has a ‘Dual Tap’ facility. This allows it to cover a broader range of low supply voltages. The transformer will be supplied with the 200V tap already connected.

This will be required for most applications.

If the additional 208V tap is required, then this can be easily changed before connecting to the generator.

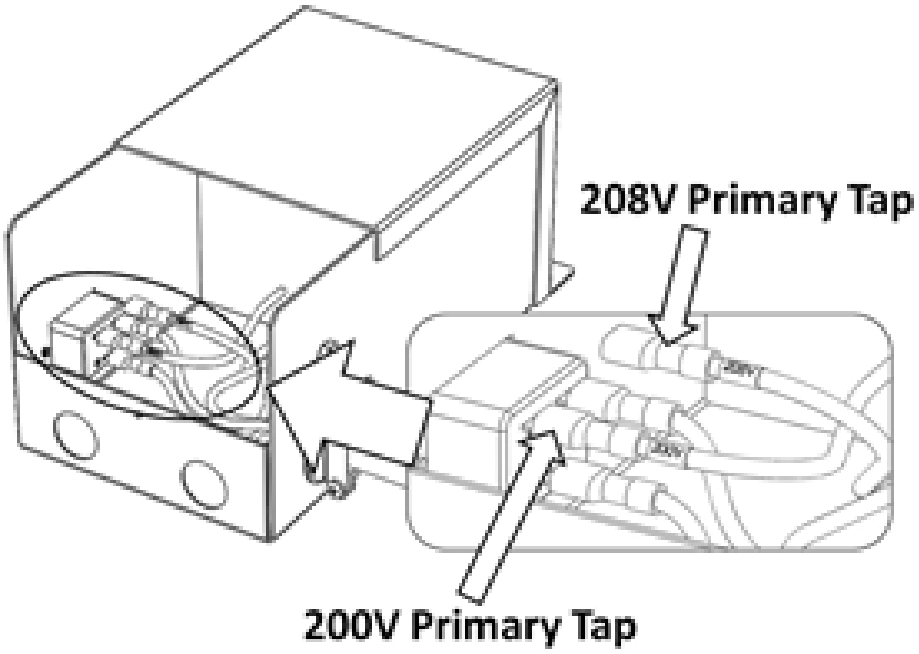
Voltage Reading 194V to 212V	The 200V tap is required, no modification to the transformer is necessary. **Proceed to step 17.**
Voltage Reading 213V to 219V	The 208V tap is required. It is necessary to change the tap inside the transformer. **This is very easy and can be done by following step 14-16.**

14.



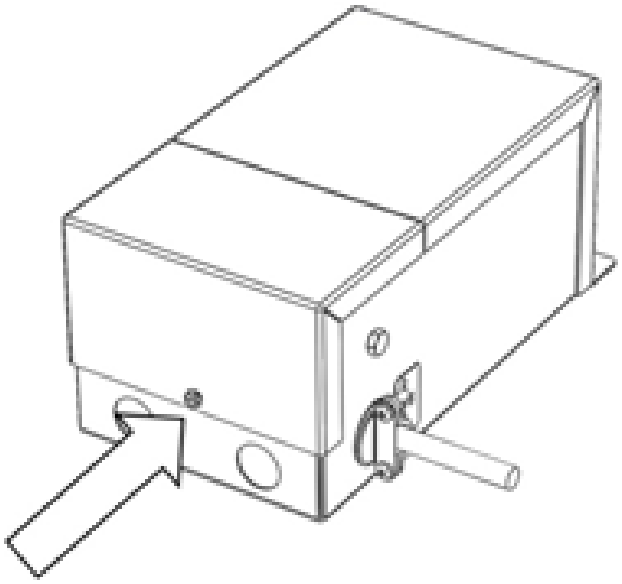
Place the transformer on its back and remove the cover retaining screw using either a flat blade screwdriver or ¼" spanner. The cover can then be removed.

15.



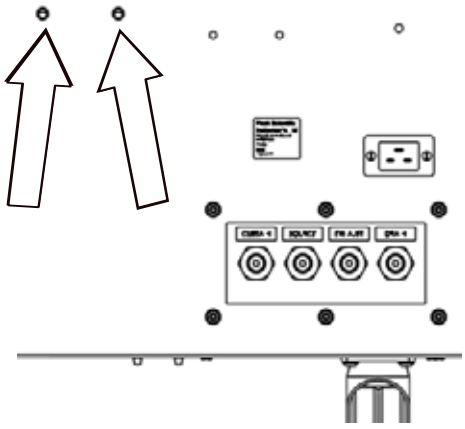
The 'Primary Taps' are now exposed. These are clearly labelled '200V' and '208V'. To change the tap simply pull the connector labelled '200V' off the spade terminal and push the connector labelled '208V' fully on to the terminal. The '200V' tap wire removed can be safely left loose in the compartment.

16.

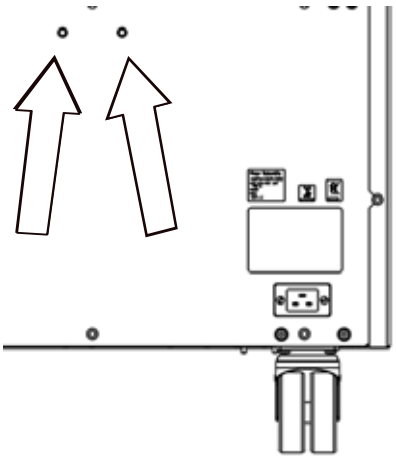


Replace the transformer cover and securely fasten with the retaining screw.
The transformer is now ready for mounting on the rear of the generator.

17.



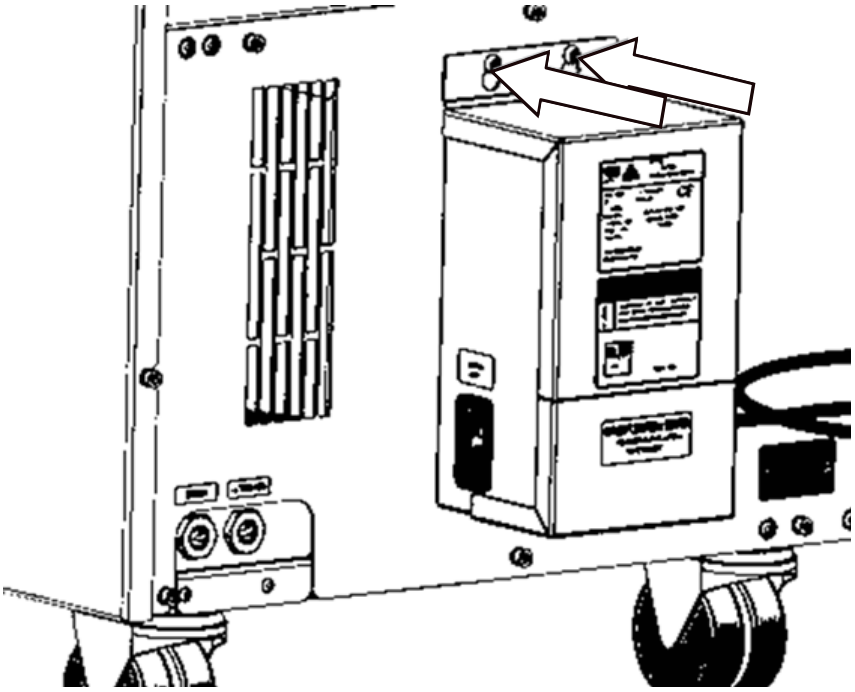
10 Series



XE 35

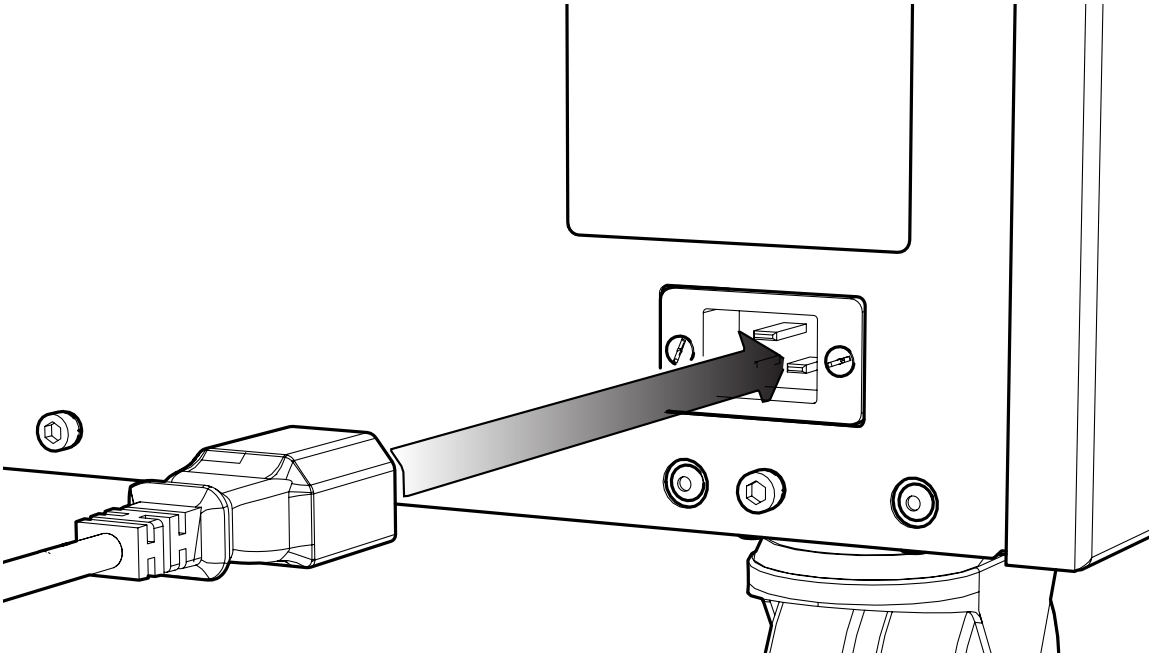
Find the location on the generator where the transformer is fitted. This can be done by looking for the M6 clinch nut threads, usually on the back on the generator.

18.



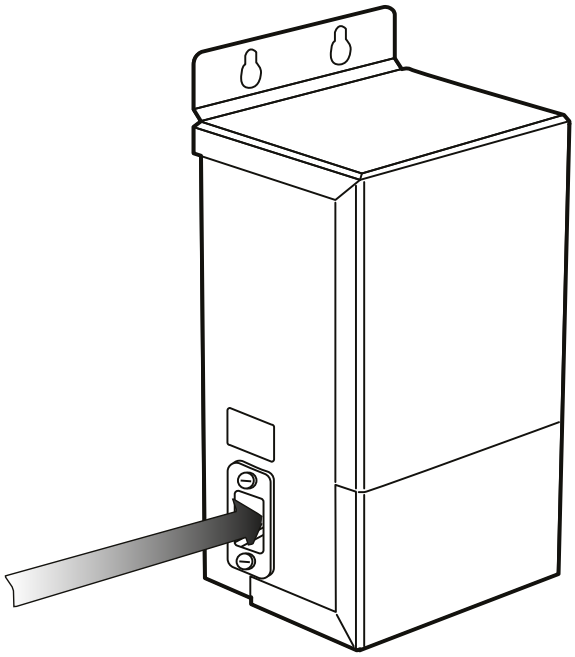
The mounting screws provided can be screwed into the holes on the rear of the generator. Leave approvimately 5mm protruding. The transformer can then be hung on the protruding screws. Once located correctly the screws can be fully secured.

19.



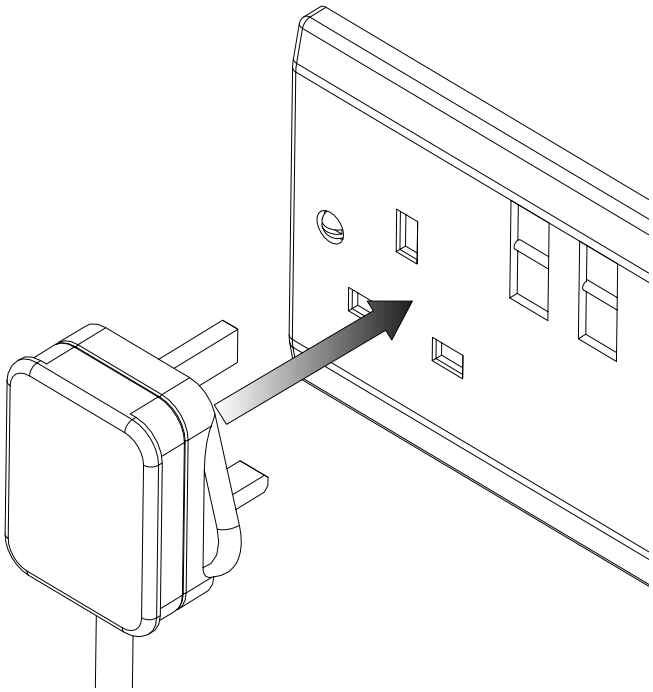
Plug the mains cable from the transformer, labelled ‘TO GENERATOR’ into the mains socket on the rear of the generator.

20.



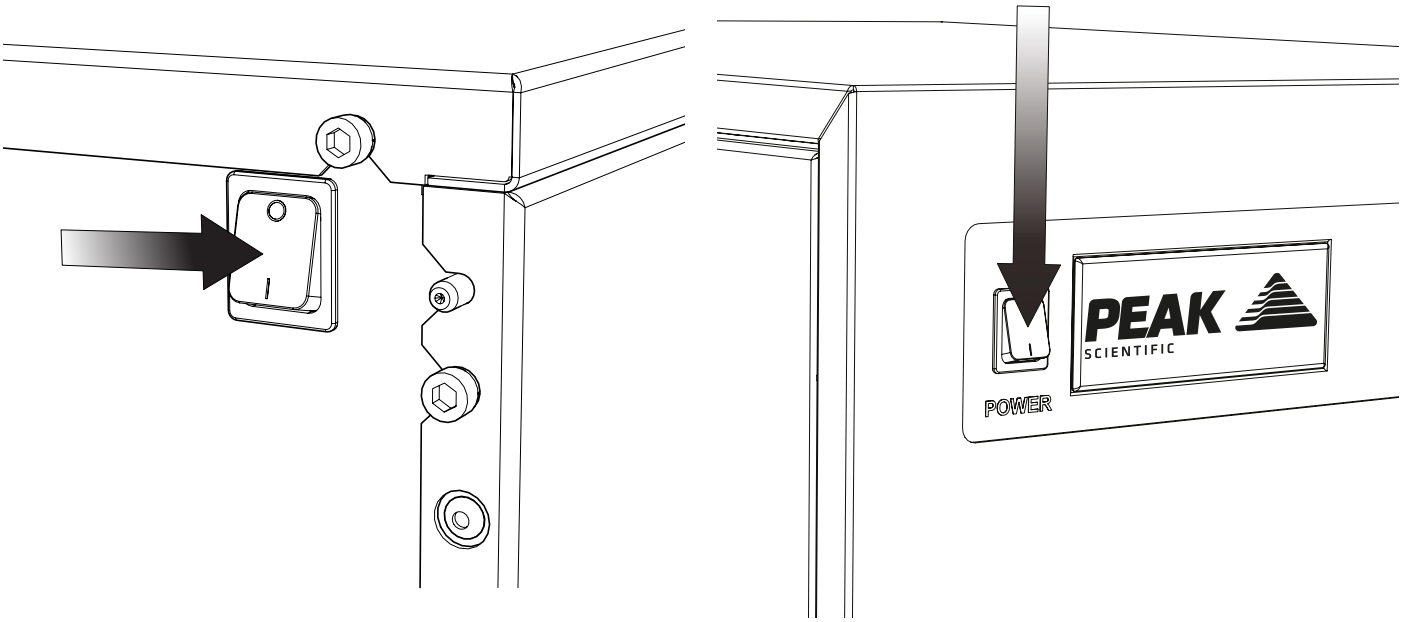
Plug the original generator mains cable into the mains inlet socket on the transformer, labelled ‘MAINS INPUT’.

21.



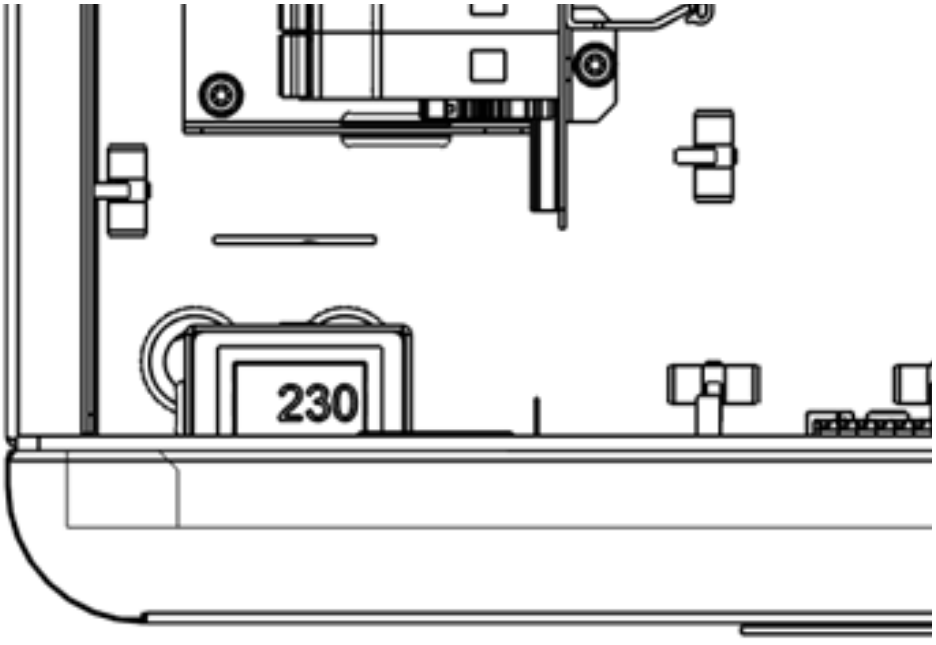
Plug the mains cable back into the original single phase mains power supply and ensure the power is switched ON.

22.



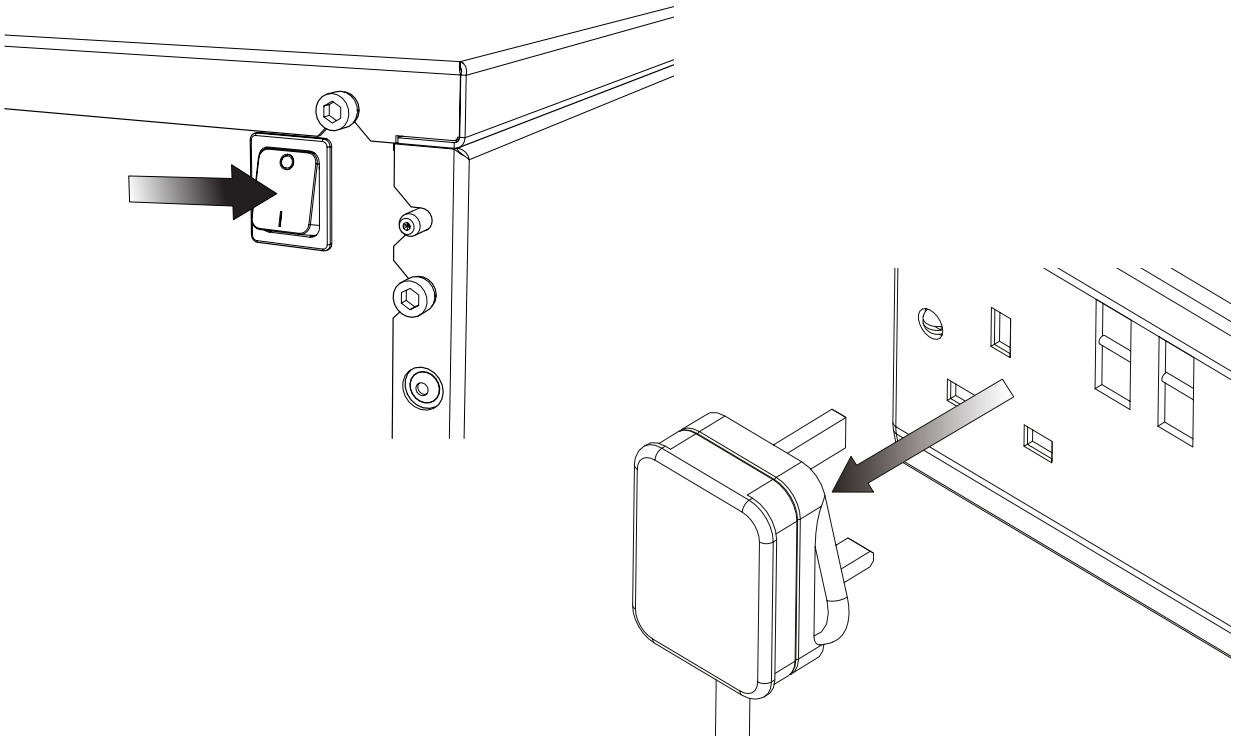
Switch the generator ON again at the switch on the rear/front panel.

23.



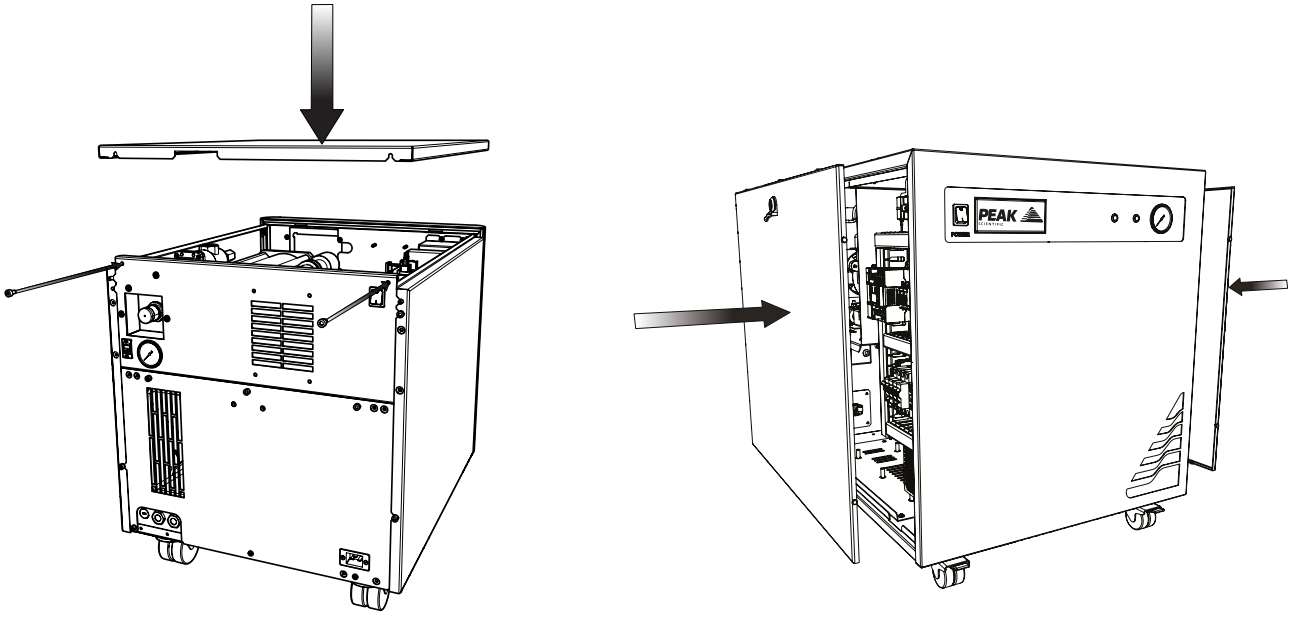
The voltmeter should now read above 220V. If it is still below 220V and you have not fitted the '208V tap', disconnect the transformer and return to step 14.

24.



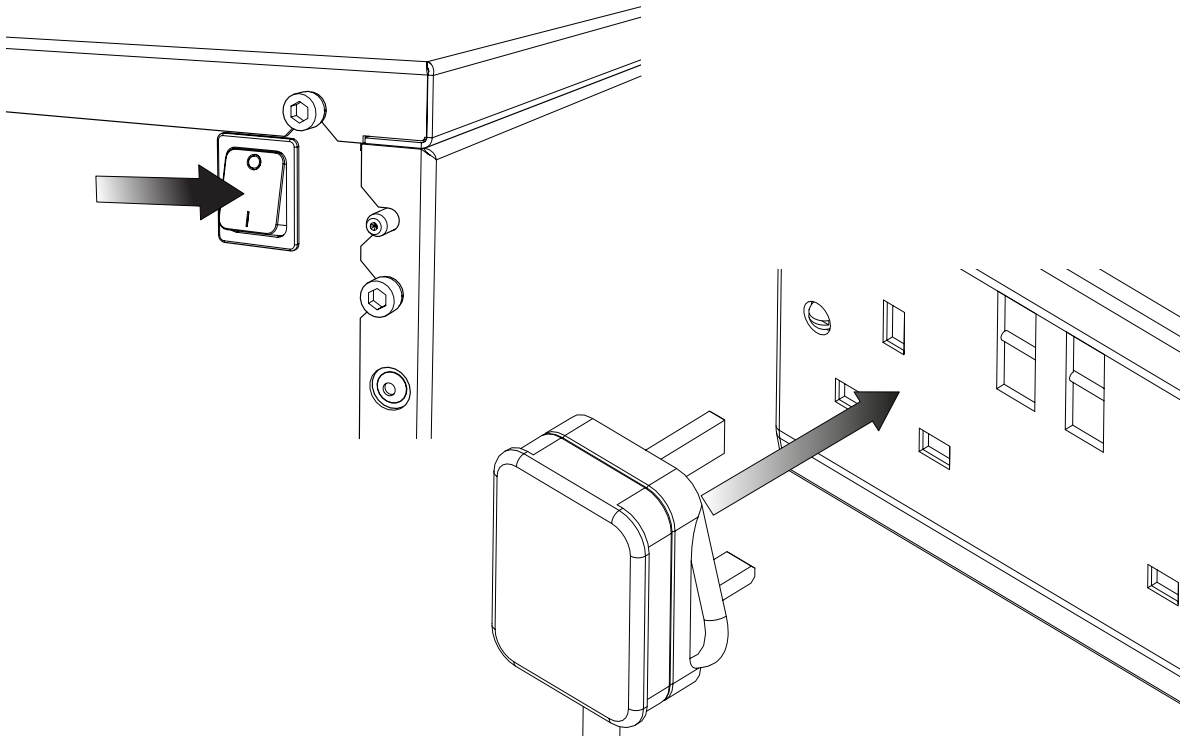
Switch the generator OFF on the rear panel and disconnect from the mains supply.

25.



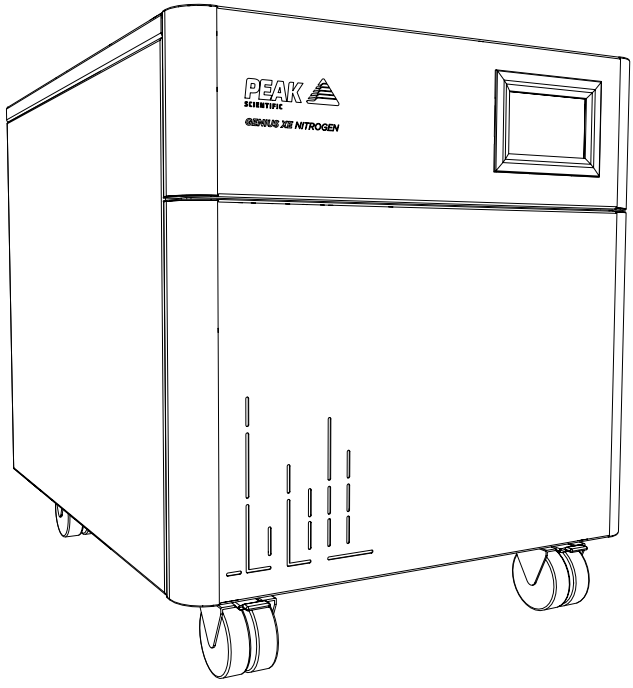
Re-attach the doors/panels to the generator, taking care to ensure the screws are fastened/ lock is secured correctly.

26.



Once the panels are securely assembled, the mains power supply can be reconnected and the generator switched back ON.

27.



CONGRATULATIONS

You have now successfully installed the transformer on your PEAK SCIENTIFIC gas generator. The generator is now operational and ready to supply gas on demand to your instrument.

If you should have any problems or require further support please contact our Technical Helpdesk on the following numbers

Please visit www.peakscientific.com/downloads to download the full User Manual for your gas generator.

[PEAK Protected]™

Peak Scientific has highly trained, fully certified Field Service Engineers located in over 20 countries across every continent around the world. This allows us to provide an industry-leading rapid response service to our customers. With **[Peak Protected]**, your laboratory's productivity becomes our top priority.

To discuss Peak Protected generator cover and payment options speak to your local Peak Representative or for further information contact: **protected@peakscientific.com**.

Peak Scientific
Fountain Crescent
Inchinnan Business Park
Inchinnan
PA4 9RE
Scotland, UK
Tel: +44 141 812 8100
Fax: +44 141 812 8200

For further information on any of our generator products please contact **marketing@peakscientific.com**

DualTapTransformer06-3200InstallationGuideRev6PNIG-06-3200RSID268EN30/08/22

PEAK SCIENTIFIC