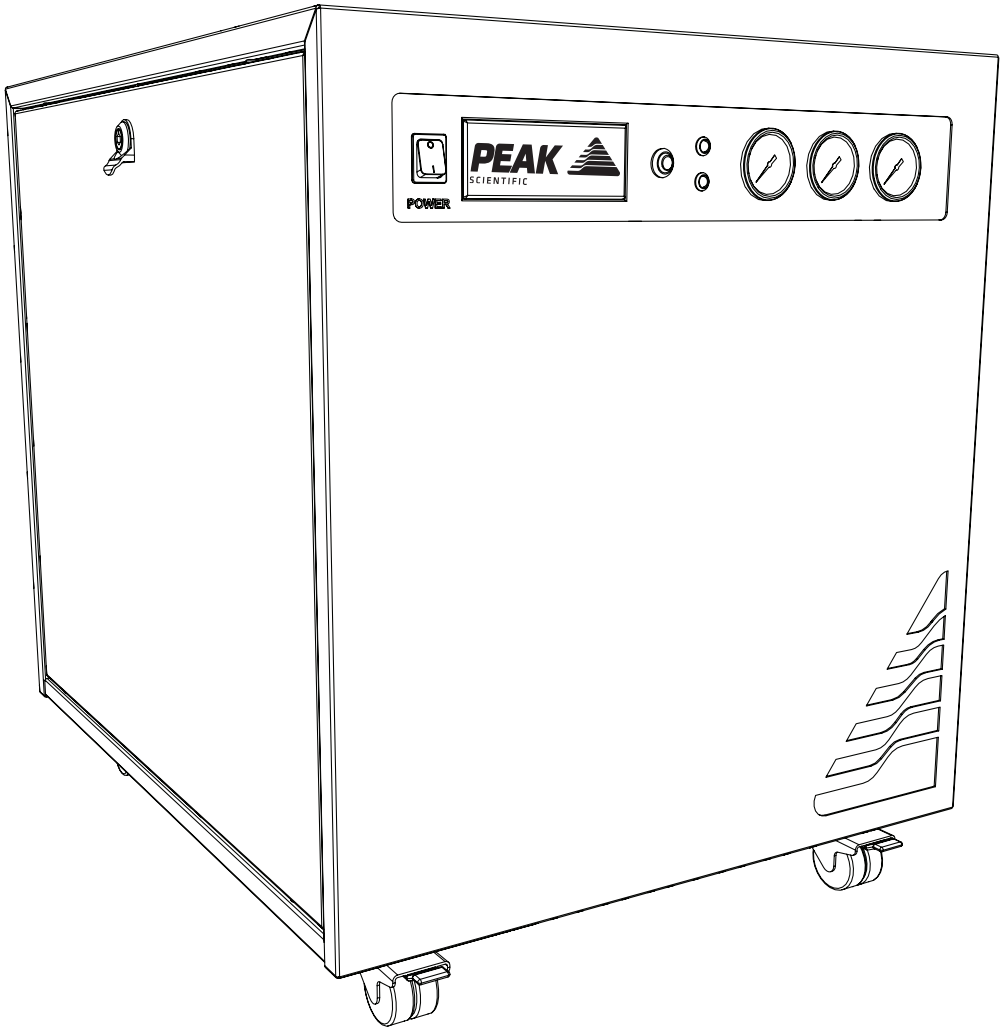
Genius 1024

Installation Guide



PEAK SCIENTIFIC

Genius1024 Installation Guide Rev 4 RSID 1916 PN IG-0018 04/07/25

Change History

Rev	Comment	Name	Date
1	Initial Release	L. Couttie	19/06/2017
2	Drain Container Warning Added	L. Couttie	28/10/2022
3	Process Update	L. Couttie	18/03/2024
4	Drain Bottle Recommendations added	J. Murphy	04/07/2025

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, and 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.

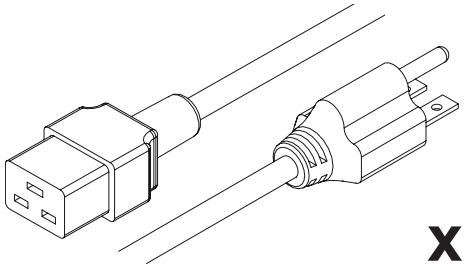

WARNING

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

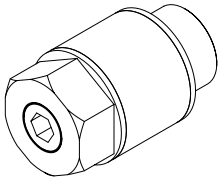
If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

Fittings Kit



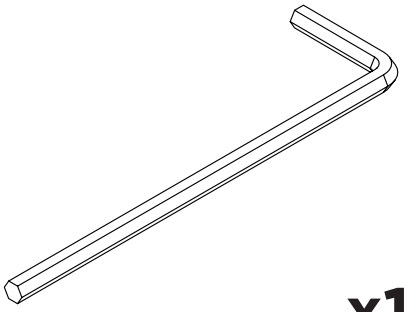
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US Mains Cable C19 6-15 04-1024



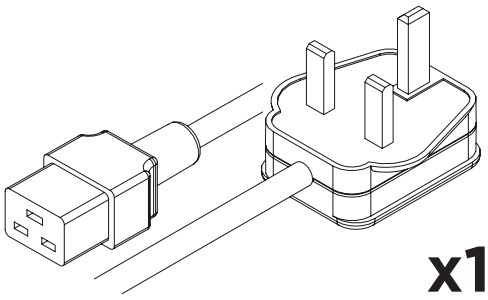
x3

Flow Control SIlencer 02-1096



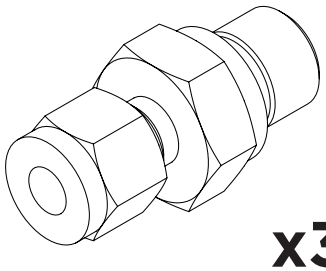
x1

8mm Hex Key 00-0007



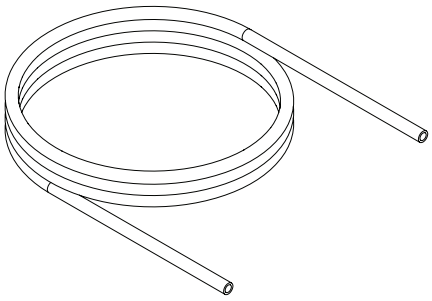
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UK Mains Cable C19 04-1025



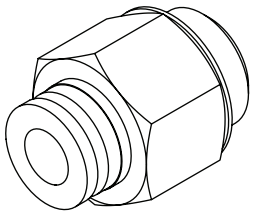
x3

¼" Compression Fitting
02-4421



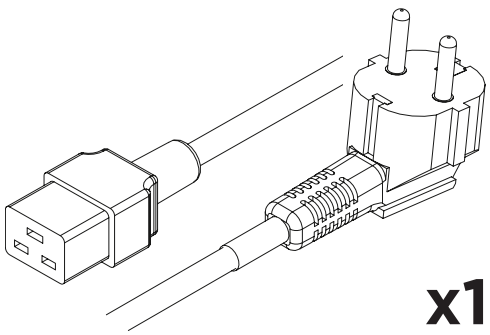
3x3m

¼" Teflon Tubing 00-1266



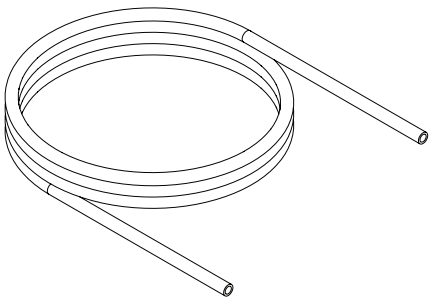
x1

¼" - 6mm Push Fit Fitting
02-4600



x1

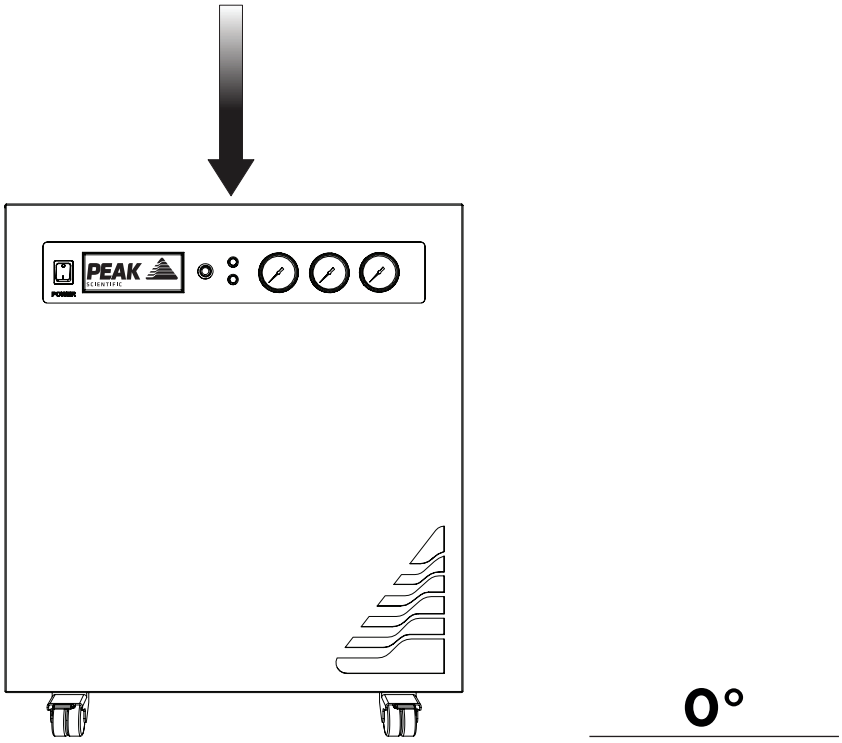
EU Mains Cable C19 04-1026



x3m

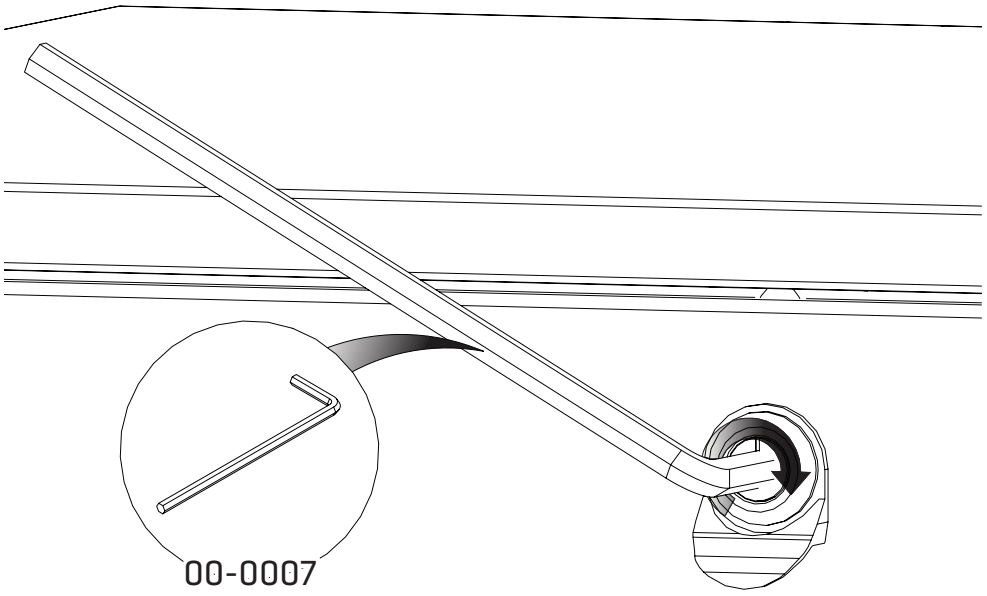
6mm OD x 4mm ID PE 00-1282

1.



Unpack the generator from the shipping crate and position on a flat surface, in desired area.

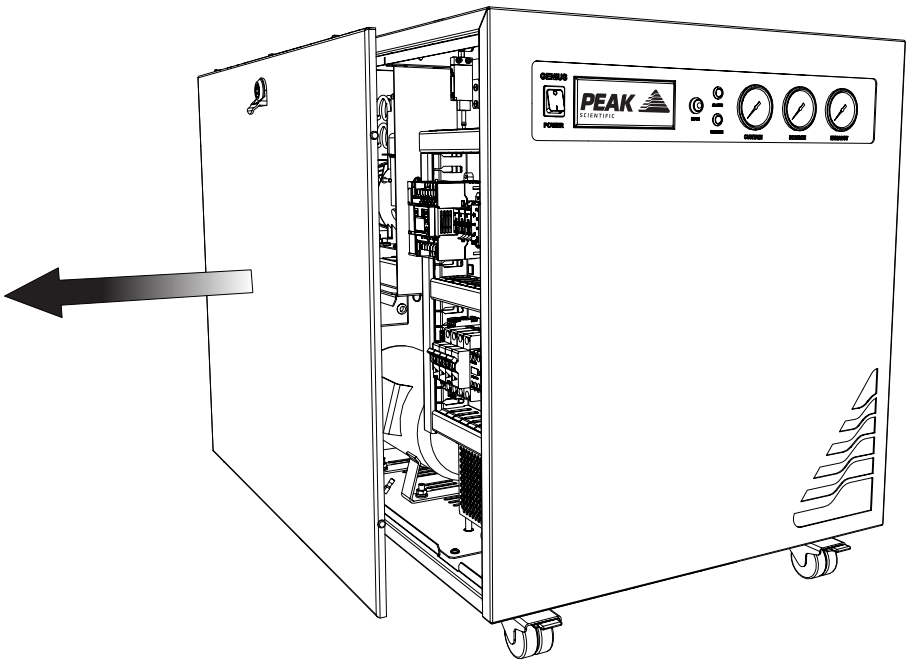
2.



First **remove the compressor transit brackets**.

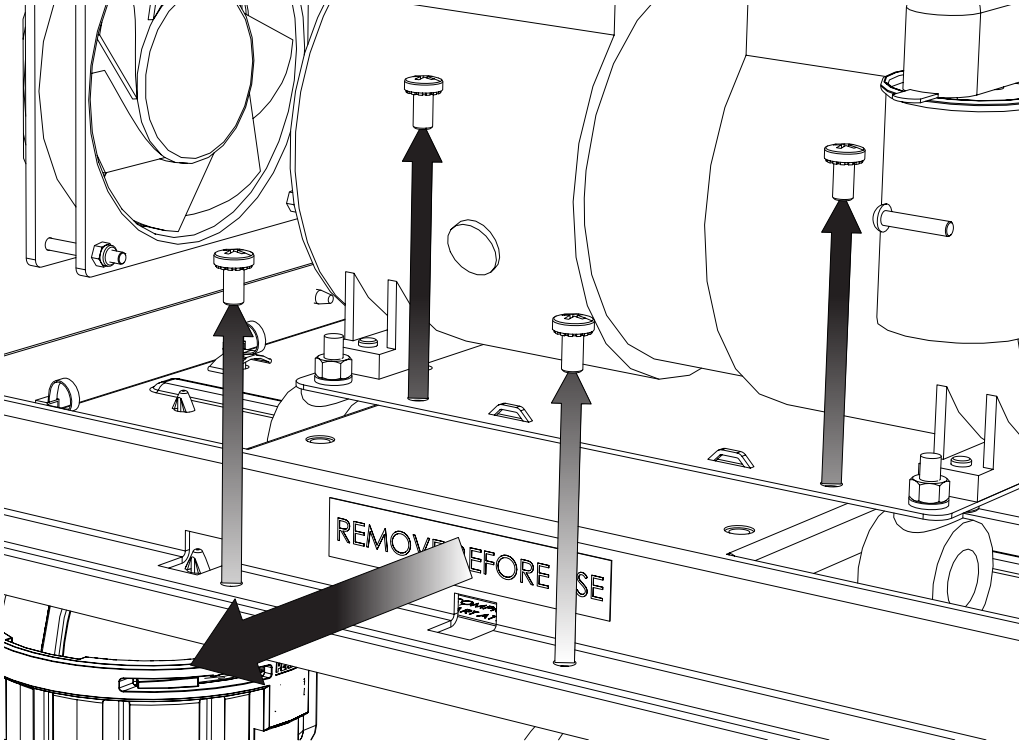
These can be accessed by removing the generator side panels. Starting with the left hand side panel, use the **8mm Hex Key 00-0007**, and turn the lock 90° to the right.

3.



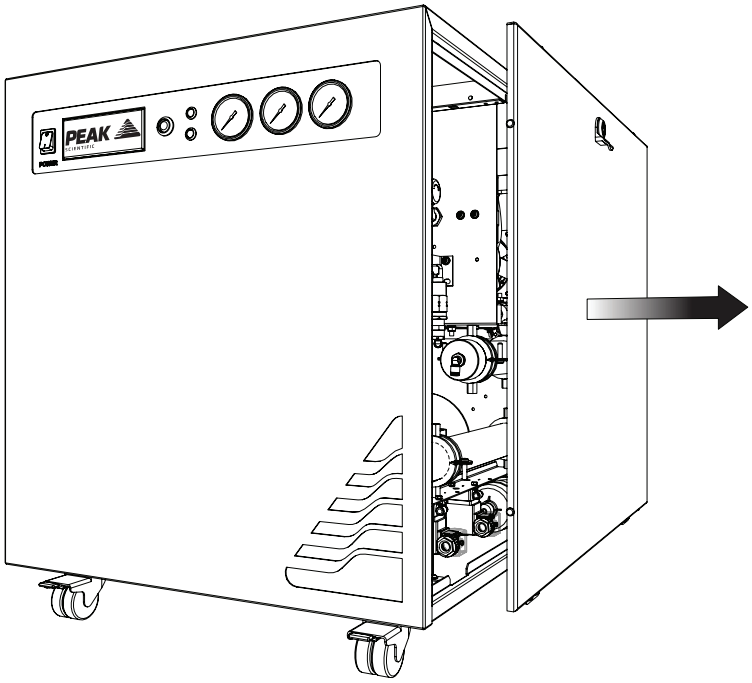
Once unlocked **remove the left hand side panel**, ensuring you **disconnect the earth lead** located in the lower middle of the panel.

4.



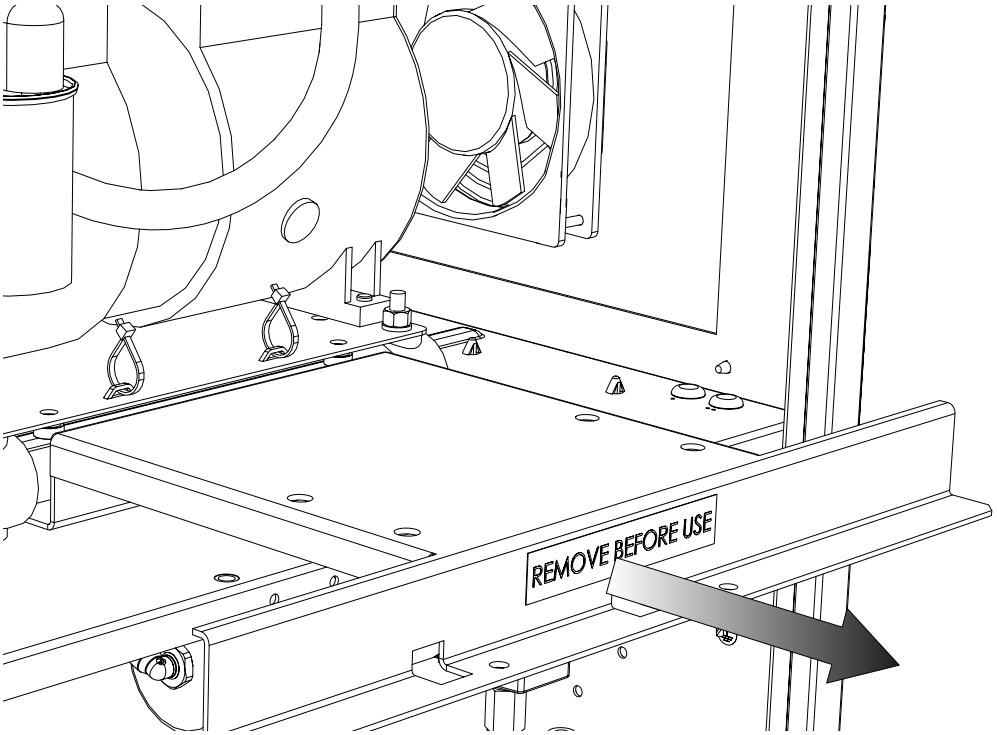
The **transit bracket** is located below the compressor and has a sticker on it stating 'Remove before use'. To remove the transit bracket, **remove the four screws** as indicated, then **slide the bracket out** from underneath the compressor. Please retain the bracket and screws for future transportation.

5.



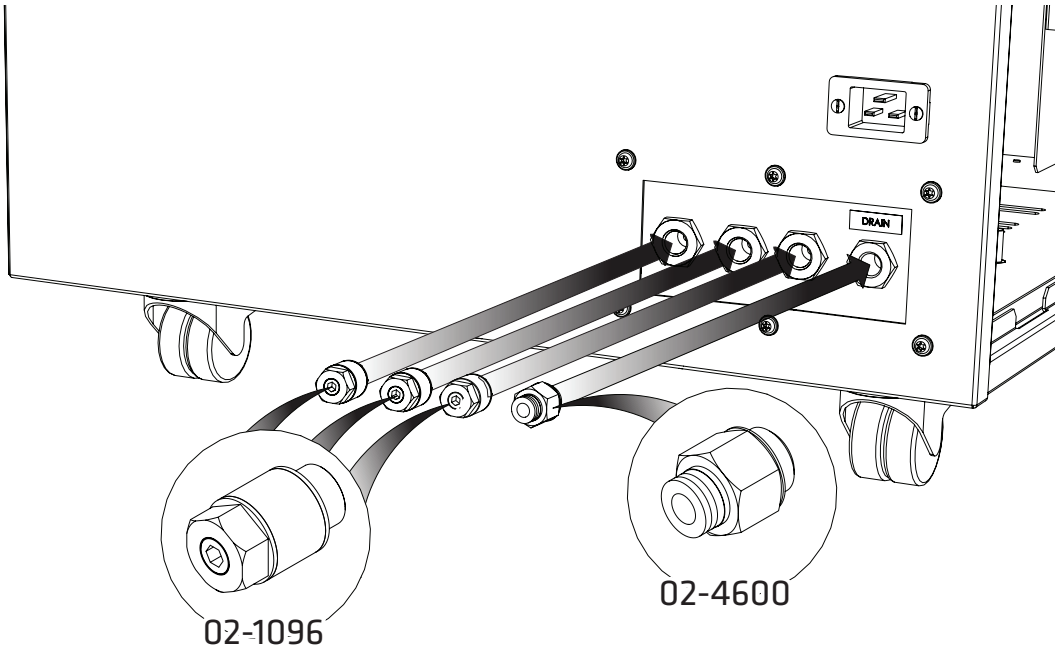
Follow the same process to **remove the right hand side panel**.

6.



Repeat step 4 to **remove the right hand side transit bracket**.

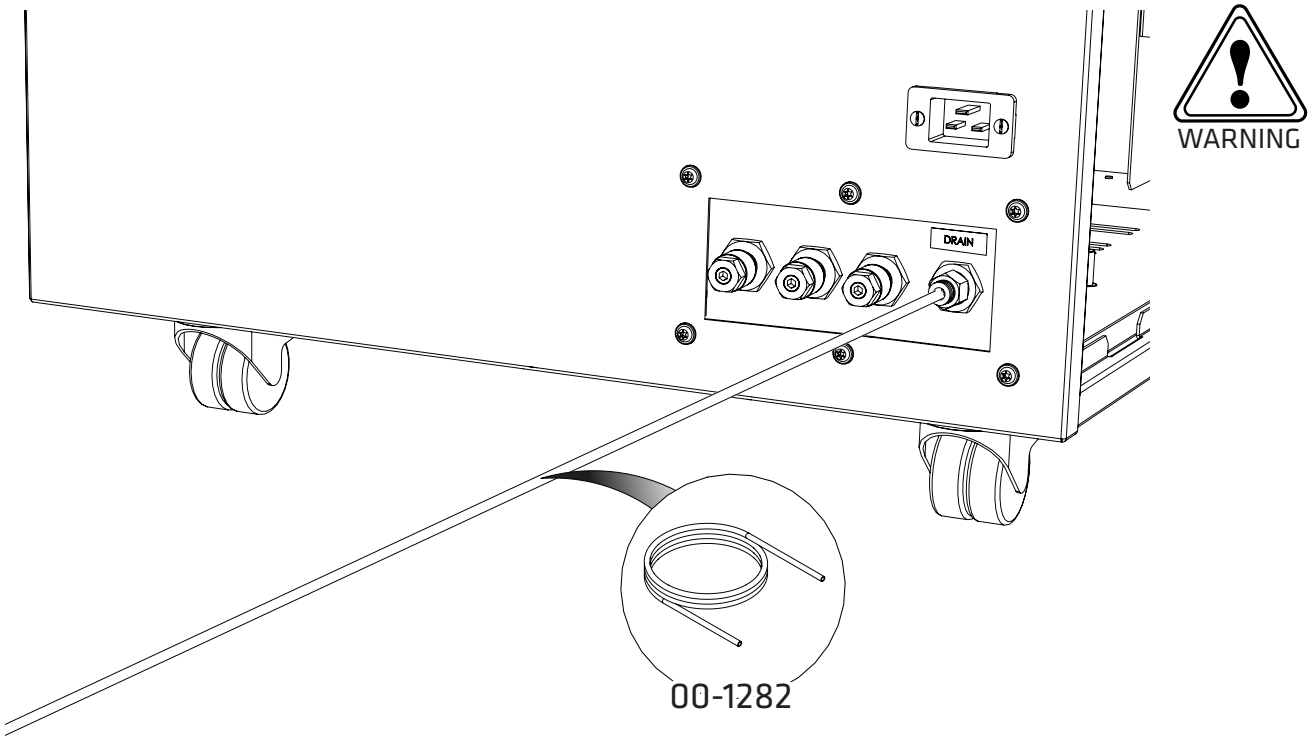
7.



Select the **¼"- 6mm Push Fit Fitting 02-4600** and attach to the Drain port at the rear of the generator.

Attach the three **Flow Control Silencer 02-1096** fittings to the **Curtain, Source** & **Exhaust** Ports.

8.



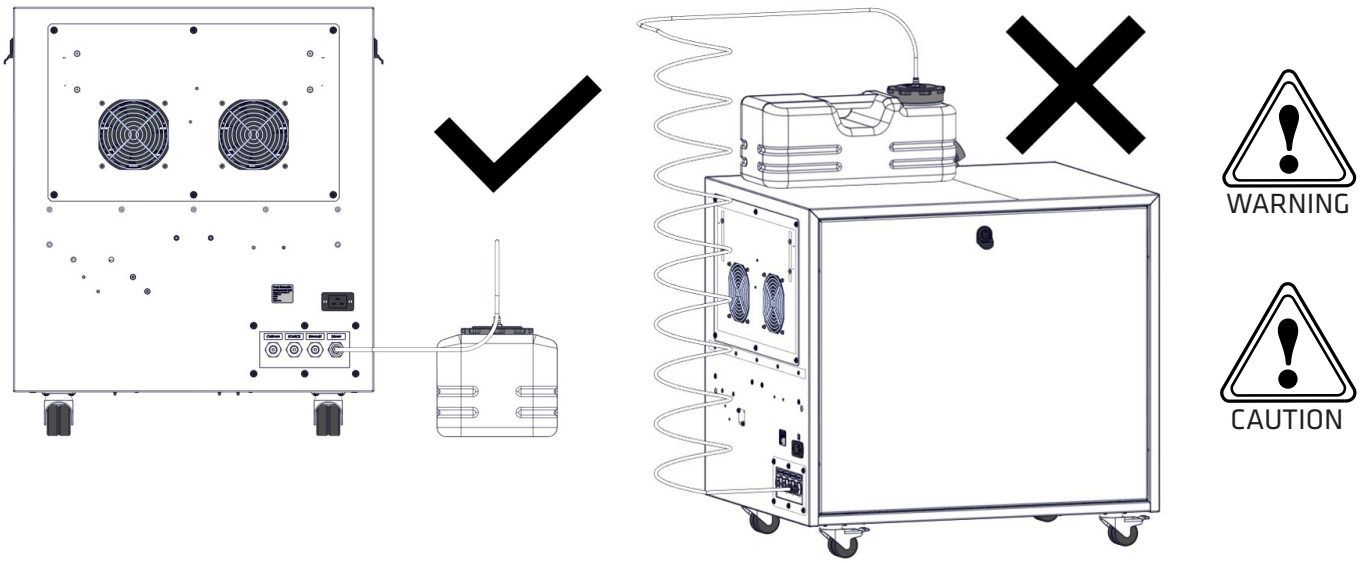
Connect the **6mm PE Tubing 00-1282** to the **¼"- 6mm Push Fit Fitting 02-4600**.

Fit the other end of the tubing to a suitable drain connection or container.

WARNING:

CAUTION

If a container is used it should be **emptied at regular intervals. The container used MUST be a plastic material and MUST NOT be glass for safety reasons.** The container **MUST NOT** have an airtight seal as water and air are expelled **periodically under slight pressure.** The container **must be placed at ground level with no elevated or spiralled tubing.** Fix the drain ending of the tube securely to prevent it from vibrating during draining. **Ensure no 'kink' or 'bends' are present in the drain line which could impede the system drainage.**



WARNING

CAUTION

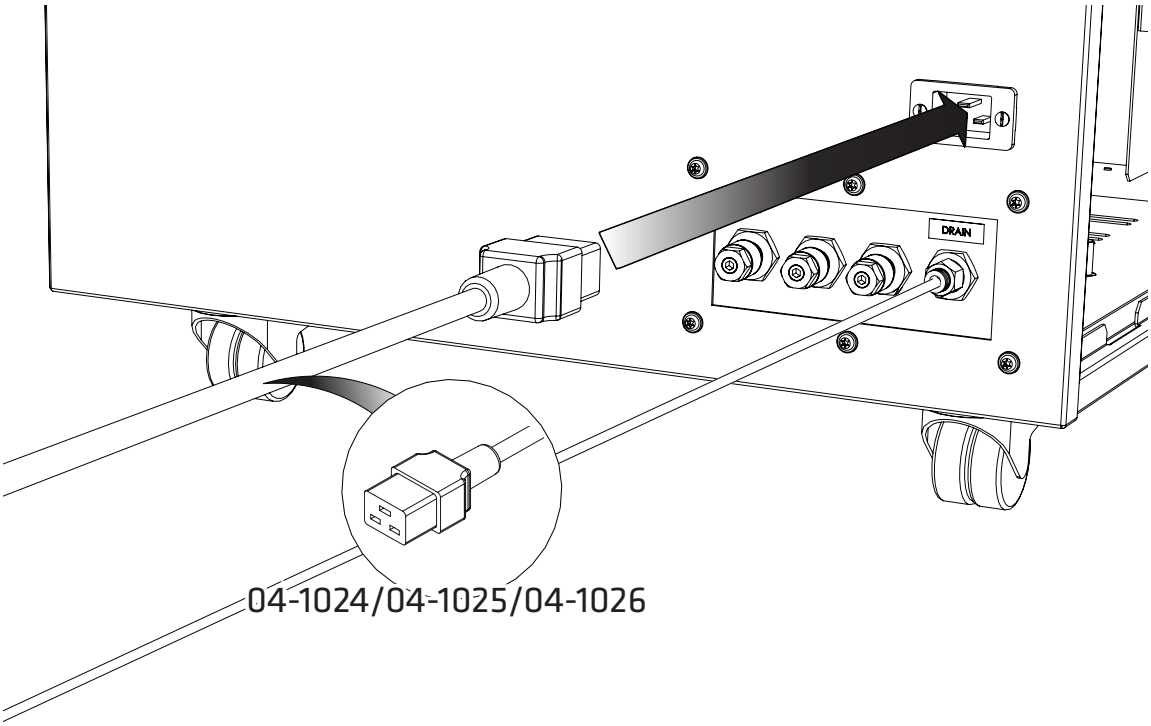
Drain Bottle Recommendations

When using this drain bottle, please note below recommendations:

1. A drain bottle should only be connected 1:1 to a single Peak Generator.
2. The drain bottle volume must not exceed 10 litres.
3. The bottle should not be allowed to be filled with drain water to more than 2/3rds.
4. The vent size should not be blocked or restricted in any way.

Contact Peak directly to purchase the Peak approved drain bottle by referencing part number 3305269.

9.

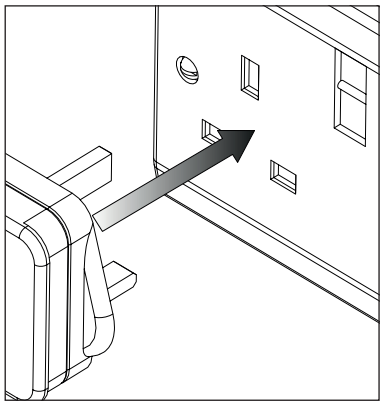


04-1024/04-1025/04-1026

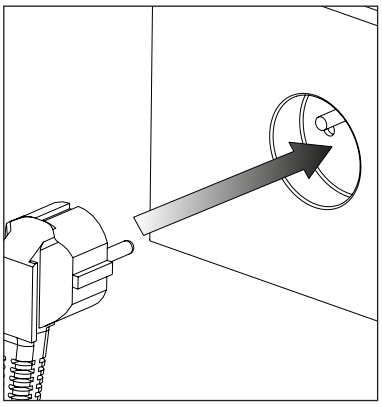
Select the appropriate **IEC 60320/C19** mains cable from the fittings kit and plug the cable into the mains input at the rear of the generator.

10.

UK



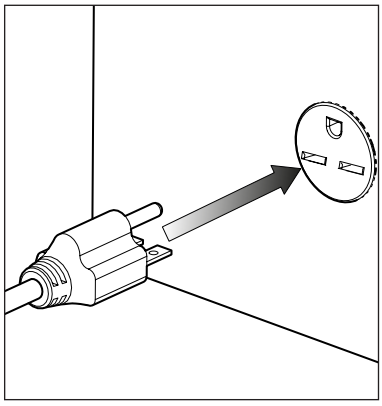
EU







US
230V

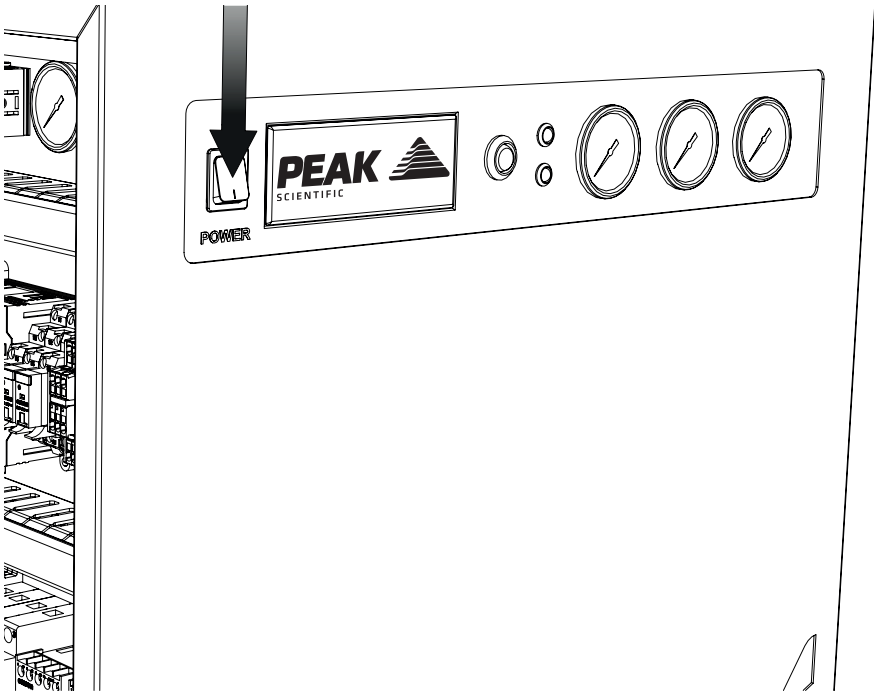


230VAC 50/60Hz

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

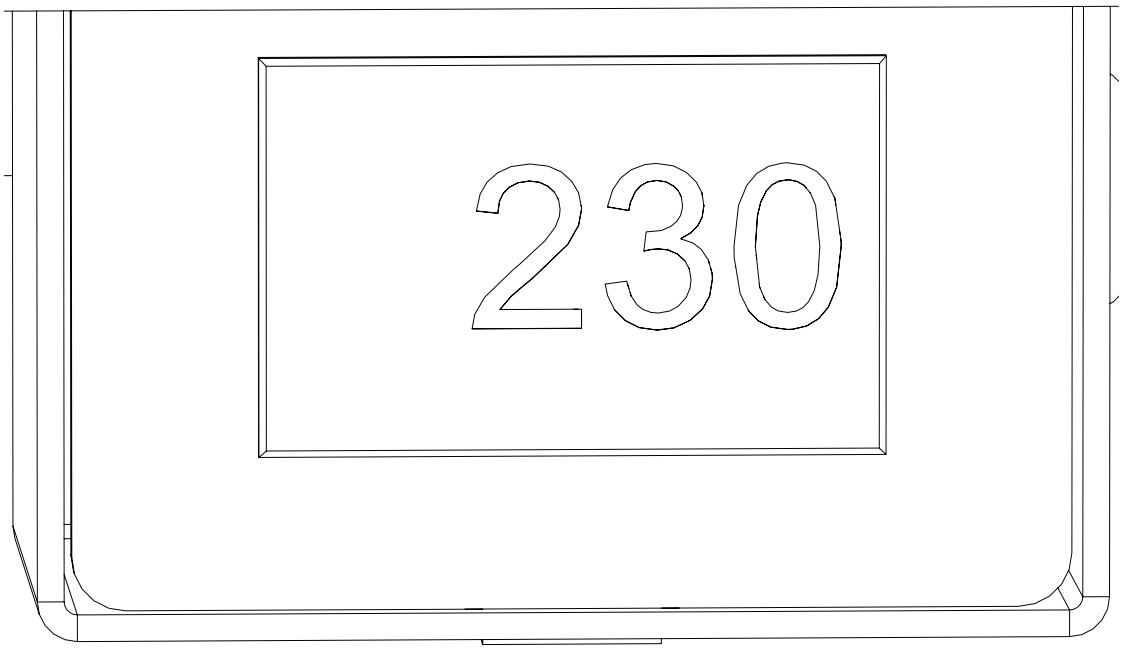
CAUTION ensure the correct cable has been selected for your electrical supply

11.



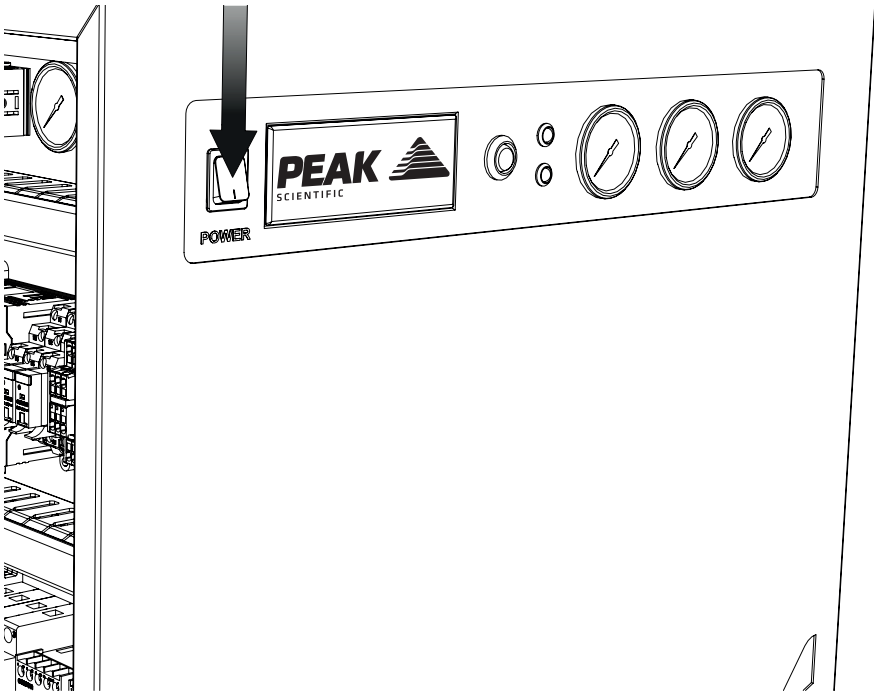
Switch the generator power **ON** using the switch on the front panel.

12.



Check the Generators **internal voltmeter**. This will measure and display the mains voltage that is being supplied to the generator. Note the displayed voltage. If the voltage is 219V or less, we would highly recommend fitting a transformer. This can be ordered directly from Peak. **06-3200 Dual Tap Transformer 200-230V**

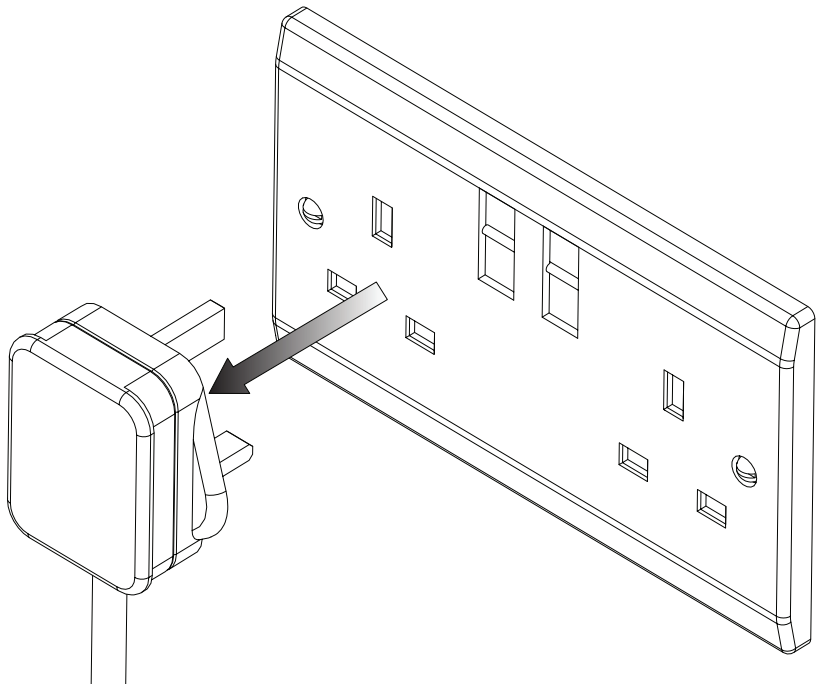
13.



Switch the generator **OFF** using the switch on the front panel.

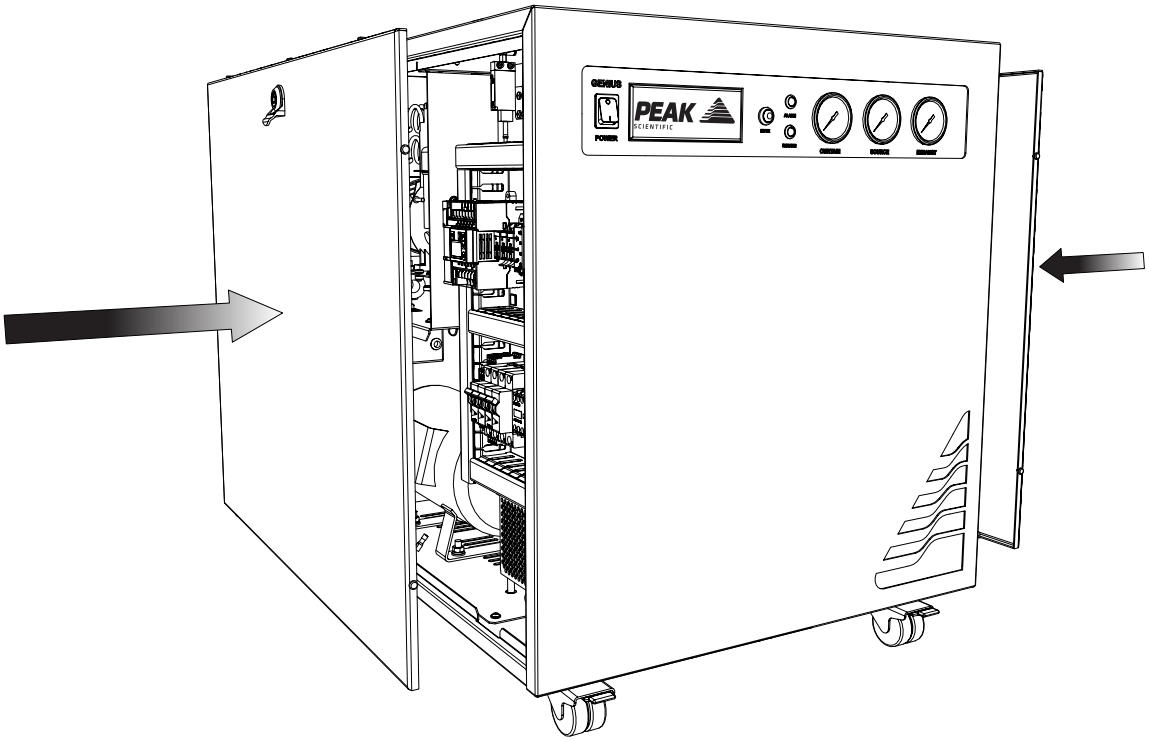
14.





Remove the mains cable completely from the power supply.

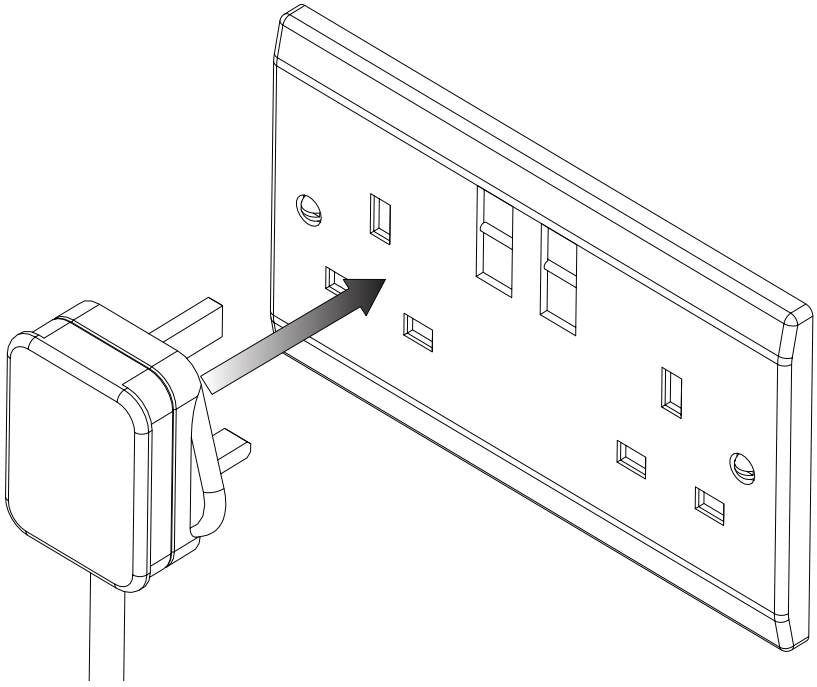
15.



Re-attach both side panels to the generator, ensuring the **earth leads** are **re-connected** and the **locks are secured**.

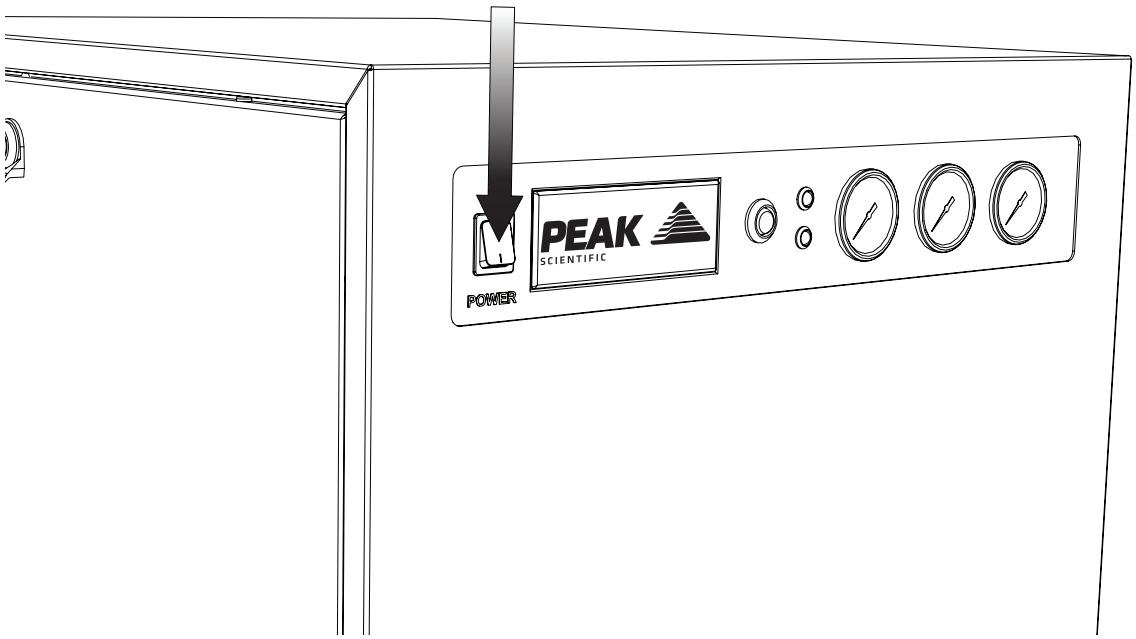
16.





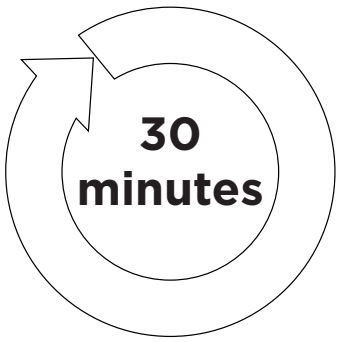
With the side panels securely re-attached, the mains power supply can be **re-connected**.

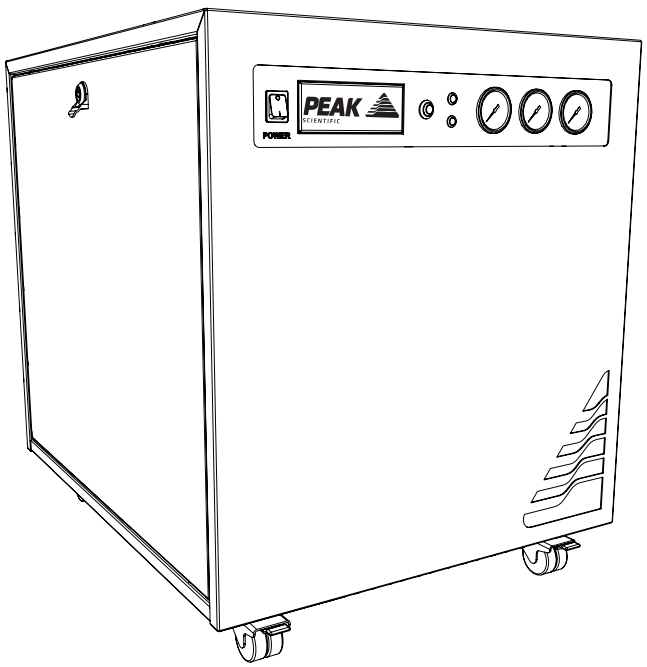
17.



Again, Switch the generator power **ON** using the switch on the front panel.

18.

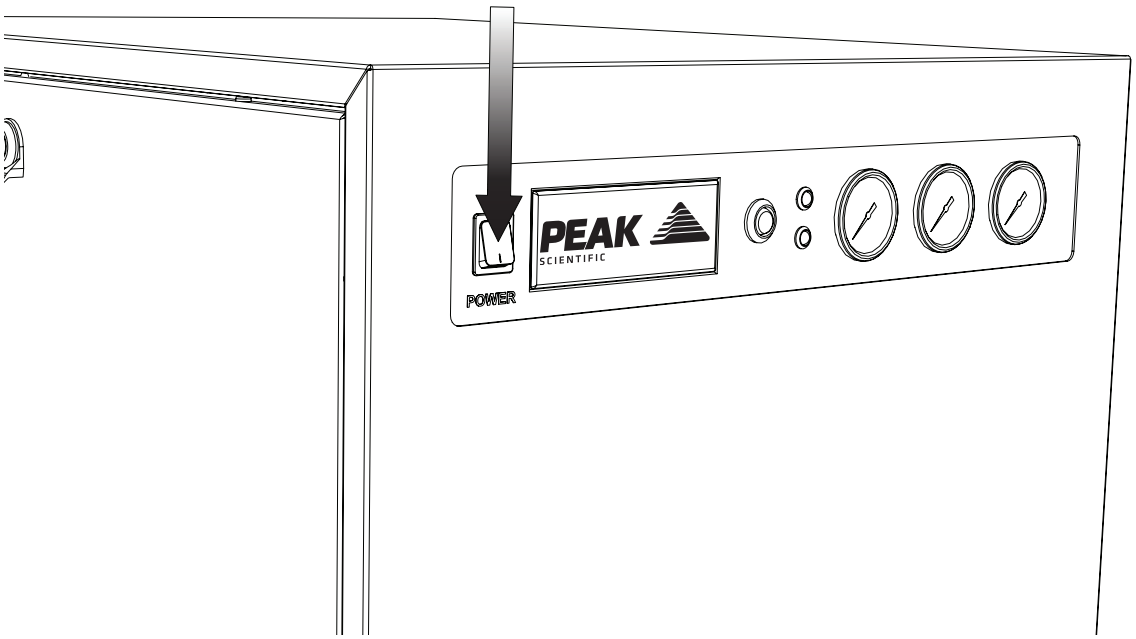




Leave the generator **switched on** for a period of **30 minutes** to purge the system.

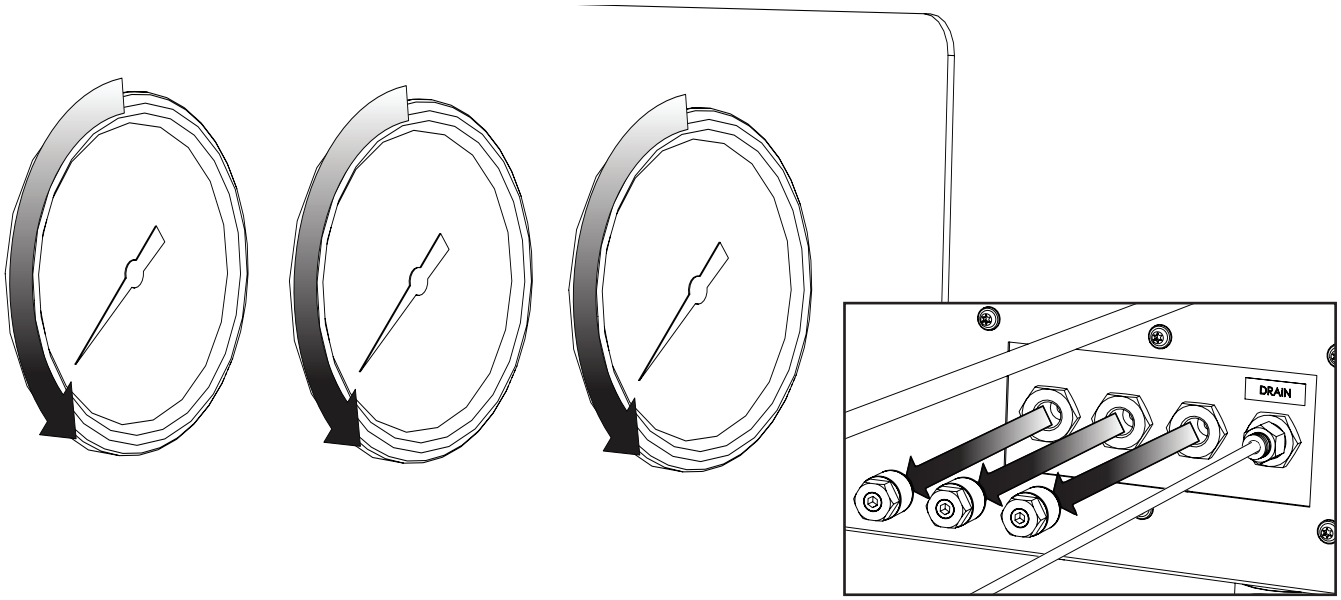
Note: Gauges are for indication purposes only.

19.



After 30 minutes of running, the generator can be turned **OFF**.
Allow the stored gas in the internal tanks to dissipate.

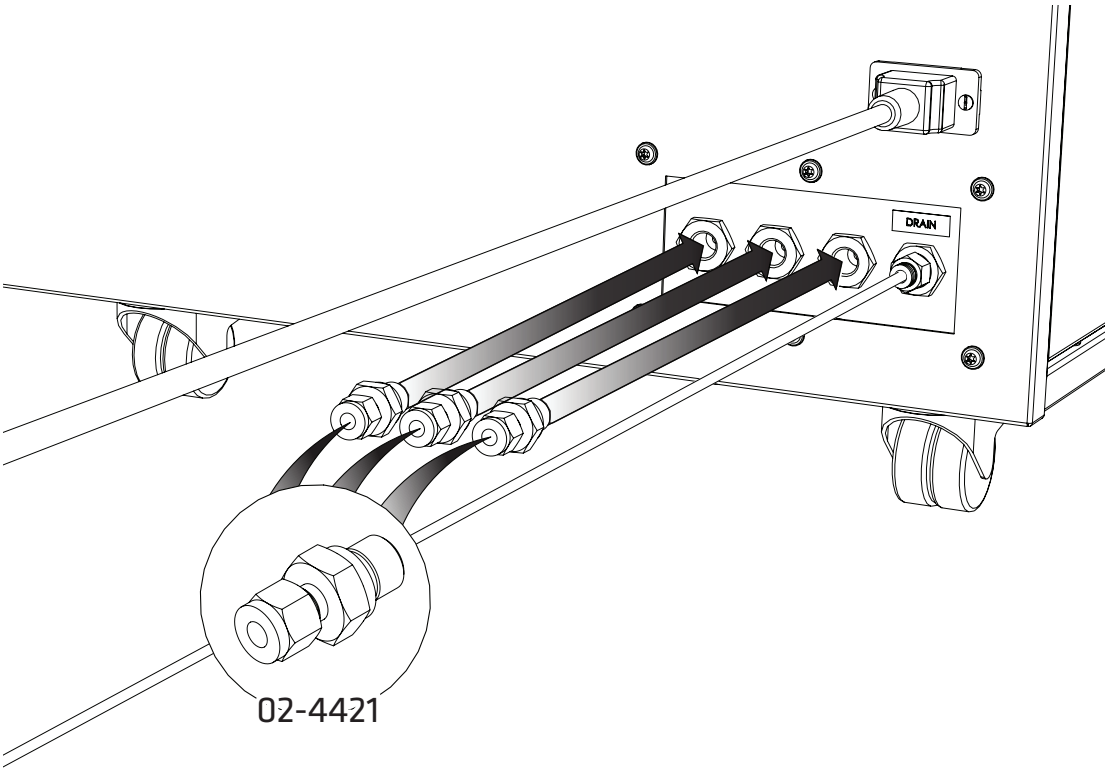
20.



The purge is now complete. Once the pressure gauges on the front of the generator read 0, the **silencer fittings can be removed** from the Curtain, Source & Exhaust ports.

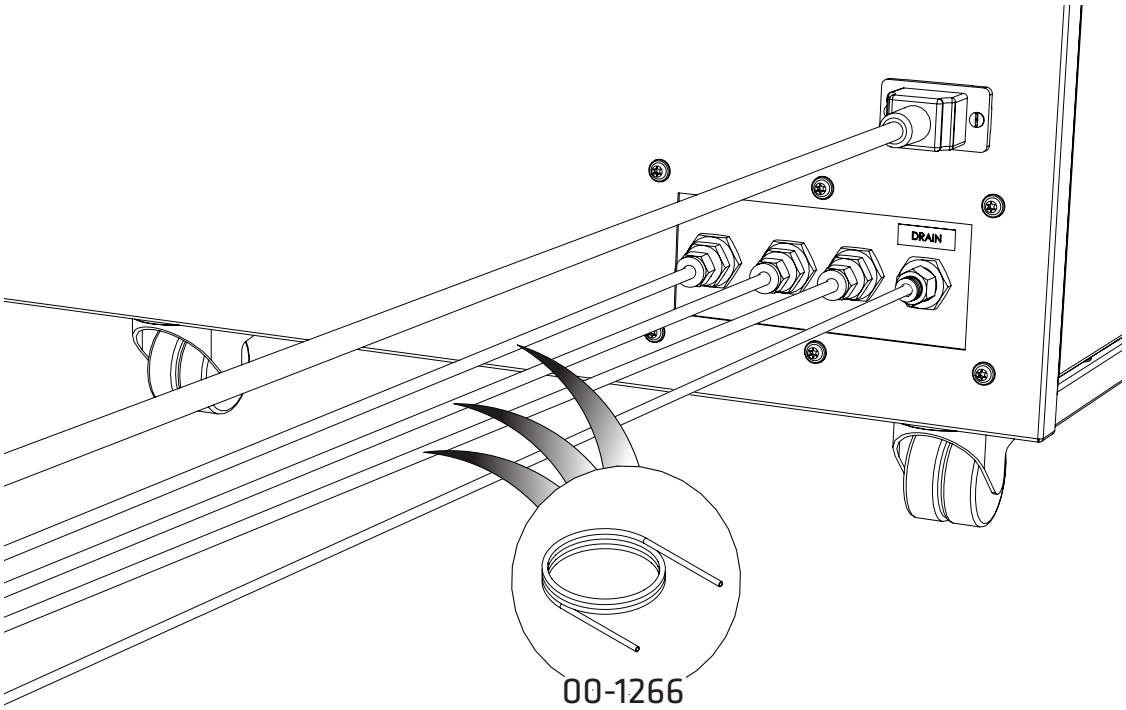
Note: Gauges are for indication purposes only.

21.



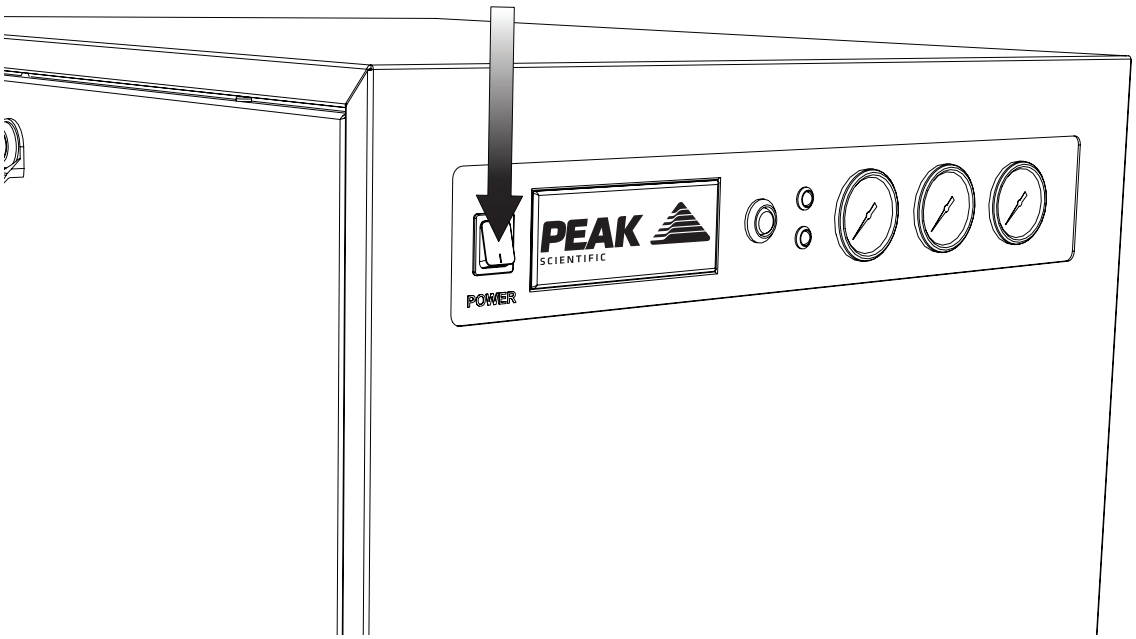
Select the ¼" **Compression Fittings 02-4421** and connect to the **CURTAIN, SOURCE & EXHAUST** ports.

22.



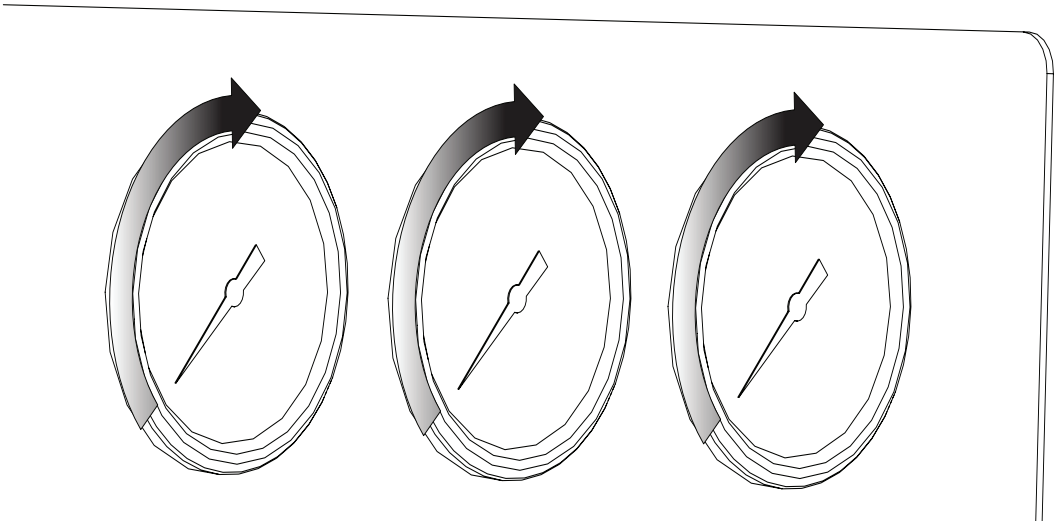
Attach the ¼" **Teflon tubing 00-1266** to the fittings attached to the **CURTAIN, SOURCE & EXHAUST** and connect to the corresponding **gas inlets of your instrument**.

23.



Switch the generator power **ON** using the switch on the front panel.

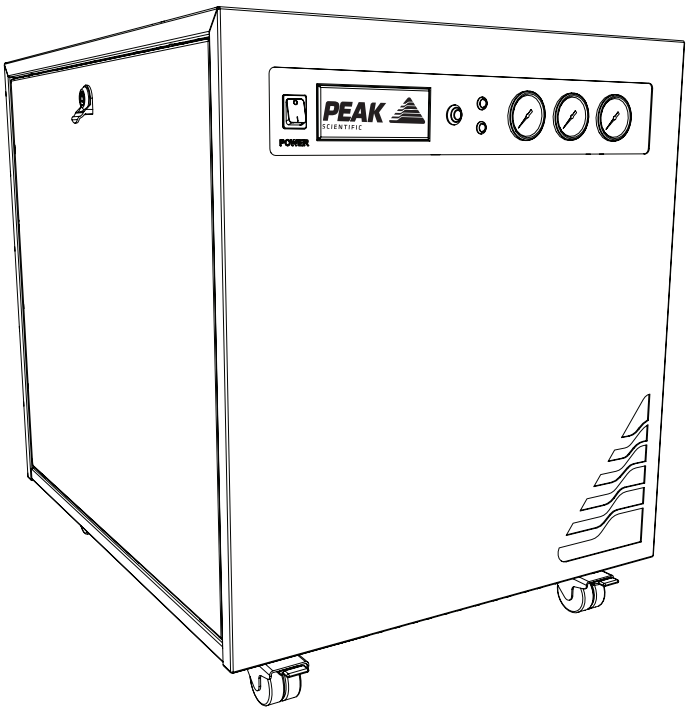
24.



The **pressure gauges** will again **gradually increase** to the factory set pressures.

Note: Gauges are for indication purposes only.

25.



CONGRATULATIONS

Your **Peak Scientific** gas generator is now fully installed. operational and ready to supply gas on demand to your instrument.

General Notes

1. Electrical requirements are 230VAC nominal +/- 10% depending on chosen model. However, running continuoulsy at voltages outwith this is not recommended. Extended periods at extremes can have a detrimental effect on the operation and life of the Generator.

2. The Teflon tube supplied in the fittings kit is to allow the generator to be installed adjacent to the instrument it is supplying. If the generator is to be installed further away from the instrument then attention needs to be paid to pressure drops that could occur. The maximum distance away from the instrument the generator can be placed still using 6mm (4mm internal diameter) or ¼" (3/16" internal diameter) tubing is 10m. For further information relating to tubing lengths please refer to the user manual.

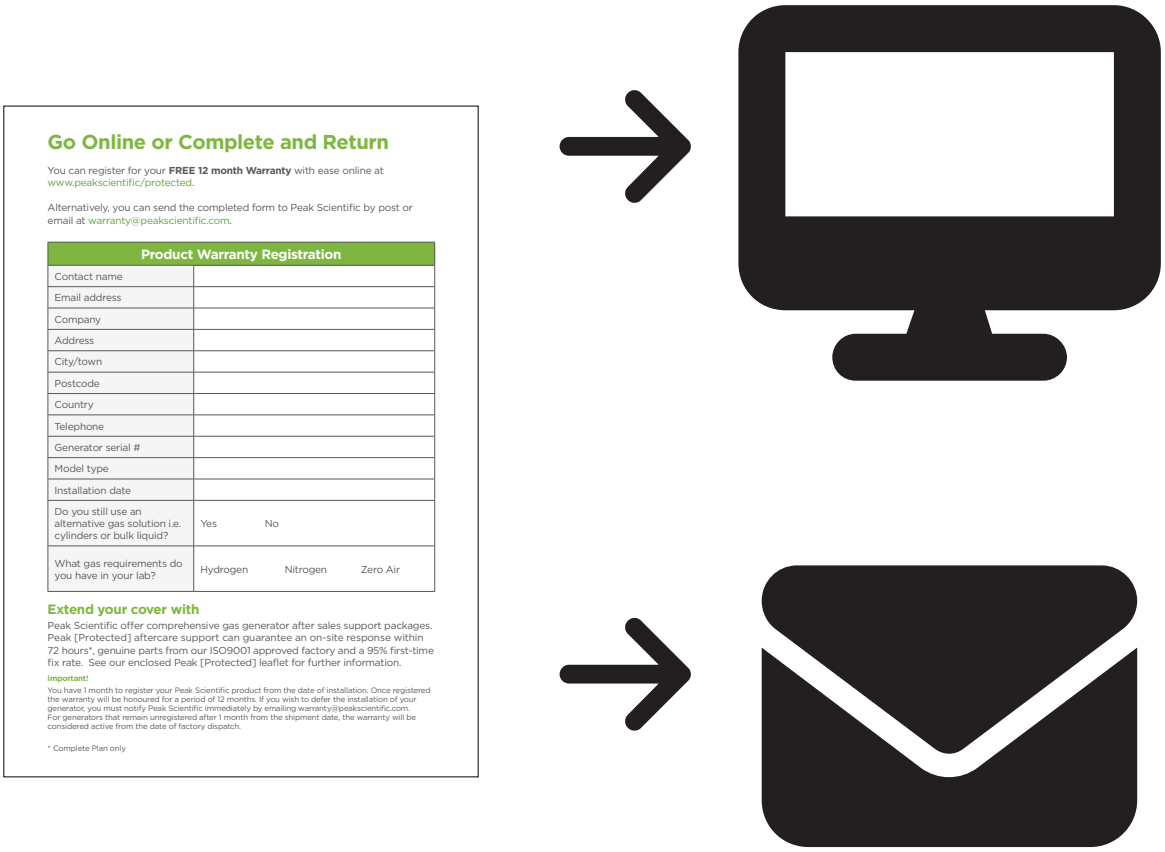
Please familiarise yourself with the full **User Manual** available at **www.peakscientific.com/downloads**. This includes all other technical specifications, operating instructions, service requirements, contact details and trouble shooting.

Go Online or Complete and Return

We know that registering any of your recently purchased products is not the first thing on your mind- but it is very important to both of us. Not all warranties are alike and Peak Scientific stand out against other gas suppliers as we offer a comprehensive, quick response, on-site warranty. This means that in the very unlikely case that your gas generator develops a fault we have rapid support teams on-hand around the world who are able to come to your lab and get you back up and running in no time.

Register for your **comprehensive 12 month on-site warranty** with ease online at www.peakscientific.com/register.

Alternatively, you can send the completed form to Peak Scientific by post or email at warranty@peakscientific.com.



Go Online or Complete and Return

You can register for your **FREE 12 month Warranty** with ease online at www.peakscientific/protected.

Alternatively, you can send the completed form to Peak Scientific by post or email at warranty@peakscientific.com.

Product Warranty Registration	
Contact name	
Email address	
Company	
Address	
City/town	
Postcode	
Country	
Telephone	
Generator serial #	
Model type	
Installation date	
Do you still use an alternative gas solution i.e. cylinders or bulk liquid?	Yes No
What gas requirements do you have in your lab?	Hydrogen Nitrogen Zero Air

Extend your cover with

Peak Scientific offer comprehensive gas generator after sales support packages. Peak [Protected] aftercare support can guarantee an on-site response within 72 hours*, genuine parts from our ISO9001 approved factory and a 95% first-time fix rate. See our enclosed Peak [Protected] leaflet for further information.

Important!

You have 1 month to register your Peak Scientific product from the date of installation. Once registered the warranty will be honoured for a period of 12 months. If you wish to defer the installation of your generator, you must notify Peak Scientific immediately by emailing warranty@peakscientific.com. For generators that remain unregistered after 1 month from the shipment date, the warranty will be considered active from the date of factory dispatch.

* Complete Plan only

Important!

You have **1 month to register** your Peak Scientific product from the date of installation. Once registered the warranty will be honoured for a period of 12 months. If you wish to defer the installation of your generator, you must notify Peak Scientific immediately by emailing **warranty@peakscientific.com.** For generators that remain unregistered after 1 month from the shipment date, the warranty will be considered active from the date of factory dispatch.

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.

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