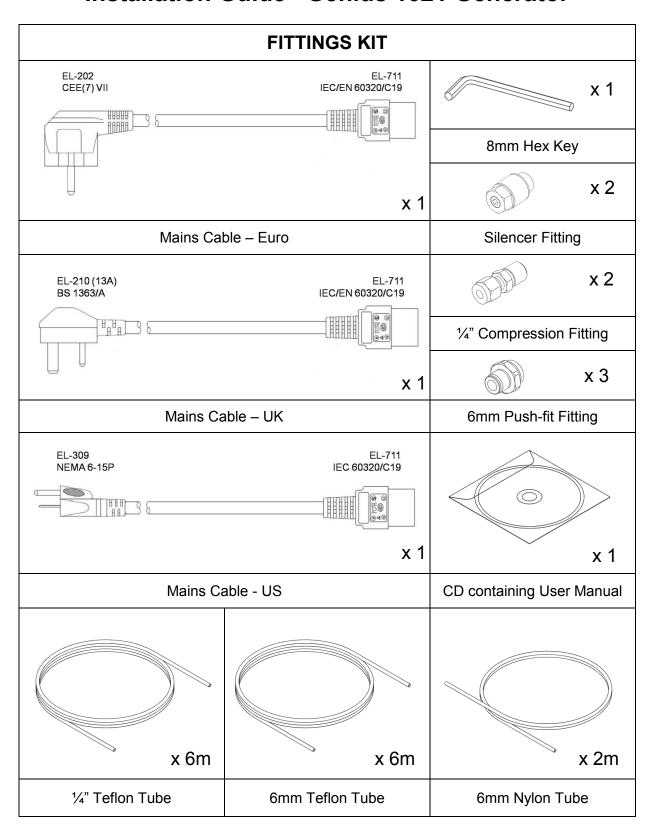


## Installation Guide -Genius 1021 Generator



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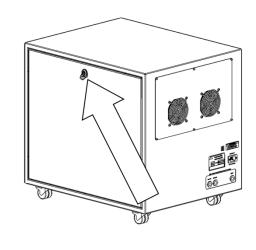


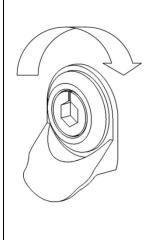
### **INSTALLATION**

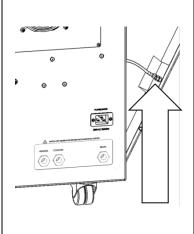
1.

2.

3.





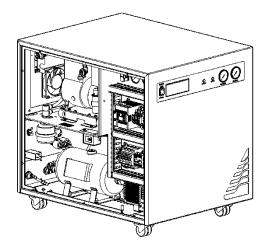


Unpack the generator from the shipping crate and place on a flat surface. To remove the transit brackets, firstly remove the LH side panel.

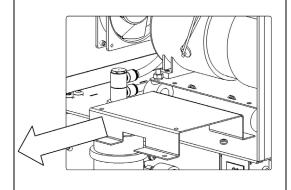
Using the Hex-Key provided in the fittings kit, turn the lock 90° to the right. An earth lead is connected to the inside of the panel. This can be removed by pulling it off the spade connector on the door.

4.

5.



With the LH side panel removed you now have access to the LH transit bracket. This is located under the LH compressor and is painted red. To remove the transit bracket remove the 4 screws as indicated.



Once these screws have been removed the transit bracket can be pulled out as shown.

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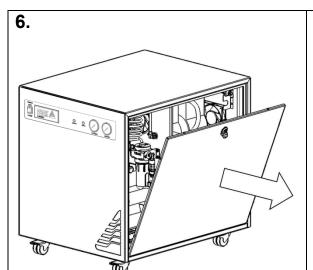
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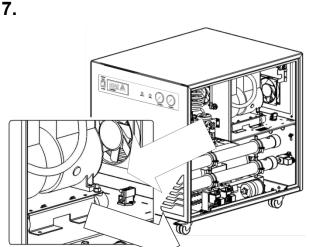
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Remove the RH side panel as before, taking care to remove the earth lead located on the inside of the door panel.

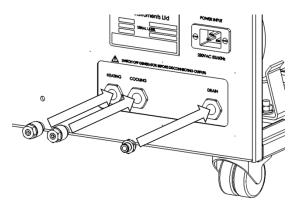
Repeat steps 4 and 5 to remove the RH transit bracket located under the RH compressor.

This will pull out in the same way.

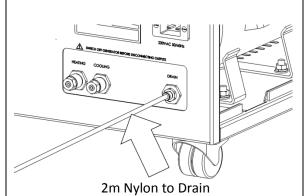
### \*\*NOTE\*\*

Do not discard the transit brackets or screws as these will be needed again if the unit is to be transported from its current location.





9.



From the fittings kit, select one of the 6mm push-fit fittings and connect it to the port marked '**DRAIN**' on the rear of the unit using a 16mm or 5/8" spanner.

Fit the silencer fittings into the ports marked 'HEATING' & 'COOLING'. These only need to be hand tight as they are a temporary fitting for the purge run and will be removed again prior to connecting to the instrument.

Connect the 2m Nylon tube to the drain line, ensure the tube is pushed fully in and gripped securely by the fitting.

Fit the other end of the drain line to a suitable drain connection or container. The container must **NOT** have an airtight seal as water and air will be expelled periodically under a slight pressure.

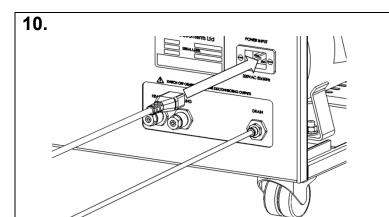
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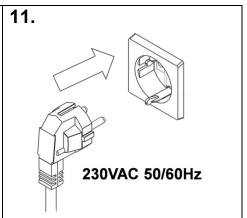
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Select the appropriate mains cable from the fittings kit and plug the IEC 60320/C19 socket into the mains input at the rear of the generator.



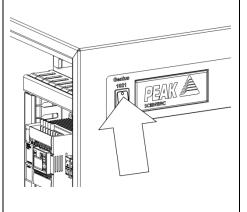
Plug the mains cable into an appropriate 230VAC 50/60Hz single phase power supply



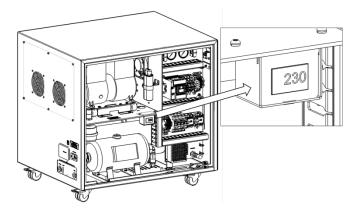
### \*\*NOTE\*\*

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

12.



13.



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

The voltmeter is located on the underside of the compressor area. This will measure and display the mains voltage that is being supplied to the generator. Note the displayed voltage.

>= 220V

<= 253V

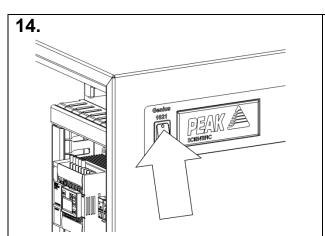
<= 219V >= 194V

\*\*NOTE\*\*

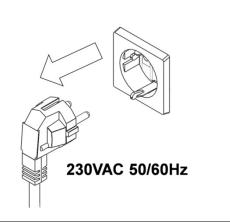
If the displayed voltage is 219V or less\* we would highly recommend fitting a transformer. This can be ordered directly from Peak Scientific, Peak part number is...

06-3200 - Dual Tap Transformer 200V - 230V



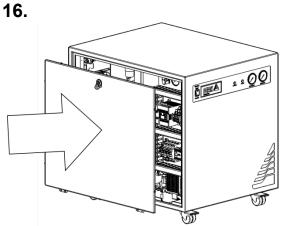


15.

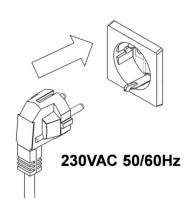


Switch the generator power **OFF** at the switch on the front panel.

Remove the mains cable completely from the power supply.



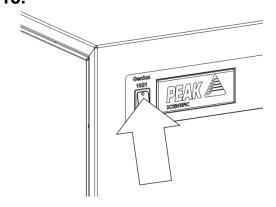
**17.** 



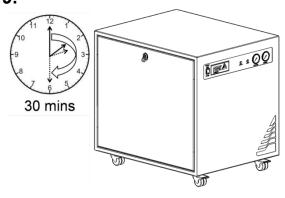
Re-attach both the RH & LH side panels to the generator, taking care to ensure the earth lead's are reconnected correctly. The locks are secured by turning the lock 90° to the left using the hex key provided.

Once the side panels are securely assembled, the mains power supply can be reconnected.

18.



19.



Switch the generator back **ON**.

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

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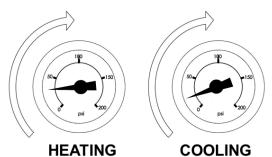
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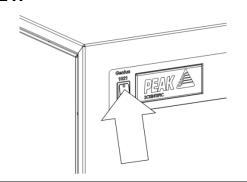






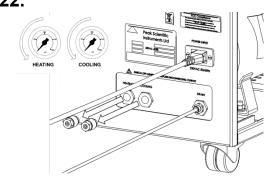
The 'HEATING' & 'COOLING' pressure gauges on the front of the generator will gradually increase from 0 to 30psi, & 20psi respectively as the pressure in the internal storage tanks increases.

21.



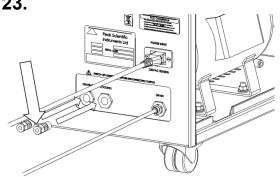
After 30 minutes of running, the generator can be turned off. Allow the stored gas in the internal tanks to dissipate.

### 22.



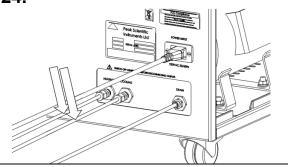
The purge run is now complete. Once the pressure gauges on the front of the generator read 0 the silencer fittings can be removed from the 'HEATING' & 'COOLING' port.

23.



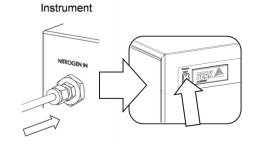
Depending on the size of the inlet on the instrument select either the 1/4" compression fittings or the remaining 6mm push-fit fittings and attach to the 'HEATING' & 'COOLING' ports. If the 1/4" compression fittings are used it is recommended that PTFE tape is applied to the thread to ensure a leak-tight fit.

#### 24.



Select the appropriate size Teflon Tube\*\* and connect to the 'HEATING' & 'COOLING' port. If using the compression fittings ensure the internal olive is crimped securely.

**25**.



Connect the other end of the Teflon Tubes to the instrument gas inputs, again ensure the fittings are securely fastened. Once these are connected the Generator can be switched on.

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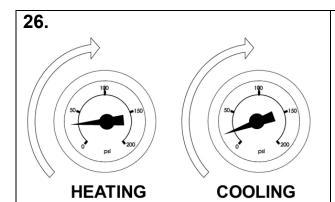
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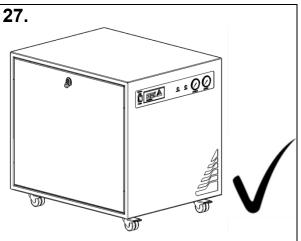
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The 'HEATING' & 'COOLING' pressure gauges on the front of the generator will again gradually increase from 0 to 30psi, & 20psi respectively as the pressure in the internal storage tanks increases.

# **CONGRATULATIONS**

Your **PEAK SCIENTIFIC** gas generator is now fully installed, operational and ready to supply gas on demand to your instrument.

#### **General Notes**

- \* The generator will operate on voltages of 230VAC +/- 10%. This means it will operate between 207V and 253V. If the generator is operated on a supply voltage of less than 220V the internal compressors will work harder and the service life of the compressors will be reduced. It is ok to operate the generator on a mains voltage between 207V and 220V for a short period of time, however we would recommend fitting the listed transformer at your earliest convenience. Mains voltages between 220V and 253V no transformer is required.
- \*\* The 6m length of 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 ½" (3/16" internal diameter) tubing is 10m. For further information relating to tubing lengths please refer to the user manual.

For all other technical specifications, operating instructions, service requirements, contact details and trouble shooting, please refer to the user manual contained on the CD supplied in the fittings kit. Please keep this for future reference.



28.

It is very important to register your generator with PEAK SCIENTIFIC. This will initiate your warranty entitlement. Please use the form on the next page to register your generator. You will need the generators serial number which can be found on the serial label on the rear of the generator.



## IMPORTANT DOCUMENTS

# Warranty Entitlement

To register your generator for your warranty entitlement, send the completed form to Peak Scientific by:

Email <u>warranty@peakscientific.com</u>

• Online <a href="http://www.peakscientific.com/service-and-support/warranty-registration">http://www.peakscientific.com/service-and-support/warranty-registration</a>

Phone +44 (0)141 530 4185

Fax +44 (0)141 812 8200

PRODUCT WARRANTY REGISTRATION	
COMPANY:	CONTACT NAME:
ADDRESS:	
	EMAIL ADDRESS:
CITY/TOWN:	GENERATOR SERIAL NUMBER:
POSTCODE:	
COUNTRY:	MODEL TYPE:
TELEPHONE:	INSTALLATION DATE (DD/MM/YYYY):

### **Important Please Note:**

You have 1 month to register your Peak Scientific product from the date of shipment.

If you wish to defer installation of your generator you must notify Peak Scientific within 1 month of the shipment date. This can be done by emailing <a href="mailto:warranty@peakscientific.com">warranty@peakscientific.com</a> Once registered the warranty will be honoured for a period of 12 months after the installation date.

For any generators that remain unregistered the warranty will begin from date of shipment.

Thank you on behalf of Peak Scientific.