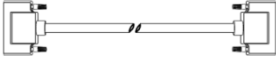
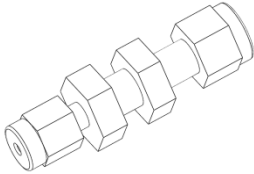


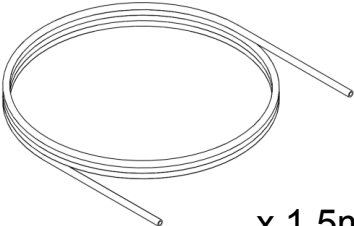
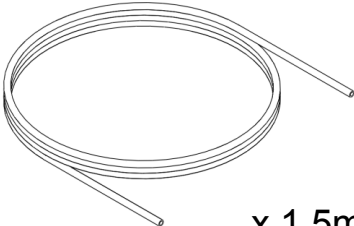
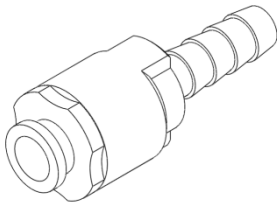
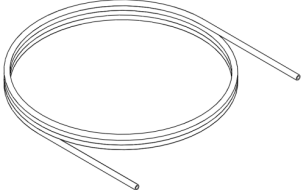
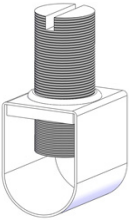
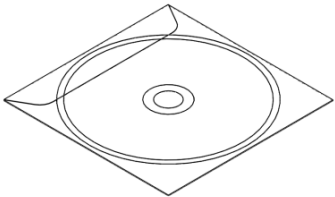
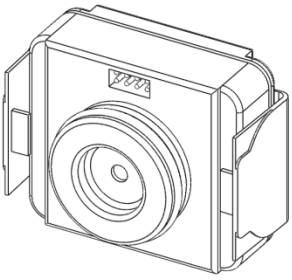
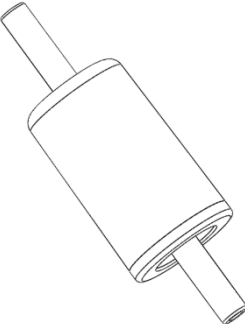
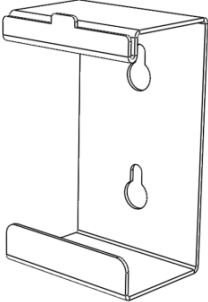
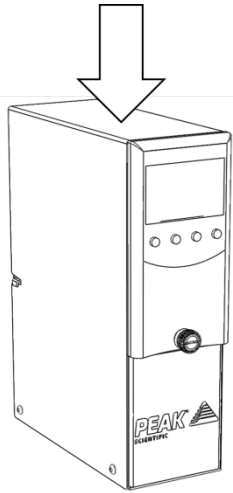


Installation Guide – Hydrogen Detector

FITTINGS KIT			
 x 1	 x 1	 x 1m	 x 1
Communication Cable	Bulkhead Reducer Fitting	1/8" OD Stainless Steel Tubing	2 mm Hex Key
 x 1.5m	 x 1.5m	 x 2	
1/4" OD x 1/8" THK (Exhaust) Tubing	1/4" OD x 3/16" THK (Input) Tubing	1/4" Push-Fit Barbed Fitting	
 x 1m	 x 2	 x 1	
Tygon Tubing (Filter)	Hose Clip	CD containing User Manual	
 x 1	 x 4	 x 1	
Cartridge	In Line Filter	Wall Mounting Bracket	

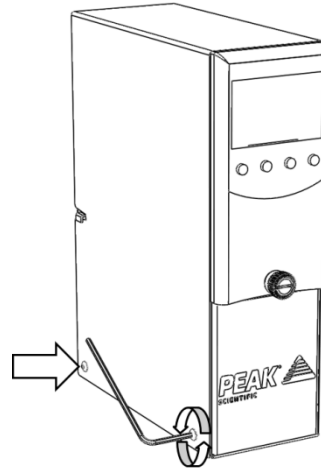
INSTALLATION

1.



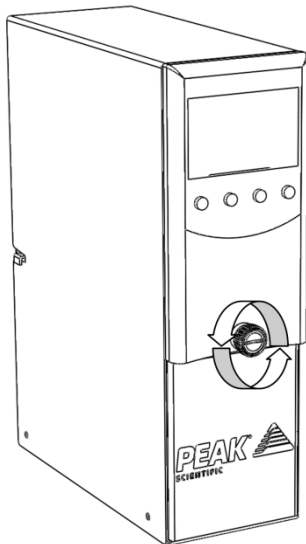
Unpack the Hydrogen Detector from the shipping crate and position on a flat surface.

2.



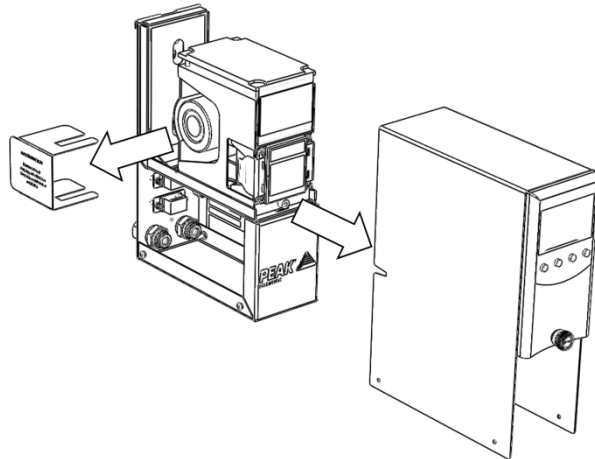
The bottom corners of the cover plate have a hex screw which must be removed, using the hex key provided, in order to remove the cover. There are 4 in total.

3.

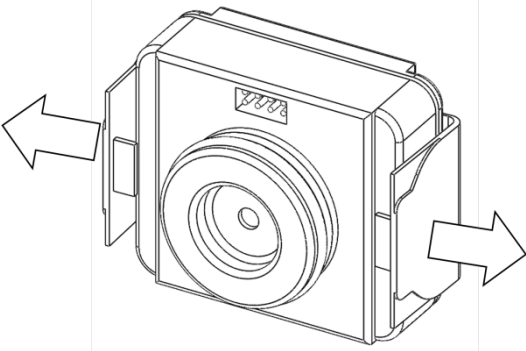
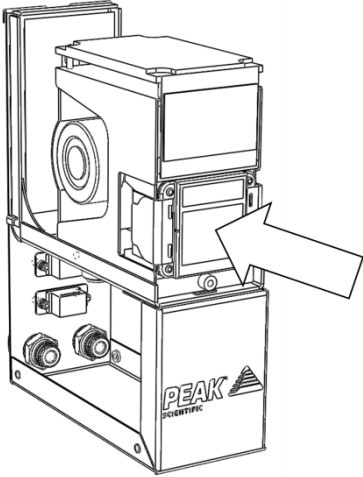
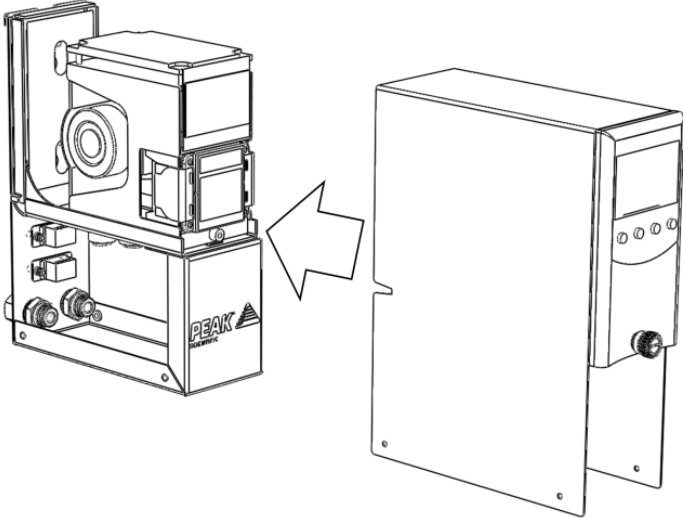


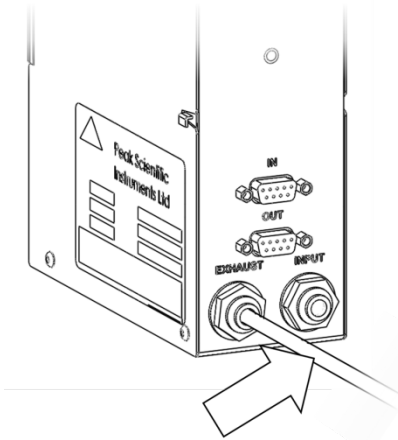
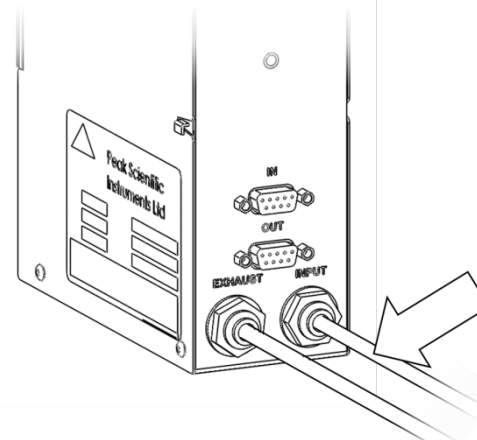
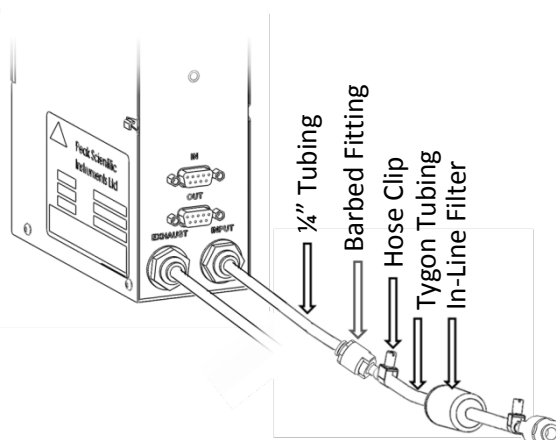
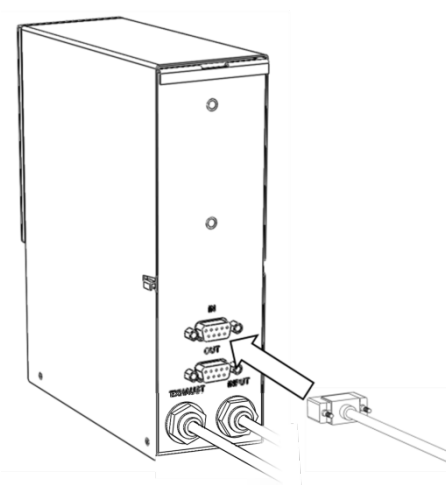
Now turn the thumbscrew on the front of the cover anticlockwise.

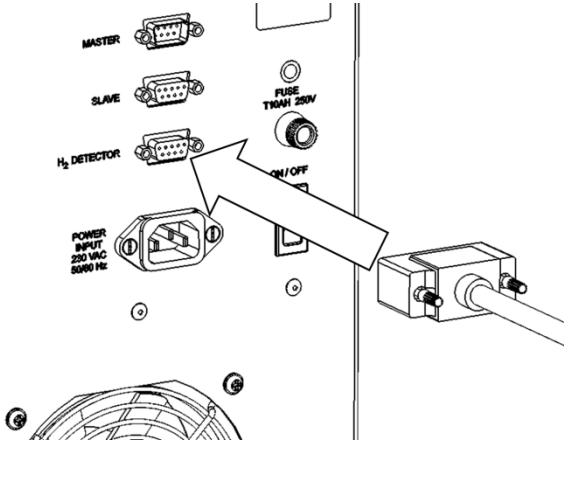
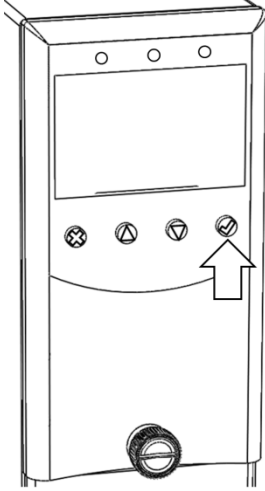
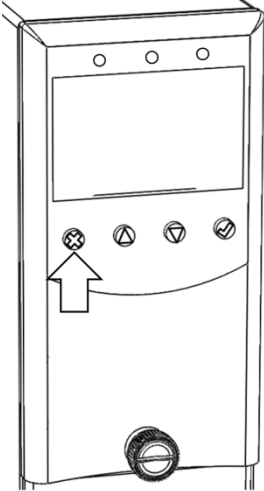
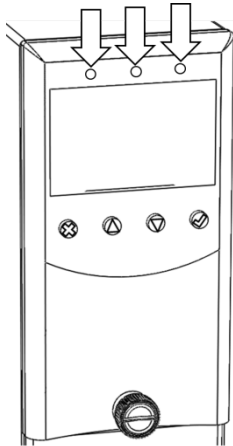
4.



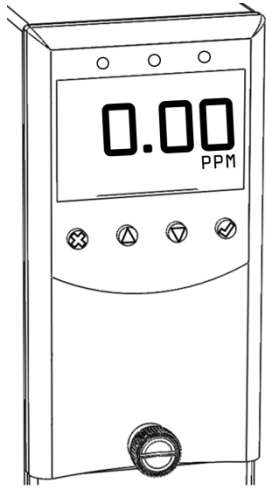
The cover can now be slid off the detector, and the cardboard shipping protection can be removed.

<p>5.</p> 	<p>6.</p> 
<p>With the cover removed, the cartridge (06-9006) can now be fitted to the detector. Ensure that there is no protective cover over the sensor head and that the side clips are unclipped by pulling outwards.</p>	<p>Fit the cartridge into the holder as shown above. Once it is in position the clips can be used to secure the cartridge to the detector.</p>
<p>7.</p> 	
<p>The cover can now be refitted, Ensuring that the thumbscrew and the 4 hex screws are securely fastened.</p>	

<p>9.</p> 	<p>10.</p> 
<p>Fit the 1.5m of $\frac{1}{4}$" OD x $\frac{3}{16}$" THK tubing provided to the detector's EXHAUST port. It is recommended that this is then connected to a fume hood or other extraction device.</p>	<p>Next fit part of the $\frac{1}{4}$" OD x $\frac{1}{8}$" THK tubing from the fittings kit to the INPUT port.</p>
<p>11.</p> 	<p>12.</p> 
<p>Next fit part of the Tygon tubing to the $\frac{1}{4}$" OD x $\frac{1}{8}$" THK tubing, using one of the $\frac{1}{4}$" Barbed Fittings and Hose clip provided. Now attach the In Line filter to the Tygon tubing. Reverse the connection process to connect the filter to the instrument.</p>	<p>To supply power to the detector, connect one end of the communications cable to the IN socket of the detector. Connect the other end to the H₂ Detector socket at the rear of the Precision 500/Trace.</p>

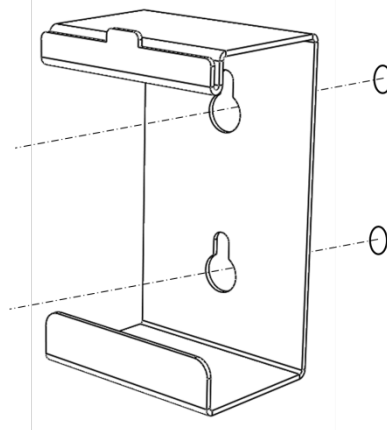
<p>13.</p> 	<p>14.</p> 
<p>Connect the other end to the H₂ Detector socket at the rear of the Precision 500/Trace.</p>	<p>With power now supplied, the Cartridge can be activated. To properly activate the detector with the cartridge for the first time, when CHANGE GAS or FIRST CELL scrolls on the display, hit the ✓ on the front panel.</p>
<p>15.</p> 	<p>16.</p> 
<p>In a first start up, an F49, F83 or F88 fault code may be displayed. There are no actual faults and these can be cleared. When the reboot completes then press and hold the ✕ key to clear any latched faults.</p>	<p>Confirm that the GREEN LED is flashing and that the YELLOW and RED LEDs are off.</p>

17.



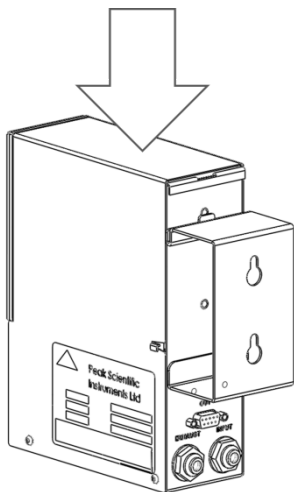
Now check that the display shows a concentration of **0**.

18.



It is recommended that the detector is wall mounted above the height of the instrument inlet. This can be done using the bracket supplied. We advise the use of M4 screws and wall plugs (not supplied).

19.



The detector can now be lowered down onto the bracket. The wall mounting has been specially designed to allow greater serviceability by enabling the unit to be taken down off of the wall for service and maintenance work to be carried out, without having to remove the wall bracket.

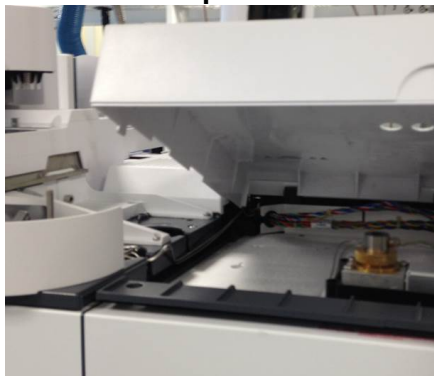
20.



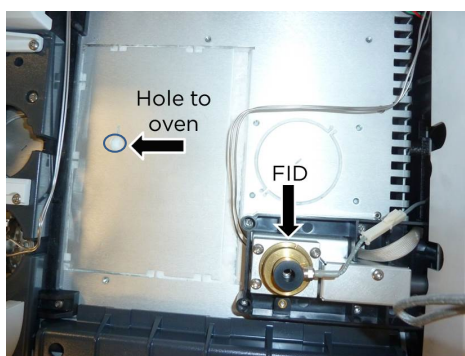
CONGRATULATIONS
Your **PEAK SCIENTIFIC** Hydrogen Detector is now fully installed, operational and ready to sample gas from your instrument.

Connecting the H₂ Detector to the GC Oven

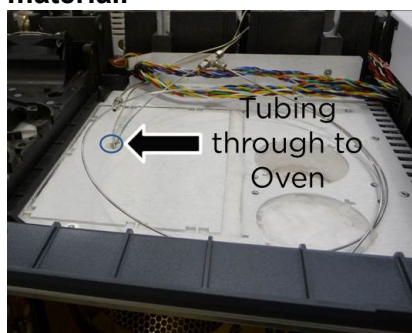
1. First remove the plastic cover on the top of the GC.



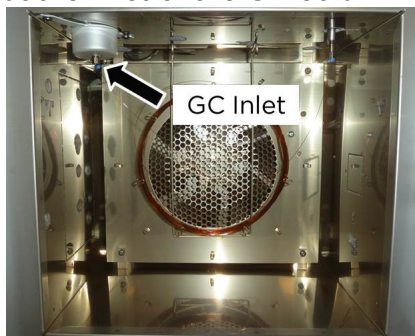
2. Locate the cut-out hole on the aluminium plate directly above the rear hole on the GC oven.



3. Make a hole through the insulation material, through to the oven. The stainless steel tubing from the detector can now be pushed through the hole, and secured in place using more insulation material.



4. Once the stainless steel tubing has been pushed through and secured, the end of the tubing should be aimed at the inlet of the GC column.



5. Position the end of the tubing as close to the inlet as possible, without limiting access for column changes and inlet maintenance.

6. The detector is now fully connected and will take samples continuously and both the detector and the H₂ generator will sound an alarm if dangerous levels of Hydrogen are detected. The generator will then shut down.

General Notes:

Fault Codes

In the event of a fault code being displayed after Installation has been completed, follow the corresponding troubleshooting steps to rectify.

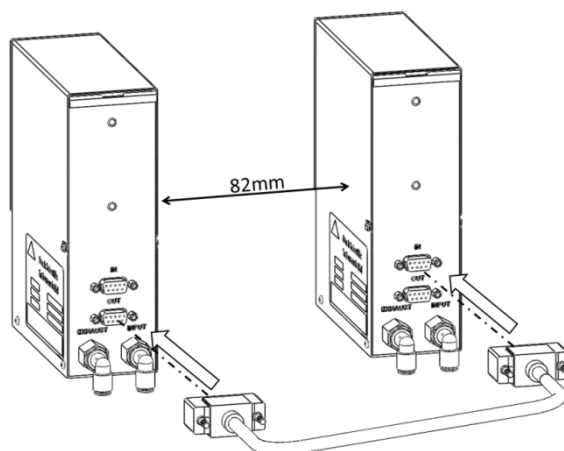
F48 – Cartridge absent – Reseat or Replace Cartridge.

F49 – Cartridge wrong type – Replace cartridge or press ✓ to accept if correct.

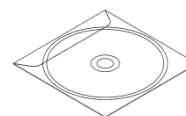
F81 – Flow fail – Check filter, check for kinked tubing.

Multiple Detectors

Multiple detectors can be connected to one Precision 500/Trace. If this is desired, connect the first detectors 'Out' port to the second detectors 'In' port, as illustrated below. Please take into consideration when working with multiple Hydrogen Detector Units that a minimum required distance between units is 82mm (3.23in).



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.



21.

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

IMPORTANT DOCUMENTS

Warranty Entitlement

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

- **Email** warranty@peakscientific.com
- **Online** http://www.peakscientific.com/service-and-support/warranty_registration
- **Phone** +44 (0)141 530 4185
- **Fax** +44 (0)141 812 8200

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

Important Please Note:

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

If you wish to defer installation of your detector you must notify Peak Scientific within 1 month of the shipment date. This can be done by emailing warranty@peakscientific.com 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.