



Operating instructions
OPD-0014420(2)
Issued 7th November 2024

Important information

This instruction document is for guidance only in conducting Let-by and Gas tightness testing on installations with an EasyAssist® device fitted.

Always refer to the current gas safety regulations to ensure compliance when carrying out work on any gas installation.

Prior to carrying out Let-by and Gas tightness testing:

- Examine the installation and ensure that all appliance isolation valves are in the open position.
- Ensure that pilot light(s) and operating taps on appliances are turned off.
- If a cooker with a drop-down lid is encountered, then raise the lid to ensure the Safety Shut-Off Valve [SSOV] is in the open position.

Equipment required

- Water Gauge (also known as U Gauge or U Tube Gauge) or a suitable Electronic Gauge*
- Flexible testing tube (to connect the gauge to the test point)
- Leak Detection Fluid (LDF)**
- Screwdrivers and spanners
- A watch or stopwatch

*The gauge shall be non high specific gravity type.

** Do not spray EasyAssist® device with cleaning chemicals, oils or lubricants.

Product information

EasyAssist® is a trademark of Oxford Gas Products Limited © 2024. All rights reserved. Patents: Granted patent GB2592068, with patents pending in other jurisdictions; registered designs.

This product is manufactured by Continental Product Engineering Limited under licence from Oxford Gas Products Limited.

Designed in Oxford, UK Assembled in Norfolk, UK

Manufacturer details

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Let-by testing | No Perceptible Movement [NPM]

No Perceptible Movement [NPM] is a movement of a water gauge over a test period that is indistinguishable to the naked eye. Therefore, if the gauge is seen to have moved it can be inferred that the pressure within the installation has altered.

Movement of 0.25 mbars or less on a Water gauge is considered to be NPM.

Movement of greater than 0.25 mbars on a Water gauge shall not be considered as NPM.

Where an Electronic gauge is used NPM is dependent upon the number of decimal places that the gauge is capable of reading, refer to Table 1 below:

NUMBER OF DECIMAL PLACES ON ELECTRONIC GAUGE	NPM MAXIMUM GAUGE MOVEMENT
1 decimal place i.e. 0.1	0.2 mbar
2 decimal places i.e. 0.25	0.25 mbar

Table 1 - Application of NPM on Electronic Gauge***

Gas tightness testing | Permissible drop in pressure

EXISTING INSTALLATION with appliance connected NO SMELL OF GAS

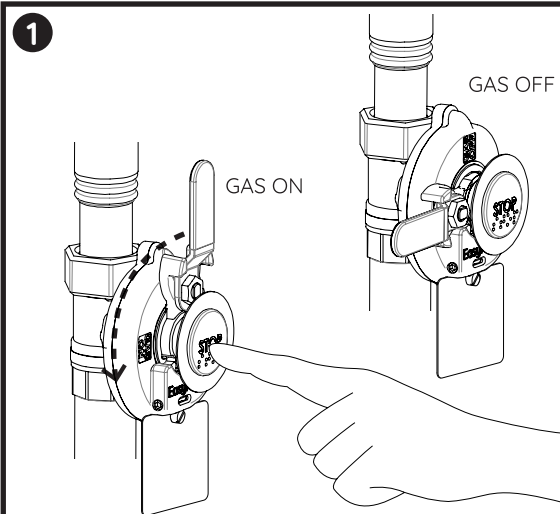
METER TYPE	PERMISSIBLE PRESSURE DROP	
	PIPE DIAMETER	
	UP TO AND INCLUDING 28 mm	GREATER THAN 28 mm, UP TO AND INCLUDING 35 mm
No meter	8 mbar	4 mbar
E6	8 mbar	4 mbar
U6/G4	4 mbar	2.5 mbar
U16/G10	1 mbar	1 mbar

Table 2 - Type of installation permissible pressure drop***

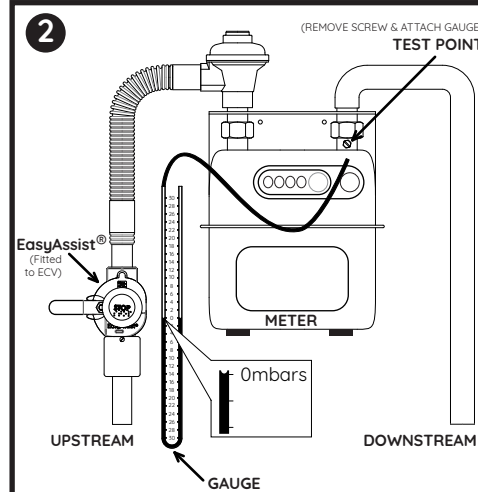
*** Tables for reference only, always refer to current gas safety regulations

Let-by testing | For standard installation

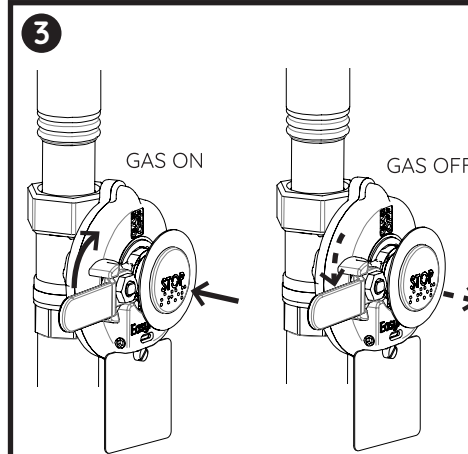
Before starting the testing, check important information



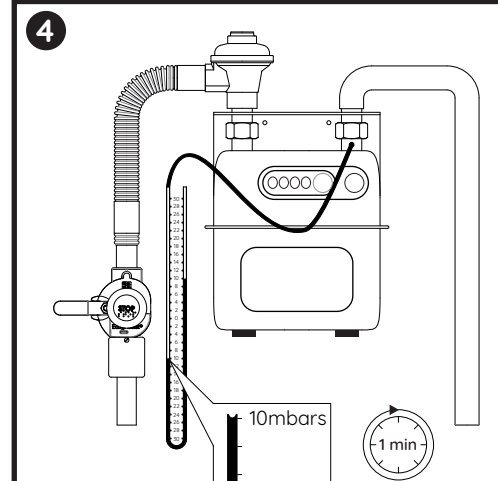
Turn off gas by pushing the 'STOP' button on the EasyAssist® device, and ensure the handle turns fully to the 'GAS OFF' position. Inspect the installation for open points, where any are found ensure they are sealed with an appropriate fitting.



Remove the test nipple screw and attach a suitable gauge (refer to Equipment required) to the test point. Ensure the gauge is zeroed. Note: If using a Water gauge, ensure this is vertical and water within the gauge is level at zero on the gauge scale.



Slowly open the ECV by pushing and holding the 'STOP' button on the EasyAssist® device whilst turning the handle clockwise until the gauge reads between 7 and 10 mbars. When this pressure range is achieved, release the handle then the button to close the ECV.



Let-by testing | For standard installation

Continued

- 5**
- Where a rise in pressure is not observed then the installation has passed the Let-By test and can proceed to Gas tightness testing on next page.
- If a rise of pressure greater than NPM is observed further investigation is required following gas safety protocols.

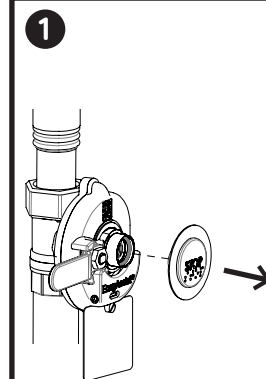
ECV Direct Access | For leak investigation

In the event that direct access to the ECV is required and the EasyAssist® device needs to be removed, follow **EasyAssist® Removal steps 1-4**.

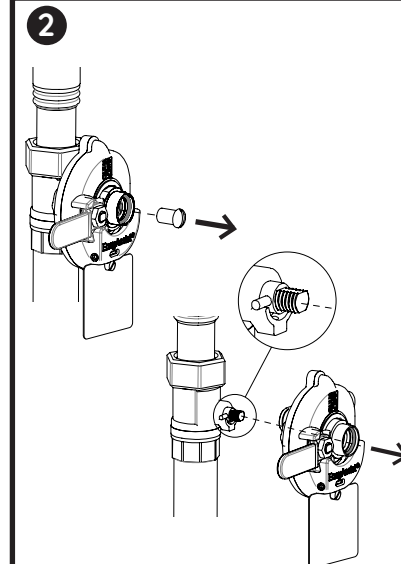
To re-attach EasyAssist® device, refer to: **EasyAssist® Installation guide [OPD-0014608]**.

EasyAssist® Removal | For standard installation

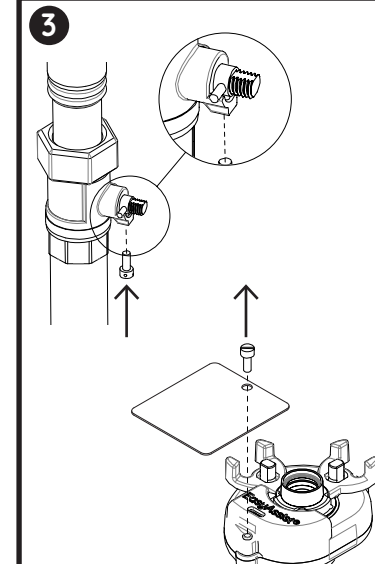
To gain direct access to ECV for gas leak investigation



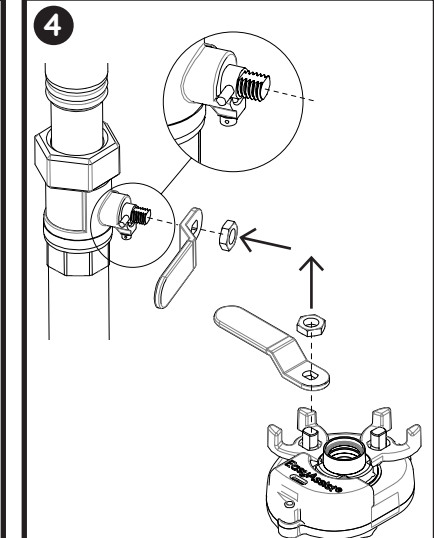
To remove the EasyAssist® device from the ECV first ensure that the EasyAssist® is in the 'GAS OFF' position. Then unclip the 'STOP' button by pulling away from the EasyAssist® device.



Next, unscrew the barrel nut and carefully pull the EasyAssist® device away from the ECV stem.



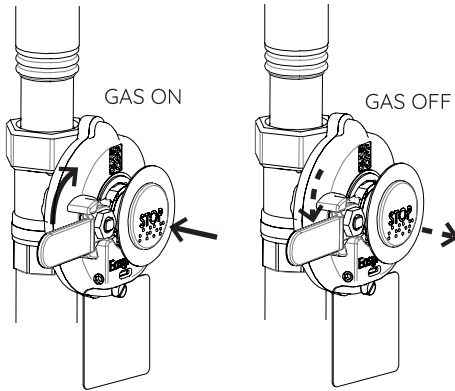
The security screw can be removed from the EasyAssist® device and reattached to the ECV stem.



The ECV handle can also be removed from the EasyAssist® device by unscrewing the handle-nut and reattaching to the ECV stem.

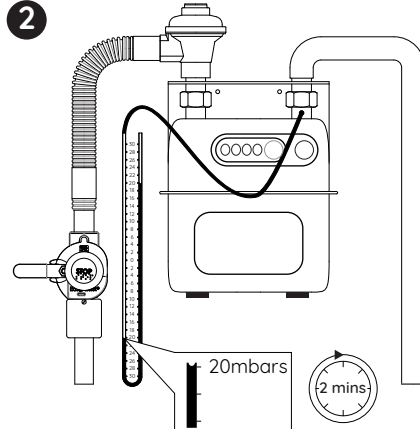
Gas tightness testing | For standard installation

1



Slowly open the ECV by pushing and holding the 'STOP' button on the EasyAssist® device whilst turning the handle clockwise until the gauge reads between 20 and 21 mbars. When this pressure range is achieved, release the handle then the button to close the ECV.

2



Allow 1 minute for temperature stabilisation and, where necessary, re-adjust the pressure to between 20 and 21 mbars (refer to step 1). Monitor gauge for a further 2 minute period checking for a drop in the pressure greater than No Perceptible Movement [NPM]. If using a Water gauge, ensure readings are taken at bottom of meniscus.

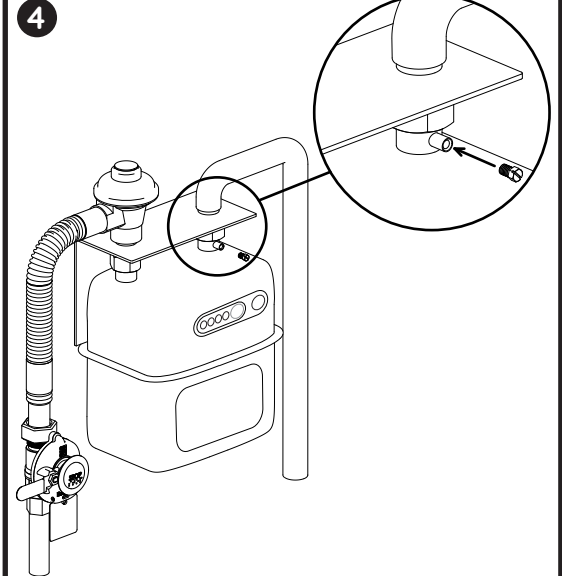
3

Where a pressure drop is observed then the following will apply as appropriate:

Where existing appliances are connected then the drop shall be compared against the permissible limits (refer to Table 2).

- If the pressure drop is within the permissible limits, proceed to step 4.
- Where a smell of gas is present, the drop is outside the permissible tolerance the test has failed and gas safety protocols shall be followed.

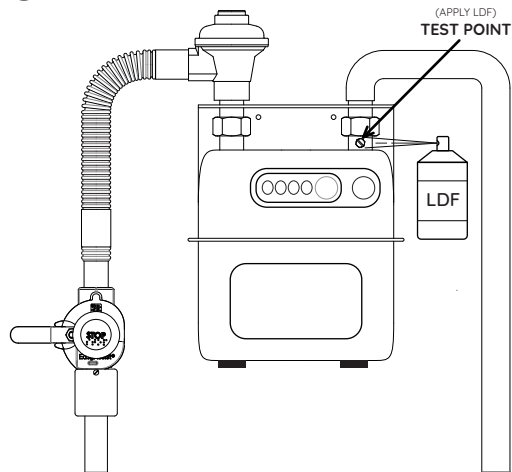
4



Remove the gauge from the test point and reattach the test nipple screw.

Gas tightness testing | Continued

5



Apply an approved Leak Detection Fluid (LDF) to the test point, ECV connections** and regulator connections and observe for any bubbles indicating a leak.

6

If a leak is detected at the ECV this must be reported immediately using the emergency number:

0800 111 999

If no leaks are detected, then the test has passed.

A gas installation shall be purged immediately following a test for gas tightness.

Purging procedure | For standard installation

Confirm purge volume prior to purging installation

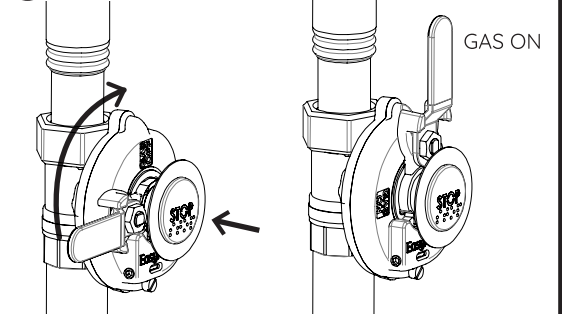
Refer to IGEM/UP/1B Ed3 or current gas safety regulations **Purge procedure** appropriate for installation and ensure all safety guidelines are followed prior to conducting **Purge procedure**.

Purge volume [PV]

Calculations for installation

Refer to IGEM/UP/1B Ed3 or current gas safety regulations to confirm installation **purge volume [PV]**.

7



To reinstate the gas, slowly open the ECV by pushing and holding the 'STOP' button on the EasyAssist® device whilst turning the handle clockwise 90 degrees. Release the 'STOP' button ensuring that the handle remains latched. Proceed to carry out purge procedure in accordance with IGEM/UP/1B Ed3 or current gas safety regulations. After successful completion of tests and purging, ensure gas is reinstated with EasyAssist® device in the 'GAS ON' position.