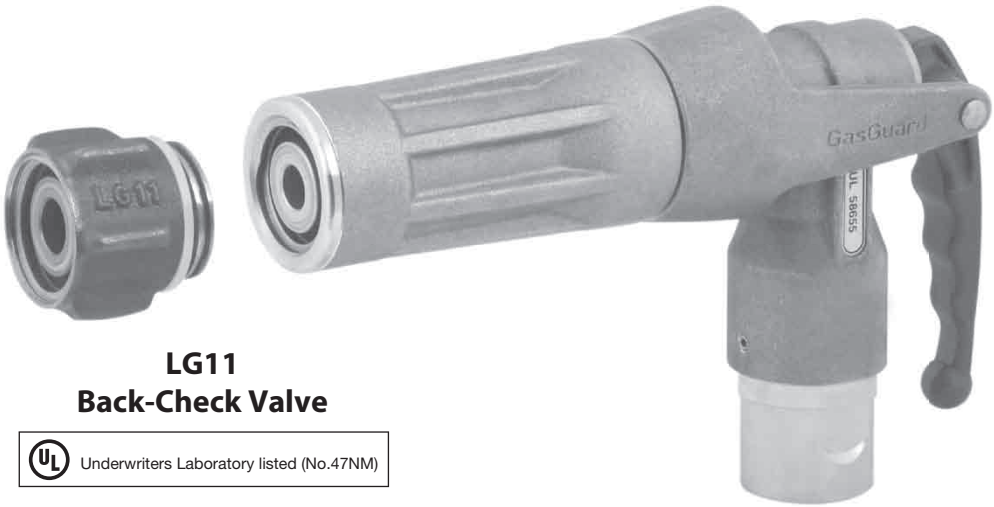
GG10
High Flow LPG Bulk Nozzle

Underwriters Laboratory listed (No. 86Y 4)



LG11
Back-Check Valve

Underwriters Laboratory listed (No.47NM)

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GG10 High Flow Nozzle

Description

The GG10 nozzle is approved for use with LPG (Liquefied Petroleum Gas) according to EN 589 and BS 4250 (propane/butane and their mixtures) with flow rates up to 380 litres/min, pump and maximum operating pressure 25 bar (360 psi), operation temperature range -40° C to + 70°C. The GG10 nozzle is Underwriters Laboratories (UL) certified under listing 86Y4. Each nozzle is tested in the factory before being labelled with a unique serial number.

The GG10 nozzle is suitable for ACME 1¾" filler necks according EN 12806 and available with either 1" or 1¼" inlet swivel. It is only to be used by trained LPG operation personnel, for the safe refuelling of LPG gas cylinders and storage facilities.

IMPORTANT: In some countries it is a requirement to fit a safety back-check valve to the nozzle. The GG10 GasGuard nozzle will operate safely and correctly when fitted with a LG11 Back-Check Valve (or Fischer M570 check valve). If this is a requirement at your current refuelling location please refer to page 3 of this manual.

Proper Handling

When transporting the GG10 nozzle from the delivery vehicle to the gas storage cylinder and back, the GG10 nozzle should be carried by the body of the nozzle. Nonetheless, the GG10 nozzle will not open when the lever is actuated unintentionally in an uncoupled state.

Before coupling the nozzle to a certified 1¾" ACME connection point, ensure that all coupling parts, seals and sealing surfaces of the nozzle and LPG tank are clean and undamaged. Nonetheless, the GG10 will still safely function without the presence of a fill point gasket/seal.

Adaptors

The following Safety Check-Valves are suitable for use with the GG10 nozzle:
- LG11 Safety Back-Check Valve (refer to Page 6 for correct operating procedure)
- Fischer M570

Other adaptors should not be used with the GasGuard GG10 nozzle as they will compromise the safety features of this nozzle. No adaptors should be used with the LG11 Safety Back-Check Valve.

Coupling / Refuelling (refer to pictures on page 5)

NOTE: Gloves must be worn for safety precautions.

1. Align the GG10 Nozzle female connector with the male ACME fill point fitting and tighten clockwise by hand until firm.
2. Lift the lever arm until it is held in the open position. Lever will be held once past the centre cam position.
3. Once refuelling has finished, lower the lever arm to the closed position. This will shut off the valve in preparation for disconnection.

NOTE: In point 4, a small amount of gas will be released from the cavity between the nose piece and the fill point fitting, the dispersion of this released gas can be controlled by the operator. Gloved hands should be kept at the rear of the connector nut during this release.

4. The operator can now slowly unwind the connector nut in an anti-clockwise direction, noting the small release of gas. Once gas has vented, unwind the connector nut. Now the operator can safely carry the nozzle back to the delivery vehicle.

LG11 Back-Check Valve

Description

The GasGuard **LG11** Back-Check Valve is a safety fill adapter for use with the GG10 High Flow nozzle. The LG11 is Underwriters Laboratories (UL) certified under listing 74NM and approved for use with LPG with flow rates up to 380 litres/min, pump and maximum operating pressure 25 bar, operation temperature range -40° C to + 70° C.

The LG11 Back-Check Valve offers a quick and reliable answer to leaking fill point check valves. Like the GG10 nozzle, the LG11 Back-Check Valve incorporates a failsafe function. When not coupled, engaging the nozzle lever will not lead to a discharge of gas.

IMPORTANT: The LG11 Back-Check Valve must be screw connected to the fill point before coupling the GG10 nozzle in order to maintain a safe seal.

Connection / Refuelling (refer to pictures on page 6)

NOTE: Gloves must be worn for safety precautions.

1. Firmly screw the LG11 Back-Check Valve onto the ACME 1¾" fill point fitting.
2. Once the LG11 Back-Check Valve is securely in place, couple the GG10 nozzle with the LG11, again making sure that both units are screwed on tight. The refuelling process can now commence safely.
3. Lift the lever arm until it is held in the open position. Lever will be held open once past the centre cam position, full flow will now commence.
4. Once refuelling has finished, lower the lever arm to the closed position. This will shut off the valve in preparation for disconnection.

NOTE: In point 5, a small amount of gas will be released from the cavity between the nose piece and the fill point adaptor when unwound, the dispersion of this released gas can be controlled by the operator. Gloved hands should be kept at the rear of the connector nut during this release.

5. The operator must first unscrew the connector nut of the GG10 in an anti-clockwise direction, noting the small release of gas.

NOTE: In point 6, a small amount of gas will again be released from the cavity between the LG11 and the fill point fitting when unscrewed, the dispersion of this released gas can be controlled by the operator. Gloves are required to be worn and hands should be kept at the nozzle side of the LG11 during release.

6. Once the GG10 is free from the fill point slowly unwind the LG11 Back-Check Valve in an anticlockwise direction, noting the small release of gas. In the case of a continuous gas release on disconnection (indication of a fill point malfunction/leak) the LG11 must be tightened back to the fill point fitting to contain the leak until appropriate service personnel can safely fix the problem.
7. Once LG11 is removed and no leak is present, the operator can salety carry the GG10 and LG11 back to the delivery vehicle.

GG 10 / LG11 - Additional Information

Warning

LPG is an extremely flammable, colourless gas, which is capable of igniting at concentrations between 2 and 10% in air. It is heavier than air. Commercial LPG is odourised before distribution to enable detection by its sulfurous smell. Uncontrolled escaping gas may cause a flash fire or explosion. Therefore open fires, smoking and potential sources of ignition are prohibited in the area of gas transfer.

Installation

The GasGuard GG10 nozzle is delivered ready for use. It should only be installed and tested by competent personnel. Applicable laws, regulations and Codes of Practice have to be followed. After connecting to the hose assembly a test operation should be performed. It is essential to examine that the nozzle, hose connector and swivel are tight under pressure and do not leak (e.g. by external application of foaming agents).

Maintenance

There must be a regular visual inspection of the external condition of both the GG10 nozzle and the LG11 Safety Back-Check Valve by appropriate operating personnel to ensure that both components are able to maintain a secure connection to the LPG tank filling connector. The coupling part of both GG10 and LG11 shall not show any signs of damage. The front seals have to be checked to confirm there is no dirt or mechanical damage. It is recommended that the GasGuard GG10 nozzle and the LG11 Safety Back-Check Valve be inspected every 3 - 6 months after installment by competent personnel, for continual safe operation. Applicable laws, regulations and Codes of Practice must be followed.

Warranty

We guarantee against defective materials and manufacturing for 6 months from date of supply. If the delivery date cannot be established, the unique serial number on the nozzle body applies. Excluded are nozzles and parts subjected to wear and tear and damages caused by improper use, for example the use with unsuitable fluids. Furthermore excluded are indirect damages and costs, such as travelling related to exchange and repair work. We refuse any liability for consequential loss or damage resulting from the use of our nozzle.

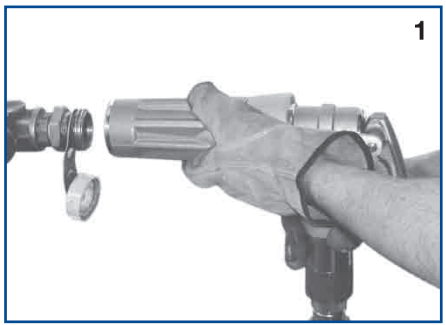
Malfunction

If a leak (perceived by visible escaping gas or a noise) is detected while using the GG10 nozzle during refuelling, the following actions must be taken:

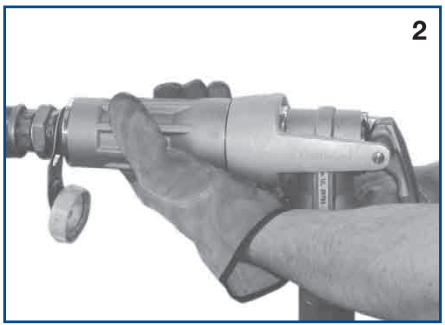
- Shut off the GG10 valve by returning the lever its original position (see picture 4 on page 5) and turn pump off.
- Check tight connection between GG10 nozzle connector nut and LPG tank coupling (and LG11 Safety Back-Check Valve when used), keeping gloved hands away from the leak.
- Once gas has vented from components, check seals on LPG tank connector and GG10 nozzle (and LG11 Safety Back-Check Valve when used), for foreign objects or damage.

If problem persists: notify your service contractor.

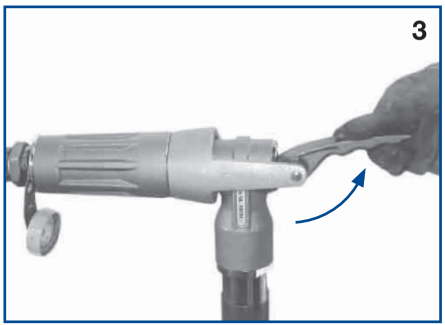
GG10 - Sequence Photos



Align GG10 with fill point fitting.



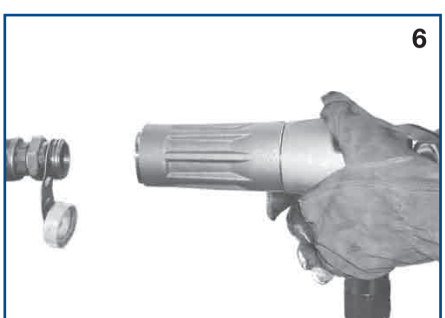
Screw GG10 to fill point.



Actuate lever until held in cam open position. Start refuelling.

After refuelling disengage lever, prepare for disconnection.

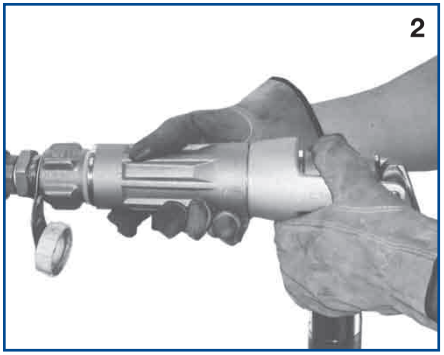
Unscrew GG10, note small release of gas.



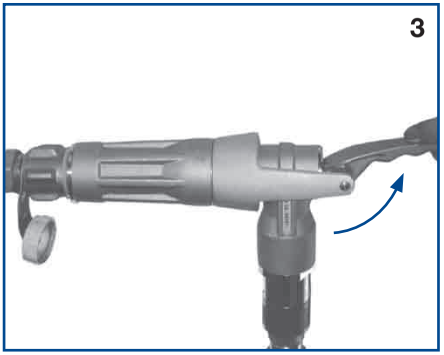
Remove GG10, carry safely back to vehicle.

GG10 + LG11 - Sequence Photos

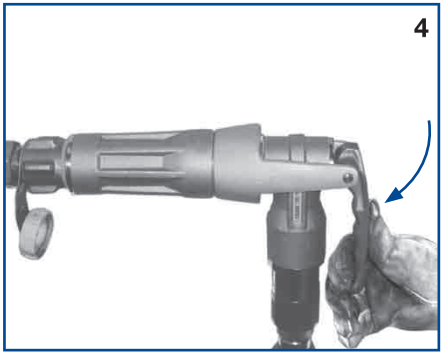
Screw LG11 to fill point fitting.



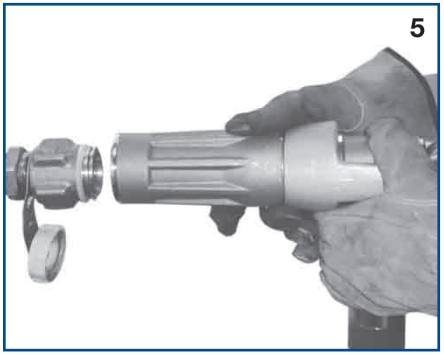
Screw GG10 onto LG11 thread.



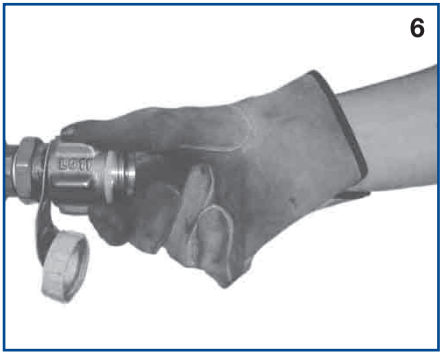
Actuate lever until held in cam open position. Start refuelling.



After refuelling disengage lever, prepare for disconnection.



Unscrew GG10, note small release of gas.



Remove LG11, note small release of gas, if fill point leak detected, re-tighten LG11.