Truma LevelControl

Truma LevelControl

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Symbols used

⚠ Symbol indicates possible hazards.

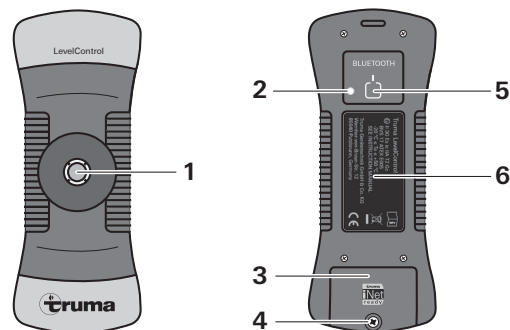ⓘ Note containing information and tips.

Appliance overview

Figure 1

1 Coupling pad
2 Status LED
3 Battery cover
4 Battery compartment screw
5 Button
6 Type plate

Proper use

Truma LevelControl is a digital gas level measuring device for up-right (propane / butane – LPG) steel or aluminium gas cylinders with a diameter of 200 to 350 mm. The appliance was designed for use in gas lockers of motor homes (vehicle class M1) and caravans (vehicle class O). Any other additional use is incorrect.

Safety instructions

– Danger from magnetic fields.
  Persons who have an active heart pacemaker must maintain a safety clearance of 30 cm between the appliance and the implant.

– The appliance must not be operated unless it is in technically perfect condition.

– Operate the Truma LevelControl only with the approved operating voltage.

– Repairs must be carried out immediately. Only carry out repairs yourself if the solution is described in the trouble-shooting guide of this operating instructions.

– A defective Truma LevelControl may only be repaired by the manufacturer or the manufacturer's service department.

– Do not use the appliance if the casing is damaged or if liquid has entered it.

– Do not make any alterations to the Truma LevelControl. Changes or modifications to this appliance that have not been expressly approved by the department responsible for conformity can invalidate the appliance's operating permit.

Important notes

The Truma LevelControl is not suitable for plastic gas cylinders, refillable tank gas cylinders, gas tanks or butane gas cartridges (Campingaz).

Dirty or rusty gas cylinders tend to be more difficult to measure accurately. Interference can also be caused by the following for example:

– an invisible patch of rust inside the gas cylinder
– very thick paint on the outside of the gas cylinder
– (frozen) condensation on the outside of the gas cylinder
– dented or heavily scratched gas cylinders

Cleaning or measuring at another point within the gas cylinder base is in most cases successful. (see "Securing Truma LevelControl on a gas cylinder")

A Truma iNet Box is required to allow the Truma LevelControl to be used.

Function description

The Truma LevelControl is secured by magnets or a clamping sheet under gas cylinders and uses an ultrasonic signal to measure the fill height of the liquid gas phase. The gas cylinder fill level is calculated from this fill height. The current gas cylinder fill level can be read out with the Truma App.

Preparing start-up

Installing the Truma App on a mobile terminal device

Load the Truma App from the Apple AppStore or Google Play-Store onto the mobile terminal device.

Install the Truma App on the mobile terminal device.

ℹ If necessary, an installed Truma App must be updated.

To continue installation, follow the instructions in the Truma App or the instructions below.

If the Truma App is to be used on several mobile terminal devices, these steps must be repeated for each mobile terminal device.

ℹ For the remote control to function properly with SMS, it is necessary for the standard SMS app of your mobile terminal device to have your phone number as the sender and not manipulate the text. Under no circumstances may "Web-SMS connectors" be used.

Connecting the terminal device to the Truma iNet Box
See the operating instructions for Truma iNet Box

Connect the Truma LevelControl to the Truma iNet Box

Put batteries into the Truma LevelControl. (see "Changing the batteries")

Make sure that there is a connection via Bluetooth between the mobile terminal device and the Truma iNet Box.

ℹ The Bluetooth range is approximately 10 m. The range can vary depending on the installation position.

Start the Truma App. Select the menu point "Settings" -> "Device manager" -> "Manage Bluetooth devices" -> "Find devices".

Briefly press the button (5) on the Truma LevelControl. The status LED (2) flashes for up to 2 minutes.

Select Truma LevelControl from the list of devices found. Follow the Truma App instructions.

The status LED (2) goes out after a connection is successfully established.

ℹ It is possible to use up to two Truma LevelControl in parallel. (see "Additional Truma LevelControl")

Securing Truma LevelControl on a gas cylinder

⚠ Do not pull the Truma LevelControl along the gas cylinder base, as this can damage the coupling pad (1). To reposition, remove the Truma LevelControl from the cylinder in an upright position and fit it in its new position.

ℹ To simplify securing of the Truma LevelControl, it is recommended to take the gas cylinder out of the gas cylinder box and to tilt it slightly or lay it on its side.

The coupling pad (1) must lie on the surface of the gas cylinder. If this is not possible due to depressions or flattenings in the vicinity of the centre of the gas cylinder base or heavy dirt (e.g. rust), fit the Truma LevelControl as far away from the centre as necessary in order to guarantee full contact between the gas cylinder and the coupling pad (1).
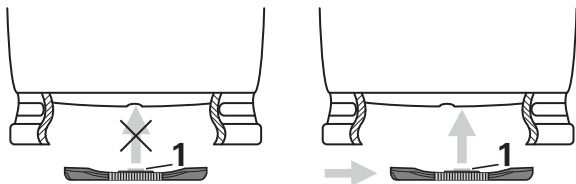
Figure 2

Steel gas cylinders

ℹ️ If the Truma LevelControl is not held by the magnets on the gas cylinder, perform the steps described under "Aluminium gas cylinders".

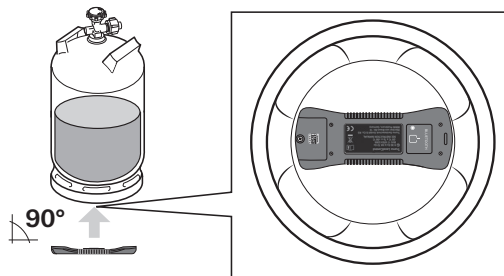Fit the Truma LevelControl with the coupling pad (1) centrally on the cylinder base.

Figure 3

Aluminium gas cylinders
The separately available clamping sheet is required for securing (see "Accessories")

⚠️ Danger of cut injuries! Wear protective gloves (conforming to EN 388 ref. no. 3221) when securing the clamping sheet.

⚠️ Do not pull the Truma LevelControl along the gas cylinder base, as this can damage the coupling pad (1). When securing the clamping sheet, make sure that the Truma LevelControl is not pushed along the cylinder base.

Adjust the clamping sheet to option A or B, depending on the gas cylinder size. Rotate the swivel plate (6) through 90° until it engages. For option B, also rotate the swivel plate (7) through 180° until it engages.
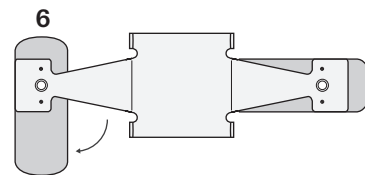
Option A
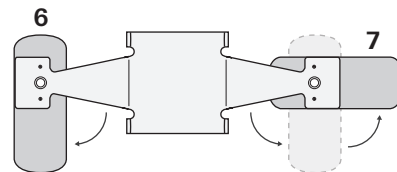

Figure 4

Option B

Figure 5

Fit the Truma LevelControl centrally onto the clamping sheet.
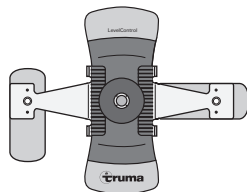

Figure 6

Hook the clamping sheet into the gas cylinder base.
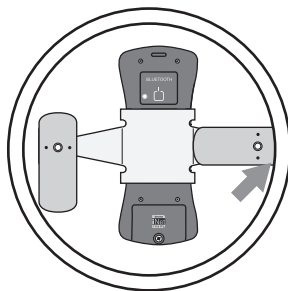
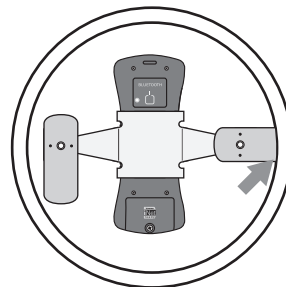**Option A**

Figure 7

Option B

Figure 8

Press the LevelControl clamping sheet into the cylinder base on the opposite side and rotate the swivel plate inwards (option A) or outwards (option B) until the swivel plate engages. Hook the clamping sheet into the gas cylinder base.
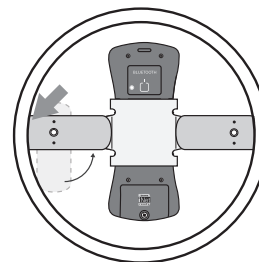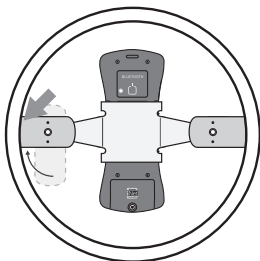
Option A

Figure 9

Option B

Figure 10

Finally, check that the clamping sheet is securely attached to the gas cylinder base and that the swivel plates are engaged.

Supporting feet
Due to the restricted space with some common gas cylinder types, the gas cylinder must be placed on supporting feet (8) in order to protect the Truma LevelControl against damage. Have supporting feet installed by an expert only. Installation in vehicles must comply with the technical and administrative regulations of the respective country of use (e.g. EN 1949).
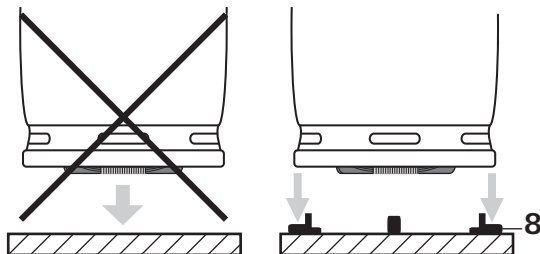

Figure 11

LevelControl magnetic foil.

So that the Truma LevelControl is not forgotten about on the gas cylinder when the gas cylinder is replaced, fit the LevelControl magnetic foil in a clearly visible location on the gas cylinder.
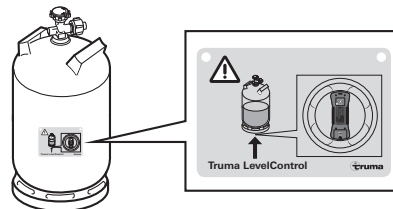
Figure 12

Secure the LevelControl magnetic foil to aluminium gas cylinders with LevelControl strap .

Replacing a gas cylinder

Caution – risk of crush injury! Carefully lift and set down gas cylinders.

Every time a gas cylinder is replaced, the gas cylinder base and the Truma LevelControl, particularly the coupling pad (1), must be cleaned to remove snow, ice, rust or dirt (see "Cleaning").

Do not pull the Truma LevelControl along the gas cylinder base, as this can damage the coupling pad (1).

Carefully set down the gas cylinder in order to avoid damage to the Truma LevelControl.

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ⓘ The button (5) on the Truma LevelControl must be pressed briefly every time a gas cylinder is replaced. If the button (5) was not pressed after a gas cylinder was changed, the gas cylinder must be reconfigured under "Status" -> "Gas cylinders" -> "Configuration", even if the cylinder type or cylinder size has not changed.

Steel gas cylinders
Remove the Truma LevelControl upright from the gas cylinder and fit it onto a new gas cylinder.

Aluminium gas cylinders

⚠ Danger of cut injuries! Wear protective gloves (conforming to EN 388 ref. no. 3221) when securing the clamping sheet.

Press the swivel plate onto the gas cylinder base and loosen it. Take the clamping sheet out of the gas cylinder base and secure it to the new gas cylinder.

Gas cylinder update
After changing the gas cylinder, start the Truma App and call up the gas cylinder fill level.

ⓘ If the cylinder type or size changes, this must be adjusted in the Truma App under "Status" -> "Gas cylinders" -> "Configuration" by selecting the respective Truma LevelControl.

LevelControl magnetic foil
Fit the LevelControl magnetic foil on the new gas cylinder.

Call up the gas cylinder fill level

Call up the "Status" menu point in the Truma App.

Remaining time

The Truma App calculates the time in which the remaining gas will probably be used up. Upon initial start-up or after the Truma LevelControl has been reset, a standard value is used that the Truma App adapts based on the measured consumption.

Resetting the appliance

Keep the button (5) pressed for 20 seconds until the status LED (2) lights up briefly. The Truma LevelControl is reset to the factory settings.

The Truma LevelControl must then be reconnected to the Truma iNet Box.

Additional LevelControl

With two Truma LevelControl, it is possible to read out the fill level of two gas cylinders parallel via one Truma iNet Box.

A maximum of two Truma LevelControl can be connected to the Truma iNet Box via the Truma App.

Disconnect the Truma LevelControl from the Truma iNet Box

Under "Settings" -> "Device manager" -> "Manage Bluetooth devices" -> "My devices" -> "Remove" select the Truma LevelControl from the list and confirm.

Changing the batteries

⚠️ Do not change the batteries in the gas cylinder box.

ℹ️ Use only non-leaking batteries (alkaline, LR03, AAA, 1.5 V). Rechargeable batteries must not be used. Use only batteries of the same type and manufacturer. Do **not** mix batteries.

Unscrew the screw (4) from the battery cover (3).

Remove the battery cover (3).

Change the batteries, paying attention to correct polarity.

Put the battery cover (3) back and screw it securely into place.

⚠️ A flat, worn-out battery can leak and damage the appliance! Remove the batteries if the appliance is not going to be used for a long period of time.

No warranty is given for damage caused by leaking batteries.

Cleaning

Clean the Truma LevelControl with a damp cloth or brush. Clean the coupling pad (1) particularly carefully. Do not use any chemical or scouring cleaning agents.

Repair

Contact Truma Service if repairs are necessary.

Disposal

🚮 Neither the appliance nor the batteries may be disposed of with domestic refuse, instead they must be sent for recycling separately via a collection point. By doing this you are contributing towards reuse and recycling.

Accessories

Clamping sheet
for aluminium gas cylinders. Including LevelControl strap. (part no. 50900-01)

Technical data

Power supply
3 V DC / 2 x 1.5 V batteries
(alkaline, LR03, AAA)
Power consumption
Operation max. 70 mA
Quiescent current consumption
0.001 mA
Weight (with batteries)
128 g
Interfaces
Bluetooth (Class 2)
2400 MHz to 2483.5 MHz
max. 4.4 dB (2.75 mW)
Operating temperature
-20 °C to +50 °C
Gas cylinder size
5 kg to 33 kg
(steel and aluminium gas cylinders)
Gas type
Liquid gas (propane / butane)

CE

⟨Ex⟩ II 3G Ex ic IIA T2 Gc

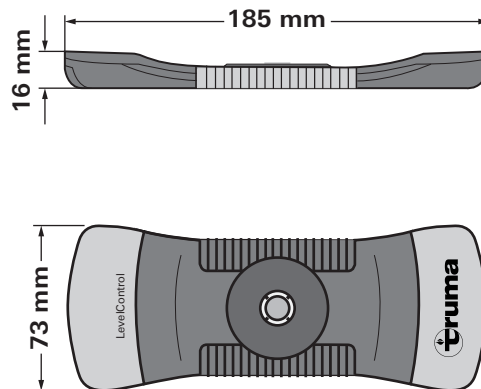BVS 17 ATEX E005

Subject to technical changes.

Dimensions

Figure 13

EU Declaration of Conformity

Manufacturer

Name: Truma Gerätetechnik
           GmbH & Co. KG
Address: Wernher-von-Braun-Str. 12
           D-85640 Putzbrunn

The manufacturer is solely responsible for issuing this declaration of conformity.

Product

Function   Gas level measuring device
Type   Truma LevelControl
Versions   n/a

The product complies with the relevant harmonisation legislation of the Union:

2014/30/EU   Electromagnetic compatibility
2014/34/EU   Appliances in potentially explosive areas
2014/53/EU   Radio systems
2011/65/EU   RoHS

The following (harmonised) standards and other technical specifications were taken as the basis:

EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013
EN 60079-0:2012 + A11:2013
EN 60079-11:2012
EN 300 328 V2.1.1:2016
EN 62479:2010
1999/519/EC:1999
EN 301 489-1 V2.1.1:2017
EN 301 489-17 V3.1.1:2017
EN 50581:2012

Signed for and on behalf of :

Truma Gerätetechnik GmbH & Co. KG

Frank Oster
Chief Executive Officer (CEO)   Putzbrunn, 01.06.2017

Troubleshooting guide

Problem	Cause / Remedy
No coupling possible between Truma LevelControl and Truma iNet Box.	Distance too great / reduce the distance
	Truma LevelControl is shielded / Put Truma LevelControl next to Truma iNet Box, use supporting feet for gas cylinder
	Batteries are flat or incorrectly inserted / change battery or insert them with the correct polarity
	Button (5) not pressed (status LED (2) not flashing) / press button (5).
Status LED (2) not flashing when button (5) is pressed.	Batteries are flat or incorrectly inserted / change battery or insert them with the correct polarity
Truma LevelControl does not stick to the gas cylinder.	Aluminium gas cylinder used / clamping sheet available as accessory
Gas cylinder on Truma LevelControl.	Gas cylinder base not deep enough / use supporting feet for gas cylinder
Truma LevelControl does not fit under gas cylinder.	Gas cylinder not suitable / replace gas cylinder (see Truma App for suitable gas cylinder types).
Measurement uncertain	Measurement not yet completed / wait for at least five minutes and check measured value again
	Fill level too low / the measured value is displayed greyed out below approx. 10 % of the total fill level
	Gas cylinder damaged or dirty / replace or clean gas cylinder
	Truma LevelControl fitted incorrectly / install Truma LevelControl as per instructions (see "Securing Truma LevelControl on a gas cylinder" on page 4)

Problem	Cause / Remedy
Gas cylinder fill level is not updated.	Gas cylinder empty / replace gas cylinder
	Truma LevelControl not configured / configure Truma LevelControl in Truma App
	Poor acoustic coupling / place Truma LevelControl elsewhere on the cylinder base (see "Securing Truma LevelControl on a gas cylinder" on page 4)
	Gas cylinder or coupling pad dirty (e.g. rust, ice) / clean the gas cylinder or coupling pad (see "Cleaning" on page 9)
	Coupling pad damaged or missing / contact Truma Service
	Gas cylinder in poor condition or unsuitable / replace gas cylinder (see "Important notes" on page 3)
	Truma LevelControl not installed correctly on cylinder / install as per the instructions
	Button (5) not pressed after gas cylinder change / press button (5) or reconfigure Truma LevelControl in the Truma App
No Truma LevelControl is displayed in the Truma App	No connection possible to the Truma LevelControl / reduce distance between Truma LevelControl and Truma iNet Box or place gas cylinder on supporting feet (see "Supporting feet" on page 7)

If these actions do not remedy the problem, please contact Truma Service.

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Service