



# Caravan owner's manual

## TK30

TOMPLAN

rev. 2

2022-10-26



Thank you for placing your trust in us and for purchasing a TOMPLAN caravan. Before using our product, please read and understand the following points of this manual carefully, as they describe the basic operation and maintenance instructions, and follow the recommendations given in it.

As we are constantly striving to improve our products in terms of their workmanship and usability, we reserve the right to amend our products, on an ongoing basis, that are not covered by the terms of this manual.

We remain confident that you have made the right choice in purchasing our caravan and wish you satisfaction in using our product and a good road ahead.

*Employees of TOMPLAN Sp. z o.o.*

***NOTE!***

**Together with this manual you should receive:**

- Extract from the approval certificate, vehicle data statement
- Warranty card for the caravan

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## 1. Specifications

The technical data of the caravan you have purchased can be found in the attached extract from the approval certificate. In addition, the most important data are listed in Table 1. You may notice slight deviations from the weights and dimensions of the caravan provided in the description.

*Table 1. Technical data of TK 30 caravan*

Total length (cm)	4,785
Internal length (cm)	3,050
Body length	3,640
Total width	2,070
Total height	2,477
Tyre size	165/70 R13
Rim size	4.5(5.0) x13
Unladen weight (kg)	698
GVW (kg)	750 kg
No. of axles	1
No. of wheels	2
Gross axle weight rating (kg)	750
Axle	Knott VG7/VGB8
Overrun device/ hitch	KFL-12C Knott/ KZE 7,5-2
Jockey wheel	48-205/50 Knott
Crank	670 mm Knott
Support	L-3-00 Grandro
Jockey wheel bracket	LB 48 Knott

### Interior

Inside the caravan, there are several zones/rooms:

- Living area- with table, seating and hallway
- Sleeping area – with the sleeping Surface of an area of 190 cm x 192 cm
- Bathroom with toilet, shower tray and basin
- Kitchenette with sink, gas hob and fridge

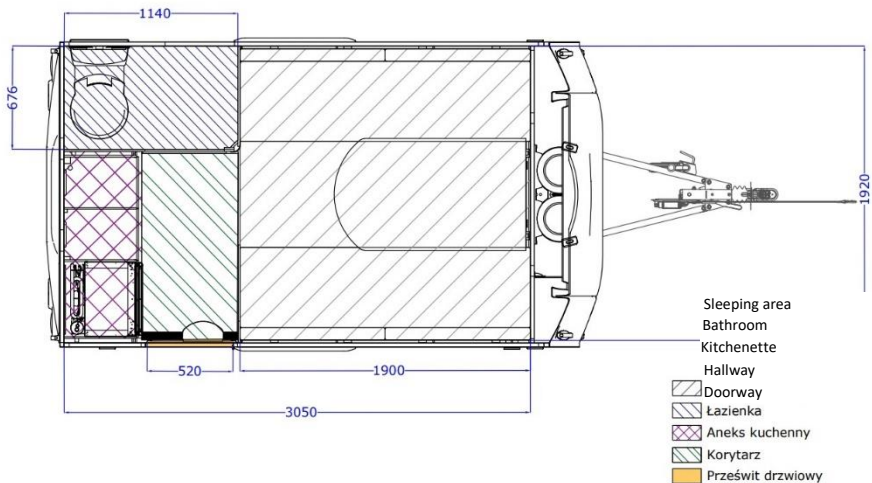


Fig. 1. Technical data of the caravan - top view

## Exterior

Figures 2, 3 and 4 show the external dimensions of the caravan, including:

- Caravan height, width and length.
- Dimensions of gas cylinder cover.
- Track width, wheel radius, height of caravan to the wheel arch.

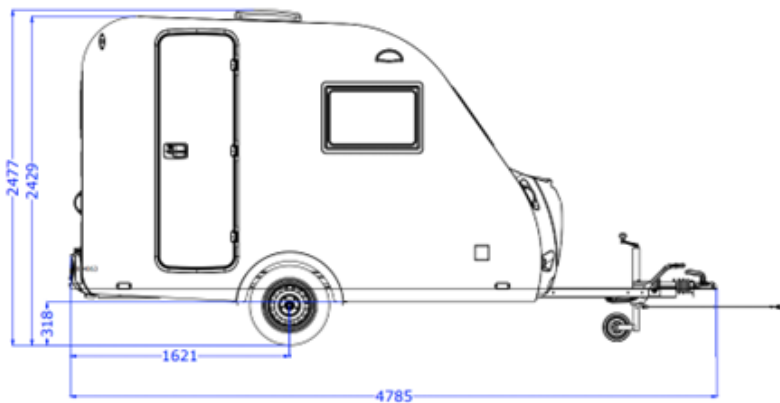


Fig. 2. Dimensions of the caravan [mm]

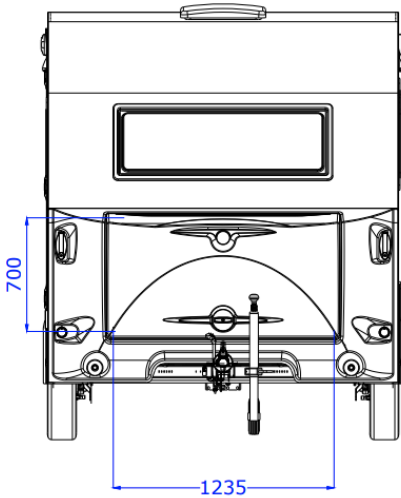


Fig. 3. Caravan cover dimensions [mm]

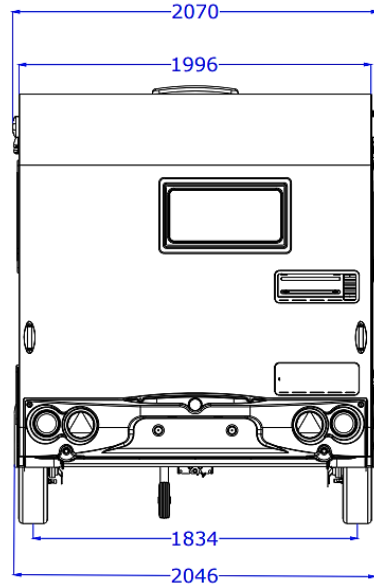


Fig. 4. Caravan rear dimensions [mm]

## 2. General operation of the caravan

Our range includes various types of caravans including the TK30 model. The TK 30 bodies are insulated and made using sandwich technology: laminate-styrodur-laminate.

### 2.1. Hitching up

The caravan must be hitched to the towbar of the vehicle using a tow ball hitch of the caravan. A description of how to hitch the caravan to the towbar of your vehicle is given in chapter 3.7 of this manual. Caravans are equipped with breakaway cable to be attached to the towbar. Remember also to connect the electrical plug of the caravan to the socket of the vehicle.

### 2.2. Loading

The load should be distributed evenly on the caravan, to ensure correct pressure on the tow ball. The load should be secured against movement. With a concentrated load, the load should be distributed over a larger area by putting spacers under the load and placing the load in the centre of the caravan. The pressure on the hitch ball must not be less than 20 kg. The maximum pressure is

specified on the ball hitch. Adequate pressure ensures proper driving behaviour. It is not permissible to overload the caravan as this will lead to serious damage and consequently compromise driving safety.



**Damage caused by overloading the caravan will result in the loss of any rights under warranty, guarantee or the Act on Special Terms and Conditions of Consumer Sales.**

### **2.3. Before setting off**

#### **Exterior**

1. Check that the hitch is properly secured on the tow ball of the hitch of the vehicle and apply the breakaway cable.
2. Release the handbrake (if present).
3. Check the operation of lights.
4. Check that the load is correctly distributed and secured against movement.
5. Check that the running wheel bolts are tightened.
6. Detach the jockey wheel or fix it in the topmost position.
7. Check if all doors and covers are properly locked.
8. Check the tyre pressure from time to time.
9. Adjust the outside rear-view mirrors of the towing vehicle.
10. Close the gas cylinder valve.
11. Close the cover and the door.
12. Remove snow from the caravan roof, if necessary.
13. Fold up the supports.

#### **Interior**

14. Windows, doors, lockers in the caravan must be closed when driving.
15. Secure the load of the caravan and any items in the caravan that could move during travel.
16. Prevent spillage of all liquids inside the caravan (including those in the fridge).
17. Close all the valves.
18. Switch off the interior lighting of the caravan.



 **Checking tyre pressures is very important - failure to do so may lead to tyre bursting, resulting in dangerous situations when driving.**

#### **2.4. During travel**

1. The caravan and car must be at the same height.
2. Take special care when reversing and when entering gates.
3. Take special care during unstable weather conditions i.e., rain, frost, ice and snow.
4. Beware of strong gusts of wind which may cause the vehicle and caravan to be blown away.
5. Be careful on bends and steep slopes.
6. If you have any problems manoeuvring, get help from a passenger.

#### **2.5. After travel**

1. Choose a good pitching place.
2. Apply handbrake.
3. Remember to empty the waste holding tank regularly.
4. Extend the supports to relieve pressure on wheels and axles.

#### **2.6. Unhitching**

1. Disconnect the electrical system, place the plug in the holder.
2. Detach the breakaway cable.
3. Uncouple the caravan from the towing hook of the car.
4. On caravans with a jockey wheel, use it to raise the drawbar and unhook the hitch from the tow ball.

#### **2.7. Tow ball hitch**

TOMPLAN caravans are fitted with ball hitches from KNOTT. Correct coupling should be carried out as follows:

1. Unlock the hitching lever by pressing the projection on it or pulling it upwards
2. Swivel the hitching lever upwards.
3. Place the hitch on the tow ball and press lightly, the hitch is closed and secured automatically.

The hitches on braked caravans have coupling indicators. When coupled correctly, the indicator will show a green field with a "+" sign. Check the correct coupling by jerking the hitch upwards. When the tow ball is engaged, there should be no perceptible play between the hitch and the hitch ball. If there is any play, this is a sign of wear on the tow ball or the hitch and the travel should not be started a coupling indicator in the red area with "-" sign).

As standard, the caravan is not equipped with a hitch lock or other safety device to prevent unauthorised detachment, these can be purchased as optional equipment.

## **2.8. Suspension and wheel bearings**

All TOMPLAN caravans are fitted with axles with rubber suspension elements. The suspension system with rubber suspension elements is maintenance-free but should be checked at least once a year at a service centre.

Caravans are fitted with double-row bearings, permanently lubricated, with two seals - no maintenance required. Once the self-locking nut securing the hub or drum to the wheel axle has been unscrewed, it must not be reused. A new nut must be used for the next fastening. Due to the long bearing life and lack of maintenance, bearing damage does not occur under normal operating conditions. If you notice noisy operation of the bearing or an easily perceptible play in the bearing, please contact the Service Department for adjustment or repair.

## **2.9. Running wheels**

TOMPLAN caravans are fitted with running wheels that are adapted to the permissible total weight of the caravan. The prerequisite for correct and safe driving is that all caravan tyres have the same pressure.

The optimum tyre pressure for caravans loaded to the gross vehicle weight is shown in the table below (Table 2).

Table 2. Optimum tyre pressures for caravans loaded to their gross vehicle weight.

Tyre size	Caravan GVW	No. of wheels	Pressure kPa
155/80 R13	750	2	180 ÷ 200
155/70 R13	750	2	200 ÷ 220
165/70 R13	750	2	200 ÷ 230
165/80 R13	750	2	180 ÷ 200

## 2.10. Braking system

TOMPLAN caravan can be equipped with an overrun braking system (Photo 1).



**Caravans over 750 kg must be fitted with an overrun braking system. Caravans under 750 kg need not be fitted with an overrun braking system.**

The overrun braking system consists of:

- overrun device,
- transfer system,
- wheel braking mechanisms.

During braking, the inertia force of the caravan exerts pressure on the overrun device which, through the linkages of the transmission, actuates the braking mechanisms in the wheels of the caravan. The caravan is equipped with a parking brake system, which is activated by a hand lever located at the overrun device and ensures trailer braking on gradients of up to 16% (Fig. 1). The parking brake is only effective when:

- ratchet lever is applied so that the last tooth of the ratchet is engaged – caravans up to 900 kg.

- the handbrake lever is applied beyond the so-called "dead centre" in the rear position – caravans with GVW between 1,000 and 3,500 kg.

It is advisable to secure the wheels with wheel chocks in addition to applying the handbrake in the event of prolonged parking on a slope.



*Photo 1. Overrun device*

### **2.11. \*Axle shock absorber**

The axle shock absorber is not a basic accessory for caravans. The shock absorber is designed to optimally improve the ride of the caravan and to eliminate trailer bouncing on bumps. Fitting a shock absorber allows for a smoother ride, more confident braking and optimum contact with the road.

### 3. Equipment and use

TK 30 caravans consist of basic equipment with the possibility of fitting other components at an additional cost.

#### **The basic equipment includes:**

1. Braked axle
2. Furniture set with mattresses
3. 230 V electrical system
4. 12 V electrical system
5. Battery
6. Cold water system
7. Wastewater system
8. Basic gas system
9. Holder for 2 gas cylinders
10. Two-burner hob with Dometic sink
11. Dometic refrigerator
12. Shower tray with shower curtain
13. Wash basin
14. Thetford swivel toilet
15. Dometic roof light
16. Dometic windows
17. Dometic entrance doors
18. Roller blinds and mosquito nets for windows
19. LED lighting
20. USB socket
21. Awning LED light
22. Third stop light
23. Jockey wheel
24. Adjustable supports + crank

#### **Optional equipment includes:**

1. Truma Varioheat heater with distribution system
2. Underfloor heating (electric type, 48 V)
3. Hot water system complete with 5l electric heater
4. Axle shock absorbers (2 pcs.)

5. FIAMMA entrance step
6. Wheel hub caps (2 pcs.)
7. Alloy wheels (2 pcs)
8. Awning

### **3.1. Opening and closing the lockers and drawers**

To make the best use of the space in the caravan, our travel trailers have been equipped with lockers, cupboards and drawers. This kind of storage avoids items moving around during the journey. All cupboards, lockers and drawers are fitted with a special locking system. To close or open the piece of furniture, the handle must be pressed firmly in. Once this is done, the piece of furniture should open or close (Fig. 2). Special attention should be paid to the opening of bathroom door. To avoid collisions, it is necessary to remember that the flap door of the wall cupboards located above the kitchenette worktop should be closed.



*Photo 2. Cupboard handle*

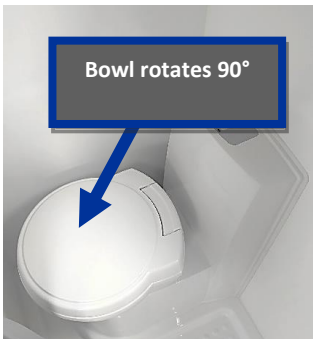
### **3.2. Bathroom with shower**

Our offer for more discerning customers also includes caravans with a bathroom. The bathroom is equipped with a toilet and shower with shower tray (Photo 3).



*Photo 3. Bathroom with shower and toilet in TK30 caravan tank*

The bathroom features a toilet with a swivel seat, which made it possible to fit it even in such a narrow room. The toilet has an electronic control panel, which is equipped with a flush switch (Photo 6). A removable cassette waste tank with a capacity of 17.5 litres allows for easy emptying of the content. The tank is located on the outside of the caravan (Photo 5). It has wheels and a vent to prevent gas pressure build-up (Photo 4). For detailed information on the Thetford toilet, please refer to the user manual<sup>1</sup>.



*Photo 6. Thetford swivel toilet with electric flushing system*



*Photo 5. Cassette waste tank caravan*



*Photo 4. Waste tanks as viewed from the outside of the caravan*

<sup>1</sup> Toilet user manual, [thetford c260 series user manual pdf download | manualslib](#)

To easily and quickly convert the bathroom into a shower cubicle, close the curtain that separates the toilet from the sink. Closing the curtain is necessary to avoid water leaking into other corners of the caravan (Photo 8). Pay attention to the sink, which has a pull-out handle. To retract it, push the cable firmly into the hole into which it is fitted (Photo 7).



**Close the curtain in the bathroom. Water getting into the unsuitable area can damage materials and objects in the caravan**



*Photo 7. . Curtain which separates the shower from the rest of the room*



*Photo 8. Pull-out sink/shower handle*

### **3.3. Living area**

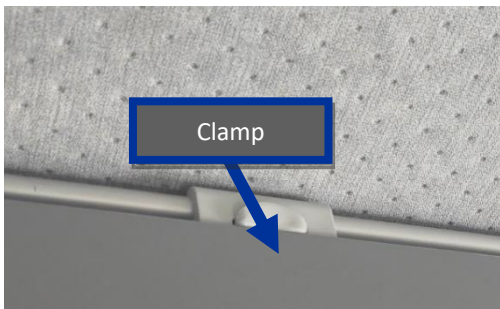
The living space consists of seating and a table. Underneath the mattresses, the storage compartments contain items such as the Truma heater, ventilation pipe, battery, fuses and power supply. All these components are visible when the mattresses are removed and the storage compartments are opened (Photo 9).



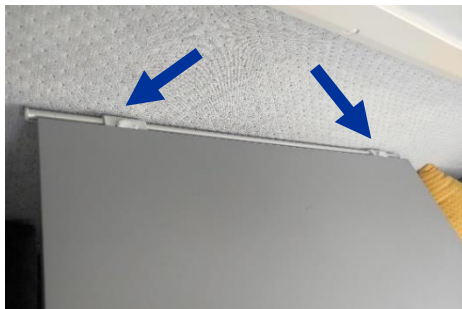
*Photo 9. Living area*



The table, which is supported by a folding leg, is mounted to the caravan using special latches (Photo 10). Care must be taken to ensure that the latches lock well, otherwise the table may sink (Photo 11). The table, when the interior arrangement is changed, is transformed into a sleeping place (for more information see 3.4.).



*Photo 10. Close-up of table clamp*

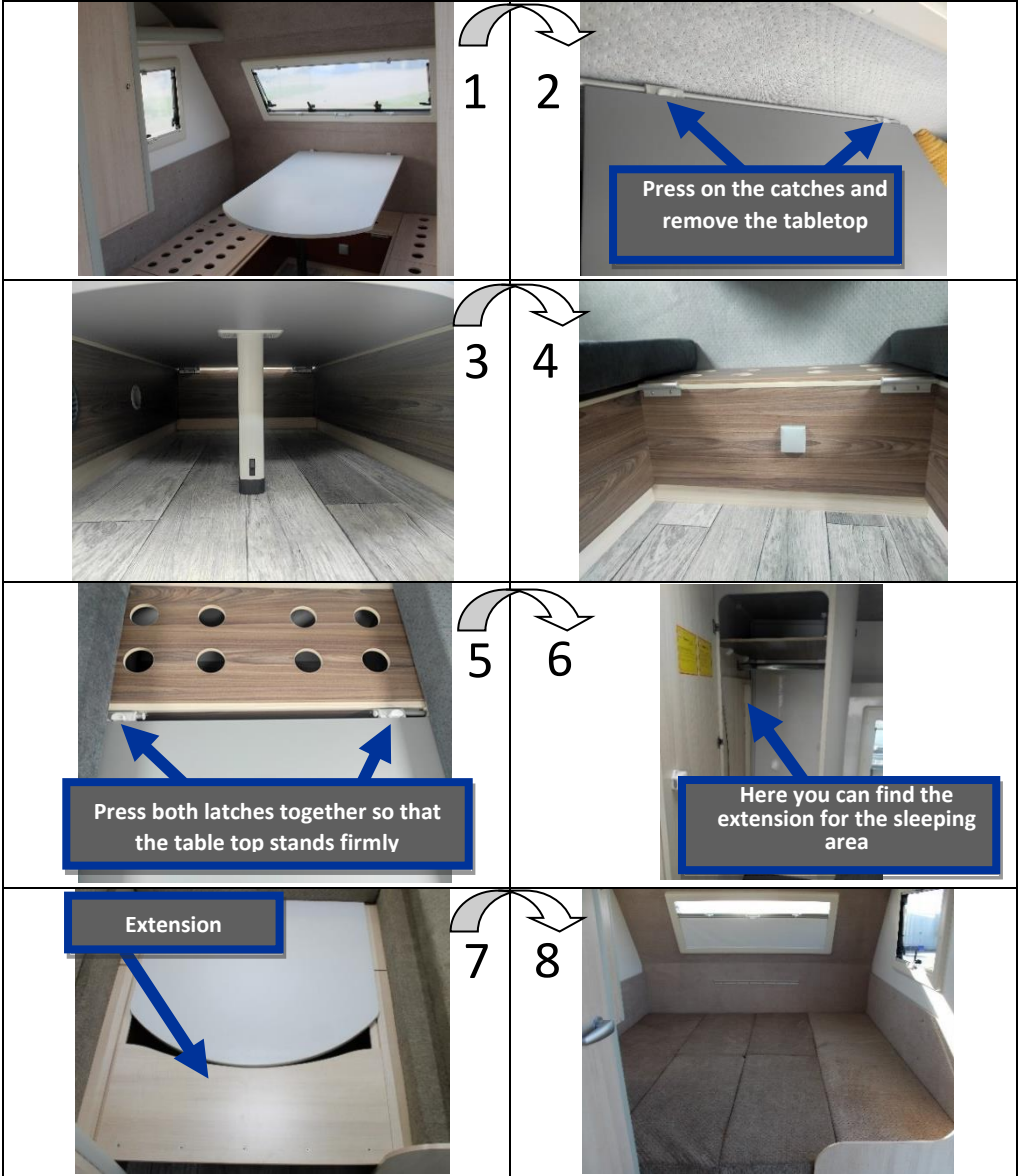


*Photo 11. Table clamp*

### **3.4. Sleeping area**

The sleeping area consists primarily of sleeping spaces. It is a modified living area. To turn the living area into a sleeping area, you need to take the following steps:

1. Remove all mattresses and pillows.
2. Release the catch lock and remove the top.
3. Fold the tabletop leg.
4. Hitch the tabletop to the box just below the table.
5. Push the tabletop latches into the catches on the box and spread evenly on the fasteners.
6. Remove the tabletop extension from the cabinet, located next to the sleeping surface (the extension is attached inside the cabinet to the side wall with Velcro).
7. Place the extension parallel to the tabletop, while resting it against the boxes.
8. Spread the mattresses over the entire surface as shown in step eight.



### 3.5. How to use windows, blinds, mosquito nets, doors and flaps

#### OPENING AND CLOSING THE WINDOWS

Our product range includes Dometic windows and blinds, which are fitted with special closing mechanisms.

To open the window, the locking handle must be released. To do this, grasp the window handle, press the button on and twist. Proceed in the same way with each locking handle around the window (Fig. 12). Now all you must do is push the window gently so that it opens. The window lifts will lock themselves at the highest point (Fig. 13). To release the lifter lock, it is enough to lift the window slightly upwards. Closing the window is done in the same way as opening.



**The window locking system is easy to use, but very easy to damage if not used properly. Do not tug on the window handle! Remember to push the buttons at the locking handle.**



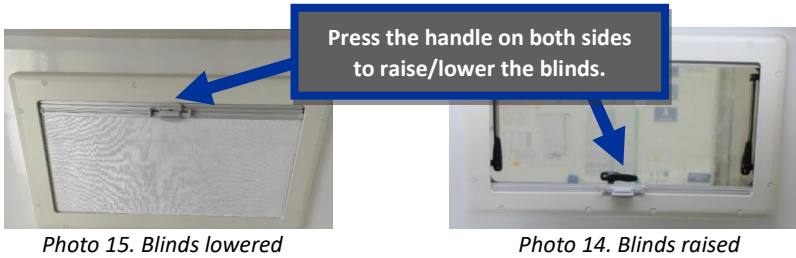
*Photo 12. Window handle unlocked*



*Photo 13. Window opened properly*

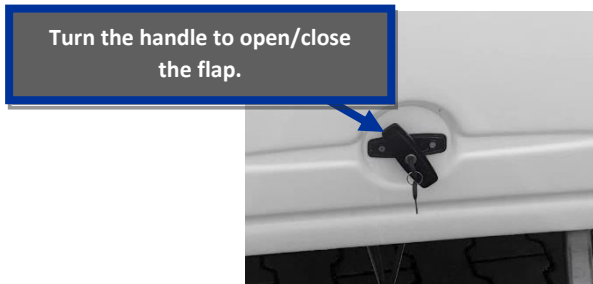
#### CLOSING BLINDS AND MOSQUITO NETS

The roller blind in the caravan also functions as a mosquito net. It does not require much force to close the roller blind. To do this, you need to push the plastic handle located at the bottom of the blind on both sides and pull the blind upwards. Then, place the handle into the catch at the top of the window (Photo 14). To uncover the window, you only need to press the handle from both sides and release the roller blind downwards (Photo 15).



## OPENING THE FLAP

Opening the flap will require the key to be inserted into the flap lock. After turning the key, the flap handle must also be turned. After this, simply pull the flap upwards to open (Photo 16).



*Photo 16. Flap handle with key.*

Remember to remove the key from the lock when opening the door. If you leave the key in the lock, the exterior laminate of the caravan may get damaged.

### 3.6. \*Awning

Additional caravan equipment includes an awning, which consists of a metal frame and tent and a caravan floor apron (Photo 17).



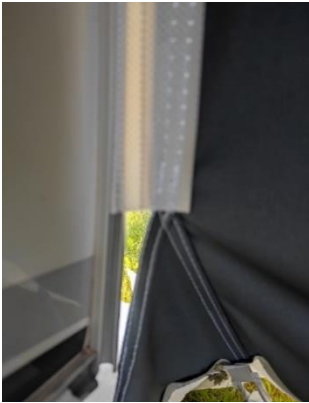
*Photo 17. Awning*

There are three catches on the side of the trailer. These catches are used to attach the frame tubes. The tubes should be inserted into the catches as shown in the photo. (Photo 18).



*Photo 18. Frame tube catch*

When installing the awning, it is necessary to slide the tent into the metal aluminium profile (Photo 20). The apron must also be inserted into the aluminium profile (Photo 19).



*Photo 20. Tent in the aluminium profile .*



*Photo 19. Caravan floor apron*

# 4. Systems

## 4.1. Signalling system

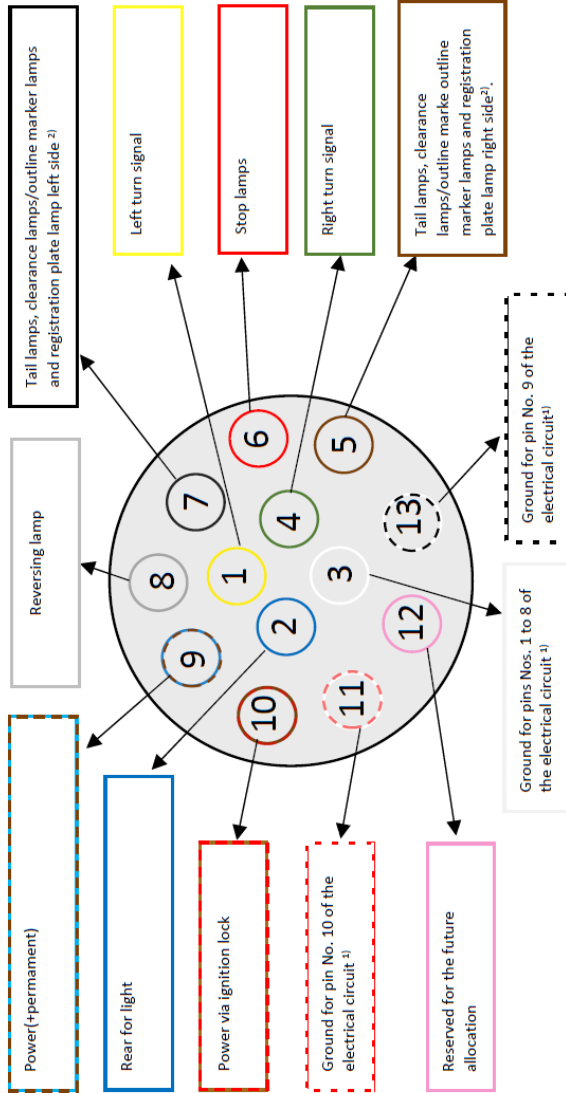


Fig. 5. 13-pin system. Sectional view.

Table 3. 13-pin connector – sectional view of the cable and colours of the conductors

Pin No.	Function	Cross-sectional area of the conductor	Conductor insulation colour
1	Left turn signal	1,5 mm <sup>2</sup>	yellow
2	Rear fog light	1,5 mm <sup>2</sup>	blue
3 <sup>1)</sup>	Ground for pins 1 to 8	2,5 mm <sup>2</sup>	white
4	Right turn signal	1,5 mm <sup>2</sup>	green
5	Tail lamps, clearance lamps/outline marker lamps and registration plate lamp right side. <sup>2)</sup>	1,5 mm <sup>2</sup>	brown
6	Stop lamps	1,5 mm <sup>2</sup>	red
7	Tail lamps, clearance lamps/outline marker lamps and registration plate lamp left side. <sup>2)</sup>	1,5 mm <sup>2</sup>	black
8	Reversing lamp	1,5 mm <sup>2</sup>	grey
9	+12V permanent	2,5 mm <sup>2</sup>	brown/blue
10	+12V via ignition lock	2,5 mm <sup>2</sup>	brown/red
11 <sup>1)</sup>	Ground for pin 10	2,5 mm <sup>2</sup>	white/red
12	Reserved for future allocation	no data	pink
13 <sup>1)</sup>	Ground for pin 9	2,5 mm <sup>2</sup>	white/black
1)	3 ground conductors must not be joined in the trailer via an electrically conductive part.		
2)	Registration plate lamp must be connected so that none of the lamp bulbs is connected to pins 5 and 7 at the same time.		



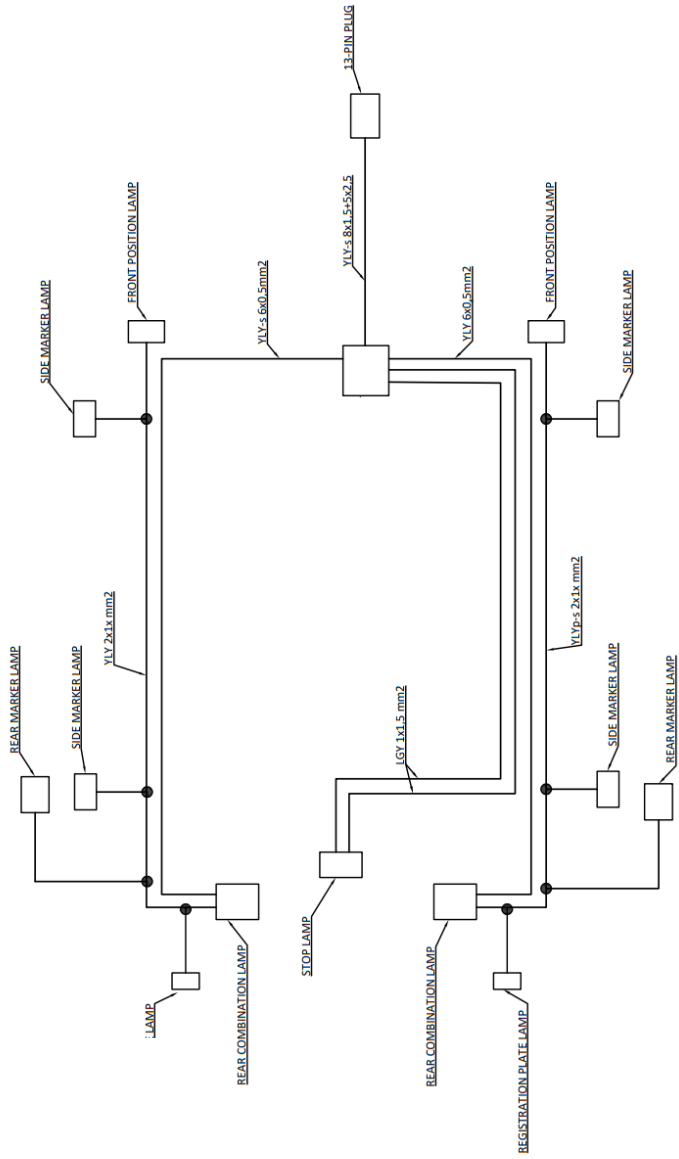


Fig. 6. Signalling system diagram

## 4.2. Gas system

The caravan is equipped with a gas system that allows the whole caravan to be heated. Gas is also necessary for the operation of the refrigerator. The gas system connects the external and internal parts of the caravan together. A gas pipe with an external diameter of 8x1 was used to create the gas system. The gas system diagram is shown in Fig. 7.

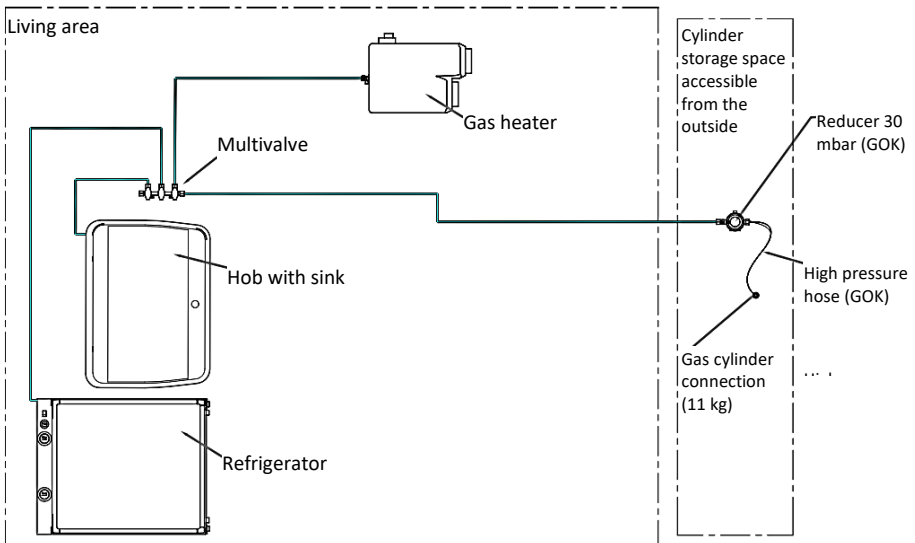


Fig. 7. Gas system diagram

## VALVES

Our caravans have gas valves which are responsible for the distribution of gas. The gas is taken from a gas cylinder, located at the front of the caravan under a lockable flap. In trailers without Truma heating there are only 2 valves. The valves are located in the cupboard under the sink and gas hob (Photo 21). Each of them provides gas supply to a particular appliance. You can recognise which valve supplies which appliance by the sticker on it.

Meaning of individual stickers:

- Kitchenette – gas hob supply valve (A),
- Snowflake – refrigerator supply valve (B),
- LIOver and tap- heating system valve (C).

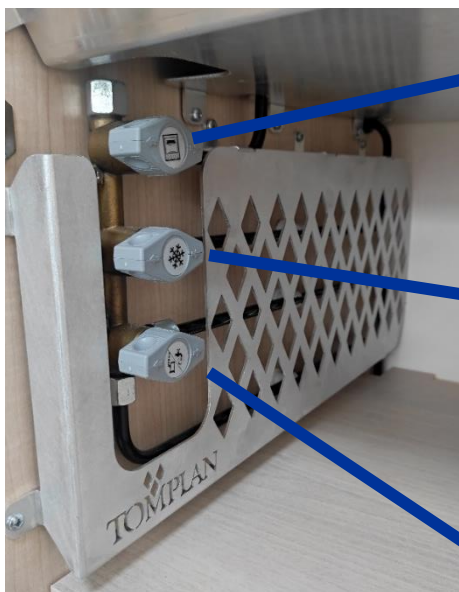
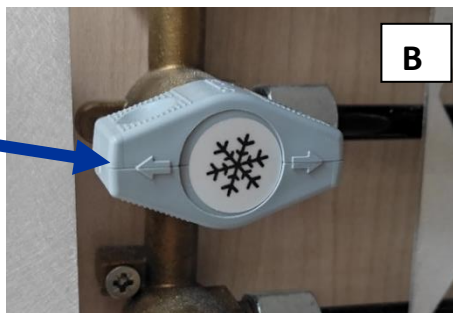


Photo 21. Gas valves



**Remember to close the valves when you are not using the caravan.  
The circuit is closed when the valve is in the upright position.**

## GAS CYLINDER

The gas system also includes a gas cylinder, which is located at the front of the caravan under a flap. The operating pressure of the gas is 30 mbar, so it was necessary to install a regulator. With the regulator it is possible to control the gas pressure in the cylinder. The pressure in the cylinder is lowered to the pressure required to operate the caravan – it is 30 mbar in this case.

Two racks located in the storage compartment allow two spare gas cylinders to be carried. Both cylinders must be secured with catches. The storage compartment also houses the gas cylinder ventilation. The cylinders are fitted to the pressure-reducing hose by means of a gas connection (Photo 22).



**Gas cylinder not included in the basic equipment of the caravan.**

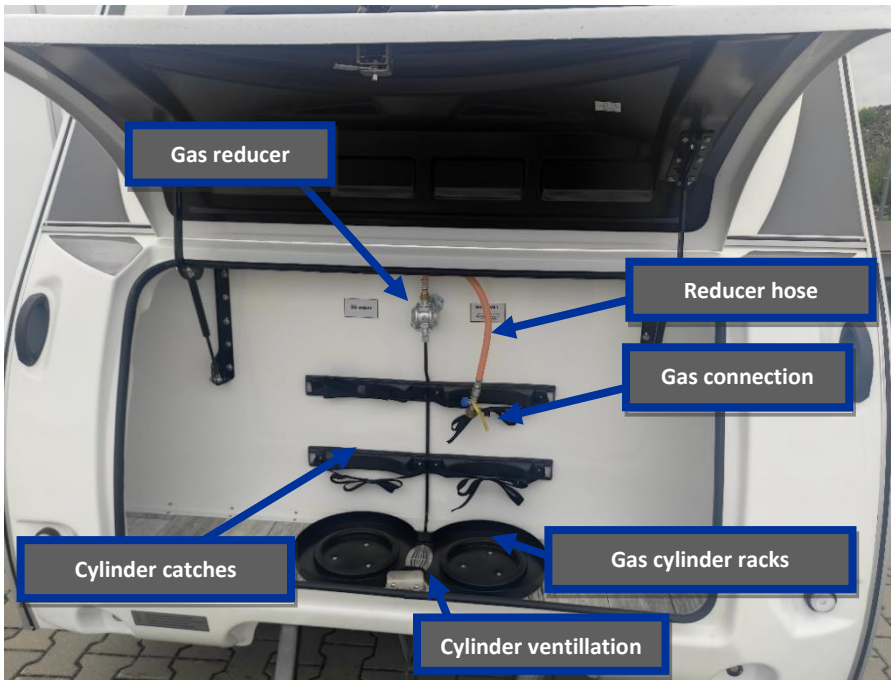


Photo 22. Gas cylinder storage compartment

## **GAS CYLINDER REPLACEMENT**

1. Open the gas cylinder compartment.
2. Close the main valve on the gas cylinder.
3. Detach the reducer hose from the gas cylinder.
4. Remove the cylinders from the catches and take them out of the compartment.
5. Place a full gas cylinder in the compartment.
6. Attach the cylinders to the catches.
7. Firmly tighten the reduction hose to the gas cylinder by hand.
8. Open the main valve of the gas cylinder.
9. Close the compartment.

### **If a gas leak is suspected:**

1. Close the valve to cut off the gas cylinder.
2. Do not smoke or burn anything near the gas leak area.
3. Open windows and doors to ventilate the room
4. Notify the fire brigade if necessary.
5. Inform nearby persons of the danger.
6. Restart the device only after it has been checked by an expert.



**Before driving, make sure that the gas cylinders are properly attached to the catches. Remember to close the cylinder valves and lock the storage compartment when driving.**

### **4.3. Clean water system**

A clean water system is installed in the TK 30 caravans to supply water to the kitchen and bathroom. Water is drawn from containers located in the cupboard under the hob with the sink and distributed to the various rooms of the caravan (Fig. 8).

#### **\*HOT WATER SYSTEM WITH ELECTRIC HEATER**

A hot water system with a 5l electric water heater is installed on request. The heater is located in the left-hand box under the mattresses. The water in the heater is heated by a 230V electric heating element. It is important not to use the heater in

electric mode without water inside (Photo 23). The water temperature is controlled by a thermostat. A description of how to fill the water heater is available in the manufacturer's manual<sup>2</sup>. To switch on the device, press the button that operates the heater to "ON" position. This button is located on the cabinet, next to the Truma heating system control panel. The indicator light of the button indicates that the device is operating (Fig. 24).

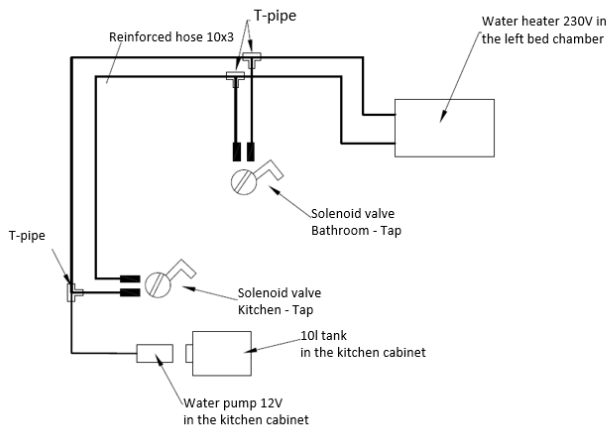


Fig. 8. Diagram of clean water system



Photo 23. Heater switch



Photo 24. Water heater, 5l.

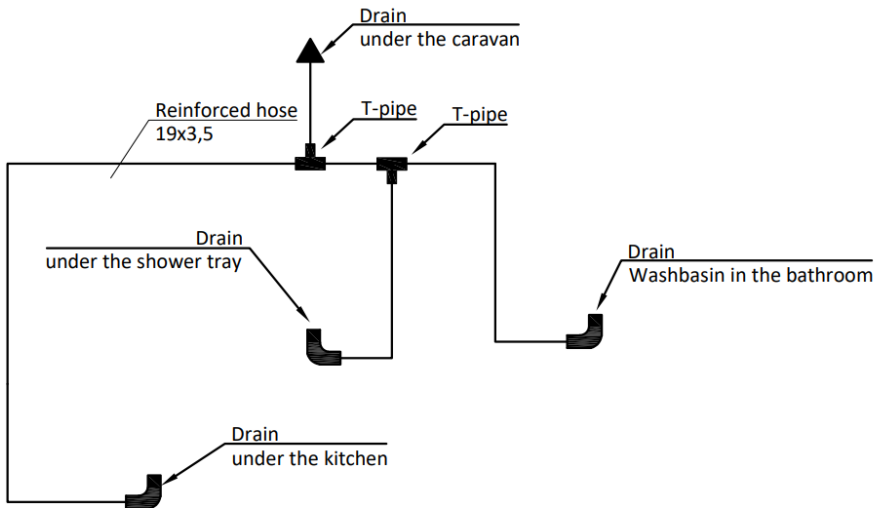
<sup>2</sup> Operating instructions for the water heater, [https://goliat.com.pl/file/2426/\\_\\_.pdf](https://goliat.com.pl/file/2426/__.pdf)



**Remember to empty the tank when the caravan is not in use and in the event of frost.**

#### 4.4. Wastewater system

Wastewater system is an important part of the campsite. With the system it is possible to discharge wastewater outside the caravan in a simple way (Fig. 9).



*Fig. 9. Diagram of waste water system*

#### 4.5. 230V electrical system

There is a power connection on the outside of the caravan which allows the 230 V external power supply to be connected safely (Fig. 25). The routing diagram of the 230 V electrical installation is indicated in Fig. 10 and Fig. 11. Version 1 of the electrical installation is used for caravans manufactured up to 31 July 2022, while you will find version 2 in caravans manufactured from 1 August 2022. Detailed information on the individual components of the system is provided in Tables 4 and 5.



Photo 25. External power supply connector

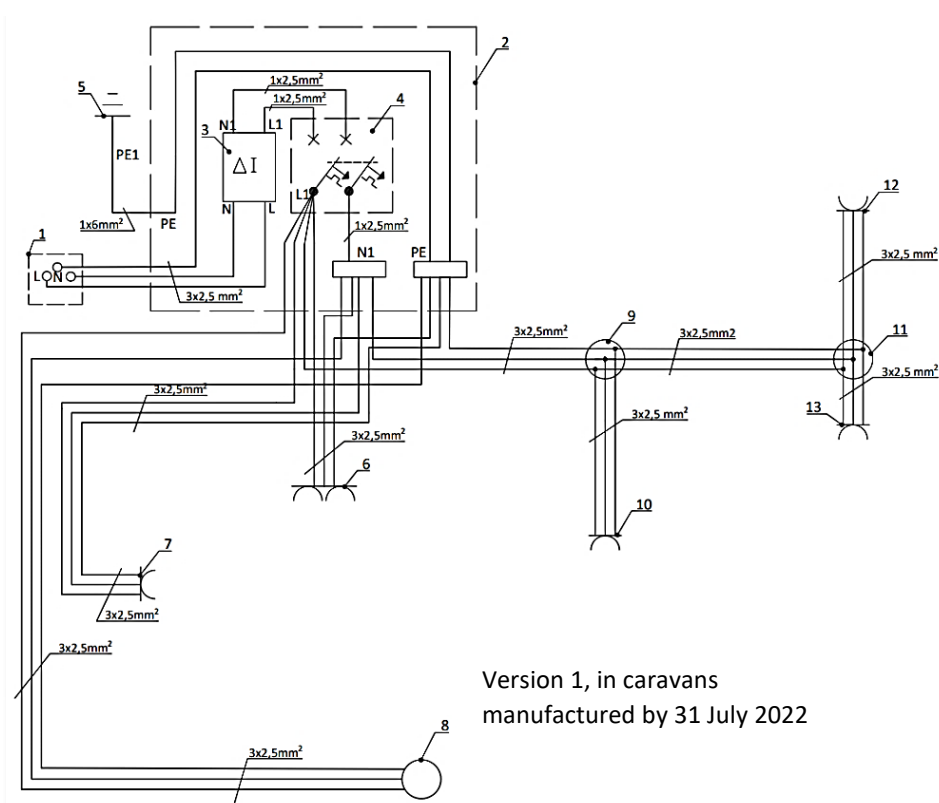


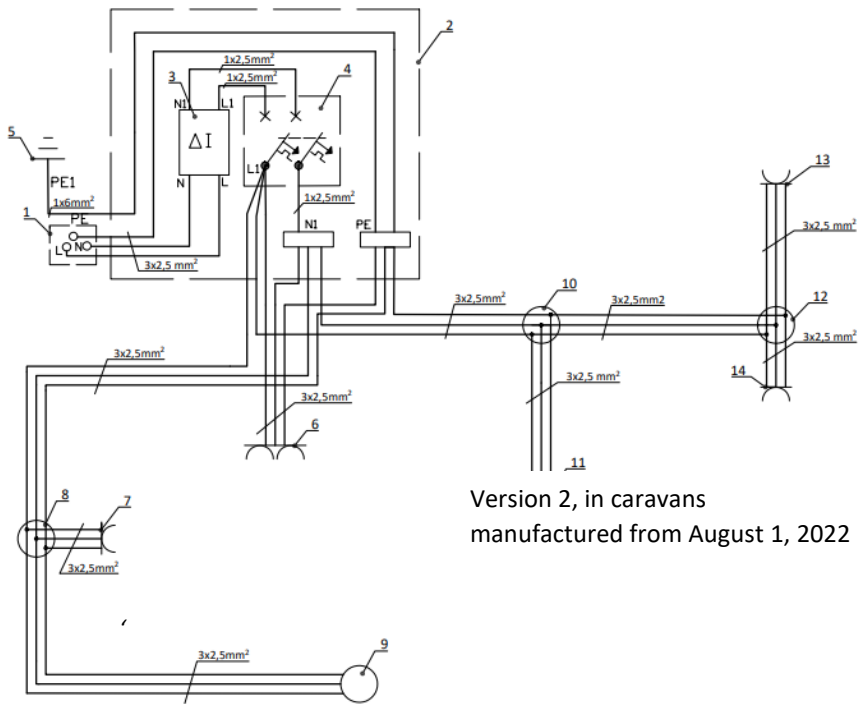
Fig. 10. Diagram of the caravan electrical system, v. 1 up to 31 July 2022



Table 4. Electrical system components (31 July 2022)

No. in the Fig.	Description	Location
1	External connector (caravan connector)	Outside the caravan
2	Distribution board	Under the right-hand bed
3	Residual current circuit breaker 30 mA, 25A type A	Under the right-hand bed
4	Two-pole overcurrent protection device C16 2P	Under the right-hand bed
5	Grounding	Connected to the metal frame of the caravan
6	Surface-mounted double socket, Schuko type	In the front part of the right-hand bed
7	Flush-mounted single socket, Schuko type	In the connector between the beds
8	Surface-mounted junction box	In the rear part of the left-hand bed
9	Flush-mounted junction box	In the rear part of the right-hand bed
10	Flush-mounted single socket, Schuko type	In the rear part of the right-hand bed on the surface
11	Surface-mounted junction box	Under the refrigerator
12	Flush-mounted single socket, Schuko type	Above the kitchen worktop
13	Surface-mounted single socket, Schuko type	Under the refrigerator

Cable type	Colour
N, N1 (neutral)	blue
L, L1 (phase)	black/brown
PE, PE1 (protective)	green/yellow



Version 2, in caravans  
manufactured from August 1, 2022

Fig. 11. Diagram of the caravan electrical system, v. 2 from 1 Aug. 2022

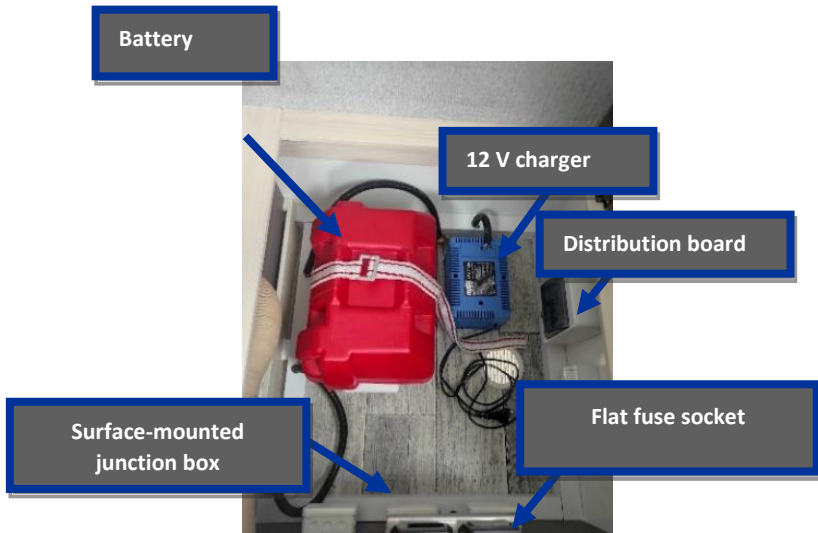
Table 5. Electrical system components (1 August 2022)

No. in the Fig.	Description	Location
1	External connector (caravan connector)	Outside the caravan
2	Distribution board	Under the right-hand bed
3	Residual current circuit breaker 30 mA, 25A type A	Under the right-hand bed
4	Two-pole overcurrent protection device C16 2P	Under the right-hand bed
5	Grounding	Connected to the metal frame of the caravan
6	Surface-mounted double socket, Schuko type	In the front part of the right-hand bed
7	Flush-mounted single socket, Schuko type	In the connector between the beds
8	Surface-mounted junction box	In the bed connector
9	Surface-mounted junction box	In the rear part of the left-hand bed
10	Surface-mounted junction box	In the rear part of the right-hand bed
11	Flush-mounted single socket, Schuko type	In the rear part of the right-hand bed on the surface
12	Surface-mounted junction box	Under the refrigerator
13	Flush-mounted single socket, Schuko type	Above the kitchen worktop
14	Surface-mounted single socket, Schuko type	Under the refrigerator

Cable type	Colour
N, N1 (neutral)	blue
L, L1 (phase)	black/brown
PE, PE1 (protective)	green/yellow

#### 4.6. 12V electrical system

It is an electrical installation powered by a battery, located in the trailer and the towing vehicle.



*Photo 26. Power supply system in the right-hand part of the bed*



POITIVE POLE (+)					
SYMBOL	COLOUR	DESIGNATION	LOAD	LENGTH [MM]	TAPS
c	black	1x2.5mm <sup>2</sup>	REFRIGERATOR	3800	0
c1	green	LGY-S 1x1.5 mm <sup>2</sup>	REFRIGERATOR LIGHT	3800	0
k	red	LGY-S 1x1.5 mm <sup>2</sup>	USB	4000	800
n	blue	LGY-S 1x1.5 mm <sup>2</sup>	WATER PUMP	8000	3500; 750; 300
o	brown	LGY-S 1x2.5 mm <sup>2</sup>	TRUMA	5000	0
s	grey	LGY-S 1x1.5 mm <sup>2</sup>	SPARK IGNITER	5200	0
z	yellow	LGY-S 1x1.5 mm <sup>2</sup>	LIGHTING	5300	RIGHT: 2000; 800; 2000 LEFT: 7250; 900
z1	yellow	LGY-S 1x0.75 mm <sup>2</sup>	LIGHTING	0	RIGHT: 500; 500; 100 LEFT: 500
NEGATIVE POLE (-)					
WIRE DESIGNATION	COLOUR	CROSS-SECTIONAL AREA	LENGTH [MM]	TAPS	
b	white	LGY-S 1x2.5 mm <sup>2</sup>	3800	0	
b1	white	LGY-S 1x1.5 mm <sup>2</sup>	3800	0	
b2	white	LGY-S 1x1.5 mm <sup>2</sup>	5200	0	
b3	white	LGY-S 1x1.5 mm <sup>2</sup>	5300	RIGHT: 2000; 800; 2000; 800 LEFT: 7250; 900	
b4	white	LGY-S 1x2.5 mm <sup>2</sup>	5000	0	
b5	white	LGY-S 1x1.5 mm <sup>2</sup>	8000	300	
b6	white	LGY-S 1x0.75 mm <sup>2</sup>	0	RIGHT: 500; 600 LEFT: 500	

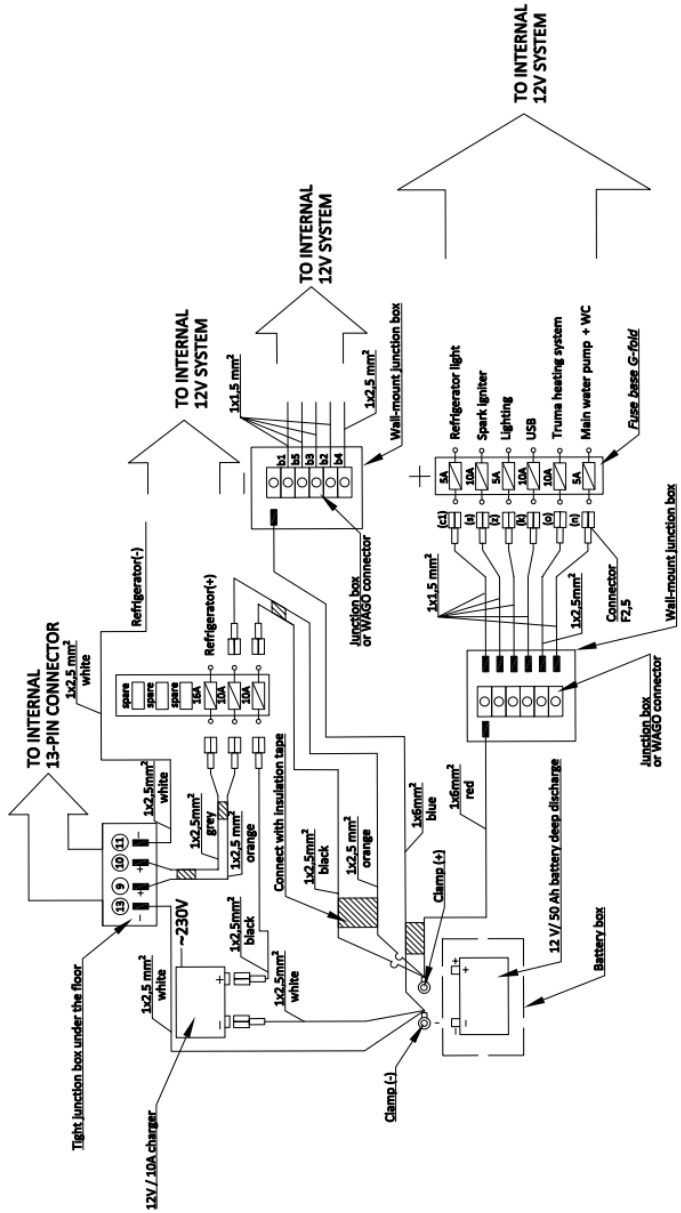


Fig. 13. Diagram of the internal 12V electrical system (part 2)

## 5. Appliances

### 5.1. \*Truma heating system

Truma Varioheat Eco heating system is an optional extra for caravans. On request, the unit is installed in the caravan (Photo 27). The control panel is located on the side wall of the cabinet (Photo 28). Using the control panel, the temperature and blower level can be adjusted. The main unit is located in the caravan boxes under the mattresses. Truma is powered by liquefied petroleum gas, contained in a cylinder located at the front of the caravan. The heat is distributed by means of pipes, located in the seat boxes. For detailed information and precautions regarding the operation of the unit, please refer to the manufacturer's manual<sup>3</sup>.

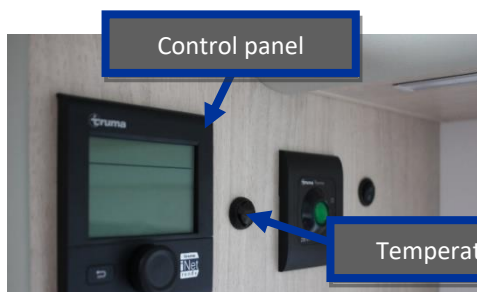


Photo 27. Heating system control panel with Truma heater switch



Photo 28. Truma unit

### 5.2. \* Electric floor heating

Additional equipment for caravans includes 48V underfloor heating. This uses heating mats that are located under the floor surface (Photo 29). The mats heat up to a temperature of 25°C. The heating features thermoregulation and switches off when the maximum value is reached. The heating mats are connected to the power supply, located in the box under the right mattress. A general diagram of the heating mat arrangement is illustrated in Fig. 14.

<sup>3</sup> Truma manual, [truma-heating-varioheat-instrukcja-pl.pdf](https://www.twistczarter.pl/truma-heating-varioheat-instrukcja-pl.pdf) (twistczarter.pl)



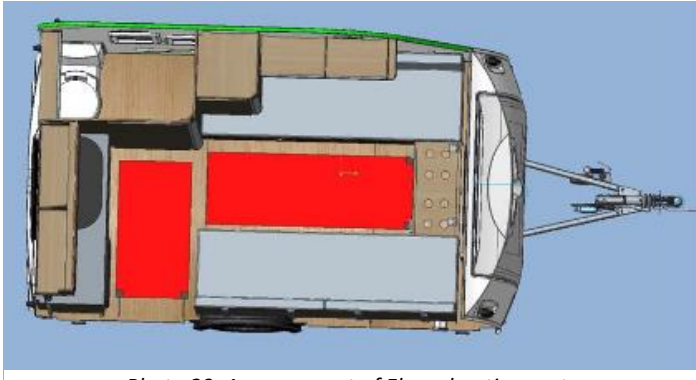


Photo 29. Arrangement of Ebeco heating mats

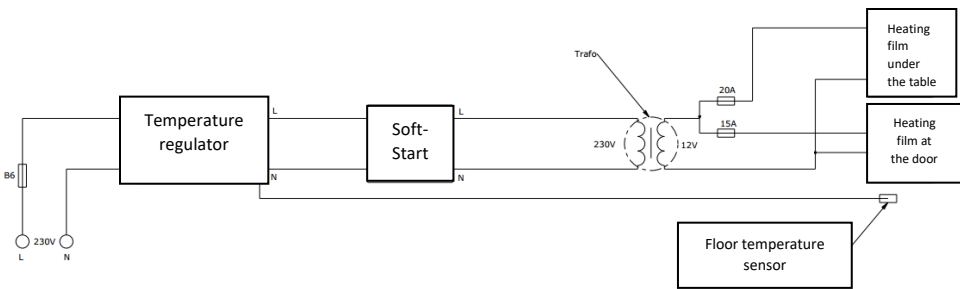


Fig. 14. Arrangement of heating mats

### 5.3. Refrigerator

The caravan is equipped with a refrigerator from Dometic. It is an absorption fridge with a capacity of 60 litres, including a freezer compartment with a capacity of 5 litres (Photo 31). There is a gas connection to the fridge (the gas valve is located under the hob with the sink). There are two knobs on the fridge - one to adjust the temperature, the other to change the operation to:

- 230V mains power,
- 12 V battery power;
- gas.

There is also an ignition button on the refrigerator to start the fridge when powered by gas and a flame indicator. There is a handle on the door for closing and ventilation (Photo 30). Detailed information on the appliance can be found in the manual<sup>4</sup>.

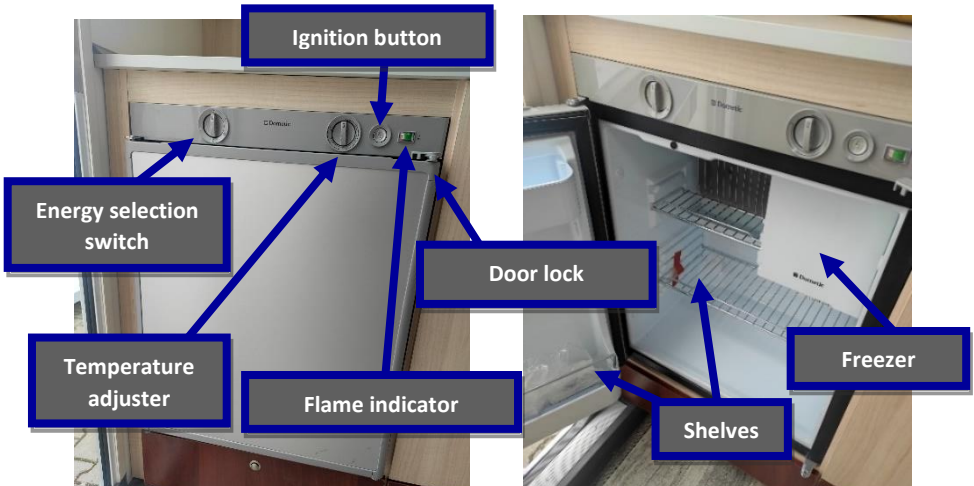


Photo 31. External appearance of the refrigerator.

Photo 30. Interior of Dometic refrigerator



Photo 32. . Appliances in the kitchenette

<sup>4</sup>Refrigerator manual, [dometic rm 5310 operating instructions manual pdf download | manualslib](#)

## START-UP

1. Open the gas cylinder valve.
2. Open the valve that shuts off the gas supply to the refrigerator.
3. Set the switch to change the operation to gas.
4. Turn the temperature control clockwise and press in. Keep the button pressed.
5. Hold down the battery igniter button. The ignition process should start automatically.
6. When the flame is burning, the pointer will start to move into the green range.
7. Keep the knob pressed for another 15 seconds, then release.
8. The refrigerator is operational and ready for use.



**Before operating the refrigerator for the first time, it is recommended to clean it with a soft cloth and mild detergent. Do not use strong detergents that will abrade the surface. Do not allow the door seal to come into contact with oil or grease.**



**When you start the refrigerator for the first time or after replacing the cylinder, air can become trapped in the gas line. To remove air from the lines, turn the refrigerator and other gas appliances on for a short time.**

## VENTILATION GRILLES

It is important to remember to open the vent grilles on the outside of the caravan when using the refrigerator (Photo 33).



*Photo 33. Ventilation grille outside the caravan*

#### 5.4. Hob with sink

A two-burner cooker and a sink with a glass lid are basic equipment for the caravan (Photo 35). The lid is made of heat-resistant tempered glass (Photo 34). The pot supports are removable and easy to clean. When you have finished cooking, simply fold down the glass lid for an additional working surface. The burner lids are enamelled. The temperature of the cooker is very easily regulated using the igniters. The gas shut-off valve is located in the cabinet under this unit.



Photo 35 . Unit cover

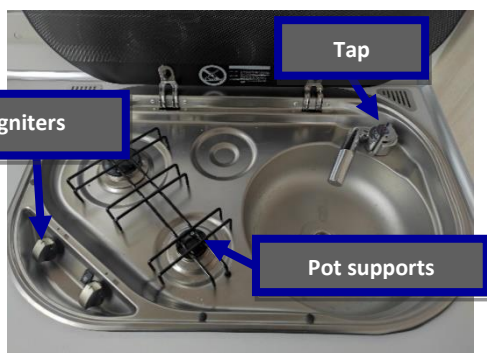


Photo 34. Hob with sink

Water for the sink is located in a cabinet just below the unit. Water is drawn from the containers located there (Photo 36). Dirty water is drained outside the trailer. When replacing the tank, the pump must be secured to prevent any residual water from escaping.



Photo 36. Water tank (to the right and valves to the left)

## 5.5. Lighting

The caravan has LED lighting. LED strips are located under the shelves (Photo 37). The main lamp is located on the ceiling of the caravan (Photo 38). The lamps have an attractive appearance and low power consumption. Care should be taken not to open the cabinet above the hob and the bathroom door at the same time as it poses a risk of damaging both pieces of furniture.



Photo 37. Ceiling lamp



Photo 38. LED strip under the cabinet above the hob

## 5.6. Switches, USB ports

Each trailer has light switches (Photo 41) and sockets (Photo 40). All these elements are located in visible places, which makes it easy to connect any appliance. There are also USB ports available to enable charging various appliances (Photo 39).



Photo 41. Light switch



Photo 40. Socket



Photo 39. USB port

## 6. Advice for users

### 6.1. Maintenance

Some caravan components require maintenance and/or periodic inspection. Following the steps listed below will reduce the risk of unforeseen situations (Table 6).

*Table 6. Maintenance / inspection intervals*

<b>Time/date</b>	<b>Activities</b>
On a current basis	Keep the caravan clean. Due to the possibility of condensation inside the bodywork, it is recommended to ventilate the caravan. Galvanised parts are not resistant to acids, salts and some chemicals. Wash the caravan thoroughly with clean water after travelling on roads sprinkled with salt or other chemicals. Check for wear on the ball hitch and the tow ball. The tow ball diameter must not be less than 49.5 mm. Ensure that the inside parts of the ball hitch are clean and lubricated and that the ball socket is covered with grease. At all times when the trailer is in use, ensure that the exposed threads of the bolts and linkages on the chassis and the axles, hinges and moving parts of the closures are lubricated with grease. Places where the zinc coating has been damaged must be cleaned, degreased and, after drying, treated with a minimum of two coats of cold spray galvanizing agent.
After 2,000 km or 6 months	Check the bolted connections, especially the bolting of the running gear, drawbar, overrun device, ball hitch and wheels. Inspect the chassis frame. During the inspection, pay attention to the condition of the welds, the protective coating and whether there are any cracks. Lubricate or oil the sliding and articulated points of the overrun device. The Truma water heater must be decalcified twice a year.

After 5,000 km or 12 months	Check the bolted connections, especially the bolting of the running gear, drawbar, overrun device, ball hitch and wheels. Inspect the chassis frame. During the inspection, pay attention to the condition of the welds, the protective coating and whether there are any cracks. Lubricate or oil the sliding and articulated points of the overrun device. Inspect the brake system, check that it is working properly.
Every 10,000-15,000 km or every 12 months	Inspect the brake system, check that it is working properly. Check the thickness of the brake shoes. Oil or replace brake cables and lubricate other components of the brake system.
Every 24 months	Checks on the gas installation should be carried out regularly in accordance with national regulations in force. Regulators, hoses and drains should also be checked.
After 5, 10 years	Safety regulators and hose lines must be replaced after 10 years at the latest, and high-pressure hoses after 5 years. Hose should be replaced immediately if scratches, porous spots, or similar damage is noticed.

## 6.2. Ventilation

- Ventilation grilles must not be obstructed during operation of the heating system.
- The ventilation grille of the refrigerator must not be obstructed during operation.
- Boxes under the mattresses allow air to circulate and prevent the formation of fungus and mould.
- It is advisable to regularly ventilate the caravan and open the windows.
- Do not close fixed air vents.
- Ventilate the caravan when cooking.
- Vent the refrigerator from time to time.



*Photo 42. Ventilation in the boxes of the sleeping area*

### 6.3. Operation in winter

- In winter, excess snow must be removed to avoid permanent deformation of the roof.
- Ventilation openings must be kept clear of snow and ice.
- In winter operation, condensation water accumulates in the vehicle at low temperatures, so the caravan must be ventilated regularly.
- Gas consumption is much higher than in summer, so it is advisable to carry a spare gas cylinder.
- During the winter period, ensure that no water remains in the water system.

### 6.4. Cleaning and care

## EXTERNAL

General rules for care:

- Wash the caravan using low water pressure.
- Use a soft sponge to clean the surface.
- Do not scrub the laminate surface.
- It is recommended to use neutral cleaning agents. Concentrated cleaners and solvents can lead to tarnishing or dissolving of the surface.
- It is not allowed to use highly corrosive cleaning agents.
- Cleaning with a dry dust cloth or micro-fibre cloth is recommended. Cleaning with a damp cloth is also allowed.
- In the case of heavier soiling, such as spilled liquids, oils or greases, it is recommended to remove them quickly by wiping and cleaning to avoid surface damage.



**We recommend testing the suitability of a given cleaning agent on a concealed, small area beforehand.**



## **INTERNAL**

- Cleaning with a dry dust cloth or micro-fibre cloth is recommended. Cleaning with a slightly damp cloth is also possible.
- Furniture is sensitive to moisture, so care should be taken not to get it too wet.
- If you spill liquid on the surface of your furniture, wipe it off as soon as possible, do not wait for the stains to dry.

## **CLEANING OF UPHOLSTERED FURNITURE**

- Protect furniture from animals.
- Avoid contact of the fabric with strong chemicals to prevent discolouration/tarnishing.
- Avoid placing hot dishes on the surface of the furniture.
- Clean the furniture with a soft clothes brush or vacuum cleaner with the furniture cleaning attachment.
- If liquid is spilled on the furniture, try to remove the excess dirt immediately with a paper towel.

## **CLEANING THE PVC**

- Regular cleaning of the flooring by vacuuming and washing is recommended. Soiling from sand and dust can cause damage to the linoleum.
- Water and grease stains should be removed from the surface of the linoleum as soon as possible as they penetrate deeply into the flooring.
- Clean the surface of the linoleum with cold or lukewarm water not to dissolve the protective layer of the linoleum.

## **7. Environment**

Caravans manufactured by TOMPLAN Sp. z o.o. are products made of various materials: steel, wood, plastic, rubber. When taken out of service, the caravan must be handed over, for disposal, to a company authorised to dispose of vehicles.

Caravan users must be mindful of the environment and its surroundings and should therefore observe the following recommendations when travelling/stopping:

- Do not damage the nature - use parking areas specifically designated for this type of vehicle.
- Empty the waste tank in designated areas. Do not empty the tank into drains or into the environment.
- Always clean up after yourself. Segregate rubbish according to the usual rules.

## 8. Warranty

TOMPLAN Sp. z o.o. guarantees the correct functioning of the caravan and the quality of the anti-corrosion coating for the period stated on the Warranty Card without any limitation on the number of kilometres travelled. Details are specified in the Warranty Card.

Exclusions from the warranty:

- Damage caused by overloading the caravan or incorrectly distributed loads;
- The so-called "white corrosion" that sometimes occurs on the zinc coating is a phenomenon that only affects the external appearance and cannot be claimed, as it occurs independently of the manufacturer;
- Chassis components and some body parts are covered with hot-dip zinc coating. Protection against corrosion is provided by the oxidation of the top layer of zinc. During that time, there is a natural dulling of the surface, which can last for several months. As long as the zinc coating remains shiny, the oxidation process is not complete;
- Allowing any changes to the caravan design;
- Light bulbs and fuses, external and internal lighting lamps and reflectors;
- Consequences resulting from the installation by the Seller of parts and components supplied by the Buyer;
- Consequences resulting from the installation by the Purchaser or the User of their own parts and components and from modifications made to them.
- Mechanical damage caused by users or third parties.
- Natural wear and tear of components and parts (e.g., tyres, brake shoes, wheel bearings).
- Damage resulting from lack of proper care and maintenance during the use of the products;
- Damage resulting from repairs carried out by an unauthorised service centre or the use of non-original parts.

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**Manuals, in hard copy, for the operation of the equipment, are included in the caravan.**

**Items marked with "\*" are optional equipment and are only found on selected caravans.**