

# Ultraflow Compact Housing and Winter Kit



**Operating instructions  
Installation instructions**

To be kept in the vehicle!

Page 2  
Page 8

# Ultraflow Compact Housing and Winter Kit

## Table of contents

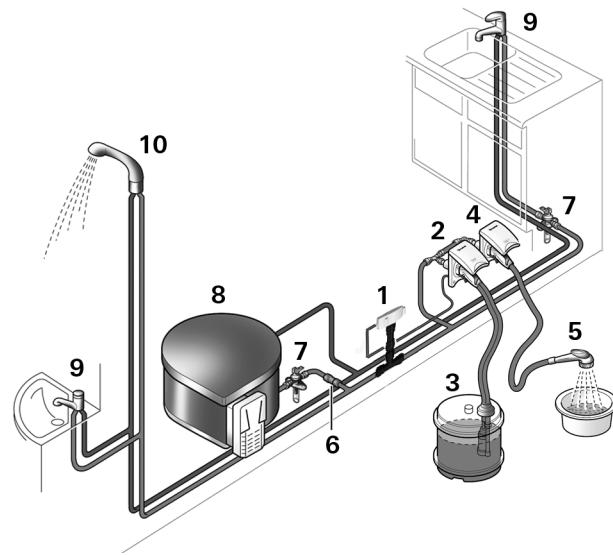
Introduction.....	3
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## Operating instructions

Compact Housing and Winter Kit.....	4
Routine maintenance .....	4
Notes .....	5
Sterilising.....	5
Accessories.....	5

## Installation instructions

Tools and accessories .....	8
Selecting the position .....	8
Cutting the hole.....	8
Lining the hole.....	8
Fixing the Ultraflow Compact Housing .....	9
Water connections .....	9
Water connections Winter Kit.....	9
Electrical connection.....	10
Checking the installation.....	11



- 1 Smart Switch
- 2 Compact Housing
- 3 Pump assembly
- 4 Shower housing
- 5 Shower assembly
- 6 Non-return valve
- 7 Safety/drain valve
- 8 Ultrastore
- 9 Water taps in bathroom and kitchen
- 10 Shower assembly

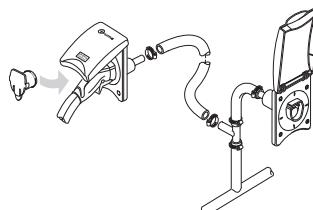
## Introduction

The Ultraflow Compact Housing (2) is part of an unique, high quality product range designed to bring water to your caravan in a convenient and efficient manner.

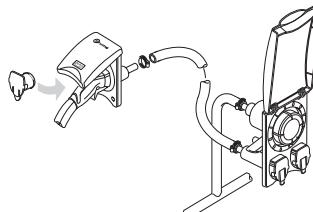
If caravanning in the winter there is a possibility that the water in the outside container will freeze. It is therefore desirable to keep the water container within the caravan to prevent freezing. This is achieved by simply fitting the Compact Housing inside of the caravan in a suitable place such as the washroom.

The winter kit can be used:

- either with second Compact Housing



- or with the Ultraflow Filter Housing.



The blanking plug must be fitted to blank off the unused Compact or Filter system.

Truma Ultraflow operates in the caravan water supply as a **pressurised system**, the optional available **Truma Smart Switch** includes an **electronically controlled pressure switch**. The pressure switch turns the water pump on and off regardless of the atmospheric pressure and the momentary battery power (between 10 V and 14 V).

 To prevent an excessive high pressure in the system, the use of a non-return valve (spring weighed – see accessories) in front of the water heater is essential.

The non-return valve (6) must be fitted between the drain valve and the first "T" connection. This also prevents the back flow of hot water to the cold water taps.

Please note the correct flow direction of the valve. No further non-return valves or other parts that can reduce the water flow may be used. Additional Truma drain valves do not reduce the water flow.

Also available, is a special outdoor shower (5). The Shower Housing (4) fits beside the Compact Housing in the outer wall.

**Please note:** the shower has no electrical connections and works only in a pressurised system (please refer to page 6).

The waterpump is detachable from the Ultraflow Compact Housing for security and while touring. A blanking plug is supplied to blank off the inlet when the pump is not attached.

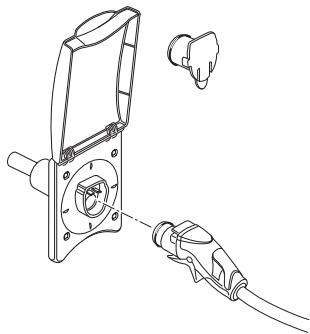
To connect the pump, simply align the plug with the socket and push into position. This makes both the water and electric connections.

To remove, pull the lower trigger and pull the plug from the socket.

## Operating instructions

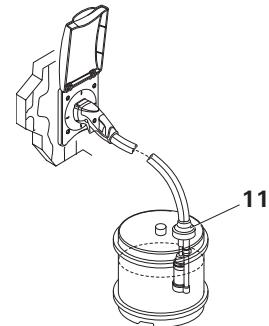
### Compact Housing and Winter Kit

Raise the lid, clean both the water socket and the plug of the pump assembly.



Plug the pump connector into the socket.

Place the pump into the water container, ensuring that it is fully submerged before operating the system. The dust cover (11) is to stop contaminates falling into the water container.



To remove the pump assembly from the Ultraflow Compact Housing, pull the lower trigger and pull out the hose plug.



**Do not remove by pulling the hose or electric cable.**

When using the Winter Kit the blanking plug provided will be fitted to the housing not being used.

### Routine maintenance

Ensure that the O-ring seal on the hose plug and the socket are free from dirt.

To aid fitting of the plug assembly smear the O-ring with vegetable oil.

## Notes

Never allow the pump to run **dry**. Always ensure that the pump is submerged in the water or the life of the pump will be reduced.

Before winter storage the water system must be completely drained and the filter cartridge (only with the Ultraflow Filter Housing) removed. The filter hole may be sealed with the filter cap.

### **Clean the water system at the start and end of the season with sterilising fluid (see notes under sterilising).**

If the pump fails to deliver water the most likely cause will be air in the system. Switch off the pump and shake the pump assembly in the water. Then switch on again.

## Sterilising

### **When cleaning the water system at the start or the end of the season it is advisable to use a sterilising fluid e.g. Chempro SDP or similar.**

Flush the system thoroughly to remove the effective fluid traces.

After sterilising the system at the start of the season it is recommended that in the Ultraflow Filter Housing a new filter cartridge should be fitted.

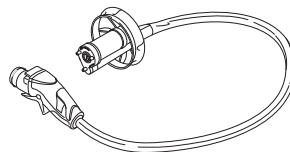
## Accessories

### Ultraflow Water Pump Assembly

The Water Pump Assembly comes complete with the water pump, container cover and storage clip. The submersible pump needs no priming and is extremely quiet in operation. This pump can be used with both the Ultraflow Filter Housing and the Ultraflow Compact Housing.

Standard pump assembly (hose length 800 mm)  
part no.: 46040-01

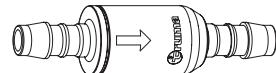
Special version for motor caravans (hose length 1000 mm)  
part no.: 46040-10



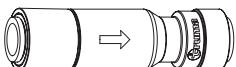
### Non-return valves

### **Flexible hoses**

part no.: 40060-90000



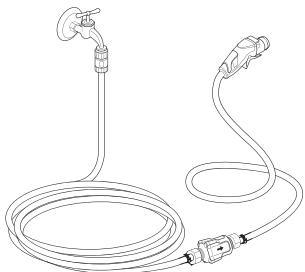
**Semi-rigid-piping** (John Guest System)  
part no.: 40060-88000



## Ultraflow Waterline

The Ultraflow Waterline is a 15 metre “food quality” hose pipe. It comes complete with fittings and a special pressure reducing adaptor which allows caravanners to connect their Ultraflow caravan water system direct to a mains water supply without modification.

part no.: 46091-01

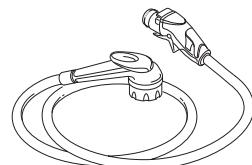


## Ultraflow Compact Outdoor Shower Set

The outdoor shower set consists of a housing in the same design of the Compact Housing, a shower head with 2.5 metres hose and connector plug.

Please note, that the shower has no electrical connections and works only in a pressurised system.

part no.: 46070-01



## Ultraflow Smart Switch

The self-calibrating Ultraflow Smart Switch has been designed to switch the pressure controlled submersible Ultraflow Maxi Pump fitted in caravans, motor homes and other vehicles.

part no.: 46120-51



## Installation instructions

### Tools and accessories

The following tools and accessories may be required:

- Bore crown with a 60 mm diameter
- Drill with a 2 mm diameter drill bit
- Pozidrive screwdriver
- Panel pins 20 mm long
- Timber (with the thickness of the caravan wall. This will be needed to line the hole).

### Selecting the position

Choose a flat vertical wall without interference of trim etc. if possible.

With the shortest possible route to the plumbing system without crossing doorways.

The pipe work should be concealed in cupboards or under bed-lockers etc., but should **not** be run under the floor of the caravan.

The accessibility of existing electrical and water connections should be taken into consideration.

Structural sections within the wall of the caravan should be avoided for safety reasons.

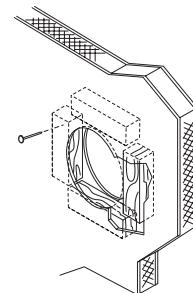
### Cutting the hole

After selecting the position, drill a hole of 60 mm diameter.

### Lining the hole

It is suggested that the hole should be lined with timber as this makes the installation of the Ultraflow Compact Housing secure.

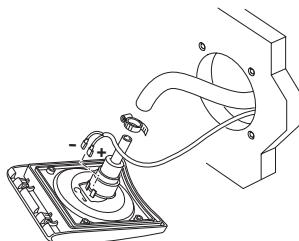
Before fitting the timber lining the insulation around the hole should be removed to the depth of the timber lining. The finished hole should have a diameter of 60 mm.



Using a non hardening mastic (do not use silicone) seal the lining to the inner and outer walls then secure the timber lining in place with panel pins. Then remove any excess sealant from around the hole. It is important to check that all the edges are sealed to prevent water entering the walls.

## Fixing the Ultraflow Compact Housing

It is easier to bring the water hose and electric cable through the cut hole and make any connection before fitting the Ultraflow Compact Housing to the caravan wall.



## Water connections

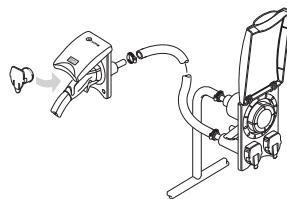
The Ultraflow Compact Housing is designed for connection to 12 mm diameter bore flexible hoses or 12 mm diameter semi-rigid piping (e.g. John Guest fittings). Flexible hoses must be secured with suitable hose clips.



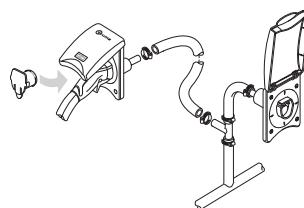
Food quality hose must be used to avoid the risk of unpleasant tastes in the water.

## Water connections Winter Kit

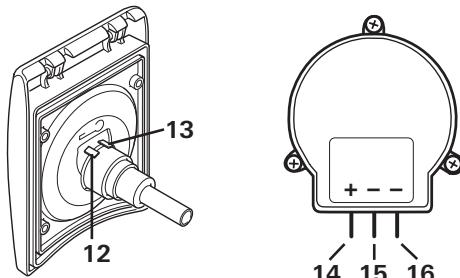
When using the winter conversion kit with a Ultraflow Filter Housing, the connection must be made as shown below. Before connecting the blanked off end on the Filter Housing must be cut off.



For the use of the winter conversion kit with a Compact Housing, the connection must be made as shown below.



## Electrical connection



### Ultraflow Compact Housing

- 12 Pump + = 4.8 mm spade connector
- 13 Pump - = 6.3 mm spade connector

### Ultraflow Smart Switch

- 14 Battery + = 6.3 mm spade connector
- 15 Pump - = 6.3 mm spade connector
- 16 Battery - = 6.3 mm spade connector



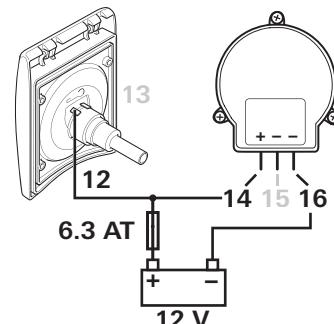
The power supply must be rated with 6.3 AT (slow).

Power packs and power supply units must have a stabilised 12 V-output (ripple content less than 0.5 V). The use of an unfiltered power supply will cause an increased wear of the pump motor.

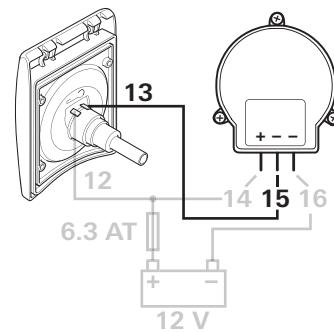
Ensure that the polarity is correct i.e. brown or red wire to „+“ and blue or black to „-“. The polarity is marked on the rear of the Ultraflow Compact Housing and on top of the Ultraflow Smart Switch.

The CSA (Cross Sectional Area) of the wire should be 0.75 mm<sup>2</sup>.

Connect the Truma Smart Switch (14,16) and the Ultraflow Compact Housing (12) to the filtered caravan 12 V supply (max. 0.5 V AC).



The Ultraflow Compact Housing (13) connects directly to the Truma Smart Switch (15).



For the winter use, both housings must be connected directly to the Truma Smart Switch.



### Important notes:

The use of isolated cable terminals is mandatory to avoid the risk of short circuits. For the same reason push the cable shoe connections/terminals completely over the connector.

If the polarity is reversed the pump will still operate but with a reduced performance.

In case of unintended reverse polarity the switch will probably not work correctly but due to the integrated protection it will not be destroyed.

The pump may be operated via switched taps or a pressure switch, a non-return valve is fitted as part of the Ultraflow Compact Housing.

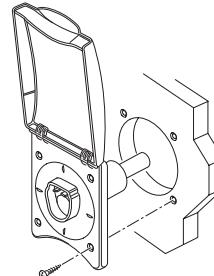
If a pressure switch is to be used, then an electrical isolation main switch must be used in conjunction with it. The main switch should be positioned so that it is convenient for the user to operate.

See also the installation instructions supplied with the Truma Smart Switch.

### Fixing to the caravan wall

After ensuring that both the electric and water connections are satisfactory offer the Ultraflow Compact Housing into its position. Using the 4 flange holes as a guide, drill through the outer wall only with a 2 mm dia drill bit.

Apply a non hardening mastic sealant to the back flange of the Ultraflow Compact Housing and using the 4 countersunk head screws secure the Ultraflow Compact Housing into position.



Finally remove any excess sealant from the coachwork.

### Checking the installation

**!** Before checking the installation, ensure that the rest of the water system is connected and that all the joints are secure.

Clean the water socket and plug of the pump assembly (as both components will be dry and new it is suggested that a smear of vegetable oil on both surfaces will aid fitting). Push the two components fully together.

Place the pump into the water container and ensure that it is totally submerged. Check that the electric supply is connected and working satisfactory. Operate the system, and check that the water is flowing from all taps and that the system is free from leaks.



Always notify the Truma Service Centre or one of our authorised service partners if problems are encountered (see Truma Service book or [www.truma.com](http://www.truma.com)).

Having the equipment model and the serial number ready (see type plate) will speed up processing.

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