

Truma-Ultrastore liquid gas storage water heater with additional electric heating 230 V

Operating instructions

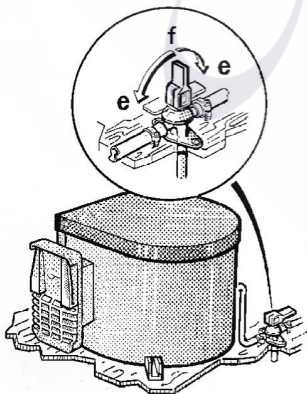
Always observe the operating instructions prior to starting! The vehicle owner is responsible for the correct operation of the appliance.

The installer or vehicle owner must apply the yellow sticker with the warning information, which is enclosed with the appliance, to a place in the vehicle where it is clearly visible to all users (e.g. on the wardrobe door)! Ask Truma to send you stickers, if necessary.

Attention: Before using for the first time, it is essential to flush the entire water supply through with clean warm water. Always mount the cowl cap when the water heater is not being operated! Drain the water heater if there is a risk of frost! **There shall be no claims under guarantee for damaged caused by frost!**

When connecting to a central water supply (rural or city connection) or when using more powerful pumps, a pressure reducer must be used which prevents pressures of greater than 2.8 bar occurring in the Ultrastore.

Safety/drain valve



e = Lever position
„Closed“
f = Lever position
„Drain“

Filling the Truma- Ultrastore with water

1. Check that the safety/ drain valve in the cold water intake is closed: Lever should be in horizontal position, position (e).

2. Open hot tap in bathroom or kitchen, with pre-selecting mixing taps or single-lever fittings set to „hot“.

3. Switch on power for water pump (main switch or pump switch).

Leave the tap open to let air escape while the water heater is filling. The heater is filled when water flows out of the tap.

Residues of frozen water can prevent filling if there is a frost. The water heater can be defrosted by switching on the heater for a short period (max. 2 minutes). Frozen pipes can be defrosted by heating the room.

Note: If just the cold water system is being used, without water heater, the heater tank is also filled up with water. In order to avoid damage through frost, the water contents must be drained by actuating the safety/ drain valve, also when the heater has not been used. As an alternative, two shut-off valves, resistant to hot water, can be fitted in front of the cold and hot water connection.

Draining the water heater

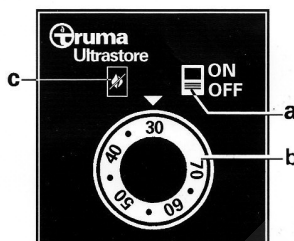
1. Disconnect power for water pump (main switch or pump switch).

2. Open hot water taps in bathroom and kitchen.

3. Open safety/drain valve: Lever in vertical position, position (f).

4. The water heater is now drained directly to the outside via the safety/drain valve. Check that the water contents have been completely drained (10 litres).

Control panel (Gas operation)



a = Slide switch „On/Off“
„Gas operation“
b = Rotary knob for water temperature
(illuminated by green lamp „Operation“)
c = Red indicator lamp
„Failure“

Gas operating instructions

Attention: Never operate the water heater without water in it!

If the wall cowl is positioned close to an opening window (or hatch) - in particular directly under it - it must remain closed when the water heater is in use (see warning plate).

1. Remove cowl cover.
2. Open gas cylinder and open quick-acting valve in the gas supply line.
3. Select required water temperature at rotary knob (b) infinitely variable from approx. 30° to 70°C.

4. Switch on water heater at the slide switch (a) on the control panel, green indicator lamp „Operation“ lights up.

5. If there is air in the gas supply line, it may take up to a minute before the gas is available for combustion. If the appliance switches to „Failure“ during this period, switch off the appliance - wait 5 minutes - and switch on again!

Switching off (gas operation)

Switch off the water heater at the slide switch (a).

Drain the water heater if there is a risk of frost!

If the water heater is not to be used for a longer period, mount cowl cover (non-observance of this point can lead to the function of the appliance being impaired through water, dirt or insects), close quick-acting valve in the gas supply line and close the gas cylinder.

There shall be no claim under guarantee if this point is not observed.

Always remove the cowl cover prior to operating the water heater!

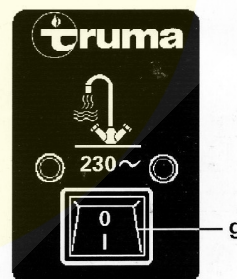
Red indicator lamp „Failure“

The red indicator lamp (c) lights up if there is a failure.

The reason for such an indication is, for example, no gas available or air in the gas supply system, triggering of the excess temperature monitor etc. To unlock, switch off the appliance, wait 5 minutes, and switch on again.

In event of faults, always contact the Truma Service (please refer to the last page)

Truma control panel (Electrical operation 230 V, 450 W)



g = Switch, „On/Off“

When using the vehicle switches

Refer to operating instructions of the vehicle manufacturer or see switch labels.

Electrical operating instructions

Attention: Never operate the water heater without water in it!

Switch on at the control panel (g). The indicator lamp indicates that the electrical water heating is switched on.

Attention: The water temperature cannot be selected, automatic temperature limitation at approx. 70°C! For a faster heating up period the appliance can be simultaneously operated with gas **and** electrical power.

Note: The electrical heating element is fitted with an excess temperature cut-out. In the event of a fault, switch off at the control panel, wait 5 minutes, then switch on again.

Maintenance

Note: The water tank in the Truma-Ultrastore is made of high quality food-proof stainless steel VA.

Use wine vinegar for de-scaling the water heater, this being introduced into the appliance via the water supply. Allow the product to react and then thoroughly flush out the appliance with plenty of fresh water. To sterilise the water we recommend „Certisil-Armento“. Other products, particularly those containing chlorine are unsuitable.

In order to avoid the proliferation of micro-organisms, heat the Ultrastore to 70°C at regular intervals.

Do not use the water as drinking water!

Fuses

The water heater fuse is on the electronic control unit on the water heater.

Important note: Only replace the miniature Fuse on the p.c.b. with a fuse of the same type: 1.6 AT EN 60127-2-3 (slow action).

If there is a defect in the electronics, return the control p.c.b. well padded. If you fail to pack it correctly the guarantee shall no longer be valid.

Only use original Truma-Ultrastore control p.c.b.'s as spare parts!

General safety notes

In event of leaks in the gas system or if there is a smell of gas:

- extinguish all naked flames!
- do not smoke!
- switch off the appliances!
- close gas cylinder!
- open the windows!
- do not operate any electrical switches!
- have the entire system checked by an expert!



Repair jobs are only to be carried out by an expert.

1. Any alteration to the appliance (including cowl) or the use of spare parts and accessories which are important for the functioning of the heater and which are not original Truma parts, as well as the non-observance of the installation and operating instructions, shall lead to the cancelling of the guarantee and exclusion of liability claims. It also becomes illegal to use the appliance, and in some countries this even makes it illegal to use the vehicle.

2. The operating pressure for the gas supply is 30 mbar (or 28 mbar butane/37 mbar propane) and must correspond to the operating pressure of the appliance (see data plate).

3. In Germany only LPG systems must comply with the DVGW form G 607.

The gas system must be tested every 2 years by a liquid gas expert (DVFG, TÜV, DEKRA). This inspection must be confirmed on the test certificate in accordance with the DVGW-form G 607.

The vehicle owner is always responsible for arranging the inspection.

4. In other countries, the respectively valid regulations must be observed. For your own safety it is absolutely necessary to have the complete gas installation regularly checked by an expert (at least every 2 years).

5. Do not operate the water heater when refuelling the vehicle and when in the garage.

6. During the initial operation of a brand new appliance (or after it has not been used for some time), a slight amount of fumes and a slight smell may be noticed for a short

while. Remedial action here is to immediately run the heater and to ensure adequate room ventilation.

7. Items sensitive to heat (e.g. spray cans) must not be stored in the installation area, since excess temperatures may under certain circumstances be incurred there.

8. If the burner makes an unusual noise or if the flame lifts off, it is likely that the regulator is faulty and it is essential to have it checked.

9. For the gas system, only gas pressure regulators with protection against excess pressure, such as regulators with safety valves according to DIN 4811 and VP 306, may be used. We recommend the Truma DUB vehicle regulator or in the case of a two cylinder gas installation that is only accessible from the outside, the Truma Triomatic automatic reserve switch-over. The Truma regulators have been specially designed for heavy duty use in caravans, boats and vehicles. In addition to a safety valve for countering excess pressure, they also have a pressure gauge with which you can check that the installation is fully gas tight.

Always connect the pressure regulators to the gas cylinders by hand, using great care! For temperatures around 0°C and below, the regulators should be operated with a defroster system (Eis-Ex). Inspect regulator connection hoses regularly for signs of weakness. For winter operation only use special frost-resistant hoses. Gas cylinders must always stand upright!

Technical data

Water contents: 10 litres

Water pressure: up to max. 2.8 bar

Type of gas:

Liquid gas (propane/butane)

Operating pressure:

30 mbar (or 28 mbar butane/37 mbar propane)

Rated thermal output: 1500 W

Gas consumption: 120 g/h

Heating time

up to approx. 70°C

Gas operation: approx. 35 min.

electrical operation:

approx. 70 min.

Gas and electrical operation:

approx. 20 min.

Power consumption 12 V

Ignition: 0.17 A

Heating up: 0.08 A

Standby: 0.04 A

Power consumption 230 V

Heating up: (2 A) 450 W

Weight (empty):

approx.: 6.7 kg

Declaration of conformity:

The Truma-Ultrastore model has been tested and approved through the DVGW and fulfils the EC gas appliance guidelines (90/396/EEC) as well as the associated EC guidelines. The CE product number is available for EU countries: **CE-0085AP0038**

Installation instructions

 Please fold out page with diagrams!

Installation and repair are only to be carried out by an expert. Always read and follow the operating instructions carefully prior to starting any work!

Intended use

This appliance has been designed for the installation in caravans, mobile homes and other vehicles. It is not approved for installation in boats. Other forms of use are also possible following consultation with Truma.

Information regarding boats: For installation in boats Truma supplies the DVGW-tested boat water heater.

Approval

Declaration of conformity: The Truma water heater model has been tested and approved through the DVGW and fulfils the EC gas appliance guidelines (90/396/EEC) as well as the associated EC guidelines. The CE Ident. Number is available for EU countries: **CE-0085AP0038**

Regulations

Any alteration to the appliance (including cowl) or the use of spare parts and accessories which are important for the functioning of the heater and which are not original Truma parts, as well as the non-observance of the installation and operating instructions, shall lead to the cancelling of the guarantee and exclusion of liability claims. It also becomes illegal to use the appliance, and in some countries this even makes it illegal to use the vehicle.

The operating pressure for the gas supply is 30 mbar (or 28 mbar butane/ 37 mbar propane) and must correspond to the operating pressure of the appliance (see name plate).

When installing the appliance always observe the technical and administrative rules and regulations of the country in which the vehicle is to be registered, for the first time!

In Germany, for example, gas appliances, cylinder mounting, duct routing as well as the approval and leak test must comply with the DVGW form G 607 for liquid gas systems in vehicles.

Ask for more details concerning regulations in the respective countries from our agencies abroad (see last page).

1 Choice of location

1. Always install the appliance in such a way that it is easily accessible for service work at all times and can be easily removed and installed.

2. Locate the heater in such a way that the cowl can be mounted on the outside on a surface which is as straight and smooth as possible.

This outside surface must be exposed to wind from all directions and, if possible, there should be no trim strips or covers in this area, mount heater on an appropriate base, if necessary.

The cowl must be placed in such a way that the exhaust gas cannot find its way into the vehicle interior. For this reason, choose a location where there are no opening windows, skylights or ventilation openings directly above the cowl or for 30 cm on either side. If this is not possible, a warning plate must be placed on the inside of the window (or skylight) stating that it must be kept closed while the heater is operating. In this case refrigerator ventilations must be tight-sealed from the interior of the vehicle.

2 Installation of the water heater

1. Position template for cowl opening on the inside of the wall.

A = bottom edge of heater
B = lateral edge of heater

Drill 4 holes (C) with 10 mm dia. through the wall. Drill hole (E) with 15 mm dia. for condensation pipe (also possible from the outside = F).

2. Position template on the outside of the wall. The markings (C) must be above the through-holes. Saw cut-out section for cowl (D) 92 x 168 mm.

If the distance between outside wall and heater is more

than 35 mm you must use the cowl extension VBO 2 (Art. no. 70131-00) with an additional length of 50 mm. Saw out 100 x 176 mm along the dashed line.

If there are any cavities in the area of the cowl (**Fig. A: 1**), pack these with pieces of wood so as to be able to tighten the screws.

Cut out trim strips or such on the vehicle or place supports beneath them so as to make the cowl lie flat.

Place a support beneath the heater if the walls are sloping. An angle of inclination of 10 degrees is not to be exceeded.

3. Fig. A: Insert heater with cowl body (3) through the cowl opening (1), allow approx. 5 mm to project out of the wall. Mount sealing frame (4) (the anti-torsion device ensures correct fitting!). Pre-drill holes for the 6 fastening bolts (5).

4. Remove sealing frame (4) and coat with plastic sealant on the side facing the vehicle - do not use silicone!

Attention: The sealing frame must be well sealed with respect to the front sides and the cross bars of the cowl body (3) as well as towards the outside wall!

5. Fasten sealing frame (4) to the cowl body using 4 self-cutting screws (7).

6. Seal the gap between the hole (2) and the condensation tube (10) with plastic sealant - do not use silicone!

7. Mount the grille (8). Press the entire cowl assembly on to the vehicle wall and fasten with 6 screws (5).

8. Screw the boiler securely to the floor of the vehicle with at least two shackle plates (11) with the screws provided, B 5.5 x 25, on a suitable base (plywood panel, laminated wood strips, or metal base).

3 Water connection

All pressure and submergible pumps up to 2.8 bar are used for operating the water heater and all mixed combination sets with or without an electrical switch.

Fig. B: When using immersion pumps, a non-return valve (12 - not included in the scope of supply) must be fit-

ted between the pump and the first branch point (arrow points in direction of flow).

Fig. C: When using pressure pumps with high switching hysteresis, hot water may flow back through the cold water tap. To prevent the backflow, we recommend that a non-return valve (6 - not included in the scope of supply) be fitted between the outlet to the cold water tap and the drain valve.

Pressure and hot water-resistant hoses (e.g. Truma boiler hose SBH, food-safe, pressure resistant up to 3.5 bar) with an internal diameter of 10 mm should be used for the boiler and the safety/drain valve connections.

For fixed pipe routing (e.g. John Guest System) Truma can provide the water connectors (15 + 16), the safety/drain valve (13) and a non-return valve (12 + 6) with a straight 10 mm diameter tap connector as special accessories.

If connecting to a central water supply (rural or city connection) or when using more powerful pumps, a pressure reducer must be used which prevents pressures of greater than 2.8 bar occurring in the boiler.

Attention: Route the water hoses so that they are as short and free of kinks as possible. All hose connections must be secured using hose clamps (also for cold water)! Pressures of up to 3.5 bar can occur in the safety/drain valve (also in submergible pumps) because of the heat of the water and the resulting expansion.

Hose clips (Art. no. 40710-00) are recommended for attaching the hoses to the wall or the floor. If gas heating has been installed, the water hoses and the hose clips can be laid on the hot air pipes, which prevents frost.

Attention: In order to guarantee that the Ultrastore is completely empty, the enclosed elbow with breather valve (figure d: 15) must be used for the hot water connection!

All hot water pipes should be routed in a descending manner to the safety/drain valve! Otherwise no guarantee of protection from frost!

Installation of the safety/drain valve

Fig. B + C: Install safety/drain valve (13) at a place which is easily accessible, near the water heater. Drill hole with 18 mm diameter and pass through discharge socket with hose (14). Fasten safety/drain valve with 2 screws. The draining is to be directly to the outside at a position protected against splash water (apply splash guard, if necessary).

Water pipe routing

1. Fig. B + C: Connect cold water supply (24) to safety/drain valve (13). Direction of flow is unimportant.

2. Fig. D: Screw elbow with integrated breather valve (15) to hot water connection pipe (upper pipe) and elbow without breather valve (16) to cold water connecting pipe (lower pipe).

Slide on nut (17), tension ring (18) and O-ring (19). Assemble screw connector and connecting pipe and fasten together using nut (17).

Slide ventilation hose with 11 mm outer diameter (20) onto the breather valve hose nozzle (21) and route towards the outside. Do not allow the radius of the arc to be less than 40 mm.

Cut off the ventilation hose approx. 20 mm below the floor of the vehicle at an angle of 45° to the direction of travel.

3. Fig. B + C: Produce hose connection (22) for cold water supply between safety/drain valve (13) and elbow (16 - lower pipe) on water heater.

4. Route the hot water pipe (23) from the elbow with integrated breather valve (15 - upper pipe) to the hot water consumers.

4 Installation of the control panels

Attention: When using control panels which are specific to the vehicle or the manufacturer, the electrical connection must be established in accordance with the Truma interface descriptions (refer to Electrical connection 230 V). Any modification made to the Truma components pertaining to this will lead to the invalidation of the guarantee, as

well as to the exclusion of any claims for liability. The installer (manufacturer) is responsible for providing instructions for use for the user as well as for identification printing on the control panels.

When selecting the location, bear in mind that the control panels must not be subjected to direct radiant heat. Length of connection cables 2.5 m.

Control panel, gas operation

If required, for the gas operation control panel a cable extension of 5 m can be supplied (Art. No. 70000-53500).

1. Pass control panel cable through the cable binder on the back of control panel. Connect cable to the control panel and tighten cable binder as strain relief.

Fasten control panel using 2 screws and route the cable to the water heater.

Note: Depending on the installation, the routing of the control panel cable can be done in the other way. This means first connect to the water heater and then route to the control panel.

Truma control panel, electrical operation

Fig. E: When selecting the place of location, always make sure that the control panel (27) is not exposed to direct heat radiation.

Drill a hole with 8 mm diameter for leading through the cable and pass the cable through the hole. Fasten control panel with the two screws and route the cable to the appliance.

5 Electrical connection 12 V

Always disconnect the appliance from the power supply prior to working on electrical components. It is not sufficient to just switch off at the control panel!

The appliance must be disconnected from the vehicle main power supply when carrying out any electric welding work on the vehicle body.

Attention: If the connections are transposed there is a risk of cable burning. This also rules out any

guarantee or liability claims.

Fig F: Unscrew cover (34) from the electronic control unit. Slide cable connector of control panel (28) onto the p.c.b.. The electrical connection is made at terminal (35) (red = positive, blue = negative), for this purpose press with a small screwdriver from above and push in cable from the front. Connect to fused vehicle mains (central electrical equipment 5 - 10 A) using a 2 x 1.5 mm² cable.

Negative cable to central earth. With lengths of over 6 m use a cable 2 x 2.5 mm². If connecting directly to the battery, the positive and negative cable must be fused. Screw cover (34) back on.

There are to be no other consumers connected to the supply line!

The water heater fuse, 1.6 A EN 60127-2-3 (slow-acting) is on the p.c.b. (36).

When using power packs, observe that the appliance is only to be operated with safety extra-low voltage according to EN 60742!

Note: For the connection of several 12 V appliances we recommend the electronically controlled Truma power pack NT (Art. no. 39900-01). The Truma power pack (6 A continuous current) is also suitable for charging lead batteries. Other charging devices are only to be used with a car battery acting as buffer. Power packs and power supply units must have a stabilised 12 V-output (ripple content less than 1 Volt).

6 Electrical connection 230 V

Attention: The electrical connection is only to be carried out by an expert (in Germany, acc. to VDE 0100, Section 721). The information given here is not intended as information for the layman, rather it is to assist the assigned expert, as additional information, when connecting the appliance!

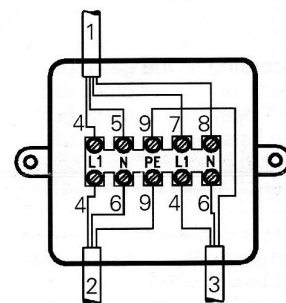
The connection to the power supply is by means of a cable 3 x 1.5 mm² (e.g. flexible sheathed cable H05VV-F) to a splitting box (not included in scope of delivery).

Always pay attention to connect carefully with the correct colours!

For maintenance and repair work a disconnecting device must be provided on the vehicle for all-pole disconnection from the power supply, with at least 3 mm contact clearance.

Connection 230 V with Truma control panel

1. Connect control panel cable, supply line 230 V and heating element cable as shown in the drawing.



- 1 = Control panel cable
- 2 = Supply line 3 x 1,5 mm²
- 3 = Heating element cable
- 4 = brown
- 5 = green
- 6 = blue
- 7 = yellow
- 8 = white
- 9 = yellow/green

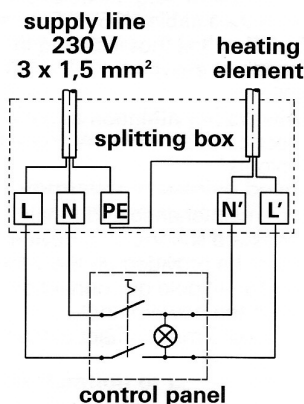
2. Assemble the splitting box (Fig. E: 37) on the vehicle floor or on the wall, in the vicinity of the appliance (observe cable length 150 cm!).

Note: All cables must be secured with cable clips.

Conection 230 V with specific vehicle or manufacturer control panels

Connect control panel cable, 230 V cable and heating element cable as shown in the drawing.

Cables must be in accordance with the technical rules and regulations of the country in which the vehicle is to be registered, for the first time (e.g. in Germany VDE 0100, section 721).



7 Gas connection

Fig. A: The 8 mm gas supply line is connected to the connection nozzle (38) with cutting ring connection. The cutting rings are to be selected according to the gas pipe used (for copper pipe: support sleeves and brass cutting ring as supplied). Carefully hold in place with a second wrench when tightening!

Before connecting to the water heater make sure that the gas lines are free from dirt, chips and such!

Route the pipes in such a way that the appliance can be removed again for servicing.

In areas frequented by people, keep the number of parting connections in the gas supply line to a technically feasible minimum.

The gas system must comply with the technical and administrative regulations of the country in which the appliance is used (in Germany, for example, the DVGW form G 607).

8 Function check

After installation, check gas supply line for leaks in accordance with the pressure drop method. Following this, check the function of the appliance as specified in the operating instructions, check the function of the draining of the water contents, in particular. **There shall be no claims under guarantee for damage caused by frost!**

Never operate the water heater without water contents. It is, however, possible to briefly check the electrical function without water contents. Always observe the operating instructions prior to operation!

The operating instructions and completed guarantee card are to be given to the owner of the vehicle.

9 Warning information

The installer or vehicle owner must apply the yellow sticker with the warning information, which is enclosed with the appliance, to a place in the vehicle where it is clearly visible to all users (e.g. on the wardrobe door)! Ask Truma to send you stickers, if necessary.

Manufacturer's terms of warranty

1. Case of warranty

The manufacturer grants a warranty for malfunctions in the appliance which are based on material or production faults. In addition to this, the statutory warranty claims against the seller remain valid.

A claim under warranty shall not pertain:

- for parts subject to wear and in cases of natural wear and tear,
- as a result of not original Truma parts being used in the appliance and as a result of unsuitable gas pressure regulators being used,
- as a consequence of failure to respect Truma instructions for installation and use,
- as a consequence of improper handling,
- as a consequence of improper transport packing, not arranged by Truma.

2. Scope of warranty

The warranty is valid for malfunctions as stated under item 1, which occur within 24 months after conclusion of the purchase agreement between the seller and the final consumer. The manufacturers will make good such defects by subsequent fulfilment, i.e. at their discretion either by repair or replacement. In the event of manufacturers providing service under warranty, the term of the warranty shall not recommence anew with regard to the repaired or replaced parts; rather, the old warranty period shall continue to run. More extensive claims, in particular claims for compensatory damages by purchasers or third parties, shall be excluded. This does not affect the rules of the product liability law.

The manufacturer shall bear the cost of employing the Truma customer service for the removal of a malfunction under warranty - in particular transportation costs, travelling expenses, job and material costs, as long as the service is carried out in Germany. Customer service carried out abroad is not covered by the warranty.

Additional costs based on complicated removal and installation conditions of the appliance (e.g. removal of furniture or parts of the vehicle body) do not come under warranty.

3. Raising the case of warranty

The address of the manufacturers is: Truma Gerätetechnik GmbH & Co. KG, Werner-von-Braun Strasse 12, D-85640 Putzbrunn. In Germany, in the event of faults, in principle the Truma Service Centre at the manufacturers' address is to be notified; abroad, respective service partners are available (refer to address list). Complaints must be specified. In addition, the correctly completed warranty certificate must be presented or the Serial number of the appliance and the date of purchase specified.

In order for the manufacturers to be able to determine whether an incident subject to guarantee has occurred, the end user must, at his own risk, bring the device to the manufacturers or send it to them. If there is damage to heaters (heat exchangers), the gas pressure regulator must also be sent back to the factory.

In instances of the device being sent to the works, dispatch is to be effected by freight transport. In cases under guarantee, the works shall bear the transport costs or the costs of delivery and return. If the damage is deemed not to be a warranty case, the manufacturer shall notify the customer and shall specify repair costs which shall not be borne by the manufacturer; in this case, the customer shall also bear the shipping costs.

Australia:

Dometic Pty Ltd.,
Victoria, Tel. (03) 95 45 56 55

Austria:

Globus Mobil Park,
Wörschach, Tel. (03682) 241 60

K. Hofer Ges.m.b.H. & Co KG,
Wien, Tel. (01) 715 11 75

Wohnwagen-Pusch,
Gmunden, Tel. (07612) 67 94 50

Belgium:

Gautzsch Gimeg N.V.,
Aalst, Tel. (053) 70 66 77

Czech Republic:

KOV, Karosárna a slévárna,
Velim, Tel. (0321) 76 35 58

Danmark:

A.C. Lemvig-Müller,
Kopenhagen, Tel. (03311) 05 32

Finland:

Kehä Caravan Tukku Oy,
Espoo, Tel. (09) 84 94 30 34

France:

Euro Accessoires,
Tournon, Tel. (04) 75 06 92 92

Germany:

Truma Gerätetechnik GmbH & Co,
Putzbrunn (Munich)
Tel. (089) 46 17-142

Great Britain:

Truma (UK) Ltd.,
Burton Upon Trent,
Tel. (01283) 55 82 01

Greece:

G. Bournas - G. Efthimiou O.E.,
Athen, Tel. (010) 346 14 14

Hungary:

Virág Trans Bt.,
Budapest, Tel. (01) 263 14 66

Iceland:

Afl-Húsbílar ehf.,
Akureyri, Tel. (0462) 79 50

Italy:

Dimatec S.p.A.,
Guanzate, Tel. (031) 352 90 61

Japan:

Carac Industry Co., Ltd.
Tokyo, Tel. (03) 39 31 02 20

Luxembourg:

Ets. Geiben s.à.r.l.,
Belvaux, Tel. 59 15 19

Netherlands:

Gautzsch Gimeg B.V.,
De Meern (Utr.), Tel. (030) 662 95 22

Norway:

Neptus A.S.,
Vollen, Tel. (6675) 99 50

Poland:

Truma Polska Sp. z o.o.,
Kraków Tel. (012) 641 02 41

Portugal:

J.C.L. Andrade, Lda.,
Feira Codex, Tel. (025) 680 10 34

Marcampo Lda.,
Lisboa, Tel. (021) 848 67 76

Russia:

Companija Poliauto,
Moskau, Tel. (095) 232 00 39

Slovakian Republic:

Tamex spol. s r.o.,
Bratislava Tel. (02) 44 45 49 20

Slovenia:

Prebil d.o.o.,
Ljubljana, Tel. (061) 542 63 70

Spain:

Stimme, S.L.,
Massalfassar (Valencia),
Tel. (0961) 40 00 58

Sweden:

Alde International Systems AB,
Färlöv, Kristianstad,
Tel. (044) 712 74

Switzerland:

Selzam AG,
Winterthur, Tel. (052) 233 25 21

Turkey:

Karyat Karavan Yat San. Tic. Ltd.,
Istanbul, Tel. (0216) 418 73 96

White Russia:

Tachograph Ltd.,
Minsk, Tel. (017) 22 66 82 02



Truma

Guarantee Card
Garantie-Karte
Bon de Garantie
Certificato di Garanzia
Garantiebon
Garantikort
Tarjeta de garantía



