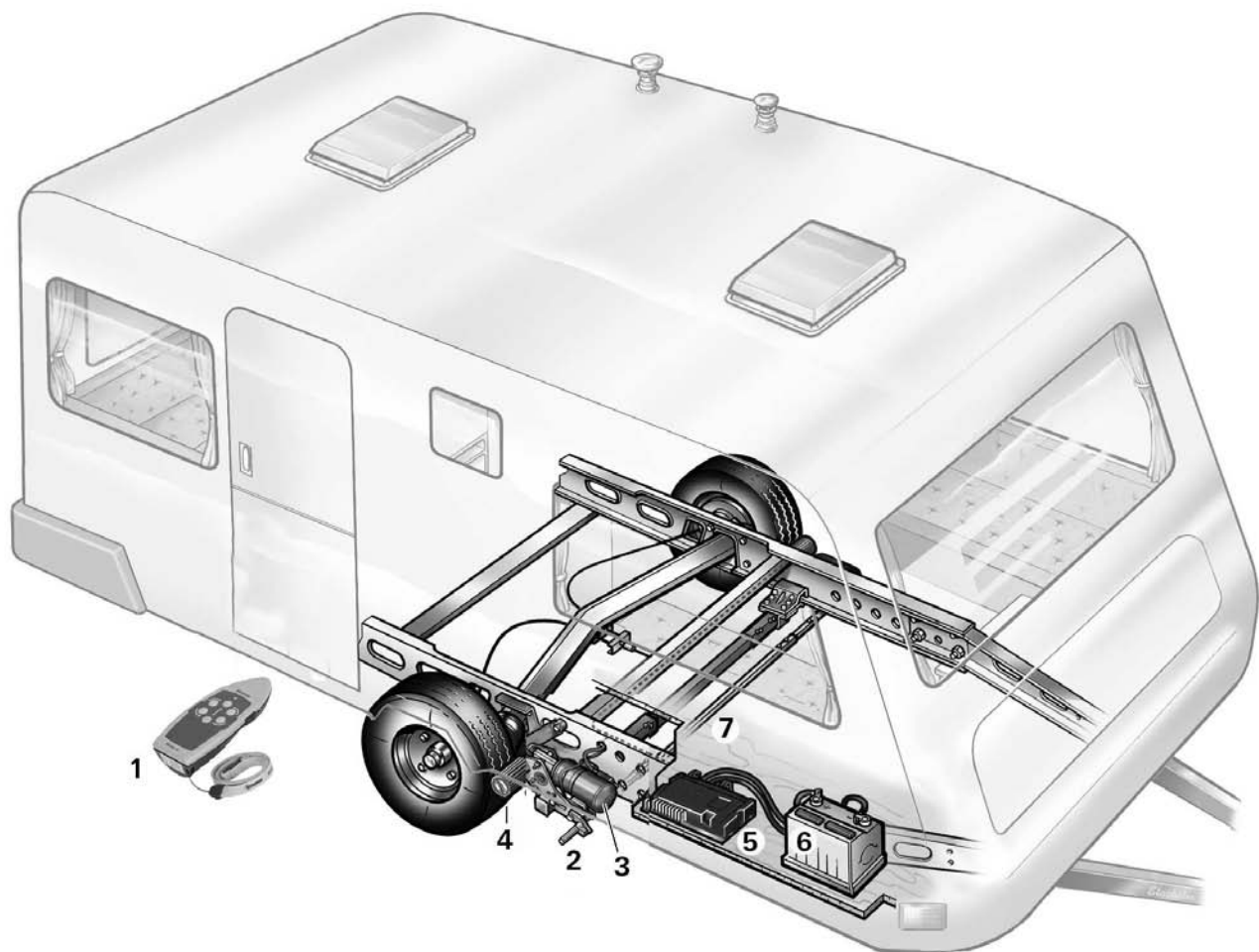


D	Gebrauchsanweisung Einbauanweisung Im Fahrzeug mitzuführen!	Seite 2 Seite 7	NL	Gebruiksaanwijzing Inbouwhandleiding Im vertuig meenemen!	Pagina 39 Pagina 43
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(D)

Einbaubeispiel

- 1 Fernbedienung
- 2 Umlenkhebel
- 3 Antriebsmotor
- 4 Antriebsrolle
- 5 Elektronische Steuerung
- 6 Batterie
- 7 Einseitenbedienung

(GB)

Installation example

- 1 Remote handset
- 2 Toggle crank
- 3 Drive motor
- 4 Drive roller
- 5 Electronic control unit
- 6 Battery
- 7 Cross actuation device

(F)

Exemple di montage

- 1 Télécommande
- 2 Levier de renvoi
- 3 Moteur d'entraînement
- 4 Rouleau d'entraînement
- 5 Commande électronique
- 6 Batterie
- 7 Maniement d'un seul côté

(I)

Esempio di montaggio

- 1 Telecomando
- 2 Leva di inversione
- 3 Motore di azionamento
- 4 Rullo di trasmissione
- 5 Centralina di comando elettronica
- 6 Batteria
- 7 Comando unilaterale

(NL)

Inbouwvoorbeeld

- 1 Afstandsbediening
- 2 Balanshefboom
- 3 Aandrijfmotor
- 4 Aandrijfrol
- 5 Elektronische besturing
- 6 Accu
- 7 Enkelzijbediening

(DK)

Monteringseksempel

- 1 Fjernbetjening
- 2 Omskifterhåndtag
- 3 Drivmotor
- 4 Rulle
- 5 Elektronisk styring
- 6 Batteri
- 7 Enkeltsidet styring

(E)

Ejemplo de montaje

- 1 Mando a distancia
- 2 Palanca inversora
- 3 Motor accionador
- 4 Rodillo impulsor
- 5 Mando electrónico
- 6 Batería
- 7 Mando unilateral

Safety instructions


- Practice operating the Mover in an open area before using for the first time. **This to fully familiarise yourself with the handset / mover operation.**
- Always check tyres and drive rollers before using the equipment; remove sharp-edged stones and the like if necessary.
- No person must be present in the caravan during operation.
- **All persons (particularly children)** must remain outside the Mover operating area.
- When operating the mover, ensure that no hairs, fingers or other body parts, clothing or any other objects carried on the body can become trapped by moving or rotating parts (e.g. drive rollers).
- The distance between the radio remote hand set and the centre of the caravan when manoeuvring **must not exceed 10 m!**
- In the event of malfunctions pull on the handbrake.
- To prevent the caravan from tipping, direct the tow hitch downhill when manoeuvring down a slope.
- After manoeuvring, always **apply the handbrake** first, **disengage the drive rollers from the tyres** and **block the wheels** (particularly on downwards-sloping surfaces). The Mover is **not suitable for use as a parking brake** for a parked caravan.
- Ensure that remote radio control is protected from unauthorised access (particularly by children!).
- Never tow the caravan with the drive rollers applied. This can cause damage to the tyres, the towing vehicle and the drive units.
- All wheels and tyres on the caravan must be of the same size and design.
- In order to ensure that the Mover operates correctly, the distance between the tyres and the disengaged drive rollers must be 20 mm. All tyres must have the same inflation pressure as per the manufacturer's instructions (check at regular intervals!). If tyres are worn or new tyres are fitted, the distance between the drive rollers and the tyres may need readjusting (see "Installation of the drive units").
- Do **not** use the Mover as a support when jacking up the caravan, since this can damage the drive unit.
- Sensitive objects such as cameras, cassette players (Walkmans) etc. must not be kept in the stowage box near the control unit or the motor cable. They can be damaged by the electromagnetic fields.
- The empty weight of the vehicle increases by the weight of the Movers, which reduces the payload of the vehicle.

General instructions

The Mover SR has been designed to cope with inclines of up to approx. 25 % bearing a gross weight of 1200 kg or 15 % bearing a gross weight of 1800 kg on a suitable surface.

Depending on the weight of the caravan, the Mover cannot overcome obstructions that are more than about 2 cm in height without assistance (please use wedges as a ramp).

Due to the nature of a radio signal, it can get corrupted by external terrain or objects. So there may be small areas around the caravan where the quality of reception reduces, hence the Mover may stop momentarily.

 When the Mover is switched off using the remote control the control unit remains in standby. In order to switch off completely the battery must be disconnected or an isolating switch installed.

Batteries

We recommend the use of so-called drive and lighting batteries. Gel batteries and round cell batteries are also suitable.

These batteries are designed for high power demands and have an extremely long service life. The maximum power consumption of the Mover on the steepest incline and carrying the maximum weight is 120 A. The correct choice of battery depends on the usage period and the scope of use (other consumers in caravan). For mover operation we recommend batteries with a capacity of approx. 60 Ah or more.

Example:

A fully charged lead-acid battery with a capacity of 60 Ah allows the Mover to be operated for approximately 30 minutes with a full load (depending on weight of caravan, battery type and terrain). On level terrain the Mover has average power consumption of approximately 20 A and therefore an operating time of approx. 3 hours.

The use of gel batteries or round cell batteries means that smaller batteries can be used.

Batteries with more capacity allow the equipment to be used for longer.

For optimum operation, we recommend the Truma Mover PowerSet.

Function description

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

Note that only single axle caravans are suitable.

The Mover is a manoeuvring system with which a caravan can be moved without the assistance of a towing vehicle.

It consists of two separate drive units, each of which has a 12 Volt DC motor. These units are attached to the frame of the vehicle near the wheels and are connected by lateral bars.

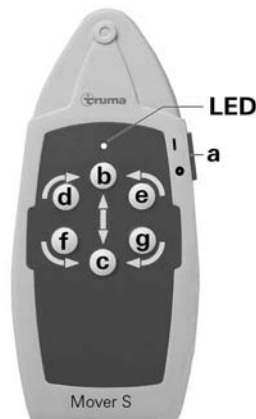
Once the drive rollers have been engaged onto the tyres using the provided lever, the Mover is ready for operation. All operation takes place using the remote hand set. This transmits radio signals to the control unit. A separate 12 V lead-acid battery or suitable lead-gel battery (not included in scope of delivery) supplies the control unit with current.

Remote Handset

a = On / Off slide switch

- On (green LED illuminates)
- Off (green LED goes off)

- b = Caravan forwards
(both wheels rotate in forwards direction)
- c = Caravan reverse
(both wheels rotate in reverse direction)
- d = Caravan right forwards
(left wheel rotates in forwards direction)
- e = Caravan left forwards
(right wheel rotates in forwards direction)
- f = Caravan right reverse
(left wheel rotates in reverse direction)
- g = Caravan left reverse
(right wheel rotates in reverse direction)



The caravan can be turned in a circle on the spot without moving forward:

- d + g = Turn caravan to the right
(left wheel rotates forwards + right wheel rotates backwards)
- e + f = Turn caravan to the left
(left wheel rotates backwards + right wheel rotates forwards)

The remote hand set automatically switches itself off after approx. 2 minutes if no button is pressed, or after 7 minutes if one of the movement buttons is permanently held down. The green LED goes off.

To reactivate the remote control, move slide switch to "Off" ● and then back to "On" ■ after approximately 1 second.

There is no "On / Off" switch on the caravan to be operated.

Remote hand set LED flash codes and acoustic signal

LED "On" and no acoustic signal

System is ready for operation

LED "Off" and no acoustic signal

System off
(check remote hand set batteries if necessary)

LED "flashes" in combination with acoustic signal:

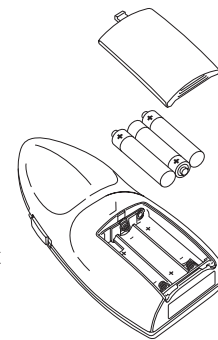
- for approx. 5 seconds after switching the remote hand set on, until the system is ready for operation.
- for approx. 10 seconds after switching the remote hand set on, then it is switched off again – unable to establish radio link to controller.
- every 3 seconds if the caravan battery has a low charge (finish manoeuvring as quickly as possible and charge battery).
- 5 times a second (5 Hz) if the caravan battery voltage is low. No manoeuvring is possible until the battery voltage is above 11 V again (e.g. by means of recovery / battery charging).
- approx. 2 times per second with overcurrent / over-temperature (2 Hz). Switch remote hand set off and on again (wait for cooling down if necessary in the event of overtemperature).

Changing the batteries in the remote handset

Please be sure to use leak proof micro-batteries only, type LR 03, AAA, AM 4, MN 2400 (1.5 V).

When fitting new batteries ensure the polarity is correct!

- ⚠ Dead and used batteries may leak and damage the remote handset! Remove the batteries if the handset is not going to be used for an extended period.



No claims under guarantee will be considered for damage caused by leaking batteries.

Before throwing away a defective handset, it is essential that the batteries are removed and disposed of in proper manner.

Manoeuvring the Caravan

- ⚠ Please read the "Safety instructions" before using the Mover!

With the caravan uncoupled (apply handbrake), engage the drive rollers to the tyres using the provided lever. Swivel the lever until it cannot be swivelled any further without using excessive force. The drive unit securely engages in the end position.

- ⚠ Before operating the Mover, release the handbrake.

Move slide switch (a) on remote hand set to the "On" ■ position – green LED flashes for 5 seconds in combination with the acoustic alarm until the control unit is ready for operation.

The six direction buttons provide movement in six directions – forward, reverse, left forward, left reverse, right forward, right reverse.

The "left forward" (e) and "right reverse" (f) or "right forward" (d) and "left reverse" (g) buttons can also be pressed simultaneously in order to turn the caravan in a circle on the spot without moving it forwards.

- i The soft start / stop facility means that the caravan starts without jerking and is gently braked when stopping.

If the buttons are released or the radio signal is interfered with or becomes too weak, the caravan stops. Your Mover cannot be activated by radio devices or other Mover remote hand sets.

After starting up, the Mover moves at a uniform speed. The speed will increase a little when going downhill and decrease a little when going uphill.

Move slide switch on remote control to the "Off" ● position to switch the remote control and the Mover off.

- i The slide switch also acts as an "Emergency stop" switch.

After manoeuvring, **first apply the handbrake** and then **disengage the drive rollers away from the tyres**.

Hitching to a tow car

It is totally possible to position the caravan's hitch to a stationary car tow ball using the Mover, but take some care.

Use the instructions above as your guide. Use the button controls to bring the caravan to the car (car handbrake "ON", and car in gear). Use a button stabbing technique to exactly position the hitch directly over the ball. Lower the hitch to the ball and engage in the normal way using the jockey wheel.

Prepare the caravan for towing as usual. **The caravan must not be towed with the drive rollers engaged.**

Maintenance

Please do not allow the drive units to become soiled with coarse road material. When you are cleaning the caravan, spray the Mover with a water hose to dissolve mud etc. Please ensure that no stones, twigs or the like become trapped in the equipment. The control unit does not require maintenance. Please keep the remote hand set in a dry place.

Every year (and / or before putting away for the winter), clean Mover as described, dry and lightly spray the drive unit guides with oil spray or a similar water-repelling lubricant. **Do not put lubricant on the rollers or the tyres!** Engage and disengage the drive units in and out several times to allow the lubricant to penetrate all the guides. Do not park the caravan with the drive rollers engaged.

To prevent the battery from becoming totally discharged during long periods of inactivity it must be disconnected and recharged before using again. Charge the caravan battery before starting up.

It is extremely easy for you or your caravan dealer to perform the checking and maintenance of your Mover during the annual inspection of your caravan. If in doubt, please contact the Truma Services (see Truma Service Booklet or www.truma.com).

Checks

- Check the installation, wiring and connections for damage at regular intervals. The drive units must be able to move freely and be returned automatically to the safe idle position by the return spring when they are disengaged. If this is not the case, examine drive units for soiling or corrosion at the guides and clean if necessary. Undo all moving parts as required and oil or spray with a lubricant such as WD40 to ensure that the equipment moves correctly and provides the full range of movement.
- After the annual inspection, check whether all motors react properly to the buttons on the remote control.
- At least every 2 years, an expert **must** check the Mover for rust, check that detachable parts are firmly attached and check that all safety-related parts are in good working order.

Trouble-shooting

Before calling customer service, please check the following:

Are the batteries in the remote handset in good condition?

Is the caravan battery in good condition and fully charged? Please note that battery performance can deteriorate rapidly at cold ambient temperatures.

Perform a reset by briefly disconnecting the battery (for approx. 10 seconds).

If the fault cannot be remedied, please contact your dealer or the Truma Service department (see Truma Service Booklet or www.truma.com).

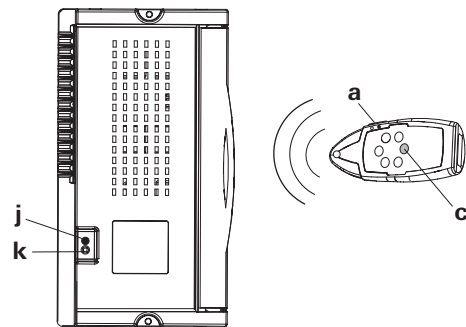
Synchronising the electronic control unit with the radio remote hand set

i The remote hand set and the control unit are synchronised with each other in the factory.

If the control unit or the remote hand set is replaced, they must be re-synchronised as described below.

Check the installation in accordance with the installation instructions and ensure that the drive rollers are **not** applied. Check that the battery is properly connected, check the condition of the battery and that a voltage of 12 V is present at the control unit.

Press the reset button (k) on the control unit and hold down (red LED – j – flashes slowly), and after approx. 5 seconds the LED (j) starts to flash rapidly. Then release the reset button and press and hold down the caravan reverse button on the remote hand set (c) within 10 seconds, simultaneously switching on the remote hand set using the slide switch (a).



The remote hand set and the control unit are synchronised to each other. After successful synchronisation, the red LED flashes rapidly.

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 using parts that are not original Truma parts in the units,
- as a consequence of failure to respect the manufacturers instructions for installation and use
- as a consequence of improper handling
- as a consequence of improper transport packing.

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 re commence 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 by an authorised Truma Dealer.

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.

Rollers carry 24 months warranty against manufacturing defects. Take care to remove sharp stones from your tyres prior to using your Mover.

3. Raising the case of warranty

The manufacturer's address is:
Truma Gerätetechnik GmbH & Co. KG,
Wernher-von-Braun-Straße 12,
85640 Putzbrunn.

In Germany, always notify the Truma Service Centre if problems are encountered; in other countries the relevant service partners should be contacted (see Truma Service Booklet or www.truma.com). 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 to allow the manufacturer to check whether it is a warranty case, the end consumer must take or send the device to the manufacturer at his own risk.

In instances of the device being sent to the works, dispatch is to be effected by freight transport. In cases under warranty, 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.

Conformity Declaration

1. Manufacturer master data

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

2. Equipment identification

Model / Version :

Mover S, Mover SE, Mover TE, Mover H SE, Mover H TE, Mover SR, Mover SE R, Mover TE R manoeuvring aid

3. Complies with the requirements of the following EC directives

- 3.1 R&TTE directive (1999/5/EC)
- 3.2 Low voltage directive (73/23/EEC)
- 3.3 EMC directive (89/336/EEC, 2004/108/EC)
- 3.4 Interference suppression in motor vehicles (72/245/EEC, 2006/28/EC)
- 3.5 Machinery Directive 2006/42/EC

and bears the type approval number e1 03 4473 and the CE symbol.

Mover S:
class 1, optional frequency 434 MHz or 868 MHz.

Mover SE / Mover TE / Mover H SE / Mover H TE / Mover SR / Mover SE R / Mover TE R:
Class 1, frequency 868 MHz.

Countries:

AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MT, NL, NO, PL, PT, RO, SE, SI, SK.

4. Basis of proof of conformity

EN300220-2:2006, EN300220-1:2006 (R&TTE art. 3.2), EN301489-1:2005, EN301489-3:2002 (EMC art. 3.1b), EN61000-4-2:2001, EN61000-4-3:2006, EN61000-4-6:2001, EN55022:2003 (Class B), ISO 7637-2:2004, EN60950:2001, 2006/28/EC, 2006/42/EC

5. Monitoring body

Federal Office for Motor Traffic

6. Information concerning position of undersigned



Signature: Dr. Schmolle
Executive Manager, Technology

Putzbrunn, 15.12.2008

Installation instructions

Read the installation instructions prior to starting work and follow them carefully!

Please ensure that no metal chips or other contaminants get into the controller during installation.

Intended use

The **Mover SR** has been built for use with single-axis caravans with a gross weight of up to 1800 kg.

The Mover SR weighs approx. 34 kg with the cross actuation device attached.

Check the towing load of your vehicle and the gross weight of your caravan in order to establish whether they are designed for the additional weight.

Approval

The Truma Mover SR has design approval, and a general operating permit (ABE) has been issued for Germany. Acceptance by a vehicle expert is not required (except when installing the low chassis kit). The ABE must be kept in the vehicle.

The Mover SR complies with the vehicle engine interference suppression directive 72/245/EEC with supplements 2004/104/EC, 2005/83/EC and 2006/28/EC and bears type approval number: e1 03 4473

The Mover SR complies with EMC directive 89/336/EEC (2004/108/EC) and low voltage directive 73/23/EEC.

The remote hand set and the receiver comply with the requirements of the R&TTE directive 1999/5/EC.

The Mover SR satisfies the Machinery Directive 2006/42/EC.

The technical and administrative regulations of the country in which the vehicle is initially registered must be complied with when the Mover is being installed.

Any modifications to the unit, or the use of spare parts and accessories that are important to the operation of the system that are not original Truma parts and failure to follow the installation and operating instructions will cancel the warranty and indemnify Truma from any liability claims. In addition to this, the operational approval for the device will be cancelled.

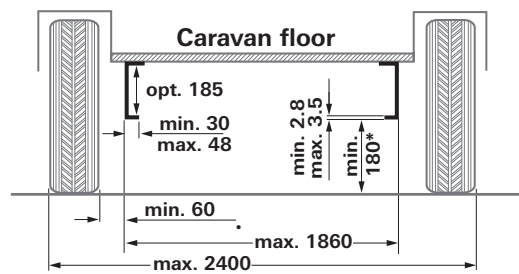
Tools and facilities required

To install the unit you will need:

- 13 mm, 17 mm, 10 mm socket wrench, ring spanner or open-jawed spanner
- Torque wrench (10 – 40 Nm)
- Cable cutter / Crimping tool
- Power drill / screwdrivers / 25 mm hole cutter
- Portable 2 tonne trolley jack and axle stands to suit
- Appropriate lighting

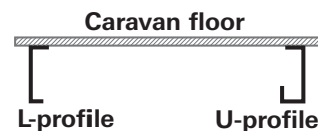
Minimum installation dimensions

The equipment can only be fitted to caravans / trailers within the following dimensions.



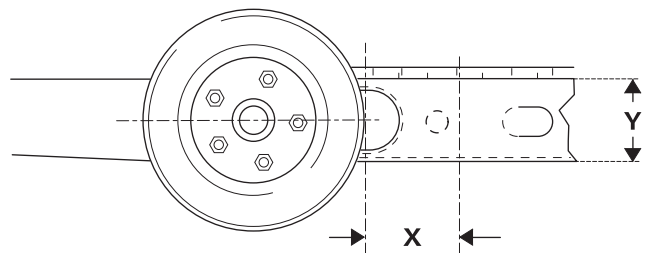
all dimensions in mm
* with fully loaded vehicle

i A distinction is made between L-profiled and U-profiled chassis as shown in the illustration.



Measuring the chassis height

Frame height (Y) measured at distance of 106 mm (X) from the outer edge of the tyre at height of hub / middle of tyre.



Determining the installation type

1. Standard installation

Standard installation is used with a U-profile or L-profile chassis and a frame height (Y) of approx. 185 mm. **No special accessories** are required.

2. Installation with chassis with U-profile or L-profile and frame height of between 140 and 185 mm

With a chassis with a frame height (Y) of 140 mm to 185 mm, 1, 2 or 3 **spacer plate sets** and the **screw set** are needed to compensate for the height.

3. Installation with chassis with U-profiles or L-profiles with frame height of less than 140 mm

With a chassis with a frame height (Y) of less than 140 mm a **low chassis kit** must be fitted to compensate for the height.

⚠ In Germany, the low chassis kit installation must be accepted by a vehicle expert.

4. The **AL-KO Vario III / AV installation kit must be used** with the AL-KO Vario III / AV chassis with a frame thickness of less than 2.8 mm.

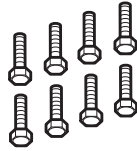
5. Installation with Eriba Touring chassis

The Eriba Touring mounting set is needed for the Eriba Touring chassis.

Special accessory installation

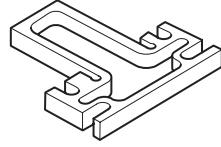
1. Set of screws

for height compensation with spacer plates, max. 45 mm
eight DIN 933 screws
M10 x 95 8.8, galvanized,
part no. 60010-70000.



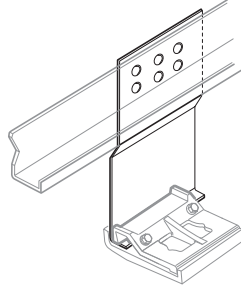
2. Spacer plate kit (two 15 mm spacer plates)

for height compensation
max. 45 mm (3 Plates) at each
side (e.g. installed behind axle)
part no. 60010-66000.



3. Low chassis kit

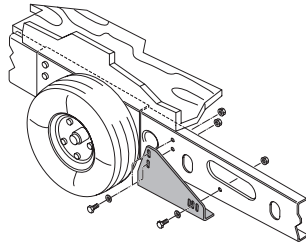
For height compensation for
caravan / trailer with frame height
of **less than 140 mm**,
part no. 60010-64900.



! In Germany, this installation
kit **must be accepted by a
vehicle expert.**

4. AL-KO Vario III / AV Installation kit

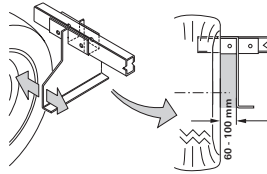
For caravans with
AL-KO Vario III / AV Chassis
(frame thickness less than
2,8 mm) **mandatory**,
part no. 60010-21500.



5. Mover mounting set for Eriba-Touring

part no. 60030-09000.

! Installation is not possible in
some cases because of
attachments to the underbody.
Contact your dealer if necessary.



i Detailed installation instructions are provided with the
relevant mounting set.

! **The Mover SR is not approved for installation on
caravans / trailers with any other chassis!**

Any drilling (exception: when using low chassis kit) or welding
to the chassis is not allowed. Under no circumstances remove
any suspension components from the chassis.

Choice of location

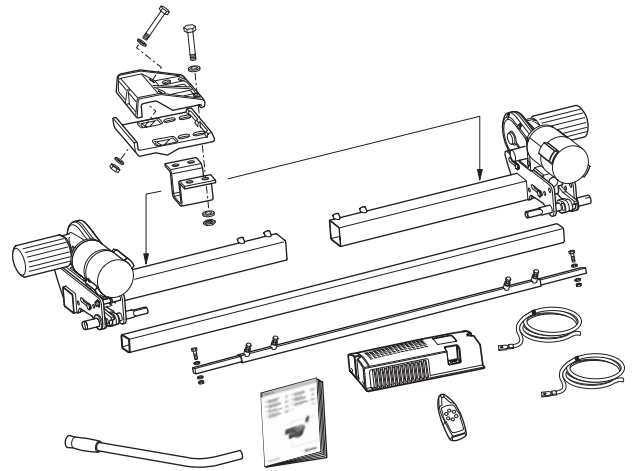
The Mover should preferably be installed in front of the axle,
but can also be installed behind the axle under special circum-
stances (e.g. lack of space). Only the bolts that are provided
must be used to secure the Mover (or the add-on parts
provided as special accessories).

Installation of the drive units

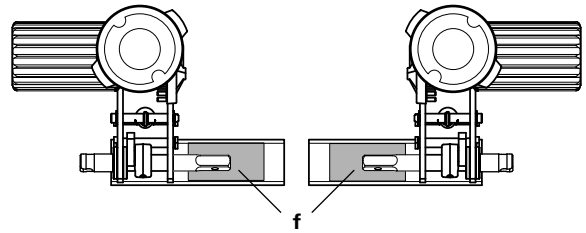
The frame of the vehicle must be kept free of rust and heavy
soiling and without any damages to the suspension components.

The wheels and tyres that are fitted to the caravan must be of
the same size and model and inflated as per the manufacturer's
instructions.

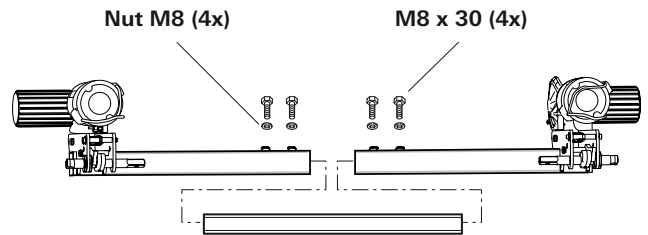
Remove all components from packing and place on the floor.



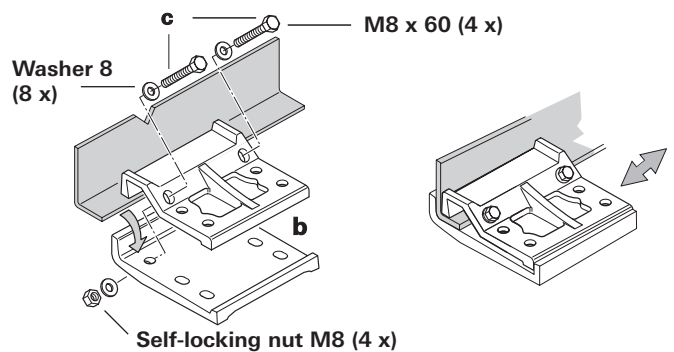
! In order to maintain the validity of the General Operating
Permit (ABE), the provided factory plates (f) must be at-
tached on the left and right sides of the cross strut next to the
drive unit retaining plates.



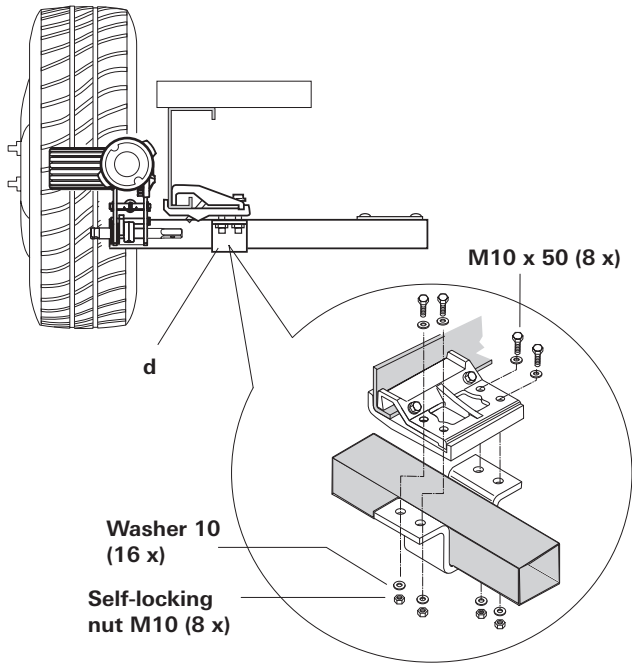
Loosely attach the drive units to the lateral bar. The bolts (lock
nuts) must be no more than finger-tight.



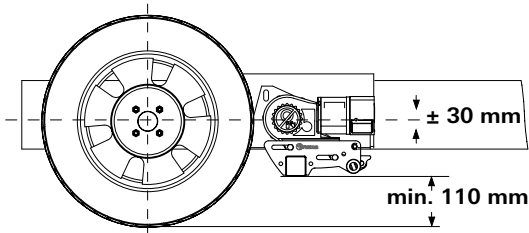
Place the mounting set (b) on the vehicle frame and secure
using the two bolts (c), tight enough so that it can just about
be moved on the frame.



Bolt drive units with lateral bar to mounting set using U-bracket (d), tight enough so that it can just about be moved.



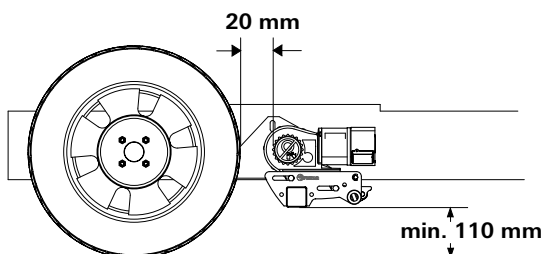
Position the drive rollers so that they are at approximately the same height as the wheel hub (middle of wheel ± 30 mm).



Truma can supply a spacer plate set for compensating for height differences of up to 45 mm (part no. 60010-66000, 2 pcs. à 15 mm). Up to three spacer plates can be used at each side. A bolt set (part no. 60010-70000) is needed to attach the spacer plates.

The low chassis mounting set (part no. 60010-64900) must be used for height differences of more than 45 mm. Check that there is adequate ground clearance (min. 110 mm).

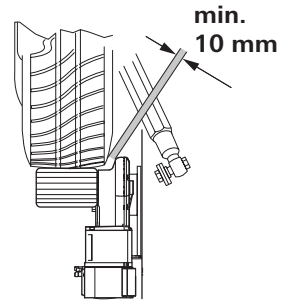
The correct distance can be set between the tyre and the roller (20 mm) with the provided spacer by sliding the (disengaged) drive units in the longitudinal direction. The movable middle tube makes it possible to adapt to the width of the frame.



Slide drive units in lateral direction so that the maximum amount of tyre tread is covered.

Ensure that there is adequate clearance between the gearbox and the tyre / shock absorber so that they do not touch.

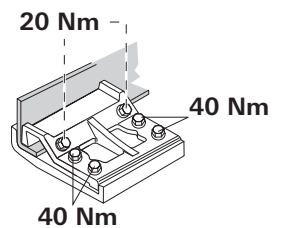
The minimum clearance with the drive units engaged in is 10 mm.



After correctly positioning the bolts and nuts of the mounting set, tighten slightly and then check the required distances / clearances again. The weight of the caravan must be on the wheels when doing this.

Move sliding middle tube to a central position (e.g. measure at open side of middle tube with a pocket rule), tighten the 4 bolts (15 – 20 Nm) and secure the locknuts.

Re-check the distance of 20 mm to the tyre (with weight on wheels) and then tighten the 2 mounting set bolts (M8) with 20 Nm and the 4 mounting set bolts (M10) with 40 Nm.



The bolt tightening order must be strictly adhered to for correct installation.

Re-check that **all** 6 bolts have been tightened to the correct torque!

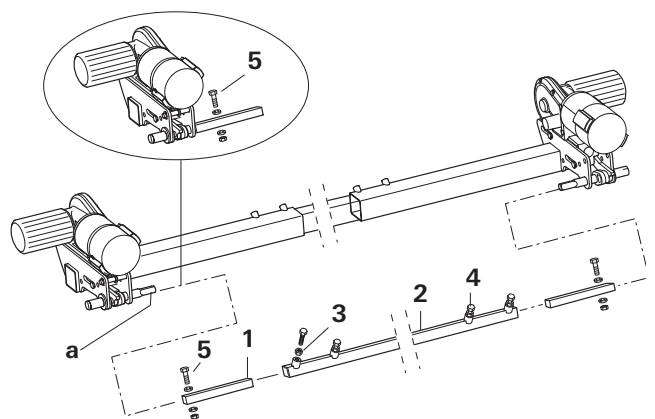
Installing the cross actuation device

Please ensure that the drive rollers are **not** resting against the tyres (at both sides)!

Slide the connecting tubes (1) into the middle tube (2) with the holes facing the outside.

Slide the connecting tubes (1) onto the deflexion bolts (a). Insert screws (5) through the deflexion bolts and tighten.

Align middle tube (2) in central position and measure if necessary. Tighten the 4 bolts (4) and M8 nuts (3) in this position (15 – 20 Nm). Then re-check all bolted connections.



Engage the rollers using the provided lever. The drive rollers must now be applied at both sides. Also check the opposite side. Disengage drive rollers again.

Repeat this procedure at the opposite side.

Installation of motor cables and control unit

The Mover is only suitable for connection to 12 V batteries (DC voltage)!

! Remove battery cable terminals and disconnect any external electrical power before starting work. If you are unsure about the electrical installation, have it checked out by a qualified Auto Electrician.

Pre-fitted, each motor has two heavy-duty cables (6 mm²). Mark the respective motor connecting cables (motor A or B – see also wiring diagram) and temporarily route to the intended control unit installation position on the underbody of the caravan. An example of a suitable location for the control unit is in a bed storage box in close proximity to the manoeuvring system, **at least 40 cm away from the battery**.

Insert control unit into storage box and secure with the supplied chipboard screws (5 x 16).

Drill a 25 Ø hole on the floor of the caravan for leading the cables through, approx. 150 mm from the control unit terminal strip.

! Take care to avoid any chassis members, gas pipes and electrical wires!

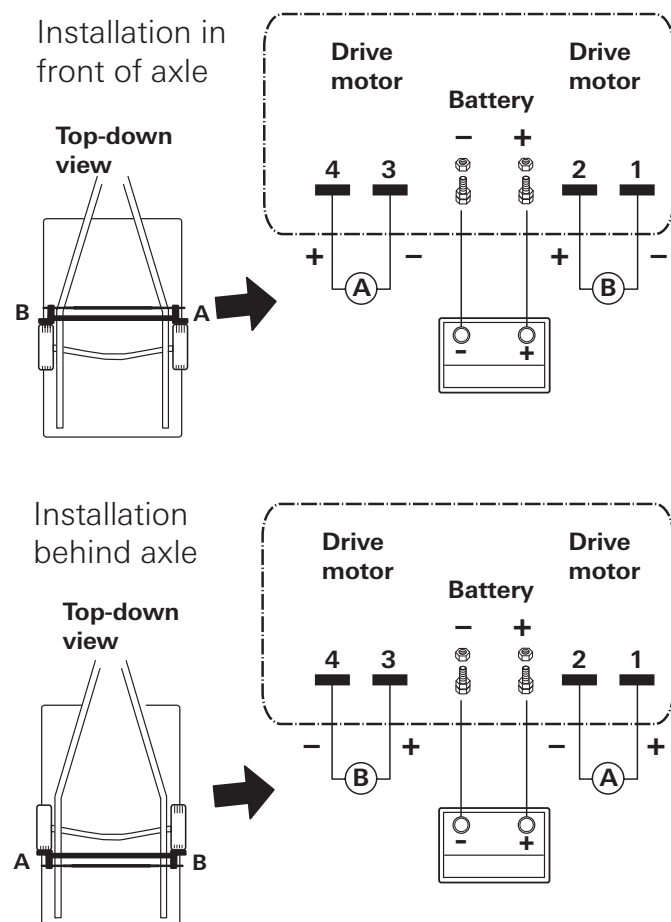
Drill hole and lead cables through floor of caravan to control unit in such a way that they cannot chafe (particularly when leading through metal panels). This can be done using protective tubes, which will prevent the cables from being damaged.

i **The drive motors move during operation.** To compensate for this, the **cables** should be secured **loosely** with a little play in this area in order to prevent cable stretching. **No** cables must be routed over the control unit!

Secure cables to chassis and/or underbody using the supplied clips and screws.

Seal hole in vehicle underbody using plastic body sealant.

Connecting diagram



Connecting the drive motors

Cut motor cable of drive motor that is furthest away from control unit to length. Shorten the motor cable of the nearest drive motor to **the same length**. The two drive motor cables must be of the same length to ensure that the drive output of the Mover is uniform! Excess cable must be routed in wavy lines without looping.

Crimp the provided flat plugs onto the drive motor cables. Release flap at control unit terminal strip by pressing and connect cables as shown in wiring diagram (**red = positive, black = negative**). Please ensure that the connections are made properly!

Connecting the battery

Route battery connecting cables (only use the original Truma cables included in the delivery) to control unit and securely attach using the provided clips and screws.

i The battery connecting cables must not be extended. They must be routed separately from the motor cables, and must **not** run over the control unit.

Route battery connecting cables so that they do not chafe (particularly at leadthroughs through metal panels). Use suitable leadthrough grommets for protection in order to prevent damage to cables. Connect battery connecting cables to the existing battery terminals (**red = positive, black = negative**).

The connection to the control unit (as per the connecting diagram) must take place in the order – nut, battery connection ring, nut (torque 10 Nm ± 1).

Commissioning the Mover

Ensure the battery used to operate the Mover is fully charged.

Park the caravan outside on an open, level surface and apply the handbrake. Ensure that the rollers are disengaged from the road tyres and the corner steadies are raised.

Connect battery terminals to battery, check that all cables are secure and not hot or indicating signs of short circuits, etc.

Move slide switch on remote hand set to the "On" **I** position. This switches the remote hand set on – green LED flashes for 5 seconds in combination with the acoustic alarm until the control unit is ready for operation. If LED does not illuminate, check polarity and condition of batteries in remote hand set. The remote hand set switches itself off after about 2 minutes if no buttons are pressed.

Check whether both drive motors are stationary. With the remote hand set switched on, and no more than 2 m away from the control unit, press the "Forwards" button. Both drive motors must now move in the forwards direction.

Move slide switch on remote control to the "Off" **o** position to switch the remote control and therefore the Mover off.

Move drive rollers against the tyres using the provided lever. Turn the lever until it mechanically engages and cannot be turned any further without using excessive force (end position approximately horizontal).

Ensure that there are no obstacles around the caravan, release the handbrake and switch the remote control on. Now check all functions several times according to the operating instructions.

Apply caravan handbrake. To switch the remote hand set and the Mover off, move slide switch on remote hand set to the "Off" **o** position. Release drive rollers using the lever and re-check distance between roller and tyre. Adjust if necessary.

i The distance between the disengaged drive rollers and the tyres is 20 mm.

Warning information

The yellow sticker with the warning information, which is enclosed with the appliance, must be affixed by the installer or vehicle owner 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 a sticker, if necessary.

Technical data

Designation	Mover SR
Area of operation	Single axle caravans with a total weight up to 1800 kg
Operational voltage	12 V DC
Current consumption	Average approx. 20 A Maximum 120 A
Stand by consumption	< 20 mA
Remote hand set frequency	Class 1, 868 MHz
Speed	Approx. 16 cm per second (depending on weight and incline)
Weights	Approx. 34 kg (including cross actuation device)



Right to effect technical modifications reserved!