

3.0 TECHNICAL INFORMATION

Technical features: Always refer to the identification plate on the product.

Environmental features :

Feature	Value	Unit
Operating temperature	-10 ÷ 60	°C
Storage temperature	-20 ÷ 70	°C
Storage moisture level	90	%
Environmental operating moisture level	90	%
May be damaged by water due to condensate		
Max. storage time for board: 10 years		

4.0 MOVEMENT AND TRANSPORT

The product is dispatched in perfect operating conditions after being tested at our premises.

Packaging type:

- If individually dispatched, the product is packed in a cardboard box.
- for multiple product deliveries, the bed lifting systems will be dispatched on adequately protected pallets.

Transport shall be carried out by a specialized company.

It is necessary to inform the Manufacturer of any possible damage upon arrival of the goods and to make sure the product is perfectly preserved and intact.

Make sure the system has no evident damage and the delivery is complete and write any possible problem on the shipping document and/or invoice.

If the damage is visible, preserve the packaging so that it can be viewed by the transport Company that delivered the system. Contact the transport Company immediately for a damage refund request.

If the delivery does not match with the order, contact the Manufacturer immediately.

Any damage or inconsistency must be communicated timely.

Any possible material inserted as product protection must be disposed of based on their specific features.

Packaging parts may cut, cause injuries or become dangerous if they are not handled with care or improperly used; keep out of reach of children and people who are not in charge of handling the system.

The system was not designed, manufactured and tested to operate in environments other than vehicles, with a high chemical gaseous materials pollution level, such as chlorine, ammonia and similar materials, in environments with a high fire and explosion risk or with a high electric risk.

However, bed lifting systems shall be transported by by skilled and authorized staff.

5.0 INSTALLATION

All installation operations shall be carried out by by skilled and authorized staff.

Remove the product from packaging.

5.1 MECHANICAL INSTALLATION

Always install the bed lifting system taking into account the system maximum load. **THE BED UNIT AS A WHOLE - INCLUDING BED LIFTING SYSTEM, MATTRESS, PILLOW, BLANKETS, ETC. - MUST NOT WEIGH MORE THAN 60 KG.** Place the system under the bed frame, following the layout example shown in TAB. A - Picture A.1, taking into account the motor revolution direction indicated by an arrow on the plastic support side (TAB. B - Picture B.1). The revolution direction stands for the winding direction of the belts. As a consequence, the shafts must have the same rotation direction.

It is very important that the belts winding in one direction are mounted in a parallel way on both shafts; the same applies to the belts winding in the opposite direction (TAB. B - Picture B.2)

After mounting the bed lifting system under the bed frame, wind the belts around the shafts taking care of the motor revolution direction and pre-wind the belts at least twice (TAB. B - Picture B.3)

THE FOUR BELTS MUST BE PRE-WINDED AT LEAST TWICE AROUND THE SHAFTS IN THE BED LOWEST POSITION; THE SAME APPLIES TO ALL OF THE FOUR BELTS.

Place the four belt-fixing plates (TAB. A - Picture A.2) in a suitable position - i.e. the highest position the system will reach - making sure the belts are aligned with the runners and taking care of the minimum distance to be kept between the slider and the belt-fixing plate (TAB. A - Picture A.3) and making sure that it will bear the system maximum load. **THE BED LIFTING SYSTEM CAN BEAR A TOTAL**

MAXIMUM WEIGHT OF 400 KG. Fix the belt-fixing plates with suitable screws (we recommend 4.2x25 screws) in the four slots first, in order to adjust and correct any possible installation defect and then fix all of the remaining screws (TAB. A - Picture A.2)

Place the bed frame inside of the vehicle on four temporary supports in order to keep it parallel to the vehicle floor. The temporary supports height must be measured based on the lowest position the bed will reach.

Insert the belts into the belt-fixing plates as illustrated in TAB. A - Picture A.2, stretch them and fix the four M6 bolts by cross-screwing, insert the covers into the belt-fixing plates.

Activate the bed lifting system and lift it to the maximum height wished; then make sure the belts are perfectly aligned with the belt sliders.

Place the two stabilizer runners by inserting them bottom-up into the stabilizers mounted on one side of the bed (TAB. A - Picture A.4).

THE RUNNERS MUST BE MOUNTED ON THE LONGEST SIDE OF THE BED AND FIXED ON A SUITABLE SUPPORTING BRACKET WITH SUITABLE SCREWS SO THAT IT WILL TOLERATE OSCILLATIONS CAUSED BY THE BED LIFTING SYSTEM. Fix one screw in the middle channel of the runner (we recommend at least 3.8x20 screws) on the highest position available under the stabilizer.

Place the limit switch correctly, making sure the bed locates against it perfectly when it comes to its highest position.

For bed lifting systems where the highest position is right under the vehicle roof - or, however, when the highest position more than 1500 mm from the floor - it is necessary to mount at least 2 opposed safety belts with internal microswitch with normally closed contact. The microswitch must be connected in series with the limit switch. THERE MUST BE AT LEAST 2 OPPOSED SAFETY BELTS.

Bring the bed lifting system to its lowest position, making sure the stabilizer runners are in a perfectly vertical position and will not jam. Fix the stabilizer runners with suitable screws (we recommend at least 3.8x20 screws) in the middle channel of the runner at a max. distance of 25 cm from each other. **MAKE SURE THE SCREW HEAD DOES NOT PROTRUDE TOO MUCH, OTHERWISE IT WILL HIT AND DAMAGE THE STABILIZER. ADJUST THE STABILIZER AND FIX THE M4X6 SCREWS WITH SOME "SOFT" THREADLOCKER**

Then install the electrical components (**Picture 3**) and program the system as illustrated in the installation and programming manual (ONLY AVAILABLE FOR SERVICE CENTRES)

IT IS FORBIDDEN TO USE THE BED WHILE THE VEHICLE IS RUNNING, AS THE BED MUST BE LOCKED WITH SAFETY BELTS.

Each BED LIFTING SYSTEM model was designed and developed to reduce or eliminate any risks related to cutting and tangling. The installer must however mount the system avoiding any risk factors/elements such as sharp edges, curls, etc.

After finishing installation, make sure THE BED LIFTING SYSTEM has no clearances and movements and the bed is parallel to the floor.

In the event it is necessary to operate the bedlift system manually through the handle, it is compulsory to carry this operation WITHOUT DISCONNECTING THE WIRES FROM THE MOTOR UNIT TO THE CONTROL UNIT.

NEVER DISCONNECT THE WIRES FROM THE MOTOR UNIT TO THE CONTROL UNIT FOR A MANUAL START OF THE BEDLIFT SYSTEM.

5.2 ELECTRIC INSTALLATION

THERE ARE 2 VERSIONS OF THE BED LIFTING SYSTEM

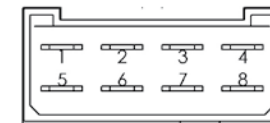
With electronic encoder

With mechanical encoder

The circuit board is a controlling device with:

- 12V DC power, max 25A;
- Free, normally closed contact end-of-stroke signal input;
- Free contact timer signal, reserved for an encoder;
- 12V DC, max 25 A motor output, with polarity control;

5.2.1 CIRCUIT BOARD CONNECTION



PICTURE 1 - FASTON CONNECTOR CONTACTS, SIDE VIEW