

The Ikotec3000 with a single column is designed for lifting a vehicle sideways to allow for mechanical repair, bodywork or repainting. It consists of a compact system with a single movable column with different fittings for various types of work, with a lifting capacity of vehicles up to 1500 kg.

Basic environmental conditions are temperatures from -10°C to +35°C, max. humidity of 80% and keeping away from water.

### TECHNICAL DESCRIPTION

- A. The system consists of a single column, its electrical components to be connected only to the user's power outlet.
- B. Electrical components

#### **1. The column**

The basic part of the system consists of a specially shaped column of folded metal sheet into which the lifting carriage is placed. It contains two grooves for the control system, a horizontal bar as a grip for moving the machine, a cable holding hook, motor mounting, belt tightening screw and the top cover with a housing for the conical load bearing.

#### **The base**

The base is A-shaped with fixed wheels at two of its ends and a mobile one at the third opposite end. This ensures stability and mobility.

The base is made of two parallel bars bent at the right angle, a beam soldered to the parallel bars and two centred holes. The bottom of the bars has a housing for the ball bearing.

#### **2. Lifting carriage**

The carriage consists of a U-shaped structure, with two axles containing one ball bearing each, which carry the weight to lift, a cover with a hole for the spindle, and a vertical hook at the front for holding the different fittings.

Inside is a force nut of an appropriate material for this function.

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### **3. Control mechanism**

The control mechanism consists of parallel bars in a special design, on the top of which there is a control lever for the lifting and lowering of the vehicle. A reversing switch is attached to the bottom part of the bars, for the forward and backward run of the motor. This switch has its own box, with power cables going to the electrical motor on one side and to the electrical outlet on the other.

The electrical motor's power is of 1,5HP at 1500 rpm, single-phase with high starting torque or three-phase.

The bars have two limit stops which mark the travel end for a total of approx. 1 m between the two ends.

### **4. Power mechanism**

Parallel to the column is a spindle which, through rotation, lifts or lowers the weight. It is supported between the upper and the lower conical bearing. Underneath, a channel A 200 pulley is linked through a belt with an A 50 motor pulley, located above the axle of the electrical motor.

## **SPECIFICATIONS:**

Sizes:

Total height: 1340 mm

Footprint: 900 x 600 mm

Weight: 72 kg

Lifting capacity: cars up to 2500 kg

Max. lifting height: approx 1 m

Max. lifting time: 35 s

Max. wheel size: 18"

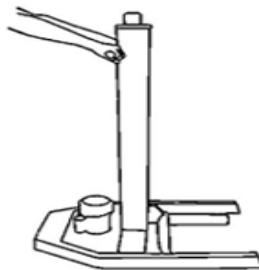
Electrical protection: IP 40

Contact protection: grounded

Electrical motor: guaranteed against voltage fluctuation up to  $\pm 5\%$  and frequency fluctuation up to  $\pm 1\%$

## **MINILIFT IKOTEC3000 USE**

1. Move the Ikotec3000 with the handlebar. **(figure 1)**



**Figure 1**

2. Put in the desired position, i.e. at the front or rear wheel of the vehicle which you want to lift, with the holding device for wheels (Push until it touches the tyre) or the holding device for the sill.

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3. Plug the mini-lift into the the mains

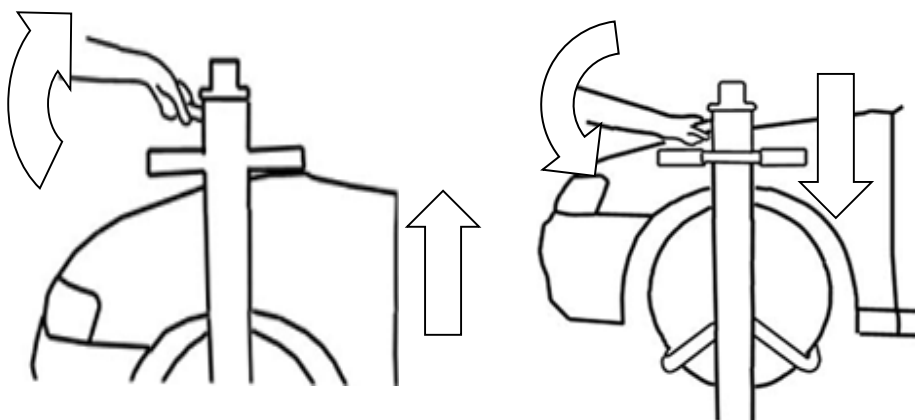


4. Before lifting the vehicle, make sure the engine is turned off. **Loosen the handbrake and put the gear in neutral (see figure 4)**



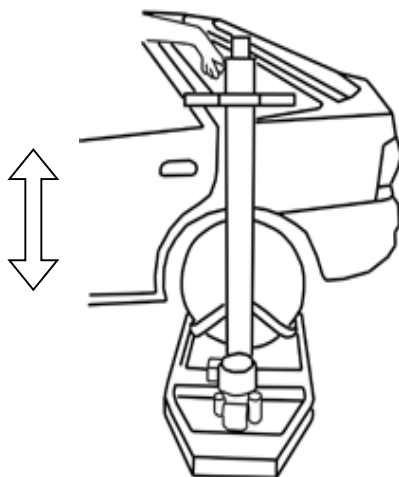
**Figure 4**

5. Once these steps are completed, the vehicle can be lifted, as shown in the following image, moving up the lever until the desired height of the vehicle is reached (see figure 5.1) and moving down for lowering the vehicle. Don't forget **to loosen the handbrake and to put the gear in neutral when you are using the mini-lift 2K.** *In case you have no power available and the vehicle is still lifted, you can lower the vehicle by taking off the top lid and turning the spindle anticlockwise with a 30 mm wrench.*



**Fig. 5.1**

**5.1** You can also lift the vehicle at the rear wheel by proceeding as explained above. See **figure 5.3.**



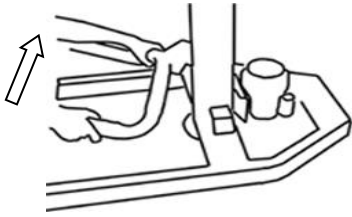
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In case you want to lift the vehicle by the sill instead of by a wheel, you will have to replace the holding device for the wheel by the holding device for the sill. To do this, follow the next steps: **Don't forget to loosen the handbrake of the vehicle and to put the gear in neutral and use stand !**

Lift the holding device for the wheel, then take it from the groove and place the holding device for the sill in it as shown in **figure 6.2**



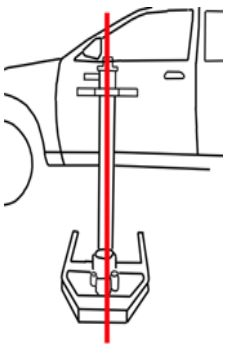
**Figure 6.1**



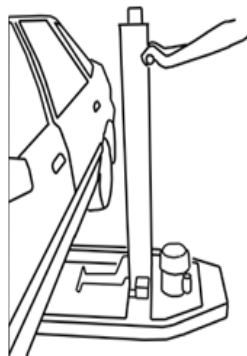
**Figure 6.2**

Once the holding device for the sill is placed in the mini-lift, the vehicle can be lifted sideways, following the next steps: **( USE STAND ! )**

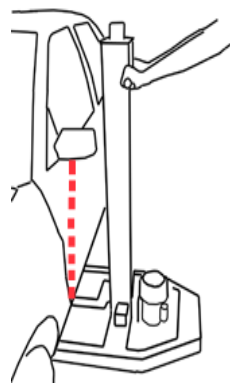
Place the minilift 3K perpendicular to the vehicle's external rear-view mirror as shown in **figures 7.1, 7.2, 7.3**



**figure 7.1**



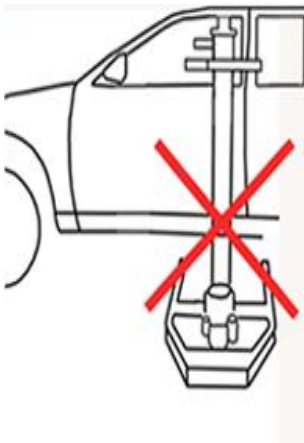
**figure7. 2**



**figure 7.3**

**7.1** Remember that the mini-lift with the holding device for the sill always has to be aligned with the vehicle's external rear-view mirror

Never in the centre (see **figure 7.4**) or at the back (see **figure 7.5**).



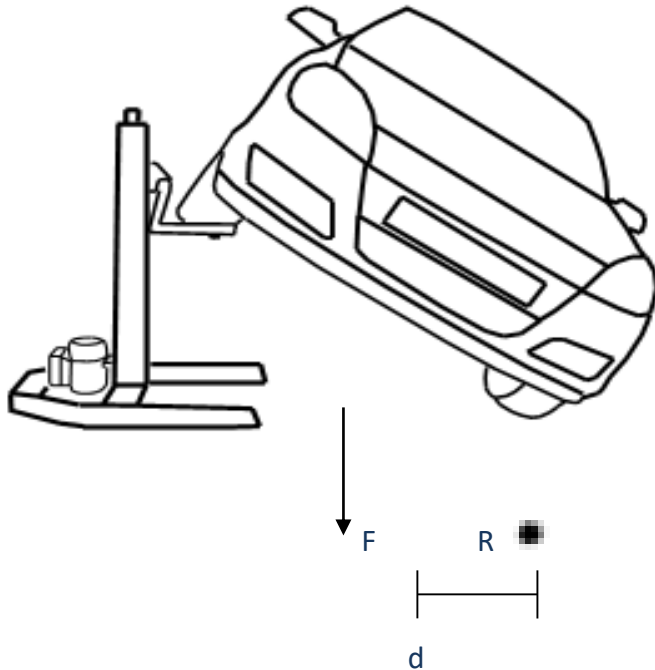
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## Why does the vehicle not turn over when lifting it with the IKOTEC3000?



**Figure 1.1**

The vehicle is shown by the force  $F$  representing its weight. The force  $F$  will remain vertical as the vehicle gradually inclines. On the other side is the point of rotation  $R$ . While the vehicle is inclining, the distance  $d$  between  $F$  and  $R$  decreases. Until this distance  $d$  doesn't reach zero or turn negative, **the vehicle won't turn over. This will never happen with the** Ikotec3000.

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