



92340

# Mobi-Lift

- Lifting capacity 1200 KG
- For vehicles up to 2500kg
- Completely mobile
- Ideal for use in any automotive workshop



For spares or repairs please contact our Service Team at The Tool Connection

### Guarantee

If this product fails through faulty materials or workmanship, contact our service department direct on: **+44 (0) 1926 818186**. Normal wear and tear are excluded as are consumable items and abuse.

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The Mobi-Lift 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 1200 kg for vehicles up to 2500 kg.

Basic environmental conditions are temperatures from -10°C to +35°C, max. humidity of 80% and keeping away from water. The floor must be hard, flat and clean.

### PLEASE BE AWARE

Obvious overload abuse will not be repaired or replaced

### 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 housing for the ball bearing.

### 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.

### 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 0.75 KW/1HP at 1500 rpm, single-phase with high starting torque. The bars have two limit stops which mark the travel end for a total of approx. 1 m between the two ends

### 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.

### Electrical Components

Reversing switch of three poles with a bridge for one phase installation of 12A with return-to-zero.  
Connecting cables: power feeding cable RV-K 3 x 1 mm (2 m long)

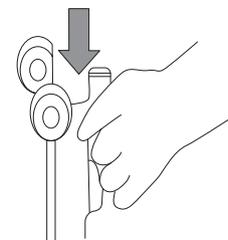
### Fittings

Holding device for wheels: 50 mm diameter structural U-shaped tube with a matching hold for fixing it on the lifting cart. This fitting is used for holding the vehicle by the wheel.

Holding device for the sill: plate in a special form with one end for attachment to the lifting cart and the other with a perpendicularly soldered V-shape. This fitting is used for taking the vehicle from the base or the chassis.

- Insert the nut in the carriage until the stop, with the help of a conical tool, as shown in Fig. 21.

Fig. 21



- Insert the safety nut Fig. 22 and 23.

Fig. 22

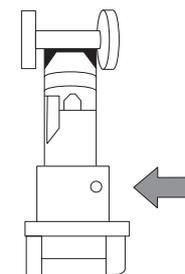
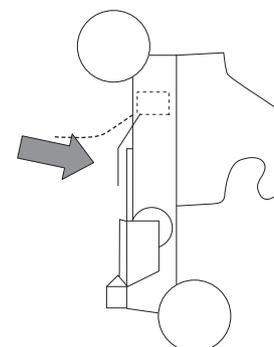


Fig. 23



- In case the main nut is worn out, the safety nut will replace its function, but only for lowering the vehicle, as the control lever will be blocked.

- Make a hole in the nut with a 5mm drill bit. Then put a screw without tightening it too much, so that the nut has some leeway Fig. 24 and 25.

Fig. 24

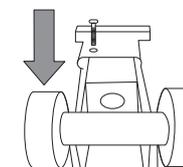
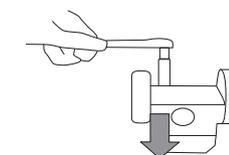


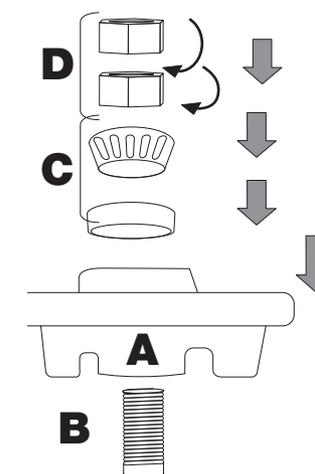
Fig. 25



### ASSEMBLING THE SPINDLE

Insert the cover (A) in the top part of the spindle (B). Then insert the bearing (C) in the lid and finally screw on the two nuts (D), as shown in Fig. 26.

Fig. 26

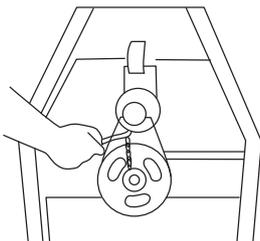


**DISASSEMBLING**

**Unplug the Mobi-Lift before you start!**

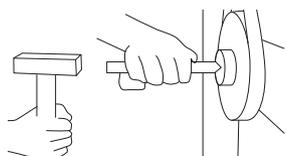
1. Turn over the mini-lift in order to be able to remove the pulley.
2. Loosen the screw which fastens the pulley to remove it, as shown in Fig. 12.

**Fig. 12**



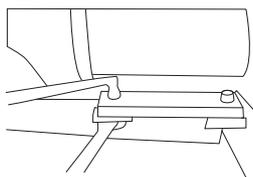
3. Place a steel point over the spindle (see Fig. 13), strike it with a hammer and remove the pulley and the belt.

**Fig. 13**



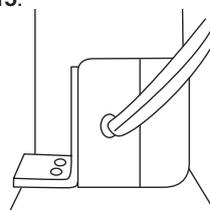
4. Removing the motor: Loosen the screws fixing the motor to the structure of the system Fig. 14.

**Fig. 14**



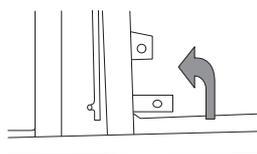
5. Once the screws are removed, take out the motor. Remove the screws which attach the switch box to the structure of the system Fig. 15.

**Fig. 15**



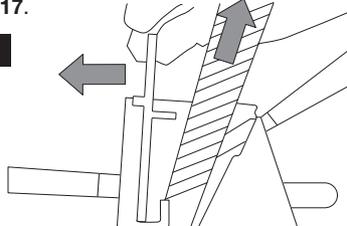
6. Move the handle upwards and then turn it as shown in Fig. 16.

**Fig. 16**



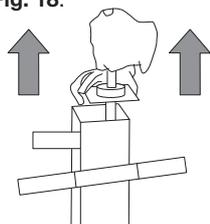
7. Place the handle in the right side, and then remove the spindle, as shown in Fig. 17.

**Fig. 17**



8. Remove the spindle with the carriage pointing upwards Fig. 18.

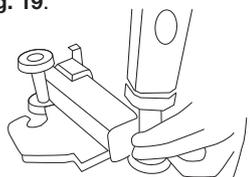
**Fig. 18**



**ASSEMBLING**

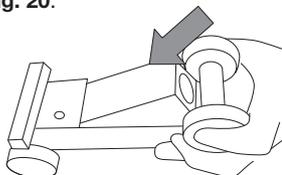
1. Insert the bearing in the carriage, as shown in Fig. 19.

**Fig. 19**



2. Insert the main nut in the carriage, as shown in Fig. 20.

**Fig. 20**



**SPECIFICATIONS**

Dimensions	Total: 1340 mm
Size	900 x 600mm
Weight	72kg
Lifting Capacity	1200kg
Maximum lift height	980mm
Maximum lift time	35 secs
Maximum wheel diameter	18"
Electrical protection	IP54
Contact protection	Earthed
Voltage Fluctuation	+/- 5%
Frequency Fluctuation	+/- 1%

**TROUBLE SHOOTING GUIDE**

Problem	Cause	Solution
Motor does not turn or sound	Cable not plugged into mains Disconnected cable in reversing switch Disconnected cable in motor	Reconnect
Motor turns too slowly	Capacitor 25 mf. burnt Disconnected cable in reversing switch Disconnected cable in motor	Replace capacitor (25 mf. Or 30 mf.) Reconnect Reconnect
Motor turns but carriage does not go up	Pulley is loose	Tighten pulley
Motor does not turn but sounds	Excessive weight Starting capacitor burnt Wrong electrical wiring Working nut worn out	Reduce weight, do not exceed vehicles more than 2500 kg Replace capacitor (160 mf. or 80 mf.) Check electrical wiring (see page 10) Check working and safety nut
Thermal switches trip	Unsuitable thermal Switch Motor burnt Wrong electrical wiring Excessive weight	Install switch with at least 16 A Replace motor (see fig.4.1, page 5) Check electrical wiring Reduce weight, do not exceed vehicles more than 2500 kg
Motor turns wrong way	Inverted cables	Exchange grey/blue with yellow/green cables in switch box or motor
High pitch sound	Lack of grease Lifting nut defective	Grease the spindle with a grease pistol Replace nut as explained on Page?
Spindle wears out or produces burr	Wrong usage of the lift without loosening the hand brake or putting the gear in neutral Broken bearing	Check usage of lift Replace bearing as explained on page 9
Pulley touches frame of the system	Strike from beneath	Remove top cover and move the spindle down
High pitch sound on forward wheels while lifting	Lack of oil on wheel socket	Lubricate

# Instructions

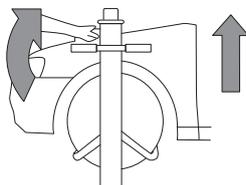
## Preparation

### DO NOT USE ON UNEVEN FLOOR

#### PLEASE BE AWARE

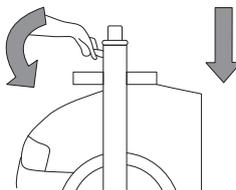
1. Manoeuvre the lift into positions using the handlebar
2. Position at the front or rear wheel of the vehicle whichever you want to lift
3. Push until it touches the tyre or the holding device for the sill.
4. Plug the Mobi-Lift into the mains.
5. Before lifting the vehicle, make sure the engine is turned off.
6. Loosen the handbrake and put the gear in neutral.
7. Once these steps are completed, the vehicle can be lifted, as shown by moving up the lever until the desired height of the vehicle is reached **Fig. 1** and moving down for lowering the vehicle.

**Fig. 1**



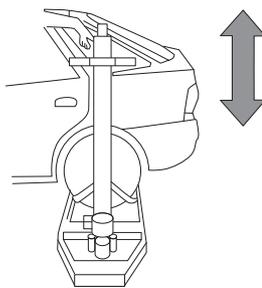
8. If you have no power available and the vehicle is still lifted, you can lower the vehicle by taking off the top lid and turning the spindle anticlockwise with a 30 mm wrench **Fig. 2**.

**Fig. 2**



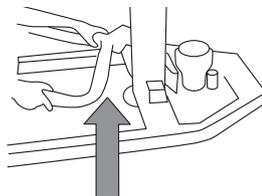
9. You can also lift the vehicle at the rear wheel. **Fig. 3**

**Fig. 3**



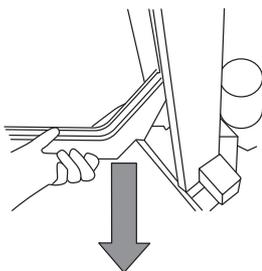
10. If you want to lift the vehicle by the sill instead of by a wheel, ensure there is adequate strength in the sill.
11. Replace the holding device for the wheel by the holding device for the sill. To do this, follow the next steps:
12. Loosen the handbrake of the vehicle and put the gear in neutral.
13. 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 **Fig. 4 and 5**.

**Fig. 4**



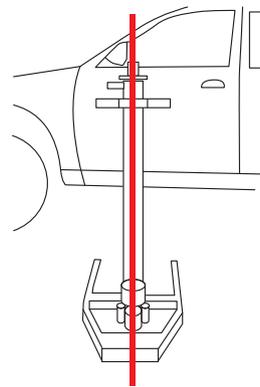
14. Once the holding device for the sill is placed in the lift, the vehicle can be lifted sideways, following the next steps:

**Fig. 5**

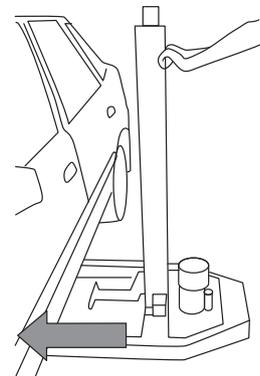


15. Place the lift perpendicular to the vehicle's external rear-view mirror as shown in **Fig. 6, 8 and 7**.

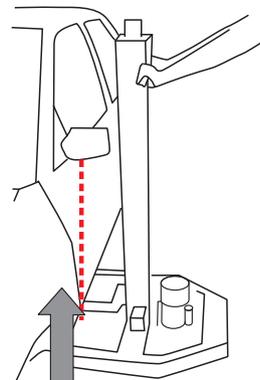
**Fig. 6**



**Fig. 7**



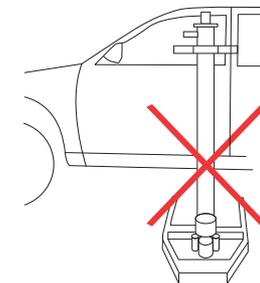
**Fig. 8**



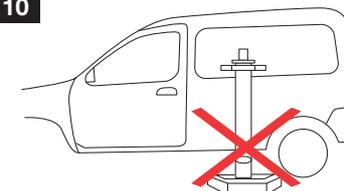
13. Remember that the lift with the holding device for the sill always has to be aligned with the vehicle's external rear view mirror.

14. Never in the centre **Fig. 9** or at the back **Fig. 10**.

**Fig. 9**

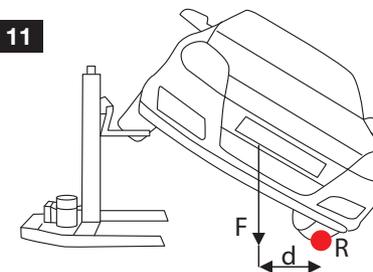


**Fig. 10**



**Why does the vehicle not turn over when lifting it with the Mobi-Lift?**

**Fig. 11**



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 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 Mobi-Lift.

# Instructions