

Operating Instructions for ROBOR rack and pinion jacks



Valid for rack and pinion jacks of the S10, S20, S30, S40, S50, S60 and S110 series

1) Intended use

ROBOR rack and pinion jacks are used for manually lifting and lowering loads up to the load capacity stamped on the shaft. They must not be used to transport people.

Before using the product for the first time, the user must read these operating instructions in full and then always comply with the points listed. The QR code at the end of the document can be used to download this document to a smartphone.

2) Check

The jack must not have any obvious defects, such as broken or bent components, cracks in the metal or defects in the welding seams. The rack, in particular, must not be bent.

Without load, the crank must be able to be turned smoothly in both directions over the entire stroke. With load applied, the load brake of the safety crank or ratchet crank must catch it completely, i.e. the crank must not show any tendency to rotate independently ("kick back").

The jack should be inspected periodically by the manufacturer or an authorised specialist company as indicated on the inspection label (stuck inside the cup). The date of the next inspection is given in the year-month format.

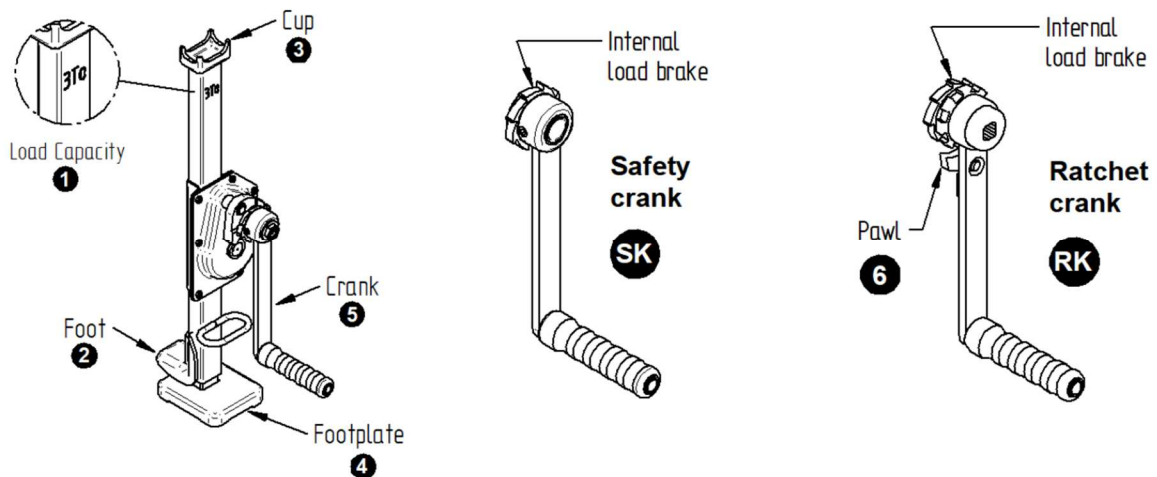


If a jack is overloaded, it must no longer be used, even if no external damage is apparent.

If any of the above points are not fulfilled, the jack must no longer be used and must be sent to the manufacturer for repair.

3) Safety information

When lifting a load, no person must be under the load or in its danger zone. Once the load has been lifted to the appropriate height, it must be expertly secured, and the jack must be unloaded before a person is allowed to go under or on top of the load.

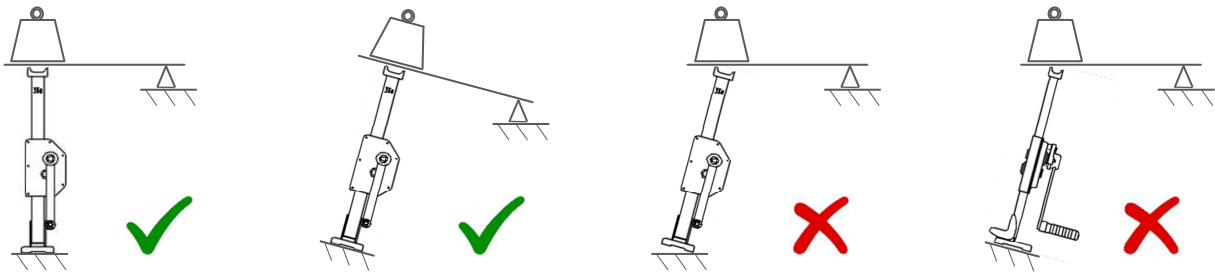


The load capacity **1** stamped on the shaft must not be exceeded. This point must be considered especially in the case of dynamic loads (impact, vibrations). The jack is not designed to take vibrating loads.

The safety crank **SK** and ratchet crank **RK** are designed to absorb compressive forces on the jack. Pull forces are not absorbed with these types of brakes. If pull or push-pull force occurs, the manufacturer should be contacted.

The jack is designed for a temperature range of -20 to +50°C. In temperatures below freezing, the user must ensure that there is no water or ice in the load brake.

The jack may be used in any angular position. However, the load must always act at right angles on the jack. Oblique loading on the foot or cup is not permitted.



4) Operation

Before each use, the operator must make sure that the jack is in flawless condition according to chapter 2.

The footplate **4** must rest on stable and load-bearing ground. The jack and the load must be reliably secured by the user against slipping or tipping. When lifting the load on the foot, place it as close as possible to the shaft; when lifting on the cup, place it on at least two prongs. The foot **2** and cup **3** may both be loaded with the maximum load capacity.

On series 20 rack and pinion jacks, ensure that the foot is properly engaged in the shaft before lifting.

To lift, turn the crank **5** clockwise. To lower the load with the safety crank **SK** turn the crank anticlockwise. To lower the load with the ratchet crank **RK**, flip the ratchet pawl **6** on the crank and turn the crank anticlockwise.

The load capacity stamped on the shaft must not be exceeded. This is achieved when the operating force on the crank or the torque on the crank shaft reach approximately the following values (1 daN \approx 1 kg):

Load capacity [t]	1.5	3	5	5 adj.	7	10
Actuating force [daN]	34	40	57	57	62	74
Torque [Nm]	(75)	(100)	(140)	(138)	(155)	(185)

For the load brake to fully perform its function when holding and lowering the load, the load must be at least 5% of the jack's load capacity.

5) Maintenance

The jack should be lubricated periodically. To do this, crank the shaft all the way up and lightly grease the rack with a high-performance grease containing graphite. Then grease the teeth generously and crank the shaft down again. The grease is thus distributed in the gearbox.

Under no circumstances may the components of the load brake be lubricated!

Further maintenance work may only be carried out by professionally qualified personnel. Maintenance work must be completed by a function test with the maximum load applied, in order to prove the proper function of the jack according to chapter 2.

Maintenance and repair work as well as the safety test can be carried out by the manufacturer, in which case a new inspection label will also be issued.

6) Validity

The manufacturer guarantees the conformity of its products as supplied. The manufacturer declines all responsibility if the product is modified without its written consent or if the points listed in the operating instructions are disregarded.



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V 2022-11