

SUPERJAKKI, A 20 TONNES PULLING TOOL

Please get acquainted with these instructions prior to using the SUPERJAKKI tool.

General SUPERJAKKI is the name for the heavy duty tool for producing pulling or pushing forces in installation work. Typical applications in ship building are e.g. assembling of sections to form a complete hull.

WARNING: The max. allowed load when using SUPERJAKKI for pushing is 5 tonnes. In case the compressing force is exceeding the max. allowed figure a safety pin built into the tool will shear and protect the tool from damages. **Do not exceed the red marking of the screw when pushing – the length of stroke is ending !**

SUPERJAKKI is attached to the working pieces by lugs inserted to the fork ends and connected by screws to SUPERJAKKI. The lugs tack welded on the working pieces are conveying the force produced by SUPERJAKKI to the working pieces.

Application and Safety

It is impossible to produce detailed safety instructions for power tools. The operator shall comply with the general safety instructions at the ship yard or workshop and use own judgement. When in doubt whether SUPERJAKKI can be used for some specific application please do not hesitate to contact the seller or manufacturer for advice.

The nominal capacity of SUPERJAKKI is 20 tonnes. The full power can be reached by using the standard lever, length 750 mm.

WARNING: The use of too long lever or excessive force may break the pawl and cause an injury.

In case the installed SUPERJAKKI is subject to external forces, the lug or the installation screw (M24, 8.8) will rupture at about 40 tonnes load protecting the tool. The body of SUPERJAKKI will break under load of some 50 tonnes.

MAINTENANCE INSTRUCTION AND SPARE PARTS

Main screws

The screws shall be lubricated at all times. The threads to be cleaned as necessary and a thin layer of grease applied on the screws. The function of the grease is to reduce friction and prevent the welding spatter from sticking on the threads

Usually the welding spatter is removed when turning the screws into the nut

Major welding spatter can be removed by using a file or a small grinder

Dismantling

- Remove the plugs (13)
- Turn the fork nut (5) so that the stopper pin (10) can be removed
- Screw the fork nut (5) out

Assembly

- Screw the fork nut (5) in
- Press the stopper pin (10). Please check that it is fitting so closely in the hole that it does not move by own weight. Make sure that the stopper pin (10) is at the center position, i.e. it does not touch the wall of the fork nut (5)
- Push the plugs (13) in

Ratchet It is advisable to dismantle the ratchet annually and clean and lubricate the parts. The ratchet housing (14) can be dismantled by removing the retaining ring (20)

The pawl (19) is dismantled by opening the stopper screw (17)

Instructions for assembling the ratchet

- the pawl (19) shall rest at the bottom of the groove and the flat surface shall be parallel with the tooth side. For achieving this situation please turn the ratchet in relation to the body (1).
- on the sliding ring (22) there shall be notch for the tip of the stop screw (17). Drill if necessary.
- do not over tighten the stop screw (17). Otherwise the slide ring (22) will get deformed and prevent the pawl from moving.
- secure the stop screws (16 and 17) by using thread glue (e.g. Loctite or Truloc)
- please check that the spring (18) is pressing the pawl (19) positively to the bottom of the groove

Thrust bearing

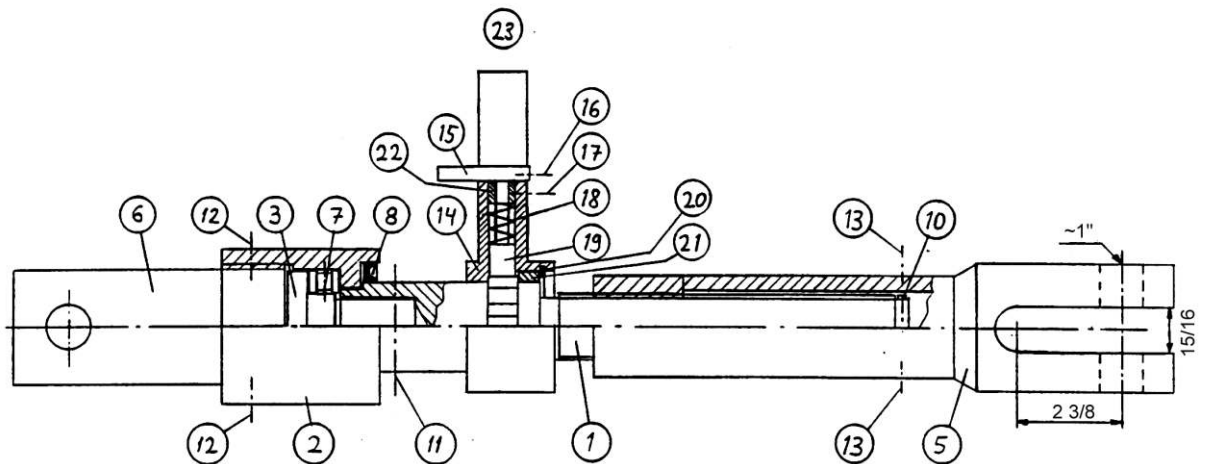
The thrust bearing (7) and its seal (8) shall be checked from time to time and replaced if worn out.

Dismantling

- Remove the stop screws (12). Clamp the bearing housing (2) in a vice and dismantle the fork screw (6).
- Push the safety pin (11) out and screw the bearing pin (3) out.

When assembling the thrust bearing, please check that the safety pin (11) is fitting so closely in the hole that it does not move by own weight.

The clearances in the SUPERJAKKI threads (between the screw and nut) are deliberately quite big in order to prevent malfunctions. The clearances are growing in intensive work over the years. This does not, however, have an effect on the functioning of SUPERJAKKI.



Spare parts for SUPERJAKKI

Part no	Denomination	Part no	Denomination
1	Body, ratchet and screws	14	Ratchet housing
2	Bearing housing	15	Shifting lever (open / close)
3	Bearing pin	16	Stop screw, M5 x 12
5	Fork nut	17	Stop screw, M5 x 8
6	Fork screw	18	Spring
7	Bearing	19	Pawl
8	Seal	20	Retaining ring, DIN 472,58x2
10	Stopper pin (Tension Pin Ø6-36)	21	Bearing ring
11	Safety pin	22	Slide ring
12	Stop screw	23	Operating lever, l = 750 mm
13	Plug		
24	Rubber case (not in drawing)		

When ordering spares, please give the serial number and the purchase date of your SUPERJAKKI, if possible.

Technical data	Weight	14,2 kg
	Stroke	130 mm
	Max. pull	200 kN (20 tonnes)
	Max. length	620 mm
	Min. length	750 mm
	Attachment screws	M 24, 8.8
	Lever	
- length	750 mm	
- weight	1,8 kg	

Warranty: The manufacturer, Craftmer Oy, is granting a 12 months warranty for SUPERJAKKI tools, calculated from the sales date. The warranty is covering claims related to damages to the tool and pertaining to material faults and mistakes in production. The warranty does not cover indirect losses or damages or damages due to wrong use or overloading of the SUPERJAKKI tool.

Manufacturer:

Craftmer Oy
Kuormakatu 11
FI- 20380 TURKU
phone: +358-2-4327 111
www.craftmer.fi
e-mail: craftmer@craftmer.fi