

OPERATING INSTRUCTIONS OF TEPA 500 GENERAL PURPOSE WINCH

1. FASTENING OF THE WINCH

The operator must see to the arrangements of fastening very carefully. All anchoring points and fastening lines must withstand pulling force of at least 15kN.

2. INSTALLING OF THE OPERATING MACHINE

Put the primary axle to the chuck of the drilling machine. Tighten the axle firmly to the chuck with the help of tightening key of the drilling machine. Put the drilling machine on its place so that the primary axle is in the gear all the way. Also the 43mm neck of the drilling machine must be all the way in the bushing. Tighten the wing nut firmly by hand. Operating machine is standard 230 v electric drilling machine which is used according its operating instructions. If the winch is used in lifting operations with rope the operating machine must be a model with power over load protection.



3. OPERATING OF THE WINCH

Connect the power supply of the drilling machine to a plug (230v). One of the following options is mounted to the working axle and fastened with safety pin.

When using rope drum (516) put the rope trough the guides underneath around the drum 2 – 5 rounds. The number of rounds depends on the need for pulling force. Start the drilling machine and lock the operating switch on continuous running. Both pulling force and speed can be adjusted by tightening or loosening the rope around the drum.

If the rope drum is used in lifting operations a rope arrester 516A must be assembled to the frame of the winch. If the rope arrester is not ready in its place ask installation directions from your local dealer or manufacturer. Loosen the locking pin of the rope arrester and install the rope between the clamps. Close the clamps and install the locking pin of the arrester. Check that the point of locking pin is in safety position Install the rope underneath 2 - 3 rounds around the rope drum and through the rope guide.

The rope used in lifting operations must be artificial twist rope with diameter of 10,5mm. Tensile strength of the rope must be at least 20 kN and the maximum strain 4,5 %. A certificate of manufacture must be available for the rope. Check the condition of the rope. The rope fabric must be without rips. The rope must be clean, dry and knotless. The fastening of rope pulleys must be sufficient firm.

Check the operation of the rope arrester and the fastenings of winch and rope pulleys before lifting operation. Pull the rope tight around rotating rope drum and loosen the rope so, that the rope arrester will hold the load and you may check the fastenings.

When lifting a load, the operator must all the time hold the rope tight around the rope drum. When loosening the rope, the tractive power of winch will disappear and the rope arrester will hold the load.

When lowering a load, the operator must hold the rope tight around the rope drum and simultaneously loosening the rope arrester by pulling the hand lever of the arrester to the rope drum. The speed of lowering is adjusted by controlling the tightness of rope around the rope drum. When the hand lever of the arrester is loosened, the rope arrester will hold the load and stop the lowering.

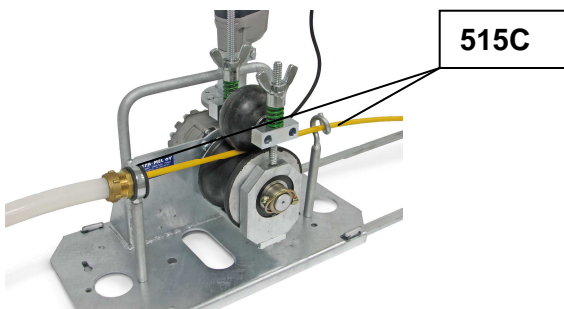
When starting the lowering, the operator must first lift a load slightly for loosening the hand lever of the rope arrester.

The load must never hang on the winch without a follow-up and always fasten the rope to a robust anchoring point.

When using wire drum (517) controlling of the pull is done from the switch of the operating machine. The operating switch is not allowed to lock in continuous run and the drilling machine must stop when the switch is released. It is not allowed to guide the wire by hand near the wire drum. For guidance of the wire a wire controlling mechanism 517A is assembled to the frame of the winch. The wire drum can take max 50m of 5mm untwisted wire.

When using cable pushing device (515) the operating switch is not allowed to lock in continuous run and the drilling machine must stop when the switch is released. It is not allowed to guide the cable by hand near the pushing roller. When pushing cables over 25mm of diameter the pushing roller is equipped with 515A metal pressing rollers. The change of the pressing rollers is done by loosening the wing nuts of the pushing roller. Tighten the pressing roller over the cable by using reasonable force.

When pushing cables less than 25mm of diameter or glass fiber draw spring the pushing roller is equipped with 515B rubber pressing roller. When pushing glass fiber draw spring a pair of cable guides 515C is assembled to the frame of the winch. The feeding guide leads the thin cable to right position on the pushing roller. The out feed cable guide includes a hose fitting for plastic hose. Be careful when pushing glass fiber draw spring and release the operating switch of the drilling machine immediately if the draw spring stops or the pushing roller is slipping under the draw spring. This avoids the glass fiber draw spring from damage.



4. PROPERTIES

TEPA 500 general purpose winch is designed and manufactured so that the power and torque of the operating machine determines both pulling force and speed of the winch.

Maximum pulling force:	500kg
Maximum lifting force with rope drum:	280kg

5. MAINTENANCE AND SAFETY

To ensure long working life of the winch check the winch approximately after every time it has been used. Take care of sufficient cleanness of the winch / rope / wire / cable pushing device and other device. The best place to storage the winch is in dry place in its own storage box. Never use damaged or worn pulling rope / wire. If the winch is used in lifting operations check the condition of the rope arrester regularly. Especially check that the brake clamp is in good condition and that it has not worn out. Check the operation instructions of the rope arrester Rescucender B50.

Do not use the winch if some of its parts is damaged or makes abnormal noise when operating the winch. Maintenance and operation of the drilling machine according to the user manual of the machine. Never exceed the announced pulling / lifting limits.



Maintenance and spare part service is available from manufacturer or local dealer.

In all cases for maintenance it is advisable to contact manufacturer or local dealer.

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