

WARRANTY

The warrantor will repair this product free of charge, for **one (1) year** from the date of the original purchase in the event of a defect in materials or workmanship

1. This warranty only covers failures due to defects in material and workmanship which occur during normal use.

The warranty does not cover

- Damage caused by tempering with the product
 - Failures which are caused by products not supplied by the warrantor
 - Failures which result from accident, misuse, abuse, neglect, mishandling, faulty installation, Misapplication, improper operation or maintenance, alteration, modification.
2. This warranty is extended only to the original purchaser. A purchase receipt and this warranty bill – with the date of original purchase and retail dealer's signature and stamp – will be required before warranty service is rendered.
3. To take advantage of this warranty, the product must be returned to, and repaired by the nearest Tajfun Service Centre.

Type	Factory No.	Production year
EGV 30 A		
Dealer's Address and Date of Purchase Signature		

SPARE PARTS

When ordering spare part, at your dealer the following information should be specified: model(type), serial number of the product, production year; spare part, catalogue number and quantity; address of the customer.

Within the period of 5 years after sales service and spare parts supply are guaranteed by the producer.

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INSTRUCTIONS MANUAL

SINGLE DRUM LOGGING WINCH

EGV 30 A

Art.: 122.00.000



880.04.062-GB

2005-01 / GB

*Please read these instructions carefully prior to initial use and
In the interest of safety*

INTRODUCTION

Dear customer,

Thank you for purchasing a Tajfun logging winch. This Tajfun product is manufactured to be highest quality standards. Please read this instructions carefully in order to gain optimal use of your winch and in the interest of safety.

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EC Declaration of Conformity

according to the EEC Directive 98/37/EEC

We:

TAJFUN Planina, proizvodnja strojev d.o.o., Planina 41a, 3225 Planina pri Sevnici, Slovenija

Declare under our sole responsibility that the product:

LOGGING WINCH

EGV 30A

to which this declaration relates, correspond to the relevant basic safety and health requirements of the

EEC Machinery Directive 98/37/EEC

and to the following standards:

EN 292-1, EN 292-2, EN 294, EN 349

Planina, 4. 01. 2002

Iztok Špan
Direktor

 Tajfun Planina,
proizvodnja strojev d.o.o.
Planina pri Sevnici

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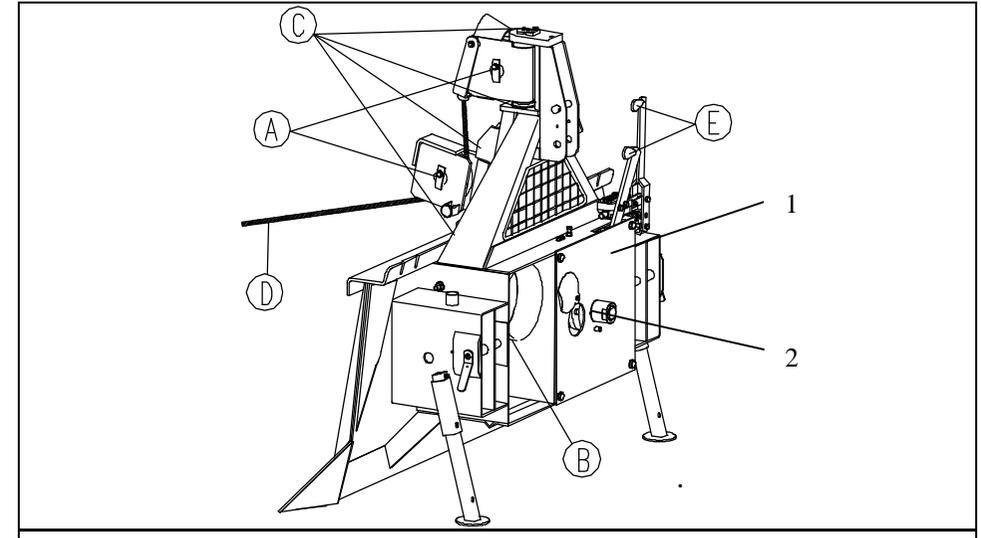
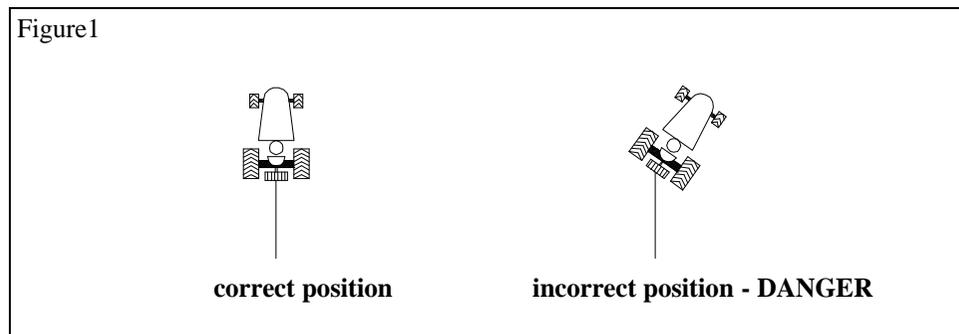
1. TECHNICAL DATA

<i>Nominal Pulling Power (max)</i>	<i>30 kN</i>
<i>Pulling Power at a Full Drum</i>	<i>15,7 kN</i>
<i>Brake Power</i>	<i>37,5 kN</i>
<i>Pulling Speed (at 540 rev/min)</i>	<i>0,63 - 1,21 m/s</i>
<i>Gear Ratio</i>	<i>1 : 7,5</i>
<i>Necessary Tractor Power</i>	<i>(12-20 kW), (16 -27 KM)</i>
<i>Wire Rope Length - Drum Capacity</i>	<i>Æ 9/85m, Æ 10/70m, Æ 11/55m</i>
<i>Wire Rope Min. Brake Point</i>	<i>68,4 kN</i>
<i>Width</i>	<i>1220 mm</i>
<i>Length</i>	<i>489 mm</i>
<i>Height without Wire Guard</i>	<i>1195 mm</i>
<i>Height with Wire Guard</i>	<i>2100 mm</i>
<i>Max. Operating Noise</i>	<i>70 dB (A)</i>
<i>Weight</i>	<i>235 kg</i>

2. SAFETY INSTRUCTIONS

Working with a winch is demanding and dangerous, therefore absolute concentration and caution are essential. To gain optimal use of you winch and to work safely, the following instructions are to be observed:

- Mount your winch only to a tractor that is technically impeccable and equipped according to all relevant regulations.
- Use PTO shafts of necessary capacity, with undamaged outer plastic guard.
- Use personal safety items (helmet, gloves, protective shoes etc.) Keep your First Aid Kit in the tractor.
- Only trained persons older than 18 years are allowed to operate the winch and do maintenance work.
- Prior to any use check the operation of the winch. Any deficiency should be eliminated immediately. The winch must be inspected by an expert once a year at least.
- Do not forget to switch off the tractor and the PTO shaft before starting any maintenance work or repair.
- During the operation of the winch no safety devices on the winch (safety guards, covers etc.) can be removed or changed in any way.
- Prior to pulling with the winch the tractor must be anchored by the blade into the ground. On steep slopes or when pulling heavy load the tractor should be additionally secured by a wire rope or chain to prevent the tractor from sliding or overturning.
- The tractor must be positioned ideally regarding the pulling direction (Figure 1)
- The lower pulley decreases the danger of overturning of the tractor when pulling heavy loads (the pulling power shifts off the upper to the lower pulley)
- Use only attested wire ropes of necessary strength and quality: see Wire rope min. brake point - Technical Data - Chapter 1.
The same rule is to be observed with all connecting and joining elements.
- Check the condition of the wire rope regularly. Do not use the wire rope with more than 10% of damaged wires. During the pulling the wire rope must not slide over sharp stones or edges, and make loops on the drum etc.



5.3. CONSEQUENCES OF OVERLOAD AND MISUSE OF THE WINCHES:

- »burnt« clutches
- »burnt« brake band
- brake mechanism
- chain torn
- broken pulley or pulley bearing
- damages of cardan shaft housing
- damages of cardan shaft or chain wheels
- bending of the frame (blade, couplings, protecting elements, main compound of the drive system, pulleys..)
- broken wire rope or linking chain of appropriate strength
- drum axis bent

5.2. MAINTENANCE PLAN

Before starting any operation, the winch must be checked visually and functionally:

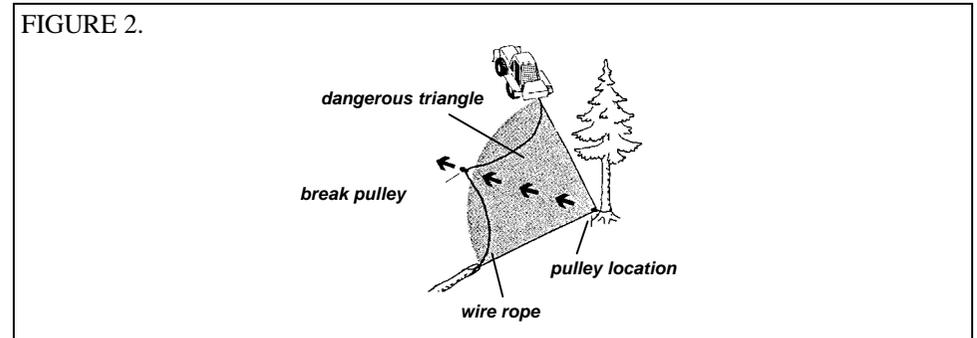
- All nuts and screws must be tightly screwed down;
- There should be no mechanical damages on the winch;
- All safety devices must be installed on the connecting parts of the winch;
- The PTO shaft must be correctly connected and secured by the safety chain;
- The bottom links of the tractor must be fixed correctly to prevent the winch from moving horizontally;
- Check the function of the clutch;
- Check the function of the brake band;
- The wire rope release power must be set correctly;
- All deficiencies and damages must be done away with before starting to work.

WHAT to do ?	WHEN ?	HOW ? WHAT ?		
<ul style="list-style-type: none"> • release the wire rope and coil it tightly onto the drum • check, if the wire rope is undamaged and fixed correctly 	when the winch is new and always when the wire rope is loose on the drum	Visually Chapter 4.4.1		
<ul style="list-style-type: none"> • check and stretch the chain 	every 48 operating hours	See Chapter 4.8.		
<ul style="list-style-type: none"> • change the clutch plates 	When necessary	*		
<ul style="list-style-type: none"> • change the brake band 	When necessary	*		
lubrication See Figure 11	A	slide bearings in the pulleys	at least every 8 hours of operation	Lithium grease
	B	drive chain	every 48 operating hours	chain spray
	C	bottom and upper pulley bearings, other sliding parts	at least monthly	Lithium grease, oil
	D	wire rope	monthly	Lithium grease
	E	small pulleys bearings	before setting of the pulling power	oil, spray
<ul style="list-style-type: none"> • Cleaning of the housing interior 	Every 100 working hours or more often when severe working conditions			

Operate the winch from a safe position, which is minimum 5 m away from the winch, or in the tractor cabin equipped according to the safety regulations, and out of reach of the wire rope, moving load, falling branches and other dangers.

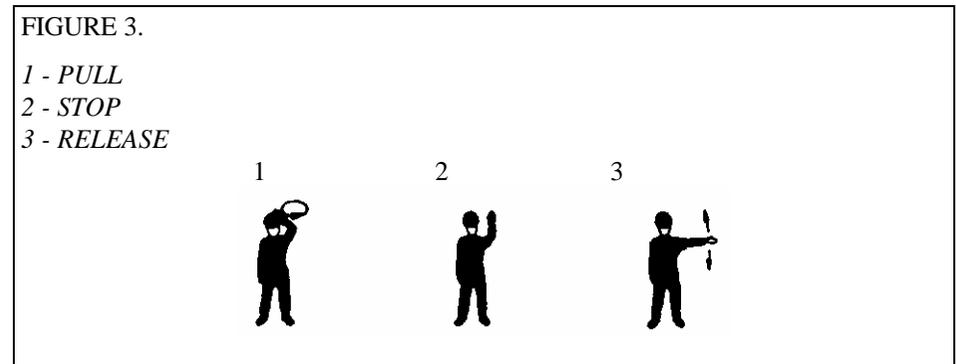
- Make sure that the load is fixed safely and properly to the wire rope. The assistant must not fix the load without knowledge of the tractor operator.
- Make sure that at least five coils of wire rope remain on the drum before it is loaded (4.4.1).
- Prior to each switching on of the function $\frac{1}{2}$ PULL $\frac{1}{2}$ make sure that there is nobody in the working area of your machine, i.e. 5 m within the reach of the winch and in the area between the winch and the load.
- When using the additional pulley take into account the $\frac{1}{2}$ dangerous triangle $\frac{1}{2}$ (See Figure 2). During the pulling of the load nobody should be in this area, because in case that the pulley breaks, a person may be hit by a flying wire rope.

FIGURE 2.



- The winch operator must constantly observe the load being pulled. If the pulling distance is not visible from his position, an assistant in constant contact with the operator must observe the load.
- The winch operator and the assistant should communicate using the following signs - See Figure 3
- When working with the lower pulley pay attention to the correct position of the wire rope in the pulley.

FIGURE 3.



3. MOUNTING OF THE WINCH

Mount the winch by three coupling pins to the three point linkage system of the tractor. The bottom links of the tractor must be fixed by the screws to prevent the cross movements.

- The winch is driven by a PTO shaft which must correspond to the necessary tractor capacity - see Technical Data - Chapter 1.
- Prior to work lift the supporting legs of the winch

When initially mounting the PTO shaft, its length MUST be checked.

By lifting and lowering the winch find the position where the distance between the connecting shafts is the shortest. In this position the tubes of the mounted PTO shaft should be shorter for approx. 20 mm.

If the PTO shaft is too long, it must be shortened:

- Saw off the steel and plastic tubes at both ends - the sawed ends must be equally long. File the edges, clean and grease them.

Put the winch to the firm and plane surface. After the winch is dismantled from the tractor, the PTO shaft can remain mounted to the winch and laid on the hook.

4. FUNCTION AND OPERATION OF THE WINCH

Take into account the safety instructions - Chapter 2
Follow the important tips in the frames.

4.1. RELEASE THE WIRE ROPE Figure 4

- By pulling the white string 1 pull the brake handle 3 until it stops in the ridge. The brake band is loosened and the drum is released to turn freely. The wire rope can be pulled off the drum. Make sure that the wire rope pulling power is set correctly (see Chapter 4.5.).

The wire rope should be pulled constantly, without any jerks which may cause the loosening of the wire rope on the drum and building of loops.

When coiling the wire rope off the drum, be careful not to rip it off at the end.

5. SERVICE AND MAINTENANCE OF THE WINCH

Regular maintenance of the winch is imperative for its smooth operation and long life.

5.1. TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE	ACTION
the pulling power is too low	• too much wire rope on the drum	See Chapter 1
	• clutch incorrectly set	set the pulling power according to the instruction - See Chapter 4.6.
	• greasy clutch plates (false lubrication of the drive chain)	change the clutch plates or clean their surfaces
	• clutch plates worn out	*
	• defect at switching mechanism	check the function of the switching mechanism - See Chapter 4.7.
the brake does not function	• damages at the driving system of the winch	change the damaged parts *
	• false setting of the brake	set the brake power according to the instruction - See Chapter 4.7.
	• greasy brake band lining	clean the brake band lining and the brake surface on the drum *
	• brake mechanism damaged	change the damaged parts *
wire rope is hard to pull out	• brake band worn out	change the brake band *
	• wire rope release power incorrectly set	set the wire rope release power according to the instruction - See Chapter 4.5.
	• wire rope damaged	change the wire rope - See Chapter 4.4.
the winch is pulling although the clutch is switched off	• brake band damaged	change the brake band *
	• false setting of the clutch	check the setting of the clutch according to the instruction - See Chapter 4.6.
	• drum damaged	change the drum *
	• clutch plates damaged	change the clutch plates *

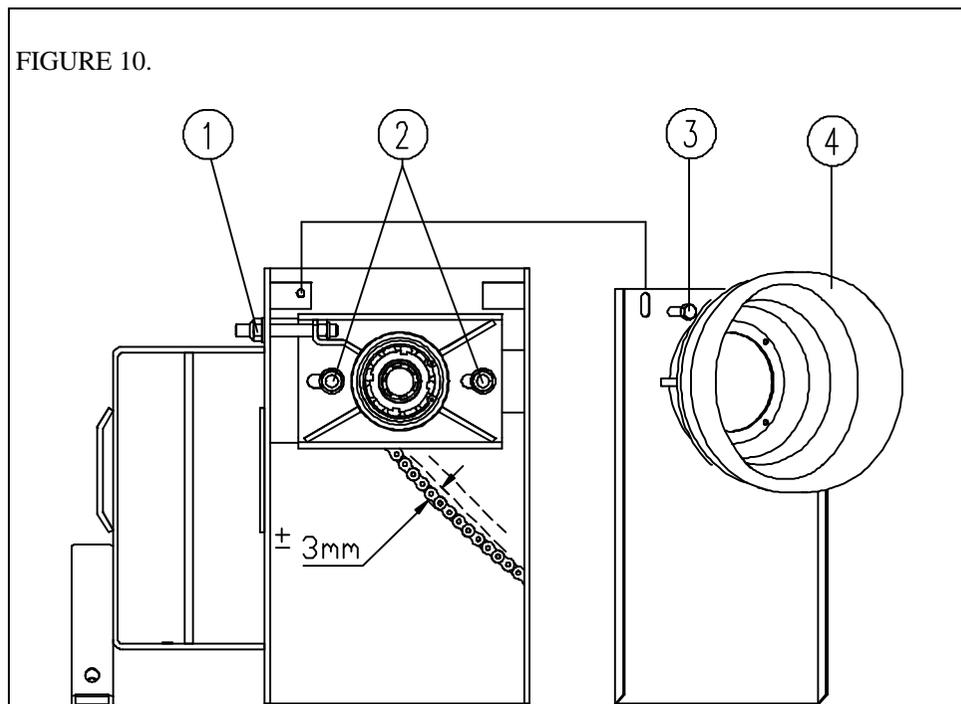
* Demanding repairs on the winch must be performed by an authorised person.

The winch is safety and functionally tested. To ensure smooth and safe operation and work, only original spare parts can be used in case of defects and/or malfunction repairs. All guarantee rights become void if other than original spare parts have been used or if the repairs have been performed by a non-authorised person or the repairs have been performed unprofessionally.

During operation and under load, the drive chain stretches a little bit so it has to be checked and reset several times to prevent overwear of the whole chain drive. The drive chain must not be too tight. The swinging of ± 3 mm must be allowed between both chain wheels.

The procedure:

- If the winch is connected to the tractor, the tractor must be switched off and the PTO shaft disconnected and removed.
- Unscrew the screw 3 and remove the chain cover 4 by pulling it upwards.
- Release both nuts 2 for approximately one turn, screw the nut on the tightening screw 1 until the desired swinging of the chain is reached: ± 3 mm.
- Tighten nuts 2.
- Spray the chain with a special chain spray.
- Re-install the chain cover and fix it by the screw 3.



4.2. PULL (COIL UP THE WIRE ROPE) Figure 4 and 8

- By pulling the black string 2 pull the clutch handle 4 and the winch starts to pull.
- Always pull the clutch handle up to the end of the groove.

The clutch plates should not slide or they will be worn out quickly

- When the clutch string 2 is released, the clutch handle returns to the OFF position and the pulling is interrupted.
- During the pulling the brake handle is blocked in the ON position (right). Even if the brake handle is blocked in the OFF position, it automatically switches on (goes right) if the clutch handle is being pulled. In this position the brake prevents the load from sliding when the pulling is stopped.

WARNING:

If the handle 3 is blocked in the left position, the handle hits after pulling the handle 4.

Although the power of the PTO shaft drive remains constant, the pulling power changes.

At the constant connected power, the pulling power depends on the length of the wire rope wound on the drum. The greatest pulling power is achieved at the first layer of coils on the drum. By coiling up of the wire rope onto the drum, the pulling power decreases progressively. The pulling power changes in inverse proportion to the pulling speed, which is highest with the full drum.

The nominal pulling power is the highest power achieved by the winch with the first layer of coils on the drum. It is stated in the technical data in this instruction manual and on the type plate on each winch. By increasing the number of coil layers on the drum, the pulling power decreases. With the full drum, the pulling power comes to 50% to 60% of the nominal pulling power.

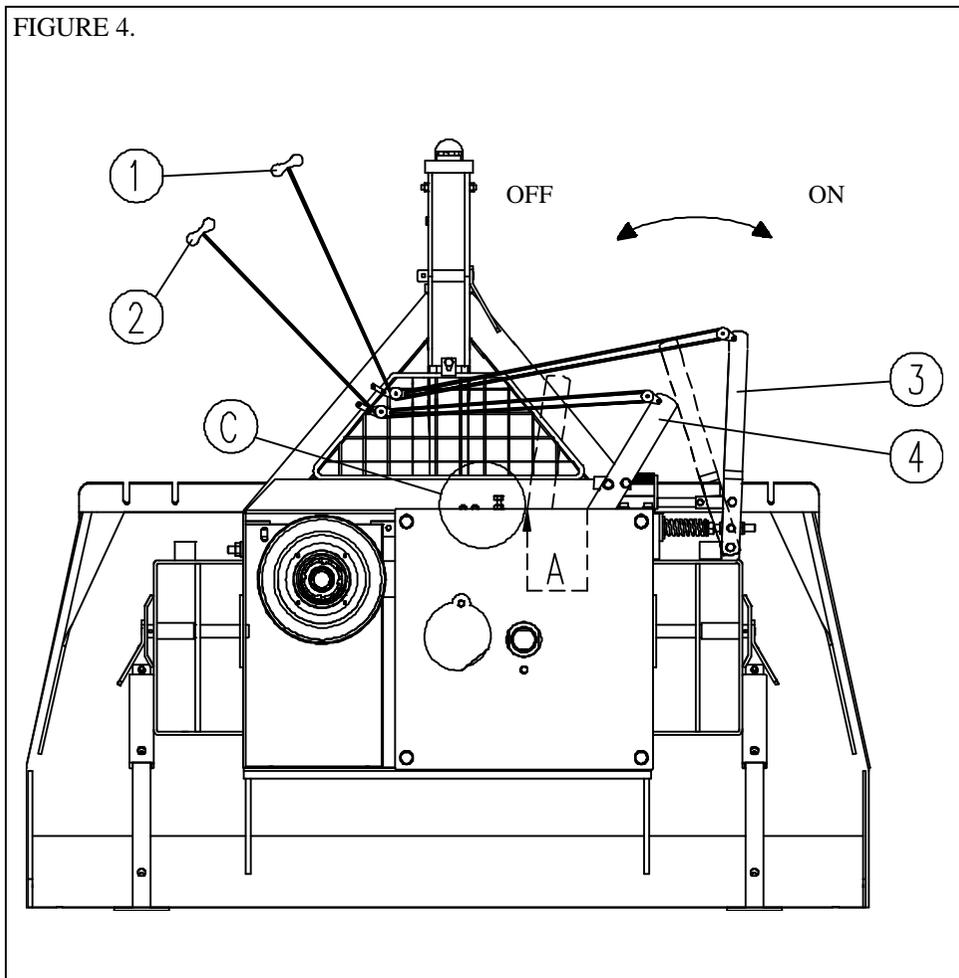
4.3. RELEASING OF THE WIRE ROPE UNDER LOAD Figure 4

- If you stop to pull, the brake prevents the load on the wire rope from sliding back.
- If you want to release the stretched wire rope, **jerklily** pull the white string 1 of the brake handle 3.

WARNING

- Do not pull the string to get the brake handle blocked in the OFF position. In this case the drum would turn off jerklily and loosen the coiled wire rope.
- If the wire rope on the drum gets loose, the outer coils of the wire rope get under the inner coils at the repeated pulling, and the wire rope gets damaged quickly.
- See Chapter 4.4.1. - How to tightly coil up the wire rope onto the drum

FIGURE 4.



4.7. SETTING OF THE BRAKE POWER Figure 9

The brake band is factory set to the brake power which is 25 % higher than the nominal pulling power of the winch. Through the wear of brake band lining, the brake power changes so that it must be reset. In position ON, the correctly set brake band prevents the load from sliding backwards, in position OFF it enables you to pull the wire rope out of the winch.

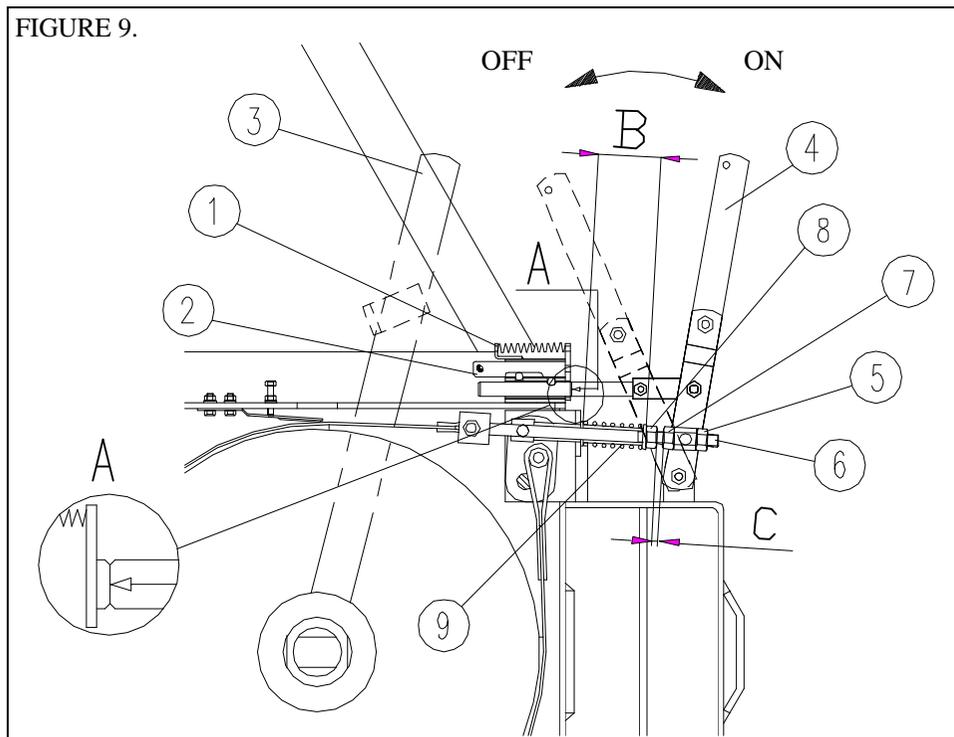
- The brake power is set by screwing the nut 8 to make the pressure spring **B = 65 mm** long. The screwing of the nut 8 from its starting position towards the pressure spring 9 results in the increase of brake power, the screwing in the opposite direction results in the decrease of the brake power.

How to check the correct position of handle 4

- Push the clutch handle 3 towards left. The upper bar 2 of the block mechanism 1 moves towards left, and the brake handle 4 comes to the position ON.
- Check if the groove on the lower bar of the block mechanism A remains in the same line with the outer edge of the upper stop plate 1. If this is not the case, balance the system by simultaneously screwing or unscrewing of nuts 5 and 7, which must be tightly re-screwed after the setting - Enlargement A
- Release the clutch handle 3. The distance between nuts 7 and 8 is $C = 18 \text{ mm}$.

IMPORTANT: If you switch the clutch handle to the position ON, the brake handle **jerks** to the position ON. This happens only if the brake handle has been in position OFF.

FIGURE 9.



Each winch is factory set to its maximum pulling power, which is also stated on the type plate on the winch. The increasing of the pulling power over this value is **not allowed**. After the pulling power of the winch decreases due to the wear of clutch linings, the clutch must be reset.

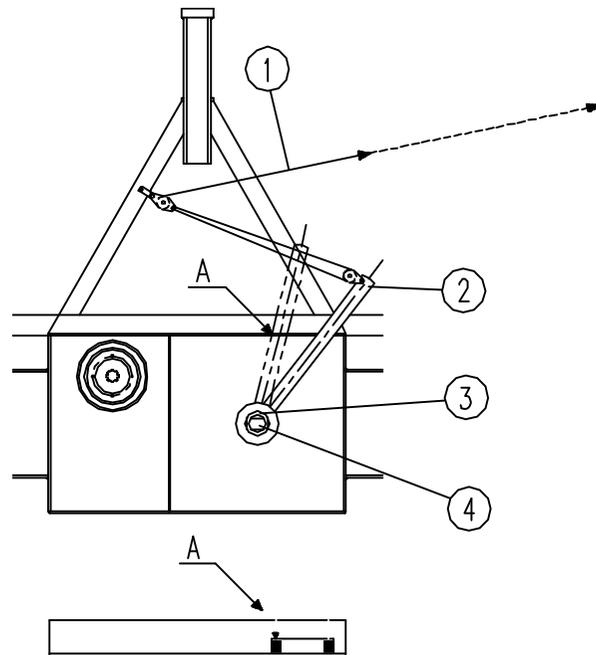
The procedure:

- Disconnect the PTO shaft and switch off the tractor.
- Using the spanner No 30, release the safety pin 4 on the drum axis by turning it to the left.
- Using the spanner No 50 turn the nut 3, M40, to the right so that you can pull the string 1 by using force of 320 N to move the clutch handle to the end of the groove A.
- Screw the safety pin 4 tightly, to prevent the nut M40 from releasing.

It is important to turn the nut M40 to the right just so far as to reach the force of 320 N when pulling the string 1 and the clutch handle to the end of the groove, and through that reach the nominal pulling power (See Chapter 4.2.)

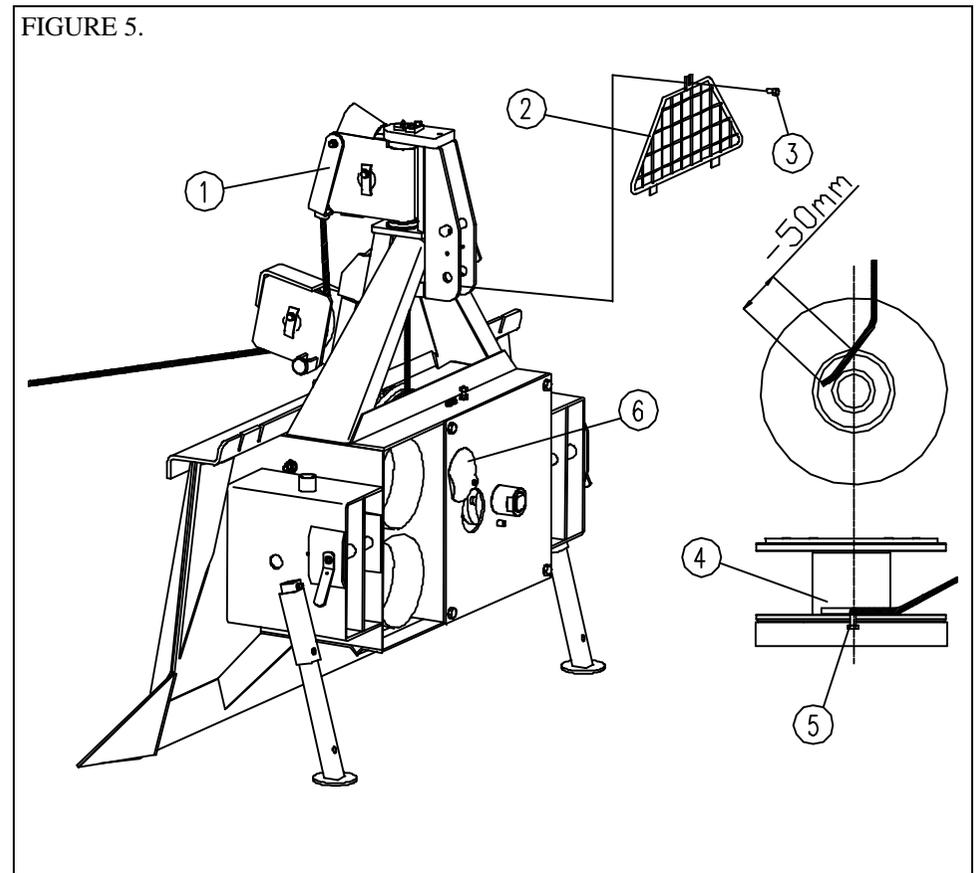
- By setting the nut M40 correctly, you reach the nominal pulling power.
- If the nut M40 is set too tightly, you cannot move the handle 2 to the end of the groove. As the result, the pulling power decreases. If the nut M40 is too loose, the drum moves too much away and the clutch plates fall off the pins. In this case the whole drum must be dismantled.

FIGURE 8.



- If the winch is mounted to a tractor, disconnect the PTO shaft and switch of the engine of the tractor.
- Remove the triangular wireguard 2 by unscrewing the screw 3.
- Remove the cover 6.
- Turn the drum to the position which will enable you to reach screw 5 through the opening.
- Using the ring spanner No 19 partly unscrew screw 5 and release the old wire rope.
- Direct the new wire rope over the upper pulley 1 into the winch to the outer sidewall of the drum. Put the wire rope for approximately 50 mm into the opening on the drum centre 4.
- Fasten screw 5 to fix the wire rope.
- Reinstall cover 6 to close the opening and fix the triangular wireguard 2.
- **Coil up the wire rope firmly onto the drum (4.4.1).**

FIGURE 5.



4.4.1. HOW TO TIGHTLY COIL UP THE WIRE ROPE ONTO THE DRUM

First, uncoil the wire rope completely. By pulling the black string 2 coil up the wire rope onto the drum. See Figure 4.

Make sure that the wire rope is coiled up tightly. This can be achieved in two ways:

- by pulling a load
- by fastening the wire rope to a fixed object so that the tractor is pulled towards this object. It is recommended to do this on a slope and pull the tractor, the engine of which should be idling, upwards, or, just brake the tractor.

WARNING The wire rope must always be tightly coiled up onto the drum - before starting to work with a new winch, the wire rope must be totally coiled off without load and tightly coiled up again. The first five coils should be coiled under minimum load, the rest under more load. Check the quality and state of the wire rope!

When coiling the wire rope off the drum, be careful not to rip it off at the end.

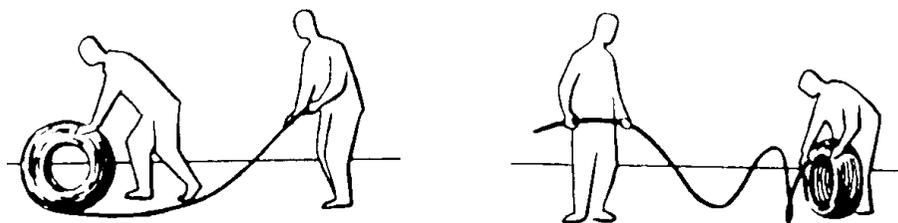
4.4.2. QUALITY OF WIRE ROPE

- Use only attested wire rope with a minimum brake point stated in the technical data - See Chapter 1.
- The wire rope must not be longer than given in the technical data - Chapter 1.

4.4.3. UNCOILING THE WIRE ROPE Figure 6

WARNING Make sure that the wire rope does not make loops during coiling off or on.

FIGURE 6.



Right

False

4.5. SETTING THE WIRE ROPE RELEASE POWER Figure 7

The wire rope release power must be set correctly so that the drum stops immediately after the wire rope has been released. This prevents the wire rope on the drum from releasing automatically.

The procedure:

- Release the safety nut 2.
- Screw or unscrew screw 1, which influences the brake band 3 through the leaf spring 4.
- By screwing the screw 1, the wire rope release power increases and it decreases by unscrewing the screw 1.
- Screw the counter nut 2.

FIGURE 7. (Enlargement c figure 4)

