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OPERATING AND MAINTENANCE INSTRUCTIONS

LOGGING WINCH

VIP PRO 90

CE

ISO 9001 Q-2295

Ver.: 1.8

07/2018-ENG

Please read these instructions carefully before installing and using this machine!

MANUFACTURER'S ADDRESS

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1. INTRODUCTION

Dear Customer,

By purchasing our **logging winch**, you have obtained a piece of equipment that will provide you with great assistance at work.

Proper use and maintenance of the product heavily affect its reliability during operation as well as its service life. Therefore, **we recommend you carefully read the instructions** before starting and observe them during the operation.

We would like to thank you for your trust and we hope you will find satisfaction in your work with the **TAJFUN VIP PRO 90 LOGGING WINCH.**

Above all, follow these basic rules:

- Observe all safety instructions;
- Keep your winch clean - any dirt may increase wear on moving parts and thus cause potential damage;
- Always use lubricants of prescribed qualities;
- Lubricant contamination increases the risk of an accident;
- For any expert advice please contact our Sales Department, while our Customer Service team is there to assist you with maintenance;
- When requesting information or ordering spare parts for the VIP PRO 90, please quote its type (designation) and full factory number;
- **Observe all rules concerning safety at work!** They protect the lives of others, as well as your own;
- Report any faults immediately upon identification;
- All documents are protected by the copyright laws;
- No part of this document may be distributed or reproduced.

DANGER!
Observe the information concerning the risks described next to the icon as accurately as possible!

1.1. LIMITS OF GUARANTEE

Before using this machine, read these operating instructions carefully.

The manufacturer assumes no liability for damages or faults if the machine was not used in accordance with the operating instructions.

The guarantee by the machine manufacturer and their liability shall be terminated in the following cases:

- if the machine was used in an irregular manner or was managed by a person who was not professionally qualified for this work;
- if non-original spare parts and accessories were used;
- partial or complete failure to comply with the instructions for use;
- reworking and/or modifications that were carried out without the manufacturer's prior written agreement;
- special cases.

The manufacturer cannot be held liable for defects of the wear and tear parts.

1.2. RESERVATIONS

The manufacturer reserves the right to change specifications, graphical materials and safety standards that are listed in the supplied operating instructions.

2. SAFETY INSTRUCTIONS

2.1. GENERAL SAFETY INSTRUCTIONS

In order to protect yourself against the risk of personal injury, electrocution, and fire, the following instructions must be observed when using the winch.

Before starting work, carefully read the following instructions!

- Work safely! Follow all operating instructions and accident prevention instructions to. Also comply with any relevant laws or other regulations and standards for forestry work.
- The winch may only be used by persons who are familiar with its operation, the possible hazards, and the instructions for use.
- Using the winch without an emergency call system is strictly forbidden.
- Persons under the influence of drugs or medication that affect or may affect physical and mental fitness, may not operate or maintain the winch.
- The winch may only be operated by qualified persons over the age of 18 years!
- Work carefully! Improper use of the winch may lead to severe injury due to the moving parts!
- Keep the working area clean and orderly!
- Do not reach into the danger area of the winch during work (e.g. between the winch and the tractor/the winch drive)!
- It is necessary to make a visual inspection and check the proper operation of the winch before use, at least once per working day. Resolve any deficiencies immediately! The winch should be inspected by a qualified person (authorised service centre) at least once per year. You may only use a winch that is in flawless condition.
- We recommend the use of a logbook to record all winch services and inspections
- Before any cleaning, troubleshooting, or maintenance work on the which:
    - shut off the winch drive. Shutting off the PTO drive is not enough; you must also switch off the drive motor of the device;
    - turn off the power supply;
    - lower the winch to the ground and disconnect the PTO.
- Observe all traffic rules and regulations for vehicle parts or equipment in the country of use.
- The transportation of people on the winch is prohibited.

2.2. SPECIAL SAFETY INSTRUCTIONS

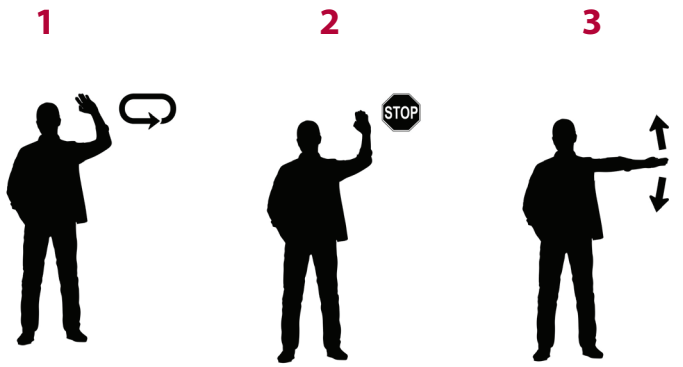
- All winch protective devices (protective nets, covers, etc.) must be properly installed, and should never be changed before operation!
- Replace a damaged cable or plug immediately.
- Use PTOs with a proper transfer power (min. 25 kW) with undamaged protection! The PTO shaft must be properly protected.
- The load capacity of the attachments (e.g.: forestry chain, hook, slider) and fastening (e.g.: snatch block, load belt) gear must be in accordance with the traction force of the winch.
- Damaged attachments and fastening tools must be replaced immediately!
- Pulling ropes must be strong enough and in accordance with the data on the winch type plate and the winch specifications. The minimum wire rope breaking force must be at least twice as high as the maximum pulling power of the winch.
- A damaged pulling rope must be replaced immediately!
- Use pulling ropes of an appropriate length (*See section: Technical specifications*)!
- Wire rope must always be wound tightly on the drum (*See section: Winding the Rope Tight onto the drum*).
- The drive machine (e.g. tractor) to which the winch is connected must be in perfect technical condition. We recommend that the machine is adequately equipped (e.g.: additional cab protection, chassis protection) for forestry work.
- The drive machine must have an adequate tyre tread depth that complies with the applicable law and traffic regulations. Install snow chains, if necessary. The use of snow chains on slippery, snowy, or icy terrain is mandatory.
- Use personal protective equipment (protective clothing, gloves, forestry shoes, helmet)!
- Do not wear loose clothing!

2.3. INSTRUCTIONS FOR SAFE WORK

Working with the winch is challenging and dangerous, therefore it requires full concentration and vigilance. For the safe performance of the required work, observe the following instructions:

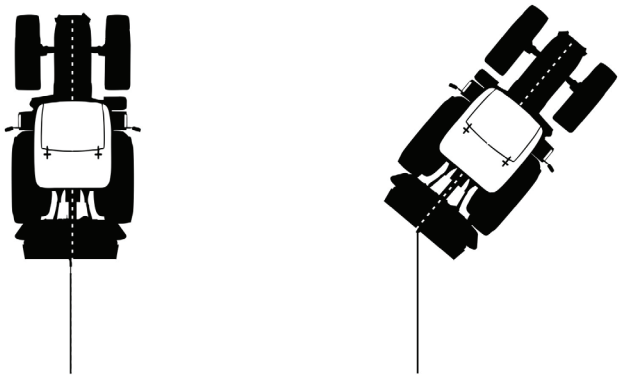
- Always connect and disconnect the winch on a level and hard surface.
- Prior to pulling and during the use of the winch, the operator must ensure that no people or other objects are present in the working area.
- The winch operator must be careful not to fully unwind the pulling rope under load. There must be enough rope to make at least five more rotations (except in dangerous situations).
- The operator must observe the load at all times during pulling. If the operator cannot observe the entire pulling path from the seat, the load must be observed by an assistant with whom the operator is in constant contact. The assistant communicates with the operator with previously agreed signs (*see picture below*).

1	Pull
2	Stop
3	Brake release



If you cannot recognise the sign, STOP the working process!!

- Particular attention must be paid to the correct and safe attachment of loads to the pulling rope. The assistant must not start the attachment process until the tractor or winch operator has been informed of his intention!
- Before working, the tractor must be properly anchored with a protective winch board which is pressed into the ground. If soft ground does not provide sufficient support on steeper slopes or when pulling heavier loads, the tractor must be anchored with an additional rope or chain to prevent the tractor from slipping or even tipping over! Additional anchoring is also required if the operator cannot see the tractor.
- In order to prevent accidents, load size, as well as tractor and winch capacity and terrain characteristics (slope, soil composition, etc.) must also be taken into account when working with a tractor and winch.



Ideal position **Wrong - DANGEROUS**

- Use the lower winch pulley especially for heavier loads; this secures the risk of the tractor tipping over. Always make sure that the rope is properly unwinding from the pulley.
- During unloading, be careful to approach the load only when the rope or brake has been released.
- Before leaving the driver's cab to operate the winch, the operator must ensure that:
  - the winch is lowered and securely anchored to the ground;
  - the tractor parking brake is activated;
  - the tractor is in the park position.
- During uncoupling, the winch must be placed on a solid and level surface. First, place the support legs in the correct support position, then store the PTO on the dedicated holder.

2.4. DANGEROUS AREA

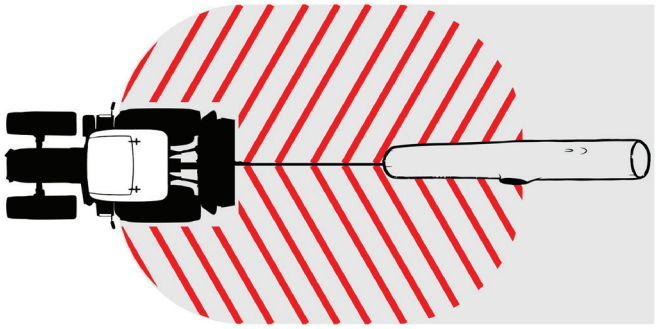
- The winch may only be operated from a safe place that ensures that the machine itself, the load, the rope, or any other object cannot hit the operator in case the pulling rope (or any of the devices for tying and securing loads) breaks. The operator seat of the tractor is considered to be a safe place to operate the winch, if a suitable protective net is correctly installed between the winch and the driver's seat.
- Operation of the winch from close range (up to 5 m) outside the tractor cab is only permitted if this location is secured with appropriate protection.
- Standing behind a larger tree is also considered a suitable safe place to operate the winch from an appropriate distance.
- **Do not stand in the dangerous work area of the winch during operation.**

The most common dangerous areas are:

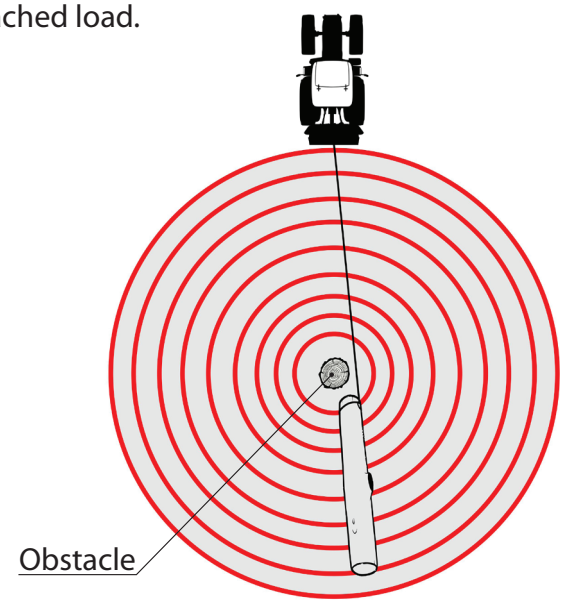
The following examples are helpful for understanding individual hazards that can also occur SIMULTANEOUSLY and need to be taken into account.

DANGEROUS AREA:

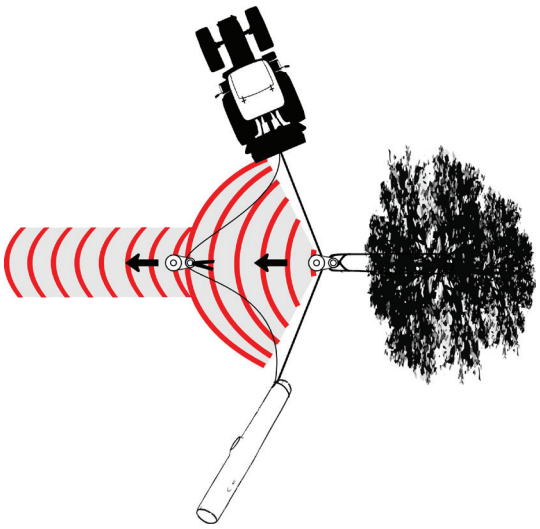
1. Area within 5 m along the pulling rope.



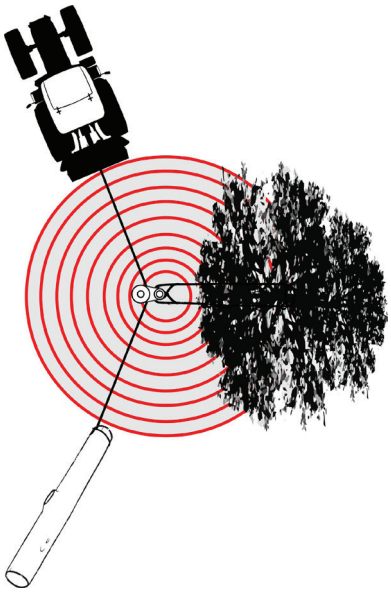
2. • If the load hits another object during pulling, the vicinity of these objects presents a dangerous area as well (e.g.: dry branches falling from the trees).
   • An area inside a circle with centre at an obstacle and a radius greater than the length of the attached load.



3. • When working with the snatch block, do not stay in the “danger triangle” between the winch, the snatch block, and the load, where there is a danger in case of breakage of the load belt or the snatch block.

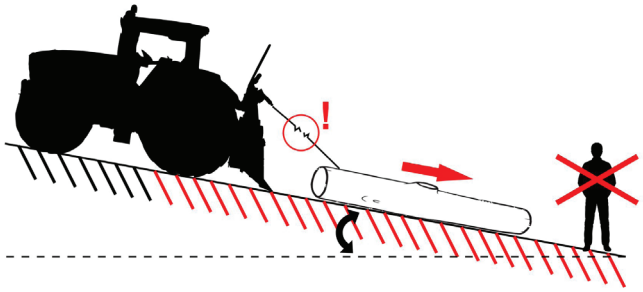


• Also, do not stay in the areas where there is a greater danger in the event of a pulling rope breakage or any other attachment device (e.g.: hook, forestry chain, slider).

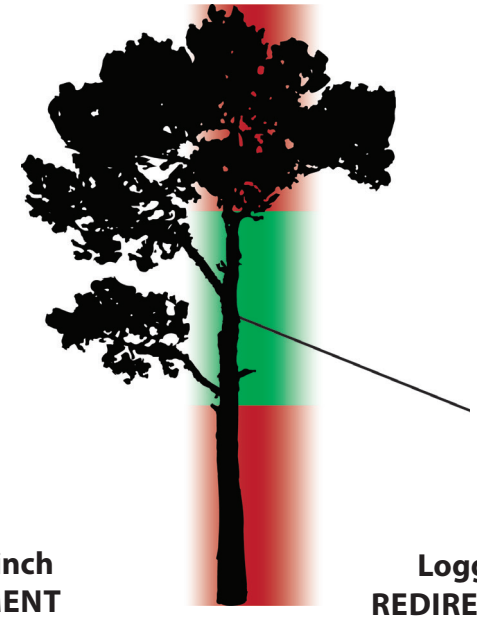


4. • The area of a potential load slip due to terrain characteristics (e.g. downhill position, side slipping) or a pulling rope breakage (or any other load lashing elements).

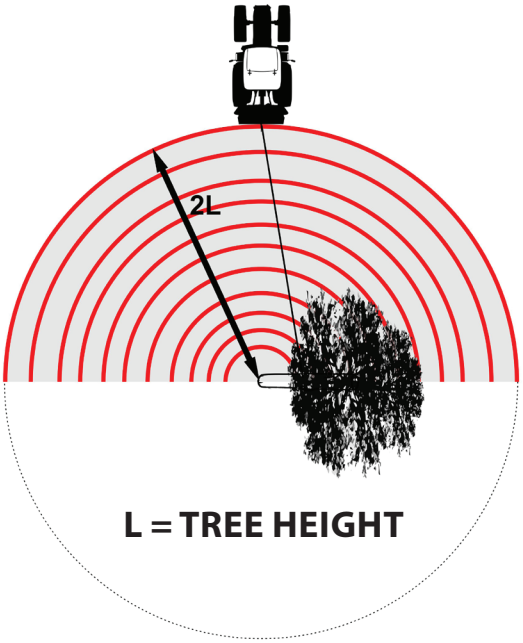
- Do not stand under the attached load while pulling the load up or down the slope, even if the load is secured on a tightened rope.



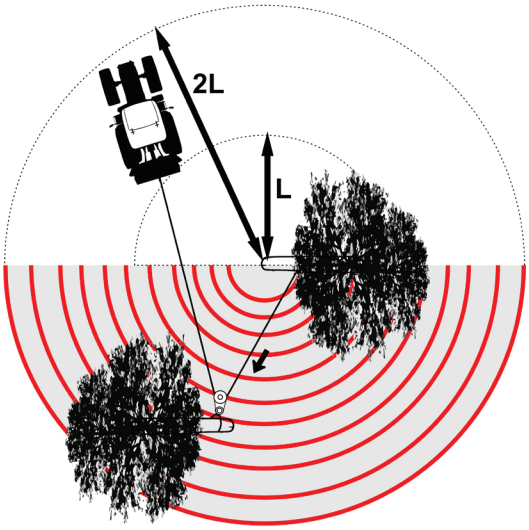
5. When securing a standing tree, the pulling rope must be attached to the three on the upper 2/3 of its height, and tensioned before starting the felling process. Position yourself with the winch outside the dangerous area, at a distance of twice the height of the tree. If you use a snatch block to reverse the direction of felling, the dangerous area is up to the distance of the height of a single tree. When using the snatch block, do not stay in the "danger triangle" or other dangerous areas!



Logging with a winch
DIRECT ATTACHMENT



Logging with a winch
REDIRECTED ATTACHMENT



2.5. OTHER DANGERS

Even if all safety precautions are followed and the winch is used according to the instructions, some risks remain:

- danger of injury due to the moving parts of the winch;
- injury from flying wood particles;
- human error (excessive physical exertion, psychical and psychological stress, exhaustion, etc.).

2.6. INTENDED USE

The logging winch is intended for use in forestry, mainly for hauling wood. It is designed to be used as a three-point hitch of a suitable drive machine (e.g. tractor). **The winch may only be used for ground pulling work.** In order to guarantee proper use, all instructions for use must be followed.

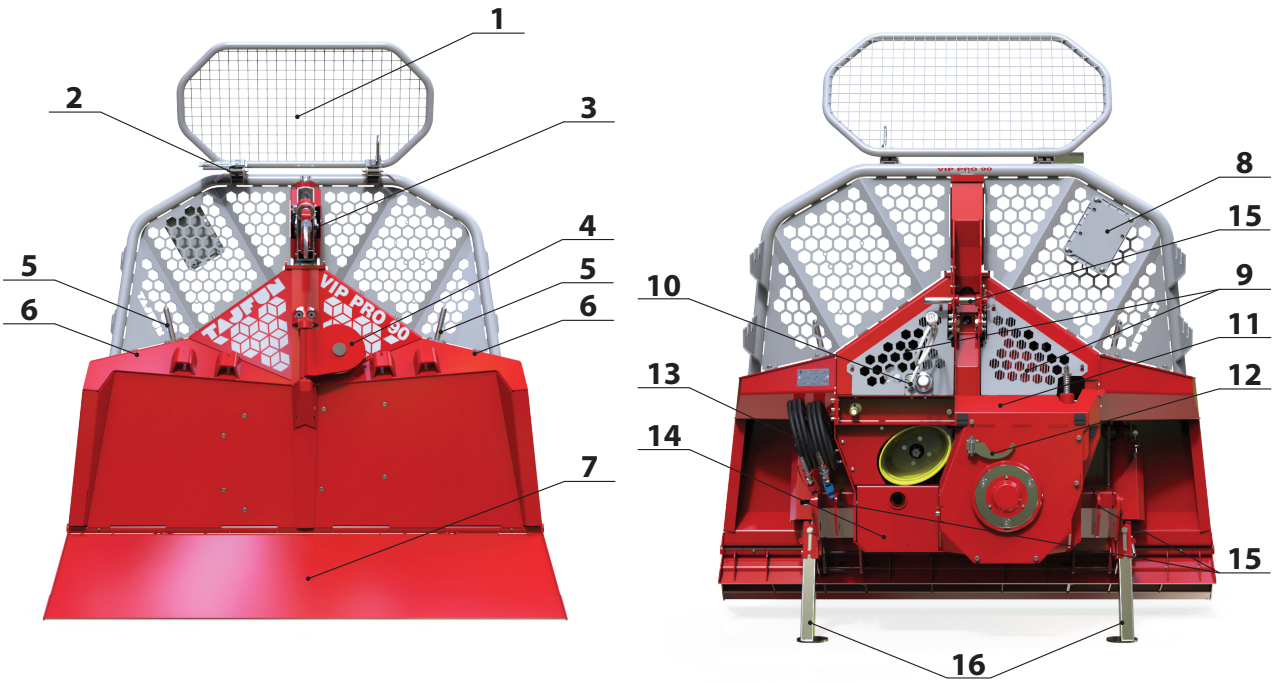
2.7. IMPROPER USE OF THE WINCH

Lifting or lowering loads with the winch is forbidden.

Any other uses of the winch than those described in the previous section are considered incorrect, and are therefore prohibited. Tajfun accepts no liability for any possible damage resulting from such use.

3.1. DESCRIPTION

The VIP PRO 90 logging winch is intended for use in forestry, in particular for hauling wood.



1	Protective net	9	Triangular shield
2	Tail hook holder	10	Connection panel
3	Upper pulley	11	Toolbox
4	Lower pulley	12	P.T.O. Shaft holder
5	Chain hangers	13	Hydraulic connections *
6	Chain box (2x)	14	Oil Tank
7	Movable logging blade *	15	Three-point hitch
8	Motor saw holder	16	Support leg (2x)

** Only for G-designated models*

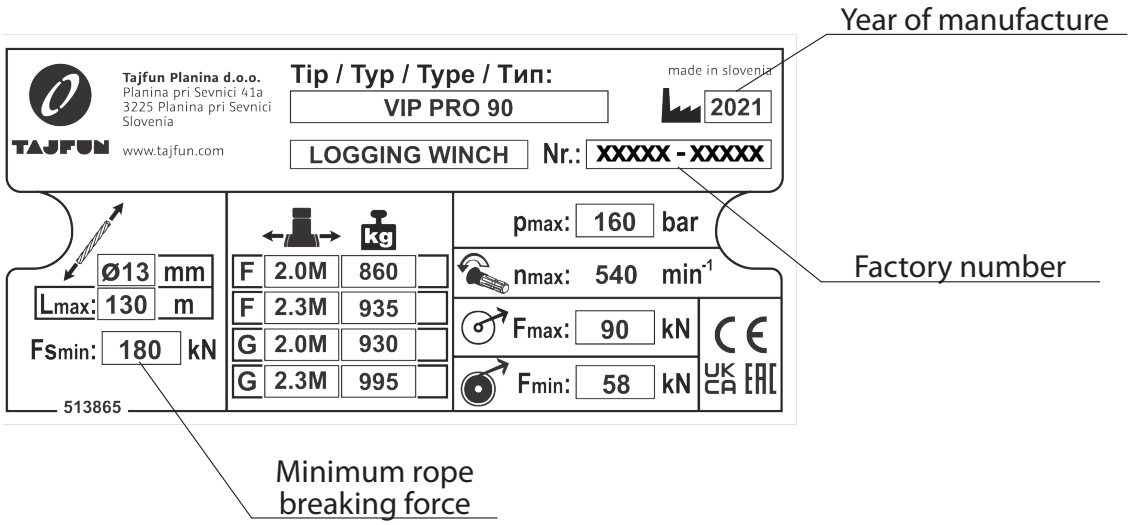
3.2. TECHNICAL SPECIFICATIONS

VIP PRO 90	
Pulling power	90 kN
Pulling power at max. drum capacity	58 kN
Brake power	112,5 kN
Gear ratio	1:13,7
Wire rope Velocity (at 300 min^{-1})	0,27 - 0,44 m/s
Wire rope Velocity (at 540 min^{-1})	0,50 - 0,79 m/s
Required tractor capacity	75 - 110 kW (100 - 150 HP)
Maximum wire rope length	130 m ø 13 mm
Minimum wire rope breaking force	180 kN
Mounting	II, III
Operating pressure (Winch)	145 - 160 bar
Hydraulic oil viscosity	46 mm^2/s at 40°C
Hydraulic oil capacity	13 L
Reductor oil capacity	3,7 L
Required tractor outlet voltage	12 V
Minimum control fuse rating	10 A
Operating noise level	70 dB (A)

	F2.0M	G2.0M	F2.3M	G2.3M
Weight without wire rope	860 kg	930 kg	935 kg	995 kg
Width	2000 mm	2000 mm	2300 mm	2300 mm
Length	830 mm	890 mm (Movable logging blade in middle position)	830 mm	890 mm (Movable logging blade in middle position)
Transport height	1870 mm	1870 mm	1870 mm	1870 mm
Height (including protective net)	2300 mm	2300 mm	2300 mm	2300 mm
Operating pressure (Movable logging blade)	/	max. 200 bar	/	max. 200 bar

3.3. TYPE PLATE

The type plate is attached to the frame of the winch and contains information about the product and the manufacturer.



When requesting information or ordering spare parts, please quote its type and full factory number. This way, you will receive the parts that exactly match your version of the machine.

CE

The CE marking declares that the machine meets all the essential safety and health requirements.

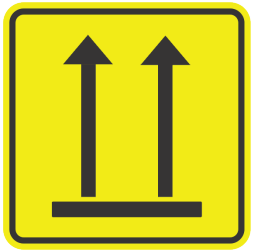
The manufacturer has also issued the prescribed **Declaration of Conformity** for this winch.

3.4. LABELS ON THE WINCH

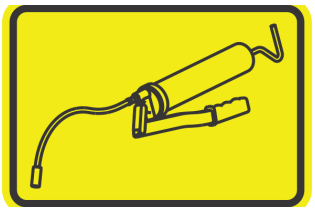
Reading instruction manual is mandatory.

Do not stay in the dangerous area of the winch.

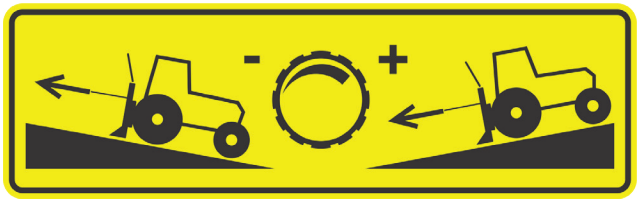
It is forbidden to lift loads. The winch can only be used for hauling on the ground.



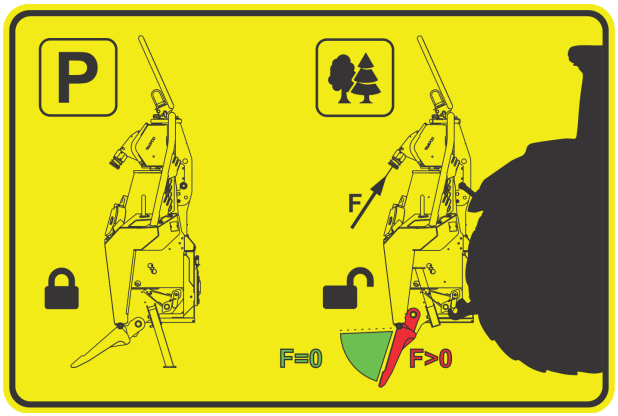
Keep upright.



Lubrication point.

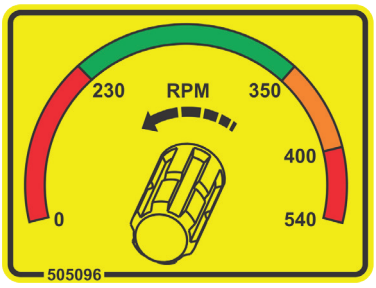


Adjusting the feeding device.



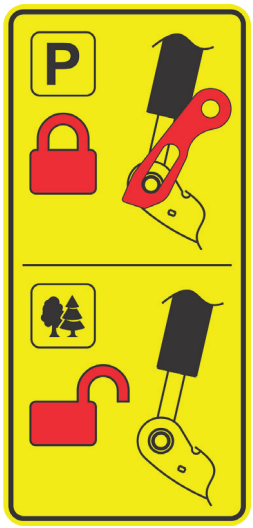
Parking and working position of the movable logging blade.
Only for G-designated models.

Connection voltage 12 V.



Correct direction of PTO shaft rotation.

Permitted rotation speed range.



Parking lock on the movable logging blade.
Only for G-designated models.

4. CONNECTING THE WINCH

4.1. USER QUALIFICATION

The attachment of the logging winch can only be carried out by persons who are **qualified** for this kind of work.

4.2. BEFORE FIRST USE

- **Read the instructions;**
- **check the length of the PTO shaft *(See section: Connecting the VIP PRO 90)*;**
- **remove the parking lock on the movable logging blade *(See section: Movable logging blade)*** *Only for G-designated models****;***
- **perform a (visual) inspection before starting work *(See section: Inspection before starting work);***
- **tightly wind the wire rope onto the winch drum *(See section: Winding the Rope Tight onto the drum)*.**

4.3. CONNECTING THE VIP PRO 90

Use bolts to fasten the winch to the three-point tractor system. Check that all bolt-securing systems are undamaged and properly installed. The tractor's lower link arms must be fixed by using tensioning screws to prevent the winch from moving transversely.

- The winch is driven via a PTO shaft which must match the required power of the winch - min. 25 kW;
- Before starting the work with the winch, lift the support legs.

On first installation, it is essential to check the length of the PTO shaft.

To check the length of the PTO shaft, find the position with the shortest distance between the connecting shafts by lifting or lowering the winch. In this position, the tubes must be shorter by approx. 20 mm when the PTO shaft is fitted.

If the PTO shaft is too long, reduce the length as follows:
Use a saw to cut both ends of the steel and plastic tubes to the same length. Then file down, clean and grease the edges.

The winch must be placed on a solid and flat base. After disconnecting the tractor, the PTO shaft can remain on the winch, positioned on the PTO shaft holder.

When using our machines, we recommend Tajfun PTO Shafts:

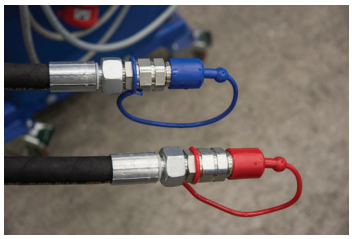
NAME	DIMENSIONS	COMPATIBILITY
PTO Shaft C Line-T 6BR + KK560	1 3/8" Z6 – 1 3/8" Z6; LKK = 560	VIP PRO 90

CONNECTING THE MOVABLE LOGGING BLADE TO THE TRACTOR HYDRAULICS

(Only for G-designated models)

For the operation of the movable logging blade, the winch must be connected to the tractor hydraulics.

Connect the hydraulic hose of the movable logging blade (red connector protection) to the pressure line of the tractor hydraulics and the hydraulic hose of the movable logging blade (blue connector protection) to the return line of the tractor hydraulics.



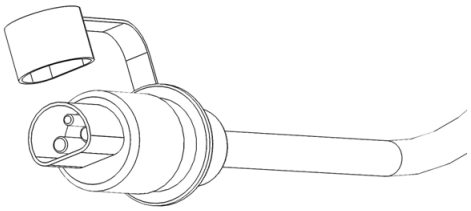
The movable logging blade is operated by an appropriate control lever located inside the tractor cab.

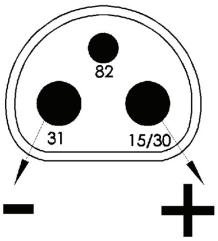
Operating pressure (Movable logging blade): max. 200 bar.

Basic positions of the movable logging blade are described in the section: *Movable logging blade*.

4.4. CONNECTING TO THE MAINS CIRCUIT

Connect the 3 pin plug to the power supply on the tractor or a 7 pin plug in a specially prepared socket on the tractor *(See section: Electrical diagram)*.
Check that the power source provides a constant 12 V voltage and 8 A current. Otherwise, this may lead to faulty electrical system operation. Minimum cross-section of the cables from the power source should be 2,5 mm^2. Negative pole of the power supply must be on the tractors body (K31).





Check the polarity on the power source.

TURNING THE WINCH ON AND OFF

To turn on the winch hold the "Wire rope loosening / feeding" or "Wire rope pulling" button on the control pendant / radio remote control transmitter. When the winch is turned on the LED indicator on the connection panel lights up.

The winch is automatically turned off after 4 hours of inactivity or by disconnecting the power supply.

Before turning off the winch it is necessary to turn off the tractor PTO shaft drive.

4.5. CONNECTING THE CONTROLS

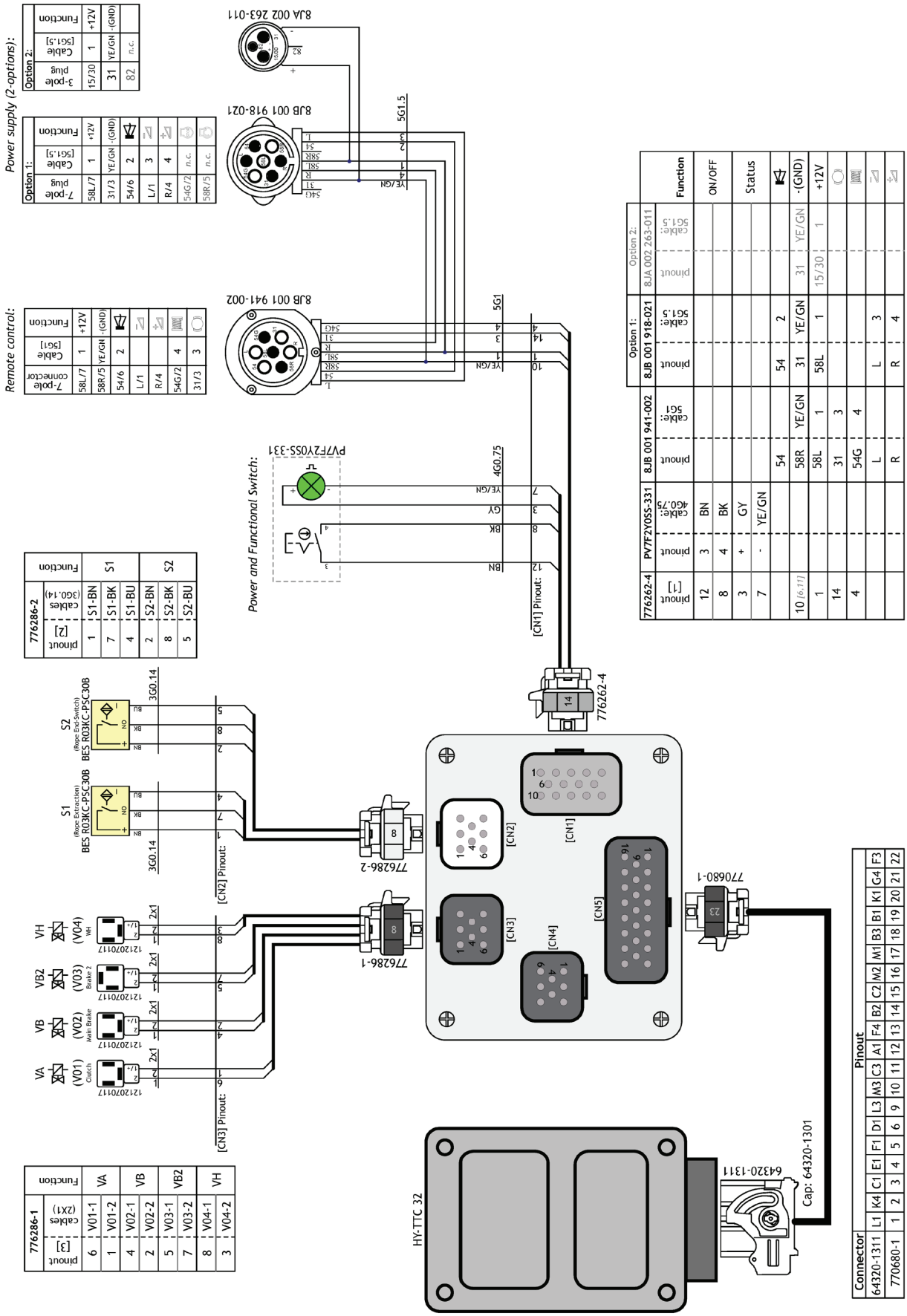
CONTROL PENDANT

Plug the control pendant into the socket located on the winch connection plate.

RADIO REMOTE CONTROL

You can also use a radio remote control to control the winch. Instead of the control pendant connect the radio remote control into the socket located on the connection plate of the winch.

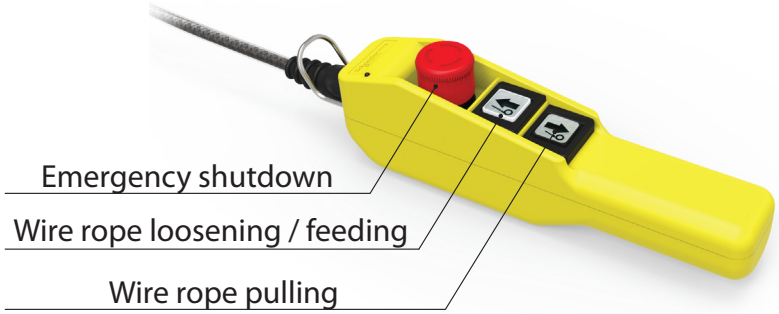
4.6. ELECTRICAL DIAGRAM



5.1. CONTROL UNITS

Control pendant type A

Control pendant type B



Radio remote control

For description of individual functions see sections: "*Feeding the rope from the winch*" and "*Pulling (rope winding)*".

Follow the instructions of the radio remote control manufacturer!

5.2. FEEDING DEVICE

The winch is equipped with a feeding device that unwinds the wire rope from the winch. This greatly facilitates the operator's work when unwinding the wire rope to reach the load. At the same time, this prevents uncontrolled unwinding of the wire rope.

Feeding device pressure gauge shows the pressure representing the resistance of the rope, which must be overcome by the feeding device when unwinding (feeding the rope). During operation, the pressure of the feeding device is between 50 and 80 bar. Should this value exceed 80 bar, this would mean the rope is having trouble winding onto the drum making the operation of the drive device difficult. The cause for this may be in a mechanically damaged rope or an inadequate setting of the feeding brake.

In this way, the feeding brake *(See section: Adjusting the feeding device)* may decisively affect the efficiency of the feeding device.

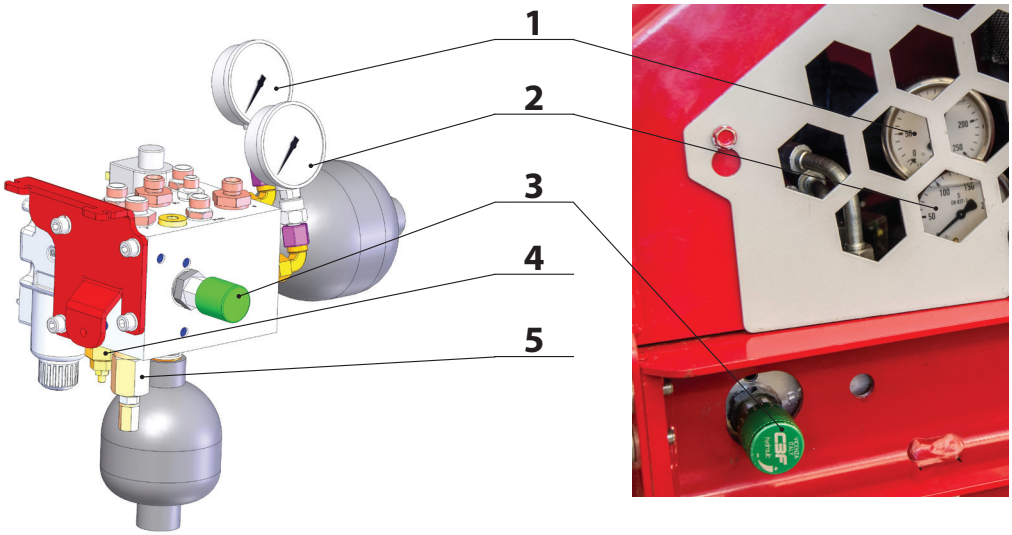
An efficient operation of the feeding device depends on the friction coefficient between the wire rope and the running surface of the drive elements (sheave, push wheel). Since the friction coefficient changes according to the operating conditions, it is necessary to adjust the feeding brake setup several times *(See section: Adjusting the feeding device)*.

The manufacturer guarantees the best results in the operation of the feeding device, when using the wire rope from the standard offer of the winch manufacturer.

When pulling (winding the rope on the drum), the feeding device has a braking effect. This causes the rope to be more tightly wound, which is especially important when winding an unloaded rope (without a load). This braking force is not adjustable and is determined by the configuration of the integrated hydraulic system. The operation of the braking effect can be monitored by observing the pressure value on the feeding device pressure gauge (10 - 15 bar).

USAGE OF WIRE ROPE

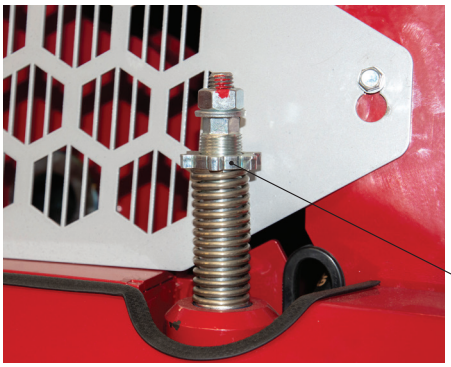
The feeding device is intended for use with a steel wire rope. The device is not suitable for any other types of rope (for example, ropes from artificial materials).



1	Operating pressure gauge in hydraulic system
2	Feeding device pressure gauge
3	Regulation valve for feeding speed adjustment
4	Safety valve (Factory-set and cannot be changed: 140 bar)
5	Operating pressure valve (Factory-set and cannot be changed: 145 - 160 bar)

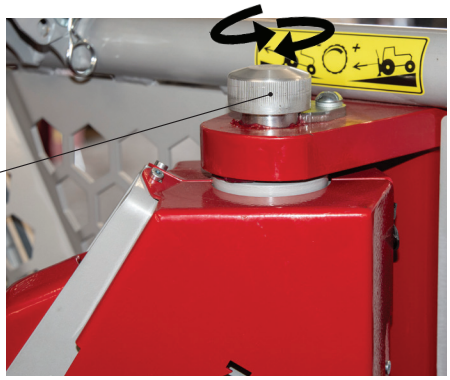
5.3. ADJUSTING THE FEEDING DEVICE

- The feeding brake must be correctly adjusted to stop the drum immediately after feeding and prevent the rope left on the drum from loosening.
- Adjust the feeding brake by using the brake adjusting star nut. The braking force increases by tightening the brake adjusting star nut and decreases by loosening it. During the feeding device operation, the pressure must be kept between 50 and 80 bar (feeding device pressure gauge).
- The speed of feeding can be changed by turning the regulation valve. The regulation valve must never be completely closed (tightened). We recommend using a fully open (loosened) valve. Before adjusting the regulation valve it is necessary to turn off the tractor PTO shaft drive.
- By pulling the wire rope, you switch on the feeding device. You can adjust the force necessary to activate (and deactivate) the feeding of the wire rope with the adjustment screw above the upper pulley. By tightening the adjustment screw, the force necessary to activate the feeding increases, and it decreases by loosening.



Adjustment screw of the feeding device

Brake adjusting star nut



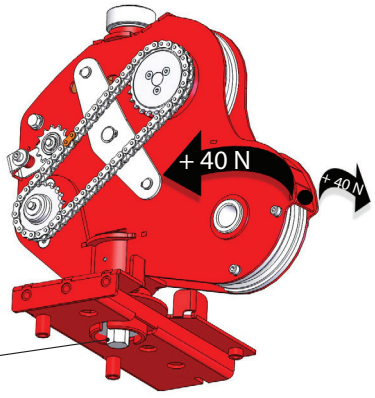
5.4. WINDING DEVICE

The winding device ensures proper winding of the rope on the drum. When winding the rope on the drum the feeding device is not driven, but still rotates and brakes the rope. This causes the rope to be more tightly wound, which is especially important when winding an unloaded rope (without load).

The movement of the winding device (left - right) is controlled by the screw under the winding device.

The force by which the winding device can be rotated is factory-set to approx. 40 N (without the wire rope). The winding device should neither move freely (left - right), nor should it be fastened too tightly.

The fitted automatic tensioner serves for tightening the winding device chain. The chain requires no special maintenance or lubrication.



Screw under the winding device

5.5. FEEDING THE ROPE FROM THE WINCH

CONTROL PENDANT TYPE A

Turning the "Wire rope feeding" switch to the "I" position will release the band brake and "enable feed activation". Feeding is **switched on by pulling the wire rope** and switched off when we stop pulling the wire rope. In the event that the wire rope is tensioned when the function is switched on, the feeding **starts with a time delay (2 s).** Pay attention to the correct setting of the feeding brake.
Turning the "Wire rope feeding" switch to the "0" position, disables the permanently released brake and the activation of the feeding.

When the "Wire rope feeding" switch is in the "I" position, the remaining keys on the control pendant are not operational.

CONTROL PENDANT TYPE B AND RADIO REMOTE CONTROL

Pressing and holding the "Wire rope loosening / feeding" switch for 3 s on the control pendant / transmitter will permanently release the band brake and "enable feed activation". Feeding is **switched on by pulling the wire rope** and switched off when we stop pulling the wire rope. In the event that the wire rope is tensioned when the function is switched on, the feeding **starts with a time delay (2 s)**. Pay attention to the correct setting of the feeding brake.
Pressing the "Wire rope loosening / feeding" or "Wire rope pulling" button disables the permanently released band brake and the activation of the feeding.

The rope must be pulled out evenly, without any sudden pulls, since this can cause loosening of the rope on the drum and the formation of loops.

Towards the end of unwinding the rope, make sure that you do not tear it out of its attachment slot on the drum.

5.6. PULLING (ROPE WINDING)

CONTROL PENDANT TYPE A

Turn the "Wire rope feeding" switch to the "0" position and activate the pulling function by pressing the "Wire rope pulling" button. The pulling stops when you release the "Wire rope pulling" button on the control pendant.
When pulling is stopped, the band brake prevents the pulled load from sliding back.

CONTROL PENDANT TYPE B AND RADIO REMOTE CONTROL

Pressing the "Wire rope pulling" switch activates the pull function. The pulling stops when the "Wire rope pull" switch on the control pendant is deactivated.
When pulling is stopped, the band brake prevents the pulled load from sliding back.

Despite the constant power of the PTO drive, the pulling force varies.

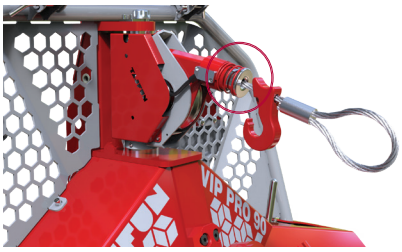
The maximum pulling force is reached with the first layer of rope on the drum. With the multi-layer winding of rope on the drum, the pulling force gradually decreases. The pulling speed changes inversely proportional to the force, being higher with a full drum.

The nominal pulling force is the maximum pulling force reached on the first layer of the wire rope wrap on the drum. It is shown in the technical specifications or on the type plate of the winch. By increasing the diameter of the wire rope on the drum, the pulling force decreases. Thus, a full drum has about 65 % of the nominal traction force.

5.7. STOP PULLING

The pulling is automatically switched off when the limit switch is activated.

The limit switch is activated when the element (hook, slider, loop, ...) on the wire rope activates the mechanism on the upper pulley. The limit switch can also be activated by a damaged wire rope or other object.



After turning off the pulling with the limit switch, the wire rope must be slightly pulled out (approximately 15 cm) so that the spring of the switch does not remain compressed.

In case of damage/failure of the limit switch, no pulling function is allowed by the winch. You can check whether the limit switch is damaged by activating the feeding, unwinding a few meters of the wire rope and checking whether the LED indicator is flashing.

If the LED indicator is flashing in a one second's pace, the limit switch is damaged. A damaged switch must be replaced immediately.

The user can temporarily enable the pulling **exclusively for one-time winding of unladen wire rope** onto the drum! First it is necessary to turn off the tractor PTO shaft drive. Unscrew both screws and remove the triangular shield, which allows you to access the LED indicator button.

By pressing the flashing LED indicator button, the user confirms to be aware of the failure on the final switch, thus assuming all responsibility for further work. The LED indicator flashes at a faster, half-second's pace, thus warning of special caution. Reinstall the triangle shield. Pulling is now temporarily enabled.

Once the emergency pulling is activated, special caution is required, since the limit switch is not operational. Switch off the pulling action in a timely manner!

5.8. LOOSENING OF LADEN ROPE

When pulling is stopped, the band brake prevents the pulled load from sliding back.
To loosen the tensioned rope, press the "Wire rope loosening/feeding" button to release the band brake.
The winch features an additional brake which complements the band brake. When loosening the tensioned rope, this additional brake, applying a force of about 5 kN, keeps holding the load for another 2 seconds. After this time, the additional brake is released completely and the feeding device starts feeding the wire rope. The additional brake thus prevents uncontrolled unwinding of the rope on the drum and the loosening of the rope. If the wire rope is loosened on the drum, the external windings may be caught under the lower ones, which could quickly damage the rope. Such a rope should be re-wound tightly *(See section: Winding the Rope Tight onto the drum)*.

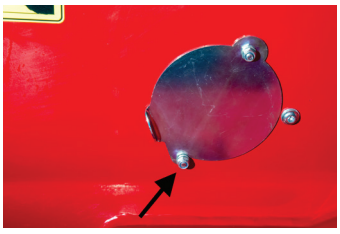
When loosening large loads, the efficiency of the system decreases, so the rope needs to be loosened with **short presses on the button.**

EMERGENCY STOP (CONTROL pendant TYPE B AND RADIO REMOTE CONTROL)

By pressing the "Emergency Stop" button, the control of the winch is switched off. Thereby, the button is locked mechanically in the pressed position. In this pressed position, neither pulling nor loosening the rope can be activated. You can deactivate the button by turning it partially to the right.
The transmitter of the radio remote control must be switched off and on again.

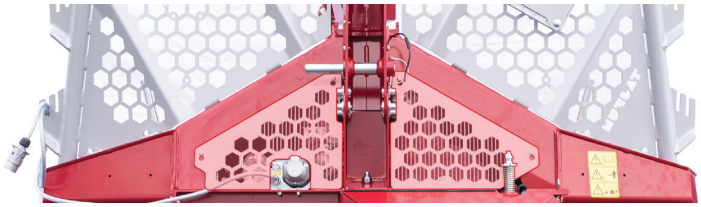
5.9. WIRE ROPE INSTALLATION

- Unscrew the safety screw and open the access door to the drum by turning it.

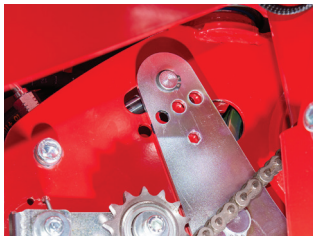


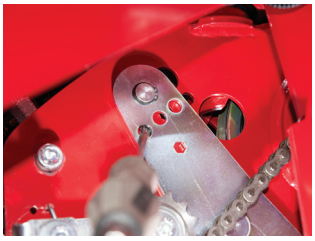
- Rotate the drum so that the rope attachment screw is visible through the opening.
- If the winch is connected to the tractor, turn off the tractor PTO shaft drive.
- Turn off the tractor.
- In the hydraulic system, lower the operating pressure to 0 bar, to allow for the displacement of the push wheels in the feeding device. To do this, press the pull/feed function repeatedly until the operating pressure on the pressure gauge (system) drops to zero (the power supply must be connected, the winch must be on, the PTO must be switched off).

- Unscrew the screws and remove the two triangular shields.



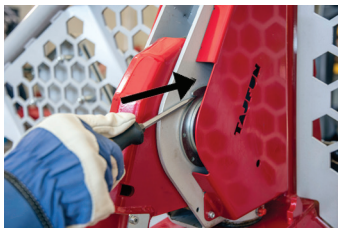
- Move the push wheels in the feeder device by pushing the push wheel coupling to the left with a screwdriver.

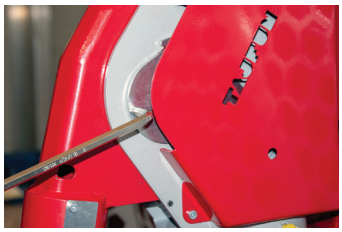




- With an 6 mm hex wrench, partially unscrew the screw for securing the rope to the drum.
- Cut off the end of the new wire rope to keep the wires together and not protruding on the sides (prior to cutting, cover the wire rope with adhesive tape, or you can also solder the cut end face so that the cut ends of the rope are held together).
- Slightly twist the wire rope by 15° approximately 5 cm from the end.
- Unscrew the adjusting screw of the feeding device to the lowest value.

- On the upper pulley, insert the screwdriver into the slot on the element or insert a 6 mm hex wrench into the cut-out on the side of the element. Move the element towards the inside of the pulley.

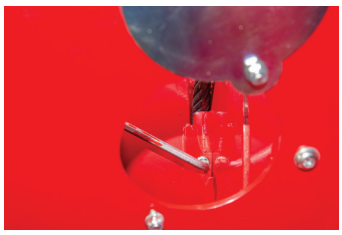




- When you move the element to the end, insert the second screwdriver through the side holes. The element must lean against the inserted screwdriver so that it cannot return to its original position. Only remove the screwdriver when the new wire rope is attached to the drum.

- Route the wire rope through the upper pulley to the inside of the winch. To facilitate the insertion of the rope, lift the wire rope guide on the upper pulley.

- Insert the wire rope all the way to the attachment slot on the drum. Tighten the rope securing bolt.



- Turn the access door to the drum to close, install the safety screw and reinstall the triangle shield.
- Tightly wind the rope onto the drum *(See section: Winding the Rope Tight onto the drum)*.

5.10. WINDING THE ROPE TIGHT ONTO THE DRUM

First, completely unwind the rope and check it for damage, then wind it back onto the drum by pressing the "Wire rope pulling" button.

In doing so, be careful to wind the first five threads with a lower load and the remaining rope with a higher load.

You can do this in two ways:

- by pulling the load,
- by attaching the pulling rope to a stable object to pull the tractor towards this object. It is recommended that you do this on a slight slope so that the tractor, which is in idle mode, is pulled upwards or by braking with the tractor.

WARNING: The wire rope must always be wound tightly onto the drum - before starting the work with a new winch, the rope needs to be fully unwound, checked for damage and then firmly wound the drum: the first five threads with a minimum load and the remaining rope with a higher load!

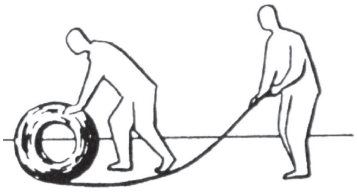
Towards the end of unwinding the rope, make sure that you do not tear it out of its attachment slot on the drum.

IMPECCABILITY OF THE WIRE ROPE

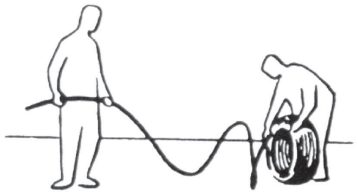
- You can only return an unused wire rope.
- Use only approved pulling ropes with a minimum breaking force equal to or higher than the one specified in the technical specifications and on the type plate.
- The wire rope must not be longer than the maximum length specified in the technical specifications.
- The wire rope diameter must match the one shown on the type plate and specified in the technical specifications.

UNWINDING THE WIRE ROPE

WARNING:
When handling the rope, be careful that no loops are made when winding and unwinding.



Correct

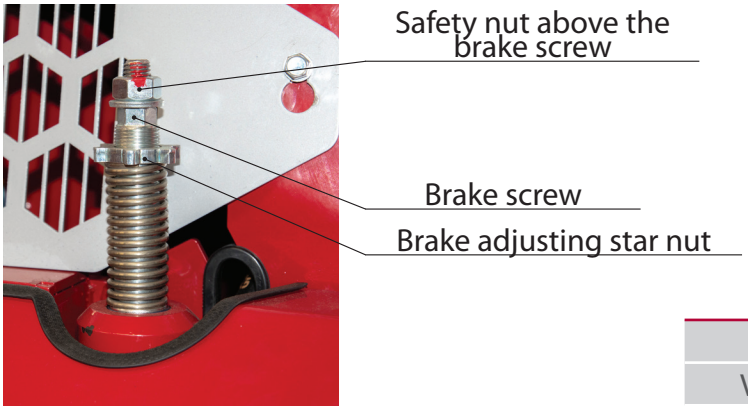


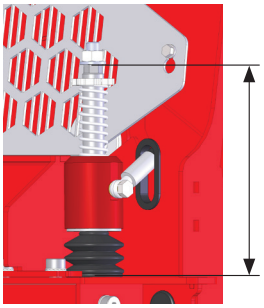
Incorrect

5.11. BAND BRAKE - ADJUSTING THE BRAKING FORCE OF THE WINCH

A correctly adjusted band brake automatically retains the load on the rope to prevent it from slipping back when pulling is stopped. With the "Wire rope Loosening/Feeding" function, it also allows the feeding of the rope from the winch. It is factory-set to be 25 % higher than the pulling force. For loads greater than 125 % of the pulling force, the band brake slips to protect the winch against overload. Do not adjust the band brake to higher values!
Adjustment of the band brake can only be done by an authorized person!

- The braking force (as well as the pulling force) depends on the length of the rope left on the drum. The maximum braking force is achieved at the first layer wound on the drum. With the multi-layer winding of the rope on the drum, the pulling force gradually decreases.
- The brake force changes with the wear of the brake pad and due to different operating conditions (weather, temperature, ...). In these cases, the brake force must be reset.
- Before starting, make sure both the band brake and the contact surface of the drum are clean and dry. This is achieved by repeatedly applying the brake on the drum.
- The braking force is adjusted by tightening or loosening the brake screw. By tightening the brake screw, braking force is increased, while loosening it reduces the braking force.
- When changing the brake belt, the brake force is adjusted from the starting position. The starting position is only an orientation value for approximate setting of the brake force. The exact setting can only be achieved using a measuring instrument - dynamometer.
- Once the brake screw (i.e. braking force) is adjusted, secure it against loosening by tightening the safety nut located above the brake screw.
- Safety nut above the brake screw must be once again resealed after adjustment.





Type:	Starting position
VIP PRO 90	188 mm

5.12. MOVABLE LOGGING BLADE *(Only for G-designated models)*

When the winch is correctly attached to the tractor hydraulics (*See section: Connecting the VIP PRO 90)*, we can operate the movable logging blade with an appropriate control lever located inside the tractor cab.
We know two basic positions:

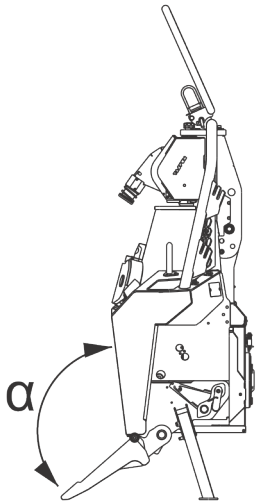
PARKING POSITION

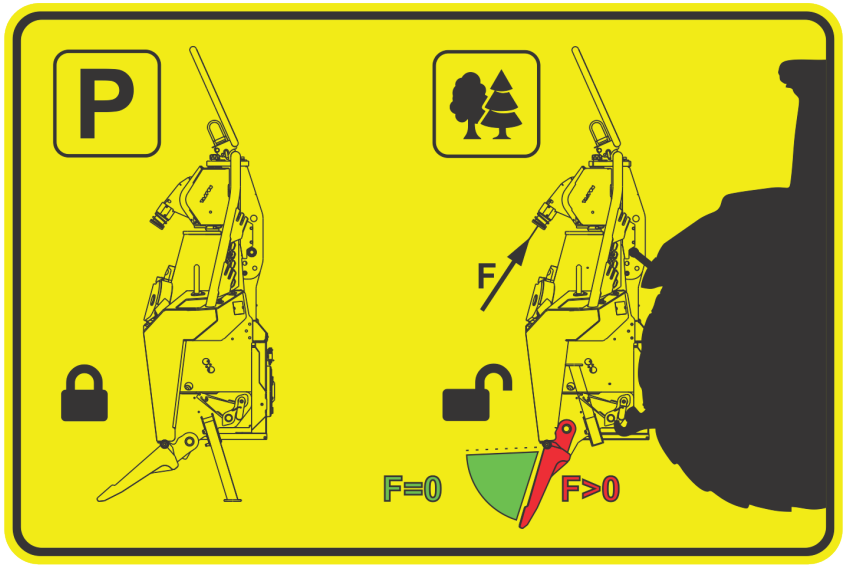
The movable logging blade is in position that enables the winch to stand upright. The support legs are lowered and properly lay on the floor, parking locks on the movable logging blade are installed, winch is disconnected from the tractor. The parking position is shown in the picture below (α = 120°).

Always place the winch on a solid and flat surface!

WORKING POSITION

The winch is connected to the tractor, support legs are folded, parking locks on the movable logging blade are removed. The movable logging blade must be completely lowered during pulling (α = 150°). However, it can be used in the entire work area during transport and manipulation; **from completely raised to completely lowered (85° < α < 150°).** The working position is shown in the picture below.



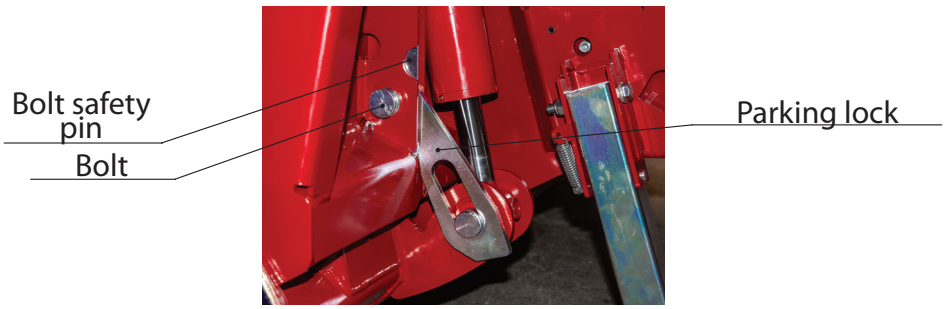


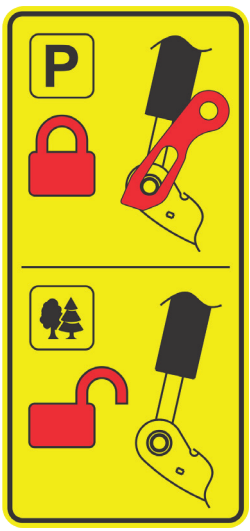
Parking position **Working position**

PARKING LOCK ON THE MOVABLE LOGGING BLADE

The VIP PRO winch has factory fitted parking locks on the movable logging blade which prevents its movement in parking position and thus preventing the possibility of overturning the disconnected winch.

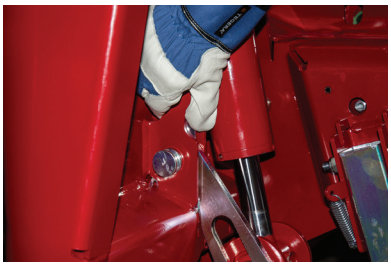
Before use remove both parking locks on the movable logging blade.



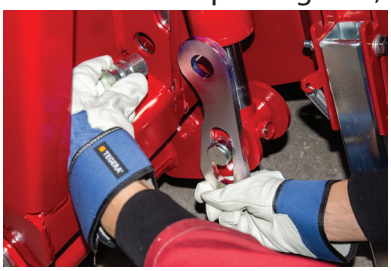


Procedure for removing the parking lock on the movable logging blade:

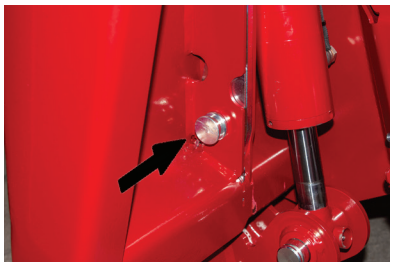
- Push the bolt safety pin inwards and pull out the bolt;



- remove the parking lock;



- place the parking lock in the groove and secure it with a bolt.

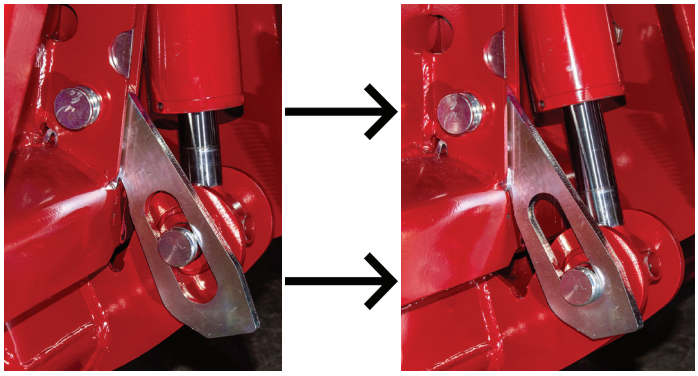


- remove the parking lock on the other side.

Before disconnecting the winch from the tractor install both parking locks on the movable logging blade.

Procedure for installing the parking lock on the movable logging blade:

- Install the parking lock when the winch is still connected to the tractor;
- for easier installation place the movable logging blade in a middle position;
- repeat the parking lock removal procedure in opposite order;
- lift the movable logging blade so that the bolt is at the lowest point of the parking lock.



6. MAINTENANCE

Regular machine maintenance ensures reliable operation and long lifetime of the machine.

This machine has successfully undergone several functional and safety tests. In case of malfunction only original spare parts must be used for flawless and safe operation. Warranties and customer's rights become void if:

- any other spare parts are used;
- if repair is carried out in a non-professional manner;
- if repairs are carried out by unauthorized personnel;
- and in case of modifications or rework.

6.1. TROUBLESHOOTING

FAULT	POSSIBLE CAUSE	SOLUTION
The winch does not react when the switch is toggled or at the push of a button on the control pendant (or on the transmitter of the radio remote control)	There is insufficient pressure in the hydraulic system	Check if the winch drive is on (the PTO shaft must be switched on, otherwise the pump does not work)
		Check the oil level in the tank
	The system is not under voltage	Check the connection of the electrical connection to the tractor
		Make sure the winch is turned on
		Check the transmitter battery
		Check and, if necessary, clean the oxidized contacts
	The control valve does not work	If there is no power supply, the defects in the previous item must be corrected
		*
The winch fails react when switching on the pulling function	Failure of the limit switch	Replace the limit switch *
Pulling force of the winch is too low	Excess length of the wire rope on the drum	*See section: Technical specifications*
	Greasy clutch plates	Clean the clutches sliding surfaces or replace clutches *
	Worn out clutch plates	Replace the clutches *
	Damaged drive part of the winch	Replace damaged parts *
	Operating pressure too low	*
Operating pressure below 145 bar	Oil level low	Check the amount of oil in the tank and top up if necessary, locate and seal any possible leaks

FAULT	POSSIBLE CAUSE	SOLUTION
Low operating pressure	Pump failure	*
	Operating pressure valve failure	*
	Oil level low	Add oil *
A rapid drop in pressure (less than 30 seconds) without winch operation	Non-return valve failure	*
	Operating pressure valve failure	*
	Control valve failure	*
	Pressure accumulator failure	*
Brake force is not appropriate	Worn band brake	Adjust the band brake *
	Greased band brake pad	Clean brake pad and braking surface on drum *
	Damaged band brake mechanism	Replace damaged parts *
	Damaged drive part of the winch	Replace damaged parts *
	Worn out band brake	Replace the band brake *
The wire rope is difficult to pull out	Incorrect setting of the feeding brake	Adjust the feeding brake according to the instructions
	Damaged wire rope	Replace the wire rope
	Damaged band brake	Replace the band brake *
The winch is pulling in spite of the clutch being switched off	Damaged drum	*
	Damaged clutches	Replace the clutches *
The feeding device is not feeding the rope from the winch	The feeding brake is adjusted to high	Check the feeding brake setting. *See section: Adjusting the feeding device*
	Damaged wire rope	Replace the wire rope
	Wire rope of inadequate diameter	*See section: Technical specifications*
	The wire rope is jammed on the drum	Release the jammed wire rope

FAULT	POSSIBLE CAUSE	SOLUTION
The feeding device is not feeding the rope from the winch	System pressure too low! The feeding device is operational only when the operating pressure in the system is reached and the operating pressure valve (relief valve) switches to pumping the oil to the tank	Check whether the winch drive is connected to the PTO shaft and the PTO shaft is rotating at sufficient number of turns (n_{min} = 230 min^{-1})
		When the pump fails to provide a pressure of 160 bar at 230 min^{-1} or more turns of the PTO shaft, getting overheated and the pressure is gradually lowering, replace the pump.
		If the operating pressure (without activating functions) fluctuates between 140 - 160 bar in 2 - 3 seconds interval, may mean that the pressure accumulator is not working
	Incorrect adjustment of the feeding device	*See section: Adjusting the feeding device*
The feeding device continuously feeds the wire rope	The adjustment screw of the feeding device is not set correctly	*See section: Adjusting the feeding device*
	Feeding device sensor failure	Replace feeding device sensor *
The wire rope is winding too loosely on the drum (without load)	Failure of the non-return valve	*
LED indicator on the winch flashes with a cycle of 4x per second, when you press the switch / button on the control pendant (or radio remote control)	Control pendant or radio remote control malfunction.	Fix or replace the control pendant / radio remote control *

* Any demanding repair works on the winch must be carried out by a professional (service department).

HYDRAULIC OIL

Hydraulic system oil volume: 13 L

FIRST INSTALLATION	RECOMMENDED OIL FOR OIL CHANGES
Hydrolubric - VGS 46	Hydrolubric - VGS 46
	Castrol Hyspin AVH 46
	Mobil DTE 16
	Shell TELLUS T46
	BP Energol SFA 46
	SETRAL Poclain

REDUCTOR OIL

Reductor oil volume: 3,7 L

FIRST INSTALLATION	RECOMMENDED OIL FOR OIL CHANGES
Renolin CLP 100	Renolin CLP 100
	Hydrolubic VG 100
	Castrol Alpha SP 100
	Mobil DTE Heavy 100
	Shell Omala S2 G100
	BP Energol HLP 100

6.2. INSPECTION BEFORE STARTING WORK

Visual inspection of the winch and a performance test must be carried out before the start of each work day to check that:

- all screws and nuts are fastened
- there is no mechanical damage on the winch
- whether the hydraulic hoses are damaged
- if any oil is leaking
- whether there is enough oil in the hydraulic tank (oil level indicator)
- bolt protectors are installed at the connection points of the winch
- the PTO shaft is properly connected and the PTO shaft safety chain is attached
- the lower connection arms of the tractor are properly fixed to prevent horizontal movement of the winch
- the clutch works properly
- the band brake works properly
- the rope feeding brake is correctly adjusted

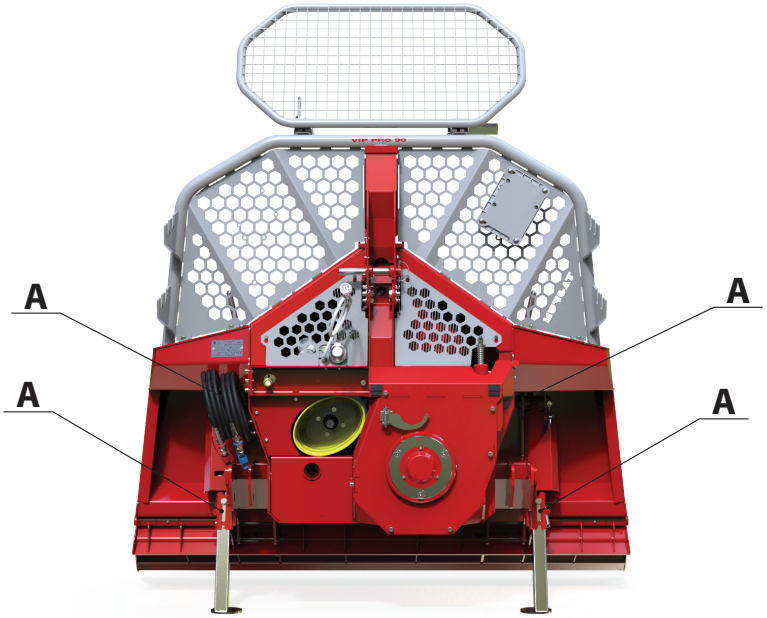
If defects are identified during the inspection, they must be eliminated before starting work!

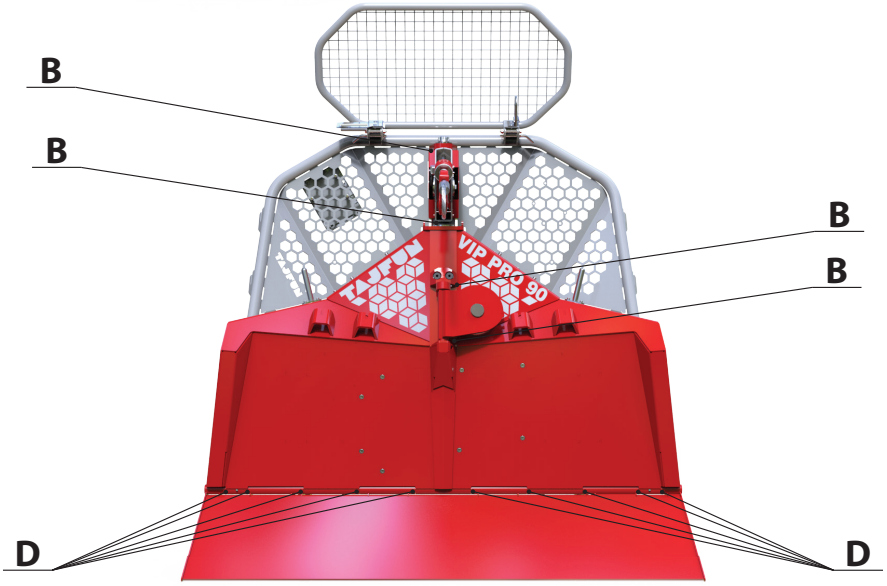
6.3. MAINTENANCE PLAN

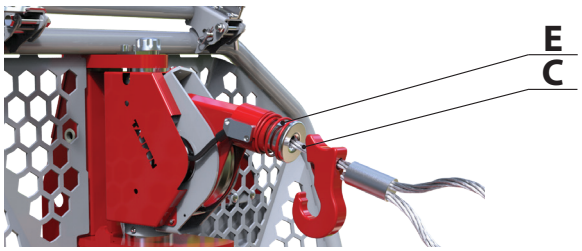
WHAT must be done?	WHEN?		HOW? WITH WHAT?	
Unwind the rope and then tightly wind it on the drum	With a new winch, when the rope on the drum is loose		Visual	
Check that the rope is undamaged				
Check that the rope is properly attached	At first installation or replacement		The feeding device must not dislodge the fixed wire rope	
Adjust the band brake	If necessary		*See section: Band brake - Adjusting the braking force of the winch* *	
Replace the band brake	If necessary		*	
Replace clutch	If necessary		*	
Changing the oil and filter in the hydraulic system	After 48 hours of operation, afterwards once a year		Table: Hydraulic oil	
Changing the oil in the reductor	After 500 hours, the next time after 3000 hours		Table: Reductor oil	
Lubrication (See picture of lubrication points)	A	Fixing of hydraulic cylinders of the movable logging blade *(Only for G-designated models)*	Monthly	Grease (lithium)
	B	Bearings of upper and lower pulleys, other sliding parts	Monthly	Grease (lithium) oil
	C	Wire rope	Monthly	Spray for chain lubrication
	D	Movable logging blade hinge *(Only for G-designated models)*	Monthly	Spray for lubrication
	E	Limit switch bearing	Monthly	Grease (lithium)
Cleaning the inside of the frame	If necessary or every 100 hours of operation		With accessories	

* Any demanding repair works on the winch must be carried out by a professional (service department).

PICTURES OF LUBRICATION POINTS







6.4. CONSEQUENCES OF OVERLOADING AND INCORRECT USE OF FORESTRY WINCHES

- "burnt out" clutches
- "burnt out" band brake
- broken band brake
- damaged brake mechanism
- broken pulley or pulley bearing
- damaged reductor
- warping of the frame (connecting elements, safety elements, load-bearing parts of the drive, pulleys, ...)
- torn "new" wire rope
- warped drum axis.

6.5. SPARE PARTS ORDERING

When ordering spare parts, please provide the following information to our service department:

- type of winch, factory number and year of manufacture of the winch;
- the catalogue number, name and quantity of the spare part;
- address of the customer.

The manufacturer guarantees 10 - year servicing of the product and all necessary spare parts during this time.

Tajfun Planina proizvodnja strojev, d.o.o.
Planina pri Sevnici 41a
SI-3225 Planina pri Sevnici
Slovenija
www.tajfun.com

EC - DECLARATION OF CONFORMITY OF MACHINERY

Manufacturer:
Tajfun Planina proizvodnja strojev d.o.o., Planina pri Sevnici 41A,
3225 Planina pri Sevnici, Slovenia

declares, with full responsibility, that the product mentioned hereafter:

LOGGING WINCH

Type:	Factory number:
VIP PRO 90	247559 - XXXXX

subject to this Declaration, meets the requirements of:

Machinery Safety Regulations – OG RS Nr. 75/2008 (directive 2006/42/EC),

in compliance with the following standards and regulations:

SIST EN ISO 12100:2011, SIST EN ISO 4254-1:2010,
SIST EN 14492-1:2007+A1:2010, ISO/FDIS 19472:2005

The person responsible for compiling the technical documentation at the address of the manufacturer is the signee of this statement:

Planina, 19. 11. 2021

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

Iztok Špan
Director

CERTIFICATE OF GUARANTEE

THIS WARRANTY DOES NOT EXCLUDE THE RIGHTS OF THE CONSUMER ARISING FROM THE LIABILITY OF THE SELLER FOR PRODUCT DEFECTS.

We hereby declare:

- to guarantee flawless operation of the product within the warranty period, provided that the customer abides by the provided operating instructions;
- to ensure the removal of defects and deficiencies within the warranty period and within a period no longer than 45 days. If we fail to repair the product within the given period, we will provide a new product upon customer's request.

The warranty period is **12 MONTHS** from the date of purchase or delivery, which can be observed from the certified warranty certificate (store's stamp, date of delivery and salesman's signature, factory number, year of manufacture).

The Certificate of Guarantee is only valid in conjunction with an invoice!

The warranty covers defects in materials or workmanship. This warranty is voided if an unauthorized person has interfered with the product systems, if repairs have been performed by an unauthorized person or if it has been repaired using non-original spare parts. Our warranty also becomes void as follows:

- If these operating instructions are not followed;
- Damages caused by improper use or overload and operation in unsuitable conditions.

The warranty does not include compensation for additional costs incurred due to product malfunction (loss of income, transport costs, other potential damages, ...).

The availability of maintenance and spare parts is guaranteed for 9 years after the expiration of the warranty period.

TAJFUN

Product specifications (copy from the type plate):

Type:	Factory number:	Year of manufacture:

Retail information:

VENDOR (company and headquarters):	Date of delivery: Vendor's stamp and signature: