Fransgård

Safety, Maintenance and Operation Tips for North American winch Models:

V3004 - V3507 - V4000 and V6500

NOTICE: THIS SECTION MUST BE READ PRIOR TO USING THIS MACHINE

The owner's operator and repair manual, included with the machine, must also be read prior to using this machine

Failure to heed the warnings printed on the winch or in the owner's manual might result serious PHYSICAL injury.

SAFETY INSTRUCTIONS

The machines may only be used by qualified operators.

Prior to operating this winch, make sure that the tractor and the winch are on a stable, level surface, to avoid tipping over, when the unit is under load. The user is responsible for assuring that no unauthorised persons are in the working area. The timber winch must be lowered to the ground when the winch is in operation.

The steel wire cable should be inspected daily, and if it is frayed it should be replaced immediately. The protective screen, supplied with the unit, must be installed <u>before you start</u> operating the winch. The pressure pins (p/n 15503) at pos.3 on page 14, must be inspected for wear at regular intervals or at least twice a year. If necessary they must be replaced, since the clutch lever may stick with worn pins.

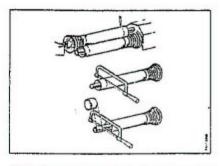
INITIAL INSTALLATION

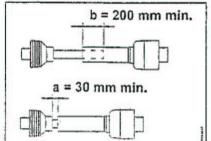
Mounting to the tractor's linkage system:

The forestry winch is to be mounted on the 3-point linkage of the tractor.

Adjust length of top-link to prevent the protection screen from hitting the tractor's cabin.

Verify the length of the P.T.O. shaft both in working and transport position, shorten if necessary. Inspect the P.T.O. regularly to make sure all the guards are in good condition and replace if necessary.





The P.T.O must be cut to a proper length, so it does not "bottom out" and bind. Remove the PTO to perform this operation. If the PTO is not cut to the proper length, it may cause damage to the PTO, gearboxes etc. See illustration for proper measurements.

a = clearance when attached to tractor; should be 30mm /1.20 inches

b = overlap; should be 200mm / 7.87 inches

Mount the PTO to the tractors PTO output shaft. Connect the safety chain to the machine, so it will not turn and get caught to any clothing.

REMEMBER! Inspect the PTO safety shield for any damages, before and when operating the machine. Change the safety shield if necessary.

Adjusting the Lift Arms and top links: The lift arms should be attached to the lower lift arms when the winch is set on level ground. Then proceed to attach the top link. The top link must be adjusted in such a way so the winch may sit vertical when it is set to the ground.

Also, make sure that the protection screen does not hit the tractor cab, when the winch is lifted with the 3-point hitch. If this is the case, adjust the top link accordingly.

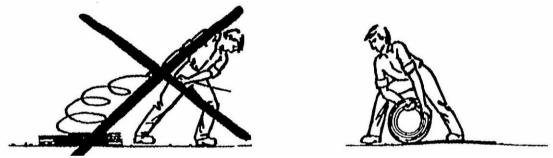
Installing and/or replacing the wire cable (if the winch is initially delivered without the cable installed)

During the initial cable installation or when replacing a worn wire cable, unroll the cable completely, making sure there are no twists in it. (see diagram A)

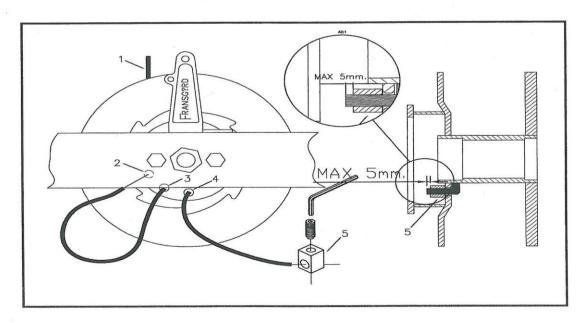
Then proceed to install the wire cable on the cable drum by leading it over the top pulley and down though the tube located under the pulley to the cable drum.(fig. 1 in drawing 1) There are three holes in the side wall of the cable drum, run the wire cable out through hole no 2, back in through hole no. 3 and out through hole no. 4 (fig. 2, 3 and 4 in drawing)

Lock the cable to the wire drum by means of the locking lug (which is in the plastic bag where the owner's manual was stored, there is also an Allen Key and set crew in the same bag). Pass the cable through lug, with a maximum of 3/16" (5mm) of cable exceeding the length of the lug, and tighten the set screw securely with the Allen Key that is supplied iwth the lock lug. Then pull the remainder of the cable into the cable drum. Do not leave any excessive cable hanging out from the lock lug since it may get snagged when the winch is operated.

Next, attach the hook end of the wire cable with a choker chain to a fixed object (tree, another implement, etc.). Then with the PTO operating at 500 rpm engage the winch with the Green pull cord and pull the tractor towards the fixed object This will enable the cable to be wrapped evenly and tightly on the cable drum. This is critical in ensuring the wearing life of the cable, and smooth operation of the winch. This procedure should be repeated occasionally, also when you note that the wire cable is loosely wrapped on the cable drum or it is difficult to pull the cable out, when logs are to be tied.



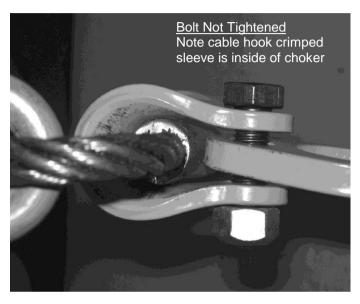
Drawing "A" Unrolling New cable



Drawing "B" Attaching cable to wire drum

Fransgard uses a specially designed cable that resists abrasion from being dragged on the ground. Therefore it is highly recommended that an original Fransgard wire cable be used as a replacment for a LONGER WEARING LIFE AND BETTER VALUE FROM YOUR PURCHASE.

Installing the Chokers/Sliders: After installing the cable, release 4 – 5 ft of cable, by unlocking the cable drum locking latch which is running on the cable drum sprocket. Remove the bolt joining the two pieces of the choker/slider. Place the rounded part on the cable, then slip the flat slotted part in between the rounded part and tighten with the bolt and Nylon lock nut. These must be tightened securely to prevent the choker/slider from slipping over the crimped sleeve attaching the end-hook to the cable. Slip the choker/slider down to the hook to make sure it doesn't slide over the crimped sleeve. If it does then tighten the bolt even more. FAILURE TO DO SO MAY DAMAGE THE CABLE DURING THE WINCHING OPERATION (Cables are considered a wearing part and are not covered under the warranty agreement. Note: If your winch was delivered with the cable and choker/sliders installed, make sure the choker/slider bolt has been tigthened securely as described below in Fig. A



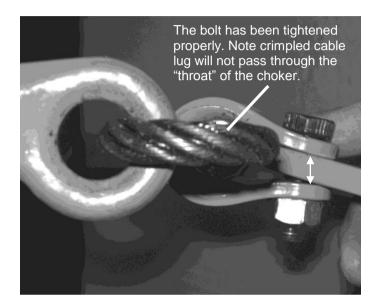


Fig. A

Protection Screen

Screens removed for servicing the machine, must be reinstalled prior to using to using the winch again. The machine should never be operated with the protective screen removed.

Make sure your three-point hitch is properly adjusted so when the winch is put in a raised position with the three-point hitch, the protection screen does not hit the tractor cabin.

INSTRUCTIONS FOR USE

Prior to operating the winch, make sure that:

- the cable is properly installed, and the cable is wound tight on the cable drum
- the cable is not damaged, with broken strands that might cause the cable to break when it is pulling a load.
- the P.T.O. shaft is properly mounted and adapted in such a way that the angle of the P.T.O. Is as straight as possible to prevent breakage and additional wear to the joints.
- the clutch is properbly adjusted as to ensure the cable drum does not turn until the Green power cord is pulled.

Winching:

Lower the winch so that it rests on the buttplate. Activate the tractor PTO set the it to run at approx. 500 rpm.

Unlock the cable drum, by pulling the cable drum latch.

Pull out the desired length of cable towards the logs that are to be pulled.

Tie the foresty chain around the log, and lock the forestry chain either on to the hook or in the slot of the slider/choker, which has been previously installed properly on the cable (as per Fig. A, above), Never wind the cable directly around the log that you wish to pull, since this will permanently damage the cable. You must only use the choker chains, for this purpose.

Return to the tractor, Flip the cable drum locking latch so it will ride on the cable drum sprocket, and prevent the load from slipping, if the engine on the tractor was to stall. Then position yourself at a distance from the winch and where you have good view of the logs being pulled and are away from any flying stones or debris

that could be projected as the logs are being pulled in.

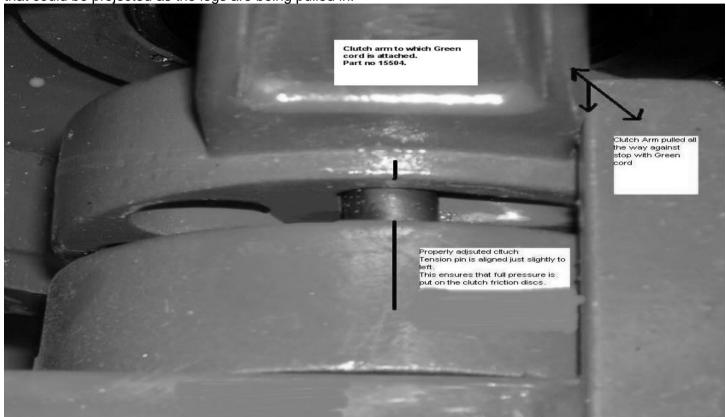


Fig. C

Pull the Green power cord slowly to engage the clutch and begin the pulling process. Make sure that you pull this cord so that the clutch arm lever comes to rest against its stop (as indicated by the arrows to the right in **fig. C**).

If an obstacle is hit, the clutch will slip, when this occurs, release the Green power cord, all winching action will cease, enabling you to go and remove the obstacle and then resume operation.

When the logs have been brought up to the winch, remove the chains from the cable and/or end hook.

Attach them to the tow bar. When attaching logs to the tow bar on the skid plate, keep enough slack on the chains so the logs will not bind against the skid plate when making turns (this will bend the tow bar), also make sure the butt ends of the logs are lifted off the ground when the winch is raised with the three-point lift of the tractor, to avoid tipping over, with the tractor, if an obtacle is hit Do not haul logs directly with the cable, always attach the forestry chains to the tow bar, this will lower the center of gravity of the tractor and prevent tipping over with the tractor. Furthermore this will prevent damaging the cable, top pulley, and main shaft of the cable drum, since the clutch will not release when the cable drum locking latch is engaged.

Transport:

Lift the winch with the 3-point linkage and proceed with caution,.

Avoid sharp turns, to avoid tipping the tractor and/or prevent breaking the forestry chains when the logs bundle-up agaisnt the skid plate.

LOGS MUST ALWAYS BE ATTACHED TO THE TOW BAR WITH THE FORESTRY CHAINS WHILE IN TRANSPORT POSITION. THIS WILL LOWER THE CENTER OF GRAVITY OF THE TRACTOR AND PREVENT THE TRACTOR FROM TIPPING OVER, IF AN OBTACLE IS HIT, AND PREVENT SEVERE DAMAGE TO THE WINCH!

LUBRICATION AND MAINTENANCE

- Lubricate the PTO. shaft once daily.
- Lubricate the drive chain once every week with a small amount of grease, only. <u>NEVER USE OIL</u>, these liquid lubricants may seep down and get on the clutch lining, which is located directly below the drive chain. No oil should never be used, since it might penetrate the clutch lining (15509) surface, and would cause the clutch to slip.
- Clean off the dirt and grease the TOP Pulley support table, once every day, to enable the pulley to pivot freely. This will prolong the life of the wire cable and the pulley. Use grease only.
- Use only original Fransgård replacements parts, do not make any modifications. The drive chain is a
 metric chain, which is hardened to avoid stretching under load, other drive chains will stretch and
 wear out the main drive gear. The outside wraps of the cable are made of special hardened steel
 (Warrington seal). This cable is designed specifically for this application since most cables are not
 designed to be dragged on the ground, stones etc. These are just a few of the several reasons why
 you should demand and only use Fransgard genuine replacement parts when servicing your product.
- Lubricate the cable using a very small amount of grease on a rag and wipe the cable, when it is fully extended. AVOID USING OIL SINCE IT WILL IMPREGNATE THE CLUTCH SURFACE OF THE CABLE DRUM AND CAUSE THE CLUTCH TO SLIP.

Clutch Adjustment:

- The friction clutch system is adjusted at the factory prior to shipment.
- Under normal conditions it should perform without any adjustment for well over 1000 working hours.
- If it is noted that the clutch is slipping with minimal loads, even though the green power cord is fully pulled, so the clutch arm rests against the stop, then a clutch adjustment may be necessary.

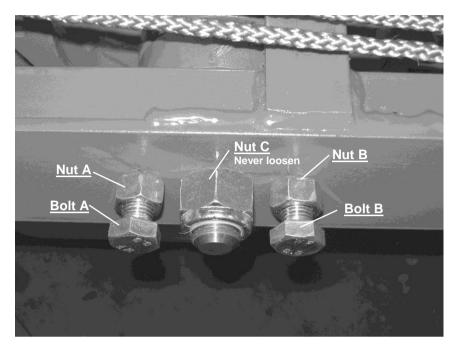


Fig. B

Procedure for adjusting the clutch

IMPORTANT: REMOVE THE PTO FROM THE WINCH

- 1. Loosen Nut "A" and Nut "B" as show in Fig. B above, Never loosen Nut "C" unless your dismantling the main cable drum shaft. (This is to be done by an authorised dealer only)
- 2. Pull the Green Pull Cord until the clutch cam lever (p/n 15504) rests against the stop and hold the pressure on the clutch
- 3. Tighten bolts "A" & "B" until a resistance is met. Then release the Green pull Cord.
- 4. Tighten bolts "A" & "B" an additional 3/4" turn each
- 5. Tighten nuts "A" & "B". Install and engage the PTO shaft, and the winch is now ready to operate

DO'S AND DONT'S FOR SAFETY AND LONGER MACHINE WEAR

DANGER! WARNING!

DO:

Read the original manual before operation this machine!. It is the owner's responsibility to instruct all equipment operators and support personel in the operation of winch.

FOR OPERATING WINCH:

- 1) Keep hands, feet and clothing away from power driven parts!.
- 2) Ensure that the cable is in good conditions before operating the winch. If the cable breaks, parts of it can fly both toward and away from the winch. Ensure that all bystanders are out of reach of the cable when the winch is used.
- 3) Never perform maintenance on the cable without shutting off the power-take off!.
- 4) Check moving parts. They should be fastened in place, in good working condition and all shields and guards must be in place.
- 5) Familiarize yourself with the controls and how to stop the winch and tractor in an emergency.
- 6) Park the winch and tractor on level ground for winching.
- 7) Operate the winch from a control rope at least 12 feet to the side of the machine.
- 8) Ensure that other people do not become endangered when you are using the winch.
- 9) Disangage the PTO an turn the tractor off before you service the winch. Remove the keys so the tractor cannot be started up accidentally.
- 10) Inform everyone who works with the winch about risks and how they can avoid accidents.
- 11) Stay alert!. Do not operate when fatigued.
- 12) The tractor should never be set in motion without the "butt-ends" of the logs (that have been winched) being raised off the ground. If this is not done and an obstacle hits the butt end of the log (s), then the tractor may turn over and severe injuries may result.
- 13) Only use forestry chains, to tie the logs, never directly attach a cable around a log, since this put a "kink" in the cable, and reduce its breaking load permanently.
- 14) **Never use wire rope slings**, since they cannot be locked into the tow bar while in transport, which lowers the centre of gravity and prevents tipping over, when going up hill or uneven ground.
- 15) Always pull the Green power cord sufficiently to ensure that the clutch engagement lever rests against the stop. This ensures that full pressure will be exterted on the clutch, and full power will be exerted in hauling in the logs. Otherwise, you could "glaze" the or burn the clutch lining

DO NOT:

- 1) Do not attempt to operate this winch without proper training and knowledge of the working features of this winch
- 2) Do not operate this machine until the owner's manual has been completely read and understood. New owner's manual are avaible from your Dealer or the factory phone + 45 98 63 21 22 (North America: 450 654 6126). If the warning decals become illegible, new decals can also be ordered.
- 3) Do not transport logs direct in the cable use the log towing bar. **This can cause severe damage to the winch!**
- 4) Do not use the winch for other uses than winching and skidding trees.
- 5) Do not let children or incapable persons operate the winch.
- 6) Do not wear loose clothing, loose sleeves, neckties or long uncovered hair around moving parts of machinery.
- 7) Do not operate the winch from the tractor seat. Operator could be hit by flying objects during the winching operation since the protection screen does not protect the operator when the winch is lowered to the ground for operation. **Note**: The tractor operator is protected when the winch is raised with the three-point linkage in transport mode.
- 8) Do not leave the tractor running unattended.
- 9) Do not winch at a side angle exceeding 30°, the tractor may tip over causing physical injury. Also use the bottom pulley (optinal on model V3004) when pulling logs that are located lower than the winch surface. This will lower the center of gravity of the tractor, and avoid tipping over.
- 10) Oil or similar liquid lubricants should never be used on this winch. (SEE SECTION ON LUBRIFICATION & MAINTENANCE)

Failure to heed the warnings printed on the winch or in the owner's manual might result serious PHYSICAL injury, and severe damage to the machine.

This product was designed to provide a safe and efficient means of performing your forestry tasks. Operating and servicing this product properly will provide you with many years of satisfying results.



Delivery Check List

W	inch Model: Serial No.:			
De	ealer Check List on delivery of winch			
1)	PTO cut and installed on tractor with proper overlap of Safety guard and shafts to prevent the Shaft from "binding" or "bottoming-out" when the winch is raised with the three-point hitch	[]	
2)	The three-point hitch is to be adjusted properly so that the Protection screen does not hit the tractor cabin when the winch is raised	[]	
3)	Operating and Safety Instructions reviewed with Purchaser	[]	İ
4)	Purchaser advised that the choker chains be removed from the cable when the logs have been pulled in and how to attach the chains properly to the tow bar before moving with the tractor, for safety and preventing severe damage to the winch.	[]	
5)	Purchaser advised how to activate pulling procedure with Green power cord and ensuring the clutch lever comes to rest tightly against stop to apply full pressure on the clutch discs.	[]	
6)	Advise the purchaser not to put oil on the drive chain, but only a little bit of grease, occasionally, since clutch lining is 1"below the drive chain.	[]	
7)	The support table under the top pulley must be greased and free of dirt and debris, so the top pulley will swivel easily and prevent additional wear to cable and top pulley	[]	
	Dealer Signature, Purchaser Signature			
	Date:			

Reviced Oct. 10th, 2007

Note: (Dealer, please keep copy and return original to Distributor to activate the Winch warranty within 30 days of the sale)