

Operator's Manual

# FARMI JL 250

skidding winch

normet  
**B**



## **WARNING**

Read and understand the operator's manual before assembling or operating this unit.

1. Keep all shields in place.
2. Before servicing the machine, ALWAYS disengage the PTO-shaft and wait for all movement to stop.
3. Before handling the wire cable, disengage the PTO-shaft.
4. Keep hands, feet and clothing away from power driven parts.
5. Keep all other people away from the reach of the cable.
6. Observe safety recommendations in operator's manual.

## **WARNING**

1. Before operating the machine, make sure that the wire cable is free of defects.
2. Operate the winch from the control ropes standing at least 6 feet to the side of the machine.  
\*DO NOT operate the winch from the tractor seat if there is no protective shield between the seat and the winch.
3. Park the winch and tractor on level ground for winching.
4. Use the machine only for winching trees.
5. Do not winch from sideways angles exceeding 30 degrees.



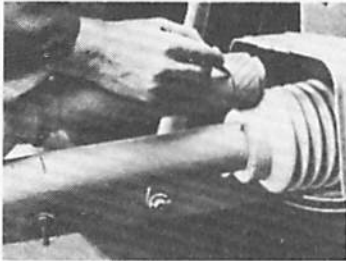
# JL 250

**Read and understand these instructions before operating the winch and follow the safety regulations.**

## MOUNTING

The winch can be mounted to the 3-point hitch of any cat. I or II tractor.

- 1) If your tractor has a draft control valve connected to the top link, disconnect the valve. If this can not be done, lock the top link with brackets so that it will not move. Brackets for different tractors are available from your Farmi dealer.
- 2) Connect the lower links.
- 3) Connect the top link to the winch.
- 4) Lift the 3-point linkage up slowly to ensure that the winch will not touch the cab or the fenders of the tractor. Lengthen top link if necessary.
- 5) Cut the PTO-shaft to the right length for your tractor. Be sure that the PTO-shaft is short enough. A too long PTO-shaft will get damaged when the winch is lifted or lowered. Both PTO-shaft halves must be shortened by equal lengths.



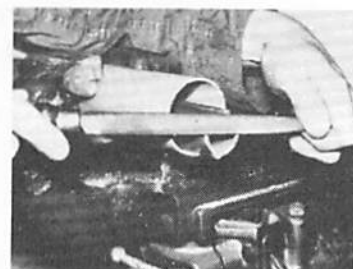
Connect one shaft half to the tractors PTO. Lay the other PTO half on its side so that the end of the shaft is one inch from the PTO-end of the winch. Mark lengths required.



Cut the plastic shield.



Cut profile tube by same length.



File sharp edges.

- 5) Mount the PTO-shaft. The chain on the PTO-shaft is fastened to the PTO-shield on winch.
- 6) Lift the winch until the PTO-shaft is in an approximately horizontal position. Pull out the stabilizer legs and secure the legs with their pins.
- 7) Lower the winch so that it is standing with the legs on the ground.
- 8) Adjust the top link to such a length that the drum axle is lying horizontally or slightly away from the tractor. Note: If the drum is leaning toward the tractor, it will lie on the clutch plate and the cable will not run out freely.
- 9) Pull out a few feet of the cable rapidly. There is risk for tangle and kinks on the

cable if the drum does not stop turning when the pull is discontinued. You should turn the drum brake down until you can notice sufficient resistance on the cable. See "Brake adjustment".

- 10) Every new cable should be pulled out all the way and winched in with a heavy load. This tightens the cable on the drum and increases the cable lift. This procedure should be repeated always if the cable is loose on the drum and is developing kinks or the cable is mixed up.

#### BEFORE RUNNING THE WINCH CHECK:

1. The cable
  - is faultless (breaking risk)
  - the cable clamps' guard pipe is in its place
  - its length is suitable, avoid using too long a cable
2. The machine fastening
  - all the pins, spindles and screws are in place and the screws tightened
3. Chain tightening, drum brake and latch brake, see "Periodic Service"
4. Clutch (see "Periodic Service")
  - the clutch is correctly adjusted
  - the clutch rollers are lubricated
  - the return spring disconnects the clutch

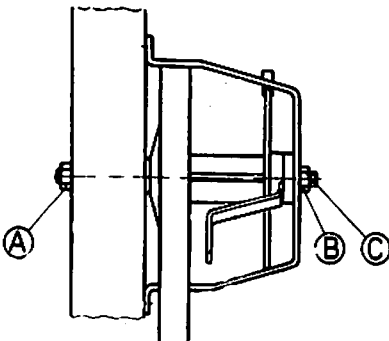
#### SAFETY PRECAUTIONS

1. Choose as even a hauling route as possible. Avoid steep slopes, especially when winching from the side. Check that the log haulage way is clear and that the tractor's brake is on.
2. The driver's safest place is obliquely backwards from the winch, where the visibility is good. Do not allow any outsiders near the working area. The assistant's safest place is behind the load.
3. Engage and disengage the clutch gradually.
  - Avoid an unnecessary strong pull, the tractor can turn over.
  - Adjust the inwinching speed according to the conditions.
  - Use a shield between the seat and the winch (e.g. safety cab).
  - Keep the tractor's PTO-shaft uncoupled when driving.
  - Use agreed gestures when working in groups.
  - When starting to winch, unwind the cable entirely and wind it up again together with the load.

#### PERIODIC SERVICE

##### 1. CLUTCH ADJUSTMENT

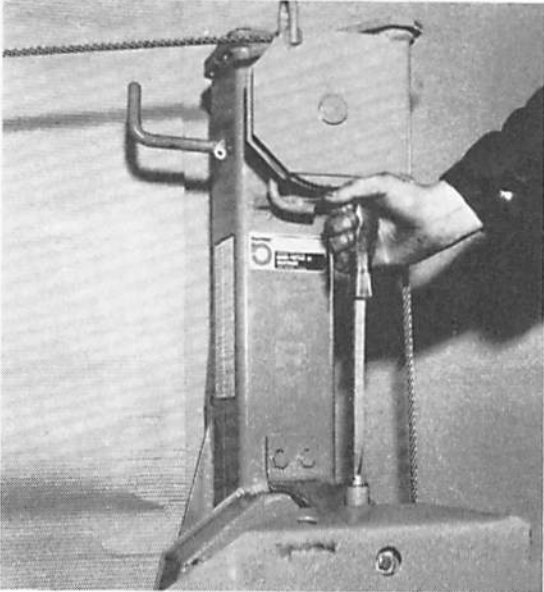
Adjust the clutch so that the clutch grips well, but also releases when the clutch lever is down. Make the clutch adjustment in the following way:



- a) Loosen the nuts A and B on both ends of the drum axle with a 1 7/16" wrench (30 mm metric wrench).
- b) Adjust the clutch by turning the axle C. The clutch loosens clockwise, tightens counter-clockwise (usually 1/4 turn is enough).
- c) After adjustment getighten the nuts on the ends of the drum axle (A and B).

## 2. BRAKE ADJUSTMENT

Always adjust the drum brake so that it slows down the drum lightly while pulling out the cable. This will prevent the drum from turning freely and entangling the cable. The brake should not be turned down so much that it is hard to pull out the cable. For adjusting, turn the screw up or down. The brake should be turned down about 1/4 turn every working day. This will increase the life of the cable.

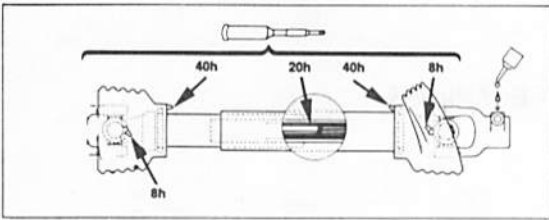


## 3. TIGHTENING THE ROLLER CHAIN

Adjust by moving the chain tightener in the following way:

- a) Loosen the 2 hexagonal bolts, which lock the chain tightener.
- b) Move the tightener toward the chain until the chain is suitably tight. The roller chain must have some slack to run properly (the chain has a tendency to come off the sprocket if it is too tight).
- c) Retighten the bolts.

## SERVICE



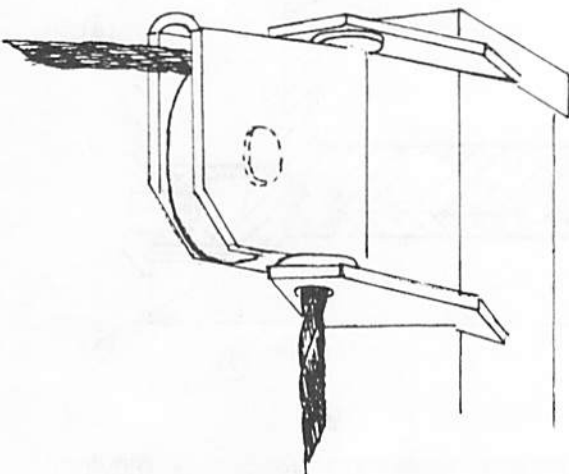
Grease the PTO-shaft as shown on illustration below.

Grease the lower sprocket bearing once a month.

Oil the brake ratchet latch once a week.

LIGHTLY oil the roller chain once a month with chainsaw bar and chain oil.

DO NOT use much oil because it may run into the clutch. If oil does get into the clutch, the entire winch mechanism has to be taken apart to remove the oil from the clutch.



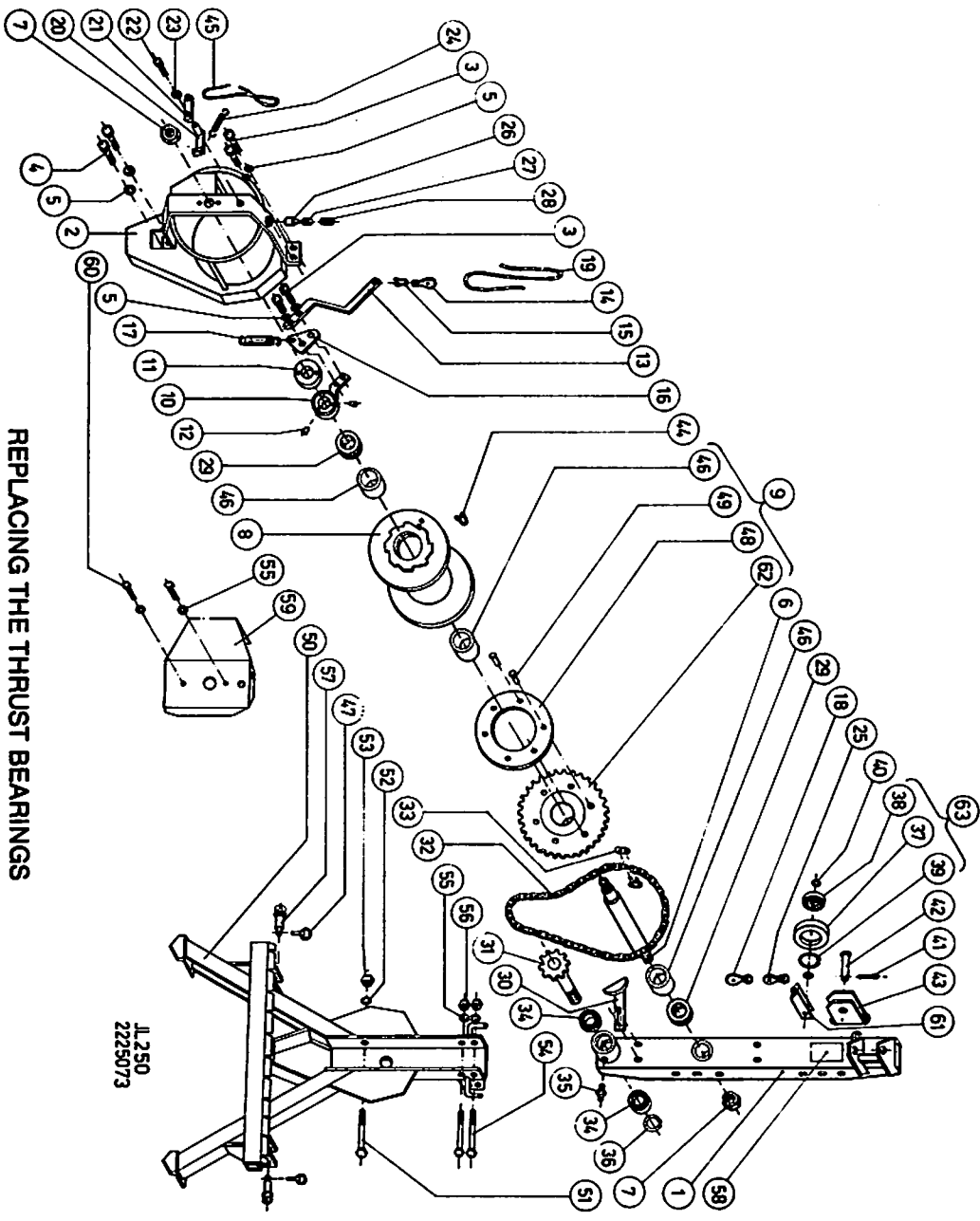
## REPLACING THE CABLE

The cable should be replaced when it develops kinks or shows signs of wear.

Note from picture how the cable should be run through the winch frame to the upper pulley. The cable goes through a hole in the frame to the upper pulley. Also tighten new cable as described in mounting instruction 10.

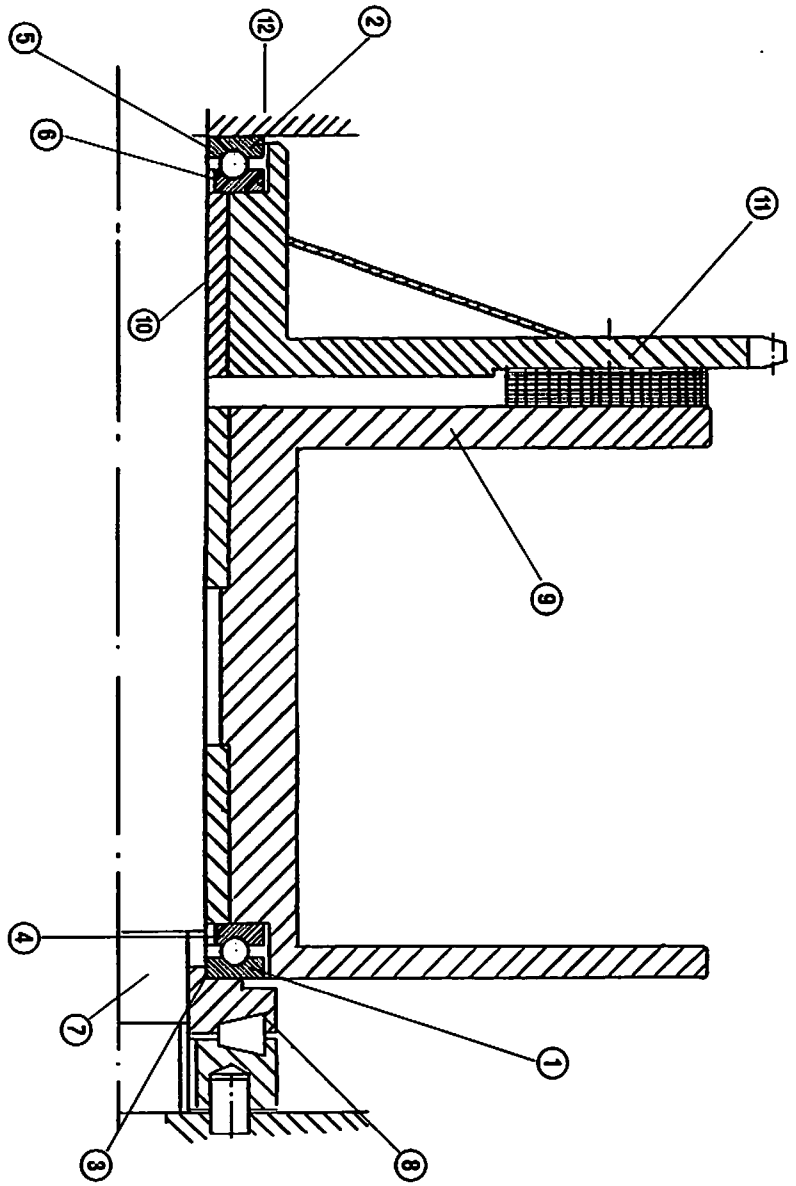
Replace JL 250 cable with 3/8" cable.

Steel core cable of good quality should be used.



L 250  
2225073

REPLACING THE THRUST BEARINGS



- 1. Thrust bearing
- 2. Thrust bearing
- 3. Smaller inside dia goes towards the clutch half
- 4. Bigger inside dia goes towards the drum

- 5. Smaller inside dia goes towards the frame
- 6. Bigger inside dia goes towards the sprocket
- 7. Drum axle
- 8. Drum axle
- 9. Wire drum
- 10. Bearing
- 11. Sprocket
- 12. Winch frame

# SPARE PART LIST JL 250

## No. 2225073

No.	Order No.	Part	Pcs	No.	Order No.	Part	Pcs
1	2074001	Upper frame	1	33	5482004	Chain link 5/8"	1
2	2073008	Drum support and cover	1		5482005	Chain link 5/8"	1
3	5206022	Hexagonal bolt M10 x 25	4	34	5451130	Ball bearing 6007 Z	2
4	5206035	Hexagonal bolt M10 x 35	2	35	5240101	Grease fitting R1/8"	1
5	5220004	Washer M10	6	36	5223006	Circlip ø 35 x 2,5	1
6	3074002	Drum axle	1	37	4058020	Snatchblock	1
7	5211110	Hexagonal nut M24	2	38	5451111	Ball bearing 6305 2Z	1
8	3058160	Wire drum	1	39	5223112	Circlip for hole ø 62 x 2	1
9	2073068	Main sprocket	1	40	4058210	Sleeve	2
10	3073006	Clutch half	1	41	5281321	Cotter pin ø 6 x 40	1
11	3073005	Clutch half	1	42	9462086	Snatchblock pin	1
12	4066023	Roller	3	43	3292002	Snatchblock house	1
13	3058008	Clutch lever	1	44	4073012	Shackle	1
14	4270041	Block	1	45	0201065	Latch rope l = 2500	1
15	5481504	Shackle	1	46	5456205	Bearing sleeve ø 45/55—45	3
16	4058017	Spring fastener	1	47	5284215	Ring splint	2
17	9461301	Clutch spring	1	48	5491323	Friction surface	1
18	4072079	Block	1	49	5283001	Rivet ø 1/4" x 3/4"	6
19	0201064	Clutch rope l = 3500	1	50	1225035	Lower frame	1
20	4058215	Latch	1	51	5206260	Hexagonal bolt M16 x 150	1
21	4058018	Latch lever	1	52	5221107	Spring washer M16	1
22	5206011	Hexagonal bolt M8 x 16	1	53	5211007	Hexagonal nut M16	1
23	5221404	Star washer M8	1	54	5206259	Hexagonal bolt M12 x 150	2
24	9461101	Latch spring	1	55	5221105	Spring washer M12	4
25	4072062	Block	1	56	5211005	Hexagonal nut M12	2
26	4044411	Brake	1	57	9282089	Cat. I and II Link pin	2
27	9460101	Brake spring	1	58	4073067	Safety regulations	1
28	5200815	Brake bolt M20 x 25	1	59	2225056	Front plate	1
29	5454205	Thrust bearing 51109	2	60	5206203	Hexagonal bolt M12 x 40	2
30	4058012	Chain tightener	1	61	3292004	Finger guard	1
31	4225053	Fluted shaft	1	62	2073077	Sprocket	1
32	5482045	Roll chain 5/8" -81 links	1	63	0074015	Snatchblock, compl. parts 37, 38, 39	1

### FARMI WINCHING ACCESSORIES

#### 1) SKIDDING CHAIN JK 104

The JK 104 is a short and lightweight chain for pulling tops or for adding on to other Farmi chains. Breaking strength: 6000 lbs. Weight: 2.5 lbs. Length: 38" plus 9" pin

#### 2) SKIDDING CHAIN JK 208



The Farmi skidding chains are made of alloy steel and have a breaking strength of 7000 lbs. The chains have a pin on the end of the chain to make it easier to pass the chain underneath the tree. Weight: 4.5 lbs. Length 68" plus 9" pin

#### 3) SKIDDING CHAIN JK 248



The lightweight but remarkably strong JK 248 has a breaking strength in excess of 15,00 lbs. The



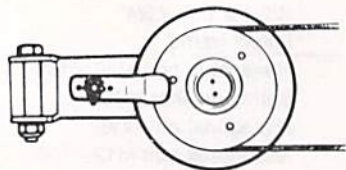
JK 248 can be used on all Farmi winch models. The chains have a pin on the end of the chain to make it easier to pass the chain underneath the log. Weight: 7 lbs. Length: 80" plus 9" pin

4) FARMI KEYHOLE SLIDERS LL 2



The Farmi keyhole sliders are used with the Farmi skidding chains. Keyhole sliders are available as extra equipment.

5) FARMI SELF-RELEASING SNATCHBLOCK TP 11



When obstacles prevent direct winching or when remaining trees are to be protected from damage a self-releasing snatchblock should be used. The Farmi snatchblock releases the cable when the load reaches it. The snatchblock is attached to an anchor tree with a plastic covered cable which prevents damage to the tree. The automatic cable release works only when the pulley is turned upside down, that is, when the release mechanism faces the ground. The self-releasing snatchblock can be used with 7/16" and smaller cable.

6) SKIDDING GRAPPLE FARMI JS 3



The grapple can be used on all Farmi skidding attachments. The grapple will grip automatically when the forward motion has begun. The advanced 3 prong design reduces risk of getting hooked up behind stumps and roots as the cone-shaped grapple steers the log around obstacles. The grapple also reduces the tendency of the log to dig in the ground when pulled up hill. The grapple has 6 points which ensures a secure grip. The points are also designed to release the log effortlessly at the end of the pull as the points will work themselves out when the top of the grapple is moved back and forth sideways. The grapple has a swivel loop hookup. Weight: 20 lbs. Width closed: 8" Largest opening: 21"

7) SKIDDING GRAPPLE FARMI JS 3-P



The skidding grapple is used when the tree lies flat and it is hard to get a choker chain under it. Weight: 23 lbs. Largest opening 25"