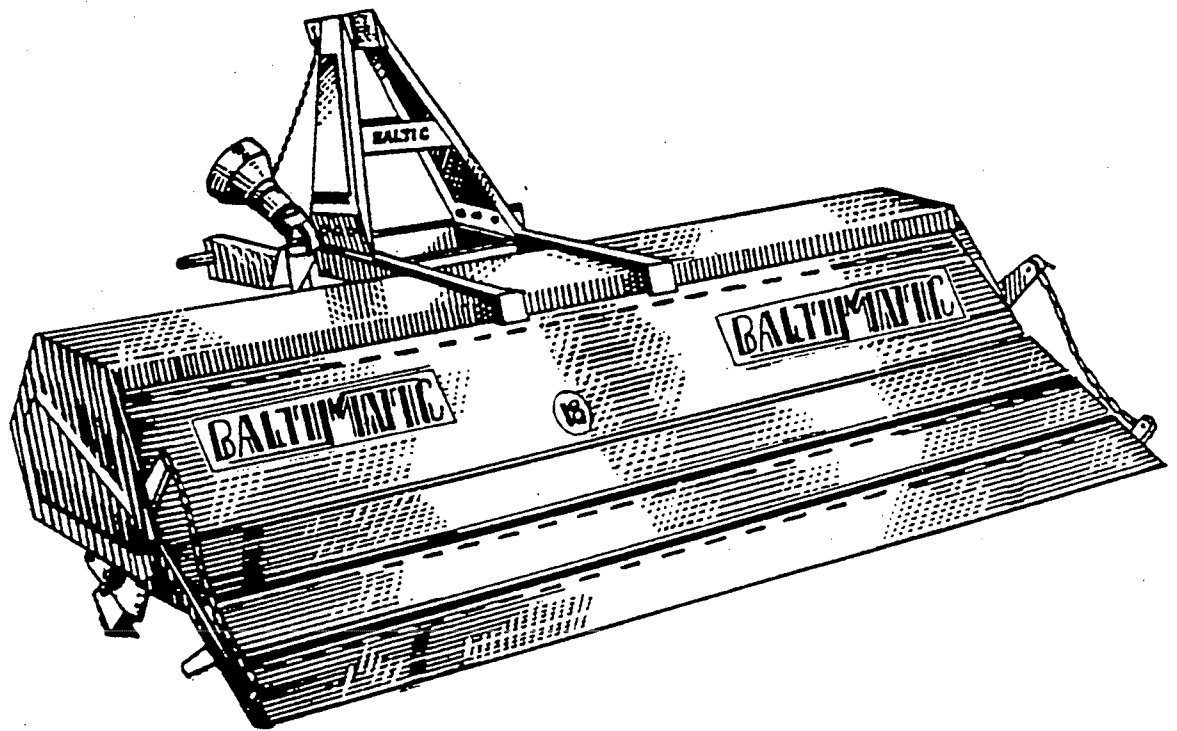


BALTIMATIC[®] ROTARY TILLERS



Instructions & Spare Parts

TENNESSEE FARMERS COOPERATIVE
200 Waldron Road, La Vergne
Tennessee 37086. U.S.A.
Phone: 615 793 8398. Fax: 615 793 8432.

Equipment and Replaceable parts.

S. No.	Name of part or set	Catalogue No. of part or standard number	Number of pieces in machine
1	Special wrench-set	1521/00-100/0	1
	Lift arm pin ø 22 mm Cat. 1.	1521/00-002/0	2

I. Utilization Instructions.

Each time before starting work, the oil level should be checked in the driving attachment.

After 15 minutes from starting of the first operation the loose bolted joints should be tightened, particularly the working drums fastening.

1. Application.

The rototiller is used for opening and mixing of the soil/except soils with stones/, quick bringing to order of fields after multiyear cultures, after ploughing of meadows and pastures, for mixing of fertilizers and herbicides with the soil on the vegetable fields, crushing of clods, etc.

The rototiller should be applied for cultivation of the soils with moisture enabling to get good agrotechnical results.

Application of the rototiller in the conditions of too low or too high moisture highly lowers down the quality of the received effects.

The telescopic jointed shaft 400 Nm/40 kGm/with inseparable guard adapted to 540 rpm should be used for driving of the rototiller.

The rototillers are adapted for cooperation with tractors of class 6-9 kN having a minimum power of 15-36 kN/20-49 HP/.

2. Structure and Principles of Operation.

The rototiller frame is a welded unit to which the hanger is screwed up.

Two gauge wheels are fixed to the frame; they are used for adjustment of the depth of work.

The frame hanger and the mounting journals are used for suspending the rototiller on the hydraulic lift of the tractor.

The driving attachment along with the knife coulter and the skid are screwed up to the frame.

The knife coulter should be applied for cutting sod on the meadows and pastures.

The knife coulter should not be used on heavy soils, crust soils because both make it hard or even impossible for the rototiller to deepen into the soil.

The rotary motion is transferred from the tractor power transmitter shaft via the telescopic joint shaft and a couple of toothed wheels onto the working drum.

The working drum of the rototiller comprises two subassemblies: Right working drum and left working drum which are mounted on the driving attachment shaft.

The rototiller working drum is guarded by a steady guard and a mobile guard, which protect it against soil chips. The mobile guard position is adjusted by means of chains.

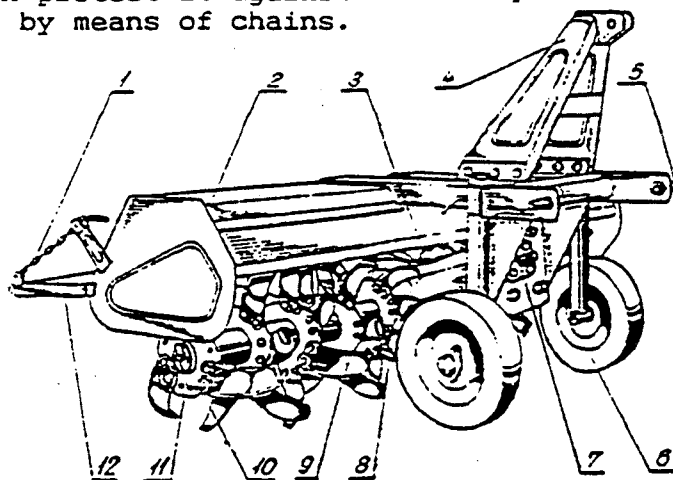


Fig. 1. Suspended Rototiller 160.

1. Adjustment chain. 2. Frame with guard-set. 3. Working drum-left. 4. Hanger-set. 5. Twosided journal. 6. Gauge wheel. 7. Driving attachment. 8. Knife coulter. 9. Left cutter. 10. Right cutter. 11. Working drum-right. 12. Mobile guard-set.

3. Characteristics.

3.1. Technical characteristics.

Parameters	Units of measure	Rototiller types and value			
		140	160	180	200
Rototiller type	--	suspend.	suspend.	suspend.	suspend.
Working width	m/inches	1,4/ 4'7"	1,6/ 5'3"	1,8/ 5'11"	2,0/ 6'7"
Max. working depth	m/inches	0,12/ 4 3/4"	0,12/ 4 3/4"	0,12/ 4 3/4"	0,12/ 4 3/4"
Number of cutter discs	pcs	8	8	10	10
Number of cutters on drum left/right	pcs	21/21	24/24	27/27	30/30
Number of rotat.WOM	rpm	540	540	540	540
Number of rotat. of working drum	rpm	186	186	186	186
Working speed	mile/h	1-3	1-3	1-3	1-3
Working speed	km/h	1,5-5,0	1,5-5,0	1,5-5,0	1,5-5,0
Transp. speed		see chapter: Work Safety/Para 6/ Precautions			
Work cap. in one shift	ha/h	0,18-0,60	0,20-0,68	0,23-0,77	0,26-0,83
Power consumption approx.	kW	15-26	18-33	22-36	25-44
	HP	20-35	25-45	30-49	35-60
Oper. personnel	persons	1	1	1	1

3.2 commercial characteristics.

Overall dimensions	Units of measure	Rototiller types and values			
		140	160	180	200
Length approx	feet/inches	4'5"	4'5"	4'5"	4'5"
Width approx.	feet/inches	5'	5'8"	6'7"	6'11"
Hight approx	feet/inches	3'7"	3'7"	3'7"	3'7"
Mass	lbs	727	772	816	839

4. Principles of Proper Utilization and Technical Servicing.

4.1. Preparation of Rototiller to Work.

In case of cooperation of the rototiller with tractor having the outer overall dimensions of the rear tractor wheels larger than the rototiller working width, it should be set up asymmetrically in relation to the tractor.

This way due to enlarging of the width of uncovered track of one wheel, total covering of the track of another wheel is gained Fig.2.

For the purpose of covering the track of the right rear wheel of the tractor, the right journal of the rototiller suspension/looking from the rear of the machine/should be left in the front hole of the front beam, and the left journal should be mounted in the rear hole. After putting of the tension members on the journals, the rototiller will be set up skew in relation to the tractor.

If the tractor is provided with the lower tension members chains, then the proper shortening of the right tension member chain at simultaneous elongation of the left tension member chain will cause that the rototiller will be shifted a little bit rightwards in relation to the tractor covering the track of the right rear wheel.

In cause of covering of the tractor wheel tracks by the rotoiller, proceed as follows:

- both suspension journals of the rototiller should be placed in the front holes of the front beam,
- after suspending the rototiller on the tractor, both chains of the tractor lower tension members should be slightly tightened for the purpose of getting central position of the rototiller in relation to the tractor and for limiting sidewise deflections of the rototiller during its transportation.

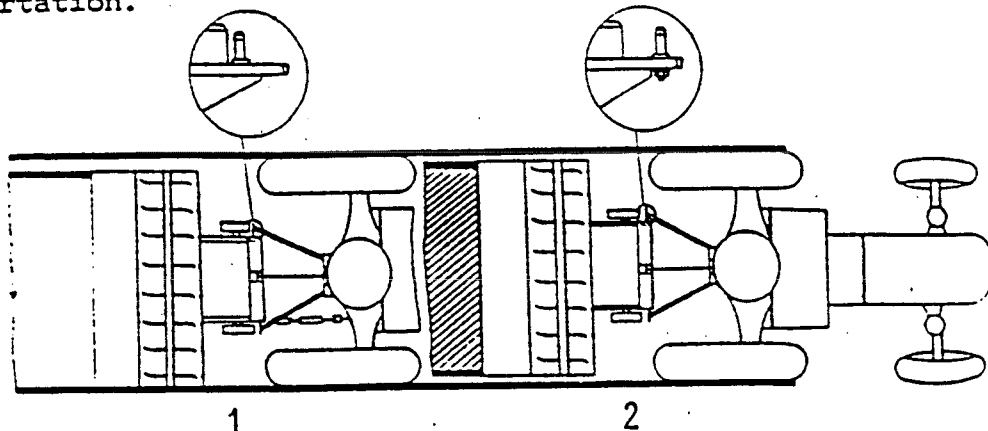


Fig. 2. Setting up of rototiller in relation to tractor.
1- asymmetrically/factory set up/
2- symmetrically.

Before proceeding to work the technical condition of the machine.

For that purpose proceed as follows:

- unscrew the control plug and check for gearbox is filled up with gearbox oil.

NOTE!!

The oli should flow out from the hole. During this checking, the rototiller should stand on the horizontal plane.

- before suspending the rototiller on the tractor, remove the transporting hook, deflectable catch and catching beam from the tractor,
- spacing of the tractor rear wheels should not exceed/mm/inches:

Assymmetrical				Symmetrical			
RT-1,4	RT-1,6	RT-1,8	RT-2,0	RT-1,4	RT-1,6	RT-1,8	RT-2,0
140	160	180	200	140	160	180	200
1250	1350	1500	1500	1100	1250	1425	1425
49"	53"	59"	59"	43"	49"	56"	56"

- check bolted joints of the rototiller, in case of stating lose ones, tighten nuts or screws,
- lubricate the rototiller according to the instructions,
- suspend the rototiller on the tractor, not mounting up however the telescopic jointed shaft,
- after starting the tractor engine, lift up the rototiller to the transporting position, stop the tractor engine and observing a proper care, proceed to further checking operations,
- check the technical condition of the cutters, replace damaged or worn up ones for new,
- check the working drum by turning it manually, for the turn is free without jamming,
- check for the guard and the gauge wheels can be freely lifted up and lowered down,
- lower down the rototiller,
- connect the rototiller with the tractor by means of the telescopic jointed shaft.

This operation must be done at disengaged tractor engine.

In case of difficulaties in seating the ends of the telescopic jointed shaft in the tractor WOM spined end, the rototiller working drum should be slightly moved by hand.

Before first mounting of the telescopic jointed shaft, the following operations are to be done:

- disassemble the shaft for two halves, shift one half on the splined end of the rototiller and another on the spined tractor end.
The safety devices after shifting on the halves have to snap;
- the rototiller should be lifted totally up, in its upper position, and the shaft halves should be kept one besides another.
If the chance of shifting on the halves is less than 40 mm (16") than the guard and the profile tube have to be properly shortened /Fig. 3/;
- lower down the rototiller on the ground, and hold the shaft halves one besides another.
While shortening, both halves are be shortened by equal length;
- after fitting the telescopic jointed shaft is to reassambled and mounted in the rototiller and in the tractor WOM splined end, and the chain holding the guard should be caught by rototiller /it is to protect the guard against turning/.

5.

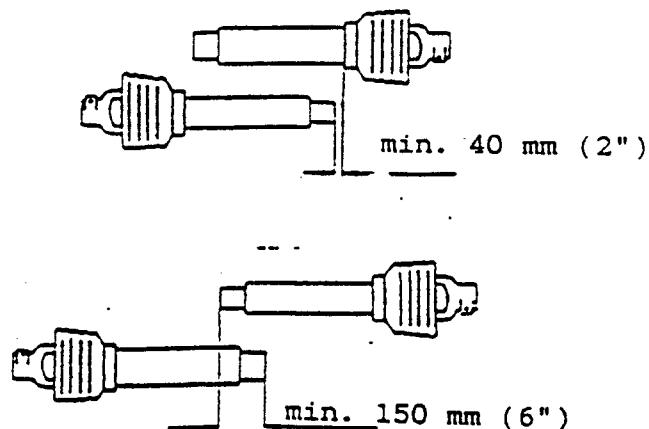


Fig. 3. Determination of length of telescopic jointed shaft.

NOTE!!

It is prohibited to mount in the telescopic jointed shaft before checking the technical condition of the rototiller. Primarily level up the rototiller with the tractor hanger crank towards transverse direction to the work direction and with tractor upper connector towards longitudinal direction to the rototiller working direction.

During the first working passage proceed:

- set up the gauge wheel for the required working depth, which is regulated gradually every 2,5 cm (1"),
- primarily levelled up rototiller has to be levelled up thoroughly

Nor levelling up of the rototiller towards the transverse direction makes a difference in work depth of the working drums, and in the longitudinal direction unproper angles of jointed shaft breaking. At properly levelled up rototiller in the working position /with cutters in the soil/ the rototiller frame plane should be parallel to the ground.

Attention should be paid that the working drums are firmly mounted on the shaft. This is gained by tightening of the rods. The tightening rod and the screw protecting the right drum /looking from the rear of the machine/ are provided with left-hand thread, but the same parts of the left working drum are provided with right-hand thread. During operation of the rototiller violent jerks should be avoided. It is prohibited to back up the tractor when the rototiller is in working position. While turning, the rototiller must be lifted up into the transporting position and the working drum drive disengaged.

It is prohibited to turn at work with the cutters in the soil. The mobile guard position is adjusted depending on the agrotechnical conditions.

The guard should be lifted high on light soils. On heavy, wet soils, due to the change of luting - also high up.

On the other hand on heavy, dry - the lower edge of the guard should touch the surface of the field.

On the light soils with small stones, due to the safety of work, the guard should be loweres down.

When it is required to level up the worked up field surface, the guard is to be totally lowered down.

For the purpose to avoid jamming of the working drums, before proceeding to work, the field should be cleaned from long, loose plant remainders /after harvest/.

4.3. Transport.

For transport purposes the working drum drive must be disengaged.

Nor disengaged of the drive can be a cause of damaging of the tractor, of the telescopic jointed shaft or of the rototiller. The rototiller has to be lifted to the transporting position, and paying a special care, to proceed to transporting. Due to projecting of the rototiller outside the tractor edges, during over taking and passing by of other vehicles a particular care should be taken. The remaining instructions pertaining the transport are contained in Para 6 "Work Safety Precautions".

4.4. Lubrication.

Mineral grease must be only used for lubrication, it is prohibited to use animal or plant originated lubricants. Before pressing in grease by grease gun, the grease nipples should be thoroughly cleaned. For lubrication of the gear box, gear oil in the quantity of 1,5 litre is used.

The oil level in the gear box should be checked before each going out into the field, and if needed, the oil must be filled up. The control plug is used for checking up the oil level; it should be unscrewed then oil should flow out. During checking of the oil level, the rototiller should be levelled up in compliance with requirements given in Para 4.2. Lubrication is to be carried out according to the instructions given in the lubrication card to Fig. 4.

Permeability of the de-aerating valve should be checked too. Besides, the terms of replacing total oil in the driving attachment should be observed.

I-st replacement - after 20 hours of work
 II-nd replacement - after next 40 hours of work
 III-rd and following replacements after each 200 hours of work
 Replacement of oil should be carried out after a longer period of machine work, when the oil is hot.

Due to wearing in during work of the new toothed wheels, the metal file dust is formed, which being accumulated in the gear box, and then being mixed with oil can cause a quicker wear of the teeth of the toothed wheels and rolling bearings.

Before filling up the gear box with new oil, it should be flushed, to remove the dirt, with machine oil.

Replacing oil in the gear box, the following operations should be performed:

- place a container for the used up oil under the drain plug,
- unscrew the drain plug and filling plug,
- after draining the used up oil drive in the drain plug,
- flush the gear box with machine oil, turning by hand the working drum several times,
- unscrew the drain plug and drain the impure machine oil,
- drive in the drain plug,
- unscrew the control plug,
- fill up the gear box with fresh gear oil upto the level of the control plug,
- drive in the control plug and the filling in plug.

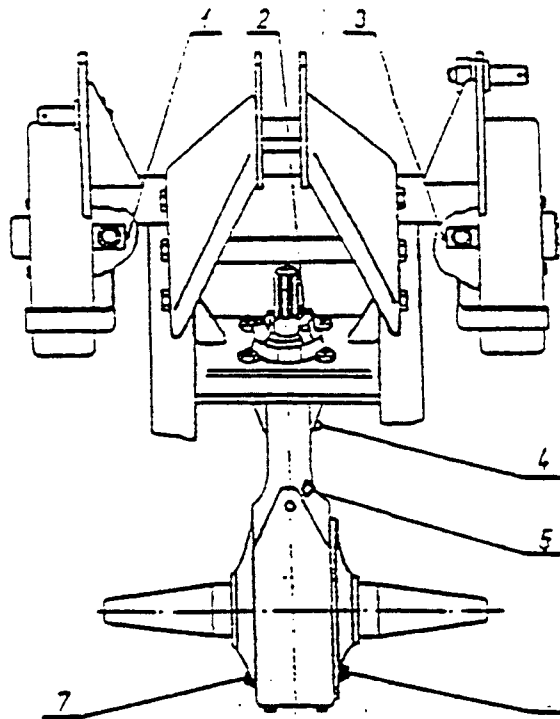
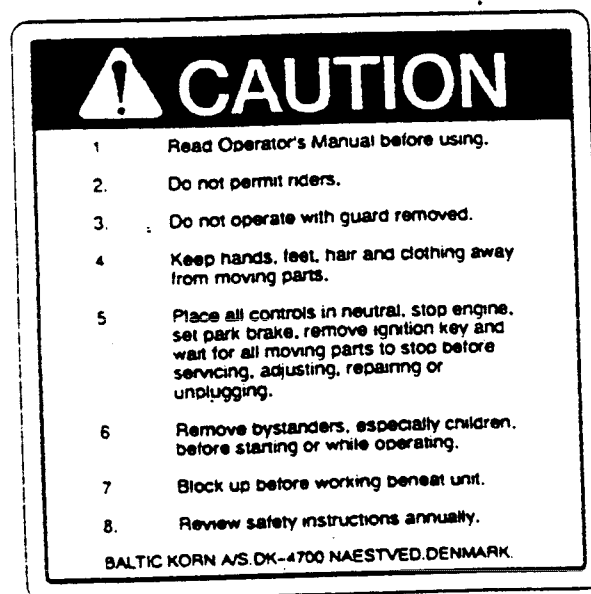


Fig. 4. Lubrication points of rototiller.

1 and 3 gauge wheel axle, 2- attachment head, 4- deserating valve, 5- driving attachment, oil inlet, 6- checking of oil level in driving attachment, 7- oil drain hole in driving attachment.

Labels situated on frame replacement labels available NO CHARGE on request.



LUBRICATION CARD TO FIG. 4.

Pos. No.	Name of spot mechanism of	Sort of lubricating material		Lubricating system	Frequency of lubrication	Consumption		Periods of replacement	Used up oil recovery worked up /lbs
		recommen.	substit.			replace ment /lbs	current lubric. /lbs		
1-3	Gauge wheel axle	grease	grease	grease gun	10	0,04	0,02	once in season	-
2	Attachment head	grease	grease	grease gun	10	0,18	0,09	once in season	-
5	Driving attch. gear - oil filling in	oil	oil	filling in upto contr. plug/item in Fig.6	check oil level before going to field each time			I-st replacement after 20 hours of work II-nd replacement after next 40 hours of work III-rd and following replacements after each 200 hours of work	2,87
	Working surfaces	machine oil	-	flushing	at replacing oil	3,1	-	-	2,87
	Working surfaces	kerosine grease	-	washing on surface	after season	1,88	-	-	-
			-		after season	1,32	-	-	-

5. Maintenance and Upkeep.

Each time after ending work, the rototiller should be cleaned up from soil, thereafter an inspection of the connections, parts and units should be carried out.

Parts worn out are to be replaced for new and damaged ones repaired. Cracked cutters should be replaced for new loose bolted joints have to be removed by tightening. After the work season is ended, the rototiller should be thoroughly cleaned, and the cutters working surfaces and pins and suspension journals should be washed up with kerosine, the protected against corrosion coating with grease by means of a brush.

Moreover, lubrication of the rototiller should be carried out in compliance with the instructions given in the lubrication card to Fig. No. 4.

The rototiller splines shaft end should also be washed up with kerosine and then coated with layer of grease.

The rototiller should be kept in a closed accomodation/under roof/ and in case of difficulties, at least on the hardened ground. If the rototiller during the period of break in exploitation is left outside the building, lubrication should be repeated from time to time as rain flushes out grease. Local damages in oainting should be repaired by repainting.

5.1. Recommendations for repair shop of driving attachments. Properly set up by the factory backlash measured in the assembled gear should be in range 0,13 to 0,39 mm (1/500"-1/80") measured on the leafed pinion dividing radius that is on the arm 35,75 mm (1 1/2") long.

For its measurement we can mount into the box a plate with radially set up resistance, and on the input shaft a clamping sleeve with built in micrometer. Turning the input shaft to the sensible resistance /the output shaft is immobilized/, we measure with micrometer, in relation to the resting resistance on the box, the backlash.

For making it possible an execution and mounting of the measuring device, the size of the backlash can be measured on longer than 35,75 mm (1 1/2") arm conversing the result properly to the length of the assumed measurement arm.

5.2 Dissassembly of working drums and replacement of cutters. Disassembly of the drums from the driving attachment shaft is carried out as follows:

- slacken the safety screw,
- hold with key the safety screw /in loose position/,
- drive out the tightening rod until the working drum slides off from the shaft of the driving attachment taper shaft.

For the purpose of installing the working drum on the driving attachment shaft proceed.

- drive out the protecting screw,
- drive in the tie rod /2-3 turns/ in the threaded shaft end hole of the driving attachment,
- drive in the protecting screw,
- screw home/strongly/ the tie rod and the protecting screw.

Attention should be paid, that the tie rod and the protecting screw of the right drum /looking from the rear of the machine/ have left-hand thread, on the other hand, the same parts of the left working drum have right-hand thread.

For replacing the damaged cutters at work, the telescopic jointed shaft drive has to be disengaged. Stop the tractor motor and lower down the rototiller on the ground.

Set up the working drum that way, that the damaged cutter is easily accessible. Then proceed to replacement of the damaged cutter. It is prohibited to replace the cutters in the transporting position of the rototiller.

While installing the fastening bolts observe the principle that the bolt heads are from the side of the cutters.

6. Work Safety Precautions.

The unit may be operated only by a person who knows exactly the operation of the tractor and of the rototiller as well, after learning the proper instructions. The rototiller should be used paying a great care, and most of all it should be kept in mind that:

- it is prohibited to stay between the tractor and the rototiller during work of the tractor engine,
- mounting of the rototiller on the tractor must be carried out in compliance with the instructions contained in Para 4.1.,
- the rototiller has to be lifted and lowered smoothly-without jerks and knocks,
- adjustment of the depth of work and of the guard position may be carried out at the tractor engine stopped,
- strangers must not come close to the rototiller during its work because of lumps of oil and stones chipping out,
- repair of the rototiller may be carried out only when the tractor engine is disengaged,
- the rototiller may be lubricated or cleaned at work only when the tractor engine is stopped,
- it is prohibited to come too close to the rotating working drum of the rototiller,
- during the time the rototiller has to be lowered down and the tractor engine disengaged,
- during making turns the rototiller drive should be disengaged and a particular care observed, if people or objects are in the range of the unit,
- replacement of the damaged cutters may be carried out only at the tractor engine disengaged and the rototiller lowered down,
- transporting of the rototiller on the hydraulic lift of the tractor may be carried out only when the working drum drive is disengaged,
- the transporting speed may be:
 - a) on the roads with smooth surface/asphalt/to 9 miles/h,
 - b) on the field ways or macadam roads 3 - 5 miles/h,
 - c) on the pot-hole roads not more than 4 miles/h,
- because of projection of the rototiller outside the tractor edges, at overtaking and passing by of other vehicles a particular care should be taken,
- the rototiller may be detached from the tractor only after stopping the tractor engine,
- storage of the rototiller during the period of not being exploited should be exercised in places off limits for the strangers and animals,
- it is prohibited to use the telescopic jointed shaft without the guard or with damaged guard,
- it is prohibited to drop the telescopic jointed shaft or to knock it with other objects,
- it is prohibited to put, lay or hang objects on the telescopic jointed shaft mounted to the tractor and rototiller,
- after the work is ended, the telescopic jointed shaft should be disconnected from the tractor and from the rototiller,

- at work and during transporting of the rototiller it is prohibited to stand on it or to put additional load on it,
- it is prohibited to back up the tractor with the rototiller and to make turns in the working position,
- it is prohibited to use independent tractor breaks while making turns with the unit.

NOTE!!

For protection of all the bolts contained in the unit/tractor and rototiller/typical protecting pins should be used. It is prohibited to use substitute protections as: Bolts, rods, wires, etc., which, at work or transportation, can get out off or can fall out, and at the same time can be the cause of the tractor damage or rototiller damage, making a hazard for other road users.

For damages made as a result of unobserving of the Operating and Servicing Instructions the Manufacturer is not liable.

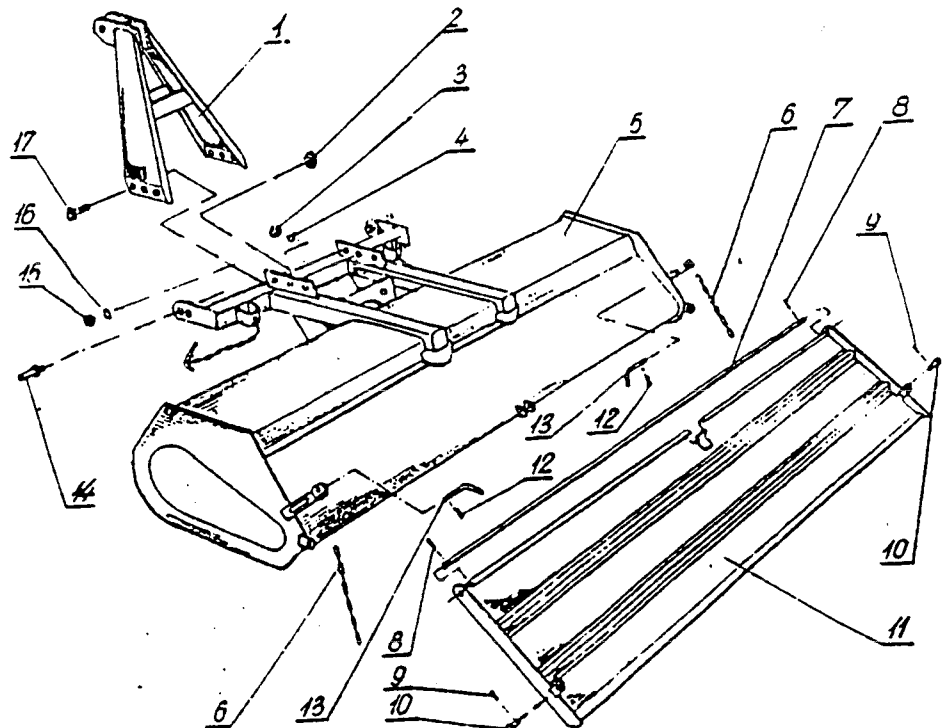
Labels situated on frame replacement labels available **NO CHARGE** on request.

 <h1 style="margin: 0;">DANGER</h1>		
		
<p>ROTATING BLADE HAZARD KEEP AWAY - ROTATING BLADES</p> <p>To prevent serious injury or death from thrown objects or blade contact:</p> <ol style="list-style-type: none"> 1. Do not operate with cover removed. 2. Do not point discharge toward people, animals or buildings when operating. 3. Do not place hands or feet under deck when operating or when engine is running. <p>BALTIC KORN A/S. DK-4700 NAESTVED. DENMARK.</p>		

FRAME WITH GUARD-SET.

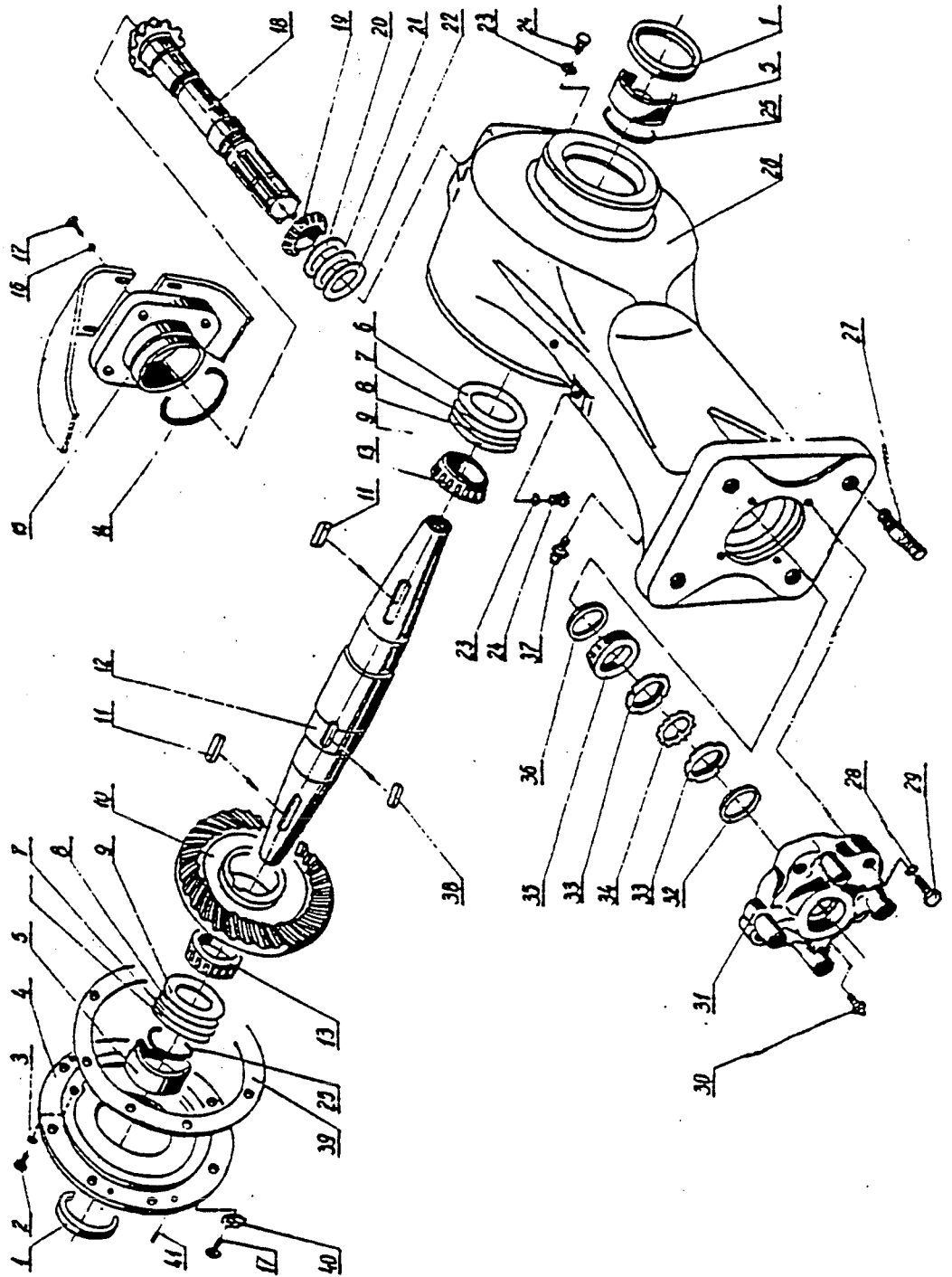
Pos. No.	Description	Spare part No.	Number of pcs in machine					
			100	120	140	160	180	200
1	Hanger set welded	1521/30-000/0	1	1	1	1	1	1
2	Nut with insert M16	ZN-75/MPM-29-10651	5	5	6	6	6	6
3*	Nut M20x1.5-5-B	PN-86/M-82155	4	4	4	4	4	4
4*	Spring washer 20.5	PN-77/M-82008	4	4	4	4	4	4
5	Frame with guard-set D	1521/70-000/0	1	1	1	-	-	-
	Frame with guard-set E	1522/30-000/0	1	1	-	1	-	-
	Frame with guard-set F	1523/30-000/0	-	-	-	-	1	-
	Frame with guard-set G	RT-4/10-600/0	-	-	-	-	-	1
6	Link chain 6 (12 links)	PN-75/M-84543	2	2	2	2	2	2
7	Guard pin A	1521/00-001/0	1	-	1	-	-	-
	Guard pin B	1522/00-001/0	-	1	-	1	-	-
	Guard pin C	1523/00-001/0	-	-	-	-	1	-
	Guard pin D	RT-4/00-001/0	-	-	-	-	-	1
8*	Split pin S 4x25	PN-76/M-82001	2	2	2	2	2	2
9	Split pin S 2.5x16	PN-76/M-82001	2	2	2	2	2	2
10	Pin 10x28/23	PN-63/M-83002	2	2	2	2	2	2
11	Mobile guard-set A	1521/20-000/0	1	-	1	-	-	-
	Mobile guard-set B	1522/20-000/0	-	1	-	1	-	-
	Mobile guard-set C	1523/20-000/0	-	-	-	-	1	-
	Mobile guard-set D	RT-4/20-600/0	-	-	-	-	-	1
12	Split pin 148-Fa/Zn-mbcc	BN-81/1902-04	2	2	2	2	2	2
13	Pin	1500/00-005/0	2	2	2	2	2	2
14	Journal-lift arm pin Ø28 mm - cat. 2	1500/04-005/0	2	2	2	2	2	2
	Journal-lift arm pin Ø22 mm - cat. 1	1521/00-002/0	2	2	2	2	2	2
15*	Nut M30x2-5-B	PN-86/M-82144	2	2	2	2	2	2
16*	Spring washer 30.5	PN-77/M-82008	2	2	2	2	2	2
17	Bolt M16x50-8.8-B	PN-85/M-82101	6	6	6	6	6	6

19.05.95.



DRIVING ATTACHMENT.

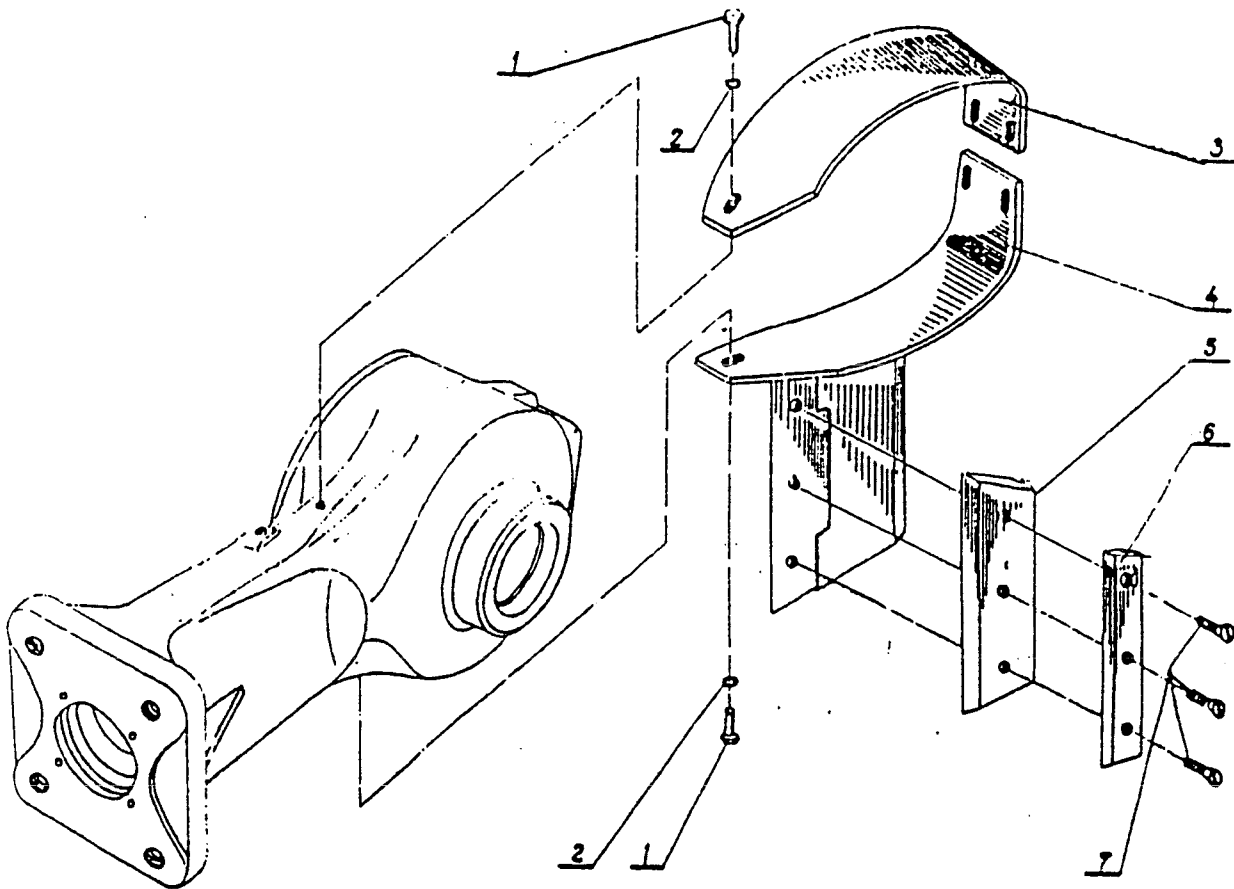
Pos. No.	Description	Spare part No.	Number of pcs in machine			
			140	160	180	200
1	Packing ring A70x90x10	PN-72/M-86964	2	2	2	2
2*	Bolt M10x10-5.6-A	PN-85/M-82105	1	1	1	1
3*	Plug packing	1500/01-024/0	1	1	1	1
4	Gearbox cover	1500/90-002/0	1	1	1	1
5	Sleeve	1500/90-003/0	2	2	2	2
6	Distance washer 0.1	1500/90-005/0		as necessary		
7	Distance washer 0.15	1500/90-006/0		as necessary		
8	Distance washer 0.5	1500/90-007/0		as necessary		
9	Distance washer 1.0	1500/90-008/0		as necessary		
10	Bevel gear with curved teeth see pos. 42	1500/20-004/0	1	1	1	1
11	Key	1500/20-016/0	2	2	2	2
12	Shaft	1500/20-005/0	1	1	1	1
13*	Taper bearing 30212	PN-86/M-86220	2	2	2	2
14	Packing ring A	1500/20-013/0	1	1	1	1
15	Assembly cover C	1500/20-012/0	1	1	1	1
16*	Washer 13	PN-78/M-82005	4	4	4	4
17*	Bolt M12x1.25x30-8.8-B	PN-85/M-82105	12	12	12	12
18	Shaft with bevel gear with curved teth	1500/20-003/0	1	1	1	1
19	Taper bearing 32309	PN-86/M-86220	1	1	1	1
20	Distance washer 0.2	1500/20-007/0	1-3	1-3	1-3	1-3
21	Distance washer 0.3	1500/20-008/0	0-4	0-4	0-4	0-4
22	Distance washer 1.0	1500/20-009/0	1	1	1	1
23*	Packing	1500/01-027/0	2	2	2	2
24*	Plug A N 16st	BN-71/1902-21	2	2	2	2
25	Packing ring	1500/90-004/0	2	2	2	2
26	Gearbox	1500/90-001/0	1	1	1	1
27*	Body bolt	1500/01-019/0	4	4	4	4
28*	Spring washer 10.2	PN-77/M-82008	4	4	4	4
29*	Bolt M10x45-3.6-C	PN-85/M-82008	4	4	4	4
30*	Grease nipple st. M10x1 B 1/8"/45 gr.	PN-76/M-86002	1	1	1	1
31*	Attachment head A	1500/01-051/0	1	1	1	1
32*	Packing ring A35x35x12	PN-72/M-86964	1	1	1	1
33*	Bearing nut KM 8A	PN-82/M-86478	2	2	2	2
34*	Toothed washer MB8	PN-82/M-86482	1	1	1	1
35*	Taper bearing 32208	PN-86/M-86220	1	1	1	1
36*	Packing ring A40x68x10	PN-72/M-86964	1	1	1	1
37	Deaerating valve	E2-002-933-871-00	1	1	1	1
38	Prism key A18x11x45	PN-70/M-85005	1	1	1	1
39	Cover packing	1500/90-009/0	1	1	1	1
40	Washer	1500/20-014/0	8	8	8	8
41	Straight pin 8u7x20	PN-66/M-85021	2	2	2	2
42	Pair of bevel gear pos. 10 + 18	1500/20-200/0	1	1	1	1
43	Distance washer-set Contains items 20, 21 and 22	1500/20-400/0	1	1	1	1
44	Distance washer-set Contains items 6, 7, 8 and 9.	1500/90-100/0	2	2	2	2
	Shaft cover	5621/01-001/0				



KNIFE COULTER.

Pos. No.	Description	Spare part No.	Number of pcs in machine			
			140	160	180	200
1*	Bolt M12x30-3.6-C	PN-85/M-82105	2	2	2	2
2*	Spring washer 12.2	PN-77/M-82008	2	2	2	2
3	Scate B	1500/20-011/0	1	1	1	1
4	Knife coultter-set-welded A	1500/21-100/0	1	1	1	1
5*	Knife coultter	1500/01-009/0	1	1	1	1
6*	Strap	1500/01-025/0	1	1	1	1
7*	Screw M8x16-5.6-B	PN-85/M-82215	3	3	3	3
	Knife coultter-set A	1500/21-000/0	1	1	1	1

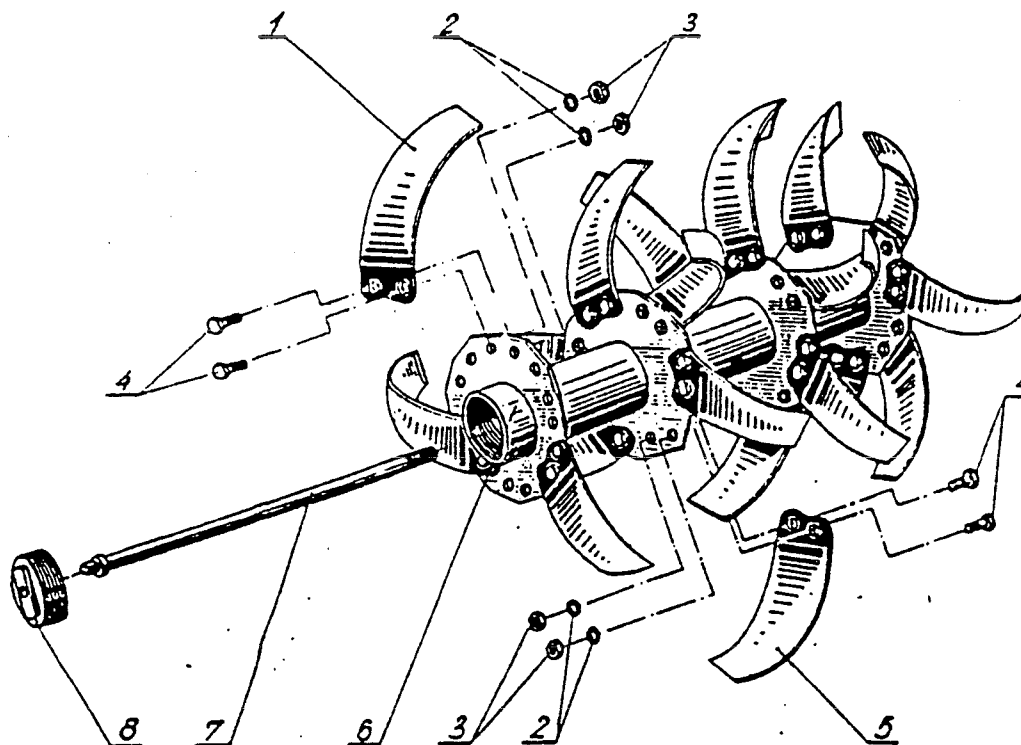
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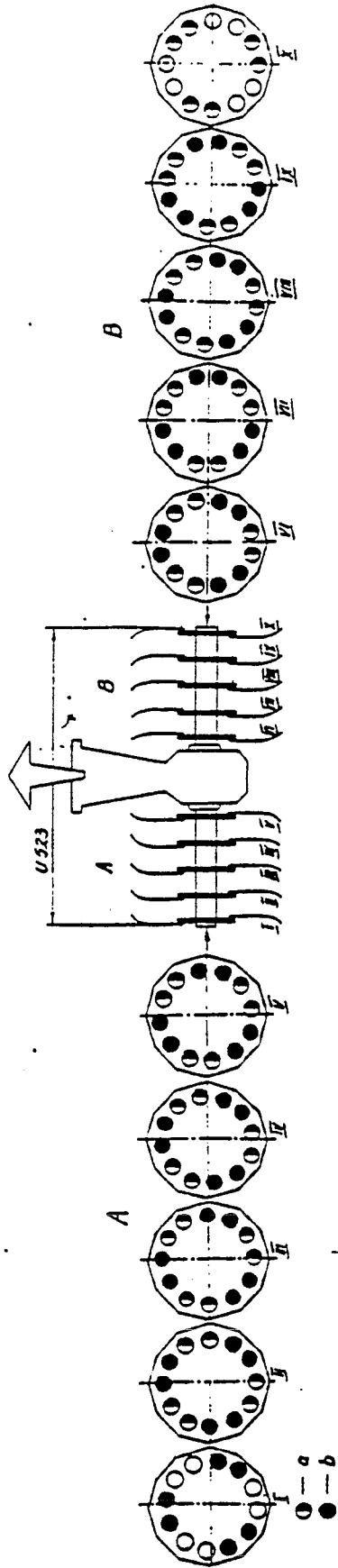
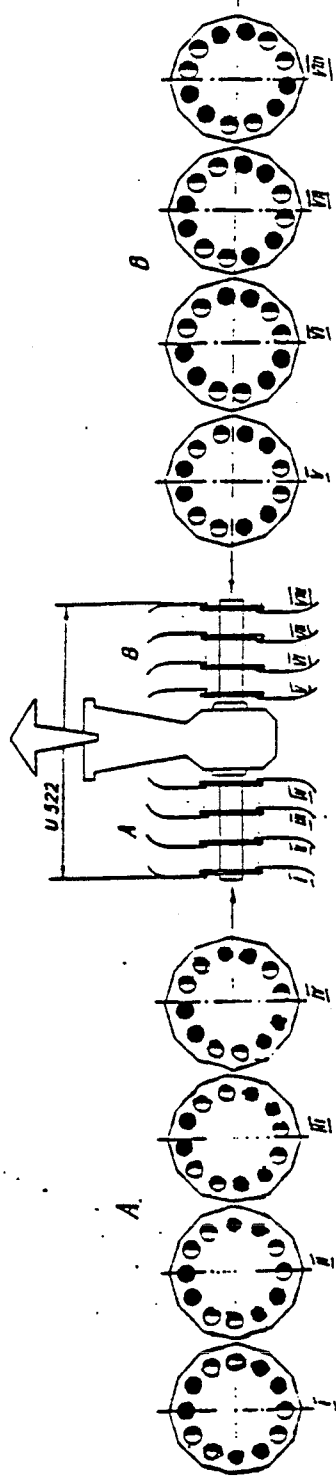
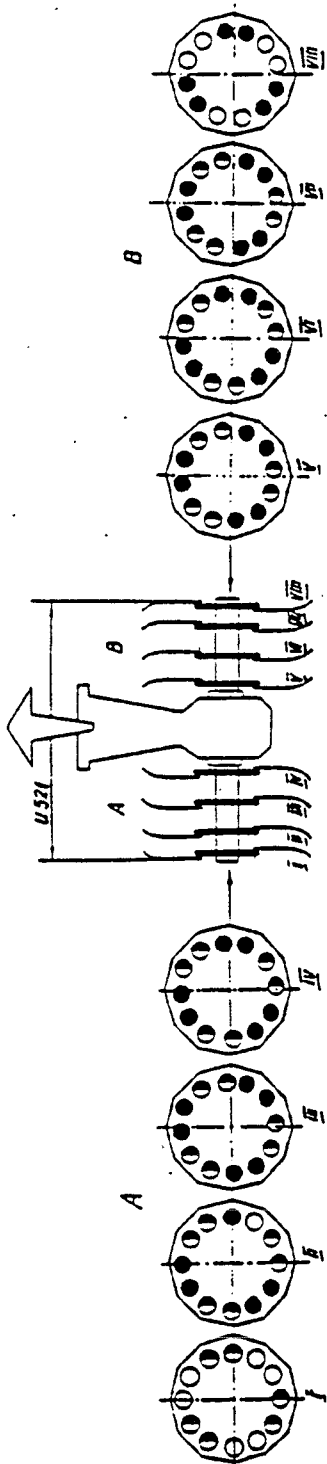


WORKING DRUMS.

Pos. No.	Description	Spare part No.	Number of pcs in machine				40" 100
			140 55"	160 65"	180 71"	200 80"	
1*	Cutter LL1	BN-86/1926-01	21	24	27	30	
2*	Toothed washer A 16.5	DIN 6798	84	96	108	120	
3*	Nut M16x1.5-8-B-Fe/Znb	PN-86/M-82144	84	96	108	120	
4*	Special bolt B	1500/02-009/0	84	96	108	120	
5*	Cutter LP1	BN-86/1926-01	21	24	27	30	
6*	Working drum l/set weld.	1500/02-022/0	1	-	-	-	
	Working drum l/set weld.	1500/02-007/0	-	1	-	-	
	Working drum l/set weld.	1500/02-008/0	-	-	1	1	
	Working drum r/set weld.	1500/03-011/0	1	-	-	-	
	Working drum r/set weld.	1500/03-003/0	-	1	-	-	
	Working drum r/set weld.	1500/03-004/0	-	-	1	1	
7*	Tie rod with r/hand thread	1500/00-003/0	1	-	-	-	
	Tie rod with r/hand thread	1500/02-003/0	-	1	-	-	
	Tie rod with r/hand thread	1500/00-001/0	-	-	1	1	
	Tie rod with l/hand thread	1500/00-004/0	1	-	-	-	
	Tie rod with l/hand thread	1500/03-001/0	-	1	-	-	
	Tie rod with l/hand thread	1500/00-002/0	-	-	1	1	
8*	Protecting screw with right-hand thread B	1500/02-020/0	1	1	1	1	
	Protecting screw with left-hand thread B	1500/03-009/0	1	1	1	1	

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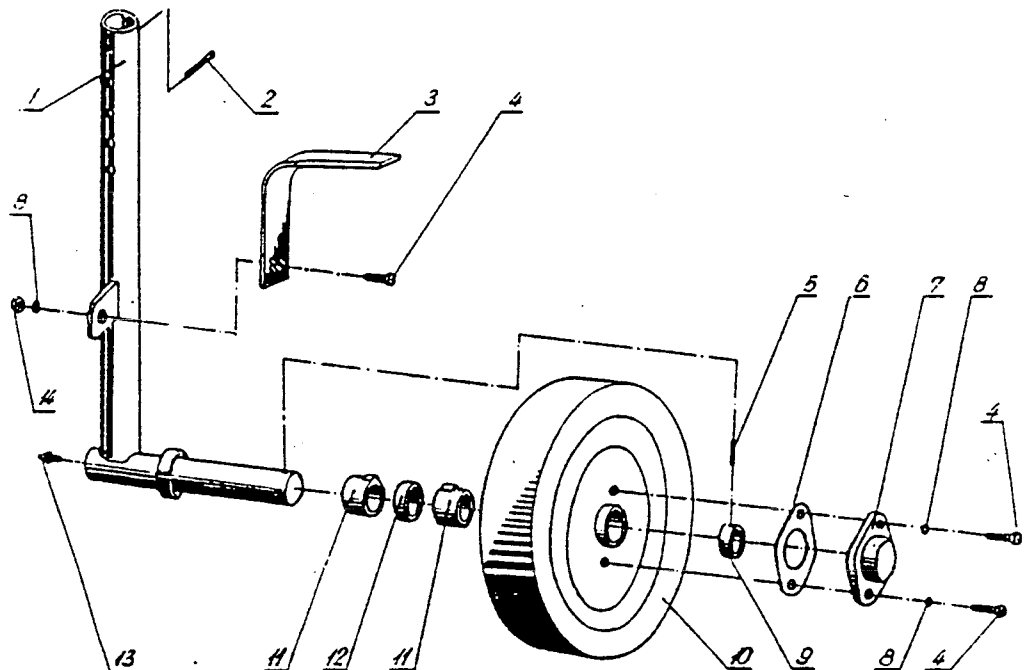




GAUGE WHEEL.

Pos. No.	Description	Spare part No.	Number of pcs in machine				Notes
			140	160	180	200	
1	Wheel standard, right, set, welded	1521/40-100/0	1	1	1	1	
	Wheel standard, left, set, welded	1521/50-100/0	1	1	1	1	
2*	Split pin S 8x63	PN-76/M-82001	2	2	2	2	
3*	Scraper, left-set	1500/04-006/0	1	1	1	1	
	Scraper, right-set	1500/04-007/0	1	1	1	1	
4*	Bolt M10x30-3.6-C	PN-85/M-82005	6	6	6	6	
5*	Pin	1015/04-010/0	2	2	2	2	
6*	Packing B	1015/04-011/0	2	2	2	2	
7*	Hub cover	1015/04-008/0	2	2	2	2	
8*	Spring washer 10.2	PN-77/M-82008	6	6	6	6	
9*	Mounting ring 26	1500/04-045/0	2	2	2	2	
10*	Wheel-set, welded	1521/81-100/0	2	2	2	2	
11*	Wheel hub sleeve	1500/04-043/0	4	4	4	4	
12*	Distance sleeve	1500/04-044/0	2	2	2	2	
13*	Grease nipple M10x1	PN-76/M-86002	2	2	2	2	
14*	Nut M10-4-C	PN-86/M-82144	2	2	2	2	
*	Wheel-set (Containing items 10, 11 and 12)	1500/04-008/0	2	2	2	2	
	Right wheel-set (Containing items 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 and 14)	1521/81-000/0	1	1	1	1	
	Left wheel-set (Containing items 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 and 14)	1521/80-000/0	1	1	1	1	

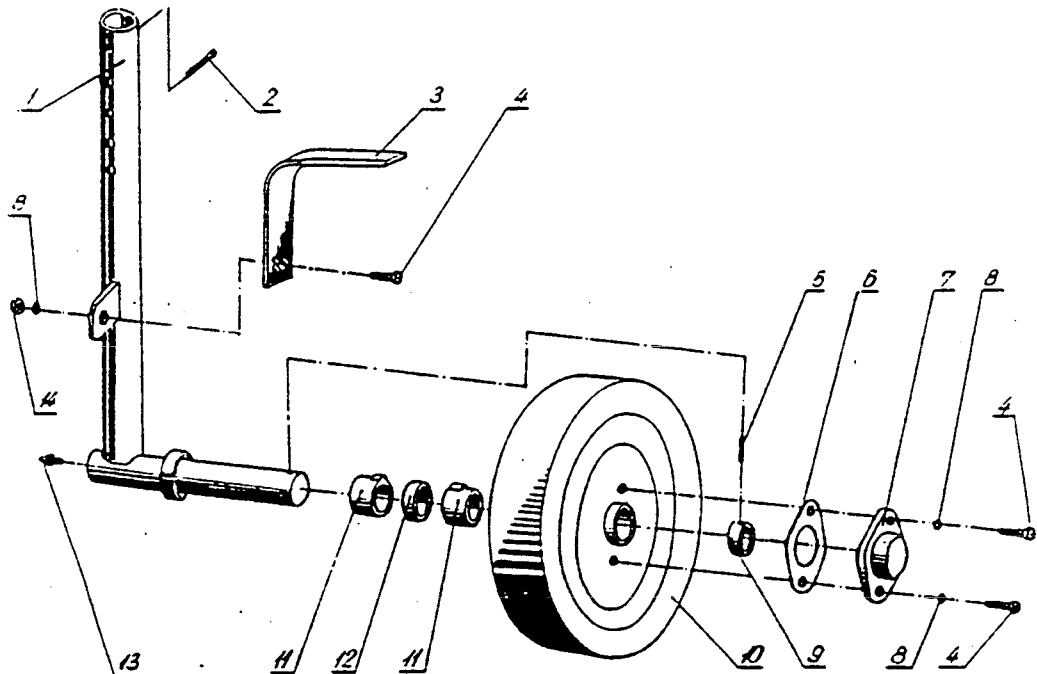
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GAUGE WHEEL.

Pos. No.	Description	Spare part No.	Number of pcs in machine				Notes
			140	160	180	200	
1	Wheel standard, right, set, welded	1521/40-100/0	1	1	1	1	
	Wheel standard, left, set, welded	1521/50-100/0	1	1	1	1	
2*	Split pin S 8x63	PN-76/M-82001	2	2	2	2	
3*	Scraper, left-set	1500/04-006/0	1	1	1	1	
	Scraper, right-set	1500/04-007/0	1	1	1	1	
4*	Bolt M10x30-3.6-C	PN-85/M-82005	6	6	6	6	
5*	Pin	1015/04-010/0	2	2	2	2	
6*	Packing B	1015/04-011/0	2	2	2	2	
7*	Hub cover	1015/04-008/0	2	2	2	2	
8*	Spring washer 10.2	PN-77/M-82008	6	6	6	6	
9*	Mounting ring 26	1500/04-045/0	2	2	2	2	
10*	Wheel-set, welded	1521/81-100/0	2	2	2	2	
11*	Wheel hub sleeve	1500/04-043/0	4	4	4	4	
12*	Distance sleeve	1500/04-044/0	2	2	2	2	
13*	Grease nipple M10x1	PN-76/M-86002	2	2	2	2	
14*	Nut M10-4-C	PN-86/M-82144	2	2	2	2	
*	Wheel-set (Containing items 10, 11 and 12)	1500/04-008/0	2	2	2	2	
	Right wheel-set (Containing items 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 and 14)	1521/81-000/0	1	1	1	1	
	Left wheel-set (Containing items 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 and 14)	1521/80-000/0	1	1	1	1	

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DANGER



ROTATING BLADE HAZARD KEEP AWAY - ROTATING BLADES

To prevent serious injury or death from thrown objects or blade contact:

1. Do not operate with cover removed.
2. Do not point discharge toward people, animals or buildings when operating.
3. Do not place hands or feet under deck when operating or when engine is running.

BALTIC KORN A/S. DK-4700 NÆSTVED. DENMARK.



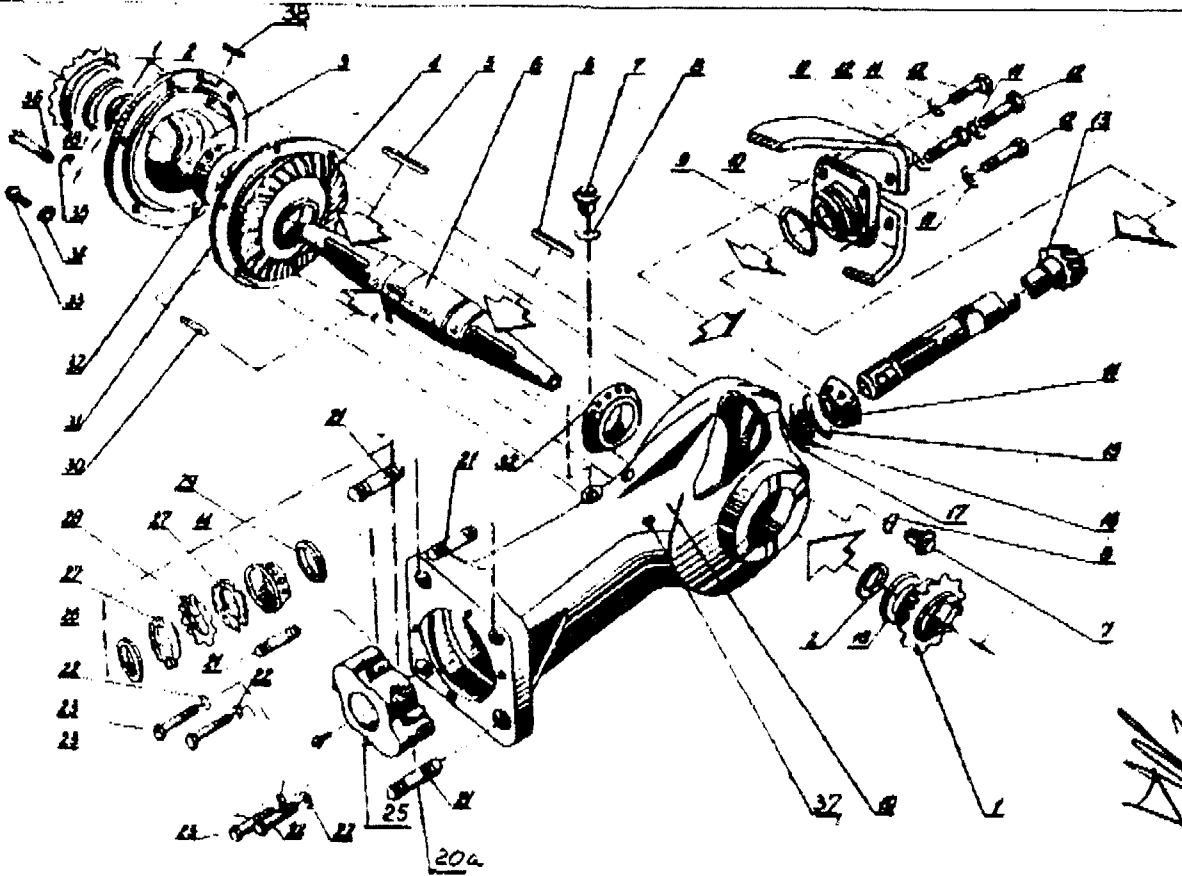
CAUTION

1. Read Operator's Manual before using.
2. Do not permit riders.
3. Do not operate with guard removed.
4. Keep hands, feet, hair and clothing away from moving parts.
5. Place all controls in neutral, stop engine, set park brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.
6. Remove bystanders, especially children, before starting or while operating.
7. Block up before working beneath unit.
8. Review safety instructions annually.

BALTIC KORN A/S. DK-4700 NÆSTVED. DENMARK

BALTIC PARTS DISTRIBUTORS

310 South College Street
Lebanon, Tennessee 37087.
Phone Toll Free 888-914-0777.
Fax 615-443-3956.



10: BRAFT MANNY
 COMPLETE BOOK SHOTS VIA MAIL
 FOR LOWE TULLER.

Table 2. Layshaft.

Layshaft.

14.

No.	Description	Part number	Number off in 1.40 55"	off in 1.40 65"
1	Securing ring, cpl.	1500/01-022/0	2	
2	Securing ring A60x80x8	PN-72M-86964	2	
3	Cover, gear casing	1500/01-017/0	1	
4	Bevel gear with arc teeth A	1500/01-032/0	1	
5	Key	1500/01-011/0	2	
6	Plug A M16S1	1500/01-006/0	1	
7	Shaft	BN-71/1902-21	2	
8	Seal	1500/01-027/0	2	
9	Packing ring	1500/01-021/0	1	
10	Mounting cover B	1500/01-047/0	1	
11	Washer 13	PN-78/M-82005	4	
12	Screw M12x1.25x30	PN-85/M-82105	4	
13	-8.8-1.8			
14	Shaft with bevel gear with arc teeth A	1500/01-030/0	1	
15	Angular bearing 32208	PN-75/M-86220	2	
16	Spacer washer 1.0	1500/01-043/0	0-1	
17	Spacer washer 0.3	1500/01-042/0	0-4	
18	Spacer washer 0.2	1500/01-041/0	1-3	
19	Packing ring 99.2x5.7	PN-60/M-86961	2	
20	Gear casing	1500/01-016/0	1	
21	Layshaft head A	1500/01-051/0	1	
22	Double-nutted pin	1500/01-019/0	4	
23	Spring washer 10.2	PN-77/M-82008	4	
24	Screw M10x45-3.6-C	PN-85/M-82101	4	
25	Lubricant fitting			
26	SIB 1/8/450	PN-76/M-86003	1	
27	Packing ring A35x55x12	PN-72/M-86964	1	
28	Nut, bearing KM8 A	PN-82/M-86478	2	
29	Tooth washer MB 8	PN-82/M-86482	1	
30	Packing ring A40x69x10	PN-72/M-86964	1	
31	Prismatic key A18x11x40	PN-70/M-85005	1	
32	Cover	1500/01-026/0	1	
33	Angular bearing 30212	PN-85/M-86220	2	
34	Screw M10x10-5.6 A	PN-85/M-82105	1	
35	Seal, plug	1500/01-024/0	1	
36	Washer 13	1500/02-012/0	6	
37	Screw M12x1.25x30-8.8 S	PN-74/M-82105	6	
38	Securing ring assy. with packing ring spacer washer assy. Bevel gear	1500/01-013/0 1500/01-010/0 1500/01-020/0 PN-89/M-85021	2 1 1 1	

