



Order-No. 9900.01.50GB01

--	--	--	--	--	--	--	--	--

Serial-No.

Operating Instructions

Flail Mower 130-225 Side



CONTENT

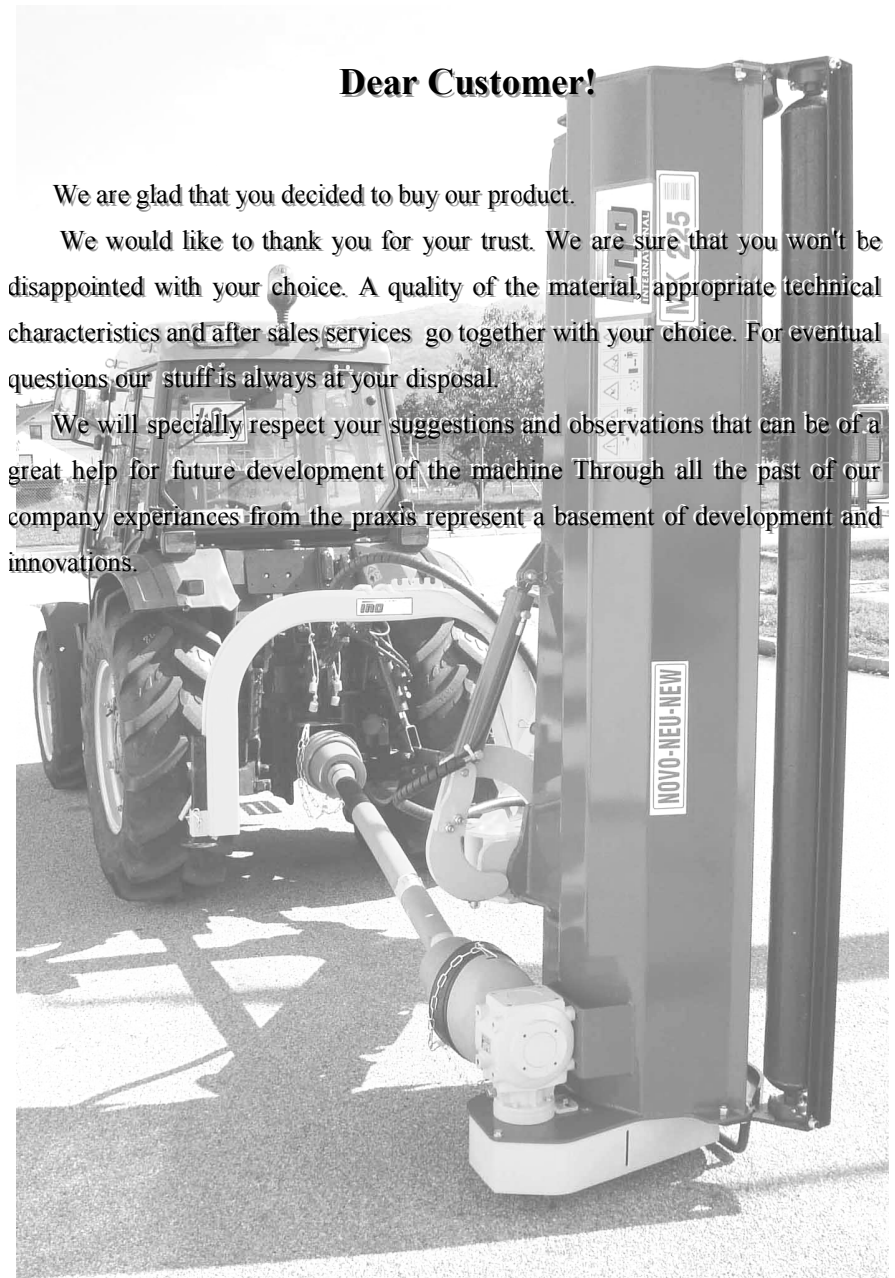
1. General information.....	4
1.1 Purpose of use.....	5
1.2 Warranty.....	5
1.3 Identification of the machine	6
2. Technical data	7
2.1 Noise	7
2.2 Technical specification	8
2.3 Optional equipment.....	9
3. Safety.....	10
3.1 General safety rules.....	10
3.2 Attachment on the tractor and transport.....	11
3.3 PTO drive.....	12
3.4 Hydraulic system.....	13
3.5 Safety rules during use.....	14
3.6 Warning decals.....	15
3.7 List of guards.....	16
4. Description and operating of the machine.....	17
5. Transport and attachment of the machine.....	18
5.1 Transport to the customer.....	18
5.2 Attachment and detachment from the tractor.....	19
5.3 Fitting the PTO shaft.....	20
5.4 Stability of the tractor.....	21
6. Adjustment and setting up.....	22
6.1 Regulating the height of cut.....	22
6.2 Belt tension adjustment.....	23
7. Operating.....	24
8. After the job done.....	27
8.1 Cleaning.....	28
9. Maintenance.....	29
9.1 Belt tension control.....	30
9.2 Oil level control.....	31
9.3 Control of bolts.....	31
9.4 Greasing.....	32
9.5 Plan of maintenance jobs.....	33
9.6 Replacement of working tools.....	34
9.7 At the end of the season.....	34
9.8 Demolition when out of order.....	34
10. Trouble shooting.....	35

Dear Customer!

We are glad that you decided to buy our product.

We would like to thank you for your trust. We are sure that you won't be disappointed with your choice. A quality of the material, appropriate technical characteristics and after sales services go together with your choice. For eventual questions our stuff is always at your disposal.

We will specially respect your suggestions and observations that can be of a great help for future development of the machine. Through all the past of our company experiences from the praxis represent a basement of development and innovations.



1. General information

This operation and maintenance manual is intended to the operator. It consists of operating instructions, maintenance part and spare parts list for the machine.

It is mandatory to follow these instructions in order to prevent events which could endanger the operator's, other people's and animal's safety, apart from the correct functioning of the machine. In case of doubt do not experiment, call Rabe after-sales service instead, or a specialized Rabe dealer.



It is mandatory to read these instructions to understand the operating of the machine!



In the case of re-sale of the machine it is necessary to give these instructions to the new owner!

A meaning of decals in this book



Very important information!



Technical warning!



Safety warning!

1.1 Purpose of use

Flail Mower Side is purposed mostly for mulching grass, branches and vines, smaller bushes and other crop residues. It is appropriate for all green areas, vineyards and orchards. We use it on public areas, for banks and verges. Its construction is rigid, designed for intensive use, under the angle $+90^{\circ}/-65^{\circ}$. It is very important also in ecological way. With mulching we avoid the use of herbicides.

1.2 Warranty

Warranty period for the machine is 24 months.

This machine is in conformity with the following provisions of law:

- Directive Machine 89/392/CEE and following additions: 91/368/CEE, 93/44/CEE and 93/68/CEE
- Regulations UNI EN 292/1 and 292/2 (Machinery Safety)
- Regulation SIST EN 745 (Rotary and flail mowers safety)



A producer can ensure normal operating of the machine only with use of original spare parts!



Rabe is not responsible for any damage or injuries, if the user doesn't consider the rules in this book!



Rabe is not responsible for any damage or injuries due to improper use of the machine!

After receiving the machine it is necessary to check that the machine was not injured during transport and that it is equipped with all basic and additional equipment (if ordered). A customer can claim any missing or damaged part in the period of 8 days after receiving the machine.

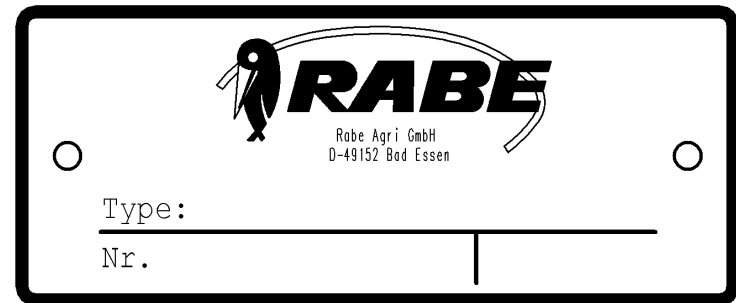
Rabe does not accept any responsibility in the case of:

- Improper maneuvering the machine,
- Improper maintenance,
- Unauthorized repairing or modifications on the machine or use of non-genuine spare parts,
- Non-respecting these rules,
- Overloading of the machine (see Table nr.1 – limited values)

1.3 Identification of the machine

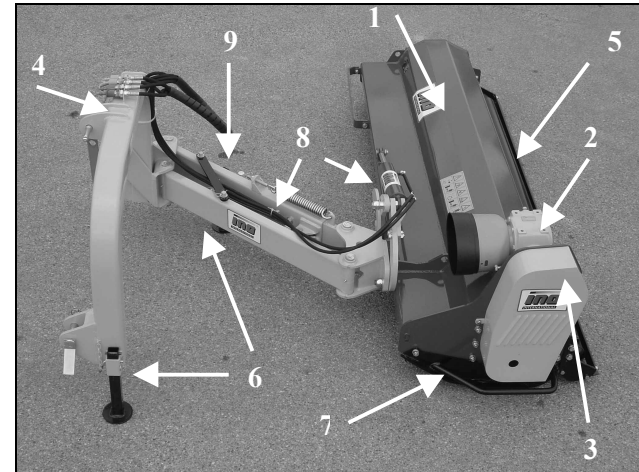
Each machine is fitted with an identification plate with the following data: producer and address, name of the machine, type, identification number and year of production.

Fig. 1



2 Technical data

Fig. 2



- | | |
|--------------------|------------------|
| 1. frame | 6. support foot |
| 2. gear box | 7. skid |
| 3. belt drive | 8. sliding tubes |
| 4. 3-point linkage | 9. mower arm |
| 5. rear roller | |

2.1 Noise

The sound level of this machine, as measured at the operator's ear, ranges from 70 to 90 dB when the rear window of tractor is open. We recommend the use of ear protectors

2.2 Technical specification

Tab. 1: Technical data for Flail Mower Side

Type		130	160	190	225
Working width	cm	131	161	191	225
Tractor power	KW/HP	40/70	50/80	70/90	80/100
Min.tractor weight	kg	1800	2200	2400	2600
Min.tractor width	cm	160	180	200	200
drive	rpm	540	540	540	540
Weight	kg	475	522	582	639
linkage	cat	II	II	II,III	II,III
Angle	°	+90/-65	+90/-65	+90/-65	+90/-65
Y-bl	nr	32	40	48	56
hammer	nr	16	20	24	28
width	cm	149	179	209	244
height	cm	100	100	100	100
Transp.length	cm	145	145	145	145

Tab.2: Working width in different positions

		130	160	190	225
A	Cm	130	160	190	225
B	Cm	200	200	200	200
C	Cm	43	48	48	48
D	Cm	230	260	290	325
E	Cm	115	145	170	200

Fig. 3

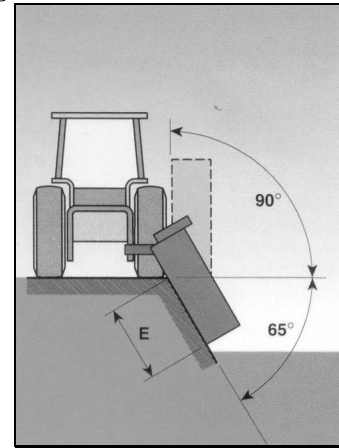
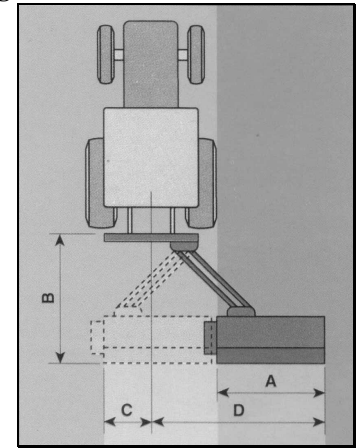


Fig. 4



2.3 Optional equipment

According to the working conditions we recommend the following additional quipment:

- Y blade (for cutting material till max. 3 cm in diameter)
- Hammers (for cutting material till max 5 cm in diameter)



Maximal thickness of the material depends on the sort and hardness of the wood. Up-mentioned diameters are valid for the fresh wood only.

3. Safety



3.1 General safety rules

1. Before starting, checks on the tractor and the machine must be carried out as regards: functionality, road safety, accident prevention rules.
2. Together with the operating and maintenance rules for the machine it is necessary to consider general health and security rules and warnings.
3. Before starting it is mandatory to know everything regarding the equipment and operating of the machine. Reading instructions among operating is too late.
4. Security and warning decals on the machine are very important. Respect them always.
5. Even when using the machine correctly, stones or other objects may be thrown on a long distance. Therefore nobody must stand within the danger area. Special attention must be paid when working near roads or buildings.
6. Use tractor with the cabin.
7. Whenever using public roads, respect traffic rules.
8. Never wear loose or fluttering clothes.
9. Keep the machine clean to avoid fire danger.
10. Before starting check the surrounding area for the likely presence of children and/or animals.
11. Never carry passengers on the machine.

12. At connecting the machine on the tractor put a support foot into the working position (up). After removal put the support foot into the standing position (down). Take care about the stability of the machine when it is removed.
13. Never overload the machine and the tractor. Use the ballast if necessary.
14. Start the machine only if all guards of the machine are fit on proper places .
15. It is forbidden to stand in the range of operating of the machine.
16. Do not enter the working zone of the PTO shaft. It is dangerous to approach the rotating parts of the machine.
17. Keep a safety distance from drive parts outside of the machine (PTO shaft, hydraulic pipes).
18. Before leaving the tractor with the machine attached disconnect the tractor, put the machine steadily on the ground (with the hydraulic lift), apply the hand brake and if the ground is steeply slooping, wedge the tractor. Take out the starting key.
19. Do not enter the zone between the tractor and the machine. It is strongly forbidden to be in this zone if the tractor is not properly disconnected, hand brake applied and starting key taken out.



3.2 Attachment on the tractor and transport

1. Before attaching the machine on or detaching it of the tractor be sure that hydraulic lift system is in a neutral position.
2. check that a category of 3-point linkage on the tractor corresponds to that one on the machine.
3. Be careful! There is a danger of injuries when working near or with 3-point linkage.

4. It is forbidden to be in the zone between the tractor and the machine while working with the hydraulics.
5. Put the 3-point linkage into the position that moving of the machine during transport is not possible.
6. During transport secure the lever of hydraulic lift to avoid any unplanned moving the machine.
7. Never leave the tractor cab when the tractor is working.
8. Adjust driving speed to the road conditions.



3.3 PTO drive

1. Use only PTO shafts with all guards, as directed by the producer.
2. All guards on PTO shaft must be in good order .
3. Take care that all guards on the PTO shaft are in proper position during transport or operating. Respect the producer's instructions.
4. The PTO shaft must be assembled or diassambled only with the engine stopped and the starting key removed.
5. The guards of the PTO shaft must be fixed to the machine and to the tractor with chains, to prevent rotation.
6. Before starting always check that the speed and the rotational direction correspond to those on the machine.
7. At some tractors a number of rotations depends on the speed and a direction of rotating depends on the direction of driving. Take care about that.
8. Before starting the PTO shaft be sure, that noone is in the danger area.

9. Never try to start the PTO shaft when the tractor engine is disconnected.
10. It is forbidden to be in the zone of drive axle exit, when it is engaged.
11. After the drive is disconnected wait that the drive axle stops to rotate completely. Never approach before it stops.
12. Never carry out maintenance of a machine or tractor whilst the engine is running. The engine should be switched off and the key removed.
13. If the PTO shaft is damaged, immediately stop with any operating.



3.4 Hydraulic system (optional equipment)

1. Take care! Hydraulics is under very high pressure.
2. At connecting the pipes on the tractor check that the pressure is not too low.
3. We recommend that an official service tests the pipes before operating and than at least ones per year. Damaged or worn pipes should be replaced immediately with others of the same specification.
4. at checking pipes it is necessary to wear protection clothes and gloves to avoid injuries.
5. The oil under high pressure may sweep into the skin causing serious infections. In this case contact a doctor immediately.
6. Before working on the hydraulic system lower the machine, take pressure out and stop the tractor.

7. Approximate using period of the pipes is 6 years. After that the pipes should be replaced to avoid any damage.
8. Used oils and greases must be stored and disposed of according to antipollution rules.



3.5 Safety rules during use

1. Never start or continue to work with the machine if the tractor or the drive axle are engaged
2. Always remove the starting key after you stopped the tractor.
3. Periodically check that bolts and nuts are tighten properly.
4. At maintaining it is sometimes necessary to lift the machine. It is mandatory to put under the machine an appropriate support to avoid falling the machine at eventual damage on hydraulics.
5. Use the gloves and appropriate tools at changing sharp parts of the machine to avoid injuries.
6. Used oils and greases should be removed according to the rules.
7. Always disconnect electric cables on the tractor before any welding or other operation when using electricity is necessary.
8. Only original spare parts should be installed.

3.6 Warning decals



1. Always take off previously the machine of the tractor and read the instructions carefully before starting servicing and or lubrication operations.



2. Keep at a safety distance from the machine to avoid the risk of projection of objects.



3. Never remove the guards while the parts of the machine are moving. It is dangerous to injure the hands.



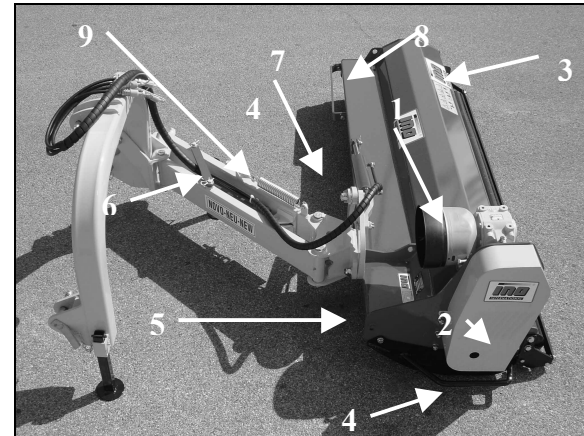
4. Keep at a safety distance from the machine to avoid the risk of cutting the feet.



5. It is forbidden to mount on the machine because of the risk of fall.

3.7 List of guards

Fig.5



- | | |
|------------------------|-----------------------|
| 1. PTO shaft shield | 7. vertical blockade |
| 2. belt shield | 8. frame guard |
| 3. warning decals | 9. mechanic breakaway |
| 4. Side guard | |
| 5. flaps | |
| 6. horizontal blockade | |

4. Description and operating of the machine

The machine is equipped with hammers (Fig.6) on the rotor shaft or with y-blades (Fig.7) as an option. Hammers are appropriate for more hard work, for material with diameter till 5 cm. Y-blades are used for material with diameter max. 3 cm. While rotating working tools cut the material and lift it under the top of the frame. Falling material is again cut several times by rotating hammers (or Y-blades).

Fig.6

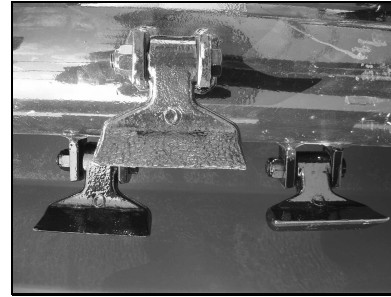


Fig.7

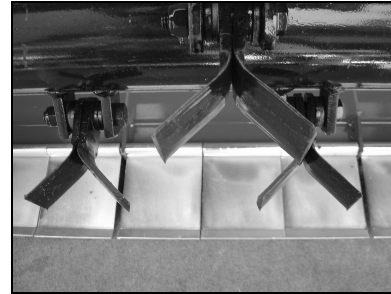


Fig.8

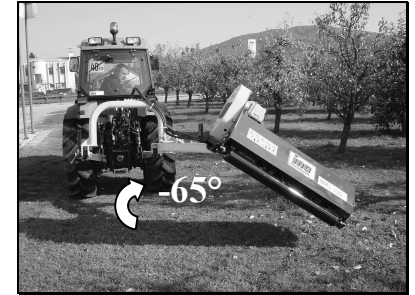


Operator manuals are made for all types of the machine.
All special details are described for each type separately.

Fig. 9



Fig. 10

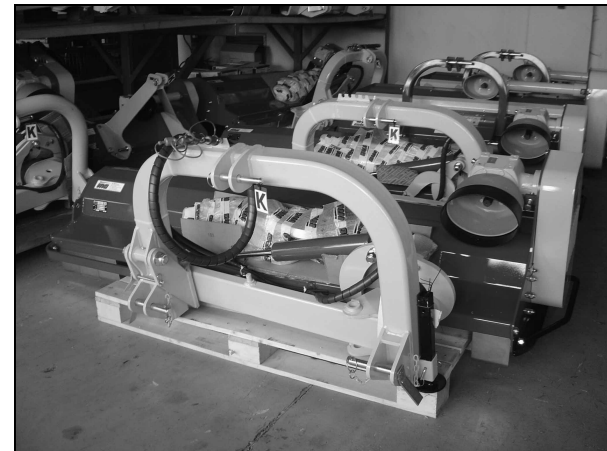


5. Transport and attachment of the machine

5.1. Transport to the customer

Unload the machine with special care to avoid any damage. For unloading use special bolt on gearbox (Fig.11). Check that all nuts and bolts are fixed and tightened. Specially check the bolts and nuts for the working blades.

Fig.11



According to the dimensions of the machine and different possibilities of the transport, the machine can be sent split assembled on the pallet or in the box.

5.2. Attachment and detachment from the tractor

Before any operation check:

- That the machine is in good condition,
- That all guards are on proper places and in good condition,
- That working blades are complete and undamaged,
- That all greasing points are greased well and that in gearbox is oil enough,
- Appropriate tensioned belts,
- That rpm and direction of rotation on the drive axle correspond to those on the machine.

To attach the machine to the tractor, bring the tractor lower lines near the machine, to the points corresponding to the pins. Insert the pins and secure them with the spring clips. Fit the top link, raise the machine to a perpendicular position with the ground. Adjust the two tractor lower linkage stabilizers thus fixing the machine to the tractor in a central position. Connect the hydraulic cylinders and check if it works.



Before testing of hydraulik system move away blockades for horisontal and vertical movement.

Before transport put on the blockade for horisontal movement. 130,160 and 190 transport in the horisontal position. 225 is transported in a vertical position because of its total width (Fig 13/1).

Fig. 12



Fig. 13





It is mandatory to put on a horizontal blockade. On the 190 and 225 put on a vertical blockade, too.



3-point hitch of the machine must be in a simetrical position with the tractor.



At connecting hydraulic pipes first split both pa of hydraulic connecting ends for each hydraulic cylinder and properly connect with those on the tractor.



At the machine attached put both support feet into a transport position.

5.3 Fitting the PTO shaft

Attack the machine on the tractor. Split the tubes into both parts and put one part on the tractor and another on the machine. At the machine laying on the ground, minimum overlapping of the tubes mustn't be less than 1/3 of total length. Cut too long part of the tube and clean the edges. Cut on the proper length also the guard as on fig. 15. Measure the length when the PTO shaft is in horizontal position. Grease before putting them together.



Too long PTO shaft can seriously damage tractor or flail mower.



Never put PTO shaft on the tractor without all guards and chains fitted properly (Fig.15).

Fig. 14: Appropriate length of PTO shaft at the machine on the ground

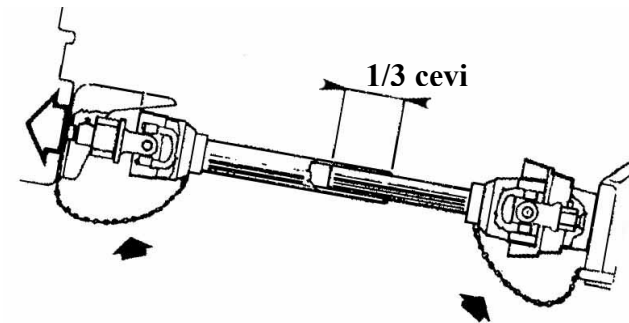
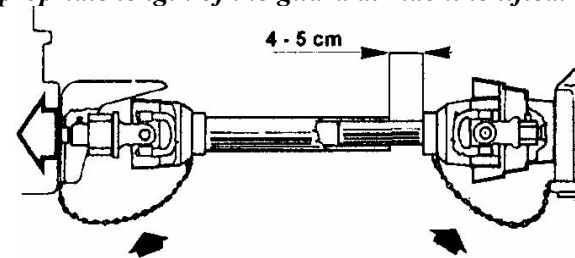


Fig. 15: Appropriate length of the guard at machine lifted.

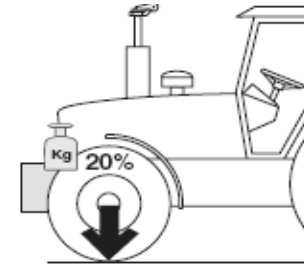


5.4 Tractor stability



At attachment of the machine on the tractor always take care about allowed weight of the attachment and axle load. First axle of the tractor should always be loaded with min.20% of the weight of the tractor itself. This is very important specially on this machine because of its distance between the tractor and working part of the machine

Fig. 16



6. Adjustment and setting up

6.1 Regulation of the height of cut

Height of cut depends on working conditions and volume of the material. The height of cut can be regulated with the hydraulic system on the tractor or/and with adjusted rear roller of the machine (*Fig. 18*).

The min. height of cut should be between 1-3 cm. The machine always run on the rear roller and not on the skids.

Fig.17

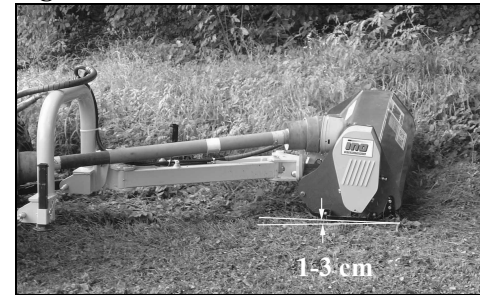


Fig. 18

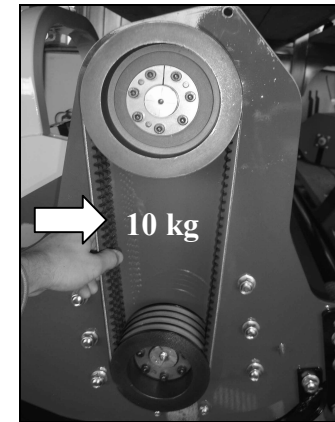


Working tools never touch the ground. The skids are only the protection against injuries. They do not touch the ground.

6.2 Belt tension adjustment

Appropriate belt tension is one of conditions for optimal operating of the machine and for long lasting of the belts themselves.

Fig. 19



Tension the belts only when tractor is disconnected and starting key taken out.



Appropriate belt tension is achieved when at pressing on the belts with the force of 100 N (i.e. 10 kg), we reach a deviation of the belt 1,5 cm!

7. Operating



Before operating it is necessary to tho the following:

1. move away both, horisontal and vertical blockade.
2. move awy a transport blockade of the machine
3. move away the pin to activate a mechanic breakaway. Put it on the proper position.
4. lift both support feet.

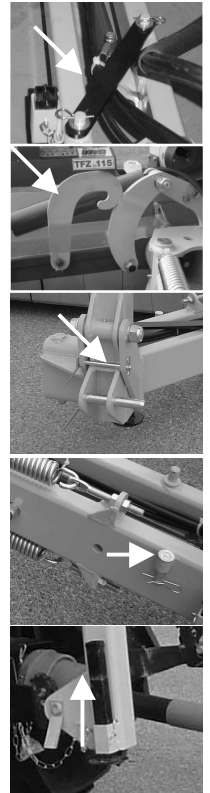


Fig.20



Before starting check the terrain first for some stones, wood and other.



If there is no other sign, max rpm of PTO shaft is 540 rpm.



Before starting lift the machine for 10 cm. After starting the machine, put it on the ground into the working position gently.

Working speed depends on working conditions and on the material cut. Optimal speed is between 3-8 km/h.



It is strongly forbidden to activate PTO shaft if the machine is touching the ground in the vertical position (Fig.21).



At using hydraulic on the machine it is necessary to lift the machine enough to avoid touching the ground (Fig.22).

Fig. 21

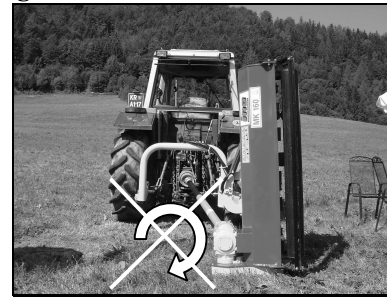


Fig. 22

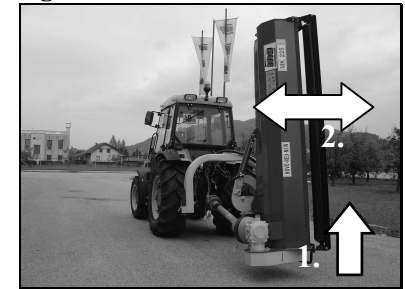
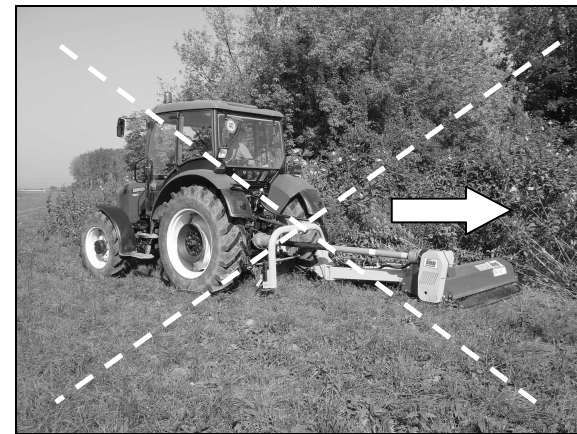


Fig. 23



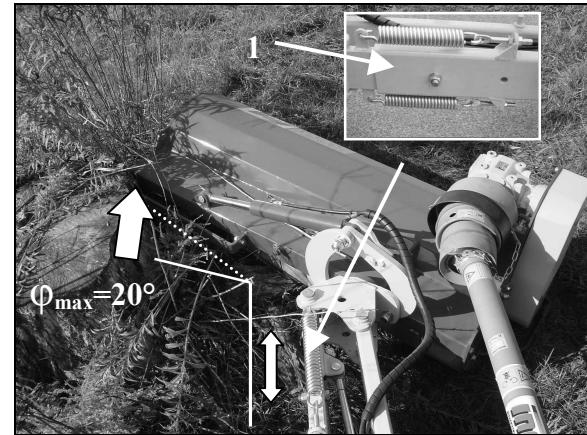
During reverse movement lift the machine off the ground to avoid damaging it. (Fig. 22)!



During turning lift the machine.

Very important part of equipment is mechanic breakaway (Fig.24). At touching the stone or other obstacle mechanic breakaway allows that body of the machine moves away to avoid injury. At touching any barrier stop immediately and drive back that springs turn back into normal position, lift the machine, bypass the obstacle and continue with normal work.

Fig. 24



8. After the job done

After the job done disconnect the PTO shaft, lift the machine and transport it onto the appropriate place.



During transport reduce the speed, especially on bumpy roads. The weight of the machine may render driving difficult and damage the machine itself. During transport the machine must be always in the transport position.



PTO shaft must be disconnected during transport.



At disconnecting the machine respect the warning rules for connecting the machine.



Before disconnection of the machine put on a pin (Fig.25/2)

Put the machine on the flat not soft ground. Put the support feet into the appropriate position. (Fig. 26). To avoid a corrosion store the machine on a dry place.

In the case of small place put together the arm of the mower: put away the horizontal blockade (Fig.26/1) and push the machine to the tractor that arm comes close to the body of the machine. Put the support feet into the standing position and lift down the machine. Disconnect the PTO shaft and put it on the hook (Fig.25/1). Disconnect the machine from the tractor 3-point hitch.

Fig. 25

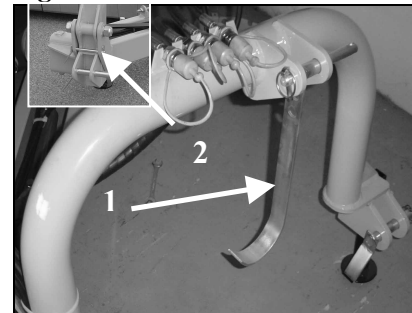
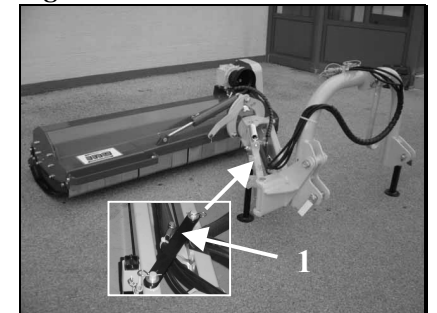


Fig. 26

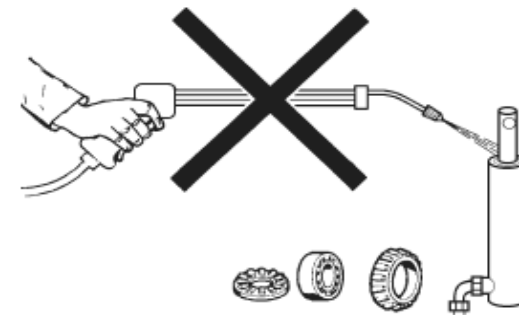


At disconnecting the machine from the tractor block the rear roller with a piece of wood for stability of the machine.

8.1 Cleaning

To avoid any corrosion clean the machine after each working day, especially working tools, bearings etc. Be careful to avoid damaging hydraulic pipes, bearings and colour.

Fig. 27



9. Maintenance



All maintenance, cleaning and repair operations must be carried out with the machine firmly lowered to the ground and detached from the tractor, or with disconnected PTO, engine off and starting key out.



A time of maintenance is defined according to the normal use of the machine. If the machine is used in very hard conditions, the time between maintenance operations must be shorter.



Take care that grease nipples on the machine are always clean.



After each maintenance operation check that all guards are fitted on the proper place.

9.1. Belt tension adjustment

Remove the belt shield (*Fig. 28*) and check the belt tension. To tension the belts, loose the nut on the bolt and four bolts under the gearbox (*Fig. 29*). Tighten the bolt for tensioning (*Fig. 30/1*), the nut and the bolts under gearbox. Put the belt shield back on the machine.



Appropriate belt tension is achieved when at pressing on the belts with the force of 100 N (i.e. 10 kg), we reach a deviation of the belt 1,5 cm.



After first two hours of work check the belt tension and if necessary tighten the taper lock (*Fig. 27/1, 2*)!

Fig. 28

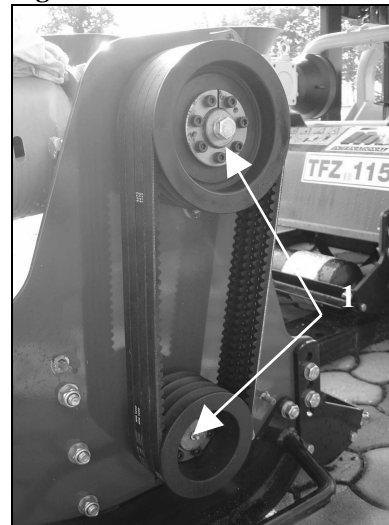


Fig. 29

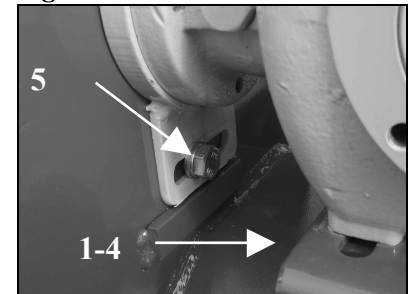


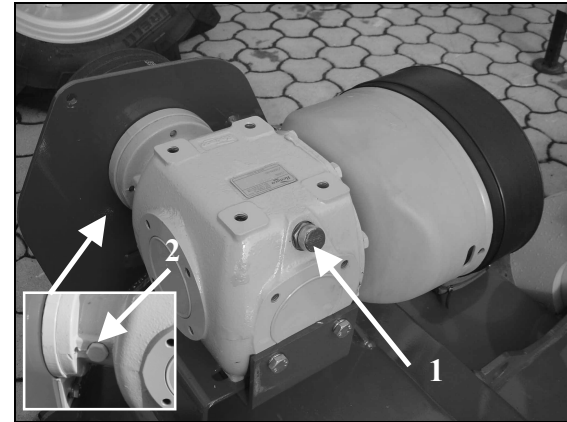
Fig. 30



9.2. Oil level control

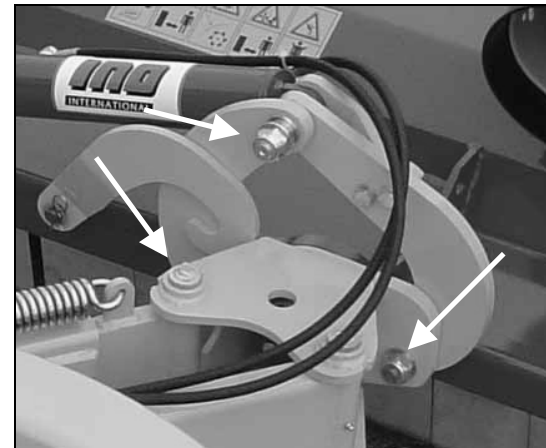
Use always the same type of oil, SAE 90. For gearbox we need cca 2 l of oil. Use the hole on the top of gearbox for filling in (Fig. 31/1). For pouring in use a funnel. *Pour in the oil till the level of the control plug on the gearbox (Fig.31/1).* A plug for oil control is placed on the rear side of the gearbox (Fig.31/2).

Slika št. 31



9.3. Control of bolts

Fig. 32





On every eight hours check that all nuts are tighten enough.



Never tighten the nuts on the connecting part (Fig.32) completely, the connecting parts must remain movable. Proper tighten nuts are when tighten the nuts till the end and than loose them for $\frac{1}{4}$ of the round.



At greasing use the gloves. After greasing always wash your hands.



Use type LIS 3 for greasing.

9.4. Greasing

The machine has the following greasing points:

- Left and right bearing on the rotor shaft (Fig.35/7,8)
- Left and right bearing on the rear roller (Fig.36/9,10)
- Pins of the arm (Fig.33/1-3, Fig.34/4,5)
- Connection (Fig.34/6)
- End parts of PTO shaft



Before any greasing operation read these instructions first.

Fig. 33

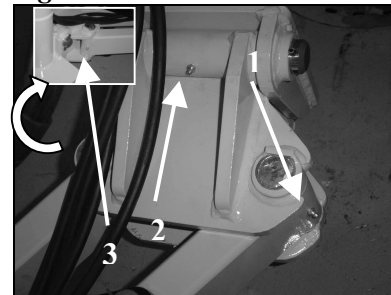


Fig. 34

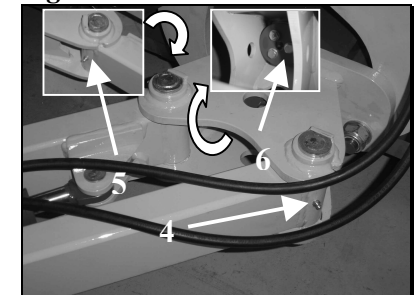


Fig. 35

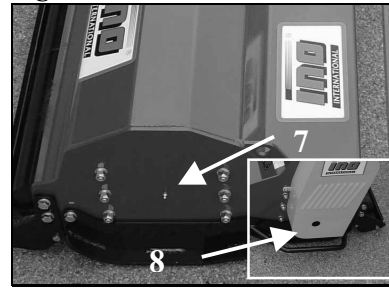
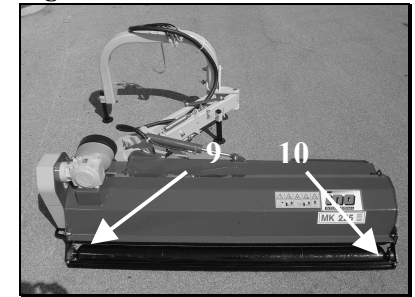


Fig. 36



9.5. Plan for maintenance jobs

1. After first two hours of work always:
 - Check the belt tension
 - **Check if all bolts and taper locks are tightened enough**

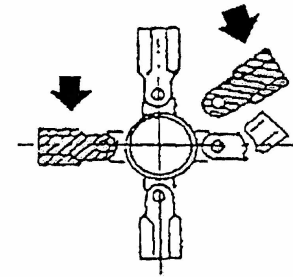
Do the same also after each belt changing.

2. After every 8 hours always check:
 - If the nuts are tightened enough,
 - A wear and condition of working tools,
 - Belts and taper locks,
 - A condition of safe guards,
 - Oil level in the gearbox,
 - That any foreign parts are not stuck on the rotor shaft,
 - That the frame and the 3-point hitch are in good condition,
 - That all parts are greased well.
3. On every 100 hours we recommend to:
 - Check and grease the PTO shaft
4. On every 12 months we recommend to:
 - Change the oil in the gearbox and check the belts tension.

9.6. Replacement of working tools

Immediately after you notice that working tools are damaged, change them. If it is necessary to change only few blades, always change the broken or worn one and the one diametrically opposite in order to maintain the balance. If the rotor shaft is vibrating after changing the blades, immediately stop the machine. The machine must be balanced before any work.

Fig. 37



9.7. At the end of the season

At the end of the season we recommend to clean the complete machine, change eventual broken or worn parts, tighten the bolts, the belts, grease the parts and oil the parts with damaged colour. Put the machine on a dry and flat ground.

9.8 Demolition when out of order

If the machine is out of order, all its parts that might cause dangers have to be made inoffensive. Materials, forming the machine that have to undergo a differentiated division, are:

- steel
- mineral oil
- rubber
- plastic

All the above mentioned operations and the disposal have to be carried out in total respect of the present provisions of law on the subject.

10. Trouble shooting chart

Trouble	Causes	Remedies
Irregular cut	Worn, bent or broken flails	Replace the flails
	Too low RPM	Increase RPM
	Machine is not in the level with the ground	Correct mounting on the tractor
	Clogged material due to excessive working speed	Reduce the working speed
Noise	Loosen bolts	Tighten the bolts
	Damaged parts of the machine	Find damages and repair the machine
Noise in the gearbox	Lack of oil	Fill till level
	Worn gears	Replace
	Worn bearings	Replace
Vibrations	Broken or worn flails	Replace
	Unbalanced rotor	Balance or replace
	Worn rotor bearings	Replace
Excessive backlash in joints	Worn pins	Replace
Damaged bearings	Dirty or ungreased bearings	Clean and grease
	Violant impact on the ground when the machine is lowered	Lower it gently
Belts overheating	Belts slipping	Tension the belts
	Working flails are touching the ground	Adjust the height of cut
	Too fast working speed	Reduce the speed

11. SPARE PARTS



We reserve to modify the technical data and characteristics of the machines at any moment without prior notice.



A producer is obliged to supply the spare parts min.7 years after the sael of the machine.



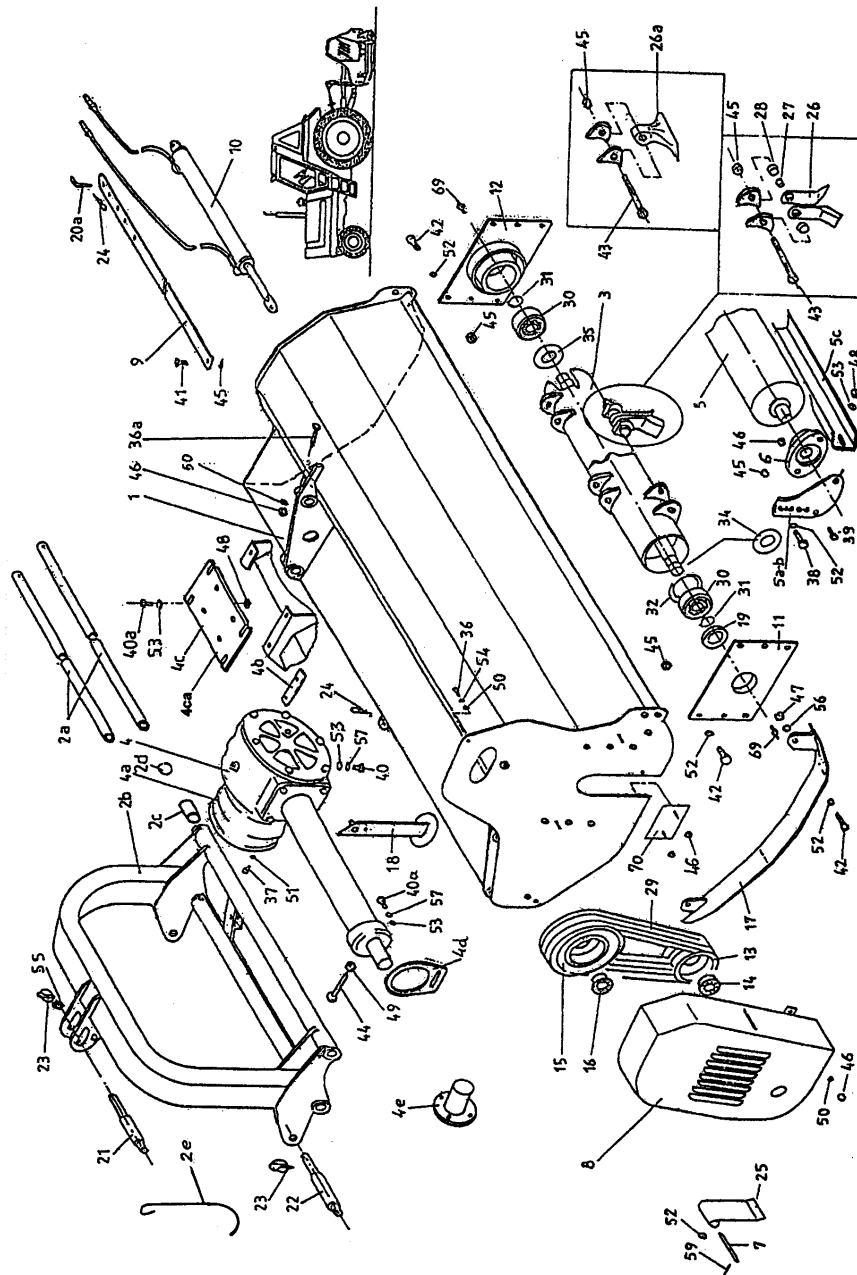
At ordering the spare parts always add the following details: type of the machine, serial number and year of the production. All data are on the identification plate. See the sample order below.

machine	type	Serial nr	year	Pos.	Part nr	name	pc
f.mower	MK	333	2006	4	017943	gearbox	1

Servicing:

Tel.: ++386 (0)7 49 59 233; (0)7 49 59 306

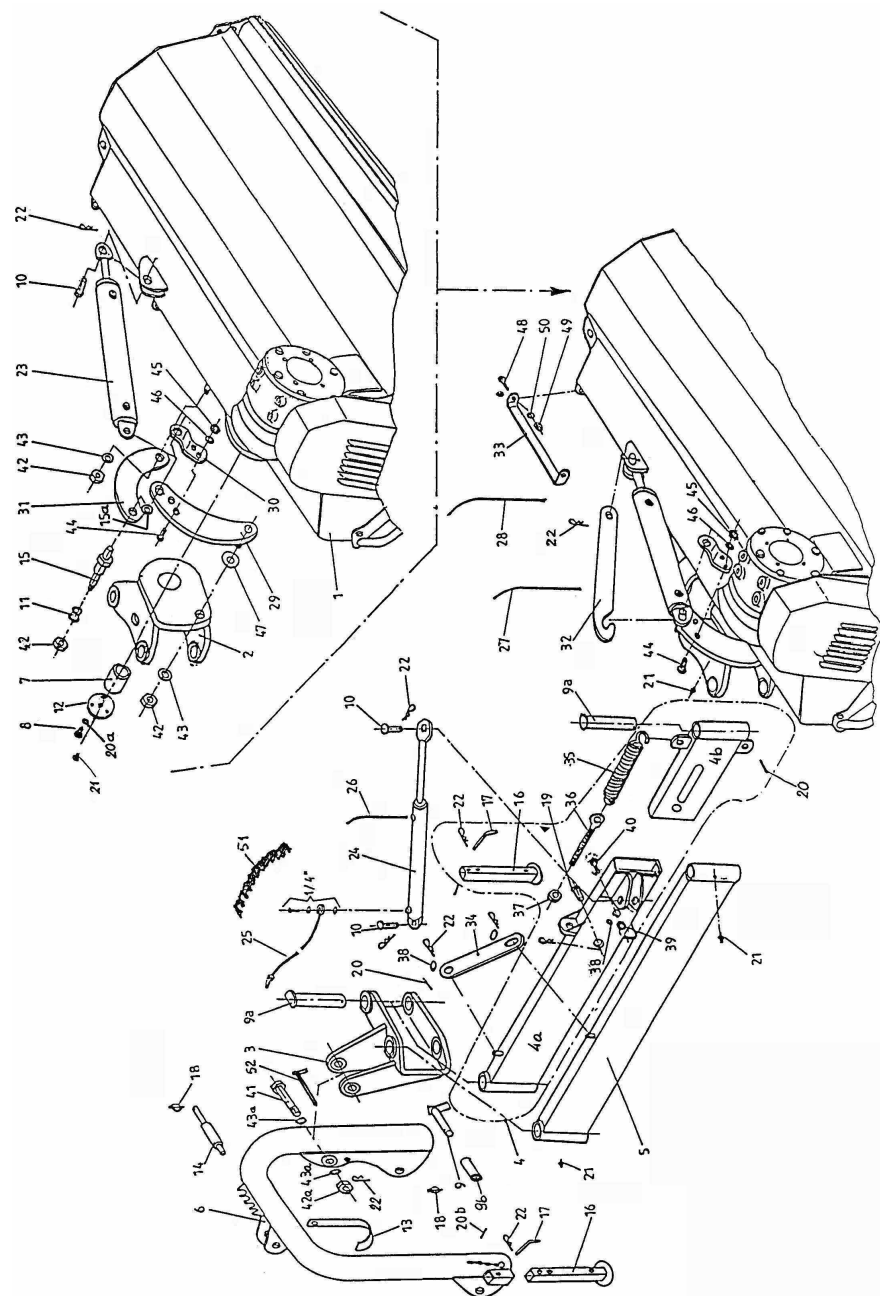




							A
Pos.	Name	Part nr.	Quantity				
			115	130	160	190	225
A	FLAIL MOWER MK	nnnn					
1	FRAME MK-1 115	016534	1				
	FRAME MK-1 130	019063		1			
	FRAME MK-1 160	019164			1		
	FRAME MK-1 190	019165				1	
	FRAME MK-1 225	019166					1
3a	ROTOR 130 H Cpl	017456		1			
	ROTOR 130 Y-BL Cpl	017457		1			
	ROTOR 160 H Cpl	017458			1		
	ROTOR 160 Y-BL.Cpl	017459			1		
	ROTOR 190 H Cpl	017368				1	
	ROTOR 190 Y-BL Cpl	017369				1	
	ROTOR 225 H Cpl	017370					1
	ROTOR 225 Y-BL Cpl	017371					1
4	GEARBOX R-240	017943	1	1	1	1	1
4a	PTO SHAFT SHIELD PVC	011880	1	1	1	1	1
4b 1	UNDERLAYING PLATE R	017855	1	1	1	1	1
4c	PIN T1 10x 8x 50	019181	1	1	1	1	1
4d	BUSHING	010139	1	1	1	1	1
4e	WASHER fi 40/fi 15x8	010140	1	1	1	1	1
4f	GEARBOX FLANGE	017850	1	1	1	1	1
5	REAR ROLLER 115	110006	1				
	REAR ROLLER 130	110007		1			
	REAR ROLLER 160	011733			1		
	REAR ROLLER 190	011734				1	
	REAR ROLLER 225	011735					1
5a	ROLLER BRACKET R	010848	1	1	1	1	1
5b	ROLLER BRACKET L	011699	1	1	1	1	1
5c	SCRAPER 115	011748	1				
	SCRAPER 130	010741		1			
	SCRAPER 160	010742			1		
	SCRAPER 190	010743				1	
	SCRAPER 225	010744					1

							A
Pos.	Name	Part nr.	Quantity				
			115	130	160	190	225
A	FLAIL MOWER MK						
6	BEARING WITH CASING	011927	2	2	2	2	2
7	FLAP BAR 115	010746	1				
	FLAP BAR 130	010747		1			
	FLAP BAR 160	010748			1		
	FLAP BAR 190	010749				1	
	FLAP BAR 225	011013					1
8	BELT SHIELD	010973	1	1	1	1	1
11	BEARING CASING L	010753	1	1	1	1	1
12	BEARING CASING R	010754	1	1	1	1	1
13	PULLEY 130/80-3	011912	1	1	1		
	PULLEY 130/80-4	011848				1	1
14	TAPER LOCK ELVE 80/45	010760	2	2	2	2	2
15	PULLEY 180/80-3	011915	1	1	1		
	PULLEY 180/80-4	010757				1	1
17	SKID L	010013	1	1	1	1	1
17a	SKID R	010959	1	1	1	1	1
19	OIL WASHER 45x90x10	012241	1	1	1	1	1
25	FLAP 140	010769			2	5	12
	FLAP 130	110008	5	9	9	9	9
	FLAP 125	110009	3				
25a	FLAP 130-SPEC	010572	1	1	1		
26	Y-BLADE OPTION	010867	28	32	40	48	56
26a	HAMMER	011806	14	16	20	24	28
27	BLADE SLEEVE	012462	14	16	20	24	28
28	SPACER	010771	56	64	80	96	112
29	BELT	010447	3	3	3	4	4
30	BEARING	011054	2	2	2	2	2
31	SLIDE PC EXT 45	010404	2	2	2	2	2
32	SLIDE PC INT. 100	010417	1	1	1	1	1
34	BEARING CAP	010934	1	1	1	1	1
35	BEARING CAP	010935	1	1	1	1	1
36	BOLT M 10x 30	010259	1	1	1	1	1
37	BOLT M 10x 16	012025	4	4	4	4	4
38	BOLT M 14x 40	011835	4	4	4	4	4
39	BOLT M 10x 35	010260	4	4	4	4	4
40	BOLT M 12x 30	010998	4	4	4	4	4
40a	BOLT M 12x 35	010270	1	1	1	1	1

							A
Pos.	Name	Part nr.	Quantity				
			115	130	160	190	225
A	FLAIL MOWER MK						
40b	BOLT M 10x 25	012026	2	2	2	2	2
41	BOLT M 14x 65	011843	1	1	1	1	1
42	BOLT M 14x 35	010325	16	16	16	16	16
43	BOLT M 14x 90	017322	14	16	20	24	28
44	BOLT M 16x 80	012446	1	1	1	1	1
45	LOCKNUT M14	010204	30	32	36	40	44
46	LOCKNUT M10	010202	6	6	6	6	6
47	NUT M14	010191	4	4	4	4	4
48	LOCKNUT M12	010203	2	2	2	2	2
49	NUT M16	010193	1	1	1	1	1
50	WASHER 10	010219	3	3	3	3	3
51	WASHER 10	010219	4	4	4	4	4
52	WASHER 14	010221	21	21	21	21	21
53	WASHER 12	010220	3	3	3	3	3
54	SPRING WASHER 10	010232	3	3	3	3	3
56	SPRING WASHER 14	010234	5	5	5	5	5
57	SPRING WASHER 12	010233	5	5	5	5	5
59	SPLIT PIN 3,2x30	010449	1	1	1	1	1
69	GREASE NIPPLE AM 10x1	010395	2	2	2	2	2



							B
Pos.	Name	Part nr	Quantity				
			115	130	160	190	225
A	FLAIL MOWER MK						
1	FLAIL MOWER HEAD H	016593		1			
1	FLAIL MOWER HEAD Y	016594		1			
1	FLAIL MOWER HEAD H	016595			1		
1	FLAIL MOWER HEAD Y	016596			1		
1	FLAIL MOWER HEAD H	016597				1	
1	FLAIL MOWER HEAD Y	016598				1	
1	FLAIL MOWER HEAD H	016599					1
1	FLAIL MOWER HEAD Y	016600					1
2	CONNECT 1	018784	1	1	1	1	1
3	CONNECT 2 115-160	016540	1	1	1		
3	CONNECT 2 190-225	016656				1	1
4	ARM RIGHT CPL	016533	1	1	1	1	1
4a	ARM RIGHT	016576	1	1	1	1	1
4b	INNER ARM RIGHT	016541	1	1	1	1	1
5	ARM LEFT	016548	1	1	1	1	1
6	LINKAGE 115-160	016549	1	1	1		
6	LINKAGE 190-225	016613				1	1
7	BUSHING fi 76/fi 68-70	017864	1	1	1	1	1
8	BOLT M12x 25	010997	3	3	3	3	3
9	PIVOT PIN fi 28	016648	2	2	2	2	2
9a	PIN fi 30x240	010142	4	4	4	4	4
9aa	WASHER 30	010227	4	4	4	4	4
9ab	NUT M 30	017993	4	4	4	4	4
9b	BUSHING fi 37/fi 28	018114				1	1
10	PIN fi 20x55	010033	3	3	3	3	3
11	BUSHING fi 40 x 23	016016	1	1	1	1	1
12	WASHER 100	017932	1	1	1	1	1
13	HOOK FOR PTO SHAFT	019024	1	1	1	1	1
14	PIVOT PIN CONNECT19/25	010991	1	1	1	1	1
15	PIN 36 x 135	015894	1	1	1	1	1
16	SUPPORT FOOT	110036	2	2	2	2	2
17	PIN fi 8	011598	2	2	2	2	2
18	PIN fi 10	011618	3	3	3	3	3
19	PIN fi 20x78	016577	1	1	1	1	1
20	PIN	010332	4	4	4	4	4
20a	SPRING WASHER 12	019021	3	3	3	3	3
20b	BOLT M 8 X 16	012024	2	2	2	2	2
20b	LOCKNUT M8	010201	2	2	2	2	2
21	GREASE NIPPLE AM8x1	011669	6	6	6	6	6

							B
Poz .	Naziv	Šifra	Količina				
			115	130	160	190	225
22	PIN R3	010327	10	10	10	10	10
23	HYDR.CYLINDER 115-160	016120	1	1	1		
23	HYDR.CYLINDER 190	016572				1	
23	HYDR.CYLINDER 225	016738					1
24	HYDR.CYLINDER 115-160	010285	1	1	1		
24	HYDR.CYLINDER 190-225	016574				1	1
25	HYDRAULIC PIPE 1/4"	016825	1	1	1	1	1
26	HYDRAULIC PIPE 1/4"	016826	1	1	1	1	1
27	HYDRAULIC PIPE 1/4"	016827	1	1	1	1	1
28	HYDRAULIC PIPE 1/4"	016828	1	1	1	1	1
29	BRACKET L WITH PIN	018781	1	1	1	1	1
30	BRACKET L	016589	1	1	1	1	1
31	BRACKET R	015893	1	1	1	1	1
32	HORISONT. BLOCKADE	019002	1	1	1		
32	VERTICAL BLOCKADE	016814				1	1
33	FRAME GUARD	016559	1	1	1	1	1
34	BLOCKADE	016560	1	1	1	1	1
35	SPRING	016047	2	2	2	2	2
36	BOLT M16x160	016044	2	2	2	2	2
37	LOCK NUT M 16	010205	2	2	2	2	2
38	WASHER 20	010224	5	5	5	5	5
39	LOCK NUT M 20	010207	2	2	2	2	2
40	BOLT M 20 x 80	011868	2	2	2	2	2
41	BOLT M 30 x 180	017992	1	1	1		
41	BOLT M 30 x 190	017991				1	1
42	LOCK NUT M 24	011810	3	3	3	3	3
42a	LOCK NUT M 30	017993	1	1	1	1	1
43	WASHER 24	010226	3	3	3	3	3
43a	WASHER 30	010227	2	2	2	2	2
44	BOLT M 14 x 55	016615	2	2	2	2	2
45	LOCK NUT M 14	010204	2	2	2	2	2
46	WASHER 14	010221	2	2	2	2	2
47	WASHER 55 / 24x2	016603	1	1	1	1	1
48	BOLT DIN 14 x 40	011835	2	2	2	2	2
49	LOCK NUT M 14	010204	2	2	2	2	2
50	WASHER 14	010221	2	2	2	2	2
51	GUARD SPIRAL 25x30	016829	2	2	2	2	2
52	PIN fi 14x155	017105	1	1	1	1	1



INO BREŽICE d.o.o.
8262 Krška vas 34 b, Slovenija
Tel.: ++386 (0) 749 59 233;
Fax: ++ 386 (0) 749 59 151
E-mail: ino@inobrezice.si
www.inobrezice.com



V-01/11.06