

ORIGINAL USER MANUAL

SPARE PARTS CATALOGUE

WARRANTY



Rear Disc Mower OptiCUT 210 ; 250 ; 280 ; 320

Borzytuchom 2022

3rd edition





ATTENTION!

Please read this User Manual prior to operating the machine and follow the included safety rules.

The User Manual is the integral part of the machine!

The Manual should be kept in a safe place accessible to the user and the operator throughout the entire time of operating the machine,

In case of losing or damaging the User Manual, a new copy should be obtained from the machine's retailer or manufacturer.

In case of selling the machine or making it available to other operators, the User Manual together with the declaration of conformity should be with the machine.

The manufacturer reserves all rights to the User Manual.

Copying, processing of the User Manual or its parts is prohibited without the manufacturer's permission.



The first oil change in the gear and pinion should make after the first 50 hours of operating the machine. Next oil changes shall be made every 500 hours of operation.



In order to prevent the cutter bar from any blocking due to the sticking dry residue while starting it, the mower's cutter bar should be cleaned with water under pressure after each operation of the machine.



The machine has been equipped with an appropriately selected Power-Take-Off shaft (PTO). Using any other PTO will result in losing the right to the warranty coverage, is dangerous for the machine and the surroundings, and it may damage the mower.

TALEX guarantees efficient operation of the machine when operating it according to the technical and operational conditions described in the User Manual.

The defects disclosed during the warranty period shall be removed by the Warranty Service. The time of repairs is defined in the WARRANTY CARD.

Warranty does not cover parts and the machine components subject to wear under normal operating conditions, regardless of warranty period.

Warranty service applies only to following cases: mechanical damages not due to fault of the user, factory defects of the parts, etc.

In cases, when damages occurred in result of:

- fault of the user or a road collision
- Inappropriate operation, adjustment and maintenance, using the machine not in accordance with its purpose
- Using a damaged machine
- Repairing the machine by unauthorized persons, inappropriate performance of repairs
- Performing lawless and self-made changes in design of machine,

The user may lose warranty service.

The detailed conditions of the warranty are included in the attached WARRANTY CARD.



WARNING!

Please demand from the seller of the machine to correctly fill out the WARRANTY CARD and the complaint coupons. The lack of date of purchase or the seller's stamp/signature exposes the user to the possible refusal of claims.



WARNING!

The tension of the V-belts should be checked after a few hours of operating the machine, and if they are too loose, they should be stretched.

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1. Introduction

Prior to any activities related to the operation of the mower, please read this User Manual with care and understanding and follow all included suggestions.



Attention!
Please read this User Manual
Prior to the operation of the machine.

This instruction manual includes a description of dangers, which might occur, if the safety rules are not followed while operating and maintaining the mower. The manual lists precautions, which should be undertaken, in order to minimize or avoid hazards.

The User Manual also includes the rules of proper operating of the mower and explains which maintenance activities should be undertaken meanwhile.

In case the information included in this User Manual is incomprehensible, please contact the manufacturer for explanations.



ATTENTION!
This symbol warns about a hazard. This warning symbol indicates important information in the manual regarding a hazard. Please read the indicated information, follow the suggestions, and take special caution.

2. Operational Safety

2.1 Users Safety

The disc mower may be operated only by adults, who have familiarized themselves with functioning of the machine and context of the User Manual and have proper qualifications. The mowers should be operated taking all necessary precautions, especially:

- Follow the general safety and hygiene rules along with the suggestions of this manual;
- Follow the safety signs placed on the machine;
- It is prohibited to operate the machine by persons under the influence of alcohol or other narcotic substances;
- Never allow for any persons other than the machine's operator to operate the machine, as well as never allow for any other persons to be present in the vehicle or by the machine while operating it;
- The mower may be operated by licensed persons authorized to operate the vehicle, to which the mower is attached, in accordance to the manufacturer's suggestions;
- The working place of the operator while working with the mower is the vehicle cabin, to which vehicle the mower is attached;
- Please remember, that there are many places on the mower, which may cause wounds (sharp edges, structural elements sticking out, etc.). Increased caution should be taken when at work by the mentioned hazardous places, as well as the personal protective measures, such as:
 - Protective clothing
 - Protective gloves
 - Protective shoes
- It is prohibited to carry any persons or things on the mower;
- It is prohibited to operate the machine by other people not familiarized with the User Manual;
- The person operating the mower should have a first aid kit with means to provide first aid together with the instruction to use it;
- When moving a vehicle with a mounted, not working mower, make sure the safe transport height of ~ 0.5 m is applied;
- Prior to driving, the mower must be positioned in the transport position and lifted by the rear suspension system. While at rest, the machine must be lowered.
- During transport the mower must be positioned in the transport position and lifted by the rear suspension system, and the hydraulic actuator valve should be closed;
- Pay special attention when driving on the public roads and follow the applicable provisions of the traffic law;

- Pay special attention when driving on the public roads and follow the applicable provisions of the traffic law;
- An electric vehicle contour lighting must be used while driving on public roads, checking its efficiency and visibility, as well as keeping it clean;
- A low-speed vehicle triangular plate should be placed on the machine or on the vehicle. The cleanliness and visibility of the reflective lighting and the warning signs placed on the structural elements of the machine must be ensured;
- Transport speed should be adjusted to condition of the surface of the road, and it should not be higher than 15km/h;
- The vehicle and the mower should not be left on hills or other slopes unsecured from sliding off on its own. The mower should be placed on the ground. Wheel chocks should be placed behind the wheels.
- The mower should be adjusted for assembling it to the vehicle. It is possible to adjust the position of the mower from the cabin, without the need to leave the vehicle's cabin by the operator.
- The activities related to the preparation, assembly, dismantling or adjusting may be performed after turning the drive off, disengaging the engine, immobilizing the vehicle and allowing all moving elements to come to a complete stop;
- Please check all resealable connections, such as screw connections, after the first hour of operation;
- The mower should be stored on a flat, even, hardened surface in a place not accessible to bystanders and animals. Use a support for stable positioning of the mower;
- During the assembly or the dismantling of the mower special care should be taken, paying extra attention to the structural vehicle mounting components;
- Prior to starting any work, please check the technical condition of the mower and the attached vehicle. Both, the vehicle and the mower must be in a good technical condition. Worn or damaged parts should be immediately replaced with new ones.
- The mower must be equipped with all guards securing from the access to the moving parts (the ones suggested by the manufacturer). The guards must be complete and fully operational;
- Please familiarize yourselves with the functioning of the mower prior to putting it into service by reading the User Manual, work safety rules, as well as the suggestions regarding the maintenance and the adjustments;
- The weight of the mower suspended on the vehicle may alter the steering, therefore extra care should be taken;
- The User Manual should be carried with the machine. When lending the machine, it should be technically efficient and with attached User Manual;
- It is prohibited to attach additional means of transport to the mower;


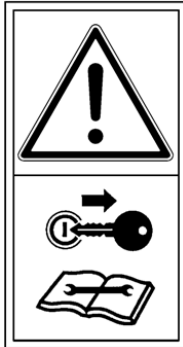







- During the first operation of the machine, please check its functioning and perform initial adjustments without any load;
- To secure the three-point suspension system king pins please use only typical cotter pins. Operating the machine with other types of securing components is prohibited;
- Due to natural wear, check the condition of the cutting components and whether they are complete, applying the suggestions described in the chapter 6. Servicing and Maintenance;
- Check the technical condition of the machine upon receipt of the mower and its transport to make certain it did not incur any damage;
- It is prohibited for any persons to be present under the lifted the mower due to the risk of being crushed by its components;
- Do not place your fingers or limbs between the components of the machine while adjusting it;
- It is prohibited to leave the cabin of the tractor while the drive is engaged, and before the moving components come to a complete stop;
- The vehicle's operator working with the mower must be cautious so that **nobody comes near the machine and becomes present within less than 50m perimeter from the working mower ;**
- Prior to engaging the mower's drive, lower the cutting assembly to the operating position;
- Begin mowing after the nominal 540 rpm of the power-take-off is reached. It is prohibited to overload the shaft and the mower or to rapidly switching the gear;
- An appropriate visibility should be ensured or an properly trained person should be used for that purpose while turning or reversing, maneuvering with the machine;
- **Mowing while reversing is prohibited.** The machine should be raised while reversing;
- The hydraulic system should not be under pressure when connecting the hydraulic hoses;
- The machine may be attached to the tractor only by the appropriately selected by the manufacturer PTO shaft;
- It is prohibited for any persons to be present between the vehicle and the mower while the engine is engaged;
- Operation on the slopes of more than 8% is unacceptable;
- Pay extra attention while working on slopes
- Disengage the PTO drive while turning or reversing;
- It is prohibited to operate the machine in public places (parks, schools, etc.) or in stony ground for the purpose of avoiding the risk of stones or other object being thrown out;
- Do not allow for the PTO rotations to surpass the 540 rpm, and the speed of driving must be adjusted to the requirements of the work;








- Working with the damaged or incomplete articulated telescopic shaft is prohibited. It is especially prohibited to work without the guards of the moving parts;
- The articulated shaft has signs indicating which end should be attached to the tractor; check whether the direction of the rotations is appropriate prior to turning it on;
- Never leave the tractor with the working engine. Prior to leaving the driver's cabin, lower the machine to the ground, turn the engine off, take the key out of the ignition, and set the manual brake;
- Do not use unbuttoned, hanging working clothing while at work, assembling, dismantling or adjusting. Keep it far from the components, which might pull it;
- It is recommended to clean and wash the mower after finishing work at a car wash equipped with waste water treatment or the settling vessel for neutralizing wastewater;
- The machine should be stored in places secured from other people and animals, avoiding the risk of accidental injury, on a flat, hardened surface, under a roof;
- In case of failure, immediately turn off the drive carried from the vehicle;
- Use hearing protection while operating the machine for the purpose of minimizing the exposure to noise. It is also recommended to close the door and the windows of the vehicle's cabin;



Failure to follow the above rules may pose a risk to the operator and the bystanders, as well as it may lead to damaging the mower.

2.2. Safty decals and locations

 <p>1.0 –Caution. Prior to work commencement read the operating manual.</p>	<p>C.2.26</p>  <p>1.1 – Caution. Stop the engine and remove ignition key before carrying out any repairs or maintenance.</p>	<p>C.2.36</p>  <p>1.2 –Thrown objects, pull-in accidents and other hazards. No persons allowed in distance less than 50 m from the working machine.</p>
<p>C.2.4</p>  <p>1.3 – Before entering in danger turn on security lock</p>	<p>C.2.27</p>  <p>1.4 – Don't drive over platforms or ladders</p>	<p>C.2.7</p>  <p>1.5 – Crush point. Keep away from linkage arms of the tractor hydraulic lift whilst use.</p>
<p>C.2.20</p>  <p>1.6 - Uninstalling or opening the guard while operating machine is prohibited</p>	<p>C.2.30</p>  <p>1.7 High voltage - risk of electric shock. Keep sufficient clearance from power supply lines.</p>	<p>C.2.44</p>  <p>1.8 - Avoid exposure to liquid flowing under pressure. Refer to the instructions in the operators manual</p>

 <p>1.9 - Do not stay in the area swing mower</p>	 <p>2.0 – Attention rotating blades do not approach to mower</p>	 <p>2.1 – Lift point</p>  <p>2.5 – Warning about pressure in hydraulic system</p>
 <p>2.2 – Mandatory use of hearing protection</p>	 <p>2.3 – Use protective clothing</p>	 <p>2.4 – Use protective gloves</p>

2.3. Residual risk

No.	Risk	Source of risk (cause)	Protection measures
1.	Overload of the drive system (physical overload)	Working in a standing position, tilted-forced, walking, moving	Reading the User Manual, workplace training including the weight –bearing norms for the manual transporting jobs, the proper techniques of weight-bearing and lifting , using the help of others, devices helping move objects, e.g. jack, winch
2.	A fall on the same level (misstep, slip)	Uneven surface, mess – objects laying around or standing, wires on the traffic paths, slippery surfaces	Proper shoes, even surface, paying attention, keeping the surroundings clean, reading the User Manual
3.	Being hit by the objects protruding from the machine	The machine and its surroundings	Proper positioning of the machine, safes pace to move around, proper organization of work, paying attention, Reading the User Manual
4.	Being hit by the moving objects	Plants or random parts of the turf or Stones thrown out by the machine	Paying attention, marking the danger zone, moving around the operating machine is prohibited, it is prohibited for anybody to be present within the 50m perimeter from the operating machine, using individual protection – helmet, eye glasses, reading operators manual
5.	Sharp, dangerous edges	Protruding components of the machine, using manual tools	Individual protection –protective gloves, buttoned up work clothing, paying extra attention
6.	Gear pulleys	Moving Wheel and the gear pulley belts, rotating Power Take-off shaft, lack of the moving parts guards	Moving around, being close to or performing adjustments on the operating machine is prohibited, paying increased attention, using guards for the moving parts, Reading the User Manual
7.	The weight of the suspended machine	Inappropriate assembly, aggregating, wrong positioning of the machine, improper maintenance, leaving the machine suspended on the tractor	Paying increased attention, using individual protection – protective shoes, safe positioning of the machine, Rusing the help of others, using jacks, davits, reading the User Manual
8.	Microclimate – changing atmospheric conditions	Work performer in different weather conditions	Proper work clothing, fluids, body lotions with UV protection, rest, reading the User Manual
9.	Noise	Rotations of the machine too high, damaged, loose, vibrating parts	Working with the efficient machine, current maintenance inspections of the machine, proper rotations of the machine, Reading the User Manual

3. Intended use

The disc mower was designed to mow all low stem green plants growing on meadows and fields, **on flat, stoneless surfaces**.



The lightweight disc mowers are not resistant to stones. If the machine is operated on stony surface of the cultivation, it may cause frequent **replacement of blades and discs**. In rare instances, the cutting bar is also damaged, which is not covered by the warranty.

This machine accelerates the agricultural works due to high efficiency cutting and the proper layout of the windrows. This type of windrow layout accelerates the drying process and eliminates additional proceedings - spreading the windrows after cutting.

This type of mower is suspended on the three-point suspension system of the class II or III tractor of the minimum power of 30KM. The mower is driven by the telescopic articulated shaft and the hydraulic system with the actuator, which adjusts the position of the mower during operation.

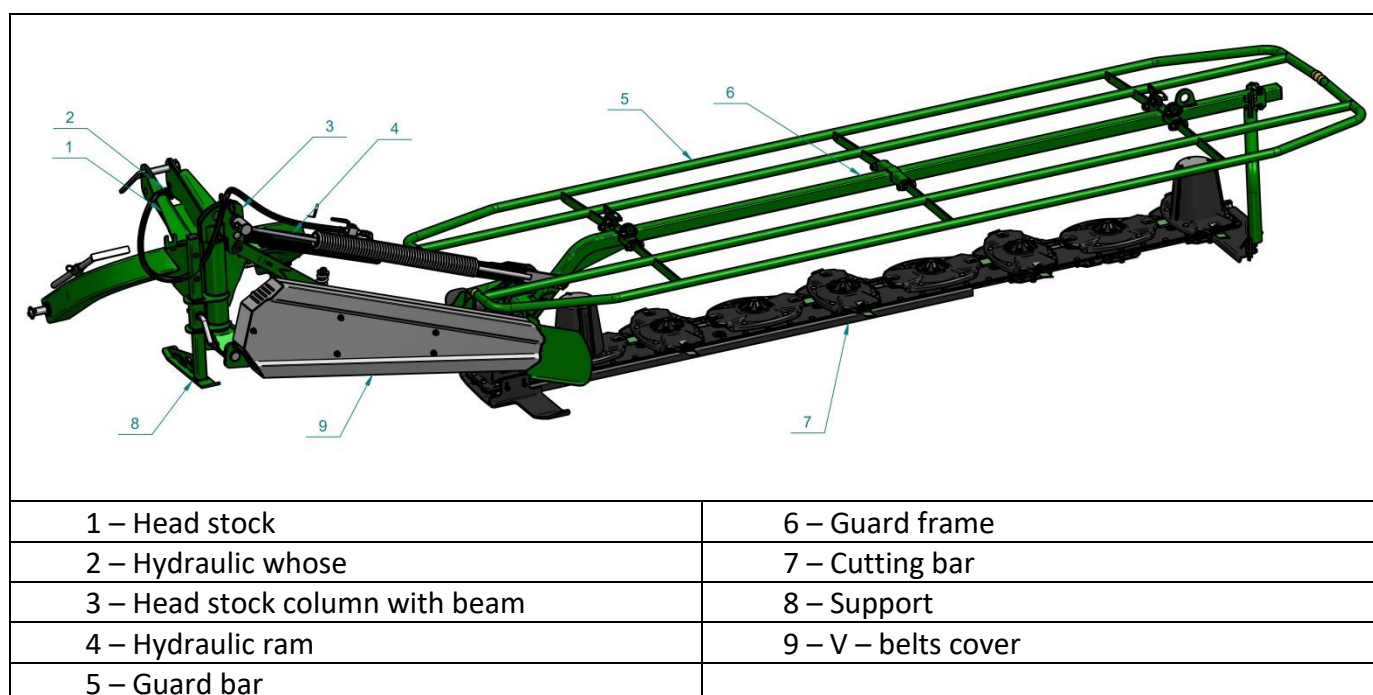


Fig.1 General design of the mower

The rotating discs equipped with blades are the basic operating components. This system is driven by power input from the telescopic articulated shaft, bevel belt gear to the cutting bar. The cutting bar consists of gear set transferring the power to the discs.

The fulfillment of the requirements for the use of the machine, the maintenance and repair by the manufacturer and strict compliance with the manufacturer's suggestions is a prerequisite

for use of the machine in accordance with its purpose. The machine should be used, maintained and repaired only by the persons familiarized with the specifics of the machine and health and safety rules.

The manufacturer has a wide variety of agricultural machines, and is also available to advise on the selection of appropriate equipment based on the user's needs.



All ambiguities concerning the purpose of the device should be clarified by contacting the manufacturer. The proper selection of the device and understanding its purpose will increase the work safety

Using the machine for other than intended purposes shall be considered as a misuse.

4. Description of device



Fig. 2 General view of the disc mower (without tarpaulin cover)

The disc mowers contain three basic components. The first component – **hitch (the suspension system of the mower)** is made of steel elements connected by welding, which constitute a compact and strong structure. The second component – **the support frame** made of steel elements connected by welding, which connects the three main components of the mower's frame. The third component – **the cutting bar with the frame and the guard curtains** made of steel elements bolted and welded, which constitute a rigid system. The cutting bar and the gears are covered by the safety shields. The machine is equipped with gatherers laying windrows while cutting.

Controlling the operating positions of the machine is performed from the tractor's cabin through the hydraulic actuator system. It allows for a precise positioning of the machine during work. The mowers are equipped with a fuse, which allows the mower to tilt when moving onto an obstacle or in case of high cutting resistance.

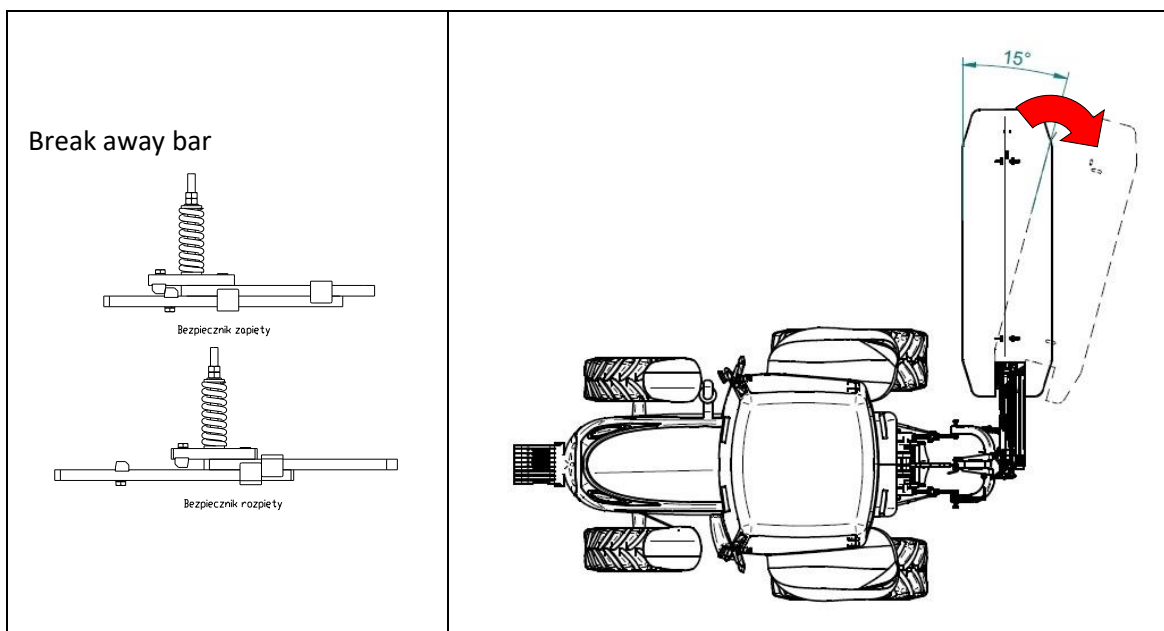


Fig. 3 Disc mower – tilting of mower with break away bar



Fig. 4 Transport holders



The mower may be transported if the valve on the actuator is closed. Use the certified and adjusted to the machines weight slings or chains. Pay special attention to the proper assembly of the slings to the tractor and the machine. Remember about securing the supporting frame with a king pin while transporting or loading with the lever devices. The support should be lowered and secured with a king pin.

4.1. Equipment and accessories

4.1.1. Basic equipment

Consists of basic equipment:

- The articulated telescopic shaft with a one way slip clutch
- The support
- Spare set of blades
- A wrench key to secure the discs during replacing/inspecting blades
- User Manual
- Warranty Card



The warning plates and the slow moving vehicles triangle are not part of the basic equipment of the mower. They may be purchased from the manufacturer or at a warehouse with agricultural equipment. Every user should have a slow moving vehicles plate. Not exposing it during transport may cause accidents. The user is responsible for the damages incurred during accidents.

Warning:

ALL EQUIPMENT ELEMENTS OF THE MACHINE ARE AVAILABLE FOR SALE AT THE MANUFACTURER.

4.2. Technical data and characteristics

Table no. 1

DISC MOWER OptiCUT TECHNICAL DATA

No.	Description	UoM	Parameter			
1.	Machine type	-	210	250	280	320
2.	Mounting type		Suspended			
3.	Working width	[mm]	2100	2500	2800	3200
4.	Power requirement	[HP]	30	45	60	80
5.	Number of discs	[pcs]	5	6	7	8
6.	Number of blades	[pcs]	10	12	14	16
7.	Tractor hitch class	Three point linkage	Cat II or III			
8.	Disc rotation speed	rpm	3180			
9.	PTO rotation speed	rpm	540			
10.	PTO shaft	-	460Nm L=660mm with one way clutch			
11.	Efficiency	[ha/h]	2,0	2,5	3,0	3,5
12.	Operating speed	[km/h]	10 – 15			
13.	Transport speed	[km/h]	15			
14.	Nominal oil pressure	MPa	16			
15.	Hydraulics oil type	-	HL 32			

16.	Gearbox and cutter bar oil type	-	SAE90EP			
17.	Gearbox oil capacity	[dm ³]	0,7	0,7	0,7	0,7
18.	Cutter bar oil capacity	[dm ³]	2,1	2,7	3,2	3,5
19.	Number of operators	[pcs]	1			
20.	Transport dimensions					
	Length (A)	[mm]	1328	1328	1328	1328
	Width (C)	[mm]	1957	1957	1957	1957
	Height (B)	[mm]	2679	3019	3439	3782
21.	Weight	[kg]	497	527	563	610
22.	Noise level emitted by machine	L _{pA}	96±1 dB			
		L _{Amax}	108±1 dB			
		L _{Cpeak}	110±1 dB			

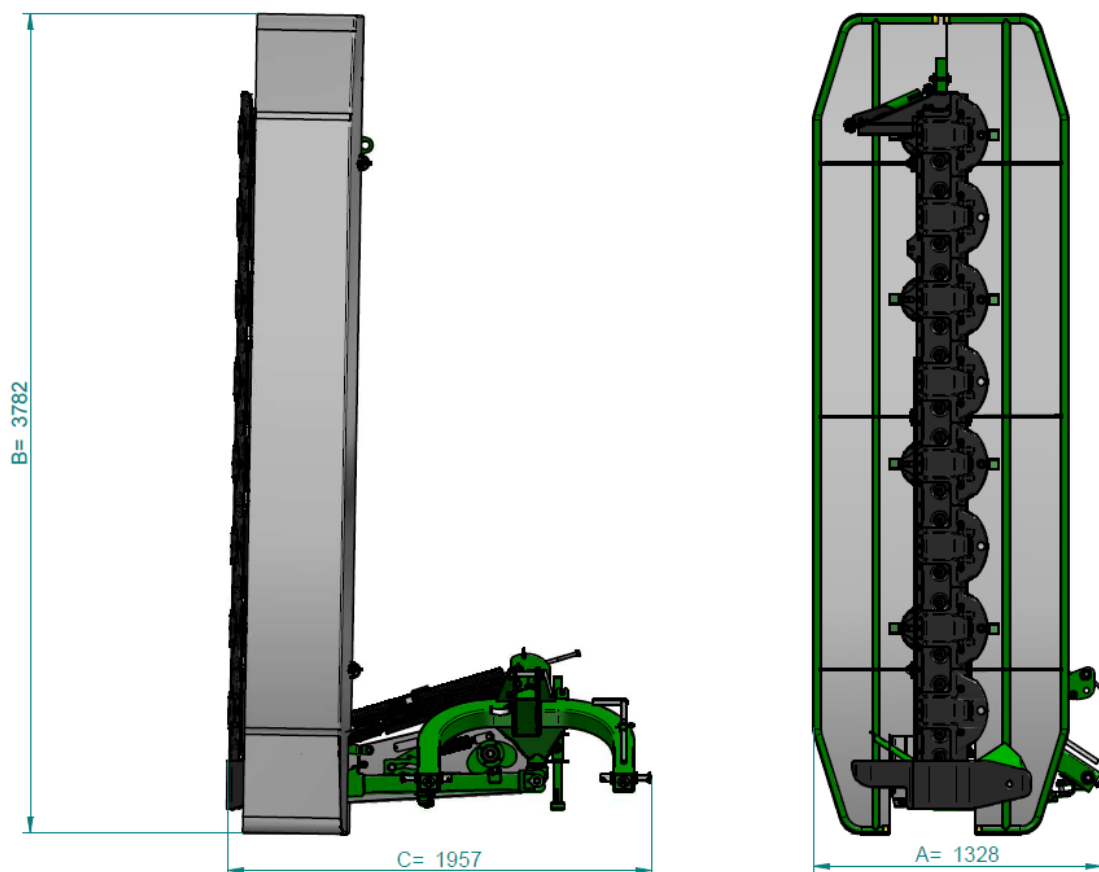


Fig. 5 Transport dimensions

5. Use of device

The manufacturer ensures, that the machine is fully operational and is inspected in accordance with the quality control procedures and is approved for use. It does not release the user from the responsibility of inspecting the machine upon receiving it.



Check the technical condition of the mower prior to every operation, especially the cutting system, the drive system, the hydraulic installation and the guards.

5.1. Coupling – mower assembly



Make sure that the coupling components of the vehicle and the machine are appropriately paired to ensure the safe installation and work. In case of any ambiguities, contact the manufacturer of the vehicle or the machine.

I. The assembly of the vehicle and the machine's suspension system.

The machine should be suspended on the three point suspension system of the tractor. To make the aggregating easier, the hoses of the tractor should be at the height of about 350mm.

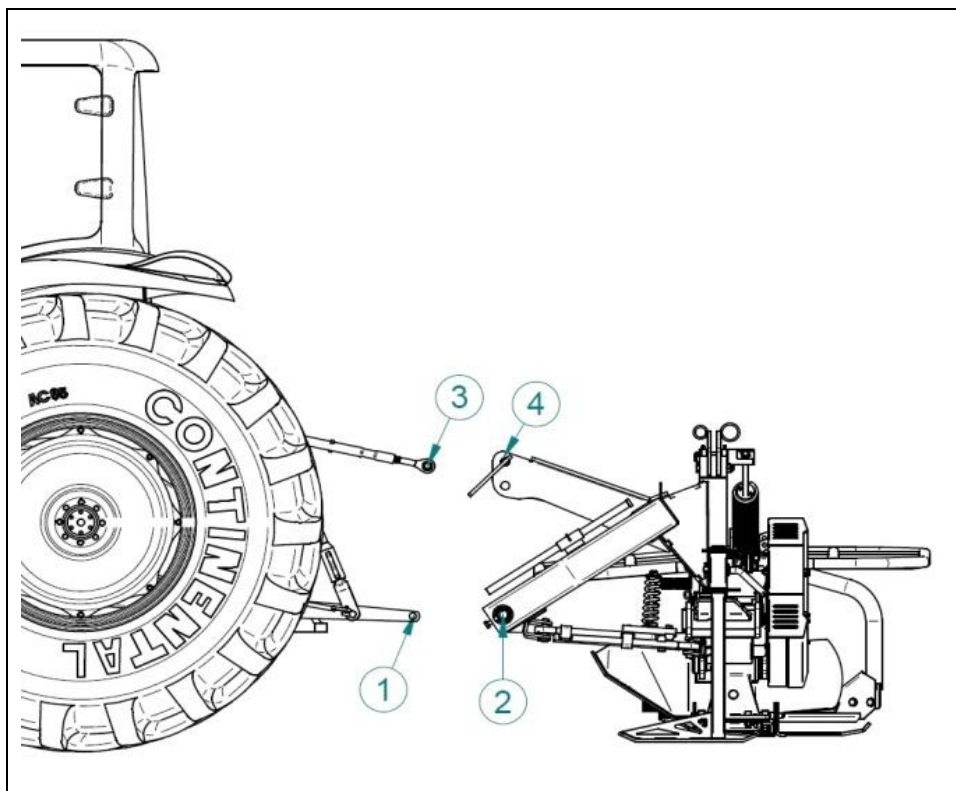


Fig. 6 Coupling with tractor

Depending on the type of the three point suspension system, properly place the bottom link pins of the suspension system (Fig. 7)

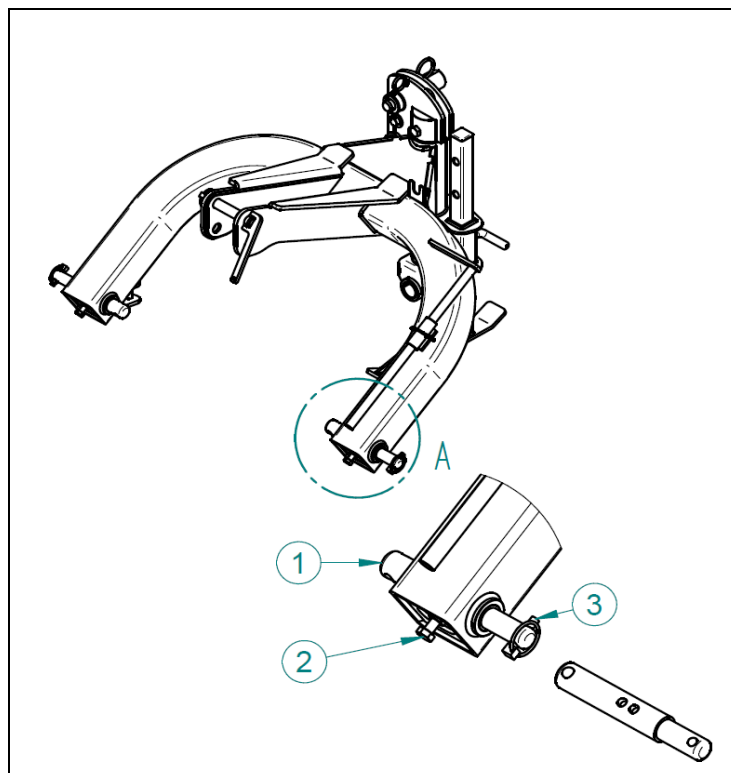


Fig. 7 Adjustment bottom link pins of suspension

After coupling the mower, lift the support, attach the connector (3,4) and adjust its length to achieve the $4\div 5^\circ$ angle to the surface. Decreasing the angle may cause increasing the height of cut. Make sure that the original securing parts are used. Check the wear condition of the connecting components, such as bolts and pins every time maintenance work is performed. In case they are worn, they should be immediately replaced.

II. The assembly of the telescopic articulated shaft of the machine.

After assembling the machine on the three point suspension system, install the articulated telescopic on the PTO of the tractor and the power input of the machine and then raise the support to the upper position.



Use only the original articulated telescopic shaft with the one way slip clutch with the CE sign and the power take-off and the power input shields. Check for the proper fastening of the latches after placing the ends of the articulated telescopic shaft onto the ends of the power take-off and the ends of the power input. Use the proper hoses ended with fitted connectors.

III. The assembly of the hydraulic actuator.

The mower has one hydraulic lifting system. The machine is equipped with a connector, which should be connected with the hydraulic hoses with the tractor's power system

connectors. Before connecting, make sure that the system is not under pressure. Check the type of oil used in the tractor and the machine's system – they must be the same.



Disassembly of machine should be performed in the reversed order, maintaining special conditions of safety while disassembling mechanical system, which separates the machine from the vehicle. Block the supporting frame in the resting position prior to disconnecting the mower from the tractor's suspension system. **After use machine should be store on support on level concrete surface**

5.2. Transport

Lift the mower to the height of 400 mm by the three point suspension system for the purpose of transport drive. It is recommended to disconnect PTO shaft from the vehicle and placing it on a hanger.

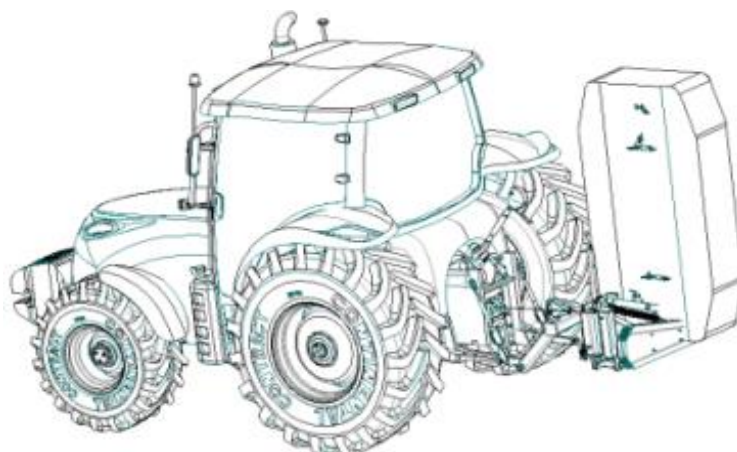


Fig. 8 Transport position



1. In the transport position A it is necessary to unlock the latch (1) Fig. 9 during the lifting up and closing of the valve (2) on hydraulic cylinder.

2. Maneuvering and moving along public roads

Keep a low speed due to the stability of the suspended machine.

3. Driving on public roads, it is absolutely necessary that machine must be equipped with a triangular plate for low-speed vehicles, and light and start the machine - warning.

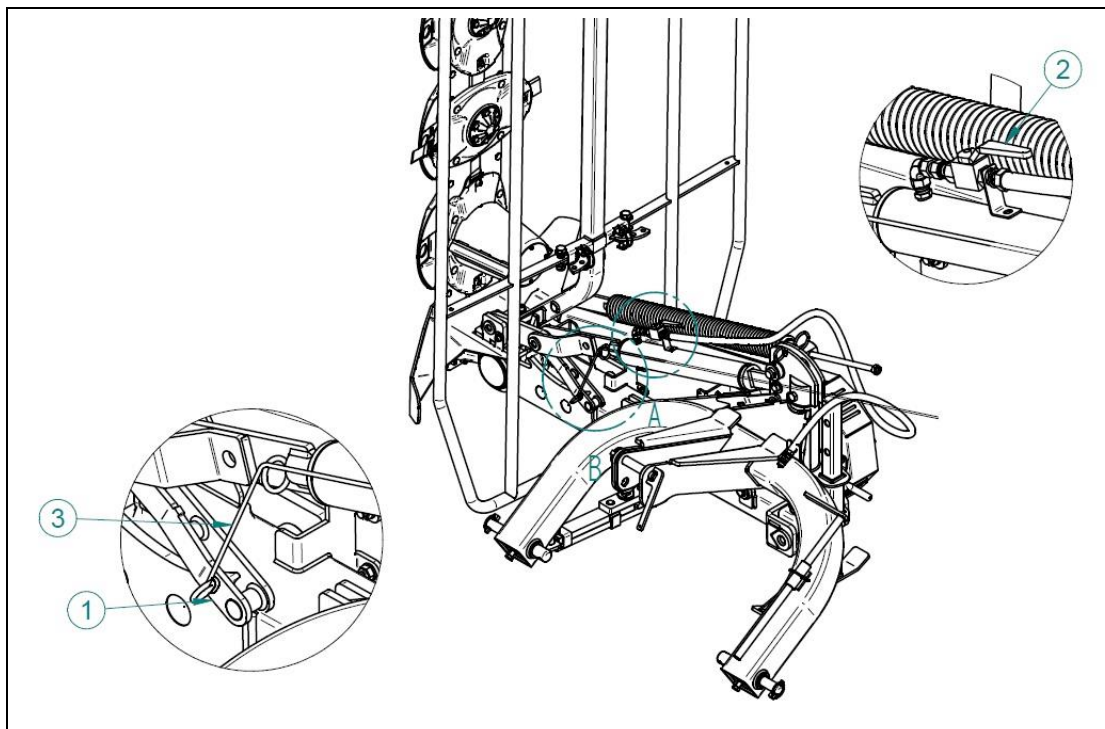


Fig. 9 Transport position

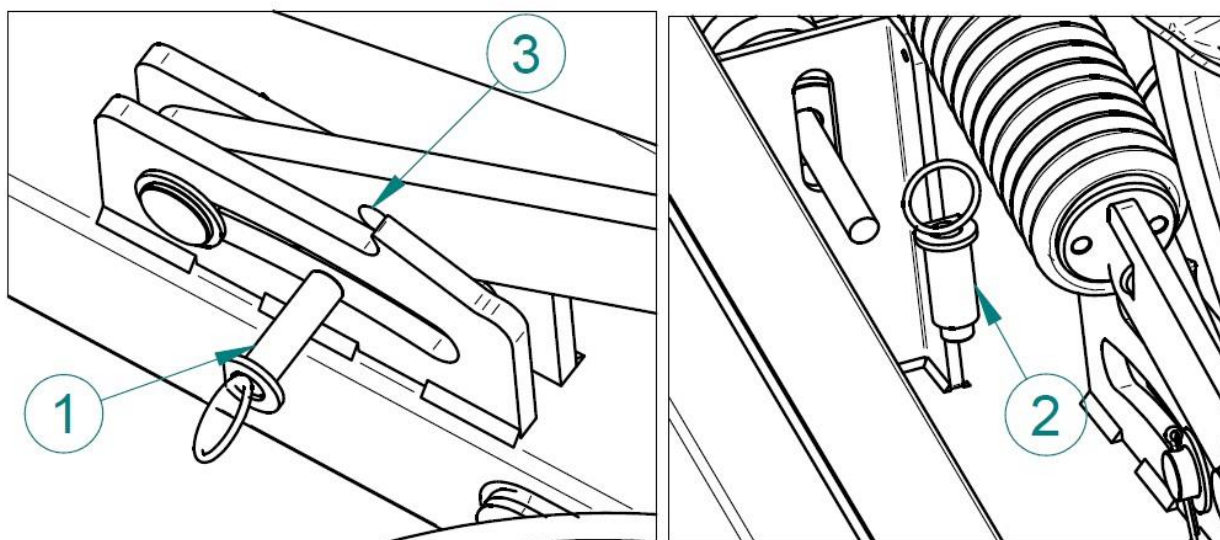


Fig. 10 Secure for transport



After lifting mower into transport position, securing pin (1) must be placed in whole (3) in bar for securing machine against unauthorized fall in the event of hydraulic ram damage. To unlock mower to working position, securing pin must be placed in whole (2) on main beam.

5.3. Work setting

After transporting the machine and positioning the tractor for the mowing, open the valve (2) on the actuator, unlock the supporting frame (1) by pulling by the cord (3) Fig. 11.

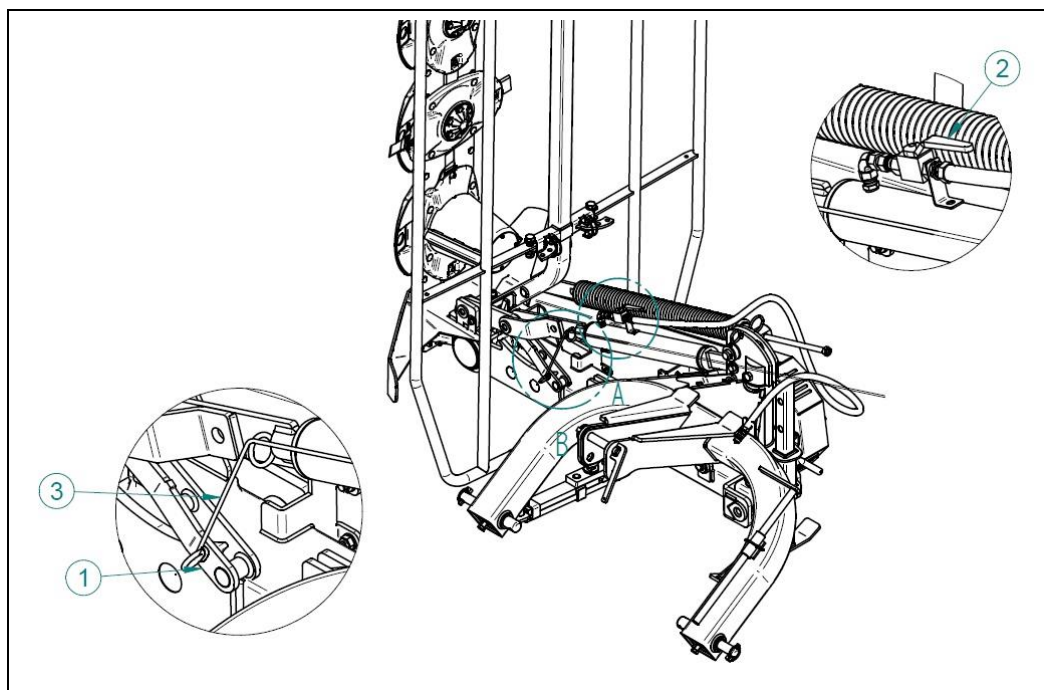


Fig. 11 Folding to transport position

Next, lower the cutter bar to the horizontal position and set the height of the suspension so the pin (detail A) is positioned in the center of the groove as in Fig. 10.

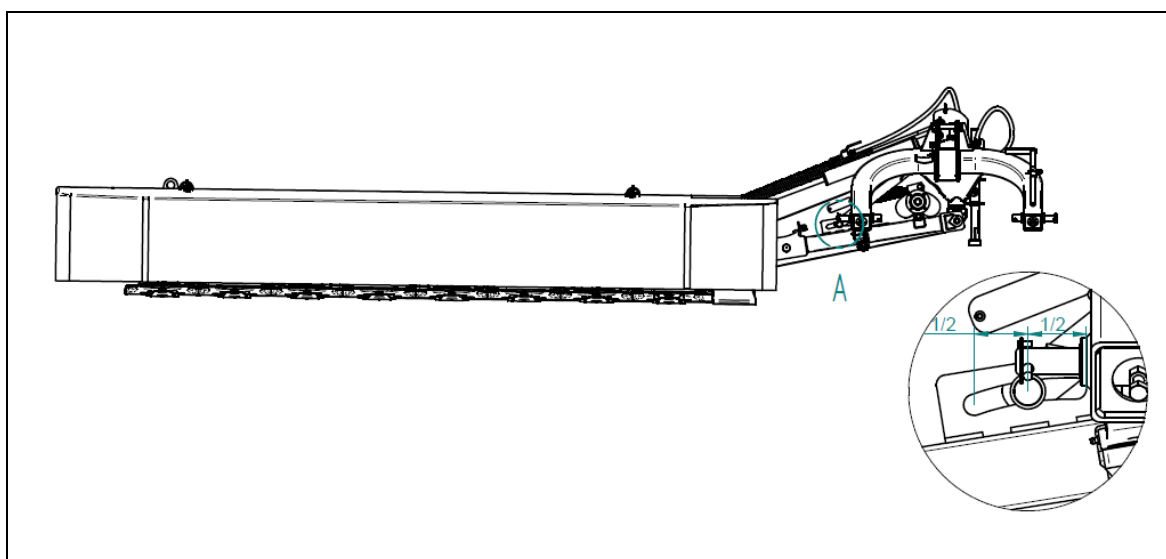


Fig. 12 Adjusting the height of suspension of mower

After adjusting the suspension, adjust the height of cut by adjusting the length of the connector (1) to obtain the $4\div 5^\circ$ angle from the ground. Decreasing the angle causes increasing the height of cut, Fig. 13.

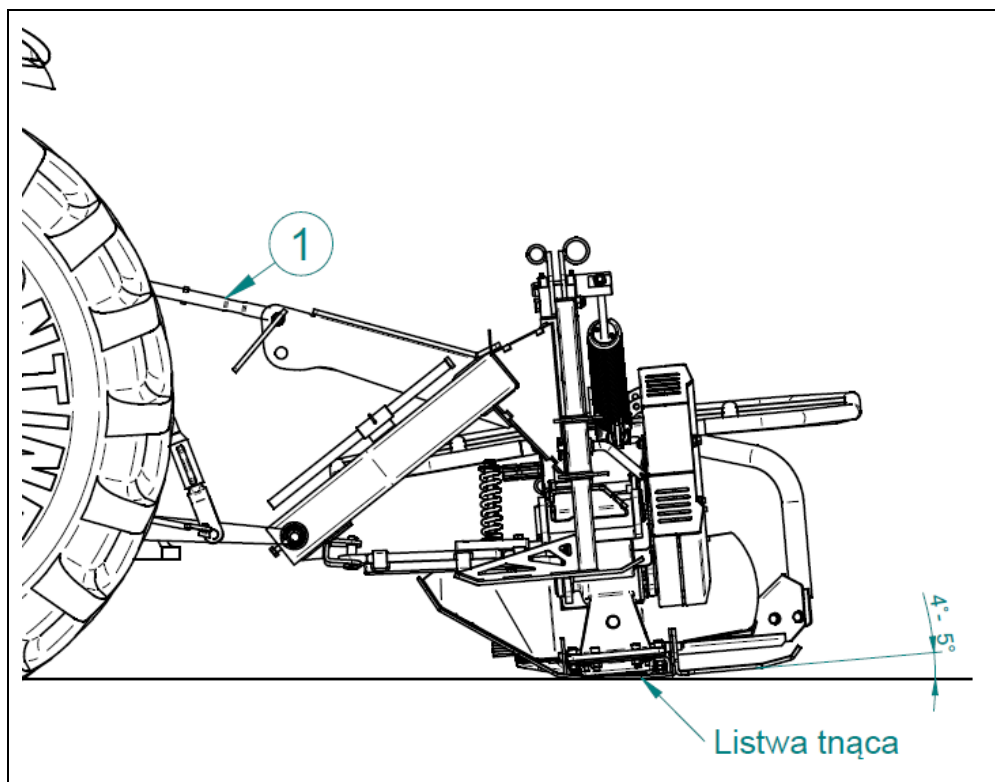


Fig. 13 Adjusting cut height



There is the possibility of adjusting the pressure on the ground. It may be adjusted by a spring tension (1) drawing 12 of the suspension. The pressure should be adjusted individually (2) having in mind the type of surface where the mower is operated.

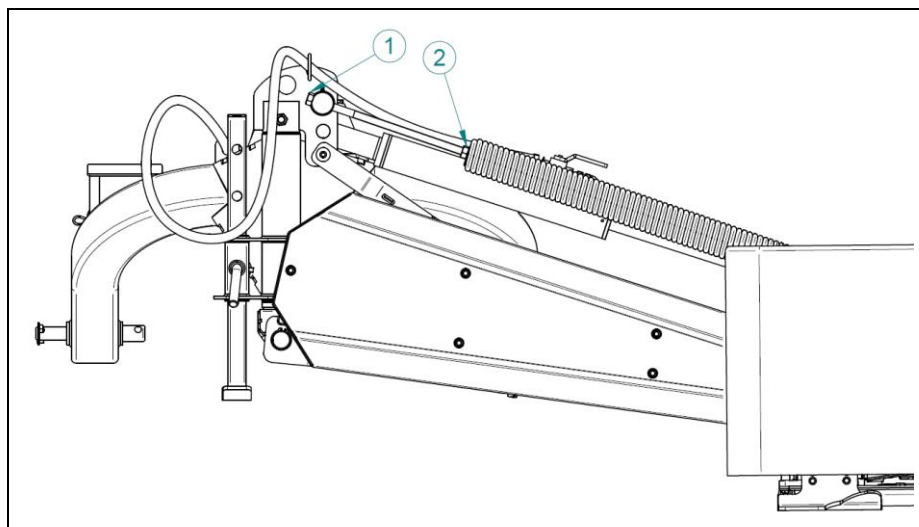


Fig. 14 Adjusting the relieving spring



In order to start the mower, efficient safety guards need to be installed. Also follow the suggestions of section 6: Servicing and maintenance. Always start the mower by releasing the drive clutches slowly, paying attention to the operating machine. All observed irregularities prohibit operating the mower. In such case it is important to read the User Manual again, following all steps regarding the positioning and the adjusting of the mower. If that does not help, contact the manufacturer and explain all ambiguities.

Remember about the range of the mower's operation, which is reached after adjusting the height of the suspension of the mower in accordance with the Fig. 15.

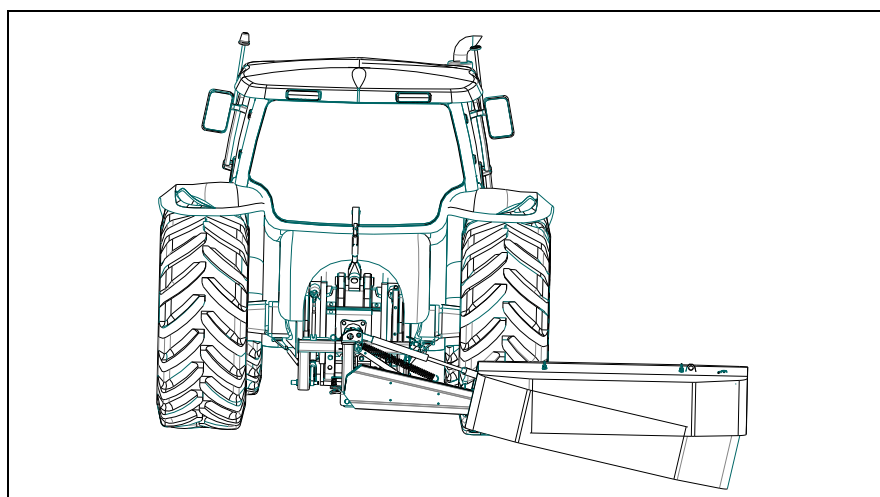


Fig. 13 The range of the mower's operation (the range of the bar - 8°; the range of the beam - 0÷12°)



Depending on the conditions of mowing, the machine may generate a noise exceeding 85db. In such case, it is recommended to use hearing protection.

6. Maintenance

All activities related to the maintenance of the machine may be performed by the user of the vehicle, to which it is connected, under the condition, that he is authorized to operate that vehicle.



After use machine should be stored under roof, on a flat, hardened surface with a support.

Prior to connecting the machine to the vehicle, the operator must inspect the technical condition of the machine each time and prepare it to the trial drive. For that purpose the operator must:

- Familiarize with this User Manual and follow the included suggestions
- Learn the design and understand the functioning of the machine
- Inspect all components of the machine for any possible mechanical defects
- Lubricate the machine in accordance with the suggestions
- Inspect the technical condition of the kingpins of the connecting system and the securing cotter pins
- Check the oil level in the gears
- Inspect the tension of the gear belts
- Inspect the condition of the screw connectors
- Inspect the condition of the cutting blades; the worn should be replaced in pairs



Installing only the original manufacturer's parts may guarantee the safe and reliable operation of the device. Using generic parts or repairing damaged parts will cause loss of warranty.

If all mentioned above activities are performed and the technical condition of the machine does not raise any concerns, the machine may be then connected to the tractor.

- Position the machine in the operating position
- Adjust the length of the articulated telescopic shaft to the connected tractor in accordance with the instructions of the shaft
- Connect the articulated telescopic shaft to the tractor and the mower
- Engage the drive

Engage drive of the operating shaft for 3 minutes. Check in the meantime for any:

- Knocking sounds in the drive system
- Vibrations in the cutting system

6.1 Adjusting belt tension

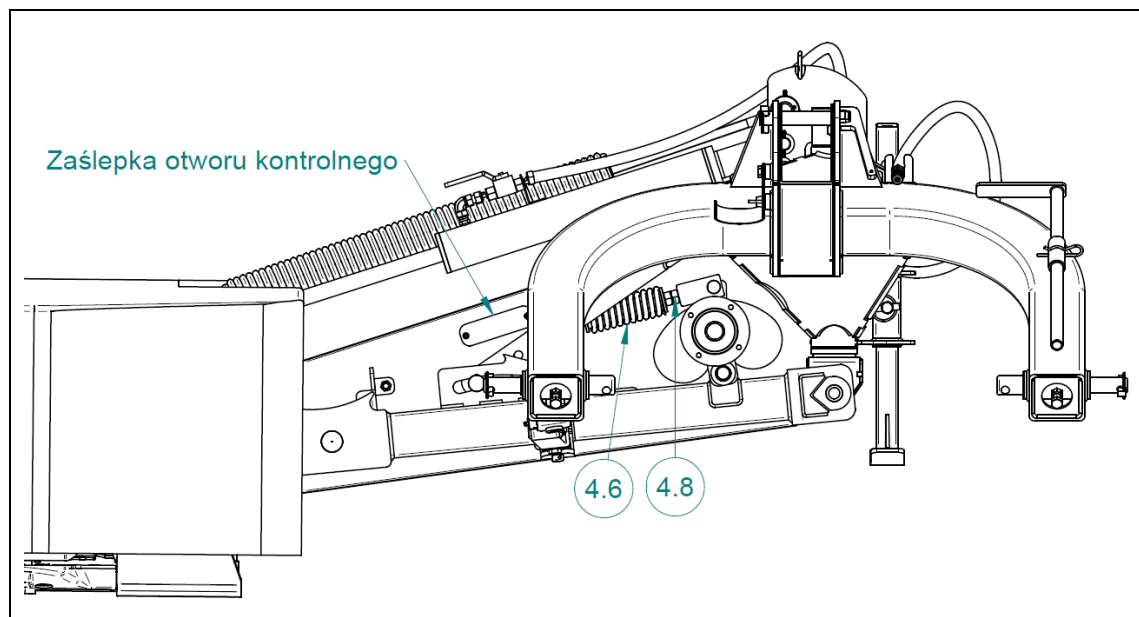


Fig. 14 Adjusting tension of v-belts (inspection of belt tension)

Adjusting of v-belt tension must be done when machine and tractor are turned off. Please check belt tension through the check hole, removing the cap by unscrewing two bolts. Belt deflection at a pressure of 100N (10kgG) should not exceed 20 - 30 mm. In the event of failure of one belt, replace the entire set.

Adjustment of V-belt tension:

- Unscrew the counteracting screws (4.8)
- Change the position of the spring (4.6), moving it by the nut (4.8)
- Counter the nuts (4.8)

Inspect the V-belts periodically (at least once in a season and every time before starting work). The belts should be tensioned in such a way that the slip on the wheel does not exceed 1%. If the tension is too little, it causes the belts slipping. If the belts are too tight, the life of the belts is shortened and the bearings become excessively worn. The tension of the belts should be lessened when storing the machine.

6.2 Blades replacement

The discs of the mower are equipped with the cutting blades. They are double sided, which means, that the other side of the blades may be used in case it wears by turning it to the other side.

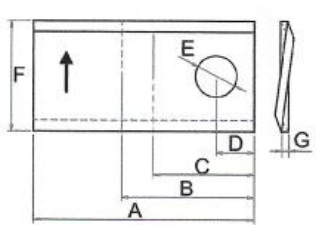
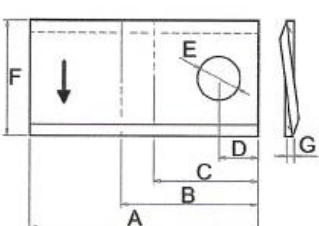
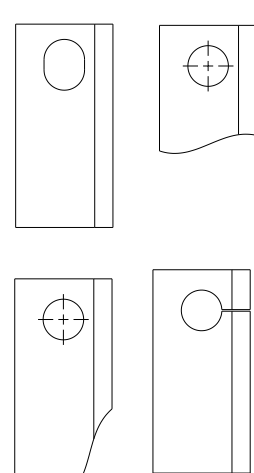
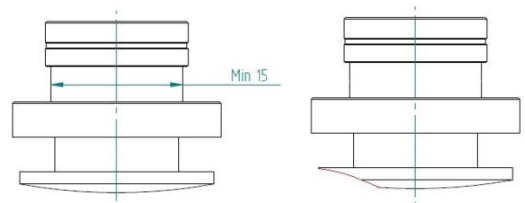
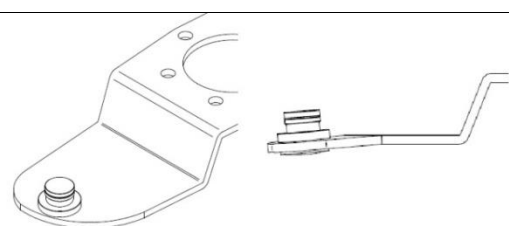
Drawing of blade	Dimension [mm]						
	A	B	C	D	E	F	G
RIGHT 	100	70	42	20	21	50	4
LEFT 							

Fig. 15 Drawing of blade mountings



Cutting blades should be immediately replaced if damage or traces of wear, dulling of the edges or incompleteness of the blades is observed or the blades are excessively loose.

	
	Blade holder shank
	
Blade	Blade holder

QUICK CHANGE blade replacement system

For the purpose of fast and efficient maintenance of the mower, the manufacturer created a very simple system of replacing worn blades – **Quick change**. It is done by using a special type of blade holder, which is tilted by one lever movement of a special wrench key (included in the basic equipment of the machine), which then releases a blade.

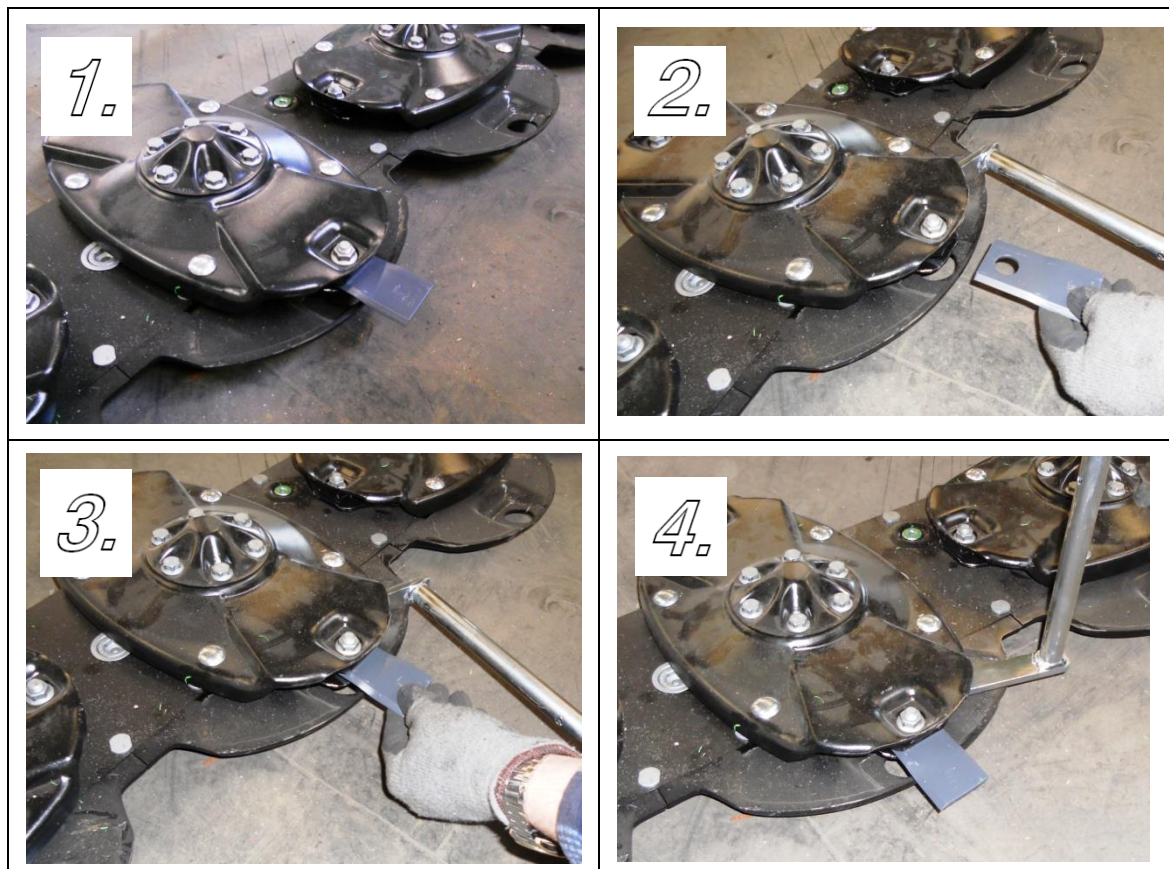


Fig. 16 Inspection, replacement and turning of blade

Replacement or turning of blade is performed by using a special wrench in accordance with the Fig. 19. Wrench is placed (picture 16 (1)) between the upper plate of the disc and the blade holder, the blade holder is tilted until it becomes loose making it possible to remove the blade 16(2). After inspecting the blade 16 (3), the blade tang and the blade holder (in accordance with the Fig. 18), the installation of the blade 16 (4) may be performed by turning the blade or replacing it.



The worn or damaged components must be immediately replaced to new ones. Working with damaged components of the discs, such as the blade holder, blade tang or blade itself is prohibited.



The inspection of blades must be performed every time prior to starting work and every time after moving onto an obstacle, such as a stone, wood, metal.

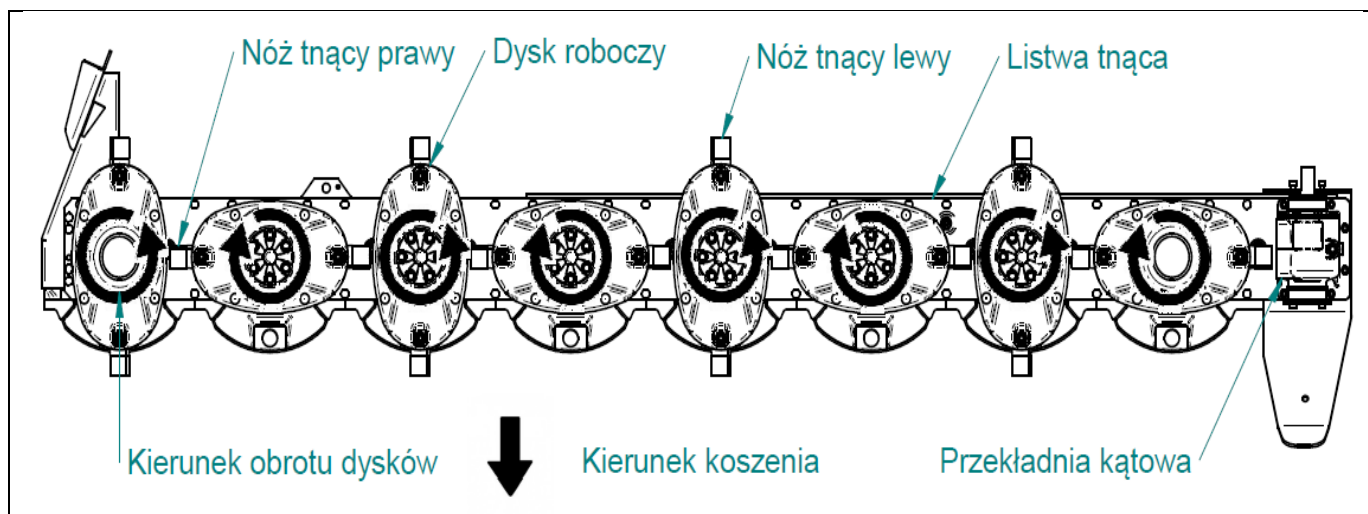


Fig. 17 The layout of the blades depending on the rotations of the discs (view from above)

Table no. 2

RANGE OF MAX. PLAY OF THE BLADES

Luz	nominal [mm]	acceptable [mm]
Transverse axial play	0,2	3,0
Longitudinal axial play	0,1	0,4

Replacement of the blades should be performed maintaining special conditions of safety.

1. Use only the original and efficient parts of the cutting system
2. Every replacement considers a whole set of the disc tools. Remember about the even layout of the rotating mass and the even wear of the blades.
3. Inspect the condition of the cooperating components: blade holder, blade tang, and blade. Replace with new ones if damages are observed. Fig. 18
4. Follow the suggestions of Table nr. 3 when tightening the screw connectors, selecting proper tightening moments of the screws and the nuts.

6.3 Post-operation maintenance

Each time after finishing work, the machine must be cleaned, **the cutting bar must be washed under pressure**, and it should be placed on a flat, hard surface. An inspection of the connections of parts must be performed. The damaged and worn parts should be replaced with new ones. Inspect all screw connections and tighten the loose ones in accordance with the Table no. 3.

THE MANUFACTURER TALEX ENSURES THE ACCESS TO ALL PARTS

Table no. 3 THE TIGHTENING MOMENTS FOR BOLTS AND NUTS

Resistance	6.8	8.8	10.9	12.9
Metric thread	Tightening Torque [Nm]			
M5	4,5	5,9	8,7	10
M6	7,6	10	15	18
M8	18	25	36	43
M10	37	49	72	84
M12	64	85	125	145
M14	100	135	200	235
M16	160	210	310	365
M18	220	300	430	500
M20	310	425	610	710
M22	425	580	820	960
M24	535	730	1050	1220

All safety signs placed on the machine and the triangle plate of the slow moving vehicles should be kept clean.

At least once a year check the level of oil in the bevel gear. The gear oil should be used with the SAE90EP characteristics.

It is also important to inspect the tension of the V-belts, and to replace the damaged ones (always replace whole sets). Everything should be adjusted in accordance with the instruction in 6.1 Adjusting the blade tension.

It is important to inspect the axis and shaft backlash. In case of observing an obvious backlash, the axis or shaft bearings must be replaced (always in pairs) with new ones in accordance with the spare parts catalog. All bearings have rings protecting from the dirt.

6.4 Lubrication



All maintenance and servicing work should be performed with tractor's engine disengaged, pressure and rotations cessation, with the vehicle and the machine.



Avoid contact with oil! Use personal means of protection in the form of: protective clothing, shoes and gloves.

In order to ensure the proper operation of the machine, it must be greased thoroughly and in a proper manner, in accordance with the manufacturer's suggestions.

Mower has greasing points at all main connections. Use only manual or foot lubricator filled with grease. Clean the residues and the old grease before and after greasing, and the utilize the contaminated absorbents.

The articulated telescopic shaft should be greased after removing it from the machine. The telescopic part of the shaft should be greased not less frequently than every 8 hours of operating the machine – with completely separated shaft and after removing any residues.



Every time before starting work, not less frequently than once a year, the level of oil in the cutting bar and the bevel gear should be checked and filled if necessary.

The level of oil in the cutting bar should be checked after placing the mower on an even surface by opening the oil filler plug (A), Fig. 18. The oil level should be within the range of 5 ÷ 7 mm.

Gearbox oil level should be checked with the oil dipstick placed in the oil control-filler-drain plug (A) , after opening it Fig. 18. The (B) position is the cutter bar vent.

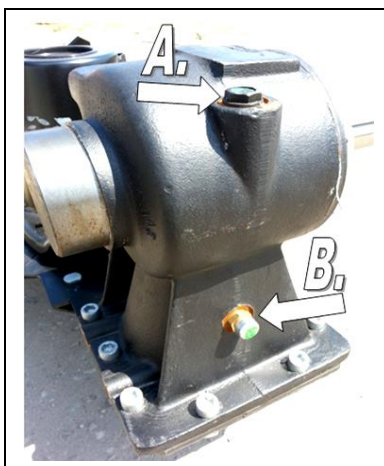
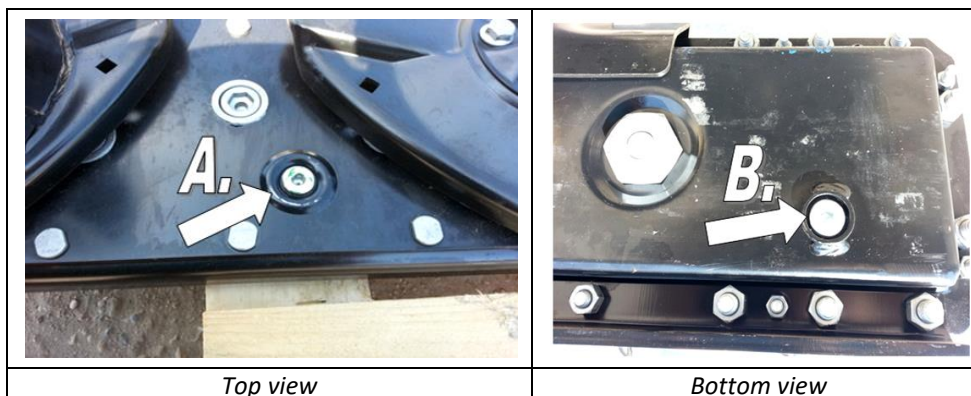


Fig. 18. Gearbox oil inspection: A – filler, drain, dipstick
B – cutter bar vent

The oil in the gear should be replaced immediately after work, when the oil is still hot. In order to do that, the following must be done:

- Lift the cutting bar to the vertical position
- Open the oil filler, drain and control plug (A) Fig. 18.
- Drain the oil to the prepared container
- Lower the bar to the horizontal position
- Fill in new oil SAE90EP (in accordance with the quantity listed in the Table no. 1)
- Check the level and close the plug (A)



Rys.22. Cutter bar – oil check: A – filler, oil level control
B – oil drain

Oil in the cutter bar should be changed immediately after work, while the oil is still hot. In order to do that, the following must be done:

- Open the oil filler, control plug (A) Fig. 18
- Lift the bar
- Open the oil drain plug (B)
- Drain the oil to the prepared container
- Close the oil drain plug (B)
- Lower the cutting bar to the horizontal level and fill in the SAE90EP oil (in accordance with the quantity indicated in the Table nr 1)



The oil in the bevel gear and the cutting bar should be changed after the first 50 hours of operation. The following oil change should be performed after 500 operating hours or every year.

If leaking is noticed, the sealing and the oil level should be checked, operating the mower with low oil levels may cause permanent damage to the mower. All repairs of the cutting bar and the gear may be performed by the indicated by the manufacturer mechanical workshop.



DANGER
If the level of oil in the bar is too high, it may worsen its functioning or even damage it.

6.5 Post-season maintenance

Maintenance covers all activities listed in the section: Post-operation maintenance. In addition, the machine should be stored under a roof, on a flat, hardened surface with a support. Check the sealing paint. If you notice any damage to the paint, clean the area and fill it in with a new layer of sealing paint.



In case of leakage of hydraulic system, it is essential to replace damaged parts and units of hydraulic system to prevent environmental contamination. **Hydraulic hoses, regardless of the external condition must be replaced after a period of 5 years.**

6.6 Environment and disposal

In case of a complete wear of machine to extent where it is impossible to operate the machine any more, it should be disposed off. It also concerns current repairs and replacement of damaged parts. For that purpose the machine should be completely cleaned. The oil should be drained and utilized. Next, the machine should be dismantled, segregating the parts in accordance to the use materials. The segregated parts should be delivered to a waste collection or utilization place.

The machine is fully environment friendly. The materials used for its production are in 97% recyclable. The used parts should be utilized in accordance with the local environmental regulations. Throughout the entire period of operating the machine, be careful to prevent any oil leaking, which could contaminate the environment.

7. Spare parts catalogue

ORDERING SPARE PARTS

When ordering parts, always provide the following:

- Customer address,
- Delivery address (place where machine is kept or method of receiving goods),
- Payment terms,
- machine serial number and production date (according to namplate),
- Spare part index,
- Quantity



The spare parts should be ordered from the machines retailers or the manufacturer. Only the use of the original manufacturer's parts guarantees the safe and reliable operation of the machine. Using generic parts or repairing the damaged parts will result losing the warranty rights.

TALEX Spółka z ograniczoną odpowiedzialnością

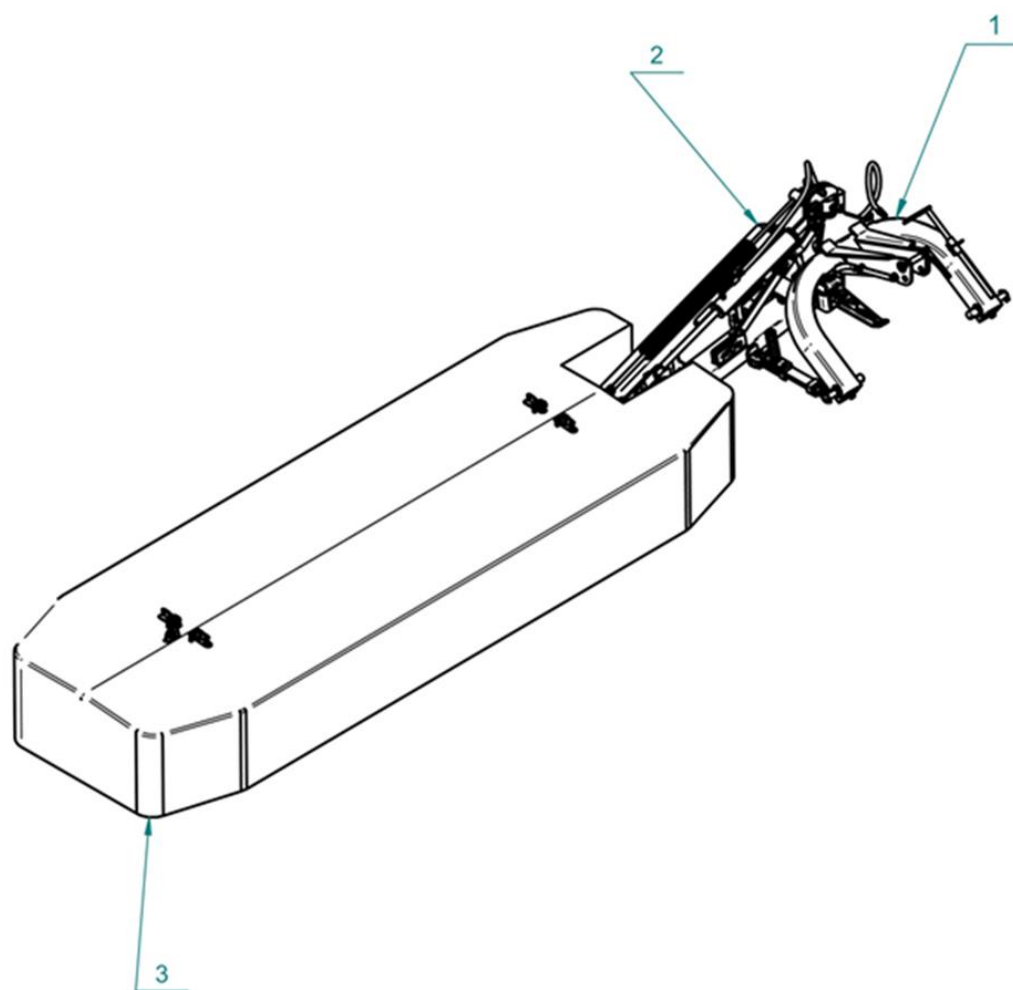
ul. Dworcowa 9C

77-141 Borzytuchom

Tel.: +48 59 821 13 40

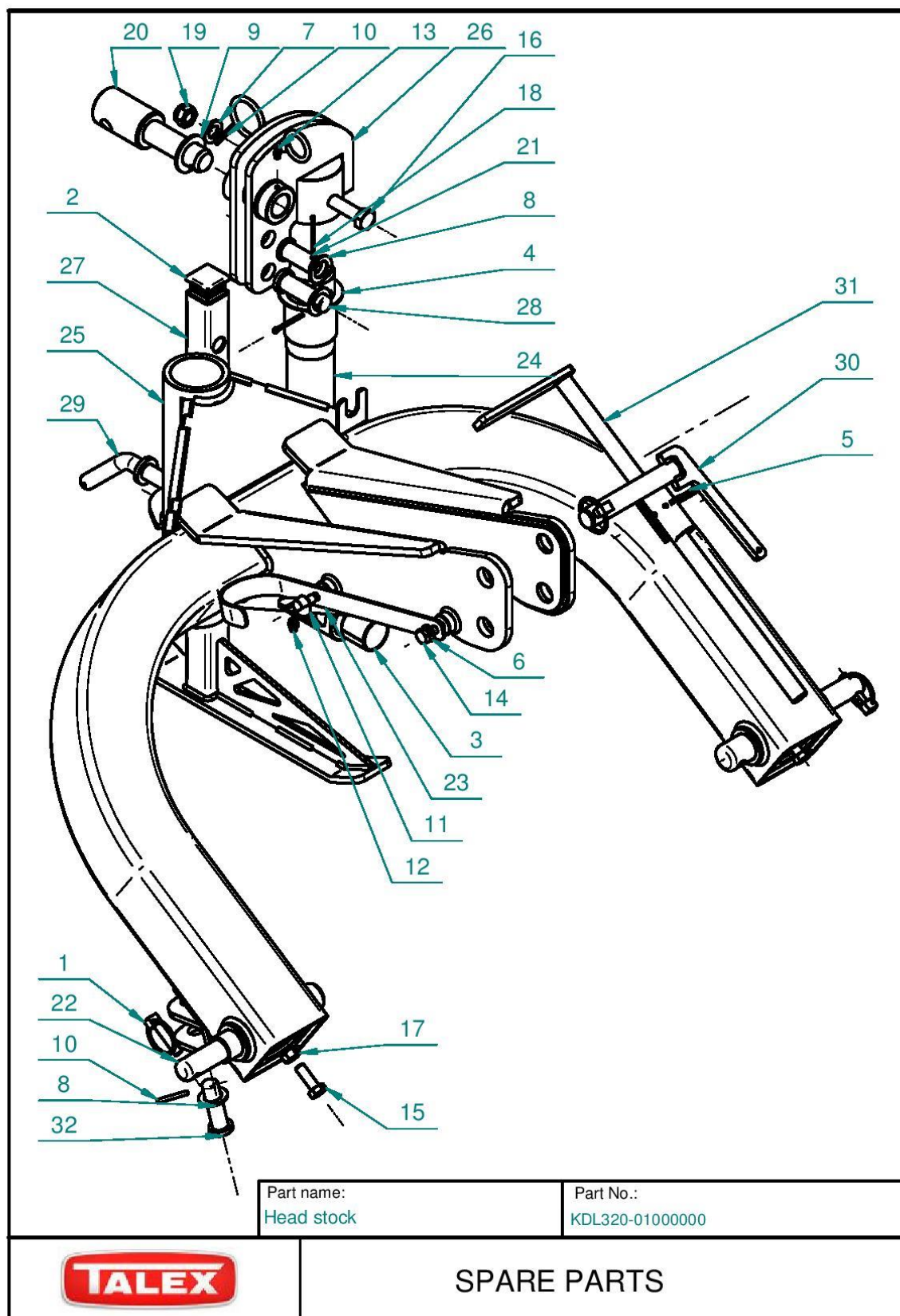
<https://talex-sj.pl/en>

e-mail: biuro@talex-sj.pl



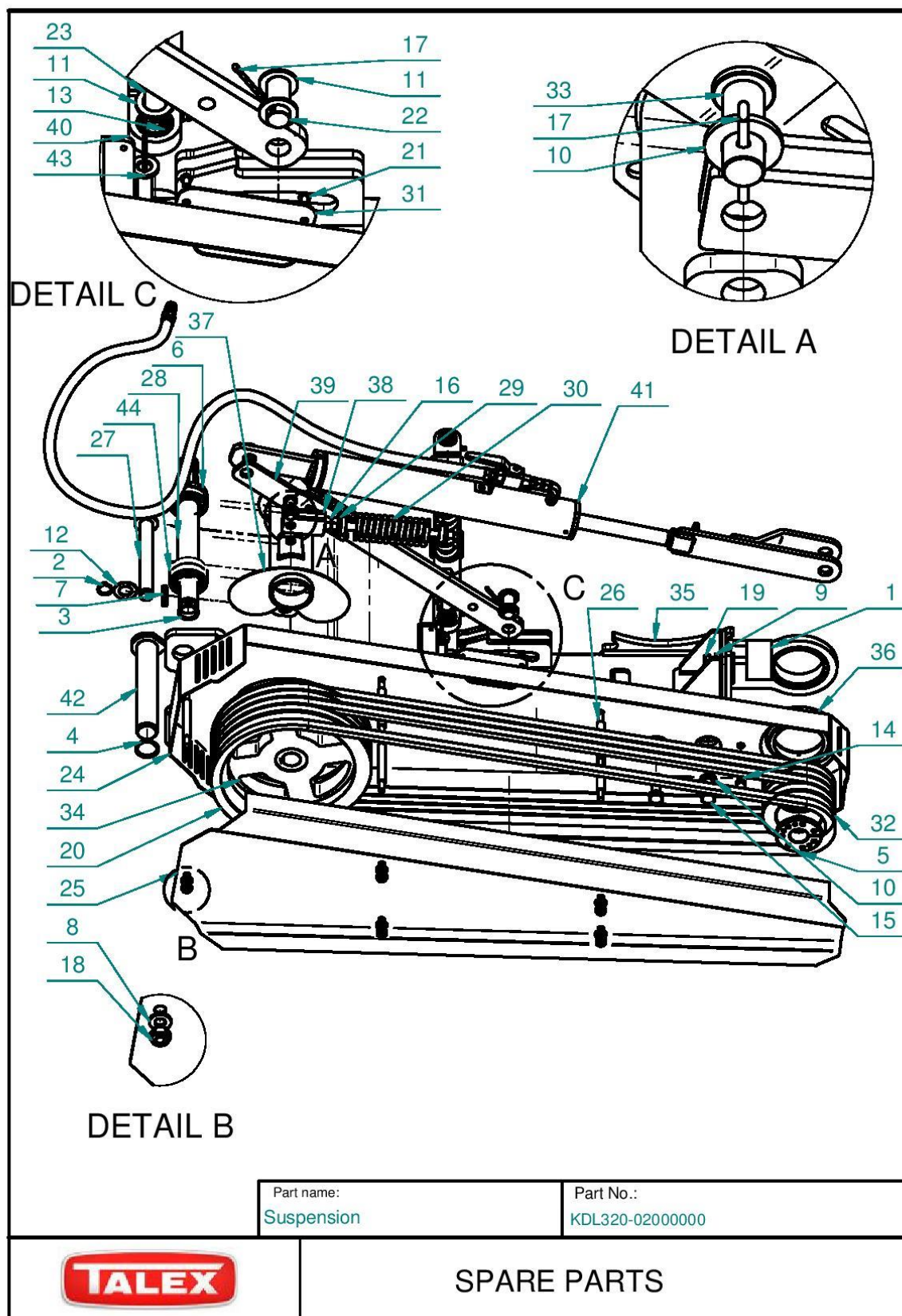
GENERAL CONSTRUCTION			
Pos.	Description	Index	Quantity
1.	Head stock	Chapt. 7.2	1
2.	Suspension system	Chapt. 7.3	1
3.	Main fame	Chapt. 7.6	1

27.10.2016



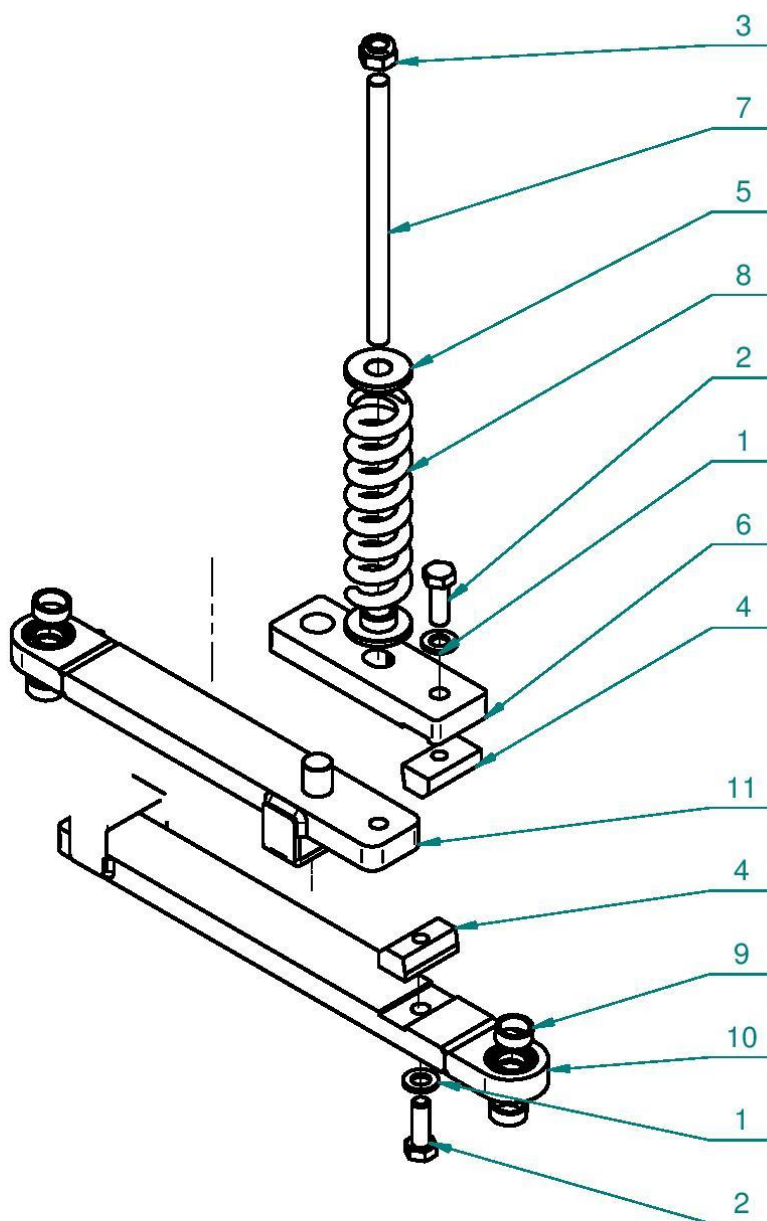
SUSPENSION 3-Pt			
Pos.	Description	Index	Quantity
1.	Cotter pin	T000981	4
2.	Plastic cover 40x40x1.0-3.0	T000971	1
3.	Slide bearing 404440	T000860	2
4.	Slide bearing 606580_62	T000216	2
5.	Cotter pin diameter 4	T000987	1
6.	Washer M10 Galv.	T000456	1
7.	Washer M 16 Galv.	T000460	1
8.	Washer M22 Galv.	T000463	3
9.	Washer M30 Galv.	T000466	1
10.	Spring pin 5x40	T000080	2
11.	Wing screw M10*16	T000817	1
12.	Greasing nipple M10*1	T000643	1
13.	Greasing nipple M6x1	T000645	2
14.	Hexagon bolt M10*30 class 8.8 galv.	T000741	1
15.	Hexagon bolt M12*35 class 8.8 galv.	T000756	2
16.	Hexagon bolt M16*100 class 8.8 galv.	T001367	1
17.	Hexagon nut M12 galv.	T000267	2
18.	Cotter pin 5*40	T000985	2
19.	Hexagon selflocking nut M16 galv.	T000294	1
20.	Tensioner pin	P013074	1
21.	King pin S22	T000694	1
22.	Lower suspension pin	P013082	2
23.	PTO hook	P013087	1
24.	Welded hinge	P013003	1
25.	Coupling frame	P013010	1
26.	Hydraulic ram mounting	P013033	1
27.	Support	P013045	1
28.	Top link Pin	P013057	1
29.	Support pin	P013050	1
30.	Upper suspension pin	P013063	1
31.	Quick Change wrench	P013069	1
32.	Breakaway bar pin	P013144	1

27.10.2016



Suspension system			
No.	Name	Index	Pcs.
1.	Bushing	T000328	1
2.	Circlip 25Z	T000424	2
3.	Circlip 35Z	T000412	1
4.	Circlip 40Z	T000413	1
5.	Clampex clutch D35/80	T000678	1
6.	Sealant 72x35x10	T000889	1
7.	Prismatic inlet 10x8x50	T000947	1
8.	Washer M10 Galv.	T000456	10
9.	Washer M12 Galv.	T000458	1
10.	Washer M16 Galv.	T000460	3
11.	Washer M22 Galv.	T000463	3
12.	Washer M25 Galv.	T000464	2
13.	Spring pin 5x40	T000080	1
14.	Hexagon bolt M10*30 class 8.8 galv.	T000741	1
15.	Hexagon bolt M16*40 class 8.8 galv.	T000685	2
16.	Hexagon nut M16 galv.	T000270	2
17.	Cotter pin 5*40	T000985	2
18.	Hexagon selflocking nut M10 galv.	T000292	10
19.	Hexagon selflocking nut M12 galv.	T000291	1
20.	V-belt HB2650	T000386	4
21.	Round head bolt M6*10 class 8.8 galv.	T000940	2
22.	King pin S22	T000694	1
23.	Breakaway bar pin	P013144	1
24.	Internal V-belt cover	P013228	1
25.	External V-belt cover	P013186	1
26.	Spacer bolt	T000714	5
27.	Head pin	P013254	1
28.	Drive shaft	T000912	1
29.	Spring mounting	T000638	2
30.	Tensioner spring	T000663	1
31.	Cover	P000955	1
32.	Small pulley	T000096	1
33.	King pin S16	T000691	1
34.	Big pulley	T000100	1
35.	Suspension beam	P013100	1
36.	Yoke	P013197	1
37.	Driving head	P013242	1
38.	V-belt tensioner	P000957	1
39.	Push rod	P013150	1
40.	Breakaway bar	P013124	1
41.	Complete cylinder	OptiCUT (280/320)	1
		OptiCUT (210/250)	
42.	Rotatiom pin	P013092	1
43.	Transport pin	P013180	1
44.	Bearing 6207 2RS	T000179	3

27.10.2016



Part name:
Breakaway bar

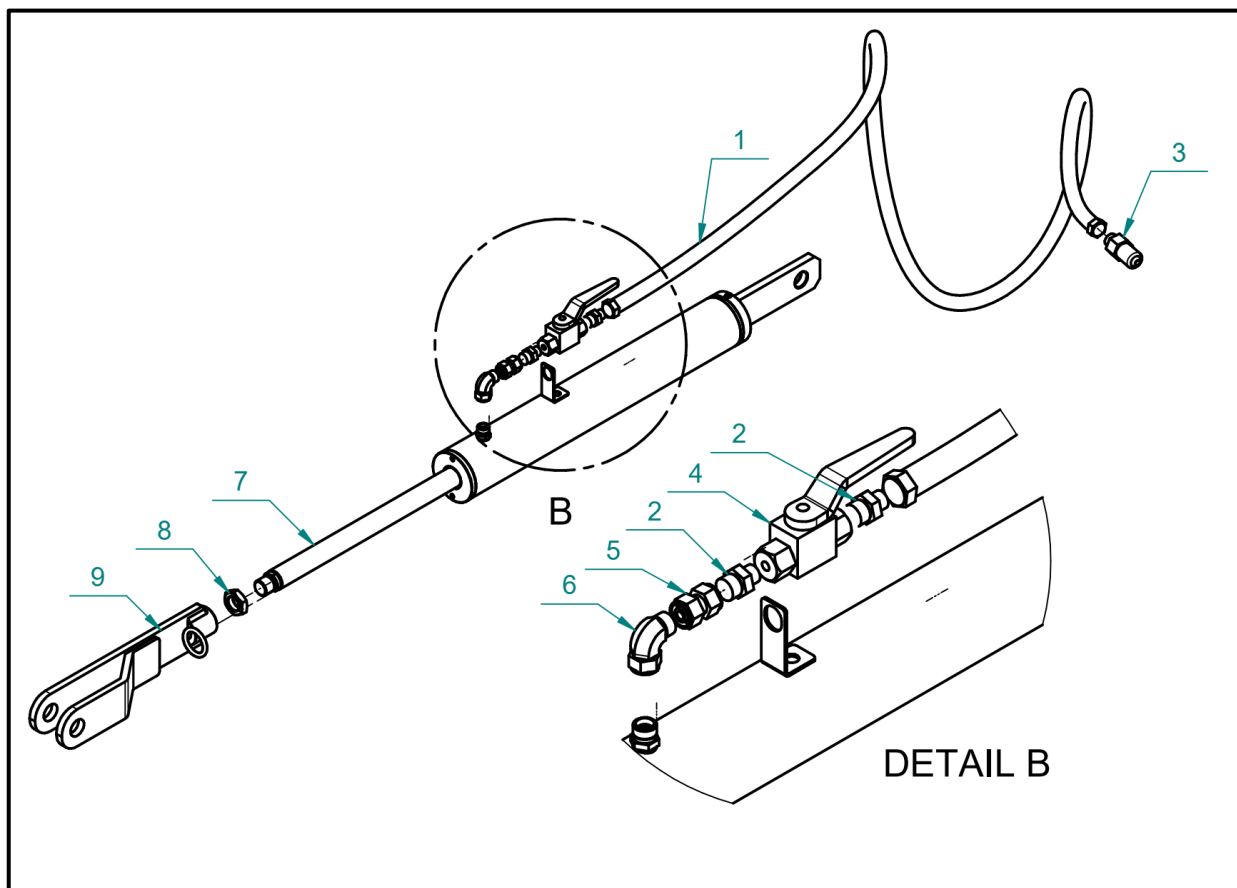
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KDL320-02060000



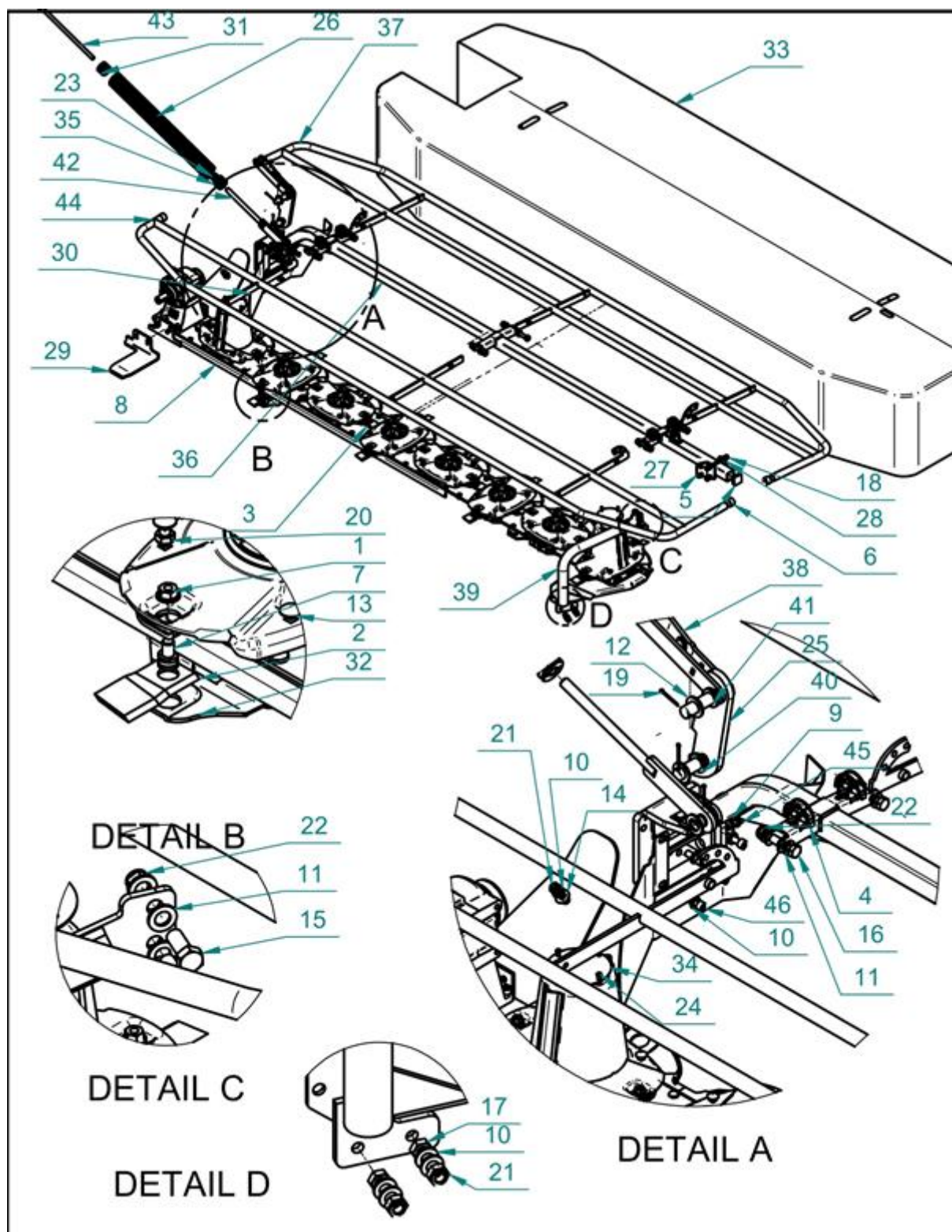
SPARE PARTS



Fuse			
Pos.	Description	Index	Quantity
1.	Washer M12 Galv.	T000458	2
2.	Hexagon bolt M12*35 class 8.8 galv.	T000756	2
3.	Hexagon selflocking nut M14 galv.	T000293	1
4.	Safeguard cube	T001129	2
5.	Breakaway bar block	T000637	2
6.	Middle bar	P013134	1
7.	Breakaway bar rod	P013135	1
8.	Spring	T000652	1
9.	Spacer sleeve	T000854	4
10.	Outside bar	P013125	1
11.	Inside bar	P013129	1



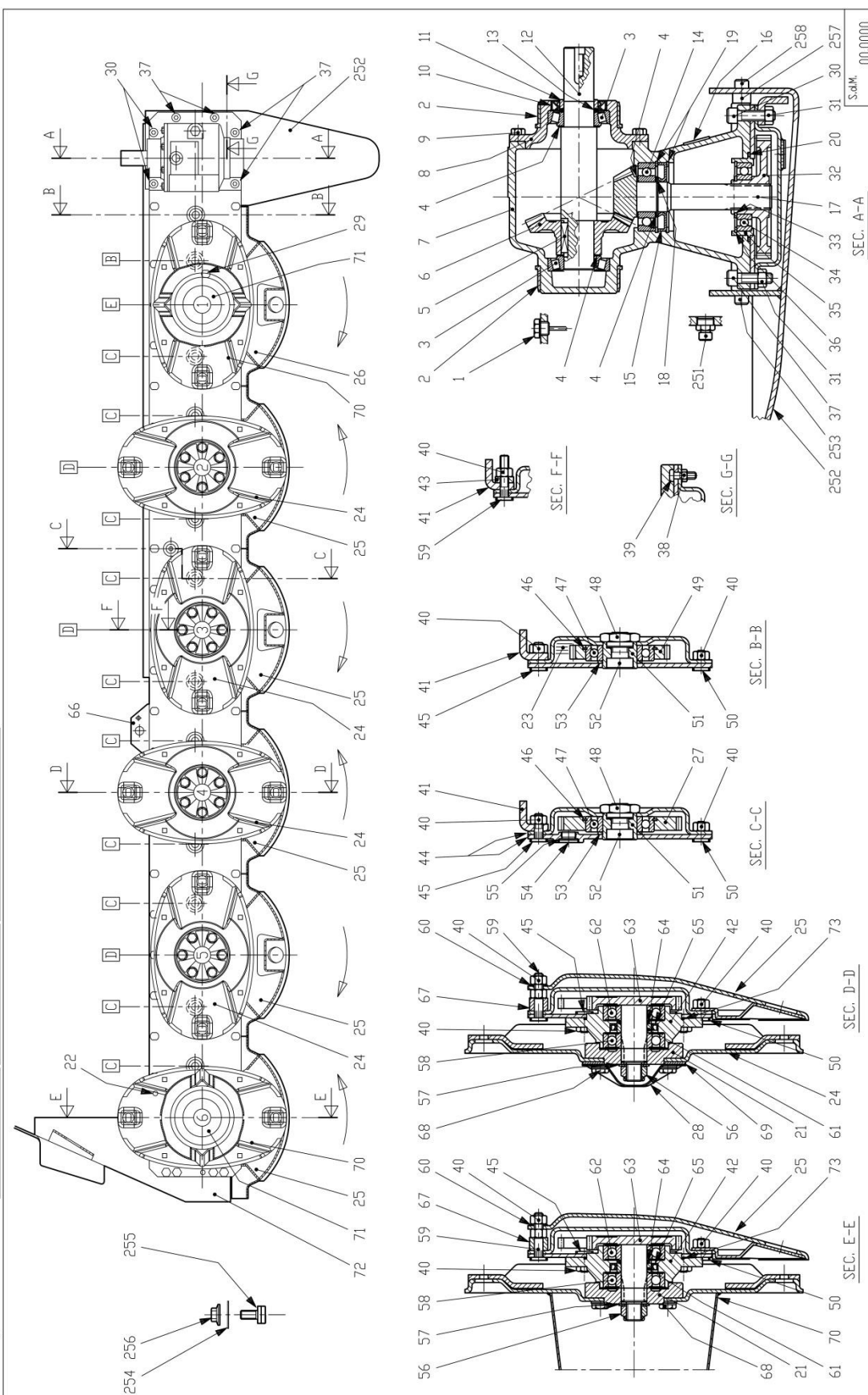
HYDRAULIC CYLINDER			
Pos.	Description	Index	Quantity
1.	Hydraulic Hose	T000522	1
2.	Fitting A G1/4-M16*1,5 10L	T000583	2
3.	Euro type fitting	T000995	1
4.	Ball valve 3/2-1/4	T000996	1
5.	Fitting AA M16*1,5	T001025	1
6.	Fitting AB M16x1,5/M16x1,5 10L/10L	T001026	1
7.	Complete cylinder OptiCUT (280/320)	T001292	1
	Complete cylinder OptiCUT (210/250)	T001293	
8.	M22 x 1.5 low nut	T000276	1
9.	Cylinder hitch	P013330	1



MAIN FRAME			
Pos.	Description	Index	Quantity
1.	Blade holding nut (OLD DISC MOWER)	T000258	16/14/12/10
2.	Left cutting blade	T000312	8/8/6/6
3.	Right cutting blade	T000313	8/6/6/4
4.	Tubular plug	T000980	4
5.	50x50x5 plug	T000966	1
6.	Pipe plug 1inch	T000485	4
7.	Bolt 404.7160.00	T000727	16/14/12/10
8.	Cutting bar FR-508A - 8 disc- 3,30m (OLD DISC MOWER)	T000007	1
	Cutting bar FR-507A - 7 disc - 2,85m (OLD DISC MOWER)	T000006	
	Cutting bar FR-506A - 6 disc - 2,42m (OLD DISC MOWER)	T001049	
	Cutting bar FR-505 - 5 disc (OLD DISC MOWER)	T001701	
9.	Flat washer M10 galv.	T000456	1
10.	Flat washer M12 galv.	T000458	13
11.	Flat washer M16 galv.	T000460	16
12.	Thin flat washer M25 galv.	T000464	3
13.	Bolt M10x20 galv. 10.9 p.gw	T000739	32/28/24/20
14.	Bolt M12x25 galv. 10.9 low seat	T000824	1
15.	Bolt M16x40 8,8 galv.	T000685	2
16.	Bolt M16x60 galv. 8.8	T000782	6
17.	Bolt M12x35 GALV. 8.8 p.gw	T000756	2
18.	Bolt M12x90 GALV. 8.8 np.gw	T000763	2
19.	Pin 5x40 GALV.	T000985	3
20.	Self-locking nut M10 GALV.	T000292	32/28/24/20
21.	Self-locking nut M12 GALV.	T000291	5
22.	Self-locking nut M16	T000294	8
23.	Self-locking nut M20	T000255	1
24.	Round head bolt M6x12 GALV.	T000940	8
25.	Hydraulic cylinder hinge (OLD DISC MOWER)	P013288	1
26.	Spring Φ 12 (OptiCUT 320/280)	T000656	1
	Spring Φ 10 (OptiCUT 250/210)	T000654	
27.	Support mount I	P013313	1
28.	Support mount II	P013314	1
29.	Rear slide	P013259	1
30.	Transmission cover	P013286	1
31.	Spring joint (OptiCUT 280/320)	P013174	1
	Spring joint (OptiCUT 250/210)	P000644	
32.	Blade holder T-55A Set (OLD DISC MOWER)	P084505	16/14/12/10 8/7/6/5
	Blade holder T-70A (OPTICUT DISC MOWER)	T000850	
33.	Disc mower cover 320	T000354	1
	Disc mower cover 280	T000353	
	Disc mower cover 250	T000352	
	Disc mower cover 210	T000351	
34.	Disc plug	T001439	2
35.	Spring joint 320/280	P013175	1
	Spring joint 250/210	P000645	

Pos.	Decsription	Index	Quantity
36.	Frame L-320	P013272	1
	Frame L-280	P012272	
	Frame L-250	P011272	
	Frame L-210	P010272	
37.	Barrier L-320 right	P013211	1
	Barrier L-280 right	P012211	
	Barrier L-250 right	P011211	
	Barrier L-210 right	P010211	
38.	Blockage	P013296	1
39.	Disc support bar	P013309	1
40.	Lower pivot	P013290	1
41.	Upper pivot	P013303	1
42.	Spring hitch	P013168	1
43.	Tensioner bar set	P013171	1
44.	Barrier L-320 left	P013223	1
	Barrier L-280 left	P012223	
	Barrier L-250 left	P011223	
	Barrier L-210 left	P010223	
45.	Allen bolt with cylinder head M10x16 OC 8.8 p.gw.	T000735	1
46.	Allen bolt with cylinder head M12x35 OC 8.8 p.gw.	T000730	4

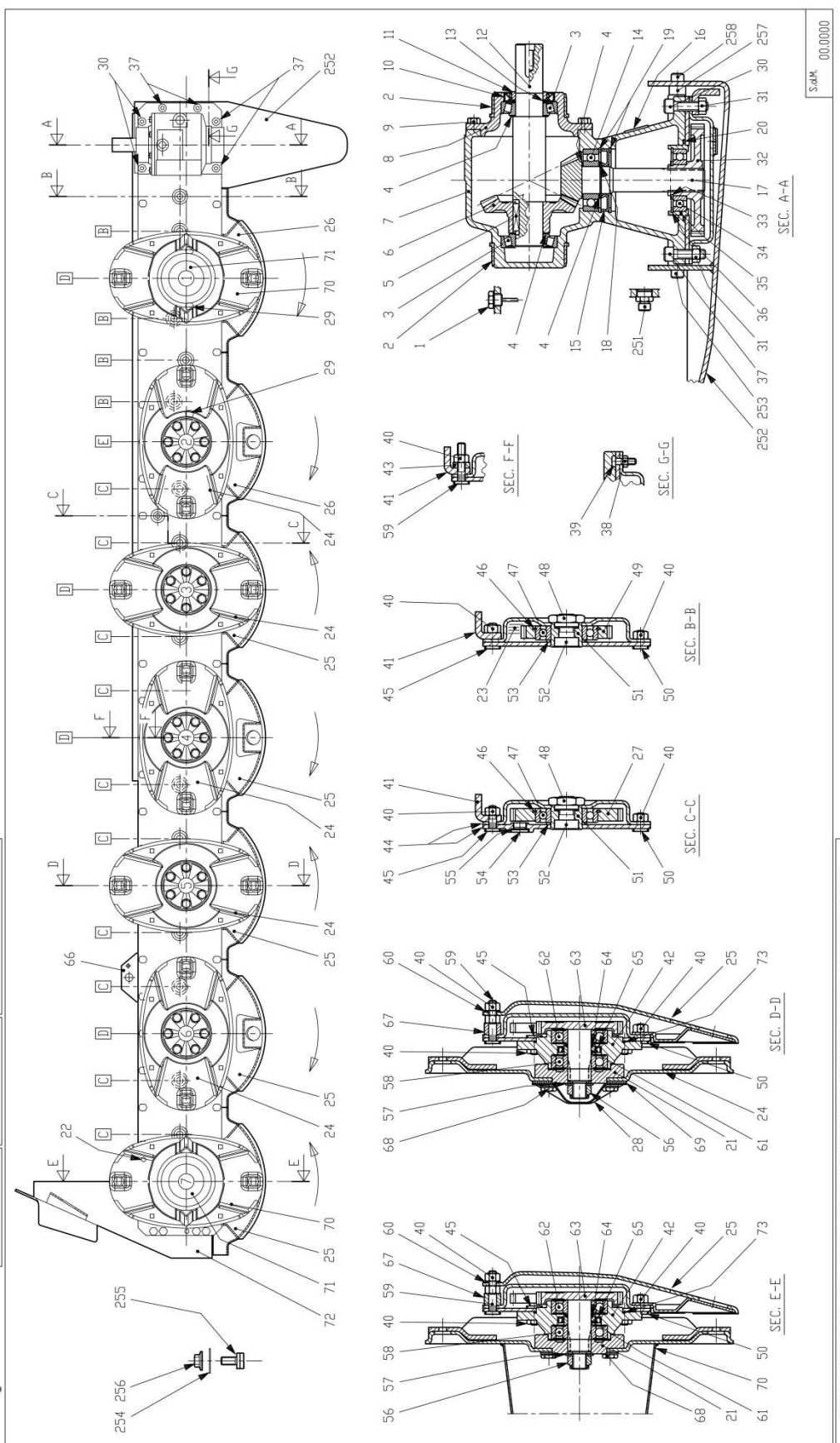
COMPANY	REF.	DESIGNATION	FR-506A
	DATE	CODE	9.506.221.00
	18-06-2013		





User manual
OptiCUT disc mower

COMPANY	REF.	DESIGNATION	FR-507A
DATE	18-06-2013	CODE	9.507.216.00

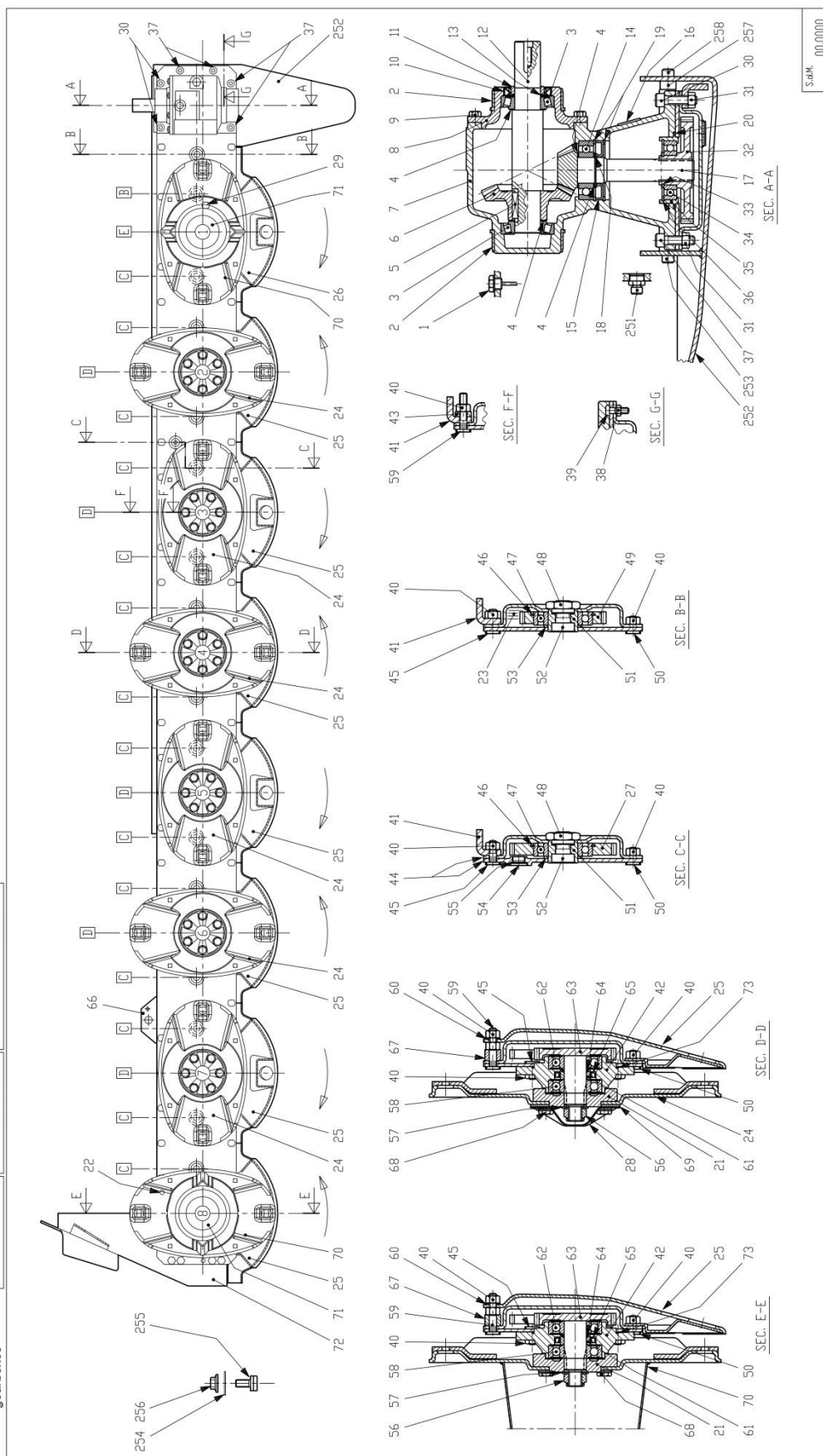


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CIDRER INDUSTRIES S.p.A. #2046 Villanova di Reggiolo (R.E.) Italia Tel. 0522/974111 (9 Lines) Telefax 0522/973249



DESIGNATION CUTTER BAR			A FR-507A			CODE N° 9.507.216.00		
POS.	DRG. N.	PIEC	DESCRIPTION	POS.	DRG. N.	PIEC	DESCRIPTION	
1	0.142.7101.00	1	PLUG	56	8.2.6.00740	7	LOCKNUT	
2	0.142.7103.00	2	BUSH	57	8.5.5.01425	7	BELLEVILLE SPRING	
3	8.0.9.00026	2	BEARING	58	8.0.1.02267	7	BEARING	
4	0.259.7500.00	4	SHIM	59	0.404.7102.00	7	SCREW	
5	8.4.1.01125	1	PARALLEL KEY	60	0.404.7140.00	7	BELLEVILLE SPRING	
6	0.142.5001.00	1	CROWN WHEEL	61	0.505.7100.00	7	BUSH	
7	0.142.0301.00	1	CASING	62	8.0.1.02279	7	BEARING	
8	0.142.1301.00	1	COVER	63	0.505.5000.00	7	GEAR	
9	8.1.1.01540	8	BOLT	64	8.7.6.01244	7	O-RING	
10	8.7.1.00769	1	DOUBLE LIP SEAL	65	8.7.3.00044	7	OIL SEAL	
11	0.142.7100.00	1	BUSH	66	0.404.7118.00	1	MOUNTING	
12	0.142.2001.00	1	SHAFT	67	0.404.7137.00	3	SPACER	
13	8.7.6.00954	1	O-RING	68	0.420.7101.00	42	BOLT	
14	8.0.1.00644	1	BEARING	69	0.465.7005.00	7	SPACER	
15	8.7.3.00081	1	OIL SEAL	70	2.404.7067.00	2	CONVEYOR	
16	0.259.7111.00	1	PLATE	71	0.404.7135.00	2	SPACER	
17	0.142.6000.00	1	PINION SHAFT	72	2.404.1330.00	1	MOUNTING	
18	8.5.1.00005	1	SNAP RING	73	8.7.6.02254	7	O-RING	
19	8.5.2.00030	2	SNAP RING					
20	8.7.6.01188	1	O-RING					
21	0.522.7003.00	7	FLANGE	251	A.142.001	1	OIL BREATHER PLUG	
22	8.4.5.01205	2	SPRING PIN		8.6.7.00161		3/8"GAS	
23	8.8.6.00435	3,51	OIL SHELL					
24	2.404.7065.00	5	REINFORCED DISC	252	A.507.022	1	MOUNTING	
25	2.520.1714.00	5	SLIDING SHOE	253	2.404.1319.00	1	BOLT	
26	2.520.1716.00	2	SLIDING SHOE	254	8.1.2.01531	2	WASHER	
27	0.505.6002.00	10	GEAR	255	1.404.7109.00	14	SCREW	
28	0.420.7046.00	5	CAP	256	0.404.7160.00	14	SCREW	
29	0.404.7132.00	3	SCREW	257	0.404.7139.00	14	NUT	
30	8.1.2.02353	3	BOLT	258	0.404.7113.00	2	SPACER	
31	8.2.1.01533	8	HEX. NUT		8.1.2.01532	2	BOLT	
32	0.505.6000.00	1	GEAR 245 M3					
33	8.5.1.00680	1	SNAP RING					
34	8.0.1.01184	1	BEARING					
35	0.404.7108.00	1	BUSH					
36	8.5.2.00030	1	SNAP RING					
37	8.1.2.01530	5	BOLT					
38	8.2.1.00985	4	HEX. NUT					
39	8.1.2.01527	4	BOLT					
40	8.2.1.01528	119	HEX. NUT					
41	0.407.7102.00	1	BACK REINFORCEMENT					
42	0.505.1302.00	7	MOUNTING					
43	0.404.7136.00	4	SPACER					
44	2.507.0301.00	1	CUTTERBED+COVER					
45	0.404.7101.00	71	SCREW					
46	0.505.7101.00	15	SNAP RING					
47	8.0.1.01918	15	BEARING					
48	0.465.7050.00	15	NUT					
49	0.505.6001.00	5	GEAR					
50	0.404.7112.00	31	SCREW					
51	0.465.7049.00	15	PIN					
52	0.404.7107.00	15	BOLT					
53	0.404.7105.00	15	SPACER					
54	0.404.7131.00	2	PLUG					





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<https://talex-sj.pl/en>

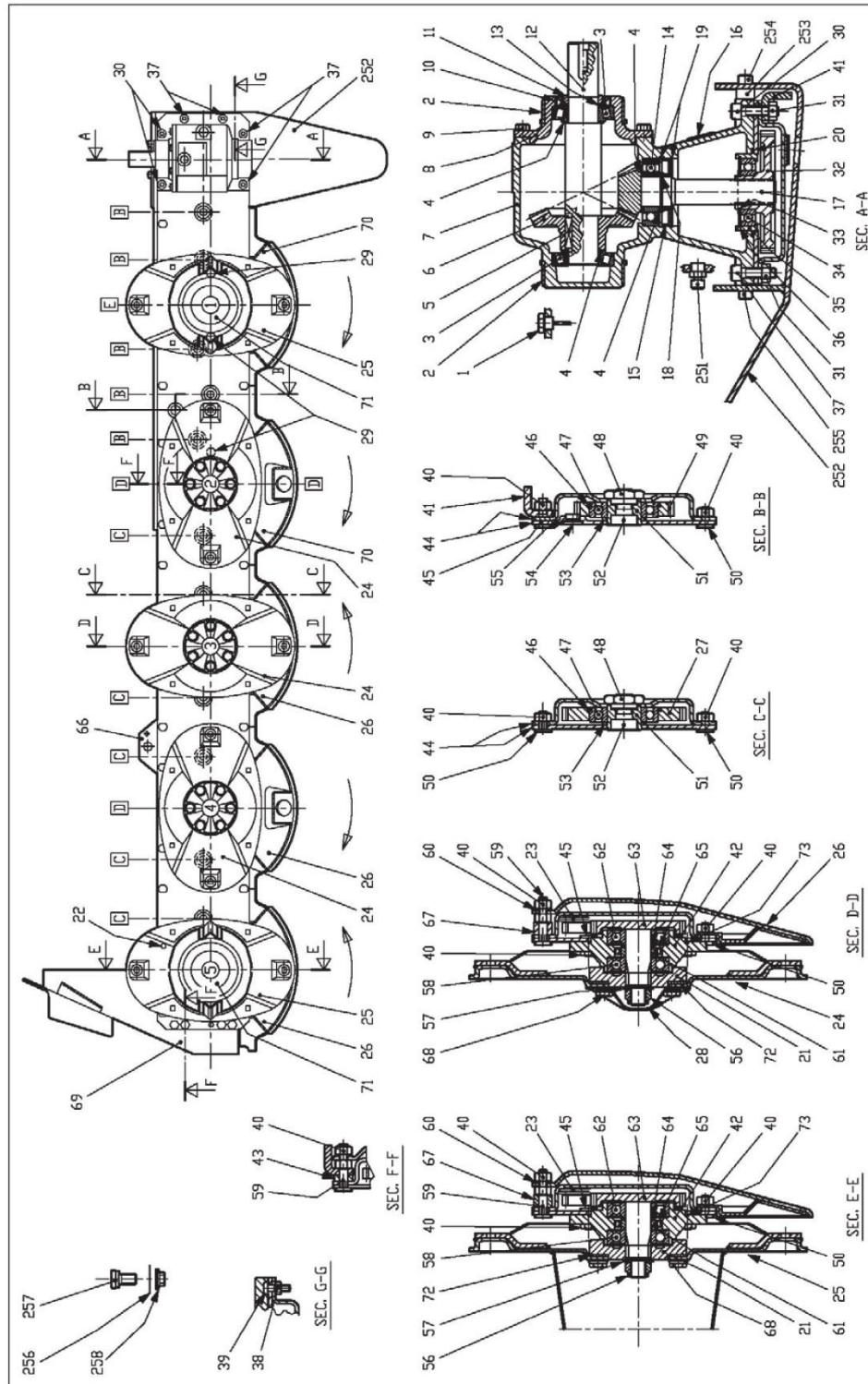
DESIGNATION CUTTER BAR		A FR-507A	CODE N°	9.508.216.00
POS.	DRG. N.	PIEC	DESCRIPTION	
1	0.142.7101.00	1	PLUG	3/8" GAS
2	0.142.7103.00	2	BUSH	30207
3	8.0.9.00026	2	BEARING	35.3x48.0
4	0.259.7500.00	4	SHIM	B 10X8X35
5	8.4.1.01125	1	PARALLEL KEY	233 M3.75
6	0.142.5001.00	1	CROWN WHEEL	
7	0.142.0301.00	1	CASING	
8	0.142.1301.00	1	COVER	
9	8.1.1.01540	8	BOLT	M10x22 8.8 DCRT
10	8.7.1.00769	1	DOUBLE LIP SEAL	45X65 X10
11	0.142.7100.00	1	BUSH	
12	0.142.2001.00	1	SHAFT	
13	8.7.6.00954	1	O-RING	39.83x34.59x2.62
14	8.0.1.00644	1	BEARING	6307
15	8.7.3.00081	1	OIL SEAL	35X80X10
16	0.259.7111.00	1	PLATE	
17	0.142.6000.00	1	PINION SHAFT	Z16 M3.75
18	8.5.1.00005	1	SNAP RING	35 UNI7435
19	8.5.2.00030	2	SNAP RING	80 UNI7437
20	8.7.6.01188	1	O-RING	OR 4375
21	0.522.7003.00	8	FLANGE	
22	8.4.5.01205	2	SPRING PIN	10X12 D1481
23	8.8.6.00435	3,78	OIL SHELL	OMALA SZG 320
24	2.404.7065.00	6	REINFORCED DISC	
25	2.520.1714.00	7	SLIDING SHOE	
26	2.520.1716.00	1	SLIDING SHOE	
27	0.505.6002.00	14	GEAR	Z45 M3
28	0.420.7046.00	6	CAP	
29	0.404.7132.00	1	SCREW	M10x30 DCRT
30	8.1.2.02353	3	BOLT	M12 10 DCRT320
31	8.2.1.01533	8	HEX. NUT	
32	0.505.6000.00	1	GEAR Z45 M3	
33	8.5.1.00680	1	SNAP RING	40 UNI7436
34	8.0.1.01184	1	BEARING	6208/C3
35	0.404.7108.00	1	BUSH	80 UNI7437
36	8.5.2.00030	1	SNAP RING	M12x40 12.9 DCRT320
37	8.1.2.01530	5	BOLT	M8 ZINC. 8
38	8.2.1.00985	4	HEX. NUT	M8x25 8.8 DCRT320
39	8.1.2.01527	4	BOLT	M10 DCRT320
40	8.2.1.01528	135	HEX. NUT	
41	0.408.7100.00	1	REINFORCEMENT	
42	0.505.1302.00	8	MOUNTING	
43	0.404.7136.00	5	SPACER	
44	2.508.0301.00	1	CUTTERBED+COVER	
45	0.404.7101.00	84	SCREW	M10x30DCRT320
46	0.505.7101.00	16	SNAP RING	80
47	8.0.1.01918	16	BEARING	6208 N/C3
48	0.465.7050.00	16	NUT	
49	0.505.6001.00	2	GEAR	Z36 M3
50	0.404.7112.00	34	SCREW	M10x19 DCRT320
51	0.465.7049.00	16	PIN	
52	0.404.7107.00	16	BOLT	M20x30 DCRT320
53	0.404.7105.00	16	SPACER	40.3x51.5x3
54	0.404.7131.00	2	PLUG	3/8" GAS
55	8.3.0.01353	2	BOLT WASHER	17x22x1.5

POS.	DRG. N.	PIEC	DESCRIPTION	
56	8.2.6.00740	8	LOCKNUT	20X1,5H17,3
57	8.5.5.01425	8	BELLEVILLE SPRING	0.4X40X2.25
58	8.0.1.02267	8	BEARING	
59	0.404.7102.00	8	SCREW	M10x52 DCRT320
60	0.404.7100.00	8	BELLEVILLE SPRING	20X10,2X1,1
61	0.505.7100.00	8	BUSH	
62	8.0.1.02279	8	BEARING	6306 2Z/C3 KBC
63	0.505.5000.00	8	GEAR	Z34 M3
64	8.7.6.01244	8	O-RING	OR-3112
65	8.7.3.00044	8	OIL SEAL	40X56X8
66	0.404.7118.00	1	MOUNTING	
67	0.404.7137.00	3	SPACER	
68	0.420.7101.00	48	BOLT	M10x20
69	0.465.7005.00	8	SPACER	
70	2.404.7067.00	2	CONVEYOR	
71	0.404.7135.00	2	SPACER	
72	2.404.1330.00	1	MOUNTING	
73	8.7.6.02254	8	O-RING	OR-3425
251	A.142.001	1	OIL BREATHER PLUG	3/8" GAS
252	A.508.022	1	MOUNTING	
253	2.404.1319.00	1	BOLT	M10x22 12.9 DCRT320
254	8.1.2.01531	2	WASHER	Sp.1DCRT320
255	1.404.7109.00	16	SCREW	
256	0.404.7160.00	16	NUT	M12 DCRT320
257	0.404.7139.00	2	SPACER	
258	8.1.2.01532	2	BOLT	M10x35 12.9 DCRT320



comer industries

Spare part drawing



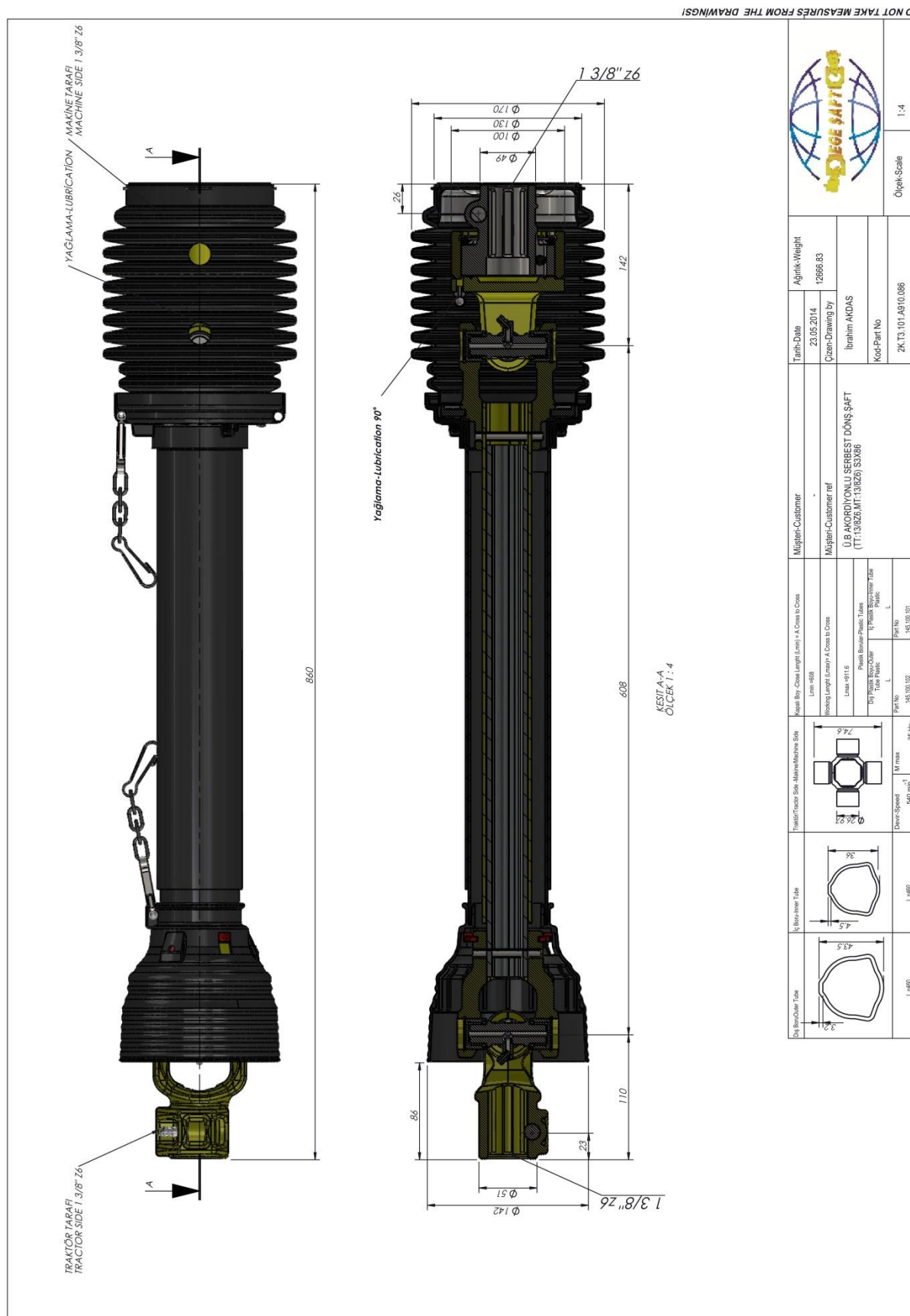


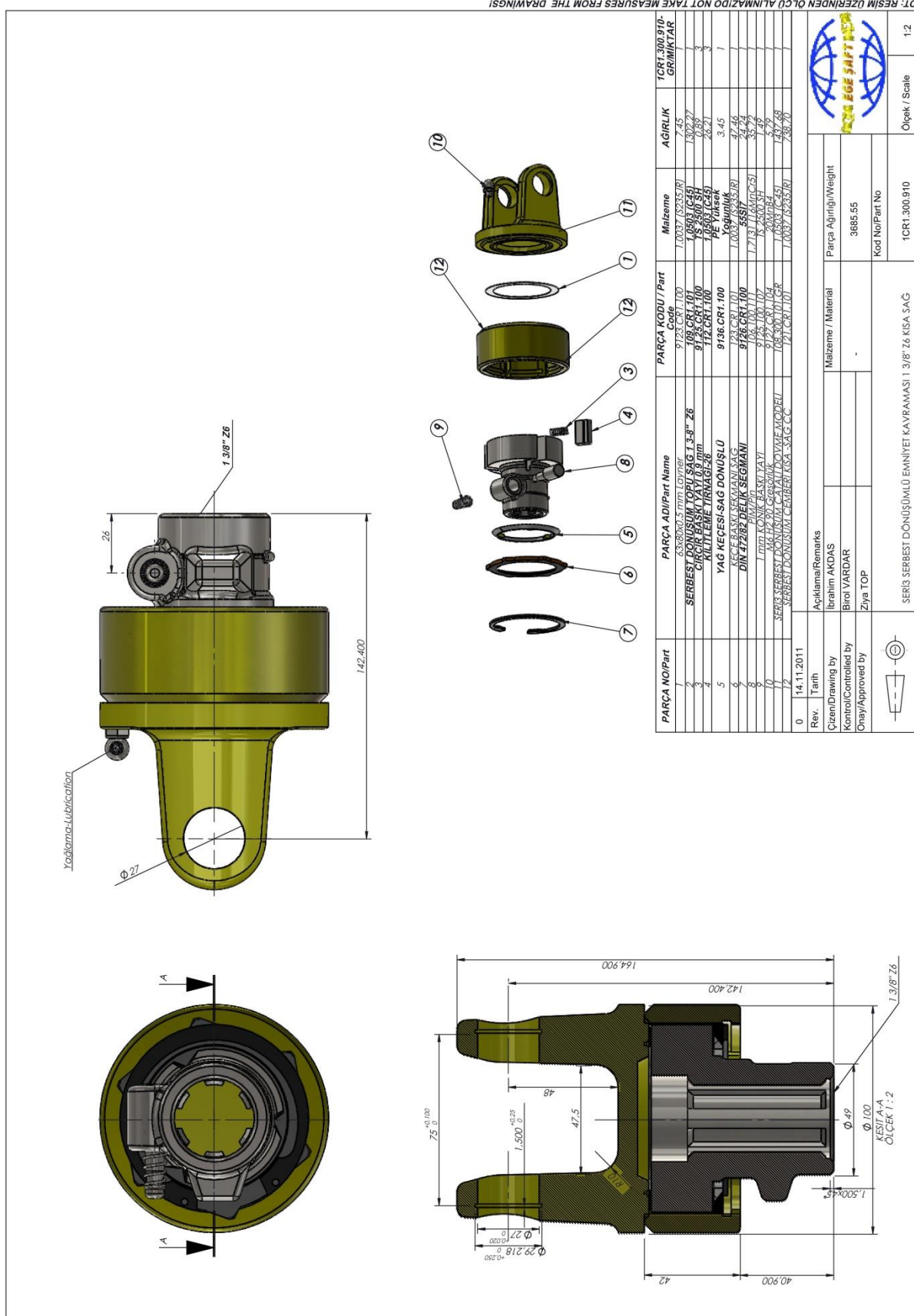
comer industries

List spare part drawing

DESIGNATION CUTTER BAR		A FR-505A		CODE N° 9.505.110.00	
POS.	DRG. N.	PIEC	DESCRIPTION	POS.	DRG. N.
56	8.2.6.00740	5	LOCKWUT	56	8.2.6.00740
57	8.5.5.01425	5	BELLEVILLE SPRING	57	8.5.5.01425
58	8.0.1.02267	5	BEARING	58	8.0.1.02267
59	0.404.7102.00	5	SCREW	59	0.404.7102.00
60	0.404.7140.00	5	BELLEVILLE SPRING	60	0.404.7140.00
61	0.505.7100.00	5	BUSH	61	0.505.7100.00
62	8.0.1.02279	5	BEARING	62	8.0.1.02279
63	0.505.5000.00	5	GEAR	63	0.505.5000.00
64	8.7.6.01244	5	O-RING	64	8.7.6.01244
65	8.7.3.00044	5	OIL SEAL	65	8.7.3.00044
66	0.404.7118.00	1	MOUNTING	66	0.404.7118.00
67	0.404.7137.00	1	SPACER	67	0.404.7137.00
68	0.420.7101.00	30	BOLT	68	0.420.7101.00
69	2.404.1330.00	1	MOUNTING SHOE	69	2.404.1330.00
70	2.520.1716.00	2	SLIDING SHOE	70	2.520.1716.00
71	0.404.7135.00	2	SPACER	71	0.404.7135.00
72	0.465.7005.00	2	SPACER	72	0.465.7005.00
73	8.7.6.02254	5	O-RING	73	8.7.6.02254
251	A.505.018	1	OIL BREATHER PLUG	251	A.505.018
252	8.5.7.00161	1	MOUNTING	252	8.5.7.00161
253	2.404.1319.00	1	SPACER	253	2.404.1319.00
254	0.404.7113.00	2	BOLT	254	0.404.7113.00
255	8.1.2.01532	2	BOLT	255	8.1.2.01532
256	8.1.2.01531	10	WASHER	256	8.1.2.01531
257	1.404.7105.00	10	SCREW	257	1.404.7105.00
258	0.404.7160.00	10	NUT	258	0.404.7160.00
259	0.404.7139.00	10	NUT	259	0.404.7139.00

DESIGNATION CUTTER BAR		A FR-505A		CODE N° 9.505.110.00	
POS.	DRG. N.	PIEC	DESCRIPTION	POS.	DRG. N.
1	0.142.7101.00	1	PLUG	1	0.142.7101.00
2	0.142.7103.00	2	BUSH	2	0.142.7103.00
3	8.0.3.00026	4	BEARING	3	8.0.3.00026
4	0.239.7500.00	4	SHIM	4	0.239.7500.00
5	8.4.1.01125	1	PARALLEL KEY	5	8.4.1.01125
6	0.142.5001.00	1	CROWN WHEEL	6	0.142.5001.00
7	0.142.0301.00	1	CASING	7	0.142.0301.00
8	0.142.1301.00	1	COVER	8	0.142.1301.00
9	8.1.1.01540	8	BOLT	9	8.1.1.01540
10	8.7.1.00769	1	DOUBLE LIP SEAL	10	8.7.1.00769
11	0.142.7100.00	1	BUSH	11	0.142.7100.00
12	0.142.2001.00	1	SHAFT	12	0.142.2001.00
13	8.7.6.00954	1	O-RING	13	8.7.6.00954
14	8.0.1.00644	1	BEARING	14	8.0.1.00644
15	8.7.3.00081	1	OIL SEAL	15	8.7.3.00081
16	0.259.7111.00	1	PLATE	16	0.259.7111.00
17	0.142.6000.00	1	PINION SHAFT	17	0.142.6000.00
18	8.5.1.00005	1	SNAP RING	18	8.5.1.00005
19	8.5.2.00030	2	SNAP RING	19	8.5.2.00030
20	8.7.6.01188	1	O-RING	20	8.7.6.01188
21	0.522.7003.00	5	FLANGE	21	0.522.7003.00
22	8.4.5.01205	2	SPRING PIN	22	8.4.5.01205
23	8.6.6.00435	2	OIL	23	8.6.6.00435
24	2.404.7085.00	3	REINFORCED DISC	24	2.404.7085.00
25	2.404.7067.00	3	CONVEYOR	25	2.404.7067.00
26	2.520.1714.00	2	SLIDING SHOE	26	2.520.1714.00
27	0.505.6002.00	6	GEAR	27	0.505.6002.00
28	0.420.7046.00	3	CAP	28	0.420.7046.00
29	0.404.7132.00	3	SCREW	29	0.404.7132.00
30	8.1.2.02353	3	BOLT	30	8.1.2.02353
31	8.2.1.01533	8	HEX. NUT	31	8.2.1.01533
32	0.505.6900.00	1	GEAR	32	0.505.6900.00
33	8.5.1.00680	1	SNAP RING	33	8.5.1.00680
34	8.0.1.01184	1	BEARING	34	8.0.1.01184
35	0.404.7108.00	1	BUSH	35	0.404.7108.00
36	8.5.2.00030	1	SNAP RING	36	8.5.2.00030
37	8.1.2.01530	5	BOLT	37	8.1.2.01530
38	8.2.1.00985	4	HEX. NUT	38	8.2.1.00985
39	8.1.2.01527	4	BOLT	39	8.1.2.01527
40	8.2.1.01528	87	HEX. NUT	40	8.2.1.01528
41	0.405.7103.00	1	BACK REINFORCEMENT	41	0.405.7103.00
42	0.505.1302.00	5	MOUNTING	42	0.505.1302.00
43	0.404.7136.00	2	SPACER	43	0.404.7136.00
44	2.505.0301.00	1	CUTTERBED+COVER	44	2.505.0301.00
45	0.404.7101.00	49	SCREW	45	0.404.7101.00
46	0.505.7101.00	11	SNAP RING	46	0.505.7101.00
47	8.0.1.01918	11	BEARING	47	8.0.1.01918
48	0.465.7050.00	11	NUT	48	0.465.7050.00
49	0.505.6901.00	5	GEAR	49	0.505.6901.00
50	0.404.7112.00	25	SCREW	50	0.404.7112.00
51	0.465.7049.00	11	PIN	51	0.465.7049.00
52	0.404.7107.00	11	BOLT	52	0.404.7107.00
53	0.404.7105.00	11	SPACER	53	0.404.7105.00
54	0.404.7131.00	2	PLUG	54	0.404.7131.00
55	8.3.0.01353	2	BOLT WASHER	55	8.3.0.01353





8.Warranty

WARRANTY CARD

Serial no.	Type
Year built	KJ

The manufacturer agrees to repair under warranty the physical defects of the machine disclosed during the warranty period, which lasts 12 months from the date of sale, cost free.

The manufacturer is released from the responsibility under warranty in case of:

- Mechanical defects of the machine after transferring it to the user
- Inappropriate operation, maintenance, storing of the machine, especially not in accordance with the User Manual
- Performing repairs by unauthorized persons without the manufacturer's permission
- Introducing changes in the design of the machine without making appropriate arrangements with the manufacturer
- Breaking of the gear guard caused by the shaft runout

The Warranty Card is valid if it has the seller's signature and the date of sale confirmed by the company stamp. There may not be any deletions or corrections of unauthorized persons.

The copy of the Warranty Card may be issued by a written request after providing the proof of purchase by the user.

The claims may be reported 14 days from the incurred damages immediately to the seller.

The manufacturer ensures the maintenance service within 14 days from the date of reporting of the claim to the day of repair.

The warranty is extended for the period of the repair, counting from the day of reporting to the day of performing the service, if the damage made it impossible to use the machine.

The warranty does not cover elements subject to natural wear, such as hydraulic hoses, tarpaulin covers, working discs, working slides, drive belts, blade holders, cutting blades, fasteners, bearings, bushings and sliding elements.

Date of sale: _____
(Day, month, year)
company)

(Signature and the Stamp of the selling
company)



WARRANTY REPAIRS

FILLED OUT BY THE MANUFACTURER

Date of reporting the claim: _____

The range of repairs and replaced parts: _____

Date of settling the claim : _____

Warranty extender to the date: _____

(signature and service stamp)

Date of reporting the claim: _____

The range of repairs and replaced parts: _____

Date of settling the claim : _____

Warranty extender to the date: _____

(signature and service stamp)

Date of reporting the claim: _____

The range of repairs and replaced parts: _____

Date of settling the claim : _____

Warranty extender to the date: _____

(signature and service stamp)

Date of reporting the claim: _____

The range of repairs and replaced parts: _____

Date of settling the claim : _____

Warranty extender to the date: _____

(signature and service stamp)

DECLARATION OF CONFORMITY

1. The product manufacturer:

TALEX Spółka z ograniczoną odpowiedzialnością Sp.K
Ul. Dworcowa 9C
77-141 Borzytuchom

2. Name of the product:

Disc Mower OptiCUT

Year built: Serial no.:

3. The product class:

PKWiU 29.32.31-70.90
Other mowers, not mentioned elsewhere

4. Purpose and range of application of the product:

Lightweight disc mowers
Are used to mow all green lowstalk plants
growing on meadows and fields on flat and stoneless surfaces

5. Documents:

EU provisions		Polish provisions	
Directive No.	Title	Name of document	No.
2006/42/WE	Machine Directive	Regulation of the Minister of Economy of 21 October 2006. on the basic requirements for machines	Acts. Law 199/1228
Nr normy	Tytuł		
PN-EN ISO 12100-1:2005	Machines. Safety. Basic terminology, general rules of design. Part 1: Basic terminology, methodology		
PN-EN ISO 12100:2011	Machine Safety – General rules of designing – risk assessment and risk reduction		
PN-EN 14121-1:2008	Machine safety – risk assessment – Part 1: Rules		
PN-ISO 730-1:1996	Wheeled tractors – rear Three point suspension system -- Class 1, 2, 3 i 4		
PN-EN ISO 4254-1:2009	Agricultural machines -- Safety – Part 1: General requirements		
PN-ISO 11684:1998	Tractors, agricultural and forest machines, moto tools. Safety signs and hazard pictograms. General provisions.		
PN-ISO 3600:1998	Tractors, agricultural and forest machines, moto tools – User Manual – Content and form		
PN-M-73022:1973	Hydraulic driver and steering – hydraulic steering components – classification and designation		
Quality Control Instructions	Quality Control Instructions 2012/03 Version 01		
Painting Instructions	Painting Instructions, wet paint layering 2012/02 Versio9n 01		
Welding Instructions	Welding Instructions MIG/MAG 2012/01 Version 01		

The conformity with the requirements of the directives and norms are based on the research conducted by the company: "FITMECH" Foundation of the Polish Engineers and Mechanical Technicians in Slupsk
The research was performer by: Zbigniew Myszk, appraiser SIMP NR 9763/11

I declare with full responsibility, that the product is in compliance with the reference documents listed in section 5.

Borzytuchom 02.01.2016
(place and date of issue)

Karol Jaworski

.....
(first and last name and the signature of the authorized by the manufacturer person)