

THE INSTRUCTION MANUAL
CATALOGUE OF PARTS
WARRANTY

LEOPARD 320/O PROFESSIONAL SHREDDER



Borzytucho 2014

Issue 02



ATTENTION!

Read this instruction manual prior to using the equipment and observe the safety rules described therein.

The instruction manual constitutes an inherent part of the machine!

Keep the instruction manual in a safe place, where it should be accessible to the machine operator during an entire lifespan of the machine.

In the event of its loss or damage, you must acquire a new copy from the machine dealer or manufacturer.

In the event the machine is sold or made available to another user, the instruction manual must be attached with the declaration of conformity for the machine.

The manufacturer reserves its copyrights to the instruction manual.

Copying, processing of the Instruction Manual and its parts without the manufacturer's permission is strictly prohibited



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1. Introduction

Before the first use of the shredder, you must thoroughly read and understand this instruction manual, and follow all the instructions contained herein.



ATTENTION!
Before use, read the instruction manual

This instruction manual contains a description of the hazards that can occur in case of non-compliance with safety rules during operation and maintenance of the shredder. The instruction manual specifies precautionary measures to be taken to minimize or avoid risks.

This manual also contains principles of correct use of the shredder and specifies the maintenance operations to be performed.

If you do not understand any information contained herein, please contact directly the manufacturer.



ATTENTION!
This warning symbol alerts about a hazard. The warning symbol indicates an important hazard information provided in the instruction manual. Please read the information carefully, follow the instructions and be exceptionally careful.

2. Rules of safe operation

2.1 User safety

The shredder can only be used by adults, who have learnt its operation and read this instruction manual, and are properly qualified. The shredders should be operated with all necessary precautions, in particular:

- In addition to this instruction manual, also observe the general rules of health and safety at work.
- Observe warning symbols placed on the machine.
- It is strictly forbidden, to operate the machine by persons under the influence of alcohol or other intoxicants.
- Never allow the vehicle towing the shredder to be driven by a person other than the shredder operator, and under no circumstances allow any other persons to be on the vehicle, or by the machine, during its operation.
- The shredder may be operated by an operator licensed to drive the vehicle onto which the shredder has been mounted, in line with the recommendations of its manufacturer.
- The operating position of the operator, while working with the shredder, is the cabin of the vehicle to which the machine is attached.
- Please note, that there are many elements of the shredder that may cause an injury (sharp edges, protruding parts, etc.). While using the equipment, exercise particular caution when moving close to the above-mentioned critical spots and obligatorily use the following personal protection equipment:
 - protective clothing,
 - protective gloves,
 - protective footwear.
- It is forbidden to carry persons or objects on the machine.
- It is forbidden that the machine should be operated by persons who are not familiarized with the instruction manual.
- The person operating the shredder should be provided with a first-aid kit containing measures for first aid, along with instructions regarding their use.
- Take special care when driving on public roads, and comply with the applicable road traffic regulations.
- When driving on public roads, it is essential to use the electric outline lighting of the vehicle, check its efficiency and visibility, and keep it clean. On the machine or on the rear of the vehicle a triangular plate must be fitted, distinguishing low-speed vehicles. Care should be taken about clarity and visibility of the reflective lighting and warning signs located on the structural elements of the machine.
- The transportation speed should be adjusted to the condition of a road surface, it should not exceed however 20km/h.
- Do not leave the vehicle with the shredder on a hillside or other sloping surfaces, without

securing the vehicle from rolling down. The shredder must be lowered to the ground.

Put wedges under the wheels of the vehicle.




- The shredder must be adjusted to working height, during its attachment to the vehicle. Setting adjustment is possible during the shredder operation which should be done from the inside of vehicle cabin, with the operator remaining in the cabin.
- Any preparations, fitting, dismantling or adjustment can be performed only after the drive has been switched off, the engine stopped, the vehicle immobilized and when all the moving parts of the machine have stopped.
- After the first hour of operation, check all disjoint connections, i.a. screw connections.
- The shredder should be kept on a flat, level, paved surface, out of the reach of strangers and animals. Use the support foot for stabilizing the shredder.
- Exercise caution during the mounting and dismounting of the shredder, and pay particular attention to the structural elements through which the cutter is connected with the vehicle.
- Prior to commencing work, check the technical condition of the shredder and the vehicle it is attached to. The vehicle and the shredder unit must be in good technical condition. Worn or damaged parts must be replaced immediately.
- The shredder must be equipped with all the safety guards (provided by the manufacturer), preventing access to any moving parts. The guards must be complete and fully operational.
- Before beginning to work with the shredder, familiarize yourself with the way it operates, occupational safety rules and recommendations for maintenance and adjustment procedures, by reading this instruction manual.
- The weight of the shredder mounted on the vehicle may affect the manoeuvrability. In this situation, particular caution should be exercised.
- The instruction manual should be kept on the machine. When letting the machine to other user, you must ensure that it is in good mechanical condition, and that the instruction manual is also handed over.
- Do not attach additional transport means to the shredder.
- By first start, check operation of the machine, and make the initial adjustment without load.
- TUZ (three-point hitch suspension system) assembly protection of the shredder with pins should be made only using the typical secure cotter pins. Do not use other securing elements.





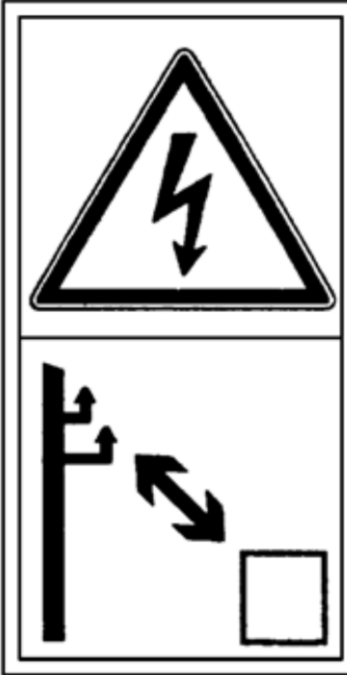

- Due to the natural wear and tear the state and completeness of cutting machine tools should be controlled, using the recommendations described in the instruction manual.
- Storage, warehousing of the machine should be carried out in places protected from outsiders and animals by eliminating the risk of accidental injury, on a flat, paved surface, under a roof.
- In the event of failure, immediately switch off the drive transferring power from the vehicle to mower.



Failure to follow the above rules may be dangerous for the operator and bystanders and can cause damage to the shredder. The user is responsible for any damages caused by the non-compliance to the above principles.

2.2. Safety signs on the machine

		
<p>1.0 – Prior to using the machine, read the instruction manual</p>	<p>1.1 – Switch off the engine and remove the ignition key before any servicing or maintenance procedures</p>	<p>1.2 – Keep a safe distance from the machine. Do not allow unauthorized persons within the range of 50 m from the machine</p>

 <p>1.1.1 – Warning, belt transmission. Use extreme caution. Drawing-in of hand and arm.</p>	 <p>1.1.2 – Warning, possibility of being drawn-in by the machine</p>	 <p>1.5 – Do not stand near the lifting jack connectors, when controlling the jack</p>
 <p>1.6 – Do not open or remove safety guards, when the engine is running</p>	 <p>1.7 – Keep a safe distance from power lines</p>	 <p>1.2.1 – Keep a safe distance from the machine. Crushing of toes or a foot – Force applied from the top</p>

		 <table border="1" data-bbox="1069 443 1340 533"> <tr> <td>bar</td> <td>kPa</td> </tr> <tr> <td>1,5</td> <td>150</td> </tr> </table>	bar	kPa	1,5	150
bar	kPa					
1,5	150					
<p>1.4 – Do not ride on platforms and ladders</p>	<p>2.1 – Place for holding on to the shredder during movement</p>	<p>2.5.1 – Warning about the pressure present in the tyres</p>				
						
<p>2.3 – Use protective suit</p>	<p>2.4 – Use protective gloves</p>	<p>2.5 – Use protective goggles</p>				

2.3. Hazards associated with the operation of the shredder

<i>Item No.</i>	<i>Hazard</i>	<i>Hazard source (cause)</i>	<i>Hazard protection measures</i>
1	Overloading the locomotor system (physical load)	Working in a standing position, inclined-forced position, walking, moving objects	Reading and understanding the instruction manual, workplace training including lifting standards for the manual transportation labour, proper techniques for lifting and carrying weights, use of another person's assistance, moving devices such as jacks, winches
2	Fall on the same level (tripping, slipping, etc.)	Uneven terrain, messy environment - objects lying and standing around, cables lying on communication roads, slippery surfaces	Suitable footwear, levelled terrain, paying attention, maintaining order, familiarization with the instruction manual
3	Hitting stationary, protruding parts of the machine	Machine and its surroundings	Proper positioning of a machine, safe space to move around, proper organization of work, paying attention, familiarization with the instruction manual
4	Struck by moving objects	Crushed plants, incidental part of the turf, stones thrown out by the machine	Paying attention, establishing a danger zone, prohibiting any traffic near the working machine, banning persons from standing within the range of less than 50 m from the working machine, using personal protective equipment - protective helmet, glasses, familiarization with the instruction manual
5	Sharp, dangerous edges	Protruding structural elements of the machine, use of manual tools	Personal protective equipment – protective gloves, buttoned up work clothes, paying special attention
6	Belt transmission systems	Fast moving transmission pulleys and belts, rotating jointed telescopic shaft, no covers on the movable parts	Ban of moving, approaching and making adjustments on the running machine, exercising caution, using shields of moving parts, reading the instruction manual
7	Weight of the suspended standing machine	Improper mounting, aggregating, wrong setting of the machine, improper operation, leaving the suspended machine on a tractor	Paying special attention, use of personal protective equipment - safety footwear, protective gloves, secure setting of the machine, help of another person, use of lifting jacks, davits, familiarization with the instruction manual
8	Micro climate - variable weather conditions	Work carried out in different weather conditions	Suitable working clothes, beverages, creams with sun screens, proper rest, familiarization with the instruction manual
9	Noise	Too high rotational speed of the machine, damaged, loose, vibrating parts	Work only with the machine in good mechanical condition, regular inspections, proper rotational speed, familiarization with the instruction manual

3. Intended use of the device

The LEO 320 PROFESSIONAL shredder is designed to destroy the remainders of plant crops and to shred the cut-down tree and shrub branches, it is perfect for mulching meadows and pastures. It is a machine suspended on tractors with ca. 120 horsepower powered from the PTO of the tractor by a jointed telescopic shaft to the power input shaft of the machine.

Mounting the machine to the vehicle is possible via the TUZ (three-point hitch suspension system) mounts.

The working element is the spinning shaft with the pivotally mounted teeth or hammers. This unit is driven from power input shaft, through angular transmission and belt transmission.

Complying with the requirements related to the use of machine, its operation and repairs, strictly according to the manufacturer's guidelines, is the precondition of the use of machine as intended. The machine should be used, operated and repaired only by persons familiar with its specific characteristics, who have learnt the rules of conduct prescribed by the occupational health and safety regulations.

The manufacturer offers a wide range of agricultural machinery. It can also provide professional advice in terms of choosing the right equipment for your needs.



Any doubts concerning the device's intended use should be resolved by contacting its manufacturer. Selecting the right device and knowing its intended use makes its operation safer.

4. Device description

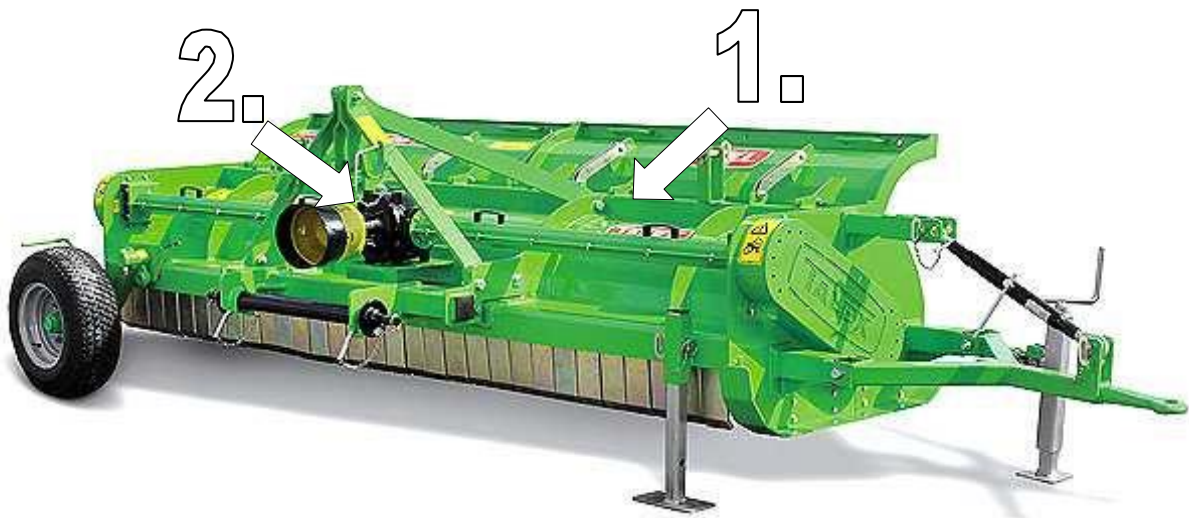


Fig.1 General view of the machine. Leopard 320/O

The shredders are made of two main construction elements. The first element – **the supporting framework with a transportation unit (1)**, made of steel elements, connected with each other by welding, constituting a compact and solid construction. The second element – **the shredder drive unit (2)** consists of the angular transmission with a transition of 1:3, belt transmission, bearing-mounted shaft and hammers (or blades) mounted pivotally on the shaft holders. The drive unit of the shredder starts the power input shaft of the machine. Everything is enclosed in safety guards. The machine has adjustable wheels leading the machine during work. The shredders are equipped with a sheet metal curtain preventing stones and hard objects from being thrown forward.

4.1. Equipment and accessories

4.1.1. Basic

The basic elements of the shredder include the following:

- The Instruction Manual
- The Warranty Card



The shredder is not supplied with a portable warning light or a triangular slow vehicle warning sign. These elements can be purchased separately from the manufacturer or in a farming equipment depot.

Each user of the machine should have a fully functional triangular slow vehicle warning sign. Failure to install these elements during transport may result in an accident. The machine user is responsible for the damage resulting from the accident.

4.1.2. Additional

1. A \varnothing 10.5 cotter/safety pin
2. C40210 power take-off shaft, (830Nm, L=1100mm) marked with CE 3 sign. PTO and power input shaft canopies
4. Central coupler to the tractor

Attention:

ALL OPTIONAL ELEMENTS OF THE MACHINE ARE AVAILABLE FROM THE MANUFACTURER AGAINST AN ADDITIONAL PAYMENT.

4.2. Technical specification

Table No. 1

TECHNICAL DATA ROZDRABNIACZ LEOPARD 320/O SHREDDER

Item No.	Details	Unit	Parameter
1.	Z086 type	-	320
2.	Mount type	-	Suspended
3.	Shredding width	[mm]	3200
4.	Power requirement, min	[KM]	120
5.	Compatible tractor class	-	0.9
6.	Number of working shafts	[pcs.]	1
7.	Number of blades	[pcs.]	92
8.	Number of hammers	[pcs.]	46
9.	Shredding height	[mm]	Horizontally acc. to pre-sets
10.	Tractor hitch class	-	II
11.	Set-up of the shredder for shipment	-	Horizontally
12.	Rotational speed of tractor's PTO	[rpm]	540
13.	Performance	[ha/h]	2.5
14.	Tyre pressure in supporting wheels	[bar]	1.5
15.	Working speed	[km/h]	8-10
16.	Transportation speed	[km/h]	20
17.	Number of operators	[pcs.]	1
18.	Overall dimensions		
	Length	[mm]	2200
	Width	[mm]	3700
	Height	[mm]	1200
19.	Weight	[kg]	1400

5. Using the device

5.1. Aggregating – installation of the shredder



Make sure that the connecting parts of both, the vehicle and the machine, are suitably adjusted to each other.

In case of any doubt, always ask the vehicle or the machine manufacturer.

I. Installation of the hitch system of the vehicle and the machine.

The machine is mounted on a three-point hitch suspension system of the tractor, vehicle. In order to facilitate aggregating the bottom tie-rods should be located at the height of ca. 350 mm. After hitching the machine, the length of the top coupler must be adjusted in such a way that the position of slides is parallel to the ground. The bottom tie-rod hitch chain should be adjusted in such a way that the lateral tilts of the machine are minimal.

Depending on the three-point hitch suspension system type (TUZ), make sure the original safety elements are present. Each time the shredder is mounted on the vehicle, check the connecting elements, i.e. pins and plugs, for wear. In case of wearing out replace them with new ones.

II. Installation of the machine's drive shaft.

After mounting the machine on the three-point hitch suspension system, mount the jointed telescopic drive shaft onto the PTO of the tractor and the power input shaft of the machine and lift the support to the upper position.



Use only the original C40210, (830 Nm, L=1100mm) jointed telescopic shaft for the shredder drive, marked with the CE sign and PTO and power input shaft canopies.

Check if the latches are securely clamped after sliding the jointed telescopic shaft caps onto the PTO and power input shaft canopies.

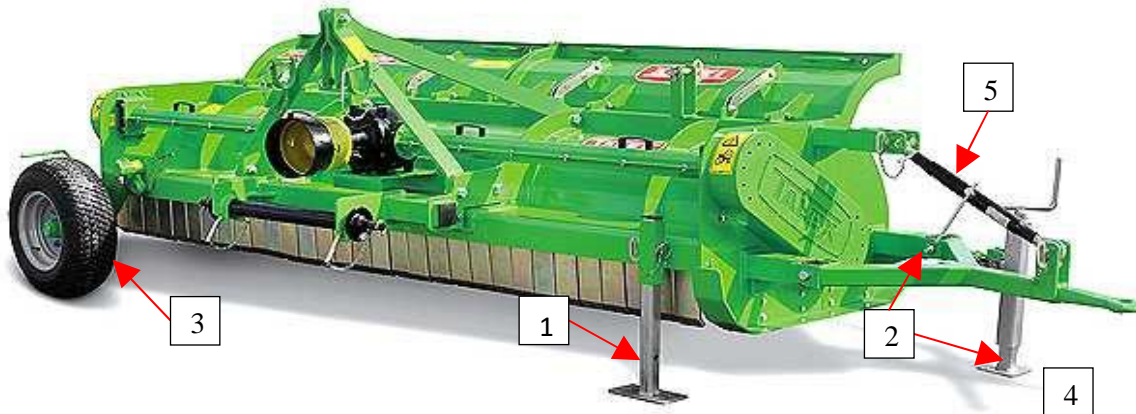


To dismount the machine, follow the above instructions in a reverse order, exercise particular caution when disconnecting the mechanical system between the machine and the vehicle.

5.2. Leo 320 Professional shredder transportation position

Due to the large dimensions, exceeding the permissible transport width, the shredder cannot be transport in the working position. According to the traffic law regulations, the shredder must be pulled behind a tractor, using an additional hitch.

The picture below shows the shredder in the parking position.



When in the parking position, the machine should rest on the support feet (pos. 1, pos. 2) and on the ground wheels (pos. 3). If we want to transport the shredder, the additional transport hitch must be deployed (pos. 4). The transport hitch should be deployed and set in a horizontal position. Use the adjustable support (pos. 2) to adjust it. After levelling out the hitch, adapt the length of the central coupler (pos. 5). The next step is to close any covers and check if the transport wheels (pos. 3) are locked in the correct position, as well as if all the pins are secured from moving by means of safety pins.

After performing the control activities, when everything has been checked, aggregate the tractor with the machine. After the aggregation, lift the supports (pos. 1, pos. 2) up and secure them from dropping. Remember to use the warning triangle when moving on public roads. Remember that after the shredder has been transported to the workplace, the transport hitch needs to be set in the working position, the additional transport wheel (pos. 3) must be lifted up and the ground wheels moved into the required working position.



The position of the additional transport hitch during work

6. Operation and maintenance

All the machine operations can be performed by the operator of the vehicle, to which the machine is attached, providing he/she has proper authorization to operate this vehicle.

Operating the machine is permissible only after reading the instruction manual.

- When commissioning and transporting the shredder, inspect its technical condition to check for damage.
- It is forbidden to stand under the raised shredder, as it may result in being crushed by the structural elements.
- When adjusting, do not place your fingers and limbs between the structural elements of the machine.
- The operator of the vehicle working with the shredder must ensure that no person approaches the machine during its operation and adjustment, and **the distance of not less than 50m from the working shredder** is always maintained.
- When turning, reversing or manoeuvring with the machine, you must ensure, that your visibility is adequate, or get assistance from a properly trained person.
- Do not stay between the vehicle and the shredder when the vehicle engine is running.
- Working on slopes exceeding 15% is not allowed.
- Exercise particular caution when working on slopes.
- When making turns and returns turn off the PTO (power take-off shaft).
- It is forbidden to operate the machine in close proximity of public squares (parks, schools, etc.) or on stony grounds, to avoid the danger coming from the thrown out stones and other objects.
- Do not allow the PTO working speed to exceed 540 rpm, while driving speed must be adjusted to the type of work being done.
- Using a damaged or incomplete jointed telescopic shaft is prohibited. In particular, it is strongly forbidden to work without covers on moving parts.
- Never leave a vehicle with the engine running. Before leaving the driver's seat (the cabin), lower the machine to the ground, turn off the engine of the vehicle, remove the ignition key, and apply the handbrake.
- Make sure that during work, fitting, dismantling or adjustment of the machine, no parts of your work clothing are unbuttoned or hanging loose. Keep them away from components that can catch them.
- After work it is recommended to clean and wash the shredder in the wash fitted with a sewage treatment plant or a settler to neutralize the resulting waste water.

6.1 Adjustment of the belts tension

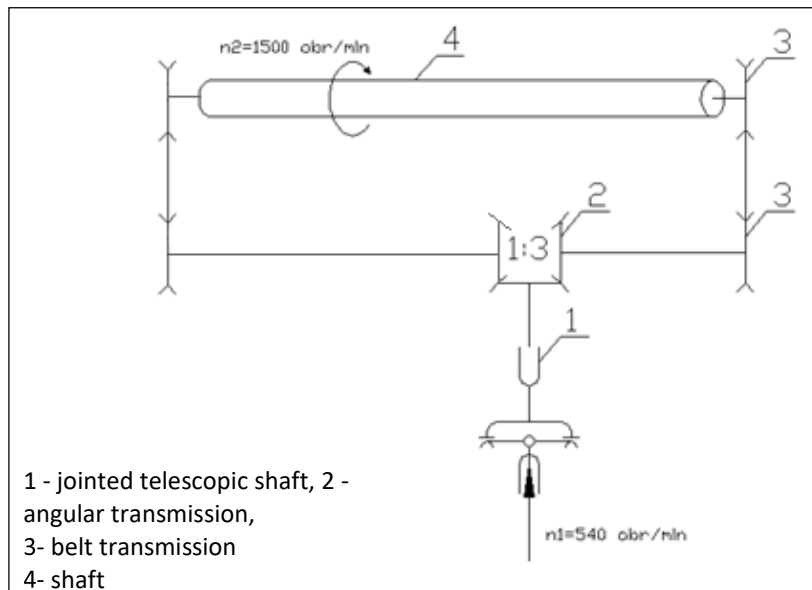


Fig. 3 Shredder drive diagram

The adjustment of the transmission drive belts tension is done with the machine turned off and the vehicle engine switched off. Refer to Fig. 4. The optimal tension of the belts – under the pressure of 100N (10kG) the belt bends 1.5 - 2.5 cm. The successive activities need to be carried out in the following manner:

1. First, loosen the bolts holding the transmission
2. Remove the belt transmission shield,
3. Check the condition and tension of the V-belts (replace the damaged ones with new),
4. Loosen the nut (1),
5. Tighten the bolt (2) checking the tension of belts,
6. Secure the bolt with the lock nut,
7. Tighten the nut (1),
8. Install the metal transmission shield,
9. Tighten the transmission bolts.



ATTENTION!!!

To ensure the correct performance of the transmission, tighten the belts simultaneously for each side.

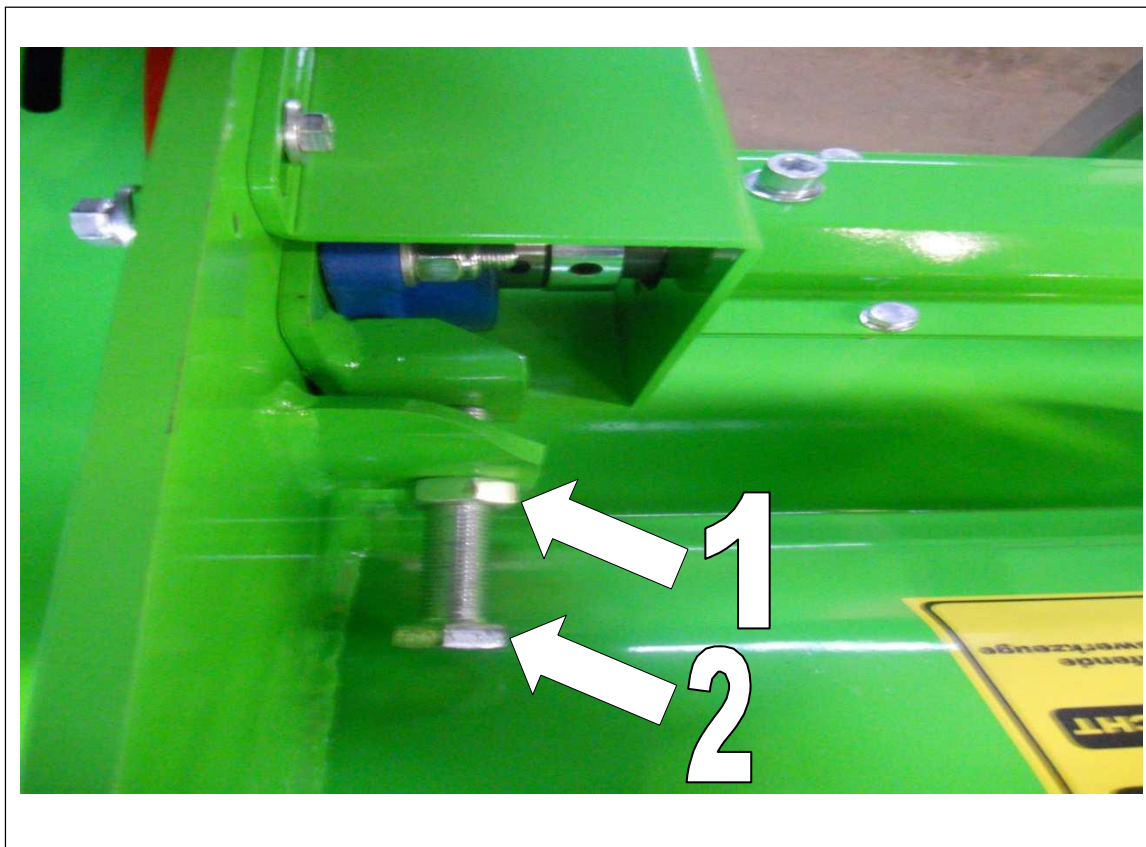


Fig. 4. Adjustment of the transmission belts tension

6.2 Adjustment of the cover – LEO 320 PROFESSIONAL shredder

The LEO 320 PROFESSIONAL shredder has an additional function which allows a greater spread of the shredded plant parts. The machine is equipped with an openable cover.

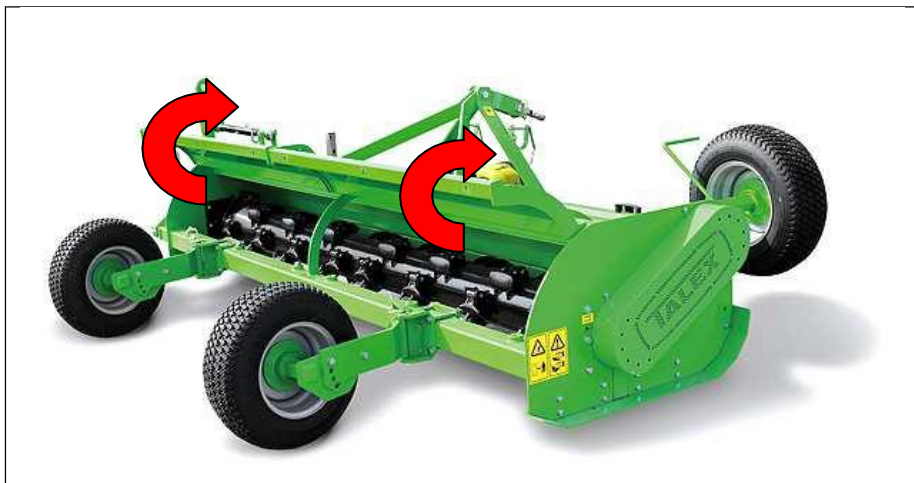


Fig. 5 Lifted cover of the LEO 320 PROFESSIONAL shredder

The liftable cover is on one side mounted pivotally to the frame of the shredder, on the other side it is fixed with bolts. Lift the shield and fasten it in the open position with the fastening bolts after unscrewing the bolts.

6.3 Replacement of the blades, hammers

Depending on the customer's requirements, the working shaft is equipped with the appropriate equipment in the form of shredding tools. They are 3.4 (908-01-01-00-07) blades or 3.8 (Z-908) hammers Fig. 6.

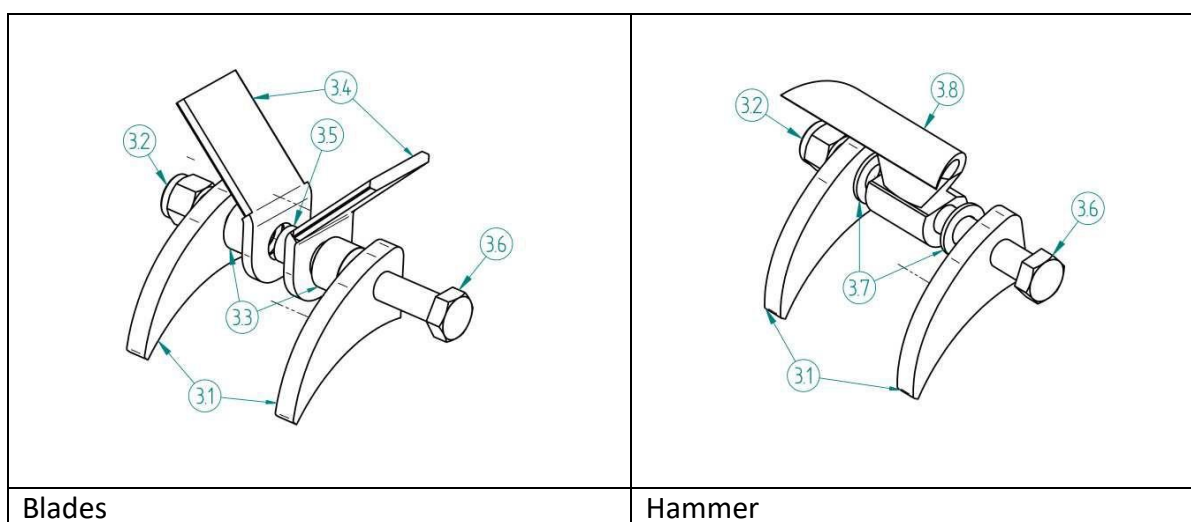


Fig. 6 Blades and hammers mount drawing



The shredding tools must be replaced after discovering defects, noticeable signs of wear, blunting of the cutting edges, missing blades or hammers, or excessive play of the mounted tools.

Table No. 2

MAXIMUM PLAY OF THE SHREDDING TOOLS

Play	nominal [mm]		permissible [mm]	
	Blade	Hammer	Blade	Hammer
Axial transverse	0.2	0.3	0.5	0.6
Axial longitudinal	0.1	0.2	0.4	0.6

The shredding tools must be replaced in compliance with the specific safety rules.

1. Use only the original and functional parts for the cutting units
2. The replacement must each time include the full set of tools. You must remember about the uniform distribution of the rotating masses, to ensure the uniform wear of the tools.
3. The bolt connections need to be replaced with new ones each time the tools are replaced, paying attention to the durability 8.8 of the bolt and the self-locking nut.
4. When tightening the bolt connection, pay attention to the free (without excessive play) rotation of the tool in relation to the bolt axis.

6.4 Maintenance after work

Each time your work has been completed, clean the machine and position it on a flat and hard ground. Carry out an inspection of connections between the parts and units. Damaged and worn out parts replace with new ones. Check all the bolt connections and tighten the loose ones, according to the table on tightening torque values for bolts and nuts.

All safety signs on the machine and the triangular plate distinguishing slow vehicles should be kept clean.

Table No. 3

TIGHTENING TORQUE VALUES FOR BOLTS AND NUTS

Durability	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

At least once a year check the level of oil in the angular transmission. Use the GL 4 80W90 type transmission oil. The oil volume in the transmission is 3.3 l.

It is also necessary to check the tension of V-belts, replace the damaged ones with new, adjust the whole set in accordance with the instruction - 6.1 Adjustment of the belts tension.

It is important to check the play of axes and shafts. Replace the axis or shaft bearings (always in pairs) with new ones, according to the catalogue of spare parts, in case a noticeable play is discovered. All bearings have ZZ dirt protection rings.

6.5 Lubrication

To ensure the correct performance of the machine, it must be thoroughly and properly lubricated according to the diagram - Fig. 6.



Fig. 6. Lubrication diagram

All points marked on Fig. 6, equipped with ball grease fittings, should be filled with solid grease ŁT43 by means of a lubricator. Lubricate the jointed telescopic shaft after removing it from the machine. Lubricate the telescopic part of the shaft at least after 8 hours of operation - when the shaft is entirely moved apart and impurities have already been cleaned.

6.6 Post-seasonal maintenance

Includes all activities specified in the item "Maintenance after work". In addition, the machine should be stored under shelter, on a flat and hard surface. Attention should be paid to the tightness of paint coat. If there are any defects in the coat, clean the spot and apply a new protective coating.

6.7 Scrapping, environment

In the event the machine is worn to the extent which prevents its further use, it should be scrapped. This also applies to regular repairs and replacement of damaged parts. Clean the machine thoroughly before scrapping. Drain oils from the machine and have the machine decommissioned. Next, disassemble the machine by segregating its parts based on the applied materials. Segregated parts should be transported to a scrap yard or disposed of.

The machine is 100% environmentally friendly. 97% of the materials used in the production process are recyclable. Worn machine parts must be disposed of in line with the local environment protection regulations. Prevent oil leakage throughout the period of use of the machine, as oil may pollute the environment.

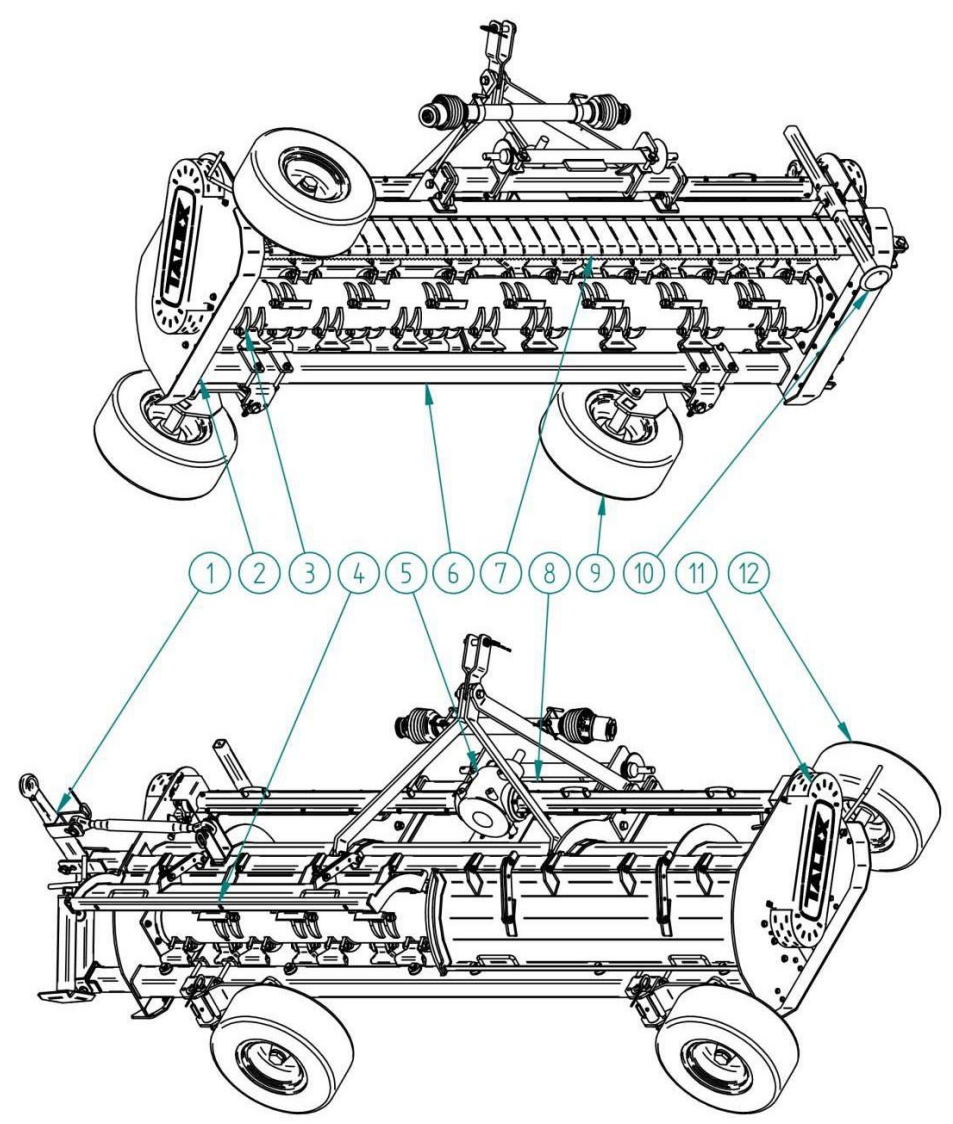


7. Spare parts catalogue

Spare parts catalogue

Professional 3200


shredder



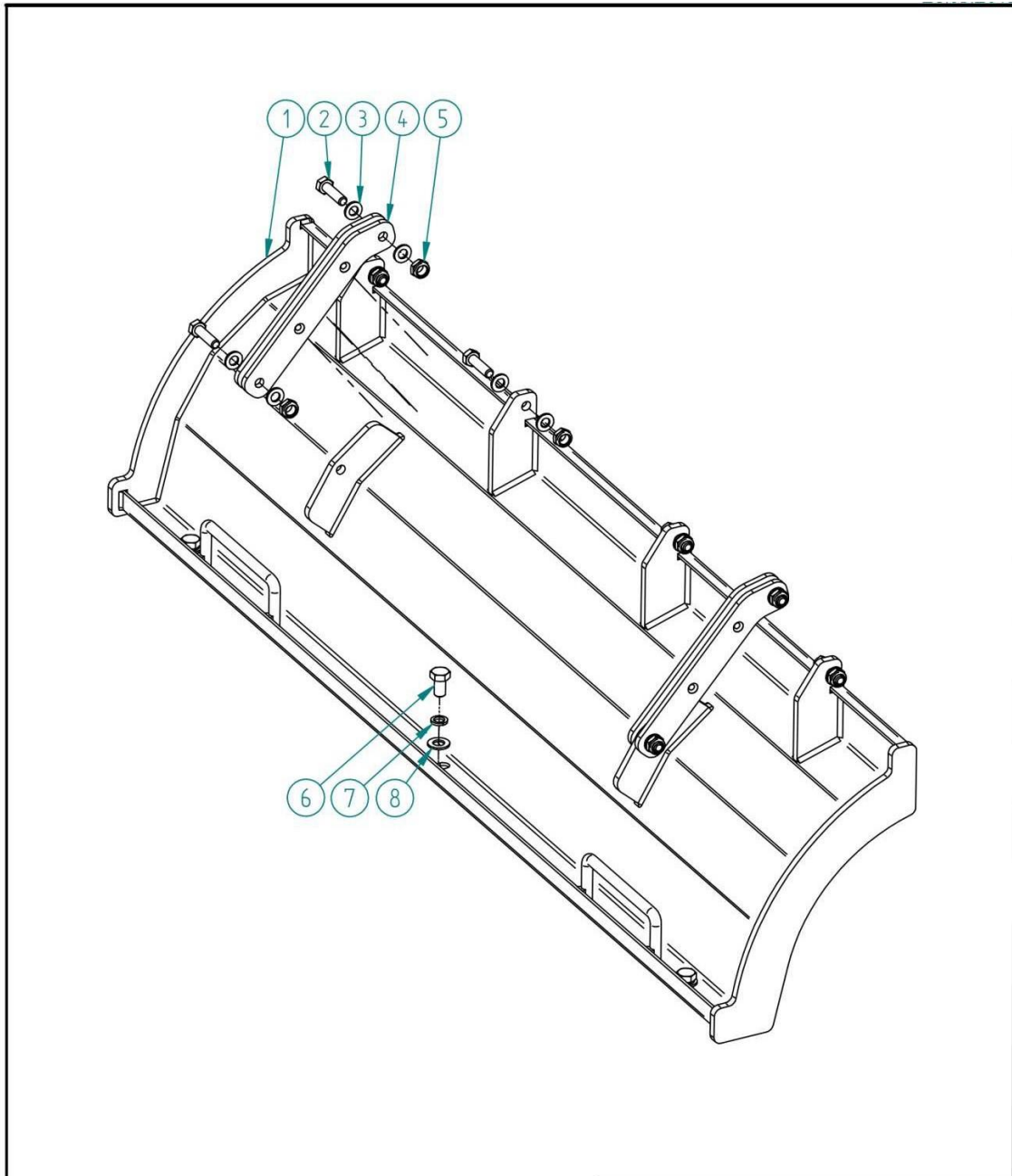
Parts list			
Item No.	Part name	Part no.	Quantity
1	Transport hitch	R_PROF 3200_05.00.00.00	1
2	Slide	R_PROF 3200_07.00.00.00	1
3	Working shaft	R_PROF 3200_01.00.00.00	1
4	Cover	R_PROF 3200_03.00.00.00	2
5	Drive system	R_PROF 3200_13.00.00.00	1
6	Welded body	R_PROF 3200_04.00.00.00	1
7	Curtain	R_PROF 3200_11.00.00.00	1
8	Working three-point hitch	R_PROF 3200_06.00.00.00	1
9	Swivel wheel	R_PROF 3200_09.00.00.00	2
10	Parking support	R_PROF 3200_12.00.00.00	1
11	Belt transmission shield	R_PROF 3200_08.00.00.00	2
12	Fixed wheel	R_PROF 3200_10.00.00.00	1

R_PROF 3200 - components


Professional 3200 shredder

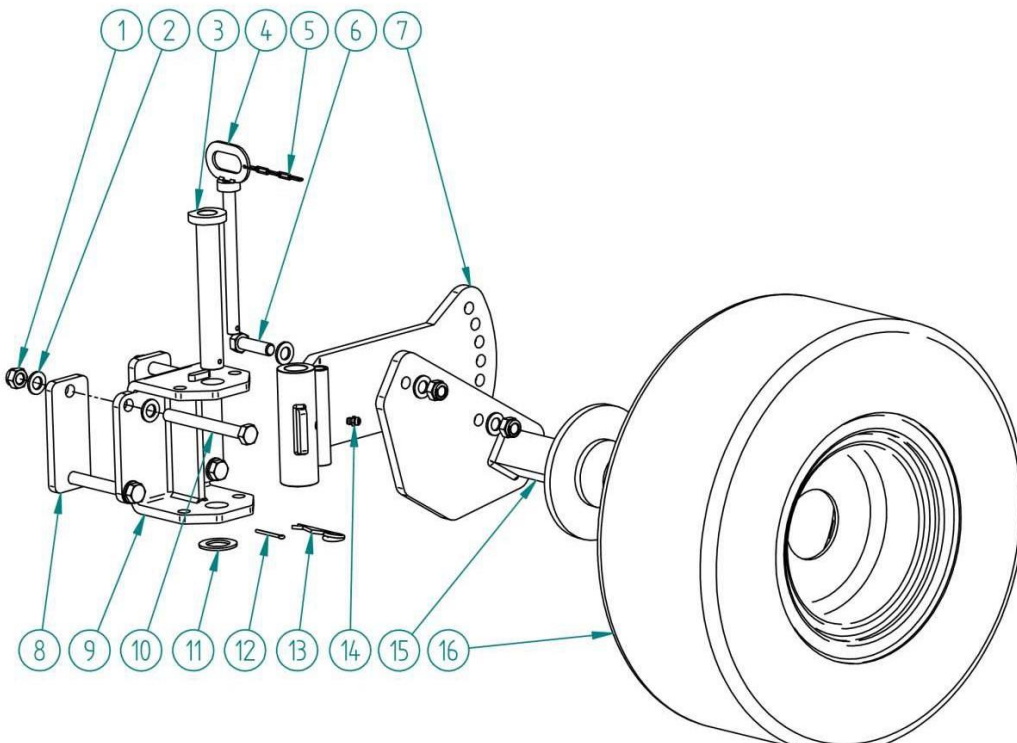


Spółka z ograniczoną odpowiedzialnością
 Spółka komandytowa
 ul. Dworcowa 9 C
 77-141 Borzytuchom




Parts list			
Item No.	Part name	Part No.	Quantity
1	Cover	R_PROF 3200_03.00.00	1
2	Bolt 6-kt.M12x90x30-8.8-OC	11-0012/A	8
3	Round washer f12-OC	11-0125/A	16
4	Flap positioner	R_PROF 3200_03.01.00	2
5	Nut 6-Rt.M12-8-OC-samoz.par	11-0128/B	8
6	Bolt 6-Rt.M14x20-8.8-OC	11-0258	3
7	Spring washer f14-OC	11-0090	3
8	Round washer f14-OC	11-0171	3

 Spółka z ograniczoną odpowiedzialnością Spółka komandytowa ul. Dworcowa 9 C 77-141 Borzytuchom	Flap - Parts list Professional 3200 shredder
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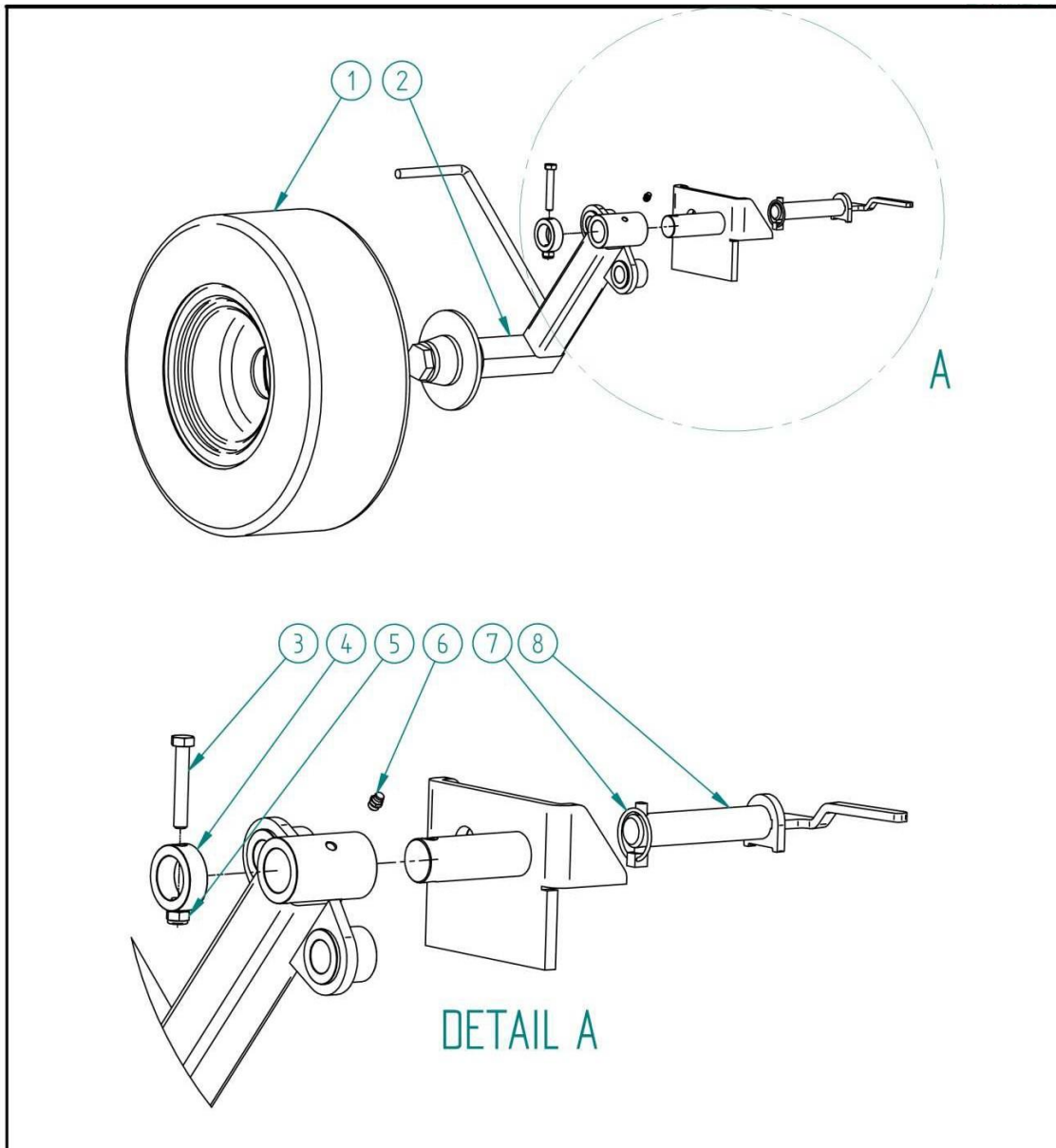
Parts list			
Item No.	Part name	Part No.	Quantity
1	Nut 6-kt.M16-8-OC-samoz.	11-0143/1	6
2	Round washer fi 16-OC	11-0149	12
3	Wheel steering axis pin		1
4	Wheel steering lock pin		1
5	Long link chain 2x22x6 DIN 763	12-1078/B	1
6	Bolt 6-kt.M16x60-8.8-OC	11-0111/A	2
7	Driving wheel mount		1
8	U-profile to frame mount		2
9	U-frame with sheet		1
10	Bolt 6-kt.M16x120-8.8-OC	11-0079/A	4
11	Washer #3 of the driving wheel axis pin		1
12	Split linchpin 5x40	11-0104/A	1
13	Beta pin 4x100, double	14-0029/E	1
14	Straight grease nipple M10x1	01-0276	1
15	Driving wheel hub		1
16	Ground wheel 23x8.5-126PR TL K500	23-0020/C	1



Spółka z ograniczoną odpowiedzialnością
 Spółka komandytowa
 ul. Dworcowa 9 C
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Driving wheel - Parts list

Professional 3200 shredder



DETAIL A

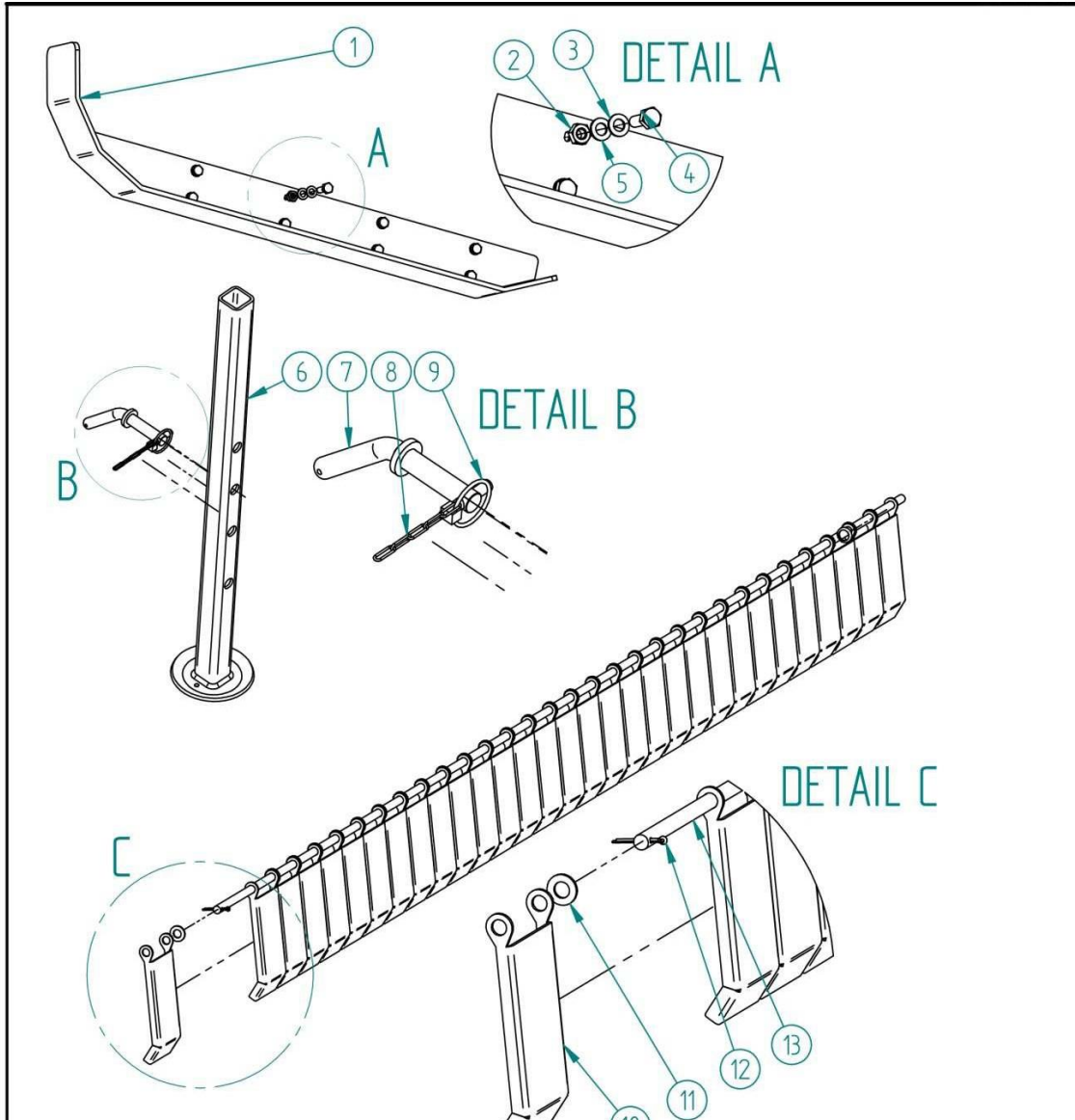
Parts list			
Item No.	Part name	Part No.	Quantity
1	Ground wheel 23x8.5 126PR TL K500	23-0020/C	1
2	Fixed wheel/hub mount	R_PROF 3200-10.01.00.00	1
3	Bolt 6-cat. M12x80x50-8 8-OC	11-0201	1
4	Wheel position axis securing ring	R_PROF 3200-04.07.00.04	1
5	Nut 6-klM12-8-OC-samoz.	11-0128/B	1
6	Straight grease nipple M10x1	01-0276	1
7	Universal pin 10.5x45	01-0686	1
8	Fixed wheel position pin	R_PROF 3200-10.02.00.00	1



Spółka z ograniczoną odpowiedzialnością
 Spółka komandytowa
 ul. Dworcowa 9 C
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Fixed wheel - Parts list

Professional 3200 shredder




DETAIL A

DETAIL B

DETAIL C

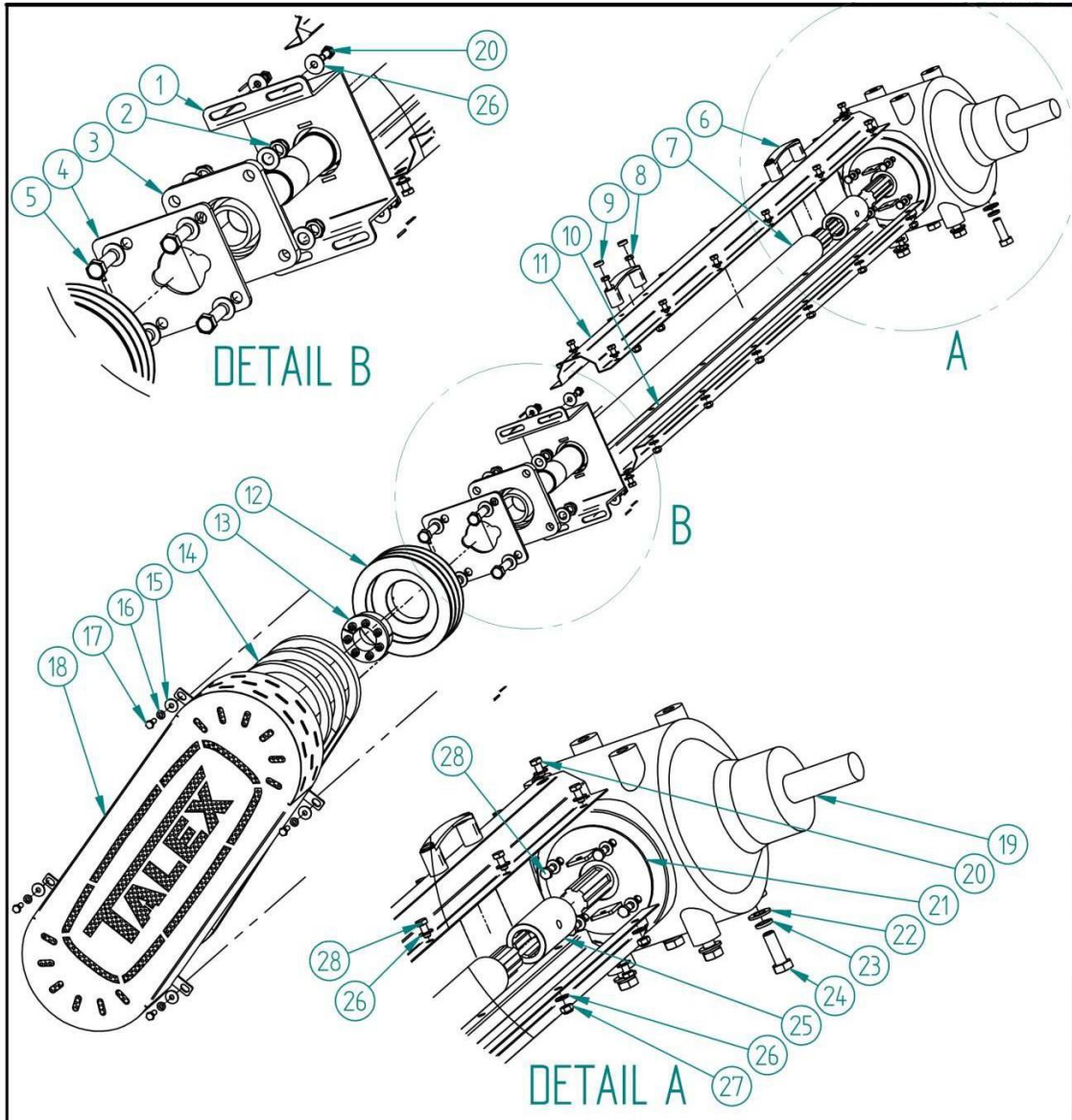
Parts list			
Item No.	Part name	Part No.	Quantity
1	Skid	R_PROF 3200-07.00.00.00	1
2	Nut 6-kt.M10-8-OC-samoz	11-0127/A	9
3	Simple washer f10-OC	11-0055/A	9
4	Bolt 6-kt.M10x30-8.8-OC	11-0026	9
5	Spring washer fil O-OC	11-0090	9
6	Foot	R_PROF 3200-12.00.00.00	1
7	Foot pin	R_PROF 3200-12.01.00.00	1
8	Long link chain 2x22x6 DIN 763	12-1078/B	1
9	Universal pin 10.5x45	01-0686	1
10	Shield	R_PROF 3200-11-00.00.02	31
11	Round washer f14-OC	11-0171	30
12	Split linchpin 5x40	11-0104/A	1
13	Cover tie rod	R_PROF 3200-11.00.00.01	1



Spółka z ograniczoną odpowiedzialnością
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Curtain, slide, foot - Parts list

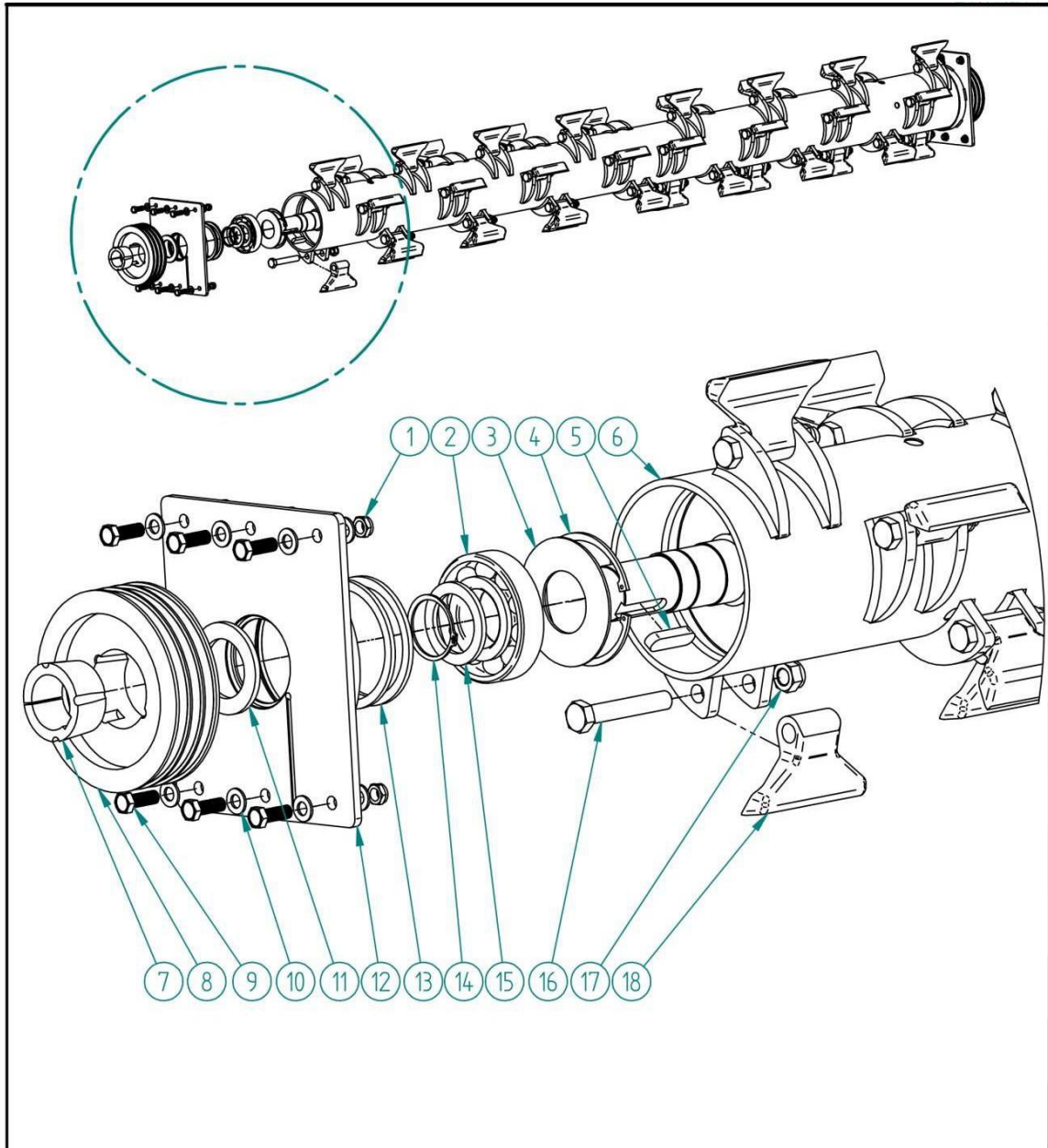
Professional 3200 shredder



Parts list			
Item No.	Part name	Part No.	Quantity
1	Drive shaft shield side mount	R_PROF 3200-13.00.01.00	1
2	Nut 6-kt.M14-8-OC-samoz.par	11-0186/B	4
3	Bearing assembly UCF 209 SNR	06-0433	1
4	Tensioner	R_PROF 3200-13.02.01.01	1
5	Bolt M14 x 45-8-8-OC	11-0135	4
6	HGA holder 117mmT115511	12-1162	2
7	Drive shaft	R_PROF 3200_13.00.00.01	1
8	Socket head bolt M8x25-8-8-OC.par	11-0196	4
9	HGA 117 holder plug	12-1163	4
10	Lower drive shaft shield	R_PROF 3200_13.00.00.02	1
11	Upper drive shaft shield	R_PROF 3200_13.00.00.01	1
12	Pulley fi 189 SPB	10-0945	1
13	Clutch 225-40x80 (Clampex)	12-0939	1

Parts list			
Item No.	Part name	Part No.	Quantity
14	V-belt HB 1600	07-0202	3
15	Extensional washer M8.din 9021-OC.par	11-0053	8
16	Spring washer M8-OC	11-0056	4
17	Bolt 6-kt. M8x25-8-8-OC.par	11-0187/A	4
18	Belt transmission shield	R_PROF 3200-08.00.00.00	1
19	Angular transmission T-269B	12-1037/N	1
20	Bolt 6-kt M8x 16-8-8-OC	11-0049	6
21	Drive shaft shield mount	R_PROF 3200-13.00.02.00	1
22	Round washer fi16-OC	11-0149	12
23	Spring washer fi16-OC	11-0090	4
24	Bolt 6-kt.M16x30-8-8-OC	11-0009	4
25	Splined bushing 1 3/8 L=100	R_PROF 3200-13.00.03.00	1
26	Round washer fi8-OC	11-0049	32
27	Nut 6-kLM8-8-OC-samoz.	11-0040	16
28	Bolt 6-kt M8x20-8-8-OC	11-0187/A	16

 Spółka z ograniczoną odpowiedzialnością Spółka komandytowa ul. Dworcowa 9 C 77-141 Borzytucho	Drive system - parts list
	Professional 3200 shredder



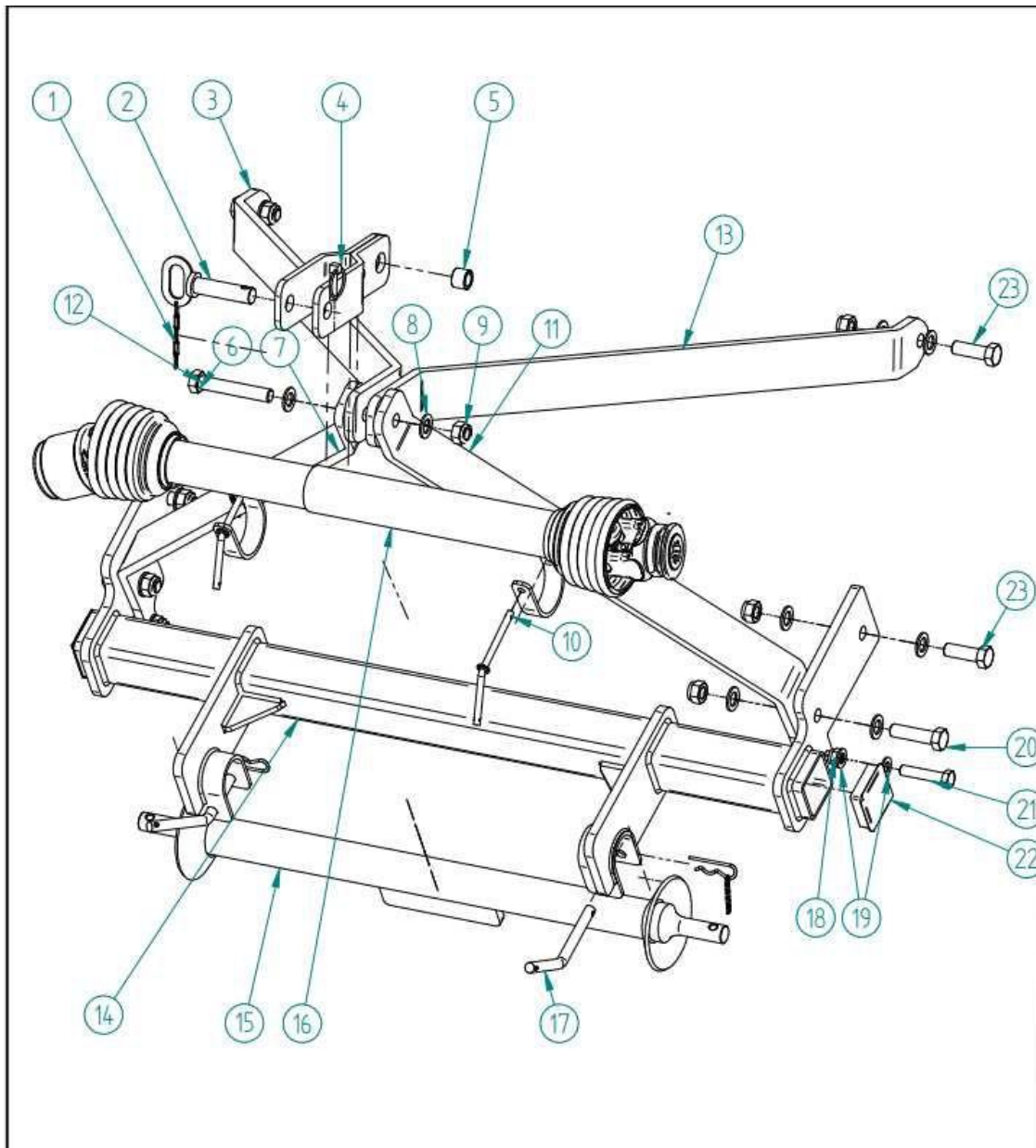
Parts list				Parts list			
Item No.	Part name	Part No.	Quantity	Item No.	Part name	Part No.	Quantity
1	Nut 6-kt.M14-8-OC-samoz.par	11-0186/B	12	10	Round washer fil4-OC	11-0171	24
2	Bearing 21313 EXQW33	06-0432	2	11	Shaft seal TC 65 100 10	08-0363	2
3	Bearing cover in fitting	R_PROF 3200_02.00.02	2	12	Flange with setting of bearings and band-iron	R_PROF 3200_02.01.00	2
4	Retaining ring W 140 DIN 472	08-0364	2	13	Bearing spacer	R_PROF 3200_02.00.01	4
5	Parallel key 18x11x56 PN-70_M-85005	12-1138	2	14	Retaining ring Z 65 DIN 471	08-0249	2
6	Welded working shaft	R_PROF 3200-01.01.00.00	1	1 b	Bearing spacer on the working shaft	R_PROF 3200-01.00.00 02	2
7	Clutch TB 251760 REM	12-0940/H	2	16	Bolt 6-kt M20x 150-8-8-OC	11-0252	46
8	optibelt_tbspb21232517	12-0945/D	2	17	Nut 6-kt.M20-8-OC-samoz.	11-0163/1	46
9	Bolt M14x40-8-8-OC.par	11-0134	12	18	Mulcher hammer RMOD	R_PROF 3200-01.00.00.01	46



Spółka z ograniczoną odpowiedzialnością
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Working shaft - parts list

Professional 3200 shredder



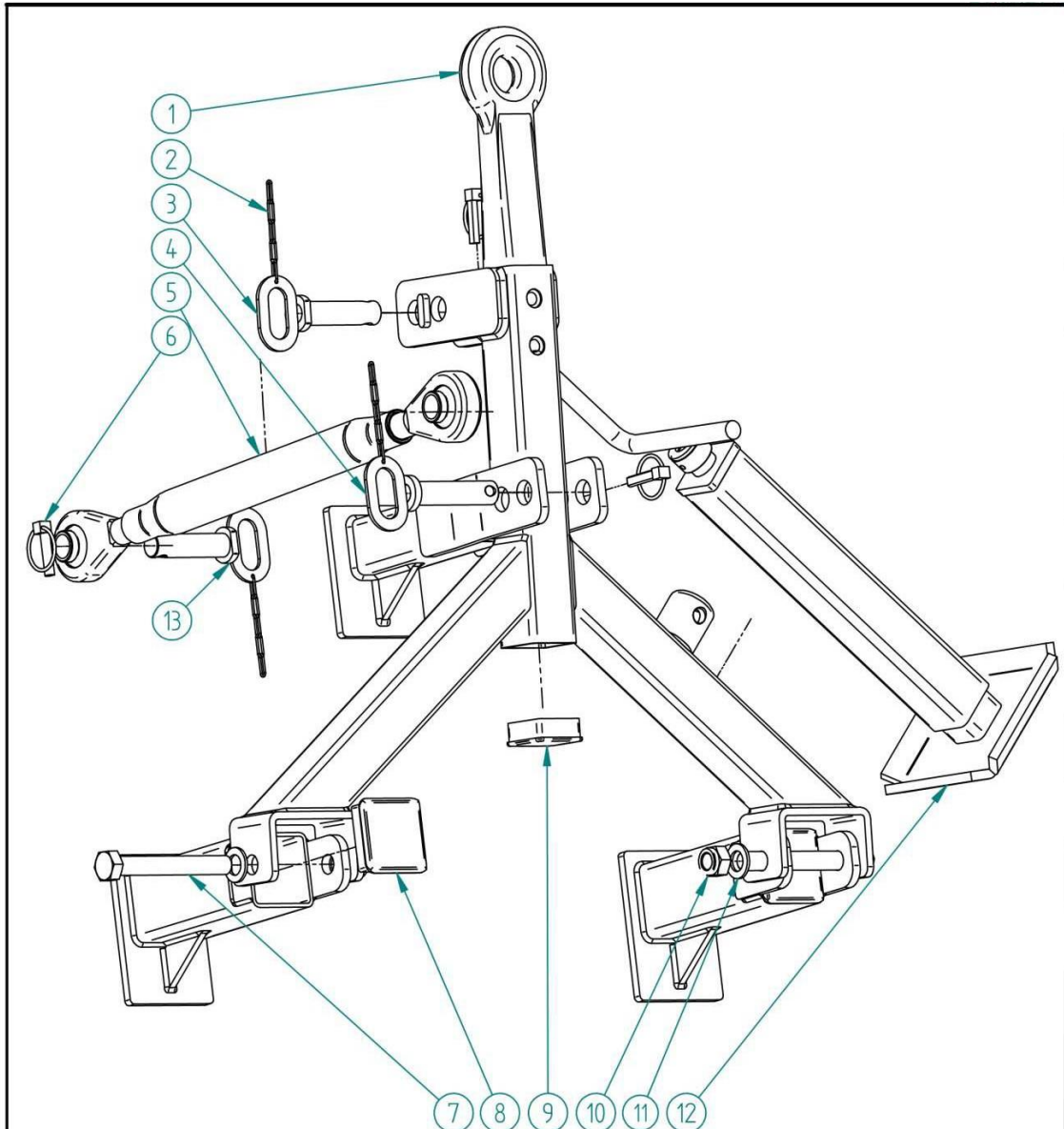
Parts list				Parts list			
Item No.	Part name	Part No.	Quantity	Item No.	Part name	Part No.	Quantity
1	Long link chain 2x22x6 DIN 763	12-1075/B	5	13	Working three-point hitch flat bar	R_PROF 3200-06.02.00.02	2
2	Pin fi 25x96	R_PROF 3200-06.00.01.00	1	14	Working three-point hitch	R_PROF 3200-06.00.00.00	1
3	Working three-point hitch central holder	R_PROF 3200-06.02.01.00	1	15	Working three-point hitch shaft	R_PROF 3200-06.0100.00	1
4	Universal pin 10.5x45	01-0656	1	16	PTO shaft 530 Nm. L=1110	12-0295/I	1
5	Spacer bushing in the working three-point hitch	R_PROF 3200-06.02.00.03	1	17	Safety bolt 2	R_PROF 3200-06.06.00.00.06	2
6	Bolt 6-kt.M20x150-5.5-OC	11-0147	1	18	Nut 6-kt.M16-6-OC-samoz.	11-0143/I	2
7	Flat bar with working hitch eye (mirror)	R_PROF 3200-06.02.02.D0_odb	1	19	Round washer fi16-OC	11-0149	4
8	Round washer fi20-OC	11-0101	14	20	Bolt 6-kt.M20x50x50	11-0201	2
9	Nut 6-kt. M20-B-OC-samoz.	11-0163/I	7	21	Bolt 6-kt.16x50-5.5-OC	11-0201/A	2
10	PTO shaft safety pin	R_PROF 3200-06.02.03.00	2	22	Stopper 50x50x2-4	12-1164	2
11	Flat bar with working hitch eye	R_PROF 3200_06.02.02.00	1	23	Bolt 6-kt.M20x50-5.5-OC	11-0252	4
12	Beta pin 4x100, double	14-0D28/B	4				




Spółka z ograniczoną odpowiedzialnością
 Spółka komandytowa
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Working (three-point) hitch - parts list **części**

Professional 3200 shredder



Parts list			
Item No.	Part name	Part No.	Quantity
1	Transport hitch	R_PROF 3200_05.00.00.00	1
2	Long link chain 2x22x6 DIN 763	12-1078/B	3
3	Pin fi 25 x 96	R_PROF 3200_05.00.01.00	1
4	Transport hitch pin	R_PROF 3200_06.00.00.00	1
5	Central coupler 0086450999	12-1139	1
6	Universal pin 10.5x45	01-0686	3
7	Bolt 6-kt M20x150-8.8-OC	11-0252	2
8	Stopper 80x80x2-4	12-1164	2
9	Stopper 60x60x2-4 black	12-1146	2
10	Nut 6-kt M20-8-OC-samoz.	11-0163/1	2
11	Round washer fi20-OC	11-0101	4
12	Support foot LT2103 50x430 SIMOL	12-1143	1
13	Coupler pin	R_PROF 3200-05.00.03.00	1



Spółka z ograniczoną odpowiedzialnością
 Spółka komandytowa
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Transport hitch - Parts list

Professional 3200 shredder



8. Warranty

WARRANTY CARD

Factory no.
Year of manufacture

Type
Quality Control (KJ)

Under the warranty, the manufacturer undertakes to repair, free of charge, any physical defects revealed during the warranty period, i.e. 12 months from the date of sale.

The manufacturer will be exempt from liability under the warranty in case of:

- Mechanical damage of the machine, which occurred after it was delivered to the user;
- Improper use, maintenance, storage of the machine, in particular if not compliant with the instruction manual;
- Execution of any repairs by unauthorized persons and without the consent of the manufacturer;
- Introducing design changes without consulting with the manufacturer;
- Transmission fitting cracks caused by the shaft run-out;

The warranty card is valid provided it has the vendor's signature and the date of sale certified with the company stamp. It must not contain deletions and amendments by unauthorized persons.

A duplicate of the warranty card may be issued upon a written request after presentation by the user of the proof of purchase.

In the case of an unjustified service call to warranty repair, the related costs will be borne by the user.

The user will file complaints within 14 days from the date of damage/defect directly to the vendor.

The manufacturer will carry out warranty repairs within 14 days from the date of the complaint.

The guarantee will be extended by the repair time counted from the date of the complaint until to the date of completion of the service if the defect prevents the use of the machine.

Date of sale: _____
(day, month, year)

(signature and stamp of the point of sale)



WARRANTY REPAIRS RECORDS

Filled in by the manufacturer

Date of complaint claim: _____

The scope of repair and parts used: _____

Date of complaint processing: _____

Warranty extended until: _____

(signature and stamp of the service)

Date of complaint claim: _____

The scope of repair and parts used: _____

Date of complaint processing: _____

Warranty extended until: _____

(signature and stamp of the service)

Date of complaint claim: _____

The scope of repair and parts used: _____

Date of complaint processing: _____

Warranty extended until: _____

(signature and stamp of the service)

Date of complaint claim: _____

The scope of repair and parts used: _____

Date of complaint processing: _____

Warranty extended until: _____

(signature and stamp of the service)



DECLARATION OF CONFORMITY

1. Manufacturer of the product:

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

2. Product name:

LEOPARD 320 Professional shredder

Year of manufacture: Serial No.:

3. Product classification:

PKWiU (Polish Classification of Products and Services) 29.32.1500.90
Machines and devices for soil preparation, other

4. Intended use and application range of the product:

The LEOPARD 320/O PROFESSIONAL shredder
 is designed to destroy the remainders of plant crops and to shred the cut-down tree and shrub branches, it is perfect for mulching meadows and pastures.

5. Reference documents:

EU laws		Polish laws	
Directive No.	Title	Document name	Form
2006/42/EC	Machine directive	Ordinance of the Minister of Economy of 21 October 2006 regarding essential requirements for machines	Journal of Laws No. 199/1228
Standard No.	Title		
PN-EN ISO 12100-1:2005	Machines. Safety. Basic concepts, general design principles. Part 1: Basic terminology, methodology.		
PN-EN ISO 12100:2011	Safety of machinery – General principles for design – Risk assessment and risk reduction		
PN-EN 14121-1:2008	Safety of machinery – Risk assessment – Part 1: Principles		
PN-ISO 730-1:1996	Agricultural Wheeled Tractors – Rear-mounted three-point hitch suspension system – Categories 1, 2, 3 and 4		
PN-EN ISO 4254-1:2009	Agricultural machinery – Safety – Part 1: General requirements		
PN-ISO 11684:1998	Tractors, agricultural and forest machinery, powered lawn and garden equipment. Safety signs and hazard pictorials. General provisions.		
PN-ISO 3600:1998	Tractors, agricultural and forest machinery, powered lawn and garden equipment – Instruction manual – Content and presentation		
Quality Control (KJ) manual	Quality control manual 2012/03 Version 01		
Painting manual	Painting, wet paint coats application manual 2012/02 Version 01		
Welding manual	Welding manual MIG/MAG 2012/01 Version 01		

Conformity with the requirements of the directives and standards has been ascertained based on the tests conducted by:

„FITMECH” Fundacja Inżynierów i Techników Mechaników Polskich w Słupsku.
 The tests were carried out by: mgr inż. Zbigniew Myszka – expert of the Association of Polish Mechanical Engineers & Technicians No. 9763/11

I hereby declare, taking full responsibility, that the product conforms to the reference documents referred to in item. 5.

Borzytucho 01.02.2014
 (place and date of issue)

Karol Jaworski
 (name and signature of the authorised representative of the Manufacturer)