

KULLANIM KILAVUZU
CALABRIA

CALABRIA
WE CREATE A HIGHER STANDARD




RoYerMaK

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DOUBLE
CHOP



PROMOTION

The moment you see Calabria®, your heart rate will accelerate, your pupils will dilate, and the following words will unintentionally come out of your mouth: "My new machine must be Calabria®". Calabria®, one of the most anticipated machines in the history of forage harvesters, calls you with its body made of pure steel.

It all started when a farmer asked Royermak for the perfect forage harvester. S355 steel materials were used in Calabria®, which was designed with the finest chopping size and the best blowing ability.

Of course, everyone looks at you while using this machine. Of course they're a little jealous. This is expected. After all, you have their dream machine!



**DOUBLE CHOP
FORAGE HARVESTER**
1500

**DOUBLE CHOP
FORAGE HARVESTER**
1800

**DOUBLE CHOP
FORAGE HARVESTER**
2100

PREFACE

Dear user;

Congratulations on choosing Royermak. There is no doubt that Royermak products, which are sold with an extensive service network and perfect service guarantee, will add privilege to your farm.

Before using your machine, read this user and maintenance manual carefully in order to get to know the machine better, to prevent possible malfunctions and to work safely and efficiently.

You can find all the information about safety, operation, maintenance and troubleshooting that you may need during the use of the machine in the manual. If you follow the instructions given in the manual, your machine will serve you for many years.

We wish you to use your machine in good times...



WE CREATE A HIGHER STANDARD

DELIVERY CONTROL FORM (SELLER COPY)

This form will be filled in completely by the authorized dealer / agency at the delivery of the product, and the product will be delivered to the customer after all controls.

Machine Name : **CALABRIA**
 Machine Model : _____
 Serial number : _____
 Delivery date : ____/____/_____
 Year of manufacture : _____

All controls of the machine have been made before delivery.

- Missing or damaged parts checked. Warning labels checked.
- Oil levels checked.
- Tire pressures checked
- Leak check done.
- PTO shaft checked.
- The conformity of the machine to the order was checked
- Brake system checked.
- Hydraulic cylinders and their connections were checked.
- The operability check was made by connecting the machine to a suitable tractor.

Seller Company / Dealer

Stamp : _____

Signature : _____

RoYerMaK Makina İç ve Dış Tic Ltd Akabe, Şehit Furkan Doğan Cad No:11, 42000 Karatay/Konya TURKEY

Customer

Name and surname : _____

address : _____

Telephone : _____

Signature : _____

+90 553 699 89 59 / www.royermak.com

DELIVERY CONTROL FORM (CUSTOMER COPY)

This form will be filled in completely by the authorized dealer / agency upon delivery of the product and the product will be checked for all controls. will be delivered to the customer.

Machine Name : **CALABRIA**
 Machine Model : _____
 Serial number : _____
 Delivery date : ____/____/_____
 Year of manufacture : _____

All controls of the machine have been made before delivery.

- Missing or damaged parts checked. Warning labels checked.
- Oil levels checked.
- Tire pressures checked
- Leak check done.
- PTO shaft checked.
- The conformity of the machine to the order was checked
- Brake system checked.
- Hydraulic cylinders and their connections were checked.
- The operability check was made by connecting the machine to a suitable tractor.

Seller Company / Dealer

Stamp : _____

Signature : _____

RoYerMaK Makina İç ve Dış Tic Ltd Akabe, Şehit Furkan Doğan Cad No:11, 42000 Karatay/Konya TURKEY

Customer

Name and surname : _____

address : _____

Telephone : _____

Signature : _____

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WARRANTY CERTIFICATE

1. The warranty period is 2 (two) years from the date of delivery of the product to the user.
2. Except for the parts that show deformation depending on the usage rate and are designated as consumables, the entire product is within the scope of warranty.
3. The maximum repair period of the product is 30 (thirty) working days. This period; It starts from the date of notification to the service station of the product's fault, or to one of the product's seller or dealer, agency, representative, manufacturer or importer, in case there is no service station.
4. In case of malfunction of the product, the time spent in repair is added to the warranty period.
5. The warranty period of the product that is replaced under the warranty is the same as the remaining warranty period of the purchased product.
6. During the warranty period, the user is not charged any fee for the repair of malfunctions caused by material, workmanship and assembly errors.
7. In case of malfunctions, it is determined by the service stations whether there is a usage error or not, in the absence of a service station, with a report issued by the seller or dealer, agency, representative, manufacturer or importer of the product, respectively. Service forms printed by the manufacturer replace the report.
8. If the product malfunctions at least four (4) times within a year from the date of delivery to the user, or six (6) times within the warranty period, as well as these failures make the product unavailable, the maximum time required for repair is exceeded, the service stations, in case there is no service station, the seller or the dealer of the product, respectively, In the event that it is determined that the repair of the malfunction is not possible with the report prepared by the agency, representative, manufacturer or importer, the user may request a free replacement of the product, a refund or a discount at the rate of the defect.
9. The provisions of Article 8 shall not be applied in case of malfunctions that occur in case of violation of the product's user manual, warranty certificate and stickers on the product.
10. Any intervention other than authorized service and user maintenance will exclude the machine from the scope of warranty.
11. Depending on the intensity of use of the product, parts that are likely to wear out (rubber band etc.) and malfunctions caused by the electrical network are not replaced under warranty.
12. The warranty periods of parts and systems that are not manufactured by RoYerMaK and supplied as finished products are limited to the conditions specified by the supplier.
13. The transportation, packaging, parts and service expenses of the repairs made by the service stations that are not covered by the warranty are paid by the customer.
14. The user cannot claim a guarantee in case of making changes on the machine that are not approved by RoYerMaK or if original spare parts are not used.
15. Unnecessary and unintended use will void the warranty.
16. The manufacturer is not responsible for the user maintenance of the product. Repair of malfunctions caused by lack of maintenance is not covered by the warranty.
17. The user cannot demand that the improvements made by the manufacturer in the products it has produced are applied within the scope of the warranty on the product that it has previously purchased and whose warranty period is still in progress.
18. Unapproved and unsigned warranty documents are void regardless of the circumstances.
19. The responsibility of filling out the warranty certificate and giving it to the customer belongs to the seller, dealer, agency or representative office from which the customer purchased the product.
20. Any changes made on the warranty certificate, the purchased product is out of warranty.

WARRANTY

This limited warranty is a product warranty given by ROYERMAK that guarantees the product produced to the original owner. ROYERMAK's liability for defects in manufactured products is limited as stated in the following conditions.

A. SCOPE AND DURATION OF WARRANTY

ROYERMAK warrants to its original owner that the machinery and equipment it manufactures will be flawless in terms of materials and workmanship under normal usage conditions for 12 months from the date of sale (customer). By submitting the warranty registration form to the customer within 30 days from the date of sale, the distributor is covered by the limited warranty. Repair under limited warranty does not extend the warranty period.

B. WARRANTY CERTIFICATE

All claims within the scope of the limited warranty must be submitted to ROYERMAK within days from the date the customer notifies the distributor of the malfunction. Otherwise, the warranty claim cannot be accepted. A fully prepared warranty application, from the date of detection of the defect

... It will be sent to ROYERMAK within the next day. Otherwise, the warranty claim will not be accepted. your distributor, must prove that the warranty application was submitted within the time limits specified above.

C. REPAIR OR REPLACEMENT PROCEDURE

ROYERMAK accepts responsibility within the scope of limited warranty to replace or repair all parts that are defective in terms of material or workmanship within its own policy and options, provided that the warranty process is fully recorded in accordance with article 1 and performed in accordance with article 2. Under this responsibility, parts required for repair or replacement are sent to the distributor. ROYERMAK is responsible for the cost of the spare parts required for repair or replacement and their transportation to the distributor.

The distributor will keep the defective parts formonths after the replacement process. Damaged parts are sent to ROYERMAK for analysis. Shipping costs belong to ROYERMAK.

D. TERMS OF WARRANTY

D.1. Parts Not Produced by ROYERMAK

Components that are not produced by ROYERMAK but are in ROYERMAK branded machinery and equipment, such as power transmission shafts, gearboxes, tires, are under warranty by the original manufacturer.

D.2. No Guaranteed Compatibility and Performance

ROYERMAK does not guarantee the suitability and performance of its products for any machine or equipment.

D.3. Damage Caused by the Product Owner

Normal wear or tear, misuse of machinery and equipment, overload, neglect, improper installation

Failures due to the use of non-original parts are not covered by ROYERMAK Limited Warranty. Agricultural machinery is subject to extreme wear and needs regular maintenance.

D.4. Broken Parts

Parts that may wear out due to use such as knives, shafts, gear shafts, discs, sharpening equipment, stud chains, belts, roller chains, rubber dampers, filters are not covered by ROYERMAK Warranty.

D.5. Shipping

The Limited Warranty does not cover the damages and losses that occur during transportation to ROYERMAK or between the distributor and the customer.

D.6. Vandalism

The Limited Warranty does not cover damage or loss resulting from willful damage, theft of any kind, or similar errors.

D.7. Product development

ROYERMAK continuously improves its product development policy. ROYERMAK reserves the right to design, develop and change its own product. ROYERMAK does not undertake any obligation to change a previously produced product.

D.8. Indirect Damage

ROYERMAK is responsible for any loss of business, inconvenience, damage to the harvest, damage to property or persons, injury and loss of equipment, etc. In such cases, it is not responsible for damage or loss beforehand. The above limitations apply even if based on breach of contract, regardless of the circumstances that caused the damage

E. DISTRIBUTOR RIGHTS

Distributor's rights under the limited warranty are not transferable to any third party.

F. SCOPE OF WARRANTY

The basic rules and suggestions written above constitute the entire limited warranty given by ROYERMAK. There are no other warranties or conditions related to this stipulated machine, spare parts and services.

G. GUARANTEE & ASSURANCE

The distributor guarantees ROYERMAK against all warranty claims regarding cost, damage and liability of the customer or any third party. The distributor will fulfill all warranty claims regarding ROYERMAK products in its own country.

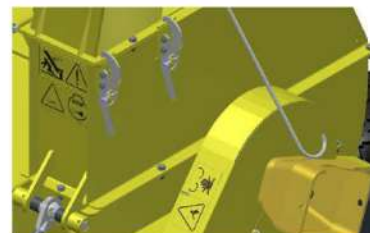
WORKING PRINCIPLES

ROYERMAK DOUBLE CHOP 1500 and DOUBLE CHOP 1800 silage machines are produced to harvest all kinds of green fodder plants. It cuts the plants from the field with its rotors with movable blades and transmits the shredder fan to the feeding helix. The products transferred from the augers to the flywheel are reduced to a shorter shredding size compared to standard grass silage machines. Then it is loaded onto the trailer by means of the chimney.

SECURITY

The machine is designed only for the harvesting of herbaceous green fodder. Do not use for other purposes.

- Read the information in the manual carefully before operating the machine.
- Keep safety guards and covers in good condition and installed.
- All enclosures and covers must be closed in operating condition.
- Perform maintenance and repairs only when the engine is stopped, the key is removed and the machine is secured. If necessary, disconnect the PTO connection from the tractor.
- Before leaving the operator's seat, take the PTO out of gear and apply the tractor parking brake.
- Note that even if the PTO is stopped, the machine will continue to work for a while.
- Do not allow children and strangers near the machine while it is working.
- Always keep the PTO speed at the recommended speed.
- Use gloves and safety glasses.
- Regularly check the tightness of all blade bolts and nuts. At the same time, check that the blades are undamaged and sharp.
- During operation, the noise level may exceed 85dB. It is necessary to use the machine with the headphone on with the tractor cabin windows closed or on tractors without a cabin.
- Keep a safe distance between you and the machine while working, as the machine may throw stones on the ground.
- When traveling with the machine on public roads, follow the local traffic rules, pay attention to the dimensions of the machine, as well as lights and warning signs during transport.
- Always drive at a reasonable speed on roads, especially on bumpy roads. The safe speed of the machine is 15 km / h.



WARNING SIGNS

WARNING SIGNS



Read User manual carefully before operating



During maintenance and repair
Be sure to stop your machine and disconnect the electrical exact. Failure to do so will result in very serious injuries that could result in death.



To the front of the tractor
The load must be at most 1500 kg. PTO
Be careful that the speed does not fall below 540 rpm.
Please pay.



A fire extinguisher should always be available. Any fire or flammable
When the situation is encountered, a fire extinguisher tube should be used when it is directly



A first aid kit should always be available, and it should be available in case of need.



The user using the tractor is tired and sleepless.
should not use. Otherwise, accidents that may cause injury or death may occur. Always check the wheels of the tractor, machine and trailer before moving.



Do not stand in between the tractor while it is working
Make sure other things are away from the tractor and the machine



Make sure that the warning lights are working while the tractor is in motion or running.



Risk of jamming.
Moving and rotating
Be careful with the parts.



Walking close or direct contact with the rotating component can cause death.



Keep children away from the moving machine



Bearing in mind that oil leaks that may occur in high-pressure hydraulic systems will harm the human body,
If you encounter a situation, go to the nearest health center immediately or call the 112 Emergency Call Center.



machine in motion
Avoid approaching with any object. to intervene
completely immobile to get in position wait.



Rotating machine
Do not pinch or touch the moving chain.
serious damage hazard



Keep distance when the machine is at work.



Do not allow foreign matter to enter the machine.
be careful.

WARNING SIGNS



15 km

Do not exceed the 15 km speed limit when the machine is connected to the tractor.



7/24
SERVIS

You can call the 24/7 service for technical malfunctions and similar situations.

Contact :
+90 553 699 89 59



Final check done.



Download link
hook.



OIL/GRESS

Lubrication point.



In CE Standards
produced.



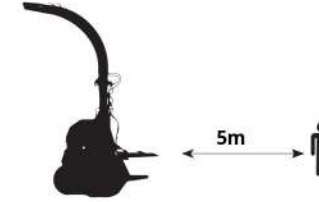
Do not go near high voltage lines! Disconnect the forage harvester from electricity keep away.



Your machine is also imitated.
our factory
produced by
Spare part
take care to use
show me



WARNING SIGNS



Maintain a distance of 5 meters from working machines! Otherwise, the materials coming out of the machine may cause injury!

MACHINE IDENTIFICATION CARD

Calabria's product identification label is positioned on the chassis at the front of the machine. On the identification label, you can find information about the product chassis / serial number, machine model, year of manufacture, product weight, product options and load limit.

Calabria's product identification label is located on the side, on the side wall. On the product identification label, you can access information about options such as product chassis, serial number, machine model, year of manufacture, product weight.

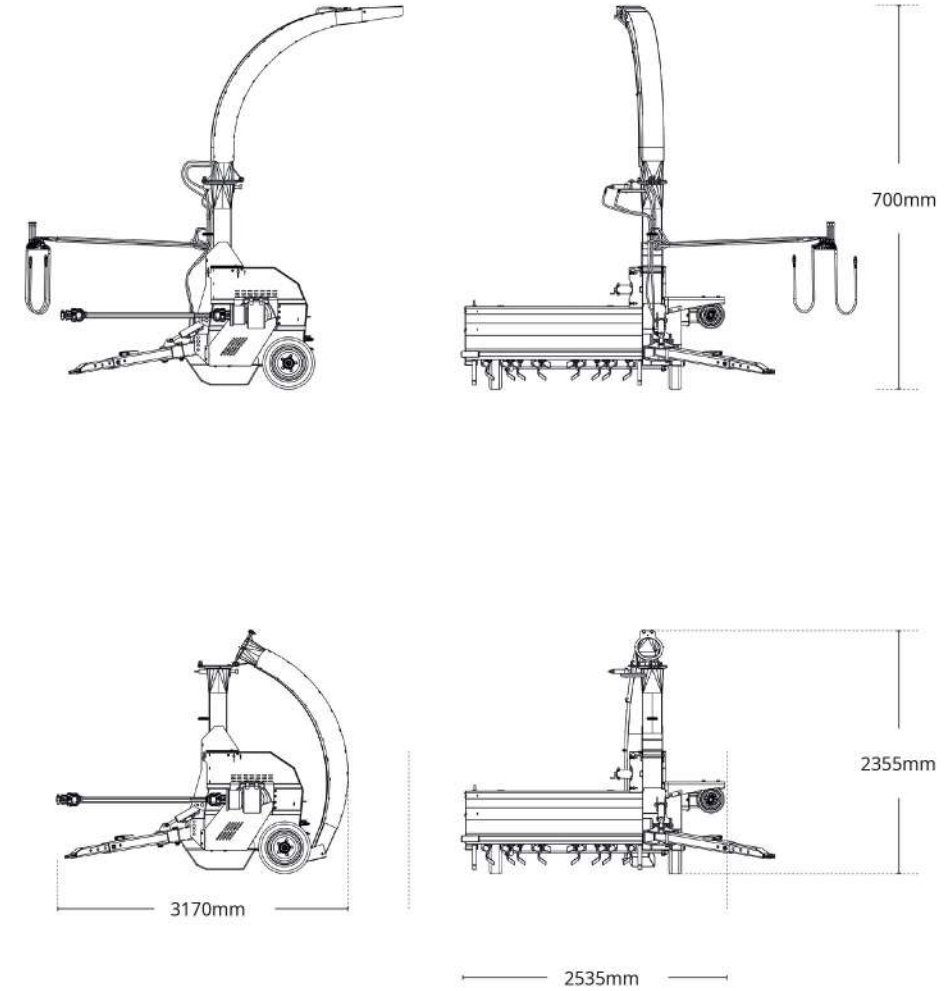


RoYerMaK İÇ VE DIŞ TIC. LTD.		ROYERMAK MAKİNA İÇ VE DIŞ TIC. LTD.
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MADE IN TURKEY		

1. TECHNICAL INFORMATION

1.1. DIMENSIONS OF THE MACHINE

Open and closed chimney height and width dimensions of ROYERMAK Double Chopper 1500 are given below.



FEATURES	grass silage machine	grass silage machine
MODEL	DOUBLE CHOP 1500	DOUBLE CHOP 1800
LENGTH (WORK POSITION) (mm)	2400	2400
LENGTH (PATH POSITION) (mm)	3170	3470
WIDTH (WORK POSITION) (mm)	2535	3835
WIDTH (ROAD POSITION) (mm)	2540	3040
HEIGHT (WORK POSITION) (mm)	3700	3700
HEIGHT (ROAD POSITION) (mm)	2355	2355
WEIGHT (kg)	925	985
WORKING WIDTH (mm)	1500	1800
WORK CAPACITY (ton/hour)	20	25
MIN. POWER REQUIREMENT (kw/hp)	45-60 hp	60-80 hp
PTO OPERATING SPEED (rpm)	540	540
NUMBER OF Chopper BLADES	10	10
NUMBER OF FIXED BLADES	36 (ROTOR BLADE)	48 (ROTOR BLADE)
SHEAR SIZE (mm)	20-70	20-70
WHEEL SIZE	165x70xR13	165x70xR13
NUMBER OF WHEELS	2nd	2nd

* Product type and efficiency may differ from site condition, operator experience and work efficiency.

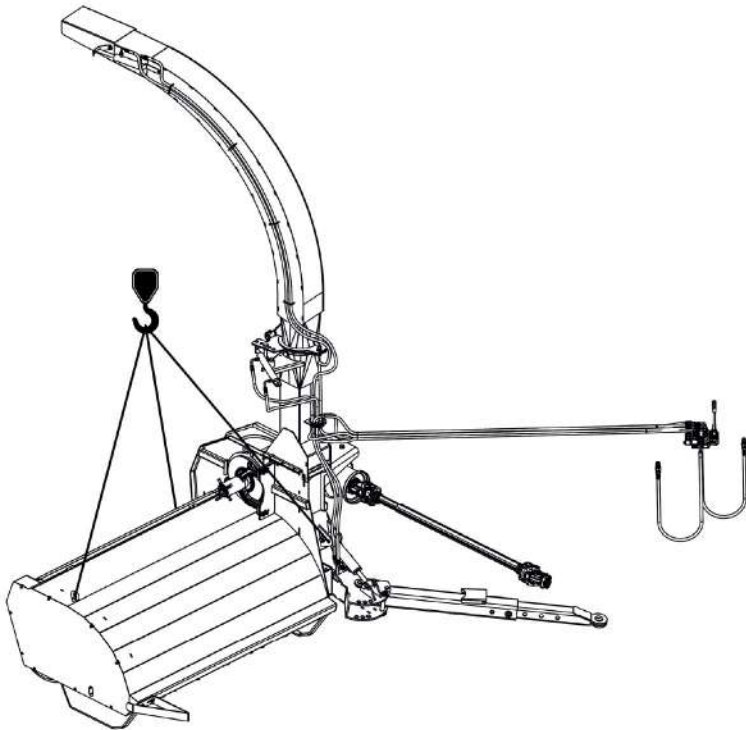
1.2. LOADING OF THE MACHINE

ROYERMAK Double Chopper 1500 transport method is shown below.

- Load your machine with a loading truck with sufficient lifting capacity (see "Technical Specifications" section to find out the weight of your machine).

Make sure that the ropes and chains to be used for loading have sufficient capacity.

- Perform the loading process by using the binding points on the machine.
- Make sure that there are no living creatures in the vehicle to be loaded and around the machine.
- After the installation, fix your machine by connecting it at the necessary points.
- Always use chocks on the front and rear of the wheels.
- Make sure that the total height after loading does not exceed the legal limits. In the process of pulling your machine with a tractor;
- Make sure that the creatures around the machine and tractor are in the safe area.
- Check that the machine's connections with the tractor are made completely.
- Lift and fix the routers of your machine during transportation.



- Load your machine with a loader with sufficient lifting capacity (if your machine is (See "Technical Specifications" section to find out the weight).

Make sure that the ropes and chains to be used for loading have sufficient capacity.

- Perform the loading process by using the binding points on the machine.
- Make sure that there are no living creatures in the vehicle to be loaded and around the machine.
- After the installation, fix your machine by connecting it at the necessary points.
- Always use chocks on the front and rear of the wheels.
- Make sure that the total height after loading does not exceed the legal limits. In the process of pulling your machine with a tractor;
- Make sure that the creatures around the machine and tractor are in the safe area.
- Check that the machine's connections with the tractor are made completely.
- Lift and fix the routers of your machine during transportation.
- Transport with the chimney folded and fixed.
- Since your machine is positioned on the right side of the tractor, you can travel with your machine.

Pay attention to your width.

- Do not forget that the weight of the load will reduce the road holding, especially the direction and braking capacity, while transporting with the tractor.
- Observe the speed limits set by laws during transportation.
- Reduce your speed on wet and soft terrain.
- Use your tractor more carefully on very sloping and rough terrain.
- Do not allow any living creature to travel on the machine.
- Always use tractor warning signs and devices while traveling on public roads.

1.3. CONNECTING THE MACHINE TO THE TRACTOR

WARNING: Make sure that the creatures around the machine and tractor are in the safe area.

- 1 - Start your tractor and approach backwards towards the three-point linkage of the machine.
- 2 - Stop your tractor, make the side arms of the three-point suspension system and the middle arm connections.
- 3 - Connect the cardan shaft.

WARNING: Make sure that the propeller shaft length is appropriate and its guard is in working condition.

- 4 - Make sure to fix the propeller shaft guard chain.

Make sure that the cardan shaft locks are closed.

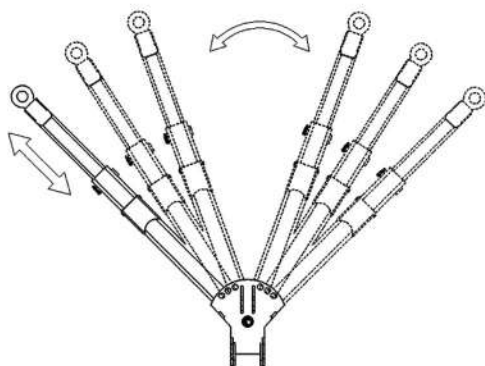
- 6 - Fix the control arms of the machine to a point where you can use it comfortably on the tractor.

2. SETTINGS AND OPERATION OF THE MACHINE

2.1 ROAD AND WORK CONDITION

Taking the machine to the road and work position is possible by changing the angle of the drawbar with the machine axis. At the same time, the distance between the tractor and the machine can be adjusted as desired by considering the radius of the turning circle.

Since the work and road position settings of the machine may vary according to the tractor brand and model, use the most appropriate setting by following the images below.



2.2 PTO SHAFT RPM

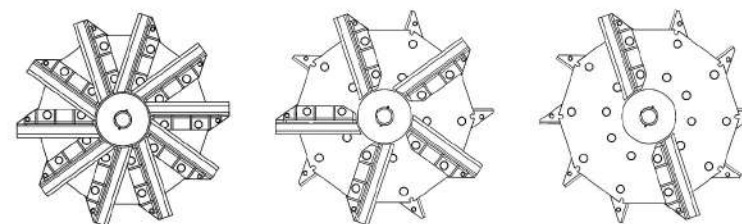
After activating the PTO shaft while your tractor is running at idle speed, increase it to working speed. Your double chopper forage harvester is set at the factory to run at 540 rpm as standard.

Make sure that the PTO speed remains constant during operation.

Operate the machine on a smooth and clean surface.

2.3 ADJUSTING THE SHREDDING SIZE

After activating the PTO shaft while your tractor is running at idle speed, increase it to working speed. Your double chopper forage harvester is set at the factory to run at 540 rpm as standard. Make sure that the PTO speed remains constant during operation. Operate the machine on a smooth and clean surface.



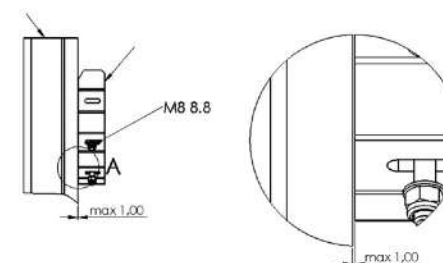
If the removed knives are to be reattached to the machine, the counterweights that were removed together with the knives must be attached. Every time the number of blades is changed, the balance (balance) must be checked again.

2.4. SETTING THE FIXED BLADE

Chopper disc blade angle 35 for a smooth cutting of the machine, and the distance from the fixed blade sharp edge should be between 0.3 - 1 mm. Do not forget that over 1 mm

At each value, the power requirement will increase at the same rate.

Flywheel Chopper Knife

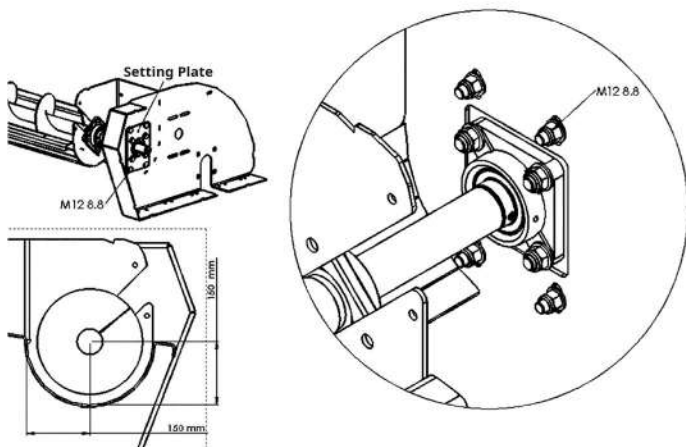


Loosen the fixed blade bolts to adjust the distance between the blades. Bring the fixed blade closer to the chopper blade by placing a gauge between the fixed blade and the chopper blade to bring it to the proper setting. Make sure to tighten the fixed blade bolts mutually to the appropriate torque value. Before starting your machine after each adjustment, make sure that the blades do not come into contact with each other by turning the chopper disc by hand.

Remember, as the chopper blades are sharpened, the distance between the blades will increase and accordingly your fuel consumption will increase. Check that the distance between the blades is in the correct setting at regular intervals.

2.5. SETTING THE FEEDING SCREW PARALLELLITY

The feeding auger should always be parallel to the hopper in which it works. Changes that may occur in the helix axis will cause the machine power requirement to increase and jams. Find the correct position by sliding the adjusting plate to the right, left, up or down to adjust the helix axis to the correct setting. The most accurate setting can be obtained in the position where the distance between the center of the helix and the bowl surface is 150 mm.



2.6 SHARPENING THE BLADES

Your machine will be delivered to you with all settings made and sharpened blades during factory tests. Knife sharpening is not required for the first use. Depending on the harvested product type and working conditions, re-sharpen your knives after every 10 decares of work.

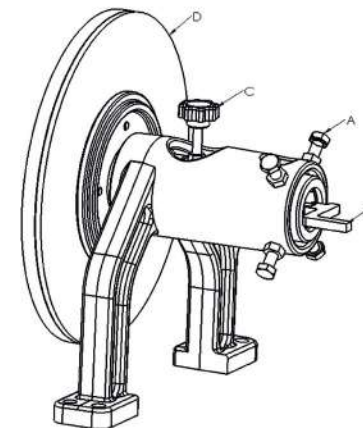
2.6.1. GRINDING STONE PARALLEL ADJUSTMENT

The sharp surface of the knives and the whetstone should always be parallel for a smooth sharpening. Bring the sharpening stone parallel to the appropriate position by using the 4 bolts (A) on the back of the body. Unless otherwise stated, it will be sufficient to set the parallelism once.

2.6.2. GRINDING

WARNING: Always use protective glasses during the sharpening process. Before sharpening, make sure that there are no cracks or breaks on the stone.

WARNING: The whetstone will begin to rotate counterclockwise while sharpening. The whetstone should not exceed 800 RPM during sharpening. In order for the speed of the grinding stone to remain at the appropriate values, the PTO shaft speed of the tractor should work at 350 RPM and below during the grinding.

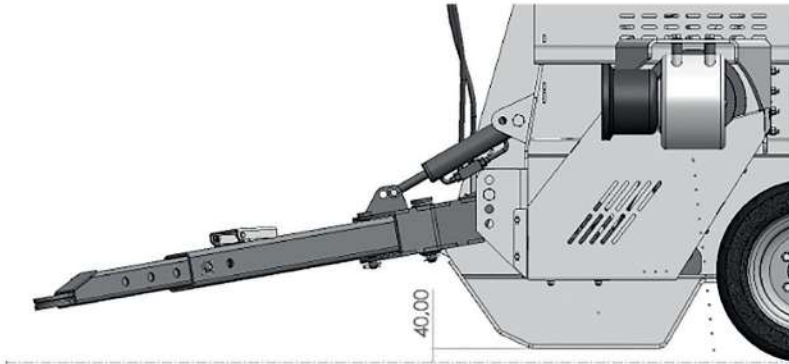


- Operate your machine by following the previously mentioned steps.
- Open the protection cover in front of the whetstone.
- Loosen the feed adjustment screw (C).
- Slowly turn the feed adjustment lever (B) until the whetstone (D) touches the blades.
- After the sharpening stone comes into contact with the blades, tighten the feed adjustment screw again and continue the sharpening process for 2 minutes.
- After the sharpening process, complete the process by following the instructions above in reverse.

NOTE: Keeping the blades sharp improves performance and saves fuel. blades each Regrind every 10,000m².

2.7. ADJUSTING THE FORMAT HEIGHT

Shape height can be made with hydraulic control valves from inside the tractor cabin by means of the hydraulic cylinder on the machine drawbar. Make sure that there is a 40 mm gap between the machine and the ground to prevent the rotor blades from touching the ground during use.



2.8. SHAFT (CARDAN SHAFT) AND SHAFT LENGTH

Do not use a different shaft other than the original shaft of the machine. Shaft strength values are determined according to the machine's needs, and when an undesirable situation is encountered, the machine's safety will be ensured by damaging the shaft before the machine. The maximum shaft strength values that can be used are below given;

PTO POWER	NUMBER OF REVOLUTIONS	TORQUE VALUE
47 KW (64 HP)	540 RPM (RPM)	830 Nm – 7350 In.Lb

Since the shaft length will differ according to the tractor brand and model, shorten the shaft length according to your tractor. After the shaft assembly is done, cut the shaft length 15 cm more than the closed length.

3. MAINTENANCE

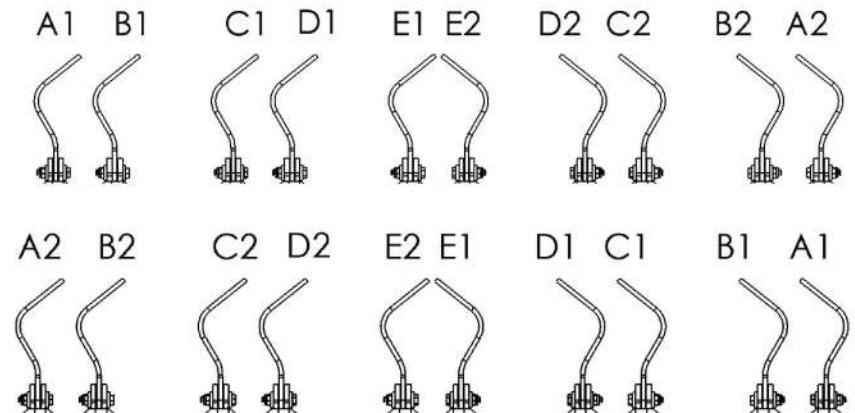
3.1. REPLACEMENT AND ADJUSTMENT OF ROTOR BLADES

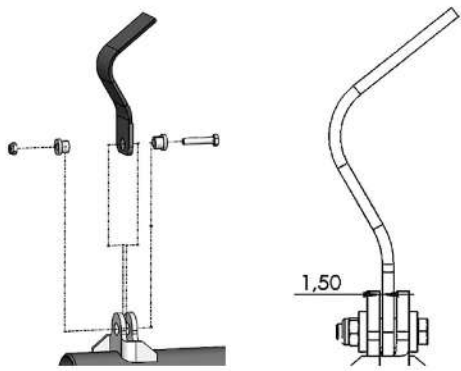
Rotor blades are designed to be used on both sides. When one side of the blades is worn, the other sides can be used by changing their direction. Follow the instructions below for proper blade replacement.

WARNING: In order for your machine to work more efficiently and without vibration, oscillations that may occur on the rotor are eliminated with computer-controlled devices while the blades are connected to the rotor. Be sure to follow the instructions so that these settings are not disturbed. Change the blade bushings and bolts along with the blade change. Do not use bolts of different lengths and standards.

3.1.1. CHANGING THE BLADE DIRECTIONS

- Remove the worn blade and other parts in order as shown below.
- Reassemble the removed blades and other parts symmetrically with each other (by replacing A1-A2, B1-B2, C1-C2, D1-D2, E1-E2 in double pairs).
- Make sure that the blades move freely after assembly.
- In the most suitable mounting conditions, a gap of 1.5 mm should be left between the blade and the holder.





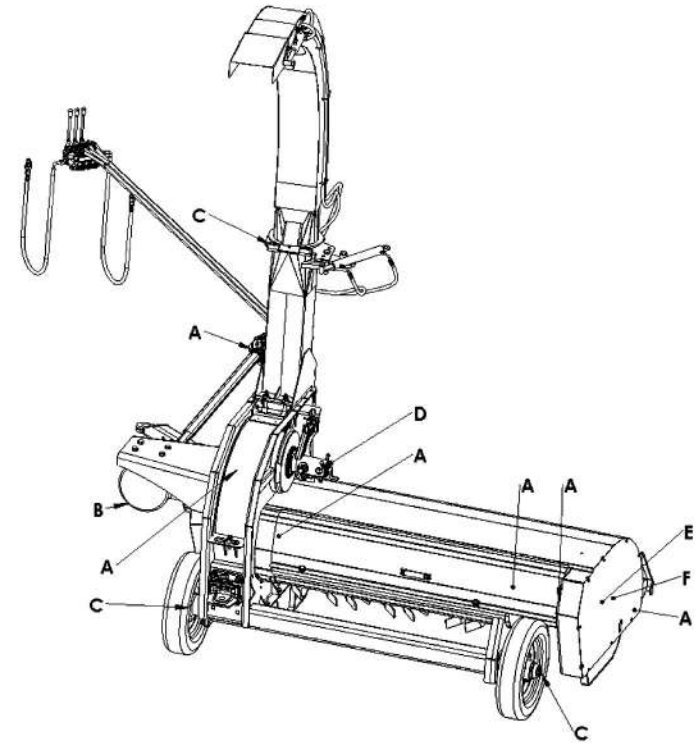
3.1.2. INSTALLING THE NEW BLADE

Assemble the new blade set on the rotor, paying attention to the above-mentioned conditions. It is recommended to replace the blades as a set in order to prevent oscillation and vibration and to keep the rotor factory settings intact.

3.2 FEED SCREW SAFETY PIN

There is a safety bolt on the feeding helix against possible clogging and strain situations. DINEN ISO 4762M10 8.8 (max 95Nm) is used as safety bolt. Do not use any other product as a safety bolt.

4. LUBRICATION



LUBRICANT REGION	DAILY	WEEKLY	MONTHLY	YEARLY
SHAFT (GREASE)	A			
BEARING BEARINGS (GREASE)	A			
GEARBOX (ISO VG 220) 2 LITER				B
DRIVE CHAINS (GREASE)		F		
OTHER (GREASE)		EC		
GREASE STONE			D	

- Daily oil maintenance: Maintenance after every 8 hours of operation
- Weekly oil maintenance: Maintenance after every 60 hours of operation
- Monthly oil maintenance: After every 240 hours of operation
- Annual oil maintenance: It means maintenance after every 2000 hours of operation.

5. END OF SEASON MAINTENANCE

After the season, clean all parts of your machine with non-pressurized water. Perform all necessary maintenance. Remove all rubber parts. Replace blades, bearings, etc. consumables that have expired with new ones.

6. POSSIBLE FAULTS AND SOLUTIONS

Problem	Causes	Solutions
Uncut product remains on the land surface.	<ul style="list-style-type: none"> a) Drive belt loose or broken b) The feedrate is too high c) Cutting height is too high 	<ul style="list-style-type: none"> a) Replace the drive belts with new ones. b) Decrease the feed rate, the feed rate will decrease as the product yield increases. c) Adjust the mowing height using the hydraulic cylinder on the drawbar
The cut size is higher than the initial setting and the chimney is clogged.	<ul style="list-style-type: none"> a) Blades blunt b) Fixed blade worn c) The distance between the fixed blade and the chopper blades is too large 	<ul style="list-style-type: none"> a) Sharpen the chopper blades. b) Replace the fixed blade c) Fixed blade setting
The machine requires more power than usual	<ul style="list-style-type: none"> a) Blades blunt b) Fixed blade worn c) The distance between the fixed blade and the chopper blades is too large 	<ul style="list-style-type: none"> a) Sharpen the chopper blades. b) Replace the fixed blade c) Fixed blade setting
There is too much vibration in the machine	<ul style="list-style-type: none"> a) Rotor blades damaged b) Chopper blades damaged 	<ul style="list-style-type: none"> a) Check and replace rotor blades. b) Check and replace the chopper blades
The machine does not work although the shaft	<ul style="list-style-type: none"> a) Gearbox safety coupling chain broken 	<ul style="list-style-type: none"> a) Replace the coupling chains and sprockets with new ones.
Feed auger does not work	<ul style="list-style-type: none"> a) Feed auger safety bolt broken b) Feed auger drive chain broken c) Rotor gear key broken 	<ul style="list-style-type: none"> a) Replace the safety bolt b) Replace the feed auger drive chain. c) Check rotor drive gear keyway and install new key





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