

# **IZELMAK**



**VERTICAL FEED MIXERS**

## **VERTICAL FEED MIXER USER'S MANUAL**

***BEFORE USING THE MACHINE***

***PLEASE READ THE USER MANUAL BEFORE.***

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## 1. Introduction

Thank you for choosing our company and our machine. In order for your machine to serve you safely and efficiently for many years, we strongly suggest that you read this user manual carefully and fulfill its requirements.

Our company, which started its activities with the production of submersible pumps in 1984, became a company in 1998 and produces the machinery and equipment needed in the agriculture and livestock sector. Our company operates in Aydın, and is an organization that offers integrated solutions as a result of its meticulous work for many years.

Our company produces almost all of the machinery and equipment it produces within its own body. Our company, which exports some of the machinery and equipment it produces abroad, carries out all of its production with its own resources. All manufactured products are supported by abundant spare parts and extensive service. We wish your machine to serve you safely and efficiently and bring you plenty of profit.

As Izelmak, our manufacturing range consists of machinery and equipment for the agriculture and livestock sector.

Izelmak Horizontal Feed Mixer and Distribution Trailer has designed its own patented auger and bucket structure in line with its long years of work experience, experienced expert engineer staff and the information we have received from you, our valuable users, and the direction given by the industry.

Horizontal Feed Mixer provides a completely homogeneous mixture by reducing the feed to the desired dimensions thanks to the main mixer auger and two auxiliary auger.

Thanks to the optional digital weighing system, it is possible to prepare a highly accurate ration program. Thanks to the loading bucket, it becomes very easy to load roughage and concentrated feed into the machine without the need for a front loader.

Thanks to Izelmak Horizontal Feed Mixer and Distribution Trailer, you get maximum efficiency and a quality mixture with minimum labor.




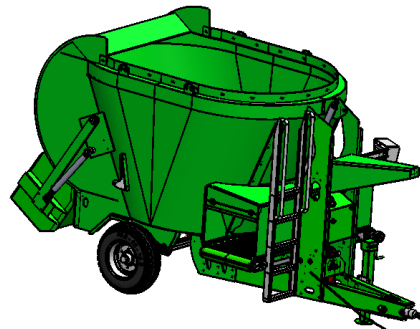
## 1.1 How to Apply for the Manual


This manual describes the operation of the machine, contains instructions for correct use and routine periodic maintenance. The guide is divided into easily identifiable sections. The instructions contained in this manual, how to use and authorize the machine for a professional user who must have special knowledge, have been instructed and properly trained. This handbook is accompanied by the EU Declaration. In case of transfer or sale, this manual must always be delivered with the machine. The manual is an integral part of this machine.

## 1.2 CE Marking Plate

Each machine is supplied with an identification plate, affixed to the left side of the front and is part of the chassis. Verify the model you have on the plate to refer to the technical data. To avoid and facilitate misunderstandings, it is always a good idea to indicate the data given on the plate whenever a request for assistance or spare parts is made.

|  |     |  |        |
|--|-----|--|--------|
|     |     | Tel: +90 256 231 15 78<br>Fax: +90 256 231 15 79 |        |
|  |     |  |        |
| SERİ NO/<br>SERIAL NO  |     | BOŞ KG   |        |
| YIL/YEAR   |     | DOLU KG  |        |
| GÜÇ/<br>OUTPUT   |     | DEVİR/<br>SPEED                                  |        |
| KURULU<br>GÜÇ  | KVA | Max 25 Km/h                                      | TSE CE |
| www.izelmak.com.tr   |     | info@izelmak.com.tr                              |        |
|  |     | MADE IN TURKEY                                   |        |
| Cumhuriyet Mah. Şehit Piyade Er M. Ali Tosun Bul. NO: 229 Tepecik Belediyesi / AYDIN |     |  |        |



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|  |     | Tel: +90 256 231 15 78<br>Fax: +90 256 231 15 79 |        |
| SERİ NO/<br>SERIAL NO   |     | BOŞ KG   |        |
| YIL/YEAR  |     | DOLU KG  |        |
| GÜÇ/<br>OUTPUT  |     | DEVİR/<br>SPEED                                  |        |
| KURULU<br>GÜÇ   | KVA | Max 25 Km/h                                      | TSE CE |
| www.izelmak.com.tr  |     | info@izelmak.com.tr                              |        |
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## 2. Explanation of Symbols on the Machine



- ✓ Insert the hook here to lift the machine.



- ✓ Danger !



Using the operator's hand  
It is forbidden to load over the ramp.



- ✓ Please contact before welding on the machine.



- ✓ Please refer to the user manual before proceeding.



- ✓ Do not come between the machine and the tractor.



- ✓ Danger! You can crush your hands.



- ✓ **Danger!** Do not stand under the conveyor belt.



Lubricate with grease every 15 days.



- ✓ Pay attention to the phrases on the label.



Use safety wedges for safety.



- ✓ For the safety of the worker, the machine must stand on the jack.



- ✓ Conveyor belt start/stop.



- ✓ Discharge gate Open/Close



- ✓ Conveyor belt Raising / Lowering.



Rotation direction and Shaft RPM.

Check the direction of rotation of the helix on electrical machines.

| LASTİK EBATLARI | MAX BASINÇ |     |
|-----------------|------------|-----|
|                 | BAR        | PSI |
| 10X75X15.3      | 4.6        | 68  |
| 10X80X12        | 2.4        | 35  |
| 11.5X80X15.3    | 4.8        | 70  |
| 16X65X8         | 4.8        | 70  |
| 28.5X70X19.5    | 6.8        | 100 |

- ✓ Max. Tire pressures.



Final Control Label



TSE Label



CE Label

### 3.Components

- 1.Wagon      6.Weighing System    11.Auger
- 2.Front Nose    7.Stairs
- 3.Reducer      8. Feed Gate
- 4.Tires        9. Jack
- 5. Axle        10. Bucket





7. Stairs

11. Auger



10. Bucket



9. Jack

5. Axle



#### 4. RULES OF USE

- Read this entire user manual carefully before using the machine.
- Check that all enclosures are in order and that the user understands the explanatory markings.
- Do not exceed 540 RPM at the universal joint.
- Get to know the control panel well and try the levers to check if it works as written in the owner's manual.
- Mixer wagon; It is operated and controlled from the driver's seat of the tractor by a licensed and experienced person over the age of 18.
- Before starting the machine, the user should make sure that there is no one behind the machine or in the working area and should stop the machine in case of a dangerous situation.
- The user should not use the machine if she is sick, tired, intoxicated or if the drugs she uses prevent her from driving.
- In the substances that the user uses as a feed substance, people, the machine itself or; It should be sure that there is no foreign substance (stone, metal, etc.) that will be harmful to the animals it is given as feed.
- Adjust the speed of the tractor according to the condition of the road. Keep in mind that stopping distance will increase when braking with a full wagon. Do not exceed the maximum speed of 20 km/h with a full wagon.
- When the mixer wagon is transported in intercity traffic, traffic rules such as tractor weight, lighting, brakes and warning signs must be followed.
- Do not enter the mixer while the machine is attached to the tractor.
- Do not use the machine as a lifting device.
- Do not use the machine to transport people, animals or other loads.
- Do not damage or remove the protective panels and warning signs attached to the machine.
- Do not perform any maintenance or repair on the machine while the machine is running or when the universal joint is connected.
- Do not modify any part of the machine.
- Do not use non-original spare parts.
- Do not operate under machine parts that rise up, such as buckets, without ensuring that these parts do not fall suddenly.
- Do not feed with moldy feedstuffs. Feed dust and mold can cause allergic reactions or damage the lungs. When handling powdery or moldy feedstuffs, a respiratory protective mask should be worn, covering the mouth and nose. Moldy feedstuffs negatively affect milk quality
- Symbols on the machine indicate moving parts and areas that can cause serious injury or even death. When a sign is damaged, ask the İZELMAK official for new ones.
- When the oil is changed, dispose of the waste oil in accordance with environmental regulations.

**CAUTION!!! Make sure that there is nobody around or inside the machine while the machine is running. Operate the machine with control.**

## 5. Safety

- You are responsible for the safe operation and maintenance of the Izelmak Feed Mixer.
- You should ensure that others who will operate, maintain or work in the vicinity of the machine are familiar with the operating and maintenance procedures and related safety information contained in this manual. This guide will take you step-by-step through your working day and alert you to all good safety practices to follow when operating this equipment.
- Remember, you are the key to security. Good security practices protect not only you but also the people around you. Make these apps a working part of your security program. Ensure that anyone using this equipment is familiar with the recommended operating and maintenance procedures and follows all safety precautions. Most accidents are preventable. Do not risk injury or death by ignoring good safety practices.
- The most important safety device in this equipment is the safe operator. It is the operator's responsibility to read, understand and comply with all safety and operating instructions in the manual. All accidents are preventable.
- A person who has not read and understood all operating and safety instructions is not authorized to operate the machine. An untrained operator exposes himself and bystanders to possible serious injury or death.
- Do not modify the equipment in any way. Unauthorized modification may impair function and/or safety and affect equipment life.
- Think safety, work safe!

## 5.1. RULES FOR USING THE MACHINE SAFELY

1. Never use your machine above its capacity.
2. Except for the bucket, it is forbidden for the operator to manually load the machine over the ramp.
3. Your machine first chops dry feed raw materials such as dry straw and clover and is mixed with other chopped silage and concentrated feed raw materials. Fresh feeds other than these feeds must be chopped.
4. Start filling the machine with straw and hay first. After chopping them, add other moist (such as silage, pulp, etc.) feeds and then concentrate feed.
5. If your machine is scaled; drive slowly. Do not enter bumps and potholes.
6. Never brake suddenly.
7. Always move the first movement of your machine's mixing system from slow to fast.
8. Your machine has a maximum speed of 540 RPM. It should work at shaft speed. Do not go higher speed.
9. Stop the shaft in sharp turns of more than 60 degrees. Move slowly when the angle is corrected.
10. The knives used in the machine should always be sharp. Operating your machine with a blunt, finished and different brand blade will cause malfunctions and waste more fuel. In this case, replace the blades with new ones. You can contact our company for this.
11. If the safety pin of the machine is cut, do not install a new one until you understand the reason and fix the problem.
12. Do not get into, bend over or interfere with the machine while it is running.
13. Never interfere with the auger and blades manually while the machine is running.
14. Never approach the shaft and working parts while the machine is running, and do not let anyone else near it.
15. Be sure to comply with the lubrication service rules supplied with the machine.
16. If your machine has a bucket, make sure that there is no one behind the machine while opening and closing the bucket.
17. Oil spilled on the ground prepares the necessary conditions for work accidents. For this reason, spilled oil should be wiped off immediately and it should be ensured that the environment is not slippery. Wood shavings are a good material for cleaning. However, wood shavings must be removed from the environment quickly so that it does not cause a fire.
18. If you encounter any problems with your machine, you should definitely get help from the authorized service.
19. Those under the age of 18 and those who do not have a tractor license cannot use the machine.
20. Failure to comply with these rules above will result in malfunctions in your machine, which will be out of warranty.
21. Accidents and malfunctions arising from not following the above safety rules are the responsibility of the user.

Attention: The instructions given in the operating instructions are valid for activities under normal conditions. Instructions for the user's special conditions are included in the manual. The manufacturer or supplier cannot be held responsible for any changes to the machine or equipment due to special requirements and conditions.

Climate, temperature, meadow (type of feed), cutting or pressing tools and protection methods are some of the factors that affect the operation and efficiency of the machine. In order to obtain the highest efficiency from the machine, it is very important to adjust the machine according to the local conditions and make it suitable.

## 5.2. General Safety

1. Read and understand the Operator's Manual and all safety signs before operating, maintaining or adjusting the machine.
2. Install and properly secure all shields and guards before operating. Use a connecting pin with a mechanical locking device.
3. Keep a first aid kit handy when needed and learn how to use it.
4. Have a fire extinguisher available when needed and learn how to use it.
5. Wear suitable protective clothing. This list includes, but is not limited to:
  - Helmet
  - Safety shoes with non-slip soles
  - Safety glasses or goggles
  - Heavy gloves
  - Wet weather equipment
  - Hearing protection
  - Respirator or filter mask
6. Before starting and operating, keep people away, especially small children, and remove foreign objects from the machine.
7. Do not let the riders.
8. Annually review safety-related items with all operators.
9. Never use your machine above its capacity.
10. Except for the bucket, it is forbidden for the operator to manually load the machine over the ramp.

## 6. ATTACHING THE MACHINE TO THE TRACTOR AND DETACHING THE MACHINE FROM THE TRACTOR

**Before attaching the machine to the tractor, make sure that the machine is fixed.**

- Bring the tractor closer to the drawbar of the machine until it is 18-20 cm.
- Take the necessary precautions to prevent your tractor from slipping.
- Stop the tractor and insert the fixing pin.
- Raise the jack of your machine sufficiently.
- Make the shaft connection between the machine and the tractor..
- If there is a weighing system, get 12 volt power from your tractor..
- Before operating your machine, make routine checks.

Important note:

Before operating your machine, visually inspect inside and around it.

- When detaching the machine from the tractor, take the machine to the parking area and fix the machine.

Take the load from the tractor and detach the machine from the tractor.

## 7. Pre-Operation Checklist

Following this pre-operation checklist is important for both personal safety and maintaining good mechanical condition of the machine. The following areas should be checked each time before and after starting the machine.:

- 1. Lubricate the machine completely. See the schedule outlined in the “Service and Maintenance Section” of this manual.
- 2. Only use a tractor with sufficient power and weight to mix and distribute feed.
- 3. Make sure the machine is properly attached to the tractor using a drawbar pin with provisions for a mechanical gripper. Make sure a retainer, such as a click pin, is attached.
- 4. Make sure the safety chain on the link is attached.
- 5. Check the tires and make sure they are inflated to the specified pressure..
- 6. Check that the machine's Oil Tank and Transmission oil gauge are properly.

**WARNING:** Use extreme caution when working around a high pressure hydraulic system. Make sure all connections are tight and all components are in good condition. Use hand and eye protection when searching for suspicious leaks.

- 7. Inspect all hydraulic lines, hoses, fittings and couplers for tightness. Tighten if there is a leak.
- 8. Inspect all moving and rotating parts. Remove any debris entangled in them.
- 9. Make sure all guards and shields are installed and secured in place.

## 8. Using the Jack

The jack should be at the highest level when the machine is out of use. The front and rear tires should be fixed by placing a ramp.

If the machine will operate, it must first be connected to the tractor and the jack must be brought to the highest position after its safety is ensured.

Jack lubrication points should be lubricated periodically.

Otherwise the gears inside the jack will run out of oil and disable it..

**NOT:** Check the jack before moving the machine.



**Attention!!**



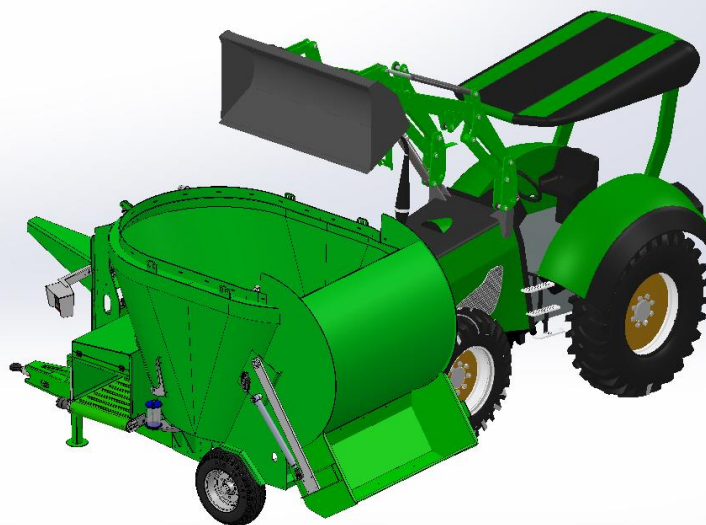
Make sure that there are no living creatures around the machine while the machine is running and do not reach the machine more than 20 meters away.  
**DO NOT APPROACH!!!**



## 9. LOADING FEED TO THE MACHINE AND SAFETY MEASURES

- Make sure that there is no one in and around the loading area while loading the machine. Do not stay under or around the machine during loading.
- Do not stay around the loading vehicle or under the loading bucket during loading.
- Before starting the installation, start the machine and load while the machine auger is running.
- When loading with the loading bucket on the machine, load with a maximum load of 100 kg.
- While the tractor is working during the loading, do not intervene inside the machine with sticks, rakes, etc., for the sake of safety and the health of your machine.
- Make sure that the brake system of the tractor is working while loading. If your machine has a brake, make sure that the brake is active.
- After the loading process is completed, check the surrounding area of your machine before moving. Close the loading bucket on the machine completely and move on.
- Avoid sudden braking and sudden starts as much as possible while the machine is in motion.
- Do not load above the full weight indicated on the machine label.
- Never enter the machine.

**NOTE:** Climbing the loaders or using the loaders as lifting gear is dangerous and prohibited.



## 10. OPERATING THE MACHINE, FEED PREPARATION AND SAFETY MEASURES

- The machine should only be used by one person. When the operator detects someone in the cutting and loading area, the operator should not operate the start control. If the machine is working, it should be stopped immediately and make sure that the danger has passed.

- Connect the tractor shaft to the machine to start the machine. Adjust the rotation direction and rotation speed of the power input connection according to the label on the machine. Max 540 rpm.

After attaching the shaft, make sure that there is no one inside the machine before activating the PTO of the tractor. When the PTO is engaged, the augers will start to operate and the hydraulic system will be activated and ready for use.

- When the machine is ready for use, idle the equipment of the hydraulic system for control purposes. Check for oil leakage.

- Never control the machine between the tractor and the machine while intervening on the front control panel. Control the machine from the tractor. It is dangerous to stand between the tractor and the machine during operation.

- Cut the ropes of the bales while loading the machine. Taking care not to throw away any foreign material other than grass, straw and feed will ensure that your machine works healthier and has a long life.

- If loading is to be carried out on the machine other than the loading bucket, the straw bales should be cut and the bale should be thrown in pieces from the back of the machine in a way that does not damage the upper spirals.

**- Pay attention to whether it is dry, damp and wet bales. Bales should never be thrown into the machine before they are shredded. Otherwise, your machine will damage the auger and equipment that will be forced. It is inevitable that the tractor will damage the PTO shaft, and your machine will not be covered by the warranty in case of errors. Definitely shred the grass and throw it away.**

- With the machine loaded or unloaded, enter the bumps and potholes on the road as carefully and slowly as possible. When the machine enters bumps and pits quickly, the risk of failure is high as the load will come directly to the loadcell weighing system. It will also damage the chassis and hub of the machine.

- Determine the mixing and homogeneous mixing time of the machine. If you are not working with the bucket, keep the bucket in the closed position as much as possible.

- Never use the bucket for carrying loads. Do not carry loads with the bucket.

- Never intervene while the machine is running or in motion.

- Never stand above the machine, on the scoop or on the hay shed. Do not get too close to the machine when loading manually, do not throw the straw from afar and do not intervene too close to the helix assembly.

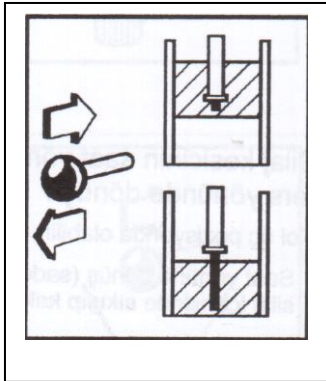
- When loading straw bales, silage blocks or other forage, care should be taken on uneven ground or uneven loading, otherwise there is a danger of lifting the drawbar.
- While the machine is running, do not go to any place other than the stairs on the machine to look inside. Never climb into the mixing and chopping section, the upper edge of the compartment.
- Pay attention to the dangers of unintentional contact with high voltage lines when using the loading bucket.
- When the loading and mixing process is finished, before taking action to distribute, check the machine environment and adjust the tractor mirrors so that the operator can see the dangerous area.

**NOTE:** The machine is suitable for use only for the intended job. Never use it for the transportation of people, animals or goods.



## 10.1. OPERATION OF THE FEED MIXED WAGON

The functions of the wagon are operated by means of the levers on the control panel at the front of the wagon.



Opening/closing the discharge door

The arm can be 3 positions.

- Open
- Stop
- Close



Conveyor rotation

Arm can be in 2 positions:

- Stop
- Start the conveyor

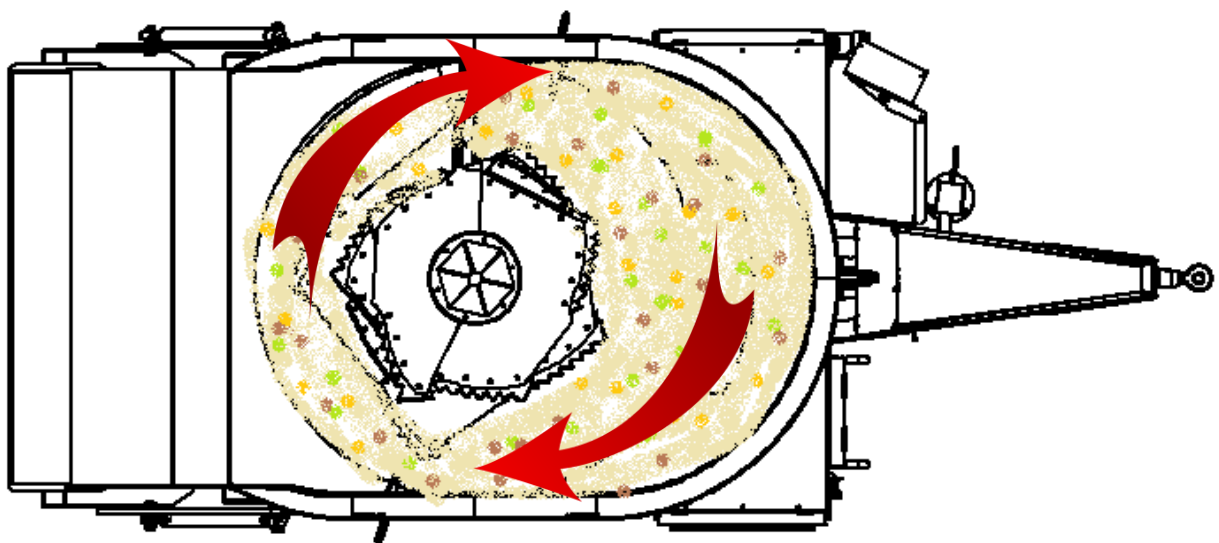
## 10.2. FEED MIXER WORKING PHASES

- 1- If the user is unfamiliar with the Mixer Wagon and the loader to be used to fill the machine, he should be careful and get used to how the machine works. You should start with small loads and increase the load amount and loading speed as you get used to the machine.
- 2- Loading some types of silage, straw and hay can be a problem, but all feedstuffs are easily loaded when the feed is loaded in small loads and at a slow loading speed.
- 3- The feed inside the mixer wagon should not hit the rear wall of the body. There should be 1-1.5 m<sup>3</sup> of free space at the back of the mixer wagon. If large bales are used with long fiber feed mixed with more than 50% dry matter, the capacity is less. It needs more free space at the rear of the mixer wagon to bring long feeds to the main auger and cut it before sending it to the upper augers.

### LOAD SEQUENCE (Normally)

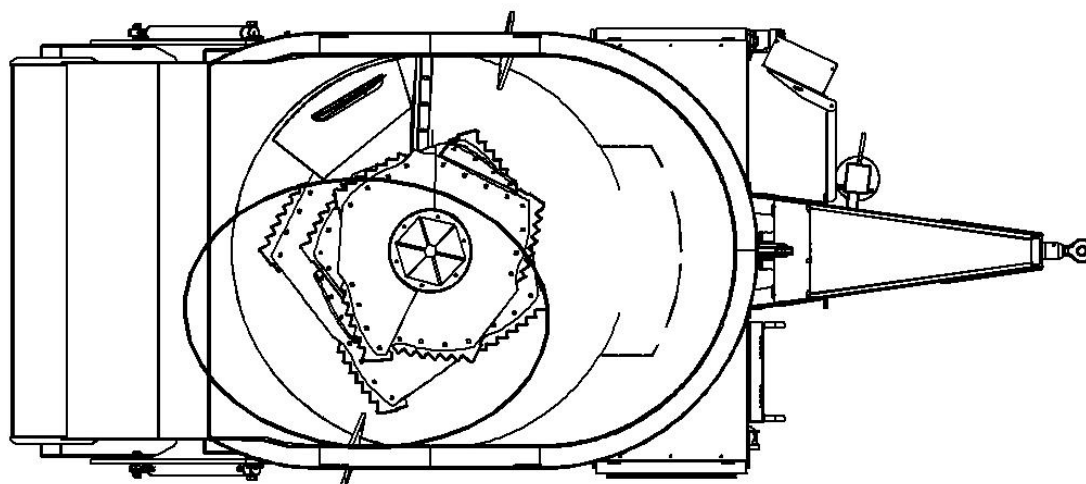
Screw conveyors, loaders etc. must be loaded by.

Manual or rear loading of the bait is the sole responsibility of the machine owner. If manual loading will be done;



**Feeds are loaded in the following order:**

- Long fodders such as straw, hay and silage.
- Meal, cereals and concentrates.



When loading silage, hay or hay with the loader, loading should be done at the back of the wagon in the middle or on the right side. The material loaded first should be a light load.

By-products such as beet pulp, molasses and potato pulp.

Minced material such as corn silage and grass silage.

The mixer wagon should run for a few minutes and the feed ingredients should be fully mixed. Until the long fiber materials are cut to the desired length, the cardan joint (Shaft) of the machine should be operated at 540 rpm and continue the loading process. When only long animal feed is used, the loading order sometimes needs to be changed. Especially when long animal feed is in round bales, the Bales should be shredded into the Machine, be the first material loaded and loaded into the rear of the mixer body so that it goes directly to the main auger. In this way, the machine is given time to process the first load so that the long material does not get entangled in the upper auger.

The user must learn how the mixture should look and make sure that a similar mixture is obtained every day. The mixture has a great effect on meat and milk yield.

- Mixing time varies depending on fiber size.
- Excessive mixing (mixing time too long)
- If the fiber length is too short, the risk of digestive problems increases.
- Little mixing (mixing time is too short)
- The mixture is not homogeneous.
- The fibers stay too long and can separate the feed while the animals are eating.

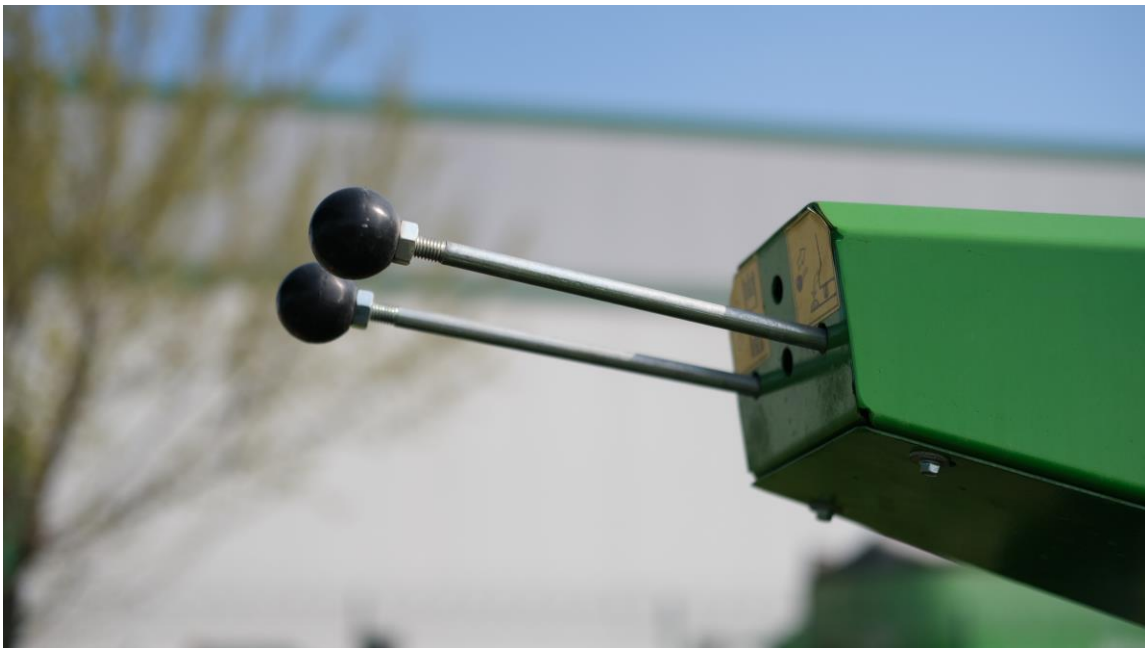
## 11. FEED DISTRIBUTION WITH THE MACHINE

- It is dangerous and prohibited to stand near the dispenser while the machine is in operation.
- While the machine is in motion and the shaft is working, definitely stop the shaft during rotation. Otherwise, the shaft and gearbox will be damaged.
- Adjust your speed and cover opening according to the amount of feed you want to throw.
- Once mixed, lower the tape and adjust the appropriate position before you start pouring the bait.
- Once you have set the proper position, start rotating the band.
- When the band is open and starts to turn, you can open the feed cover and move the tractor and adjust the amount you want.
- If you are going to take a break from the feed distribution and distribute it in another place, close the cover, stop the band, close the band and move.
- Do not leave food in the machine for the next day. Leaving feed in the machine seriously damages the feed quality and machine equipment.

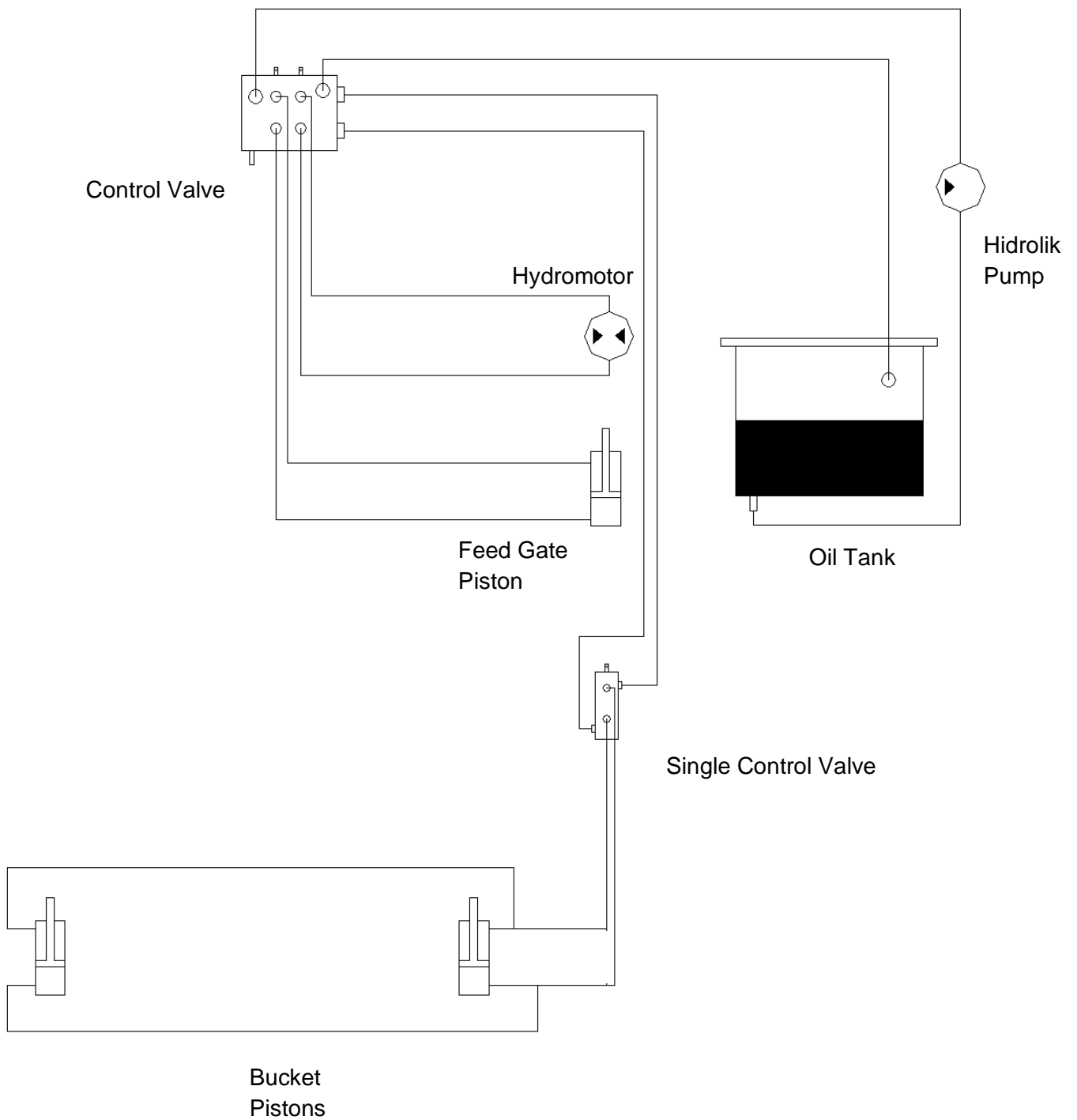


## 12. USING THE HYDRAULIC SYSTEM

- Hydraulic systems are set ready for use on the machine. For the hydraulic system to work, attaching the tractor shaft and working of the PTO will make the hydraulic system ready.
- In order to manage the hydraulic system, movement is provided from the control levers. Do not operate another hydraulic system while one hydraulic system is operating. For example, do not operate the band piston at the same time as opening the bait cover. If you operate a second system, your machine's hydraulic system will be damaged.
- The allowable lever pressure of the hydraulic circuit is set as max.135 bar. Do not change the pressure setting.



## 12.1. STANDARD VERTICAL FEED MIXER HYDRAULIC SYSTEM



### 13. DISCHARGING

1- To distribute the product in the feeding areas, use the lever that opens the discharge door until the required amount is discharged. Start the conveyor so that the mixed feed will come out of the wagon.

2- When the emptying process is complete, close the door by moving the lever in the opposite direction. Wait until the conveyor is completely empty and then stop the conveyor using the appropriate lever.

3. If the blockages are to be cleared and the machine is to be entered, first of all, the motor must be stopped, the shaft must be removed, protective shoes must be worn and the machine must be entered slowly and carefully through the feed cover. Care should be taken with the knives where you will step. Since there is a high risk of slipping and injury in the helix, it is necessary to move very carefully and slowly.



## 14. CLEANING THE MACHINE AFTER USE

- For all maintenance, service and cleaning services of the machine, the interfere must be done while the tractor shaft is dismantled and the engine is not running.
- Before starting the cleaning of the machine, the brake system must be active and fixed by placing wedges in front of and behind the tire.
- If it is necessary to turn the augers while cleaning the machine, they must be turned manually by hand.
- The operator should never move or interfere with the tractor during machine cleaning.
- The bucket should always be open when cleaning the machine.
- If the blockages are to be cleared and to enter the machine, first of all, the motor must be stopped, the shaft must be removed, and safety shoes must be put on and entered slowly and carefully from the back of the machine. Attention should be paid to the knives in the places you will press, and you should try to step on the pipe as much as possible. Since there is a high risk of slipping and injury in the helix, it is necessary to move very carefully and slowly.
- Make sure to clean the tape after use. Keep the band running, pressurized water to the inside of the band.



## 15. MAINTENANCE AND REPAIR

- Before starting the maintenance and repair, separate the machine from the tractor and fix the machine by placing wedges in front of and behind the tire.
- Lubricate the grease points on the machine regularly with grease at certain intervals.
- Check the tire pressure and lug nuts periodically. Lubricate the hub with grease at least once a week. Tire pressure is written on the tire. If your tire pressure is low or high, the tire may be damaged or your machine may tip over as a result of a tire burst, as it will be below or above the working capacity of the machine.
- The blades on the helix part of the machine should be checked once a week, and the connection bolts should be checked and tightened if they are loose.
- Check whether there is oil leakage in the hose and connection fittings of the machine periodically. If there are leaks in the connection unions, tighten the connections with the key and clean the fasteners. If oil leakage continues, please contact our company.
- Before performing maintenance and service under the raised parts of the machine, use the locking device.

### - Checking or changing knives:

\* Blades should be checked for gaps once a week. Loose bolts should be tightened.

\* If a blade change is required, the machine must be entered through the feed cover and the bolts must be started to be removed. When installing the blades, they should be mounted from the front leaves of the helix towards the back. When the auger needs to rotate, the person wearing the blade should come out of the machine and turn it carefully by hand. The shaft should never be attached to turn the auger. One person should do the blade change for safety.

- Spiral blades need to be sharpened regularly.
- Blunt blades increase electricity consumption and prolong feed mixing time by causing cuts.
- Blades should be checked daily for visible errors.
- Replace damaged or dull blades immediately.

The blades should be sharpened with the smooth side of the disc and never with the wavy part. Sharpening should be done carefully and care should be taken not to overheat the blades.

For sharpening (sharpening) knives, use a wavy surface sharpening stone and spiral.

Precautions when sharpening knives:

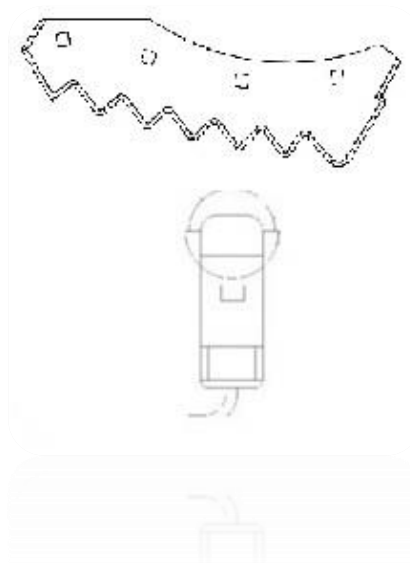
- During sharpening, parts may come to you from the blades or the disc in the spiral. This can be particularly harmful to your eyes.
- To sharpen the knives, get inside the wagon from the sides.
- Use goggles and gloves for protection.
- Sharpen the blades carefully with the soft side of the disc.
- After cleaning the dust, the sharpening process is complete.
- Remove all foreign objects such as tools etc. inside the chamber, empty the chamber completely.

### **WARNING !**

- Be careful when changing blades!
- They can make deep cuts on your fingers and hands.

Always use protective gloves when working with knives.

- When changing blades, use the following tools:
- Use two keys (Number 19),
- When placing the knives, use protective gloves or cloth-like material to protect them from the edges and to hold the sharp points.



### **- Conveyor care:**

\* Band maintenance should be done at least once a week with plenty of pressurized water. Do not leave any dirt inside the band, otherwise the dirt inside the tape will solidify and cause the tape to swell and jam.

## 16. MAINTENANCE AND REPAIR INSTRUCTIONS

### > Safety precautions

- Before servicing the machine, separate the universal joint (Shaft) from the machine and take it to a flat surface and close the hydraulic valve.
- Use safety precautions and protective equipment while performing maintenance and repair.

### > After-start maintenance

- After the first 10 hours of use, check the bolts and nuts and tighten if necessary.
- Check the wheel bolts and tire pressure.

### > After every 25 Hours of operation

- Lubricate each part with a lubricating nipple and a warning sign with grease.
- Check the hydraulic oil level. Top up if necessary. (HD68 Hydraulic oil)
- Clean the guide rails of the bait discharge cover and lubricate them with grease.
- Check the oil level of the gearbox oiling unit. Complete if necessary.

### > Checks and periodic parts replacements

- 1- Change the hydraulic oil in the transmission lubrication unit and oil tank after the first 800 hours of operation (adjusted for 2 hours of operation per day).
- 2- After the first 50 hours of operation, wash the filter cartridge in the hydraulic oil tank with diesel oil and then dry it with compressed air. Repeat this process after every 400 Hours of operation.
- 3- Check the tire pressure every month and, if missing, adjust according to the values written on the label. Check that the bolts are tight.
- 4- Make sure that the blades in the auger work efficiently and that the bolts are tight.
- 5- Replace the blades when worn. Otherwise, it will increase the fuel, which will decrease the auger and machine efficiency.
- 6- We recommend replacing the hydraulic hose when there is an oil leak or crack in the hose.

## 16.1. LUBRICATION PROCEDURES

### Lubricants

|                 |        |
|-----------------|--------|
| Hydraulic Oil   | HL 68* |
| Shell Tellus    | 68     |
| Mobil DTE       | 26     |
| P.O Haydro      | 68     |
| Total Azzola zs | 68     |
| BP. HLP         | 68     |

**Min. operating temperature -25**

**Max. operating temperature 70°C**



### Transmission Lubrication Unit

|                 |         |
|-----------------|---------|
| Hipol           | 90MF*   |
| BP. Energol     | 6RxP 90 |
| Mobil Gear      | 90      |
| Shell Omala     | 90      |
| Total Carter EP | 90      |

**Min. operating temperature - 20°C**

**Max. operating temperature 90°C**



## Grease

AGIB MU 2 / 4620542

Şampiyon RUBYNOL C

Motec MTR MYĞ/975-4/20525



## 16.2. CLEANING THE OIL TANK

- Open the oil tank cover, under the suction hose.
- Remove it by putting a container, drain the oil in the oil tank and replace it.
- Fill until oil appears from the indicator.
- Before closing the oil tank cover, clean the ventilation inside the cover with compressed air and close the cover.



### 16.3. DETACHING CONVEYOR BELT

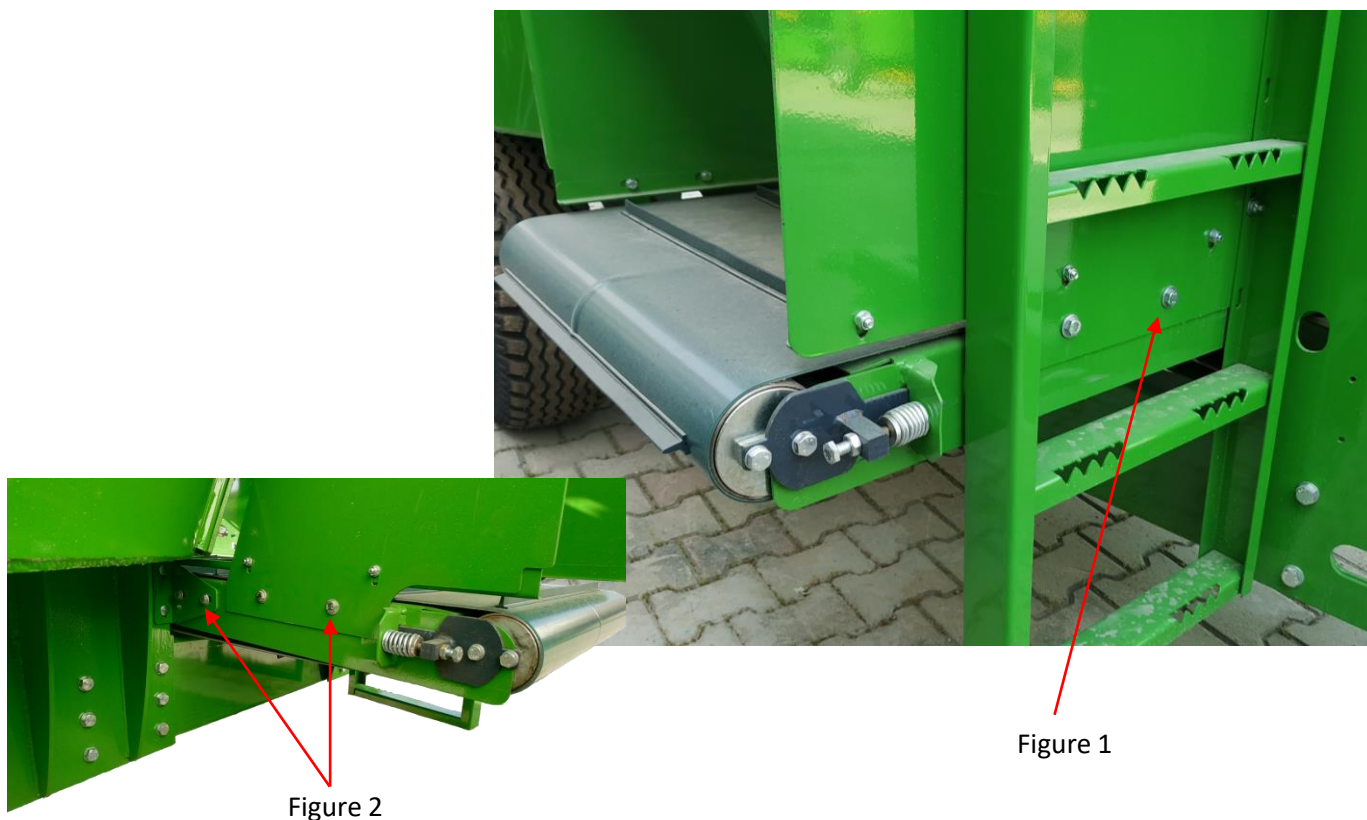


Figure 1

Figure 2

Step 1: Park the machine on level ground under the jack and with wooden chocks in front of and behind both wheels.

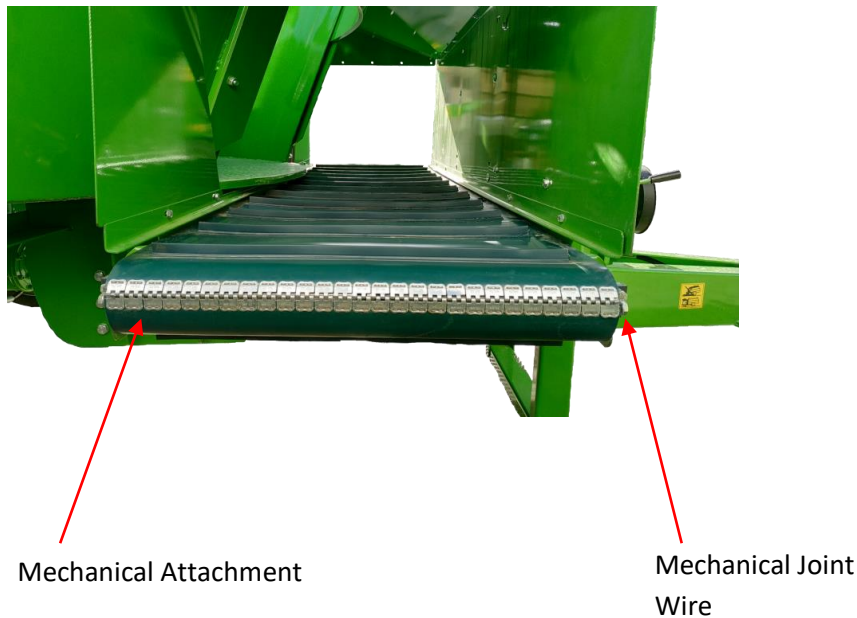
Step 2: Close the conveyor belt and disconnect the universal joint.

Step 3: Feed your wooden wedge or pallet truck so that it is under the belt.

Step 4: Unscrew all the bolts attached to the band shown in Figures 1 and 2.

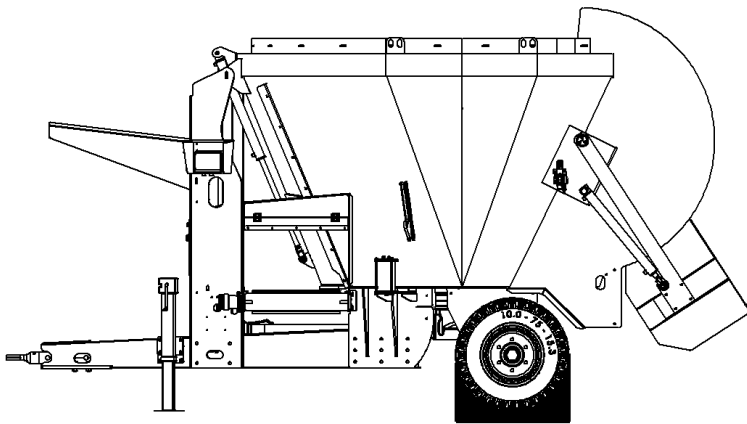
Step 5 : Separate the conveyor belt from the machine.

### 16.3.1. CONVEYOR BELT REPLACEMENT



- Step 1: Bring the conveyor belt to the position in the figure.
- Step 2: Loosen the tension of the conveyor belt all the way.
- Step 3: Straighten both ends of the wire in the mechanical attachment of the conveyor belt.
- Step 4: Pull the mechanical attached wire and remove the tape.
- Step 5: Put on a new band and bring the mechanical ends to meet each other.
- Step 6: Carefully thread the mechanical splice wire through all the slots.
- Step 7: After assembling the mechanical attachment, bend the end of the wire coming out from both sides well.
- Step 8: Adjust the belt tension.
- Step 9: Make the final checks manually and visually before operating.

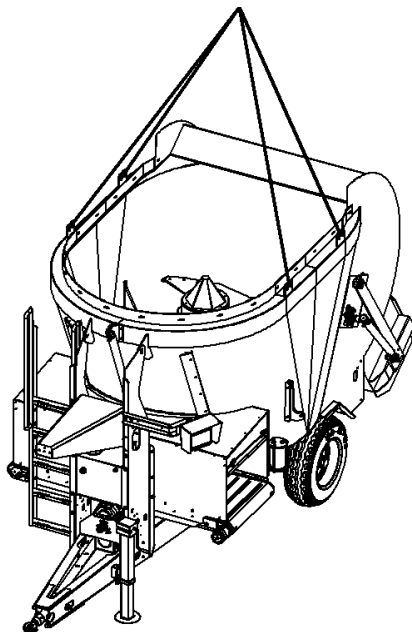
## 17. CARRYING OF SUPERMIX WAGON



### ✓ Fixing

The wagon must rest on level ground with its wheels and lifting jack.

Place wooden chocks in front of and behind both wheels under the lifting jack.



### ✓ Lifting

When the wagon needs to be lifted, it is important to use the four hooks as shown in the adjacent figure.

**NOTE!** This is the only way the wagon is allowed to be lifted. The crane used for lifting must be suitable for the weight indicated on the type plate.

## 18. TECHNICAL DATA

### **- Shaft and gearbox rotate, auger does not;**

- 1) The worm bolt may have cut.
- 2) The axle in the gearbox may be damaged..
  - \* If the upper augers are rotating, the transmission axle is intact, the bolt is cut.
  - \* If the upper auger does not rotate, the axle is cut off.

### **- Hydraulic system works, feed cover works but belt does not turn;**

- 1) It may be that the bait is filled under or inside the band and is stuck / jammed.  
(Wash the tape thoroughly with plenty of pressurized water and clean it.)
- 2) Hydromotor key (coupling) may have slipped.
- 3) The bearings of the belt drum may have disintegrated and jammed the drums.

### **- There's a noise coming from the auger;**

- 1) The blade bolts may be loose, loose or rubbing against the base. (Check remotely.)

### **- The bucket is difficult to open and close;**

- 1) Piston may be bent from overloading.
- 2) The bucket may have been hit.
- 3) The kreower union on the 2p and 3p control levers may have failed.
  - \* If the bait cover and belt are working at normal speed and the bucket is moving slowly, the kreower record has failed.
  - \* If the belt and bait cover do not operate at normal speed; The oil may be dirty, the filter is clogged, the oil is missing or the pump is faulty.

## 19.TROUBLESHOOTING

| Problem  | Reason  | Process   |
|--|---|---|
| Loud noise from the bait wagon                     | <p>Broken auger blades</p> <p>Bad worm bearing</p> <p>Out of balance, bent auger shaft</p> <p>Curved blades on main auger</p> | <p>If feed is unloaded to animals:</p> <p>Stop discharging immediately. Sharp pieces of metal can cause great harm to animals if swallowed. Empty the mixed feed. Remove the shaft and separate the Wagon from the tractor. Turn the augers by hand and try to find the cause of the noise. If the cause is a defective bearing or crooked helix shaft or blades, the wagon must be repaired by an authorized person.</p> |
| Hydraulic system not works                         | Low amount of hydraulic oil   | <p>Check the hydraulic oil level and valves.</p> <p>If there is no problem with the oil level, there may be a problem with the hydraulic pump, it should be repaired by an authorized person.</p>   |
| The double-sided control lever works unilaterally. | The control arm shaft may be bent or broken.  | If your machine is running, stop your machine. Defective part must be repaired by authorized person.  |

## 20. WARRANTY CONDITIONS

1. Before the machine you bought leaves the factory, it has been checked for material or manufacturing faults. However, the errors you notice during use will be covered free of charge for 2 (TWO) years as of the start of the warranty.
  2. Failure of the machine during the warranty period and the time spent in repair are added to the warranty period.
  3. The repair period of the machine is 20 working days.
  4. This period starts from the date of notification to the service station related to the machine, or in case of absence of a service station, to one of the company, dealer or manufacturer. It is possible for the consumer to make a fault notification by telephone, fax, e-mail, letter or similar. However, in case of dispute, the burden of proof lies with the consumer
  5. As a result of the malfunction of the machine due to material, workmanship or assembly errors during the warranty period, it will be repaired without any charge under any other name, such as labor cost, replacement part cost or any other name.
- Note: Conveyor belt rubber, scale, auger blades and tires are not included.
7. The machine cannot be used for other purposes.
  8. Original and optional accessories are installed on the machine only by the manufacturer or authorized persons.
  9. It is strictly forbidden to modify the machine. Otherwise, the warranty of the machine will expire and any damage that may arise from this change cannot be covered under the warranty.
  10. Defects arising from the use of the machine contrary to the points in the user manual are out of the scope.
  11. For problems that may arise regarding the warranty certificate, the Ministry of Customs and Trade may apply to the General Directorate of Consumer Protection and Market Surveillance.
  12. Pay attention to whether it is dry, damp and wet bales. Bales should never be thrown into the machine before they are shredded. Otherwise, your machine will damage the auger and equipment that will be forced. It is inevitable that the tractor will damage the PTO shaft, and your machine will not be covered by the warranty in case of errors. Definitely cut the grass and throw it from the back of your machine.



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