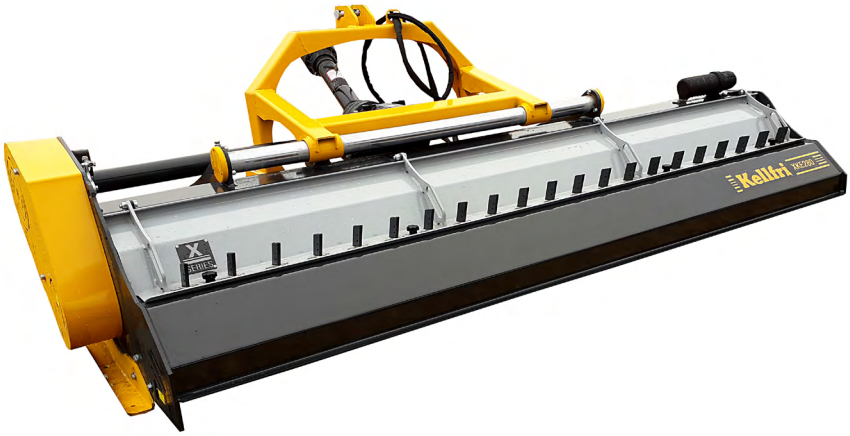
# 35-XKE280
# FLAIL MOWER 2.8 M




Kellfri

Read this manual carefully
before using the product!
Translated from the original

**TABLE OF CONTENTS**


| | |
|---|---|
| Introduction | 3 |
| Product information | 3 |
| Safety information | 4 |
| Product safety information | 5 |
| Personal protection | 6 |
| Surroundings | 6 |
| Before use | 7 |
| Workstation | 7 |
| Risks and hazards when using a mowing machine | 8 |
| Operation | 9 |
| Warning labels | 10 |
| Before using the machine | 11 |
| Operation | 11 |
| Cutting | 12 |
| Transport and storage | 13 |
| Maintenance and service | 13 |
| Recycling | 13 |
| Lubrication points | 14 |
| Movement diagram | 15 |
| Gearbox | 16 - 17 |
| Replacing the gearbox | 18 - 21 |
| Belt adjustment | 22 - 23 |
| Counterknives | 24 |
| Pins and hydraulic tubes | 25 |
| Exploded diagrams and materials list | 26 - 33 |
| Extended warranty for Kellfri groundcare machinery | 34 |
| Service | 35 - 41 |
| Complaint form | 43 |
| Warranty terms and conditions | 44 |


**Consider the following before driving:**
**- Check oil level and grease. Top up if necessary.**
**- Check the tightening of bolts and nuts.**
**- Check belt tension.**
For further information, see manual.

Kellfri designs and supplies efficient, affordable machinery and components for forestry, agriculture, construction and gardening in Sweden, the rest of the Nordic region and Europe.

Please note that the information in this document is general and may not pertain to your particular machine. We therefore recommend that you always read and follow the safety instructions and the instructions in the machine's operating manual.

Kellfri is not liable for any errors in this document.

## INTRODUCTION

Thank you for choosing a product from Kellfri AB. By following general safety information, operating instructions and common sense, you will have many years of enjoyable use of the product. Kellfris equipment and products are aimed to be use by active farmers with high demands on functionality.

## PRODUCT INFORMATION

Flail mower XKE280 is a powerful machine for those who have high demands on performance when operating over dense vegetation. Suitable for tractors between 90-100 hp. The working width is 2.8 m which makes it convenient for mowing, trimming medium or large grass areas.

The mower has coarse-toothed knives in the chassis to break the grass better and detachable counter knives to keep the grass in the machine to help chop the material. The high rotor speed gives the hammer flails a good ability to cut and chop all types of material and you get a reliable machine that is effective even for large material flows.

The cutting height is adjusted by the support roller . The adjustable support roller guarantees a correct cutting height on uneven ground. The cutting height can be adjusted between 0-70 mm which gives you the opportunity to mow the grass near the ground and thus get a more even result. The grass is evened out and the remnants decay faster.

The support roller has scraping iron to keep the roller clean from cut material. The support roller is built into the chassis to withstand rough terrain and is protected during collision. On the front side, the mower is provided with chain protectors that are compliant with the ground and protect both the tractor and the surroundings from ejected stone and grass. As standard, this flail mower is equipped with side shift which allows you to move the machine to the right or left.The mower has an openable hatch. The hatch can be leave open when you need a good material flow when cutting big areas.

| TECHNICAL DATA | 35-XKE280 |
|---|---|
| Length x Width x Height | 3010 x 1290 x 935 mm |
| Working width | 2800 mm |
| Working height | 0 - 70 mm |
| Weight | 973 kg |
| Sideshift | Standard |
| Openable hatch | Standard |
| PTO | Standard |
| Power requirement | 90-100 hp |
| Hammer flails | 22 pcs *(Y-flails not inlcuded - optional)* |
| PTO speed | 540 RPM |
| 3 point attachment | Cat 2 |
| Gearbox oil capacity | 1,5 - 1,8L oil type 80w 90 |

## SAFETY INFORMATION

Before using the product, please read the safety information and instruction manual and understand its contents for your own and others' safety. Always keep the safety information and instruction manual easily accessible to the user of the product. Remember that it may be good for your own and others' safety to read the safety information every now and then. If the instructions manual is damaged or otherwise unusable, please contact and order a new one from: Your retailer

The general safety instruction is also available from Kellfris website: www.kellfri.co.uk

Do not use this equipment if you are feeling sick, tired or in influence of alcohol. Nor if you are under the influence of strong medications or drugs, suffering from strong depression or severe mental illness. Always follow the general traffic rules and regulations and the rules of the Animal Welfare Act. Persons under 15 years old and people with mental illness may not use these product.



**WARNING!**

The machine's original design must not under any circumstances be changed without the permission of the manufacturer. Unauthorized modifications and / or accessories can result in life-threatening or fatal injury to the operator or others.

**Warning symbols identify important safety aspects in this manual to help you and others avoid hazards and accidents. When using the machine: Take extreme caution!**




This symbol indicates that a serious accident will occur if the instructions in the manual is not followed. The accident resulting in serious injury, possibly death or serious property damage.




This symbol indicates that an accident will occur if the instructions in the manual is not followed. The accident resulting in serious injury or property damage.




This symbol indicates that an accident could occur if the directions is not followed. The accident resulting in personal injury or property damage.




Notes! indicates the potential for the breakdown of the regulations is not followed.

*When using the machine in a company, the employer has the responsibility to ensure the user of the machine has theoretical and practical knowledge of the machine and the operation is done safely. Follow the country's Health and Safety regulation. For more information, contact your Health and Safety Executive.*

**PRODUCT SAFETY INFORMATION**

The user of the machine should understand the contents of this manual before use, service and installation of equipment to the tractor and all other relevant measures. Never wear jewellery, loose clothing, ties, scarves, belts, unbuttoned jackets that can get caught in moving parts.

Always wear approved clothing that complies with the provisions of accident prevention purposes, such as non-slip shoes, hearing protection, goggles and gloves. Wear a jacket with reflective stickers on the equipment used near public roads.

Contact your dealer, health authority or the nearest equivalent authority for information about the current safety regulations and special provisions to guarantee the personal security.




Always disengage the PTO shaft, Turn off the tractor engine and apply the parking brake before adjustment is performed on the machine.




Never put your hands or feet near the machine without stopping the implement and the tractor engine. The rotors may continue to rotate for up to 1 minute

* Never leave the equipment with the tractor engine running. Turn off the engine and apply the parking brake when you leave the equipment, even for a short while.
* Never leave the machine uplifted. The hydraulics can lose pressure and cause the implement to fall down.
* Make sure that all guards are fitted correctly and cannot come loose.
* The PTO shaft must be protected throughout its length. Make sure to anchor the safety chain well.
* Only the operator of the tractor shall be in the vicinity of the machine during work. No one is allowed to stand underneath any suspended load.
* Check before driving that no rocks are sticking up on the field, or lying objects or other debris that can be thrown out while operating.
* Keep hands, feet and clothing away from rotating parts.
* Lower the implement to the ground, put tractor in park, turn off engine, and remove the key from the ignition before performing maintenance, service or other reparation on the machine.
* Remove buildup of grease, oil or debris.
* Do not drive with the mower if large vibrations occur, stop the machine immediately, check and correct the error before using the machine again.
* Do not climb on the mower!
* When attaching the machine onto the tractor; do not allow anyone to stand between tractor and implement while backing up to it.
* Make sure that there is no longer any pressure in the system before disconnecting or connecting the hydraulic hoses.
* Disconnect quick couplings, and be sure to protect hydraulic couplings after use so that they are not exposed to dirt.

## PERSONAL PROTECTION

Always wear suitable clothing and footwear. Do not wear loose clothing or jewelry when using the machine. Remember to put up long hair when operating machines with rotating parts. Wear protective gloves, to prevent burn injuries on contact with hot surfaces such as exhaust system, and to avoid oil and gasoline on the skin. Hearing protection should be used when the engine is running.



## SURROUNDINGS

Make sure your working area is clear from people, children and objects before installing and using the machine. Risk of serious injuries can occur during operation.

Take an extra caution when children are in the area where the equipment/ product is being use or stored. Check the area for low hanging electrical wires. Be careful when working on slopes and near ditches.

Always work alone with single - purpose products such as this product. Never have junk lying in your area. Keep working areas clean. Always respect the risk zone.




## INCASE OF EMERGENCIES

In case of an emergency please dial 112.
Keep cell phone or emergency phone available specially when working alone. First aid kit and fire extinguishers must be kept easily accessible during all work, maintenance and service.



**BEFORE USE**
Read the safety information and instruction manual carefully. Be sure you understand the safety measures, instruction manual and warning labels. Use common sense when operating the machine and use appropriate personal protective equipment.

Always check the performance and the machine combination that are used. It's highly important these matches in a satisfactory manner. This is to ensure the product or the function and most important yours and others safety. Do visual inspection of equipment or product before each use. Fix or replace damaged or worn parts immediately to reduce the risk of injury. Lubricate moving parts and check that all screw-nuts and bolts are tightened.



**Warning!**

For safety, this product should only be used in the manner described in this manual. The user is responsible for the instruction to be read through and followed.

Learn and remember the correct working methods. Beginners should always keep a low speed, use extreme caution before routine and product knowledge is achieved. The user/customer is responsible to handle the situation correctly. The product should not be taken into use unless it can be done in a safe way for the user.
Read the tractor's manual before connecting machine.

**WORKSTATION**
The driver must remain in the driver's seat during the entire operation. If the operator need to leave the tractor, the PTO must be disengaged, the tractor engine shut off and the parking handbrake must be applied.




NEVER RUN THE HYDRAULICS WHEN THE TRACTOR IS TURNED OFF.

**What to consider when operating a machine with the PTO shaft**
The transmission gearbox is protected by both the drive shaft and the shear bolt. All guards should be effective and in good condition. If machine guards condition is poor or worn, the guards should be replaced before the implement is used.




If the PTO shaft is not properly protected, this can cause death because it can catch parts of the body or clothing and cause life-threatening injuries.

Make sure the safety chain is properly anchored to the PTO-shaft and that the PTO shaft is protected over its entire length. Ensure that PTO shaft spins easily inside the protective tube. Hold the spline groove clean and well lubricated so that the drive shaft can be connected easily.

Read PTO shaft manual adjustment and use of PTO shaft.

**RISKS AND HAZARDS WHEN USING A MOWING MACHINE**

**Risk of crushing**

Bystanders may be injured when the machine is lowered to the cutting position. The machine has crushing points around the hinge areas and between the three-point hitch mount and the main body.

**Rotating blades**

All persons will be at risk of injury if they stick out their hands or feet under the machine when it is lifted from the ground and the blades are rotating.

**Risk of pinching or risk of trapping body parts**

This risk is common in transmission devices such as belt drives, gears and rollers. Ensure that all guards are fitted correctly.



**WARNING!**

Never use a tool or product with defective safety equipment.

**Risk during disengaging of the machine**

The heavier the rotating part is, the longer it will continue to rotate after the drive has been switched off. This feature is called "free-wheeling" . Rotating blades and other components, such as drive shafts, etc. will continue to spin after the drive has been disconnected. Damages:

* When the operator releases the equipment, and try to clean or adjust the machine before the components have stopped rotating.
* When the shear bolt in the protective device in the power take off breaks and rotors still spins while the PTO has stopped. Operator's awareness is the key to safety around rotating parts. Do not raise the machine while the blades are rotating.

**Risk of ejecting objects**

Machines that mows throws out material while driving. Foreign objects such as rocks, sticks and other debris can get into the machine and ejected with tremendous speed. Cover the sides and the front prevents these objects to be thrown out but it does not always guarantee that the guards catch everything that is thrown out.

Bystanders or animals that stand in the way of the projected object can be seriously damaged. Never allow any bystanders within the vicinity of the machine. Respect the machine's danger zone. **Danger zone 15m!**

**Noise**

Please note that the machine is made to be used outdoors and that the position of the operator is in the driving seat of the tractor. It is advisable to read the regulations specified in the tractor manual and maintenance instructions.

The sound pressure level exceeds 70 dB during operation. Hearing protection should be used while driving.

**Accidents involving slips and falls**
Accidents involving slips and falls often happens as the result of:
* Slippery surface
* Uneven steps and platforms

The potential for slip-and-fall accidents can be significantly reduced by using good judgment. All unprotected rotating machinery is a potential for accidents. Damage usually occurs when loose clothing or long hair caught and wrapped around rotating parts such as transmission shafts or drive shafts on the machine. Make sure all guards are fitted.

**Drive safely on public roads**
Always follow traffic safety on public roads and follow the rules applies for driving tractor with towed equipment gear on public road.

Make sure reflectors, warning and / or warning flag that indicates protruding equipment is mounted on the machine or tractor. These indicators must be installed properly and must be visible and easily seen by the driver of the second vehicle.

Spectators must not lean on or climb on the machine during transport or during work.
NEVER allow anyone to ride on the machine!
The maximum transport speed should not exceed 20km /h

**OPERATION**
Only people who understand the safety information and instructions in this manual may operate the equipment. Be alert and careful when working with the machine and only use the equipment or product in the manner described in this manual. When working with equipment that has moving parts, there is always the risk of injury. Be careful when working with equipment equipped with hydraulic hoses ,oil under pressure can penetrate the skin. Seek medical attention immediately if this occurs. Always work alone with the equipments that are defined as single purpose equipment. Never overload the implement. Respect the equipment's danger zone.

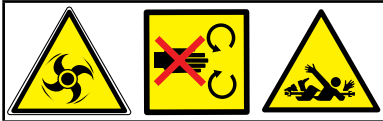


**Warning!**

DO NOT allow any inexperienced drive tractor or machine!

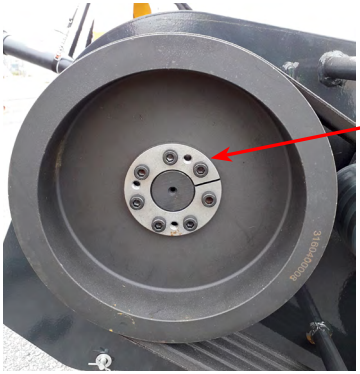
## WARNING DECALS

Make sure warning decals are always visible and clean them when necessary. Do not use a high-pressure washer directly on the warning decal. If a part with a decal is replaced, or the decall becomes worn or in any other way unusable, order a new set of decals.

| SYMBOL | EXPLANATION |
|---|---|
|  | Read the operating manual! Before carrying out work. Switch off the tractor and remove the key during maintenance/service. |
|  | Warning! Oil jet from hydraulic hose. |
|   | Warning! Ejector! Risk area of 15 metres. Respect the equipment's risk zone! |
|  | Warning! Crushing risk behind tractor during connecting and disconnecting of equipment. No one is allowed in the vicinity during connecting and disconnecting of equipment. |
|  | Warning! Rotating blades. Risk of crushing! Warning! Rotating power take-off |
|  | NEVER allow anyone to travel on the equipment! The machine is designed for individual work. |
|  | Warning! Keep off the equipment! |
|  | Warning! Accident risk for children! Children are not allowed in the vicinity of the equipment. |
|  | Always store the machine in a dry place, preferably under a roof, when not in use. |
|   | The product is CE marked |

**BEFORE USING THE MACHINE**

* IMPORTANT! **Check and tighten all bolts, nuts and all connections and specially the clamp sleeve for the pulley**



Check clamp sleeve for the pulley. The bolts should be tightened at regular intervals.Tighten and check the belt tension if necessary.

* Check knives/flails, make sure they are installed properly. Replace broken, cracked or worn knives / flails.
* Check all protective covers, protective devices. Remove any transport locking device.
* Lubricate the drive shaft and other lubrication points .

**OPERATION**

Only people who understand the safety information and instructions in this manual may operate the equipment. Be alert and careful when working with the machine and only use the equipment or product in the manner described in this manual. When working with equipment that has moving parts, there is always the risk of injury. Be careful when working with equipment equipped with hydraulic hoses ,oil under pressure can penetrate the skin. Seek medical attention immediately if this occurs. Always work alone with the equipments that are defined as single purpose equipment. Never overload the implement. Respect the equipment's danger zone.

**Connecting the machine**

* Attach the machine onto the tractor's rear three point.
* Connect the PTO shaft. Anchor the chain well.
* Connect hydraulic hoses to the tractor's double- acting hydraulic outlet
* Ready for use.

**CUTTING**

- Check the area to be cut, and remove objects and debris that might be caught and ejected by the blades.
- The amount of grass to be cut determines the forward speed; low speed usually produces the best results. It is best to cut grass when it is dry. Cutting wet grass can cause clogging and the formation of grass clumps behind the cutting unit. When cutting very tall tall grass, raise the cutting height and cut the same area twice, with a lower cutting height the second time. Allow at least 24 hours between the first and second cutting, to enable the grass to dry out.
- Lower the cutting unit towards the ground. Connect the PTO shaft so that the blades begin to rotate.
- Warning! The machine is not made to work the ground. Do not drive in dirt and rocks.
- Before each run, check the number of flails. Missing flails replace immediately with a new one. Driving with missing flails creates unevenness and can cause damage to the flail-mower. Any broken and damaged flails are replaced. Regularly check that all the bolts are properly tightened.

**Operate at 540 rpm, start at the lowest possible speed, make sure the mower works efficiently with the engine on 540 rpm without effort.**

Stop and check that the cutting unit is set correctly after the first 10 meters.




Before maintenance, service, connection and disconnection of the machine, the tractor engine must switched off and the ignition key removed.

Do not make sharp turns and do not drive backwards when the machine is sunk on the ground.




Do not connect the PTO shaft when the machine is in the raised position or at full throttle.

* The rotating knives can throw heavy stones with ease from the ground. It is therefore wise that you who work with the machine make sure that no one else is near by and the tractor when working.
* On top of the mower drive system, there are protective covers and shields that prevent soil and rock from being thrown around. These also protects the operator of the mower from the rotating blades.
* When cutting high grass, sometimes the grass get caught around the rotor and knives. Therefore, be aware when the noise is heard from the machine or excessive vibration occurs. Switch off the tractor, disconnect the machine and check that the knives rotate freely.
**IMPORTANT!** Make sure that the rotors have stopped rotating before lifting the machine to control the knives. Wait a few minutes to make sure the knives have stopped spinning before inspecting the machine.

**After use**

* Lower machine to the ground, park the tractor,pull the handbrake turn off the engine and remove the key.
* Rinse the machine if necessary.

**TRANSPORT AND STORAGE**

Check that the area is free of persons, children and objects prior transportation. Always take precaution when transporting and moving the machine. Make sure that the equipment or product is well anchored and that existing transport safety lock are fitted. Always place the load as low as possible. Always have the risk zone in mind when transporting and moving the machine. When lifting the machine nobody is allowed to stand underneath suspended load. Trailers used for transport should have functional brakes.

Always store the machine or product in a dry place, preferably underneath a roof when not in use. Make sure that the equipment or product is standing steady and there is no risk for it to tip over. Never allow children to play where the machine is stored. Keep in mind the risk of tipping! When storing a machine, it should be cleaned and all bearings and knives are lubricated.

**MAINTENANCE AND SERVICE**

Make sure the implement is stable and there's no risk of falling over during maintenance and service. Replace damaged and worn parts immediately to reduce the risk of machine failure and injuries. Perform maintenance, service and inspections as recommended. Use only spare parts with equivalent performance to reduce the risk of damage and failure.

Check that all bolts and nuts are tightened after maintenance and service. Always test the machine before starting work.

**RECYCLING**

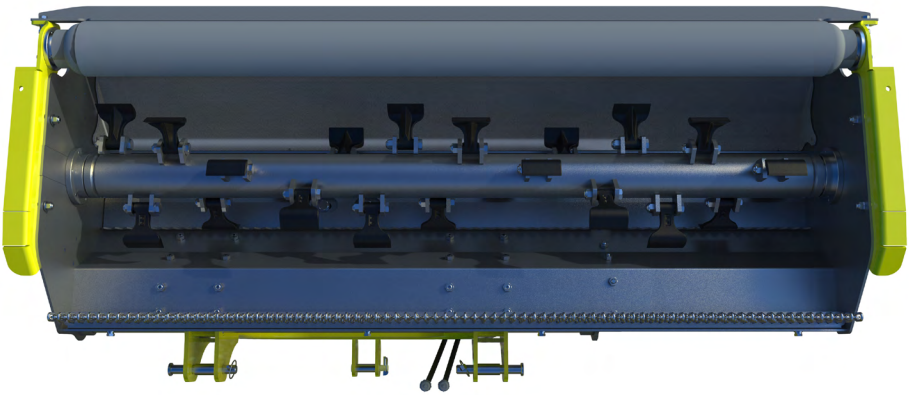
Dispose the product correctly, disassemble and transport to the municipality's recycling station. Contact your local authority for further information.

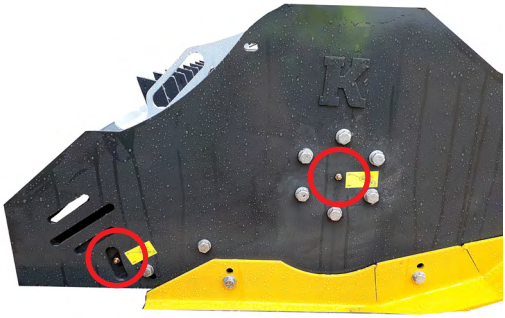




**Important!**

Dispose broken parts correctly when recycling.







## LUBRICATION POINTS

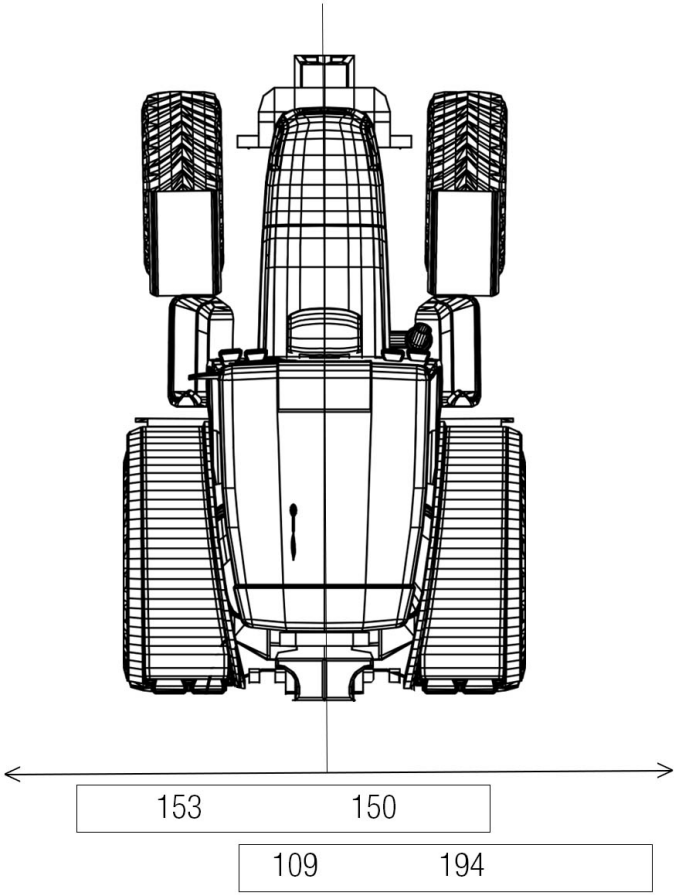
Lubricate all lubrication points on a regular basis, as well as every time you rinse the machine to remove any water that may have entered the bearing house during rinsing.

Unnecessary wear and damage may result from insufficient lubrication.
Use universal lubricant.

**IMPORTANT!** Avoid lubricating too much. Dirt gathers easily in exposed grease and cause increased wear. After lubrication, wipe excess grease from grease fittings and bearings.

| ERROR | MEASURE |
|---|---|
| The flail mower cuts unevenly or poorly. | Make sure the flails are intact and mounted properly.<br>Adjust the support roller and make sure it is positioned correctly.<br>Check and tighten any belt. |
| The sound of the machine changes during mowing. | Check the roller.<br>Check the tension of the belt.<br>Check all flails |
| Vibrations | Check the flails, replace worn or damaged |
| Hydraulic does not work. | Check hoses and couplings. |

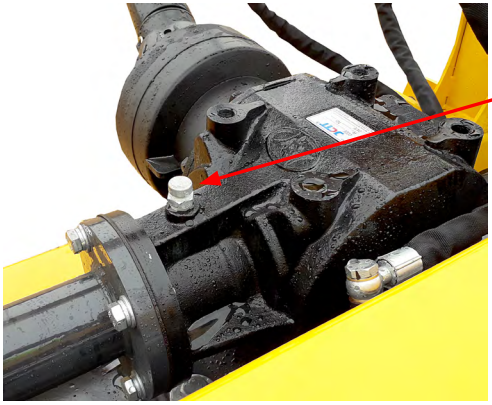
**MOVEMENT DIAGRAM**



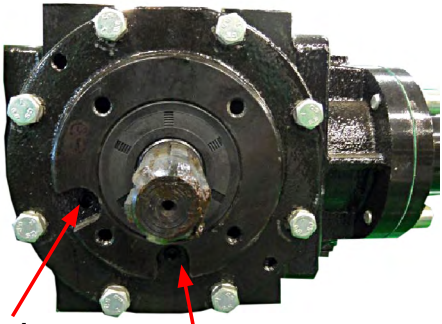

The numbers **153/150** show how far the flail mower sticks out from the tractor's center when it is centered behind the tractor.

The numbers **109/194** show how far the flail mower sticks out from the tractor's center when it is side-shifted as far out as it will go.

## GEARBOX

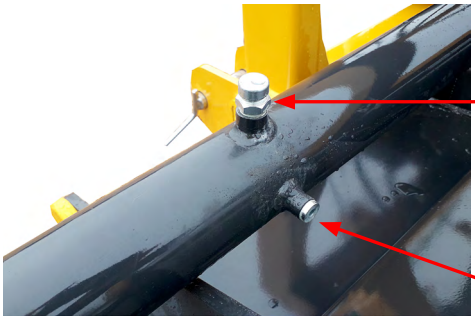


**Filler plug, gearbox**
Transmission oil 80W-90
1,5 - 1,8 L



**Gearbox level plug**

**Drain plug - gearbox**

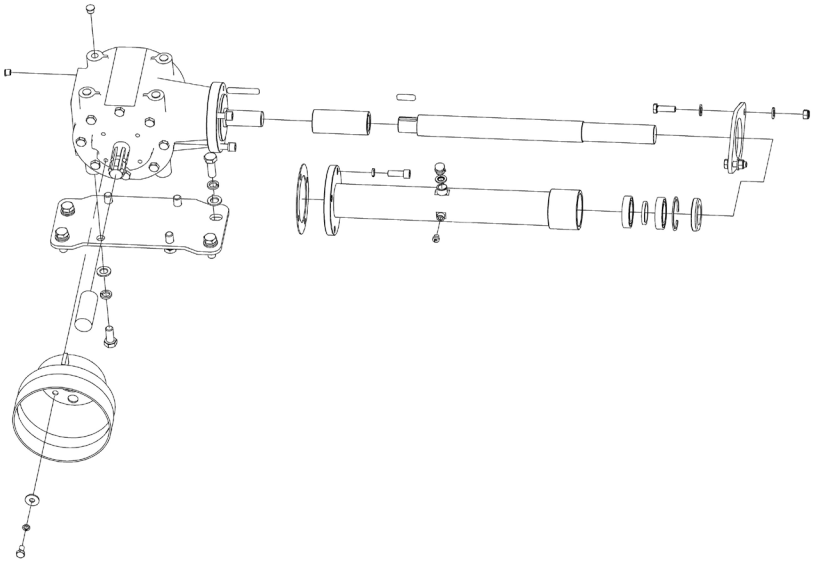


**Filler plug - tube**

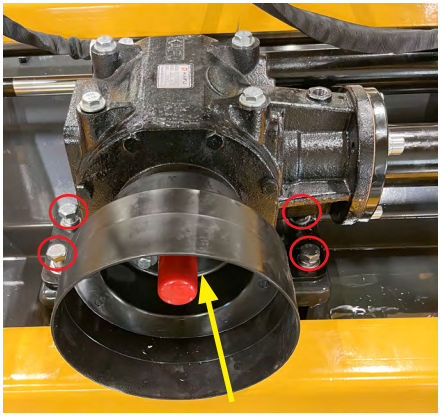
**Oil level plug**

**IMPORTANT! ALWAYS CHECK THE OIL LEVEL AND GREASE LEVEL BEFORE THE OPERATION!**

## GEARBOX



## REPLACING THE GEARBOX



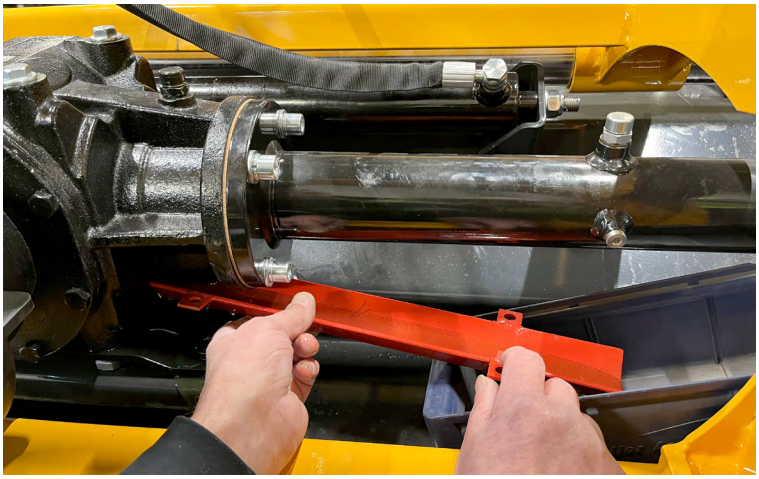
*There is also a drain plug located here.*

Unscrew bolts on the gearbox attachment.
*(Left and right sides)*



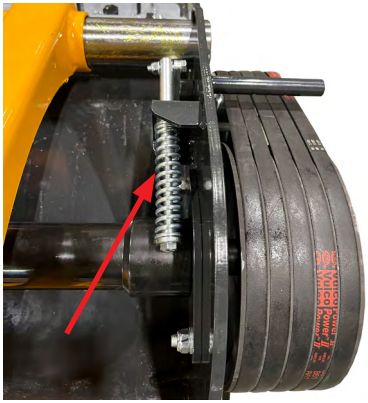
Place a receptacle underneath, and something to drain the oil with.
Unscrew the drain plug.
Unscrew the air nipple, see red arrow *(releases the pressure)*

When all the oil has run out, wipe up any spillage and screw in the drain plug.





Remove the belt protection hatch.



Release the belt tensioner.

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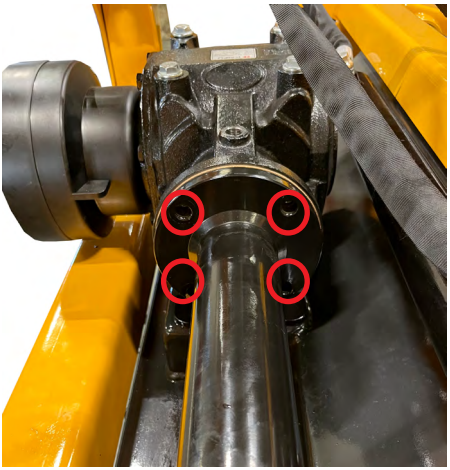
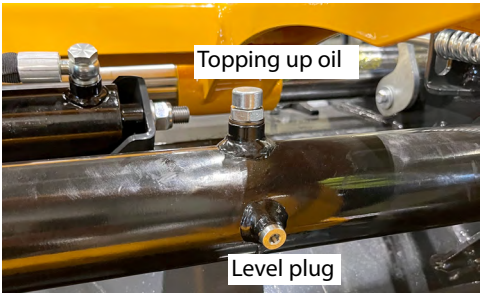
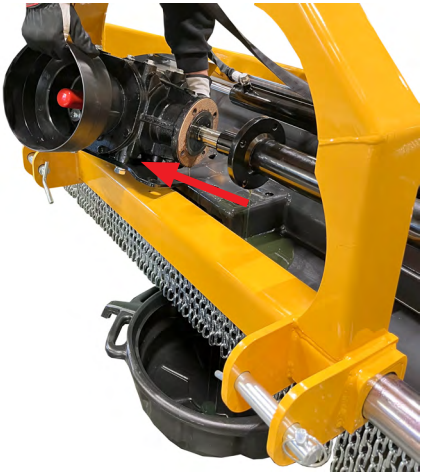


Unscrew bolts.




Check the oil level. Refill as needed.

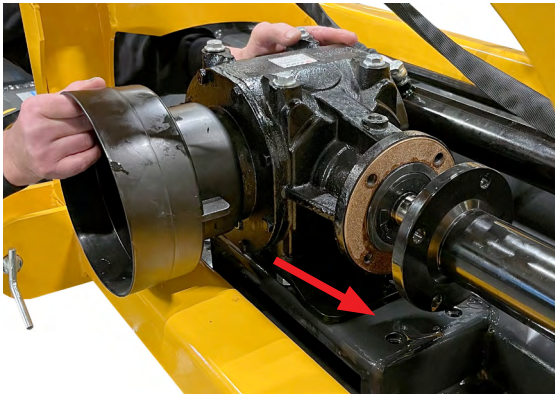


Remove the gearbox.
Tip! Place a receptacle under the mower, as a small amount of oil may run out when the gearbox is removed.



The sealing ring should be replaced when the gearbox is replaced.





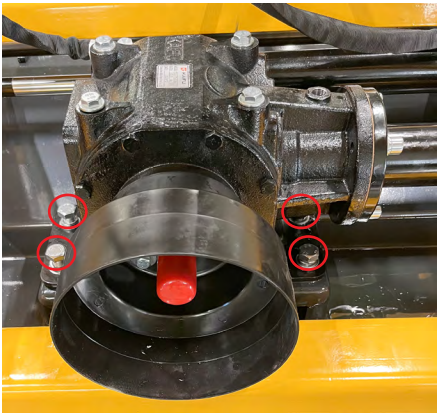
Position the gearbox.



Screw in the bolts.
Fasten the gearbox in place.



Loosen the bolts to get the pipe in place.
Tighten the bolts.



Screw in the bolts on the gearbox attachment.
*(Left and right sides)*

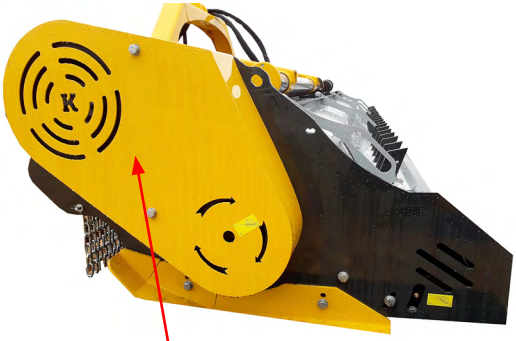


Tighten the belt tensioner.
Check belt tension.
*See pages 22-23*



Fit the belt protection hatch.

## BELT ADJUSTMENT

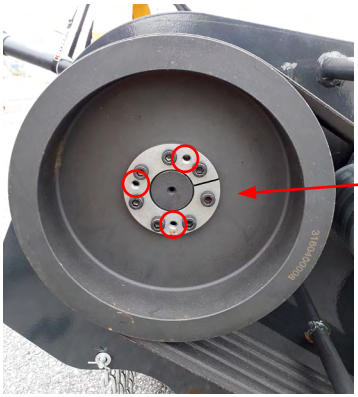


BELT GUARD

CHECK THE BELT TENSION REGULARLYAT PRESSURE THE BELT MUST BE MOVED 20 MM (SEE PICTURE BELOW)



**CHECK AND TIGHTEN THE BELT AFTER AN HOUR OF OPERATION !!**

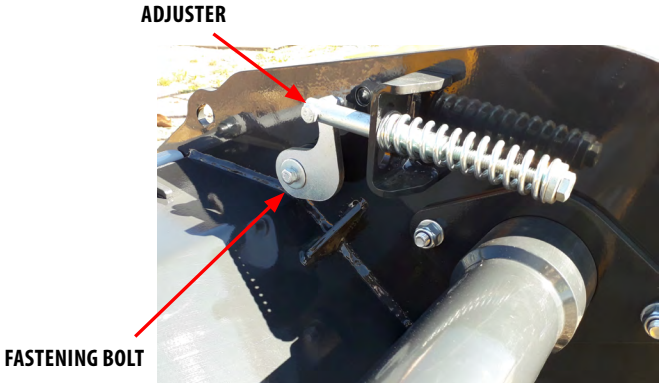


Bolts must be retighten at regular intervals.

To hold the sleeve in place when changing the belt or pulley:

* Loosen and disassemble 3 bolts from the pulley.
* Fit them into threaded holes on the sleeve (see marked holes in the picture).
* Then remove remaining bolts.
* Replace belt/pulley and then assemble all bolts.
* Tighten and check belt tension, adjust if necessary.

## BELT ADJUSTMENT




Adjust the adjusting bolt until the belts are tight enough.

**CHECK AND TIGHTEN THE BELTS ON A REGULAR BASIS.**
**NEW MACHINE, CHECK AND TIGHTEN THE BELTS AFTER 2 HOURS OF OPERATION.**

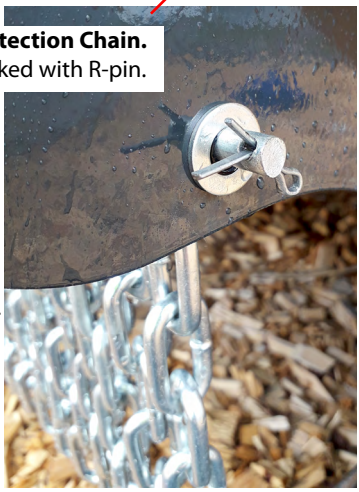


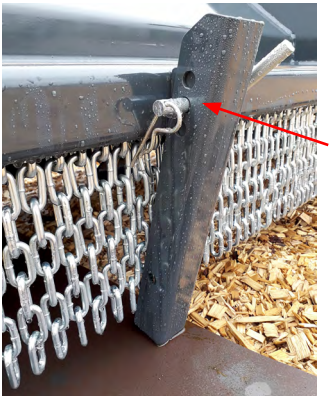



Belt B60 Li1524

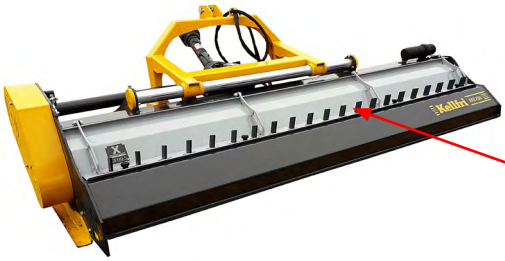


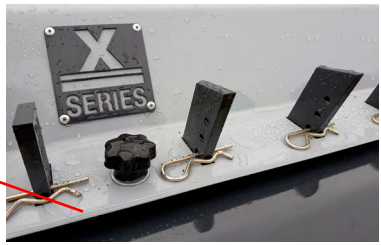
**Protection Chain.**
Locked with R-pin.





**Support legs.**
Height can be adjusted in 3 positions.
Locked with pin



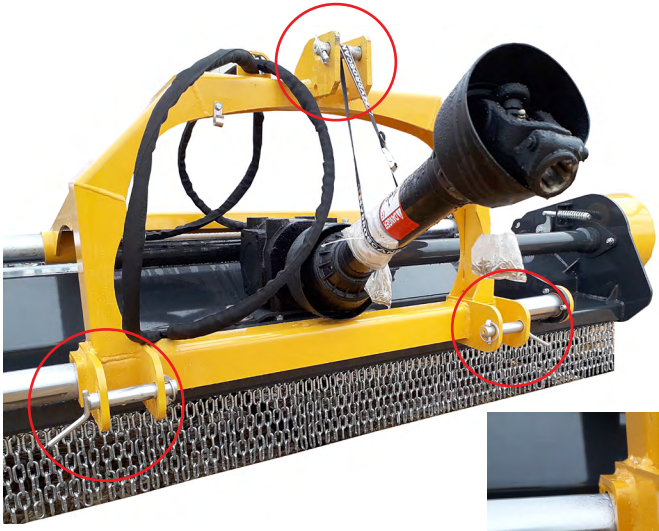



**COUNTER KNIVES**

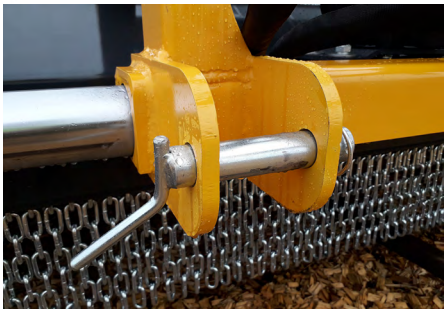
With the counter knives, the grass is processed better by keeping the grass in the mower. The blade helps cut the grass further and more efficiently as the hammer flails get help by the counter knives to process the material.

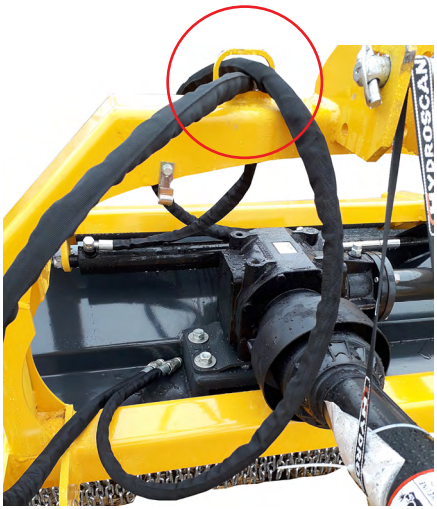
The 35-XKE280 can be operated with a closed chassis, either with or without counter knives.

## PINS AND HYDRAULIC TUBES



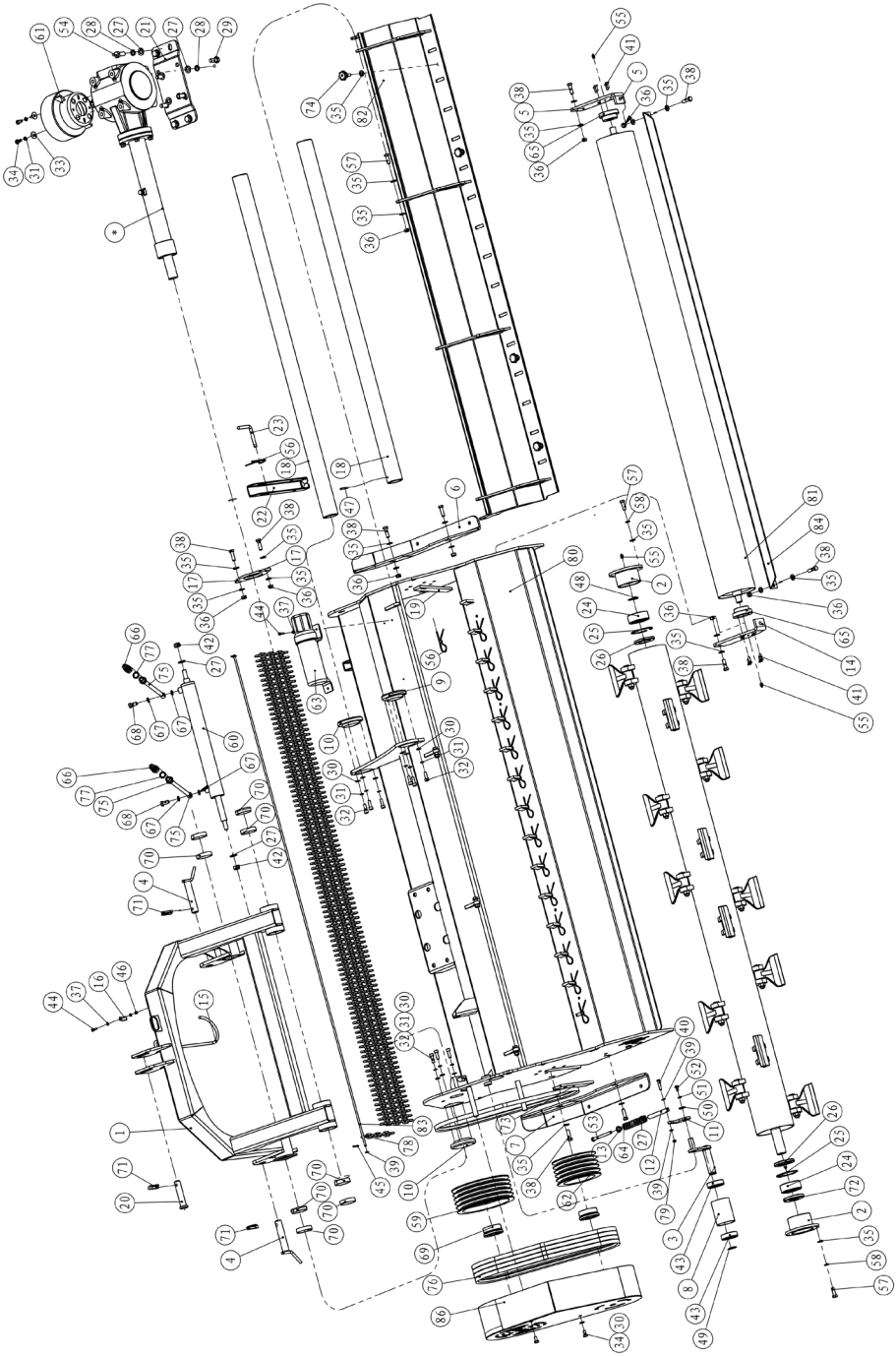
**Mounting 3-point.**
Locked with pins.





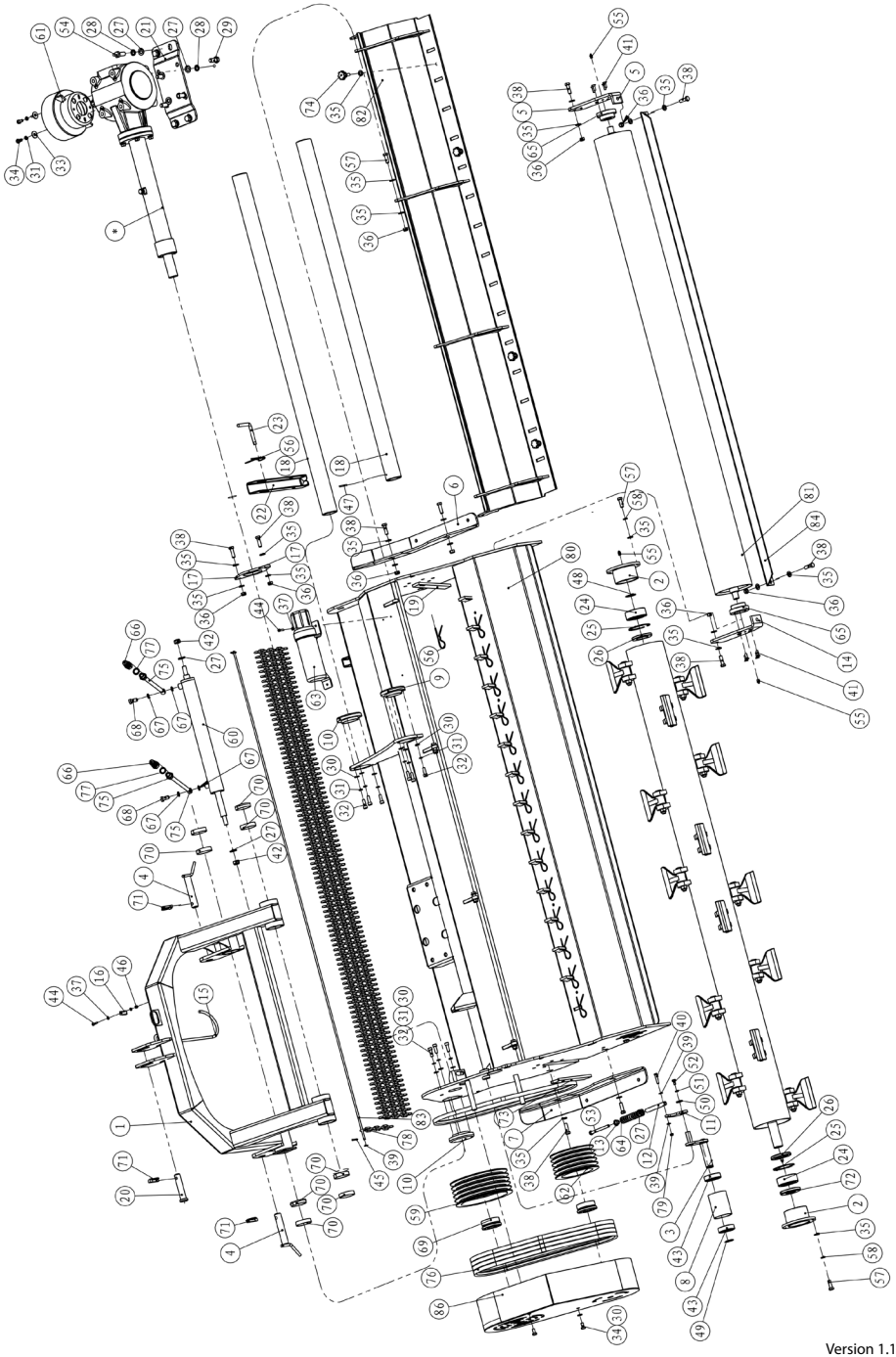
**Hydraulic tubes.**
Thread through the loop on the frame to hold them in place and avoid damage to the tubes.





**PART LIST: I**

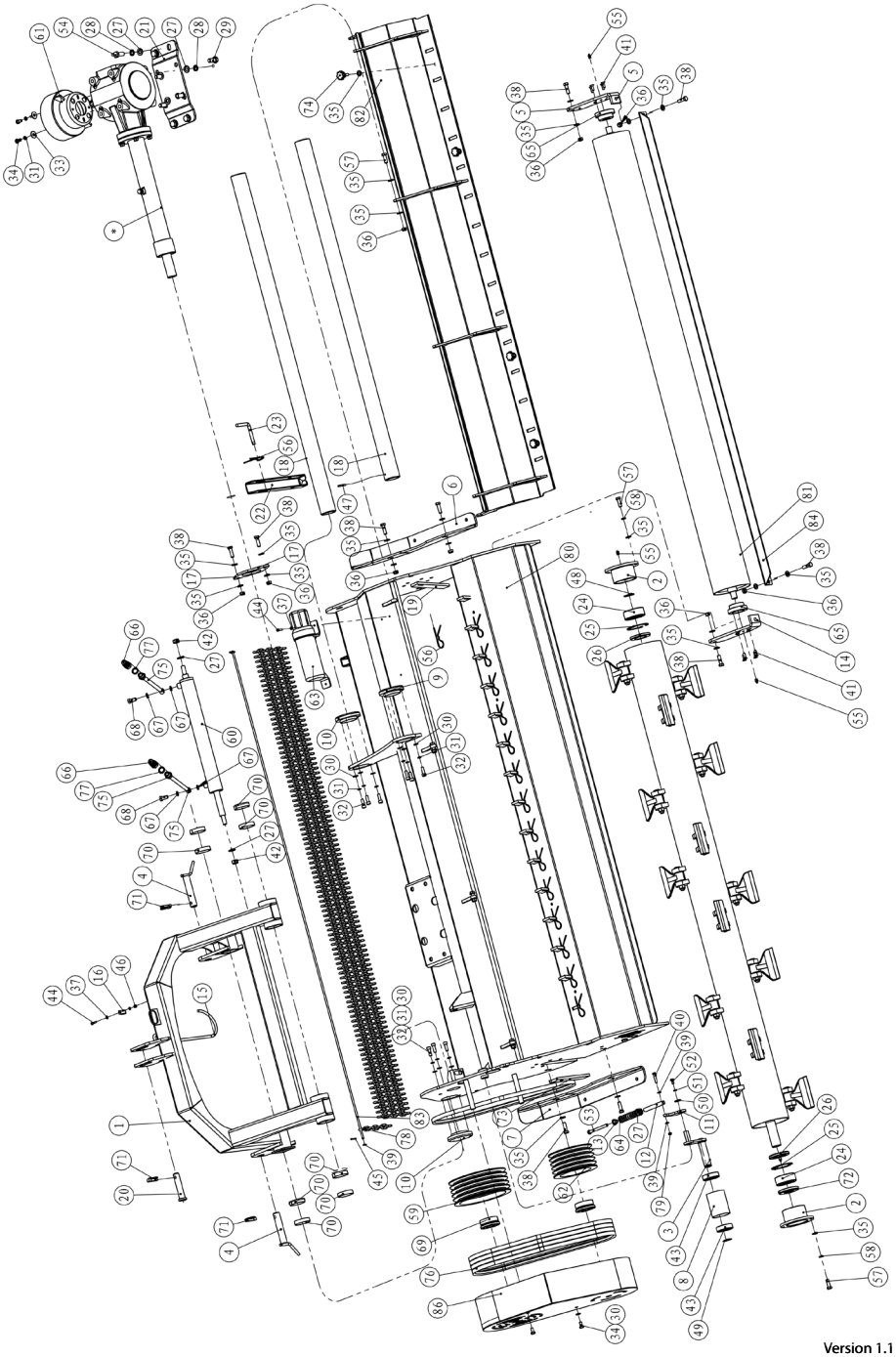
| POS.NO | PART.NO. | SPECIFICATION | QTY |
|---|---|---|---|
| 1 | VKM280N.005 | Three-point linkage | 1 |
| 2 | VKM280N.081 | Bearing house - roller | 2 |
| 3 | VKM280N.070 | Belt adjuster | 1 |
| 4 | VKM280N.002 | Pin to three point, lower part | 2 |
| 5 | VKM280N.096 | Support roller bearing holder, RIGHT side | 1 |
| 6 | VKM280N.049 | Skid, right | 1 |
| 7 | VKM280N.065 | Skid, left | 1 |
| 8 | VKM280N.069 | Belt sdjuster pulley | 1 |
| 9 | VKM280N.051 | Sliding sleeve, rear | 1 |
| 10 | VKM280N.053 | Sliding sleeve, front | 2 |
| 11 | VKM280N.076 | Adjuster plate | 1 |
| 12 | VKM280N.072 | Tightening rod | 1 |
| 13 | R35-FDM.009 | Spring | 1 |
| 14 | VKM280N.092 | Support roller bearing holder, LEFT side | 1 |
| 15 | VKM280N.006 | Shaft - Hook | 1 |
| 16 | VKM280N.009 | Adjuster - Washer | 1 |
| 17 | VKM280N.047 | Shaft mounting plate | 1 |
| 18 | VKM280N.045 | Side shift axle | 2 |
| 19 | VKM280N.050 | Vertical cutting pin | 14 |
| 20 | R35-SK140.033 | Pin upper three-point bracket | 1 |
| 21 | VKM280N.040 | Mounting plate gearbox | 1 |
| 22 | VKM280N.046 | Tube- outriggers | 1 |
| 23 | R35-VKM175.007 | Pin 12x80mm support legs | 1 |
| 24 | R35-SK180.013 | Bearing knife roller 2308 | 2 |
| 25 | R35-SK140.040 | Circlip SGH90 | 2 |
| 26 | R60-TÄTNING.034 | Radial seal 50x90x10 | 2 |
| 27 | VKM280N.017 | Flat washer 16x3 | 7 |
| 28 | R35-FDM.055 | Spring washer 16 | 4 |
| 29 | R35-FDM.051 | Hexagonal bolt M16x1.5x35 | 4 |
| 30 | VKM280N.054 | Flat washer 10x2 | 14 |



Version 1.1

**PART LIST: II**

| POS.NO | PART.NO. | SPECIFICATION | QTY |
|---|---|---|---|
| 31 | VKM280N.036 | Spring washer 10 | 14 |
| 32 | R35-FDM.077 | Hexagon screw M10x30 | 12 |
| 33 | R35-FDM.062 | Washer 10x2.5 | 2 |
| 34 | VKM280N.037 | Hexagonal bolt M10x20 | 4 |
| 35 | VKM280N.021 | Flat washer 12x2.5 | 48 |
| 36 | R35-RS165H.017 | Lock nut M12 | 16 |
| 37 | VKM280N.008 | Flat washer 6x1.6 | 5 |
| 38 | R35-FDM.047 | Hexagonal bolt M12x40 | 16 |
| 39 | VKM280N.058 | Flat washer 8x1.6 | 5 |
| 40 | R35-FDM.041 | Hexagon bolt M8x40 | 1 |
| 41 | VKM280N.091 | Hexagon screw M8x25 | 8 |
| 42 | R35-SK140.008 | Lock nut M16 | 2 |
| 43 | R10-6306-2Z | Bearings 6306-2RZ | 2 |
| 44 | VKM280N.007 | Hexagonal bolt M6x25 | 4 |
| 45 | - | R-pin 3.5x25 | 2 |
| 46 | VKM280N.010 | Lock nut M6 | 1 |
| 47 | R35-FDM240.001 | Cylinder pin 5x40mm | 1 |
| 48 | R60-SGA40 | Circlip SGA40 | 1 |
| 49 | VKM280N.067 | Circlip (for shaft type A 30) | 1 |
| 50 | VKM280N.077 | Washer 8x3 | 1 |
| 51 | VKM280N.078 | Spring washer 8 | 1 |
| 52 | R35-FDM.039 | Hexagonal bolt M8x16 | 1 |
| 53 | VKM280N.075 | Hexagonal bolt M10x110 | 1 |
| 54 | R60-BULT.070 | Hexagonal bolt 16x1.5x40 | 4 |
| 55 | R35-XKH.020 | Grease nipples | 4 |
| 56 | R35-FDM.027 | R sprint | 15 |
| 57 | VKM280N.029 | Hexagonal bolt M12x35 | 16 |
| 58 | VKM280N.030 | Spring 12 | 16 |
| 59 | VKM280N.060 | Pulley 5-groove Ø257mm, upper | 1 |
| 60 | VKM280N.018 | Cylinder sideshift | 1 |

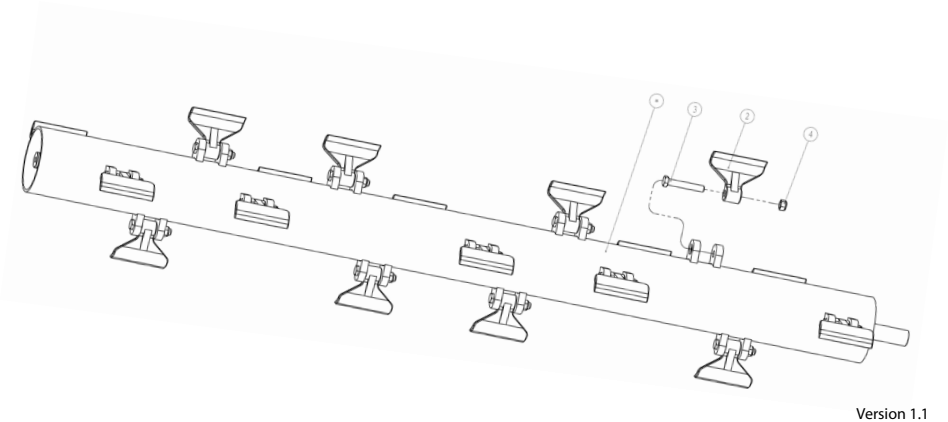


Version 1.1

**PART LIST: III**

| POS.NO | PART.NO. | SPECIFICATION | QTY |
|---|---|---|---|
| 61 | R35-SK140.037 | Protective cover PTO plastic | 1 |
| 62 | R35-VKM280N.064 | Pulley 5-groove Ø197mm, lower | 1 |
| 63 | VKM280N.052 | Container | 1 |
| 64 | R35-FDM.012 | Spring 125x28x4.5 | 1 |
| 65 | VKM280N.093 | Bearing housing including bearings for support roller | 2 |
| 66 | R10-HYD.012 | Quick coupler 1/2 male | 2 |
| 67 | R35-FDM.020 | Washer | 4 |
| 68 | R35-FDM.014 | Banjo bolt | 2 |
| 69 | R35-SK180.018 | Clamp sleeve pulley, lower | 2 |
| 70 | VKM280N.001 | Sleeve 68x3x15 | 8 |
| 71 | R35-FDM.026 | Locking pin 11x45 | 3 |
| 72 | VKM280N.082 | Radial seal 40x90x12 | 1 |
| 73 | VKM280N.066 | Protection plate | 1 |
| 74 | VKM280N.041 | Knob M10x25 | 4 |
| 75 | VKM280N.019 | Hydraulic hose for sideshift | 2 |
| 76 | VKM280N.062<br>VKM280N.103 | V-belt B59 Li1499 | 5 |
| 77 | R35-FDM.021 | V-belt B60 GATES | 2 |
| 78 | VKM280N.057 | Washer | 127 |
| 79 | R35-FDM.066 | Safety chain 6x20x28-7 | 1 |
| 80 | - | Locknut M8 | 1 |
| 81 | - | Chassis | 1 |
| 82 | - | Roller | 1 |
| 83 | - | Protection plate | 1 |
| 84 | - | Axle | 1 |
| 85 | - | Scraper | 1 |
| 86 | VKM280N.063 | Shaft | 1 |

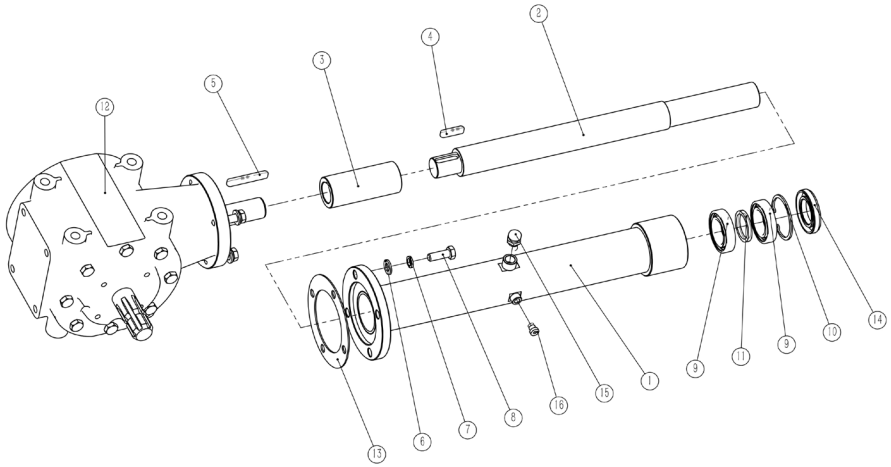
## PART LIST: ROTOR



Version 1.1

| POS.NO | PART.NO. | SPECIFICATION | QTY |
|---|---|---|---|
| 1 | - | Shaft | 1 |
| 2 | R35-SK140.004 | Flail, hammerr | 22 |
| 3 | R35-SK140.009 | Bolt M16x95 | 22 |
| 4 | R35-SK140.008 | Lock nut 16 | 22 |

**PART LIST: GEARBOX**




| POS.NO | PART.NO. | SPECIFICATION | QTY |
|---|---|---|---|
| 1 | - | Shaft | 1 |
| 2 | - | Connection Shaft | 1 |
| 3 | R35-VKM175.046 | Drive sleeve 33mm - 33mm | 1 |
| 4 | R35-VKM175.034 | wedge 10x40 | 1 |
| 5 | R35-VKM175.033 | wedge 10x70 | 1 |
| 6 | VKM280N.021 | Flat washer 12x2.5 | 4 |
| 7 | VKM280N.030 | Spring washer 12 | 4 |
| 8 | - | Hexagonal bolt 12x1.25x35 | 4 |
| 9 | VKM280N.024 | Bearings 6008-RZ | 2 |
| 10 | VKM280N.022 | Circlip SGH68 | 1 |
| 11 | VKM280N.025 | | 1 |
| 12 | R35-XKE.001<br>R35-XKE.001.2 | Gearbox<br>Gearbox 2023 | 1<br>1 |
| 13 | R35-XKE240.003 | Cork gasket between angle gear and shaft | 1 |
| 14 | R60-TÄTNING.021 | Radial seal 40x70x12 | 1 |
| 15 | - | Ventialtion plug | 1 |
| 16 | - | Drain plug | 1 |

**EXTENDED WARRANTY FOR KELLFRI GROUNDCARE MACHINERY**

From 1 March 2026, customers buying Kellfri's X-series and WKL-series flail mowers receive a 36-month warranty on the gearbox and power shaft.

**The warranty is only valid if all of the following points are met:**

- Assembly and use must have taken place in accordance with the applicable manual.
- Maintenance service must have been carried out in accordance with the instructions in the manual.
- Kellfri's selected original oil and grease must have been purchased through Kellfri or an authorised dealer, and must be supported by a receipt.
- A service report must be available on request, together with supporting documents, e.g. receipts.

**In order for the warranty to be verified, photos are required to support the claim.**
**The following photo documentation must always be attached:**

- Defective item
- Machine nameplate
- Gearbox plate
- Completed and signed service report showing that the service has been carried out
- The complete machine
- Completed Kellfri deviation form.

**Scope of warranty**
**The warranty covers up to 12 months**

- Reimbursement for parts repaired or replaced after material fault or manufacturing fault has been verified.

**The warranty does not cover:**

- Wear parts, such as but not limited to: belts, flails, blades, blade bolt, hoses, wear surfaces and oils

**The warranty covers up to 36 months**

- Reimbursement for defective parts with material or manufacturing faults in the gearbox, pulley and power shaft.

**The warranty does not cover:**

- Wear parts, such as but not limited to: Belts, flails, blades, blade bolt, hoses, wear surfaces, oils
- Belt tension, roller, bearings, bolted joints, pins, link arms, support roller, surface coating, chassis parts, PTO shaft.

**The warranty does not cover:**

- Travel costs, shipping costs or other costs related to warranty work.
- Consequential costs or downtime costs resulting from damage to the machine.
- Damage resulting from normal wear, inadequate service, improper use, user inexperience or use of non-original spare parts.
- Machines to which the buyer has made changes or modifications.
- Damage caused by accidents, external influences, fire, flooding or frost.
- A service report must be available on request, together with supporting documents, e.g. receipts.
- Incomplete Kellfri deviation form.

## SERVICE SCHEDULE

| SERVICE | INTERVAL | ACTION |
|---|---|---|
| Oil leakage | Daily/before each use | Check |
| Bolts/nuts | Daily/before each use | Check tightness |
| Belts | Daily/before each use | Check wear and belt tension |
| Grease nipples | Daily/before each use | Check that there is grease |
| Flails/blades | Daily/before each use | Check for cracks and wear |
| Protection/covers | Daily/before each use | Check for cracks and wear |

| SERVICE | INTERVAL | ACTION |
|---|---|---|
| Bolts/nuts | After 10-20 hours (running in of new machine) | Tighten |
| Belt tensioning | After 10-20 hours (running in of new machine) | Check |
| Gearbox oil | After 10-20 hours (running in of new machine) | Check oil level |

| SERVICE | INTERVAL | ACTION |
|---|---|---|
| Bearings and nipples | Every 50 hours of operation | Lubricate |
| Belts | Every 50 hours of operation | Check and adjust if necessary |
| Rotor balance | Every 50 hours of operation | Check for unusual vibrations |
| Flails/blades | Every 50 hours of operation | Check and replace if necessary |

| SERVICE | INTERVAL | ACTION |
|---|---|---|
| Gearbox oil | Every 100 hours of operation | Check and refill |
| PTO shaft | Every 100 hours of operation | Check universal joints, guards, lubrication |
| Back roller and bearings | Every 100 hours of operation | Check |
| Frame | Every 100 hours of operation | Check for cracks or damage |

| SERVICE | INTERVAL | ACTION |
|---|---|---|
| Gearbox oil | Every 200 hours of operation/once per season | Replace |
| Belts | Every 200 hours of operation/once per season | Replace worn *(if a worn belt is replaced, all belts must be replaced)* |
| Flails/blades | Every 200 hours of operation/once per season | Replace worn *(preferably in a complete set)* |
| Moving parts | Every 200 hours of operation/once per season | Check and lubricate thoroughly |

| FOR WINTER STORAGE |
|---|
| Wash the machine thoroughly |
| Lubricate all nipples |
| Check and rectify any damage |
| Store the machine in a dry place, preferably under a roof |
| Relieve the belt tension if possible |

| TROUBLESHOOTING | ACTION |
|---|---|
| The verge flail mower cuts unevenly or badly | Check that all flails are intact and firmly in position.<br>Adjust the support roller and check that it is in the correct position.<br>Check the drive belts and tighten if necessary. |
| The cutting sound changes | Check the roller.<br>Check the tension of the drive belts.<br>Check the flails. |
| Vibrations | Check the flails. |
| Hydraulics do not work | Check hoses and connections. |



## DANGER!

Ensure that all parts have stopped rotating before carrying out any operation on the machine!

When the PTO is disconnected, the PTO drive shaft stops rotating.
However, this does not mean that all parts of the mower have stopped moving.

Be cautious, and wait a few minutes in order to be sure that all parts have stopped moving.

# SERVICE SCHEDULE

*If you, as a customer, follow the service schedule and provide a fully serviced Kellfri machine through Kellfri's service schedule, this will provide added value for you and your Kellfri machine.*

MACHINE DETAILS: _____

SERIAL NUMBER: _____

GEARBOX CODE: _____

## FIRST SERVICE

**At 20 hours, but no later than 6 months from delivery.**

**Date:**_____

**Signature:**_____

Workshop stamp

## SERVICE INTERVAL

**No later than 100 hours or 12 months after previous service** *(whichever comes first).*

**Date:**_____

**Signature:**_____

Workshop stamp

## SERVICE INTERVAL

**No later than 200 hours or 12 months after previous service** *(whichever comes first).*

**Date:**_____

**Signature:**_____

Workshop stamp

## SERVICE INTERVAL

**No later than 300 hours or 12 months after previous service**
*(whichever comes first).*

**Date:**_____

**Signature:**_____

Workshop stamp

## SERVICE INTERVAL

**No later than 400 hours or 12 months after previous service**
*(whichever comes first).*

**Date:**_____

**Signature:**_____

Workshop stamp

## SERVICE INTERVAL

**No later than 500 hours or 12 months after previous service**
*(whichever comes first).*

**Date:**_____

**Signature:**_____

Workshop stamp

## SERVICE INTERVAL

**No later than 600 hours or 12 months after previous service**
*(whichever comes first).*

**Date:**_____

**Signature:**_____

Workshop stamp

## SERVICE INTERVAL

**No later than 700 hours or 12 months after previous service**
*(whichever comes first).*

**Date:**_____

**Signature:**_____

Workshop stamp

## SERVICE INTERVAL

**No later than 800 hours or 12 months after previous service**
*(whichever comes first).*

**Date:**_____

**Signature:**_____

Workshop stamp

## SERVICE INTERVAL

**No later than 900 hours or 12 months after previous service**
*(whichever comes first).*

**Date:**_____

**Signature:**_____

Workshop stamp

## SERVICE INTERVAL

**No later than 1000 hours or 12 months after previous service**
*(whichever comes first).*

**Date:**_____

**Signature:**_____

Workshop stamp

## SERVICE INTERVAL

**No later than 1100 hours or 12 months after previous service** *(whichever comes first).*

**Date:**_____

**Signature:**_____

Workshop stamp

## SERVICE INTERVAL

**No later than 1200 hours or 12 months after previous service** *(whichever comes first).*

**Date:**_____

**Signature:**_____

Workshop stamp

## SERVICE INTERVAL

**No later than 1300 hours or 12 months after previous service** *(whichever comes first).*

**Date:**_____

**Signature:**_____

Workshop stamp

## SERVICE INTERVAL

**No later than 1400 hours or 12 months after previous service** *(whichever comes first).*

**Date:**_____

**Signature:**_____

Workshop stamp

## SERVICE INTERVAL

**No later than 1500 hours or 12 months after previous service**
*(whichever comes first).*

**Date:**_____

**Signature:**_____

Workshop stamp

## SERVICE INTERVAL

**No later than 1600 hours or 12 months after previous service**
*(whichever comes first).*

**Date:**_____

**Signature:**_____

Workshop stamp

## SERVICE INTERVAL

**No later than 1700 hours or 12 months after previous service**
*(whichever comes first).*

**Date:**_____

**Signature:**_____

Workshop stamp

## SERVICE INTERVAL

**No later than 1800 hours or 12 months after previous service**
*(whichever comes first).*

**Date:**_____

**Signature:**_____

Workshop stamp

**NOTES:**

Case number:

# DEVIATION FORM

We are grateful for your help in pointing out any defects in the product supplied to you by Kellfri. Before making a claim, read Kellfri's general purchase terms and conditions in our catalogue or on our website www.kellfri.co.uk, and in the operating manual if supplied. The manual can also be downloaded from manual.kellfri.co.uk

Please fill in the details below and attach photos as documentation so that we can process your case optimally. In order for us to obtain as good an understanding as possible of any faults, please take at least four photos of the defective parts of the machine/equipment; two of the entire equipment from two different angles and two close-ups of the actual damage from two different angles. (Feel free to attach photos on the next page.)

*If the product was purchased from a dealer, please contact the dealer in the first instance.*

| | |
|---|---|
| Purchaser**: | Customer number**: |
| Address**: | Invoice number: |
| Email**: | Daytime telephone**: |

| | | |
|---|---|---|
| When was the product supplied? | When was the product put into operation? | Was the product working on delivery? YES ☐ NO ☐ |

Product name/article number**:

Serial number:

| CAUSE | YES |
|---|---|
| (11) Transport damage* | ☐ |
| (09) Product complaint* | ☐ |
| (04) Wrong goods delivered | ☐ |
| (03) Wrong quantity | ☐ |

| CAUSE | YES |
|---|---|
| (05) Wrong price | ☐ |
| (02) Ordered by mistake/Charge-back | ☐ |
| (99) Other reason* | ☐ |

* Fill in form below
Required fields**

Description of fault**:

Describe the course of events:

Miscellaneous:

| | |
|---|---|
| Customer's signature: | Date: |

*To be filled in by dealer*

| | |
|---|---|
| **Dealer:** | **Invoice number.:** |

| | |
|---|---|
| **Signature:** | **Date:** |

Kellfri

## WARRANTY TERMS AND CONDITIONS

| | |
|---|---|
| Validity of the warranty | - Kelifri's Warranty is valid 12 months from the date of purchase. |
| This warranty replaces | - Compensation for spare parts after acknowledgment that the fault lies on the material or manufacturing defects. |
| This guarantee do not cover | • Labour costs<br>• Travel expenses<br>• Any modification that the buyer himself has/had made.<br>• Any consequential damages that occurred due to damage to the machine.<br>• Damage due to normal deterioration of the machine, inadequate: service, user inexperience or use of spare parts which are not original.<br>• Wear parts such as hoses, seals, oils, and mechanical belts |

## EC-DECLARATION OF CONFORMITY, ORIGINAL

CE

According to 2006/42/EC, Annex 2A
Kellfri AB
Storsvängen 2
532 38 Skara, Sweden

Declares that the machine

Name: 35-XKE280

Type: Flail mower 2.8 m

Complies with all applicable provisions of the Machinery Directive 2006/42/EC.
Other equipment must meet the hardware requirements of the Directive.

Kjell Johansson
*Product Development Manager*

## CUSTOMER SERVICE

*You are always welcome to give your feedbacks, reviews or ask us about our equipment and products. Kellfri AB is constantly working on further developing their products and therefore reserves the right to modify, among other things the design and appearance without further notice.*