

# 35-VKM145 35-VKM175 FLAIL MOWER



READ THIS MANUAL CAREFULLY BEFORE USING THE PRODUCT !!!

TRANSLATED FROM THE ORIGINAL

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#### 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

- Working width 145 cm / 175 cm
- Adjustable roller for safe cutting

2F WV44F

- Forged hammer flails
- Skids
- Robust construction

Kellfri's flail mowers are designed to quickly manage everything from cutting/topping of grassland, clearing overgrown land with small scrub areas to slashing scrub and straw.

The fast rotation speed of the shaft allows the hammer flails to easily hack and cut all types of material, and you obtain a dependable machine.

To maintain the necessary strength and stability, Kellfri's flail mowers have been constructed using a very powerful triangular framework. The sturdy support rollers at the rear guarantee the correct cutting height. The machine is supplied with a PTO drive shaft and 3-point linkage.

By the high speed of the rotor the forged hammer flails can manage to cut and chop all kinds of materials. Suitable for tractors with 25-40 hp for VKM145 and 36-45 hp for VKM175

#### **INTENDED USE**

TEVALLEY DATA

The implement is intended to cut grass and chop brushwood. Also intended for chopping stubble and straw. Clear the mowing area from any harmful objects such as stones, branches, etc. before starting the operation. Only intended for solitary work. Mounted on the tractor's three-point hitch.

2F WWW 17F

IEKNISK DAIA	33-VK 143	33-VKW 1/3
Working width	1,42 m	1,75 m
Weight	315 kg	350 kg
Capacity	0,52-038 ha/h	0,52-038 ha/h
Flails	24 st	28 st
Power requirement	25-35 hk	36-45 hk
Operating speed	6-12 km/h	6-12 km/h
Gear box	1,0 L [Oil type: Transmission fluid 80W-90]	1,0 L [Oil type: Transmission fluid 80W-90]
PTO speed	540 rpm	540 rpm
PTO	Standard	Standard

#### **WARNING LABELS**

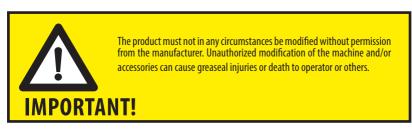
Make sure that the warning labels are always visible, clean the warning labels if necessary. Do not wash with high pressure washer directly on the warning label. If any part of the decal is worn or label becomes frayed or otherwise unreadable, order new decals.

·	
SYMBOL	EXPLANATION
	Read the instruction manual! Before work begins Warning! Before maintenance, service, coupling and un- coupling of the machine the tractor's engine should be switched off and the ignition key removed.
VARNING ROTERANDE KNUAR KALIFEI	WARNING !Rotating PTO- shaft! Rotating knives !
	Danger zone 15 m Warning! Ejection of objects
	NEVER allow anyone to be on the machine! The machine is designed for solitary work.
	Prohibition to stay on the machine Warning! Risk of crushing behind the tractor when coupling and uncoupling the machine. No one shall be nearby when coupling and uncoupling the machine.
	Warning! Accident risk for children
Tell   Tell	The equipment is CE-marked

#### 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 lables 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 are not followed. The accident leads to serious injury, possibly death or serious property damage.



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



This symbol indicates that an accident may occur if the regulations are not followed. The accident results in personal injury or property damage.



N.B! indicates the potential of failure if the regulation 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 content 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 if the machine is 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 personal safety.



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 under the machine without stopping the machine and the tractor engine. The rotors may continue to rotate for up to 1 minute after the PTO-shaft had been disengaged

- Never leave the equipment with the tractor engine running. Turn off the engine and apply the parking brake when you leave - even for a short while.
- Never leave the machine in a raised position. The hydraulics can lose pressure and the equipment falls down.
- Make sure that all guards are fitted correctly and cannot come loose.
- PTO shaft must be protected along its entire length. Make sure to anchor the safety chain correctly.
- Only you who is driving the tractor must 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 that can be thrown out while driving.
- Always disengage the machine before performing service or maintenance.
- Do not try to remove things that get stuck during operation. Ensure that the engine
  had stopped and that the blades have stopped spinning before any measures are
  taken on the machine.
- Do not drive with the mower if excessive vibration occurs, stop the machine immediately, check and correct the error before continuing your work.
- Do not climb on the mower! NEVER allow anyone to ride on the machine!
- It is forbidden to stand between the tractor / loader and the machine during coupling and uncoupling
- Make sure there is no more pressure in the system before disconnecting the hydraulic hoses. Pull the hydraulic handle from side to side several times to remove the pressure from the hydraulic hoses connected to the quick couplings.
- Disconnect the quick couplings, and use protective caps so that the couplings are not exposed to dirt.

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



NEVER RUN THE HYDRAULICS WHEN THE TRACTOR IS TURNED OFF

#### What to consider when using machine equipped with a PTO shaft

The transmission gearbox is protected by both the drive shaft and the shear bolt. All protection should be effective and in good condition. If protections condition is poor or worn, the guard should be replaced before 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 before adjusting and using the PTO shaft.



Never use a tool or product with defect safety equipment.

## RISKS AND HAZARDS DURING USE OF MOWING MACHINES 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.

### 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. Injuries may occur:

- 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 spinning 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. Covers on 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 standing on the way of the projected object can be seriously injured. Never allow bystanders within the vicinity of the machine. Respect the machine's danger zone. **Danger zone 25m!** 

#### Noise

Please note that the machine is normally 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. Injuries usually occurs when loose clothing or long hair is 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 rules on public roads and follow the rules that applies for driving tractor with towed equipment on public road.

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

No one is allowed to 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



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

#### **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.

#### PERSONAL PROTECTION

Always use appropriate protective equipment. Do not wear loose clothing or jewelry when working with the implement.









#### **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 tools/products. Never have junk lying in your area. Keep working areas clean. Always respect the risk zone.



Children in the area should be supervised.

#### **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 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.

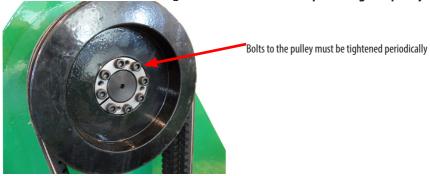
Learn and remember the correct working methods. Beginners should always keep a low speed, use extreme caution before routine and product knowledge is achieved. The user/customer is responsible to handle the situation correctly. The product should not be taken into use unless it can be done in a safe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

Read the tractor's manual before connecting equipment.

- Check and tighten all nuts and bolts!
- Check the oil level in the gear box, fill as necessary.
- Check V-belt tension and adjust if necessary.
- Check that the flails are not defective, replace if necessary.
- IMPORTANT! Always check lubrication oil level in the shaft before performing any operation!

BEFORE OPERATION! IT'S VERY IMPORTANT TO CHECK ALL BOLTS AND NUTS, MAKE SURE THEY ARE TIGHTENED, SPECIALLY THE CLAMP BUSHINGS AND PULLEY BOLTS

#### IMPORTANT! Check the mounting bolts to around the clamp bushing and pulleys



- Check all flails, make sure that they are firmly mounted. Replace broken, cracked or worn flails.
- Check all guards, protective covers, safety devices. Remove any transport lock before the operation
- Lubricate drive shaft and the other lubrication points

#### **OPERATING THE MACHINE**

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 tool 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 tools that are defined as single purpose tools. Respect the equipment's risk zone. Manoeuvrings is done from the driver's seat



#### Connecting the machine

- Connect the equipment to the tractor's rear three-point hitch.
- Connect the PTO-shaft. Anchor chain well.
- Connect the hydraulic hoses on the tractor's double acting valve
- Ready to use.

#### **OPERATION**

- Check the area to be mowed and remove objects and debris that can be caught and ejected by the blades.
- The amount of grass to be cut determines the speed forward; low speed usually gives the best results, it is best to cut the grass when it is dry. Mowing wet grass can cause clogging leading to grass clumps behind the cutting unit. When mowing high grass, raise the cutting unit and cut the same area twice the second time with a lower cutting height, leave at least 24 hours between the first and second cut so that the grass can dry.
- Lower the cutting unit to the ground. Connect the PTO-shaft so that the blades starts rotating.

Drive the machine at 540 RPM, start with the lowest possible speed, check that the mower works effectively with the engine at 540 rpm without any effort.

Stop and check that the cutting unit is correctly adjusted after the first 10 meters. Adjustments to the machine should always be carried out with the tractor engine switched off.

Do not make sharp turns and Do not reverse when the machine is lowered to the ground.



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

- The rotating blades can forcibly hit loose stones from the ground. It is therefore important that the operator of the machine ensures that no one is nearby the machine and the tractor during operation.
- The machine is equipped with protective covers and shields that prevent soil and stones from beeing thrown around and protects the operator from the rotating blades.
- When mowing high grass, it sometimes happens that the grass wraps around the rotor and blades. Please pay attention when noise is heard from the machine or vibration occurs. Turn off the tractor, disengage the machine and check that blades rotates freely.



**IMPORTANT!** Make sure that the rotors have stopped rotating before lifting the machine and checking the blades. Wait a few minutes to ensure that the blades have stopped spinning.

#### After use

- Parking is not allowed with the equipment above ground, but is done with the equipment resting on the ground.
- Rinse the equipment if necessary

#### TRANSPORT AND STORING

Make sure there are no people, children and foreign objects around the area before transporting the machine. Always take an extra caution during the transport. Ensure that the product is well secured and that transport brackets are mounted. Always place the load as low as possible. Respect the danger zone even during transport. When lifting the equipment, never go underneath suspended loads. Trailer used for transport should have working brakes.

Always store the machine in a dry place preferably underneath a cover when not in use. Ensure that the product is stable and not likely to tip over. Never let children play where the machine is being stored. Always keep in mind the risk of tipping!



#### MAINTENANCE AND SERVICE

Always turn off the tractor engine before maintenance or servicing. Ensure that the unit is stable and cannot tip over during maintenance and service. Replace damaged or worn parts immediately to reduce the risk of abrasion. Always perform maintenance, service and inspection, as recommended. Use only original replacement parts or spare parts with equivalent performance to reduce the risk of damage. Check that all bolts and nuts are tightened after maintenance and service.

Always test the machine before work is started. Always check the flails and the protective guards, considering the danger that can occur if flails would loosen and come off during operation.

- Always disconnect the machine from the tractor when performing any reparement work
- Always check the machine's condition to avoid break down. If any damage, craks, twisting
  or gap is detected, stop the operation and rectify the faults before continuing. Replace
  worn part.
- Check and retightened all bolt and nuts after a few hours of driving and daily there after
- Always test drive the machien before each use.
- Lubricate the machine regularly
- Check oil level in the gearbox before each use
- Ordering spare parts, pls. contact Kellfri AB

SERVICE	INTERVAL	
Flails	Before each run	Replace all defective flails. Sharp flails gives better result. When replacing any flails ensure that the bolts are firmly tightened.
	During operation	Always listen to any unsual noise
	After each run	Check
Gearbox	Before each run	Check oil level
Transmission oil 80W-90	After every 50 operation hours	First oil change
	After every 100 operation hours or once a year	Oil change Amount: 1L Tube: 0,5L
Rotor	After every 20 operation hours	Lubricate
Belts	After 1 hour use Regularly	Belt tension; check and tighten When the belt is pressed the belt should move about 20 mm (10mm each side)
Hydraulic	Before each run	Check all hydraulic tubes are intact, not broken, right connected and not leaking.
Machine	After each run	Rinse soil and grass with water id necessary

**WARNING!** Leaking oil or fuel under pressure can penetrate the skin and can cause serious injuries. Do not use your hands when searching for leaks. Use a piece of cardboard to search for leaks.

## Troubleshooting

#### Measure

Error	measure
Flail mower cuts unevenly or poorly	Check all flails are undamaged and secured properly.  Adjust the support roller and make sure it's properly mounted  Check and tighten any belts
The cutting sound change	Check the roller Check the tensioning of the V-belt Check the flails
Excessive vibrations	Check the flails and the roller
The hydraulic is not working	Check all tubes and couplings

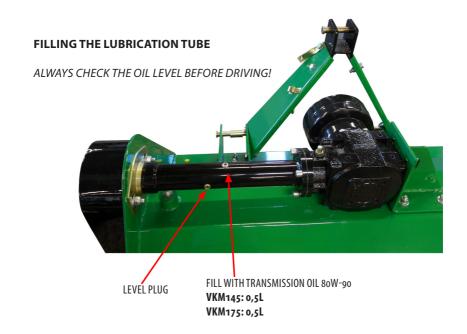
#### **SPARE PARTS FOR VKM175**

R35-VKM175.001	V-belt
R35-VKM175.002	Packbox driveshaft 40/90/8
R35-VKM175.003	Bearing - suppoert roller (UC 205)
R35-VKM175.005	Gear box
R35-VKM175.006	Pulley
R35-SK180.002	Hammer flail

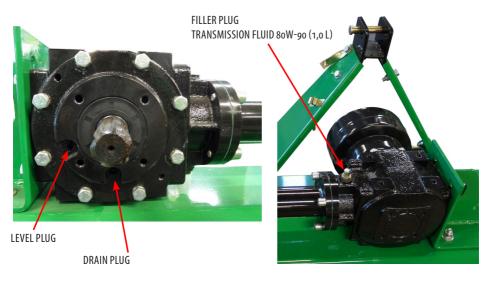
### **RECYCLING**

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



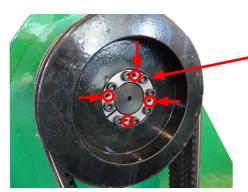


## GEARBOX VKM145/VKM175



#### **BELT TENSION**



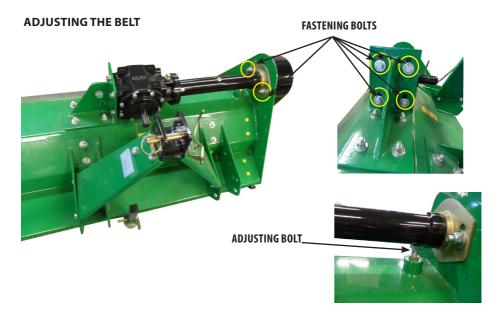


Fastening bolts for he pulley should be tightened periodcaly

To keep the clamping bush and pulley in place:

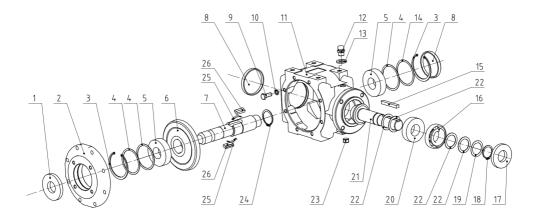
- Loosen and remove four bolts from the pulley
- Install them in the threaded holes on the clamping bush (See the marked holes in the picture) Then remove the remaining bolts.
- Replace the belt or pulley and then reinstall all the bolts.
- Tighten and check belt tension, adjust if necessary.

## CHECK AND TIGHTEN THE BELTS PERIODICALLY. NEW MACHINE CHECK AND TIGHTENED BELTS AFTER 2 HOURS DRIVING



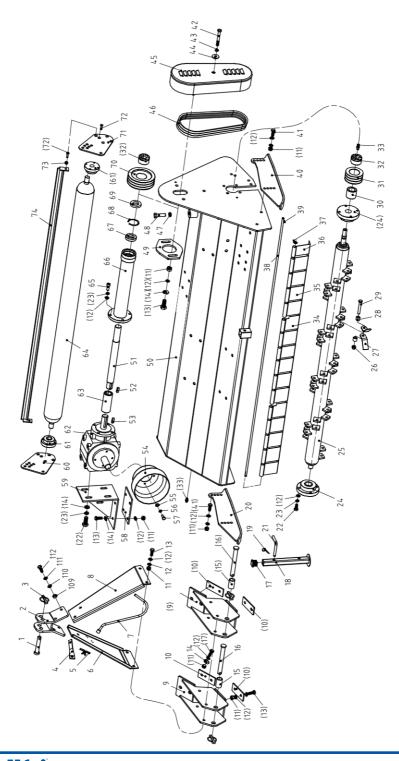
Release the fastening bolts on the gearbox and pulley (see picture). Then adjust the adjustment bolt until the belts are tensioned enough.

## GERABOX VKM145/VKM175



## **GEARBOX VKM145/VKM175**

1 Oil seal TC35×80×10 2 Gearbox cover 3 Circlips for hole 80 2 Adjusting washer for Gearbox cover 3 Deep groove ball bearing 6307E 6 Bigger bevel gear 7 Output shaft 1 Sealing Cover 9 Hex. head bolt M10×25 8 Spring washer 10 8 Sear box 1 Gear box 1 Vent-plug M16×1.5 1 Seal ring assembly 16 1 Adjusting washer for Gearbox 1 Key C10×8×70 1 Tapered roller bearing 30207 1 Oil seal TC35×72×10 1 Girclip for shaft 35 1 Thin adjusting washer for shaft 1 Tapered roller bearing 32207 2 Adjusting washer for shaft 1 Plug screw M16×1.5×15 1 Circlip for shaft 42 1 Spring piece 2	NO	NAME & SPECIFICATION	QTY.
3 Circlips for hole 80 2 Adjusting washer for Gearbox cover 3 Deep groove ball bearing 6307E 6 Bigger bevel gear 7 Output shaft 1 Sealing Cover 9 Hex. head bolt M10×25 8 Spring washer 10 8 Sering washer 10 11 Gear box 12 Vent-plug M16×1.5 13 Seal ring assembly 16 14 Adjusting washer for Gearbox 15 Key C10×8×70 16 Tapered roller bearing 30207 17 Oil seal TC35×72×10 18 Circlip for shaft 35 19 Thin adjusting washer for shaft 20 Tapered roller bearing 32207 21 Shaf with bevel gear 22 Adjusting washer for shaft 23 Plug screw M16×1.5×15 24 Circlip for shaft 42 25 Spring piece 2	1	Oil seal TC35×80×10	1
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5       Deep groove ball bearing 6307E       2         6       Bigger bevel gear       1         7       Output shaft       1         8       Sealing Cover       2         9       Hex. head bolt M10×25       8         10       Spring washer 10       8         11       Gear box       1         12       Vent-plug M16×1.5       1         13       Seal ring assembly 16       1         14       Adjusting washer for Gearbox       1         15       Key C10×8×70       1         16       Tapered roller bearing 30207       1         17       Oil seal TC35×72×10       1         18       Circlip for shaft 35       1         19       Thin adjusting washer for shaft       1         20       Tapered roller bearing 32207       1         21       Shaf with bevel gear       1         22       Adjusting washer for shaft       1         23       Plug screw M16×1.5×15       1         24       Circlip for shaft 42       1         25       Spring piece       2	3	Circlips for hole 80	2
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12       Vent-plug M16×1.5       1         13       Seal ring assembly 16       1         14       Adjusting washer for Gearbox       1         15       Key C10×8×70       1         16       Tapered roller bearing 30207       1         17       Oil seal TC35×72×10       1         18       Circlip for shaft 35       1         19       Thin adjusting washer for shaft       1         20       Tapered roller bearing 32207       1         21       Shaf with bevel gear       1         22       Adjusting washer for shaft       1         23       Plug screw M16×1.5×15       1         24       Circlip for shaft 42       1         25       Spring piece       2	10	Spring washer 10	8
13 Seal ring assembly 16 1 14 Adjusting washer for Gearbox 1 15 Key C10×8×70 1 16 Tapered roller bearing 30207 1 17 Oil seal TC35×72×10 1 18 Circlip for shaft 35 1 19 Thin adjusting washer for shaft 1 20 Tapered roller bearing 32207 1 21 Shaf with bevel gear 1 22 Adjusting washer for shaft 1 23 Plug screw M16×1.5×15 1 24 Circlip for shaft 42 1 25 Spring piece 2	11	Gear box	1
Adjusting washer for Gearbox  1 Key C10×8×70  1 Tapered roller bearing 30207  1 Oil seal TC35×72×10  18 Circlip for shaft 35  19 Thin adjusting washer for shaft  20 Tapered roller bearing 32207  21 Shaf with bevel gear  22 Adjusting washer for shaft  1 1  23 Plug screw M16×1.5×15  24 Circlip for shaft 42  25 Spring piece  2	12	Vent-plug M16×1.5	1
15       Key C10×8×70       1         16       Tapered roller bearing 30207       1         17       Oil seal TC35×72×10       1         18       Circlip for shaft 35       1         19       Thin adjusting washer for shaft       1         20       Tapered roller bearing 32207       1         21       Shaf with bevel gear       1         22       Adjusting washer for shaft       1         23       Plug screw M16×1.5×15       1         24       Circlip for shaft 42       1         25       Spring piece       2	13	Seal ring assembly 16	1
16       Tapered roller bearing 30207       1         17       Oil seal TC35×72×10       1         18       Circlip for shaft 35       1         19       Thin adjusting washer for shaft       1         20       Tapered roller bearing 32207       1         21       Shaf with bevel gear       1         22       Adjusting washer for shaft       1         23       Plug screw M16×1.5×15       1         24       Circlip for shaft 42       1         25       Spring piece       2	14	Adjusting washer for Gearbox	1
17 Oil seal TC35×72×10 1 18 Circlip for shaft 35 1 19 Thin adjusting washer for shaft 1 20 Tapered roller bearing 32207 1 21 Shaf with bevel gear 1 22 Adjusting washer for shaft 1 23 Plug screw M16×1.5×15 1 24 Circlip for shaft 42 1 25 Spring piece 2	15	Key C10×8×70	1
18 Circlip for shaft 35  19 Thin adjusting washer for shaft  20 Tapered roller bearing 32207  21 Shaf with bevel gear  22 Adjusting washer for shaft  23 Plug screw M16×1.5×15  24 Circlip for shaft 42  25 Spring piece  2	16	Tapered roller bearing 30207	1
19 Thin adjusting washer for shaft 20 Tapered roller bearing 32207 1 21 Shaf with bevel gear 1 22 Adjusting washer for shaft 1 23 Plug screw M16×1.5×15 1 24 Circlip for shaft 42 1 25 Spring piece 2	17	Oil seal TC35×72×10	1
20Tapered roller bearing 32207121Shaf with bevel gear122Adjusting washer for shaft123Plug screw M16×1.5×15124Circlip for shaft 42125Spring piece2	18	Circlip for shaft 35	1
21       Shaf with bevel gear       1         22       Adjusting washer for shaft       1         23       Plug screw M16×1.5×15       1         24       Circlip for shaft 42       1         25       Spring piece       2	19	Thin adjusting washer for shaft	1
22       Adjusting washer for shaft       1         23       Plug screw M16×1.5×15       1         24       Circlip for shaft 42       1         25       Spring piece       2	20	Tapered roller bearing 32207	1
23       Plug screw M16×1.5×15       1         24       Circlip for shaft 42       1         25       Spring piece       2	21	Shaf with bevel gear	1
24 Circlip for shaft 42 1 25 Spring piece 2	22	Adjusting washer for shaft	1
25 Spring piece 2	23	Plug screw M16×1.5×15	1
- 1 31	24	Circlip for shaft 42	1
	25	Spring piece	2
26 Swivel block 2	26	Swivel block	2



NO	NAME & SPECIFICATION	QTY VKM175	QTY VKM145	NO	NAME & SPECIFICATION	QTY VKM175	QTY VKM145
1	Upper pin	1	1	38	Baffle axle	1	1
2	Hanging weldment	1	1	39	Elastic cylindrical pin 4*25	2	2
3	Lock pin	3	3	40	Active plate(right)	1	1
4	Bracket to hook	1	1	41	Bolt M12*35	4	4
5	Clamp spring	2	2	42	Bolt M12*110	1	1
6	connecting plate weldment(left)	1	1	43	Spring washer φ12	1	1
7	Hook	1	1	44	Mid plain washer 12	7	7
8	connecting plate weldment(right)	1	1	45	Pulley cover	1	1
9	Connector	2	2	46	Belt 17×1016(BX)	3	3
10	Inner plate	4	4	47	Nut M16*1.5	1	1
11	Lock nut M12	26	26	48	BoltM16×1.5×45	1	1
12	Plain washer 12	50	50	49	Connecting plate	1	1
13	Bolt M12*40	22	22	50	Main frame weldment	1	1
14	Mid plain washer 12	14	14	51	Drive Shaft	1	1
15	Spacer	2	2	52	Key A10*70	1	1
16	Lower pin	2	2	53	Key A10*40	1	1
17	Stopper	1	1	54	PTO Dust jacket	1	1
18	Support weldment	1	1	55	Plain washer 10	2	2
19	R-Pin	1	1	56	Spring lock washer 10	2	2
20	Active plate(left)	1	1	57	Bolt M10*25	2	2
21	L pin	1	1	58	Down fix plate for gearbox	1	1
22	Bolt M12*30	12	12	59	Gearbox fix plate weldment	1	1
23	Spring lock washer 12	16	16	60	Adjusting plate (left)	1	1
24	UCC207	2	2	61	UC205	2	2
25	Blade axle weldment	1	1	62	Gearbox	1	1
26	Lock nut M16	28	24	63	Coupling	1	1
27	Blade	56	24	64	Roller	1	1
28	Blade sleeve	56	48	65	Hexagon socket screw M12X35	4	4
29	Bolt M16*80	28	24	66	Protective cover	1	1
30	Adjusting sleeve	1	16	67	Deep groove ball bearing 6007	1	1
31	Small pully	1	2	68	Circlips 62	1	1
32	Power lock 35*60	2	27	69	Oilseal 35*62*10	1	1
33	Oilcup M8*1	2	2	70	Big pully	1	1
34	Defence (current)(A)	3	3	71	Adjusting plate (right)	1	1
35	Defence (adjusted)	20	20	72	Sunk Screw M8X20	10	10
36	Defence (current)	1	1	73	Lock nut M8	2	2
37	Thin washer Ф14 thick 1	30	30	74	Scraper weldment	1	1





.UBRICATION POINTS Lubricate lubrication points regularly and every time you rinse the machine to remove the water that might have penetrate the bearings during rinsing.

> Unnecessary wear and mechanical damage can be result from insufficient lubrication. Use universal lubricant.

> IMPORTANT! Avoid applying too much. Dirt collected in any exposed grease can cause increased wear. After greasing, wipe off excess grease from the grease fittings and bearings.



## **Complaint form**

We are grateful for your help pointing out any inaccuracies in the Kellfri product delivered to you. Before making a complaint read Kellfris general warranty and sales conditions in our catalog as well as the enclosed User's manual that comes with the machine.

Please fill in the details below and attach photo and other information in order to process your request.

Buyer:		Customer number:				
Adress:	dress:		r:			
E-mail:		Phone nr:				
When was the product delivered?	When was the product delivered? When was the produ operation?		Did the product functioned as it should upon the first operation?			
Defect product / part:						
Problem description:						
Describe the sequence of events:						
Other:						
Submit Complaint form and photo to: Kellfri AB Division of Services : Contact Kellfri retailer Or e-mail service. info@kellfri.se						
Signiture:		Date:				

#### 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 manugreaseuring deffects.

This quarantee do not cover

Labour costs

Travel expenses

- Any modification that the buyer himself has/had made.
- Any consequential damages that occured due to damage to the machine.
- Damage due to normal deterioration of the machine, inadequate: service, user inexperience or use of spare parts which are not original.
- Wear parts such as hoses, seals, oils, and mechanical belts



## **EG-FÖRSÄKRAN OM MASKINENS ÖVERENSTÄMMELSE, ORIGINAL** EC-DECLARATION OF CONFORMITY

According to 2006/42/EC, Annex 2A Kellfri AB

Munkatorpsgatan 6 532 37 Skara, Sweden Declares that the machine Name: 35-VKM145, 35-VKM175

Type: Flail mower

Complies with all applicable provisions of the Machinery Directive 2006/42/EC. SS-EN ISO 12100:2010, SS-EN ISO 4254-12:2012

Other equipment must meet the hardware requirements of the Directive.

Tina Baudtler, Director

2013-09-24

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.

#### CUSTOMER SERVICE

You are always welcome to give your feedbacks, reviews or ask us about our tools and products.

#### **KELLFRI AB**

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