



# **Kellfri<sup>®</sup>**

**35-VKM200**

**35-VKM250**

**35-VKM280**

## **FLAIL MOWER**



**CAREFULLY READ THE OPERATING INSTRUCTIONS BEFORE USING THE PRODUCT!**

**OPERATING INSTRUCTIONS TRANSLATED FROM THE ORIGINAL**

## INTRODUCTION

Thank you for choosing a product from Kellfri AB. By following the general safety information and the instruction manual and by using common sense, you will have a great and safety use of your Kellfri product for many years. Kellfri tools and products aimed at the self operating farmer with high demands on functionality.

## PRODUCT INFORMATION

Kellfri's flail mower is designed to handle with high capacity anything from mowing, trimming trenches, clearing overgrown land with brushwood to chopping stumps and straw. With a great rotor speed, the Y-shaped knives (hammer knives on VKM175) has a very great ability to cut and chop all kinds of materials. In order to obtain the strength and stability required, flail mower is built with a very strong triangular framework. VKM 175 is equipped with a support roll. VKM200 / 250/280 have large carrier wheels 600 x 9 as standard, these are adjustable in height and can be easily adjusted to the desired cutting height. The machines are delivered incl. PTO shaft.

## THE MACHINE TASK

The equipment is intended for cutting grass and can also manage to cut shrubs as well as chop smaller stumps and straw.

TECHNICAL DATA	35-VKM200	35-VKM 250	35-VKM280
Width	2000 mm	2500 mm	2800 mm
Weight	560 kg	592 kg	650 kg
Hydr. sideshift	Yes	Yes	Yes
PTO-shaft	Standrad	Standard	Standard
wheel	6.00-9	6.00-9	6.00-9
power requirements	40-45 hp	45-60 hp	50-70 hp
Knives / Choppers	64 pcs	80 pcs	88 spcs
Support wheels 600 x 9	Standard	Standard	Standard

## 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 Kellfri's website: [www.kellfri.co.uk](http://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.



## PRODUCT SAFETY INFORMATION

- Never put your hands or feet under the machine without stopping the implement and the tractor engine.
- Never leave the equipment while the tractor engine is running. Turn off the engine and apply the parking brake when you leave the piece of equipment, even for a short while.
- Never leave the equipment up lift. The hydraulics can lose pressure and cause the implement to fall down.
- Ensure that all guards are always mounted and does not come loose.
- The PTO shaft must be protected over its entire length.
- Make sure to anchor the safety chain well.
- Only the operator of the tractor may be in the vicinity of the machine during work.
- Check before operating that no rocks sticking up in the field.

## IN CASE 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 accesable during all work, maintenance and service



## WARNING SIGNS AND LABELS

Ensure that warning labels are always visible and clean. Clean the warning labels as required. Do not rinse using pressure washer directly on the warning labels. Any damage/ broken stickers should be replaced. Order new stickers from your supplier.

SYMBOL	FÖRKLARING	PLACERING
	Risk zone 15m! WARNING ejection!	The side of the mach
	Rotating PTO	
	Rotating blades	
	Warning! Keep off the machine!	
	Warning! Accident risk for children!	
	The product is CE marked	

## PERSONAL PROTECTION

Always use suitable protection equipment. Do not wear loose clothing or jewellery while working with the equipment. Long hair should be tied up when working equipment that has moving parts. Use protective gloves during maintenance. Ear defenders must be worn whilst 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 tools/products. Never have junk lying in your area. Keep working areas clean. Always respect the risk zone.



## 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.



## **USE**

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. Maneuvering is done from the driver's seat.

## **COUPLING**

- Mount the implement to the tractor's rear three point linkage.
- Connect the PTO-shaft. Make sure the chain is well anchored.
- Ready to use.

## **AFTER USE**

- Parking is not allowed with the equipment above ground, always park the tractor with the implement 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**

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. All repairs and connections with electricity must be performed by a qualified person.

Check all nuts and bolts are tightened after performing maintenance and service. Always test the machine before using it.

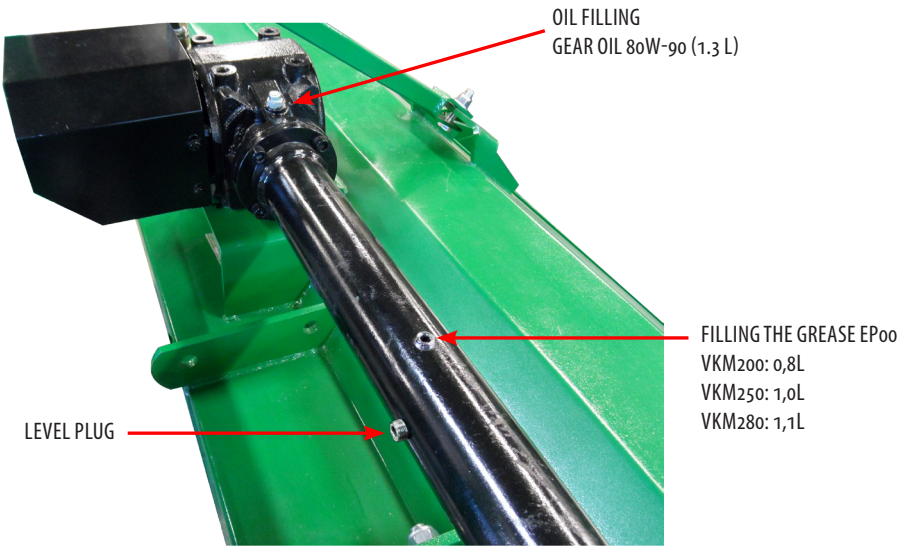
## **RECYCLING**

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

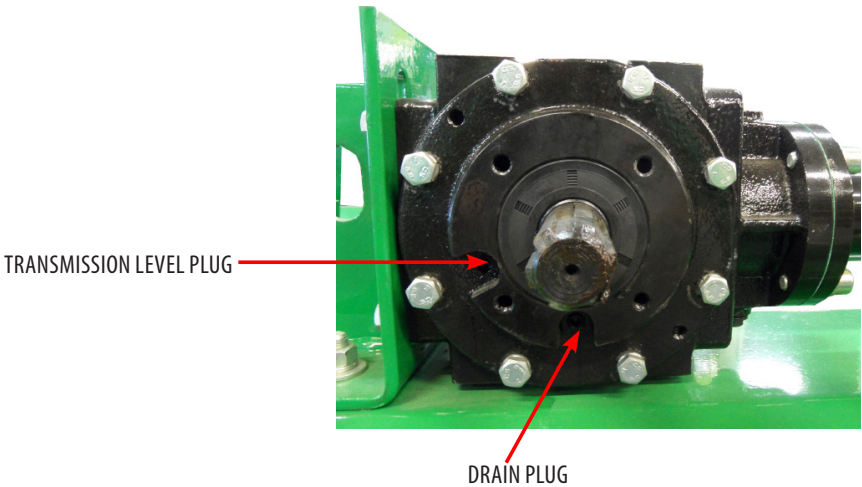
SERVICE	INTERVAL	
Flails	Before each run	Replace any defective flails. Sharp flails gives better results. Tighten the bolts properly when replacing them.
	While driving	Listen for noises
	After each run	Check
Gearbox	Before each run	Check the oil level Gearbox oil 80W-90 (1,5-1,8L)
	After 50 operating hours	First oil change
	Every 100 operating hours or min 1 time / year	Change the oil
Rotor	Every 20 operating hours	Lubrication
Straps	After 1 hour of driving regularly	Check and tighten the V belt. At the pressure belt should moved 20 mm.
The implement	After each run	Rinse away the soil and grass with water
Lubrication	The first time after some 2 hours driving after 20 hours	Lubricate all points regularly

TROUBLESHOOTING	MEASURE
Vertical mower runs unevenly or poorly	Check that the flails are intact and and mounted correctly. Adjust the support roller and make sure it is it is correctly fitted. Check and tighten any loose belts
Cut sound changes	Check roller. Check the tension of drive belts. Check flails.
Vibrations	Check flails
The hydraulics does not work	Check hoses and couplings

**GEARBOX**



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





## ADJUSTING BELT

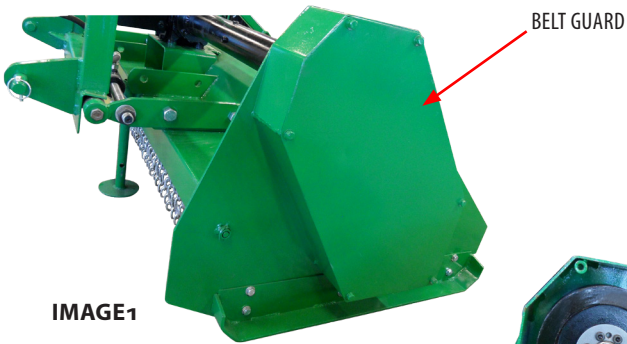


IMAGE1

CHECK THE BELT TENSION REGULARLY

At pressure the belt should move 20 mm (see figure 2)

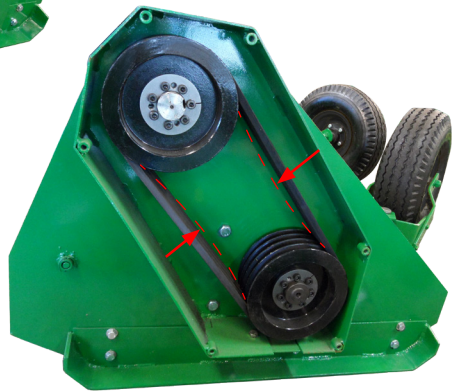
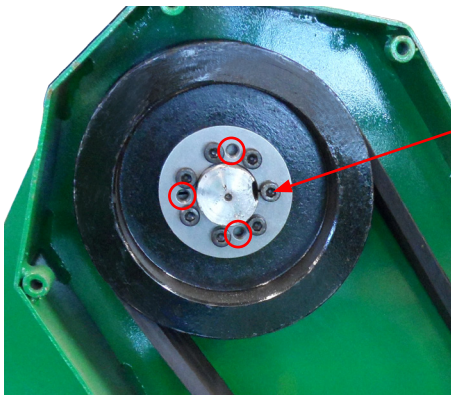


IMAGE2

**CHECK AND TIGHTEN V BELT AFTER AN HOUR OF DRIVING !!**



Pulley bolts must be tightened periodically

To keep the clamp bushing in place when replacing the belt or pulley:

- Loosen and remove the three 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 belt / pulley and then install back all bolts.
- Tighten and check belt tension, adjust if necessary.

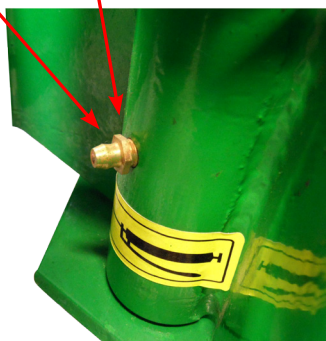


## GREASE POINTS

Lubricate intended grease fittings regularly and each time you rinse the machine to remove the water that penetrated the bearings during rinsing.

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

**IMPORTANT!** Avoid lubricating too much. Dirt will easily collect in exposed grease and leads to increased wear. After greasing, wipe off excess grease from the grease fittings and bearings.

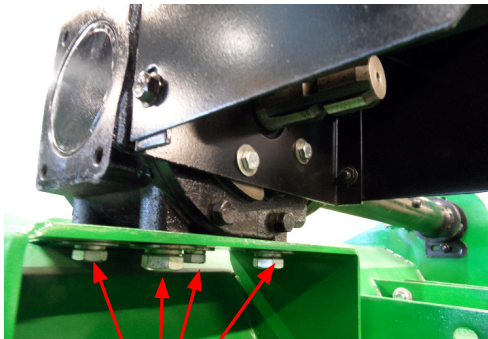




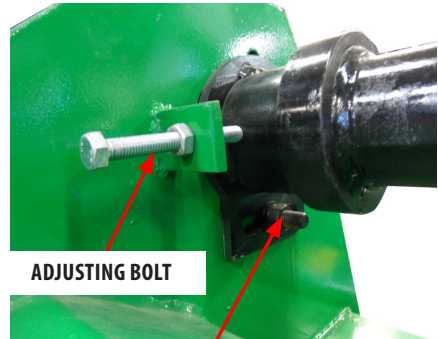
**CHECK AND TIGHTEN THE BELTS PERIODICALLY.**

**NEW MACHINE: CHECK AND TIGHTENED THE BELTS AFTER 2 HOURS DRIVING**

#### **ADJUSTMENT OF THE BELTS**

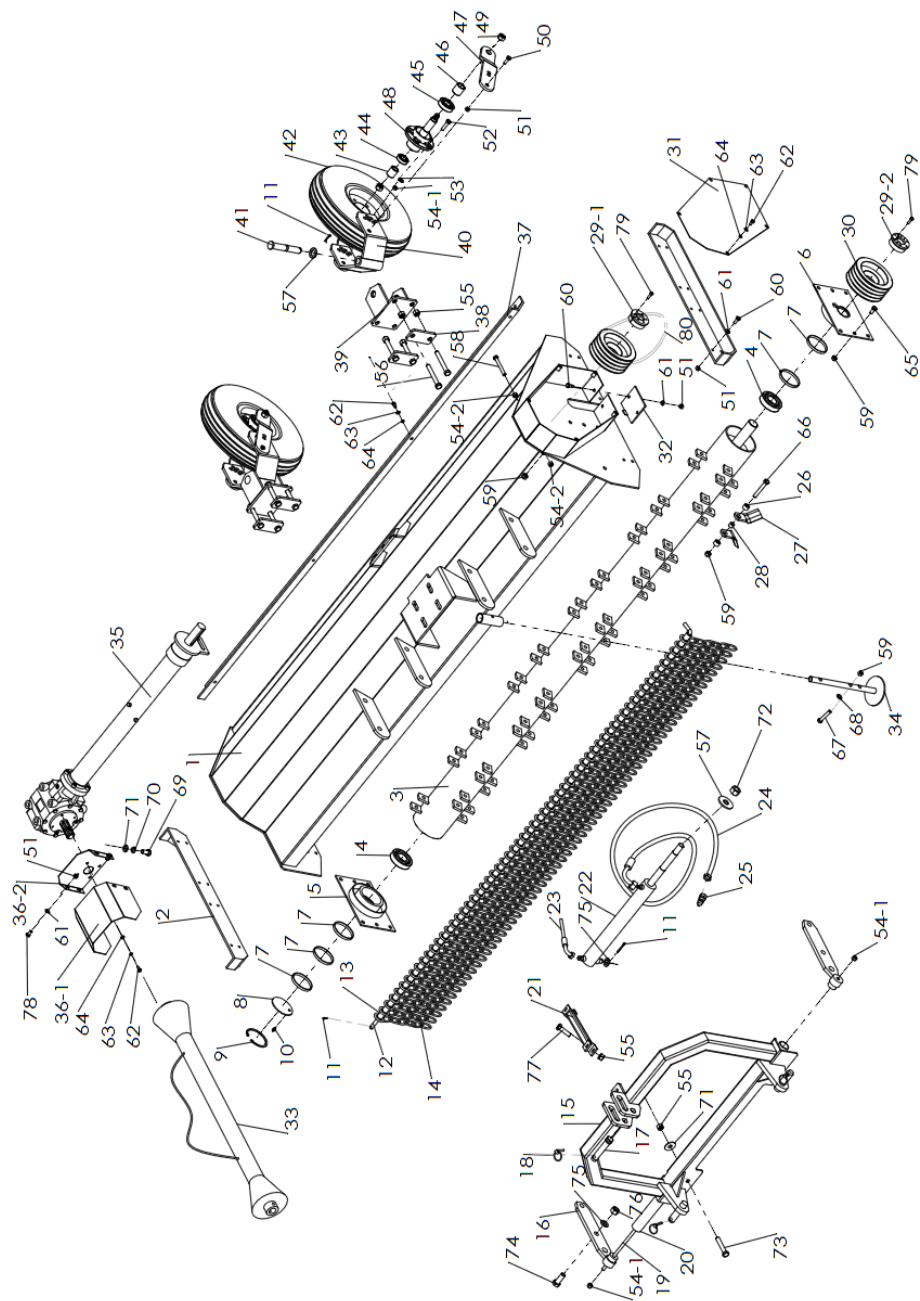


**MOUNTING BOLTS 4 PCS**

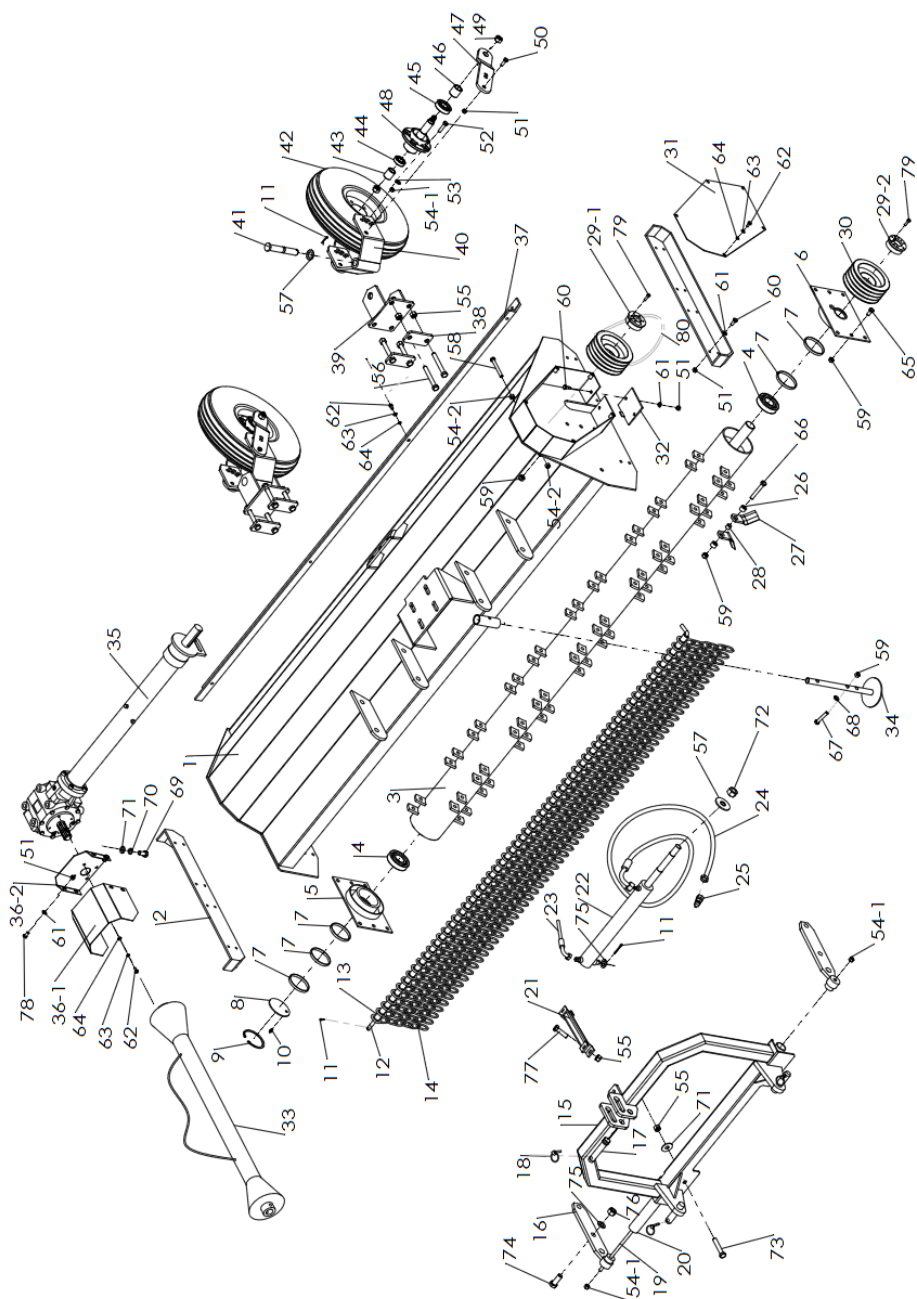


**MOUNTING BOLT**

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



NO	DESCRIPTION	AMOUNT	NO	DESCRIPTION	AMOUNT
1	FRAME - HEAD UNIT	1	27	KNIV/SLAGA VKM200	64
2	MEDAT	2		VKM250	80
3	DRUM	1		VKM280	88
4	BEARING 1309	2	28	SPACER MELLAN KNIVAR VKM200	32
5	BEARING HOUSINGS - LEFT	1		VKM250	40
6	BEARING HOUSINGS - RIGHT	1		VKM280	44
7	Φ100 SPACER		29-1	BUSHING Z6-40X80	1
8	LID	1	29-2	BUSHING Z6-45X80	1
9	LOCKING RING	1	30	PULLEY	2
10	GREASE NIPPLE	4	31	BELT COVER	1
11	COTTER PIN	4	32	LID	1
12	CHAIN SHAFT	1	33	PTO-SHAFT	1
13	CHAIN SPACER		34	OUTRIGGERS	1
14	CHAIN		35	GEARBOX	1
15	THREE-POINT LINKAGE	1	36-1	PROTECTIVE PLATE	1
16	ARTICULATION PLATE	2	36-2	PROTECTIVE PLATE	1
17	LOCKING PIN	1	37	IRON PLATE	1
18	LOCKING PIN	3	38	BRACKET	4
19	SHAFT	1	39	WHEEL BRACKET	2
20	PIPES	1	40	WHEEL FORK	2
21	SUPPORT PLATE	1	41	PIN	2
22	CYLINDER	1	42	WHEEL	2
23	2.1M HYDRAULIC HOSE	1	43	Φ35 SPACER	2
24	2.6M HYDRAULIC HOSE	1	44	BEARING 6205	2
25	HYDRAULIC COUPLING	2	45	BEARING 6306	2
26	SPACER FOR KNIVES VKM200	64	46	Φ40 SPACER	2
	VKM250	80	47	MOUNTING PLATE	4
	VKM280	88	48	WHEEL HOLDER	2
			49	LOCK NUT M18	4
			50	BOLT M10X30	8



NO	DESCRIPTION	AMOUNT
51	LOCK NUT M10	30
52	BOLT M12X45	10
53	WASHERS $\Phi$ 12	10
54-1	LOCK NUT M12	12
54-2	NUT M12	2
55	LOCK NUT M16	12
56	BOLT M16X120	8
57	WASHERS $\Phi$ 24	2
58	BOLT M12X100	1
59	LOCKING NUT VKM200	46
	VKM250	54
	VKM280	58
60	BOLT M10X25	18
61	WASHERS $\Phi$ 10	18
62	BOLT M8X15	17
63	LOCK WASHER $\Phi$ 8	17
64	WASHERS $\Phi$ 8	17
65	BOLT M14X25	12
66	BOLT VKM200	32
	VKM250	40
	VKM280	44
67	BOLT M14X80	1
68	WASHERS $\Phi$ 14	1
69	BOLT M16X30	4
70	LOCK WASHER $\Phi$ 16	4
71	WASHERS $\Phi$ 16	6
72	LOCK NUT M24	1
73	BOLT M16X90	2
74	BOLT M20X50	4
75	WASHERS $\Phi$ 20	5
76	LOCK NUT M20	4
77	BOLT M16X55	2
78	BOLT M10X15	4
79	SCREW M8X25	14
80	STRAP B1320	4



## 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
- Travel expenses
- Any modification that the buyer himself has/had made.
- Any consequential damages that occurred out of 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

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

According to 2006/42/EC, Annex 2A

Kelfri AB

Munkatorpsgratan 6

532 37 Skara, Sweden

Declares that the machine

Name: 35-VKM200, 35-VKM250, 35-VKM280

Type: Flail mower

Complies with all applicable provisions of the Machinery Directive 2006/42/EC.

Other equipment must meet the hardware requirements of the Directive.



Tina Baudtler, VD 2015-03-17

*Kelfri AB is constantly working on further developing their products and therefore reserves the right to modify, among other things the design and appearance without notice.*

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### CUSTOMER SERVICE

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

Kelfri AB

Telefon: 0046 (0)511 - 242 50

Fax: 0046 (0)511 - 168 33

E-mail: [info@kelfri.se](mailto:info@kelfri.se)



**Kelfri®**