

35-VKMATV120H
35-VKMATV150H
35-VKMATV150H2
FLAIL MOWER ATV WITH FLAP



Kellfri

Carefully read the operating instructions
before using the product!
Operating instructions translated from Swedish

TABLE OF CONTENTS

| | |
|---|---------|
| Introduction | 3 |
| Product information | 3 |
| Machine's function | 3 |
| Safety instructions | 4 |
| Instructions for emergency situations | 4 |
| Personal protection | 4 |
| Surroundings | 5 |
| Before use | 5 |
| Environment | 5 |
| Use | 6 |
| After use | 6 |
| Maintenance and service | 7 |
| Transportation and set-up | 7 |
| Recycling | 7 |
| Motorised machines | 8 |
| Refilling with engine oil | 9 |
| Fire prevention | 9 |
| Machines/tools connected to hydraulics | 10 |
| Chemicals | 11 |
| Risks and hazards associated with the use of garden machinery | 12 - 13 |
| Warning labels | 14 |
| Before use of flail mower | 15 |
| Adjustment of tow bar | 15 |
| Starting the engine | 16 |
| Operation and speed | 16 |
| Adjustment of cutting height | 17 |
| Transport mode | 18 |
| Lever height adjustment | 18 |
| Support roller and side skids | 19 |
| Tyre pressure | 19 |
| Inspection of rotor bearings | 19 |
| Inspection of oil level in engine | 19 |
| Inspection of belts | 20 |
| Inspection of wheel bearings | 20 |
| Maintenance of blades | 20 |
| Service and interval | 21 |
| Grease points | 22 |
| Choke - idling | 23 |
| Exploded diagrams and materials list | 24 - 28 |
| Notes | 29 - 30 |
| Deviation form | 31 |
| Warranty terms and conditions | 32 |

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.

We 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. Compliance with the safety instructions, operating manual and sound common sense will guarantee many years of enjoyment using the product. Kellfri's equipment and products are aimed at self-employed farmers, horse enthusiasts and other country-dwellers who have stringent performance demands.

PRODUCT INFORMATION

These flail mowers are designed to be towed behind an ATV or 4-wheeler, but can be towed by any vehicle with a 50 mm hitch ball. The swivelling tow bar hitch means that it follows the ground regardless of the angle to the towing vehicle. The flail mower is operated using a separate 13 hp engine. The tow bar hitch can be adjusted laterally to 3 positions. Simple and stable structure made from robust steel plating.

The perfect tool for you if you have large areas of grass.

The flail mower is equipped with an easy to start petrol engine and is designed to withstand many different conditions. The flail mower is easily height adjustable. It also has a full-width support roller to avoid damage to the machine, rotor and blades.

The flail mower has a steel construction to give it strength. All parts are of a high quality, guaranteeing many years of problem-free use.

MACHINE'S FUNCTION

The equipment is intended solely for cutting and topping grass and grasslands.

Remove any harmful objects such as stones, branches, etc. from the cutting area before starting work.

Important! The machine is supplied without oil. Fill before use!

| TECHNICAL DATA | 35-VKMATV120H | 35-VKMATV150H | 35-VKMATV150H2 |
|-----------------------|-------------------------------|-------------------------------|-------------------------------|
| Length | 1800 mm | 1720 mm | 1720 mm |
| Width | 1850 mm | 2060 mm | 2060 mm |
| Height | 830 mm | 900 mm | 900 mm |
| Working width | 1200 mm | 1500 mm | 1500 mm |
| Cutting height | Max: 300 mm Min: 20 mm | Max: 300 mm Min: 20 mm | Max: 300 mm Min: 20 mm |
| Wheel designation | 16 x 6.5-8 | 16 x 6.5-8 | 16 x 6.5-8 |
| Number of flails | 28 | 34 | 34 |
| Engine, hp | 15 | 15 | 18 (electric start-up) |
| Operating speed, km/h | 6 - 12 | 6 - 12 | 6 - 12 |
| Engine oil, type L | SAE 15W-40 | SAE 15W-40 | SAE 15W-40 |
| Oil quantity, L | 1.1 | 1.1 | 1.1 |
| Fuel quantity, L | 6 (unleaded 95 octane petrol) | 6 (unleaded 95 octane petrol) | 6 (unleaded 95 octane petrol) |
| Weight | 243 kg | 275 kg | 275 kg |
| Spark plug | NHSP LD F6RTC | NHSP LD F6RTC | NHSP LD F6RTC |

Kellfri's 35-VKMATV120H & 35-VKMATV150H are patent pending

SAFETY INSTRUCTIONS

Before using the equipment or product, and for the safety of yourself and others, you must read the safety instructions and instruction manual and understand their contents. Always keep the safety instructions and operating manual handy for users of the equipment or product. For the safety of both yourself and others, it may be a good idea to read through the safety instructions every now and then. If the safety instructions or the operating manual are damaged, or become unusable for any other reason, new copies may be ordered from: Kellfri AB, Munkatorpsgratan 6, SE-532 37 SKARA, Sweden. Tel.: +46 511 242 50

The safety instructions can also be downloaded from Kellfri's website: www.kellfri.co.uk

Do not use the equipment or product if you feel ill, tired or are under the influence of alcohol. Do not use the equipment or product if you are taking prescribed medication or drugs, or suffering from severe depression or mental illness. Always comply with general rules of the road and applicable rules stipulated by animal welfare legislation. People under the age of 15 are not allowed to use the equipment.



Warning!

The original design of the machine must not, under any circumstances, be modified without the approval of the manufacturer. Unauthorised modifications and/or accessories may cause life-threatening injuries or death to users and others.

Kellfri is not liable for any modifications, changes or rebuilds carried out by customers.

Where the machine is used professionally, employers are responsible for ensuring that users of the machine have theoretical and practical knowledge of the machine and that work is performed in a safe manner. Stay informed by complying with work environment legislation; contact your local work environment authority.

INSTRUCTIONS FOR EMERGENCY SITUATIONS

In case of emergency, call 112.

Always have a mobile phone or emergency phone available when working alone. A first-aid kit and fire extinguisher must be kept in an easily accessible location when carrying out any work, maintenance or service.

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 with equipment that has moving parts. Use protective gloves to avoid the risk of burns if hot surfaces such as exhaust pipes are touched, and to avoid oil and petrol getting in contact with the skin. Ear defenders must be worn whilst the engine is running.



SURROUNDINGS

Check that the work area is free from bystanders and objects before hitching or using the equipment. Otherwise, there is a risk of serious injury. Be extra careful if there are children in the vicinity of the area where the equipment or product is used or stored. Check that there are no low-hanging electrical cables within the work area. Exercise caution when working on slopes and close to ditches.

Always work alone with equipment or products that are made for working alone. Never leave rubbish in the work area, and keep work areas clean. Always respect the equipment's risk zone.



Warning!

Children must not be left unsupervised in the area!

BEFORE USE

Carefully read the safety instructions and the operating manual. Make sure that you understand the safety instructions, the operating manual and warning labels. Use common sense and suitable personal protective equipment when using the product. Always check the performance of the machine combination to be used. It is important that these are compatible and work satisfactorily together. This is to ensure that the equipment or product works as expected, and to guarantee the safety of yourself and others. Carry out a visual inspection of the equipment or product before use. Repair or replace damaged or worn parts to reduce the risk of injury. Grease moving parts and check that all nuts and bolts are tightened. Correct if necessary. Learn and remember the correct working method. Beginners must work slowly until they have learned how the machine or product works.

Users/customers are responsible for ensuring users can handle the situation. If a user feels that the machine is dangerous to use, they should not use it until they have received thorough training.



WARNING!

Never use equipment or products with defective safety components.

ENVIRONMENT



- Disposal of oil and other waste
- Improper disposal of oil or other waste may be hazardous to the environment.
- When oil is emptied from the machine, it must be poured into a leak-proof container suitable for oil. It is not permissible to store oil in a container used for food or drink, in order to avoid the oil being consumed by mistake and causing serious injury.
- It is prohibited to spill oil on the ground, or pour it into a drain or anywhere leading to a water source.
- Discarded oil, fuel, coolant, brake fluid, filters and batteries may not be thrown away or emptied in just any way. Contact your local authority for further information.

USE

Only those who understand the safety instructions and the operating manual may use the equipment or product. Exercise caution and care when working with the equipment or product and only use them in the way described in the instruction manual.

There is a risk of crushing when working with equipment that has moving parts. Exercise caution when working with equipment with hydraulic hoses, as oil under pressure can penetrate the skin. Immediately seek medical attention if this should occur. Always work alone with equipment that is made for working alone.

Respect the equipment's risk zone.



For further information about your machine, read the machine's operating manual.

Warning symbols identify important safety aspects in this manual in order to help you and others avoid dangers and accidents. When using the machine: Be extremely careful!



DANGER!

This symbol indicates that a serious accident will occur if the directions in the operating manual are not followed. The accident will lead to serious injury, possibly death, or serious damage.



Warning!

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



CAUTION!

This symbol indicates that an accident may occur if the directions are not followed. The accident will lead to injury or damage.

NOTE:

NOTE indicates the risk of a breakdown if the directions are not followed.

Where the machine is used professionally, employers are responsible for ensuring that users of the machine have theoretical and practical knowledge of the machine and that work is performed in a safe manner. Stay informed by complying with work environment legislation; contact your local work environment authority.

AFTER USE

- Ensure that the equipment/product is standing on level ground when it is disconnected. Use stabilisers, if these are included with the product/tool.
- Wash, rinse with water and dry if necessary.
- Re-lubricate if necessary.

MAINTENANCE AND SERVICE

- Make sure that the equipment is stable and cannot tip over when carrying out maintenance and service work.
- Replace damaged or worn parts to reduce the risk of injuries.
- Carry out maintenance, service and checks in line with recommendations.
- Only use spare parts with equal performance to reduce the risk of injuries and breakdowns.
- All electrical repairs and electrical connections must be carried out by a qualified person.

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



IMPORTANT! Check the oil level (engine oil) and lubricate grease points regularly!

IMPORTANT! Avoid over-lubricating. Dirt collects easily on exposed grease and causes increased wear. After lubrication, wipe off excess grease.



DANGER!

WARNING: Pressurised oil and fuel leaks can penetrate skin and cause serious injuries. Do not use your hands to locate leaks. Use a piece of paper or cardboard to look for leaks.

Kellfri AB has a policy of continuous product development and therefore reserves the right to make modifications, e.g. to the design and appearance of the product, without prior notice.

TRANSPORTATION AND SET-UP

- Check that the work area is free from bystanders, children and objects before driving off.
- Always observe additional caution during transport and moving.
- Ensure that the equipment or product is well anchored and that available transport lashings are fitted.
- Always position the load as low as possible. All protruding loads should be well anchored.
- Respect the risk zones even during transport and moving.
- Do not permit anyone to walk under suspended loads when carrying out lifts.
- Trailers used for transport should have brakes that work.
- An SMV sign must be attached when travelling on public roads.
- Check tyre pressure - see information on tyre pages. Do not exceed the maximum pressure!
- Always store the equipment or product in a dry place, preferably under a roof, when not in use.
- Ensure that the equipment or product is stable and cannot tip over.
- Never permit children to play at the storage site.
- Be aware of the tipping risk!

RECYCLING

For scrapping, the equipment/product must be dismantled and transported to a recycling station designated by your local authority. Any liquids should be collected and transported to a recycling station designated by your local authority. Contact your local authority for further information.



MOTORISED MACHINES

Important to bear in mind when using motorised machines:

- Fumes contain toxic substances, so never use the machine in poorly ventilated spaces. Do not run the engine in an enclosed space, as the exhaust fumes contain carbon monoxide, which is lethal if inhaled. The motorised machine must not be used indoors.
- Risk of burns from touching hot surfaces such as exhaust pipes.
- Operate a new machine at low speed for the first 20 hours, not at high speed and with a full load.
- Avoid getting petrol/oil on your skin. If this happens, rinse thoroughly with water.
- Avoid breathing in petrol fumes while refuelling. Screw the tank cap on securely.
- Do not keep fuel or other explosive substances near the work zone when using the machine.
- Only store fuel in containers intended for this purpose.
- Refuelling is not permitted indoors or when the engine is running.
- Never use dirty oil or fuel. This can cause serious damage to the engine.
- Never leave the machine with the engine running. Turn off the engine when you leave the equipment, even for a short period.
- Only the operator may be present in the vicinity of the machine while it is in operation. Take care if there are children in the area where the product is stored or used.
- Check that the work area is free from bystanders and objects before starting.
- Do not use the machine without having all guards correctly mounted.
- Do not operate the machine if it is vibrating substantially; stop the machine immediately and check the maintenance schedule. Check that all nuts and bolts are tightened.
- Do not alter the engine settings unless specified by the engine manufacturer. The engine's rpm must never exceed the value indicated on the sign.
- Never exceed the maximum driving speed.
- The SMV sign must be clearly visible during work.
- Lights must be used for driving on public roads, both in daylight and in darkness.
- Do not spray water directly on the sound damper, exhaust system or filter. Water may creep into the engine and cause serious damage.
- Carry out maintenance, service and checks in line with recommendations. Replace damaged and worn parts. Before beginning servicing work: stop the engine, remove the key, put the gear into neutral, apply the handbrake and ensure that all parts have stopped and cooled down.
- The exhaust pipe becomes hot and there is a risk of fire if grass and dry material collect around the exhaust pipe. Check and clean if necessary.
- A type ABE2 or 3 fire extinguisher should always be easily accessible during work. Contact your insurance provider.



Prevent inhalation of toxic gases

Fumes contain toxic substances, so never use the machine in poorly ventilated spaces. Not for indoor use.



Avoid burns

Never touch the silencer or other part of the exhaust system while the generator is running or when the parts are still hot.

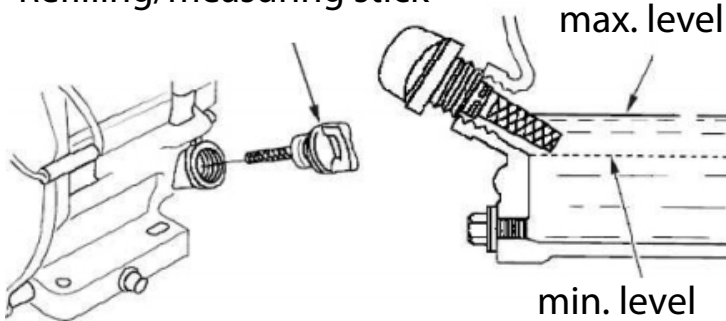


Avoid hearing damage

Long-term exposure to noise can cause permanent hearing damage. Use ear defenders.

REFILLING WITH ENGINE OIL

Refilling/measuring stick



Refill with engine oil 15W-40, 1 L

Check the level by withdrawing the measuring stick. The oil level should be between min. and max.



PREVENT FIRE

- Use the correct fuel specified for your machine. Unsuitable fuel, such as kerosene, must not be used.
- Wipe off spilt fuel with a clean cloth.
- Smoking and open flames are prohibited in the vicinity of the machine. Petrol can ignite easily.
- Keep explosive and flammable materials away from a machine with a combustion engine, as the exhaust system generates high temperatures during operation and can cause fire or explosion.
- In order to prevent fire and to keep the generator/engine well ventilated, the machine should be placed at least 1.5 m away from buildings or other equipment during operation.
- Always place the machine on a level surface. There is a risk of fuel spillage if the machine is placed on an incline.



MACHINERY/EQUIPMENT CONNECTED TO HYDRAULICS

Be careful when you connect your machine or equipment to a hydraulic hose.



DANGER!

Pressurised oil and fuel leaks can penetrate skin and cause serious injuries. Do not use your hands to locate leaks. Use a piece of paper or cardboard to search for leaks.

- Warning for high pressure, risk of penetration injury.
- Before repairs or maintenance are carried out, the system must be relieved of any remaining pressure.
- Turn off the tractor and move the hydraulic levers back and forth to release any pressure that may still be in the oil hoses and pipes before starting any work on them or the hydraulic cylinders.
- Clean the filter in the suction pipe after 10 hours' work.
- Immediately replace hydraulic hoses if cracks or wear are detected.
- Do not adjust the valve settings. Incorrect adjustment can result in damage to the machine and/or injury.
- The hydraulic system must only be operated using hydraulic oil intended for the purpose.
Check the oil level before you start the machine!
- When commissioning a new machine, it is recommended that the hydraulic oil is changed after the first 10 hours of operation, in order to remove any dirt or metal chips which may have got into the hydraulic system.

NOTE: The oil becomes hot when it flows through the hydraulic system. Check the oil temperature at regular intervals in order to avoid overheating. Stop the machine if the oil becomes overheated and allow the oil to cool down.



CHEMICALS

To maximise the service life of a product/equipment, maintenance - and not least preventive maintenance - is important, and this is largely what greases and oils do. Carefully read the operating manuals for your new products or equipment to ensure correct maintenance and service life and that the warranty remains valid!

Lubricating greases

First aid measures.

Inhalation - In the event of unintended inhalation of fumes, move the injured person into fresh air.

Skin contact - Wash with soap and water. Contact a doctor in the event of eczema or skin complaints.

Eye contact - Remove contact lenses, if any, before rinsing. Rinse thoroughly with large amounts of water, including under the eyelids. Contact a doctor if discomfort remains.

Ingestion - DO NOT induce vomiting. Drink water in small quantities. In the event of ingestion or discomfort, contact the poison information service or a doctor.

Hand protection - Wear protective gloves.

Eye protection - Avoid contact with eyes. Wear approved protective goggles.

Body protection - Suitable protective clothing.

Respiratory protection - No protection is necessary during normal handling.

Greases should be stored well-sealed in a cool place in a well-ventilated area. Storage temperature must not exceed 45°C. Keep away from heat, flames and sparks. The function and strength of materials such as steel, plastic, oils, grease etc. deteriorates considerably at very low temperatures (-20 to -30°C).



Keep chemicals out of the reach of children and animals.

Degreasing

To ensure the best lubricating effect, you need to clean parts of the product or equipment from time to time. We recommend degreasing to achieve thorough cleaning and to remove all residues of old lubricant, which may contain destructive particles.

The degreasing agent we supply at Kellfri is OKQ8, in a 20-litre can.



RISKS AND HAZARDS ASSOCIATED WITH THE USE OF GARDEN MACHINERY

Risk of crushing

Observers can be injured when the machine is lowered in the cutting position. Pasture toppers have crushing points around the hinge areas and between the three-point attachment and the main body. Respect the risk zone of 15 m!

Rotating blades

WARNING! Any person can risk injury by putting their hands or feet under the machine when it is lifted from the ground and the blades are still rotating. Nobody is allowed in the vicinity during operation or when the machine is running.

Risk of crushing

This risk is common in mechanical transmission devices such as belt drives, bevel gears and rollers.

Ensure that all guards are correctly fitted.



Rotating blades

Risk when disengaging machine

The heavier a rotating part is, the longer it will continue to rotate after the wheel drive has been disconnected. This property is called free-wheeling. Rotating blades and other components such as drive shafts etc. will continue to spin round after the wheel drive has been disconnected. Injuries occur:

- When the operator disconnects the equipment and attempts to clean or adjust the machine before the components have stopped rotating.
- When the shear bolt in the protective device in the power outlet disintegrates and the rotors continue to spin while the power outlet has stopped. The operator's awareness is of key importance for safety around rotating parts. Never raise the machine while the blades are still rotating!

Risk of ejected objects

Machines that cut grass eject material during operation. Foreign objects such as stones, sticks and other debris can find their way under the machine and be ejected at great speed. Metal guards at the sides and front prevent these objects being ejected, but this is no guarantee that they will always capture everything.



Observers or animals standing in the way of an ejected object can suffer serious injury. Never operate the machine when there are observers nearby. Respect the equipment's risk zone of 15-25 m!

Noise

Note that the machine is intended for outdoor use and that the operator's position is the driver's seat of the tractor. It is advisable to read the directions given in the tractor manual and maintenance instructions. The sound pressure level during operation exceeds 70 dB. Hearing protection must therefore be worn during operation.

Accidents involving slipping and falling are often a result of:

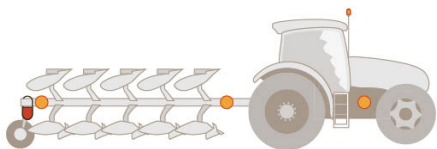
- Slippery surface
- Uneven steps and work platforms.

The risk of slips and falls can be reduced considerably by exercising good judgement.

All unprotected rotating machine parts increase the risk of accidents. Accidents usually occur when loose-fitting clothing or long hair is caught and wrapped around rotating parts, such as PTO shafts or drive shafts on the machine. Ensure that all guards are correctly fitted.

Drive safely on public roads

- Always follow traffic safety rules on public roads, and following the regulations applying to driving a tractor with towed equipment on a public road.
- Check that reflectors, warning signals and/or warning flags indicating protruding equipment are fitted to the machine or tractor. These indicators must be correctly mounted, and must be visible and easy for drivers of other vehicles to see.
- Observers must not lean against or climb onto the machine during transport or during work. NEVER allow anyone to travel on the machine!
- The maximum transportation speed must not exceed 20 km/h
- Brake regulations: If the gross weight of the trailer exceeds the gross weight of the towing vehicle, the trailer must be equipped with a brake. For further information, contact the traffic authorities.
- IMPORTANT! Mark protruding equipment clearly with additional lights or suitable reflectors. It is important that the equipment is visible! If you are driving on a public road, any load or equipment protruding in front of or behind the tractor must be marked. In darkness, at dusk or dawn or in weather with poor visibility, the load must be marked with a white reflector and lantern at the front and a red reflector and lantern at the rear. In daylight you can mark the load with a flag or a piece of fabric in colours which are easy to notice, such as red and yellow.



- Think about front-loaded equipment. As well as marking front-loaded equipment clearly, you can also try to make front-loaded equipment such as a bucket, bale spike or pallet forks less aggressive if another driver should collide with it.
- Before going out onto public roads, it is also always advisable to look over your vehicle and check that the brake system on the following vehicle is working, and that your tow bar eyes are not too worn. A worn-out towing eye can break if subjected to a heavy load, and you can lose your cart.
- It is also advisable to check that the SMV sign is clearly visible from behind. If it is obscured by any equipment or load behind, you must hang an additional one at the rear of the vehicle train.



WARNING LABELS

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

| SYMBOL | EXPLANATION |
|---|---|
|   | Read the operating manual! Before carrying out work. |
|   | WARNING! Rotating machine parts. WARNING! Crushing risk! Never use the machine without all guards correctly mounted. Do not put your hand or any other part of your body into the machine while it is running. |
|   | Ejection warning! Respect the equipment's risk zone! |
|   | - Lubrication - Tighten all bolts, nuts and couplings before use. |
|  | The machine is for individual work only. Nobody is allowed in the vicinity during operation. |
|  | Warning! Keep off the machine! |
|  | Warning! Accident risk for children! Children are not allowed in the vicinity of the machine. |
|  | Always store the product on a dry surface, preferably under a roof, when not in use. |
|  | The product is CE labelled |

BEFORE USING A FLAIL MOWER

Read the towing vehicle's instruction book before connecting equipment.

- Check the cog belt's tension, and adjust when necessary.
- Check that the flails are not defective, and replace if necessary,
- Ensure that all nuts, bolts and installations are securely mounted, that all packing/transport material such as tape, steel bands, rope etc. has been removed.
- Check that the oil level in the engine is correct and that there is petrol in the tank.
- Check that the tyre pressure is correct. See information on tyre pages. Do not exceed the maximum pressure!
- Ensure before use that all guards are in place and are not able to come loose.
- Connect the equipment to the ATV's tow bar ball coupling.
- Press grease into all grease nipples.

IMPORTANT! TIGHTEN BOLTS BEFORE STARTING OPERATION AND AFTER THE FIRST DAY OF OPERATION!

ADJUSTMENT OF TOW BAR

The height of the tow bar attachment on the towing vehicle may vary. For adjustment of the settings, there is a screw rod under the tow bar. It should be lengthened or shortened so that the flail mower is horizontal on level ground. (This gives a more effective cutting performance.)

Screw/turn the rod: lengthen the rod to raise the tow bar or shorten to lower it (illustration 1)

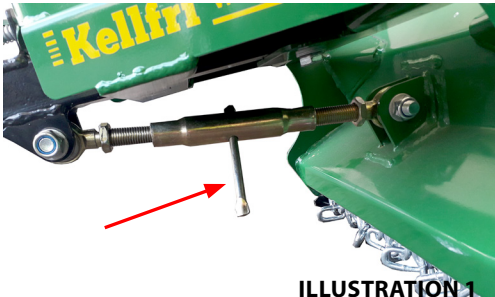
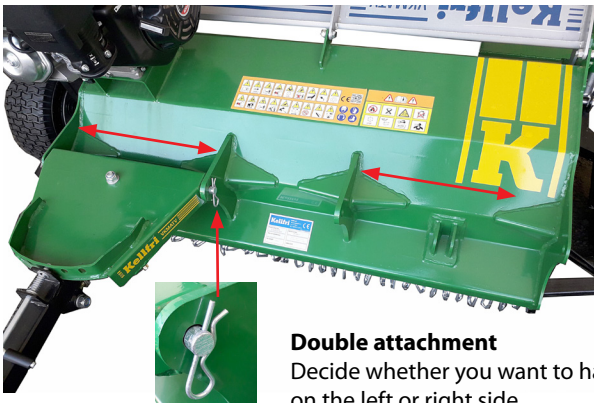


ILLUSTRATION 1



Double attachment

Decide whether you want to have the tow bar assembled on the left or right side.



Lever. Lateral adjustment of tow bar

STARTING THE ENGINE

1. Read and understand the engine's operating manual before using the machine.
2. Observe all safety regulations: Keep hands and feet away from blades and other moving parts.
3. Ensure that bystanders are at a safe distance from the machine.
4. Ensure that there is space between the blades and the ground/grass.
5. Select an area free of loose objects that can be ejected.
6. Turn the choke to the on position and set at idling.
7. Place one foot on top of the machine so that you have a firm grip and a good balance. Pull the starter cord and let it return slowly back to the engine.
8. Allow a few minutes for the engine to warm up while idling. Set the throttle at the factory setting for operation in order for the engine to have a normal working speed of max. 3600 rpm.



Warning!

Altering the accelerator setting to increase rpm above the recommendations given can invalidate the warranty. Cutting performance will decline, fuel consumption will increase and major vibrations may arise, leading to danger for persons and damage to equipment.

DRIVING AND SPEED

The amount of grass to be cut determines the forward speed; low speed usually produces the best results. Ensure that you follow the sequence below. **Normal speed:** 1 km/h for heavy work, 10 km/h for light work. Start with the lowest possible speed; ensure that the flail mower is working effectively with the engine at maximum rpm without straining. (If this is not possible because of very tough cutting conditions, raise the cutting level and cut the same area twice, the second time with a lower cutting level. Allow at least 24 hours between first and second cutting to allow the grass to dry out.)

Increase the forward speed until the engine starts to labour, then slow down immediately and maintain a speed where the engine runs easily. It is important to always listen to the engine to be sure that the engine and flail mower are working effectively - slow down or stop if the engine starts to labour.



Warning!

When changing from normal to heavier cutting, it is usual for the engine to start labouring with a drop in rpm. **SLOW DOWN IMMEDIATELY** so that the engine returns to normal rpm and speed. Follow the instructions above in "Normal speed". Expected speed is much lower when the machine is working hard.

FAILURE TO DO SO WILL RESULT IN THE POWER-TRANSMISSION SLIPPING AND VERY SERIOUS DAMAGE TO THE CLUTCH AND DRIVE BELTS.

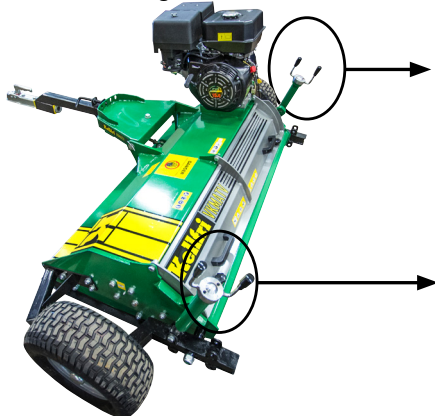
ADJUSTMENT OF CUTTING HEIGHT

The cutting height can be adjusted at three (3) places: the tow bar, the support roller and the wheels.

To raise or lower the cutting unit, adjust the following: raise or lower the wheels, raise or lower the tow bar and roller or the tow bar and wheels.

Adjust the height as follows:

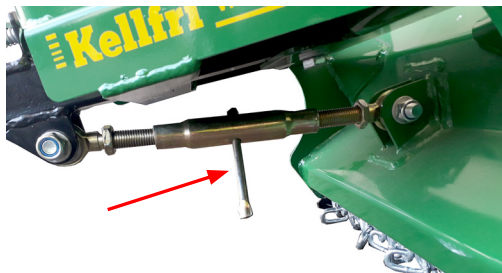
STEP 1 Wheels = Raise and lower the wheels by turning the levers. Check that both wheels are at the same height.



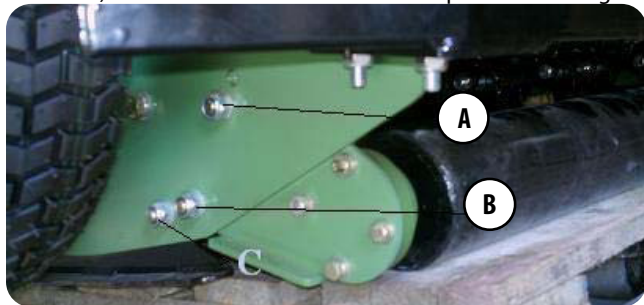
Adjustment of wheel height.

When in operating mode, the wheels must be adjusted. Turn the height adjustment levers to raise and lower the wheels.

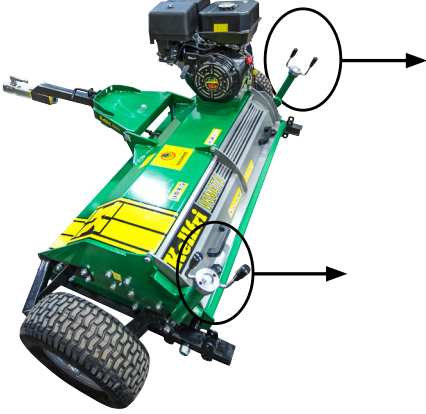
STEP 2 Combination of tow bar and support roller = Lengthen the tow bar (screw/turn the turnbuckle) to raise the tow bar or shorten it to lower it.



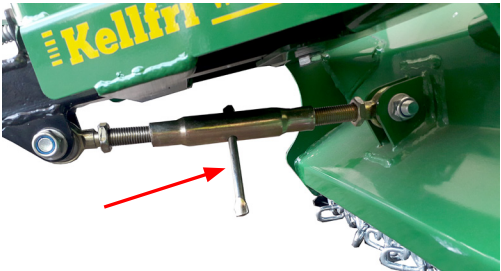
Raise the roller by loosening bolt 'B', loosen and remove bolt 'A'. (Repeat this on both sides of the roller.) Then select a different hole and replace bolt 'A'. Tighten bolts 'A' and 'B' (illustration)



STEP 3 Combining tow bar and wheels: Raise or lower the tow bar exactly as described in the previous step. (Turn the turnbuckle in or out to shorten or lengthen the tow bar.) Raise the wheels by turning the levers on both sides of the machine. Check that both wheels are at the same height.



Adjustment of wheel height.
When in operating mode, the wheels must be adjusted. Turn the height adjustment levers to raise and lower the wheels.



The skids should not drop and touch the ground. The skids are to support the machine over obstacles such as large stones or mounds of earth. If the skids touch the ground they will cause ground damage and deep grooves, and the flails will hit the ground.



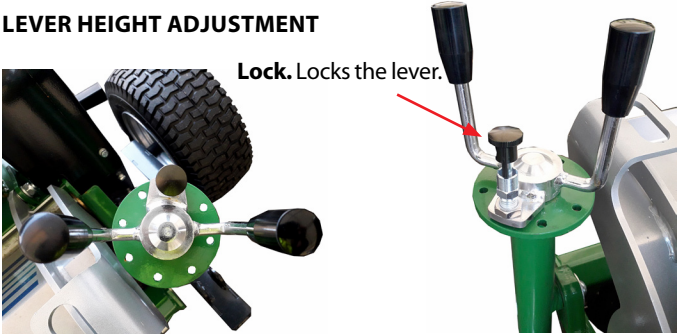
IMPORTANT! Operating speed should be adjusted to suit the prevailing cutting conditions. If the engine labours, the speed should be reduced. Be careful when operating on uneven ground.

TRANSPORT MODE

When the flail mower is to be moved from one workplace to another, it is advisable to raise the unit to the highest position, using a screw jack. (See section on cutting height.) The engine must be turned off and the blades must have stopped before changing to transport mode. Remove any loose material such as grass, etc. from the mower before leaving the field. Never move from one place to another with the engine running.

Please note that the flail mower is not legally authorised to use public roads. It should not therefore be used on public roads. Maximum driving speed is 30 km/h.

LEVER HEIGHT ADJUSTMENT



SUPPORT ROLLER AND SIDE SKIDS

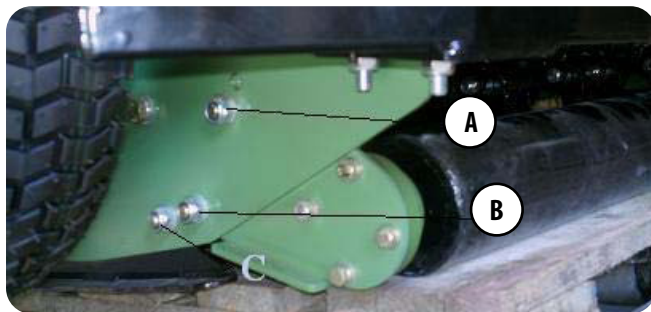
The main purpose of the support roller and the side skids is to prevent damage. If one of the wheels runs down in one direction, or if there is uneven ground between the wheels, the roller takes the weight of the mower and thus prevents the blades from touching the ground. The support roller combined with the side skids gives the rotor good protection. The support roller has the additional advantage of allowing grass edge cutting, as the roller enables the wheels to hang outside the edge. The factory-set position of the roller and side skids is suitable for most situations. But if the flail mower is often used in slightly tougher terrain, the roller and side skids should be lowered to give increased ground clearance for the rotor and blades. When the flail mower is used for 'trimming', the roller can be raised by using the various holes to give the desired cutting height, and the wheels can be raised off the ground.

TO ADJUST THE SUPPORT ROLLER:

Loosen level bolt 'B', loosen and remove bolt 'A'. (Repeat this on both sides of the roller.)

Then select a different hole and replace bolt 'A'.

Tighten bolts 'A' and 'B'.



Basic adjustment of skids:

Adjust the skids as protection for the flails, allowing the skids to be about 2 cm closer to the ground than the skids in their lowest position.

TYRE PRESSURE

Do NOT exceed the recommended tyre pressure. See info on sides of tyres for exact value.

| | |
|---------------|--------------|
| 16.5 X 6.50-8 | 29 PSI (max) |
|---------------|--------------|



**TIGHTEN BOLTS AFTER
A FEW HOURS OF
OPERATION!!!**

INSPECTION OF ROTOR BEARINGS

Turn the rotor axle by hand and feel for any unevenness in the bearings. Also try to move the axle from side to side to discover any looseness. If you discover any unevenness or looseness, remove the axle casings to inspect the bearings more closely.

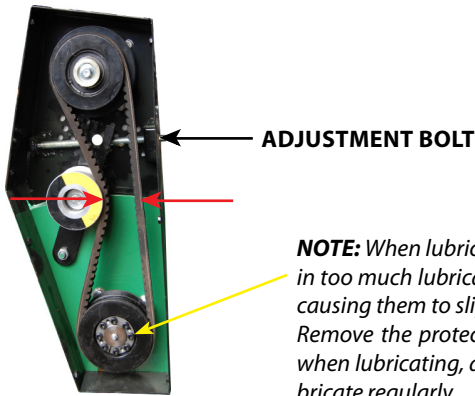
INSPECTION OF OIL LEVEL IN ENGINE

With your mower in a horizontal position, open the oil refilling tap and check that the oil level is up to the brim - see illustration.



INSPECTION OF COG BELT

A first inspection and retensioning must be performed after one hour's operation, to ensure that the cog belt is correctly tensioned. Check the cog belt regularly and tighten when necessary. Belt tensioning: the belt should move 20 mm (10 mm on each side) under pressure.



NOTE: When lubricating wheel bearings: take care not to pump in too much lubricant. Excess lubricant gets into the drive belts, causing them to slip and burn. Remove the protective fairing for a full inspection of the belts when lubricating, and wipe off excess lubricant if necessary. Lubricate regularly.

INSPECTION OF WHEEL BEARINGS

First, ensure that all wheel nuts and bolts are sufficiently tightened. Raise one side of the flail mower so that one of the wheels is exactly above the ground. Turn the wheel by hand and check the wheel's position. To check the bearings, try to move the wheel from left to right and feel for any looseness. Replace bad bearings.

GREASING THE 50 MM TOW BAR COUPLING

Check the coupling for signs of damage or wear, swivel the coupling 360 degrees and check that the bushings are not worn. Replace damaged and/or worn parts. Grease the ball coupling regularly.

BLADE MAINTENANCE

The flail mower is equipped with blades manufactured for a long service life. If a blade loosens or breaks, it is important to replace it immediately. If this is not done, imbalance may occur, which could have very serious consequences. When replacing the blade, the blade on the opposite side of the rotor must also be inspected for damage and wear. If it is partly or wholly worn, it must be replaced to maintain the correct weight balance. When the first cutting edge begins to become blunt, the entire set should be turned or replaced. Use of blunt blades reduces cutting performance and increases fuel consumption.

Blades must be replaced as follows:

- A) Ensure that the engine is switched off and the blades are not rotating. Turn off the fuel tap and allow the engine to cool down for five minutes. Remove the spark plug to ensure that the engine cannot start.
- B) Raise the mower to its maximum cutting height. Carefully raise the tow bar to a slightly inclined position so that the height adjustment bar can take some weight.
- D) Loosen and remove the bolts.
- E) Replace the blades. (Take note of the direction of rotation.)
- F) Screw the bolts tightly back in place and check that the blades move on the axle.

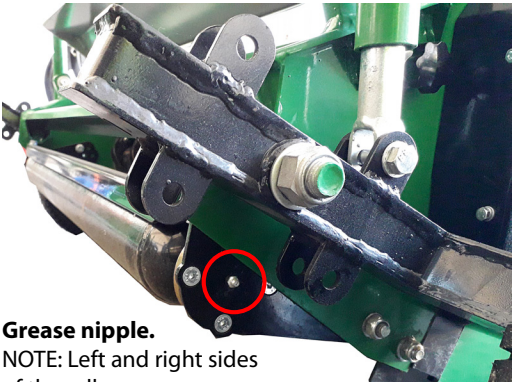
Never use worn, cracked or repaired shackles when replacing blades. Replace with new ones. For repairs in addition to the previously listed adjustments, contact your local dealer.



| SERVICE | INTERVAL | MEASURE |
|---------------|---|---|
| Flails | Before each use | Replace all defective flails. Sharp blades give better results. When replacing blades, tighten bolts fully. |
| | While operating | Listen out for noises |
| | After each use | Check |
| Engine oil | Before each use | Check level |
| Volume: 1.1 L | 500 operating hours or a minimum of once a year | Oil change Type: SAE15W-40 |
| Rotor | After 20 hours of operation | Lubrication |
| Belts | Regularly | Belt tensioning The belt should move 20 mm under pressure. |
| Hydraulics | Before each use | Check that all hoses are intact, connected and leak-proof. |
| The equipment | After each use | Wash off earth and grass with water. |

| FAULT | MEASURE |
|--|---|
| The flail mower cuts unevenly or badly | Check that all flails are intact and firmly in position. Adjust the support roller and check that is in the correct position. Check the drive belts and tighten if necessary. |
| The cutting sound changes | Check the roller. Check the tension of the drive belts. Check the flails. |
| Vibrations | Check the flails. |

GREASE POINTS



Grease nipple.

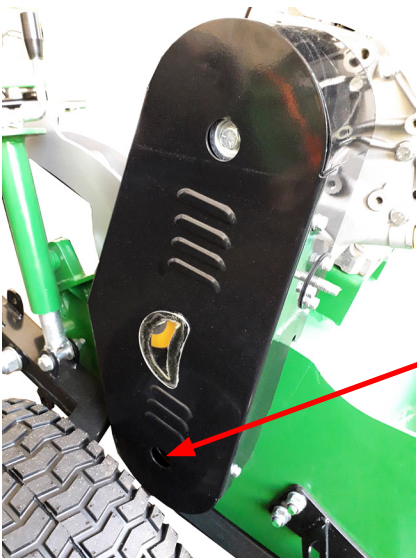
NOTE: Left and right sides of the roller.



Lubricate the indicated grease nipples regularly, and every time you rinse off the machine, to remove the water that has penetrated into the bearings during the rinsing.

Inadequate lubrication can result in unnecessary wear and mechanical damage. Use a universal lubricant.

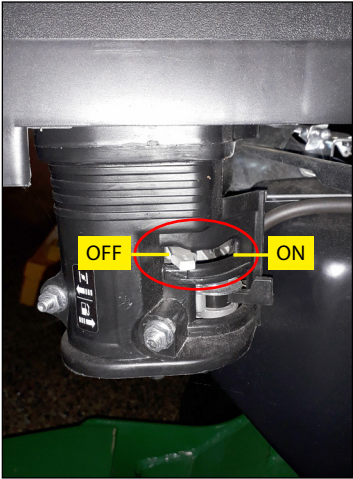
IMPORTANT! Avoid over-lubricating. Dirt collects easily on exposed grease and causes increased wear. After lubrication, wipe excess grease off from grease nipples and bearings.



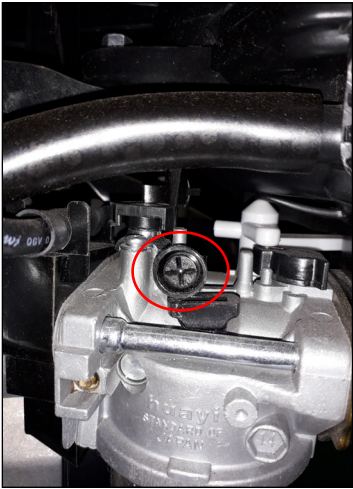
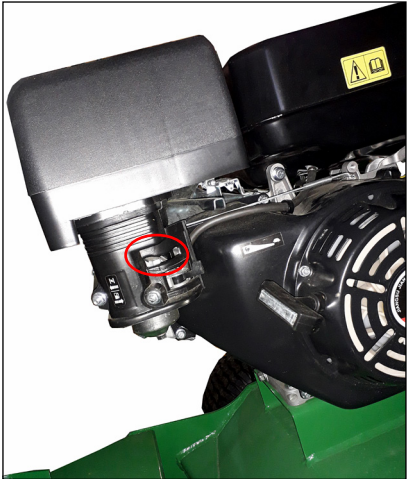
Lubricate the coupling, otherwise the bearing will cut and the coupling will break.



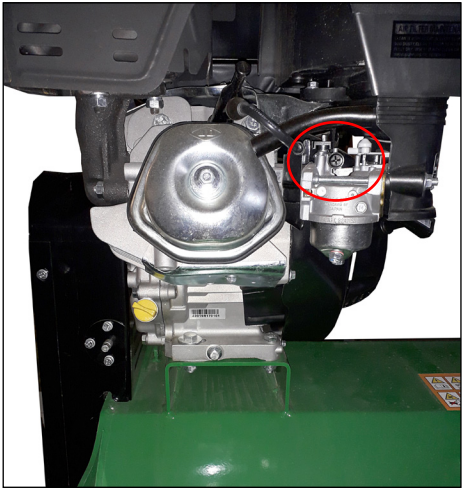
CHOKE - IDLING

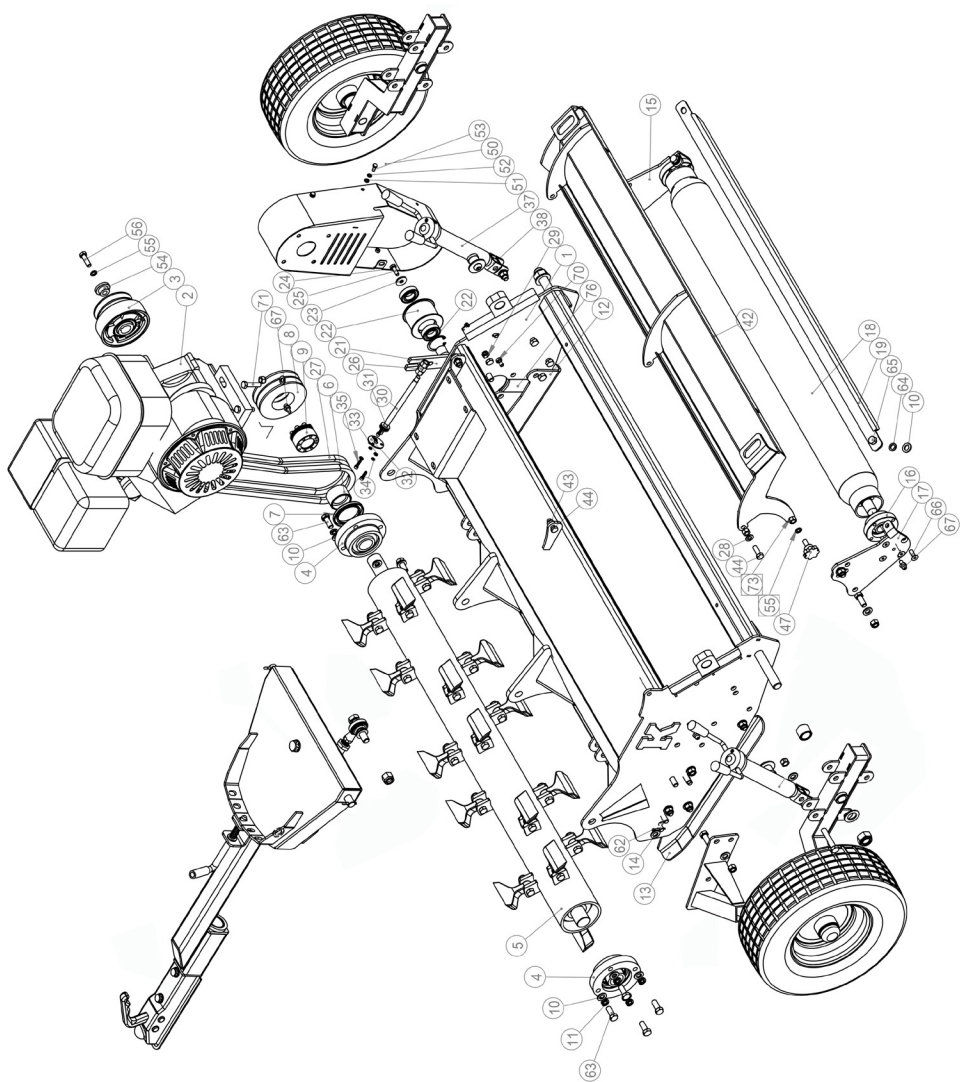


Choke Lever to left - choke OFF.
Lever to right - choke ON.

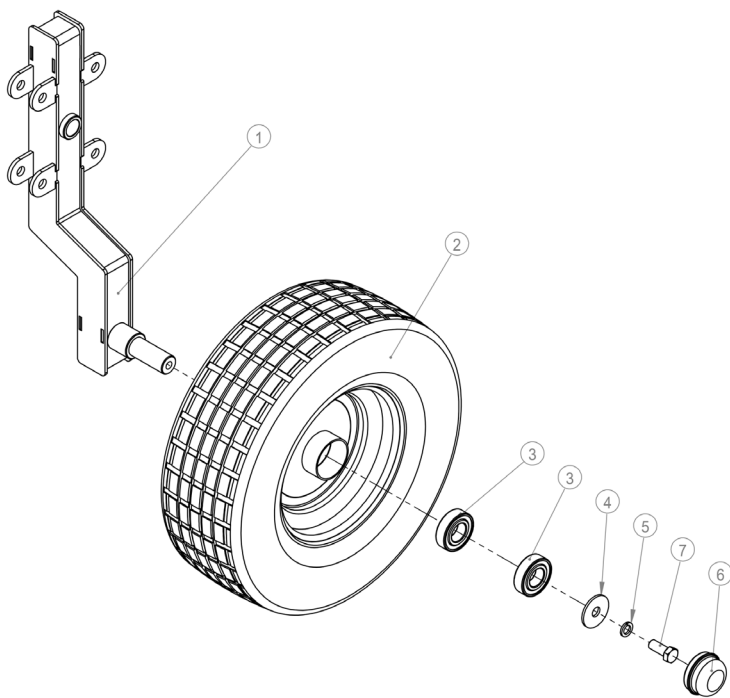


Idle. Adjustment screw.

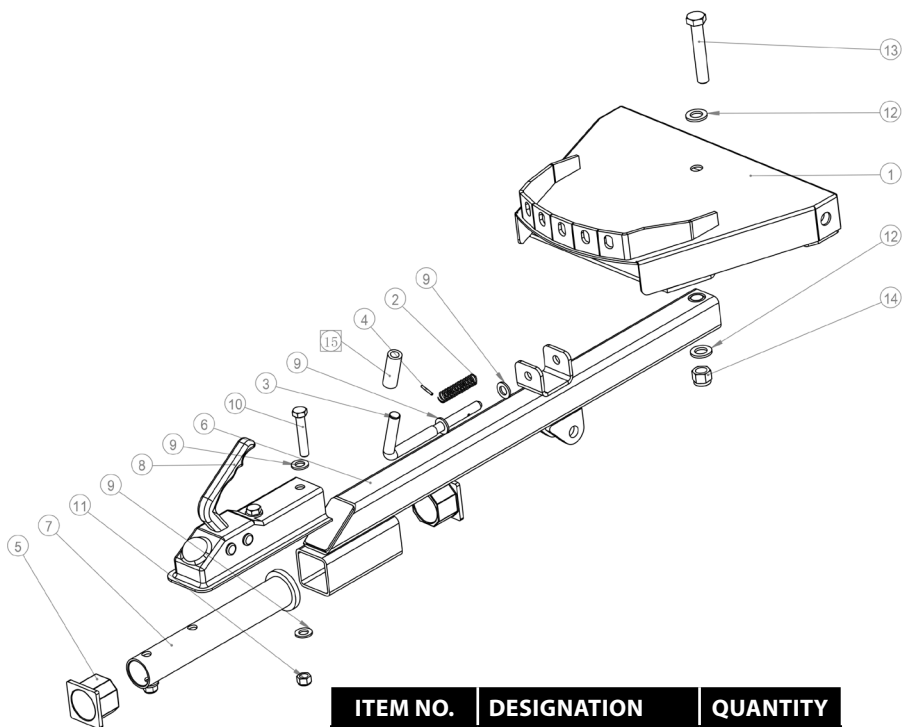




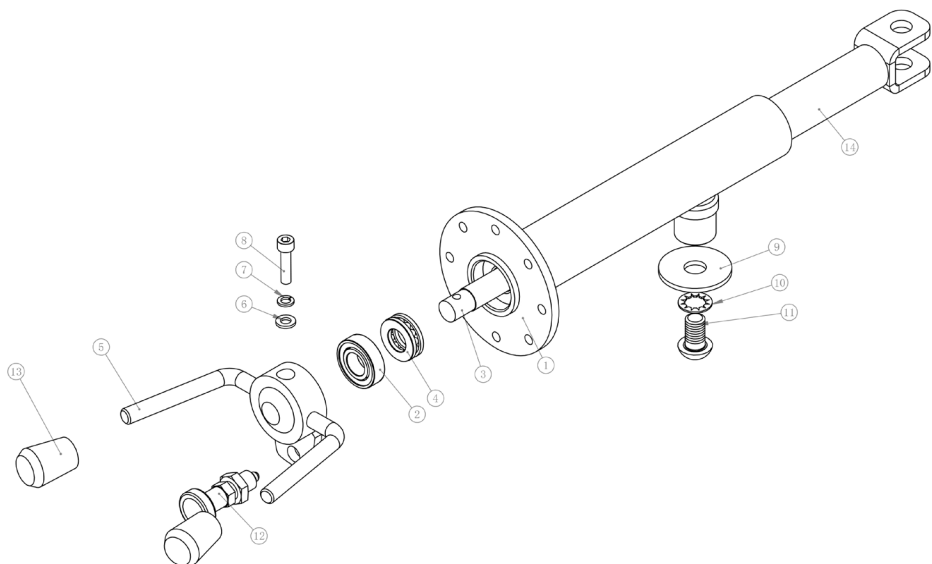
| NO. | DESIGNATION | QUAN- TITY | NO. | DESIGNATION | QUAN- TITY | NO. | DESIGNATION | QUAN- TITY |
|-----|-------------------------|---------------|-----|-------------------------|---------------|-----|--------------------------------|---------------|
| 1 | Guard | 1 | 35 | Hex key M5x20 | 3 | 66 | Screw with recessed head M8x25 | 8 |
| 2 | Engine 15 hp | 1 | 36 | Support bracket tyre | 1 | 67 | Grease nipple M8-1 | 4 |
| 3 | Coupling | 1 | 37 | Protective casing | 2 | 68 | Cotter pin 5x28 | 2 |
| 4 | Bearing housing | 2 | 38 | Inner tube | 2 | 69 | 8 Flat washer | 2 |
| 5 | Blade roller | 1 | 39 | Wheel suspension | 1 | 70 | Hex key M8x16 | 2 |
| 6 | Sleeve | 1 | 40 | Flat washer 22 | 2 | 71 | Hex key M10x45 | 4 |
| 7 | Seal 55 x 80 x 8 | 1 | 41 | Lock nut M20 | 2 | 72 | Hex lock nut M10 | 4 |
| 8 | Belt pulley | 1 | 42 | Flip | 1 | 73 | Hex lock nut M10 | 2 |
| 9 | Sleeve 65-30 | 1 | 43 | Lock nut | | 74 | Spacer | 2 |
| 10 | Washer 12 | 30 | 44 | Lock nut M10 | 3 | 75 | Connection arm | 1 |
| 11 | Spring washer 12 | 8 | 45 | Hex key M10x30 | 3 | 76 | Fender | 1 |
| 12 | Skid shoe, right | 1 | 46 | Hex key M12x65 | 4 | 77 | Hex lock nut M12 | 2 |
| 13 | Skid shoe, left | 1 | 47 | Bakelite bolt M10-22 | 2 | | | |
| 14 | Throttle axle | 1 | 48 | Triangular bracket | 2 | | | |
| 15 | Adjustment plate, right | 1 | 49 | Belt pulley protection | 1 | | | |
| 16 | Bearing housing | 2 | 50 | Belt pulley cover plate | 1 | | | |
| 17 | Adjustment plate, left | 1 | 51 | Washer 6 | 6 | | | |
| 18 | Supporting roller | 1 | 52 | Spring washer 6 | 6 | | | |
| 19 | Scraper | 1 | 53 | Hex key M6x16 | 6 | | | |
| 20 | Adjustment lever | 1 | 54 | Drive wheel | 1 | | | |
| 21 | Plate | 1 | 55 | Spring washer 10 | 3 | | | |
| 22 | Tension wheel | 1 | 56 | Hex key M10x35 | 1 | | | |
| 23 | Washer 8 | 1 | 57 | Axle | 1 | | | |
| 24 | Spring washer 8 | 3 | 58 | Flat washer 16 | 3 | | | |
| 25 | Bolt M8 x 25 | 1 | 59 | Hex key lock nut M16 | 3 | | | |
| 26 | Adjustment nut | 1 | 60 | Hex key M16x90 | 2 | | | |
| 27 | Belt Bx1067 | 2 | 61 | Hex key M16X70 | 2 | | | |
| 28 | Flat washer 10x1 | 9 | 62 | Cotter pin 4x25 | 2 | | | |
| 29 | Lock nut M10 | 1 | 63 | Hex key M12x30 | 23 | | | |
| 30 | Adjustment screw | 1 | 64 | Spring washer 12 | 2 | | | |
| 31 | Bearing 51100 | 1 | 65 | Hex key M12x25 | 2 | | | |
| 32 | Washer | 1 | | | | | | |
| 33 | Flat washer 5 | 3 | | | | | | |
| 34 | Spring washer 5 | 3 | | | | | | |



| ITEM NO. | DESIGNATION | QUANTITY |
|----------|--------------------------|----------|
| 1 | Wheel suspension - right | 1 |
| 2 | Tyre, 16 x 6 5-8 | 1 |
| 3 | Bearing 6205 | 2 |
| 4 | Washer 12 | 1 |
| 5 | Spring washer 12 | 1 |
| 6 | End cover | 1 |
| 7 | Bolt M12x30 | 1 |



| ITEM NO. | DESIGNATION | QUANTITY |
|----------|------------------------------|----------|
| 1 | Protective guard | 1 |
| 2 | Spring | 1 |
| 3 | Adjustment handle | 1 |
| 4 | Elastic cylindrical pin 3x22 | 1 |
| 5 | Bushing | 2 |
| 6 | Tow bar attachment | 1 |
| 7 | Axle tube for tow bar | 1 |
| 8 | Trailer casing | 1 |
| 9 | 12 Washer | 6 |
| 10 | Bolt M12x65 | 2 |
| 11 | Locking nut M12 | 2 |
| 12 | Washer 16 | 2 |
| 13 | Bolt M16x85 | 1 |
| 14 | Locking nut M16 | 1 |
| 15 | Control handle 11x55 | 1 |



| ITEM NO. | DESIGNATION | QUANTITY |
|----------|-----------------------------------|----------|
| 1 | Outer tube | 1 |
| 2 | Bearing 6002 | 1 |
| 3 | Threaded rod | 1 |
| 4 | Bearing 51102 | 1 |
| 5 | Adjustment handle | 1 |
| 6 | Washer 6 | 1 |
| 7 | Spring washer 6 | 1 |
| 8 | Screw with hexagonal sleeve M6x25 | 1 |
| 9 | Washer 12 | 1 |
| 10 | Inner serrated locking washer 12 | 1 |
| 11 | Hex key M12x20 | 1 |
| 12 | Pin M12x1.5 | 1 |
| 13 | Handle sleeve M10x32 | 2 |
| 14 | Inner tube | 1 |

NOTES:

[illegible]

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

Send the claim form and photographs to:
Kellfri AB
Service department
Munkatorpsgratan 6
SE-532 37 Skara, Sweden

Or e-mail Service: KELLFRI AB
service@kellfri.co.uk Munkatorpsgratan 6
SE-532 37 SKARA,
SWEDEN

Tel. +46 511 242 50
Fax: +46 511 168 33
Website: www.kellfri.co.uk
Email: info@kellfri.co.uk
Edition: 28 November 2018

WARRANTY TERMS AND CONDITIONS

- The warranty's validity - Kellfri's warranty is valid for 12 months from the date of purchase
- The warranty covers - Reimbursement for parts replaced after a material fault or manufacturing fault has been verified.
- The warranty does not cover
- Labour costs
 - Travel costs
 - Machines on which the purchaser has made or commissioned modifications.
 - Any additional costs arising as a result of damage to the machine.
 - Damage due to normal wear and tear of the machine, substandard servicing, the user's inexperience or use of spare parts that are not original.
 - Wear parts such as hoses, seals, oil and belts.

EC DECLARATION OF CONFORMITY FOR MACHINERY, ORIGINAL



In accordance with 2006/42/EC, Appendix 2A
Kellfri AB
Munkatorpsgratan 6
SE-532 37 Skara, Sweden

Hereby declares that the machine

Name: 35-VKMATV120H, 35-VKMATV150H, 35-VKMATV150H2

Type: Flail mower for ATV with flap

Conforms with all applicable requirements in the Machinery Directive 2006/42/EC.
Other equipment must comply with the Machinery Directive's requirements.

Kjell Johansson
Product Development Manager

CUSTOMER SERVICE

You are always welcome to give feedback or ask us about our equipment and products. Kellfri AB has a policy of continuous product development and therefore reserves the right to make modifications, e.g. to the design and appearance of the product, without prior notice.

Latest change 19 December 2019

Kellfri

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Email: info@kellfri.co.uk