# 21-KG08 21-KG18 21-KG21 GRAPPLE





Read the operating instructions carefully before using the product! Operating instructions translated from Swedish

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

#### **PRODUCT INFORMATION**

Kellfri's grapple is an excellent tool to simplify the moving of logs and branches. **Important! Grapple is not adapted to excavators.** 

#### APPLICATION

For loading logs.

#### Not intended for moving rocks.

<b>TECHNICAL DATA</b>	21-KG08	21-KG18	21-KG21
Rotator attachment	40 mm	50 mm	50 mm
Max. opening width	700 mm	1000 mm	1250 mm
Gripping area	0.08m <sup>2</sup>	0.18 m <sup>2</sup>	0.21 m <sup>2</sup>
Weight	27 kg	51 kg	75 kg
System pressure	18 Mpa	18 Mpa	19 Mpa
Max weight load	-	750 kg	1050 kg



The figure shows 21-KG08.

#### 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, Storsvängen 2, SE-532 38 SKARA, Sweden.

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.



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#### 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 surfaces 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 decals. 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 immediately to reduce the risk of injury. Grease moving parts and check that all nuts and bolts are tightened. Repair 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.

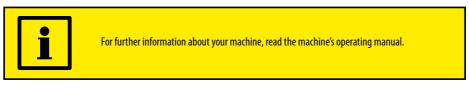


#### USE

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 it as 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.



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!



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.



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.



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



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 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 immediately 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 grapple claws before starting work.

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

#### **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 in working order.
- An SMV sign must be attached when travelling on public roads.
- Check tyre pressure see information on the sidewalls of the tyres. 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. Contact your local authority for further information.



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.

#### FORESTRY TRAILERS/GRAPPLE LOADERS

- There are different types of forestry trailers that can be connected to the tractor's towing device and smaller trailers that can be connected to a vehicle with a ball coupling. No matter which trailer you have, it is important to think about safety.
- Follow the safety information in the forestry trailer's or crane's instruction manual. It is the user's responsibility to read through the instructions and comply with them. For attachments connected to tractors, read the tractor's operating manual.
- Always check the performance of the used machine combination (trailer and crane) to help ensure safety and functionality. Grease moving parts, and check that all nuts and bolts are tightened.
- Check tyre pressure see info on the sidewalls of the tyres. Do not exceed the maximum pressure!
- Never overload the trailer!
- The trailer must not be loaded above the height of the headboard!
- Never leave the driver's seat until the brakes on the towing vehicle have been engaged.
- The risk area is 25 metres. Only the operator is allowed to be within the risk area while the trailer is in use.
- Do not leave a loaded trailer parked unsupervised.
- When unhitching the trailer, it must be empty and on a level surface with the trailer wheels secured using suitable brake blocks.
- In an emergency, stop the tractor to stop the movements of the forestry trailer.
- There is a risk of suspended loads being dropped if the oil supply to the crane is disrupted. First lower the lifting arm, then the articulated boom and then unload the grapple.
- The tractor should be fitted with an ABE2 or ABE3 fire extinguisher. Please contact your insurance company for details.
- The timber trailer's towing device must always be checked. Regularly check the coupling for wear and tear. Do not overload the maximum pressure and tensile load of the ball coupling.
- The forestry trailer's noise level does not exceed 70 dB (A).
- Exercise caution when working with equipment with hydraulic hoses as the oil under pressure can penetrate skin. Immediately seek medical attention if this should occur.
- The trailer is not equipped with lights and is only intended to be used in daylight. If necessary, the trailer can be fitted with a magnetic rear light. If the load is wider than the tractor (200 mm laterally) when it is dark outside, it must be fitted with approved white reflectors at the front.
- An SMV sign must be attached when travelling on public roads.
- EU regulations stipulate how fast a rig with a non-brake trailer is allowed to go. Comply with these regulations. The maximum speed for a full load is 30 km/h.
- Kellfri is not liable for any modifications, changes or rebuilds carried out by customers. The
  controls are placed in optimal position with tractor/ATV. Warning! Hydraulic hoses must not
  be attached inside the cab. When operating the crane, the valve block package must be
  placed in a protected place, at the crane foot or behind the trailer.
- Connect the grapple loader valve block pressure and return hoses correctly. Make sure the pressure and return hoses are connected correctly. The valve block may be damaged if the hoses are connected incorrectly.
- Ensure that the crane is fitted correctly and securely.
- The crane must not be used when the trailer is in motion.
- The stabiliser must be used when the crane is in use. Make sure the trailer and stabiliser are stable on solid level ground.
- When moving the trailer, remember to lift up the stabilisers.
- The permitted lifting capacity must not be exceeded. The gripper, rotator and any attachment that is connected to the tractor are always considered part of the load.
- Never allow inexperienced personnel to operate the crane.



#### USE AND CARE INSTRUCTIONS – FORESTRY TRAILER WITH CRANE

- Check that the crane is undamaged before connecting it to the vehicle.
- Connect the equipment and lock it in place. Always check the locking pins before use.
- There is usually air in the system at the start. Carefully extend all cylinders fully a few of times to purge any air from the system.
- Calmly and methodically practise the movement pattern used for loading and unloading timber on the trailer.
- Keep the crane low down when in transit.
- There is less stability when starting to load. Exercise caution!
- Both stabilisers must be lowered when loading and unloading. Timber must bit be pulled with the crane when driving the tractor. The tractor must be stationary when using the crane.
- The articulated boom must not be fully closed and then press the lifting arm pressed downward. The crane is designed to lift timber and not pressing down on it. Maximum driving speed is 30 km/h.
- Loads must be spread evenly across the trailer. All protruding loads should be well anchored.
- IMPORTANT! It is important that the trailer is on level and firm ground during loading to avoid the trailer tipping over.
- Ensure that there is sufficient clearance between the tractor, trailer, or highest point when you are passing a low suspended power cable.
- Always check the oil level in the crane's swivel housing. Low oil level can cause the arm to swing uncontrolled.
- Warning! Never lift a load if the grapple loader arm is positioned at the end position (if fully extended). Move the grapple loader closer to the trailer before lifting the load. Read the crane's operating manual for more information about the lifting capacity.
- Keep the grapple loader low during transport. It must be positioned correctly to avoid the trailer tipping over.
- Grease all lubrication points regularly.



The operator must keep an eye on the working area at all times. If this is not possible, the operator must work with an assistant.



#### WARNING DECALS

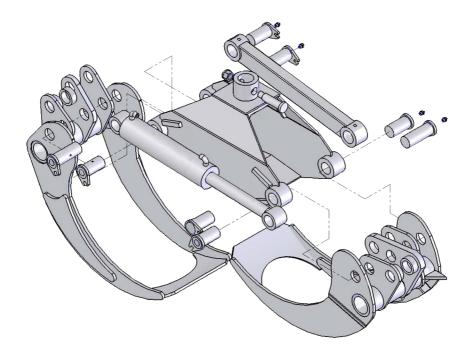
Make sure warning decals are always visible and clean them when necessary. Do not use a high-pressure washer directly on the warning decal. If apart with a decal is replaced, or the decal becomes worn or in any other way unusable, order a new set of decals.

SYMBOL	EXPLANATION
	Read the operating instructions.
<mark></mark>	Warning! Risk zone There must be a distance of at least 5 metres between the machine and any bystanders. Respect the equipment's risk zone.
	Risk of accidents to children. Children must not be left unsupervised in the area. Only those who under- stand the safety instructions and the operating instructions may use the equipment or product.
<b>A</b>	Warning! Suspended load. It is prohibited to stand under suspended loads.
	Warning! Risk of crushing!
	Always store the product in a dry place, preferably under a roof, when not in use.
	Warning! Keep off the equipment.
	NB: For lone work only.
Material           Resultant         Material           Non-Material         Material           Total mass         Material           Total mass         Material           Material         Material           Material         Material           Material         Material           Material         Material	The product is CE-marked

### **GREASE POINTS**

Grease nipples are located on the right and left. Both front and back.





SPARE PARTS	21-KG08	21-KG18	21-KG21
Cylinder	R21-KG08.001	R21-KG18.002	R21-KG21.001
Gasket kit for cylinder		R21-KG18.004	R21-KG21.006





The figure shows 21-KG08.

#### **CLAW BEAM ATTACHMENT 21-BKG21**

With this grapple accessory, you can easily pick up bushes, saplings, etc. Fits grapple 21-KG21.





**Installation** *Start by fitting the part marked A.* "Wide grip" Then fit the part marked B."*Narrow claw*".

#### NOTES:


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Required fields\*\*

#### **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 <u>www.kellfri.co.uk</u>, and in the operating manual if supplied. The manual can also be downloaded from <u>www.kellfri.co.uk/manuals</u>

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 2 different angles and 2 close-ups of the actual damage from 2 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:
E-mail**:	Daytime telephone**:

When was the product supplied?	When was the product put into operation?		the product working on d ES NO	elivery?
Product name/article number**:	REASON	YES	REASON	YES
	11) Transport da	nage*	(05) Wrong price	
Serial number:	(09) Product con	(09) Product complaint* (02) Ordered by mistake/		
	(04) Wrong good	s delivered	Charge-back	
	(03) Wrong quar	tity	(99) Other reason* * Fill in form below	

Description of fault\*\*:

Describe the course of events:

Miscellaneous:

Customer's signature:	Date:
To be filled in by the dealer	
To be filled in by the dealer	
Dealer:	Invoice number:
Signature:	Date:

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#### WARRANTY TERMS AND CONDITIONS

The warranty's validity	- Kellfri's warranty is valid for 12 months from the date of purchase
The warranty covers	<ul> <li>Reimbursement for parts replaced after a material fault or manufac- turing fault has been verified.</li> </ul>
The warranty does not cover	<ul> <li>Labour costs</li> <li>Travel costs</li> <li>A machine that the purchaser himself has modified, or has been modified by a third party.</li> <li>Any additional costs arising as a result of damage to the machine.</li> <li>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.</li> <li>Wear parts such as hoses, seals, oil and belts.</li> </ul>

## EC DECLARATION OF CONFORMITY FOR MACHINERY, ORIGINAL

In accordance with 2006/42/EC, Appendix 2A  $\mathbf{C}\mathbf{\epsilon}$ Kellfri AB Storsvängen 2 SE-532 38 Skara, Sweden

Hereby declares that the machine

Name: 21-KG08, 21-KG18, 21-KG21

Type: Grapple

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.

