<u>Kellfri</u>

37-SF180 SNOWBLOWER



CAREFULLY READ THE OPERATING INSTRUCTIONS BEFORE USING THE PRODUCT!

OPERATING INSTRUCTIONS IN ORIGINAL

INTRODUCTION

Thank you for choosing a product from Kellfri AB. Compliance with the instruction 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 who have stringent performance demands.

PRODUCT INFORMATION

Kellfri's SF180 Snowblower with a 180 cm working width is a reversing model for small and medium-sized tractors. A transverse auger cuts through all kinds of snow, even compacted, and sends it out through the ejector chute in the selected direction. PTO drive shaft with shear bolt included.

THE MACHINE'S FUNCTION

The equipment is intended solely for clearing snow.

TECHNICAL DATA	37- SF180 REVERSING
Working width	1,830 mm
Discharge chute	manual rotation 200°
Wear steel	Bolted
PTO shaft	Included
Guard	Adjustable
Power requirement	18-40 hp
3-point linkage	Cat 1 & 2
Weight	270 kg
RPM	540 rpm
Bevel gear	Gear box oil 80W-90W 0.5 L

SAFETY INSTRUCTIONS

Before using the equipment, and for the safety of yourself and others, you must read the safety instructions and operating instructions and understand their contents. Always make the safety instructions and the operating instructions easily accessible to users of the equipment or product. It is a good idea to read the safety instructions from time to time, both for your own safety and that of others. It is important that the user understands that common sense and general caution are not built into the product, but must be supplied by the user.

If the operating instructions gets damaged or in any other way cannot be used, new copies may be ordered from:

Kellfri AB, Munkatorpsgatan 6, SE-532 37 SKARA, Sweden. Tel.: +46 (0)511 242 50 The general safety instructions can also be downloaded from Kellfri's website: www.kellfri.se

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 the Animal Welfare Act. People under the age of 15 are not allowed to use the equipment.

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

PRODUCT SAFETY INSTRUCTIONS

Read the operating manual for the machine. Always check that the performance of the machine combination to be used guarantees safety and functionality. Carry out a visual inspection of the equipment before use.

- Never put your hands or feet under the machine without first stopping the equipment and the tractor engine.
- Never leave the equipment with the tractor engine running. Turn off the engine when you leave the equipment even for a short period.
- Always disengage the machine before performing a service or maintenance work.
- Only the operator may be present in the vicinity of the machine while it is in operation.
- Never leave the equipment in a raised position. There can be a loss of pressure in the hydraulics and the equipment can drop to the ground.
- Ensure that all guards are in place and are not able to come loose.
- The equipment's noise level does not exceed 70 dB (A).
- The PTO shaft must be guarded when it is fully extended.
- Make sure safety chains are well anchored.
- Never exceed the PTO's speed (540 rpm).
- When travelling on public roads, comply with the applicable rules for tractors and fit an SMV sign. Maximum permitted speed is 7 km/h.



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 lifethreatening injuries or death to users and others.

WARNING DECALS

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

Read the operating manual! Before carrying out work Warning! Before maintenance, servicing, connecting and disconnecting the machine, the tractor must be turned off and the ignition key removed. Risk zone 5 m Respect the equipment's risk zone! Warning! Risk of crushing! Warning! Rotating PTO shaft! Warning! Reep off the machine! Warning! Accident risk for children! Children are not allowed in the vicinity of the machine The product is CE marked

PERSONAL PROTECTION

KELLFRI AB

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.









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.

SURROUNDINGS

Check that the work area is free from bystanders, children and objects before hitching or using the equipment. 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. Remove all rubbish from your work area. Keep work areas clean. Always respect the equipment's risk zone.

Do NOT let anyone ride on the snowblower!



STEPS TO TAKE BEFORE USE

Carefully read the safety instructions and the operating instructions. Make sure that you understand the safety instructions, operating instructions 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 done to ensure the equipment or product work 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 users feel that the machine is dangerous to use, it should not be used.

- Check and retighten connections
- Rectify any faults before use.



USE

Only those who understand the safety instructions and the operating instructions may use the equipment or product. Exercise caution and care when working with the equipment and only use it in the way described in the operating instructions. 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. Never overload the equipment and respect its risk zone.

CONNECTING THE SNOWBLOWER

- Connect the blower to the 3-point linkage at the back of the tractor.
- Do not forget to fit the locking pins.
- Ready for use

OPERATION:

- Reduce speed when working on slopes and uneven ground.
- Adjust speed to prevailing conditions. Take the amount and nature of the snow into consideration.
- Reduce tractor speed when snow starts to build up in the intake. The maximum permitted speed however when using the blower is 7 km/h. Check the work area and watch out for any stones that can be drawn into the snow blower.
- **NOTE:** The guarantee does not cover injuries caused by careless use, for instance injuries caused by large stones being drawn into the machine.

Be careful when you connect the snow blower to the tractor. Keep an eye on the work area around the tractor at all times when working with the snow blower. When working, take particular care that the auger does not knock against any external obstacles, especially when turning. Lower the snowblower to the ground before alighting from the tractor cab.



AFTER USE

Do not park with a suspended load but with the equipment resting on the ground. Wash down the equipment with water if necessary.

DISCONNECTING THE SNOWBLOWER

- Make sure the PTO is disconnected before disconnecting the snowblower.
- Park the machine on a level surface.
- Connect the PTO.
- Disconnect the hydraulic hoses and remove locking pins for the top link and the lifting arms.



Assembly instructions



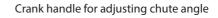


Chute



3-point linkage - upper section

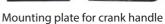






Stabiliser stay for 3-point linkage









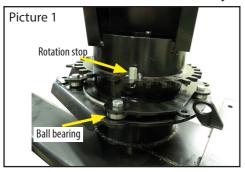
Support skids

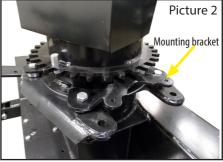




Lifting arms for 3-point linkage (Right - Left)

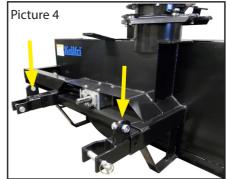
Assembly instructions



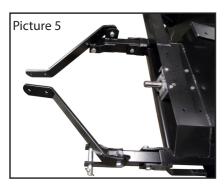


1.) See pictures 1 and 2 for how to fit the chute. The mounting brackets are fitted to the machine. Loosen bolts and remove the mounting brackets and ball bearings. Then mount the chute. Fit the mounting brackets and ball bearings back in place. Note. Do not tighten too tight as doing so makes it hard to rotate the discharge chute. Damage may also be caused to the mechanism.





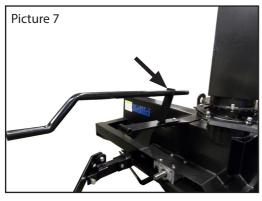
2. Fit the arms for the 3-point linkage at the back of the machine (pictures 3 and 4).

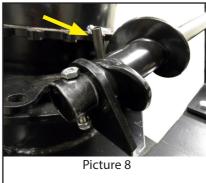




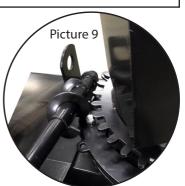
3. Fit the upper section of the 3-point linkage (picture 5), the straight edge with the two holes must be upwards. To fit the stabiliser stay for the 3-point linkage bracket, the mounting plate for the crank handle must by mounted first (picture 6). The angle bracket on top, the stabiliser stay in the middle and the short steel plate underneath.

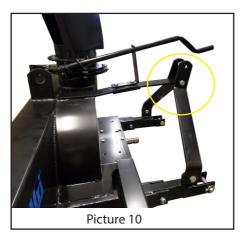
Assembly instructions





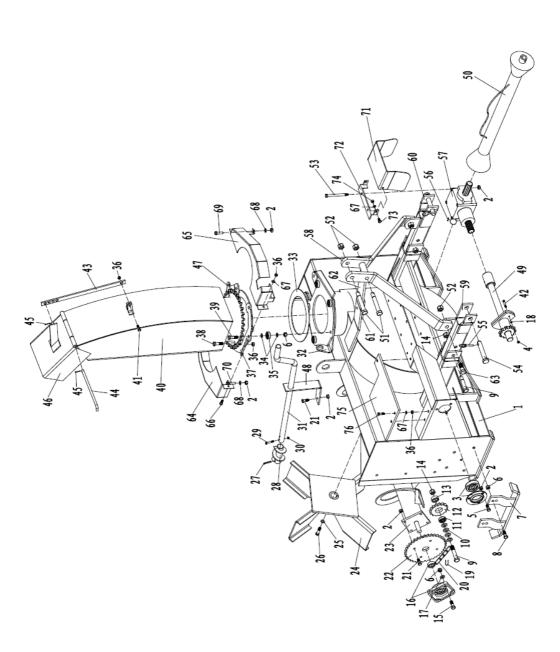
4. Remove the bolts from the crank handle and then insert it through the hole in the angle bracket (picture 7). Fit the bolts back in place (picture 8) and make sure the bolts hook onto the chute ring. Test the crank handle by rotating the chute clockwise and anti-clockwise (picture 9). Check that the chute rotates in the direction you turn the crank handle.





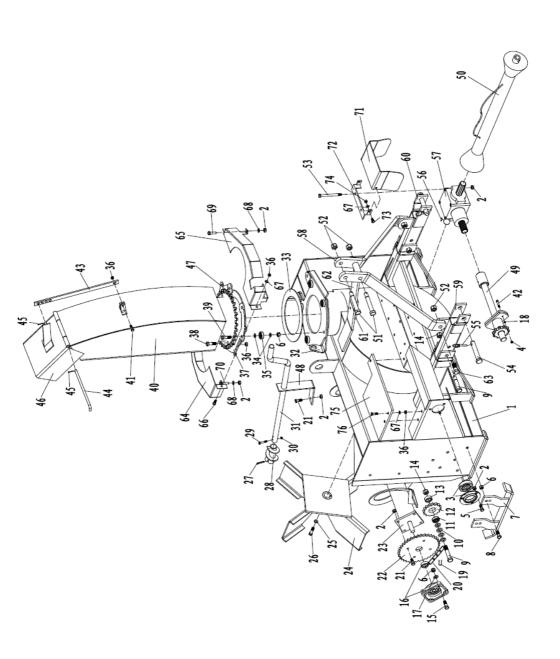


- 5. Fit the upper section of the 3-point linkage using the stabiliser stay (picture 10).
- 6. Fit the support skids, one on each side of the machine. Note. right hand and left-hand versions.
- 7. Check that all bolts are tightened. Do not forget to lubricate all grease points, as well as the chain. Check the oil level in gearbox and refill if necessary.
- 8. Attach the PTO shaft.



NO.	DESIGNATION	QUANTITY
1	Frame	1
2	M10 lock nut	17
3	Bearing housing SAPF-206-20 C/W	1
4	M6 nut	1
5	M10 x 20 bolt	3
6	M12 lock nut	17
7	Support skids	2
8	M12 x 30 bolt	4
9	M16 x 990 bolt	1
10	16 Washer	4
11	Bearing 6203-2RS.5/8	1
12	Cog wheel	1
13	Spacer	1
14	M16 lock nut	1
15	M12 x 40 bolt	8
16	Bearing housing HCFS207-23 CW	2
17	12 Washer	8

NO.	DESIGNATION	QUANTITY
18	6 Lock washer	1
19	Chain lock	1
20	Chain (56- 1/2)	1
21	M10 x 30 bolt	6
22	Gears	1
23	Auger 50"/60"/72"	1
24	Fan	1
25	3/8" flat washer	1
26	3/8" x 1-1/4" bolt	1
27	6 x 40 locking pin	1
28	Bolt	1
29	M6 x 40 bolt	1
30	M6 lock	1
31	Crank handle	1
32	Mounting plate	1
33	Nylon washer	1
34	Special washer Ø12 x 0.2	10
35	Bearing 6301-2RS1	5
36	M8 lock nut	10



NO.	DESIGNATION	QUANTITY	NO.	DESIGNATION	QUANTITY
37	Mounting plate	1	57	Gearbox	1
38	Lock bolt	2	58	3-point linkage	2
39	M12 x 45 bolt	5	59	Lifting arm - left	1
40	Discharge chute	1	60	Lifting arm - right	1
41	M8 x 30 bolt	1	61	Connector stay	1
42	M6 x 30 bolt	1	62	Mounting plate	1
43	Adjustment arm	1	63	M18 x 45 bolt	2
44	Axle	1	64	Metal guard - left	1
45	Ø2 cotter pin	2	65	Metal guard - right	1
46	Guard	1	66	M8 x 16 bolt	2
47	Locking plate	1	67	Ø8 washer	7
48	Mounting plate -	1	68	Ø10 flat washer	2
	crank handle		69	M10 x 60 bolt	2
49	Drive shaft 50"/60"/70"	1	70	M10 x 25 bolt	2
50	PTO shaft	1	71	Protection casing - gearbox	1
51	M18 x 130 bolt	1	72	Attachment plate - guard	1
52	M18 lock nut	1	73	M8 x 16 bolt	2
53	M10 x 130 bolt	4	74	Nut	2
54	Ø22 x 120 pin	2	75	Plate protection	1
55	Ø8 locking pin	2	76	M8 x 20 bolt	3
56	Cotter 1/4 square x1-1/2	1			

TRANSPORTATION AND STORAGE

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 existing transport lashings are fitted. Always position the load as low as possible. Respect the risk zone 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. Always keep the equipment or product on a dry surface, preferably under a roof when not in use. Ensure that the equipment or product is stable and cannot fall over. Never permit children to play at the storage site. Be aware of the tipping risk!

MAINTENANCE AND SERVICE

Make sure that the equipment is stable and cannot tip over when carrying out maintenance and service work. When performing maintenance on the machine, use suitable support/holder as assistance. 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. Always follow the safety instructions for maintenance according to the schedule. This is particularly important for blades and safety equipment, in consideration of the danger it would entail if they were to come loose while working.

- Regularly check the condition of the equipment to prevent breakdowns. If cracks, twists, bends, gaps or fatigue are discovered, stop using the equipment and rectify the fault. Worn parts must be replaced.
- Retighten all nuts and bolts after a few hours of operation and at the end of a day's work.
- Disconnect the equipment from the tractor while faults are being repaired.
- Check that all nuts and bolts are tightened after maintenance and service work. Always test the machine before starting work.
- Lubricate all grease points regularly. Grease points must be lubricated every 20 hours.
- The hydraulic system must only be operated using the appropriate mineral or vegetable oil. Hydraulic oils that contain polyglycols (HEPG) reduce the service life of the hydraulic seals.

For spare parts: Contact Kellfri Service.

RECYCLING

When scrapping, the equipment should be dismantled and transported to a designated recycling station. Contact your municipality for further information.



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.

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upon the	e first operation?
	Date:

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 verified material or manufacturing defect.

The warranty does not cover

- Labour costs - Travel costs

- Machines on which the purchaser has made/ 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/EG, Appendix 2A Kellfri AB Munkatorpsgatan 6 SE-532 37 Skara, Sweden

Hereby declares that the machine

Name: Snowblower Type: 37-SF180

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

Tina Baudtler, CEO 15 October 2014

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.

CUSTOMER SERVICE

You are always welcome to give feedback or ask us about our equipment and products.

Kellfri AB

Phone: 0511 - 242 50 Fax: 0511 - 168 33 E-mail: info@kellfri.se

