

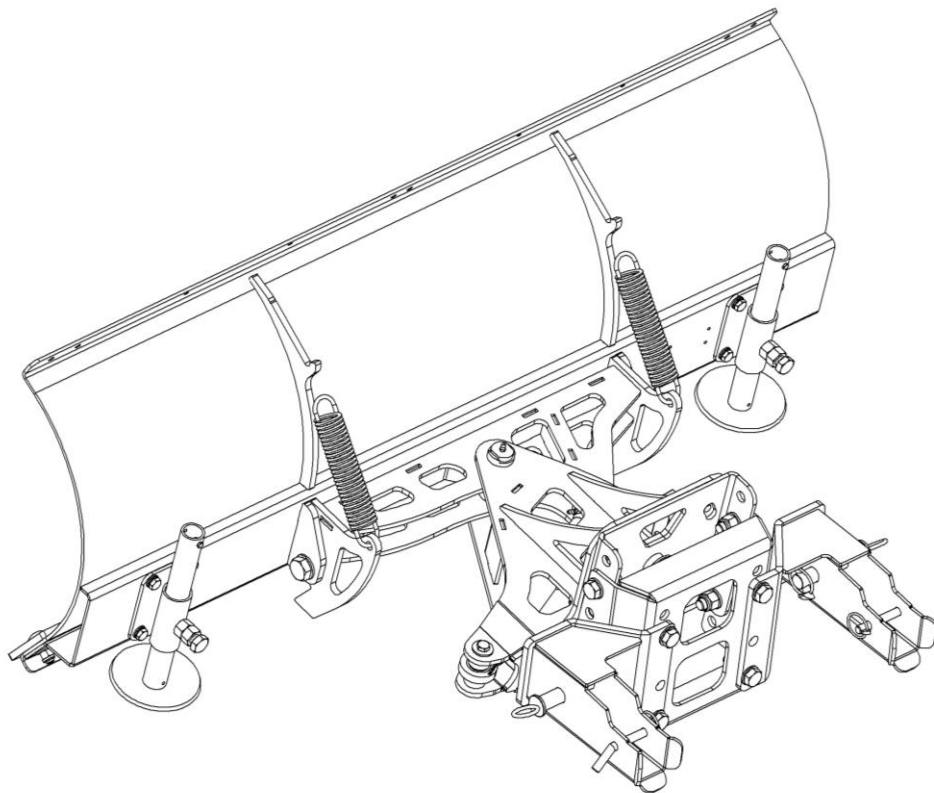


Operator's manual

Spring-loaded snowblade attachment

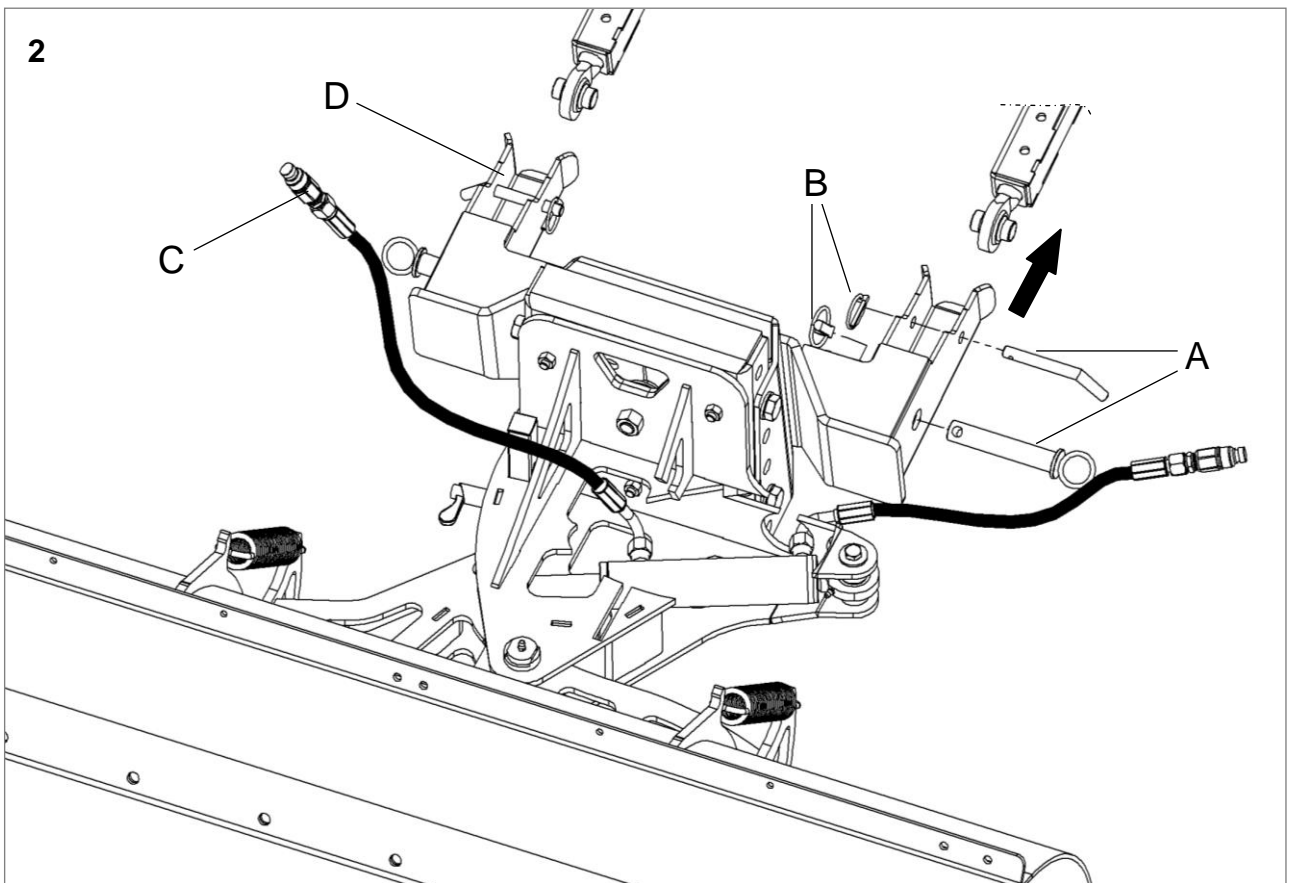
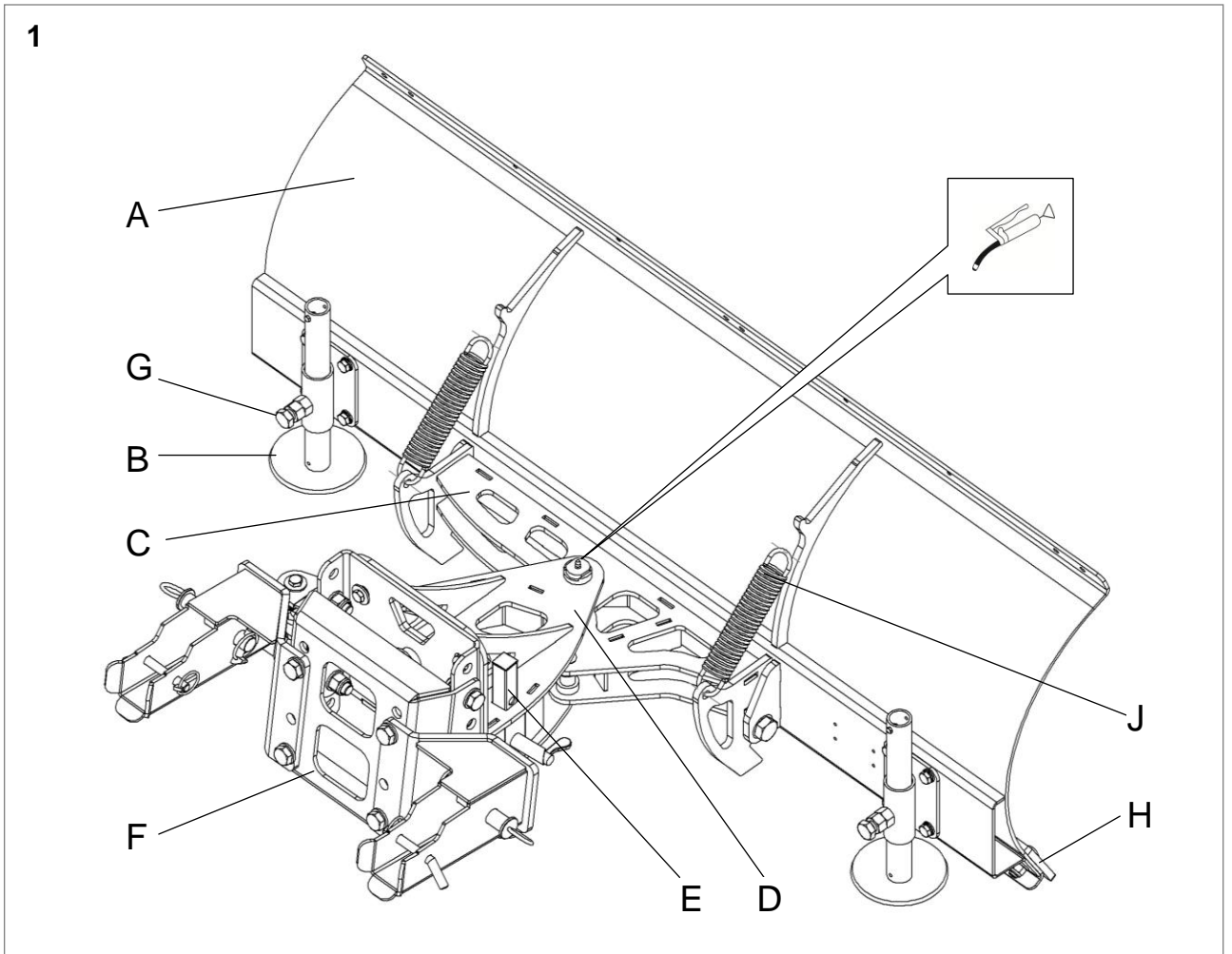
suitable for **Husqvarna P520D and P525D**

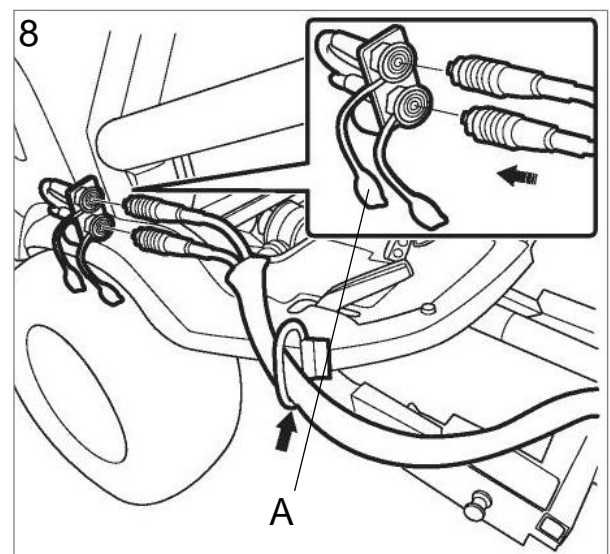
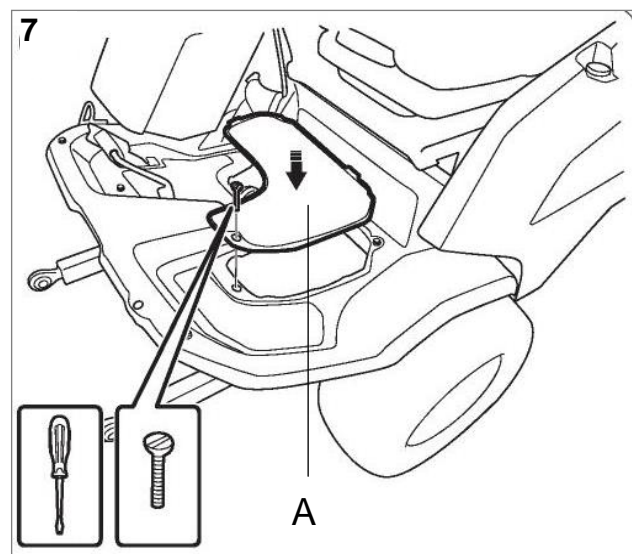
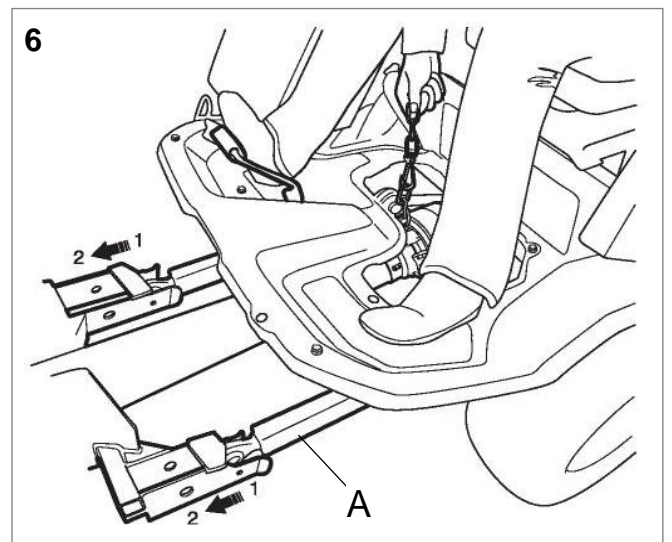
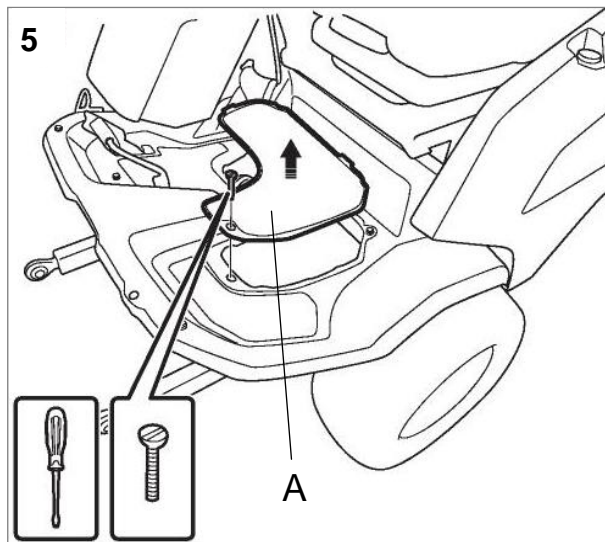
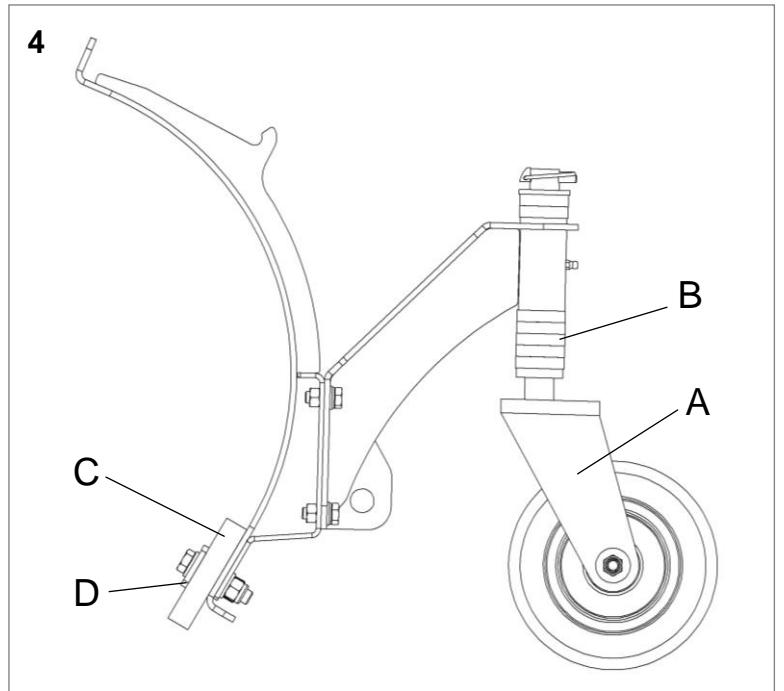
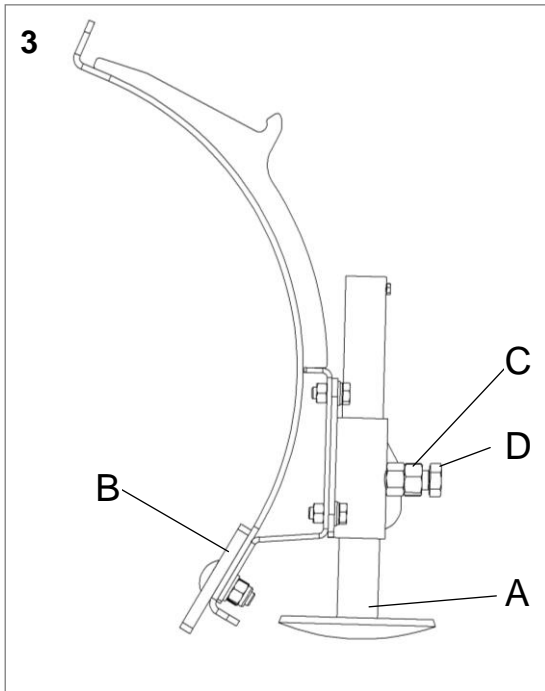
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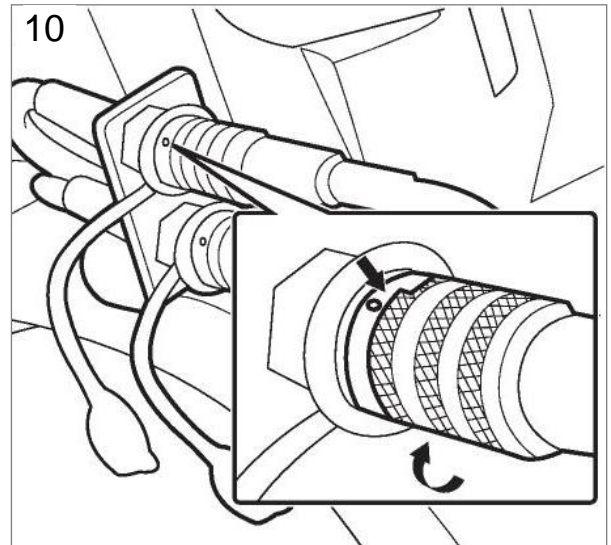
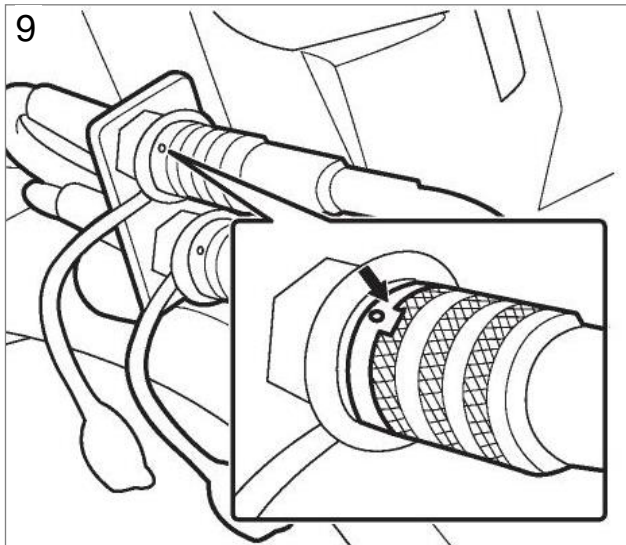


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1 About this manual

The equipment described in this manual is subject to technical improvement. While every attempt has been made to ensure the information, images and equipment specifications are up to date at the time of publication, the manufacturer reserves the right to change this manual to reflect advances in technology.

The information and images in this manual provide no grounds for any claims.

1.1 Before commissioning



As the incorrect use of self-propelled equipment and attachments presents a great risk of accident or other potential hazards, the initial commissioning of Kersten implements requires mandatory training by competent, authorised personnel. Ensure to make yourself familiar with the basic functions and their use by choosing an even, level area free of any obstacles for your first steps.

- **This will help mitigate the risk of accidents occurring to you or others.**

Please contact your dealer, distributor or manufacturer for further information or for help with any problems.

- **Make sure to read the safety instructions on the following pages.**
- **Make sure to read the operator manual before using your new equipment.**
- **Make all other users aware of the safety instructions.**

1.2 Information on the content of this manual

- Lists are structured using bullet points.

Example:

- Text
- Text

- Operating instructions are numbered according to their intended order of execution.

Example:

1. Text
2. Text

For ease of understanding the chapters in this manual contain references to the components shown in the various images. The images are numbered (1, 2, 3 etc) while the components shown are referenced using letters (A, B, C etc).

Example:

Component 'C' in figure 2 will be referenced as (2:C).

2 Safety instructions

The safety instructions contained in this manual do not cover all eventualities. Operating a machine requires common sense and precaution. Both equipment users and owners are responsible for ensuring the machine is treated with the proper amount of respect.

Please be aware of the following information to keep accident risks to a minimum.

2.1 General information



- This symbol indicates a WARNING message. Failure to comply with this warning may result in severe personal injury and/or property damage.



- Read and understand the information in this manual and the safety instructions in the vehicle manual before using the equipment.

2.2 Intended use



- The snowblade attachment was designed for general snow clearing work in normal conditions and should be used to remove snow from streets, roads, pavements and other public open spaces.
- Any use beyond the intended use will be considered improper. The manufacturer does not assume liability for damage arising from such use. The operator bears the sole risk.
- Adhering to the intended use includes complying with the manufacturer's operating, maintenance, and repair specifications.
- The snowblade attachment may only be used, maintained and repaired by personnel familiar with the implement who are aware of its associated hazards.
- Always observe and follow all applicable accident prevention regulations and any applicable general regulations regarding safety and occupational health.
- Unauthorised modifications to the equipment will void the manufacturer's liability for damage arising from such modifications.

2.3 General safety and accident prevention regulations

2.3.1 General rules



- Follow the instructions in this operator manual and comply with all general work safety and accident prevention regulations.
- Never allow children under the age of 16 to use or operate the implement even when supervised by an adult person. Never allow children or teenagers to play with the equipment.
- The equipment must be used by authorised personnel only.
- Follow all applicable legal requirements when traveling on public roads.
- Follow all national road regulations (e.g. regarding reflectors or lighting systems) when operating the implement on public roads.
- Wear snug clothing. Avoid wearing loose clothing. Wear robust shoes or safety boots.
- Never work in poor visibility or low-light conditions.
- The information and warning labels attached to the equipment contain important instructions for safe operation. Follow them for your own safety.
- Always disengage the drive before transporting equipment on a vehicle/trailer or when traveling outside of your working area.
- Implements hitched or loads added to a vehicle may affect the vehicle's handling, steering, braking and stability behaviour. Always adjust your working speed to the relevant conditions.
- Never make unauthorised modifications to the equipment as they may compromise the equipment's safety of operation.
- Check the equipment for operational safety before each use.

- Never remove or modify any protective devices or guards.
- Before stepping underneath the equipment for repair or inspection work ensure to support any raised loads or components.

2.3.2 Work and hazard areas



- The user is responsible for protecting others present in the work area.
- Check the area around the vehicle before driving off. Look out for children and animals in particular. Never start work if visibility is insufficient.
- Remove any obstacles or debris from the work area before starting work. Look out for and remove obstacles or debris during work to avoid collisions.
- Set up the relevant information and warning signage when working in public spaces to make others aware of the work being performed.

2.3.3 Before work



- Make yourself familiar with all equipment features and controls and their relevant functions before starting work. Ensure all protective devices are properly fitted and fully functional. Once you are at work it will be too late.
- Check the equipment for operational safety before each use.
- Never use the equipment with faulty or missing protective devices.

2.3.4 During work



- Never leave the operator seat while on the move.
- Never make any adjustments to the implement during operation as this may present a risk of accident.
- Never allow other persons or items to ride on the equipment.
- If the implement has caught a foreign object resulting in a blockage, disengage the PTO drive, stop the engine and remove the ignition key. Then use suitable tooling to remove the foreign object(s) from the implement. Be cautious and watchful while performing work. Some components are under tension and may suddenly come loose.
- When the implement is damaged, stop the engine immediately and have the implement repaired.

2.3.5 Parking the machine

- When parking and walking away from the machine, use wheel chocks or apply the hand brake as needed to prevent the vehicle from rolling off.
- Secure the equipment against unauthorised use.
- Never leave the equipment unattended while still in operation.

2.3.6 Hitching and unhitching implements



- Follow the relevant work and safety instructions regarding the vehicle.
- Use suitable tooling and wear protective gloves when changing implements or implement components.
- Move the required supports in position and ensure sufficient equipment stability when hitching or unhitching the implement.
- Use the hand brake or wheel chocks to prevent the vehicle and the implement from rolling off.
- Be aware of the risk of injury (crush hazard) when hitching implements. Be particularly cautious.
- Hitch the implement as instructed and make all mechanical connections.

2.3.7 Maintenance, cleaning and repair work



- Always stop the engine before performing maintenance or cleaning work.
- As the protective devices and/or implement are subject to wear, ensure to perform frequent checks and replace as needed.
- Replace any worn or damaged components.
- Use suitable tooling and wear protective gloves when replacing components.
- Thoroughly clean the snowblade and the attachment frame. Remove any remaining road salt.
- Use genuine replacement parts supplied by the manufacturer only. Genuine parts meet all technical requirements and minimise the risk of accidents.
- When using a pressure washer to clean the equipment, never direct the water jet at bearings, pivots, grease nipples, shaft seals, wheel hubs etc. Grease all lubrication points after cleaning the equipment with a pressure washer. Failure to comply will void the warranty.
- Check all moving parts for smoothness and re-grease as needed.
- Refit all protective devices after completing maintenance or cleaning work and ensure proper functionality.
- Keep the equipment clean to avoid risk of fire.
- Frequently check all nuts and bolts for tightness and retighten as needed.
- Always use suitable equipment to support the raised implement when performing maintenance, cleaning or repair work.



- Release the pressure from the hydraulic system before performing repair work. Pressurised fluids may penetrate the skin and cause severe injury. In the event of an accident make sure to seek medical attention as severe infections may occur.
- Repair work must be performed by specialist technicians only.
- Frequently check the hydraulic lines for damage or wear and replace as needed.
- Never perform welding work on any equipment parts other than the removed moldboard.
- Never perform welding, grinding, drilling or similar work on structural or safety-related components such as the frame, axles etc.

2.4 Pictograms

The following pictograms are attached to the implement to make the user aware of the relevant risks and precautions associated with operating and servicing the equipment.

Pictogram descriptions:



Read and understand the operator manual and all safety instructions before starting up the equipment.



Never open or remove any protective devices or guards while the engine is running.



Refer to the information in the technical manual.
Note the lubrication point.



Do not touch the equipment before all components have come to a halt.



Beware of flying objects while the engine is running.
Keep a safe distance.

3 Disposal

Follow the applicable municipal, regional or national regulations for disposal of equipment.

Depending on the material, dispose of used parts at conventional waste, hazardous waste or recycling collection centres.

Kersten Arealmaschinen GmbH does not offer any disposal services.

4 Warranty

The equipment is supplied with a sales notification form used to identify the warranty start date and other information. After selling each unit please fill in the sales notification form and submit it to us within 14 days of sale. Warranty claims made by customers will not be processed unless we have been sent the relevant sales notification form.

Any warranty claims should be made as soon as possible but no later than six weeks after occurrence of damage, indicating the details of the purchase. Failure to comply will result in the claim not being processed. Customer complaints require acknowledgement by Kersten Arealmaschinen GmbH. Wear parts are excluded from warranty. Any case of improper use, incorrect or insufficient maintenance, use of incorrect consumables or use of non-genuine spare parts will void the warranty.

5 Recommendations

5.1 Lubricants

Use the recommended lubricants for engine and gearbox maintenance (see "Specifications").

The use of **bio-oils** or **bio-greases** is recommended for all lube points or grease nipples exposed to the environment. Using bio-lubricants will ensure your environmental integrity by protecting the eco system and promoting human, animal and plant health.

5.2 Servicing and maintenance

Your dealer has trained technicians capable of performing professional service and maintenance work. Major maintenance or repair work should only be performed by the equipment owner or operator if they have the required tools and knowledge of machines and combustion engines.

6 Assembly

6.1 Hitching the implement

- Follow the instructions from the vehicle operator manual.
- Be aware of the risk of injury (crush hazard) when hitching implements. Be particularly cautious.
- Hitch the implement as described below:
 1. Remove the R-clips (2:B) and the lock pins (2:A) from the tabs (2:D).
 2. Lower the lift rods and slowly drive the vehicle towards the implement in a straight line.
 3. Open the floor panel (5:A) and observe as the lift rods (6:A) engage with the tabs.
 4. Once the attachment holes are aligned, reinsert the lock pins and secure them using the R-clips.
 5. Lift the implement and fully retract the jack (1:E).
 6. Close the floor panel (7:A).

6.2 Connecting hydraulic hoses



- Release the pressure from the vehicle hydraulic system before connecting any hydraulic lines.
- Ensure all couplers are clean before connecting the hoses. Contaminated hydraulic oil may cause severe hydraulic system damage.
- Stop the engine.
- Move the hydraulic controls back and forth to relieve any excessive pressure from the system.
- Remove the protective caps (8:A) from the couplers and connect the hoses as shown by fig. 8-10.

7 Unhitching the implement

- Follow the instructions from the vehicle operator manual.
- Be aware of the risk of injury (crush hazard) when unhitching implements. Be particularly cautious.
- Unhitch the implement as described below:



1. Lift the implement and fully extend the jack (1:E).
2. Lower the implement to the ground and stop the engine.
3. Move all hydraulic controls back and forth to relieve any excessive pressure from the system.
4. Disconnect the hydraulic hoses in the reverse order shown in fig. 8-10 and replace the protective caps (8:A) on the couplers.
5. Remove the R-clips (2:B), pull out the lock pins (2:A) and slowly back up the vehicle.

8 Using the equipment

8.1 Ground clearance

Depending on specification, the moldboard is either equipped with two skids (3:A) or two wheels (5:A) used to set the implement's working height.

The skids offer stepless adjustment and can be secured in position using the locking bolt (3:D).

Once the adjustment has been completed, use the jam nut (3:C) to secure the locking bolt.

The wheel height may be adjusted in increments of 10mm by removing or adding plastic shims (4:B).

Ensure to adjust the same height settings on either side.

Set the height so the skids or wheels are level with the Robalon-S wear strip (4:C) or the steel wear bar (3:B).

Never use the snowblade without the Robalon-S wear strip or steel wear bar in place.

Never set the skids or wheels higher than the bottom snowblade edge.

Whenever necessary, readjust or replace a worn Robalon-S wear strip or steel wear bar.

9 Maintenance

9.1 General information

- The snowblade requires frequent maintenance.
- Failure to maintain the equipment may lead to personal injury or machine damage. Check all safety-related parts before each use.
- Follow all safety instructions listed in section 3.3.7.
- Before carrying out any repair, maintenance, cleaning or rectification work, always ensure that the engine is stopped. Remove the ignition key or a spark plug connector. Once the work has been completed, refit all protective devices.
- Check all pin, screw and bolt connections after the initial 5 hours of operation.

9.2 Daily maintenance

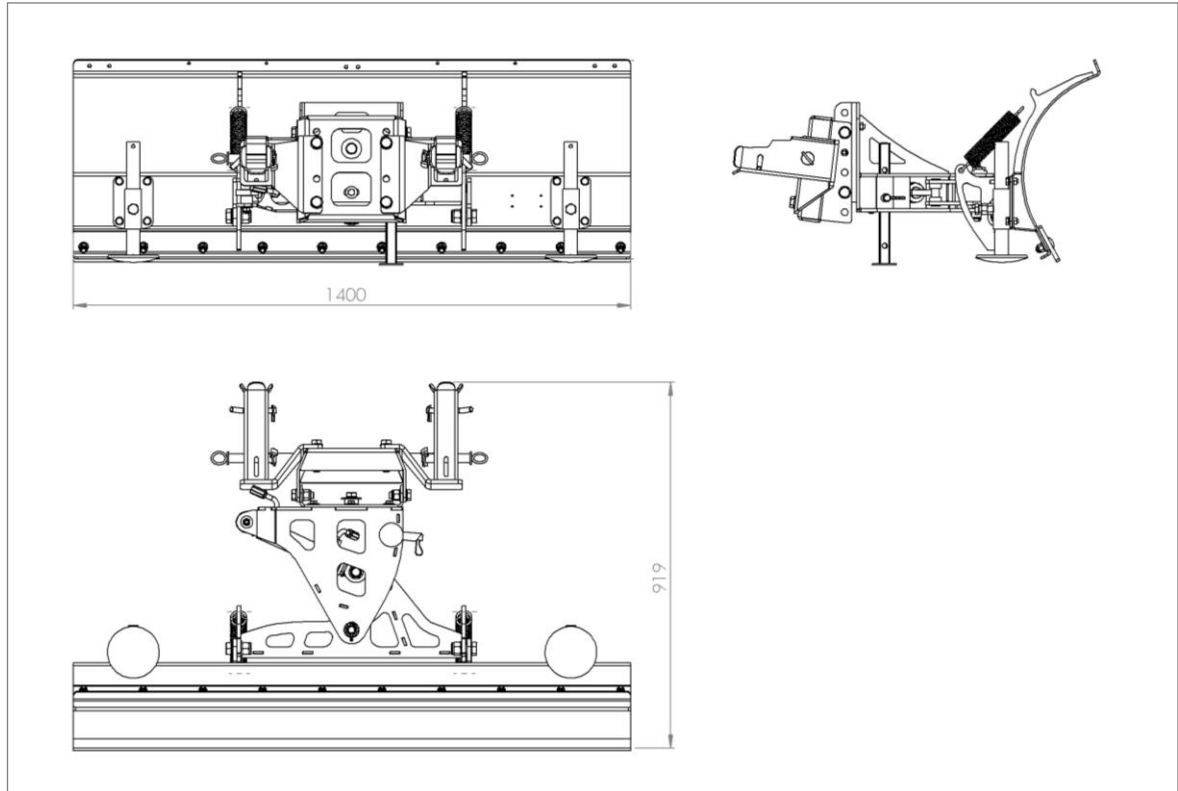
- Clean the equipment after each use.
- Before extended non-use periods apply a thin film of oil to the snowblade to avoid corrosion. This also ensures the snow will easily come off the moldboard the next time the snowblade is used.
- Check all hydraulic connections and lines for leaks.

9.3 Maintenance after 20 or 100 hours or extended downtimes

- Use grease or oil to lubricate the moving parts at regular intervals during the season and at each start or end of the season.
- Frequently lubricate the pivot pin grease nipple (fig. 1).

10 Equipment specifications

- Working width: 140cm
- Moldboard height: 60cm
- Robalon wear strip + height-adjustable wheels
- Steel wear bar + height-adjustable skids
- Hydraulic oscillation system



11 EC Declaration of Conformity

EG – Konformitätserklärung CE Déclaration de conformité

EG conformiteitsverklaring

(D)	(F)	(UK)	(NL)
Wir	Nous	We	Wij
Kersten Arealmaschinen GmbH Empeler Straße 95, D-46459 Rees, Germany			
erklären, dass das Produkt	déclarons que le produit	herewith declare that the product	verklaren dat het produkt
Sneeschild	lame de neige	snow blade	sneeuwschuif
592 75 51-01			
mit allen einschlägigen Bestimmungen der EG-Maschinenrichtlinie 2006/42/EG in Übereinstimmung ist.	satisfait à l'ensemble de la directive machines 2006/42/CE.	fulfiles all relevant provisions of Directive 2006/42/EC.	voldoet aan alle toepasselijke bepalingen van EG-Machinerichtlijn 2006/42/EG.
Die Maschine ist auch in Übereinstimmung mit allen einschlägigen Bestimmungen der folgenden EG-Richtlinien:	Cette machine satisfait également à toutes les dispositions pertinentes des directives CE suivantes:	The machinery is also in compliance with all relevant provisions of the following EC directives:	De machine is ook in overeenstemming met alle toepasselijke bepalingen van de volgende EG- richtlijnen:
Weiterhin wurden folgende Normen angewendet:	En outre, les normes et spécifications techniques suivantes ont été utilisées:	The following harmonised standards apply:	Volgende geharmoniseerde normen warden gehanteerd:
EN ISO12100:2010			
Herr	Monsieur	Mr.	De heer
Dipl. Ing. (FH) Robert Bosch Empeler Straße 95, D-46459 Rees, Germany			
ist bevollmächtigt die technischen Unterlagen zusammenzustellen.	est autorisé à constituer la documentation Technique conformément à l'annexe VII A.	is authorised to compile the technical file according to Annex VII A.	is gemachtigd het technische dossier samen te stellen.
Rees, 03.11.2016 			
Geschäftsführer	Directeur	Managing Director	Bedrijfsleider