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Original Operating Manual

SRM-FB 130/ 140/ 150/ 160
Snow blade

Version 01/2018

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1.1 About this operating manual

Dear customer!

Thank you for purchasing this implement, we appreciate your trust.

Prior to using this implement for the first time, read this operating manual carefully and conscientiously all the way through.

Keep this operating manual where it is easily accessible. This will enable you to refer to important information and handling instructions as needed.

Listings with bullet points are marked as follows:

- Text
- Text
- Text . . .

Handling instructions are marked in the sequence in which they should be executed, as follows:

1. Text
2. Text
3. Text . . .

This implement is subject to change in the interest of technical progress. All information, illustrations, and technical specifications represent the latest status at the time this manual was published. The manufacturer reserves the right to make changes at any time in the interest of technical progress.

2 Safety

Guidelines and instructions with which you must comply, are summarized in this section.

Personnel who mount, operate and maintain this implement, must have read and understood this operating manual.

2.1 Intended use

The snow blade is an implement for winter service and is used for clearing snow from roads, paths, and other areas.

All other uses are excluded.

Non-intended use causes:

- Danger of injury to the operator or third parties
- Damage to the tractor and the implements
- Environmental damage

2.2 Qualification of personnel

Only personnel 18 years of age or older, or instructed personnel should install, operate, and maintain the snow blade. The operator must have read and understood this operating manual.

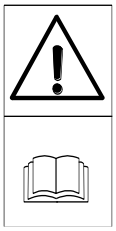
2.3 General safety instructions

General safety instructions are explained in this section. These safety instructions are used in the subsequent sections. In addition to the safety aspect, you will save money and work time if you follow these safety instructions.

Danger!
Severe injury to the operator or third parties can occur.
Follow the safety instruction.

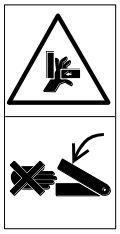
Attention!
Minor injury to the operator or third parties can occur. The tractor, the cabin, or the environment can be damaged.
Comply with the safety instruction.

Note!
Important, helpful tips or information for the operator.
Read this note. It facilitates your work.



Attention!
Injuries can occur due to improper operation. The implement can be damaged.
Read the operating manual all the way through.
Comply with the safety instructions.

Attention!
Injuries due to fluid escaping under high pressure.
Comply with the instructions in the operating manual.



Attention!
Danger of crushing due to moving parts.
Never reach into the crushing hazard danger zone, if parts are still moving or can move.
Comply with the instruction in the operating manual.

2.4 Special safety instructions

Safety instructions are specified in this section that are also affixed as stickers on the implement.

Attention!
Prior to start-up read and comply with the operating manual and the safety instructions.

Attention!
Prior to performing maintenance and repair tasks, turn off the engine and remove the key.

3 Installation

Attention!
Before starting up the implement, read the instructions on safety and handling for operation of the entire implement and connection to the tractor.

3.1 Preparations on the snow blade

The prerequisite for attaching the snow blade is a tractor with front lift and coupling triangle, as well as two coupling sockets for supplemental hydraulics. The following preparations must be made for connecting the supplemental hydraulics.

1. Remove the two sealing plugs on the hydraulic cylinder of the snow blade.
2. Screw the two angled branch pieces into the hydraulic cylinder and pay attention to the position of the angle pieces as shown in Fig 2: Alignment of the angled swivel threaded unions.
3. Screw the reducers into the quick-connect plugs and then screw in both together on the hydraulic line as shown in Fig. Fig 3: Connection components - tractor side.

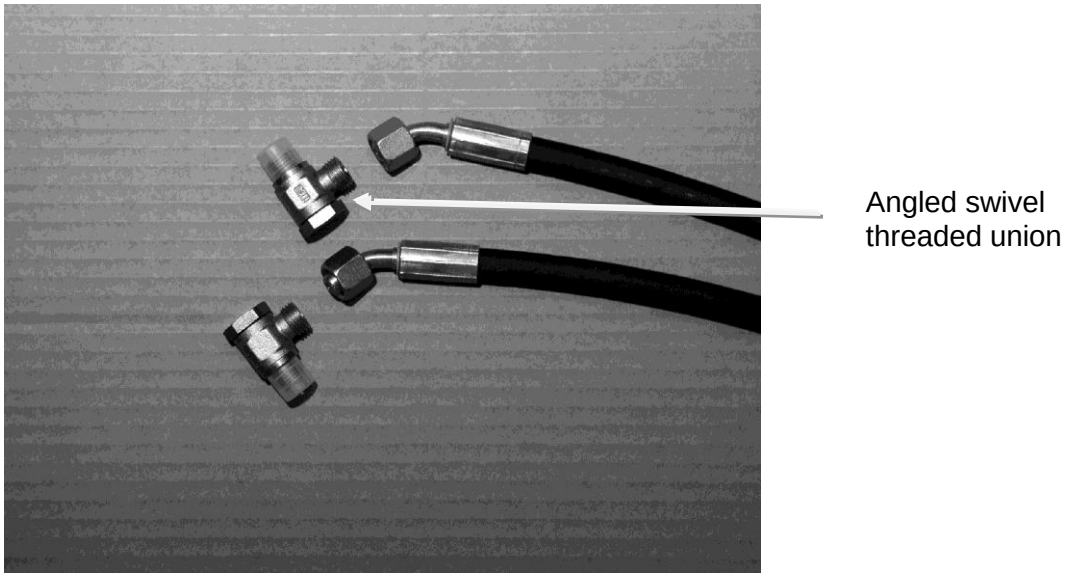


Fig 1: Connection components on the hydraulic cylinder of the snow blade

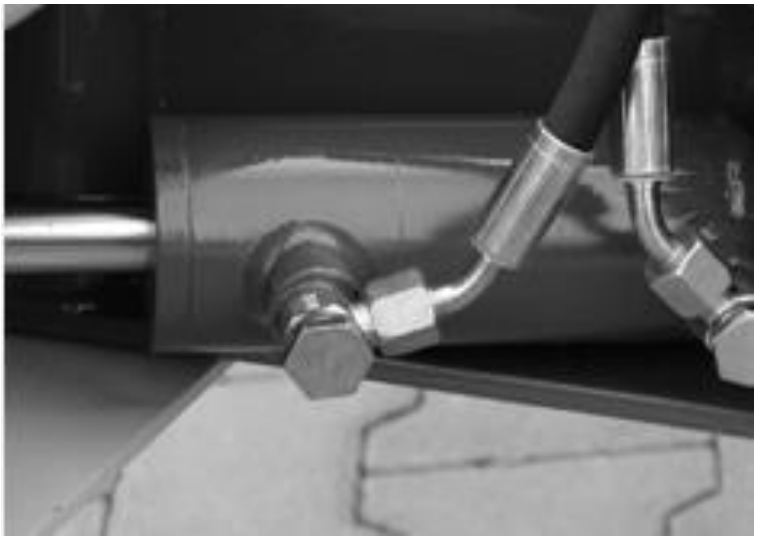


Fig 2: Alignment of the angled swivel threaded unions

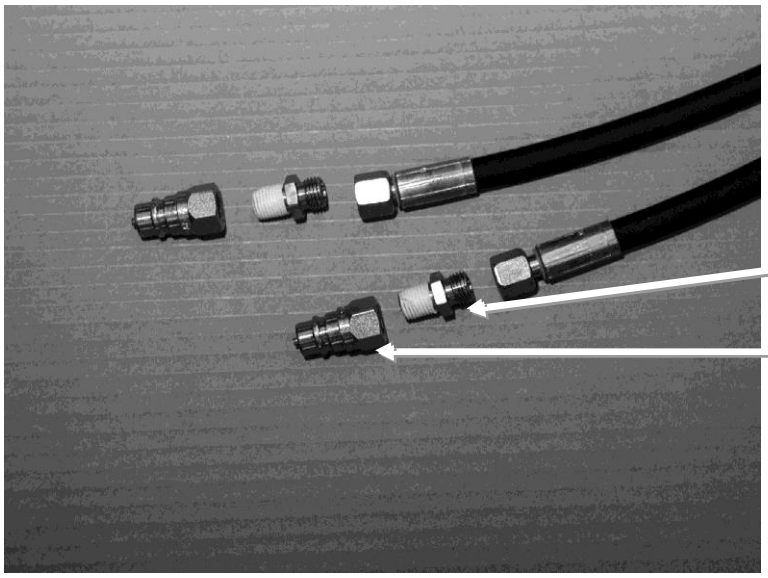


Fig 3: Connection components - tractor side

3.2 Installation of pressure contol valve

The pressure control valve can be installed as an option. Please mount and connect the hydraulics as in the following pictures.

Fig 4: Install the valve

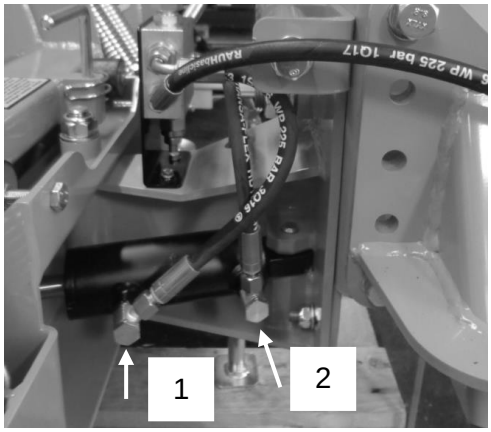


Fig 5: Connect hydraulic hoses

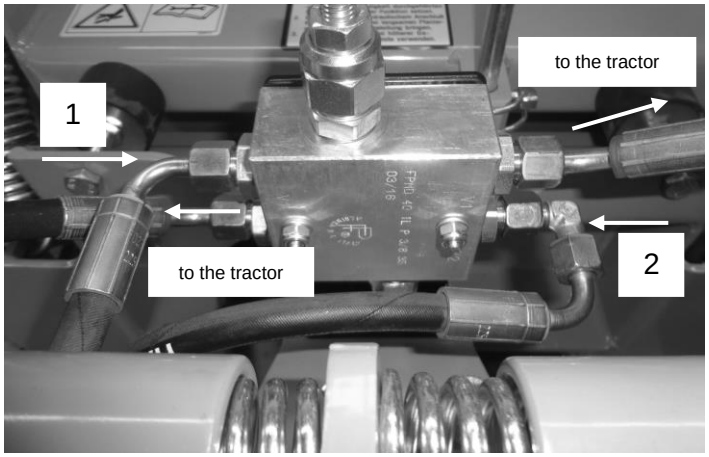


Fig 6: Connect hydraulic hoses

3.3 Attaching the snow blade on the tractor

In order to attach the snow blade onto a tractor, the tractor must be equipped with a front lift. Below, take up via a coupling triangle is described in more detail:

1. Position the snow blade in such a manner that you can drive to just in front of its coupling triangle.
2. Then the coupling triangle of the front lift is lowered all the way and is brought under the triangle of the snow blade by driving the tractor forward. In this process, ensure that the coupling triangle of the front lift is tilted slightly forward. If it is not possible to easily drive forward under the triangle of the snow blade, then the height can be set suitably by adjusting the attachment flange. To do this you must remove the 6 screws and shift the coupling triangle up or down on the attachment flange. The final step is to retighten the threaded unions.

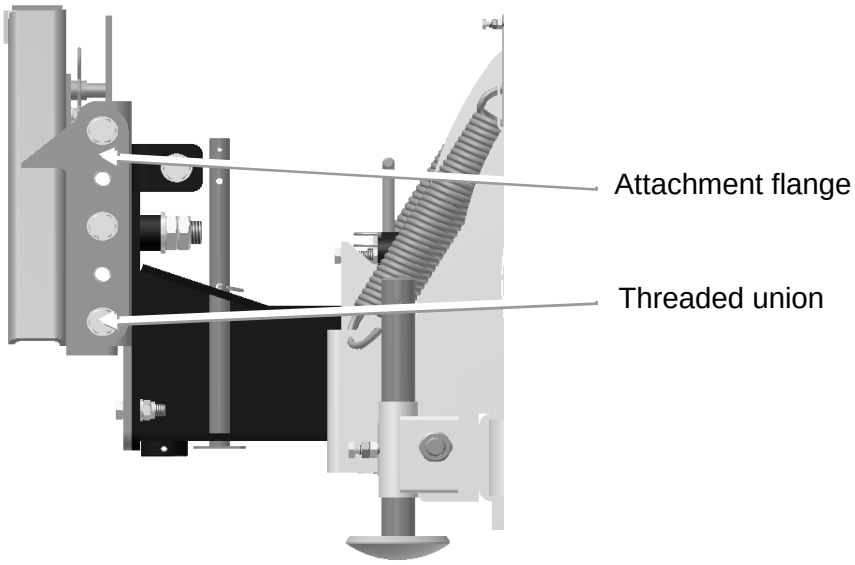


Fig. 7: Adjusting the coupling triangle

3. Lifting the front power system hooks its coupling triangle in under coupling triangle of the snow blade.
4. Then the locking pins on the coupling triangle must be inserted and secured via the spring cotter pin. If this is not possible then the locking part must be readjusted. To do this both nuts are unscrewed, the locking part is adjusted, the bolt is inserted and then it is retightened.

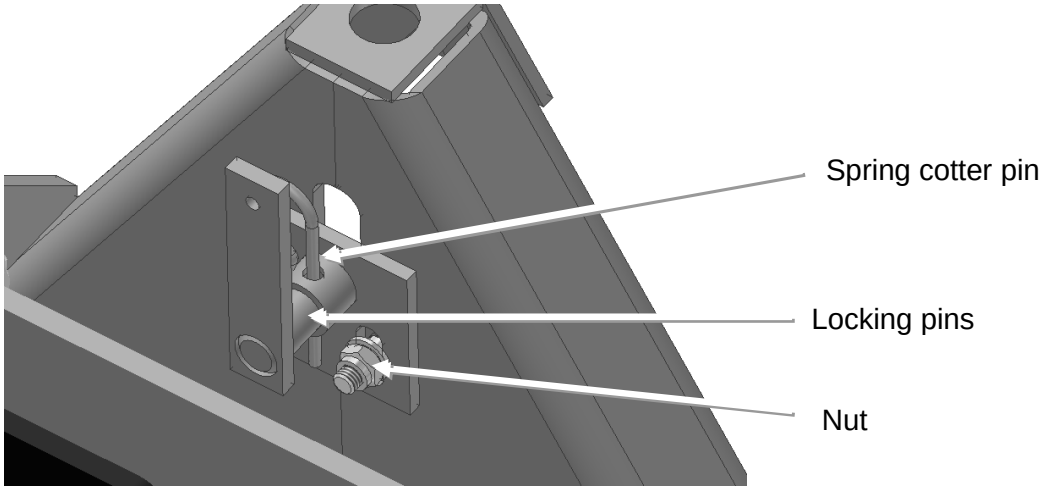


Fig. 8: Locking pin on the coupling triangle

5. Then the two hydraulic hoses, for the angle adjustment of the snow blade must be fitted onto the coupling sockets of the supplemental hydraulic system.

Fig. 9: Connecting the hydraulic lines on the tractor hydraulic system

Attention!
Both hydraulic connections must be connected on the cylinder in order to swing the snow blade to the left as well as to the right.

6. Now lift the snow blade via the tractor hydraulic system and pull out the spring cotter pin of the parking rest. Pull the parking rest all the way up and secure its position by inserting the spring cotter pin into the **lowest** bore.

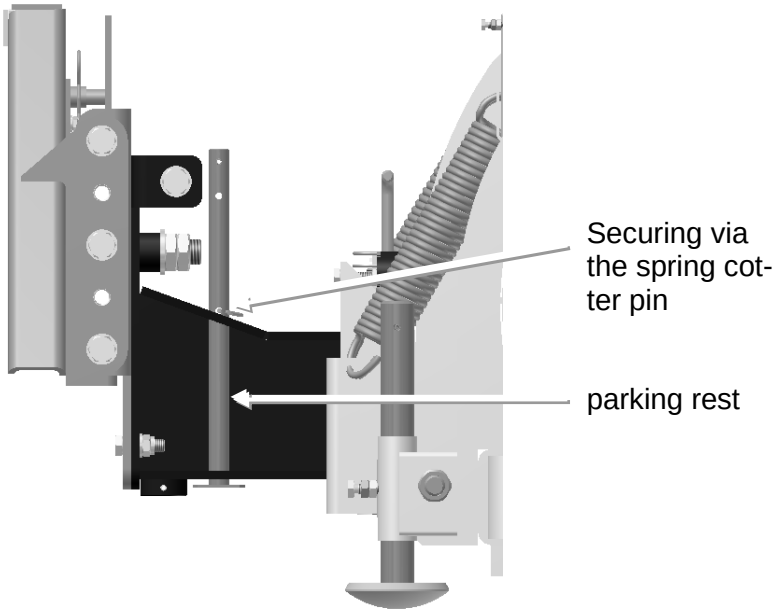


Fig 10: Bring the parking rest into drive position

Attention!
Before clearing snow, never forget to pull the parking rest up to drive position and to secure it. The snow blade can be damaged on uneven ground if the parking rest remains hanging.

7. Remove the spring cotter pin on the tube linch pin of the snow blade and pull it all the way up to unlock the blade. Secure the locking pin by inserting the tube linch pin into the lowest bore.

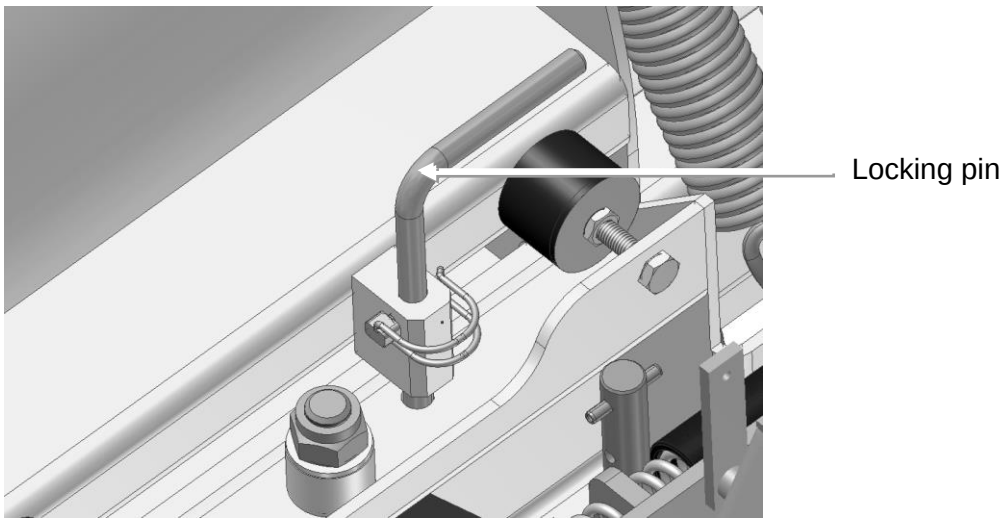


Fig. 11: Unlock the blade (locked status is shown)

Danger!
The locking pin of the blade must be in the topmost position for clearing snow (= unlocked). Otherwise the flap mechanism, which enables the blade to yield for obstacles, will not work. The consequences are significant damage to the snow blade and possibly injury to the drive.

Note!
The blade can only be operated in locked status (locking pin position = locked) for moving sand or similar material. Drive at a slow speed and watch out for obstacles on the ground to prevent damage to the blade!

3.4 Adjustments on the snow blade

Before starting to clear snow, the slide runners must be correctly adjusted. To do this the snow blade is lowered onto a level surface via the hydraulics. The snow blade is correctly adjusted when the slide runners rest on the ground and the scraper bar just barely touches the ground or clears the ground by 1-2 mm. If this is not the case the snow blade must first be adjusted.

To do this proceed as follows:

1. Lower the snow blade until it is just a little above the ground, and place it on an intermediate substrate that is 1-2 mm thick.
2. Set the hydraulic system to the float position, block, and switch off the tractor.
3. Unscrew the clamp screws of the slide runners.
4. Lower slide runners to the ground.
5. Tighten the clamp screws and secure them with the lock nuts.

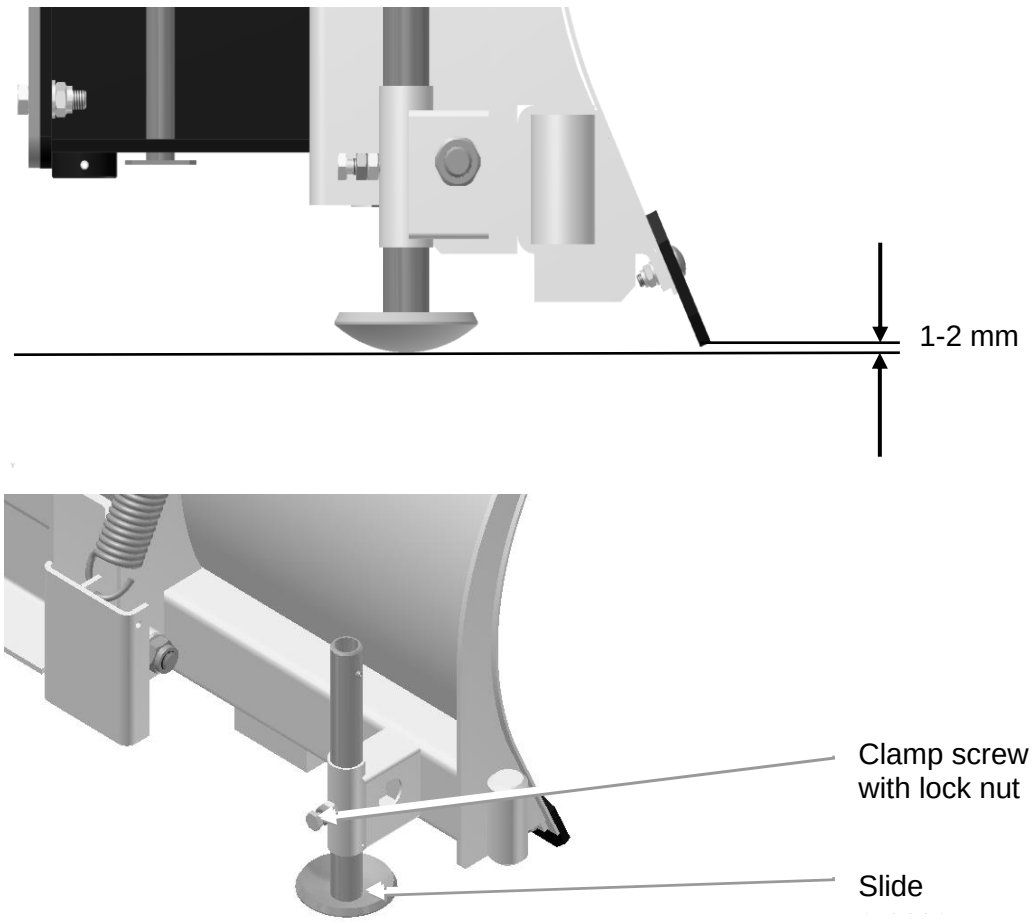


Fig. 12: Adjusting the slide runners

The following adjustment tasks should only be executed as needed:

1. **Adjusting the stop buffers.** Stop buffers are installed so that the blade is damped when it flips back against the chassis. This prevents excessive noise development and possible damage to the blade. The buffers are preset in the factory and should only be readjusted as required. First de-tension the pullback springs by loosening the eye bolts. Then unscrew the nuts directly under the base plate of the buffer and turn the buffer counterclockwise in the desired direction. Retighten the nuts and tension the pullback springs.

Note!
A second unscrewing of the buffer can result in the situation that the locking pin can no longer be pushed in

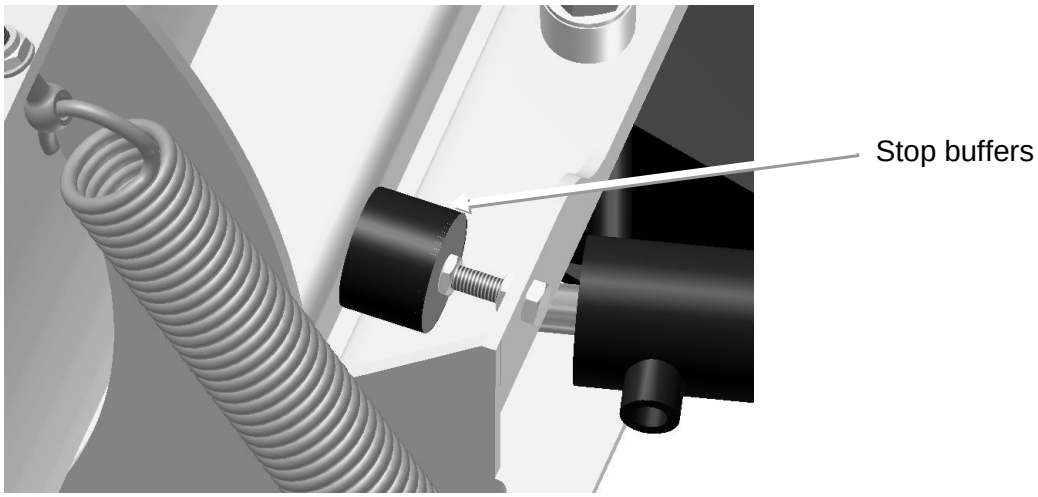
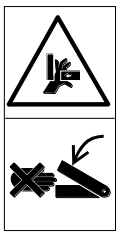


Fig. 13: Adjusting the stop buffers



Attention!
Danger of crushing due to the blade flipping back.
Never reach into the swing area of the blade when it is tilted forward and the pullback springs are tensioned Drive in reverse until the blade again rests on the stop buffers!

2. **Springs of the pendulum compensation**. To ensure the horizontal position of the blade in lifted position, the pendulum compensation springs are attached. The springs are preset in the factory and should only be readjusted as required, i.e. if the blade is does not hang horizontally in lifted position. First lift the snow blade. Tension the springs by directly turning the laterally attached screws. Only tension the springs that are opposite of the side on which the blade hangs down.

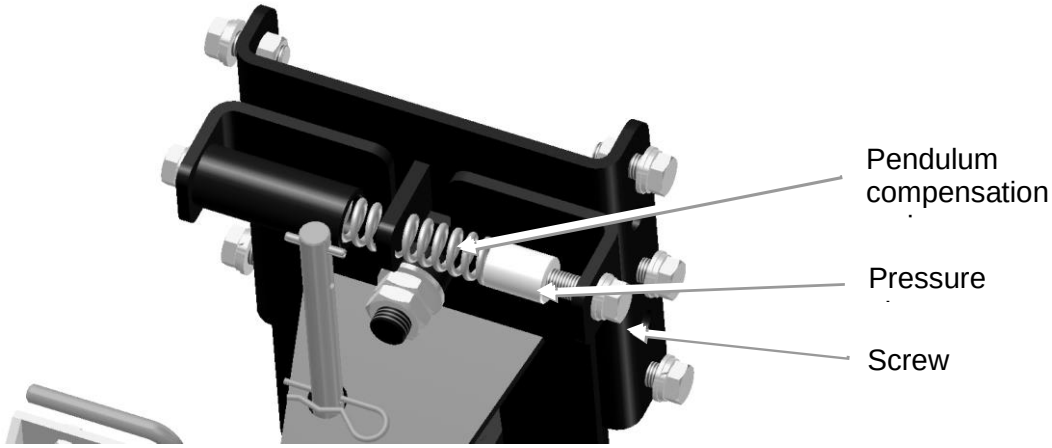


Fig 14: Adjusting the pendulum compensation (bush is not shown)

4 Operation and fault correction

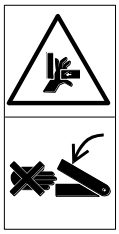
4.1 Operation

If the snow blade is correctly adjusted, you can start working. For travel between implementation sites the snow blade is lifted above the front lift and the lowering safeguard of the front lift is activated. To work with the snow blade it must be lowered and the hydraulic system must be switched to float position.

Danger!
Driving on pressure is prohibited. This can make the vehicle unsteerable!

Attention!
A disabled hydraulic system can result in damage to the implement and/or tractor!

To clear the snow to a specific side the snow blade can be pivoted via the hydraulic angle adjustment. This setting must be made in a slightly lifted out position **without** load on the snow blade. When working with the snow blade small unseen obstacles can be run over. To protect the operator and the implement, the snow blade is equipped with a movable blade plate. When driving against an obstacle (e.g. manhole cover) the blade yields to the front and thus reduces the impact.



Attention!
Danger of crushing due to the blade flipping back.
Never reach into the swing area of the blade when it is tilted forward and the pullback springs are tensioned Drive in reverse until the blade again rests on the stop buffers!

4.2 Faults

Fault:	**Possible cause:**
After clearing, snow still remains	Slide runner is adjusted too low
The snow blade vibrates excessively when removing snow	Slide runner adjusted too high substrate is extremely uneven
Tractor is hard to steer	Hydraulic system for the front lift is not in float position
The snow blade oscillates back and forth when clearing snow	Hydraulic system for angle adjustment is not in float position bearings are deflected

4.3 Contact

If there are faults, problems, or other indications of malfunction, contact your sales consultant or directly contact the manufacturer.

Enter the article number and the chassis number here.
This information is on the type plate of the implement.

Code - number: .....

Serial number:.....

Fig 15: Nameplate

5 Service

The entire implement must be subjected to regular service.

After first use, the threaded unions on the snow blade must be checked and retightened if necessary. The screws of the scraper bar and the attachment flange are extremely important in this regard.

Daily service:

- Prior to each use, check the safety elements and moving parts for wear.
- Also prior to each use, check the adjustment of the slide runners.
- Check the hydraulic connections and lines.
- Clean the implement after each use.
- Check the status of the snow blade, the level of wear on the scraper bar (steel & PU).

Maintenance after 25 operating hours (or after a longer standstill period):

At regular intervals, and always at the beginning and end of the season, the moving parts of the implement must be checked and if necessary the axle threaded unions must be retightened. The bearings are maintenance-free and only need to be replaced if there is excessive play.

The most important points are:

- Attachment points of the swing cylinders
- Swing axle of the blade plate
- Fold axle of the blade plate
- Pendulum axle of the snow blade
- Locking pin on the coupling triangle
- Slide runner (wear)
- Lubricating nipple of the swing axle
- Lubricating nipple of the fold axle

Fig 16: Attachment points of the swing cylinders

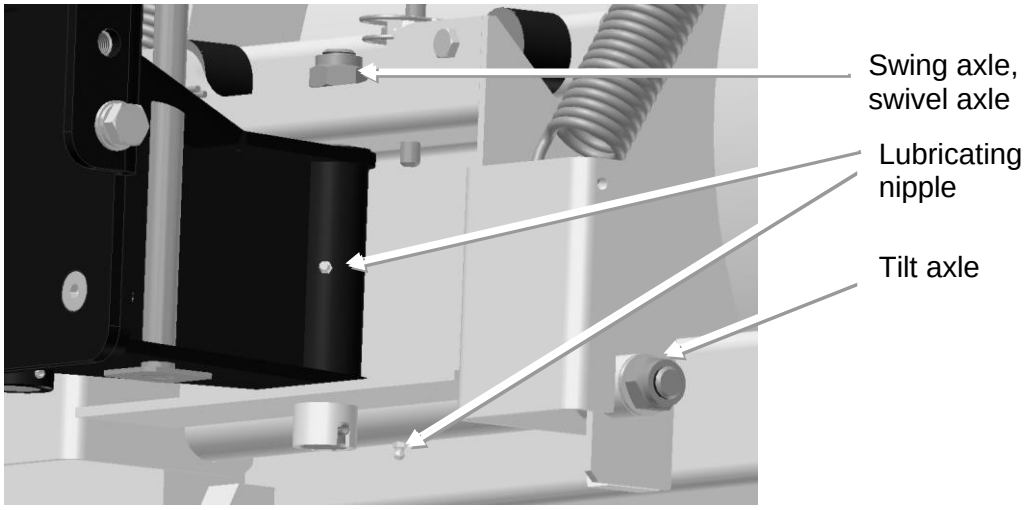


Fig 17: Lubricating nipples and axles

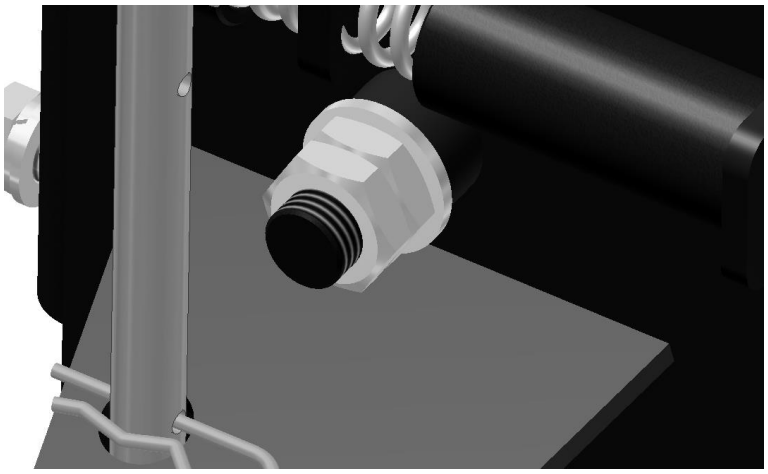


Fig 18: Pendulum axle of the snow blade

6 Disposal

The snow blade must be disposed of in accordance with the applicable regulations of the municipality or the country. Take the parts to the collection points for residual waste, special waste, or recycle them depending on material.

matev GmbH does not provide any disposal services.

7 Guarantee

The general delivery conditions of matev GmbH apply.

8 Technical data and accessories

8.1 Technical data

Dimensions	Data
Blade width	1,3 / 1,4 / 1,5 / 1,6 / 1,7 m
Blade height	575 mm
Length	590 mm
Weight SRM-FB 130	Approx. 88 kg[1)]
Weight SRM-FB 140	Approx. 92 kg[1)]
Weight SRM-FB 150	Approx. 95 kg[1)]
Weight SRM-FB 160	Approx. 100 kg[1)]
Swing angle	27°
Width in swiveled status - SRM-FB 130	1160 mm
Width in swiveled status - SRM-FB 140	1250 mm
Width in swiveled status - SRM-FB 150	1340 mm
Width in swiveled status - SRM-FB 160	1425 mm

[1)]Weight depends on equipment

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10 EC Declaration of Conformity

EC Declaration of Conformity for a machine to confirm compliance with the Machinery Directive 2006/42/EC and with the statutory regulations issued for the implementation of the Machinery Directive.

The manufacturer	matev GmbH Nürnberger Str. 50 90579 Langenzenn
declares that the machine	Snow blade SRM-FB 130 131 8773 SRM-FB 140 131 8774 SRM-FB 150 131 8775 SRM-FB 160 131 8776

complies with the provisions of the Machinery Directive 2006/42/EC and with the implementing national statutory regulations.

The signer is authorized to compile the technical documents.

The address is the address of the manufacturer.

Date / Signature	January 2018	.....
Name of signer		Georg Hemmerlein
Signer information		Managing Director