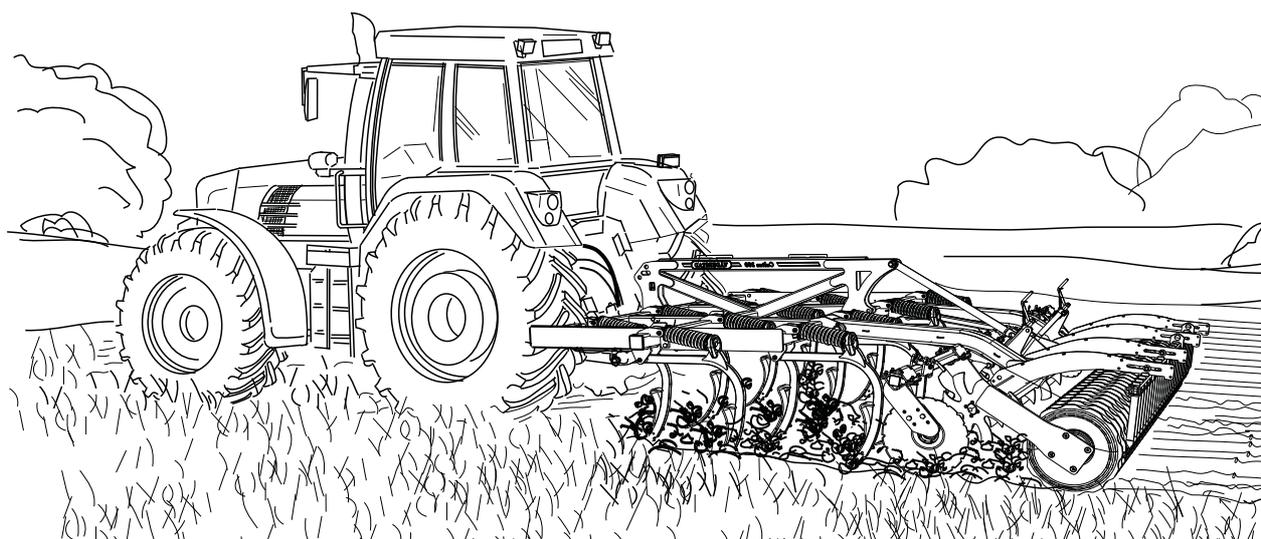
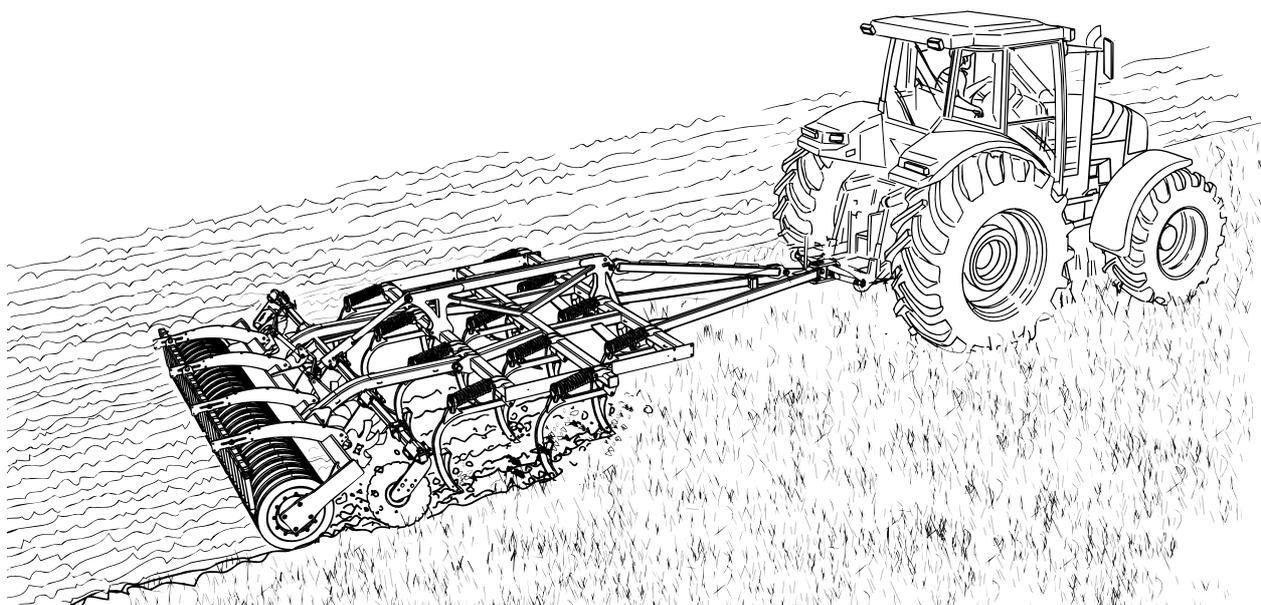


VÄDERSTAD

Cultus

series
CS 300-400

Manufacturing No. 10 400-



Instructions

900290-en

11.07.2011

ver. 3

Original instructions

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USE

The Väderstad Cultus 300-400 is intended for stubble cultivation down to a maximum working depth of 25 cm.

The cultivator has a number of optional features. As a result, it can be adapted for different soil types and cultivation requirements.

The cultivator is intended for use together with tractors up to the recommended maximum output according to the table below.

Recommended max. tractor output

	(hp)	(kW)
CS 300	160	118
CS 350	160	118
CS 400	200	147

IMPORTANT!

The hints and guidelines provided are to be regarded as general advice. If you choose to proceed other than in accordance with the recommended manner, Väderstad-Verken AB and/or its representative shall be exempted from liability. All responsibility for usage, transport, maintenance and repair, etc. of the machine rests with the owner/driver.

The owner/operator shall bear full responsibility for correct use of the machine at any given time.

Väderstad machines have passed quality assurance tests and operational tests prior to delivery. The user/purchaser shall retain sole liability for ensuring that the equipment functions correctly when in use. In case of problems, please refer to the "General delivery conditions of the Väderstad group".



EC DECLARATION OF CONFORMITY FOR THE MACHINE
in accordance with the EU Machinery Directive 2006/42/EC

Väderstad-Verken AB, P.O. Box 85, SE-590 21 Väderstad, SWEDEN
hereby confirms that the cultivation tools hereunder have been manufactured in
accordance with the Council Directive 2006/42/EC.

The above declaration covers the following machines:
CS 300, CS 350 and CS 400, manufacturing no. 10 400-13 000.

Väderstad 2010-06-18

A handwritten signature in black ink, appearing to read 'Lars-Erik Axelsson', written in a cursive style.

Lars-Erik Axelsson
Legal requirements coordinator
Väderstad-Verken AB
Box 85, 590 21 Väderstad

The undersigned is also authorised to compile technical documentation for the above
machines.

1 Safety regulations

1.1 Before using the implement



Always pay extra attention to the instructions or diagram when you see this symbol.



Figure 1.1

This implement is intended for cultivating arable land. Learn to handle the implement carefully and correctly. It could be dangerous in the wrong hands and if used without taking proper care.

- ! The CS 300-350 is intended for tractors up to 160 hp (118 kW). The CS 400 is intended for tractors up to 200 hp (147 kW). The use of tractors with higher outputs can result in more rapid wear of the implement.

1.2 Warning decals

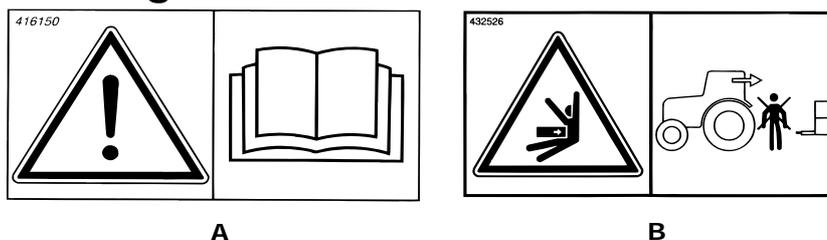


Figure 1.2

- A Read the instructions carefully and make sure you understand them.
- B Do not stand between the tractor and the implement when the tractor is being reversed to hitch the implement.

1.2.1 Locations of warning decals

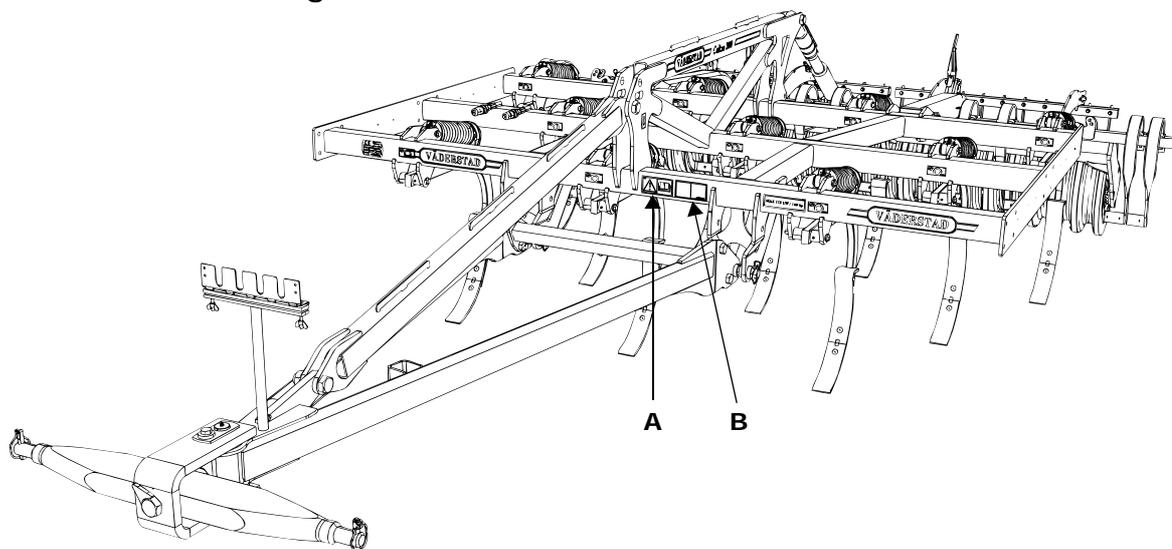


Figure 1.3

1.3 Other safety regulations



! VERY IMPORTANT! Retighten screw connections according to the table. See “1.4 Retightening of screw connections” see page 11 .

- As the implement is heavy, front counterweights should normally be mounted on the tractor. Always ensure that the tractor has a sufficient load on the front axle for safe driving.

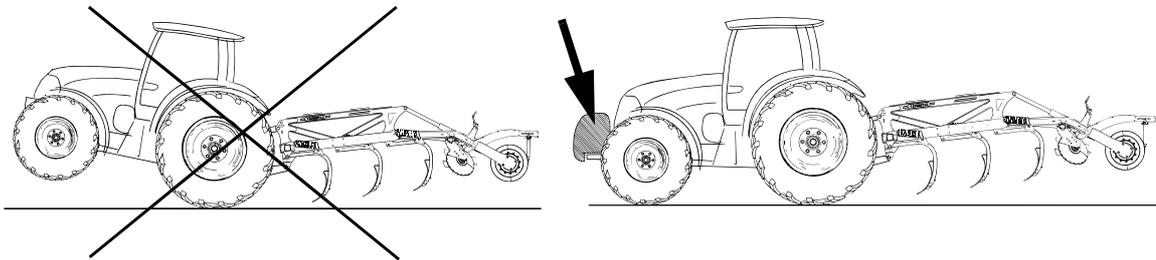


Figure 1.4

- Take great care when dismantling the cultivator tines' springs! They have a very large inherent spring force. See “4.6 Dismantling the parts in the cultivator tine suspension system” see page 35 .
- Check that the tractor's tyres and wheels are adapted for the weight of the implement and that the air pressure in the tyres is correct. Note that there is a high load on the tractor's rear axle, particularly during road transport. It is therefore necessary to check that the maximum permitted axle load is not exceeded. The implement's hitching weight on the tractor is indicated in “6 Technical data” see page 38 .
- Prior to transport on public roads, remove dirt that may fall off from both the tractor and implement.
- Observe great caution when transporting the implement on public roads. Pay attention to the width and turning area of the implement during transport. Check the position of the tractor rearview mirrors. Also check that the tractor's slow vehicle sign is visible above the implement. The owner/operator is solely responsible for transport of the implement on public roads.
- Prior to transport, fold in the levelling unit's outer discs in order to reduce the transport width to less than 3.0, 3.5 and 4 metres respectively.
- Use the lights on the implement in accordance with local traffic regulations.
- Keep in mind that the implement is heavy and, as a result, the braking distance is longer.
- Trailed cultivators may be transported at a maximum speed of 25 km/h on public highways. When transporting on uneven roads, the transport speed should be reduced.
- When transporting trailed cultivators, all the spacers must be mounted on the ram rod.
- Note that the owner/operator has sole responsibility for complying with national traffic regulations when driving on public roads.
- Prior to connecting the hydraulic hoses, make sure the male couplings on the implement and the female connectors on the tractor are clean and free from dirt.
- Always use Väderstad original spare parts to maintain the quality and reliability of the implement. If other makes of spare parts are used, all guarantee and claims commitments cease to be valid.
- Never dismantle a roller ring unit with steel rings. The unit has been pressed together with a force of 4 tonnes and there is a high risk of injury if attempts are made to disassemble the unit. If there should ever be a need for disassembly, please contact the dealer as special tools are required.

Safety regulations

- Any welding work on the machine should maintain a professional standard. Incorrect welding may result in serious injuries or possibly fatal injuries. If in doubt, contact a professional welding service for proper instructions.
- Never stand under the implement if it is only secured with the tractor's three-point lift! The section "*4.1 Securing implement during service, hydraulically mounted*" see page 31 shows how the implement is to be supported.
- Do not stand near hydraulic hoses under pressure. Recover any spilled oil after performing service on the hydraulic system.
- Before driving off, make sure that all screws and nuts are tight.
- Always park the implement on a level and solid surface. Depressurise the implement's hydraulic system, if present, by using the float position on the tractor's hydraulic control. The implement then rests on tines and the compaction roller.

1.4 Retightening of screw connections

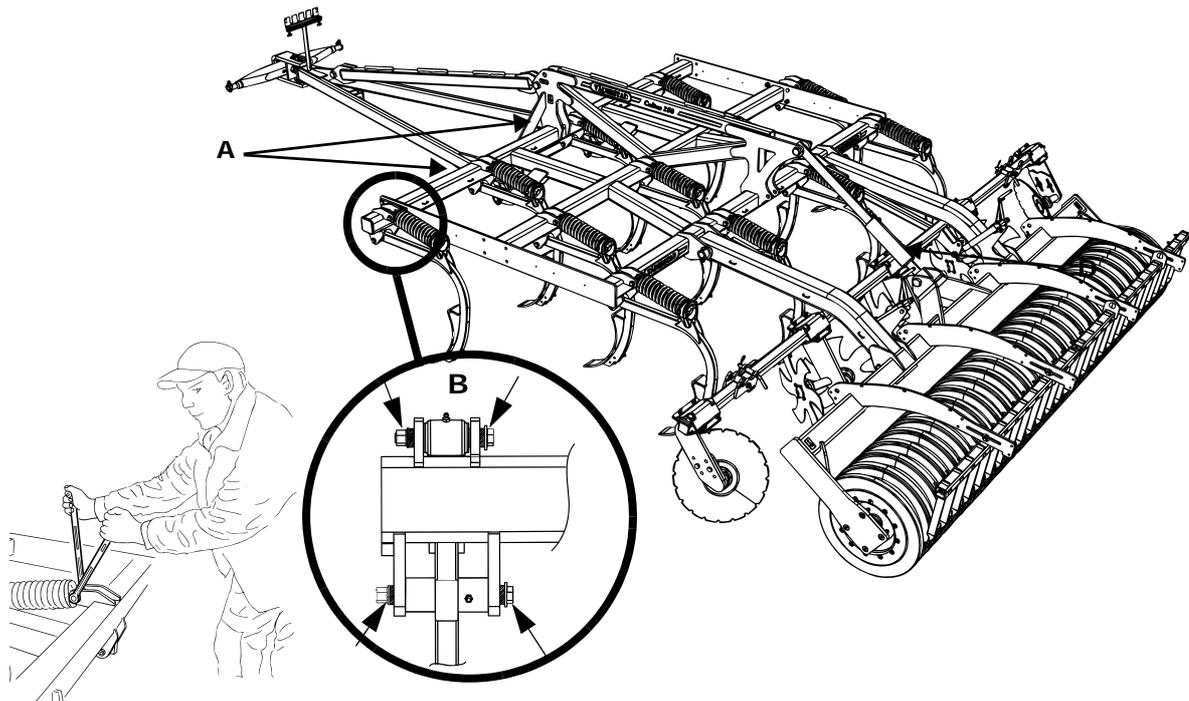


Figure 1.5

- ! Retighten the screw connections (A) between drawbar and chassis after the first day of operation. Tighten the screw connections to a torque of 550 Nm. Use a torque wrench.
- ! The screw connections (B) in the cultivator tine linkage must be retightened after the first day of operation and thereafter at least once per season. Tighten the screw connections to a torque of 114 Nm. Use a torque wrench. See also “4.5 Retightening and checking the tine linkage” see page 34 .

1.4.1 Explanation of tightening torque

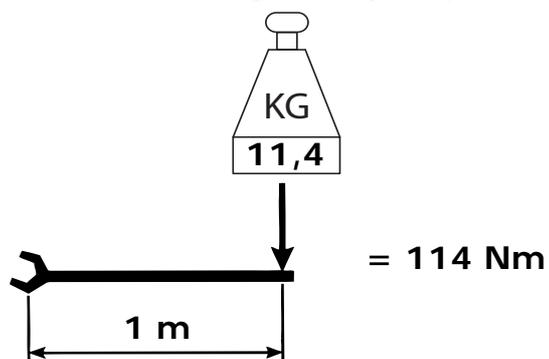


Figure 1.6

Certain sections in this instruction book state that screw connections must be retightened using a torque wrench. If a torque wrench is not available, the type of spanner shown above may be useful instead.

1.5 Machine label

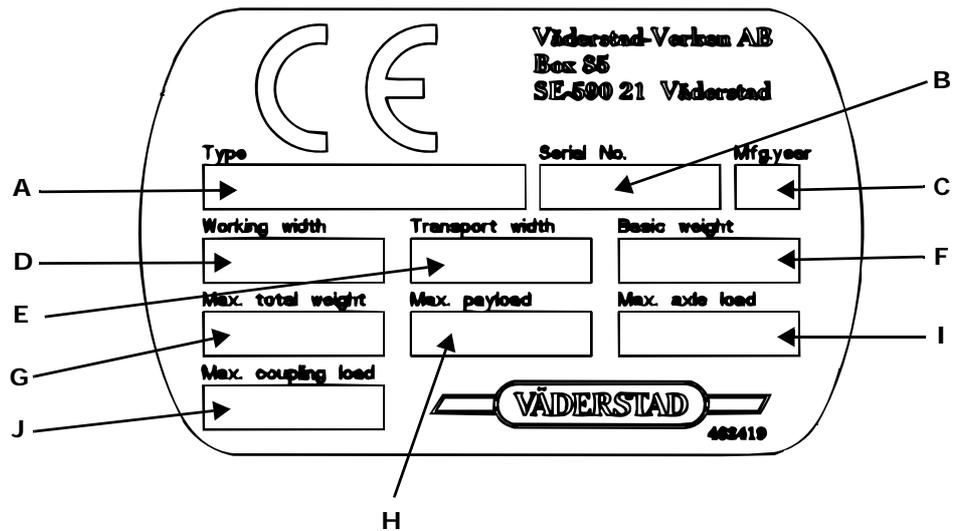


Figure 1.7

- A Machine type
 - B Serial number
(Always state the serial number of your machine when ordering spare parts and in case of servicing or warranty claims.)
 - C Year of manufacture
 - D Working width
 - E Transport width
 - F Tare weight of the basic machine
 - G Maximum total weight
 - H Maximum permitted payload
 - I Maximum permitted axle load
 - J Maximum coupling load (at the tractor hitch)
- ! Also refer to “6 Technical data” see page 38 .

1.6 Moving the machine when not hitched to a tractor



NOTE! If the machine must be moved when not hitched to a tractor, it must be transported on a machine trailer or lorry flatbed!

Mounted machines must be lifted onto and off the transport vehicle using a crane, whilst semi-mounted machines must be rolled onto and off the transport vehicle using a tractor. Semi-mounted machines must not be lifted by crane!

1.6.1 Lifting on and off of mounted CS 300-350

- 1 Place the machine on level ground and adjust the depth setting stay, so that it rests against the tines and compaction roller. Add as many clips as there is space for on the stay.
 - 2 Unhitch the tractor from the machine.
 - 3 Lift the machine on or off using a suitable lifting device at the lifting points indicated by the decals; see "Figure 1.8".
- ! For information on the machine's dimensions and weight, see "6 Technical data" see page 38 .



Figure 1.8

- 4 Secure the machine's compaction roller to prevent rolling using chocks or similar.
 - 5 Secure the machine using suitable lashing equipment in accordance with applicable rules. The lashing equipment must be attached to the machine at the locations indicated by the decals; see "Figure 1.9".
- ! Always make sure that you comply with applicable national regulations concerning transport dimensions, requirements for escort vehicles or similar!

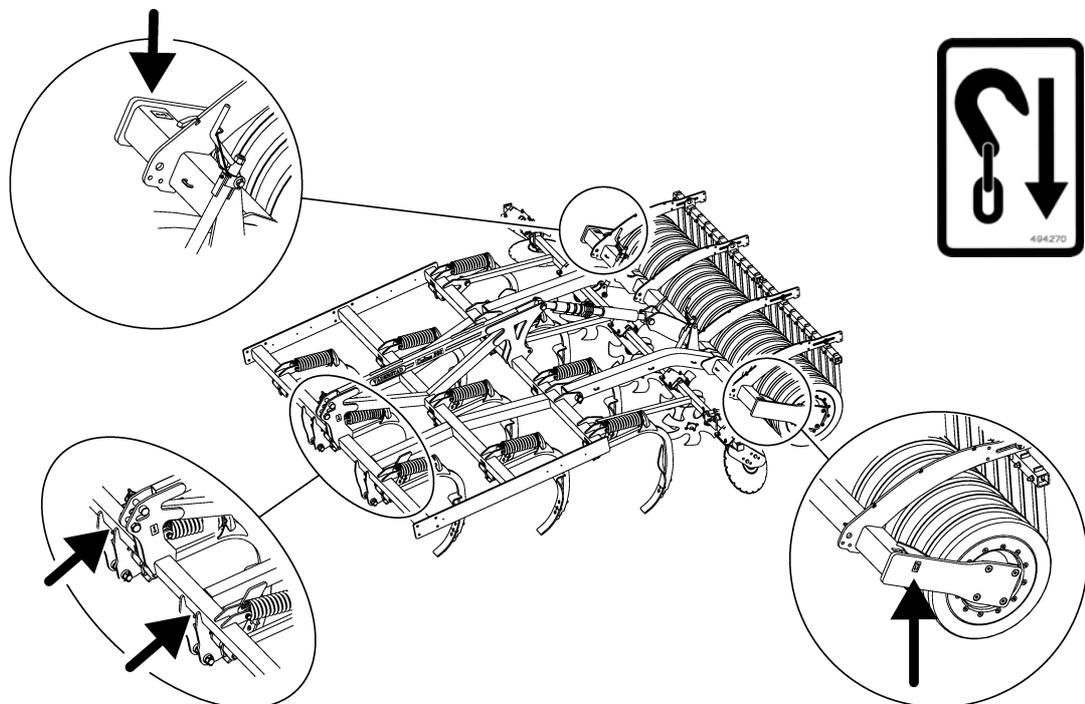


Figure 1.9

Safety regulations

1.6.2 Rolling on and off of semi-mounted CS 300-400

- 1 Raise the machine to the full lifting height.
 - 2 Reverse the machine lengthwise onto the trailer or flatbed. If using a flatbed, a ramp, loading pier or similar will be required. Take great care. Check that no machine parts are damaged during loading.
 - 3 Lower the machine with the hydraulic cylinder for depth setting so that it rests against the tines and compaction roller. Add as many clips as there is space for on the hydraulic cylinder. Depressurise the hydraulic system.
 - 4 Unhitch the tractor from the machine.
 - 5 Secure the machine's compaction roller to prevent rolling using chocks or similar.
 - 6 Secure the machine using suitable lashing equipment in accordance with applicable rules. The lashing equipment must be attached to the machine at the locations indicated by the decals; see "Figure 1.10".
- ! For information on the machine's dimensions and weight, see "6 Technical data" see page 38 !
- ! Always make sure that you comply with applicable national regulations concerning transport dimensions, requirements for escort vehicles or similar!

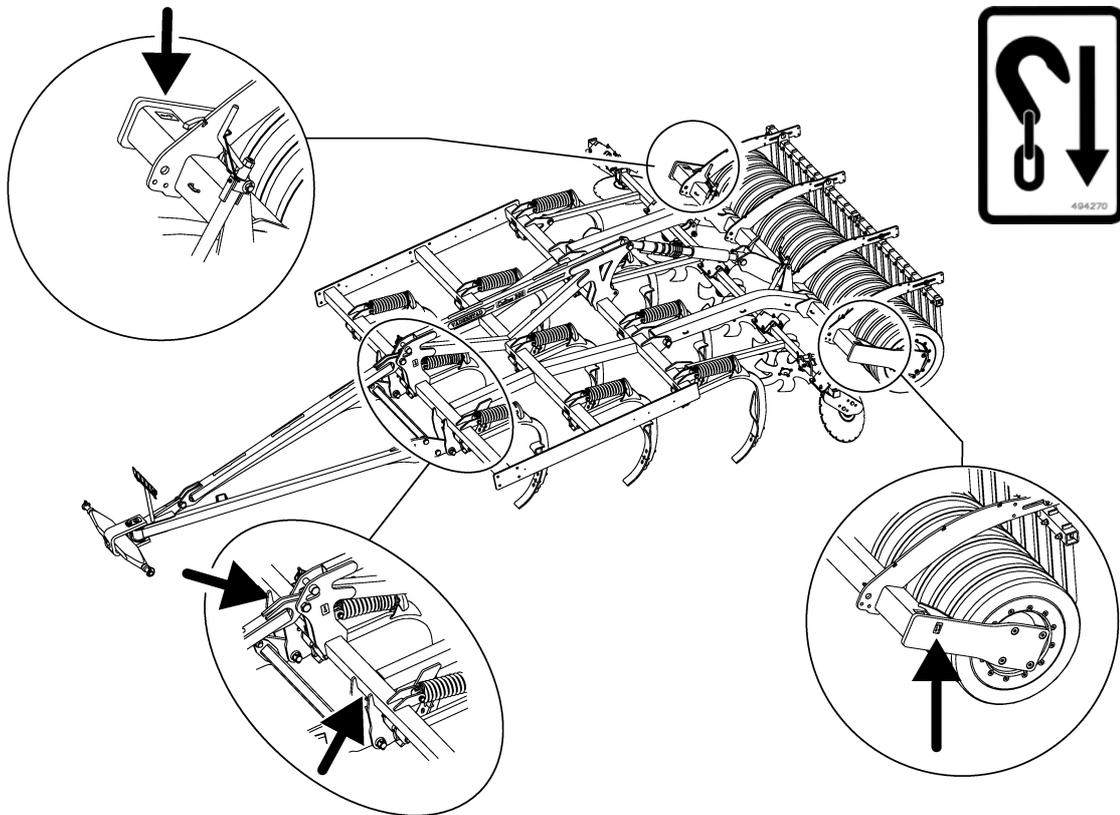


Figure 1.10

2 Instructions and settings

2.1 Tractor

- ! The CS 300-350 is intended for tractors up to 160 hp (118 kW). The CS 400 is intended for tractors up to 200 hp (147 kW). The use of tractors with higher outputs can result in more rapid wear of the implement.
- To reduce soil compaction and to increase the pull, the tractor should be fitted with very good tyres.
- Check that the tractor's tyres are adapted for the weight of the implement and that the air pressure in the tyres is correct. Note that there is a high load on the tractor's rear axle, particularly during road transport. It is therefore necessary to check that the maximum permitted axle load is not exceeded.

A double-acting hydraulic coupling is required in the case of trailed machines.

2.2 Hitching and unhitching the implement

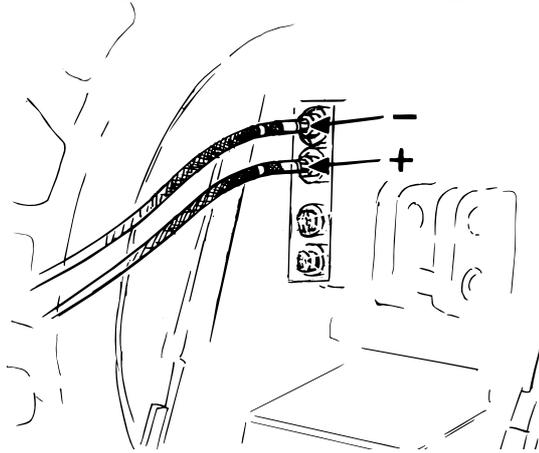


Figure 2.1

2.2.1 Hitching

Hitch the implement to the tractor and connect any hydraulic hoses. Do not stand between the tractor and the implement when the tractor is being reversed to hitch the implement!

2.2.2 Unhitching



When unhitching the machine, it is important to ensure that all the tines have roughly the same load in order to avoid the tips being broken off.

- 7 Lower the implement onto a flat, stable surface. The implement rests on the tips of the tines and the compaction roller.
- 8 Disconnect the three-point couplings.



Trailed machine with all supplied clips on the ram rod as a traffic safety catch must first be raised to full lifting height. This is done to remove the clips so that the machine can be parallel with the ground. It is important to ensure that all the tines have roughly the same load in order to avoid the tips being broken off.

- 1 Lower the implement onto a flat, stable surface.
- 2 Depressurise the implement's hydraulic system by using the float position on the tractor's hydraulic control. The implement then rests on the tips of the tines and the compaction roller.
- 3 Disconnect the hydraulic hoses and the three-point connections.

2.2.3 Choice of coupling points

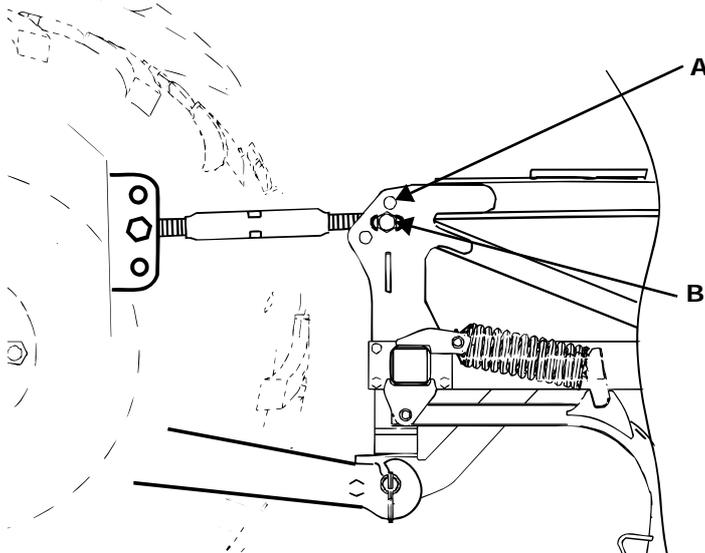


Figure 2.2

The implement is adapted for a category II or III three-point coupling.

In order to minimise the lifting power requirement, the top rod should be mounted in a high coupling point on the tractor and a low coupling point on the implement.

The round hole (A) is used if you want to use the length of the top rod to adjust the height of the front part of the implement. When using this coupling point, the tractor's hydraulic lifting arms must be in the float position when operating in the field.

The oval hole (B) is used if you want to adjust the height of the front part of the implement using the hydraulic lifting arms' height setting. Adjust the length of the top rod so that the pin is in the middle of the oval hole when the implement is parallel with the ground. Then fine-adjust using the height position of the hydraulic lifting arms when operating in the field.

NOTE! During installation, always use the enclosed original pin.

NOTE! On rolling fields, you are always recommended to use the oblong hole for more gentle handling of the implement.

NOTE! The front hole (C) must only be used for installing the drawbar.

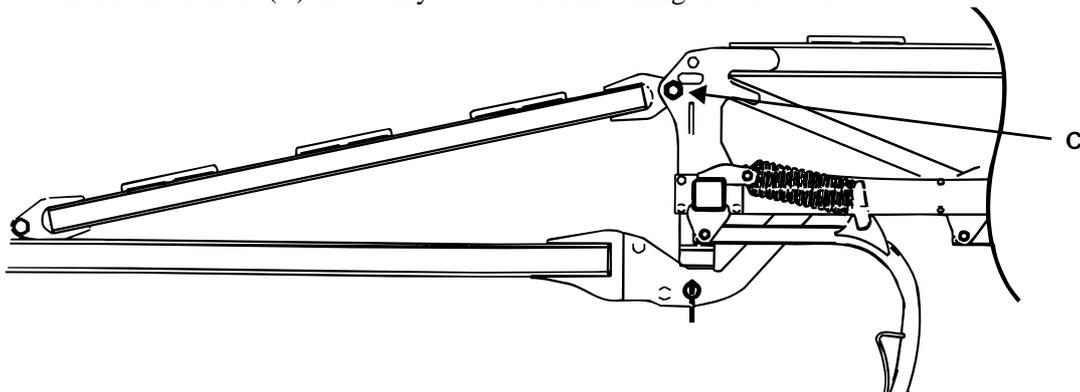


Figure 2.3

2.2.4 Stabiliser rods on the tractor's hydraulic lifting arms

! When operating in the field and for road transport, the stabiliser rods for the tractor's hydraulic lifting arms should be blocked.

2.3 Setting the levelling units

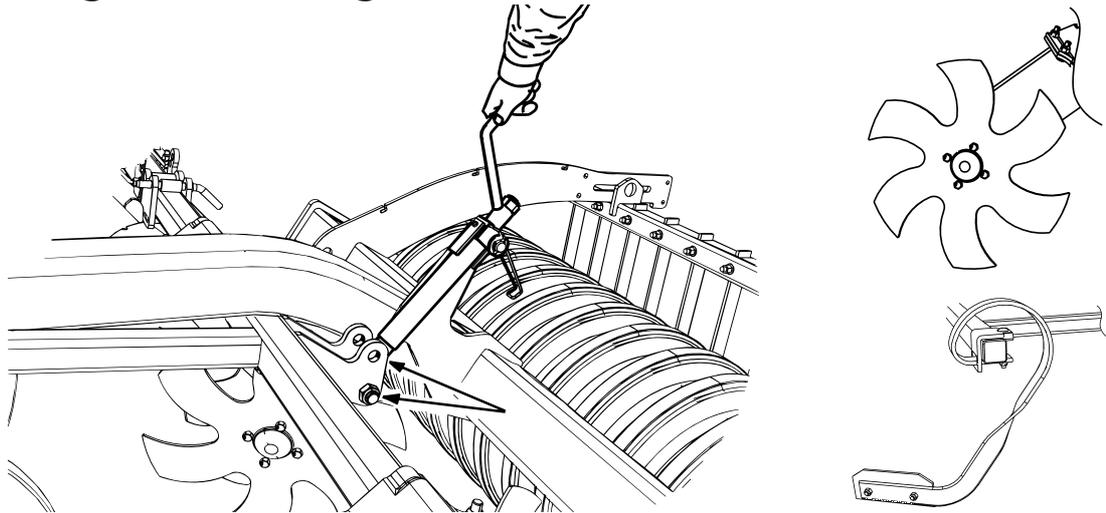


Figure 2.4

The height of the levelling units is adjusted using a crank handle. The crank handle has two alternative mounting points in the levelling units, so that optimum height adjustment should always be possible.

The levelling unit must be adjusted so that the soil cover behind the implement is as even as possible. As the levelling unit is mounted on the compaction roller's chassis, the setting of the levelling unit does not need to be adjusted in the event of minor changes in the working depth.

NOTE! The work results of the levelling units are usually best if they are set in a relatively shallow position. If the levelling units are wound down to a depth that is too great, this may cause the opposite effect, i.e. an uneven ground surface behind the implement.

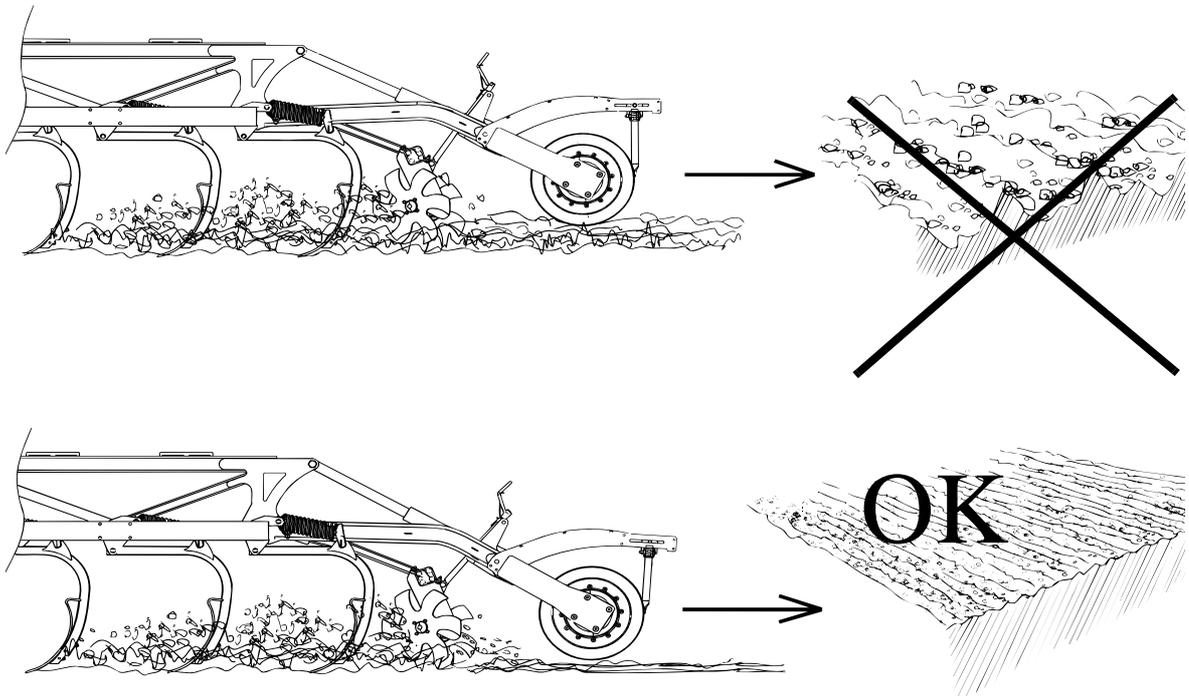


Figure 2.5

2.3.1 Adjustable outer levelling discs

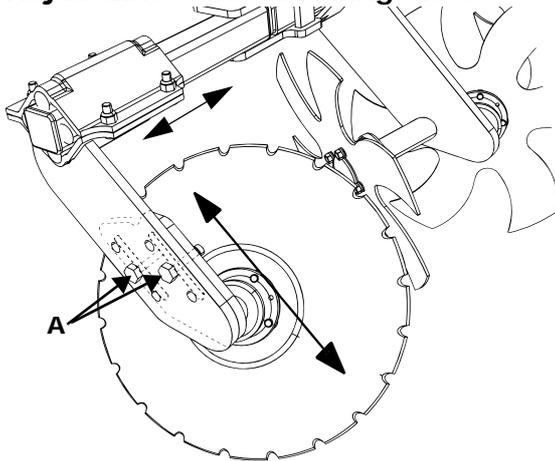


Figure 2.6

Individually adjustable levelling discs can be found outermost on either side. These enable optimum levelling in the corridors between each driven pass. Depending on working depth, soil type, etc., it may be appropriate to perform adjustment to avoid the formation of trailing lea lines or furrows.

In order to adjust, loosen screws (A) and move the discs along the oval holes. To allow more flexible adjustment settings, the screw connections can also be moved to two alternative height positions.

The entire levelling unit can be moved along the shaft to optimise the function. Unscrew the nuts until they almost come apart from the carriage bolt. Using mild force, the entire unit can then be moved in the desired direction along the shaft.

2.3.2 Folding outer levelling discs

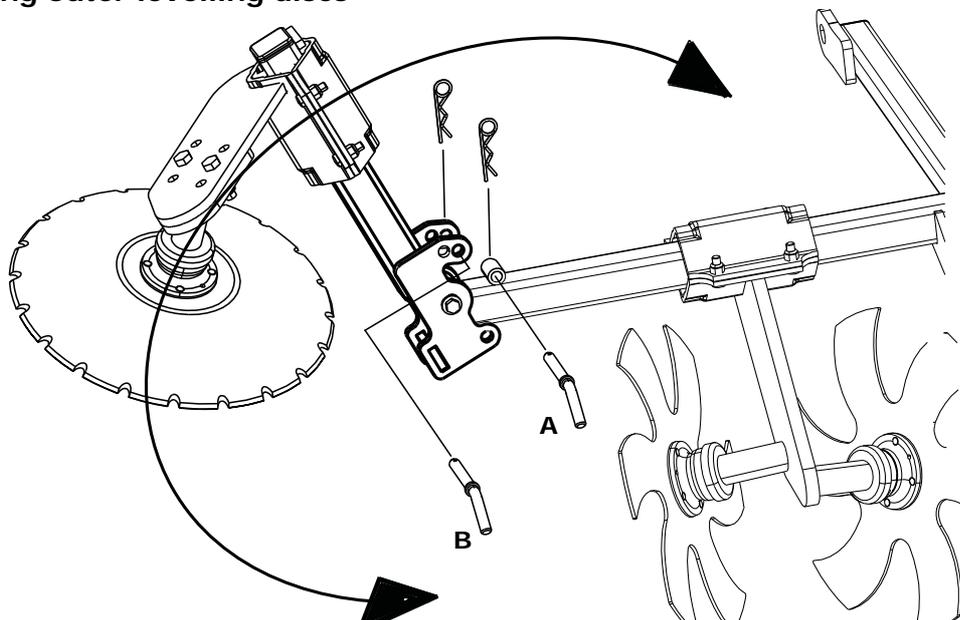


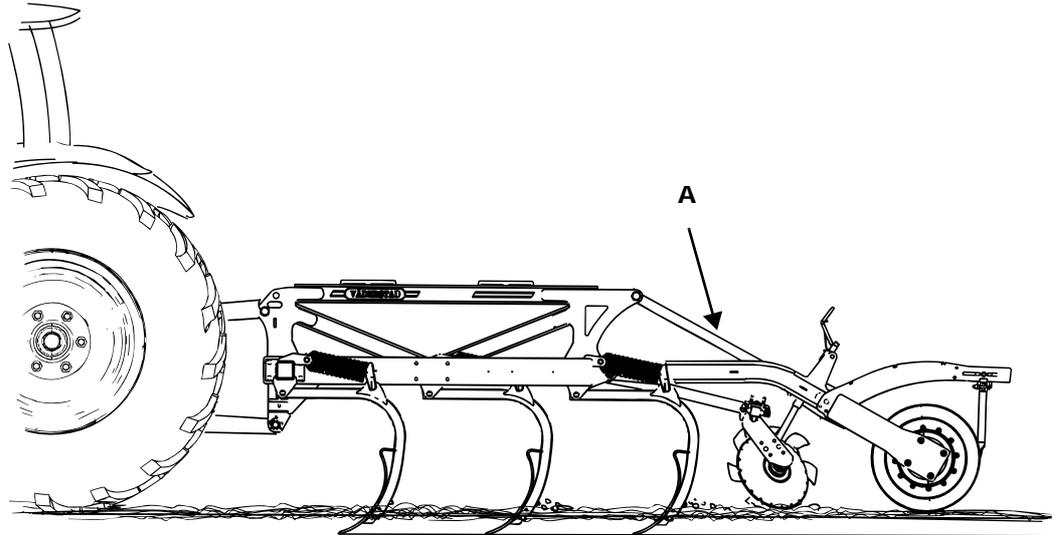
Figure 2.7

The outer levelling discs can be folded in so that the implement's transport width does not exceed 3.0, 3.5 or 4.0 metres respectively.

When resetting to the folded position, the shafts are folded up and secured with the pins in pos. (A).

In the folded out position, flexible links are always recommended with the pins stored in pos. (B).

2.4 Adjusting the working depth of the tines, hydraulically



mounted

Figure 2.8

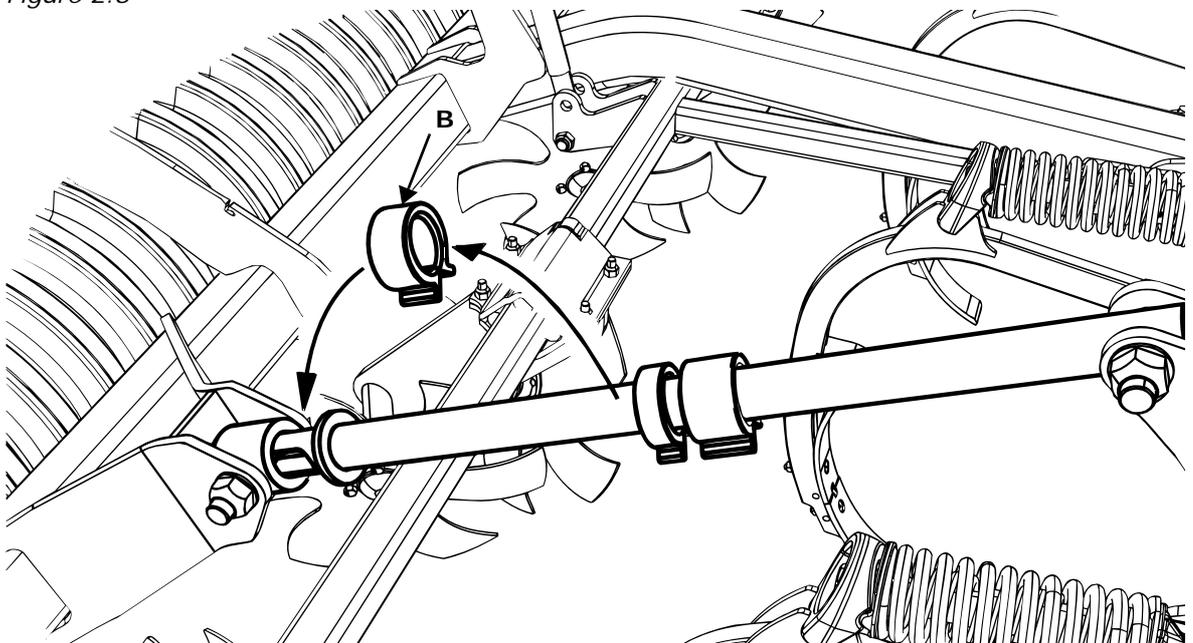


Figure 2.9

The working depth of the tines is determined by the setting of the compaction roller. The compaction roller is adjusted with the aid of a rod (A). The rod can be supplied with clips (B) to secure the end position. In order to mount the clips, the machine must first be raised in the hydraulic lifting arms. The more clips are mounted, the shallower the working depth.

! Note that the parallel alignment of the implement is affected when altering the working depth.

2.5 Adjusting the working depth of the tines, trailed

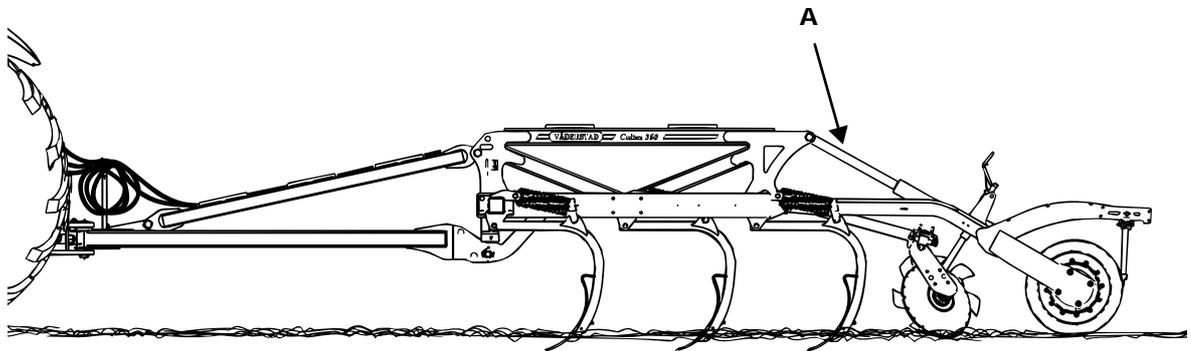


Figure 2.10

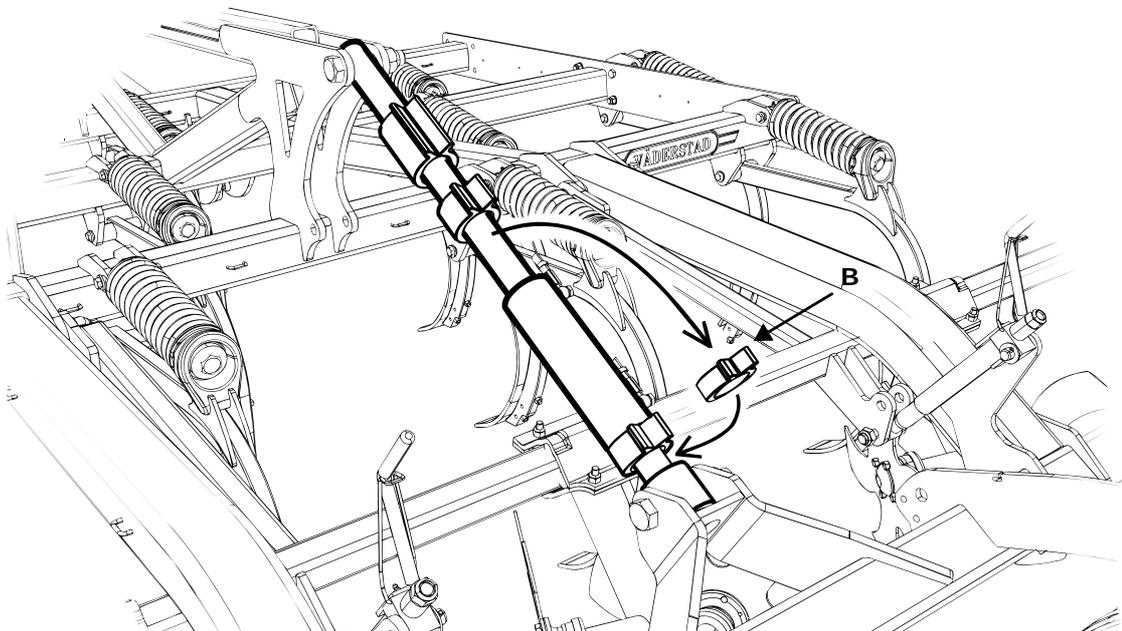


Figure 2.11

The working depth of the tines is determined by the setting of the compaction roller. The compaction roller is adjusted with the aid of the hydraulic cylinder (A). The ram rod can be supplied with clips (B) to secure the cylinder's end position. In order to mount the clips, the machine must first be lifted up. The more clips are mounted, the shallower the working depth.

- ! Note that the parallel alignment of the implement is affected when altering the working depth.
- ! During road transport, all the spacers must be mounted on the ram rod.

2.6 Adjusting parallel alignment, hydraulically mounted

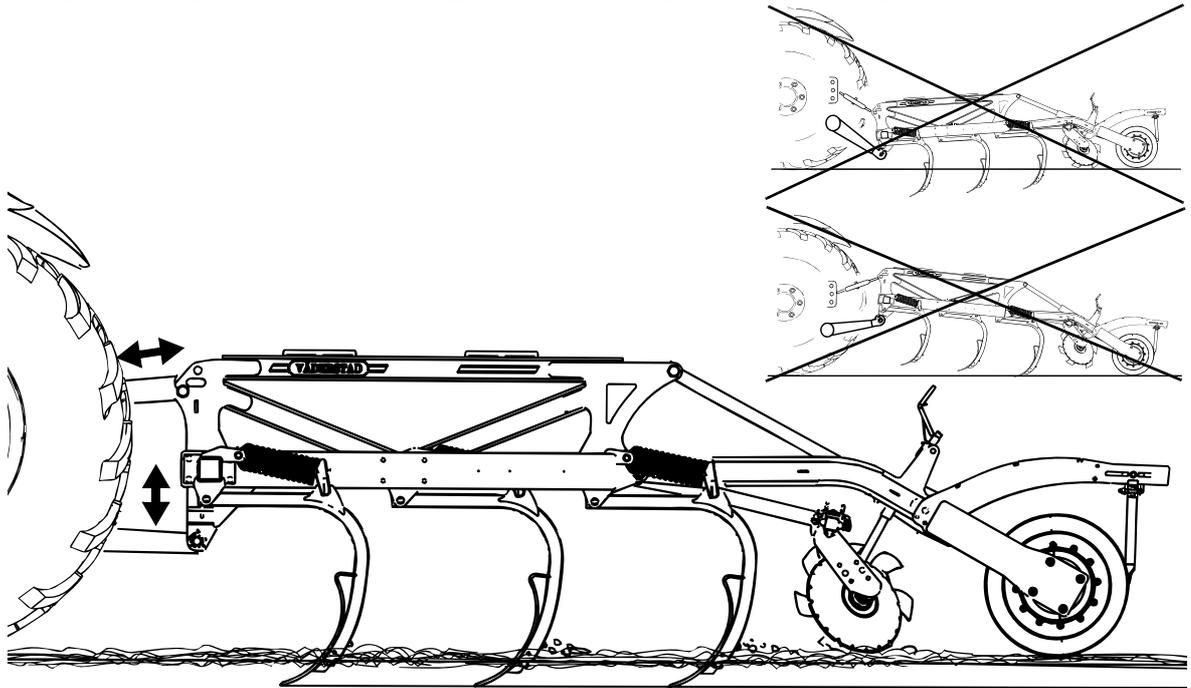


Figure 2.12

The height of the front part of the implement is adjusted with the length of the top rod or the height of the hydraulic lifting arms, depending on which coupling point has been selected in the implement's tower, see "2.2.3 Choice of coupling points" see page 17 .

When driving in the field, adjustment takes place when checking that the implement is being pulled parallel with the ground.

NOTE!The height of the front part of the implement must be adjusted when changing the position of the compaction roller, to ensure that the machine is parallel with the ground and to prevent an uneven working depth.

NOTE!Poor parallel alignment can result in the implement being unstable when in motion.

2.7 Adjusting parallel alignment, trailed

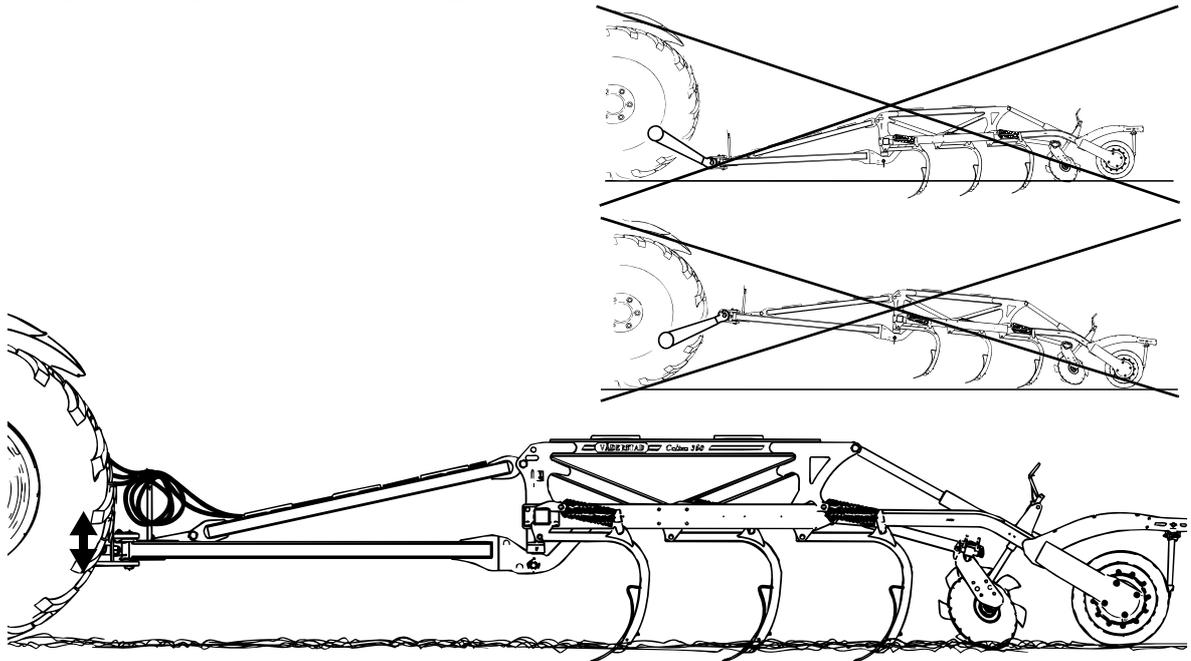


Figure 2.13

The parallel alignment of the implement is determined by the height of the tractor's lifting arms. When driving in the field, adjustment takes place when checking that the implement is being pulled parallel with the ground.

NOTE! Poor parallel alignment can result in the implement being unstable when in motion.

2.8 Adjusting the scrapers

Scrapers for rubber ring compactors

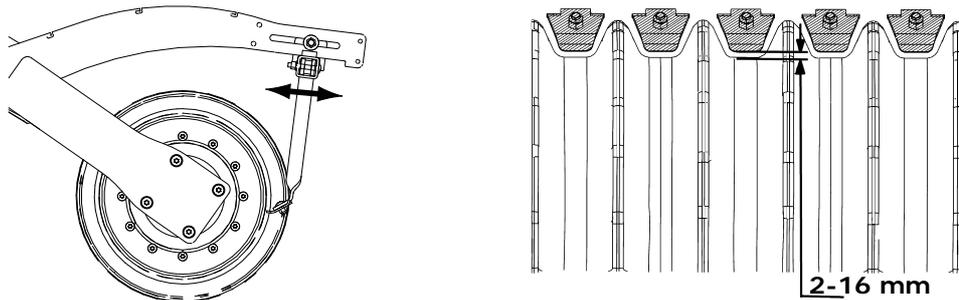


Figure 2.14

Adjust the scrapers to ensure the gap between the tips and the rubber rings is 2-16 mm. The recommended basic setting is 6 mm. If the rubber compactor does not run cleanly, adjust the scrapers in steps close to the compaction roller, although no closer than 2 mm.

- ! The scraper tips may not under any circumstances come into contact with the rubber compactor, as this could then be damaged.
- ! Regularly check that no stones have become wedged between the rubber rings.
- ! Take great care when reversing the machine! If soil and plant remains become caught in the roller ring units, there is a risk of causing damage to the scrapers if the machine is then reversed.

Scrapers for steel ring compactors

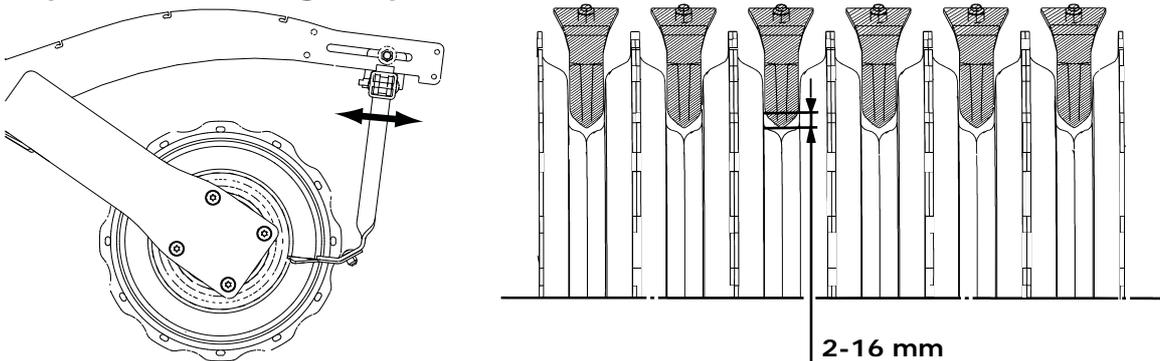


Figure 2.15

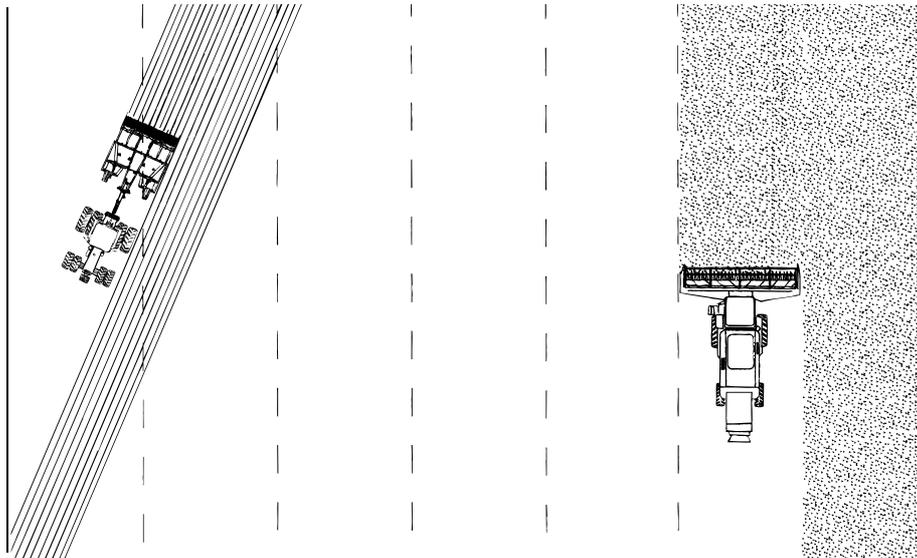
Adjust the scrapers to ensure the gap between the tips and the steel rings is 2-16 mm. The recommended basic setting is 6 mm.

- ! Take great care when reversing the machine! If soil and plant remains become caught in the roller ring units, there is a risk of causing damage to the scrapers if the machine is then reversed.

3 Operating instructions and cultivating tips

3.1 Driving directions

1



2

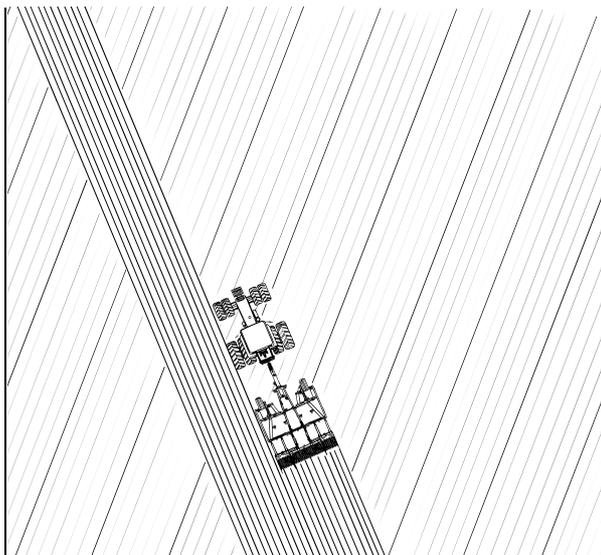


Figure 3.1

- 1 The first pass should take place immediately after harvesting and at an angle of 20° - 40° to the harvesting direction.
- 2 The second pass should take place at 20° - 40° to the previous pass.

When turning on the headland, you can choose only to raise the towed machine at the three-point linkage. As the rear tines often catch on the ground a little when turning around, the headland can become a little sticky in wet conditions. It is a good idea to raise the machine both at the three-point and with the hydraulics.

Operating instructions and cultivating tips

The final pass before sowing must not take place in the same direction as the intended sowing direction. Finish by driving as wide on the headland as you subsequently intend to sow this area, to give an indication of where the bouts are to start and finish. This produces an attractive result if you want to sow the headland last.

If sowing is to be performed with the Väderstad Rapid, its pre-implement is provided with optimum conditions if the final cultivation prior to sowing is carried out diagonally to the intended sowing direction.

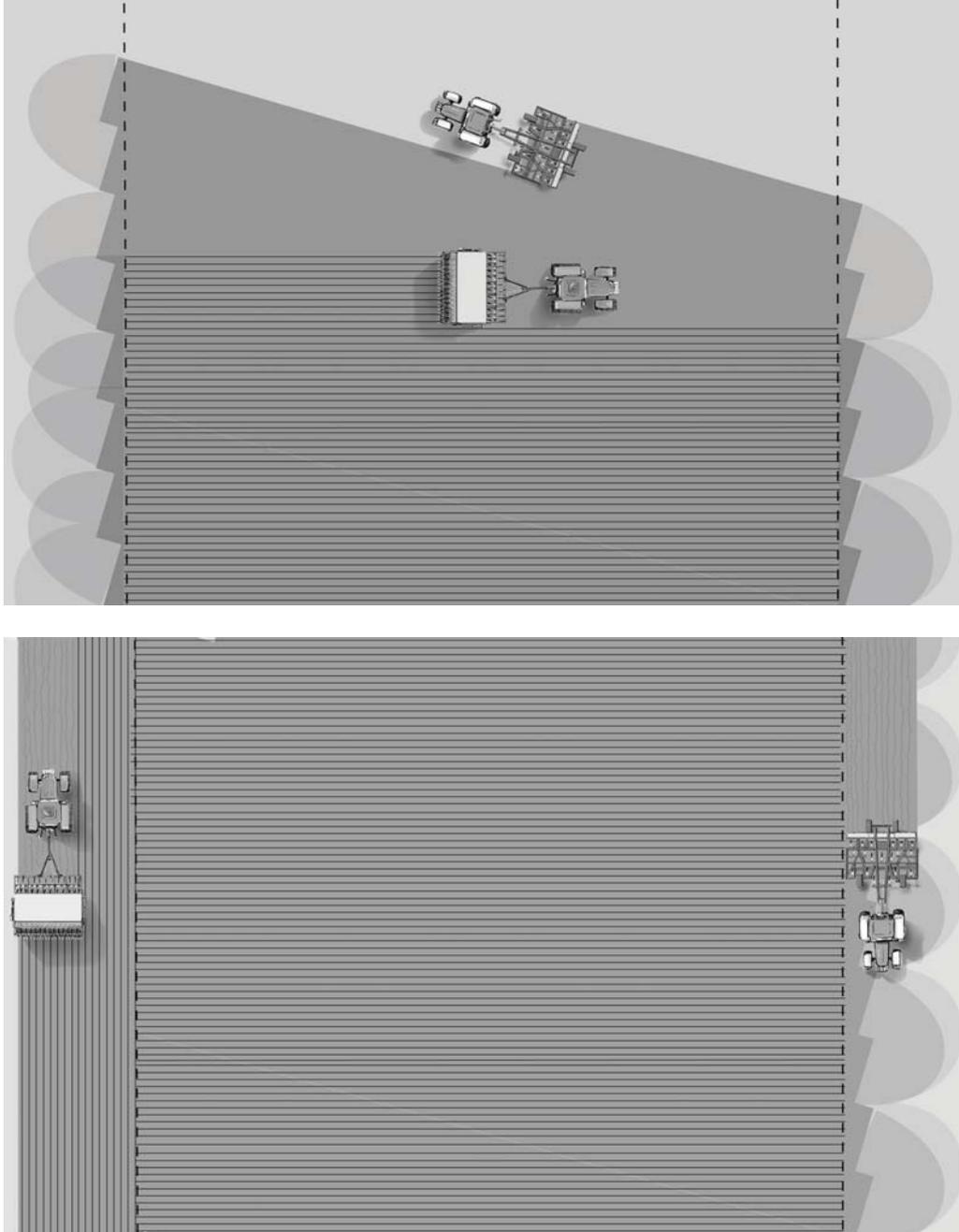


Figure 3.2

3.1.1 Pulling power regulation

To reduce the pulling power requirement and to ensure that the implement moves more calmly, employ 5-15% pulling power regulation. In this way, some weight is transferred to the tractor in order to achieve greater moving force. Pay attention to how the machine is moving to ensure that the tractor does not raise the machine too much.

3.2 Choice of tips, wing cutters and guide rails

3.2.1 Tips and wing cutters

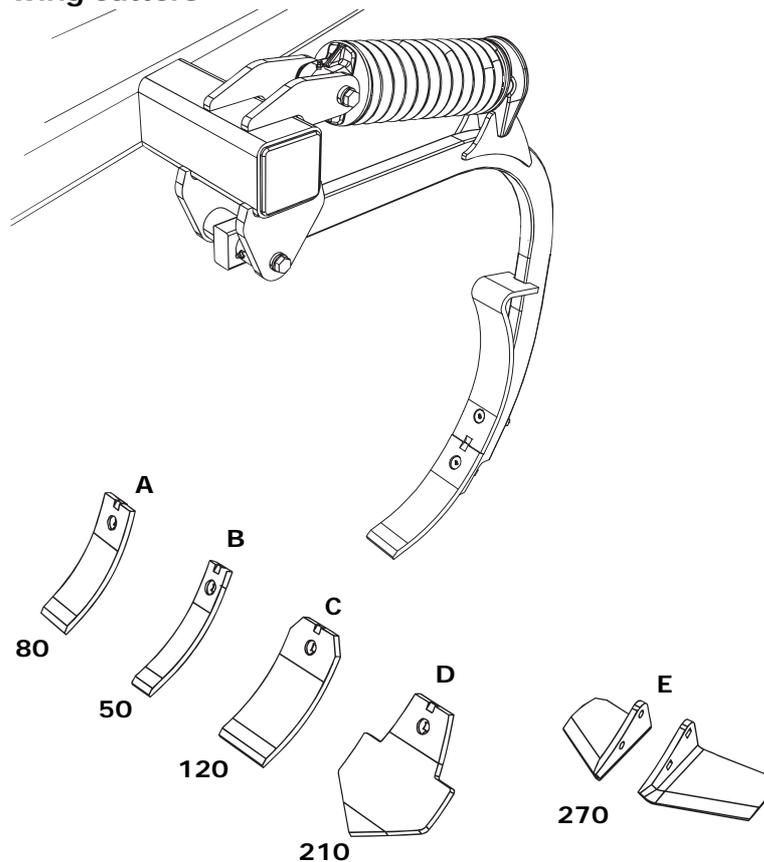


Figure 3.3

The Väderstad Cultus is fitted as standard with type (A) 80 mm wide tips.

Alternatively, tips with a width of 50 mm (B) and 120 mm (C) are available, as well as a 210 mm wide goose foot tip (D). Tip types A, C and D can be supplemented with 270 mm wide wing cutters (E). The standard tip of type (A) with a width of 80 mm and the wing cutter (E) are also available in a more durable version, called Marathon. For soils with a high volume of stones, we recommend the standard tip in the first instance.

- The narrow tips (B) are preferable for deep loosening, for example when disrupting the plough pan.
- The wide goose foot tip (D) is preferable for shallow cultivation, for example when incorporating fertiliser.
- Wing cutters (E) are used to achieve complete cutting during shallow cultivation. Mounting wing cutters is an effective method of controlling root weeds.

3.2.2 Guide rails

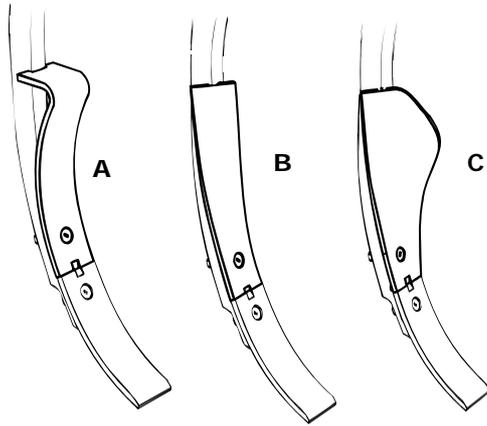


Figure 3.4

The machine is fitted as standard with a MixIn shin of type (A). The MixIn shin throws the soil forwards so that the soil achieves a rotating movement, mixing in plant remains time and again in a single pass.

Alternatively, there is the more traditional shin of type (B) in right-hand and left-hand versions. The twisted shin throws the soil diagonally upwards and in this way mixes in the plant remains. A type (C) shin is available in right-hand and left-hand versions, and is mounted in the outermost positions in order to throw the soil back into the machine. It can be combined with shins of both type (A) and (B).

3.3 Gradually increase the cultivation depth

When operating in firm soil, it is appropriate to make the first pass at a limited working depth and then to increase the depth in subsequent passes. This operating method prevents large clods that are difficult to cultivate from coming loose during the initial passes. The tractor's fuel consumption is also reduced. The driving speed is very important for achieving a good result. This means that it is better to work slightly shallower and faster than the reverse. If the machine is perceived as being unstable, you should work at a shallower level.

3.4 Stable movement and even cultivation

NOTE! In order to achieve stable movement and an even cultivation result, it is important to ensure correct parallel alignment. For hydraulic mounting see “2.6 Adjusting parallel alignment, hydraulically mounted” see page 22 . For trailed mounting see “2.7 Adjusting parallel alignment, trailed” see page 23 .

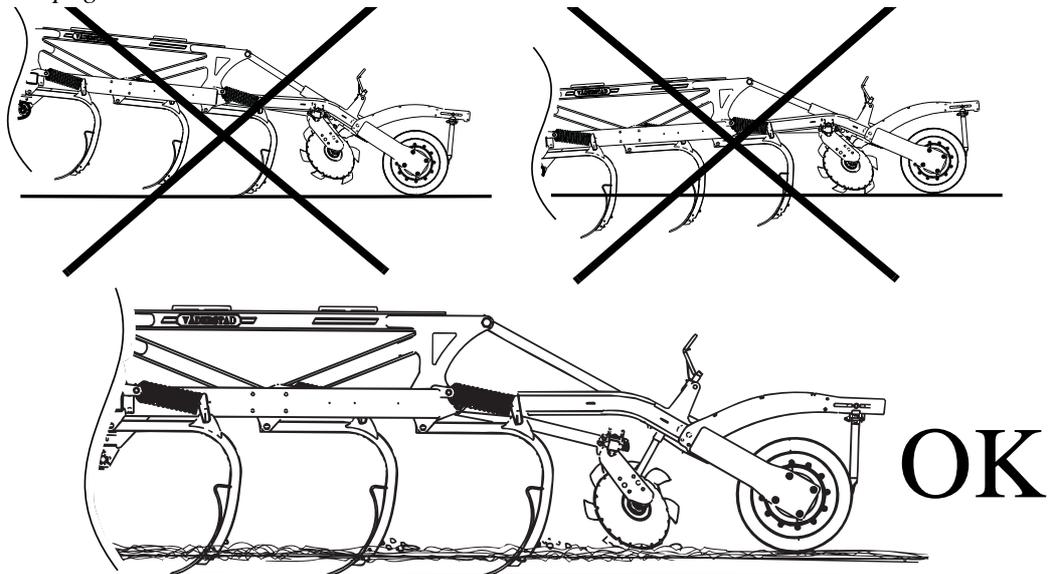


Figure 3.5

3.5 Levelling units

NOTE! The work results of the levelling units are often best if they are set in a relatively shallow position. If the working depth is wound down too far, this may cause the opposite effect, i.e. an uneven ground surface behind the implement.

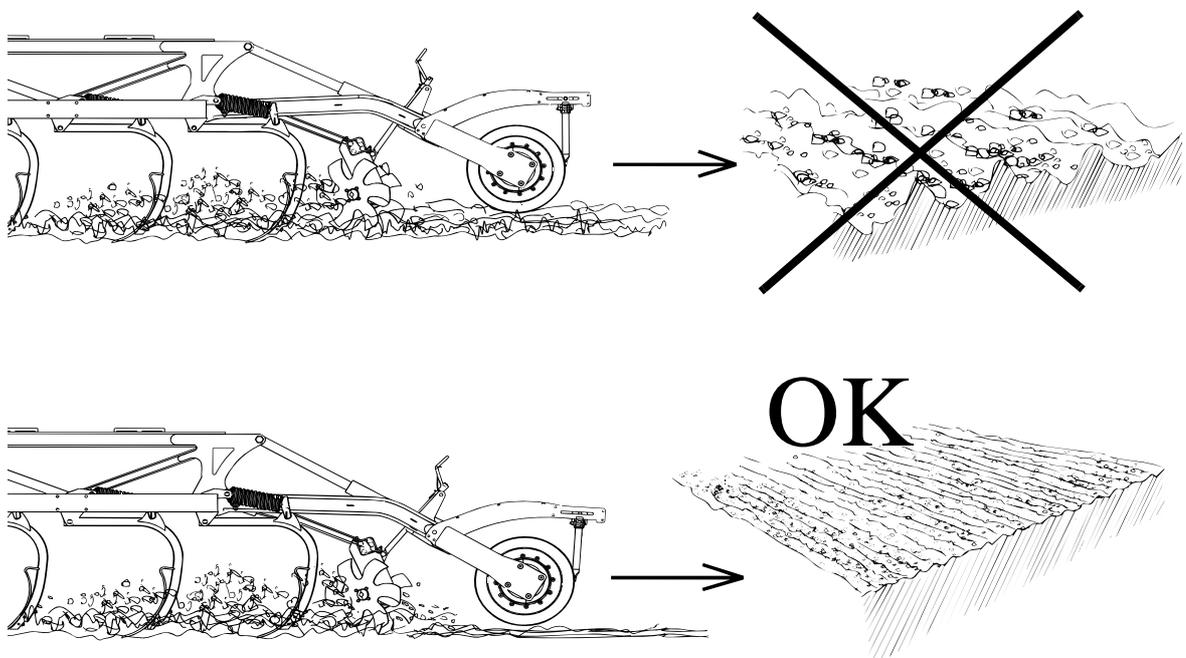


Figure 3.6

3.6 Levelling discs

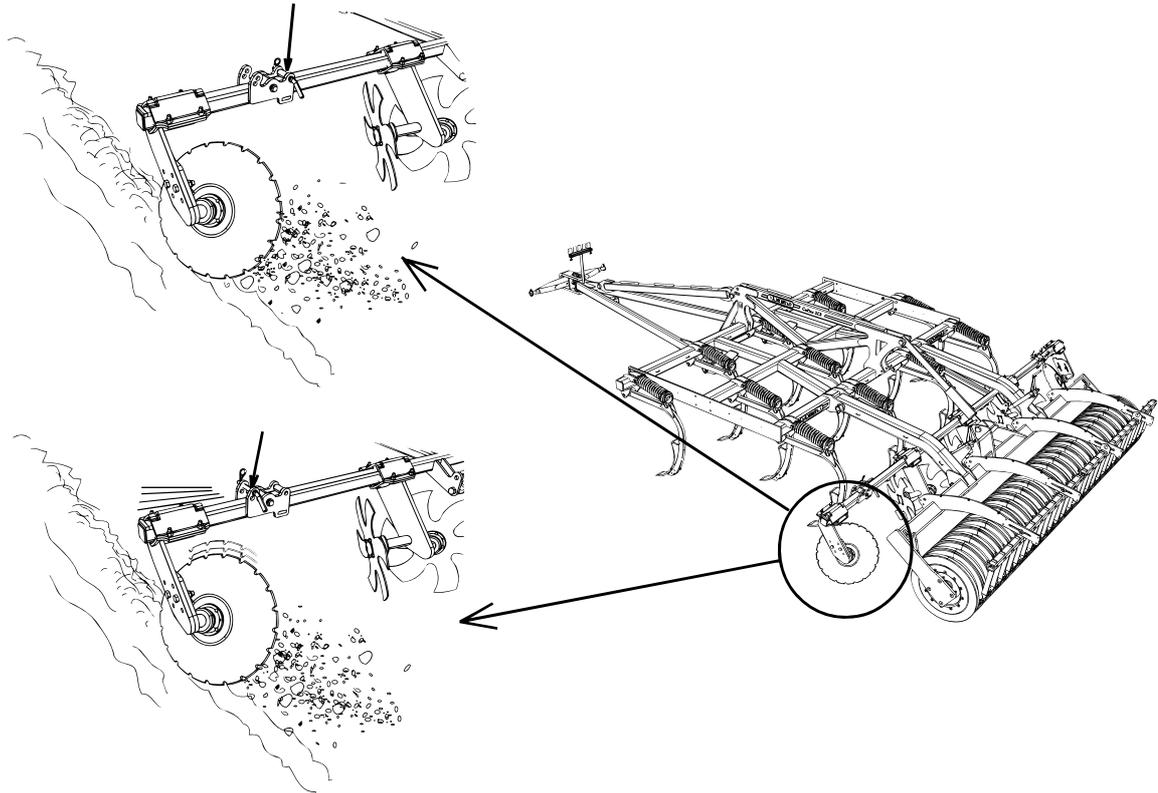


Figure 3.7

Levelling units are located outermost on either side. Depending on the working depth and the ground conditions, the links with the levelling units can be secured or remain flexible. A flexible link that produces less wear and tear is recommended.

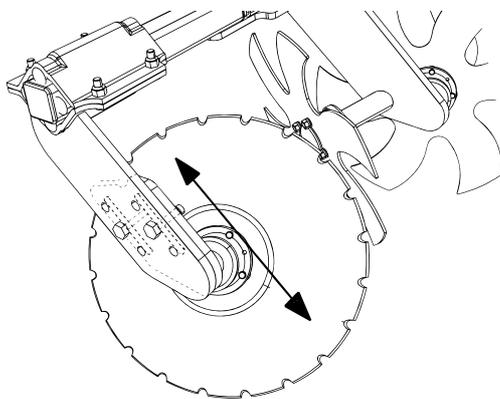


Figure 3.8

If you have levelling unit discs, these are individually adjustable. These enable optimum levelling in the corridors between each driven pass. Depending on working depth, soil type, etc., it may be necessary to perform adjustment to avoid the formation of trailing lea lines or furrows.

4 Service and maintenance

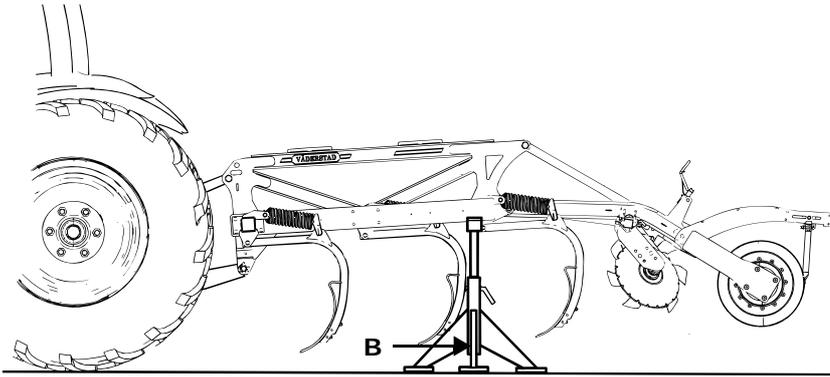


Figure 4.1

4.1 Securing implement during service, hydraulically mounted



! Never stand under the implement if it is only secured with the tractor's three-point lift!

- 1 Raise the machine in the lifting arms.
- 2 Secure the implement as far back as possible using two trestles (B) that are adapted for the weight, and ensure that the surface is stable. Note that you should not lift the machine higher above the ground than necessary.
- 3 Switch off the tractor and apply the parking brake.

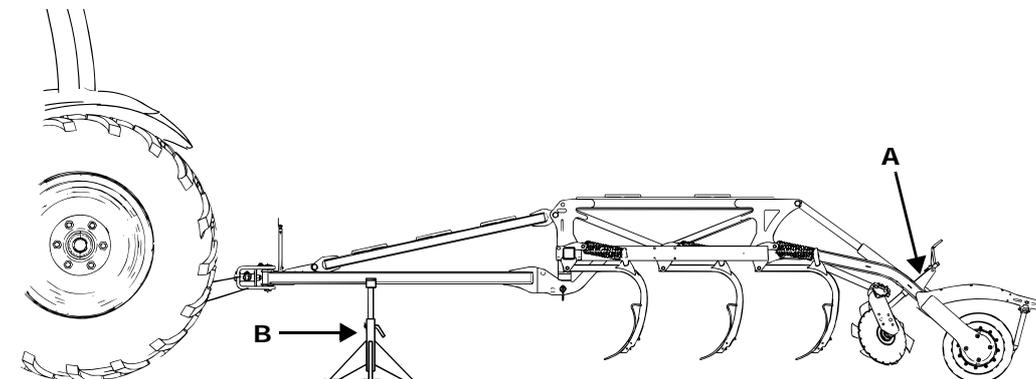


Figure 4.2

4.2 Securing implement during service, trailed



! Never stand under the implement if it is only secured with the tractor's three-point lift!

- 1 Press down the compaction roller fully.
- 2 Install all the supplied clips (A) on the ram rod.
- 3 Lower the implement to the ground and depressurise the hydraulics.
- 4 Secure the front part of the implement with a trestle (B) adapted for the weight, and ensure that the surface is stable.
- 5 Switch off the tractor and apply the parking brake.

4.3 General information regarding service



- Do not stand near hydraulic hoses under pressure. Recover any spilled oil after performing service on the hydraulic system.
- Always use Väderstad original spare parts to maintain the quality and reliability of the implement. If other makes of spare parts are used, all guarantee and claims commitments cease to be valid.
- Note that imperfect welding may result in serious injuries or fatality. If in doubt, contact a professional welding service for proper instructions.

4.4 Regular maintenance

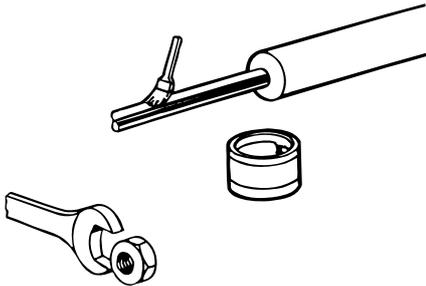


Figure 4.3

- Grease the implement according to the grease table intervals, and always prior to and after winter storage and after high-pressure water cleaning.
- Before driving, ensure that all bolts and nuts have been tightened (not applicable to bolts in flexible joints). During the season, make it a habit to regularly check that all bolts and nuts are tightened.
- When putting away the implement for the winter, grease the ram rod.

4.4.1 Lubrication chart, CS 300-400

Table 4.1

Pos.	Lubrication points	Interval	Lubricant	Number
A	Roller bearings	100 ha	Grease	2
B	Roller section mounting	100 ha	Grease	2
C	Hydraulic cylinder's ram rod head	100 ha	Grease	1
D	Mounting for tines	100 ha	Grease	2/tine

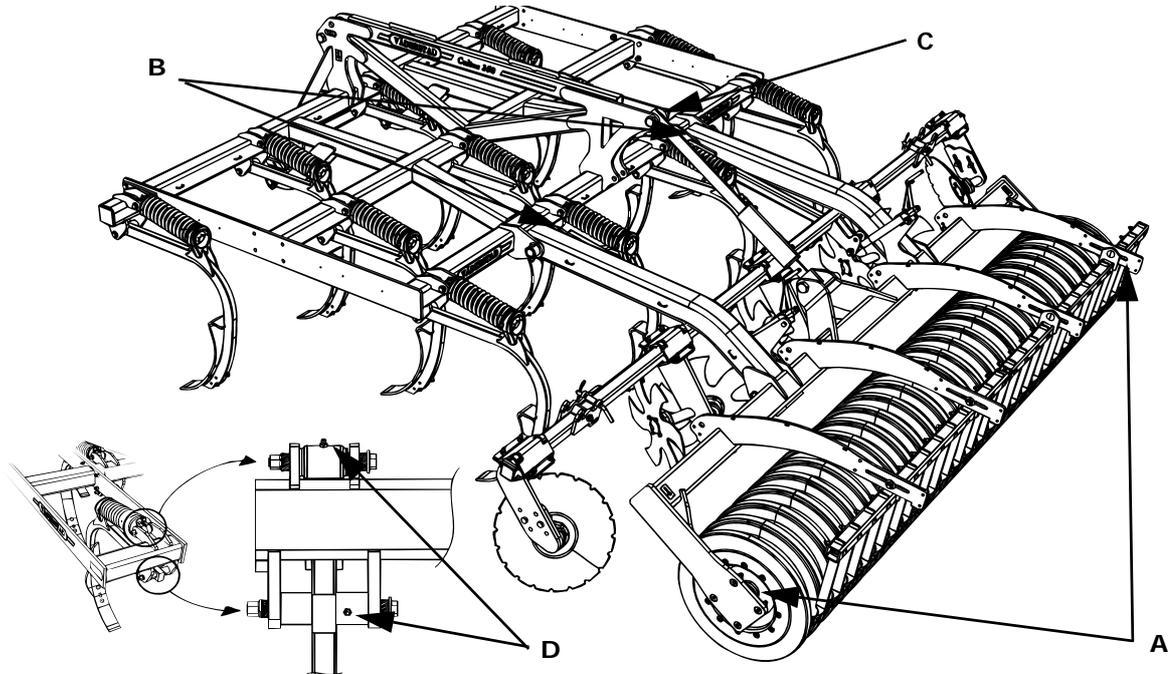


Figure 4.4

4.4.2 Lubrication chart, drawbar

Table 4.2

Pos.	Lubrication points	Interval	Lubricant	Number
D	Front joint	100 ha	Grease	1
E	Rear joint	100 ha	Grease	2

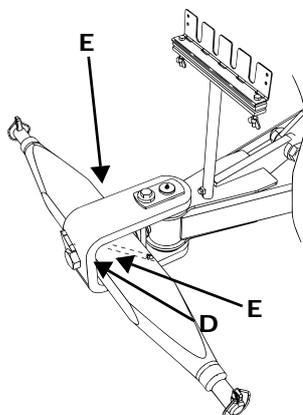


Figure 4.5

4.5 Retightening and checking the tine linkage

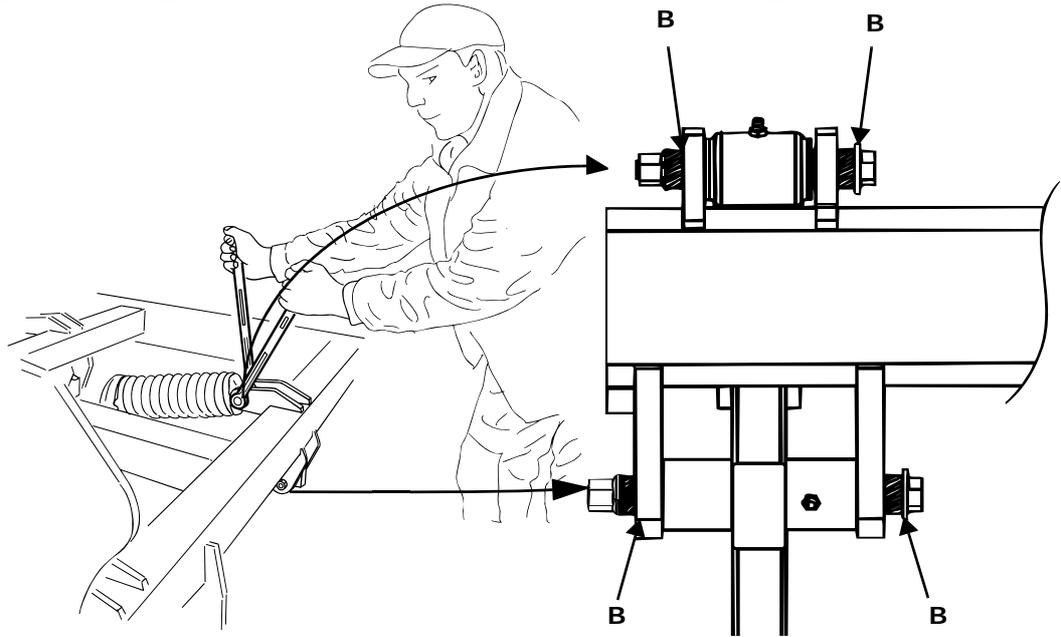


Figure 4.6

The screw connections in the tine linkage must be retightened after the first day of operation and thereafter at least once per season. If retightening is not carried out, considerable wear will occur in the tines' mounts. Tighten the screw connections to a torque of 114 Nm. Use a torque wrench.



Ensure that the sleeves (B) protrude by the same amount on each side of the mounting plates.

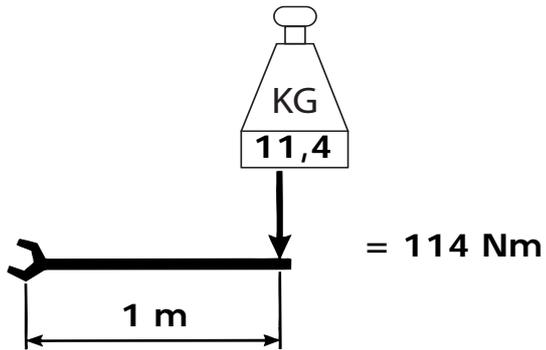


Figure 4.7

4.6 Dismantling the parts in the cultivator tine suspension system

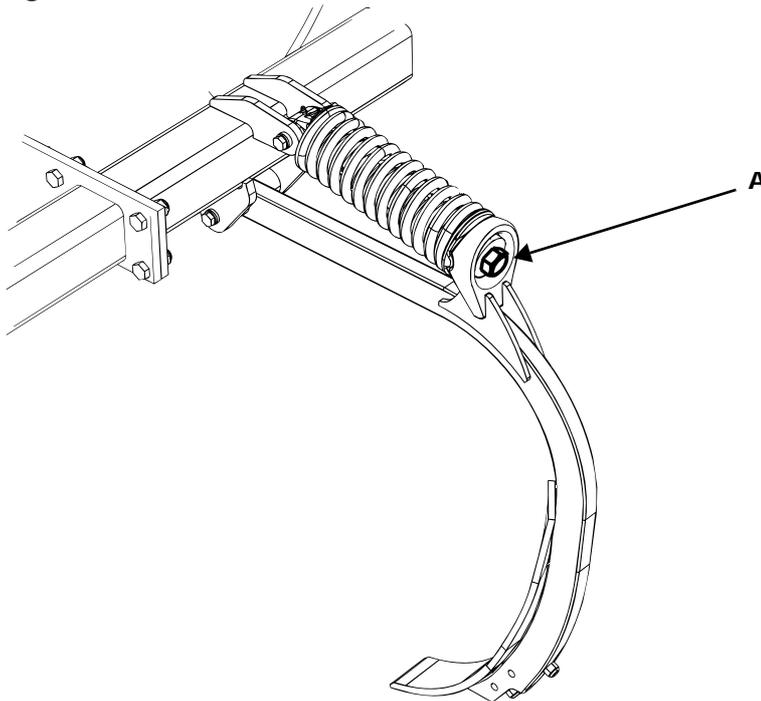


Figure 4.8

When dismantling the cultivator tines' springs, the spring locking bolts (A) must be fully loosened. The springs have a very high clamping force. By loosening the spring locking bolt, the pressure on the springs is relieved and parts can be replaced.

When installing, the springs' locking bolts (A) must be fully tightened to a torque of 665 Nm. Use a torque wrench.

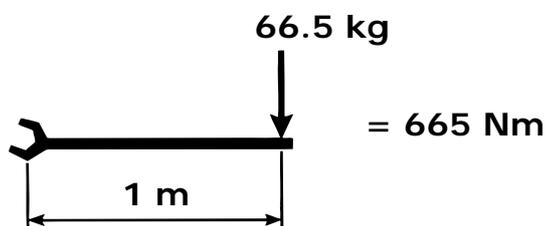


Figure 4.9

4.7 Service on rubber compactor

Apart from greasing of the bearings, the roller ring units usually do not require any maintenance. If there should ever be a need for disassembly, please contact the dealer.

4.8 Service on steel compactor

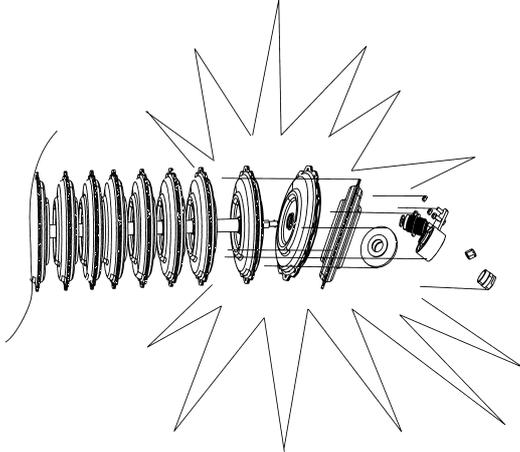


Figure 4.10

Apart from greasing of the bearings, the roller ring units do not normally require any maintenance. The roller ring units feature auto tensioners.



NOTE! Never dismantle a roller ring unit. The unit has been pressed together with a force of 4 tonnes and there is a risk of injury in case of attempts to disassemble the unit. If there should ever be a need for disassembly, please contact the dealer.

4.9 Bleeding the hydraulic cylinder

In order to bleed the hydraulic cultivation, manoeuvre the ram rod between its outer and inner limit positions. Hold for a short while in each limit position and repeat a few times until any air has been evacuated. During bleeding, the cylinder must be installed in the implement!

5 Hydraulic diagram

5.1 CS 300-400

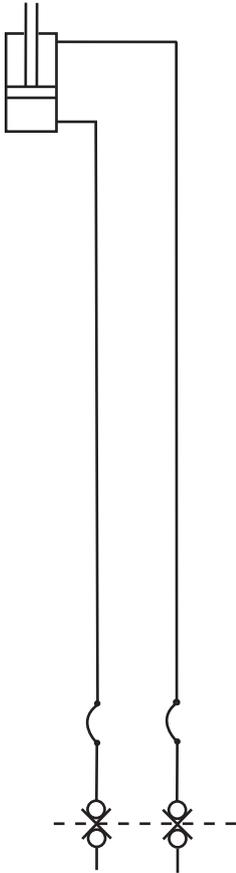


Figure 5.1

6 Technical data

6.1 CS 300-350 with steel compactor

Implement, CS	300	350
Working width (m)	3,0	3,5
Transport width (m)	3,0	3,5
Height (m)	1,4	1,4
Transport height, approximate (m)	1,8	1,8
Weight (kg)	2200	2400
Centre of gravity, (A) according to "Figure 6.1" (mm)	2200	2200
Power requirement (hp)	100-140	120-160

! The machine is optimised for use together with a tractor of up to 160 hp (118 kW) when working.

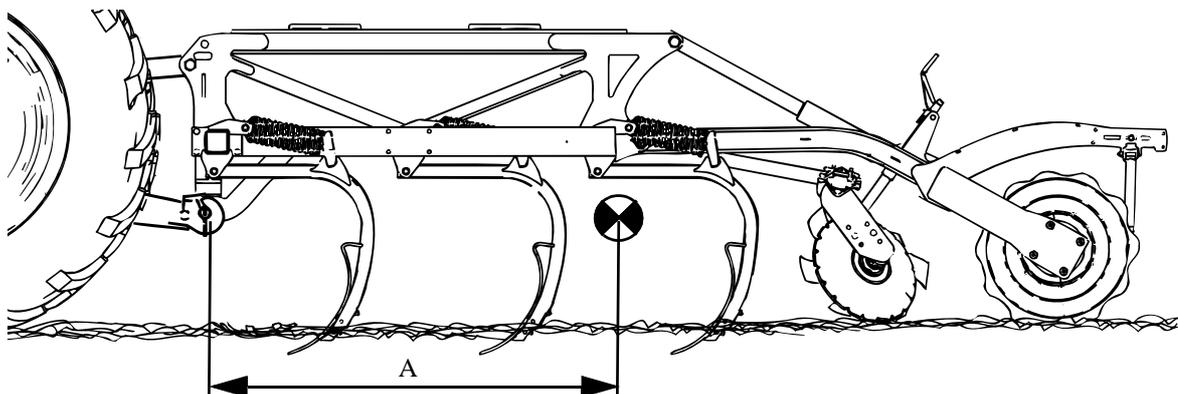


Figure 6.1

6.2 CS 300-400 with rubber compactor

Implement, CS	300	350	400
Working width (m)	3,0	3,5	4,0
Transport width (m)	3,0	3,5	4,0
Height (m)	1,4	1,4	1,4
Transport height, approximate (m)	1,8	1,8	1,8
Weight, without drawbar (kg)	2200	2400	
Weight, with drawbar (kg)	2400	2600	2800
Centre of gravity without drawbar, (A) according to "Figure 6.2" (mm)	2130	2120	
Hitching weight on tractor, implement with drawbar (kg)	650	720	740
Axle weight (kg)	1750	1880	2060
Power requirement (hp)	100-140	120-160	140-200

! The CS 300-350 is optimised for use together with a tractor of up to 160 hp (118 kW) and the CS 400 for a tractor of up to 200 hp (147kW) when working.

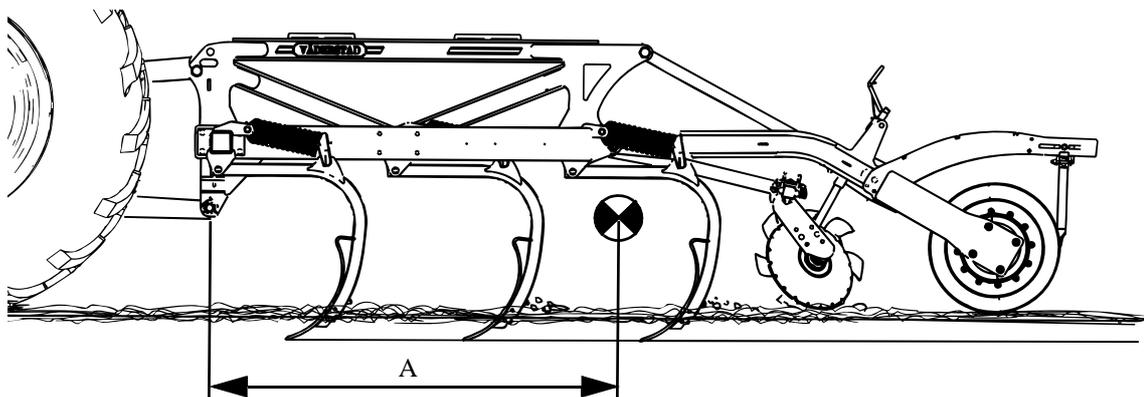


Figure 6.2

6.3 CS 300-350 with cage roller

Table 6.1

Implement, CS	300	350
Working width (m)	3,0	3,5
Transport width (m)	3,0	3,5
Height (m)	1,4	1,4
Transport height, approximate (m)	1,8	1,8
Weight (kg)	1800	2000
Centre of gravity, (A) according to "Figure 6.3"(mm)	1870	1840
Power requirement (hp)	100-140	120-160

! The machine is optimised for use together with a tractor of up to 160 hp (118 kW) when working.

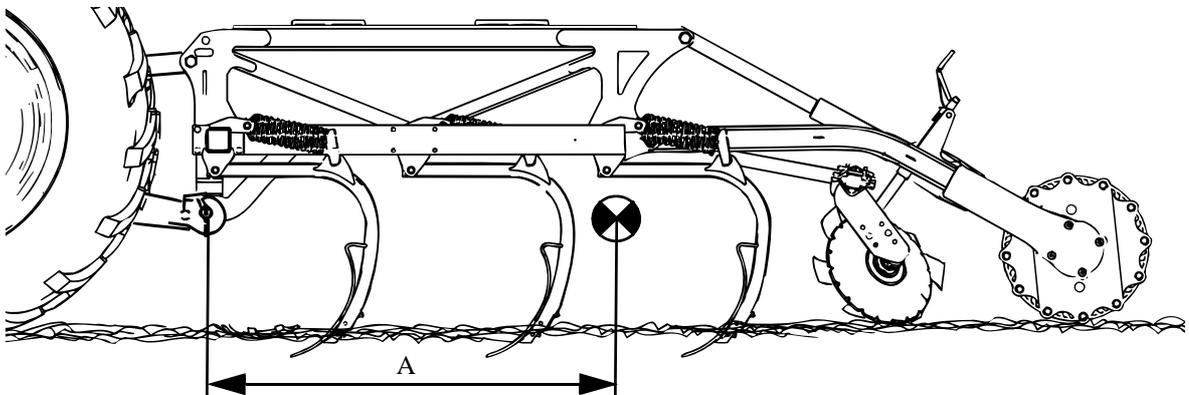


Figure 6.3



590 21 VÄDERSTAD

Telefon 0142-820 00
Telefax 0142-820 10
www.vaderstad.com

S-590 21 VÄDERSTAD
SWEDEN

Telephone +46 142 820 00
Telefax +46 142 820 10