Quick Start

Spirit R

903173-en
01.03.2017-1

STR 300S

S/N STR0000101 -

VÄDERSTAD

This QuickStart does NOT replace the instruction manual that contains much more detailed information!

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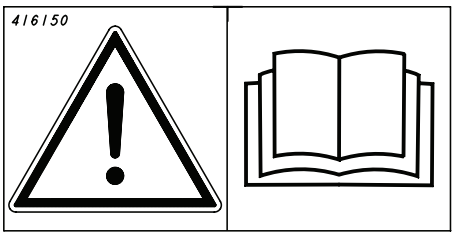
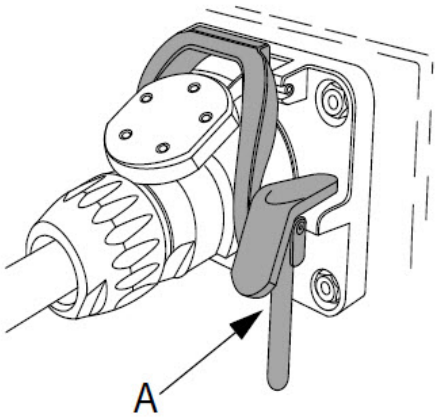


This Quickstart does not replace the instruction manual!

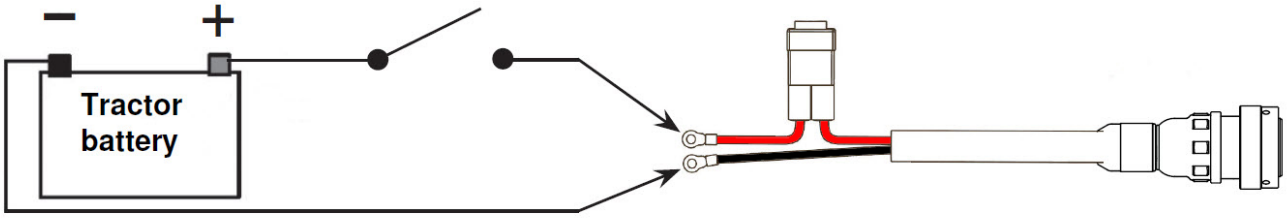
1. Electrical installation in tractors

Connect the GateWay cable if the tractor has an ISOBUS terminal.
Lock the terminal using the locking bolt (A).



If the tractor is not equipped with an ISOBUS switch, tractor cabling is available (Accessories, parts no. 172447).
Use the heavy cables and connect in and after the main power switch.

The tractor's main power switch



2. Installation of hydraulics

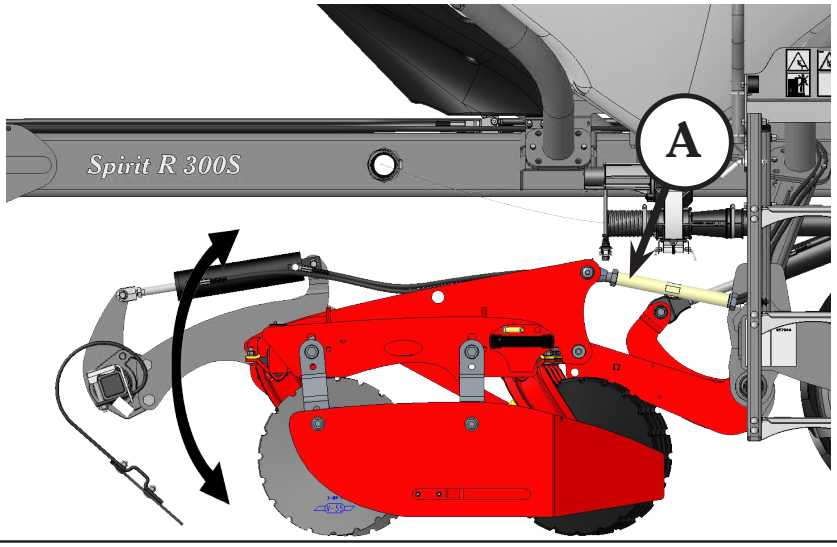
	Circuit	Function	Requirements
1.	Yellow circuit –	The main circuit for lifting, lowering, bout marker arms and operation of front tools.	Approx. 40 l/min
2.	Black circuit -	Circuit for fan operation, drill coulter pressure and following harrow pressure.	approx. 30 l/min. with variable flow (preferably prioritised).
3.	White circuit –	Operation of CrossBoard.	approx. 20 l/min
4.	3/4" hose -	Free return	NOTE: Max. 5 bar in counterpressure.

Settings

NOTE: The frame must be parallel with the ground when the basic settings are entered!

1. Front tool System Disc

If the front and rear discs have different distances to the ground, adjust the push rods (**A**) in order to bring the front and rear discs to the same distance to the ground.

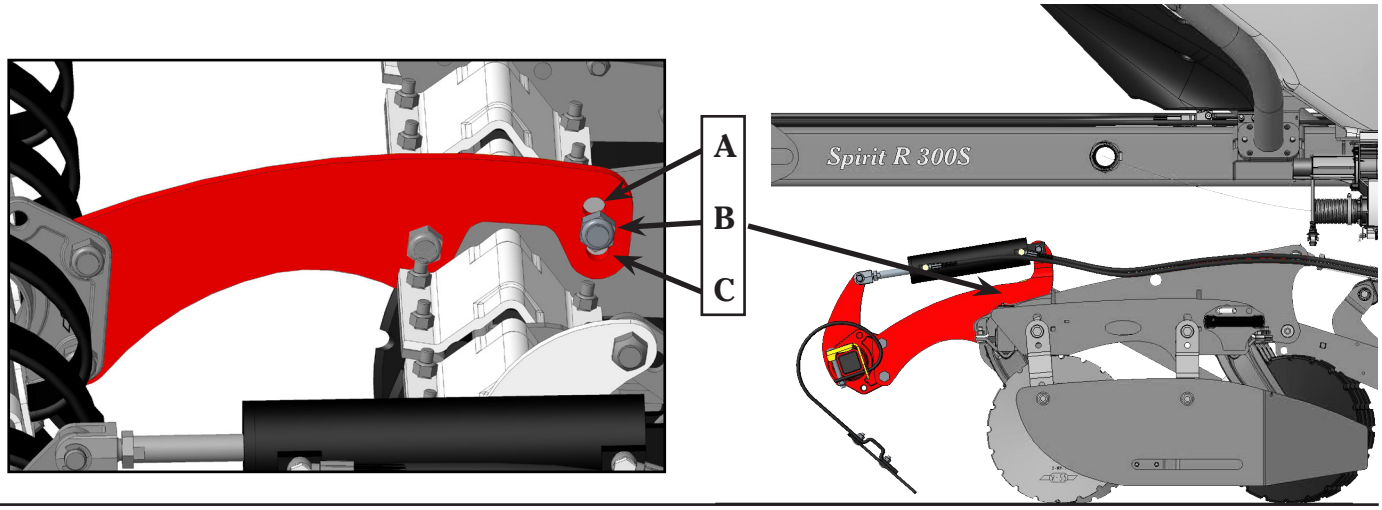


2. CrossBoard

The relationship between CrossBoard and SystemDisc can be set to three different values:

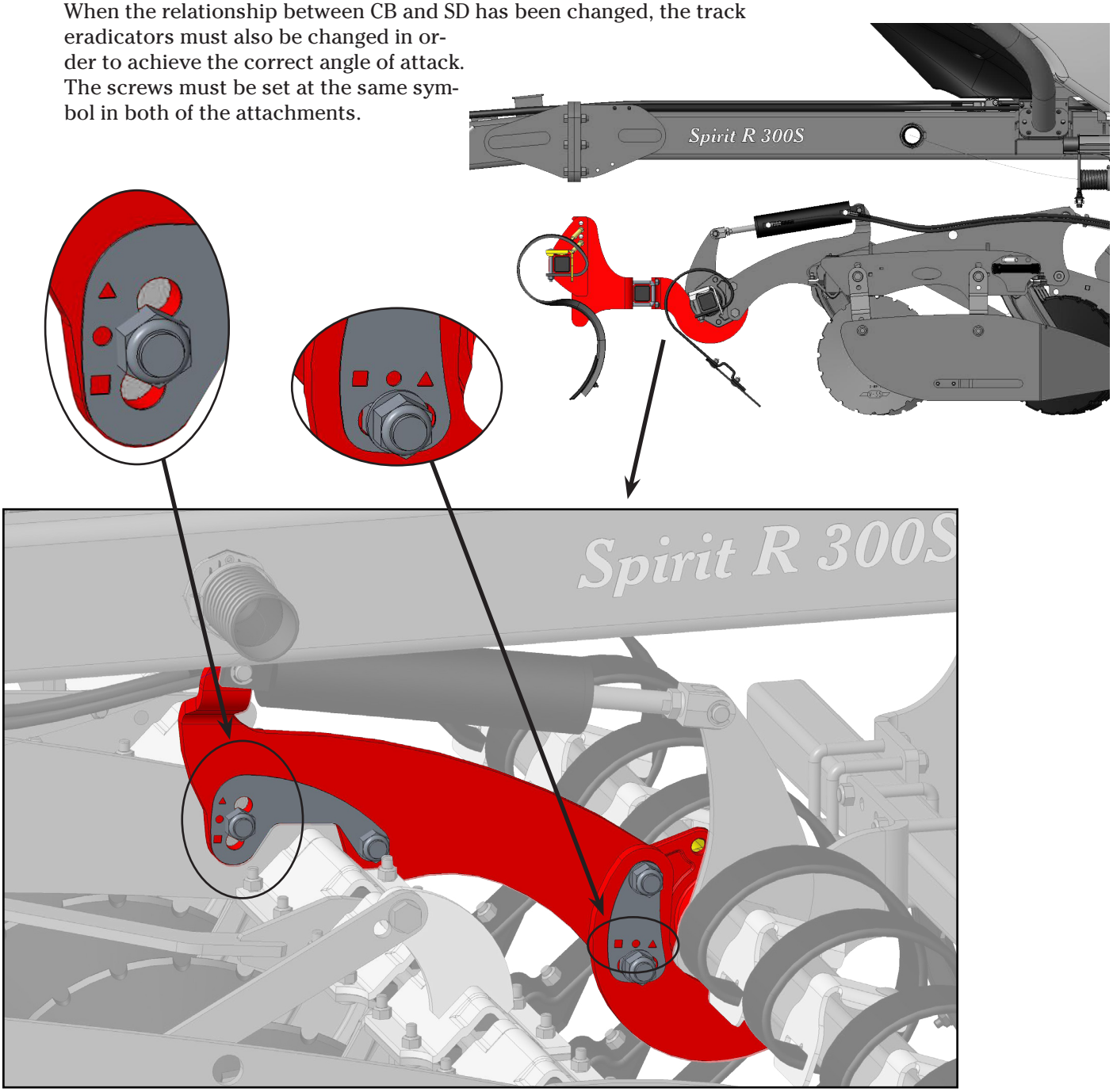
- **A** CrossBoard far up in order to go deeply with SystemDisc.
- **B** Normal position.
- **C** CrossBoard far down if you do not want to use SystemDisc.

NOTE: If the machine is equipped with a track eradicator, this must also be rest when the CrossBoard is adjusted. See next page.



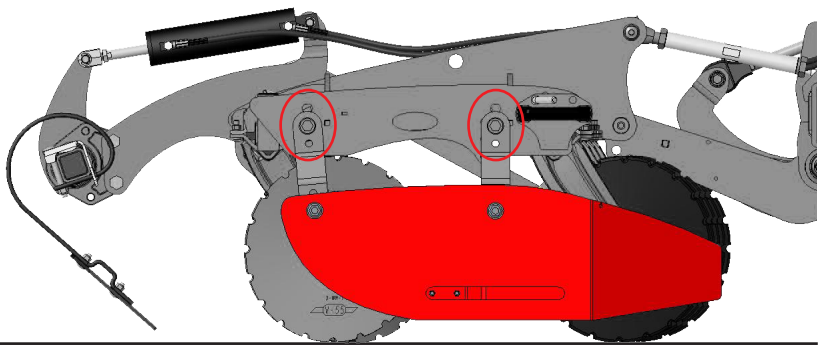
3. Track eradicator

If the machine is equipped with CrossBoard and a track eradicator there will be two control plates by the arm attachments.
When the relationship between CB and SD has been changed, the track eradicators must also be changed in order to achieve the correct angle of attack.
The screws must be set at the same symbol in both of the attachments.

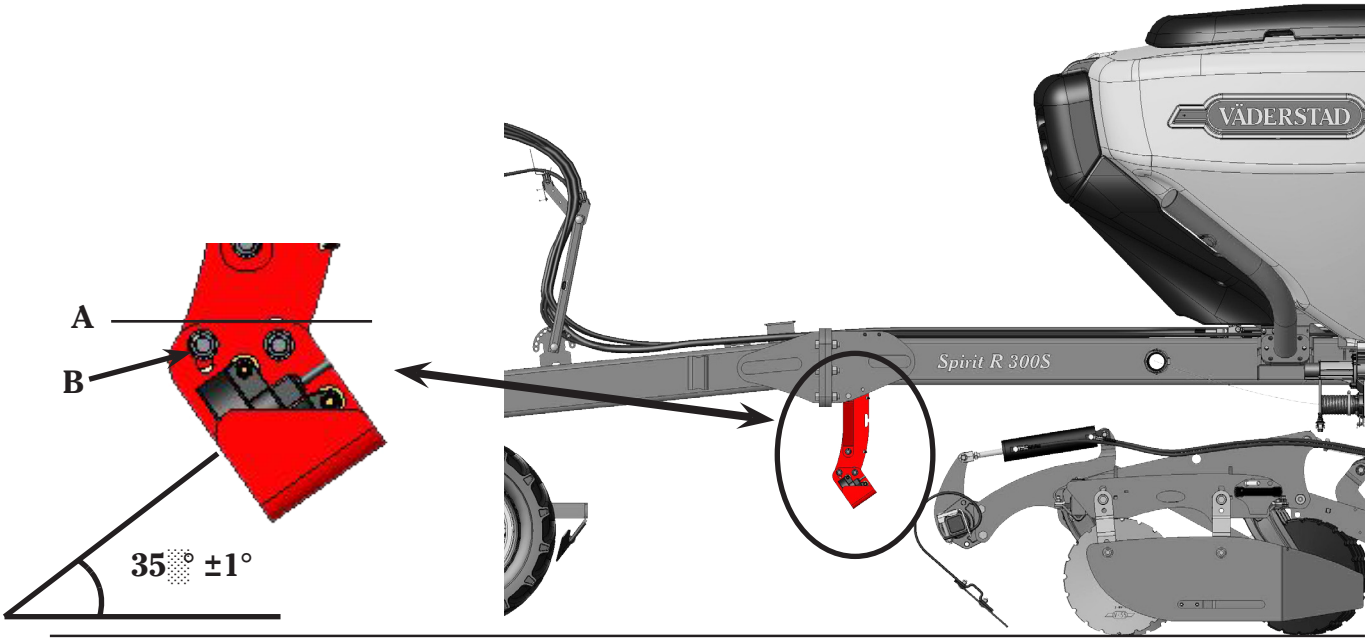


4. Spill prevention plates

The relationship between SystemDisc and the spill prevent plates can be adjusted. The basic setting is in the centre position and this does not usually need to be changed.



5. Radar



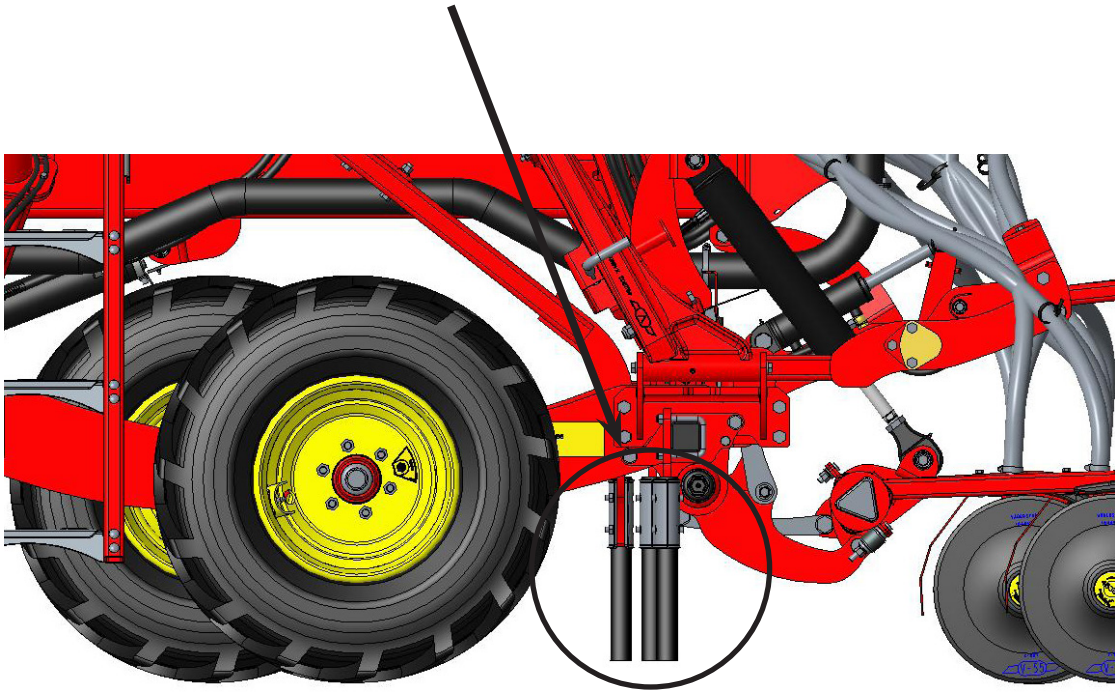
The radar angle must be adjusted. The angle must be 35° ± 1° in relation to the soil surface. The angle of the radar is optimal when the surface (A) is parallel to the soil surface. Remove the screws and adjust the bracket along the oblong holes (B).
It is often beneficial to calibrate the radar for an exact report. Look in the instruction manual.

6. Repacking/Transport wheels

In humid conditions, on adhering soils you can move two of the wheels 90 mm backwards for greater clearance to the frame.
The machine is more stable with the wheels in the standard position (greater offset).

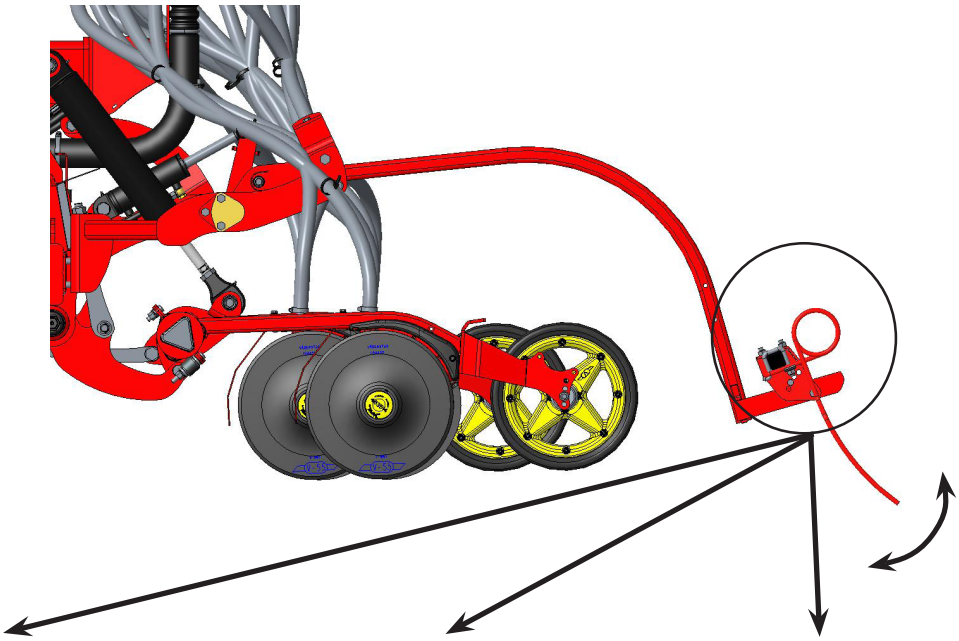
7. Light soil kit (accessory)

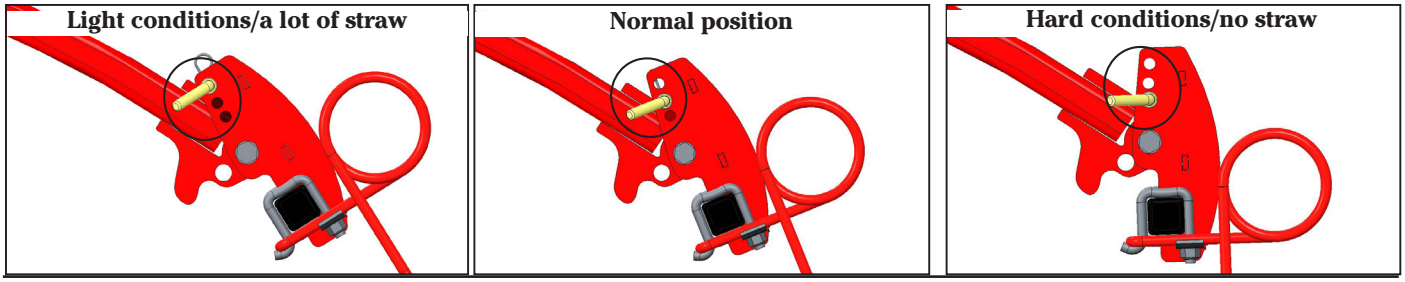
Adjust the rubber rods so that they are away from the bank that can form between the repacking wheels on light soils.



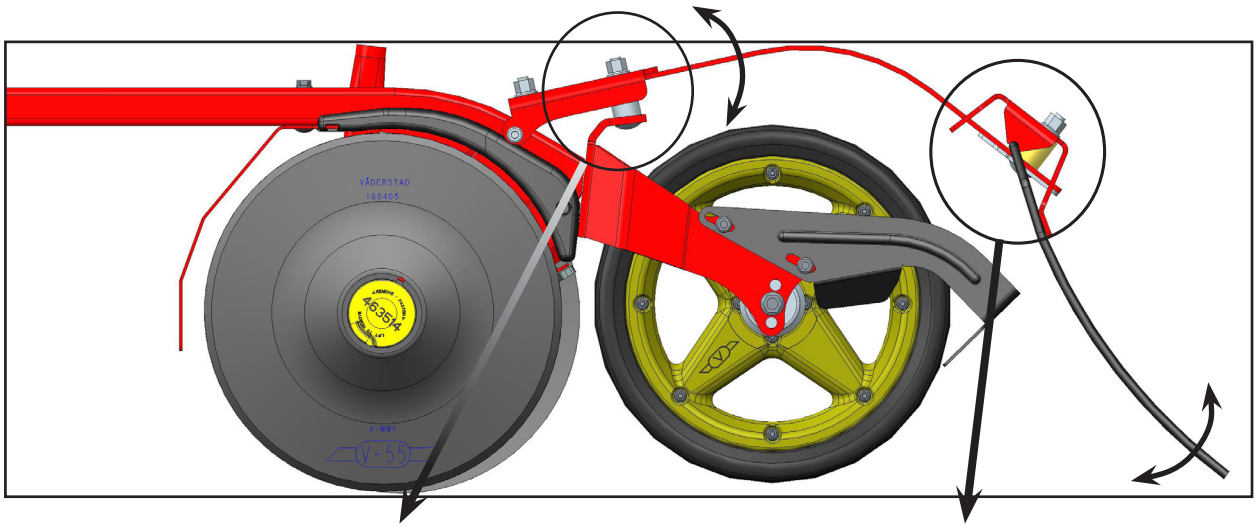
8a. Following harrow - “Heavy” model

The weight of the “heavy” following harrow is relived from E-Control. The following harrow can also be set with different angles of attack to the soil:



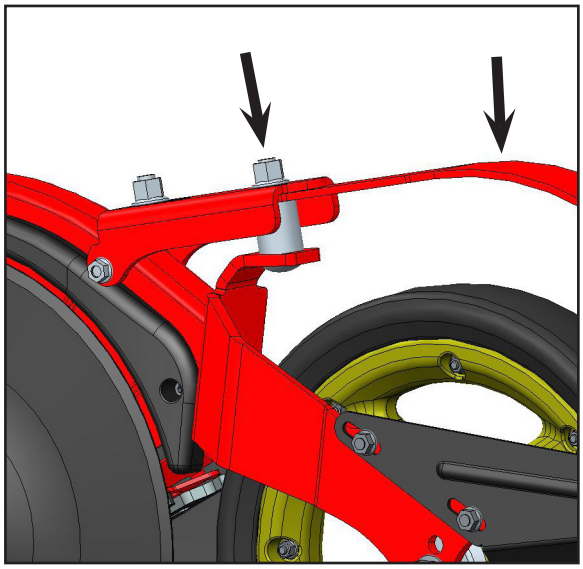


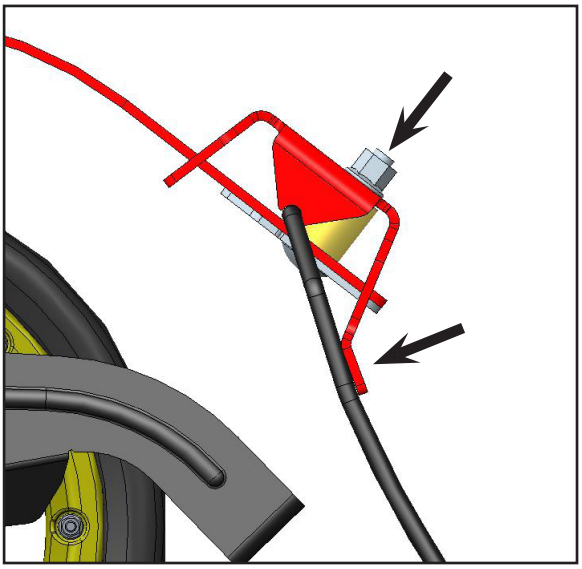
8b. Following harrow - “Light” model



Tighten the nut in order to give the following harrow more weight.

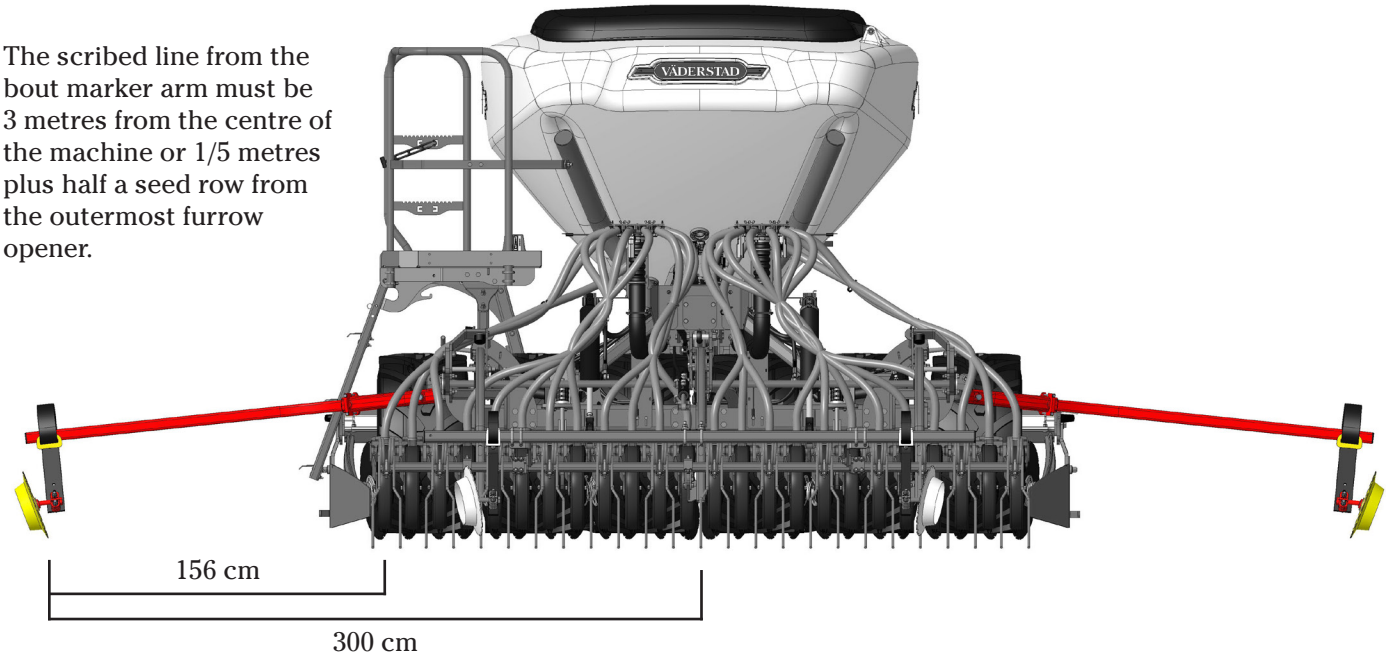
Tighten the nut to achieve a more aggressive angle for the following harrow.



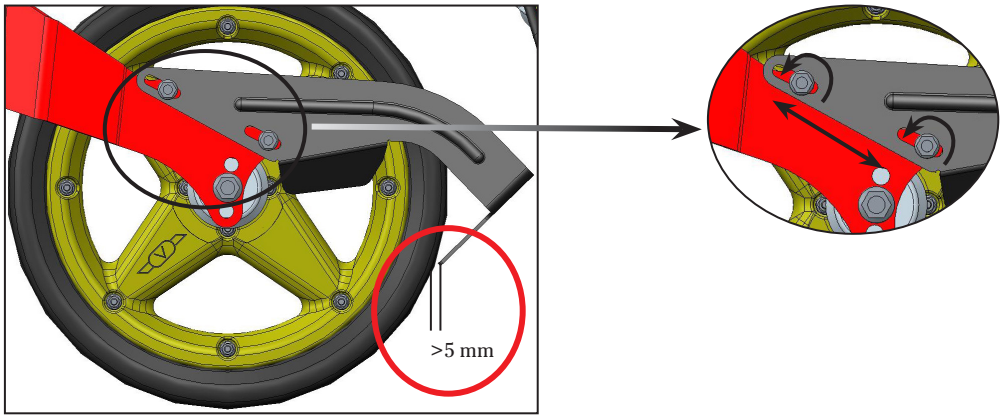


9. Bout marker arms

The scribed line from the bout marker arm must be 3 metres from the centre of the machine or 1/5 metres plus half a seed row from the outermost furrow opener.



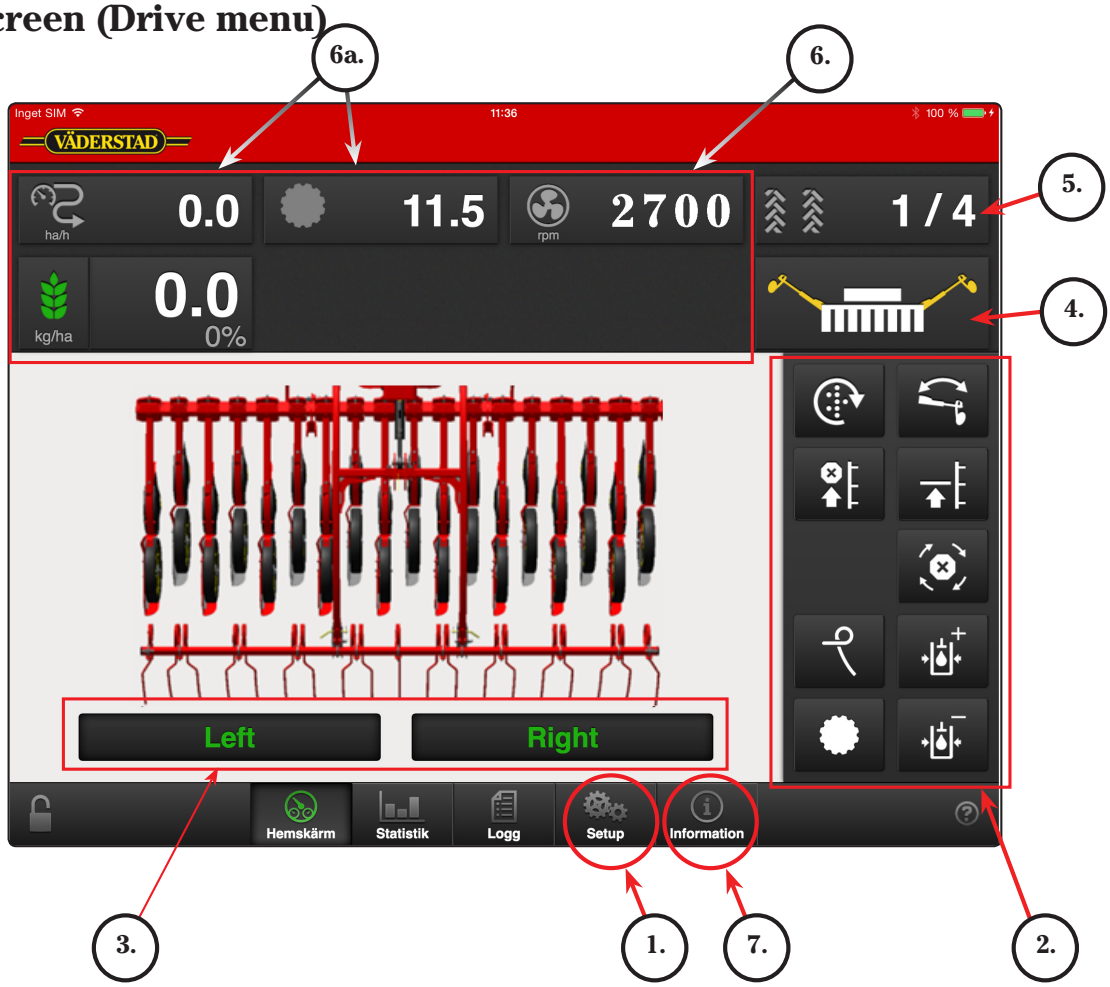
9. Scraper



E-Control

Before each season, you should connect your iPad to the Internet and open E-Control to check whether any new updates have been released. See attachment 2.

Home screen (Drive menu)

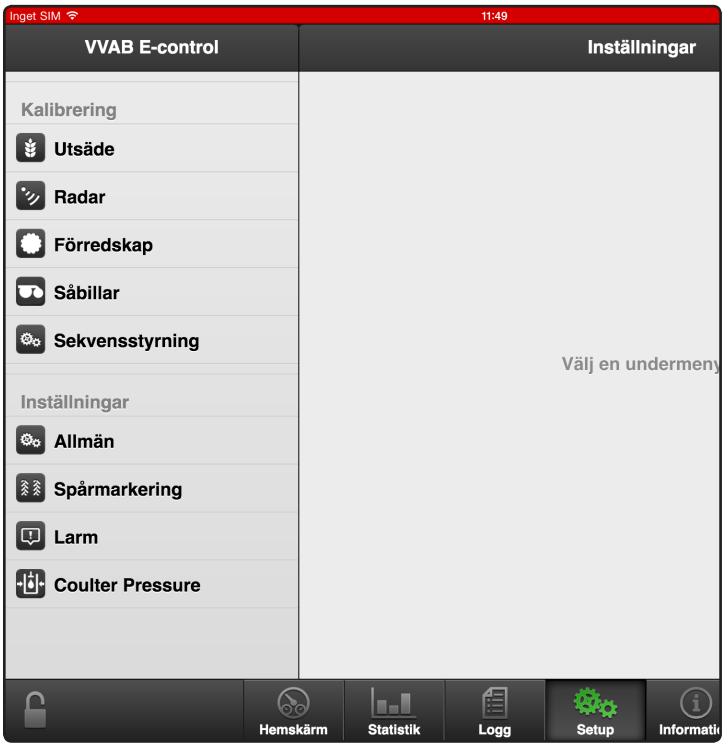


1. Setup, see next page.
2. Drive checks (page 15).
3. Half machine shut-off:
4. Manual selection of bout marker arm (Left, Right, Both or None).
5. Tramlining (page 17). See the instruction manual for how to change the cycle.
6. Monitoring, seed amount, adjustable sensor, on and off, fan speed.
   6a. Buttons that can select: Deep SystemDisc, Coulter pressure, Area, Area/hour and Speed.
7. Information menu. Alarm history and service menu.

1. Setup

Press Setup to access:

a. Calibration of delivered seed
b. Calibration of radar
c. Basic Settings Front Tools
d. Basic Settings Drilling Unit
e. Basic Settings Sequence Control



See the instruction manual for general settings:

General (Machine basic settings)
Tramlining.
Alarm settings
Basic settings of coulter pressure.

If you access any of the calibration menus, a pop up will appear:

NOTE: Feed output stops if you access any of the calibration menus!

Select Yes.

1a. Calibration of delivered seed

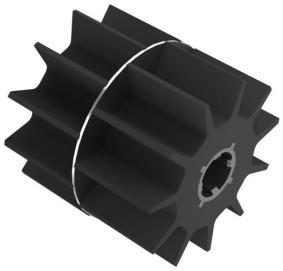
A number of things need to be considered before commencing the calibration:

Refer to Attachment 1 for Calibration and setting of sowing depth.

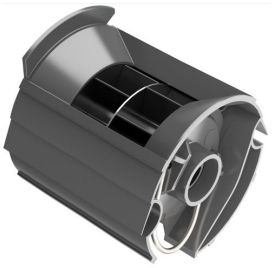
- Which seed box roller is suitable for the crop that is to be sewn (Refer to the calibration table)?
  Spirit R i supplied with three different rollers for the seed feed housing as standard:
  Grain roller 400 cc (e.g. wheat, etc.) , grass roller 120 cc (grassland, flaxseed, etc.) and an oil plant roller (rape, etc.).

NOTE: When changing roller: Clean the seed feed housing internally where the roller is to sit and externally around the flange at the motor so that the new roller can be properly installed!

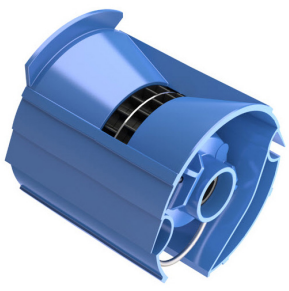
Grain roller 400 cm³



Grass roller 120 cm³



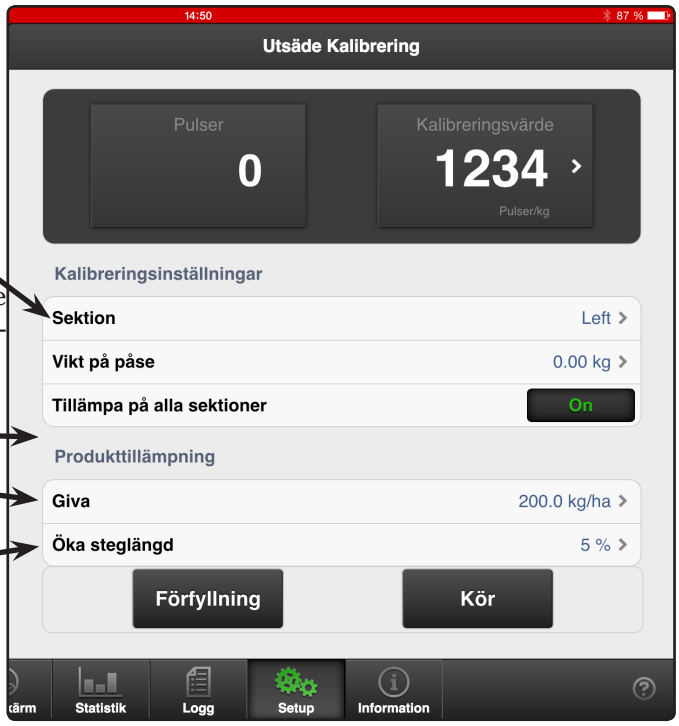
Rapeseed roller 18 cm³



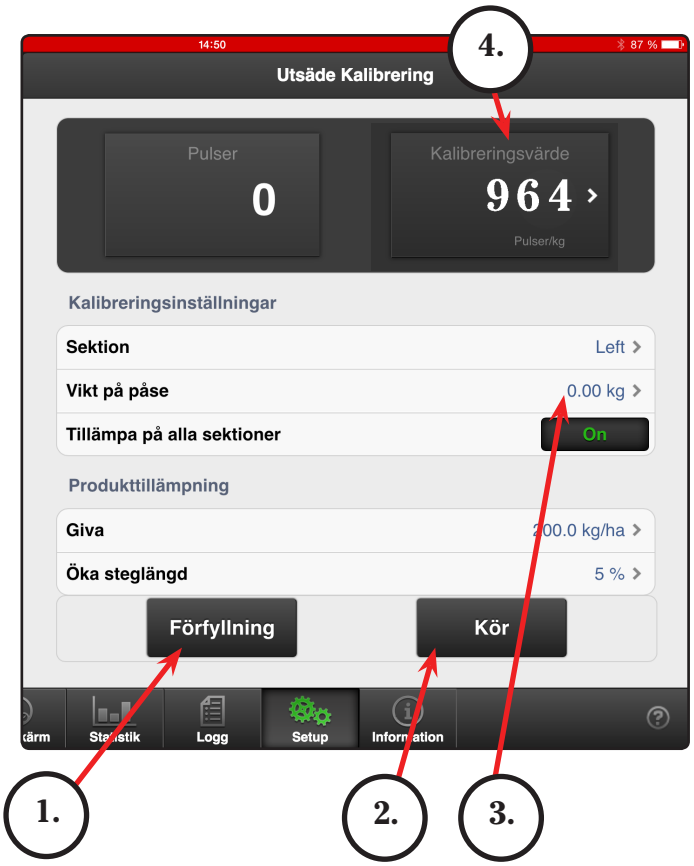
Special rollers can also be purchased for the machine.

- Is the low level sensor in the correct position?
- Refer to Attachment 1 for other sowing settings.

Contd. from previous page.



1. Selection of which side you would like to calibrate on (Left/Right).
2. If you know that both of the output boxes produce the same number of pulses per kilo, you can choose to conduct a calibration on one side (Väderstad recommends always calibrating both). The value that is entered will then be automatically saved for both of the sections.
3. Enter the required seed application rate (kg/ha)
4. Enter the required increase/decrease of variable application rate in %.
5. Place the calibration bag on the selected seed feed housing.



6. Press pre-fill (1) to fill the feed roller.
5. Empty the calibration bag and put it back onto the seed mater.
6. Press Run (2) to fill the bag with grain. Pulses are now counted for as long as the button is pressed in.
7. Weigh the contents of the bag.
8. Enter the value (3) and E-Control will calculate the number of pulses per kilo (4).

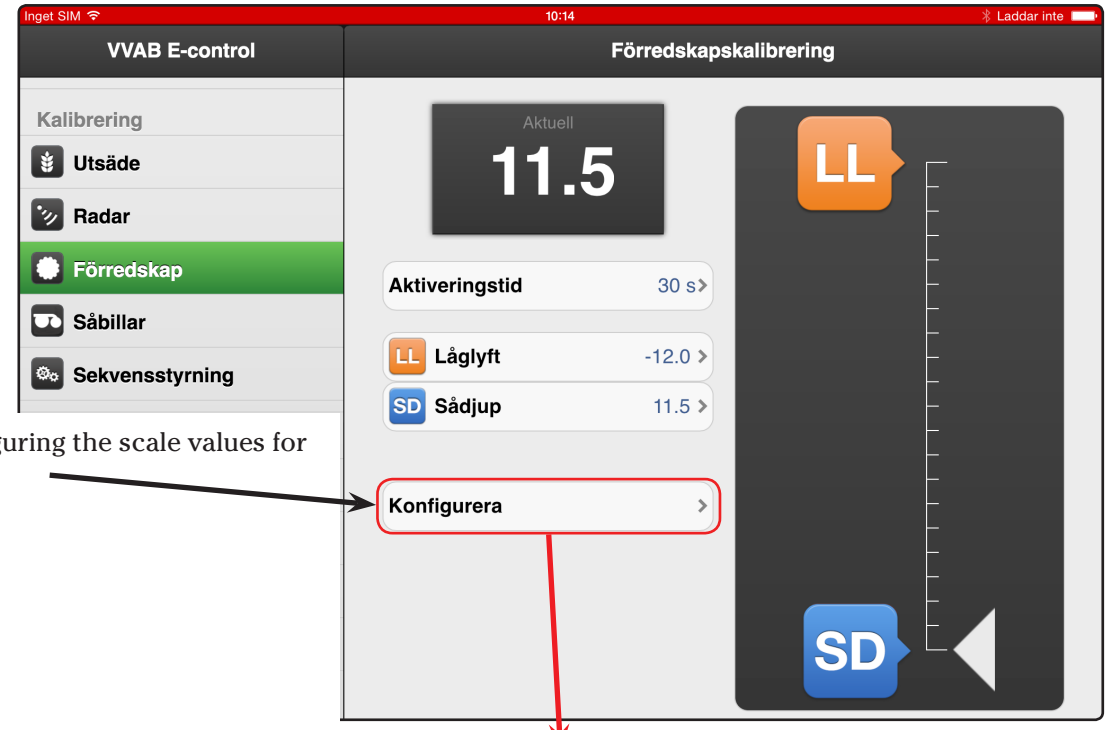
It is also possible to manually enter the number of pulses per kg by selecting Calibration value (4) and then changing it to the selected value.

Refer also to Attachment 1, Sowing depth for further advise and calibration table.

1b. Radar

It is always beneficial to calibrate the radar for an exact report. Refer to the instruction manual.

1c. Basic settings front tools



- Begin by configuring the scale values for the front tool.

1. Lower the front tool so that the discs exactly touch the ground.

   Press:

   and enter the current scale value.

2. Fully raise the front tool, press:

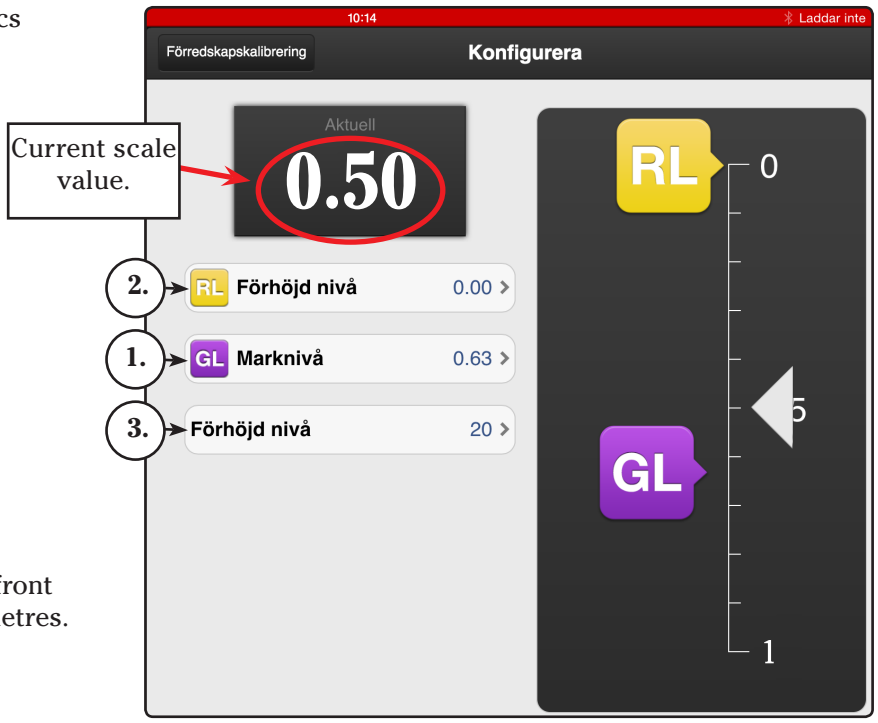
   and enter the current scale value.

3. Measure the distance between the front tool discs and the ground in centimetres.

   Press:

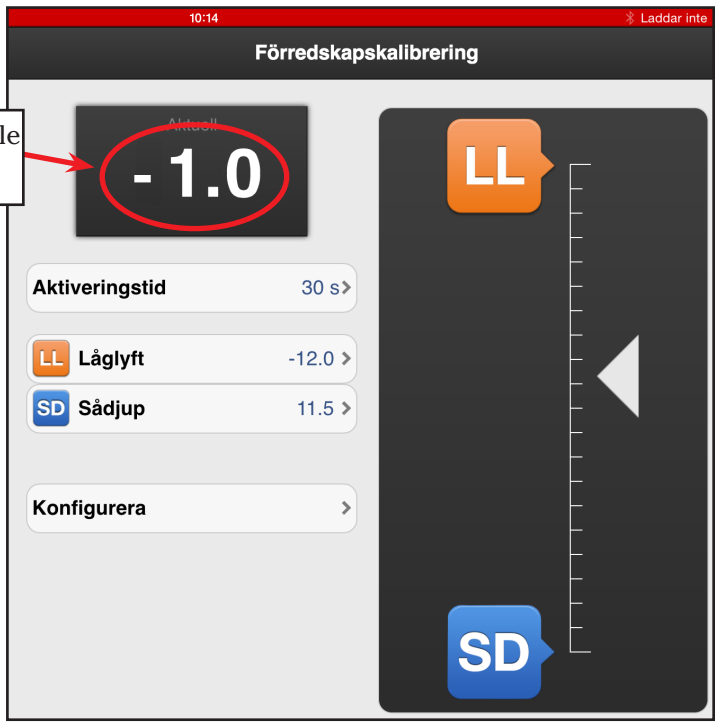
   

   Enter the height to the ground in cm.



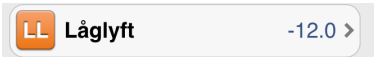
Return to the front tool calibration by pressing:

After the configuration has been completed, the ground level will be equal to 0, above ground will be minus and below will be positive (in the example next to this SystemDisc is therefore approx. 1 cm above the ground).



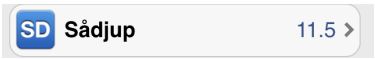
The activation time indicates how long the depth setting for SystemDisc is active in the run menu.

- Lift SystemDisc to the intended low-lift position.

- Press 

- Enter current scale value.

- Lower SystemDisc to the intended working depth.

- Press 

- Enter current scale value.

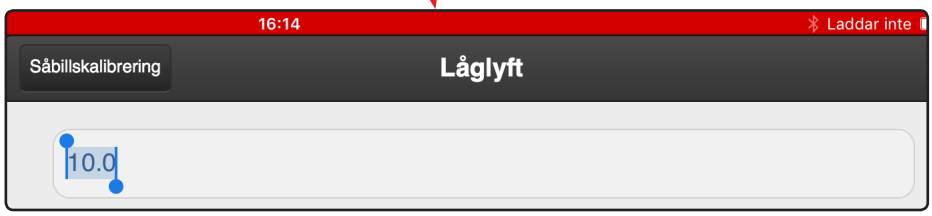
- Finished!

1d. Basic settings Drilling unit

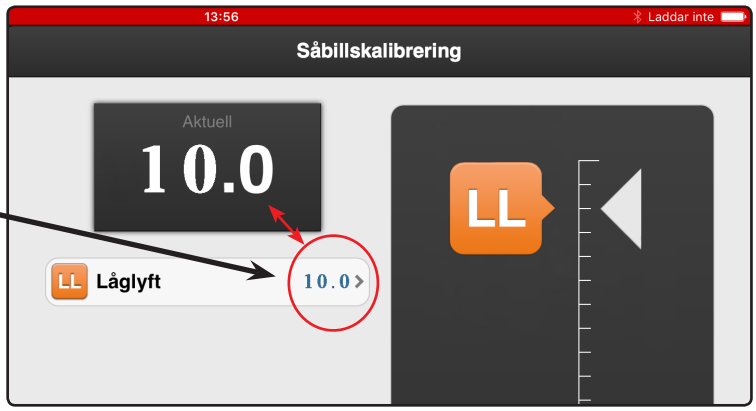
Setting of low-lift position for the drilling unit.

Lift the drilling unit with the yellow circuit to the desired low-lift height.

- Press Low-lift.



- Enter the current scale value (10.0).



- The Low-lift position is now set!

E-Control

1e. Basic Settings Sequence control

With the sequence control active the whole seed drill does not need to be up on the headland before lifting and when it is lowered the front tool will be lowered first, followed by the seed coulter.

Option to deactivate seed coulters and front tool so that they stop upon lowering.

- Time from the front tool leaving the low-lift position until the drilling unit begins to be lowered.
- Time from the front tool leaving the working depth until the drilling unit begins to be raised.
- Distance from the front tool leaving the low-lift position until the drilling unit begins to be lowered.
- Distance from the front tool leaving the working depth until the drilling unit begins to be raised.

Both time and distance are used, and it is the one that is first reached that activates the sequence.
For example, if you reverse out into a corner in order to begin stagnant sowing, it is therefore time that starts the sequence.

For the above setting it would therefore be:

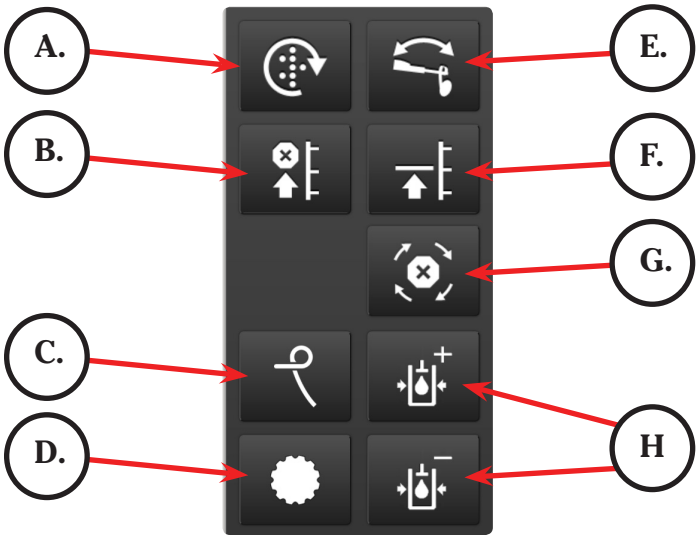
When lowering

The drilling unit begins to be lowered 0.5 m or 0.5 seconds after lowering commences.

When raising

The drilling unit begins to be raised 1 m or 1 second after raising commences.

2. Drive checks

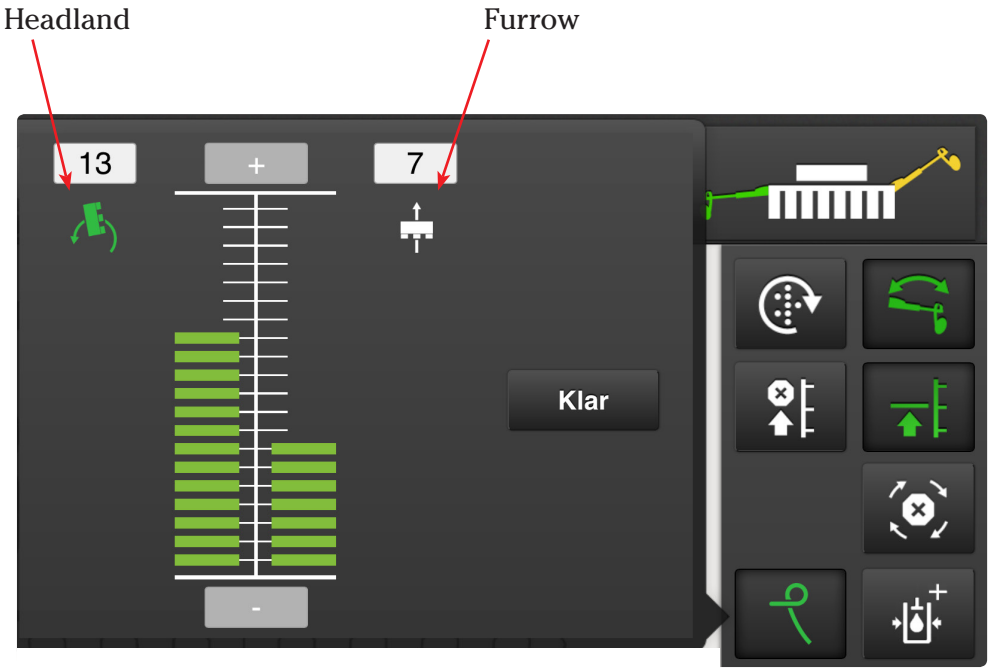


A. Manual feed output.
If you want to start feed output from a stationary position, e.g. in a corner, or during output verification, press and hold the button marked in green.
Speed can be pre-selected in Setup/General/Manual start.

B. Lift stop.
For retracting the bout marker arms without lifting the machine, e.g. around wells or posts.
Press the button and use the lifting ram to pull in the bout marker arms.
When you have passed the obstacle, use the lifting ram to extend the bout marker arms again
Press the button again otherwise it will return to its switched off position after 30 seconds.
The button remains green as long as this is activated.

C. Hydraulic following harrow.
Press the button to access an adjustment menu for the following harrow.
This menu allows you to have different following harrow pressures for headland and furrows.

1. Select the symbol for headland or furrow. It will then be marked in green.

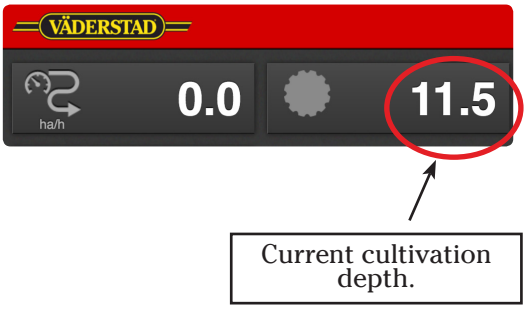


2. Then press on the plus or minus sign a number of times until the required pressure for the following harrow is reached.

- As a guide a value of 20 can correspond to the tare weight. 1 is maximum relieved and 0 is fulfilled.

- If you want the following harrow to remain raised all the time you are driving, go to the basic settings menu and set Following harrow type to Off.

D. Depth setting for SystemDisc

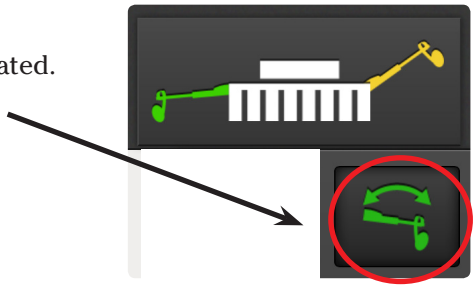


Current cultivation depth.

Two of the buttons in the monitoring display are optional:

- Choose to display the symbol for the current depth front tool.
- Press  in Drive checks). → 
- Raise or lower using the lifting circuit (Yellow circuit).
- Press  order to deactivate the option. It will then be deactivated after the set activation time (refer to 1 c Basic settings Front tool).

E. Automatic bout marker switching



The symbol is green when automatic bout marker switching is activated.
The symbol above shows which bout marker arm is activated.

F. Low-lift

Low-lift active.

The button lights green when low-lift is activated.
Deactivate low-lift if the following furrow needs raising, e.g. for reversing.

G. Tramlining

Automatic progression of tramlining program and bout takes place when the button is white.
Press the button (it will then become green) when you wish to prevent progression.

Tramlining active.

Tramlining stopped.

H Seed coulter pressure

Current coulter pressure

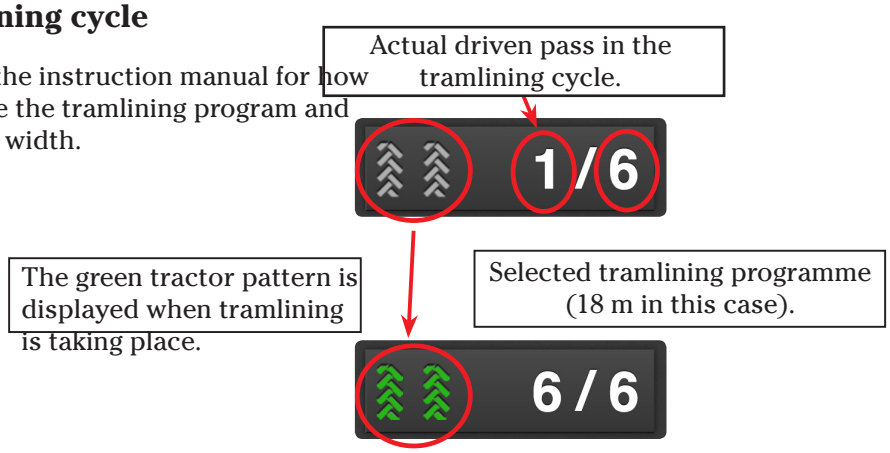
Current control value

NOTE: The fan must be started!

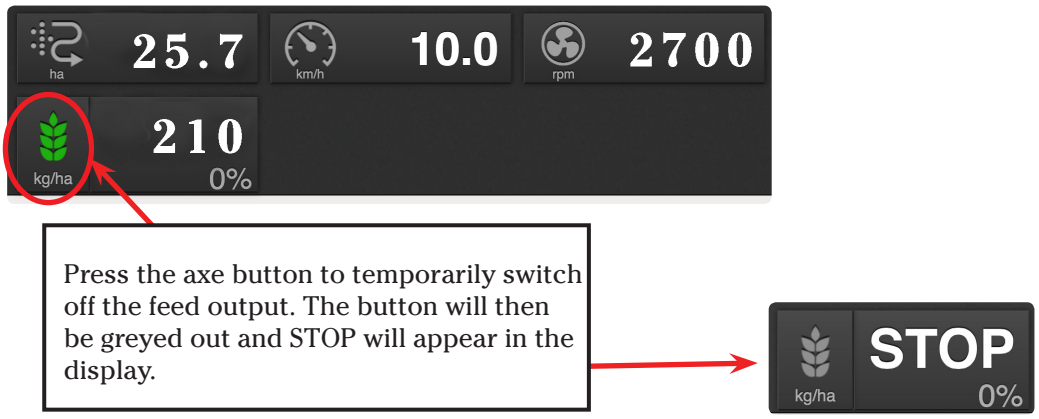
- Select the symbol for the coulter pressure in the monitoring display.
- Increase or decrease the coulter pressure using the buttons.

5. Tramlining cycle

Refer to the instruction manual for how to change the tramlining program and the track width.

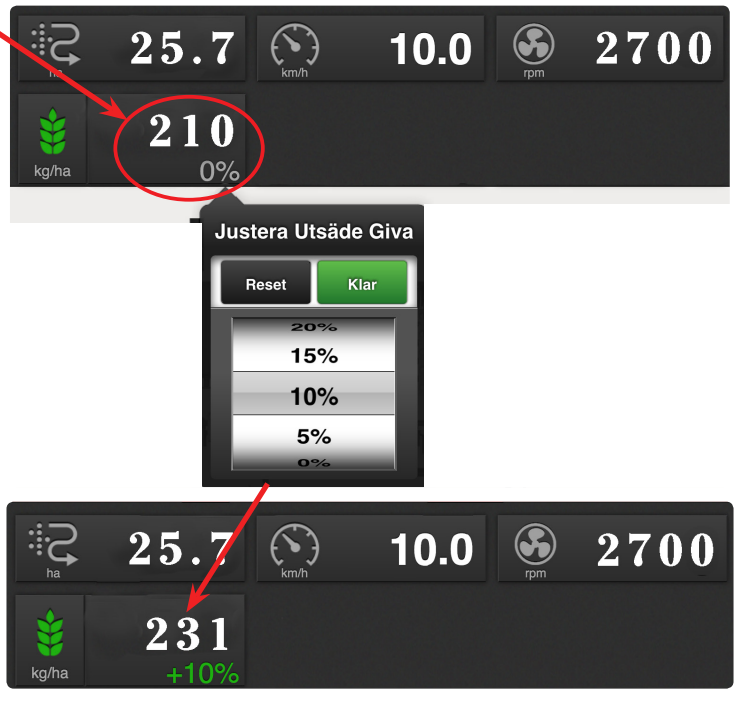


6. Monitoring of seed



6. Adjustment of the sown amount

Press current sown amount, and a pop up will appear, make changes using the drop-down list depending on whether you want to increase or decrease the sown amount. Press Done..



Select actual sown amount again, and then Reset to return to the original sown amount.

Attachment 1.

Sowing seed

The following should be considered when setting the drilling depth:

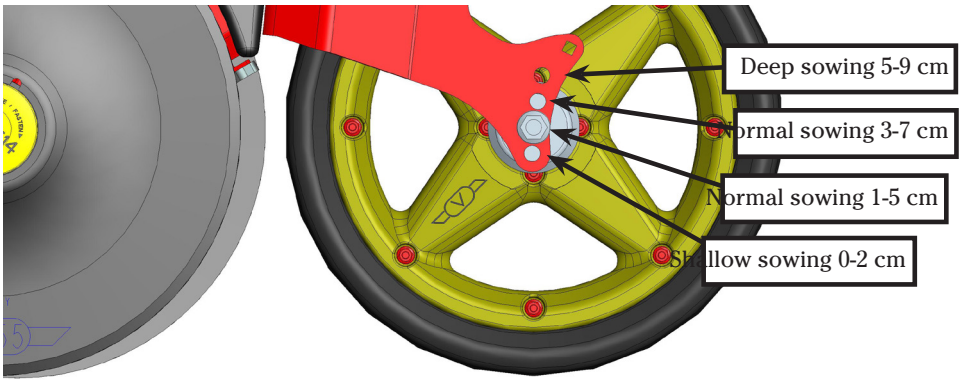
- Soil type?
- Moisture?
- Plant residues that could cause resistance?
- Quality of seedbed?

There are three settings that together affect the drilling depth:

1. Clips. The cips is the first and most important setting.

2. Coulter pressure. Do not use more coulter pressure than the conditions in the soil require. Usually 50 bar is sufficient to ensure good seed sowing. In dry and difficult conditions and/or for deep seed sowing it may be appropriate to increase the coulter pressure.

3. Positioning of the wheel The coulter arm wheel can be set to four (4) positions. For normal drilling depth (~1 - 5 cm) no adjustment needs to be made. If you are sowing peas or beans, or deeper sowing is required (e.g. early summer dry soils(, the results may be better if all of the coulter arm wheels are used. Refer to the image below.



- **The sowing table below is only a recommendation! Something to START with!**
- **The seed sowing MUST be studied and decided in the field! Ascertain the seed amount and measure the sowing depth!**
- **Too high a fan speed will result in uneven depth of sowing.**
- **Too low a fan speed will increase the risk of the seed blocking the seed hoses.**
- **It is also important to check to ensure that the correct seed amount is being put out in the field (therefore that the calibarion was correct). Advise If the actual sown amount in the field is, for example, 10 % too high, increase the pulses per kg by 10 %.**

Roller option

Feeder roll-er/colour
cm³
550
500
400
120
60
18
9

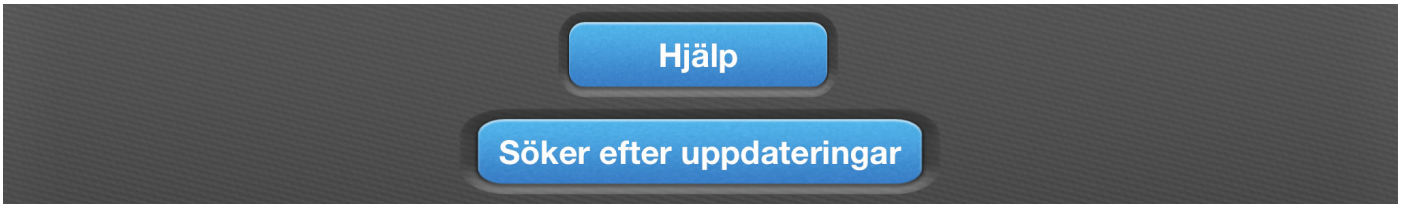
STR-300	Volym vikt (g/l)	Rek. Utmatar-vals	Min (Kg/Ha)	Max (Kg/Ha)	Rek. Fläktvarvtal (rpm)
Utsäde					
Åkerböna	850	**500**	33	411	4200
Ärtor	700	**500**	27	316	3900
Höstvete	800	**400**	30	404	3900
Vårvete	800	**400**	30	404	3900
Råg	760	**400**	28	375	3900
Korn	750	**400**	28	365	3900
Havre	550	**400**	21	281	3900
Raps	750	**9**	0,5	6,7	3000
Raps	750	**18**	1,0	14	3000
Lin	650	**120**	8	102	3000
Majs	800	**120**	7	77	4200
Rajgräs	300	**120**	3,1	42	3000
Rödklöver	780	**18**	1,0	14	3000
Rödklöver	780	**120**	8,5	116	3000
Timotej	550	**18**	0,7	10	3000
Vallfröblandning	400	**120**	4	56	3000
Fånggrödor					
Vallfröblandning	400	**120**	4,1	56	3000
Fångrödeblandning	350	**120**	4	49	3000
Senap	750	**120**	9	125	3900

Attachment 2

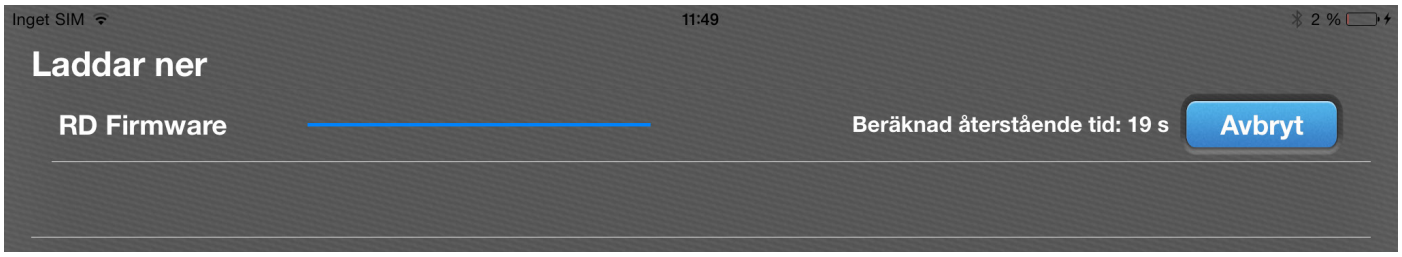
Updating Ipad

Info on how to start up E-Control for the first time is available in the instruction manual.

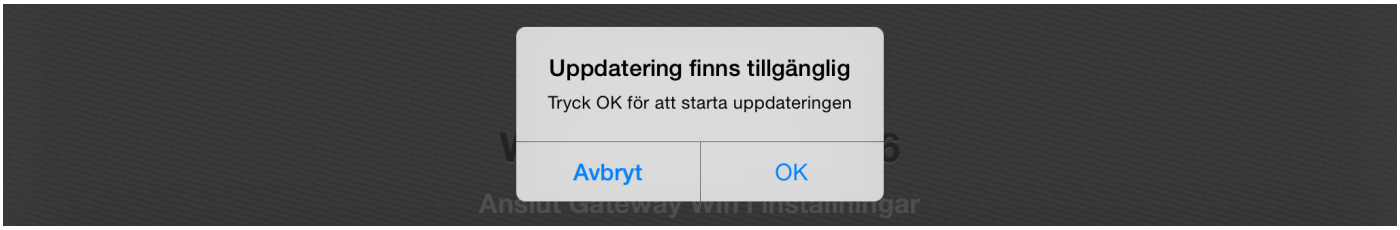
Before the season
Connect the iPad to the Internet and select the E-Control app.
Select Search for updates.



If there are any available updates, these will be downloaded.



Connect the iPad to Gateway to see the following question:



Select OK

Updates will now be downloaded in Gateway, which will re-start when done.

A message will appear telling the update was successful.

DONE!

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