

Quick Start

903134-en
17/05/2016-2

Rapid

RD 300-400S

RD 300-400C

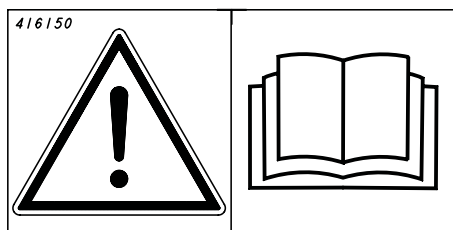
S/N 16001-



VÄDERSTAD

List of contents

Installation of electrics and hydraulics		
Installations	4	
E-Control	9	
ControlStation	16	
Attachments		
Sowing tables	20	
Tips for installing red hydraulic circuit	22	
Uploading new software – iPad	22	



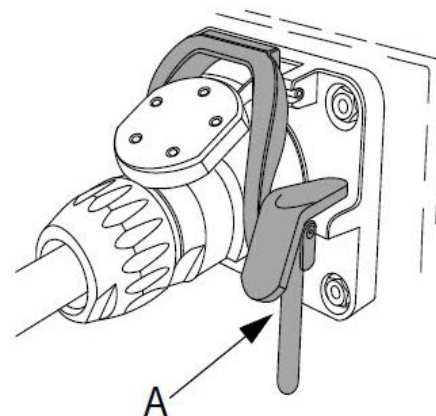
Denna Quickstart ersätter inte instruktionsboken!
 Denne Quickstart erstatter ikke instruktionsbogen!
 Denne Quickstart erstatter ikke instruksjonsboken!
 Tämä Quickstart-pikaopas ei korvaa käyttöohjekirjaa!
 This Quickstart guide does not replace the instruction manual!
 Diese Quickstart-Anleitung ist kein Ersatz für das Handbuch!
 Ce guide Quickstart ne remplace pas le manuel d'instructions!
 Instrukcja szybkiego uruchomienia nie zastępuje instrukcji obsługi,
 którą należy przeczytać przed rozpoczęciem użytkowania maszyny.
 Šis ātrais mācību materiāls neaizvieto lietošanas instrukciju!
 Šis „Quickstart“ vadovas nepakeičia instrukcijas!

See kiirjuhend Quickstart ei asenda kasutusjuhendit!
 Návod Quickstart nenahrazuje návod k použití!
 Ez a Quickstart útmutató nem helyettesíti a Használati útmutatót!
 La presente guida Quickstart non sostituisce il manuale di istruzioni!
 Это руководство «Quickstart» не заменяет основное
 руководство по эксплуатации!
 Та водник Quickstart не надомеšча прiрочника з наводили!
 Този бърз справочник не заменя наръчника!
 Ο παρών οδηγός Γρήγορης εκκίνησης δεν αντικαθιστά το εγχειρίδιο οδηγιών!

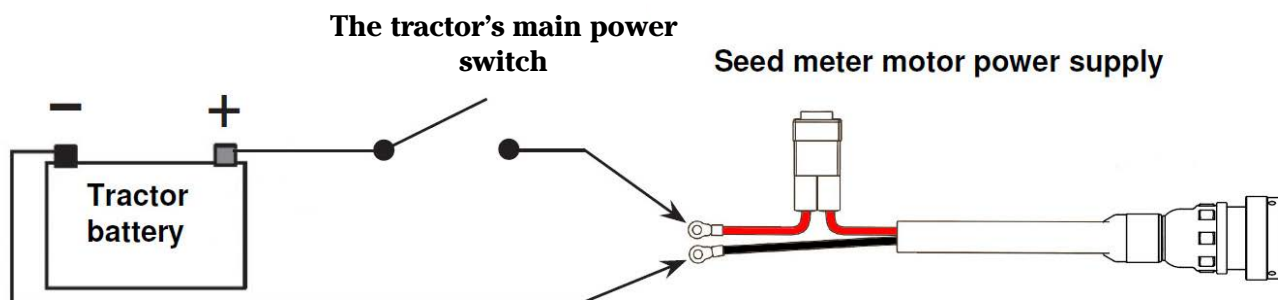
1. Electrical installation on tractors

- Mount ControlStation or the iPad in the tractor cab. Position it within your field of vision when looking forwards, and preferably so that you can reach it comfortably.

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 terminal, connect the positive side of the power supply cable – AFTER the main power switch.



2. Installation of hydraulics

Circuit	Function	Require-
1. Yellow circuit – and	The main circuit for lifting, lowering, bout marker arms operation of front tools.	Approx. 30 l/min
2. Red circuit – ma	Circuit for hydraulic feed and hydraulic following harrow, if the chine is equipped with one. See attachment 2 for tips on how to set the correct flow.	15–30 l/min with variable flow.
3. White circuit –	Operation of CrossBoard.	
4. Green circuit –	If the machine is equipped with Autopilot (only ControlStation).	Approx. 10 l/min

Settings

NOTE! It is possible to make approximate basic settings on a flat, solid floor, but you can only perform final checks of your settings when sowing in the field!

Horizontal alignment



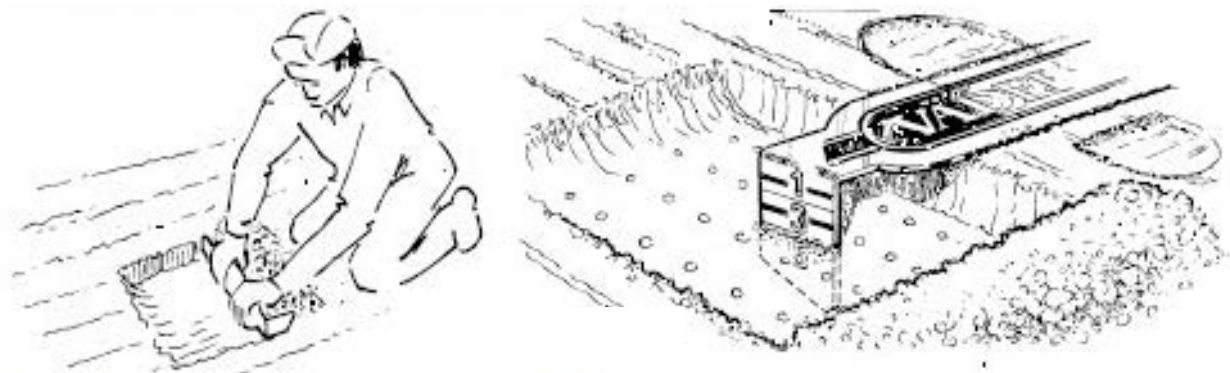
Horizontal adjustment of the seed drill is carried out by means of the push rod (B). The front and rear seed rows must have the same depth. If you shorten the drawbar, the front row will be sown deeper. One tip could be to look at the frame plate or the bottom edge of the plastic cap in relation to the ground.



If the machine is equipped with towing eyelets, the settings are changed with different hitch heights!

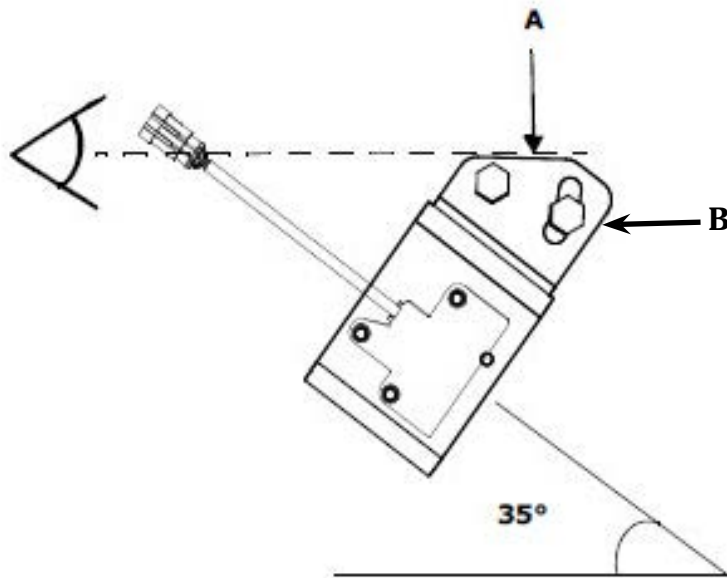
These must be set in the field using the actual seed depth! See below.

Seed depth verification



First pack the soil lightly and then scrape off very thin layers of soil until the seeds are exposed. The seeds in all rows should be exposed at the same time. If there are wide variations in seed depth, horizontal adjustment may be necessary. After adjustment, lock the push rod with the locking tab (C).

Radar



The radar angle must be adjusted. The angle must be $35^\circ \pm 1^\circ$ in relation to the soil surface. The angle of the radar is optimal when the surface (A) is parallel to the soil surface. Loosen the screws and adjust the bracket along the oblong hole (B).

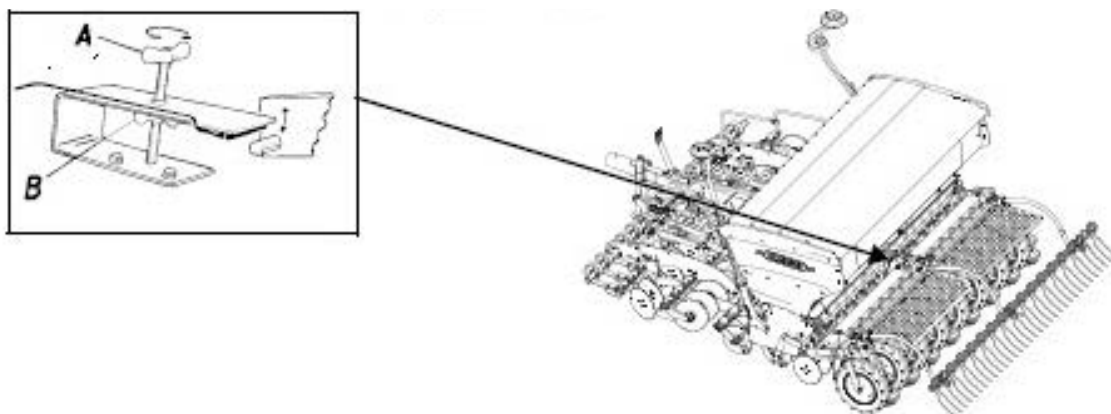
It is often beneficial to calibrate the radar for an exact report. See chapter 7.4 in the instruction manual.

LowLift

When sowing, you should use low-lift in order to not lift the machine more than necessary, and so that the following harrow also works on headlands. See the respective overviews for iPad and ControlStation on how to connect and disconnect the function.

Settings

The LowLift height is adjusted by moving the magnetic switch up or down in its holder by turning the wing screw (A), which should then be locked using the wing nut (B).

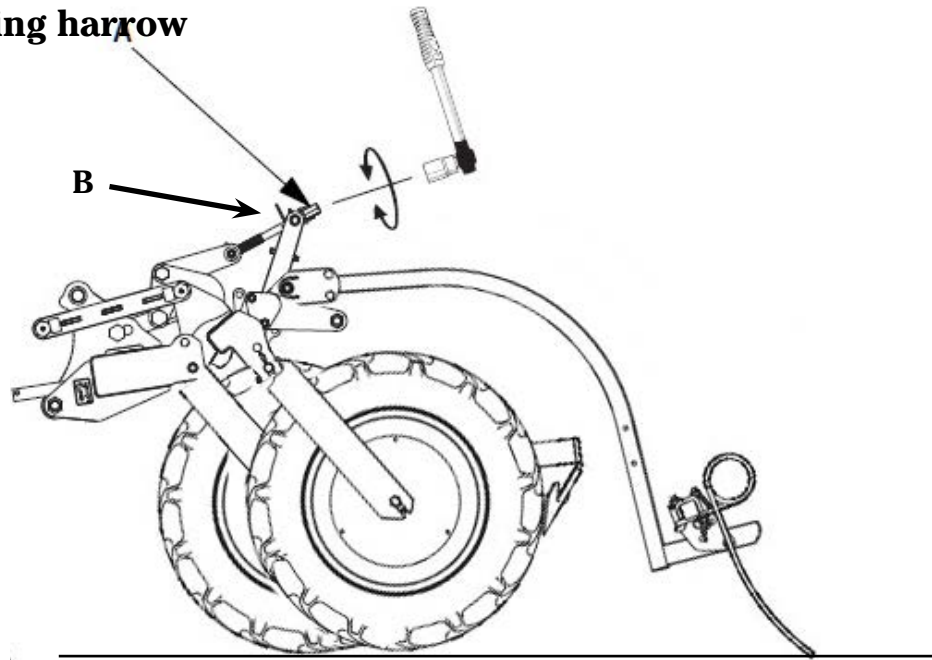


The LowLift switch triggers the start and stop of seed drilling!
 The LowLift height should neither be too low nor too high.
 The front tool must always be above ground height for low-lift!
 If set too high, this will lead to a delay in the feed output shut-off.

Following harrow

There are two different following harrows on Rapid RD – hydraulically controlled and mechanical.

Mechanical following harrow



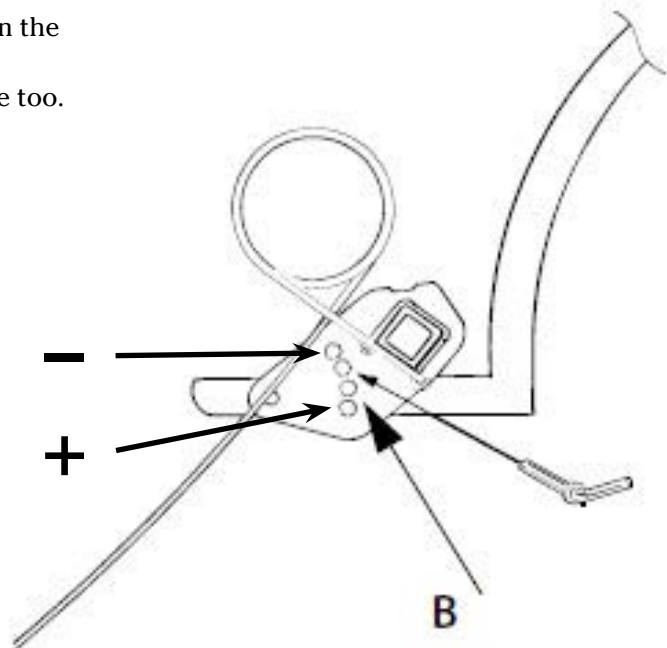
The work pressure is set using the socket supplied.

- Lower the machine, then lift it to low-lift.
- Remove the R cotter pin (B) holding the adjusting screw (A) in position.
- In this position, the following harrow must be pressed lightly against the ground, with greater pressure on heavy soils and more gently on light soils or where there is a lot of hay.

Hydraulic and mechanical following farrow.

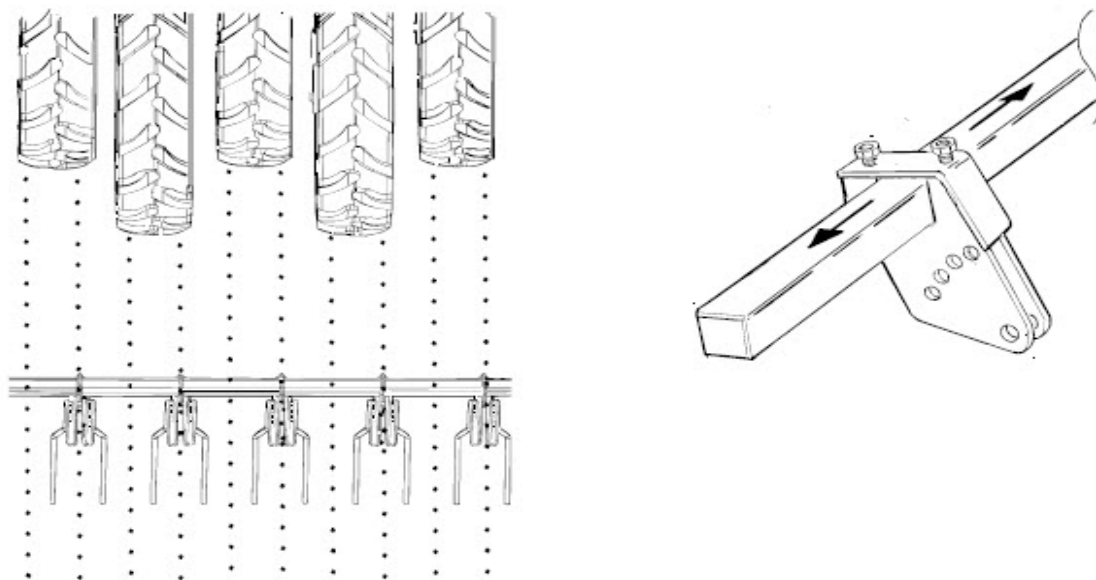
The aggressiveness is selected by moving the cotter pin the bracket's pin hole (B).

It is important to consider the presence of any hay here too.



It is important that you also check that the following harrow tines run between the seed rows, one tine should run straight in front of the wheel, and one centrally between the wheels.

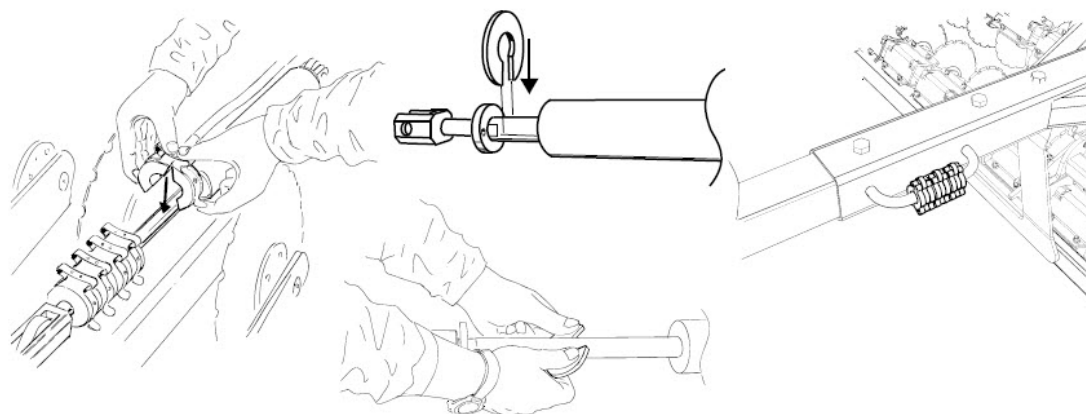
If you need to adjust the entire tine row, do so by loosening the bolts holding the shaft in the drawbar.



Front tools

All front tools, other than the CrossBoard system, are depth-adjusted using clips located on the piston rod. Operation of the front tool is controlled by the lift circuit (Yellow circuit).

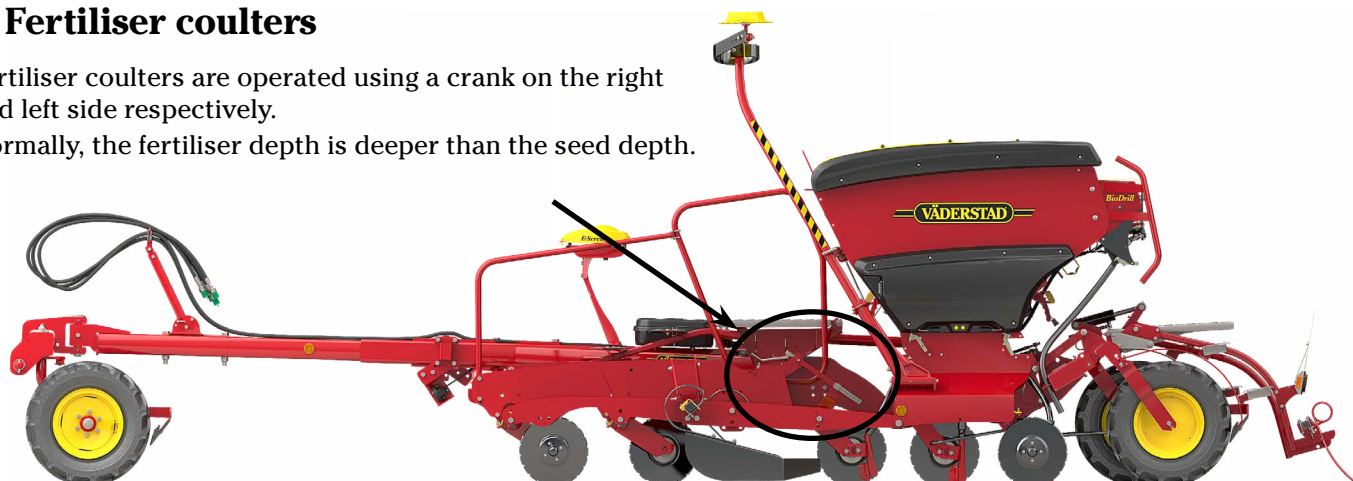
If the machine is equipped with CrossBoard, this is controlled by the white hydraulic circuit.



Fertiliser coulters

Fertiliser coulters are operated using a crank on the right and left side respectively.

Normally, the fertiliser depth is deeper than the seed depth.



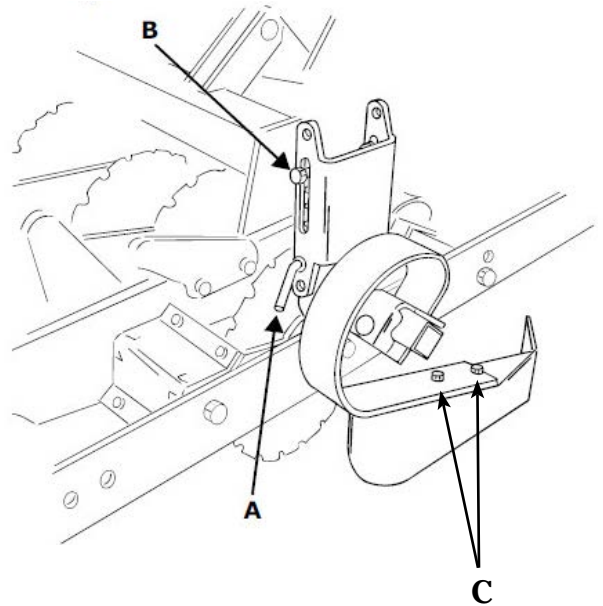
Spill prevention plates

Spill prevention plates must be adjusted so that they remove any soil ridges that may be created between the furrows. They must therefore press lightly against the ground when sowing.

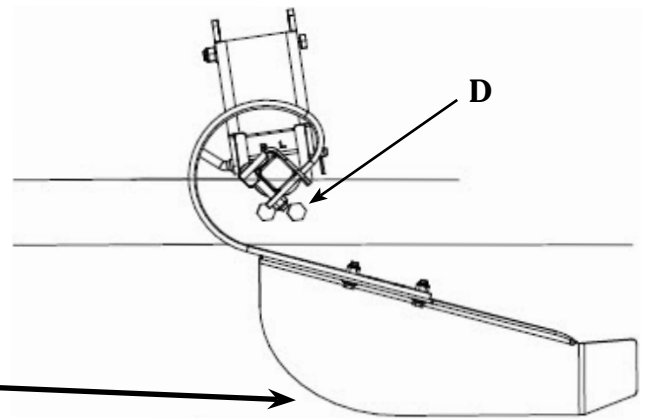
The spill prevention plates are adjusted vertically depending on seed depth and the prevailing conditions. Remove the cotter pin (A) and place it at the desired height position.

When you have found the right height, you should also tighten the screw union (B) to prevent play.

The spill prevention plates are also adjustable horizontally, by moving the bolts on the top (C).

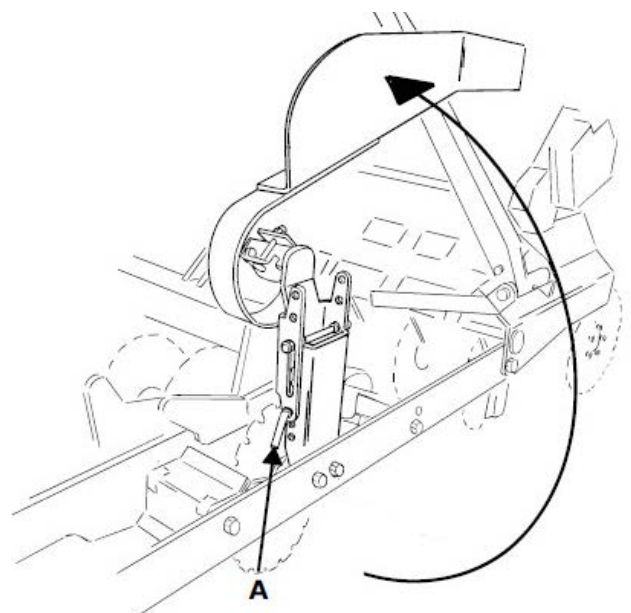


It is also possible to adjust the angle of the spill prevention plates against the ground. Loosen the screws (D), adjust the angle and tighten to 385 Nm. It is important that, once adjustment is done, the bottom edge lies flat against the ground or is angled slightly backwards.



In order to reduce transport width, the spill prevention plates can be folded up.

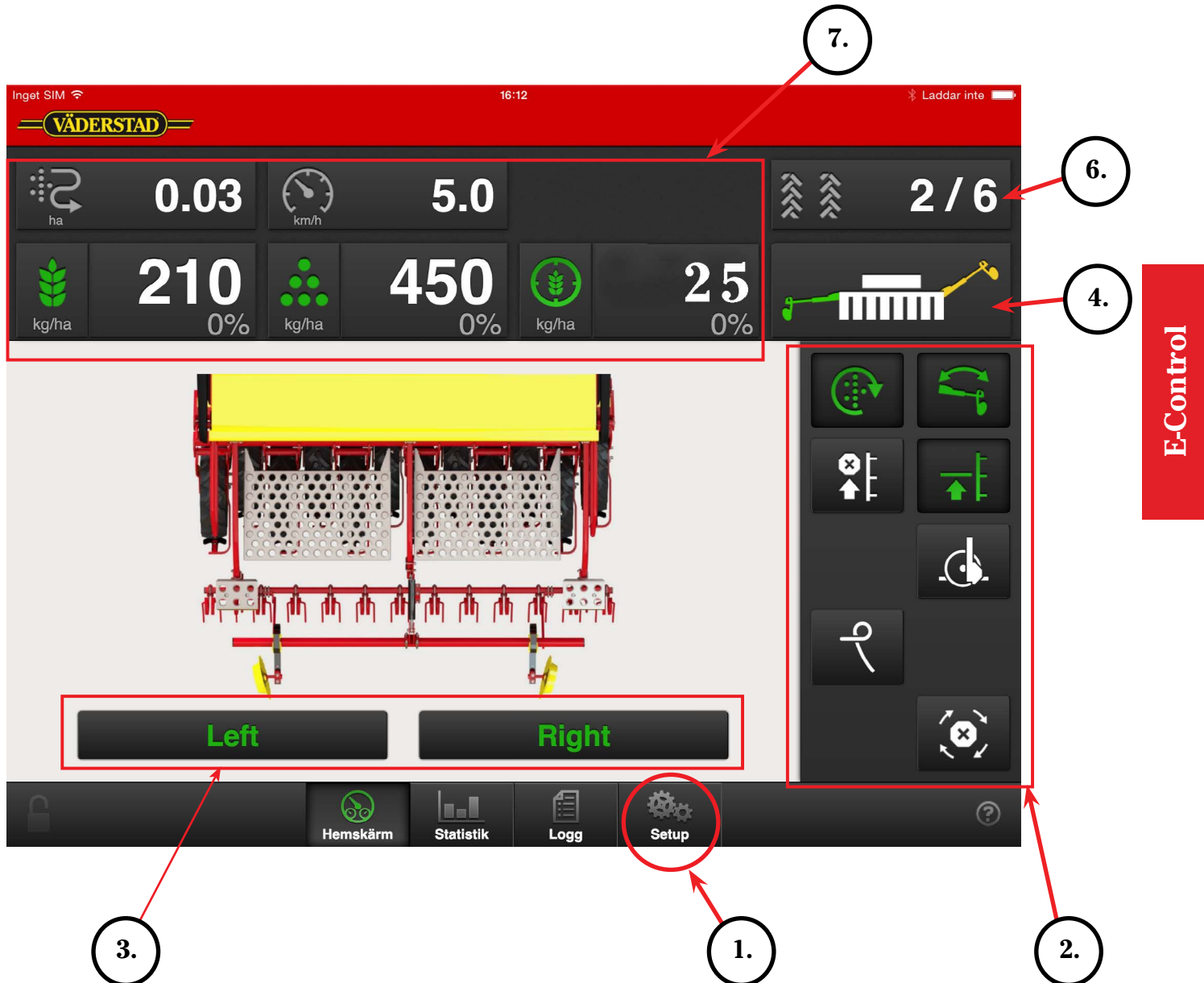
Loosen the cotter pin (A), fold up the spill prevention plates and lock them again using the cotter pin.



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 3.

Home screen (Drive menu)



1. Setup, see next page.
2. Drive checks.
3. Half machine shut-off (Area metering).
4. Manual selection of bout marker arm (Left, Right, Both or None).
5. Spray tramline cycle. See Setup.
6. Tramlining cycle.
7. Monitoring, seed amount, adjustable, on and off.

1. Setup

Press Setup to access:

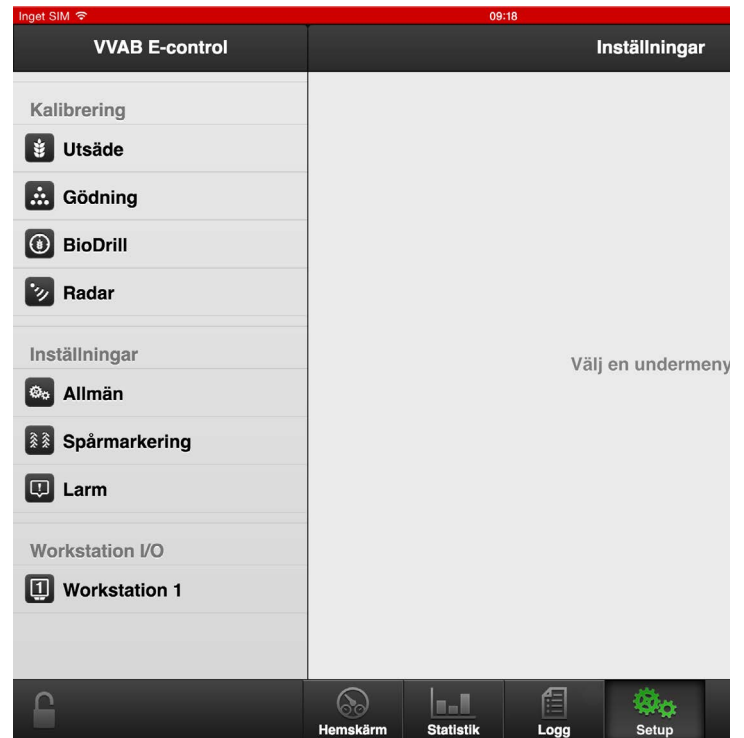
Calibration of delivered seed
Fertiliser
BioDrill (option)
Radar

General (Basic settings)

Tramlining (Setting desired tramlining programme).

Alarm settings

Workstation I/O (service menu)



1a. Calibration

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



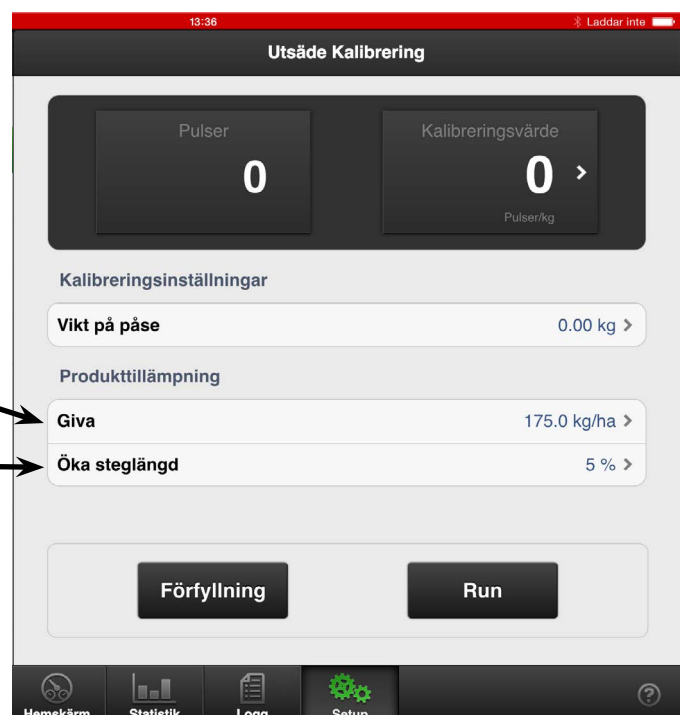
NOTE! Feed output stops if you access any of these menus!

Select Yes



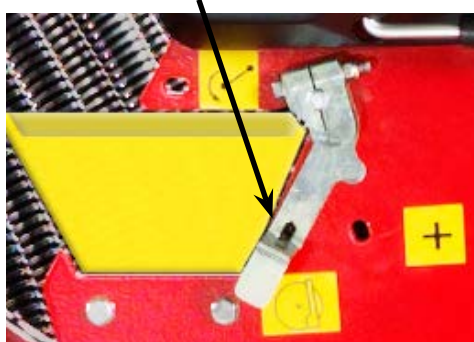
Before calibration is performed, the bottom flaps and sliding hatches must be correctly adjusted. If small-sized seed needs sowing, normal rollers must also be disengaged. See attachment 1.

1. Enter the required seed application rate (kg/ha)
2. Enter the required reduction/decrease of variable application rate in %.
3. Mount the calibration trays and reverse the calibration flaps on the lever on the side of the seed hopper (see image on next page).

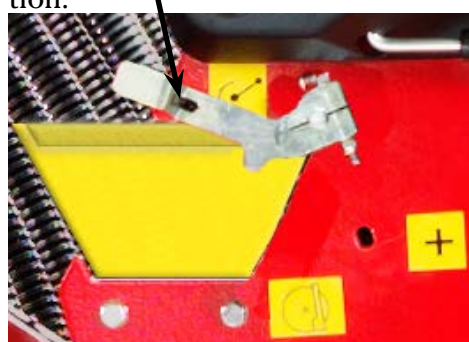


Contd. from previous page.

Flap lever in sowing position.

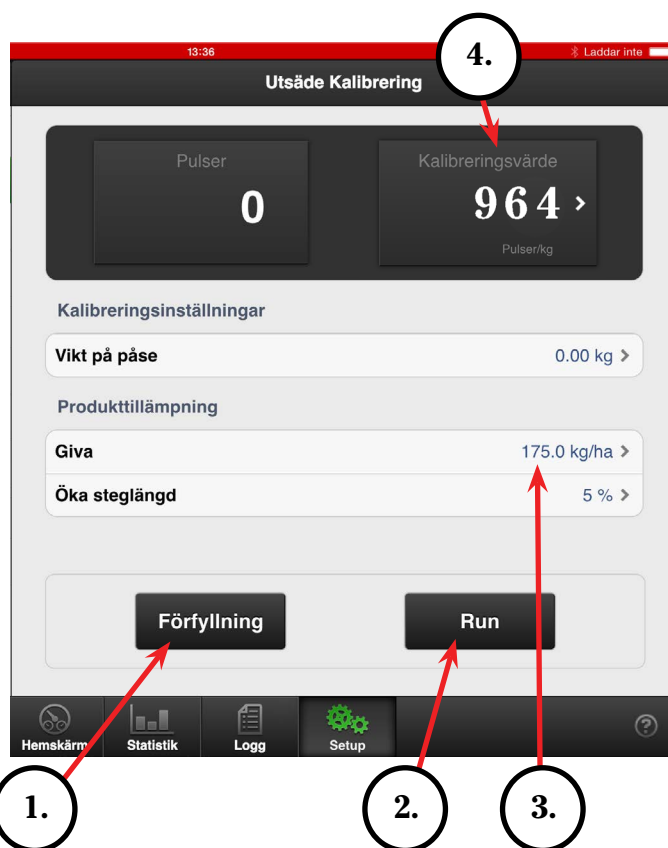


Flap lever in calibration position.



4. Select pre-filling (1) or press the plus button on the MiniRemote to fill the feed rollers. The MiniRemote is located on the left side of the seed hopper.
5. Empty the trays and place them back in calibration position.
6. Select Run (2) or press the ear button on the MiniRemote to fill the tray with grain. Pulses are now counted for as long as the button is pressed in.
7. Pour the seed from the tray into the calibration bag and weigh the content.
8. Enter the value (3) and the computer 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 chang-



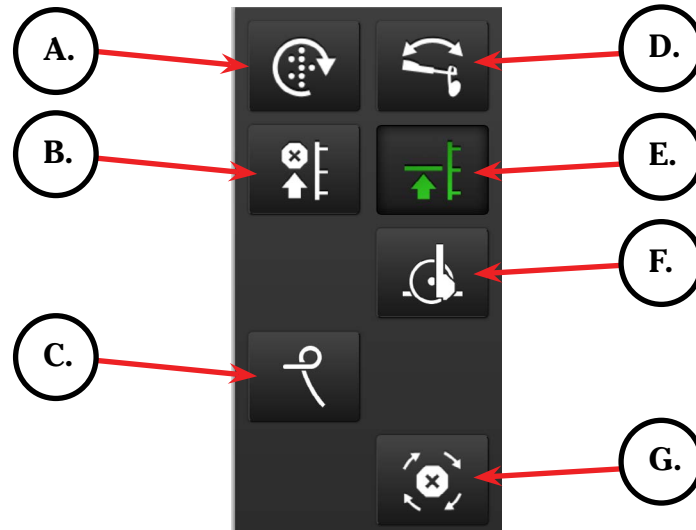
E-Control

Repeat the procedure for fertiliser and, where relevant, BioDrill.

Radar

It is always beneficial to calibrate the radar for an exact report. See chapter 7.4 in the instruction manual.

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. Preselect the speed in the Basic settings menu.

B. Lift stop.

For folding in 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 fold out 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.

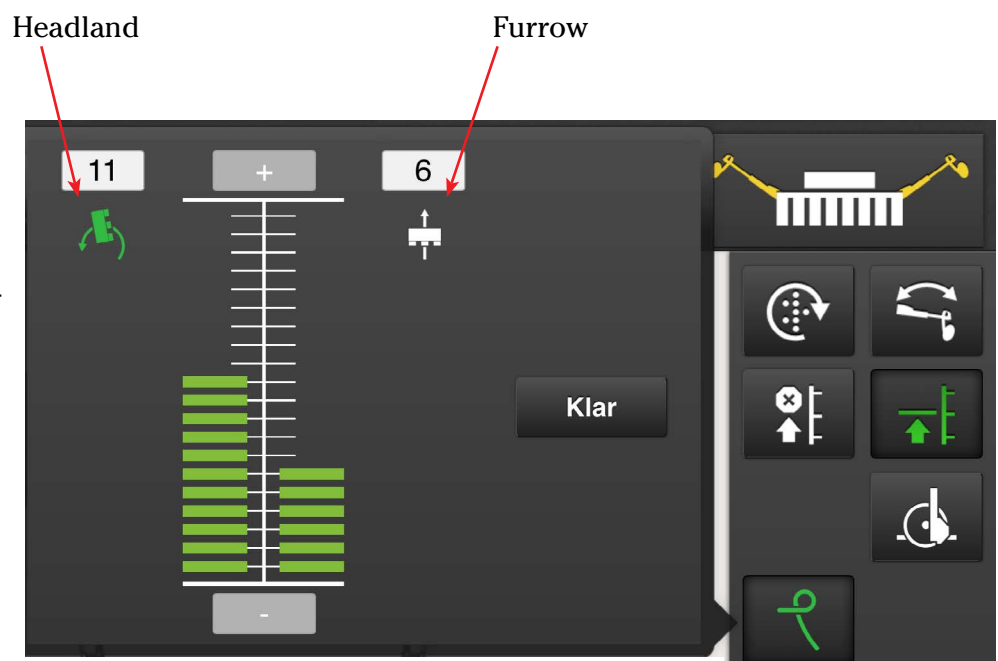
Press the button to access an adjustment menu for the following harrow. This menu allows you to have different following harrow pressures for headland and furrows.

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 10 can correspond to tare weight.

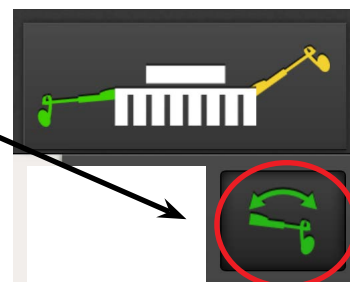
- If you want the following harrow to remain raised all the time you are driving, go to the basic settings menu and set Following harrow type to Off.



Contd. from previous page.

D. 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.



E. Low-lift

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

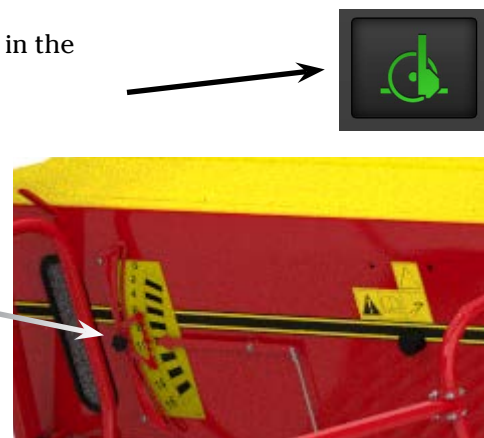
F. Drilling depth

In order to set or change seed depth, activate the Control function in the lifting ram by pressing the button.

Use the lifting ram to change depth.

The sowing depth indicator on the seed hopper shows the actual seed depth.

When depth-adjustment is done, press the button again to deactivate the Control function, otherwise the function switches off automatically after 30 seconds.



E-Control

G. Automatic progression of tramlining programme and bout marker switching.



NOTE! Automatic progression occurs when the button is white!



6. Tramlining cycle

Actual driven pass in the tramlining cycle.



The green tractor pattern is displayed when tramlining is taking place.

Selected tramlining programme (24 m on a 4 m RD in this case).



3. Half machine shut-off

Half machine shut-off occurs in two stages:

1. Go to the machine and close the selected side using the lever/levers on the side of the seed hopper.
The rear lever is for seed and the front lever is for fertiliser.

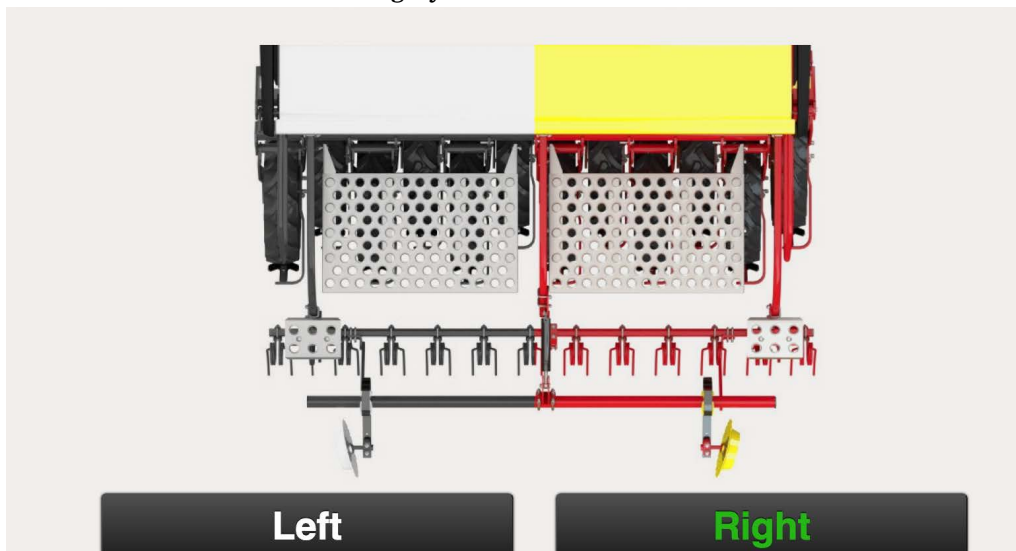
In this case, the left side of the machine.



2. Select Left on the iPad/ISOBUS in order to halve the area measurement.



The button and the left side of the machine will be greyed out to show that it has been switched off.



7. Monitoring of seed, fertiliser and BioDrill (option)

Area driven Speed

Press any of the buttons to temporarily switch off the feed output. The button will then be greyed out and STOP will appear in the display. Example.

STOP

Adjustment of the sown amount

Select actual 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, then press Done.

Justera Utsäde Giva

Reset Klar

20%

15%

10%

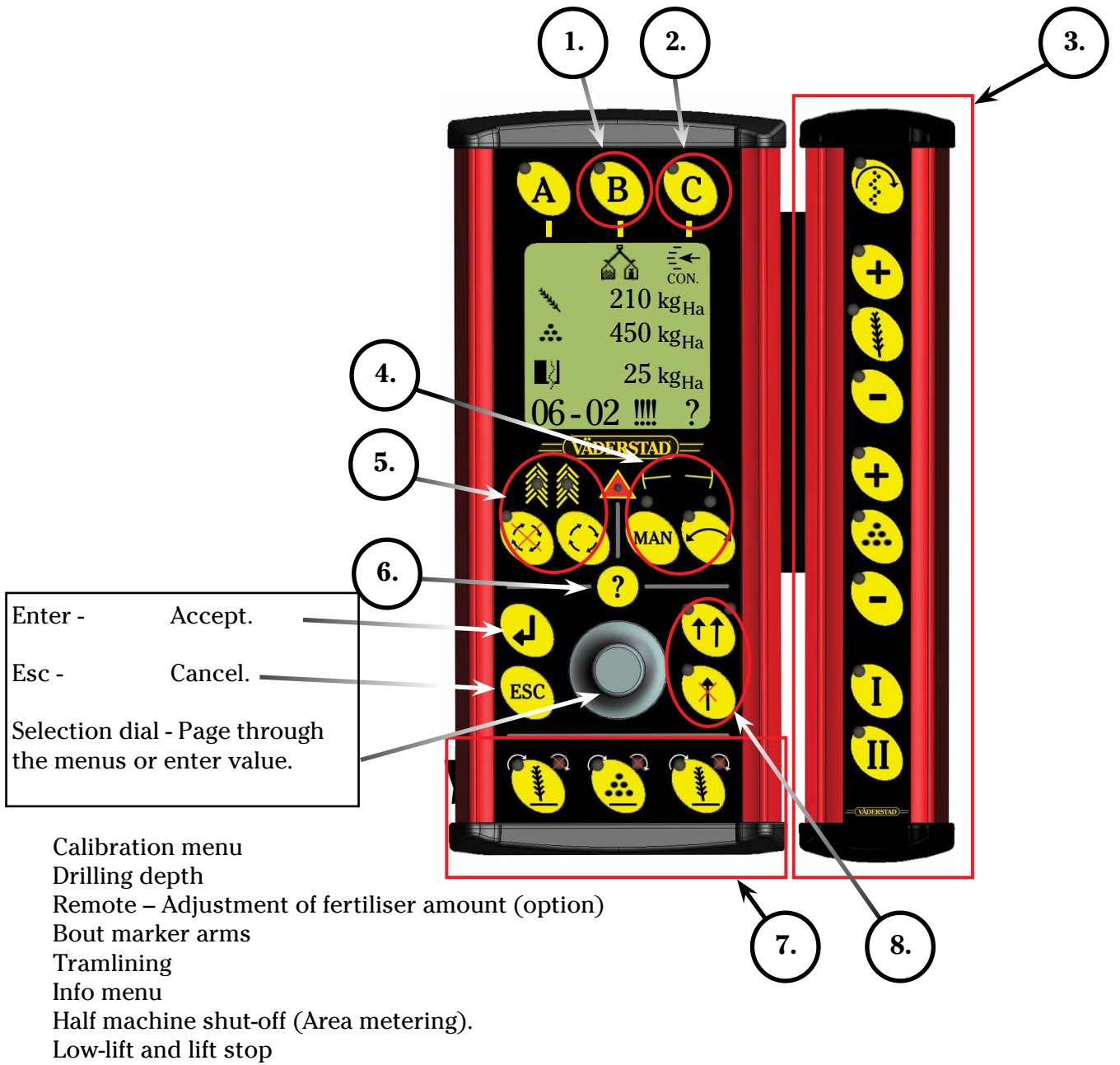
5%

0%

231
+10%

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

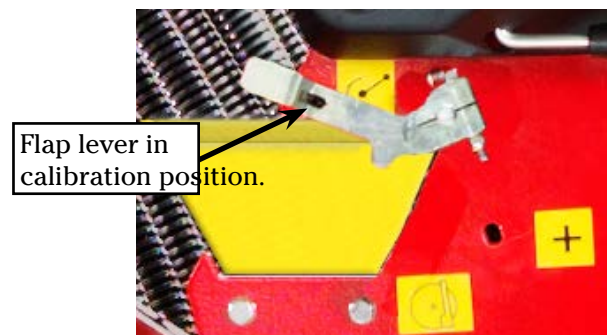
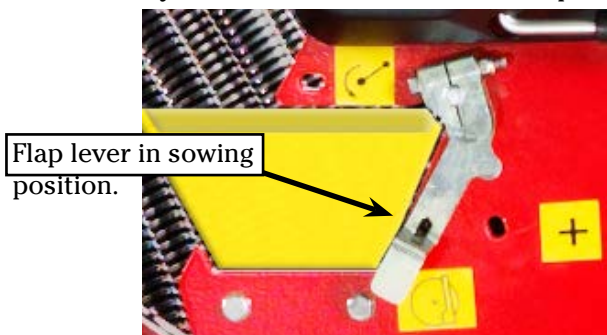
ControlStation



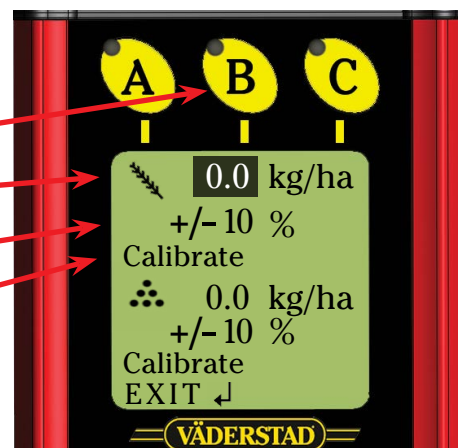
1. Calibration

Before calibration is performed, the bottom flaps and sliding hatches must be correctly adjusted. If small-sized seed needs sowing, normal rollers must also be disengaged. See attachment 1.

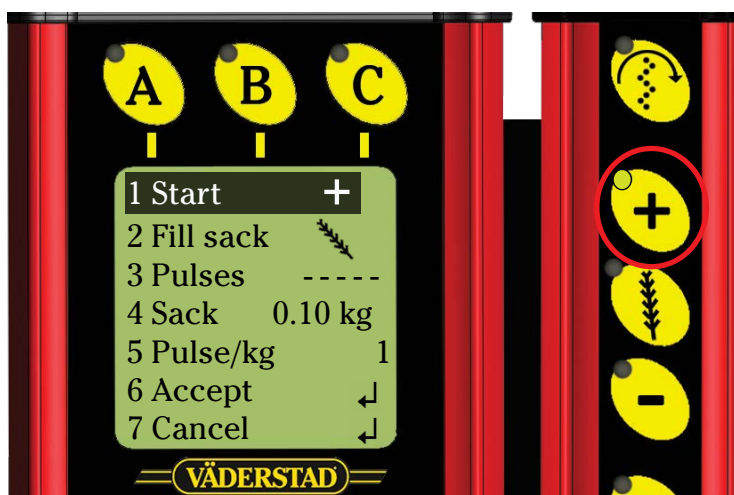
Mount the calibration trays and reverse the calibration flaps on the lever on the



1. Press the B button to access the calibration menu.
2. Enter the required seed application rate (kg/ha) Press Enter.
3. Use the selection dial to scroll down and enter the required reduction/decrease of variable application rate in %. Enter.
4. Page down to Calibrate and press Enter.

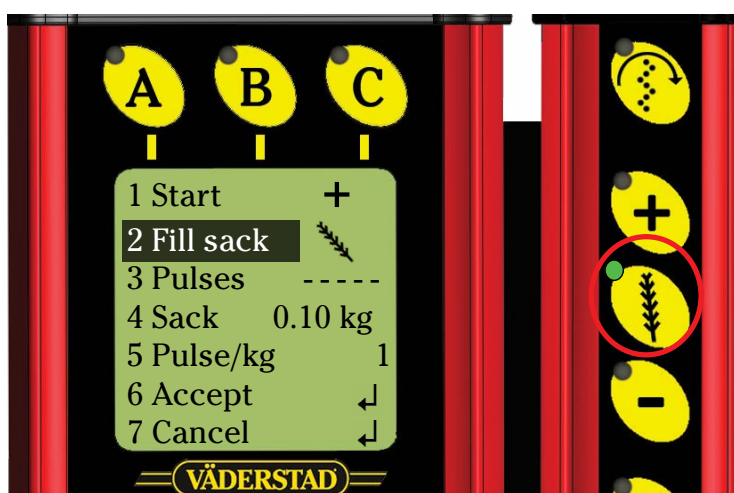



5. Press the plus button for seed on the remote or the plus button on the MiniRemote to fill the feed rollers. The MiniRemote is on the left side of the seed hopper.
6. Empty the trays and place them back in calibration position.



7. Press the ear button on the remote or MiniRemote to fill the trays with grain. Pulses are now counted for as long as the button is pressed in.

7. Pour the seed from the tray into the calibration bag and weigh the content.
8. Enter the value on row 4 – Sack, and the computer will calculate the number of pulses per kilo (row 5).



It is also possible to manually enter the number of pulses per kg by pressing row 5 – Pulse/kg and turning the selection dial to the value. Tip: Hold  to increase feed rate.

Repeat the procedure for fertiliser and, where relevant, BioDrill.

2. Control – Seed depth

In order to set or change seed depth, activate the Control function in the lifting ram by pressing the C button.

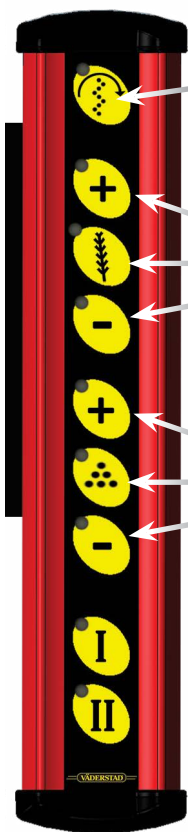
Use the lifting ram to change depth.

The sowing depth indicator on the seed hopper shows the actual seed depth.

When depth-adjustment is finished, press the button again to deactivate the Control function, otherwise the function switches off automatically after 30 seconds.



3. Remote – Adjustment of fertiliser amount (option)



Manual feed output. If you want to start feed output from a stationary position, e.g. in a corner, or during output verification, press the button marked in green. Preselect the speed in the Basic settings menu.

Adjustable seed application rate Press the plus button to proportionally increase the seed rate and minus to reduce it. Press the ear button to return to the preset value.

Adjustable fertiliser application rate Press the plus button to proportionally increase the fertiliser rate and minus to reduce it. Press the middle button to return to the preset value. Proportional increase/decrease is done in the calibration menu.

Shut off seed The lamp lights Red when feed output is taking place. Press the I button and the lamp switches off and the seed stops moving.

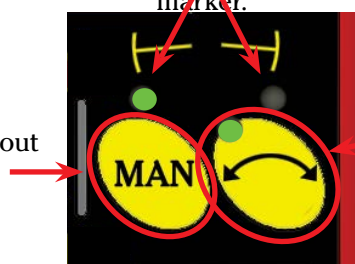
Shut off BioDrill The lamp lights Green when feed output is taking place. Press the II button and the lamp switches off and BioDrill output stops moving.

4. Bout marker arms

Indicator lights to show which bout marker is activated.

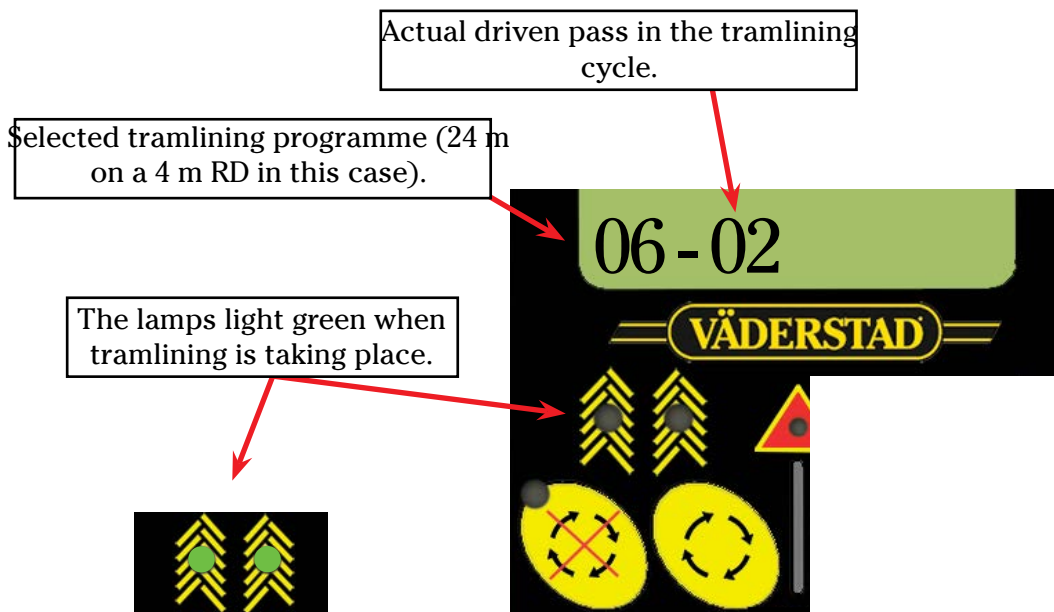
In this case, the left bout marker.

Manual selection of bout marker – Left, Right, Both or no bout marker.



Automatic marker selection The lamp lights when automatic operation is engaged.

5. Tramlining



7. Half machine shut-off

Half machine shut-off occurs in two stages:

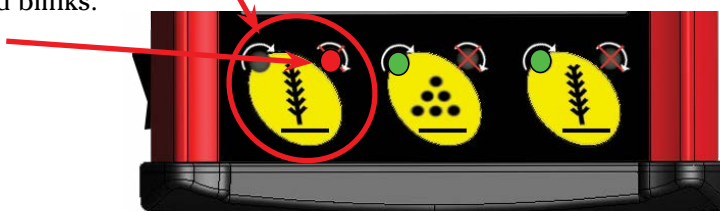
1. Go to the machine and close the selected side using the lever/levers on the side of the seed hopper. The rear lever is used for seed and the front lever for fertiliser.

In this case, the left side of the machine.



2. Press the left Ear button to halve the measurement.

The crossed out indicator lamp lights red and blinks.



ControlStation

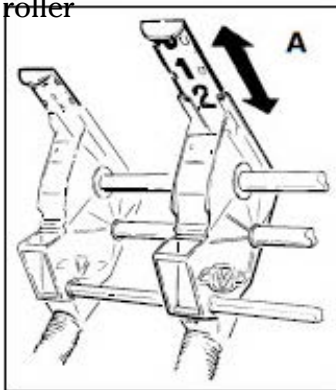
Attachment 1.

Sowing table grain

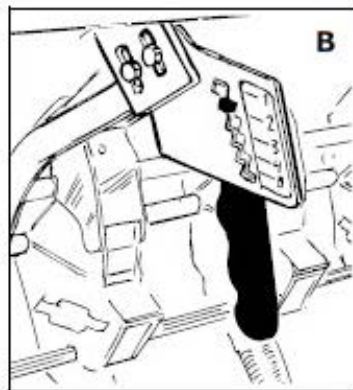
	Vete Wheat Weizen Blé	Korn Barley Gerste Orge	Kag Rye Roggen Seigle	Havre Oats Hafer Avoine	Arto Peas Erbesen Pois	Raps Rape Raps Colza	Blandgras Mixed grasses Mischgras Herbes mélangées
Kg/l	0,8	0,7	0,7	0,5	0,8	0,6	0,6
A	2	2	2	2	2	2	2
B	2	2	2	2	3	1	1
C	N	N	N	N	N	F	N

	Klover Clover Klee Trèfle	Lin Flax Flachs Lina	Bon or Beans Bohnen Haricots
Kg/l	0,8	0,7	0,8
A	2	2	3
B	1	1	5
C	F	N	N

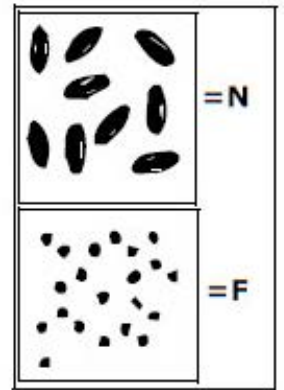
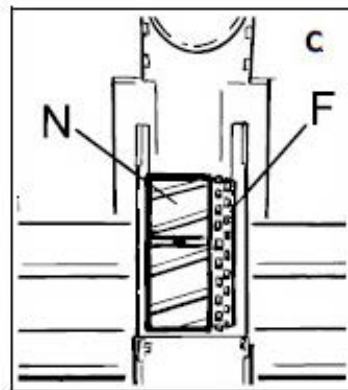
Position of sliding hatches roller



Bottom flap position



If relevant, disengagement of normal



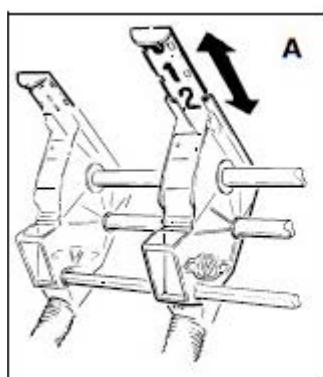
6. Info menu and Basic settings

Sowing table, fertiliser

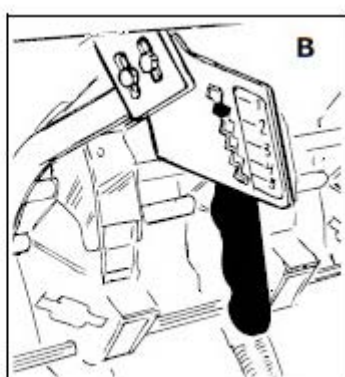
	N-28	N-34	Urea 45% N	Axan 27% N	PK-13.13	PK-11.21
Kg/l	1,0	1,0	0,7	1,0	1,1	1,1
A	2	2	2	2	2	2
B	2	2	2	2	2	2

	NPK-21.4.7	NP-27.5	Pro beta N 20N-10Na
Kg/l	0,9	0,9	1,0
A	2	2	2
B	2	2	2

Position of sliding hatches



Bottom flap position



Attachment 2

Circuit for hydraulic feed output/hydraulic following harrow (red circuit).

The feed output system and, if relevant, hydraulic following harrow take approx. 10–20 litres/min.

It will normally be sufficient to bring the hydraulic flow down to approx. 30%. If this is not sufficient, an alarm will be generated for Seed Valve Max Power, in which case, increase the flow by approx. 5–10%.

1. Field test.

1. Perform a calibration test and enter the sown amount to be sown (see calibration page 11).
2. Repeat the process for fertiliser and, if relevant, BioDrill, if these are to be used.
3. The Hydraulic following harrow also need to be activated.
4. Start sowing at the intended speed.
5. Now reduce the variable hydraulic flow on the red circuit slowly, until an alarm is generated for
 - Seed valve Max power
 - Fertiliser valve Max power
 - BioDrill valve Max power

Then increase the flow by approx. 5–10%.

You can stop movement of the above on the iPad/ISOBUS or ControlStation using adjustment of sown amount (remote on the side of CS), by holding in the manual output button instead of driving in the field.

Manual output iPad



Manual output ControlStation



Attachment 3

iPad updates

More information can be found in the instruction book.

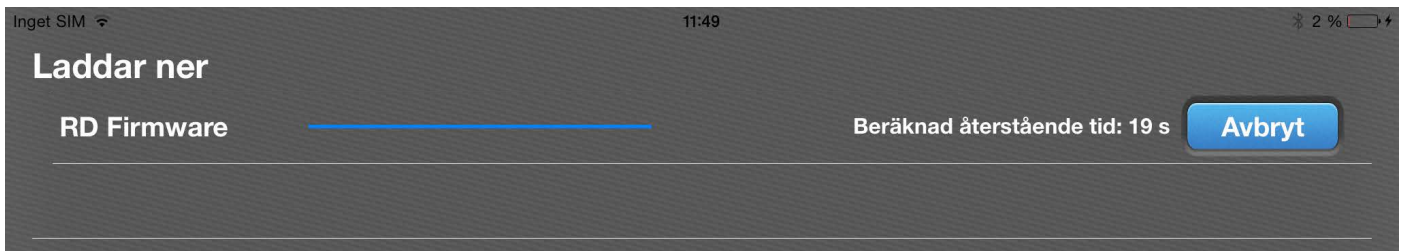
Before the season

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

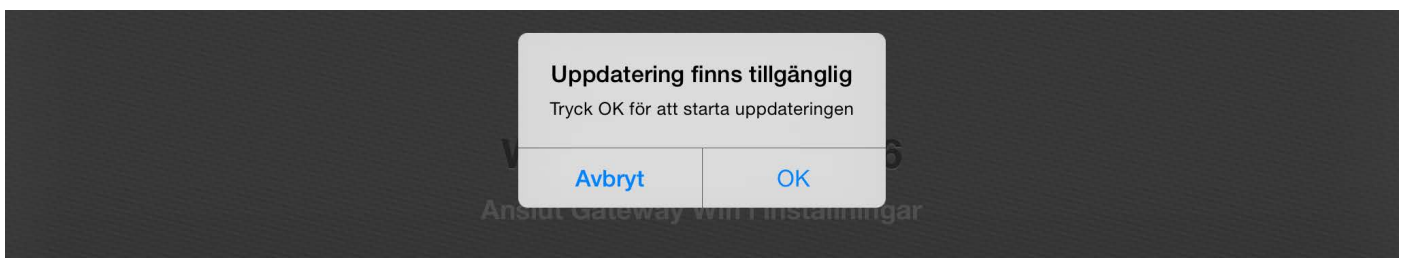
Hjälp

Söker efter uppdateringar

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!

Väderstad AB
SE-590 21 VÄDERSTAD
Sweden
Phone: +46 142 820 00

