



Seed rate
controller
r-control

Operator manual (09/00)



System
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SAFETY INSTRUCTIONS

- **Follow the instructions of the user's manual of the relevant seed drill**
- **Never leave the driving seat while the tractor is moving.**
- **Carry out the pre-settings on the seed drill and the R-control unit while the tractor is stopped.**
- **Before starting to install or carrying out any work on the electrical system, disconnect the battery circuit. Proceed in the same way as before any welding work is carried out on the tractor or the machine.**
- **The R-control unit was designed to be used exclusively with KRM Roger seed drills. Any other use will be considered contrary to good practice. The manufacturers shall not be liable if modifications have been made to the system without their express and written agreement.**

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STARTING UP

- **A** System Components

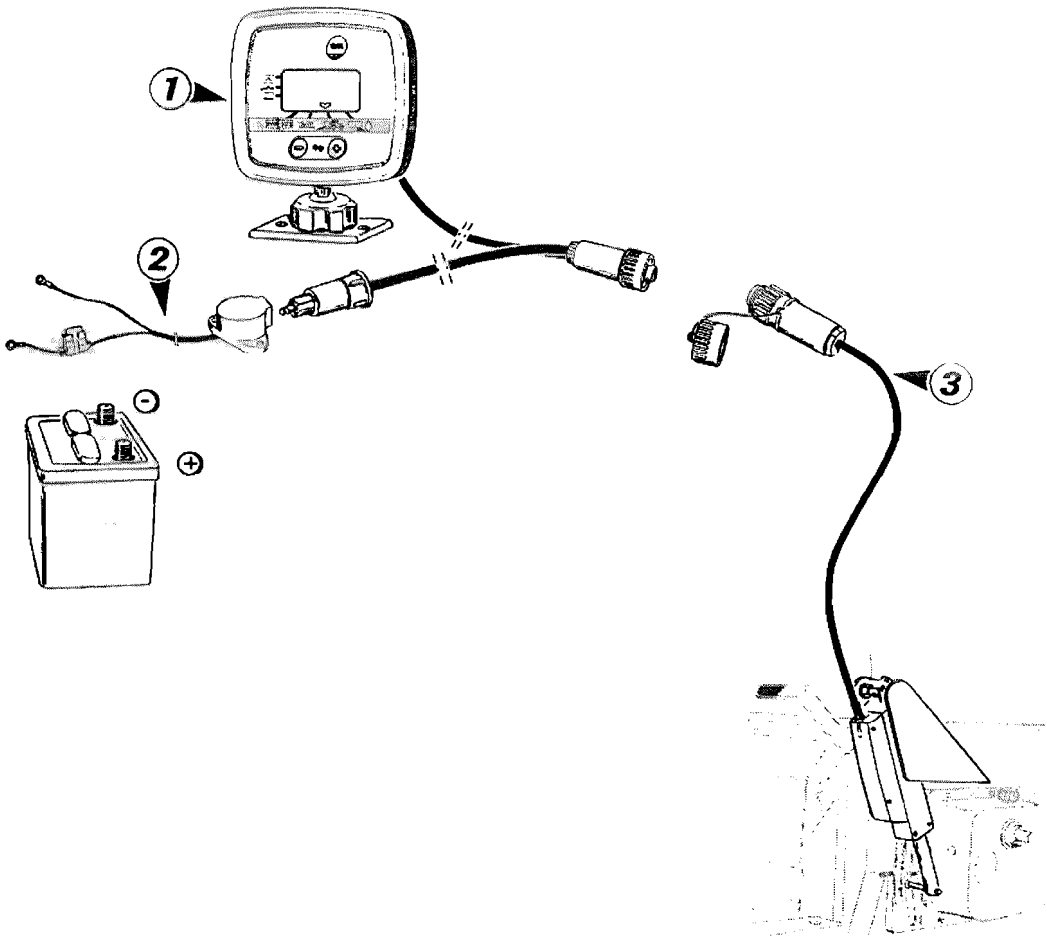
Connection :

- ① R-Control Unit
- ② Power supply circuit with 7.5 amp fuse
- ③ Seed drill actuator bundle

- **B** Power Connection

Connection :

- It is mandatory to connect the unit directly to the 12 volt battery using the connection provided.
- The unit display should light up when the connection is made.



- The unit is fitted with a back-up battery to preserve the programmed data.

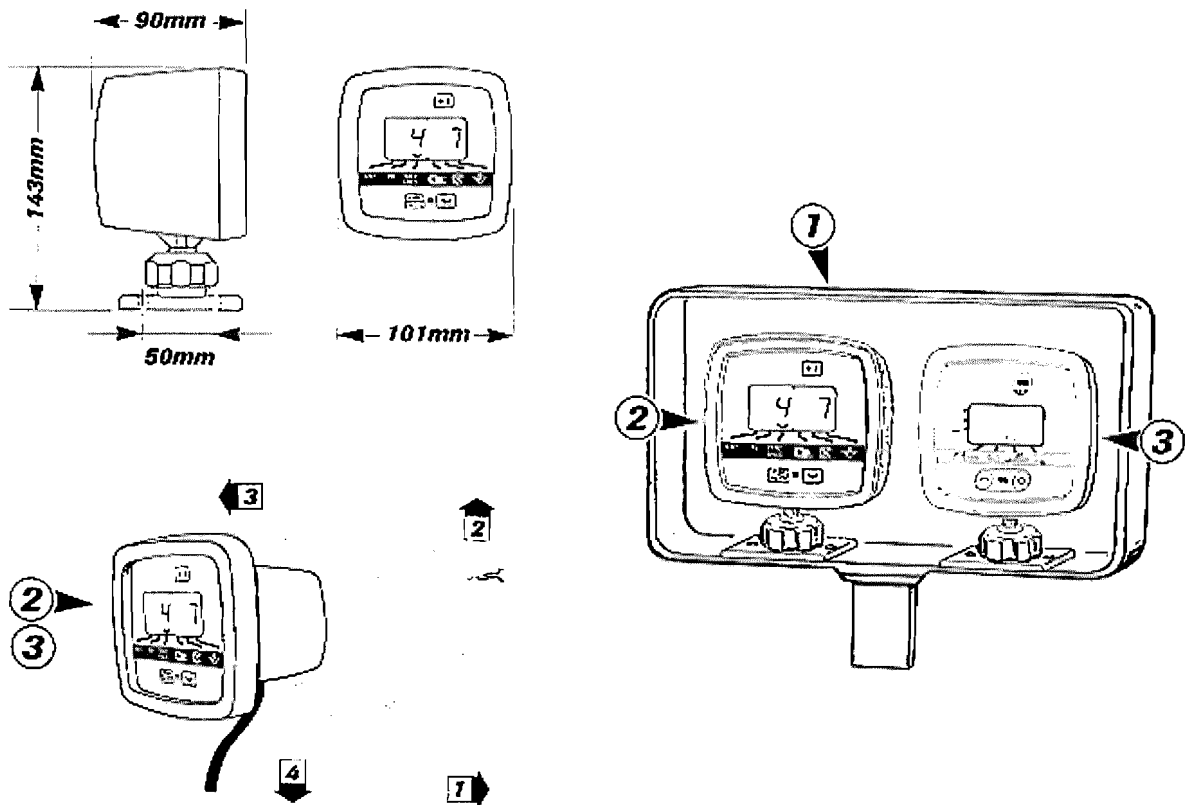
C Mounting the Unit

Positioning :

- The R-control unit should be positioned in the tractor cab so as to be easily accessible and visible to the driver.

Fixing :

- Four fixing positions in relation to the R-control front panel are available by removing and rotating the unit outer casing.
- Fix the unit bracket by drilling at the required position (2 holes, spaced at 50mm, dia.Ø 5mm)
- For mounting with seed drills with the multifunction tramline control ①, use the special bracket supplied ② with the R-control box ③.

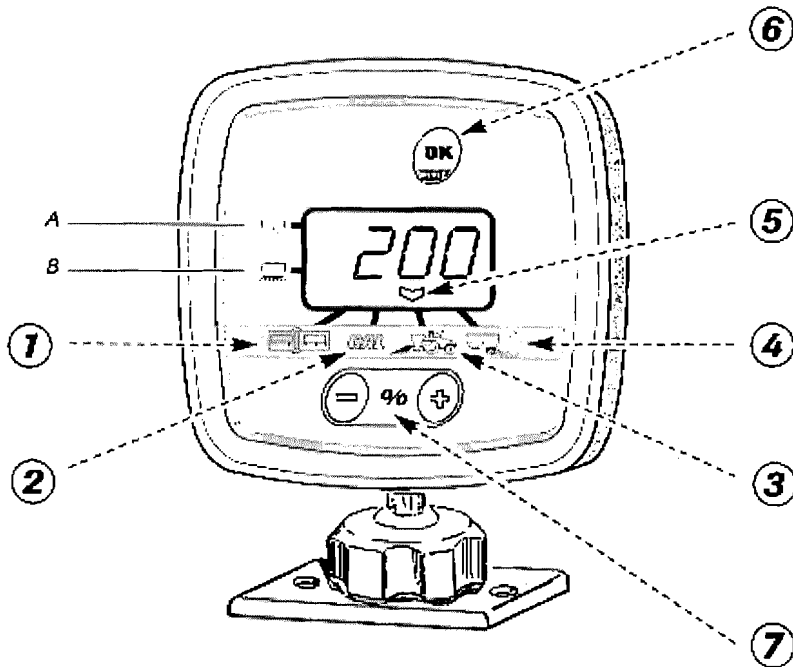


D Functions

Choice of machine : A – Spreader

B – Seed drill

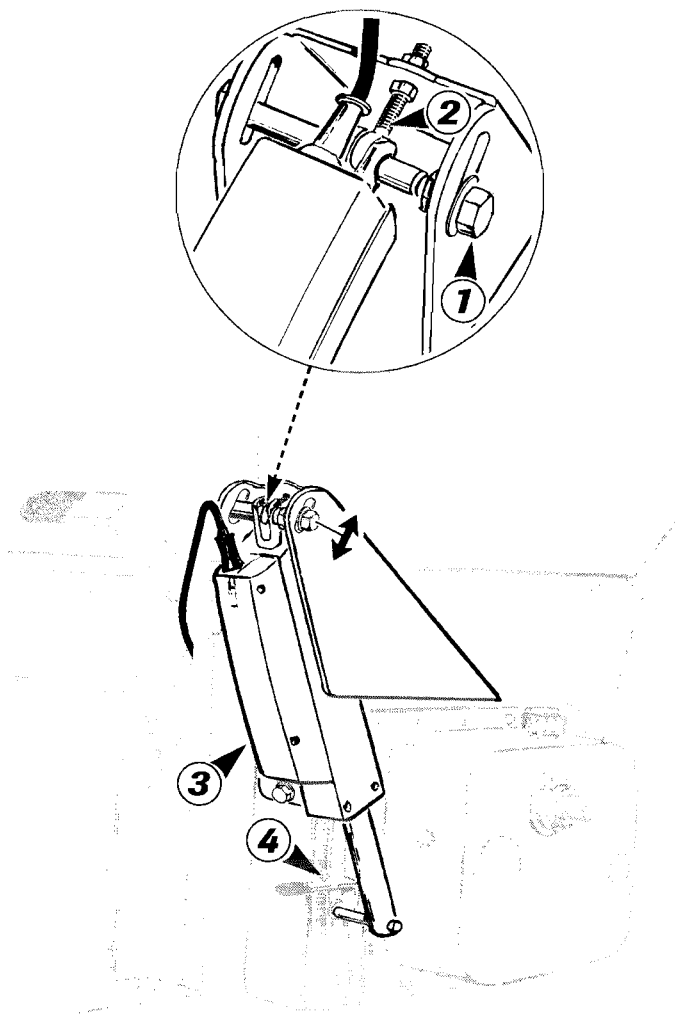
- ① Operating Indicator
- ② Calibration (Rate tests).
- ③ Sowing Rate.
- ④ Headland Spreading (Spreader only)
- ⑤ Cursor
- ⑥ Recording.
- ⑦ Changing Calibration and Rate values.



E Fitting the R-Control Unit on Seed Drills

- Mount the actuator bracket on the upper left corner of the variator.
- Mount the base of the actuator (Bolt M10 ① + Nut + threaded adjustment rod ② , and the actuator ③).
- Attach the actuator ③ to the Variator using the long bolt provided in place of the lock screw on the variator setting lever.
- Connet the R-control unit to power and select << Seed drill>> and confirm by pressing OK.
- Set the R-control display on 35 ④ .(See page 7)
- Move the base of the actuator using the threaded adjustment rod ② so that the indicator on the Variator scale also shows 35..
- Tighten the M10 clamp bolt ① and the nuts on the threaded adjustment rod ②.
- Secure all loose wiring with cable ties.

Note : Keep the Variator locking screw safely in case a manual setting of the variator is required at a future date.

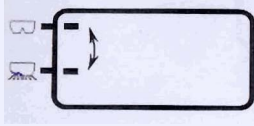


OPERATION

A Selecting the Machine Type

a) Selection

Connect the R-control to power - the display will illuminate



Press on :



Switch the cursor to choose seed drill

Press on



To save.

Press again on



to continue

INIT is displayed on the monitor



The actuator will automatically adjust to the pre-set position 35 on the Variator scale (if not see adjustment on page 6)



Press on



To move the cursor to switch to *CAL* mode



- Note :

35 on the Variator scale is the standard value for Calibration Rate testing.

B Calibration Rate Test

Check that the R-control has set the Variator at the *CAL* mode position of 35

Carry out a normal Calibration rate check for the model and width of drill (See the Operator's Instruction Book)

Weigh the amount collected in Kg(0,00).

Enter the value using



e.g.

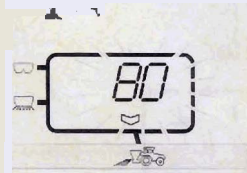


- **Note** : For small weights e.g. oilseed rape enter the Kg to 3 decimal places. (See page 13 for further details on low sowing rates.)

Press on



The R-control now computes and displays the sowing rate in Kg/ha. The rate display will be flashing ... in this case 80 kg/ha



The cursor switches to



Two choices are now possible :

- a) The rate displayed is as expected. E.g. 80 kg/ha



Press on to
save



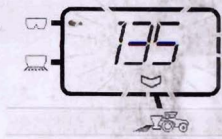
You are now ready to go drilling.

b) The sowing rate required differs to that displayed.

Press on



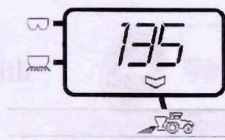
To adjust to the required rate
e.g 135 kg/ha.



Press on



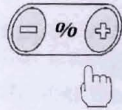
To save



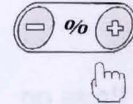
You are now ready to go drilling.

C Adjusting the Seed Rate on - the -move

Press on



- Each press of the key gives a 10% increase or decrease



- The cursor flashes. On the display, the adjusted seed rate flashes and alternates with the adjustment percentage + or -.



Press on



To return to the original sowing rate.



Note : If the seed rate is set too high and the drill is unable to reach the new target, the rate figure will flash on the display.

Press on



To return to the original sowing rate.

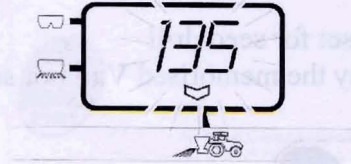
N.B Maximum recommended range of variation +/- 40%

D Changing the Target Sowing Rate

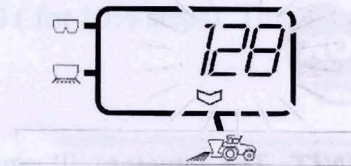
1) Press on



Release the key when the rate displayed flashes (after approx. 5 seconds.)



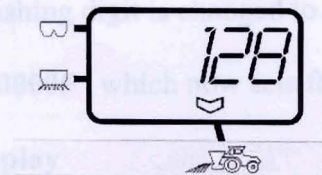
2) Alter the rate with



3) Press on



To save the new reference rate.



• Note : This procedure will only work if you are using the same sample of seed. If you have changed variety, seed dressing etc. then a new Calibration rate check should be carried out.

E Direct Access to the Settings after switching off the unit

- The R-control has memorised the last setting made on the seed drill.
- To access directly without going through the menu.

1) Power up the R-control

2) Press on



Check the R-control is set for seed drill
The monitor will display the memorised Variator setting.

3) Press on



The monitor displays the sowing rate , flashing.

4) Press on to save



The display will show **INIT** . The actuator will return to zero the back to the target rate.

You are now ready to go drilling.

The target rate displayed will be the last one used with the R-control.

F Changing the % Rate Adjustment



Take care to follow the instructions below precisely to be sure not to change the basic programming of the R-control functions . The standard rate adjustment step for the R-control is 10%, but this can be changed using the following procedure. The example shows changing from 10% to 5% steps.

To Enter into Programming

Switch OFF power to the R-control

Press and Hold key



At the same time Switch ON power . The OK key can now be released.

Position the Cursor on



by Pressing on



The display will show 00010 (for 10% steps). The last digit 0 will be flashing.

Press and hold on



Press on this key until the last digit is changed to « 5 », then release.

The second digit from the right will now flash.

Press and hold on



Press on this key until the flashing digit is changed to « 0 », then release.

The display will now show **00005** , which now sets for 5% steps.

To Return to Standard Display

Switch OFF the power to the R-control and wait at least 10 seconds before reconnecting.
Switch ON the power and the display will now return to normal function.

NOTE : For sowing low rates when single figure kg/ha are required e.g. oilseed rape, then it is necessary to set the % adjustment figure at 9% or below to allow setting of target rate in increments of 0.1 kg/ha. The weight collected during calibration can then be entered to 3 decimal places of kg .

Do not set the % adjustment figure below 5% when using low sowing rates.

INFORMATION

A Trouble Shooting

Problem	Solution
The R-control display does not light up	Check the 12 V connection. Check the 7,5 Amp fuse.
The R-control lights up then goes off.	Check the polarity +/-
The actuator does not move.	Check the 7,5 Amp fuse.

B Maintenance

a) Electronic Control Unit

- The R-control box requires no maintenance.
- When not in use, store the control box in a warm dry place.

b) Actuator

- The actuator requires no special maintenance, but beware of sharp jolts or knocks which may upset the positioning etc.
- **NEVER USE A HIGH PRESSURE WASHER TO CLEAN AROUND THE ACTUATOR OR VARIATOR.**

PERSONAL NOTES

Date	Seed Type	Variety	Kg/ha	Variator Setting	Total Area