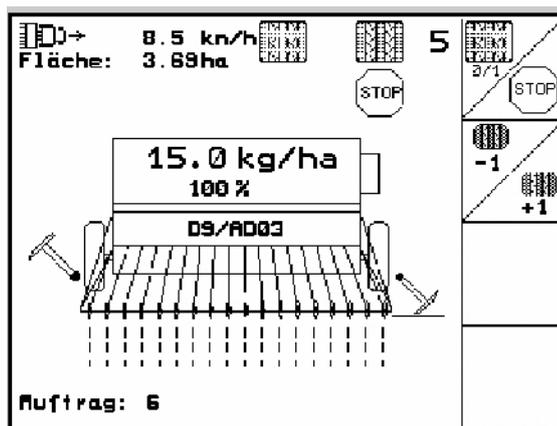


# Operator's Manual

## **AMAZONE** Software **AMABUS** and Joystick

For use in conjunction with  
mechanical seed drills

**D9** and **AD03**



MG 4660  
BAG0119.0 12.12  
Printed in Germany

Before starting to operate the machine, please carefully read and adhere to this instruction manual and safety advice!

en



## Preface

Dear customer,

The **AMATRON 3** on board computer is yet another quality product from the comprehensive range of farm equipment manufactured by AMAZONEN-WERKE, H. Dreyer GmbH & Co. KG.

In order to ensure you make the fullest use of your on-board computer in conjunction with **D9** and **A003** seed drills we recommend that you carefully read and observe the information within this instruction manual and adhere to the advice given therein.

Please ensure that this instruction manual is made available to any operator before he or she starts to operate the machine.

This instruction manual refers to the **AMATRON 3** on board computer when used in conjunction with **AMAZONE**- mechanical seed drills.



**AMAZONEN-Werke**  
**H.Dreyer GmbH & Co. KG**

Copyright © 2012 AMAZONEN-WERKE  
H. DREYER GmbH & Co. KG  
D-49502 Hasbergen-Gaste  
Germany  
All rights reserved



Contents

- 1. **Safety** ..... 4
  - 1.1 Dangers when not adhering to this safety advice ..... 4
  - 1.2 Qualification of operator ..... 4
  - 1.3 Symbols in this instruction manual ..... 4
    - 1.3.1 General danger symbol ..... 4
    - 1.3.2 Attention symbol ..... 4
    - 1.3.3 Advice symbol..... 4
- 2. **Description of product**..... 5
  - 2.1 Input of information into **AMATRON 3** ..... 5
  - 2.2 Hierarchy of the software ..... 6
- 3. **Operation** ..... 7
  - 3.1 Main menu ..... 7
    - 3.1.1 Input of machine data ..... 8
      - 3.1.1.1 Input of the sown and unsown distances (m) for the intermittent tramline ..... 10
      - 3.1.1.2 Calibration of forward speed sensor ..... 11
    - 3.1.2 Creating a job ..... 13
    - 3.1.3 External job ..... 14
    - 3.1.4 Calibration..... 14
      - 3.1.4.1 Calibration of the drill with remote seed rate control ..... 14
    - 3.1.5 Setup ..... 17
- 4. **Operation in the field** ..... 20
  - 4.1 Operational menu **D9/AD03** ..... 21
    - 4.1.1 Display - operational menu ..... 21
    - 4.1.2 Advice on field operation ..... 21
    - 4.1.3 Key layout menu - operate ..... 22
    - 4.1.4 Layout menu - joystick ..... 22
- 5. **Joystick** ..... 23
  - 5.1 Fitting ..... 23
  - 5.2 Function ..... 23
  - 5.3 Key layout ..... 24
- 6. **Maintenance**..... 25
  - 6.1 Calibration of gearbox ..... 25
- 7. **Help menu** ..... 26
- 8. **Malfunction** ..... 27
  - 8.1 Alarm ..... 27
  - 8.2 Failure of the forward speed sensor ..... 28



## 1. Safety

This instruction manual contains basic advice that must be adhered to when mounting, operating and maintaining the machine. Ensure that this instruction manual has been read by the user/operator before starting to operate the device and that it is made really available at all times to the user.

Please strictly observe and adhere to all safety advice given in this instruction manual.

### 1.1 Dangers when not adhering to this safety advice

Not adhering to the safety advice given

- may result in endangering the user or other persons, the environment and/or the machine itself.
- may result in the loss of any claim for damage.

Not paying attention to the safety advice may cause the following risks:

- Danger to persons present within the operational range.
- Failure of important functions of the machine.
- Failure of prescribed measures for maintenance and repair.
- Danger to persons from mechanic or chemical affects.
- Danger to the environment from leaking hydraulic oil.

### 1.2 Qualification of operator

The implement may only be operated, maintained and repaired by persons, who are acquainted with it and have been informed of the relevant dangers.

### 1.3 Symbols in this instruction manual

#### 1.3.1 General danger symbol



Not adhering to the safety advice in this instruction manual may cause danger to health and life of persons. They are identified by the general danger symbol (Safety symbol according to DIN 4844-W9).

#### 1.3.2 Attention symbol



Safety advice, where damage may be caused to the machine and its function when not being adhered to, are identified with the attention symbol.

#### 1.3.3 Advice symbol



Advice regarding the machine's specific particularities, which have to be adhered to for a faultless function of the machine are identified with the tip symbol.

## 2. Description of product

**AMAZONE** machines are easy to control, operate and monitor when using the **AMBUS** software and the in-cab terminal **AMATRON 3**.

This instruction manual refers from terminal-software version:

-Machine:       MHX-Version.:   2.14

-

### 2.1 Input of information into **AMATRON 3**



To assist you in operating **AMATRON 3** the function icons are illustrated in this instruction manual in order to make clear that the key related to that function icon should be pressed.

**Example:**

Function icon 

**Description in the operator's manual:**

 Reduces the gearbox lever setting to a lower position.

**Action:**

The operator actuates the key (Fig. 1/1) relating to function icon to reduce the seed rate.

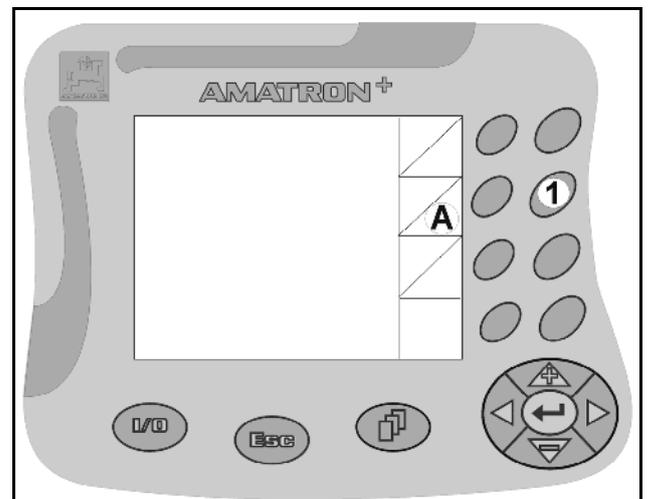
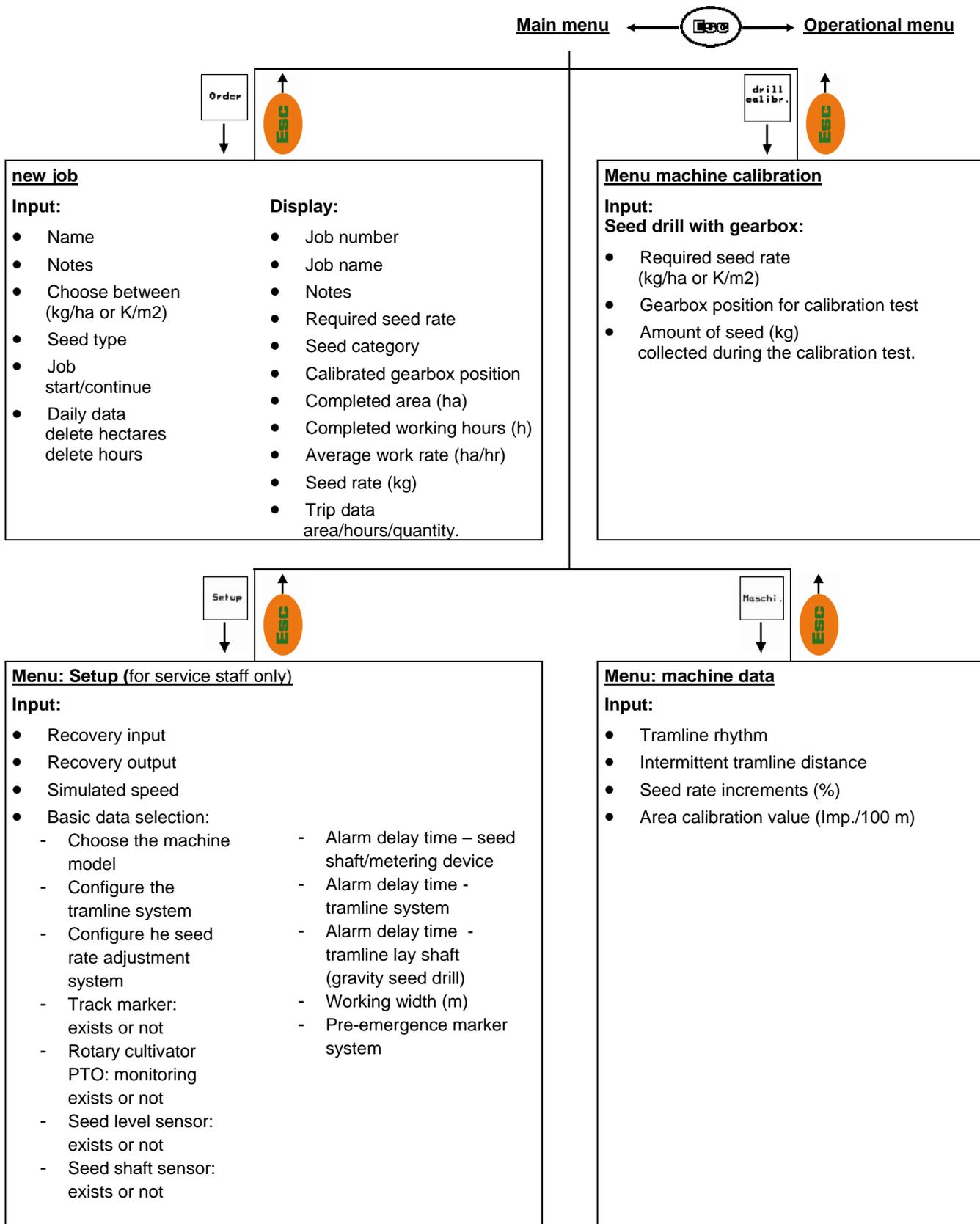


Fig. 1



## 2.2 Hierarchy of the software



### 3. Operation

#### 3.1 Main menu

- |       |
|-------|
| Order |
|-------|

Menu job: input of data for a new job. Always start a job prior to drilling (see para. 5.2.2).
- |                  |
|------------------|
| drill<br>calibr. |
|------------------|

Menu calibration: always carry out a calibration test prior to any sowing operation (see para.5.3).
- |         |
|---------|
| machine |
|---------|

Menu Machine data: input of machine specific or individual data (para. 5.2.).
- |       |
|-------|
| Setup |
|-------|

Menu: Setup - input of data or information recall for service staff during maintenance or trouble-shooting (para. 5.2.4).

<b>machine type:</b>	<b>D9/AD03</b>	<b>Order</b>
<b>order No.:</b>	<b>6</b>	<b>drill calibr.</b>
<b>tramline rhythm No.:</b>	<b>15</b>	<b>machine</b>
<b>working width:</b>	<b>2.5m</b>	<b>Setup</b>
	<b>working menu</b>	<b>aid</b>

Fig. 2



### 3.1.1 Input of machine data

Page one menu: machine data (Fig. 3):

- Inputting the required tramline rhythm (see tables Fig. 4 to Fig. 6).
- Inputting the intermittent tramline function (see para. 3.1.1.1).
- Inputting the application rate increase (as % that the seed rate changes via the , during operation).
- Calibration of hectare meter sensor (see para. 5.2.1.2).

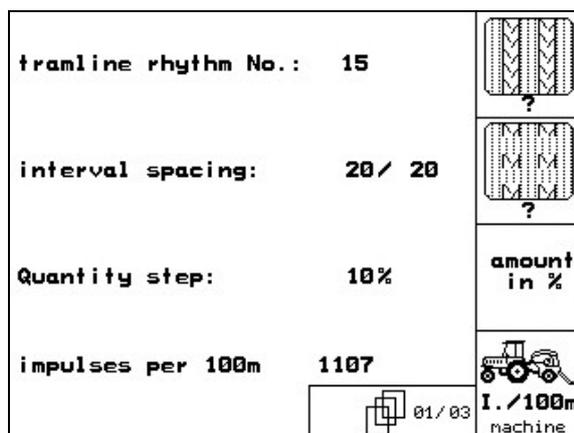


Fig. 3

Tramline rhythm	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Tramline counter	0	0	0	0	0	0	0	0	0	1	1	0	0	0	
	1	0	1	1	1	1	1	1	1	2	0	1	1	1	
		1	2	2	2	2	2	2	2	3	3	2	2	2	
		2		3	3	3	3	3	3	0	4	3	3	3	
					4	4	4	4	4	5	5	4	4	4	
						5	5	5	5	6	6	5	5	5	
							6	6	6	0	7	6	6	6	
								7	7	8	8	7	7	7	
									8	9	0	8	8	8	
										10	10	9	9	9	
												10	10	10	
													11	11	11
														12	12
															13

Fig. 4

Tramline rhythm	15	16	17	20	21	22	23	26	32						
Tramline counter	1	0	0	0	0	0	0	0	0						
	Rhythm 15 does not crate any trmlines.	1	1	1	0	0	0	0	1	0					
		2	2	2	1	1	1	1	2	1					
		3	3	3	2	2	2	2	3	2					
		4	4	4	3	3	3	3	4	3					
		5	5	5	4	4	4	4	5	4					
		6	6	6		5	5	5	6	5					
		7	7	7		6	6	6	7	6					
		8	8	8			7	7	8	7					
		9	9	9				8	9	8					
		10	10						10	9					
		11	11							10					
		12	12												
		13	13												
		14	14												
		15	15												
			16												

Fig. 5

Double tramline																					
Tramline rhythm	18 left hand	18 right hand	19 left hand	19 right hand	24 left hand	24 right hand	25 left hand	25 right hand	27 left hand	27 right hand	28 left hand	28 right hand	29 left hand	29 right hand	30 left hand	30 right hand	31 left hand	31 right hand	33 left hand	33 right hand	
Tramline counter	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	
	2	2	2	2	2	0	2	0	2	0	2	2	2	0	0	2	2	2	2	2	
	0	3	3	0	3	3	3	3	3	3	0	3			3	3	0	3	3	3	
	4	4	4	4	0	4	4	4	4	4	0	4			4	4	4	4	4	4	
	5	5	5	5	5	5	5	5	0	5	5	5			5	0			0	5	
	6	6	6	6	6	6	0	6	0	6	6	0			6	6			6	6	
	7	0	0	7	0	7	7	7	7	7									7	7	
	8	8	8	8	8	8	8	8	8	8									8	8	
	9	9	9	9	9	0	0	9	9	0									9	9	
	10	10	10	10	10	10	10	10	10	10									10	10	
	11	11	11	11			11	11													
	12	0	0	12			12	12													
	13	13	13	13			13	0													
	14	14	14	14			14	14													
	15	15	15	15																	
	0	16	16	0																	
	17	17	17	17																	
	18	18	18	18																	

Fig. 6



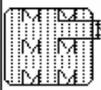
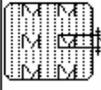
**3.1.1.1 Input of the sown and unsown distances (m) for the intermittent tramline**



Setting the sowing distance (m) when the intermittent tramline function is switched on.



Setting the non-sowing distance (m) when the intermittent tramline function is switched on.

<b>sown distance:</b>	<b>20 m</b>	
<b>n.sown distance:</b>	<b>20 m</b>	
		
		

**Fig. 7**

### 3.1.1.2 Calibration of forward speed sensor

The adjustment of seed rate, the accumulation of the worked area or an indication of forward speed, **AMATRON 3** requires the impulses of the seed drill drive wheel over a measured distance of 100 m.

The value 'Imp./100m' is the number of impulses, that **AMATRON 3** receives during the calibration distance from the seed drill drive wheel.

Slip on the seed drill drive wheel may vary in changeable soil types (e.g. from heavy to light land) resulting in a change of the value Imp./100m.

It is necessary to determine the 'Imp./100m' value:

- prior to the initial operation
- in changeable soils (wheel slip)
- in cases of a deviation between the seed rate determined by the calibration test and the quantity of seed applied in the field.
- in case of deviation between the displayed and the actual area drilled.

For a manual input of that value for a subsequent operation in the same field the 'Imp./100 m' calibrated value can be entered into the table (Fig. 10).



**The calibration figure "Imp./100m" may never be smaller than "250", as otherwise **AMATRON 3** does not operate properly.**

There are two potential possibilities to enter the Imp/100m:

-  The value is known and is entered manually on the **AMATRON 3** terminal.
-  The value is unknown and will have to be determined by driving down a measured calibration distance of 100 m.

enter value for impulses/100m or calibrate automatically.	manual Entry
	Start
actual 1107 Imp/100m	

Fig. 8

Calibration travel by driving down a test distance:

- Carefully measure the test distance of 100 m in the field. Mark beginning and end of the test distance (Fig. 9).

-  Start calibration.
  - Carefully drive test distance from the beginning to the end mark (when driving off the counter jumps back to 0). The determined impulses are continuously shown on the display.
  - Stop after 100 m. The display now shows the final determined number of impulses.
  -  Input the value 'Imp./100m'. The value can be related to the tractor by selecting it from the memory.
  -  Reject the new value 'Imp./100m'.

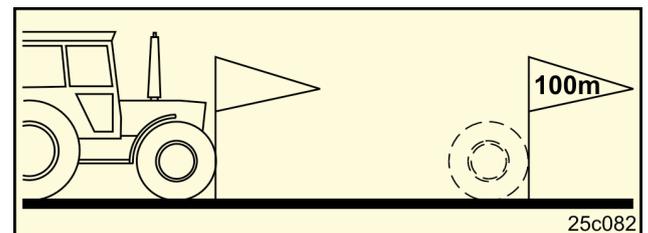


Fig. 9



The "Imp./100m" calibration value depends on both the seed drill model and the soil type.	Mechanical tyre packer Pack Top seed drills <b>AD03</b>	Mechanical seed drills <b>D9</b>
<b>Calibration value "Imp/100m"</b>		
Field 1		
Field 2		

Fig. 10

### 3.1.2 Creating a job

When the job menu is opened the last started (last worked) job appears.

20 jobs in maximum can be stored (Job no's.1-20).

For creating a new job select the desired job no (Fig. 11/1); then:

- Enter name
- Enter note
- all data in this existing job is deleted
- Starting the job so that data for this job can be accumulated.
- Enter desired application rate.
- Enter the kind of seed, the 1000-grain weight and the seed count
- Delete daily data
  - Worked area (ha/day)
  - Quantity applied (amount/day)
  - Working hours (hours/day)

Select for calling up saved datas and for starting the job again.

Pressed shift key (Fig. 12):

- Page forward in order.
- Page backward in order

order No. :	6	Shift	name
name:	-----		note
note:	-----		delete
req. amou. :	15.00 kg/ha		start
kind of seed:	fine seeds		kg/ha K/n <sup>2</sup>
cal. gearbox pos. :	65.0		kind
order:			delete daily data
finish. ha:	15.00 ha		
hours:	5.0 h		
average:	2.50 ha/h		
sown rate:	225 kg		
trip data:			
area:	3.69 ha		
hours:	0.5 h		
amount	55 kg	6/20	
		1	

Fig. 11

Job No. :	25	Started		next Job
Name:	Amazone			
Note:	instruction			
Des. quantity:	200 kg/ha			Prev. Job
Finished area:	0.00 ha			
Hours:	0.0 h			
Average:	0.00 ha/h			
Quant. spread:	0 kg			
ha/day:	0.00 ha			
Amount/day:	0 kg			
Hours/day:	0.0 h			
		2/10		

Fig. 12



### 3.1.3 External job

Via a PDA computer an external job can be transferred into **AMATRON 3** and started.

This order always takes job number 21.

The data transfer takes place via the serial interface.

-  finish external job.
-  Enter the required amount.

<b>Job No. :</b>	<b>20051</b>	finish external job
<b>Re. amount :</b>	<b>250 1/ha</b>	1/ha
<b>Worked ha :</b>	<b>0.00 ha</b>	
<b>Hours :</b>	<b>0.0 h</b>	
<b>Amount spra. :</b>	<b>0 Li.</b>	

Fig. 13

### 3.1.4 Calibration

The calibration test is carried out to ensure that, during the sowing operation the desired seed rate is maintained.

Always carry out a calibration test

- when changing the seed type
- in cases with the same seed type, however, with a different grain size, grain shape, bulk density or different dressing.
- when changing from the main seed wheel to the fine seed wheel and vice versa.
- in case of a deviation between the calibration test and the actual seed rate.

#### 3.1.4.1 Calibration of the drill with remote seed rate control

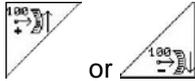
Fill the seed hopper with sufficient seed.

As described in the operator's manual for the seed drill, place the collecting tray underneath the metering unit(s).



Check/enter the desired seed rate.

Tip:  
This figure can also be entered via the job menu (para. 5.2.2).



Press the or keys to set the gearbox lever to an estimated position

**Gearbox position "50": Sowing with the main metering wheels**

**Gearbox position "15": Sowing with the fine seed wheels**



The gearbox position which is indicated on the **AMATRON 3** must coincide with that indicated on the gearbox setting scale. If not first calibrate the gearbox .

- Close the inspection window on the metering wheel.
- As described in the operator's manual of the seed drill turn the star wheel clockwise with the aid of the calibration crank until all chambers of the metering wheels are filled with seed and an even seed flow is delivered into the collecting tray(s).
- Empty the collecting tray(s).



Press and follow the advice on the display:

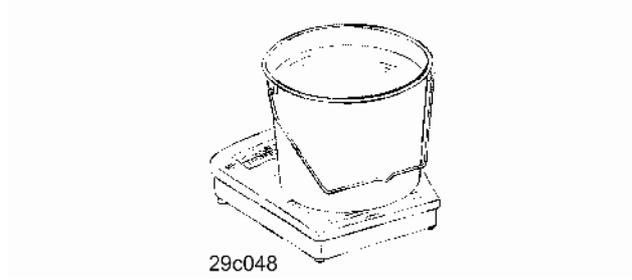
- As described in the operator's manual of the seed drill turn the drive wheel with the aid of the crank until the horn sounds. **AMATRON 3** registers any additional turns after the horn sounds in its calculation.
- To accept the calibration procedure after the horn sounds, press the key.
- Weigh the amount of seed collected in the collecting tray(s) (bear in mind the weight of the tray) and enter the weight (kg) into the terminal.



**Any balance used should weigh accurately as inaccuracy will cause deviations within the seed rate actually applied!**

<p>-enter required seed rate -pre-select gearbox position -start calibration -turn crank at least until signal sounds -enter calibrated amount in kg</p>	<p>kg/ha K/m²</p>
<p>actually set: working width: 2.5 m req.amou.: 15.00 kg/ha gearbox position 62.5</p>	<p>100 + ↑ 100 - ↓</p>
	<p>start calibr.</p>

Fig. 14



**AMATRON 3** automatically then calculates and sets the required gearbox position based on the calibration test data entered.

Repeat the calibration procedure to ensure the correct setting.



**Use the new determined gearbox position during repeating the calibration procedure ( do not start in gearbox position 15 or 50!)**

### 3.1.5 Setup

Applications in the Setup menu

- Input and output of diagnosis data for customer service staff during maintenance work or in case of problems
- Changing the settings on the display
- Selecting and entering machine basic data or activating and isolating special options (for customer service staff only).



**The settings in the Setup menu are fundamental to the machine's function should only be carried out by qualified personnel!**

Page one of menu: setup (Fig. 15):

Diagnosis of computer inputs (for customer service staff only)

Diagnosis of computer outputs (for customer service staff only).

Enter simulated speed (allows continued operation in spite of a defect in the forward speed sensor) (see para.3.1.1.2)

Settings display.

select page one of the basic data (Fig. 16):

- Selection machine type
- Selection tramline system:
  - Contractor
  - Single tramline - actuation by linear tramline motor
  - Double tramline - actuation by two linear tramline motors

The last selected value will be stored.

- Configure remote seed rate control:

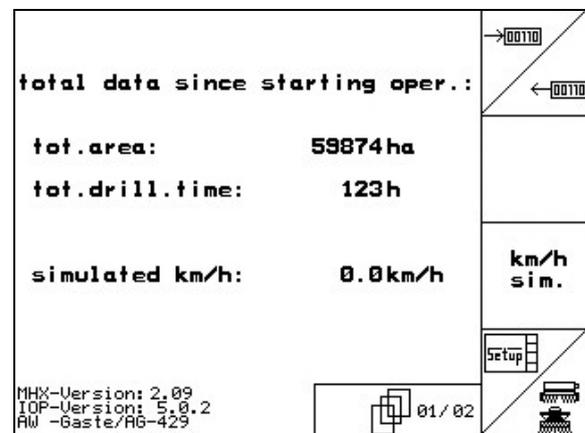


Fig. 15

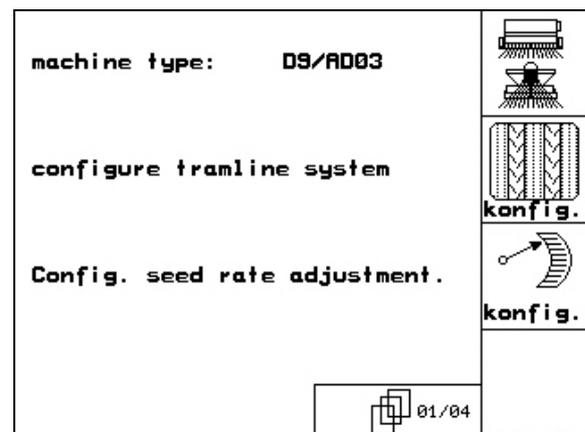


Fig. 16



-  Configure remote seed rate control
  - no remote seed rate control
  - remote seed rate control via Vario gearbox
 The last selected value will be stored.
-  Cal. Calibrate gearbox (see para.3.1.1.2).

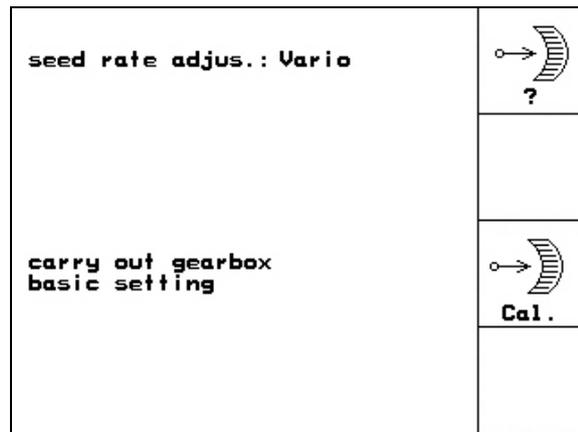


Fig. 17

Page 2  basic data (Fig. 18):

-  Number of bout marker sensors
  - one (one bout marker sensor registers the track marker position on drill models D9, AD, Avant, AD-P)
  - none (no bout marker sensor is fitted to the drill – input for drill models – Cirrus 3000 / 4000 / 6000).
-  Rotary cultivator monitoring:
  - yes (PTO speed sensor exists)
  - no (PTO speed sensor does not exist).
-  Low level sensor in the seed hopper:
  - yes
  - no
-  Monitoring of the metering wheels
  - yes
  - no.

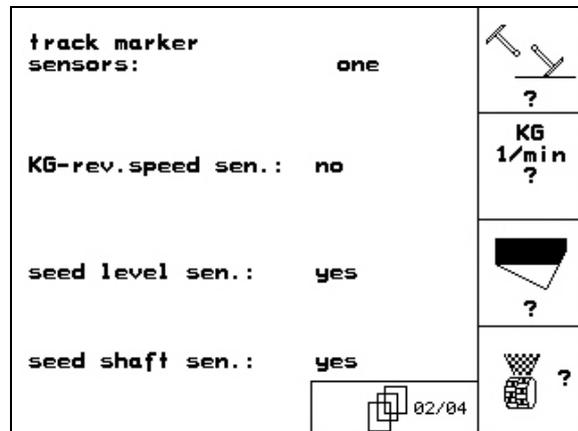


Fig. 18

Page 3  basic data (Fig. 19):

-  Alarm Input of the delay time for metering wheel alarm
-  Alarm Input of the delay time for tramline system alarm
-  Alarm Input of the delay time of tramline lay shaft alarm (only possible on gravity seed drills)

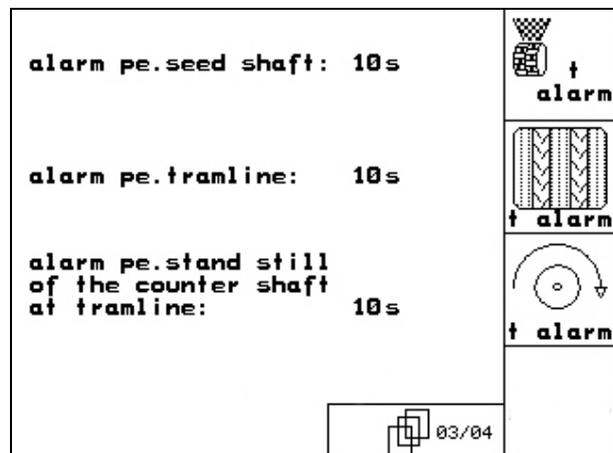


Fig. 19

 Page 4  basic data (Fig. 20):

-  Input of the working width (m)
  -  Pre-emergence markers:
    - none
    - hydr. actuated
    - electr. actuated.
- The last selected value will be stored.

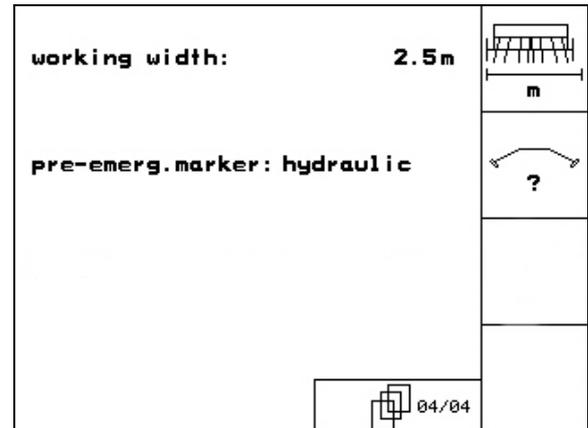


Fig. 20

 Page two  menu: setup (Fig. 21):

-  Resets machine job computer to factory setting. All entered and accumulated data (job, machine data, calibration values, setup data ) will get lost.

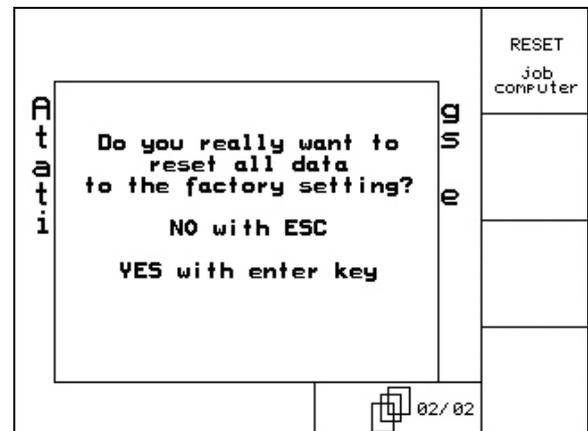


Fig. 21



## 4. Operation in the field

Before starting sowing the **AMATRON 3** will need to be provided with the following data:

- Job data (see para. 5.2.2)
- Machine data (see para. 5.2.1)
- Calibration test data (see para. 3.1.4.1).

During operation the seed rate can be changed at random with the press of a key.



each press of this key increases the sowing rate by the preset quantity step (para. 5.2.1) across the full drill. (e.g.:+10%).



Resets the sowing rate back to 100% across the full drill.



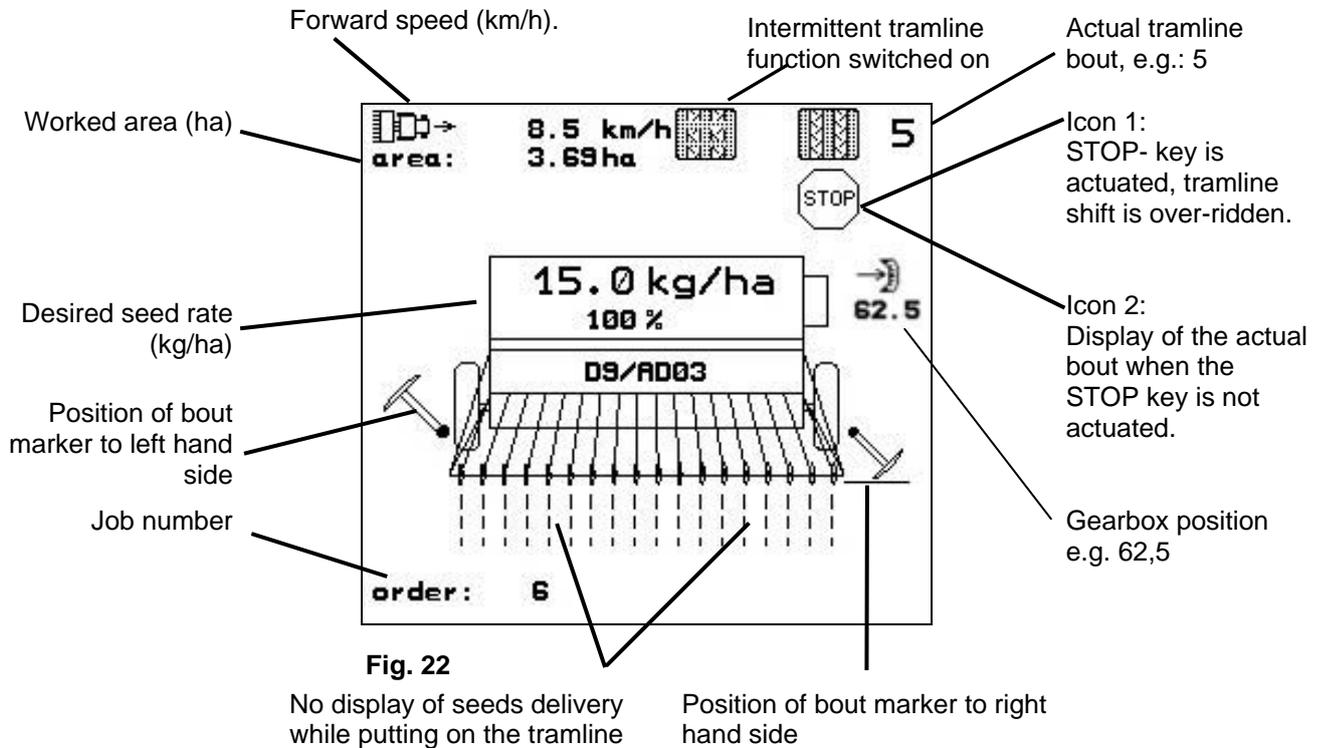
each press of this key reduces the sowing rate by the preset quantity step (para. 5.2.1) across the full drill. (e.g.: -10%).



Ensure that **AMATRON 3** is switched off during transport to the field and when travelling on public roads!

## 4.1 Operational menu **D9/AD03**

### 4.1.1 Display - operational menu



### 4.1.2 Advice on field operation

- switch **AMATRON 3** on.
- Select the desired job from the main menu and re-check settings
- start job
- select operational menu.
  - set the bout marker to the first run in the field
  - set tramline bout counter for the first run in the field.
- Start the sowing operation.  
During the sowing operation **AMATRON 3** displays the operation menu. From here the sowing operation can be controlled.
- The determined data will be stored in the started job.

### After finishing operation:

- Check job data (if required).
- switch **AMATRON 3** off.



4.1.3 Key layout menu - operate

Page 1: operational menu (Fig. 23):

-  switching on or off the intermittent tramline control
-  over-riding the tramline bout counter (Stop key)
-  retarding the tramline bout counter
-  advancing the tramline bout counter

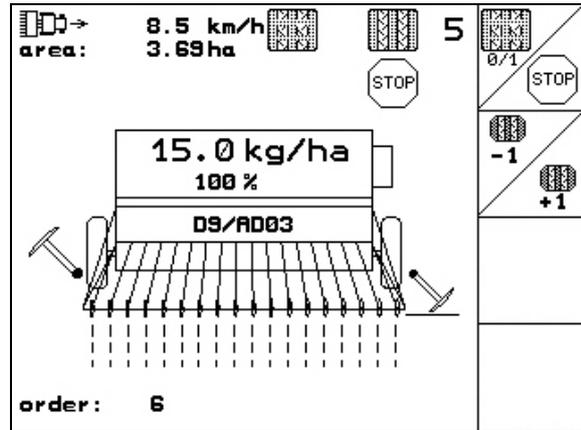


Fig. 23

4.1.4 Layout menu - joystick

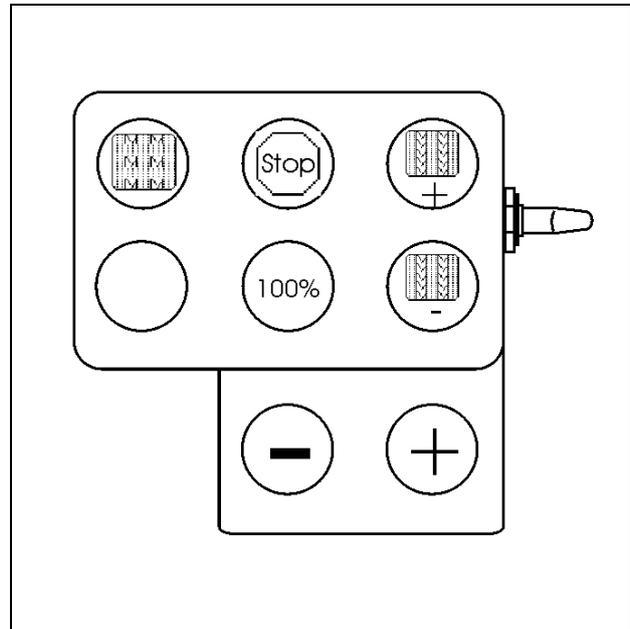


Fig. 24

## 5. Joystick

### 5.1 Fitting

Attach the joystick (Fig. 25/1) by using 4 bolts within convenient reach in the tractor cab.

Insert the plug of the basic equipment into the 9-pin Sub-D socket of the joystick (Fig. 25/2).

Insert the plug (Fig. 25/3) of the joystick into the mid Sub-D socket of **AMATRON 3**.

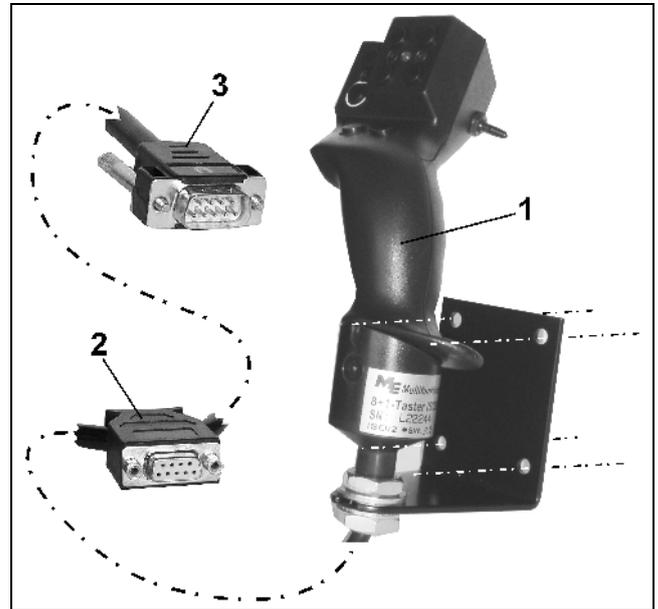


Fig. 25

### 5.2 Function

The joystick only functions in the operational menu of **AMATRON 3**. It allows the blind actuation of **AMATRON 3** during operation in the field.

For the actuation of **AMATRON 3** the joystick (Fig. 26) provides 8 keys (1 – 8). In addition the coverage of the keys can be changed 3 times by the switch (Fig. 27/2).

As standard the switch is in the

- mid position (Fig. 27/A) and can be moved
- upwards (Fig. 27/B) or
- downwards (Fig. 27/C).

The position of the switch is indicated by a LED light (Fig. 27/1).

- LED-indication yellow
- LED-indication red
- LED-indication green

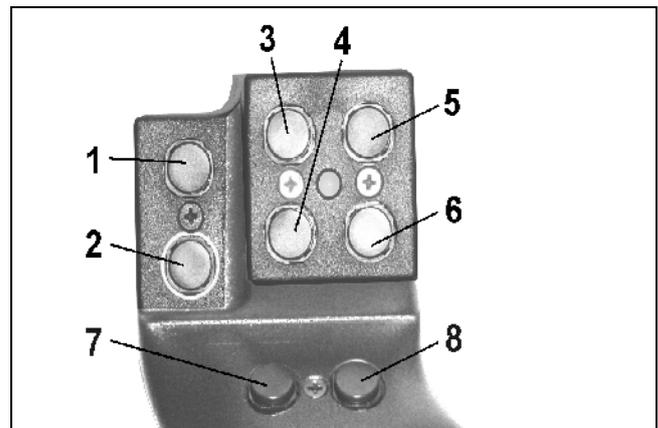


Fig. 26

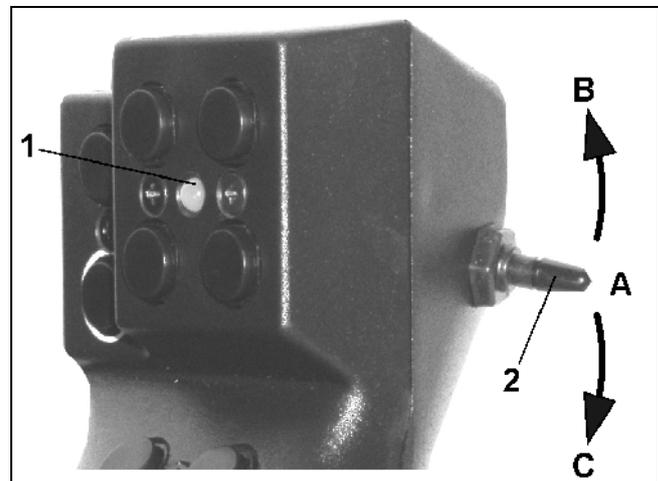


Fig. 27

### 5.3 Key layout

Taste	<b>D9 / AD03</b>
1 	Switching on or off the intermittent tramline control
2 	
3 	Switching on or off the tramline bout counter
4 	Spread rate 100%
5 	Advancing the tramline bout counter (1)
6 	Retarding the tramline bout counter (-1)
7 	- Spread rate [%]
8 	+ Spread rate [%]



In case of switch actuation upwards  or downwards  the keys are not covered.

## 6. Maintenance

### 6.1 Calibration of gearbox

Calibrating seed drills which are equipped with the Vario gearbox.

- prior to initial operation if **AMATRON 3** has not been factory fitted to the machine, but has been retrofitted.
- in case of a deviation between the display on the terminal and the gearbox scale.



Page 1: menu - setup.



Calibration of gearbox:

-  via the **AMATRON 3** move the gearbox lever back to zero until the LED on the electric seed rate control motor lights up
-  take the gearbox setting lever to a figure larger than 80 on the scale
-  Confirm the setting and enter the figure that is indicated, on the scale, by the gearbox setting lever in the now open input block (Fig. 29).

**Read the figure off the scale only when directly in front in order to avoid any reading errors!**

- After the calibration procedure move the gearbox setting lever to another figure. The indicated value should correspond to the scale value.

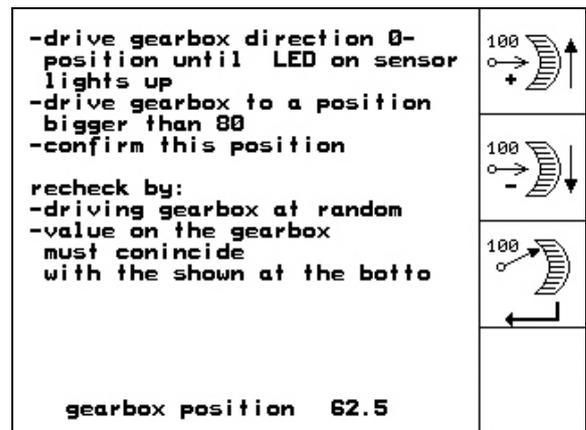


Fig. 28

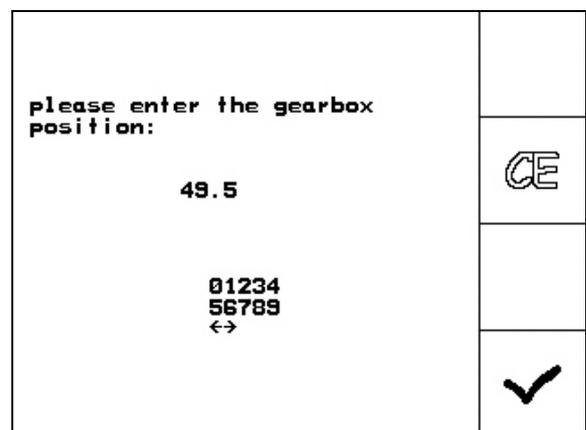


Fig. 29



## 7. Help menu

The help menu (Fig. 30) is opened from the main menu:

 Help menu:

-  help on operation
-  help on fault messages
-  help on tramline creation.

<b>aid</b>	
<b>1.aid for actuation</b>	<b>1</b>
<b>2.aid for fault messages</b>	<b>2</b>
<b>3.tramline rhythms</b>	<b>3</b>

Fig. 30

## 8. Malfunction

### 8.1 Alarm

#### Warning message:

A warning message (Fig. 31) appears at the bottom of the display and the audible alarm sounds three times. Remedy fault as soon as possible.

#### Example:

Warning: Seed hopper contents low.

Remedy: Refill seed hopper.

machine type:	D9/AD03	Order
order No.:	6	drill calibr.
tramline rhythm No.:	15	machine
working width:	2.5m	Setup
level too low		

Fig. 31

#### Error message:

The error message (Fig. 32) appears in the middle of the display and the audible alarm sounds.

- Read alarm message on the display.

-  Recall the help text

-  Confirm the error message.

machine type:	D9/AD03	Order
gearbox motor does not react		drill calibr.
confirm with enter key or page to aid		machine
working menu	aid	Setup

Fig. 32



## 8.2 Failure of the forward speed sensor

With the failure of the forward speed sensor (Imp./100m), which is attached to the gearbox or with the electric drive option on the land wheel, operation can be continued after the input of a simulated forward speed.

The failure of the forward speed sensor is indicated by the "seed drill lifted" mode on the display („Drille angehoben“).

In order to avoid possible sowing errors, exchange the defective sensor as soon as possible.

However, if a new sensor is not available in the short term, the sowing operation can continue as follows:

- Disconnect the signal cable of the defective forward speed sensor from the job computer.

- actuate  from the main menu.
-  enter a simulated forward speed.
- During operation the simulated speed must be maintained.



**As soon as impulses are sensed from the forward speed sensor the computer automatically changes over to the actual speed from the forward speed sensor.**

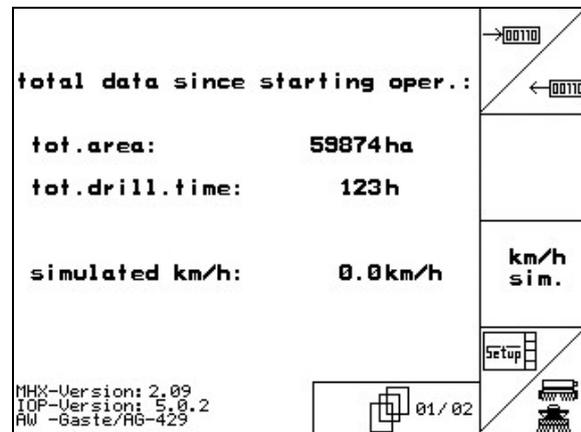


Fig. 33





# **AMAZONEN-WERKE**

H. DREYER GmbH & Co. KG

P. O. Box 51  
D-49202 Hasbergen-Gaste  
Germany

Tel.: ++49 (0) 54 05 50 1-0  
Fax: ++49 (0) 54 05 50 11 47  
e-mail: [amazone@amazone.de](mailto:amazone@amazone.de)  
http:// [www.amazone.de](http://www.amazone.de)

---

Branch factories: D-27794 Hude • D-04249 Leipzig • F-57602 Forbach  
Subsidiaries: in England and France

Factories for mineral fertiliser spreaders, field sprayers, seed drills, soil cultivation equipment,  
multi purpose storage halls and groundcare municipal machinery

---