Junkkari

WIZARD PLUS

INSTRUCTIONS FOR INSTALLING AND CALIBRATING THE ADJUSTMENT CYLINDER

WIZPLUS_09EN

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ENGLISH CE

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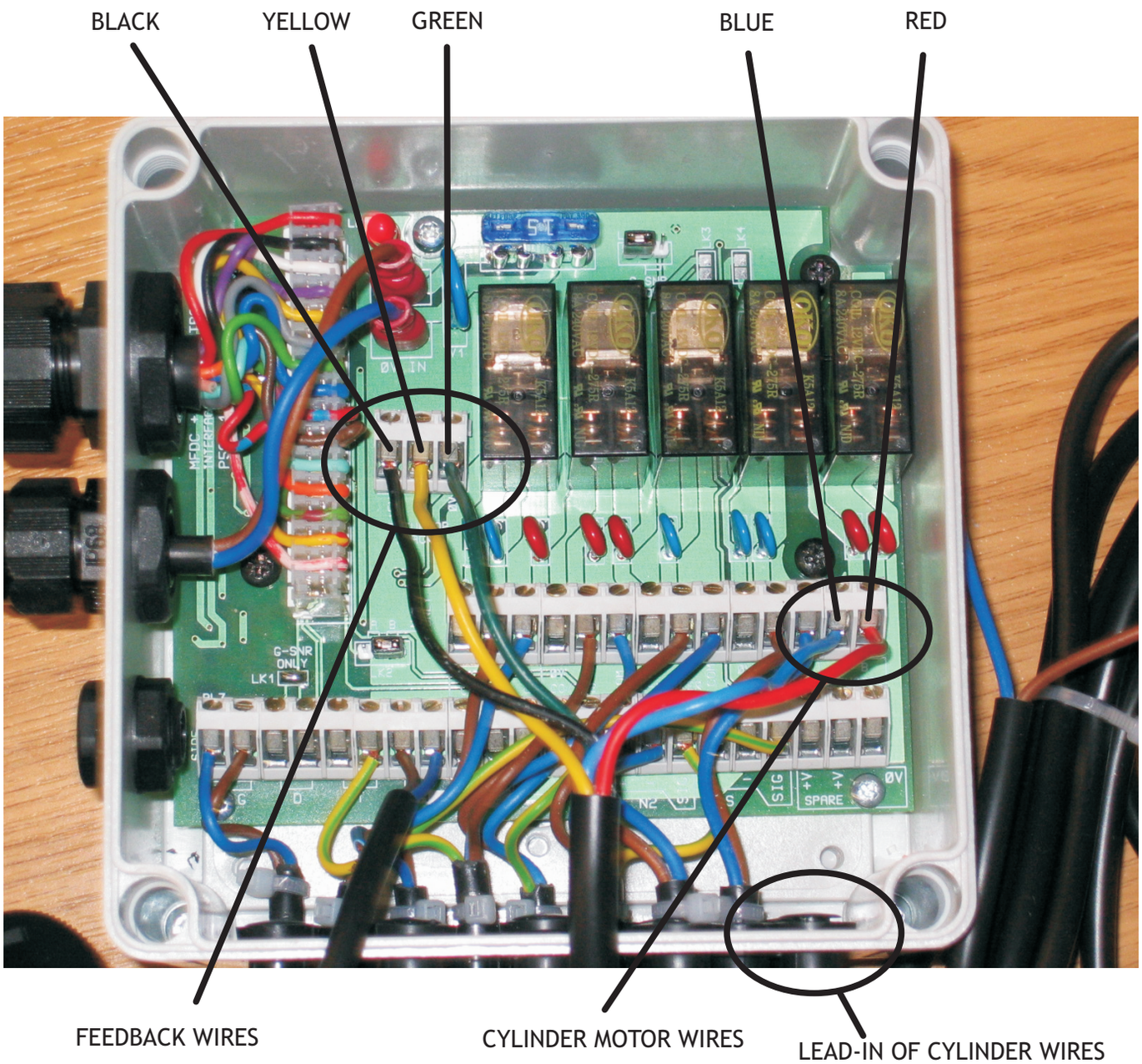
NOTE!
This booklet is intended as a supplement to the Junkkari-Simulta or Maestro instructions.

The Wizard-Plus sowing machine controller has the same functions as the Wizard controller, with the exception of the fertiliser remote control. Therefore, this booklet will only discuss the functionalities that are related to fertiliser remote control. Other functionalities are discussed in the instructions that are supplied with the machine located in the section describing the use of the sowing machine controller.

2 CONNECTIONS

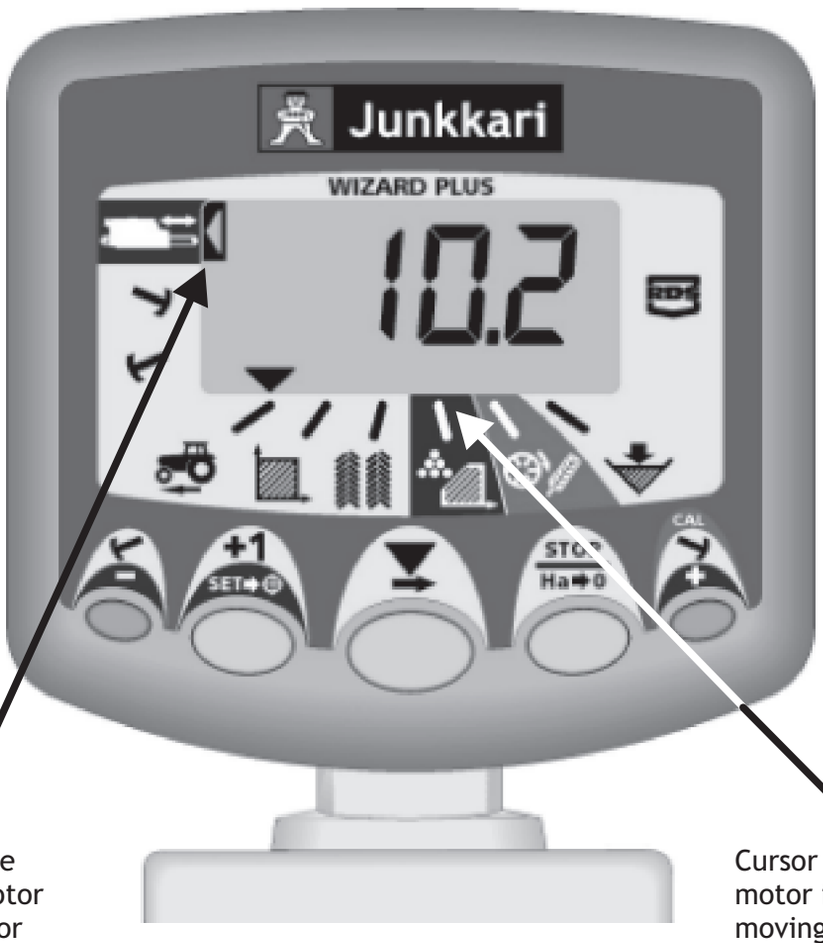
Connect the Linak LA12 wires according to the diagram below.



If the motor runs in the wrong direction, switch the motor's blue and red wires and the potentiometer's black and green wires.

Wires from the right to left:
Red = Motor + (actuator extending)
Blue = Motor + (actuator retracting)
Green = Potentiometer 0 volts
Yellow = Potentiometer signal
Black = Potentiometer + volts

3 CALIBRATION



Cursor is here when the motor is being run or calibrated.

Cursor is here when the motor is being run in a moving machine.

3.1 CALIBRATION OF THE LINAK ADJUSTMENT CYLINDER (UPPER AND LOWER POSITION)

NOTE! THIS IS NORMALLY PERFORMED WHEN BEING INSTALLED AT THE FACTORY, IN WHICH NO CUSTOMER INVOLVEMENT IS USUALLY REQUIRED.

This calibration state is reached in the following way:

1. Turn the power off.
2. Press and hold the '**STOP/ Ha to 0**' button when turning the power back on. In 10 seconds, you will see '**CAL.4**' and the display will go to programming mode 4.
3. On channel 1 (Vmin)), press the '-' button in order to move the piston to the minimum position. You will see the feedback value change on the screen. If the cylinder is correctly connected, the value should be approximately 2800±500 when the piston is completely inside.
4. . When the piston is completely inside and the motor is no longer running, release the '-' button and accept the lower threshold with the '**+1**' button.
5. Press the '**STOP/HA to 0**' button in order to move to channel 2, where the transfer to the maximum length will be carried out.
6. Press the '+' button in order to drive the piston to its maximum extent. You will again see the feedback value change on the screen. It should finally reach 7800±500.
7. When the piston is completely outside and the motor is no longer running, release the '+' button and accept the upper threshold with the '**+1**' button.
8. Press the '**STOP/Ha to 0**' 0' button in order to move to channel 3, where the parking exactitude of the cylinder will be seen. This can normally be changed with the centre button (the normal value is 0025). If the cylinder is whirring continuously, the value can and must be changed.
9. When you press the '**STOP/Ha to 0**' once more, the cursor will move back to channel 1.
10. Turn the power off and then turn it back on. The cylinder is now calibrated.

3.2 DRIVING THE CYLINDER PISTON TO THE CENTRAL POSITION AND THE ROTATION TEST

is performed as follows:

1. Turn the display off.
2. Press and hold the '+' button and turn the power on. The display will show the text '**CAL.3**' signalling programming mode 3.
3. The cursor will be seen on channel 1 and the screen will show '**P.CAL**' (product calibration)
4. Press the '**STOP/Ha to 0**' button once. The screen will alternately show '**ACT**' ja '**P05**'. When you begin to rotate the fertiliser axle, the following occurs: The piston of the cylinder will drive itself to the 50% position, and when this is reached, a sound signal will be emitted. After this, the screen will show an area. This means that you can begin the rotation test.
5. Rotate the fertiliser axle until the amount that is rotated equals an area of 0.01 ha. The display will beep, in which you can then end the rotation test.
6. After the test ends, the display will automatically switch to channel 3, which shows the amount that is theoretically achieved in kilogrammes.
7. Change the on-screen value to the real value achieved in the rotation test with the '+' or '-' button; e.g. 4,700. Accept the value via the centre button, in turn moving the cursor to channel 4.
8. The value is theoretical. Therefore, it is recommended that this stage be skipped. Channel 4 will display the specific weight factor of the rotation test result. You can take advantage of this value if you are using fertilisers of different weights.
9. By pressing the '+' button, the cursor will move to channel 5, which produces a value between 80% and 120%. This value can be used in order to compensate for the rotation test in various situations – the machine may be nearly empty or full. The value has the form 0100. This value cannot be changed in this programming mode; it is performed at 5. This can be used when using different fertilisers.
10. Press the '+' button, in turn moving the cursor to channel 1 and ending the rotation test.
11. Turn the power off.

3.3 SETTING A NEW FERTILISER AMOUNT WHEN THE MACHINE IS PRESENT

is performed as follows:

1. Select channel 4.
2. Press and hold the '+' or the '-' button for at least 3 seconds.
3. When the numbers begin to blink, release the button.
4. The '+' button can be used to increase the amount and the '-' button to decrease it.
5. When the desired amount is displayed, press the ' **+/1Set Target** ' button for 3 seconds in order to accept the new amount.
6. When you set the machine in motion, the cylinder will move to the set, desired position.

3.4 CHANGING THE FERTILISER AMOUNT WHEN THE MACHINE IS MOVING

is performed as follows:

1. Choose the channel via the centre button.
2. Use the '+' button to increase the fertiliser amount. The display will blink and alternately show the new amount and the percentage increase, e.g. '**550**' and '**10**', meaning that the new amount is 550 kg/h,which is 10% more than the previous amount. If you press '+' a second time, the screen will alternate between '**600**' and '**20**', and so on.
3. Decreasing the amount is correspondingly performed with the '-' button.
4. The previous setting can be restored by pressing the STOP button one time when in channel 4.

(NOTE! AFTER THE FINAL ADJUSTMENT, THE WIZARD NEEDS 6 SECONDS BEFORE THE ROW MARKERS WILL BEGIN TO WORK AUTOMATICALLY AGAIN)

3.5 CHANGING THE SPECIFIC WEIGHT FACTOR OF THE ROTATION TEST (NOT NORMALLY USED)

Is performed as follows:
1. Select channel 4. Press and hold the '**1/Set01 Target**' button.
2. After 5 seconds, the current factor is displayed on the screen. The value can normally be changed via the centre button.

3.6 CHANGING THE SCALE OF THE AMOUNT ADJUSTMENT

is performed as follows:
1. Turn the display off.
2. Press and hold the '**1/Set01 Target**' button and turn the display on. The display will show the text '**CAL.2**'.
3. The cursor will move to channel 1 and the display will show the percentage scale of the adjustment.
4. The centre button can be used to change the value to: 5, 10, 15, 20, or 25.
5. When you have the desired value on the screen, turn the display off, and then turn it back on. The

The ON/OFF button is located on the back of the display, which can be utilised to navigate to different programming modes.

1 Calibration of the Linak adjustment cylinder
- Press and hold the '**STOP/Ha to 0**' button for 10 seconds when turning the power on.

2 Driving the cylinder piston to the central position and the rotation test.
- Press and hold the '+' button when turning the power on.

3 Changing the scale of the amount adjustment
- Press and hold the ' **+1/Set Target** ' button when turning the power on.
  The STOP button can be used to restore the original fertiliser value (cursor on channel 4)

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SPARE PARTS CATALOGUE

WIZPLUS09_EN_B

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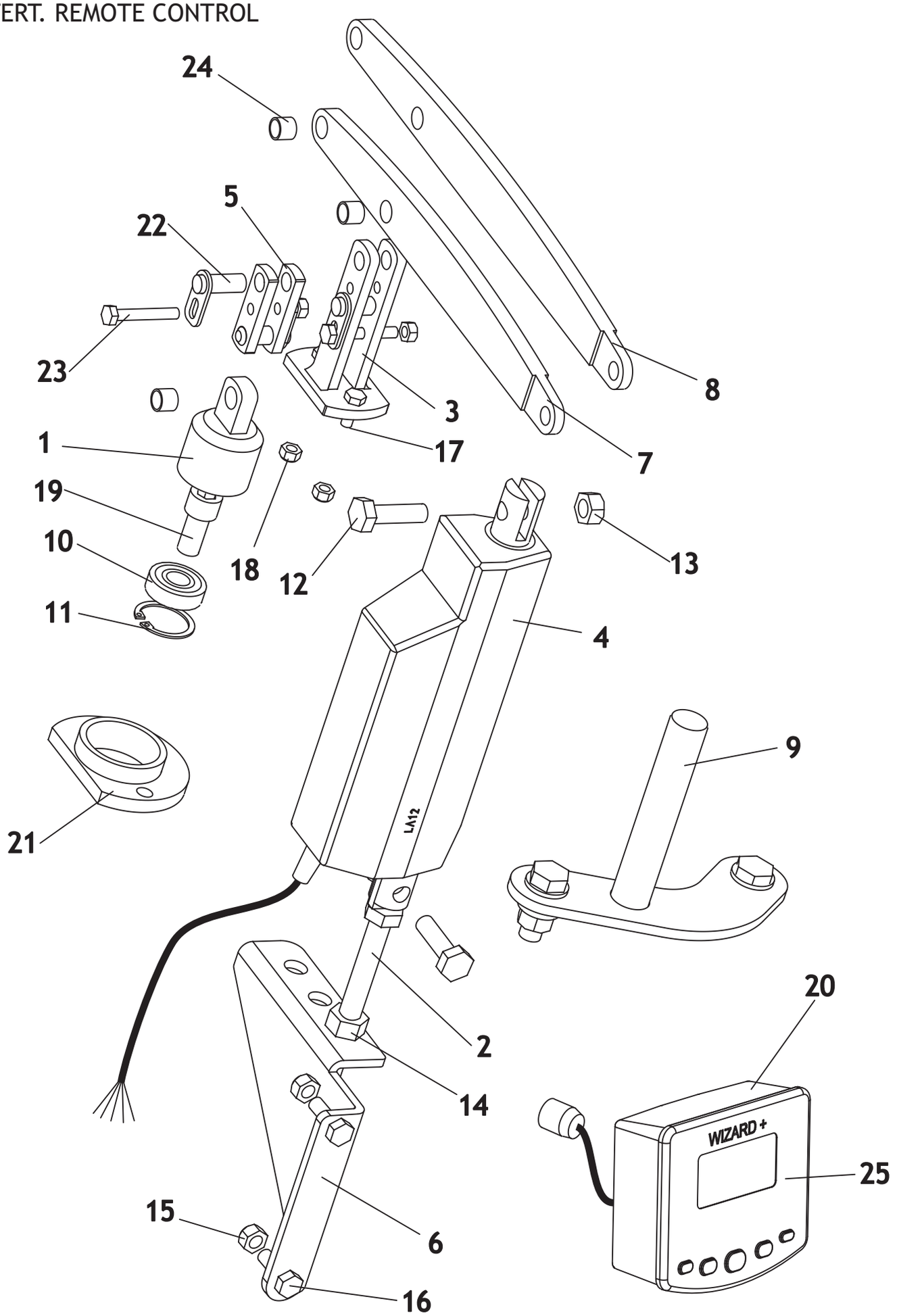
ENGLISH CE

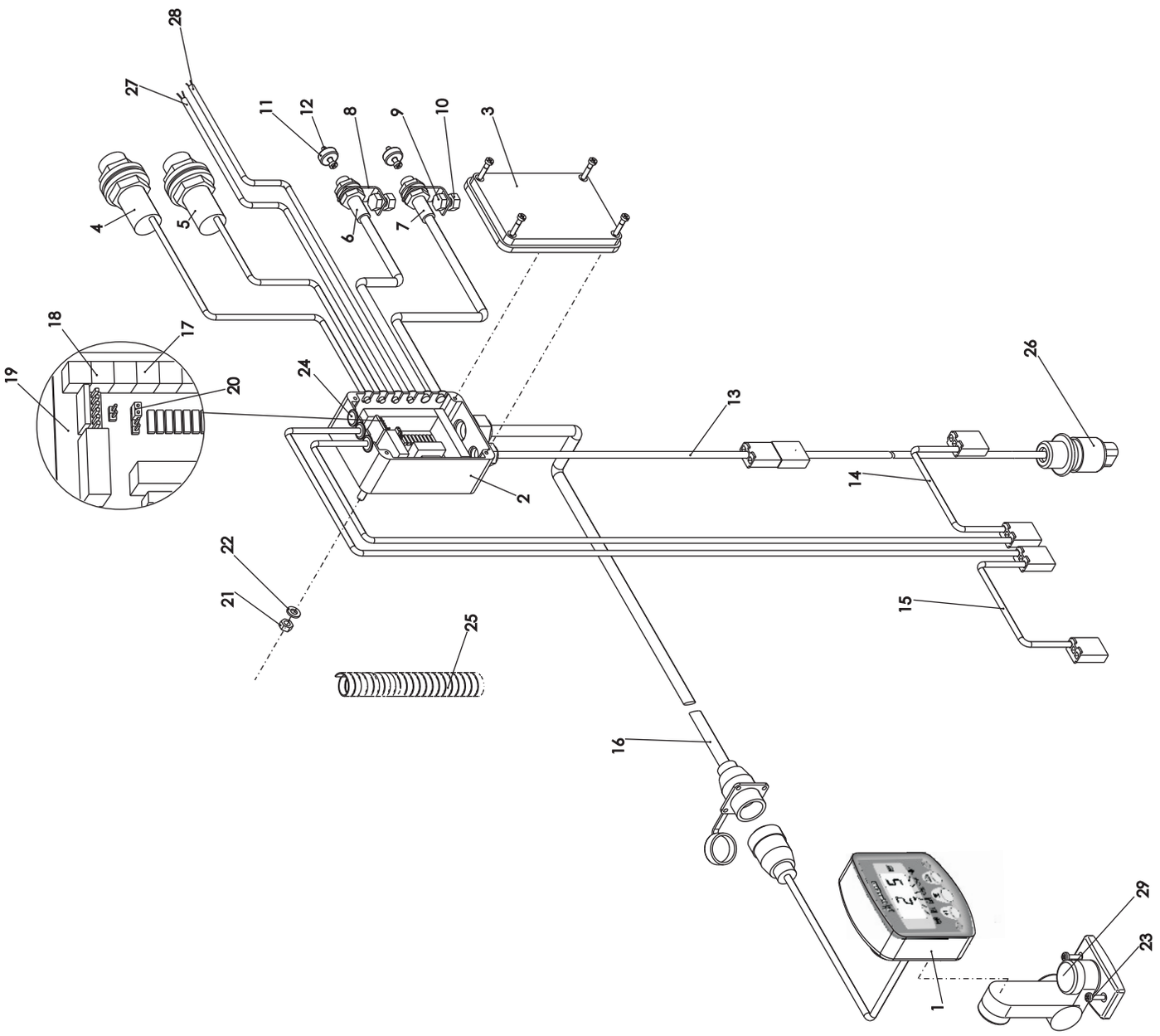
18244 / WIZARD PLUS +
FERT. REMOTE CONTROL



PART	CODE	NAME	AMOUNT
1	18696	BEARING HOUSING WELDED	1
2	15498	PLOUGH SHARE HOLDER SCREW WELDED	1
3	18705	JOINT FORK WELDED	1
4	D40600	CYL. LINAK LA12.1P-100-12-011P6	1
5	18699	SEPARATOR PLATE NEW	2
6	15902	ADJUSTMENT CYL. SUPPORT	1
7	16401	TRANSM. PLATE (SIMULTA)	1
8	18707	TRANSM. PLATE FOR MAESTRO	1
9	18708	LINAK PROTECT. TUBE COMPILED	1
10	CE62012RS	BALL BEARING 6201 2 RS	1
11	BH1210L11	SEGER RING, HOLES 32X1.2 DIN472	1
12	A0A151014	6-SCREW M10X35 8.8 DIN933 ZN	2
13	AGA113014	6-BOLT IL M10 DIN985-8 ZN	2
14	AGC111014	6-BOLT M12 DIN934-8 ZN	2
15	A50710	6-BOLT IL M8 A2 DIN985 AISI	2
16	A080S1514	6-SCREW M8X25 8.8 DIN933 ZN	2
17	A060G1024	6-SCREW M6X16 8.8 DIN 933 ZN	2
18	Ag6113014	6-BOLT IL M 6 DIN985-8 ZN	4
19	A0C0S4524	HEXAG. SCREW M12X25 8.8 DIN912 ZN	1
20	S/HU/306-5-001	WIZARD PLUS MONITOR	1
21	16199	MOVI BEARING	1
22	18698	PIVOT WELDED	3
23	A061A1524	6-SCREW M6X40 8.8 DIN 933 ZN	2
24	CV0101210	DRYMET BEARING 701 10/12/10	3
25	Z780-510	WIZARD PLUS FRONT PANEL	1

18244	WIZARD PLUS ALL PARTS
D40602	Computer WIZARD PLUS PACKAGE (Only the parts from RDS)

WIZARD PLUS SOWING MACHINE CONTROLLER



VIITE REF. ANM. REF.	NRO NR. NR. NO	KOODI KOD CODE CODE	NIMIKE	BESKRIVNING	BESCHREIBUNG	DESCRIPTION
1	S/HU/306-5-001		MONITORI WIZARD +	MONITOR WIZARD +	MONITOR WIZARD +	INSTRUMENT WIZARD +
2	S/AC/306-3-003		KYTKENTÄRASIA	KOPPLINGSKÅPA	ANSCHLUSSDOSE	JUNCTION BOX
3			KANSI	DÄCK	ANSCHLUSSDOSEDECK	JUNCTION BOX LID
4	S/F713-009		ANTURI/APULANTA	SENSOR/GÖDSEL	INPULSGEBER/DüNGER	SENSOR/FERT.LEVEL
5	S/F713-009		ANTURI/SIEMEN	SENSOR/FRÖNIVÅ	INPULSGEBER/KERN	SENSOR/SEED LEVEL
6	S/Z782-006		ANTURI/NOPEUS	SENSOR/HASTIGHET	INPULSGEBER/TEMPO	SENSOR/SPEED
7	S/Z782-006		ANTURI/LASKURI	SENSOR/BERÄKNING	IMPULSGEBER/ZÄHLER	SENSOR/TL. COUNT
8	14837	3-14837	ANTURIN PIDIN	SENSORHÅLLARE	HALTER FüR IMPULSGEBER	SENSOR HOLDER
9	A080G1514	M8 X 16	KUUSIORUUVI	SEXKANTSKRUV	SECHSKANTSCHRAUBE	HEX SCREW
10	Ag8113014	M8	KUUSIOMUTTERI	SEXKANTMUTTER	SECHSKANTMUTTER	HEX NUT
11	S/MG/193-1-020	16 X 6	MAGNEETTI	MAGNET	MAGNET	MAGNET
12		M4	MAGN.KIIN.RUUVI	MAGNET FÄST.SKRUV	MAGN.AUFSPANNSCHRAUBE	SCREW, FOR MAGNET
13	S/CB/306-1-020		SÄHKÖJOHDIN	STRÖMLEDNING	STROMLEITER	POWER LEAD
14	S/CB/306-1-025		AJOURAMERK. 2	KÖRSPÅRMARKÖR 2	FAHRSTRASSE BESCHRIFTUNG 2	TRAMLINE 2
15	S/CB/306-1-024		AJOURAMERK. 1	KÖRSPÅRMARKÖR 1	FAHRSTRASSE BESCHRIFTUNG 1	TRAMLINE 1
16	S/CB/306-3-020		JOHTO MONITORILLE	LEDNING TILL MONIT.	LEITER FüR MONITOR	INSTRUMENT LEAD
17	S/T602-102		2-NAPAINEN IDC	2-POLIG IDC	2-POL IDC	2-WAY IDC
18	S/T602-103		3-NAPAINEN IDC	3-POLIG IDC	3-POL IDC	3-WAY IDC
19	S/A306-004		PIIRILEVY WIZARD+	KRETSKORT WIZARD+	SCHALTBRETT WIZARD+	CIRCUIT BOARD WIZARD+
20	S/T607-040		JUMPPERI “HYPPYL.”	JUMPER LINK	JUMPER LINK	JUMPER LINK
21	A50460	M6	KUUSIOMUTTERI	SEXKANTMUTTER	SECHSKANTMUTTER	HEX NUT
22	B60505	M6 DIN 125	ALUSLEVY	BRICKA	UNTERLEGRING	WASHER
23		4 X 18	PELTIRUUVI	SKRUV	SCHRAUBE	SCREW
24	S/G730-014		LÄPIVIENTIERISTE	ISOLERING (GUMMI)	ISOLATION AUS GUMMI	GROMMET
25	D55112	SS 32 - 400mm	SUOJASPIRAALI	SKYDDSPIRAL	DECKUNG SPIRALE	PROTECTION SPIRAL
26	S/CB/306-2-020		SÄHKÖJOHDIN	STRÖMLEDNING	STROMLEITER	POWER LEAD
27			SÄHKÖJOHDIN	STRÖMLEDNING	STROMLEITER	POWER LEAD
28			SÄHKÖJOHDIN	STRÖMLEDNING	STROMLEITER	POWER LEAD
29	K/WIZ/MTG/BKT		KIINNITYSJALKA	FÄSTDETALJ	SPANNGLIED	MOUNTING BRACKET