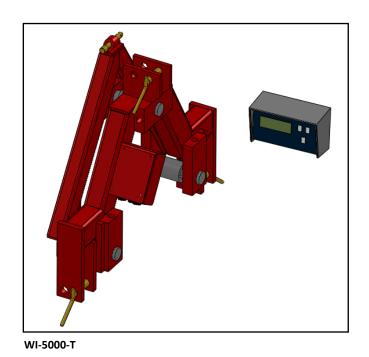
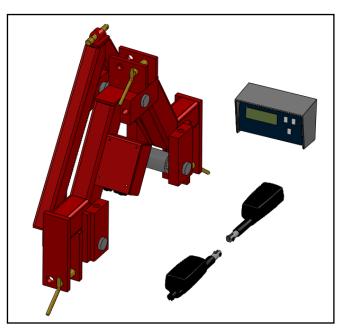


# WI-5000-T/WI-5000-TS

Weighing equipment





WI-5000-TS

Appendix WI-5000-T: Operators Manual "Digi-star EZ 400"

Appendix WI-5000-TS: Operators Manual "Risseeuw spreading computer"







# English

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#### 1. To the user

#### 1.1 Introduction

This manual gives information about the commencement of operation, use and maintenance of your newly purchased WIFO weighing equipment. Also included in this manual are a number of safety instructions to create a safe working environment.

WIFO-Anema B.V. continuously aims to improve its products. WIFO-Anema B.V. reserves the right to introduce any changes and improvements deemed necessary without prior notice.

Please read the manual thoroughly and observe the safety procedures before putting the unit into operation. Contact your dealer for any further questions or concerns you may have.

We hope you will enjoy working with your WIFO weighing equipment.



#### **ATTENTION:**

Carefully read this manual before you put the machine into operation and act upon all directions that are given. This is to guarantee its safe, trouble-free operation.

Keep this manual in a safe place for future reference!

WIFO-Anema B.V.

Deal	er:				



# 1.2 Safety precautions and warnings

Please read this manual before you put the machine into operation for the first time, and observe the safety instructions at all times. The most important instructions are marked with a symbol.



This symbol is used for all important safety instructions throughout this manual. Carefully observe the instructions and be very cautious.



This symbol is used for all important actions that should not be carried out under any circumstances. Carefully observe these prohibitions.

Any person in charge of the commencement of operation, the operation itself or the maintenance of the machine is urged to carefully read and observe the following instructions.

#### 1.2.1 Safety regulations



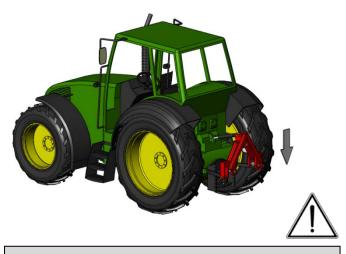


Do not allow anyone to hitch a ride.



Do not stand below the weighing equipment and stay out of the working area of the built-on equipment. Be mindful of falling goods.





Transport the load in the lowest possible position to increase the stability of the vehicle.



Load the weighing equipment in a manner that goods are properly secured. Distribute the goods evenly. Keep the centre of gravity close to the mounting frame and always between the measuring pins for accurate reading. Make sure the weighing equipment is in a vertical position during the weighing process in order to minimise inaccurate reading (+/- 1%).

Operate the weighing equipment and auxiliary equipment from the driver's seat only. Make sure the operator has full view of the work to be carried out.

Park the transport vehicle with the weighing equipment in the lowest position. Make sure that unexpected movements are ruled out if the combination is not being used. Place the weighing equipment on its front on a flat, stable surface after having been uncoupled and put away.

Make sure the weighing computer for controlling the weighing equipment is not mixed up with any other operating equipment to prevent any inadvertent operation.

Make sure the power cables cannot get jammed during the operation.



#### 1.2.2 Safety stickers and warning signs



A safe working environment also requires personnel to be well-informed about the various safety stickers on the machine. Be aware of the hazards they warn you to look out for.

Replace any loose, illegible or missing stickers.

Several safety stickers have been put onto the machine. The meaning of the stickers on this machine is as follows:

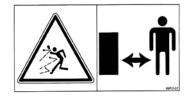


#### N.B.:

Please read the instructions from the manual prior to any maintenance to the machine.

Turn off the engine and remove the key from the ignition for the time maintenance on the machine is carried out!





#### Danger:

Always keep at a safe distance from the machine!



# 1.2.3 Placement of the safety stickers on the machine

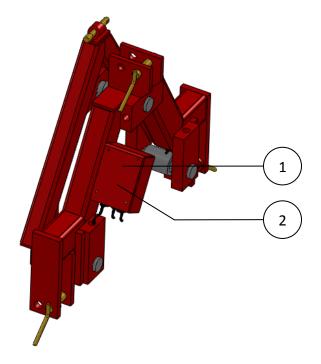


Figure 1.2.1-Position of safety stickers for WI-5000-T/WI-5000-TS



## 1.3 Purpose of use

WIFO weighing equipment can be used for weighing goods up to 5,000 kg. Forces up to 1,000 kg may be brought in the horizontal plane of the weighing equipment.

WIFO weighing equipment is only to be used in combination with a tractor with a standard category II/III 3-point power lift.



#### **ATTENTION:**

The lifting capacity of the tractor / telescopic handler / front-end loader must exceed the overall mass of the weighing equipment and the load. The lifting capacity of the weighing equipment may not exceed 5,000 kg.



#### **ATTENTION:**

The weighing equipment may not be used in combination with e.g. excavators or mowers because of any lateral and/or tensile forces. Remove the weighing equipment in such situations.

Do not use the WIFO weighing equipment for carrying people under any circumstances!



#### 1.4 Liability

Any person working with or on the machine must have read this manual. The machine is to be used for its intended purpose only. Included in the intended purpose are, among other things:

- 1. Work must be carried out in accordance with the directions and within the functional restrictions (e.g. maximum hydraulic working pressure) as outlined in the regulations. Use only sound and appropriate tools.
- 2. Electric / electronic equipment and accessories (e.g. cables) must be treated in accordance with the general accepted policy for using non-waterproof portable electric and electronic equipment, such as.:
  - a) Storing and keeping in a clean, dry environment away from rodents and the like; and
  - b) Protecting the equipment against severe, uncushioned shocks and water (precipitation).
- 3. Use only original or compatible spare parts. Such parts must be assembled as directed (e.g. by observing the recommended tightening moments). Spare parts (as well as lubricants) are considered compatible only if explicitly approved by WIFO or in the event that the customer is able to prove they possess the required properties for the purpose(s) they are used.
- 4. Use only lubricants that meet the specifications as described in the directions.
- 5. Always observe the local regulations in terms of accident prevention, safety, traffic and transport.
- 6. Only trained personnel with knowledge of the possible hazards have permission to work with/on the machine.
- 7. WIFO-Anema B.V. will assume no liability in any shape or form for losses or damage caused following modifications to the machine, which have not been explicitly approved by WIFO.



Noncompliance with the rules and directions from this manual will be considered as serious negligence, for the consequences of which WIFO-Anema B.V. accepts no liability whatsoever. In such cases, the user will bear the full risk of his actions.

WIFO-Anema B.V. is continuously working on the improvement of its products. For that reason, WIFO-Anema B.V. reserves the right to introduce any changes and improvements deemed necessary without prior notice. However, it does not imply an obligation to make any such changes or improvements to machines bought by customers in the past.

#### 1.5 Warranty

WIFO-Anema B.V. guarantees the soundness of its products in terms of materials used and/or structural defects. However, in any event this warranty is limited to the free-of-charge replacement or repairs of the defect product, or part thereof. WIFO-Anema B.V. assumes no liability for any loss or damage arising from faulty deliveries and/or the breakdown of purchased goods before the warranty period has expired. The warranty period for this product is twelve months.



# 2. Technical details

# 2.1 General technical data

Model	WI-5000-T	WI-5000-TS
Measuring range	Up to 5000 kg	Up to 5000 kg
Measuring deviation	+/- 1%	+/- 1%
Display	10 grams – 100 kg (standard 1 kg)	10 grams – 100 kg (standard 1 kg)
Connection	12 Volt	12 Volt
Weight	90 kg	95 kg
Extension loss <sup>1</sup>	80 mm/120 mm	80 mm/120 mm

Table 2.1.1-Models of WIFO weighing equipment

#### **Extension details:**

The tractor must have a standard category II/III 3-point power lift.

# **Optional extras:**

- Extension triangle.



#### **ATTENTION:**

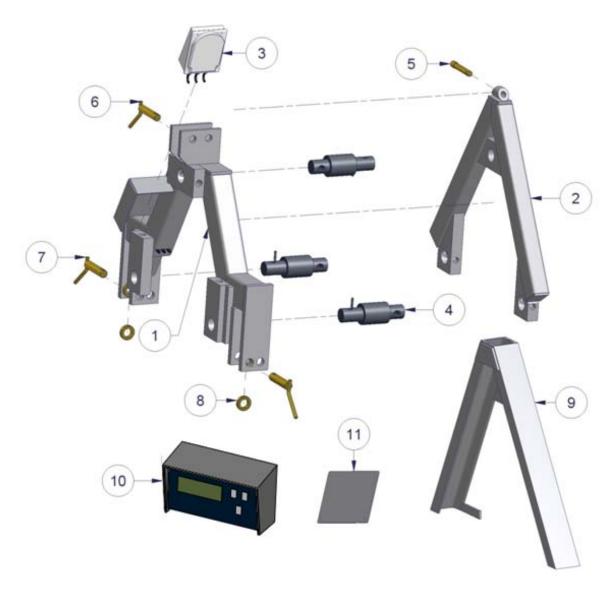
Zero adjustment-setting and calibration have been realised by the manufacturer.

<sup>&</sup>lt;sup>1</sup> In category II 3-point power lift / In category III 3-point power lift.



# 2.2 WI-5000-T

# 2.2.1 Parts list



No.	Description	Comments
1	Three-point frame	
2	Carrier frame	
3	Wire box	
4	Weighing pin	
5	Tops category I	
6	Tops category II	
7	Carrier pin category II	
8	Spacers	
9	Extension triangle	Accessory
10	Digi-Star weighing computer	
11	Base plate for spreading computer	

Table 2.2.1-Parts list for WI-5000-T



#### 2.2.2 Commencement of operation WI-5000-T

The following description refers to the add-on unit for a tractor with a 3-point power lift:

- Make sure the drawbars of the power lift of the tractor are at the same level.
- 2. Couple the 3-point weighing equipment to the category II/III 3-point power lift of the tractor. Use the spacer sleeves to fill up the drawbars. Use good-quality locking clips.
- 3. Adjust the upper control arm to ensure the weighing equipment is in an absolute vertical position.
- 4. Only very little lateral play of the weighing equipment in the power lift is allowed. Make the adjustments via the stabilizers of the power lift.
- 5. Attach the instrument with the extension triangle to the weighing equipment and secure it using the pin and the spring clip.

Following the weighing equipment, the weighing computer can be installed:

- Mount the weighing computer using the mounting plate in such a location that the tractor driver is able to see and operate the weighing computer from his control post, without the risk of mixing it up with any other controls
- 2. Connect the 2-core power cable as follows: the red wire (+) goes to a fused, continuously live wire. The black wire (-) goes to earth. When connecting the wires, make sure the connections are properly clean and dry.

Keep an eye on the correct voltage of the tractor and the weighing computer. The weighing computer runs on 12 Volt.



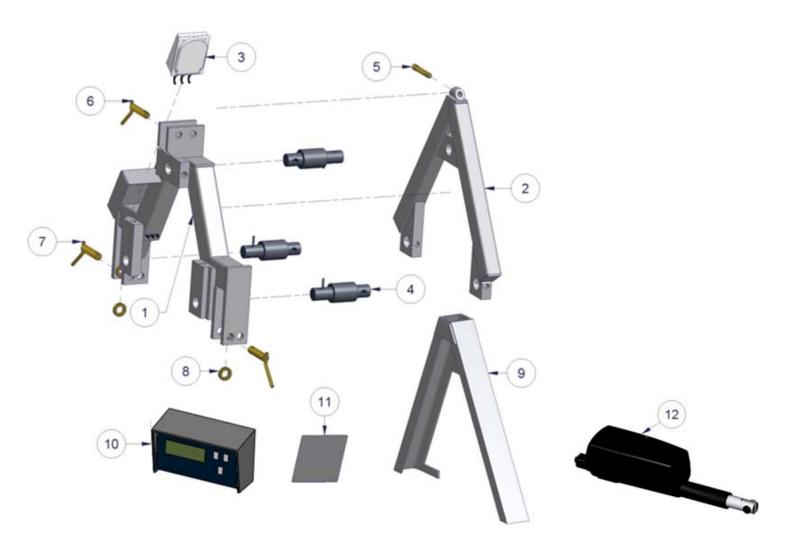
Keep the sensor wire, from the weighing equipment to the weighing computer, at a fair distance from live wires and the like, in order to prevent any incorrect readings. The operation of the electronically controlled power lift could also end up deranged. Even a mobile phone call may have an effect on the measuring data of the weighing computer.

The WIFO weighing equipment is now ready to be used.



# 2.3 WI-5000-TS

# 2.3.1 Parts list



No.	Description	Comments
1	Three-point frame	
2	Carrier frame	
3	Wire box	
4	Weighing pin	
5	Tops category I	
6	Tops category II	
7	Carrier pin category II	
8	Spacers	
9	Extension triangle	Accessory
10	Risseeuw weighing/spreading computer	
11	Base plate for spreading computer	
12	Electric wire spindle	

Table 2.3.1-Parts list for WI-5000-T



#### 2.3.2 Commencement of operation WI-5000-TS

The following description refers to the add-on unit for a tractor with a 3-point power lift:

- 1. Check that the drawbars of the power lift of the tractor are at the same level.
- 2. Couple the 3-point weighing equipment to the category II/III 3-point power lift of the tractor. Use the spacer sleeves to fill up the drawbars. Use good-quality locking clips.
- 3. Adjust the upper control arm to ensure the weighing equipment is in an absolute vertical position.
- 4. Only very little lateral play of the weighing equipment in the power lift is allowed. Make the adjustments via the stabilizers of the power lift.
- 5. Attach the instrument with the extension triangle to the weighing equipment and secure it using the pin and the spring clip.

Following the weighing equipment, the weighing/spreading computer can be installed:

- 1. Mount the weighing/spreading computer using the mounting plate in such a location that the tractor driver is able to see and operate the weighing/spreading computer from his control post, without the risk of mixing it up with any other controls.
- 2. Connect the 2-core power cable as follows: the red wire (+) goes to a fused, continuously live wire. The black wire (-) goes to earth. When connecting the wires, make sure the connections are properly clean and dry.

Keep an eye on the correct voltage of the tractor and the weighing/spreading computer. The weighing/spreading computer operates on 12 Volt.



Keep the sensor wire, from the weighing equipment to the weighing computer, at a fair distance from live wires and the like, in order to prevent any incorrect readings. The operation of the electronically controlled power lift could also end up deranged. Even a mobile phone call may have an effect on the measuring data of the weighing computer.

The WIFO weighing equipment is now ready to be used.



# 2.4 Accessories/optional extras

# 2.4.1 Extension triangle for WI-5000-T/WI-5000-TS

#### Purpose of use:

A piece of equipment, such as a fertilizer spreader, must be fitted with an extension triangle to be attached to the weighing machine.

#### **Commencement of operation:**



#### **ATTENTION:**

Welding an extension triangle to a piece of equipment must be carried out by a professional welder/mechanic.

# **Operating instructions:**

Make sure the carrier frame is in line with the extension triangle so that the pin fits through the hole in the extension triangle and can be secured using the lock pin and the spring clip.

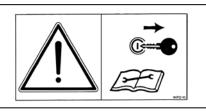
# 2.5 Replacement components

Model	Description	Part no.
All models	Weighing pin	839005
	Wire box	839023
	Feeder	839025
WI-5000-T	Digi-Star EZ-400 weighing computer	839021
WI-5000-TS	Risseeuw weighing/spreading computer	-

Table 2.5.1-Replacement components WIFO weighing equipment



#### 3. Faults and maintenance



#### N.B.:

Please read the instructions from the manual prior to any maintenance to the machine!

Turn off the engine and remove the key from the ignition for the time maintenance on the machine is carried out!

Make sure the weighing equipment is in the lowest position during maintenance. Prevent any inadvertent operation of the weighing equipment during maintenance by turning the tractor engine off and taking the key from the ignition.



#### Warning:

Do not conduct any welding jobs on the weighing equipment to prevent damage to the weighing sensors. Remove the weighing equipment during welding jobs on the tractor or machine.



#### **ATTENTION:**

When hosing down the machine, make sure not to aim for the cable inlet of the weighing pins to avoid damage to the weighing pins as a result of moisture.

#### 3.1 Troubleshooting

For WI-5000-T: See "Digi-star EZ 400" operators manual.

For WI-5000-TS: See "Risseeuw spreading computer" operators manual.



Please contact your dealer for any further concerns you may have. He will be pleased to assist.



# 3.2 Work to be carried out by the user



**ATTENTION:** 

Zero adjustment-setting and calibration have been realised by the manufacturer.

#### 3.2.1 Calibrating the weighing equipment for WI-5000-T



Do not try and calibrate the weighing computer until the weight readings are stable. The calibration procedure is not used for correcting instability, inconsistencies or flashing "RANGE" messages.

- 1. Put the weighing trestle at zero via **net gross** and **zero**.
- 2. Then push and hold the **net gross** and **on** buttons simultaneously.
- 3. Hold the **net gross** button pushed down until **calib** appears on the screen.
- 4. Push the **on** button three times.
- 5. Put a heavy object, the weight of which is known, onto the weighing trestle. For the best results, calibrate the computer with at least the heaviest load you will use.
- 6. Push the **on** button, and the value will start to blink.
- 7. Enter the correct weight (the calibration weight) via the **net gross** and the **tare** buttons.
- 8. Push the **on** button.
- 9. The word **good** will appear on the screen.
- 10. Push and hold the **on** button until **end** appears on the screen.
- 11. Push the **on** button once again.

The weighing computer has now been calibrated.

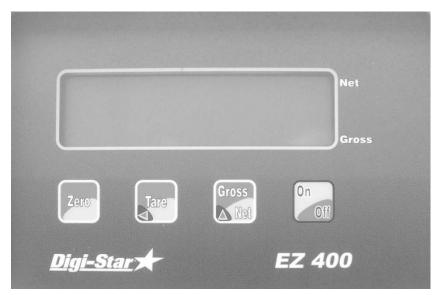


Figure 3.2.1-Control panel weighing computer



#### 3.2.2 Calibrating the weighing equipment for WI-5000-TS

- 1. Turn the weighing/spreading computer off.
- 2. Push and hold the weighing 1 and weighing 2 buttons (the two green buttons) and turn the computer on.
- 3. Hold the buttons pushed in until the message calibrating weighing system appears on the screen.
- 4. Release the buttons. The following will appear on the screen.

F=1234Hz	WF=223
W=0073kg	FO=1302

Letter	Description
F	The frequency generated by the weighing converter
WF	The relationship between frequency and weight
W	Weight
F0	The frequency at the zero setting

Figure 3.2.2-Display weighing/spreading computer

- 5. Remove the calibration weight from the weighing unit.
- 6. Set the weight **W** at zero by pushing the **weighing 1** button. **F0** is now lined up with **F**.
- 7. Put the calibration weight on the weighing unit.
- 8. Repeatedly push the **PLUS** and **MINUS** buttons until **W** (the weight reading) is equal to the calibration weight.
- 9. Repeat steps 5 8 to make sure all functions work as they should.
- 10. Push the **SET** button to save the settings.

## Calibration of the weighing/spreading computer is now complete.

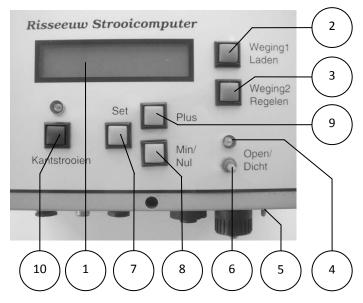


Figure 3.2.3-Control panel weighing/spreading computer

- 1. Screen for displaying information.
- 2. Button for weighing 1, push after filling the fertilizer spreader.
- 3. Button for weighing 2, the computer weighs the rest of the fertilizer and adjusts the metering valve accordingly.
- 4. Pilot light, is turned on if the metering valve is in the "open" position.
- 5. On/Off switch to turn the computer off.
- 6. Switch for opening and closing the metering valve.
- 7. Set button, to retrieve various set-up screens.
- 8. Minus button, for reducing the setting values down to zero.
- 9. Plus button, for increasing the setting values.
- 10. Button for activating and deactivating one-sided spreading.



#### 3.2.3 Circuit testing weighing pins for WI-5000-T/WI-5000-TS

#### Using a multimeter

Without a working weighing computer or connection box, you will be able to test the weighing pins using a multimeter. This method is not fully reliable. A weighing pin may pass the test but still have a problem. For the best results we recommend you test the weighing pins using a working weighing computer.

Only Regular DB + DA weighing pins are to be used for WIFO weighing equipment. Table 3.2.4 shows the resistance between the various cores of the weighing pin. Replace the weighing pin if the measured value exceeds the 20% tolerance margin as in table 3.2.4.

When using a multimeter, any defective weighing pins will usually give no reading at all, or a reading in excess of twice the value as shown in table 3.2.4.

Weighing bar type	Regular DB + DA
Core colour	
Red & Black	350Ω - 400 Ω
White & Green	350 Ω
Red & Green	262 Ω
Green & Black	262 Ω - 312 Ω
Black & White	262 Ω - 312 Ω
White & Red	262 Ω
Screening in relation to any other core	Infinite (open)

Table 3.2.4-Resistance values weighing pins



Shortened, extended or soldered weighing pin cables may result in inaccurate readings. Contact your supplier for more information and assistance.



# 3.3 Work to be carried out by a competent welder/mechanic

#### 3.3.1 Instructions for welding an extension triangle to a machine

Take adequate safety measures for grinding and welding jobs (fire risk, personal protection, etc.).

- 1. Weld the extension triangle in such a manner to the machine for weighing that the extension triangle can still be easily attached and secured to the coupling triangle.
- 2. The machine for weighing must be put in the correct position before the weighing procedure. The extension triangle must be in a perfect vertical position for the weighing procedure.

#### 3.3.2 Instructions for replacing a weighing pin

Provide adequate support for the machine parts.

- 1. Disconnect the four wires of the weighing pin to be replaced from the wire box and put the connection cable of the weighing pin through the three-point frame, so that the weighing pin and the connection cable can be removed without causing damage.
- 2. Remove the bolts from the carrier frame. Make sure the attachment hole is clean and undamaged.
- 3. Mount the lower weighing pins with the arrow symbol pointing down and the upper weighing pin with the arrow symbol pointing up.
- 4. Run the connection cable of the weighing pin in the correct manner and without causing damage through the frame. The cable must not be shortened or get jammed under any circumstances.
- 5. Connect the four wires correctly in the wire box.
- 6. Reattach the carrier frame to the weighing pins using the bolts.



Always use original WIFO parts for replacement in order to comply with the warranty terms and conditions.









Wytze Anema (Director)

# EG-VERKLARING VAN OVEREENSTEMMING VOOR MACHINES EC-DECLARATION OF CONFORMITY FOR MACHINERY EG-MASCHINENÜBEREINSTIMMUNGSERKLÄRUNG DÉCLARATION DE CONFORMITÉ "CE" POUR MACHINES

Fabrikant/Manufacturer/Fabrikant/Fabricant:	
WIFO-Anema B.V.	
Adres/Address/Adresse/Adresse:	
Hegebeintumerdyk 37 9172 GP Ferwert The Netherlands	
Verklaart hiermede dat /Herwith declares that/Erklärt hiermit, daβ/Déclard	e ci-après que
Serienummer/Serial number/Serienummer/Numéro de série:	
Uitvoering/Model/Ausführung/Modèle:	
<ul> <li>Voldoet aan de bepalingen van de Machinerichtlijn (Richtlijn 2006) nationale wetgeving ter uitvoering van deze richtlijn;</li> <li>Is in conformity with the provisions of the Machine Directive (Directional implementing legislation;</li> <li>Konform ist min den einschlägigen Bestimmungen der EG-Maschin inclusive deren Änderunge, sowie mit dem entsprechenden Rechts nationales Recht;</li> <li>Est conforme aux dispositions de la Directive "Machines" (Directive modifiée) et la législation nationale adoptée en application de ladit</li> </ul>	ctive 2006/43/EC, as amended) and with perichtlinie (EG-Richtlinie 2006/42/EG), serlaβ zur Umsetzung der Richtlinie in e 2006/42/EC telle que dernièrement
Ferwert, March 2009	