

English



Service manual

Replace grid sensor



Valetudo Horse Products BV

FeedingMaster Pro

The FeedingMaster Pro is produced by:

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Dear customer,

We are sorry that your FeedingMaster Pro has malfunctioned. Fortunately, it is easy to repair with the parts provided and this service manual. This manual explains how to do this, so please read the manual carefully.

Pay extra attention to sentences preceded by one of the following words:

WARNING: If the indicated instructions are not followed, there is a risk of serious injury to you or your horse.

TIP: Useful information that helps you perform certain steps more easily or check them in another way.

We would like to see you satisfied. If you have any questions about certain steps, please feel free to contact us at Service@VHProducts.eu. We will do our best to answer your question within 24 hours.

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1. Safety Instructions

Before starting the repair, you should be aware of the risks involved if you do not fully follow the instructions in this manual.

The following important safety precautions must be observed when working on a FeedingMaster Pro:

- Certain parts in the controller carry the mains voltage. Never open the housing of the controller when the FeedingMaster Pro is connected to the mains.
- During a fault, the FeedingMaster Pro may suddenly switch on or off parts of the drive. Therefore, never carry out service work when the FeedingMaster Pro is connected to the mains voltage.
- Never make any adjustments to the FeedingMaster Pro other than described in this manual.

WARNING: Remove the mains plug from the wall socket and wait at least 10 seconds before starting any service work.

2. Introduction

This service manual describes how the malfunction can be repaired step by step. A checkbox is placed before each step. It is advisable to check this off when the step has been completed. This prevents a step being swapped or skipped.

Is a certain step not clear or do you have other questions? Then you can always contact us, we are happy to help you.

TIP: It is advisable to place a blanket or piece of cardboard in and in front of the FeedingMaster Pro. If small parts accidentally fall, you will not lose them in the sawdust or other bedding.

3. Replace grid sensor

- [] Switch off the FeedingMaster Pro by removing the mains plug. Wait 10 seconds for the display to turn off.



- [] Open the grid



[] Remove the two allen screws holding the controller using a 5mm allen key.



[] Grab the controller and tilt it forward as far as possible.



[] Lift the controller between the mounting brackets.



[] Tilt the controller 90 degrees clockwise and place it on the right mounting bracket.



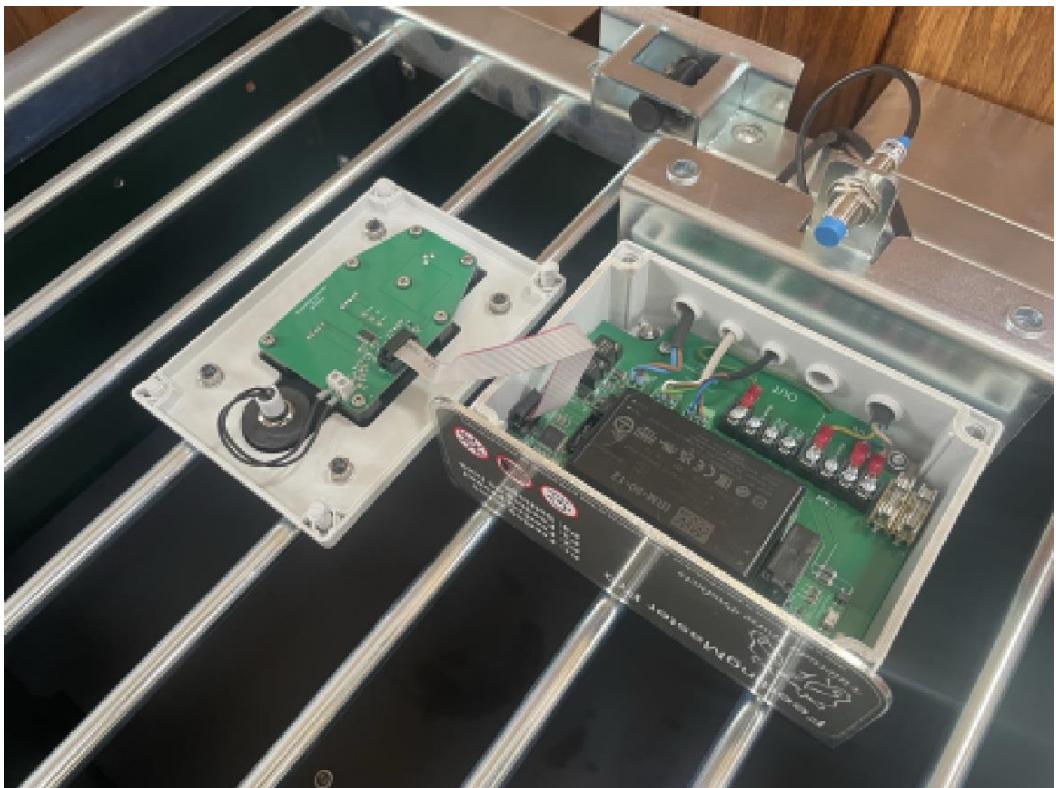
[] Close the grid and place the controller on the grid.



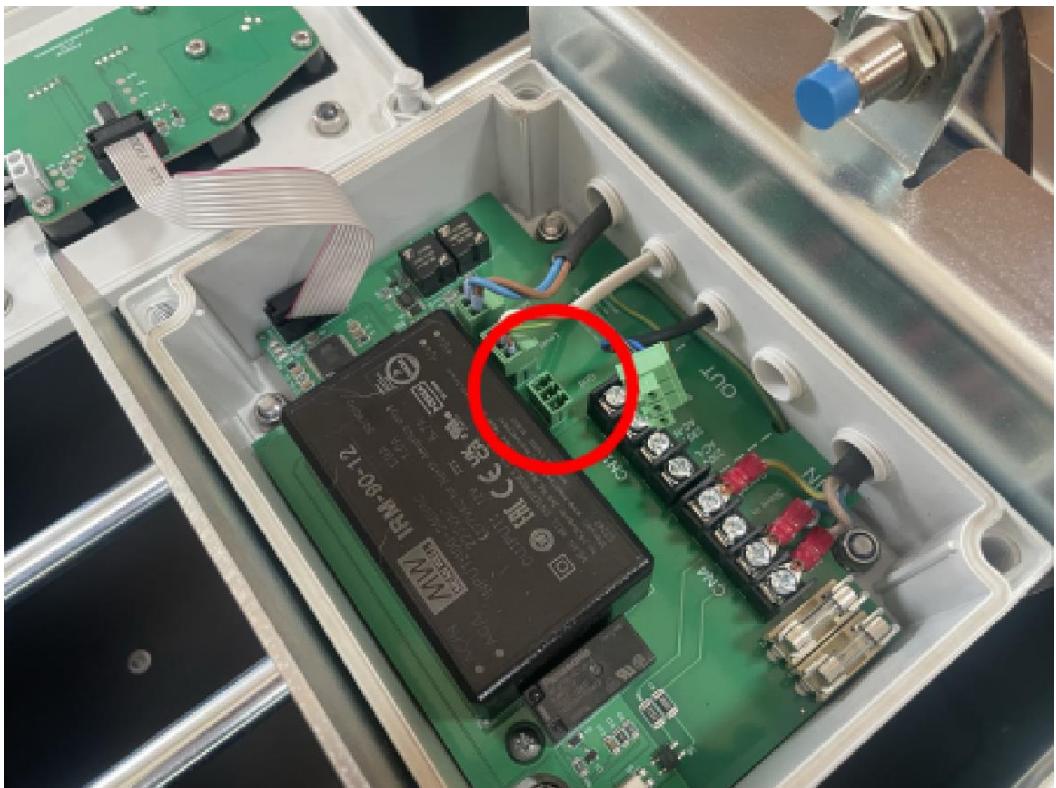
[] Unscrew the 4 bolts from the front of the controller housing with a Phillips screwdriver. The bolts are secured to the front of the housing. These can only be unscrewed, but not removed.



[] Lift the front of the housing and place it to the left of the controller.

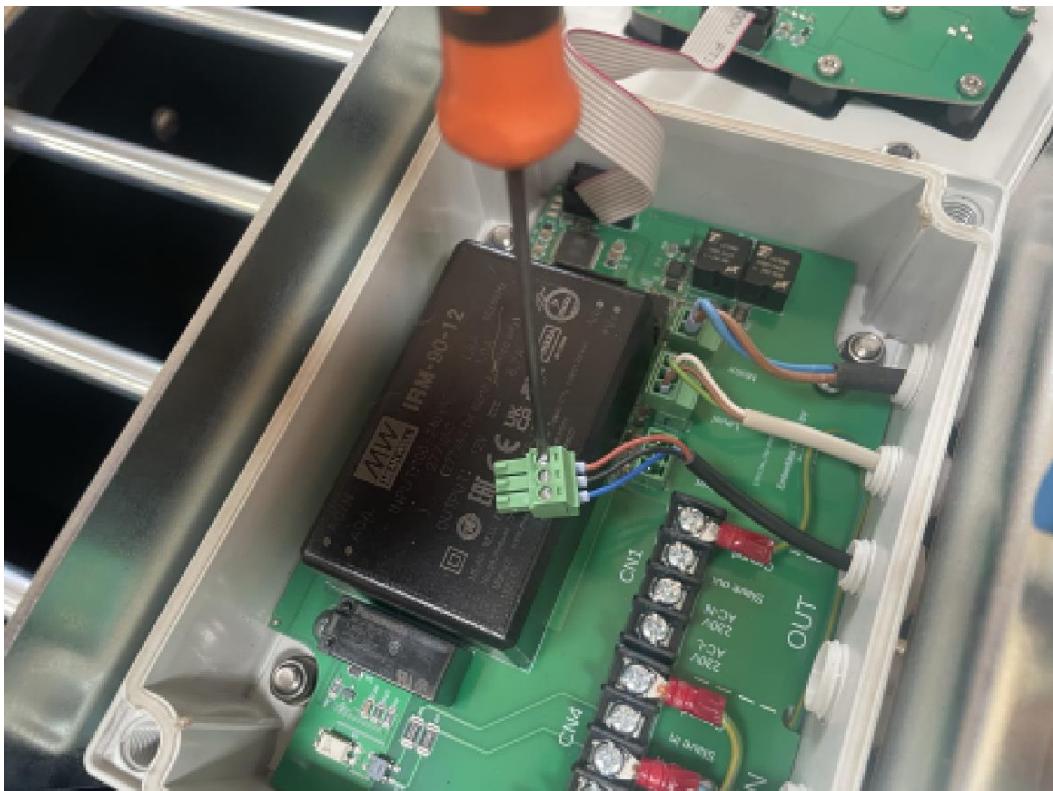


[] Remove the plug from the connector labeled "Grid".

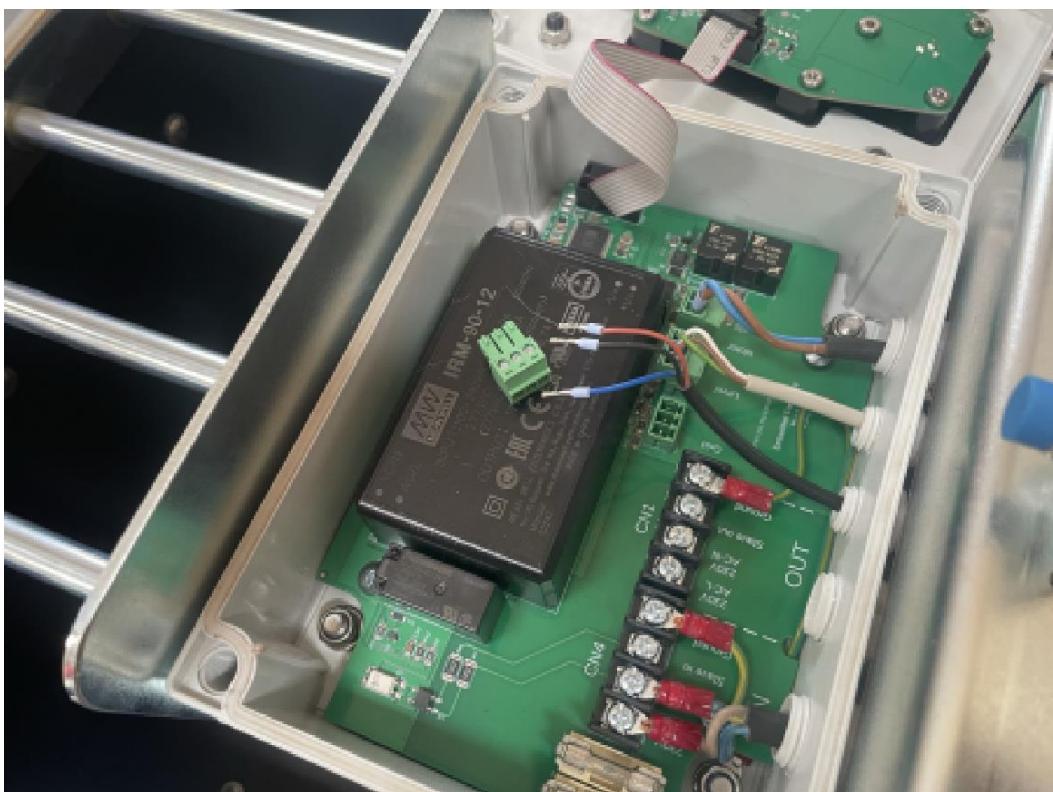


[] Loosen the terminals of the plug with a small flat screwdriver.

TIP: Take a photo of the plug so that it is clear which color wire is in which connection of the plug. Then this can be used later if there is any doubt when connecting.



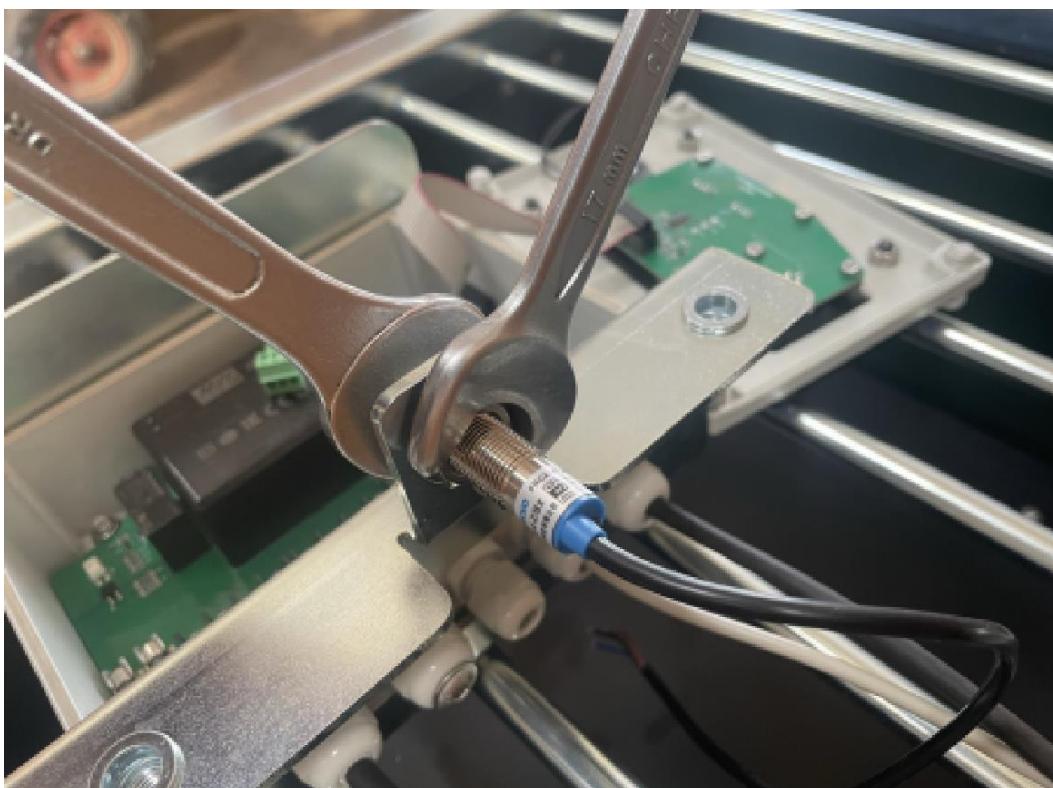
[] Remove the wires from the plug.



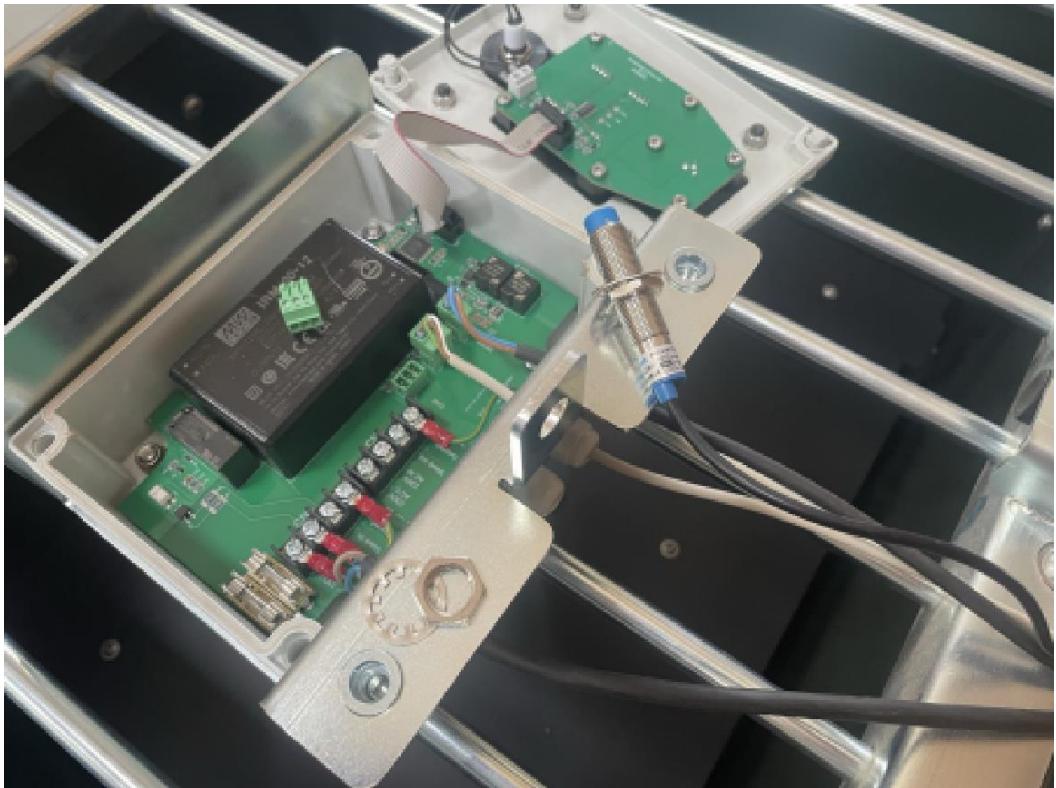
[] Unscrew the last part of the strain relief on the back of the controller unit that feeds the cable from the grid sensor into the controller unit. Remove the grid sensor cable from the strain relief. Place the loosened part of the strain relief back half a turn so that it is not forgotten later.



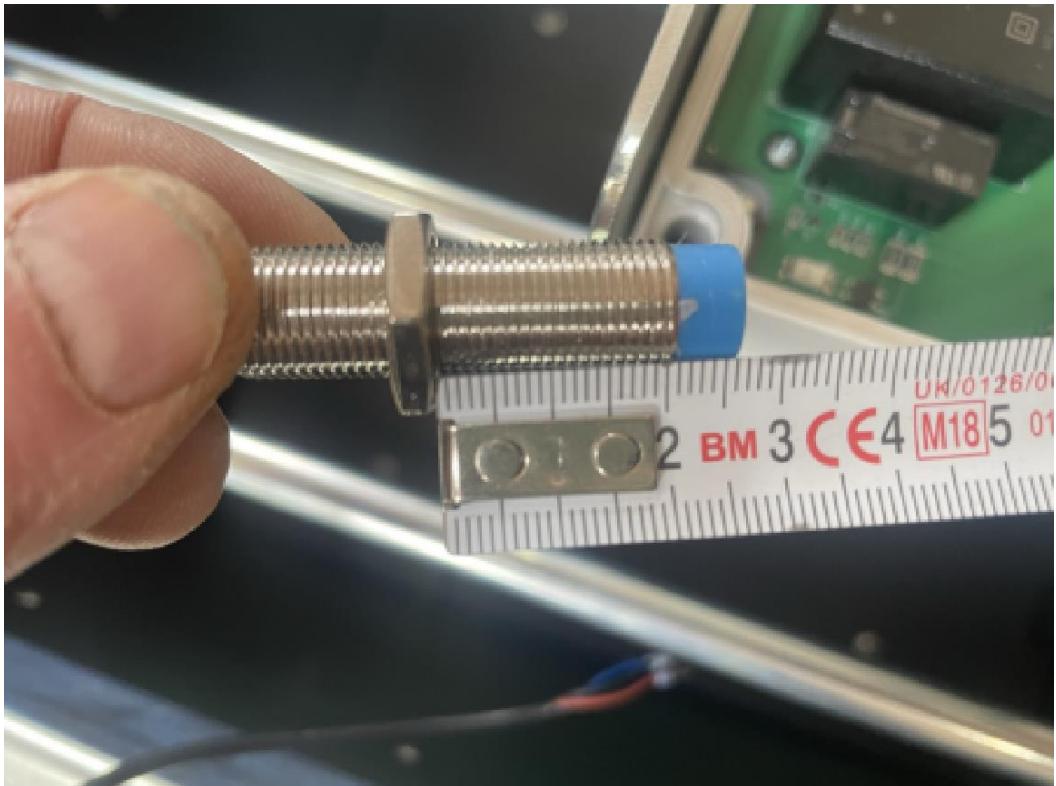
[] Place two 17mm spanners on the nuts of the grid sensor and loosen the nuts.



[] Remove the grid sensor.



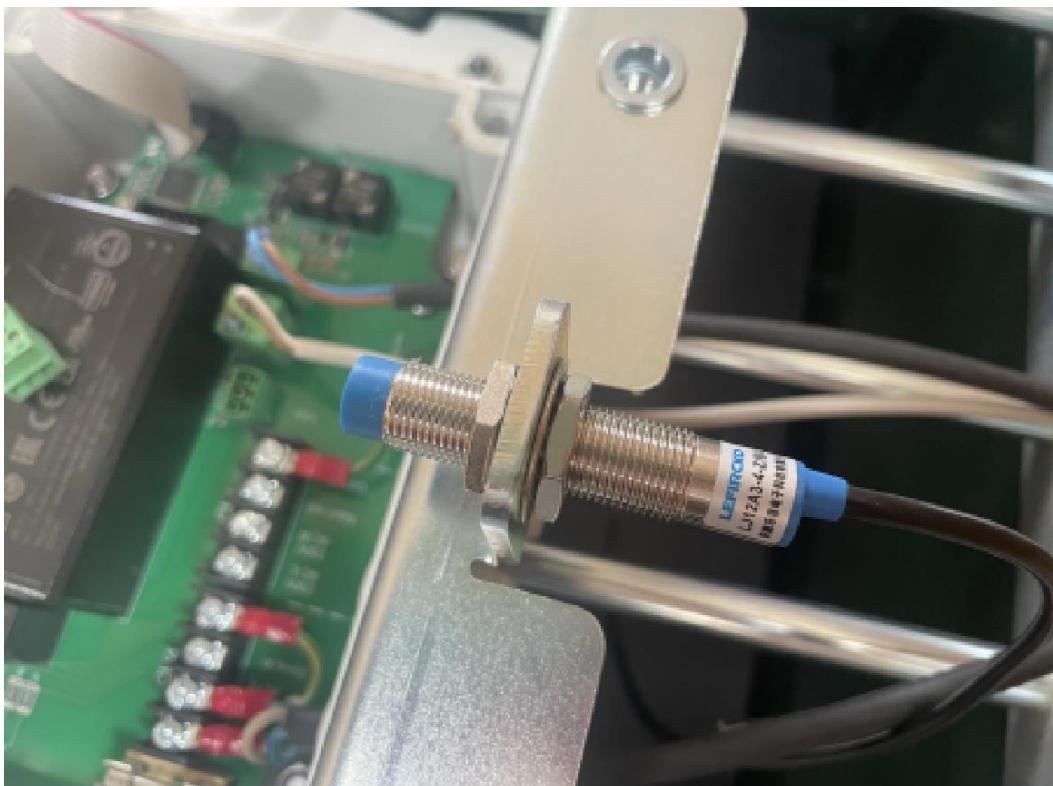
[] Place a nut on the new grid sensor 27mm from the blue top. This does not have to be very precise, about this size is good enough.



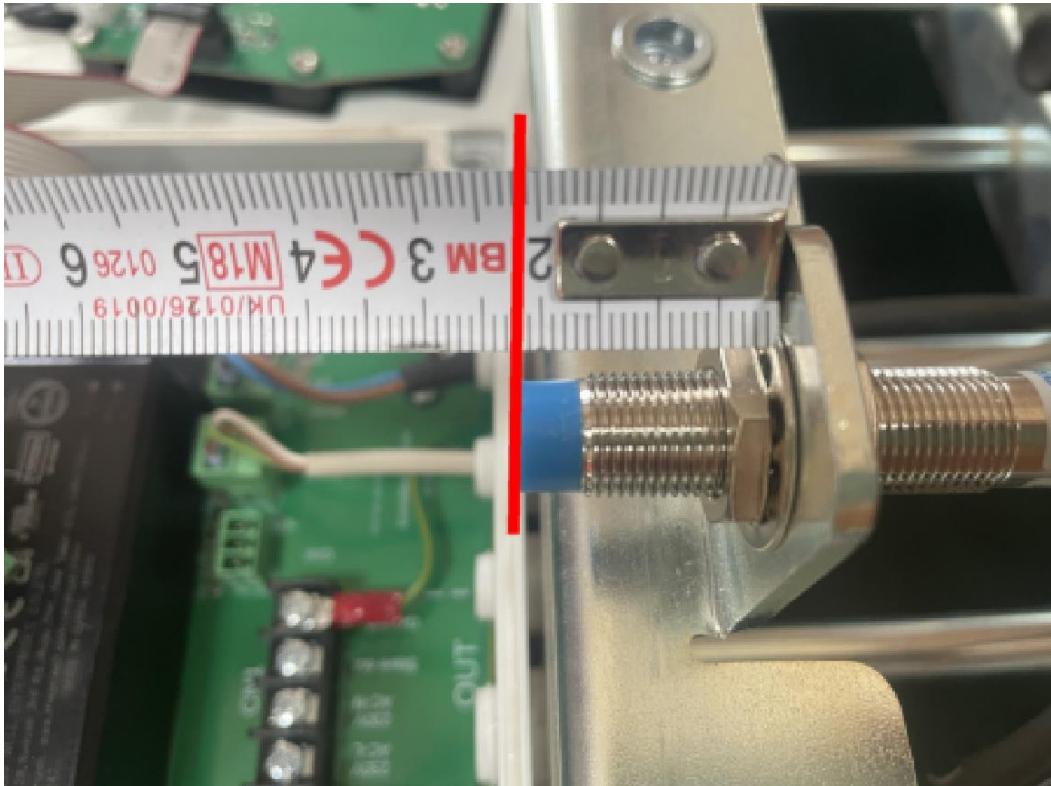
[] Place a knurled washer against the nut on the sensor and slide the sensor into the mounting hole of the controller.



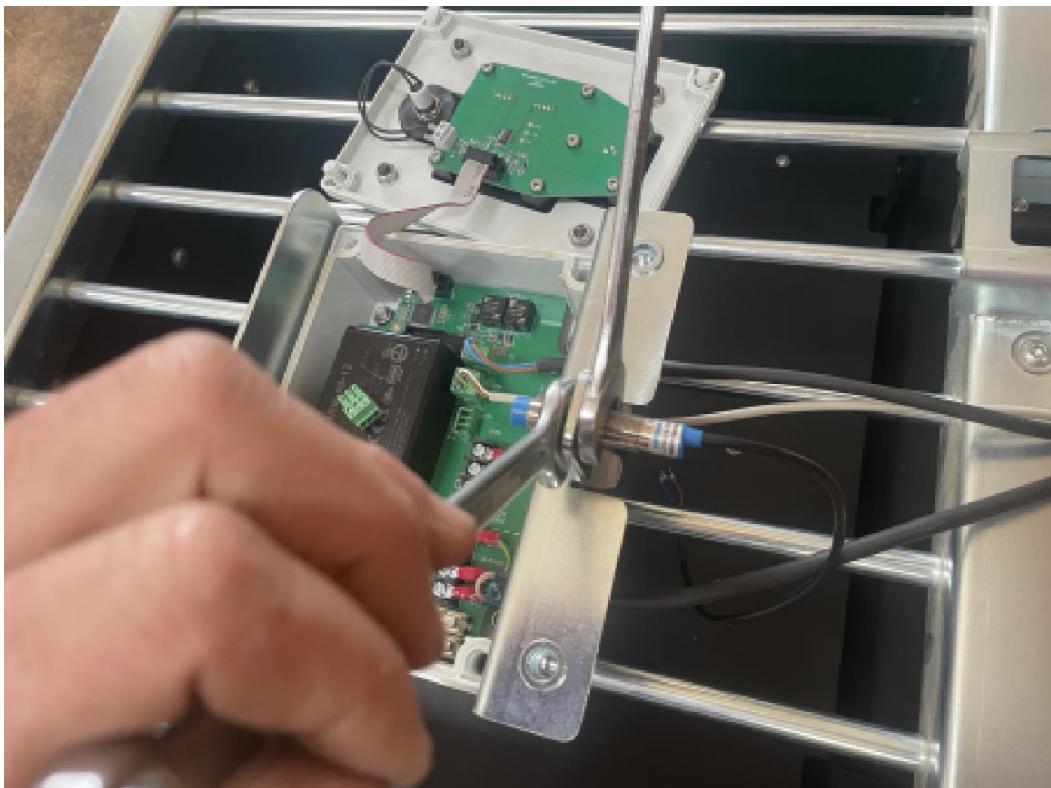
[] Place a knurled ring on the other side over the sensor against the controller. Place the second nut on the sensor and hand tighten.



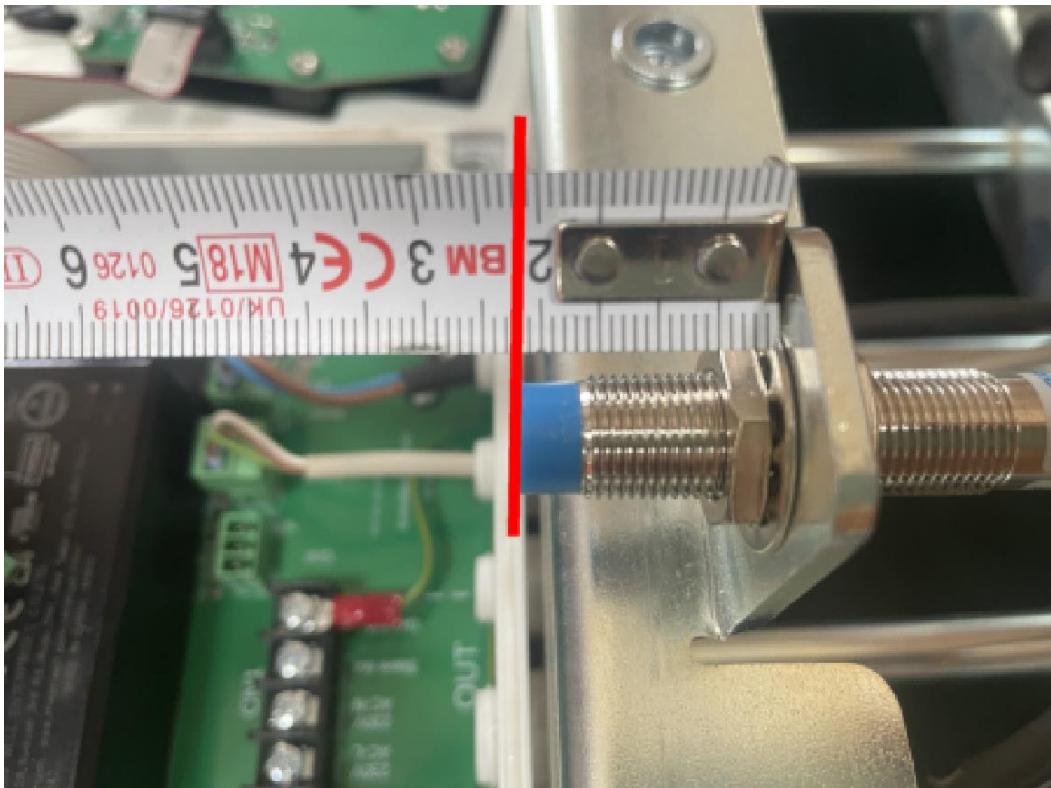
[] Check that the grid sensor protrudes 23mm, measured between the top of the blue cap and the metal of the controller. If not, the grid sensor can be moved by turning both nuts in the same direction.



[] Tighten the nuts of the grid sensor by moving both wrenches against each other. As a result, both nuts rotate and the grid sensor will not move during tightening. Do not overtighten the nuts, usually a 1/2 turn of both wrenches is sufficient.



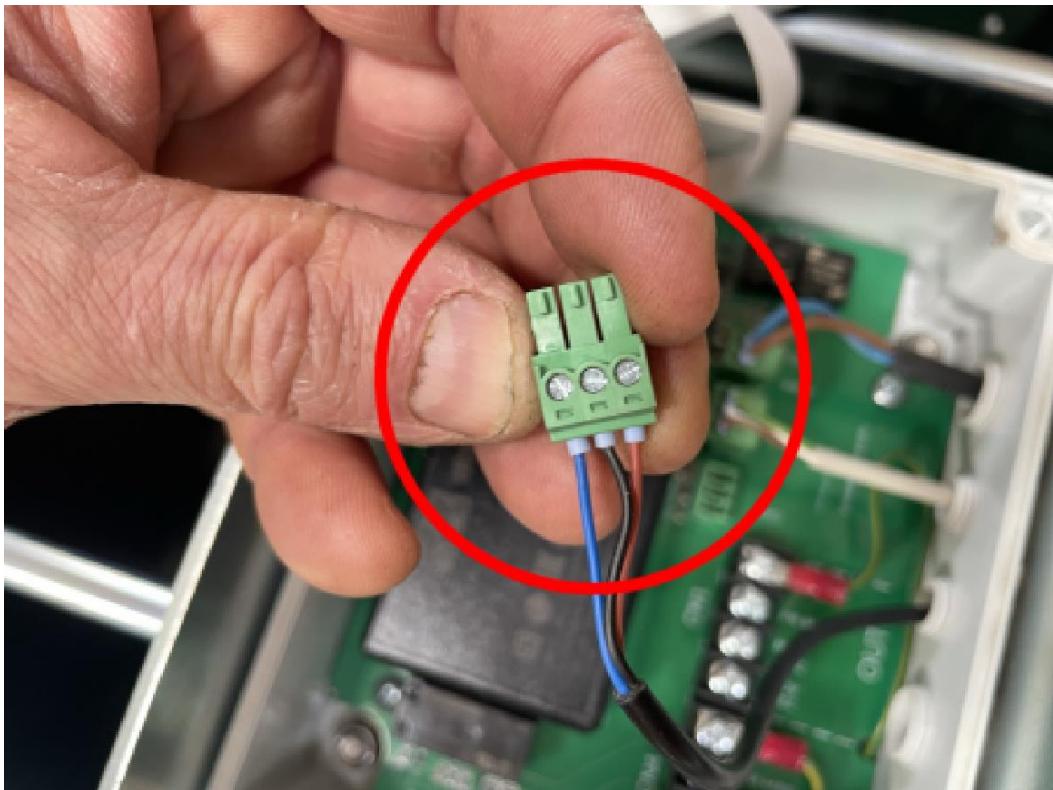
[] Check that the grid sensor protrudes 22mm measured between the top of the blue cap and the metal of the controller. If not, loosen the nuts and adjust the position of the grid sensor.



[] Slide the cable of the grid sensor through the strain relief. Do not tighten it yet.



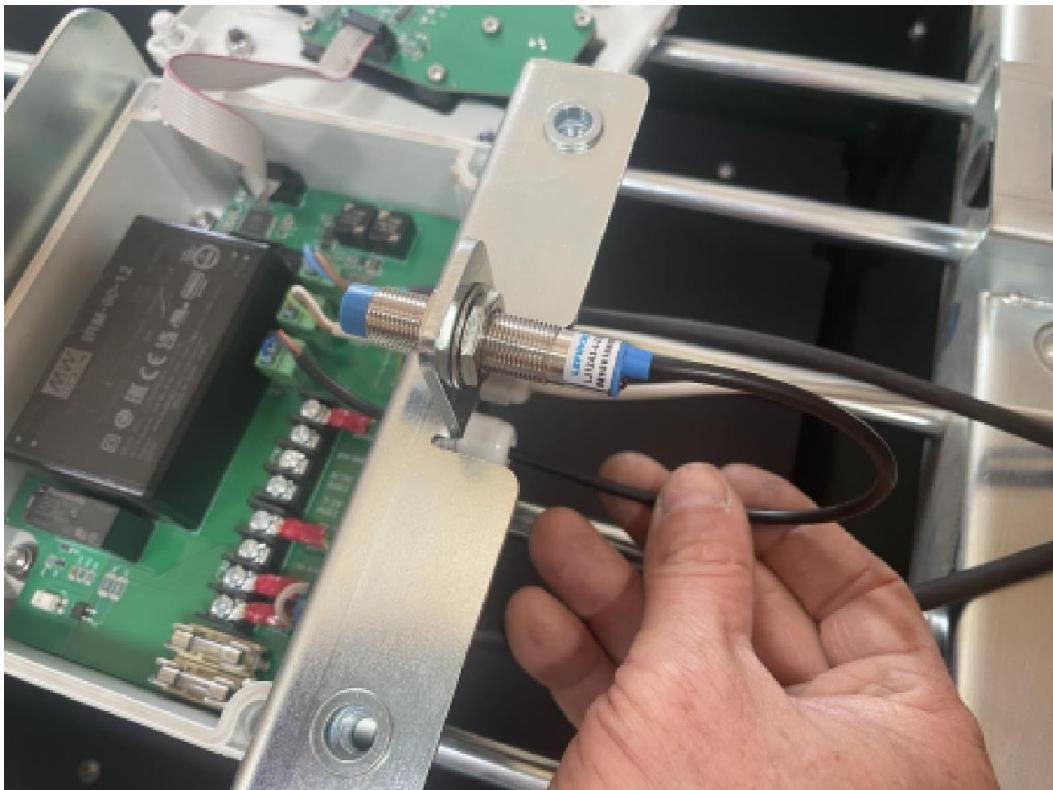
[] Place the wires in the plug and screw it hand tight. Check whether the colors of the wires are connected correctly. Then tighten them 1/8 to 1/4 turn of the screwdriver.



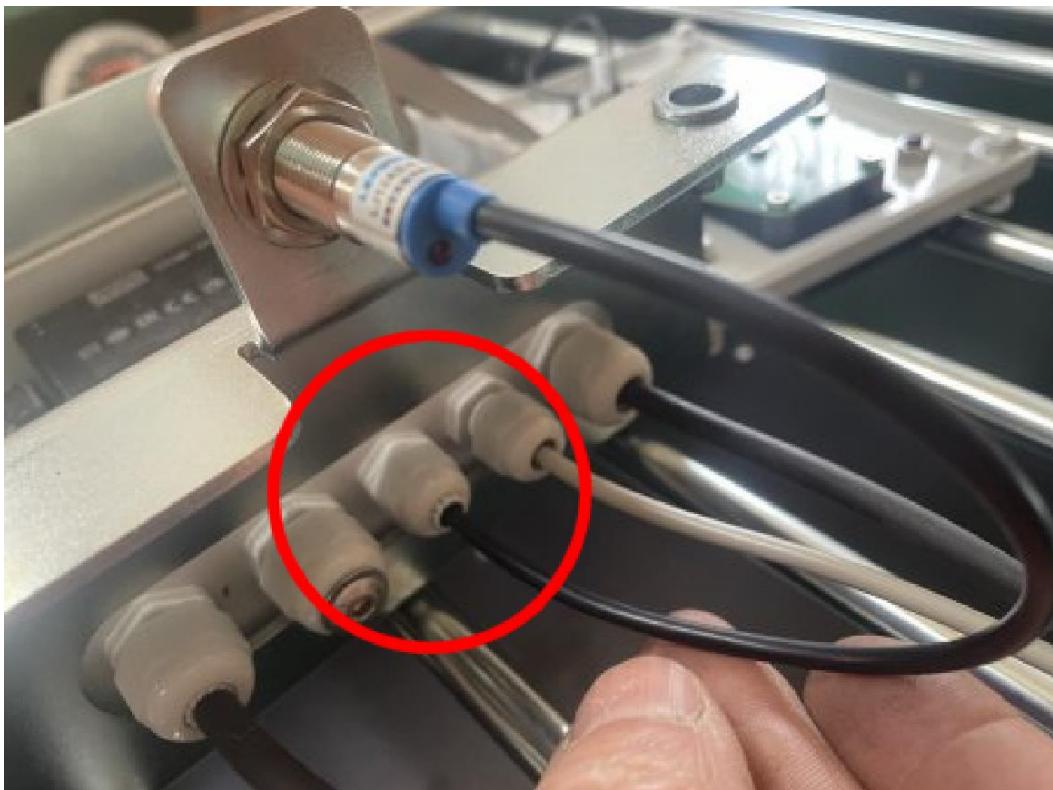
[] Push the grid sensor plug into the plug on the controller labeled "Grid".



[] Gently pull the cable of the grid sensor out of the strain relief until it is as short as possible but not yet under tension.



[] Tighten the strain relief of the grid sensor fully by hand.



[] Place the front of the housing above the housing. Carefully press the cable of the display into the corner of the housing.



[] Place the front of the housing on the controller housing. Check that there are no wires between the parts and that the front of the housing rests neatly on the back of the housing.



[] Secure the front of the housing by finger-tightening the four nuts. Tighten the nuts 1/8 turn of the screwdriver.



WARNING: If the nuts are tightened too hard, the silicone gasket between the front and back of the housing will be crushed and the two parts will no longer be watertight. Moisture can then condense in the housing, causing the controller to malfunction.

[] Place the controller on the right mounting bracket.



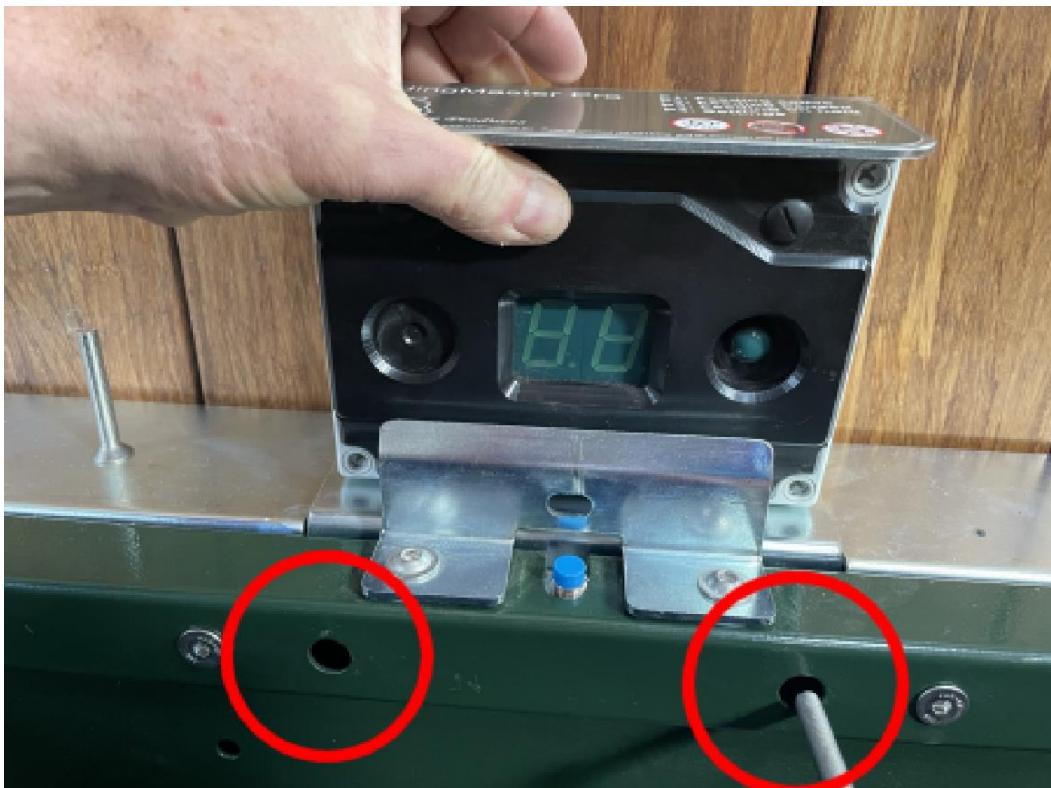
[] Open the grid.



[] Grab the controller and tilt it forward. Lower the controller between the mounting brackets. Hook the grid sensor into the recess under the grid closure bracket.



[] Tilt the controller back. Secure the controller with two M8x60 countersunk bolts.



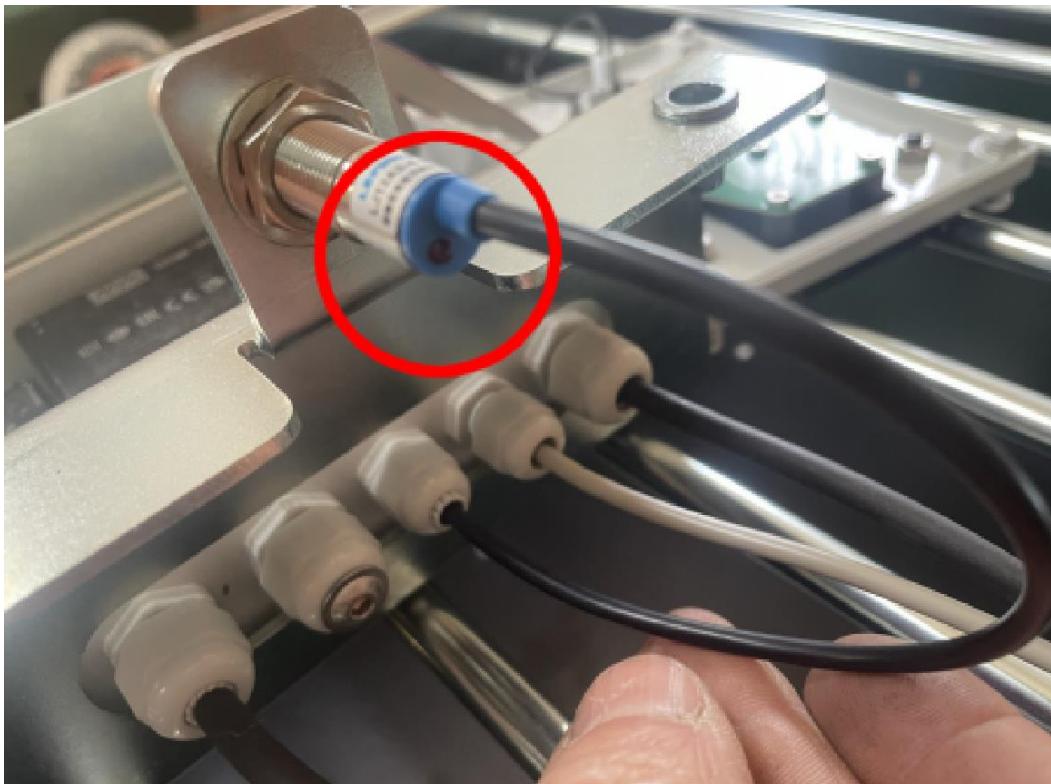
[] Close the grid and switch on the mains voltage of the FeedingMaster Pro again. Check the correct operation of the grid sensor by opening the grid. The feed floor of the FeedingMaster Pro must then be lowered to the filling position.



If the feed floor does not move when the grid is opened, this can be due to the following causes:

- The grid sensor is set too low and therefore does not detect the grid sensor. Remove the controller and check that the red light on the bottom of the grid sensor lights up when you press a metal object such as a wrench against the blue cap on the front. If the light comes on, the grid sensor needs to be readjusted.
- The wires of the grid sensor have been switched. Check that the correct order has been followed.

WARNING: The feed floor can move when you test the grid sensor. Make sure the grid is closed before performing the test.



Your FeedingMaster Pro is now ready for use again.