

MI_2401:

Interlock Safety System (ISS) - removal, installation and function test



iHexagon



15 min.



see required tool



24/11/2025

Topic

The information describes:

- Work steps - removal Interlock Safety System (ISS)
- Work steps - installation Interlock Safety System (ISS)
- Work steps - function test Interlock Safety System (ISS)
- Work steps - potential troubleshooting Interlock Safety System (ISS)

Affected product/accessories

iHexagon

- 6-1/1

Required tool

- Standard
- Multimeter
- Microwave leakage tester

Required components

The following components are required for removal, installation and function test:

- The article no.: 87.01.943S "Board set+ISS 061E*LM4" includes the following components:

Component:	Item number:
Board TSSE 061E LM4	42.00.398
Board ISS Main 061E LM4	42.00.400
Hexagon nut M5 - flange	10.01.065

General information

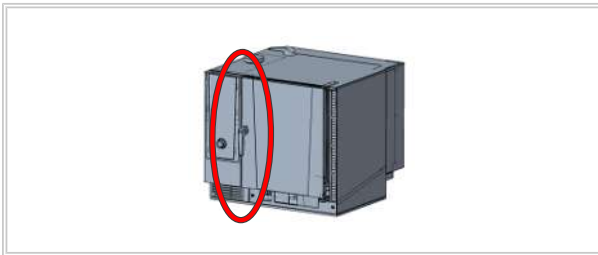
NOTICE

Enter the installation of the component on the service level ("Component replacement" tab). This is an integral part of the maintenance history.

Target group

- This document is intended for skilled technicians, who have been certified by the manufacturer after attending training and safety instructions.
- Installation, inspection, maintenance, and repair work must only be carried out by trained technicians.
- It is recommended that only technicians authorised by the manufacturer perform inspection, maintenance and repair work.
- The unit may not be used, cleaned, or maintained by children. The unit may not be used for play. This is prohibited even under supervision.
- The unit may not be used, cleaned, or maintained by people with limited physical, sensory, or mental capacity or those without the necessary experience or knowledge, unless such people are supervised by a person who is responsible for their safety and who has been informed of the hazards of the unit.
- In order to prevent accidents or damage, the manufacturer recommends that technicians attend training and safety instructions.

Installation position



Safety instructions

DANGER

High voltages when connecting to the mains power

Danger to life due to high voltage.

- Disconnect from the power supply.
- Secure against unintentional switching on.
- Make sure the unit is disconnected from the power.

CAUTION

Sharp edges on the housing

Risk of cuts on the housing when working in the electrical compartment.
Wear protective gloves.



WARNING

Risk of chemical burns due to cleaning chemicals

There is a risk of chemical burns from conscious and unconscious contact with cleaning chemicals.

- During installation and maintenance, wear tight-fitting safety glasses and chemical protective gloves that will allow you to handle cleaning products safely.

NOTICE

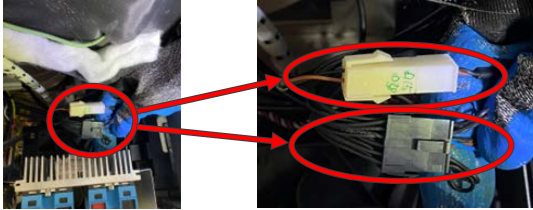
Observe regional and country-specific safety and testing regulations

The relevant regional, country-specific safety and testing regulations apply to all work on RATIONAL units. These regulations may vary by region and are country-specific and are therefore not listed separately in this document.

The technician is responsible for complying with these regulations.

Work steps - removal Interlock Safety System (ISS)

- ✓ The unit is switched off and voltage-free.
- 1. Open the control panel.
- 2. Hang the control panel in the parking position.
- 3. Disconnect the two plugs from the ISS cable LM4.



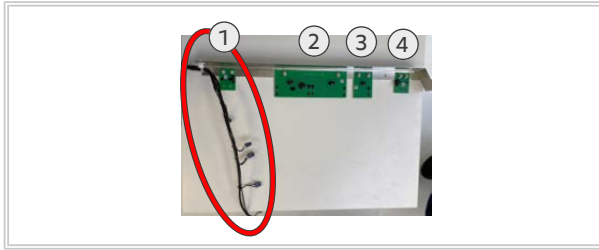
- 4. Remove the two screws from the ISS holder.
To do this, use an attachment with wrench width 8 for the screw driver.



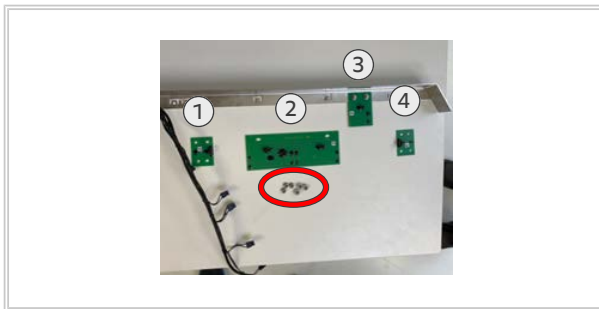
- 5. Remove the complete ISS holder.



6. Disconnect the plugs from the boards (1) - (4).



7. Remove the nuts from board (1), (2) and (4).
To do this, use an attachment with wrench width 8 for the screw driver.
8. Remove the boards (1), (2) and (4).



>> The removal is complete.

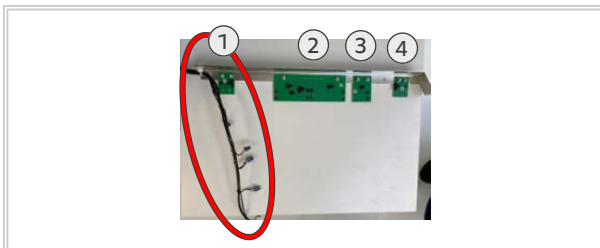
Work steps - installation Interlock Safety System (ISS)

✓ The unit is switched off and voltage-free.

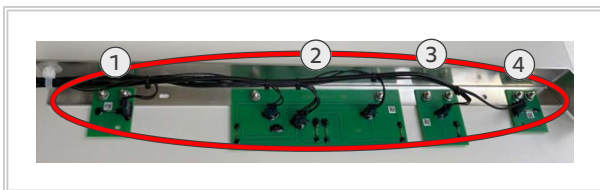
1. Align the ISS-Main board using the centre punch marks.



2. Install the nuts on the boards (1), (2) and (4).
To do this, use an attachment with wrench width 8 for the screw driver.



3. Install the plugs of the boards (1) - (4).



4. Install the complete ISS holder.



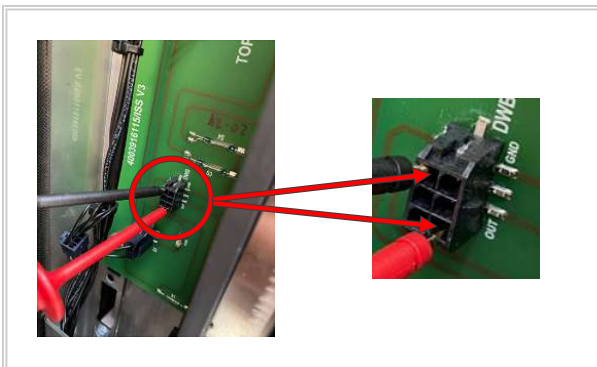
5. Install the two screws of the ISS holder.
Tighten the two screws with a torque of 3 Nm [26.55 lbf in].
For this purpose, use an attachment with wrench width 8 for the torque wrench.
 6. Insert the two plugs of the ISS cable LM4.
- >> The installation is complete.

Work steps - function test Interlock Safety System (ISS)

- ✓ The unit is switched off and voltage-free.
 - ✓ The door adjustment and latch adjustment have been carried out.
 - ✓ Hang the control panel in the parking position.
 - ✓ The door handle must be adjusted as described in the following points.
 - Close the cooking cabinet door
 - Close the door handle until it is 45 mm [1 25/32 inch] between the door edge and the bottom left corner of the door handle
- NOTICE! The locking hooks of the cabinet door must slide completely behind the latches.**



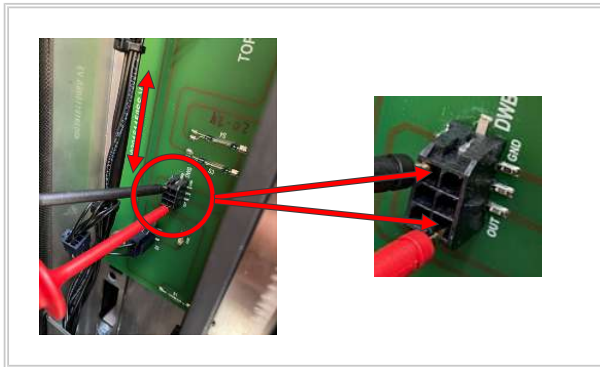
1. Check whether the ISS safety chain is closed:
Check the continuity with the multimeter on the 6-pin plug on the large ISS board (ISS-Main).



2. The ISS safety chain is closed when continuity is measured with the multimeter.
NOTICE! If the ISS safety chain is open and no continuity is measured, skip the next five points.
3. Connect the 6-pin plug to the ISS-Main board.
4. Install the control panel.
 - > The ISS safety chain is correctly set.**NOTICE! The function test is completed.**
5. Check the unit for microwave leakage.
WARNING! The unit is energized.

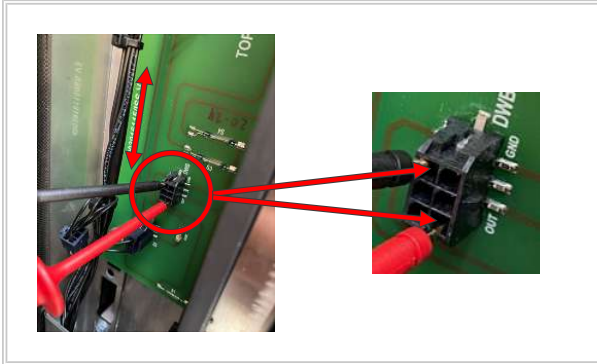
6. Open: Service level -> Microwave -> Leak test -> Component replacement
 7. Now carry out the test for microwave leakage.
The values to be measured must not exceed 5 mW/cm^2 .
NOTICE! For more information about microwave leakage, see the installation manual.
- >> The function test is completed.

8. Loosen both nuts on the ISS-Main board.
To do this, use an attachment with wrench width 8 for the screw driver.
9. Push the ISS-Main board all the way up.
10. Tighten the two nuts with a torque of 3 Nm [2.21 lbf ft].
For this purpose, use an attachment with wrench width 8 for the torque wrench.
11. Check whether the ISS safety chain is closed:
Check the continuity with the multimeter on the 6-pin plug on the large ISS board (ISS-Main).



12. The ISS safety chain is closed when continuity is measured with the multimeter.
NOTICE! If the ISS safety chain is open and no continuity is measured, skip the next five points.
 13. Connect the 6-pin plug to the ISS-Main board.
 14. Install the control panel.
> The ISS safety chain is correctly set.
NOTICE! The function test is completed.
 15. Check the unit for microwave leakage.
WARNING! The unit is energized.
 16. Open: Service level -> Microwave -> Leak test -> Component replacement
 17. Now carry out the test for microwave leakage.
The values to be measured must not exceed 5 mW/cm^2 .
NOTICE! For more information about microwave leakage, see the installation manual.
- >> The function test is completed.
18. Loosen both nuts on the ISS-Main board.
To do this, use an attachment with wrench width 8 for the screw driver.

19. Push the ISS-Main board all the way down.
20. Tighten the two nuts with a torque of 3 Nm [2.21 lbf in].
For this purpose, use an attachment with wrench width 8 for the torque wrench.
21. Check whether the ISS safety chain is closed:
Check the continuity with the multimeter on the 6-pin plug on the large ISS board (ISS-Main).

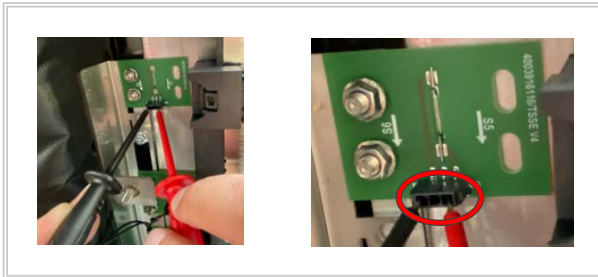


22. The ISS safety chain is closed when continuity is measured with the multimeter.
NOTICE! If the ISS safety chain is open and no continuity is measured, skip the next five points.
23. Connect the 6-pin plug to the ISS-Main board.
24. Install the control panel.
 - > The ISS safety chain is correctly set.
NOTICE! The function test is completed.
25. Check the unit for microwave leakage.
WARNING! The unit is energized.
26. Open: Service level -> Microwave -> Leak test -> Component replacement
27. Now carry out the test for microwave leakage.
The values to be measured must not exceed 5 mW/cm².
NOTICE! For more information about microwave leakage, see the installation manual.
- >> The function test is completed.

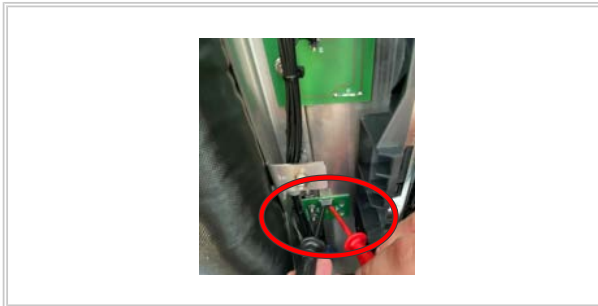
Work steps - potential troubleshooting Interlock Safety System (ISS)

If continuity still cannot be measured, proceed as follows:

1. Unplug the top board.
2. Check for continuity on the top board.



- > If continuity cannot be measured:
 - the door handle adjustment may be incorrect
 - the cabinet door/latch may be incorrectly adjusted
- 3. Unplug the bottom board.
- 4. Check the bottom board for continuity.



- > If continuity cannot be measured:
 - the door handle adjustment may be incorrect
 - the cabinet door/latch may be incorrectly adjusted
- 5. After checking the door handle setting and the cabinet door/latch, carry out a function test again.

If the function test is still not successful, contact RATIONAL Service.