

# Installation **Instructions**

for Upgrading EAS/EOS

©2019

**BRUNNER**<sup>®</sup>  
*made in germany.*

# CONTENTS

1	Basics.....	2
2	Compatible stove/fireplace inserts.....	3
3	General installation.....	3
4	HKD 4.1 / HKD 5.1 / HKD 6.1.....	4
5	HKD 2.2 / HKD 2.6.....	6
6	Kompakt-Kamin.....	8
7	Eck-Kamin / Stil-Kamin / 180°-Kamin.....	11
8	Romantikfeuer RF55 / RF66.....	12
9	Kamin-Kessel 62/76 03 Series.....	14
10	Kamin-Kessel 38/86 and 62/76 04 Series.....	17
11	Kamin-Kessel Eck Series 04.....	21
12	Kamin-Kessel Eck Series 04.1.....	24
13	WF 33 and WF 55.....	26

## 1 BASICS

### Basics

The installation of the stove control/regulation system components must take place according to the following instructions, because safety and operability of the system depend on correct assembly.

Please read these Upgrading Instructions carefully, before you start with the installation. We do not accept any warranty claim or liability for damage resulting from failure to observe these installation instructions!

Electrical connection, configuration and commissioning of the control system are described in the accompanying EOS/EAS Installation Guide and are not covered here separately.

The proper function of EOS/EAS is guaranteed only in such situation, when the upgrade kit is installed correctly on a stove or fireplace insert manufactured by Ulrich Brunner GmbH.

All national and/or local regulations must be observed.

Additional accompanying instructions must be observed.

Subject to technical changes.

Please keep these instructions!

## 2 COMPATIBLE STOVE/FIREPLACE INSERTS

EOS/EAS kits can be used to upgrade all types of the following series:

- HKD
- SF
- HWM
- RF
- Kompakt-Kamin
- Stil-Kamin
- Eck-Kamin
- Kompakt-Kessel
- WF 33, WF 55
- Kamin-Kessel

For HF series conversions (e.g. from EOS-S to EOS/EAS) and in cases of doubt - please always contact Ulrich Brunner GmbH, Technical Dept. 08721 / 771-500 before starting any works.

Please also contact Ulrich Brunner GmbH, if you notice that your stove/fireplace insert is not mentioned here.

## 3 GENERAL INSTALLATION

Basically, in each case, the door contact switch and the thermocouple must be installed on the stove/fireplace insert.

When upgrading units from HF, SF or HWM series, or a masonry heater equipped with HF front, it is necessary to install the K1 and/or K2 actuators on the stove. Usually, this requires that the stove shell is laid open in the firing door area. In these cases, please contact the customer service of Ulrich Brunner GmbH.

For units from other series (see chapter 'Compatible stove/fireplace inserts'), the actuator is installed on the combustion air hose connected to these units. Details of combustion air supply positions can be found in the relevant Installation Guide of the unit.

The location of EOS/EAS electronics has to be agreed with the customer, but the max. ambient temperature must not exceed 60°C.

Between the stove/fireplace insert and electronics, the thermocouple wiring, door switch wiring and K1 bus wiring must be led through separate cable conduits. If three separate cable conduits are not possible, the thermocouple and door switch wiring can use one single cable conduit.

## 4 HKD 4.1 / HKD 5.1 / HKD 6.1

### Delivery contents

- door contact switch
- thermocouple
- actuator with motor box
- EOS or EAS
- cable clamp (HKD 4.1 and HKD 5.1 only)
- combustion air hose (1 meter long) with adjustable hose clamps
- door switch wiring\*
- thermocouple wiring\*
- K1 bus wiring\*
- EOS/EAS Installation Guide
- these instructions

\* Length of wiring depends on site conditions and must be specified when ordering.

### Assembly

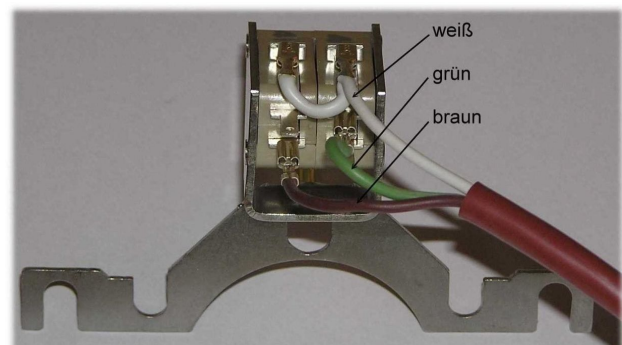
For upgrading EOS<sub>R</sub>5 it is necessary to provide access to the stove in the area below the firing door. The stove shell must be laid open, if necessary.

1. If not present yet, install the cable clamp for door switch wiring on the right, below the firing door.
2. Unplug the door switch wiring and put it through the cable clamp from below. The plug remains outside the stove/fireplace insert!



*Illustr. 1: Cable clamp with cable*

3. Reconnect the wiring with the door switch. The connection of single wires is shown in figure.



*Illustr. 2: Door switch wiring*

4. Lift off the warning plate from the air distributor.



Illustr. 3: Warning plate

5. Install the door contact switch within the air distributor using two hexagon screws.

The door switch contact pin must be placed inside the threaded sleeve of the lower door hinge.

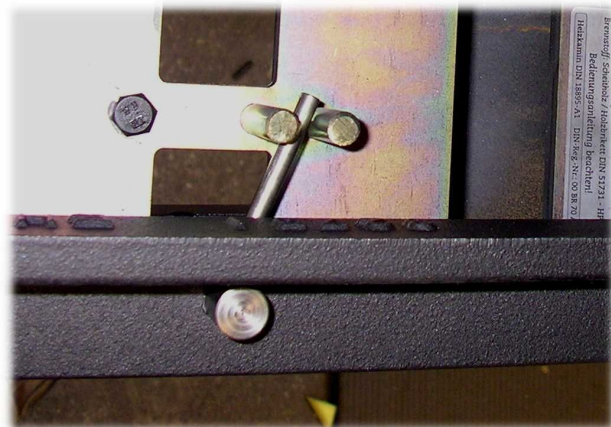
CAUTION: The door switch must be checked for proper function. Close the firing door. The door contact switch must respond just before the door is closed. Adjust the door switch, if necessary. Loosen hexagon screws and change the door switch position.



Illustr. 4: Door switch installed

6. If available, remove the manual operation lever from the air leading flap and secure the air leading flap against moving with a screw.

7. The further assembly process depends on the original delivery contents of a HKD 4.1 / 5.1 / 6.1 with EOS or EAS, and is described in the accompanying EOS/EAS Installation Guide and the HKD 4.1 / 5.1 / 6.1 Installation Guide. If these Installation Guides are not available anymore, you can order them from Ulrich Brunner GmbH.



Illustr. 5: Affixed air leading plate

## 5 HKD 2.2 / HKD 2.6

### Delivery contents

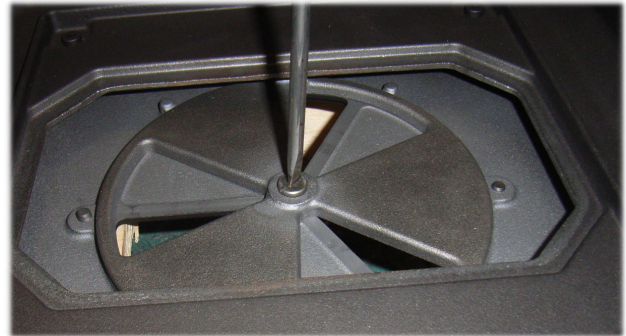
- door contact switch
- thermocouple
- actuator with motor box
- EOS or EAS
- combustion air hose (1 meter long) with adjustable hose clamps
- blind caps
- grub screw
- door switch wiring\*
- thermocouple wiring\*
- K1 bus wiring\*
- EOS/EAS Installation Guide
- these instructions

\* Length of wiring depends on site conditions and must be specified when ordering.

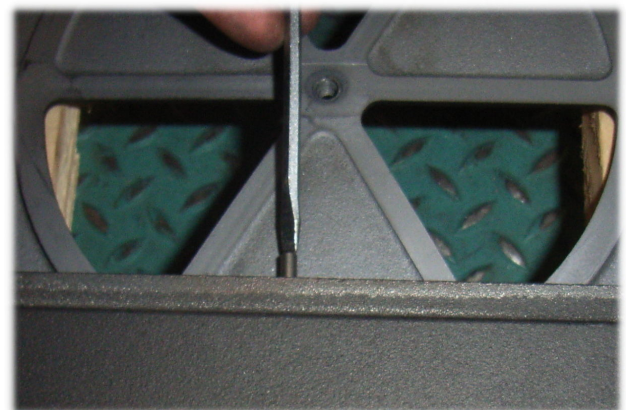
### Assembly

For EOS/EAS upgrade it is necessary to provide access to the stove below the firing door. The stove shell must be laid open, if necessary. The combustion air connecting piece (available in HKD 2.2 / 2.6 delivery contents) must be installed.

1. Clean the combustion chamber and remove the bottom plate.
2. Remove the turntable. Remove the screw and lift the turntable.
3. Unscrew the rod.

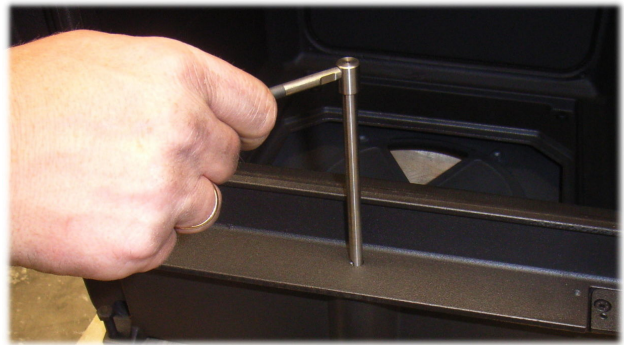


*Illustr. 6: Turntable removal*



*Illustr. 7: Unscrewing rod*

4. Remove the combustion air lever.



*Illustr. 8: Rod removal*

5. Insert the attached blind caps in the upper and lower holes, which are open after rod removal.



*Illustr. 9: Blind cap*

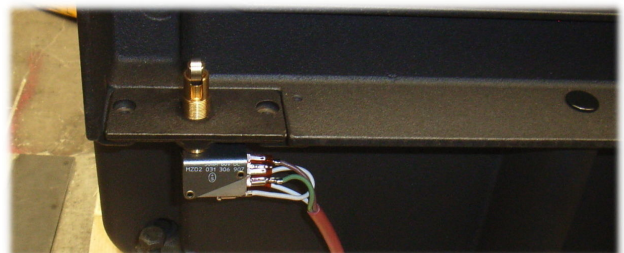
6. Remove the door switch mounting plate and then assemble the door switch with the mounting plate.



*Illustr. 10: Mounting plate removal*

7. Adjust the door switch vertical position, to ensure that it clicks audibly when closing the firing door.

8. Hold against the door switch and tighten the mounting plate screws.

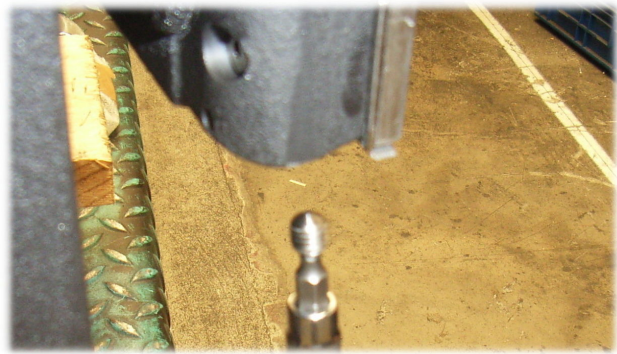


*Illustr. 11: Door switch installed*

9. Insert and tighten the attached grub screw in the lower part of firing door.

10. Insert the bottom plate.

11. The further assembly process depends on the original delivery contents of a HKD 2.2 / 2.6 with EOS or EAS, and is described in the accompanying EOS/EAS Installation Guide and the HKD 2.2 / 2.6 Installation Guide. If these Installation Guides are not available anymore, you can order them from Ulrich Brunner GmbH or download them at <http://www.brunner.de>.



*Illustr. 12: Grub screw tightening*

## 6 KOMPAKT-KAMIN

### Delivery contents

- door contact switch
- thermocouple
- actuator with motor box
- EOS or EAS
- combustion air hose (1 meter long) with adjustable hose clamps
- door switch wiring\*
- thermocouple wiring\*
- K1 bus wiring\*
- EOS/EAS Installation Guide
- these instructions

\* Length of wiring depends on site conditions and must be specified when ordering.



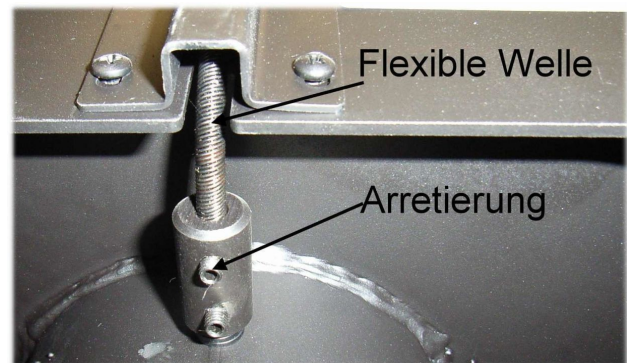
## Assembly

For EOS/EAS upgrade it is necessary to provide access to the fireplace below the firing door. The stove shell must be laid open, if necessary.

1. Set the air supply adjusting lever into 'light-up / max. heating power' position.
2. Detach the flexible shaft from its mounting below the fireplace.
3. Disassemble the guide plate for the flexible shaft.



*Illustr. 13: Flexible shaft guide plate*



*Illustr. 14: Flexible shaft*

4. Remove the air supply adjusting lever with the mounting piece and the flexible shaft.

CAUTION: Do not change the position of the combustion air flap inside the connecting piece!



*Illustr. 15: Air supply adjusting lever*

5. Replace the flexible shaft with the threaded rod of the locking screw and tighten the lock. Now attach the locking screw with both washers and nut to the metal shell of the fireplace insert.

CAUTION - Risk of deflagration! Make sure that the flap inside the combustion air connecting piece is completely open and does not move!



*Illustr. 16: Locking screw installed*

6. Install the door switch as shown. Check the switching behaviour of the door contact switch when closing the door. An audible click must be heard.

7. The further assembly process depends on the original delivery contents of a Kompakt-Kamin with EOS or EAS, and is described in the accompanying EOS/EAS Installation Guide and the Kompakt-Kamin Installation Guide. If these Installation Guides are not available anymore, you can order them from Ulrich Brunner GmbH or download them at <http://www.brunner.de>.



*Illustr. 17: Door switch installed*

## 7 ECK-KAMIN / STIL-KAMIN / 180°-KAMIN

### Delivery contents

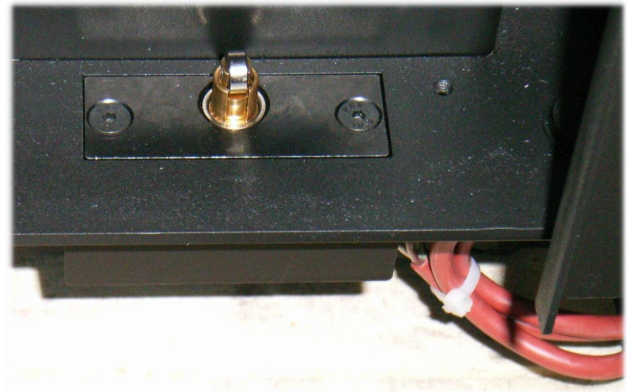
- door contact switch
- thermocouple
- actuator with motor box
- EOS or EAS
- combustion air hose (1 meter long) with adjustable hose clamps
- door switch wiring\*
- thermocouple wiring\*
- K1 bus wiring\*
- EOS/EAS Installation Guide
- these instructions

\* Length of wiring depends on site conditions and must be specified when ordering.

### Assembly

For EOS/EAS upgrade it is necessary to provide access to the fireplace below the firing door. The stove shell must be laid open, if necessary.

1. Remove the manually operated combustion air flap. The motorized combustion air flap can be installed in the same position. Observe the permissible ambient temperatures!
2. Install the door switch as shown. In order to do so, remove the currently installed mounting plate (lower right door area) and install the door switch mounting piece.



*Illustr. 18: Door switch installed*

3. The further assembly process depends on the original delivery contents of a Kompakt-Kamin with EOS or EAS, and is described in the accompanying EOS/EAS Installation Guide and the Kompakt-Kamin Installation Guide. If these Installation Guides are not available anymore, you can order them from Ulrich Brunner GmbH or download them at <http://www.brunner.de>.

## 8 ROMANTIKFEUER RF55 / RF66

### Delivery contents

- door contact switch
- thermocouple
- actuator with motor box
- EOS or EAS
- combustion air hose (1 meter long) with adjustable hose clamps
- door switch wiring\*
- thermocouple wiring\*
- K1 bus wiring\*
- EOS/EAS Installation Guide
- these instructions

\* Length of wiring depends on site conditions and must be specified when ordering.

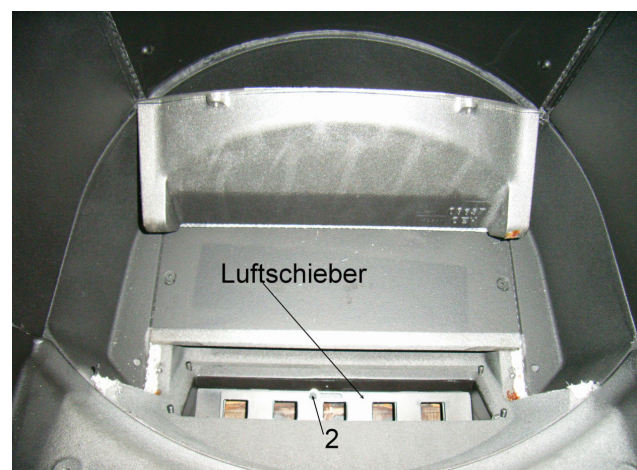
### Assembly

For EOS upgrade it is necessary to provide access to the fireplace insert below the firing door and from its side at the front of the door. The stove shell must be laid open, if necessary.

1. Remove the mounting frame or door frame.
2. Remove the frontal bottom part of the fireclay linings.
3. Detach the air distribution plate by removing both screws (1).
4. Set the air supply adjuster into 'light-up / max. heating power' position.
5. Affix the air supply adjuster with a screw (2).

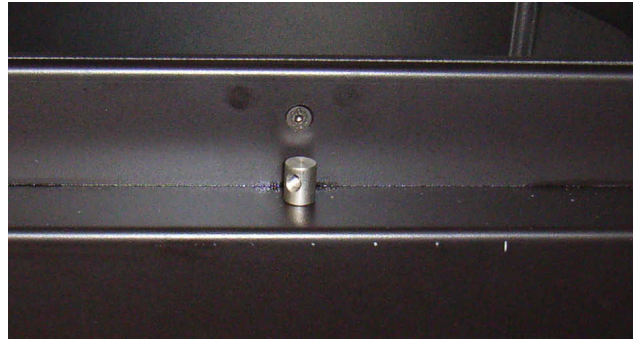


Illustr. 19: Cast iron bottom with air distribution cover



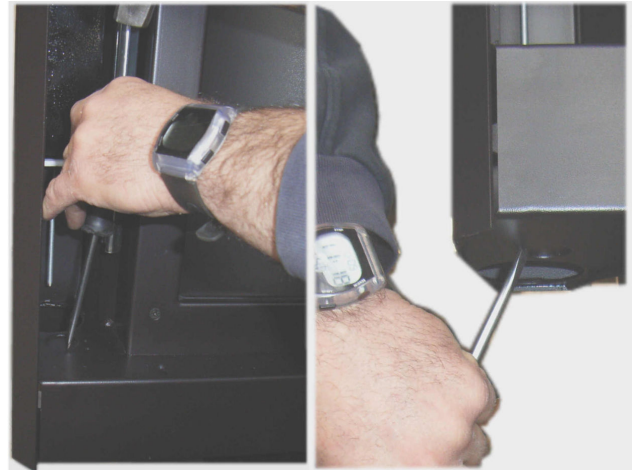
Illustr. 20: Air supply adjuster

6. Remove the manual operation handle.



*Illustr. 21: Manual operation handle removed*

7. On the left side of the firing door there are breaking points for installation of the door switch and cable entry. Punch the holes out using appropriate tools.



*Illustr. 22: Punching holes out*

8. Installation of the door contact switch, as shown on picture.

9. Now adjust the door switch, to ensure that it responds when closing door.

10. The further assembly process depends on the original delivery contents of a RF55 / RF66 with EOS or EAS, and is described in the accompanying EOS/EAS Installation Guide and the RF55 / RF66 Installation Guide. If these Installation Guides are not available anymore, you can order them from Ulrich Brunner GmbH or download them at <http://www.brunner.de>.



*Illustr. 23: Door switch installed*

## 9 KAMIN-KESSEL 62/76 03 SERIES

### Delivery contents

- door contact switch
- thermocouple
- actuator with motor box
- EOS or EAS
- guide rails
- clamps with M5 nuts (8 pcs.)
- combustion air hose (1 meter long) with adjustable hose clamps
- door switch wiring\*
- thermocouple wiring\*
- K1 bus wiring\*
- EOS/EAS Installation Guide
- these instructions

\* Length of wiring depends on site conditions and must be specified when ordering.

### Assembly

For EOS/EAS upgrade it is necessary to provide access to the fireplace below the firing door. The stove shell must be laid open, if necessary.

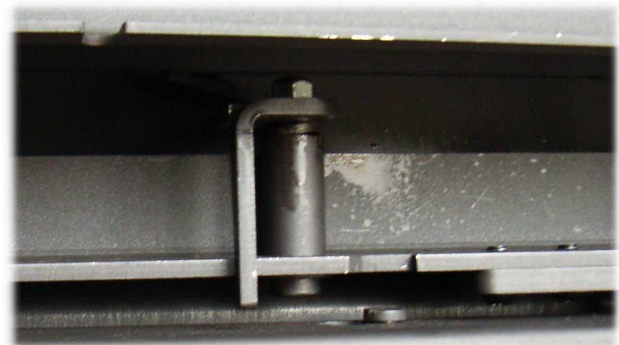
Remove the manually operated combustion air flap. The motorized combustion air flap can be installed in the same position. Observe the permissible ambient temperatures!

Install the door switch as shown. In order to do so, remove the currently installed mounting plate (lower right door area) and install the door switch mounting piece.

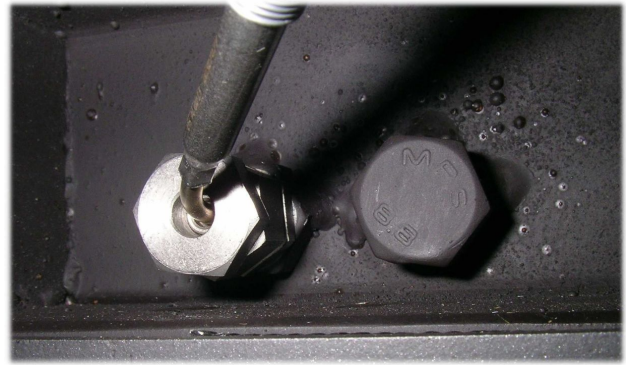
The thermocouple is installed above the firing door. Close and lock the firing door. The mounting plate for thermocouple is in the middle above the firing door behind a metal cover.



*Illustr. 24: Door switch installed*



*Illustr. 25: Locked firing door*



*Illustr. 26: Thermocouple installed*

Attach the cable with a clamp on the tip of guide rail.

In order to lay the thermocouple wiring it is recommended to remove the right side panel.

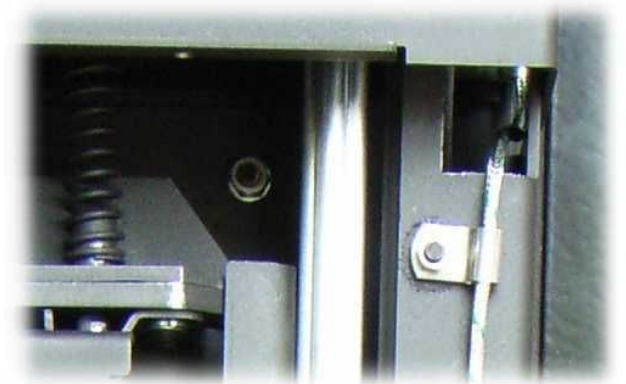
The thermocouple wiring must be led right above the firing door, behind the wire rope of the pulley mechanism, and pulled to the front through the opening.

Attach the guide rail on top of the two bolts available above the firing door. Make sure that the guide rail does not touch the steel rope.

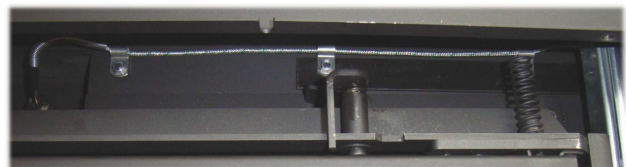
Put a clamp with wiring on each bolt and tighten.



*Illustr. 27: Guide rail with wiring*



*Illustr. 28: Wiring on Kamin-Kessel*



*Illustr. 29: Complete guide rail after installation*

Now attach the wiring on the right with the remaining cable clamps.

The further assembly process depends on the original delivery contents of a Kamin-Kessel with EOS or EAS, and is described in the accompanying EOS/EAS Installation Guide and the Kamin-Kessel Installation Guide. If these Installation Guides are not available anymore, you can order them from Ulrich Brunner GmbH or download them at <http://www.brunner.de>.





## 10 KAMIN-KESSEL 38/86 AND 62/76 04 SERIES

### Delivery contents

- door contact switch
- thermocouple
- actuator with motor box
- EOS or EAS
- clamps with M5 nuts (8 pcs.)
- angular piece as switching plate for door switch
- combustion air hose (1 meter long) with adjustable hose clamps
- door switch wiring\*
- thermocouple wiring\*
- K1 bus wiring\*
- EOS/EAS Installation Guide
- these instructions

\* Length of wiring depends on site conditions and must be specified when ordering.

### Assembly

For EOS/EAS upgrade it is necessary to provide access to the fireplace below the firing door. The stove shell must be laid open, if necessary.

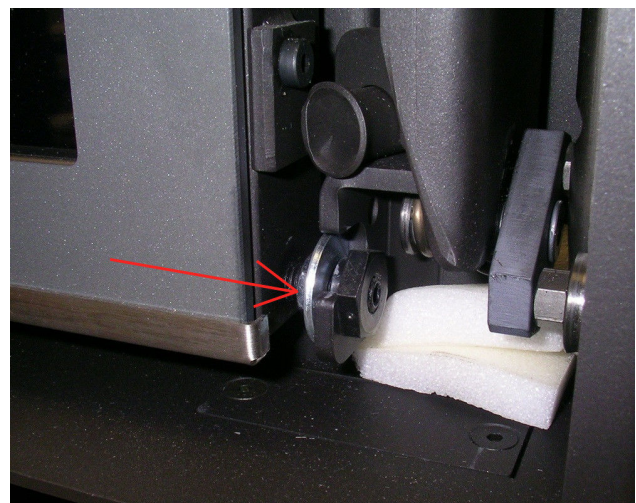
Remove the manually operated combustion air flap. The motorized combustion air flap can be installed in the same position. Observe the permissible ambient temperatures!

Install the door switch as shown. In order to do so, remove the currently installed mounting plate (lower right door area) and install the door switch mounting piece.

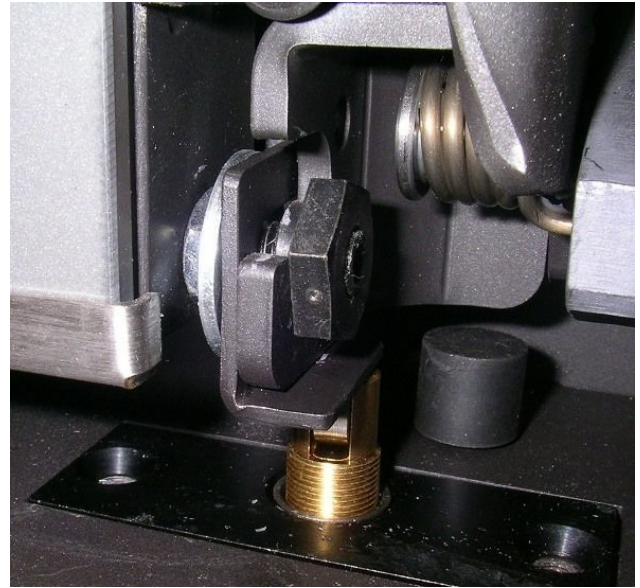
The angular piece as switching plate for the door switch is installed in the lower right corner of the firing door. Loosen the locknut and slide the angular piece at the front. Now retighten the locknut.



*Illustr. 30: Door switch installed*



*Illustr. 31: Loosen the locknut*



*Illustr. 32: Angular piece installed*

In order to install the thermocouple, it is necessary to bend the thermocouple carefully at 90° above the screw fitting.

**CAUTION:** The thermocouple can be bent only once without destroying it!

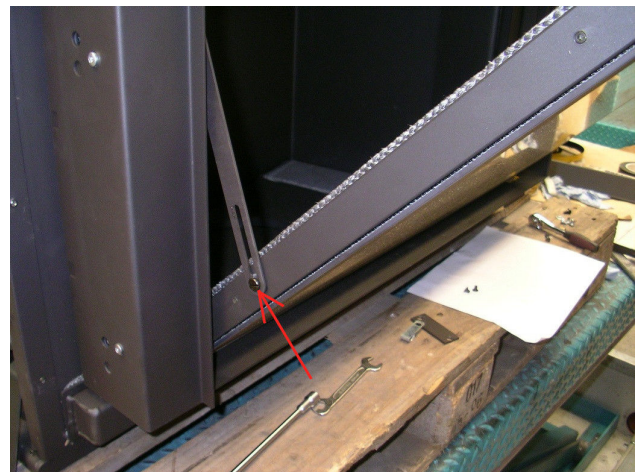


*Illustr. 33: Bent thermocouple*

The thermocouple must be assembled in the provided screw fitting above the firing door.

To reach the screw fitting, it is necessary to tilt out the firing door and lift up the frame of the firing door.

First, the hinge struts left and right must be released from the firing door.



*Illustr. 34: Releasing hinge struts*

Now lift up the frame of the firing door and put down the firing door at the front.

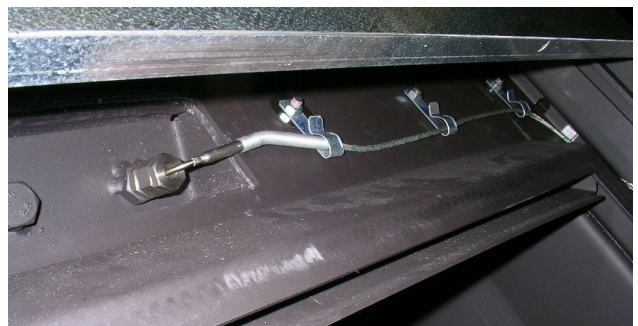


*Illustr. 35: Lifting frame*



*Illustr. 36: Putting down the door*

Attach the thermocouple and put the cable into the clamps as shown.



Lead the sensor wiring and connector down behind the pulley mechanism. The sensor wiring must be led through the lateral cable clamp.

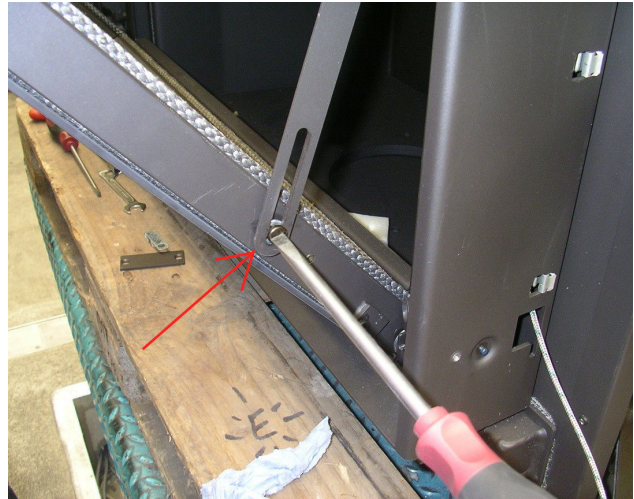


Put the connector through the provided opening and remove the cable slack to avoid collisions with the door mechanism.



Now slide the door frame down again and attach the hinge struts on both sides of the firing door.

The further assembly process depends on the original delivery contents of a Kamin-Kessel with EOS or EAS, and is described in the accompanying EOS/EAS Installation Guide and the Kamin-Kessel Installation Guide. If these Installation Guides are not available anymore, you can order them from Ulrich Brunner GmbH or download them at <http://www.brunner.de>.



## 11 KAMIN-KESSEL ECK SERIES 04

### Delivery contents

- door contact switch
- thermocouple
- actuator with motor box
- EOS or EAS
- combustion air hose (1 meter long) with adjustable hose clamps
- door switch wiring\*
- thermocouple wiring\*
- K1 bus wiring\*
- EOS/EAS Installation Guide
- these instructions

\*Length of wiring depends on site conditions and must be specified when ordering.

### Assembly

For EOS/EAS upgrade it is necessary to provide access to the fireplace below and above the firing door. The stove shell must be laid open, if necessary.

Install the door switch as shown. In order to do so, remove the currently installed mounting plate (lower right door area) and install the door switch mounting piece.



*Illustr. 37: Door switch installed*

To avoid air supply malfunctions it is necessary to disassemble the sliding plate and the air supply adjuster.

Remove the fireclay bottom plate (1) and the cast iron revision plate (2).

Now remove the two screws (3) on the sliding plate (4).

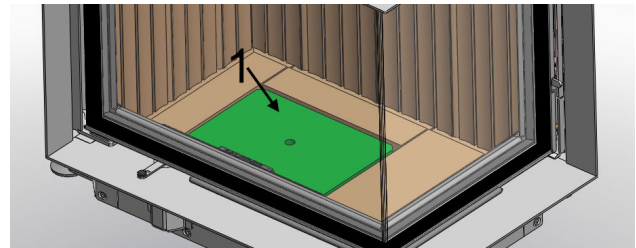
The sliding plate (4) can be removed.

Unscrew the pin (5) from the shaft of the air supply adjuster.

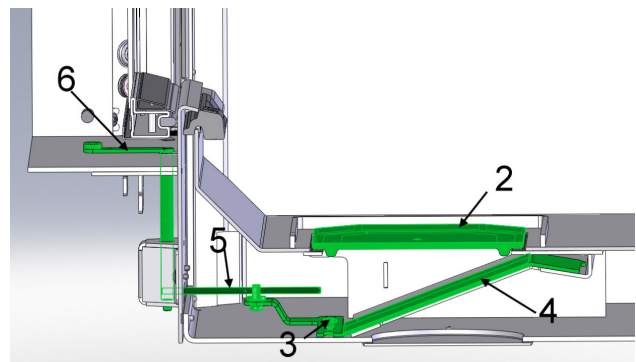
The air supply adjuster (6) can be now pulled out from above.

Screws, sliding plate, pin and air supply adjuster are not needed anymore.

Put the cast iron revision plate and the fireclay bottom plate in place.



*Illustr. 38: Bottom plate*



*Illustr. 39: Sliding plate*

In order to install the thermocouple, it is necessary to bend the thermocouple carefully at 90° above the screw fitting.

**CAUTION:** The thermocouple can be bent only once without destroying it!



*Illustr. 40: Bent thermocouple*

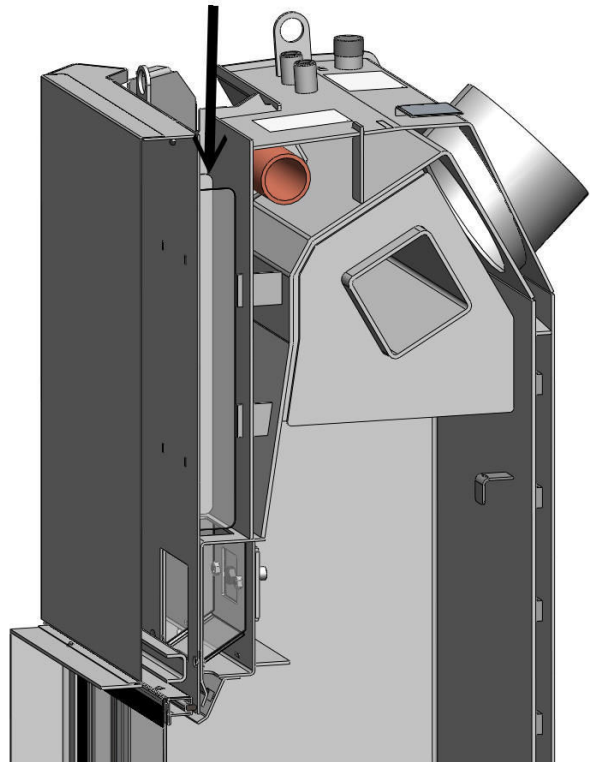
The thermocouple must be assembled in the provided screw fitting above the firing door.

To reach the screw fitting, it is necessary to remove the deflector plates and insulating plates above the fireclay linings. Now the mounting plate can be removed from inside of the combustion chamber.



*Illustr. 41: Mounting plate inside combustion chamber*

Let the thermocouple fall from above through the cable conduit.

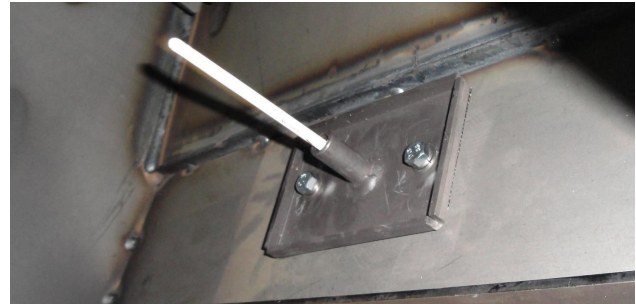


*Illustr. 42: Position of cable conduit*

Put the thermocouple into the combustion chamber and assemble it on the mounting plate.



Now attach the mounting plate again, and put the combustion chamber deflectors and insulation plates in place.



The further assembly process depends on the original delivery contents of a Kamin-Kessel Eck with EOS or EAS, and is described in the accompanying EOS/EAS Installation Guide and the Kamin-Kessel Eck Installation Guide. If these Installation Guides are not available anymore, you can order them from Ulrich Brunner GmbH.

## 12 KAMIN-KESSEL ECK SERIES 04.1

### Delivery contents

- door contact switch
- thermocouple
- actuator with motor box
- EOS or EAS
- combustion air hose (1 meter long) with adjustable hose clamps
- door switch wiring\*
- thermocouple wiring\*
- K1 bus wiring\*
- EOS/EAS Installation Guide
- these instructions

\* Length of wiring depends on site conditions and must be specified when ordering.

### Assembly

For EOS/EAS upgrade it is necessary to provide access to the fireplace below and above the firing door. The stove shell must be laid open, if necessary.

Install the door switch as shown. In order to do so, remove the currently installed mounting plate (lower right door area) and install the door switch mounting piece.



*Illustr. 43: Door switch installed*



To avoid air supply malfunctions it is necessary to disassemble the sliding plate and the air supply adjuster.

Remove the fireclay bottom plate (1) and the revision plate (2).

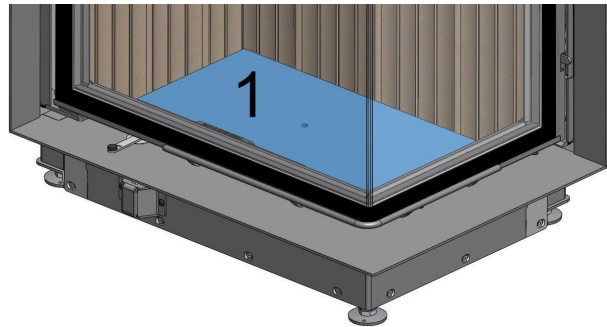
Now remove the screw (3) and the turntable (4).

Unscrew the pin (5) from the shaft of the air supply adjuster.

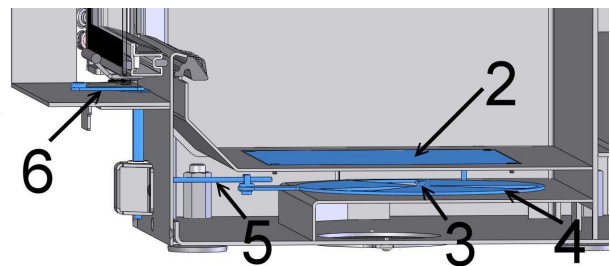
The air supply adjuster (6) can be now pulled out from above.

The screw, turntable, pin and air supply adjuster are not needed anymore.

Put the revision plate and the fireclay bottom plate in place.



*Illustr. 44: Bottom plate*



*Illustr. 45: Sliding plate*

In order to install the thermocouple, it is necessary to bend the thermocouple carefully at 90° above the screw fitting. In original delivery contents, the thermocouple is already bent to fit.

**CAUTION:** The thermocouple can be bent only once without destroying it!

The thermocouple must be assembled in the provided screw fitting above the firing door.

To reach the screw fitting, it is necessary to remove the deflector plates and insulating plates above the fireclay linings. Now the mounting plate can be removed from inside of the combustion chamber.



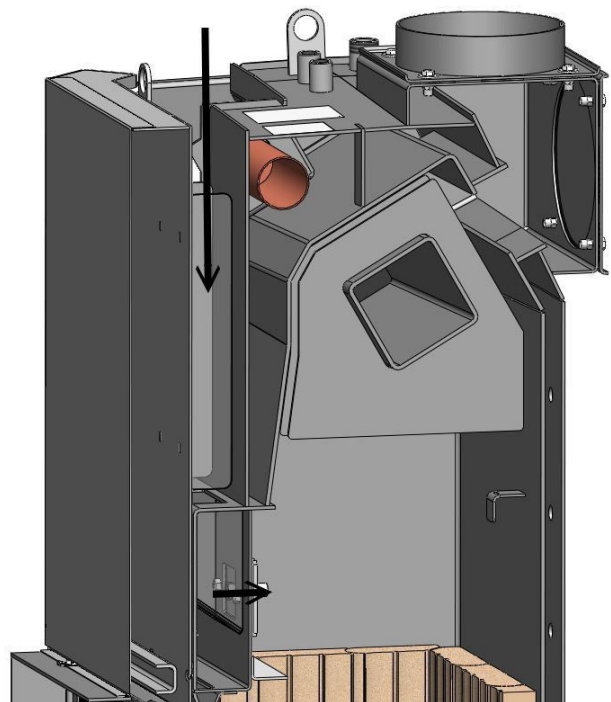
*Illustr. 46: Bent thermocouple*



*Illustr. 47: Mounting plate inside combustion chamber*

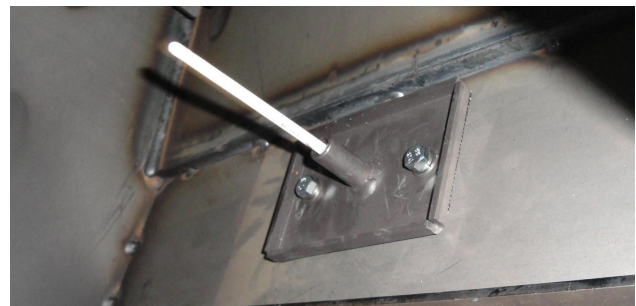
Let the thermocouple fall from above through the cable conduit.

Put the thermocouple into the combustion chamber and assemble it on the mounting plate.



*Illustr. 48: Position of cable conduit*

Now attach the mounting plate again, and put the combustion chamber deflectors and insulation plates in place.



The further assembly process depends on the original delivery contents of a Kamin-Kessel Eck with EOS or EAS, and is described in the accompanying EOS/EAS Installation Guide and the Kamin-Kessel Eck Installation Guide. If these Installation Guides are not available anymore, you can order them from Ulrich Brunner GmbH or download them at <http://www.brunner.de>.

## 13 WF 33 AND WF 55

### Delivery contents

- door contact switch
- thermocouple
- actuator with motor box
- EOS or EAS
- combustion air hose (1 meter long) with adjustable hose clamps
- door switch wiring\*

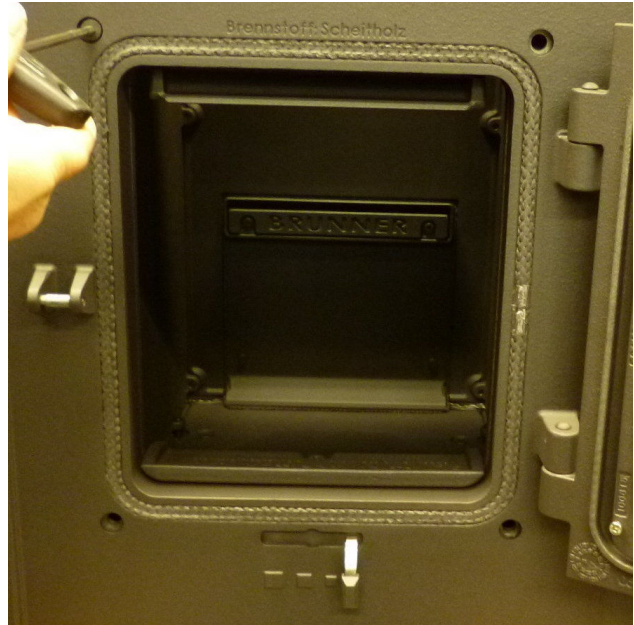
- thermocouple wiring\*
- K1 bus wiring\*
- EOS/EAS Installation Guide
- these instructions

\*Length of wiring depends on site conditions and must be specified when ordering.

## Montage

For EOS/EAS upgrade it is necessary to demount the front panel of the WF stove.

The front panel is attached to the corners of the firing door with the four screws. Remove the screws and pull the front panel off the body.



In order to avoid incorrect operation of the air supply, it is absolutely necessary to dismount the sliding plate and the air control element.

To remove the air control element, first remove the lever on the back of the front panel.



Now you can dismantle the counter plate.



The actuator can now be removed from the back side of the front panel. For this it is helpful to open the firing door slightly (a crack).



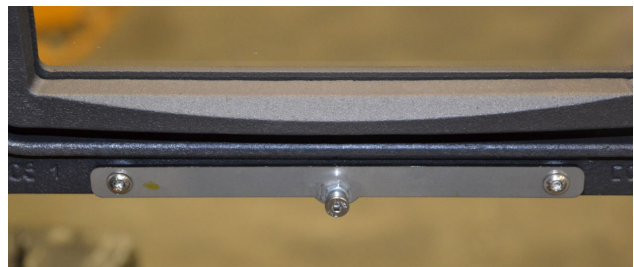
Now fit the door contact switch to the position of the counter plate.



Insert the cable of the door contact switch below the firing door into the combustion chamber and refit the front panel.



Mount the door contact actuator on the inside of the firing door. Attention: If the required thread in the door leaf is not available, please contact our customer service.



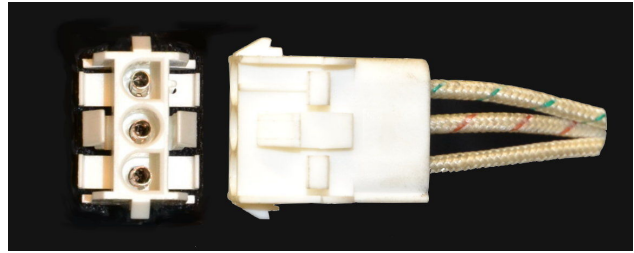
Pass the cable through the strain relief.



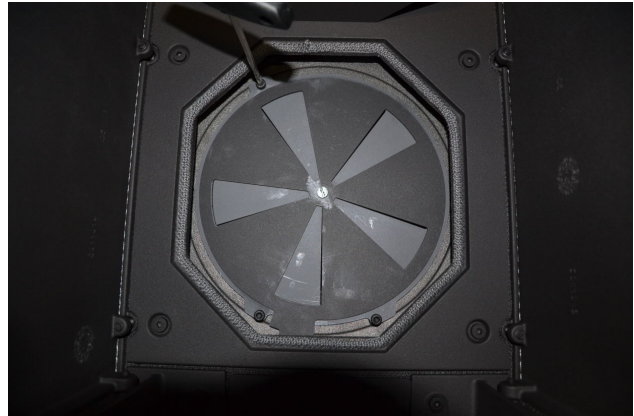
Push the cable through so far that about 30 cm free cable length looks out of the air inlet nozzle.



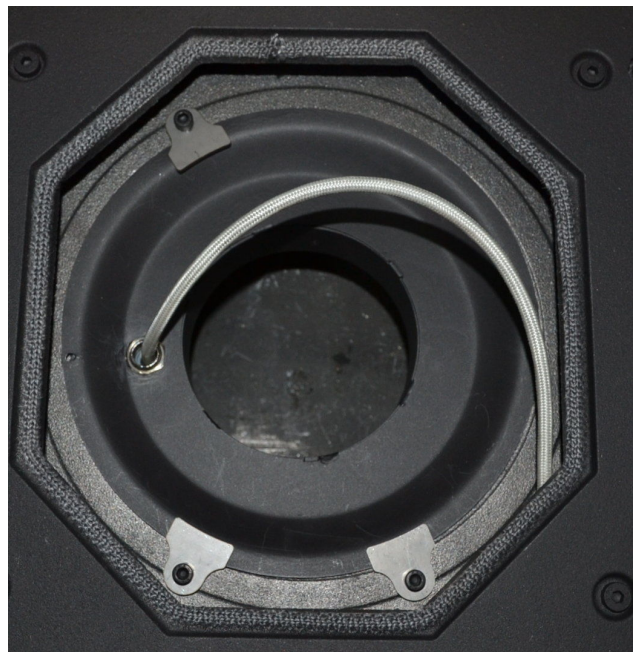
Insert the cables into the plug until they click into place. Pay attention to the color coding of the cables. In the picture seen from above: green> brown> white.



Remove the fireclay bottom plate and the revision plate and remove the air sliding plate assembly.



Insert the air connection nozzle and fix it with the three clamping plates. Reinstall the inspection cover.



The further procedure corresponds to the original delivery status of a WF with EOS or EAS and can be taken from the enclosed instructions for setting up the EOS/EAS and WF stove.

Ulrich Brunner GmbH

Zellhuber Ring 17-18

D-84307 Eggenfelden

Tel.: +49 (0) 8721/771-0

Fax: +49 (0) 8721/771-100

Email: [info@brunner.de](mailto:info@brunner.de)

**Art.Nr.: 200552**