

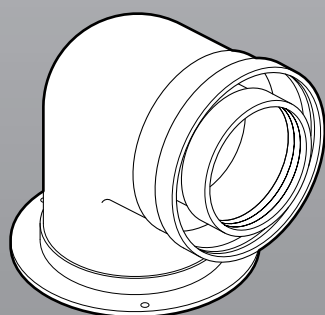
INSTALLATION INSTRUCTIONS FOR FLUE KIT

HORIZONTAL FLUE TERMINAL ASSEMBLY Ø 80/125 MM

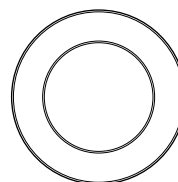
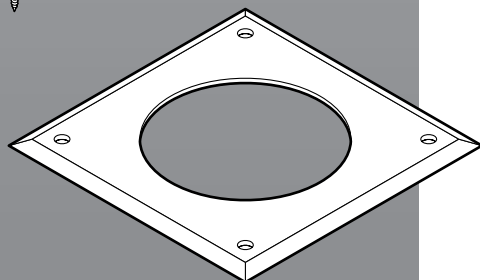
7 719 003 702

FOR GAS CONDENSING APPLIANCES:

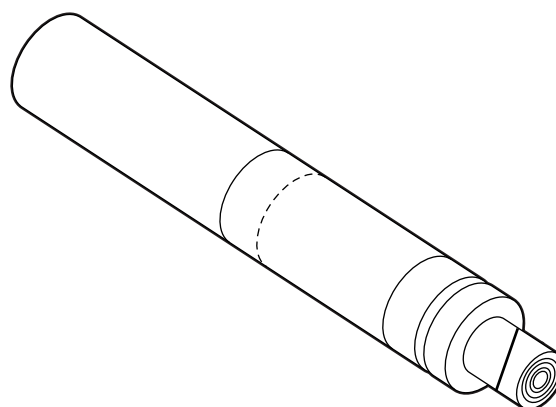
**GREENSTAR CDI SYSTEM/COMBI/REGULAR, GREENSTAR I JUNIOR,
GREENSTAR SI, GREENSTAR RI, GREENSTAR SYSTEM**



3x 



2x 



4x

6 720 611 436-00.30



CONTENTS

1	Symbols and safety precautions	3
1.1	Explanation of symbols	3
1.2	Safety precautions	3

2	installation regulations	5
----------	---------------------------------	----------

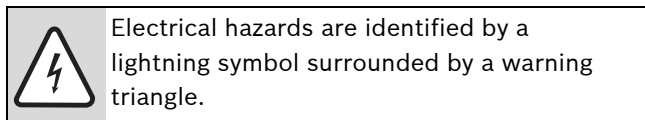
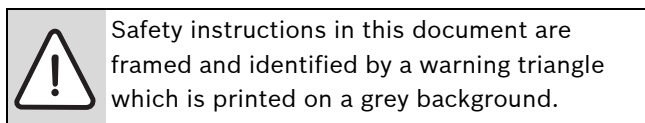
3	Use	6
3.1	General	6
3.2	Combination with flue duct kits	6
3.3	Standard specifications	6

4	Mounting	7
4.1	Notes on fitting	7
4.2	Room-sealed air/flue ducting with exit through outside wall	7
4.3	Redirecting the flue discharge	9

1 SYMBOLS AND SAFETY PRECAUTIONS

1.1 EXPLANATION OF SYMBOLS

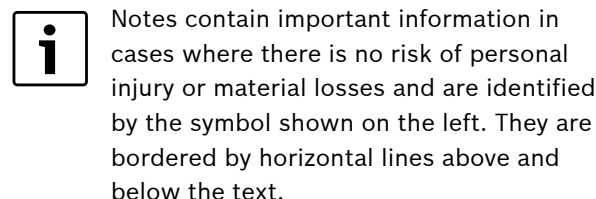
WARNING SYMBOLS



Signal words indicate the seriousness of the hazard in terms of the consequences of not following the safety instructions.

- **NOTICE** indicates possible damage to property or equipment, but where there is no risk of injury.
- **CAUTION** indicates possible injury.
- **WARNING** indicates possible severe injury.
- **DANGER** indicates possible risk to life.

IMPORTANT INFORMATION



ADDITIONAL SYMBOLS

Symbol	Meaning
▶	a step in an action sequence
→	a reference to a related part in the document or to other related documents
•	a list entry
–	a list entry (second level)

Tab. 1

1.2 SAFETY PRECAUTIONS

IF YOU SMELL GAS

- ▶ **Do not** smoke or strike matches.
- ▶ **Do not** turn electrical switches **ON** or **OFF**.
- ▶ Put out naked flames.
- ▶ Open doors and windows.
- ▶ Keep people away from the affected area.
- ▶ Turn off the control valve at the meter.
- ▶ Call your gas company.

-or-

- ▶ Call emergency number 0800 111 999.

IF YOU SMELL FUMES FROM THE APPLIANCE

- ▶ Switch off the appliance.
- ▶ Open windows and doors.
- ▶ Inform your heating engineer.

INSTALLATION INSTRUCTIONS

Please read these instructions carefully before starting installation. If you are in any doubt contact Worcester Technical Support.

These installation instructions must be read in conjunction with the appliance manual.

Please leave these instructions with the user or at the gas meter after installation or servicing.

Distance learning and training courses are available from Worcester, Bosch Group.

BENCHMARK

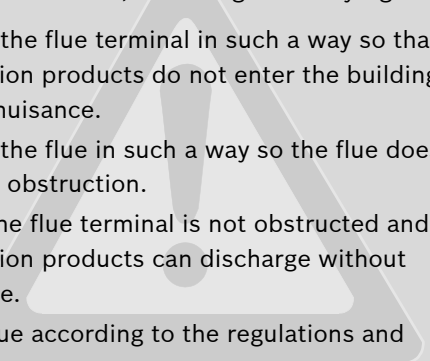
Please leave these instructions with the completed Benchmark Checklist (or a certificate confirming compliance with IS 813, EIRE only) with the owner after installation or servicing.

The Benchmark Checklist can be found in the back two pages of the appliance installation manual.

FITTING AND MODIFICATIONS

Fitting the flue system to the appliance must be carried out by a GAS SAFE registered, competent person in accordance with these installation instructions and the current Gas Safety Regulations (Installation and Use).

Flue systems must not be modified in any way other than as described in the fitting instructions. Any misuse or unauthorised modifications to the appliance, flue or associated components and systems will invalidate the warranty. The manufacturer accepts no liability arising from any such actions, excluding statutory rights.

- 
- ▶ Position the flue terminal in such a way so that combustion products do not enter the building or cause a nuisance.
 - ▶ Position the flue in such a way so the flue does not cause an obstruction.
 - ▶ Ensure the flue terminal is not obstructed and combustion products can discharge without hindrance.
 - ▶ Fit the flue according to the regulations and standards.

SERVICING

Advise the user to have the system serviced annually by a GAS SAFE registered, competent person using approved spares, to help maintain the economy, safety and reliability of the appliance.

The service engineer must complete the Service Record on the Benchmark Checklist after each service.

2 INSTALLATION REGULATIONS



Current Gas Safety Regulations (Installation and Use):

Failure to install flue systems correctly could lead to prosecution.

All flue systems and associated components must be installed by a GAS SAFE registered, competent person in accordance with the following regulations.

Relevant regulations:

- Gas Safety Regulations 1998 (Installation and Use)
- Building Regulations
- Building Regulations (Northern Ireland)
- Building Standards (Scotland) (Consolidation)
- IS 813 (Eire)
- IGE "Gas Installation in Timber Frame Buildings"
- Any other local requirement

The relevant British Standards to be followed, include:

- BS5440:1
Flues and ventilation for gas appliances of rated heating not exceeding 70 kW (net): Flues
- BS5440:2
Flues and ventilation for gas appliances of rated heating not exceeding 70 kW (net): Air Supply
- BS7698
Installation of gas fired boilers of rated input up to 70 kW (net)

If no specific instruction is given, refer to the British Standard Codes of Practice.



CAUTION:

The flue terminal outlet position must follow those stated in the relevant appliance Instruction Manual and when redirecting the flue discharge the outlet terminal must also be at least 1500 mm from any opening in the direction of the discharge to prevent combustion products from entering the building (→ fig. 1).

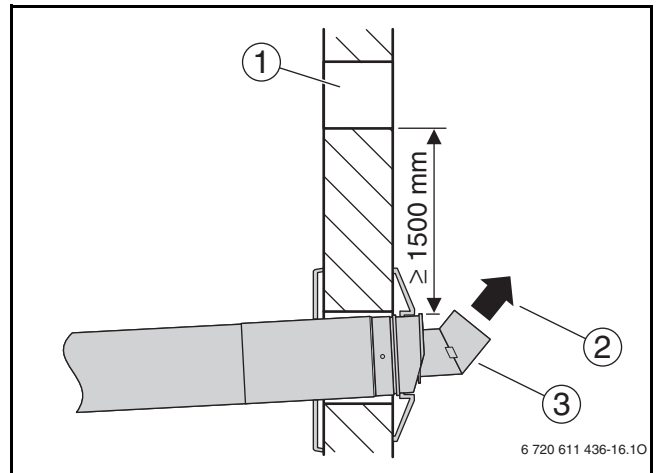


Fig. 1

- 1 Opening in building
- 2 Direction of flue discharge
- 3 Plume deflector

3 USE

3.1 GENERAL

The installation of a gas condensing appliance must be in accordance with the relevant British Standard, the relevant Building Regulations and any local rules.

The surface temperature of the fresh air duct is below 85 °C. Therefore the distance from a combustible building material is kept to a minimum of 5 mm.

FLUE DUCTING TO C₁₃ AND C₃₃:

The flue gas accessory is part of CE approval when discharging flue gas according to C₁₃ and C₃₃. For this reason, only use flue accessories that are branded Worcester Bosch Group, or carry the Original Quality "Q" label.

3.3 STANDARD SPECIFICATIONS

3.2 COMBINATION WITH FLUE DUCT KITS

The 7 719 003 702 can be combined with the following flue duct kits:

Flue duct kits	
7 719 003 664	90° bend
7 719 003 665	45° bend
7 719 003 666	extension 990 mm

Tab. 2

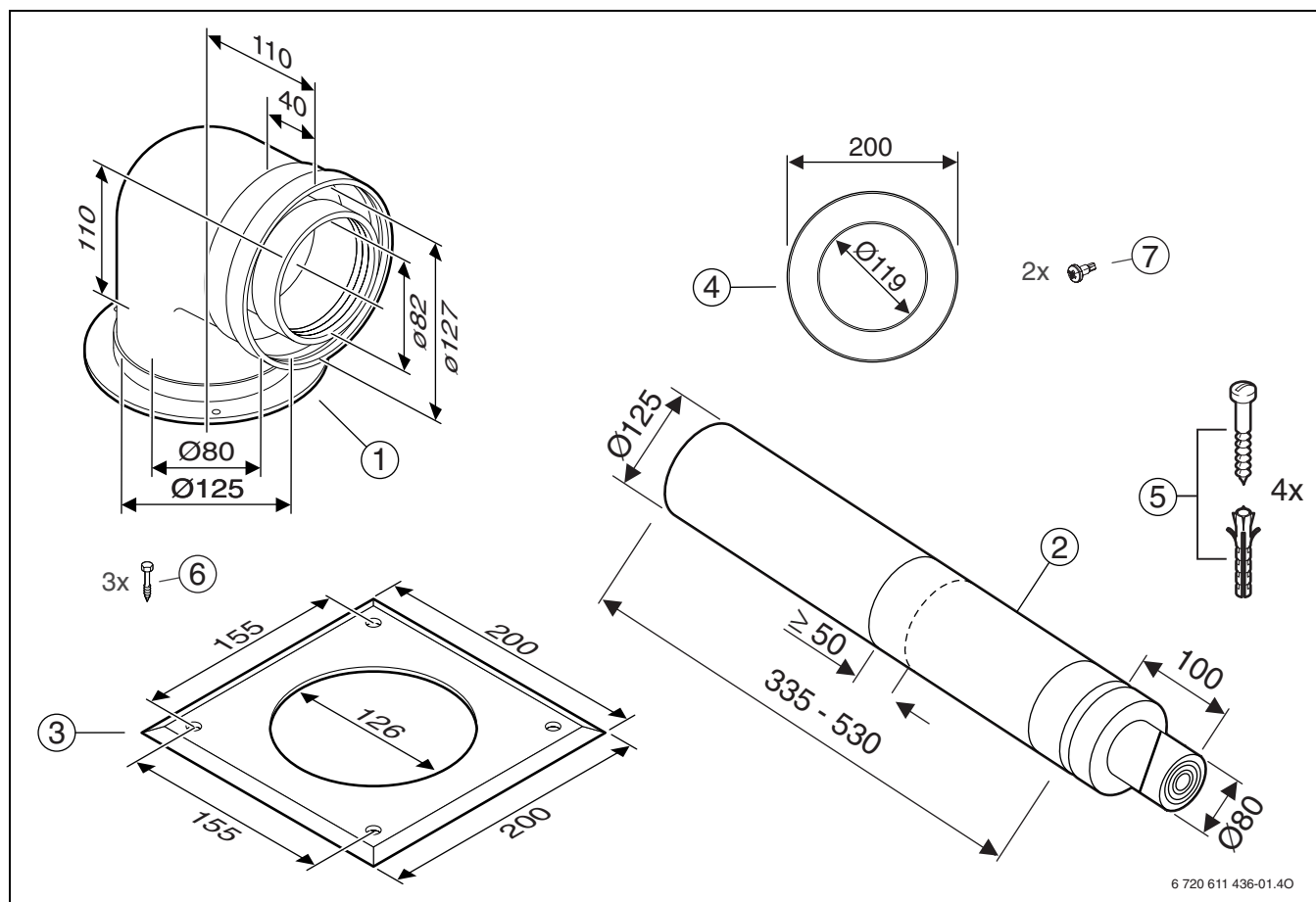


Fig. 2

- 1 Connecting elbow
- 2 Flue terminal assembly
- 3 Inner wall seal
- 4 Outer wall seal
- 5 Screws and wall plugs
- 6 Connecting screws
- 7 Securing screws

4 MOUNTING

4.1 NOTES ON FITTING

- The horizontal flue duct (7 719 003 702) can be extended at any point between the connecting elbow [1] and the flue terminal assembly [2] using the flue duct kits 7 719 003 664, 7 719 003 665 and 7 719 003 666.
- For flue pipe maximum and equivalent lengths with the usage of bends refer to the installation instructions with the appliance.
- Every additional horizontal extension 7 719 003 666 must be supported by a bracket (not supplied).
- The horizontal air/flue duct should be fitted with an upward incline of 3° (= 52 mm per meter) in the direction of flow of the flue gases.

4.2 ROOM-SEALED AIR/FLUE DUCTING WITH EXIT THROUGH OUTSIDE WALL

- Apply a thin layer of solvent-free grease (e.g. Vaseline) to the seals on the joints.
- Unscrew the screws around the flue connection on the top of the appliance.

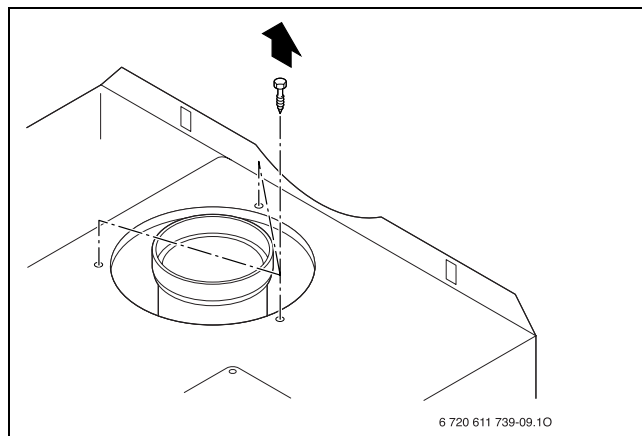


Fig. 3

- Place connecting elbow [1] on the top of the appliance and align.
- Fix connecting elbow [1] with screws.



While the screws are not fully tightened, the connecting elbow can be swivelled around its vertical axis.

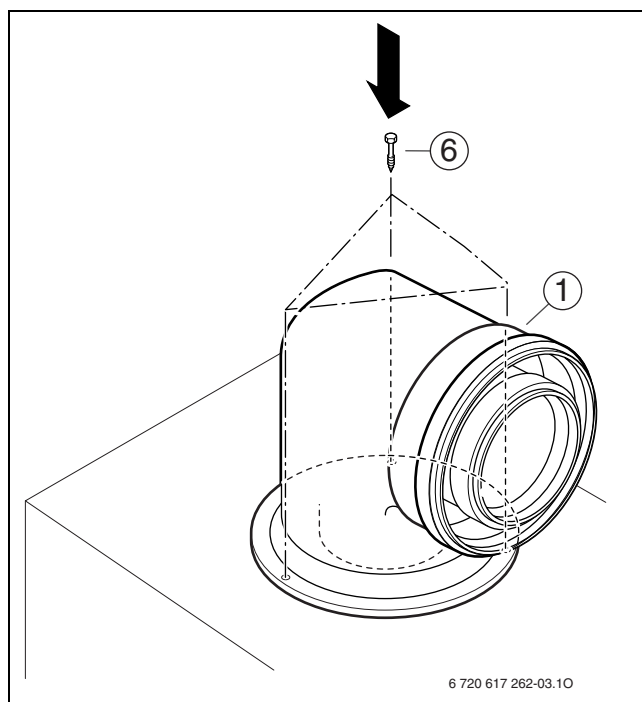


Fig. 4

- Calculate length of the flue terminal assembly [2] taking account of the distance from the outside wall to the end of the flue pipe.

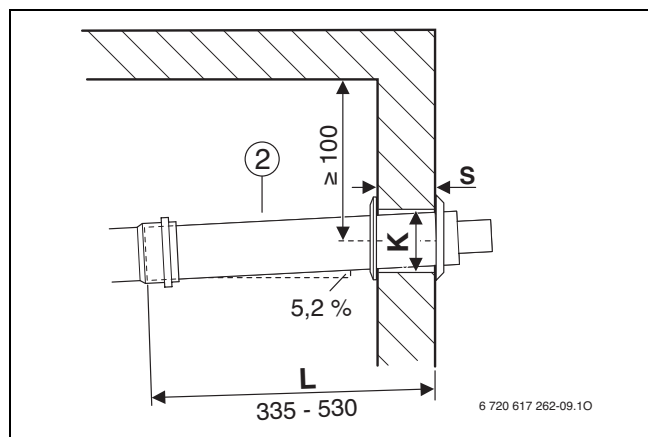


Fig. 5

- Calculate the required diameter **K** of the hole in the wall according to the wall thickness **S**.

Wall thickness S	Diameter K
15 - 24 cm	155 mm
24 - 33 cm	160 mm
33 - 42 cm	165 mm
42 - 50 cm	170 mm

Tab. 3

- Make the hole in the wall remembering to allow for the required 3° incline of the air/flue pipe.
- Set the flue length to the distance required and secure with screw [7].

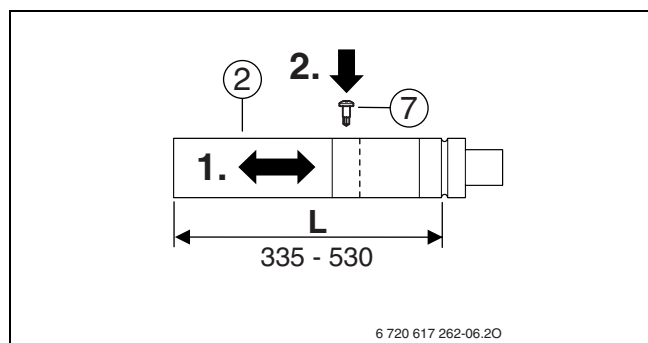


Fig. 6

- Slide the outer wall seal [4] onto the terminal [2] as shown.

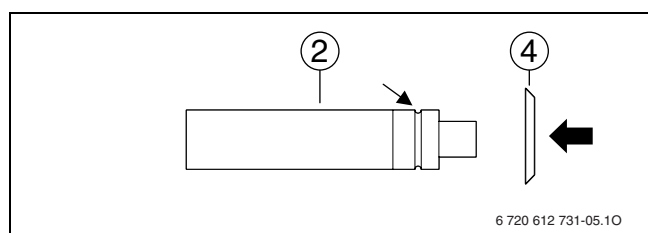


Fig. 7

- Position terminal [2] through the flue opening in the wall to the outside of the building.

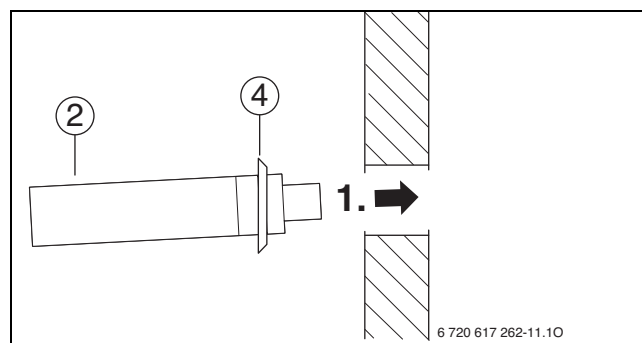


Fig. 8

- Slide the inner wall seal [3] onto the terminal [2] as shown.

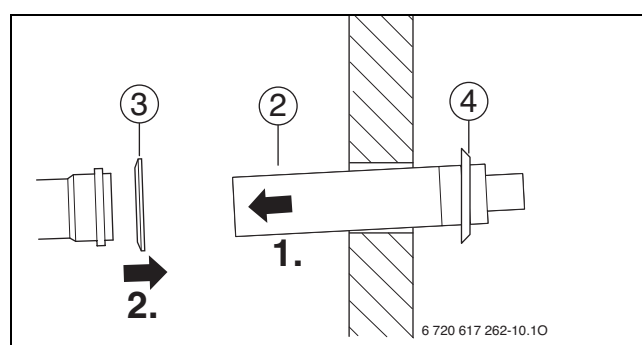


Fig. 9

- If necessary mount additional flue extensions (7 719 003 664) and bends (7 719 003 665, 7 719 003 666) between connecting elbow [1] and terminal [2] and secure with screw.

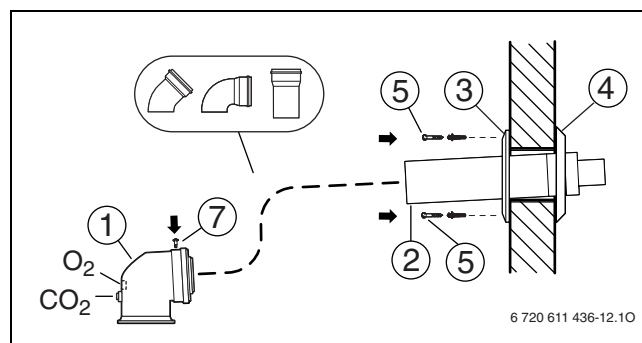


Fig. 10

4.3 REDIRECTING THE FLUE DISCHARGE

The flue discharge can be redirected:

- Bend clips [A] up and disconnect the terminal end.

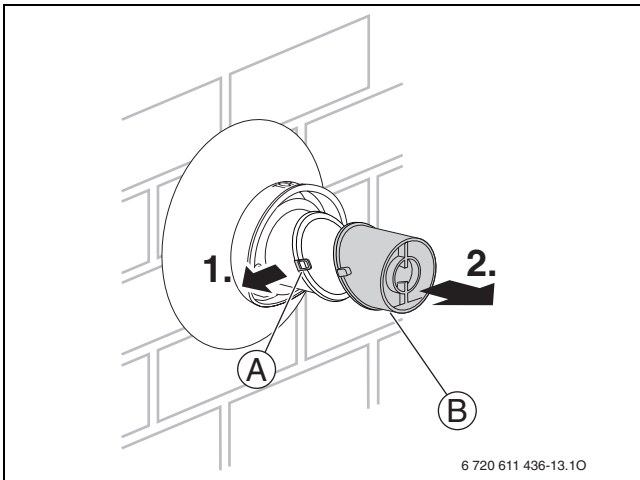


Fig. 11

- Rotate the terminal end [B] through 180°.



NOTICE:

- **Do not** rotate the complete flue terminal assembly.

- Refit the terminal end [B] and secure with clips [A].

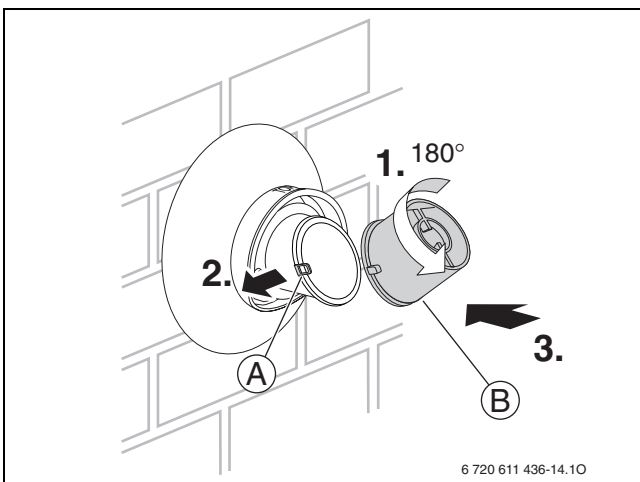


Fig. 12

- Loosen screws [C] and rotate the entire outlet assembly to redirect the plume.

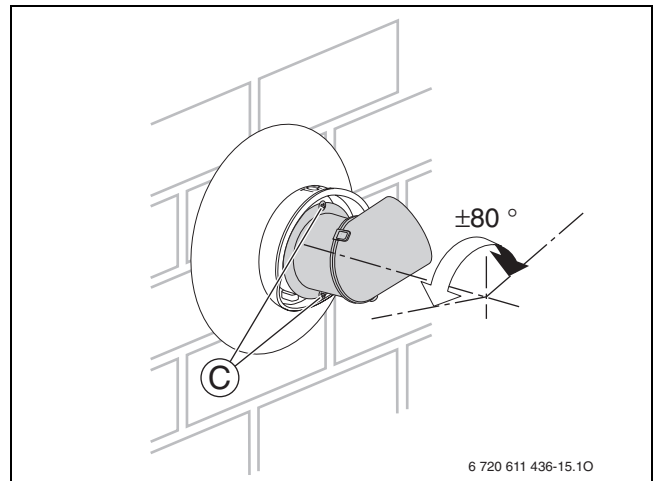


Fig. 13

- Retighten screws [C] to secure in the required position.



The flue terminal outlet has built-in stops to limit rotation for horizontal fluing to allow condensate to run back into the appliance for safe disposal.

- Do not attempt to force beyond the limit stops.



CAUTION:

Ensure clearance to an opening in the direction of discharge is increased to 1500mm, → page 5.

CONTACT INFORMATION

WORCESTER, BOSCH GROUP:

TECHNICAL:	08705 266241
SERVICE:	08457 256206
SPARES:	01905 752571
LITERATURE:	01905 752556
TRAINING:	01905 752526
SALES:	01905 752640
WEBSITE:	worcester-bosch.co.uk

Worcester, Bosch Group
Cotswold Way, Warndon, Worcester WR4 9SW.
Tel. 01905 754624 Fax. 01905 754619
Worcester, Bosch Group is a brand name of Bosch Thermotechnology Ltd.
worcester-bosch.co.uk

6 720 611 436

