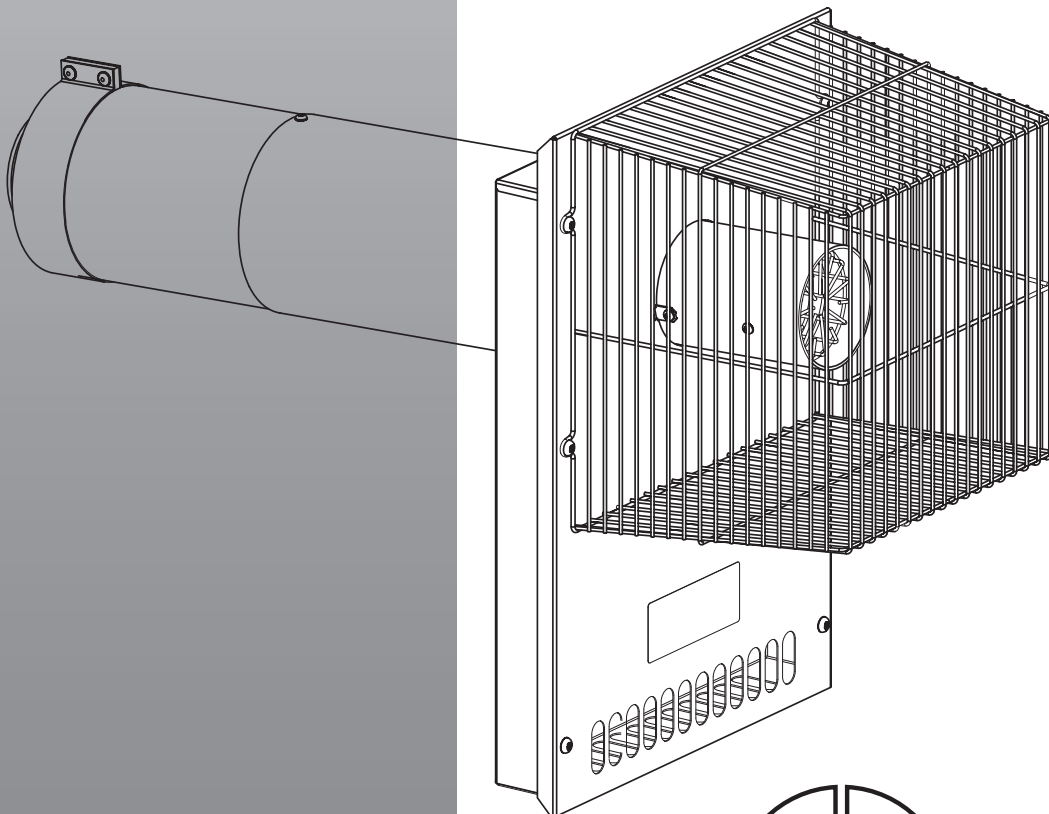


INSTRUCTION MANUAL

GREENSTAR OILFIT EXTERNAL

LOW LEVEL HORIZONTAL BALANCED FLUE

GREENSTAR CAMRAY EXTERNAL & HEATSLAVE EXTERNAL BOILERS



GreenstarTM
Oilfit
EXTERNAL

GB

8 718 683 735a 04/2009


WORCESTER
Bosch Group

CONTACT INFORMATION

WORCESTER, BOSCH GROUP

MAIN RECEPTION: 01905 754624
MAIN FAX: 01905 754619
TECHNICAL: 08705 266241
SERVICE: 08457 256206
SPARES: 01905 752571
LITERATURE: 01905 752556
TRAINING: 01905 752526
SALES: 01905 752640
WEBSITE: www.worcester-bosch.co.uk

FLUE TERMINAL GUARDS:

WORCESTER, BOSCH GROUP
Part Number: 7 716 190 050

OIL FIRING TECHNICAL ASSOCIATION:

OFTEC: 0845 6585080
www.oftec.org

INSTALLATION & SERVICING INSTRUCTIONS

PLEASE READ THESE INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION.

THESE INSTRUCTIONS ARE APPLICABLE TO THE WORCESTER APPLIANCE MODEL(S) STATED ON THE FRONT COVER OF THIS MANUAL ONLY AND MUST NOT BE USED WITH ANY OTHER MAKE OR MODEL OF APPLIANCE.

THE INSTRUCTIONS APPLY IN THE UK ONLY AND MUST BE FOLLOWED EXCEPT FOR ANY STATUTORY OBLIGATION.

THIS APPLIANCE MUST BE INSTALLED BY A COMPETENT PERSON. FAILURE TO INSTALL CORRECTLY COULD LEAD TO PROSECUTION.

IF YOU ARE IN **ANY DOUBT** CONTACT THE WORCESTER TECHNICAL HELPLINE.

DISTANCE LEARNING AND TRAINING COURSES ARE AVAILABLE FROM WORCESTER, BOSCH GROUP.

PLEASE LEAVE THESE INSTRUCTIONS WITH THE USER OR WITH THE APPLIANCE AFTER INSTALLATION OR SERVICING.

ABBREVIATIONS USED IN THIS MANUAL:

∅	Diameter
CF	Conventional flue
RS	Room sealed flue
SEDBUK	Seasonal Efficiency of Domestic Boilers in the United Kingdom
OFTEC	Oil Firing Technical Association for the Petroleum Industry

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SAFETY &
REGULATIONS

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PRE -
INSTALLATION

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SAFETY PRECAUTIONS

OIL SMELLS, LEAKS OR FUMES FROM THE APPLIANCE:

- ▶ Extinguish any naked flames.
- ▶ Isolate the electrical supply.
- ▶ Isolate the fuel supply to the boiler.
- ▶ Rectify fault.

HEALTH & SAFETY:

The appliance contains no asbestos and no substances have been used in the construction process that contravene the COSHH Regulations (Control of Substances Hazardous to Health Regulations 1988). Where applicable, the CE mark indicates compliance with relative EU Directives.

COMBUSTIBLE AND CORROSIVE MATERIALS:

Do not store or use any combustible materials (paper, thinners, paints etc.) inside or within the vicinity of the appliance.

The combustion air must be kept clear of chemically aggressive substances which can corrode the appliance and invalidate any warranty.

FITTING & MODIFICATIONS:

Fitting the appliance and any controls to the appliance may only be carried out by a competent engineer in accordance with these instructions and the relevant Installation Regulations.

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 could invalidate the warranty. The manufacturer accepts no liability arising from any such actions, excluding statutory rights.

INSTALLATION REGULATIONS

Failure to install appliances correctly could lead to prosecution.

The appliance should be installed by a competent person. The person installing the appliance should be aware of the Health and Safety at Work Act and take appropriate action to ensure that the regulations are adhered to. In order to give optimum efficiency and trouble free operation the appliance must be commissioned by a qualified OFTEC engineer.

The compliance with a British Standard does not, in itself, confer immunity from legal obligations. In particular the installation of this appliance must be in accordance with the relevant requirements of the following British Standards and regulations in respect of the safe installation of equipment.

BS 5410: part 1: Code of practice for Oil Fired Boilers.

The Building Regulations Part J and L1 England and Wales; Part F and Part J Section III Scotland; Part L and Part F Northern Ireland.

Local water company bye-laws.

The Control of Pollution (Oil) Regulations.

OFTEC Standards.

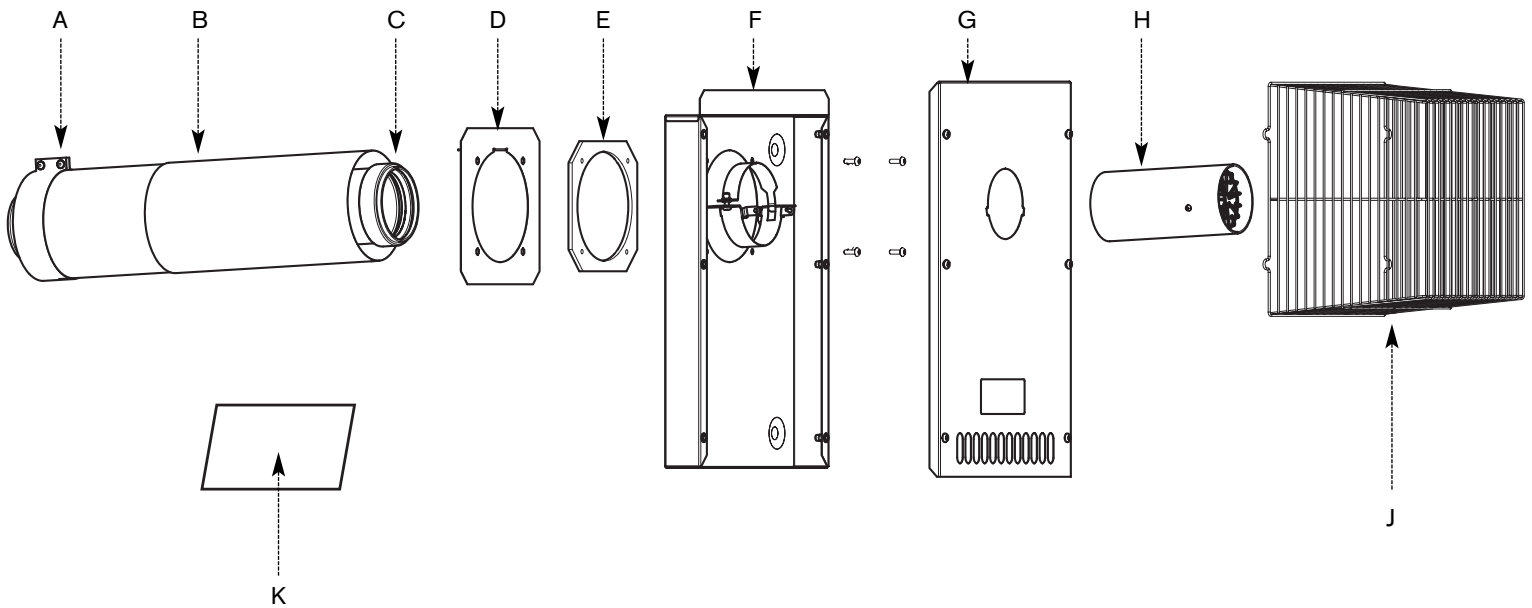
Where no specific instruction is given, reference should be made to the relevant codes of practice.

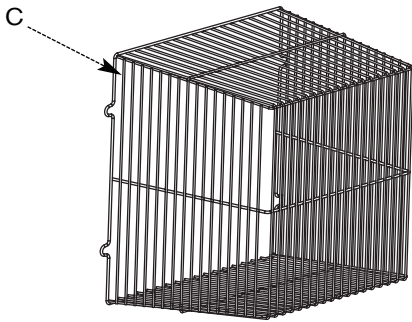
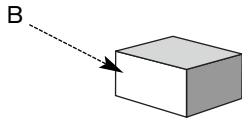
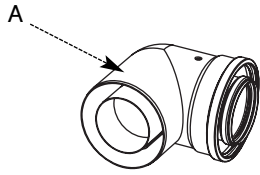
BALANCED LOW LEVEL DISCHARGE FLUE COMPONENTS

KEY:

- A AIR INLET CLAMP
- B TELESCOPIC AIR INLET SECTION & ACOUSTIC INSULATION
- C 80mmØ FLUE PIPE (INCLUDING SEAL)
- D AIR BOX MOUNTING BRACKET
- E AIR BOX GASKET
- F AIR BOX
- G AIR BOX COVER
- H FLUE TERMINAL
- J TERMINAL GUARD
(not supplied, Part No. 7 716 190 050)
- K ACCESSORY PACK

PRODUCT
INFORMATION





BALANCED LOW LEVEL DISCHARGE FLUE ADDITIONAL COMPONENTS

RS 90° ELBOW (for side flue options):

Part Number: 7 716 190 034 including:

A 90° SWEPT ELBOW

B SOLVENT FREE GREASE PACK,
CONTAINING 2 No.8 SCREWS & GREASE
SACHET

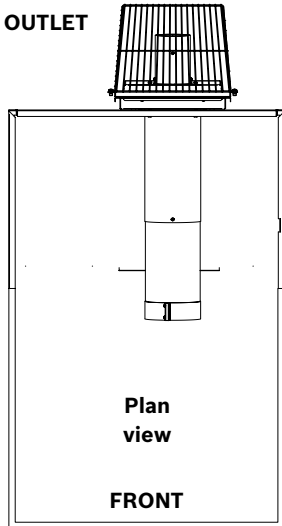
TERMINAL GUARD:

C Part No.: 7 716 190 050

BALANCED LOW LEVEL DISCHARGE FLUE OPTIONS

REAR FLUE OUTLET

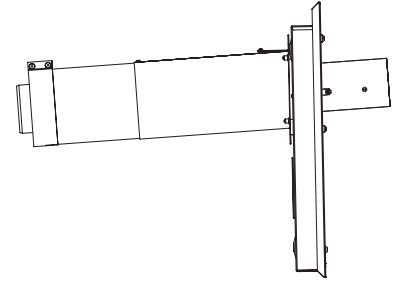
A + C



- The balanced flue can be fitted to the rear or either side of the cabinet.

IMPORTANT:

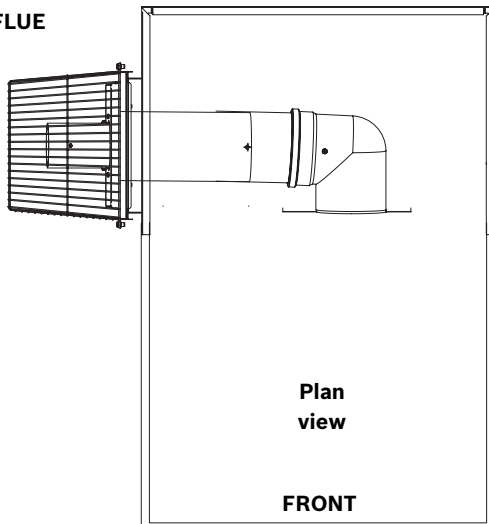
It is recommended that the flue terminal faces away from walls to minimise wetting. Flue gases have a tendency to plume and in certain weather conditions a white plume of condensation will be produced. The flue terminal should be positioned in such a way that the plume does not cause a nuisance.



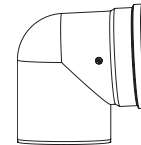
PRE-
INSTALLATION

LEFT HAND FLUE OUTLET

A + B + C



- A - External horizontal flue kit
Part No. 7 716 190 082



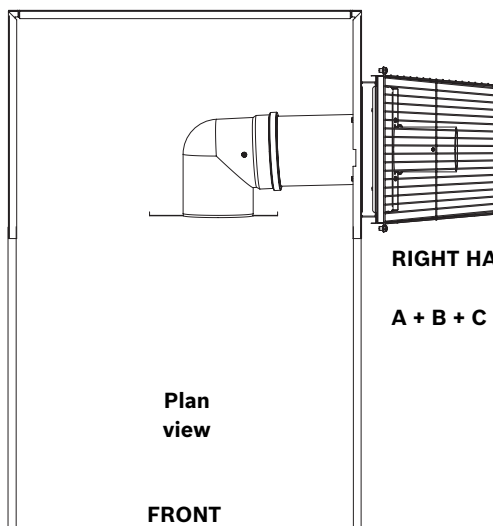
- B - 90° inline elbow 80/125mm
Part No. 7 716 190 034



- C - Terminal guard
Part No. 7 716 190 050

RIGHT HAND FLUE OUTLET

A + B + C



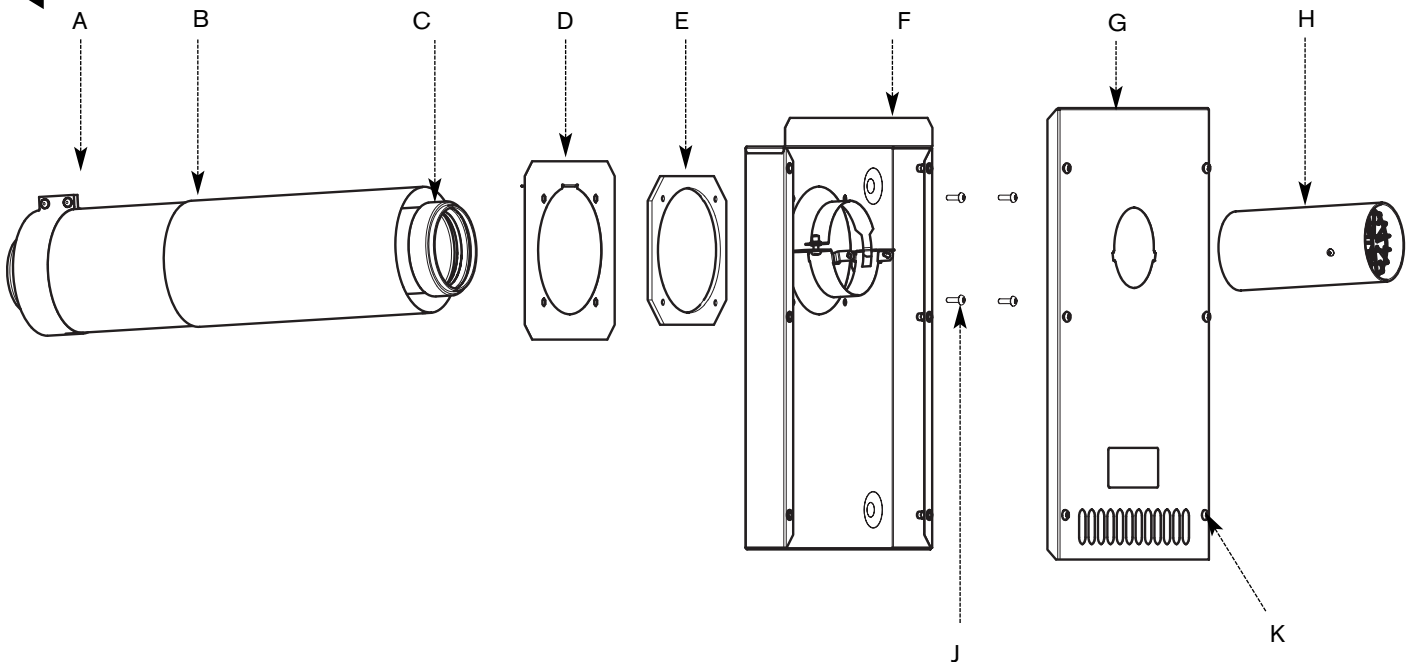
BALANCED LOW LEVEL DISCHARGE FLUE FITTING

KEY:

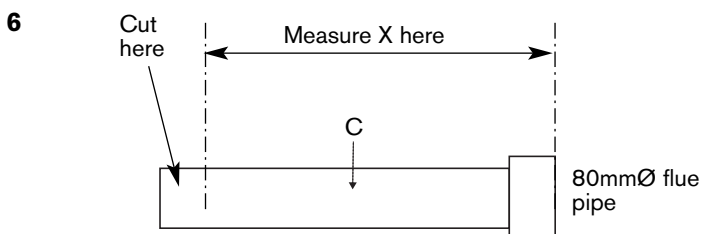
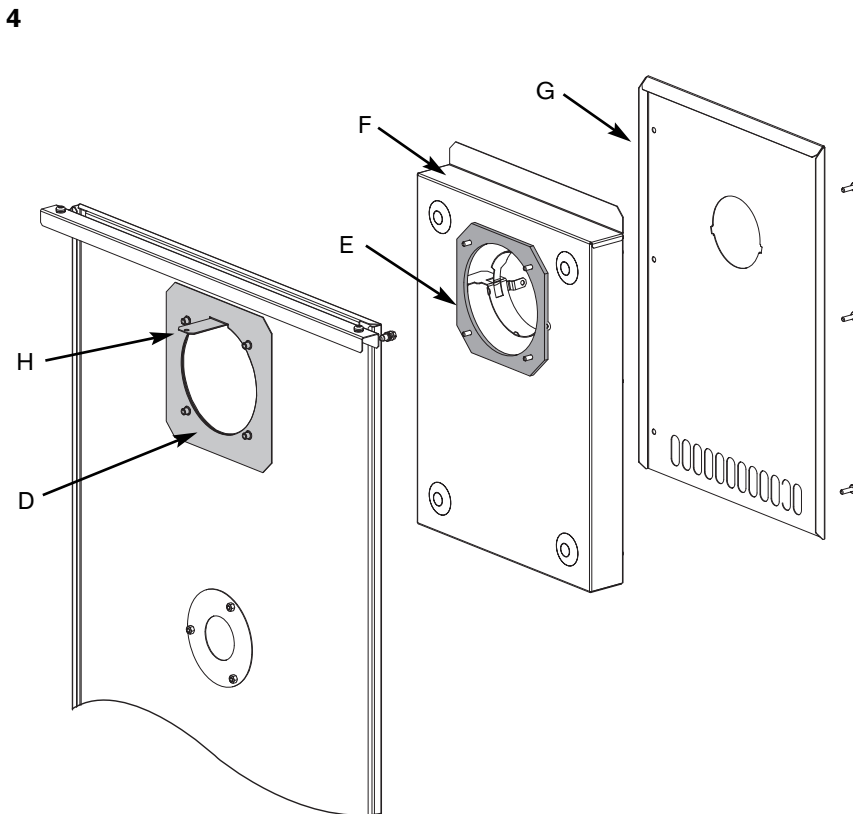
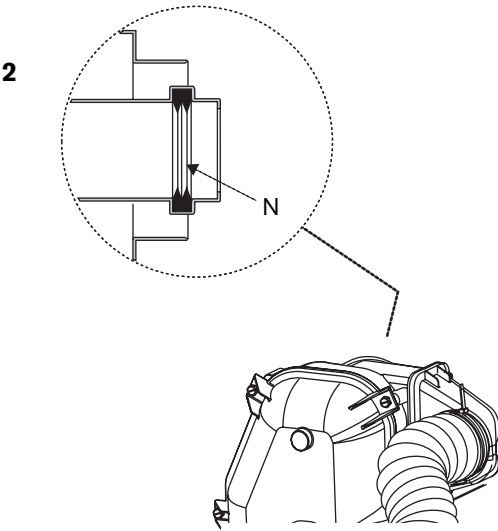
- A AIR INLET CLAMP
- B TELESCOPIC AIR INLET SECTION
- C 80mmØ FLUE PIPE
- D MOUNTING BRACKET
- E AIR BOX GASKET
- F AIR BOX
- G AIR BOX COVER
- H FLUE TERMINAL
- J MOUNTING SCREWS x 4 (Accessory pack)
- K AIR BOX COVER SCREWS x 6

NOTE: To use the right hand or left hand flue options a 90° swept flue elbow is required, (Part No. 7 716 190 034)

INSTALLATION



BALANCED LOW LEVEL DISCHARGE FLUE FITTING



Installation Notes:

- ▶ Ensure all seals are in good condition and seated properly.
- ▶ To ease assembly of flue components, grease seals lightly with the solvent free grease supplied.
- ▶ A terminal guard must be fitted if the terminal is 2m or less above a surface where people have access.

All flue options:

1. Remove the front and top panels from the appliance. Remove the relevant panel blanking plate (if necessary) and refit to unused aperture.
2. Lightly grease the flue cowl seal (N) with the solvent free grease supplied.
3. Cut the insulation from the flue opening in the cabinet panel and carefully peel down the insulation from the top of the cabinet panel the flue is to pass through.
4. Remove the six screws from the airbox assembly and remove the airbox cover (G).
 - ▶ Position the gasket (E), as shown, on the back of the airbox (F) and use one screw to locate the gasket.
 - ▶ Position the mounting plate (D) with the tab (H) at the top, as shown, behind the cabinet panel
 - ▶ Present the airbox with gasket to the cabinet panel and loosely fit one screw to locate the airbox to the mounting bracket.
 - ▶ Fit the other three screws to secure the airbox to the boiler panel, tighten fully when the airbox is in position.
5. Refit the cabinet insulation.
6. Mark and cut the 80mmØ flue pipe (C) to the length given in the chart below. Ensure the cut is square to the tube, remove any burrs and chamfer the outside edge to assist insertion into seal.

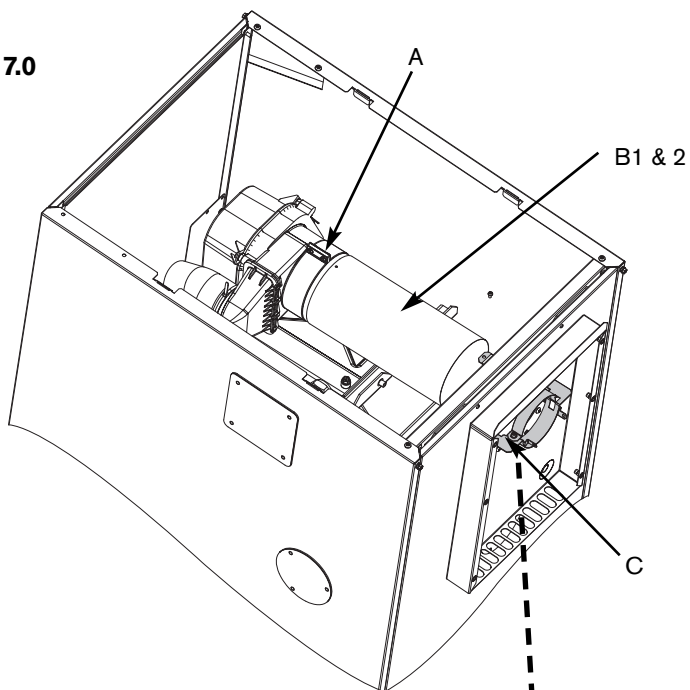
Flue outlet	Boiler	
	Camray	Heatslave
Right hand	265**	230*
Left hand	230*	345
Rear	465	420

* The air inlet outer section is not needed for this outlet position.

** Camray only: for the right hand flue option reduce the air inlet outer section by 130mm, ensure that the cut is square and remove burrs after cutting.

NOTE: There will be one screw spare with the *outlet position.

7.0



BALANCED LOW LEVEL DISCHARGE FLUE FITTING

Rear flue option:

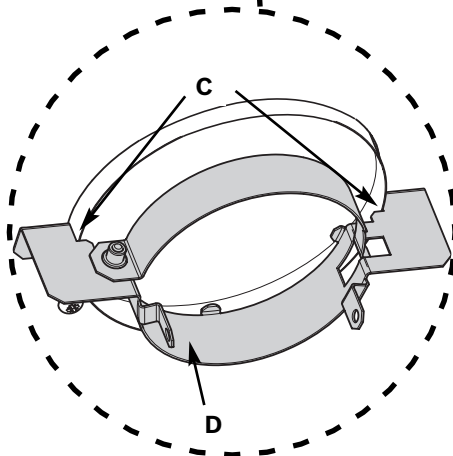
7.0 Fit the air inlet telescopic sections (B1 & B2) to the boiler flue cowl and secure the inner section with the clamp (A).

7.1 Push the air inlet outer section (B2) through the rear panel opening until the end of the tube is against the stops (C) on the clamp assembly (D).

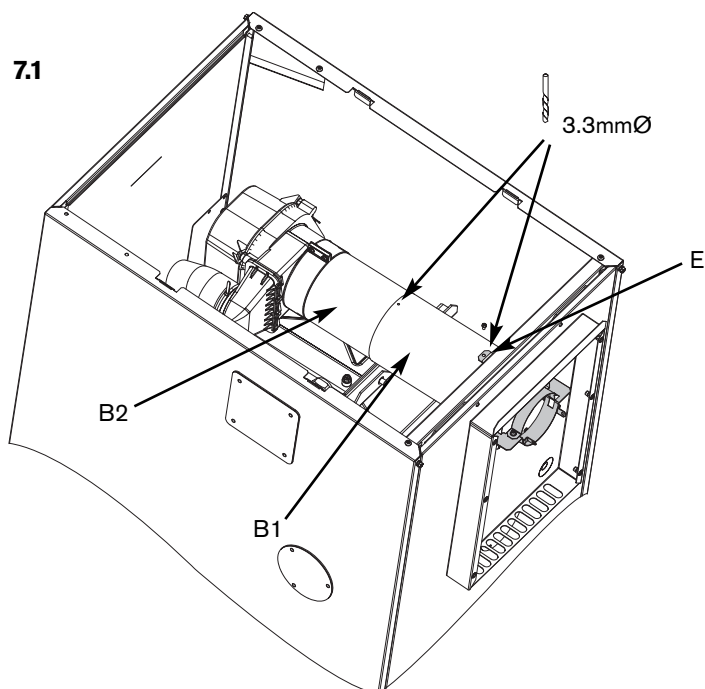
7.2 Drill through the two sections of the flue inlet (B1 & 2) with the 3.3mm jobber drill bit supplied and secure the two sections with a self tapping screw supplied.

Drill through the tab (E), with the 3.3mm jobber drill bit supplied, into the flue inlet outer section (B2) and secure with a self tapping screw supplied.

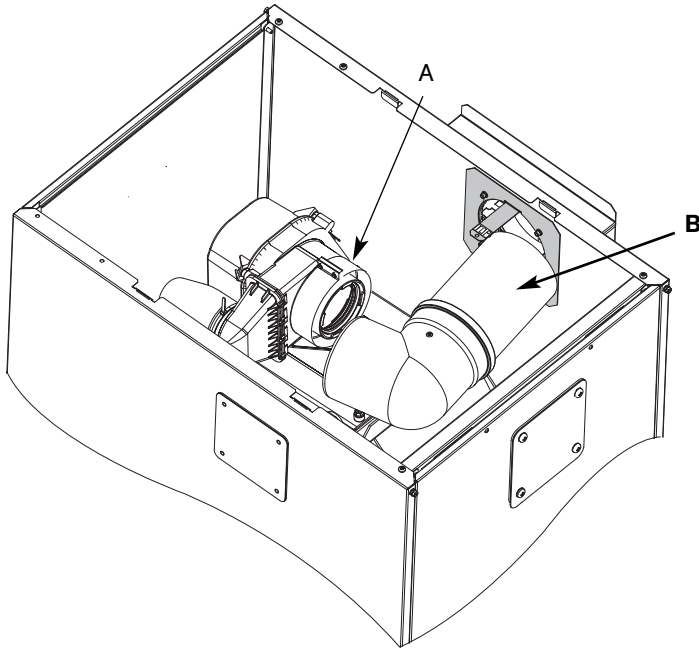
7.1



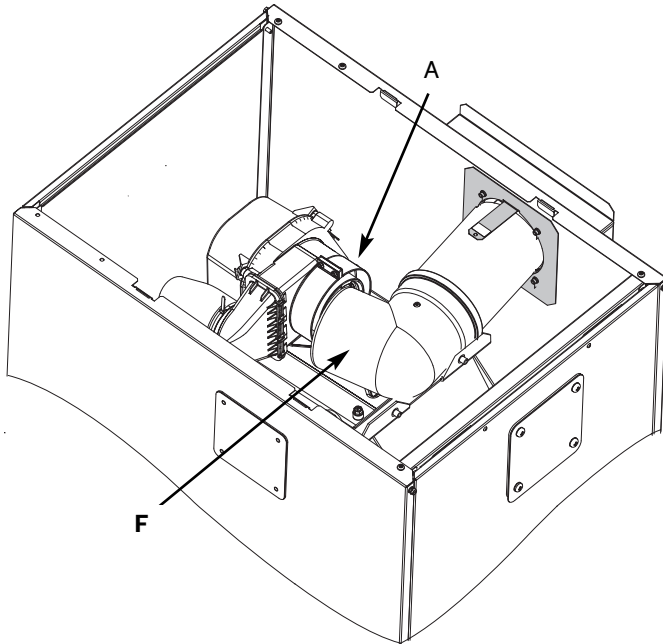
7.1



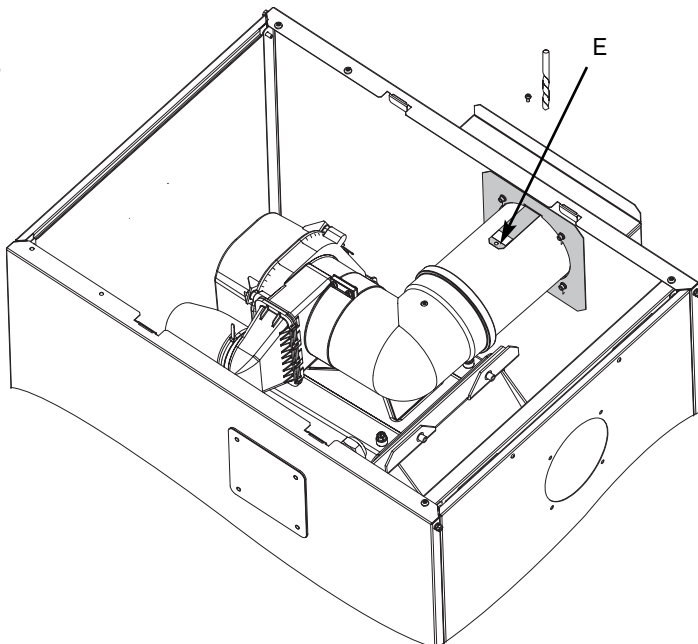
7.1



7.2



7.3



BALANCED LOW LEVEL DISCHARGE FLUE FITTING

Side flue option:

7.0 Lightly grease the 90° flue elbow seals with the solvent free grease supplied.

Camray lefthand option and Heatslave righthand option

7.1 Fit the air inlet inner section (B) to the elbow.

7.2 Fit the clamp (A) to the flue cowl.

- ▶ Push the air inlet inner section through the side panel opening into the airbox until it meets the stops (C) on the clamp assembly.
- ▶ Centralise the the inner elbow pipe within the elbow.
- ▶ Fit the elbow (B) onto the flue cowl.
- ▶ Tighten the clamp (A) onto the flue elbow.

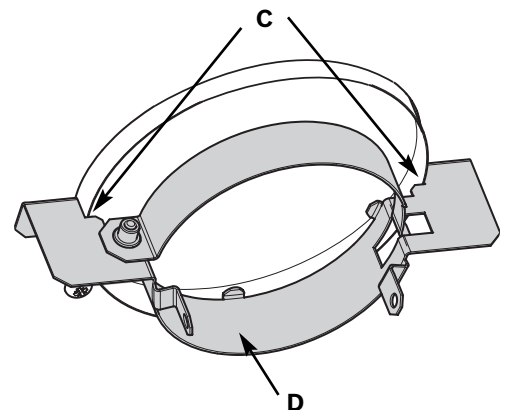
7.3 Drill through the tab (E) on the mounting bracket, with the 3.3mm jobber drill bit supplied, into the air inlet outer section and secure with a self tapping screw supplied.

Flue outlet	Boiler	
	Camray	Heatslave
Right hand	265**	230*
Left hand	230*	345
Rear	465	420

* The air inlet outer section is not needed for this outlet position.

** Camray only: for the right hand flue option reduce the air inlet outer section by 130mm, ensure that the cut is square and remove burrs after cutting.

NOTE: There will be one screw spare with the *outlet position.



BALANCED LOW LEVEL DISCHARGE FLUE FITTING

Side flue option:

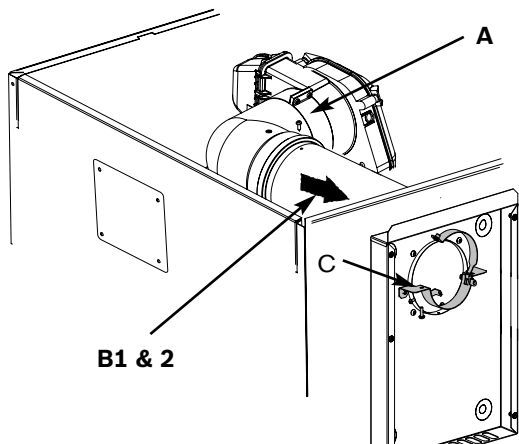
7.0 Lightly grease the 90° flue elbow seals with the solvent free grease supplied.

Camray righthand option and Heatslave lefthand option

Camray righthand option only:

Cut the air inlet outer section down by 130mm, ensure that the cut is square and remove all burrs after cutting.

7.1

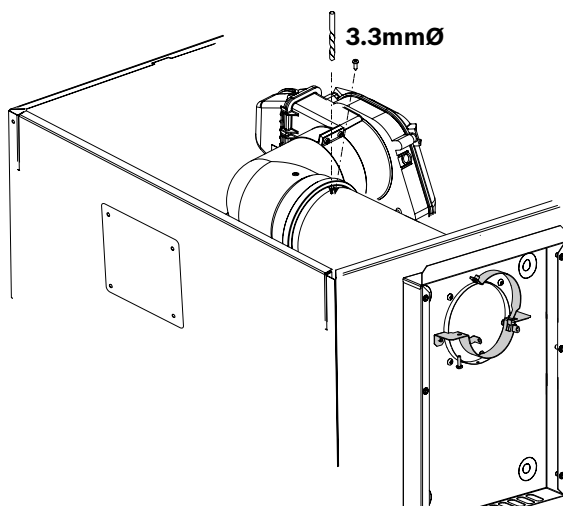


B1 & 2

7.1 Fit the air inlet inner section (B1) to the elbow, then slide the outer section (B2) over the inner.

- ▶ Fit the clamp (A) to the flue cowl.
- ▶ Centralise the the inner elbow pipe within the elbow.
- ▶ Fit the elbow onto the flue cowl.
- ▶ Slide the air inlet outer section (B2) into the airbox until it meets the stops (C) on the clamp assembly (D).
- ▶ Tighten the clamp (A) onto the flue elbow.

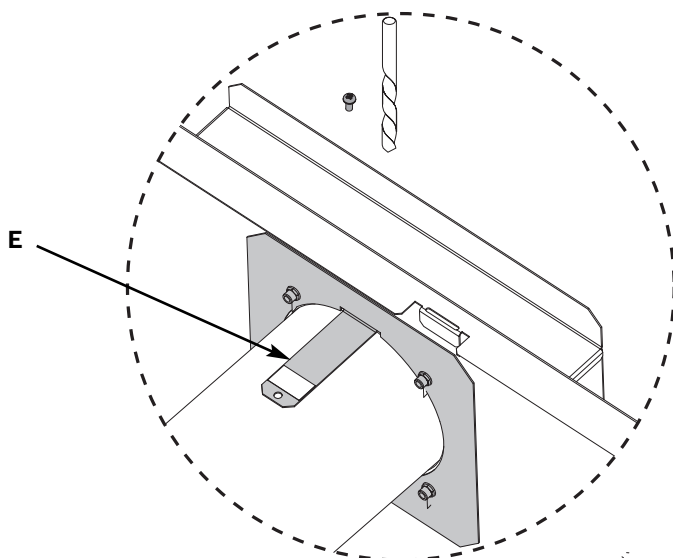
7.2



3.3mmØ

7.2 Drill through the air inlet outer section (B), with the 3.3mm jobber drill bit supplied, into the inner section and secure the two sections with a self tapping screw supplied.

7.3



E

7.3 Drill through the tab (E) on the mounting bracket, with the 3.3mm jobber drill bit supplied, into the air inlet outer section and secure with a self tapping screw supplied.

Flue outlet	Boiler	
	Camray	Heatslave
Right hand	265**	230*
Left hand	230*	345
Rear	465	420

* The air inlet outer section is not needed for this outlet position.

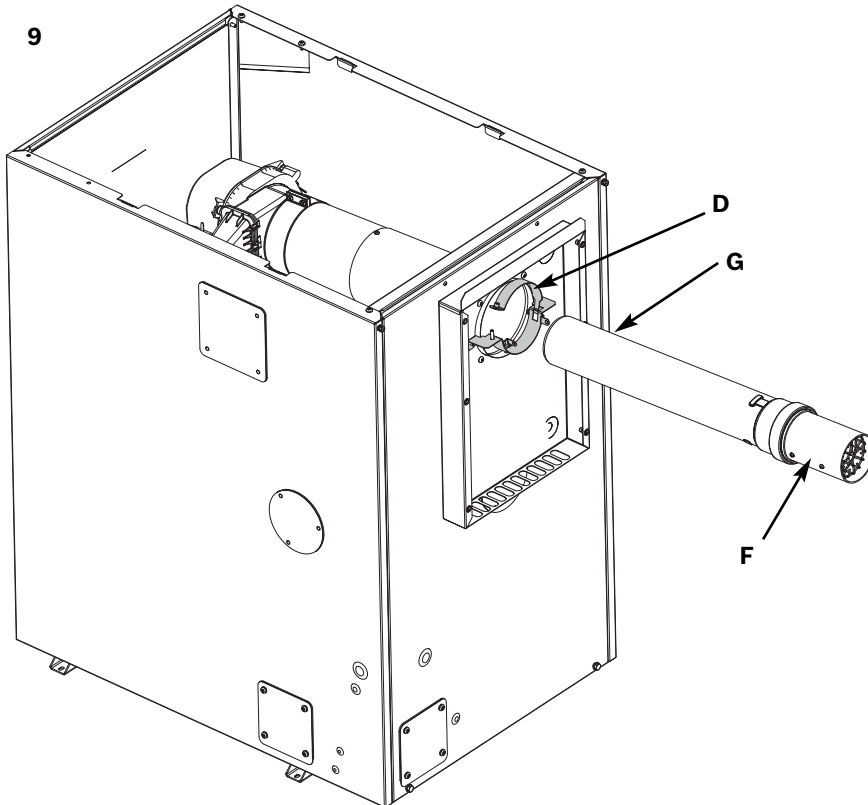
** Camray only: for the right hand flue option reduce the air inlet outer section by 130mm, ensure that the cut is square and remove burrs after cutting.

NOTE: There will be one screw spare with the *outlet position.

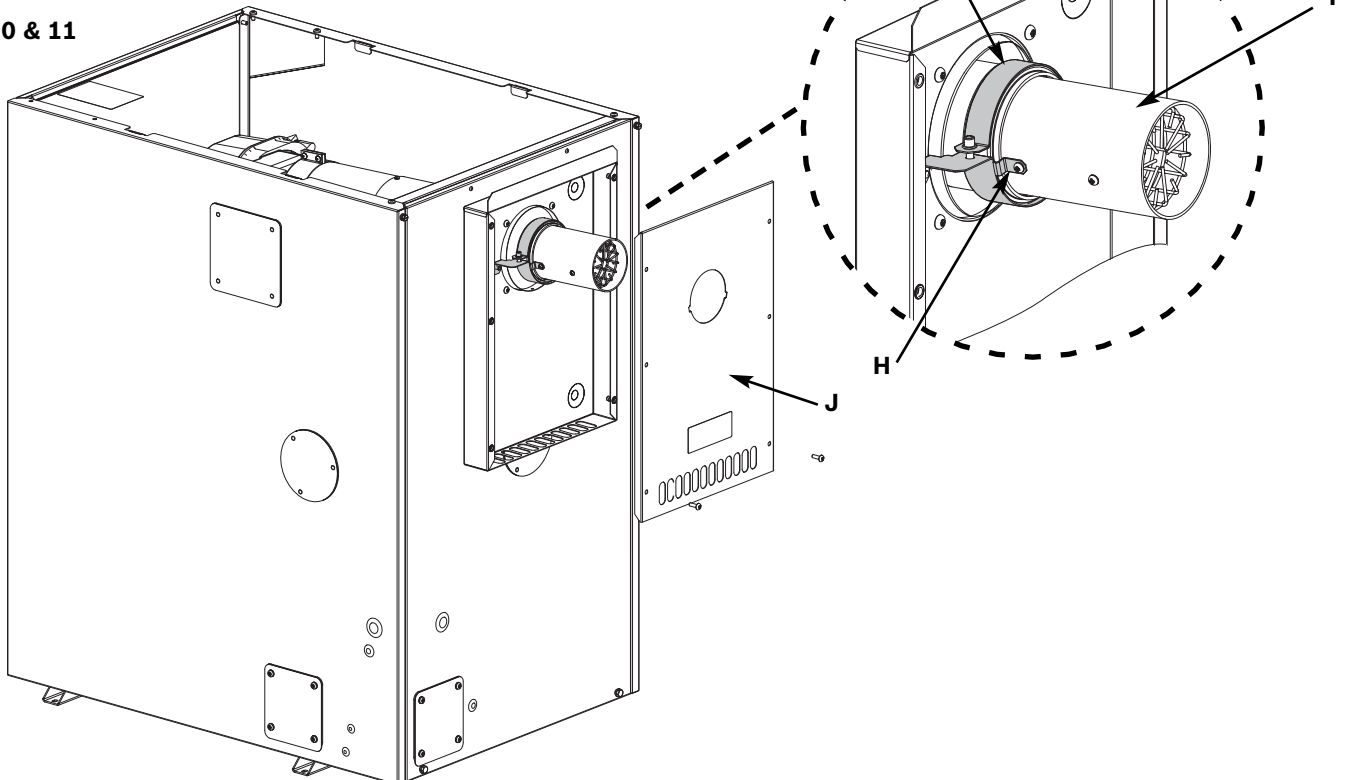
BALANCED LOW LEVEL DISCHARGE FLUE FITTING

All flue options:

8. Lightly grease the flue pipe seal with the solvent free grease supplied.
9. Remove the screw from the clamp bracket (D) and open the clamp.
 - ▶ Insert the terminal (F) fully into the 80mmØ flue pipe.
 - ▶ Pass the flue pipe (G) through the clamp (D) and push into the flue cowl or elbow.
 - ▶ Line up the terminal grill retaining screw with one of the tabs on the clamp and fit the screw removed earlier and tighten the clamp onto the flue.
10. Drill two holes into the terminal (F) through the tabs (H), with the 3.3mm jobber drill bit supplied, one either side, and secure the terminal to the tabs (H) using two self tapping screws supplied.
11. Fit the air box cover (J) over the lip on the top of the airbox and secure with the bottom two screws removed earlier.

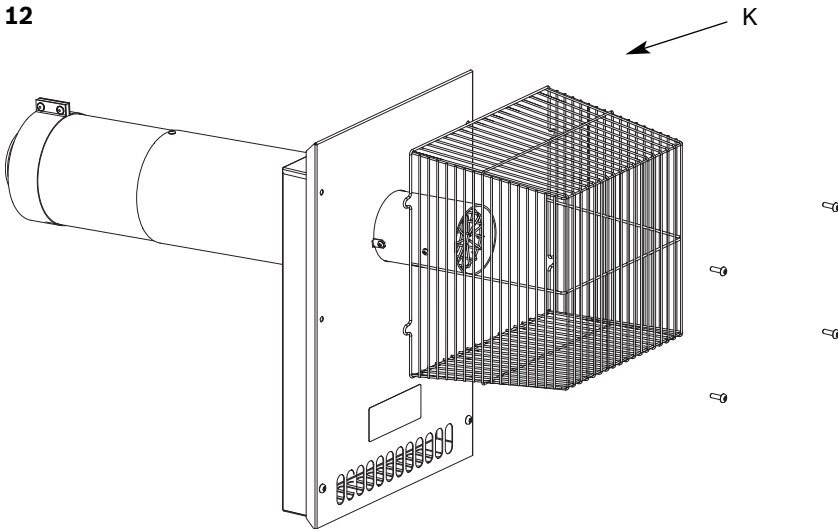


10 & 11



BALANCED LOW LEVEL DISCHARGE FLUE FITTING

12



All flue options continued:

12. To fit the terminal guard (K, not supplied):

Hold the terminal guard in place and secure with the four screws removed from the airbox assembly earlier.

NOTE: *There will be one self tapping screw spare with some outlet positions.*

NOTES

INSTRUCTION MANUAL GREENSTAR OILFIT EXTERNAL

www.worcester-bosch.co.uk
EXCELLENCE COMES AS STANDARD

Worcester, Bosch Group
Cotswold Way, Warndon, Worcester WR4 9SW.
Tel. 01905 754624 Fax. 01905 754619

8 718 683 735a (04/2009)

Worcester, Bosch Group is a brand name of Bosch Thermotechnology Ltd.

