

# **DR-SG CONDENSING WATER HEATER FLUE STARTER KIT**

**Installation Manual for  
B23, B23P, C13, C33 flue systems  
installed with Dorchester DR-SG  
condensing water heaters**

## **IMPORTANT NOTE**

**THESE INSTRUCTIONS MUST BE READ  
AND UNDERSTOOD BEFORE INSTALLING,  
COMMISSIONING, OPERATING OR  
SERVICING EQUIPMENT**



**Hamworthy**

## 1. WARNINGS AND RECOMMENDATIONS

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### 1.1. Symbols used in this document

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**CAUTION:**

Failure to comply with these instructions may cause damage to the installation or to other objects.



**WARNING:**

Failure to comply with these instructions may cause injury and serious material damage.

### 1.2. Safety instructions

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Always disconnect the DORCHESTER DR-SG from the power supply and shut off the main gas supply before carrying out any work on the appliance

### 1.3. Regulations covering installation

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The installation and maintenance of the DORCHESTER DR-SG must be performed by a qualified professional, in accordance with the regulatory texts and current good practice in the country where the appliance is installed.

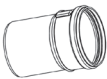



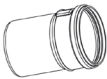
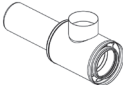










## 2. INTRODUCTION

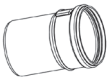



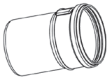











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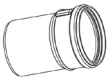



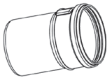











This leaflet, describes the assembly of the flue kits C13, C33, B23 and B23P for DORCHESTER DR-SG water heaters. For more information about the devices, refer to their manuals.

In these flue starter kits, there are no terminals or additional system components continuing past the water heater. These are available from Hamworthy and must be ordered separately.

### 3. COMPONENTS ACCORDING TO KIT REFERENCE

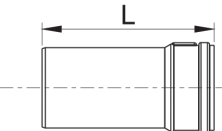
ITEM	INCLUDED IN THE KIT	Dorchester DR-SG XX-210	
		C Type (concentric) installation	B Type (open) installation
1	FLUE OUTLET EXTENSION Ø80 LG 186 	1	1
2	SUPPORT PP ELBOW Ø80 90° 	1	1
3	PP DUCT Ø80 LG 990mm 	1	1
4	PP DUCT 80 LG 500mm 	1	1
5	AIR INLET EXTENSION Ø80 LG 212 	1	
6	CONCENT. T ADAPTER. Ø80/80-125 LG 443 	1	
7	ADJUSTABLE SUPPORT LEG 	1	1
8	AIR INLET BASKET 20-30kW 		1
9	WATER HEATER BRACKET KIT SG30	1	1
9-a	DUCT FIXING TAB SG30-60 	1	1
9-b	CBLX SCREW - M6 X 16 	2	2
9-c	THREADED ROD M8 LG100 	1	1
9-d	NUT HM 8 ZN 	2	2
9-e	FLAT WASHER M8 	2	2
9-f	PIPE CLIP Ø80 	1	1
10	WIRE RETENTION CLIP Ø80 	6	4
11	WALL BRACKET Ø80 	1	1

ITEM	INCLUDED IN THE KIT	Dorchester DR-SG XX-356	
		C Type (concentric) installations	B Type (open) installations
1	FLUE OUTLET EXTENSION Ø100 LG 155 	1	1
2	SUPPORT PP ELBOW Ø100 90° 	1	1
3	PP DUCT Ø100 LG 1000mm 	1	1
4	PP DUCT Ø100 LG 500mm 	1	1
5	AIR INLET EXTENSION Ø100 LG 214 	1	
6	CONCENT. T ADAPTER. Ø100/100-150 LG 445 	1	
7	ADJUSTABLE SUPPORT LEG 	1	1
8	AIR INLET BASKET 35-60kW 		1
9	WATER HEATER BRACKET KIT SG60	1	1
9-a	DUCT FIXING TAB SG30-60 	1	1
9-b	CBLX SCREW - M6 X 16 	2	2
9-c	THREADED ROD M8 LG100 	1	1
9-d	NUT HM 8 ZN 	2	2
9-e	FLAT WASHER M8 	2	2
9-f	PIPE CLIP Ø100 	1	1
10	WIRE RETENTION CLIP Ø100 	6	4
11	WALL BRACKET Ø100 	1	1

ITEM	INCLUDED IN THE KIT	Dorchester DR-SG XX-538	
		C Type (concentric) installations	B Type (open) installations
1	FLUE OUTLET EXTENSION Ø130 LG 182 	1	1
2	SUPPORT PP ELBOW Ø130 90° 	1	1
3	PP DUCT Ø130 LG 1000mm 	1	1
4	PP DUCT Ø130 LG 500mm 	1	1
5	AIR INLET EXTENSION Ø130 LG 222 	1	
6	CONCENT. T ADAPTER. Ø130/130-200 LG 552 	1	
7	ADJUSTABLE SUPPORT LEG 	1	1
8	AIR INLET BASKET 70-120kW 		1
9	WATER HEATER BRACKET KIT SG120	1	1
9-a	DUCT FIXING TAB SG30-120 	1	1
9-b	CBLX SCREW - M6 X 16 	2	2
9-c	THREADED ROD M8 LG100 	1	1
19-d	NUT HM 8 ZN 	2	2
9-e	FLAT WASHER M8 	2	2
9-f	PIPE CLIP Ø130 	1	1
10	WIRE RETENTION CLIP Ø130 	6	4
11	WALL BRACKET Ø130 	1	1

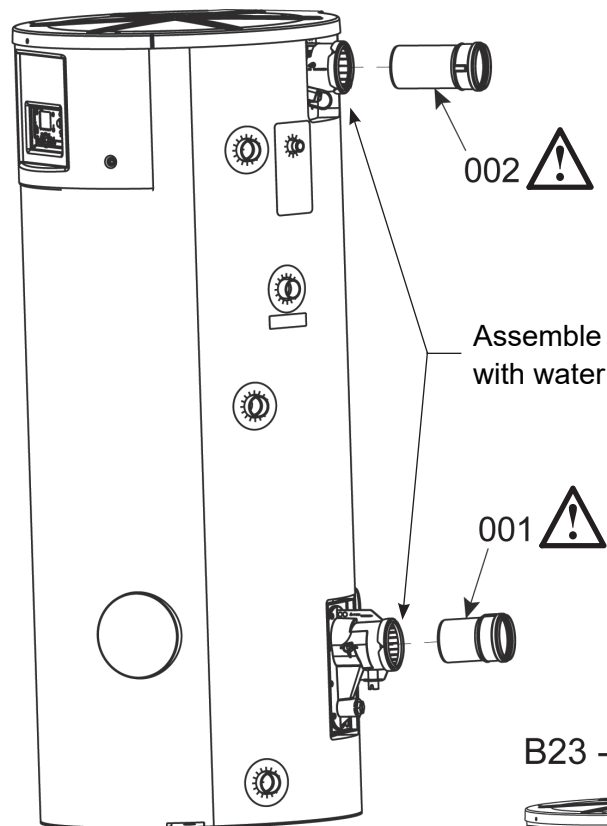
## 4. PROCEDURE AND RECOMMENDATIONS

### 4.1. B type and C type kits

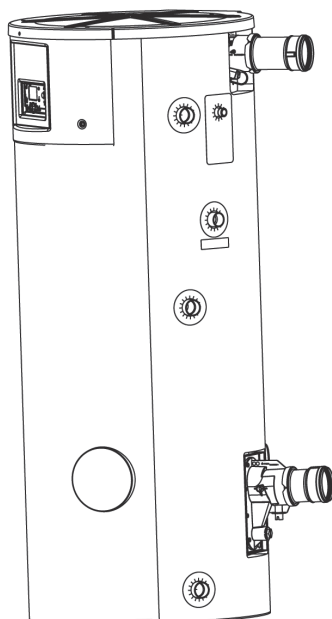
	C13 - C33 - B23 - B23P	C13 - C33
	001	002
20 - 25 - 30 kW	185	212
35 - 50 - 60 kW	155	214
70 - 80 - 100 - 120 kW	182	222



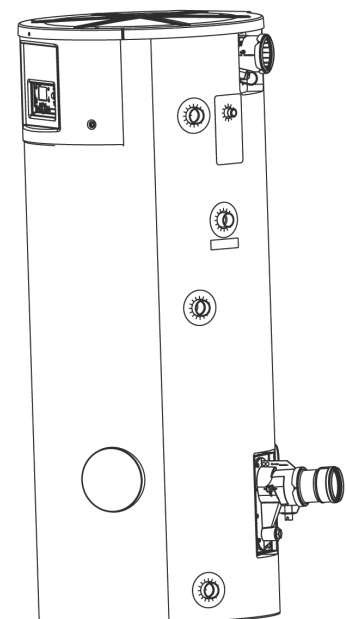
Wire Retaining Clips are provided to prevent movement of the tube connections. These must be fitted to the joints to ensure safe operation of the system. There is one Wire Retaining Clip provided for each of the flue connections. The Wire Retaining Clip locates under the rim of the female component and is secured by a nut and bolt around the locating spigot, which creates a resistance to any opposing force.



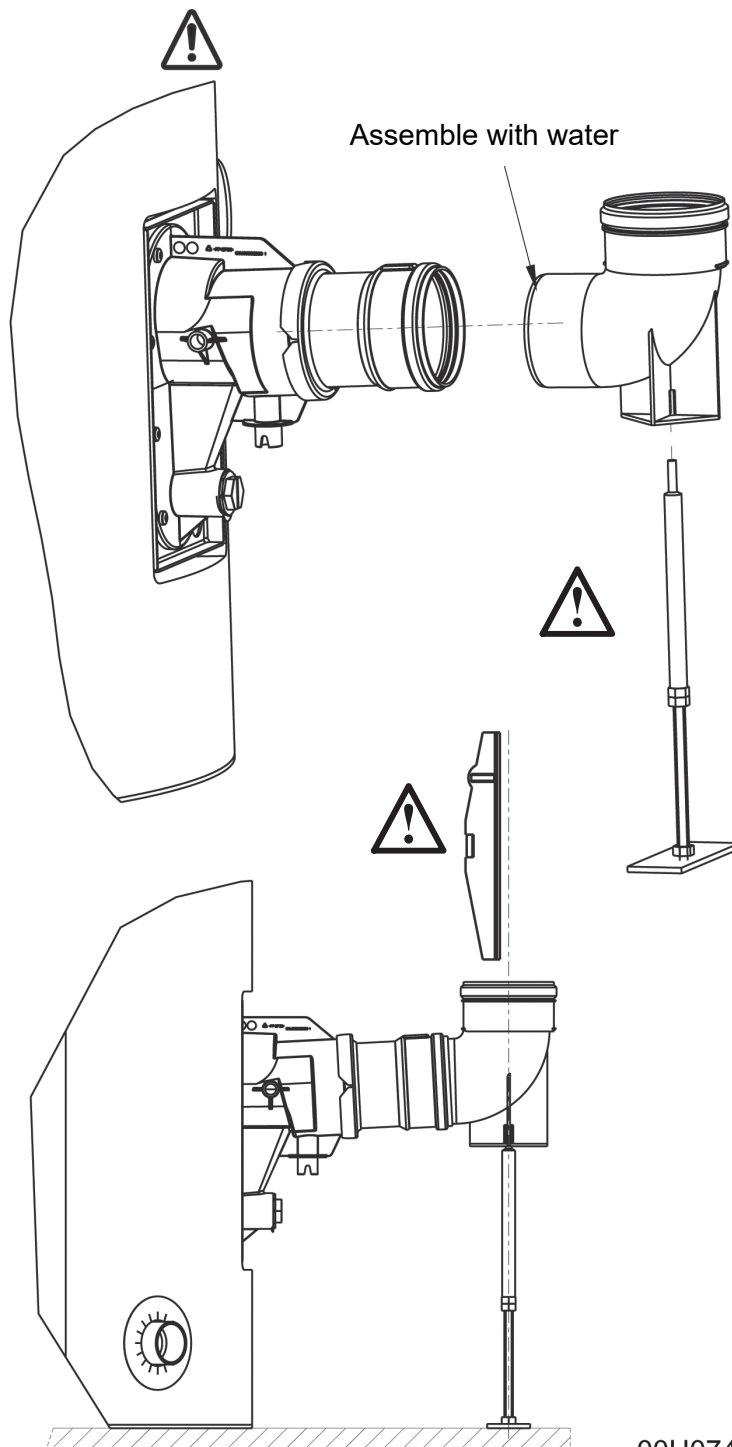
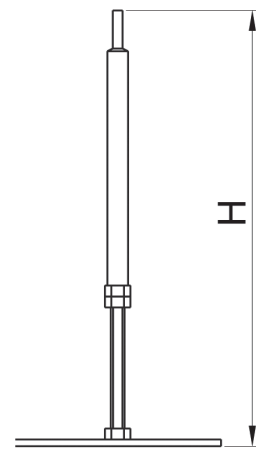
C13 - C33



B23 - B23P



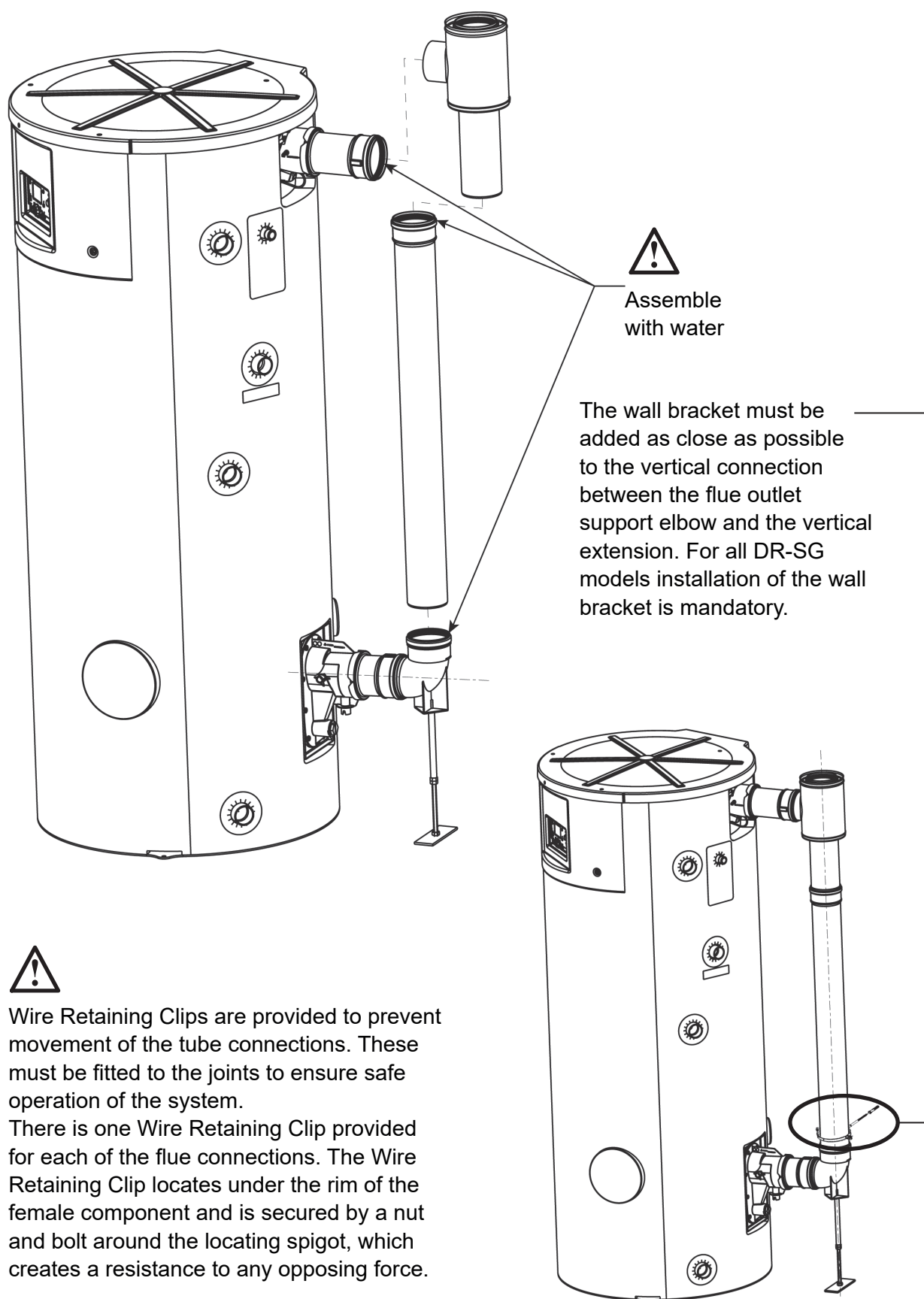
	C13 - C33 - B23 - B23P
	H (mini 278 - maxi 400)
20-25-30 kW	348
35-50-60 kW	356
70-80-100-120 kW	381



Wire Retaining Clips are provided to prevent movement of the tube connections. These must be fitted to the joints to ensure safe operation of the system. There is one Wire Retaining Clip provided for each of the flue connections. The Wire Retaining Clip locates under the rim of the female component and is secured by a nut and bolt around the locating spigot, which creates a resistance to any opposing force.

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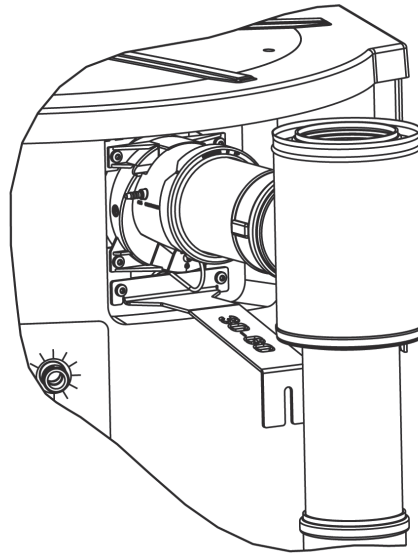
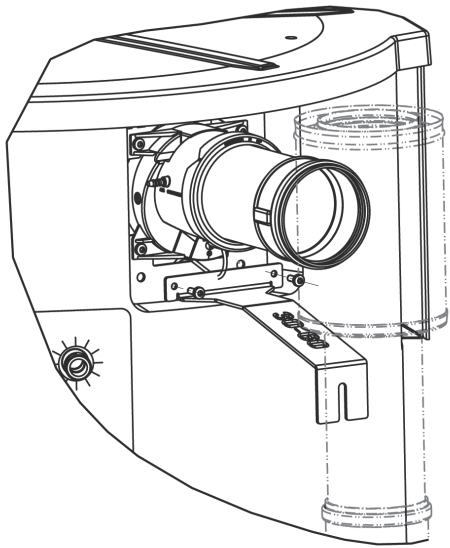
## 4.2. C type kits







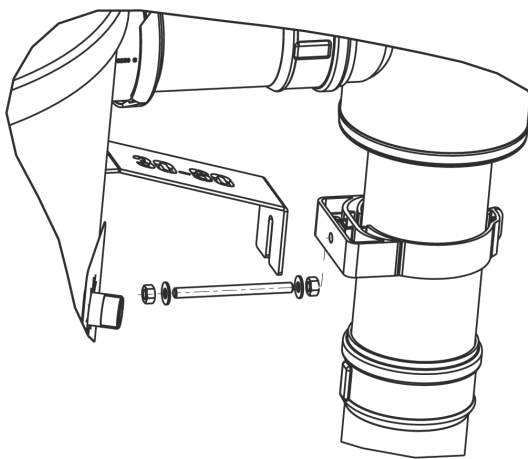
The wall bracket must be fixed to either a wall, or to a vertical support which is itself fastened to either a wall or to the floor. The vertical support holding the bracket cannot be freestanding.



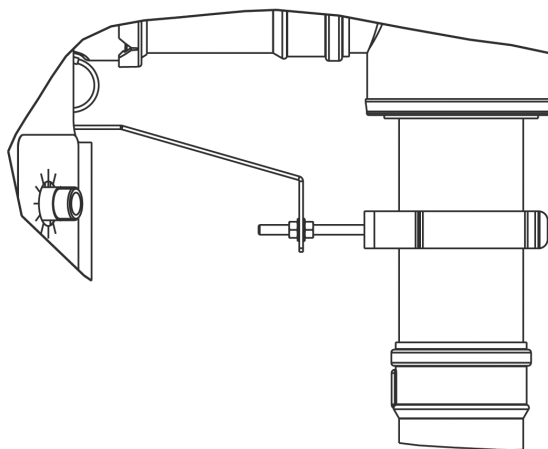
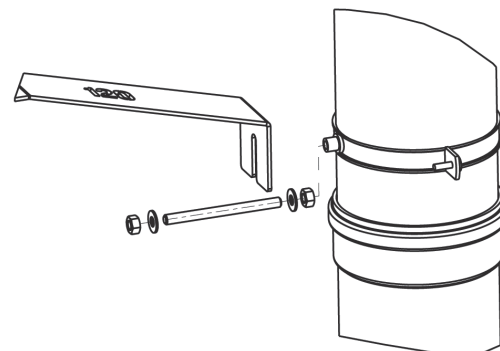
Wire Retaining Clips are provided to prevent movement of the tube connections. These must be fitted to the joints to ensure safe operation of the system.

There is one Wire Retaining Clip provided for each of the flue connections. The Wire Retaining Clip locates under the rim of the female component and is secured by a nut and bolt around the locating spigot, which creates a resistance to any opposing force.

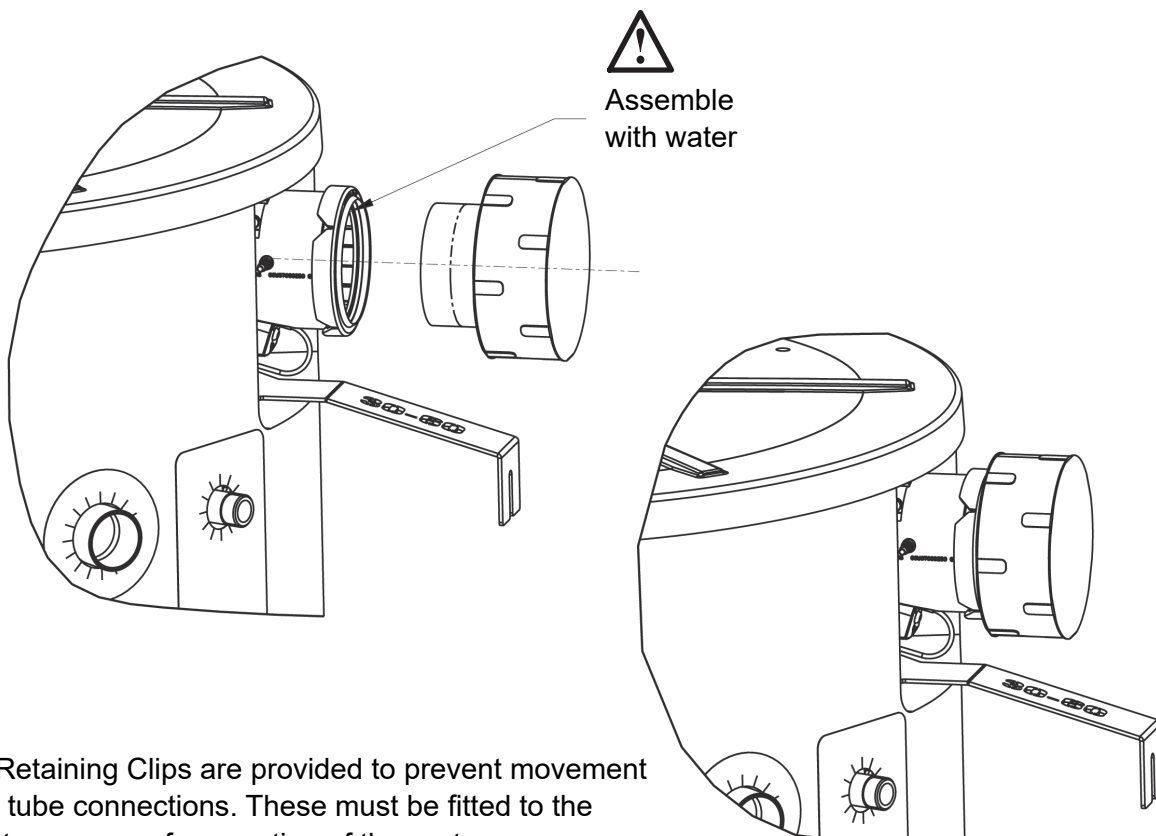
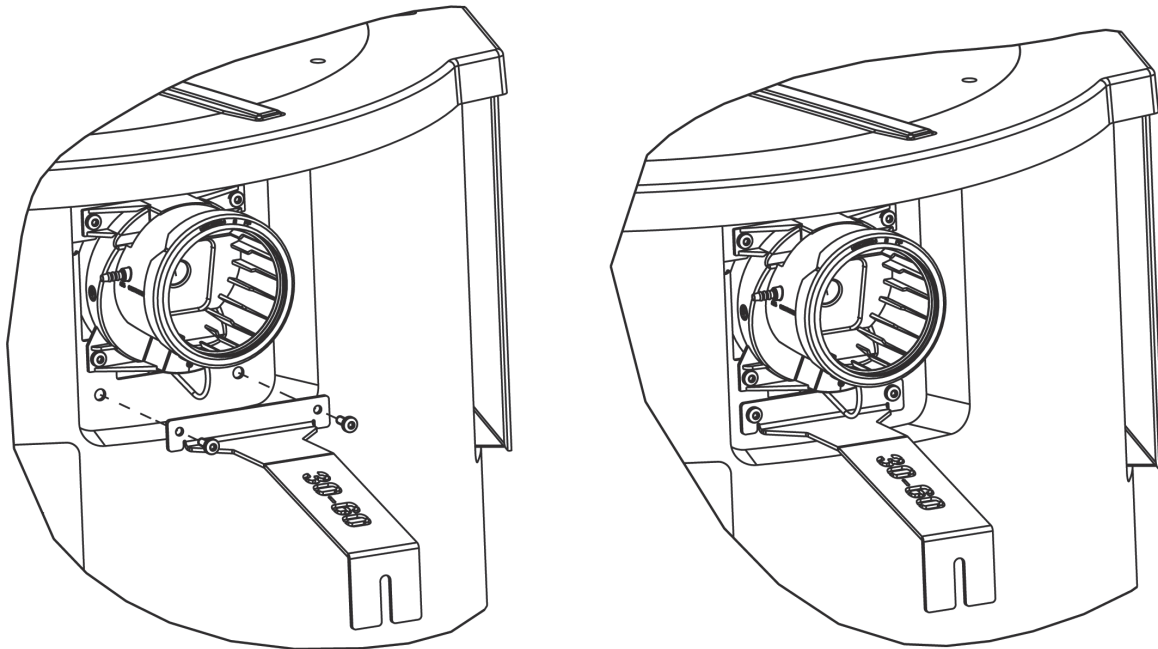
**Dorchester DR-SG XX-210 and XX-356**



**Dorchester DR-SG XX-538**

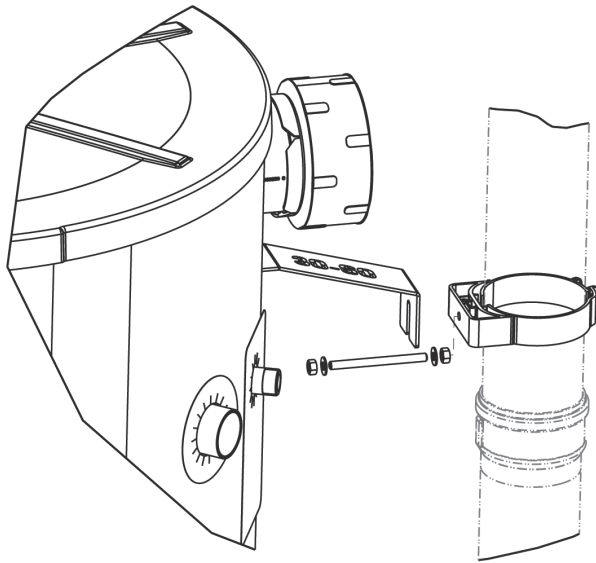


### 4.3. B type kits

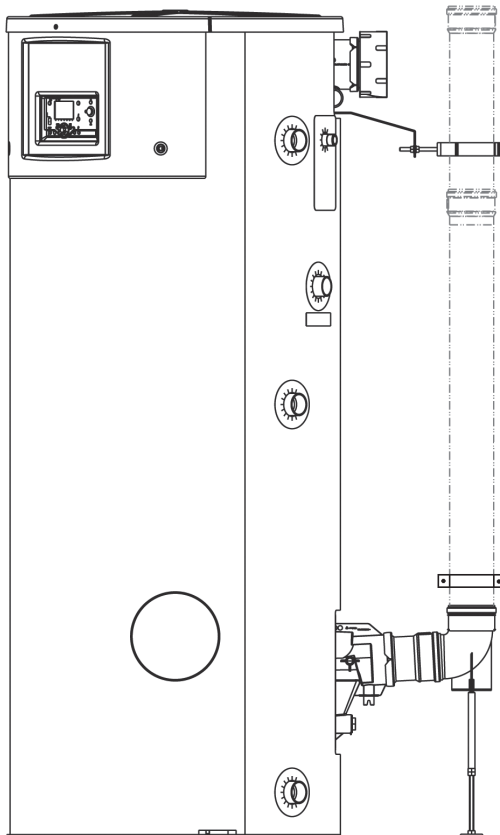
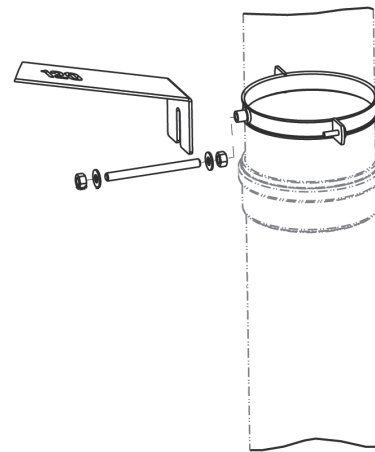


Wire Retaining Clips are provided to prevent movement of the tube connections. These must be fitted to the joints to ensure safe operation of the system. There is one Wire Retaining Clip provided for each of the flue connections. The Wire Retaining Clip locates under the rim of the female component and is secured by a nut and bolt around the locating spigot, which creates a resistance to any opposing force.

Dorchester DR-SG XX-210 and XX-356



Dorchester DR-SG XX-538



Wire Retaining Clips are provided to prevent movement of the tube connections. These must be fitted to the joints to ensure safe operation of the system.

There is one Wire Retaining Clip provided for each of the flue connections. The Wire Retaining Clip locates under the rim of the female component and is secured by a nut and bolt around the locating spigot, which creates a resistance to any opposing force.

The wall bracket must be added as close as possible to the vertical connection between the flue outlet support elbow and the vertical extension. For all DR-SG models installation of the wall bracket is mandatory.

The wall bracket must be fixed to either a wall, or to a vertical support which is itself fastened to either a wall or to the floor. The vertical support holding the bracket cannot be freestanding.

## 5. STARTING UP THE APPLIANCE



### IMPORTANT:

The various seals **MUST** be checked once the flue pipes have been fitted.

Refer to the appliance manual for information on starting it up.

# Hamworthy Heating Accredited Agents

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email: **info@hevac.ie**

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**MMS.McDowallModularServices@hamworthy-heating.com**

# Hamworthy Heating Customer Service Centre

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British engineering excellence from Hamworthy Heating;  
the commercial heating and hot water specialists.



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