



## **WESSEX-100M SERIES WATER MANIFOLD KITS**

**For Multiple M200 & M300 Boilers  
Including  
Valved Water Manifold Kits  
& Unvalved Water Manifold Kits**

**INSTALLATION, COMMISSIONING AND  
SERVICING INSTRUCTIONS**



### **IMPORTANT NOTE**

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

# Customer Services

## Technical Enquiries



**01202 662527/662528**

To supplement the detailed technical brochures, technical advice on the application and use of products in the Hamworthy Heating range is available from our technical team in Poole and our accredited agents.

## Site Assembly



**01202 662555**

Hamworthy offer a service of site assembly for many of our products in instances where plant room area is restricted. Using our trained staff we offer a higher quality of build and assurance of a boiler built and tested by the manufacturer.

## Commissioning



**01202 662555**

Commissioning of equipment by our own engineers, accredited agents or specialist sub – contractors will ensure the equipment is operating safely and efficiently.

## Maintenance Agreements



**01202 662555**

Regular routine servicing of equipment by Hamworthy service engineers inspects the safety and integrity of the plant, reducing the risk of failure and improving performance and efficiency. Maintenance agreements enable our customers to plan and budget more efficiently.

## Breakdown service, repair, replacement



**01202 662555**

Hamworthy provide a rapid response breakdown, repair or replacement service through head office at Poole and accredited agents throughout the UK.

## Spare Parts



**01202 662525**

A comprehensive spare parts service is operated from our factory in Poole, providing replacement parts for both current and discontinued products. Delivery of parts and components is normally from stock within seven days. However, a next day delivery service is available for breakdowns and emergencies.

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**For Multiple M200 & M300 Boilers  
Including  
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& Unvalved Water Manifold Kits**

**INSTALLATION, COMMISSIONING AND  
SERVICING INSTRUCTIONS**

**FOR HEATING INSTALLATIONS UP TO 110°C MAX  
AND UP TO 130°C MAX FOR HIGH TEMPERATURE VERSIONS**

**NOTE: THESE INSTRUCTIONS SHOULD BE READ AND UNDERSTOOD  
BEFORE ATTEMPTING  
TO INSTALL, COMMISSION OR OPERATE THIS UNIT!**

THESE INSTRUCTIONS MUST BE READ IN CONJUNCTION WITH THE  
WESSEX 100 M  
INSTALLER'S GUIDE (HHL Part No. 500001080)

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## 1.0 GENERAL INSTRUCTIONS

These instructions MUST be read in conjunction with the Wessex 100 M Installer's Guide (HHL Part No. 500001080).

**SAFETY NOTE:** All safety instructions referred to in the Installer's Guide must be adhered to, and a competent person must carry out all works referred to in this instruction.

These water manifold kits are specifically for use with Wessex 100 M series boilers for hot water heating systems up to 110°C(max) for the standard range, and up to 130°C(max) for the high temperature range.

All manifold components are pressure tested prior to despatch.

\* Flexible Hose 532403104 must NOT be used on the high temperature water manifold kit.

**NOTE:** This water manifold kit is intended for use as reverse-return. However, should the manifold flow and return connections terminate on the same side, ensure that system design water flow rates ( $\Delta t$  11°C) are achieved through each boiler module (refer to Installer's Guide) (N.B. This is not an issue on the 1xM300 and 1xM200 kits as they will still be reverse-return whichever way the top/bottom manifolds are assembled).

1.1 Check that all parts have been supplied by referring to Table Nos. 1a & 1b and Figure No. 1 for lists and description of parts.

Lay out the parts generally as shown in the appropriate sketch from Figure No. 2.

**Table No. 1a—WESSEX 100 M - WATER MANIFOLD KIT MATRIX**

	kit part no./qty	3 x M300	2 x M300	1 x M300	3 x M200	2 x M200	1 x M200
		562702006	562702005	562702004	562702003	562702002	562702001
Top/Bottom Manifold – 1 Wide	532702021			2			2
Top/Bottom Manifold – 2 Wide	532702022		2			2	
Top/Bottom Manifold – 3 Wide	532702023	2			2		
Vertical Manifold – 2 High	532702024				6	4	2
Vertical Manifold – 3 High	532702025	6	4	2			
Gasket, Flange, 65mm PN16	531201021	6	4	2	6	4	2
Elbow, Female, 45°, 40mm	530506001	18	12	6	12	8	4
Flexible Hose*	532403104	18	12	6	12	8	4
Nut, M10, Zinc Plate	748440283	6	4	2	6	4	2
Washer, M10, Zinc Plate, Form B	740157281	6	4	2	6	4	2
Bolt, M16x55, Zinc Plate	748215065	24	16	8	24	16	8
Washer, M16, Zinc Plate, Form B	740157315	24	16	8	24	16	8
Nut, M16, Zinc Plate, Full Nut	748440317	24	16	8	24	16	8
Plug, 15mm(R½) BSPT	742227041	3	3	3	3	3	3

**Table No. 1b - WESSEX 100 M HIGH TEMPERATURE - WATER MANIFOLD KIT MATRIX**

	kit part no./qty	3 x M300	2 x M300	1 x M300	3 x M200	2 x M200	1 x M200
		562702019	562702018	562702017	562702016	562702015	562702014
Top/Bottom Manifold – 1 Wide	532702021			2			2
Top/Bottom Manifold – 2 Wide	532702022		2			2	
Top/Bottom Manifold – 3 Wide	532702023	2			2		
Vertical Manifold – 2 High	532702024				6	4	2
Vertical Manifold – 3 High	532702025	6	4	2			
Gasket, Flange, 65mm PN16	531201021	6	4	2	6	4	2
Elbow, Female, 45°, 40mm	530506001	18	12	6	12	8	4
Flexible Hose	532403094	18	12	6	12	8	4
Nut, M10, Zinc Plate	748440283	6	4	2	6	4	2
Washer, M10, Zinc Plate, Form B	740157281	6	4	2	6	4	2
Bolt, M16x55, Zinc Plate	748215065	24	16	8	24	16	8
Washer, M16, Zinc Plate, Form B	740157315	24	16	8	24	16	8
Nut, M16, Zinc Plate, Full Nut	748440317	24	16	8	24	16	8
Plug, 15mm(R½)BSPT	742227041	3	3	3	3	3	3

**1.0 ASSEMBLY**

2.1.1 Fit the 3 no. 15mm(R½) BSPT plugs into the sockets of the lower horizontal manifold using proprietary sealant (not HHL supply). NOTE: The lower two plugs will be inaccessible once the kit is installed.

2.1.2 Drill holes in the flooring as shown in Figure Nos. 3a or 3b as appropriate, suitable for 12mm anchor bolts (or equivalent) (not HHL supply). Locate the lower horizontal manifold over the holes and secure in place.

2.1.3 Locate the lower (return) vertical manifold(s), on the flange(s), with the stub pipes towards the boiler site, ensuring that the gaskets are correctly placed. Secure with the M16 nuts, bolts and

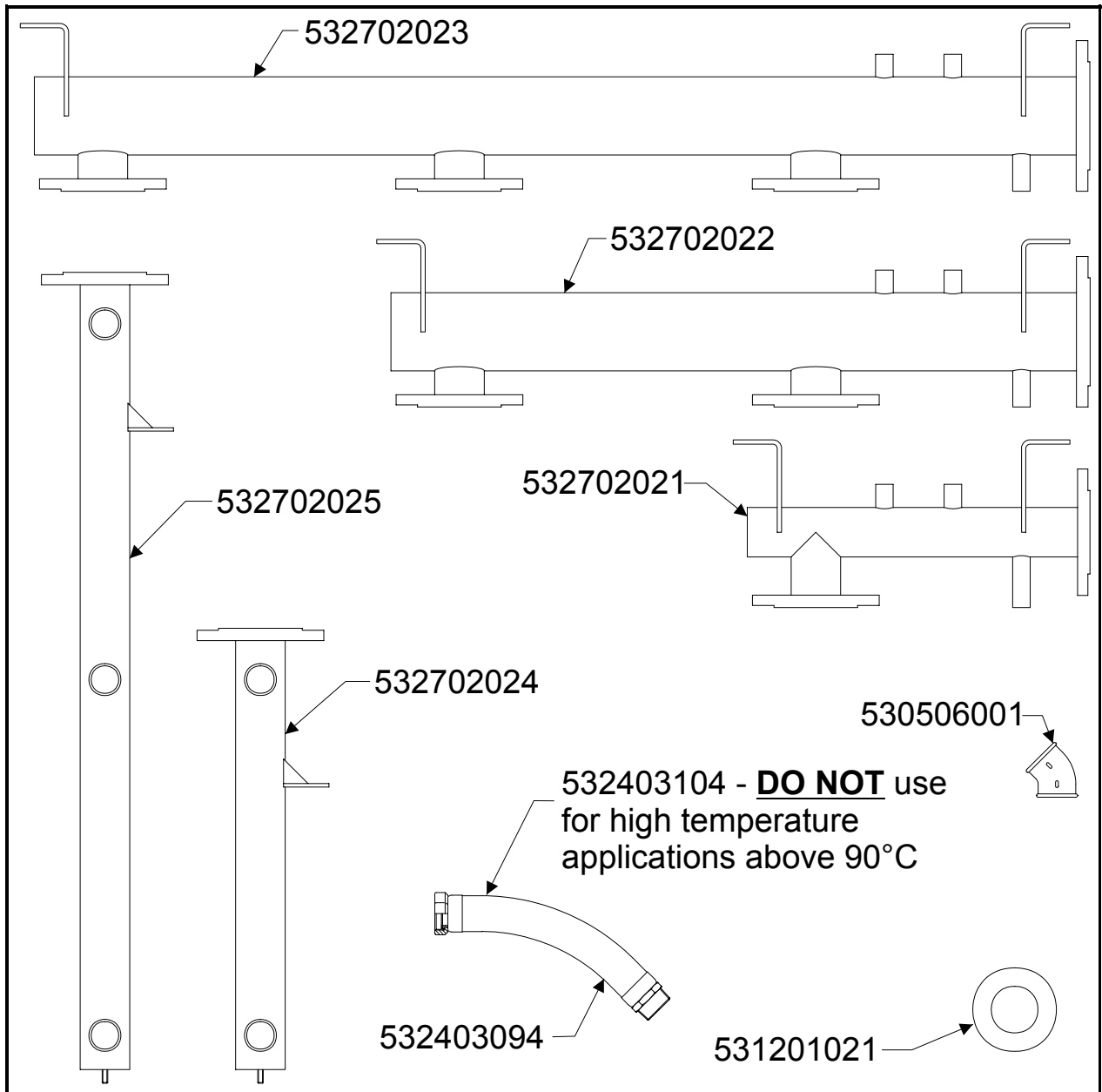
washers supplied.

2.1.4 Locate the upper (flow) vertical manifold(s) such that the threads at each end locate in the brackets and the stub pipes are in the same direction as the ones on the lower manifolds. Secure with the M10 nuts and washers supplied.

2.1.5 Locate the upper horizontal manifold flange(s) to the flange(s) of the upper vertical manifold(s) and secure with the M16 nuts, bolts and washers supplied. A small amount of adjustment may be achieved by slackening the M10 nuts on the vertical manifold(s).

2.1.6 If module valve kits are to be fitted, fit in accordance with Section 3.0.

**Figure No. 1 - WESSEX 100 M - PARTS IDENTIFICATION CHART**



2.1.7 Fit the 45° elbows to the pipe threads on the stub pipe(s) using proprietary thread sealant (not HHL supply) (PTFE tape recommended), ensuring orientation as shown.

2.1.8 Fit the flexible hoses supplied to the 45° elbows using proprietary sealant (not HHL supply).

2.1.9 Locate and secure the boilers in accordance with the installer's guide.

2.1.10 Connect the flexible hoses to the rear of the boilers using the gaskets supplied and taking care NOT to overtighten (spare gaskets are available from Hamworthy Heating Ltd – HHL P/N 531201038).

2.1.11 If required, the mounting holes of the upper horizontal manifold may be used for securing.

2.1.12 If valve kits are included fit the safety vents in accordance with Section 4.0.

2.1.13 Drain valves and safety valves (not HHL supply) should now be installed (N.B. it is recommended that safety valves should be of the high lift type). Reducing bushes may be required if the valves are of a smaller size (not HHL supply).

2.1.14 Automatic air vents (not HHL supply) or open vent connections may also be installed.

2.1.15 Test and commission as required.

Figure No. 2 – WESSEX 100 M – TYPICAL WATER MANIFOLD ASSEMBLIES

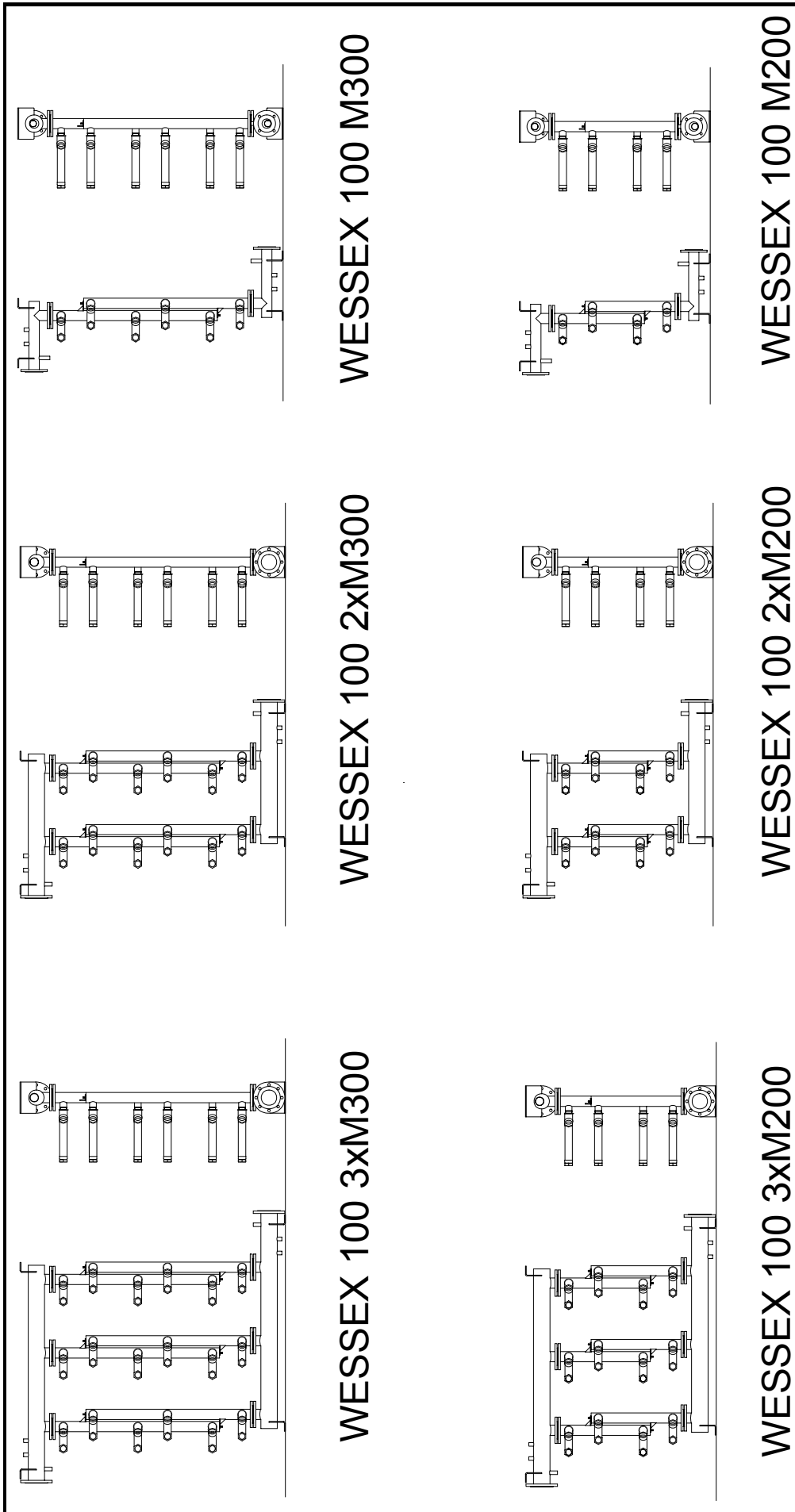
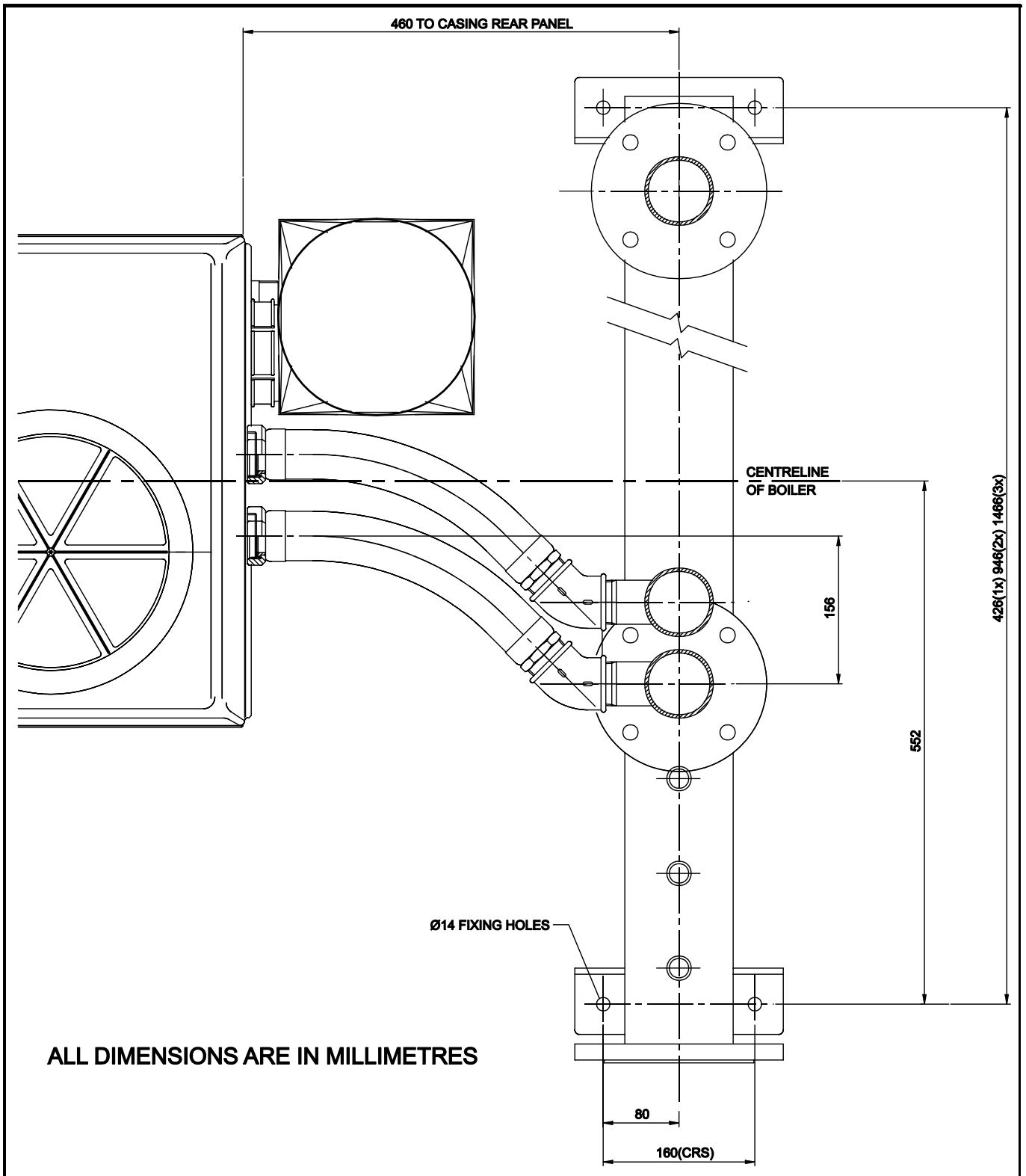
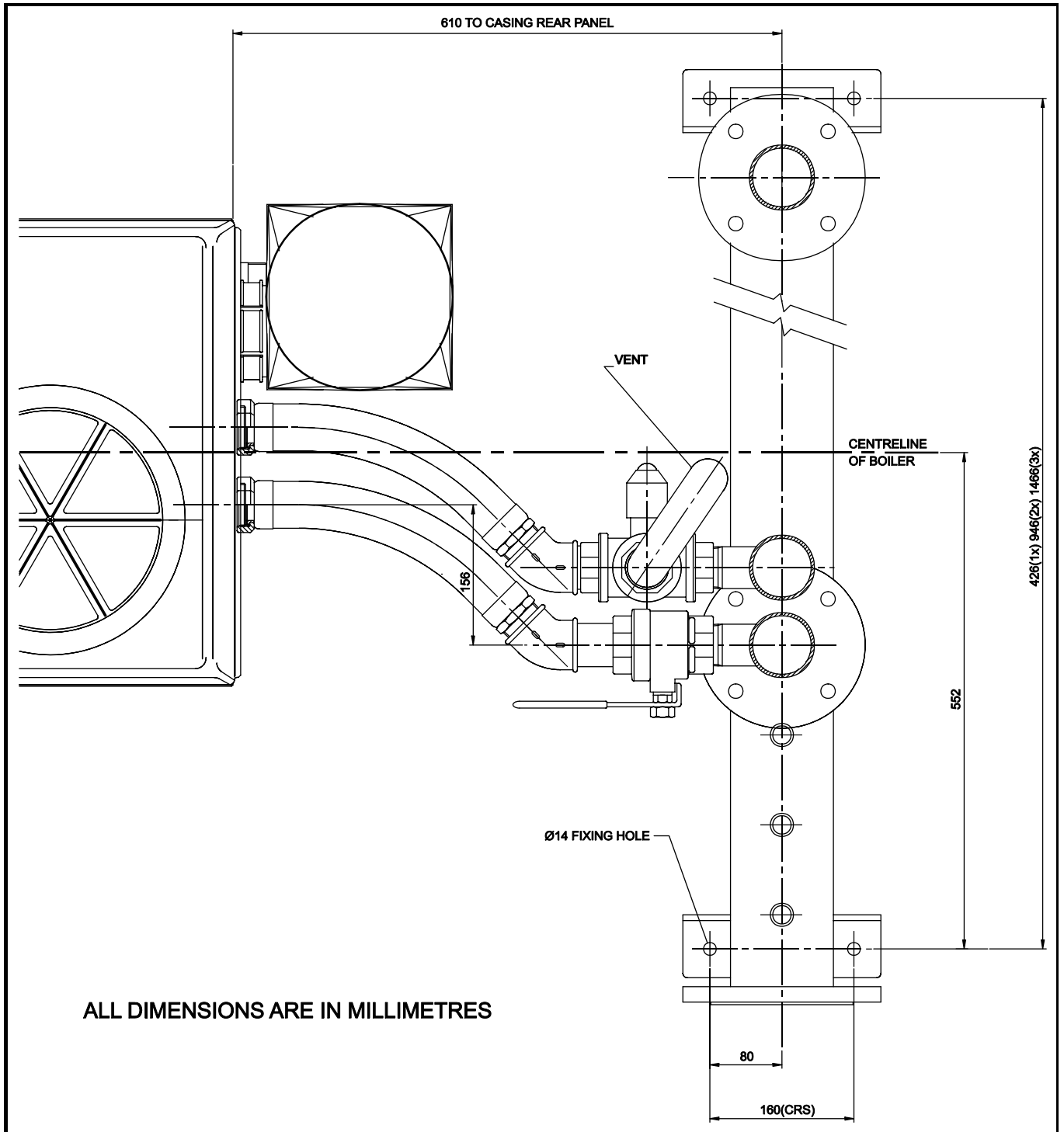




Figure No. 3a – WESSEX 100 M – UNVALVED WATER MANIFOLD LOCATION





### 3.0 VALVED WATER MANIFOLD KITS

#### 3.1 Check Supplied Parts

3.1.1 Check that all parts are supplied by checking with Table Nos. 2 & 3 (or 2 & 4 for high temp kit).  
**NOTE:** - One no. module valve kit is required for each boiler module to be connected.

#### 3.2 Assembly

3.2.1 Fit the Ball Valve to the 40mm(R1½) stub on the return vertical manifold, such that the handle is as

shown in Figure Nos. 5a & 5b.

3.2.2 Fit the Special Barrel Nipple to the ball valve, such that the 15mm(Rp½) socket is pointing down. If a drain is required, a 15mm(R½) drain valve (not HHL supply) should now be fitted to the socket. If a drain is not required, a 15mm(R½) plug (not HHL supply) must now be fitted to the socket.

3.2.3 Fit the 3-way Valve to the 40mm(R1½) stub on the flow vertical manifold, such that when the handle is downwards as shown in Figure No. 5b, the flow is straight through, and when the handle is moved

horizontally towards the boiler, the flow is directed upwards from the end connected to the flexible hose to the upper port (vent).

NOTE:- Adjustment must be made when the valve is installed in the pipework. At all times care must be taken not to damage the indicator spindle. To adjust the valve, pull the handle away from the valve such that the interlock is free and rotate the handle to the desired position. The ball should be adjusted with the handle in interlock position. Remove and discard the attached label.

3.2.4 Fit the Primofix Adaptor to the upper (mid) port of the 3-way valve.

3.2.5 Fit the Close Taper Nipple to the exposed port of the 3-way valve.

3.2.6 Repeat this procedure for each module.

Table No. 2 - WESSEX 100 M - MODULE VALVE KIT MATRIX

	kit part no./qty	MODULE VALVE KIT
		562702007
Valve, 3 Port, 40mm	531911031	1
Valve, Ball, 40mm	531911028	1
Nipple, Close Taper, 40mm(R1½)	741613084	1
Nipple, Special Barrel, 40mm(R1½) with 15mm(Rp½) Socket	530502013	1
Adapter, Primofix, Black, 40(R1½)	533604002	1

Table No. 3 - WESSEX 100 M- VALVED WATER MANIFOLD KIT MATRIX

	kit part no./qty	3 x M300	2 x M300	1 x M300	3 x M200	2 x M200	1 x M200
		562702013	562702012	562702011	562702010	562702009	562702008
3xM300 Manifold	562702006	1					
2xM300 Manifold	562702005		1				
M300 Manifold	562702004			1			
3xM200 Manifold	562702003				1		
2xM200 Manifold	562702002					1	
M200 Manifold	562702001						1
Module Valve Kit	562702007	9	6	3	6	4	2
Vent Pipe – 2 High	532812001				3	2	1
Vent Pipe – 3 High	532812002	3	2	1			

Table No. 4 - WESSEX 100 M HIGH TEMPERATURE – VALVED WATER MANIFOLD KIT MATRIX

	kit part no./qty	3 x M300	2 x M300	1 x M300	3 x M200	2 x M200	1 x M200
		562702025	562702024	562702023	562702022	562702021	562702020
3xM300 Manifold	562702019	1					
2xM300 Manifold	562702018		1				
M300 Manifold	562702017			1			
3xM200 Manifold	562702016				1		
2xM200 Manifold	562702015					1	
M200 Manifold	562702014						1
Module Valve Kit	562702007	9	6	3	6	4	2
Vent Pipe – 2 High	532812001				3	2	1
Vent Pipe – 3 High	532812002	3	2	1			

Figure No. 4 – WESSEX 100 M – BOILER MODULE DESCRIPTION

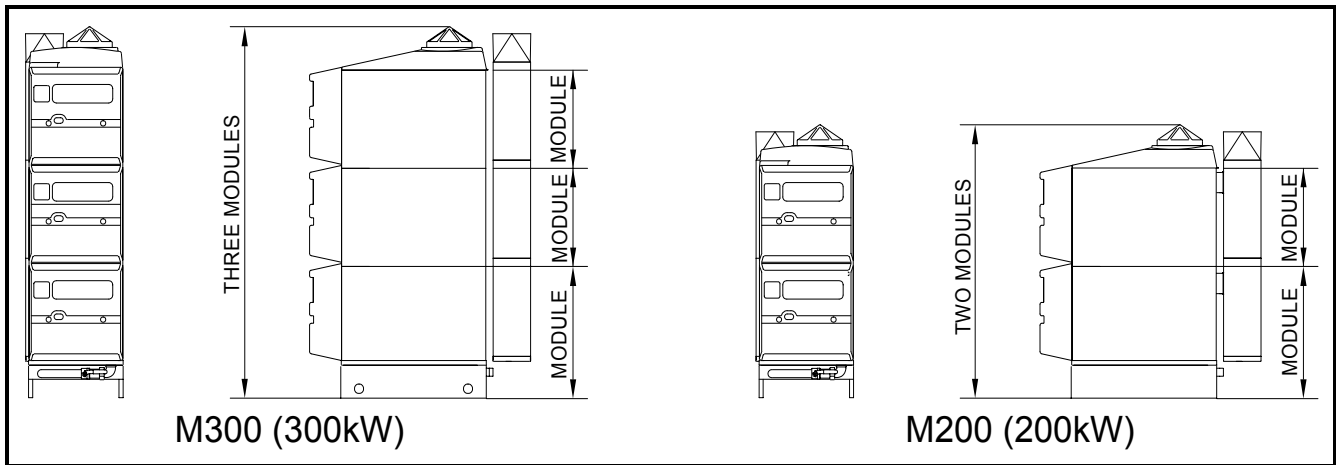


Figure No. 5a – WESSEX 100 M – MODULE VALVE KIT ASSEMBLY

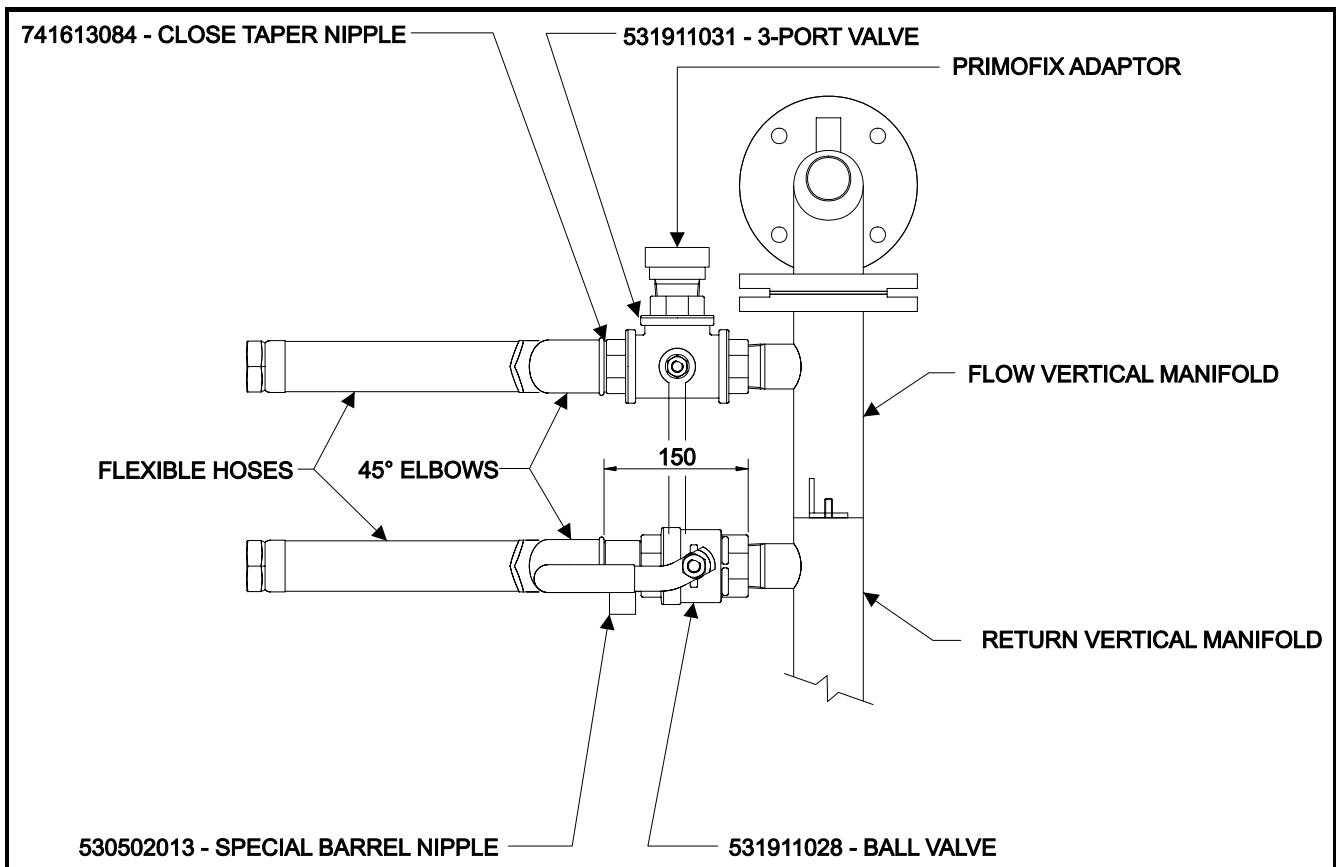
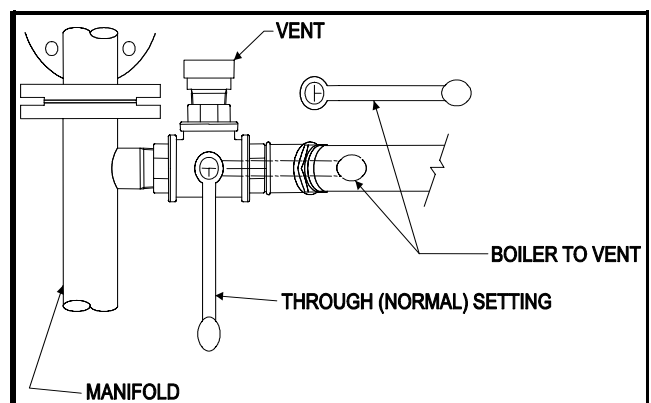


Figure No. 5b – WESSEX 100 M – 3-PORT VALVE SETTING



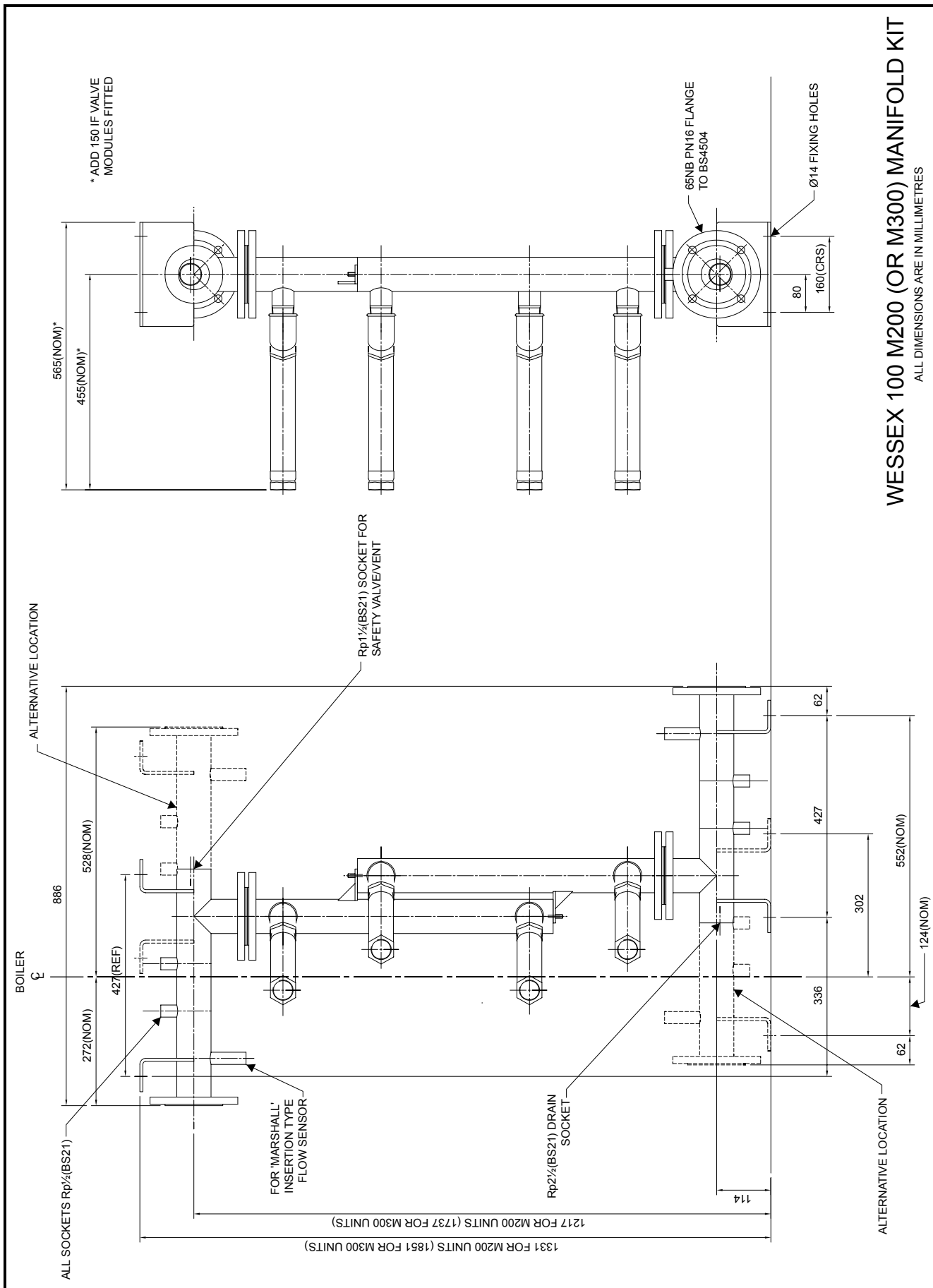
**4.0 VENT PIPES**

**4.1 Assembly**

4.1.1 Locate the vent pipes into the Primofix adapters so that the discharge is approximately 150mm above the floor and in the orientation as shown in Figure No. 3b.

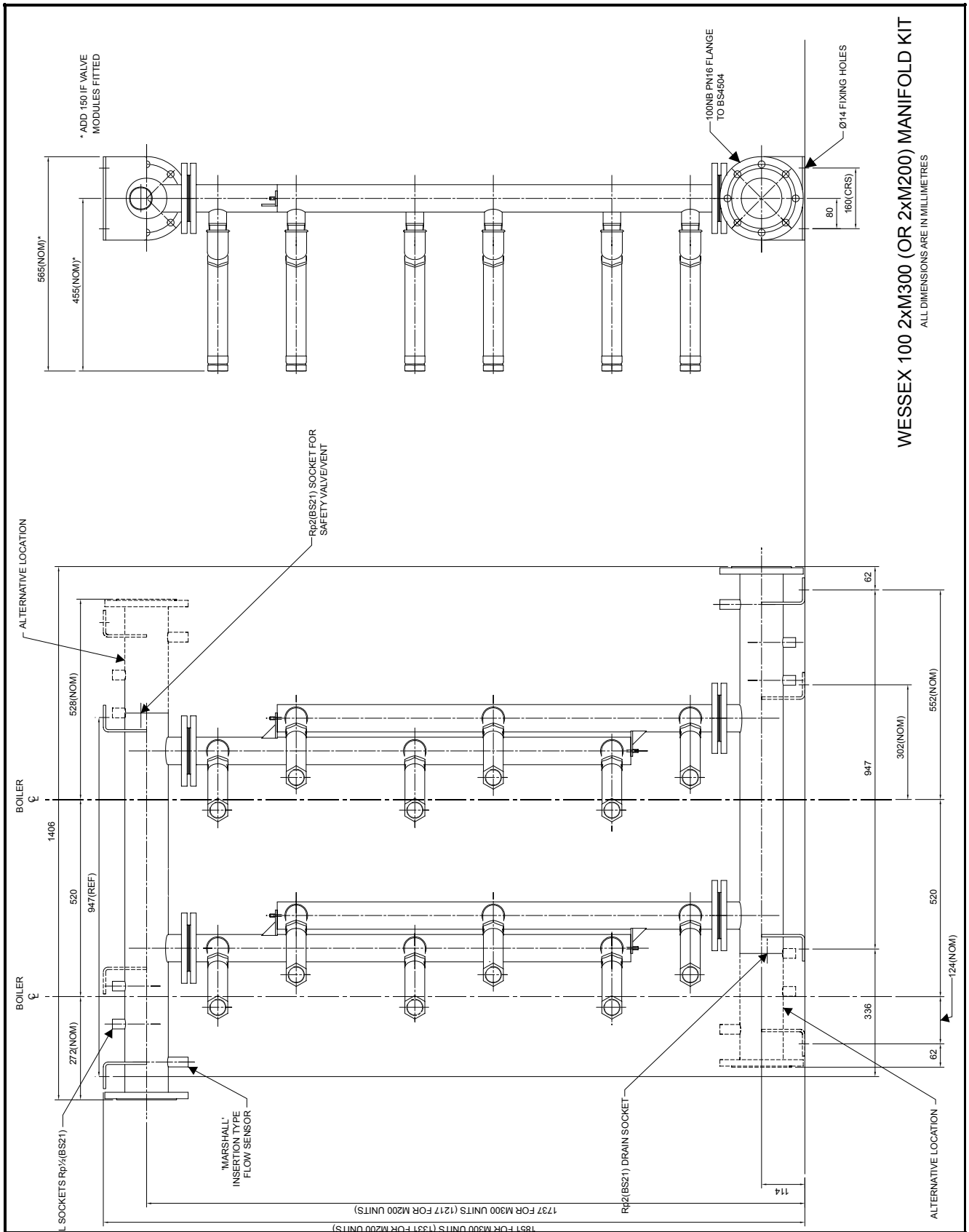
4.1.2 Firmly push the vent pipes into the Primofix adapters until fully home. Tighten the Primofix adapters.

Figure No. 6a – WESSEX 100 M200 (OR M300) MANIFOLD KITS



**WESSEX 100 M200 (OR M300) MANIFOLD KIT**  
ALL DIMENSIONS ARE IN MILLIMETRES

Figure No. 6b – WESSEX 100 2xM300 (OR 2xM200) MANIFOLD KITS



WESSEX 100 2xM300 (OR 2xM200) MANIFOLD KIT

ALL DIMENSIONS ARE IN MILLIMETRES



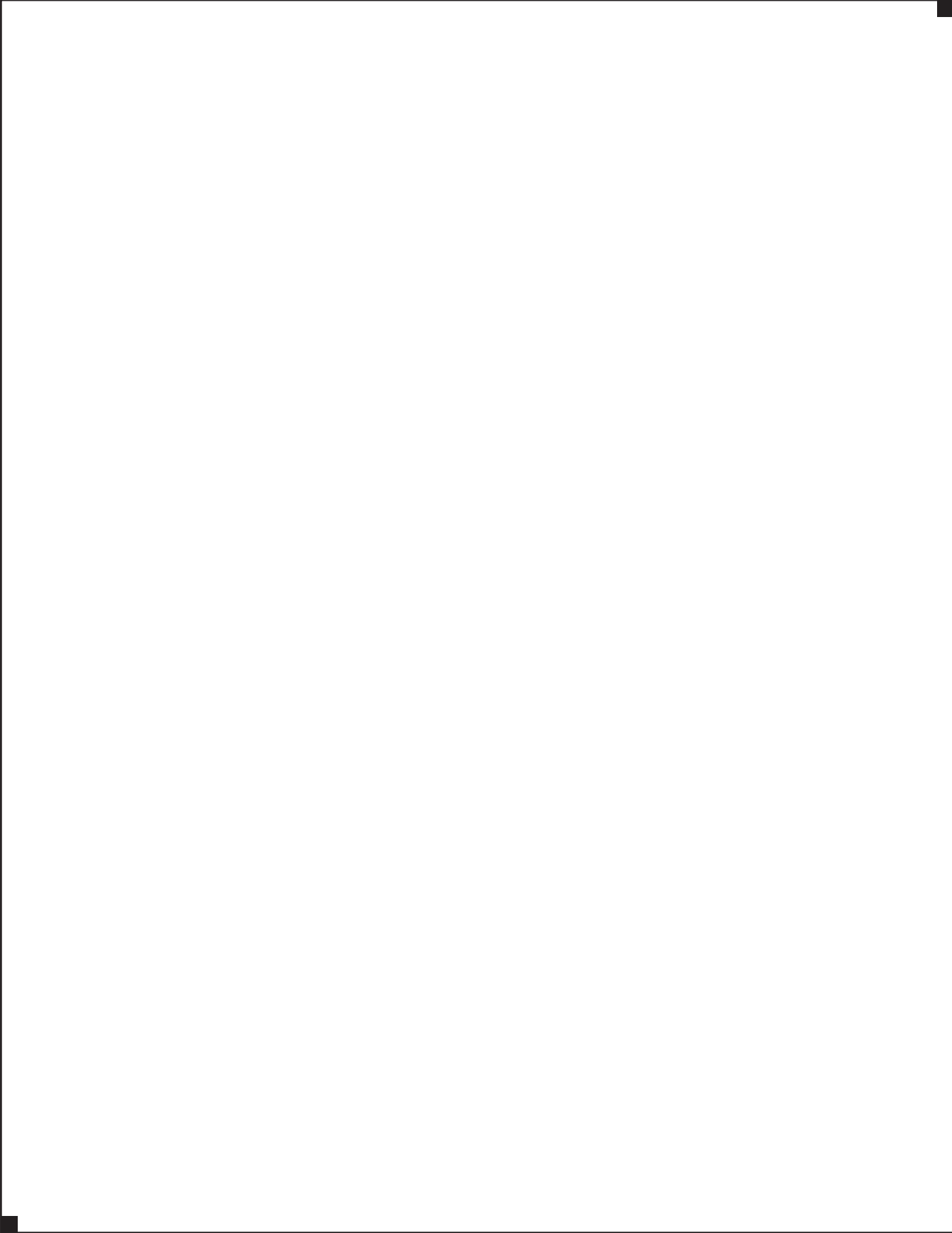
## NOTES



## NOTES

## NOTES

# Notes



# Connect direct






Direct Dial Telephone and Fax Numbers



- boilers
- controllers
- water heaters
- pressurisation sets

## Poole Office

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Main switchboard tel: **01202 662500**

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Spare parts	 <b>01202 662525</b>	 <b>01202 665111</b>
Service department	 <b>01202 662555</b>	 <b>01202 662522</b>



- flue components
- packaged fan dilution systems
- bespoke flue components
- bespoke flue systems
- design and installation

## Birmingham Office

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General enquiries  **0121 360 7000**

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technical@hamworthy-heating.com  
sales.flues@hamworthy-heating.com

## Hamworthy Heating Accredited Agents

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tel: **0151 666 1030** fax: **0151 647 8101**

### Southern Ireland

HEVAC Limited  
Naas Road, Dublin 12, Ireland  
tel: **00 3531 141 91919** fax: **00 3531 145 84806**

### Northern Ireland

HVAC Supplies Limited  
Unit 2, Antrim Line Business Park, Sentry Lane, Newtownabbey BT36 8XX  
tel: **02890 849826** fax: **02890 847443**

### Scotland

McDowall Modular Services  
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Website

**[www.hamworthy-heating.com](http://www.hamworthy-heating.com)**

Associate Companies, Offices and Agents throughout the World.

Hamworthy reserves the right to make changes and improvements which may necessitate alteration to the specification without prior notice.