FLEET WALL HUNG SERIES BOILER PIPE KITS

Suitable for one, two, three, and four boiler installation configurations

IMPORTANT NOTE

THESE INSTRUCTIONS MUST BE READ AND UNDERSTOOD BEFORE INSTALLING AND COMMISSIONING THESE PIPE KITS.
Customer After Sales Services

Telephone: 01202 662555   E-mail: service@hamworthy-heating.com   Fax: 01202 662522

Technical Enquiries
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
Hamworthy offer a service of site assembly for many of our products where plant room access 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
Commissioning of equipment by our own engineers, accredited agents or specialist sub-contractors will ensure the equipment is operating safely and efficiently.

Service Contracts
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. Service contracts enable you to plan and budget more efficiently.

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

Spare Parts
We offer a comprehensive range of spare parts, providing replacement parts for both current and discontinued products. Delivery options are available to suit you. Please refer to our website for more details.
FLEET WALL HUNG BOILER PIPE KITS

Suitable for one, two, three, and four boiler installation configurations

INSTALLATION, INSTRUCTIONS

NOTE: THESE INSTRUCTIONS MUST BE READ AND UNDERSTOOD BEFORE ATTEMPTING TO INSTALL & COMMISSION THESE PIPE KITS.

THESE INSTRUCTIONS MUST BE READ IN CONJUNCTION WITH THE FLEET WALL HUNG BOILER INSTRUCTIONS (HHL Part No. 50001211)

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<th>PAGE</th>
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</tr>
</tbody>
</table>
1.0 GENERAL INSTRUCTIONS

These instructions MUST be read in conjunction with the Fleet Boiler Installer’s Guide (HHL Part No. 500001211).

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 these instructions.

The water and gas pipe kits are specifically for use with Fleet Wall Hung boilers for hot water heating systems. Additional kits are available for use in conjunction with the Pipe Kits:

- 2 Port Low Loss Header
- 6 Port Low Loss Header
- Spool kits for 3 off, Diameter 6mm Sensors

Boiler flue kits are also available - refer to boiler instructions for details.

All pipe kit components are pressure tested prior to despatch.

In order to ensure the correct parts are delivered please use the tables and drawings in sections 2.0 & 3.0 (pages 4 to 14) of this guide. As options are available for this product please check the original order requirement against the delivery note and then check the parts supplied.

If any items are missing, use the delivery note & fax this back to HHL. Fax No. 01202 665111.

The range of header kits are suitable for 40kW, 50kW, 60kW, 70kW, 80kW, 85kW, 100kW, 120kW, 125kW, 140kW, 150kW, 160kW, 170kW, 180kW, 200kW, 210kW, 240kW, 250kW, 255kW, 280kW, 300kW, 340kW, 375kW, 400kW, 450kW, 500kW, 600kW boiler configurations.

Figure 1.1 - Single boiler arrangement showing boiler, frame, optional 2 port low loss header, optional flue header, water & gas pipe work for 40kW, 50kW, 60kW, 70kW, 85kW, 100kW, 125kW, 150kW boiler outputs.
Figure 1.2 - Two boiler arrangement showing boilers, frame, optional 2 port low loss header, optional flue header, water & gas pipe work for 80kW, 100kW, 120kW, 140kW, 170kW, 200kW, 250kW, 300kW boiler outputs.

Figure 1.3 - Three boiler arrangement showing boilers, single & double boiler frames bolted together, optional 6 port low loss header, optional flue header, water & gas pipe work for 120kW, 150kW, 180kW, 210kW, 255kW, 375kW, 450kW boiler outputs.
Figure 1.4 - Four boiler arrangement showing boilers, two double boiler frames, optional 2 port low loss header, optional flue headers, water & gas pipe work for 160kW, 200kW, 240kW, 280kW, 340kW, 400kW, 500kW, 600kW boiler outputs.

Figure 1.5 - Wall Hung Pipe Kit Assembly - Parts Identification

- Fleet Boiler (Supplied Separately)
- Pressure Relief Valve Vent Pipe (supplied with D22 coupling)
- Return Connection
- Fittings (Supplied Loose) For Provision Of 1/2" BSP Connection, To Purge Gas Pipe Work
- Gas Pipe Assembly (inc. ball valve & flexible hose)
- Flow Pipe Assembly (inc. ball valve & flexible hose)
- Return Pipe Assembly (inc. ball valve & flexible hose)
- Frame Assembly
- Flow Connection
- Condensate Tun Dish
- Gas Connection
- Malleable Iron Union For Connection Of Gas Pipe (supplied loose)
- Manifold Kit Supplied Loose (inc. 2 flanges, 4 seals, 8 nuts M16, 8 bolts M16, 8 washers M16, union, reducing sock & plug)
- Condensate Drain Pipe Work (socket & drain eye supplied loose)

Note: See pages 4 to 13 for the parts used in each assembly.
SECTION 2 – PARTS IDENTIFICATION

Note: Frame Assemblies are supplied complete with pipe work. Where pipe kits are joined together the frame coupling kit comes supplied in a plastic bag tie wrapped to the pipe kit.

Fig 2.1 Frame Assemblies - Parts
Figure 2.2 – 40-150kW Boiler Pipe Kit Gas Pipe Assembly - Parts

Single 40-150 kW Boiler Gas Pipe

Double 40-150kW Boiler Gas Pipe

Three 40-150 kW Boiler Gas Pipe Assembly

Four 40-150 kW Boiler Gas Pipe Assembly

*IF GAS SUPPLY PIPE IS TO BE FITTED OPPOSITE TO THE END SHOWN, SWAP POSITION OF 741604451 (UNION) WITH 741623183 (REDUCING SOCKET) & 742227348 (PLUG)
Figure 2.3 – 40-150kW Boiler Pipe Kit Flow Pipe Assemblies - Parts

Single 40-150 kW Boiler Flow Pipe
562403264

FIT 742190074 (GASKET)

532702220 x 1 (PIPE)

53201169 x 2 (R1 1/4 SEAL)

531911032 x 1 (DUAL PURPOSE WATER / GAS BALL VALVE)

532403330 x 1 (HOSE)

531201169 x 1 (R1 1/4 SEAL)

748231351 x 8 (M16 BOLT)
748440317 x 8 (M16 NUT)
740157315 x 8 (M16 WASHER)
530501017 x 1 (PN16 DN65 BLANK FLANGE)
742190074 x 1 (DN65 GASKET 77x116x1)
331920127 x 1 (DRAIN COCK)

Double 40-150 kW Boiler Flow Pipe
562403277

FIT 742190074 (GASKET)

Three 40-150kW Boiler
562403264 & 562403277
Flow Pipe Assemblies

Three 40-150kW Boiler
2 Off 562403277
Flow Pipe Assemblies
Figure 2.4 – 40-150kW Boiler Pipe Kit Return Pipe Assemblies - Parts

Single 40-150 kW Boiler Flow Pipe
562403263

Double 40-150 kW Boiler Flow Pipe
562403276

Three 40-150kW Boiler Flow Pipe Assemblies
562403263 & 562403276

Three 40-150kW Boiler Flow Pipe Assemblies
2 Off 562403276

532403330 x 1 (HOSE)
531201169 x 1 (R1 1/4 SEAL)
531911032 x 1 (DUAL PURPOSE WATER / GAS BALL VALVE)
748231351 x 8 (M16 BOLT)
748440317 x 8 (M16 NUT)
740157315 x 8 (M16 WASHER)
530501017 x 1 (PN16 DN65 BLANK FLANGE)
742190074 x 1 (GASKET 77x116x1)
331920127 x 1 (DRAIN COCK)

532702216 x 1 (PIPE)
531201132 x 2 (R1 1/4 SEAL)
532702219 x 1 (PIPE)
531911032 x 1 (DUAL PURPOSE WATER / GAS BALL VALVE)

FIT 742190074 (GASKET)
FIT 742190074 (GASKET)
Figure 2.5 – Condensate Pipe Assembly - Parts. (Supplied Unwelded So Apply Solvent Weld To All Joints)
Figure 2.6 – Pipe Kit Boiler Safety Relief Valve Vent Pipe Assembly - Component Parts

- 532403332 x 1 PER BOILER (VENT PIPE)
- 530502036 x 1 PER BOILER (D22xD22 COUPLING)

Figure 2.7 – Manifold Fix Kit 563605605 (40-150kW Boiler Pipe Kit) - Parts

- 741604451 x 1 (UNION)
- 741623183 x 1 (REDUCING SOCKET)
- 742227348 x 1 (PLUG)
- 530501017 x 2 PN16 / DN65 EN1092-1 BLANKING FLANGE
- 331920127 x 2 (DRAIN COCK)
- 740157315 x 16 (M16 WASHER)
- 740157317 x 16 (M16 NUT)
- 742190074 x 4 (DN65 GASKET)
- 748231351 x 16 (M16 BOLT)
Table No. 1 - Water & Gas Pipe Work 1 & 2 Boiler Pipe Kits

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No./Qty</th>
<th>1 Boiler Kit 40-150kW Range</th>
<th>2 Boiler Kit 40-150kW Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HHL Ref:</td>
<td>HHL Ref:</td>
<td></td>
</tr>
<tr>
<td>Frame Assembly 1 Boiler Wide</td>
<td>560202017</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Frame Assembly 2 Boiler Wide</td>
<td>560202021</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Gas Pipe Assembly 1 Wide 40-150kW</td>
<td>562403265</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Gas Pipe Assembly 2 Wide 40-150kW</td>
<td>562403278</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Flow Pipe Assembly 1 Wide 40-150kW</td>
<td>562403264</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Flow Pipe Assembly 2 Wide 40-150kW</td>
<td>562403277</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Return Pipe Assembly 1 Wide 40-150kW</td>
<td>562403263</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Return Pipe Assembly 2 Wide 40-150kW</td>
<td>532403276</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Condensate Drain Kit 1 Boiler Wide</td>
<td>561955009</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Condensate Drain Kit 2 Boiler Wide</td>
<td>561955010</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Safety Relief Vent Pipe</td>
<td>532403332</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Vent Pipe D22 Coupling</td>
<td>530502036</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>DN65 Manifold Fixing Kit 40-150kW</td>
<td>563605605</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
### Table No. 2 - Water & Gas Pipe Work 3 & 4 Boiler Pipe Kits

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No./Qty</th>
<th>3 Boiler Kit 40-150kW Range</th>
<th>4 Boiler Kit 40-150kW Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Boiler Kit 40-150kW</td>
<td>562702185</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Two Boiler Kit 40-150kW</td>
<td>562702186</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

### Table No. 3 - Boiler Water & Gas Connection Seals

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No./Qty</th>
<th>1 Boiler Kit 40-150kW Range</th>
<th>2 Boiler Kit 40-150kW Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>D30xD20x2 Seal For R1 Gas Connection</td>
<td>531201163</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>D37xD27x2 Seal For R11/4 Flow / Return</td>
<td>531201169</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

### Table No. 4 - Frame Assembly Spare Parts

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No./Qty</th>
<th>Single Boiler Frame Assembly</th>
<th>Two Boiler Frame Assembly</th>
<th>Three Boiler Frame Assembly</th>
<th>Four Boiler Frame Assembly</th>
</tr>
</thead>
<tbody>
<tr>
<td>D22 Pipe clip</td>
<td>533706075</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>D36 Pipe clip</td>
<td>530505304</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2in Box Section Plastic Cap</td>
<td>531202024</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>M12x75 Adjustable Foot</td>
<td>530120021</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Frame Coupling Kit</td>
<td>563605613</td>
<td></td>
<td></td>
<td>See Parts Below</td>
<td></td>
</tr>
<tr>
<td>M10 x 110mm Hex Head Bolt</td>
<td>748355607</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>M10 Nut</td>
<td>748440283</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

### Table No. 5 - Condensate Pipe Work Parts

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No./Qty</th>
<th>Single Boiler Condensate Line Assembly</th>
<th>Two Boiler Condensate Line Assembly</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.25/36 Swept T</td>
<td>531955026</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1.25/36 x 175 ABS Pipe</td>
<td>531955012</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1.25/36 x 1.25/36 Straight Coupling</td>
<td>531955023</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1.25/36 x 550 ABS Pipe</td>
<td>531955011</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2/54 M x 1.25 /36 F Reducer</td>
<td>531955024</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2/54 x 2/54 Straight Coupling</td>
<td>531955025</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1.25/36 330 ABS Pipe</td>
<td>531955028</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1.25/36 x 500 ABS Pipe</td>
<td>531955027</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
### Table No. 6 - Manifold Fixing Kit Parts

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No./Qty</th>
<th>DN65 40-150kW Manifold Fixing Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Part No./Qty</td>
<td>HHL Ref: 563605605</td>
</tr>
<tr>
<td>DN65 Blanking Flange With 1/2 BSPT Hole</td>
<td>530501017</td>
<td>2</td>
</tr>
<tr>
<td>DN65 Gasket D116xD77x1</td>
<td>742190074</td>
<td>2</td>
</tr>
<tr>
<td>Rc2 FxF Union 40-150kW Boiler Gas Pipe</td>
<td>741604451</td>
<td>1</td>
</tr>
<tr>
<td>Rc2xRc1/2 Red Socket (Gas Line Purge)</td>
<td>741623183</td>
<td>1</td>
</tr>
<tr>
<td>Drain Cock</td>
<td>331920127</td>
<td>2</td>
</tr>
<tr>
<td>Plain Washer M16</td>
<td>740157315</td>
<td>8</td>
</tr>
<tr>
<td>M16x70 Bolt</td>
<td>748231351</td>
<td>8</td>
</tr>
<tr>
<td>Nut M16</td>
<td>748440317</td>
<td>8</td>
</tr>
<tr>
<td>R0.5 Plug</td>
<td>742227348</td>
<td>1</td>
</tr>
</tbody>
</table>

### SECTION 3 – OPTIONAL EXTRAS

![Diagram](image-url)

Figure 3.1 – DN65 PN16 Flanged Low Loss Header - Component Parts (Boiler Models F125W & F150W)
### Table No. 7 - Low Loss Header Part Numbers

<table>
<thead>
<tr>
<th>No. of Boilers</th>
<th>2 Port Header</th>
<th>6 Port Header</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 x 562702189</td>
<td>1 x 562702190</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table No. 8 - Low Loss Header Spare Parts

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No./Qty</th>
<th>2 Port Header 40-150kW Boilers</th>
<th>6 Port Header 40-150kW Boilers</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1/2” Auto Air Eliminator (AAV)</td>
<td>531905005</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>R1/2” Drain Cock</td>
<td>331920127</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Adjustable Foot M12x75</td>
<td>530120021</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Thermostat Pocket</td>
<td>531050007</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>M12 Hex Nut</td>
<td>748440291</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Fixing Kit 2 Port DN65 Low Loss Header</td>
<td>563605610</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Fixing Kit 6 Port DN65 Low Loss Header</td>
<td>563605611</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>

### Table No. 9 - Low Loss Header Fixing Kit Components

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No./Qty</th>
<th>2 Port DN65 Fixing Kit</th>
<th>6 Port DN65 Fixing Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasket DN65 PN16 Flange D77xD116x1</td>
<td>742190074</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Hex Head Bolt M16x70</td>
<td>748231351</td>
<td>16</td>
<td>32</td>
</tr>
<tr>
<td>M16 Plain Washer</td>
<td>740157315</td>
<td>16</td>
<td>32</td>
</tr>
<tr>
<td>M16 Hex Nut</td>
<td>748440317</td>
<td>16</td>
<td>32</td>
</tr>
</tbody>
</table>
Figure 3.2 – DN65 PN16 Flanged Sensor Spool Kit 562702224 (x 2 Of The Above Supplied)

Table No. 10 - Sensor Spool Kit Part Numbers

<table>
<thead>
<tr>
<th>No. of Boilers</th>
<th>Sensor Spool Kit</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>40-150kW Boiler</td>
<td>562702224</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table No. 11 - Sensor Spool Kit Spare Parts

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No./Qty</th>
<th>DN65 Sensor Spool Kit HHL Ref: 562702224</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermostat Pocket</td>
<td>531050007</td>
<td>2</td>
</tr>
<tr>
<td>Gasket DN65 PN16 Flange D77xD116x1</td>
<td>742190074</td>
<td>4*</td>
</tr>
<tr>
<td>Hex Head Bolt M16x70</td>
<td>748231351</td>
<td>16</td>
</tr>
<tr>
<td>M16 Plain Washer</td>
<td>740157315</td>
<td>16</td>
</tr>
<tr>
<td>M16 Hex Nut</td>
<td>748440317</td>
<td>16</td>
</tr>
</tbody>
</table>

Note

* 2 Gaskets Supplied As Spare
4.0 DIMENSIONAL DRAWINGS

Figure 4.1 – One Boiler Pipe Kit Dimensions With Boiler Assembled

Figure 4.2 – Two Boiler Pipe Kit Dimensions With Boilers Assembled
Figure 4.3 – Three Boiler Pipe Kit Dimensions With Boilers Assembled

Figure 4.4 – Four Boiler Pipe Kit Dimensions With Boilers Assembled
Figure 4.5 – Dimensions DN65 / PN16 Flanged 2 Port Low Loss Header

Figure No. 4.6 – Dimensions 4 Wide 40-150 Boiler Pipe Kit & 2 Port Low Loss Header
Figure No. 4.7 – Dimensions 40-100kW Boiler Pipe Kit & Sensor Spool Kit

Figure 4.8 – Dimensions DN65 / PN16 Flanged 6 Port Low Loss Header
5.0 ASSEMBLY & INSTALLATION OF THE PIPE KIT

a) Always use appropriate Personal Protective Equipment when installing pipe kits on site.

b) Gas supply pipe work, 2 Port & 6 Port Low Loss Headers (for connection to the heating system) can be assembled to the left hand or right hand end of a single or multiple pipe kit for up to 4 boilers. See Figures 1.1 to 1.4 (Pages 1 to 3).

c) Instrument spools (pipes with flanges welded at either end & fitted with a sensor pocket for 3 off diameter 6.3mm temperature sensors) can be assembled to the flow & return pipes of the pipe kit. These are supplied when a low loss header is not used. See Figure 4.7 (page 18).

d) Multiples of single boiler or twin boiler pipe kits can be assembled together for up to 4 boilers in a row. See Figures 4.1 to 4.4 (Pages 15 to 16).

e) The bolts & nuts supplied in the pipe kits are to ISO 898-1 Grade 8.8 & flange gaskets to DIN2690.

f) Position the pipe kits side by side & against the wall, as shown in Figures 1.1 to 1.4 (on pages 1 To 3).

g) Adjust the feet to the desired height so that the centres of the flow, return & gas pipes of adjacent pipe kits are in line. The feet can be adjusted by 55mm.

h) Push the pipe kits apart to leave sufficient gap between each pipe kit so the union/s supplied can be fitted to the threads of the gas pipes at the positions shown in Figures 2.2 (page 5).

i) Apply a EN751-1 (gas) approved thread sealant to the threads of the gas pipes. Assemble one half of the union to the right hand side gas pipe & one half to the left hand side gas pipe of adjacent kits being coupled together.

j) Refer to Figure 2.5 (Page 8). The condensate pipe work is not supplied solvent welded. Orientate the swept T’s of the condensate pipe work to the desired direction of flow to drain. Depending on the orientation of the condensate pipe work it may be necessary to swap 531955028 & 531955012 over from what is shown. Remove the rod eye from the socket where the socket is to mate with the pipe of the adjacent pipe kit.

k) Push the pipe kits together so that adjacent flanges of the flow & return pipes are 3-5mm apart. Adjust the feet of each pipe kit so that the flow, return, gas & condensate pipe centres are at the same height. Use a builders level to ensure that the pipe kits are level.

l) See Figures 2.3 & 2.4 (Pages 6 to 7). Assemble the respective flow & return pipes of each kit together with the gasket supplied sandwiched between the flanges, using the M16 nuts, bolts & washers provided to connect the pipe work together. Tighten the bolts opposite to one another, working clockwise round the flange for a leak free assembly.

m) See Figure 2.2 (Pages 5). Where pipe kits are assembled together assemble the two halves of the unions together to join the gas pipes of adjacent pipe kits.

n) See Figure 4.1 (page 15) Cut a R2” thread on the gas supply pipe to match the thread of the gas pipe/s of the pipe kit/s. The gas supply pipe can be connected to either end of the bank of pipe kits using the union/s supplied. Apply a EN751-1 (gas) approved thread sealant to the pipe thread before assembling to the union.

o) Assemble the reducing sock & plug as shown in Figures 2.2 to the outer thread of the gas pipe at the end opposite to which the gas supply pipe is fitted. Apply a EN751-1 (gas) approved thread sealant to the male thread of the pipe & R1/2” plug before assembling the reducing sock to the pipe.

p) See Figure 2.5. Where necessary realign the centres of the horizontal condensate pipe work of adjacent pipe kits. Adjust the position of the horizontal portion of the condensate line by sliding the vertical condensate pipes up or down in the pipe clip fixed to the frame (Figure 6.2 - Page 21). Provide an incline to the horizontal so the condensate pipe work will drain.

q) Working from one end of the condensate line of the pipe kits to be joined together to the other end, disassemble then solvent weld each condensate pipe & fitting together as shown in Figure 2.5 (page 8) Solvent weld the socket 531955023 of adjacent pipe kits to the pipe of the kit next to it.

r) Check local authority requirements with respect to disposal of boiler condensate to the local sewers prior to connecting any condensate pipe work to drain.

s) Where allowed, pipe the condensate pipe work to drain.

t) At the opposite end to the pipe kit/s connection to drain, solvent weld a socket & rod eye to the end of the pipe. as shown in Figure 2.5 (Page 8).

u) Once the flow, return, gas & condensate pipe work of adjacent pipe kits has been assembled use the M10 Nuts & long M10 bolts provided, to bolt the frames together through the holes in the side of the vertical box section of the frame shown in Figure 2.1 (Page 4).

v) The pipe kits should be secured to the wall & floor using the holes in the frame provided. Fixings are not supplied for this purpose. See Figure 2.1 (Page 4).

w) See Figure 4.6 (Page 17) When assembling a low loss header to the pipe kit adjust the foot of the low loss header so the centres of the header & pipe kit flanges are at the correct height.

x) Where a low loss header is not ordered a sensor spool kit can be fitted. See Figure 3.2 (Page 14).
z) Assemble the Low Loss Header shown in Figure 3.1 (page 12) or instrument spool kit Figure 3.2 (page 16) to the pipe kit as shown in Figures 4.6 & 4.7 (Pages 17 & 18). Sandwich the gasket supplied between the flanges. Bolt the flanges together using the M16 nuts, bolts & washers provided. Tighten the bolts opposite to one another, working clockwise round the flanges to produce a leak free assembly.

6.0 ASSEMBLY OF THE BOILERS TO THE PIPE KIT

a) Fix the pipe kits to the wall.
b) Refer to Figure 6.1 below. Using suitable lifting equipment lift the boiler onto the hooks on the frame to locate with the corresponding slots in the back of the boiler so the boiler hangs on the frame.
c) Pivot the boiler away from the frame & secure a temporary packing to push the boiler away from the frame. Adjust the two M6 x 20 Screws at the bottom right & left hand sides at the rear of the boiler, so that the bottom of the boiler is pushed away from the frame. Take precaution to prevent trapping fingers between the frame & the boiler during the adjustment. Remove the packing & using a builders level check the boiler hangs parallel to the pipe kit.
d) Refer To Table 12 (below) & Figure 6.2 (page 29). Assemble a sealing washer (provided) between the sealing face of each Flexible hose and the connection on the boiler above it & screw the nut of each flexible hose up over the thread of the boiler connection. Tighten using a spanner for a leak proof seal.
e) Push the D22 compression coupling supplied with the bent D22 copper pipe on the pipe kit, over the end of the short length of D22mm pipe protruding from the bottom of the boiler. Make a leak free connection between both pipes by tightening the nuts of the compression coupling.

![Figure 6.1 - Hanging The Boiler On The Pipe Kit](image)

**Table No. 12 - Installation Parameters For Boiler Connection**

<table>
<thead>
<tr>
<th>Boiler Thread</th>
<th>Sealing Nut AF (mm)</th>
<th>Seal Part Number</th>
<th>Seal Dimensions (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1 1/4”</td>
<td>47</td>
<td>531201169</td>
<td>D37xD27x2</td>
</tr>
<tr>
<td>R1”</td>
<td>42</td>
<td>531201163</td>
<td>D30xD20x2</td>
</tr>
<tr>
<td>D22 Compression (PRV Vent Pipe)</td>
<td>32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7.0 TESTING & PURGING GAS PIPE WORK

a) Strength & tightness test the gas pipe work to IGE/UP/1 & 1A.

b) To purge the gas installation to IGE/UP/1 & 1A an isolating valve (not HHL supply) will need to be fitted instead of the R1/2" plug assembled to the reducing socket at the opposite end to the gas supply pipe. The gas pipe work can then be purged by connecting to this isolating valve. See Figure 7.1 below.
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