<u>ATMOS MULTI</u>

FRAME MOUNTED ASSEMBLY

INSTRUCTIONS FOR ASSEMBLY

Including instructions for assembly from loose components

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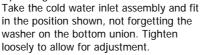
Figure 18.1, etc

Assembly instructions for wall frame and pipework assembly kit

Assembly instructions using loose components

1. Mains Cold water supply

Open Bag 1.



Note: It is important to check that the safety valve grub screw is tightly fixed, otherwise the valve can blow off.

Bring the cold mains water to the boiler in 22mm pipe. Fit a 22mm stop tap. Assemble the Altechnic UV4 valve and manifold with Locktite as illustrated. Connect to the boiler cold inlet utilising the 22x15mm reducer supplied. Fit the safety valve by inserting into the hole, taking care not to damage the O ring seal. When the safety valve position has been correctly determined, clamp in position using the small grub screw with the Allen key provided. It is IMPERATIVE that this screw is tightly fixed, otherwise the valve can blow off.

2. Equal pressure cold water out (Optional extra kit)

Where an equal pressure cold water supply is required, use the optional equal pressure cold water kit.

Remove the 22mm compression nut and

cap from the side inlet port of the manifold. Assemble the pipe with the compression nut and olive to the manifold, and the union to the CW valve. Joints can be loosely tightened until the whole assembly is ready for final tightening, and don't forget the washer on the lower union.

Where an equal pressure cold water supply is required, there is a 22mm connection on the side of the UV4 manifold for this purpose. If this is not required, use the 22mm cap which is provided in the UV4 kit to blank off this port.

3. Gas connection.



Open Bag 2 with two pipes. The 22mm pipe is for the gas, and the 15mm pipe for the towel rail return connection.

Take the 22mm gas pipe and connect the gas union valve ½" bsp to the boiler gas inlet with suitable gas sealant. There is no valve on the valve plate, so connect the gas pipe directly to the incoming 22mm gas pipe through the hole provided.

Fit gas union with loose part of union to boiler. Connect to 22mm gas supply.

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4. Auxiliary (comfort loop) connection.



The auxiliary or towel rail connection is blanked off on the boiler with a hexagonal chrome plug. If this option is required, take the 15mm pipe from Bag 2 with a 15mm x ½" bsp male threaded compression fitting and a union. Remove the chrome plug (take care as residual water sometimes dribbles out) and fit the compression fitting. Connect to the towel rail flow union on the valve plate. If this is not required, simply discard the pipe or use elsewhere.

The auxiliary or towel rail connection is blanked off on the boiler with a hexagonal chrome plug. If this circuit is required, remove this plug and connect 15mm copper pipe as a flow to the towel rail circuit. An isolating valve may be fitted for convenience. Note that the return connection must be the last connection on the heating circuit return pipe.

5. Hot water and Secondary hot water return



From Bag 1 take the 15mm pipe assembly with the thermostatic mixing valve. Assemble the pipework from the cold water manifold 15mm port, and connect to the 15mm hot water return valve on the valve plate. Loosely tighten joints.

If there is no secondary hot water circulation system, TURN OFF this valve fully as it will not be required. To be absolutely certain of no future leakage, we recommend that a 15mm pipe with a soldered end cap is used to blank off this port.

Take the short 15mm hot water inlet pipe and the 15mm compression elbow. Connect from the boiler to the thermostatic mixing valve (port W).

The upper right 15mm connection on the UV4 manifold is used for the following purposes :-

- 1) Feed to the central heating filler loop or connector.
- 2) Cold feed to the hot water thermostatic mixing valve.
- Return port for a secondary hot water re-circulation system where required (optional)
- Connection to the hot water expansion vessel. There must be no valve between the expansion vessel and the UV4.

6. Hot water supply



Fit the longer 22mm hot water outlet pipe from the 15mm port M to the hot water out valve on the valve plate. Don't forget the washer.

At this point all hot and cold water connections are in place, and final tightening of all unions and connectors can be done.

Take the thermostatic mixing valve. Connect cold water inlet to rear port marked K. Connect the 15mm hot from the boiler to the side port marked W. Connect the hot water out (marked M = Mixed) to the domestic hot water supply. Supply size can be 15mm or 22mm, depending on the load, but 22mm will be required for more than one bathroom.

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7. Heating system return connection.



Open bag 3.

Fit the 22mm return pipe using the 22mm compression connector of the filter at the boiler, and the two unions to the Valve plate. Remember the washers for both unions.

Note: If there is no towel rail circuit, TURN OFF the towel rail return valve fully as it will not be required. To be absolutely certain of no future leakage, we recommend that a 15mm pipe with a soldered end cap is used to blank off this

TIGHTEN ALL JOINTS WHEN ASSEMBLED AND DON'T FORGET THE UNION WASHERS.

The heating flow and return are connected in 22mm copper to the boiler connections (flow and return). The following connections must be made:-

- 1) Cold filler loop connection.
- 2) Safety valve with discharge pipe
- By-pass valve if mostly thermostatic valves are used on the heating system.
- Towel rail return (if used) must be the last return connection on the system.
- 5) 22mm filter on return pipe (optional means of protection)

8. Heating system flow pipe



Fit the 22mm flow pipe using the 22mm compression connector at the boiler, and the union to the Valve plate. Remember the washer!

Fit the 22mm by-pass valve between the flow and return in the correct direction, as shown in the photo (head to right)

Connect 22mm flow pipe to heating system.

9. Safety valve discharge system



Take the 15mm safety discharge pipe with one bend, and connect to the 6 bar cold water pressure relief valve at the back of the boiler. Ensure that the pipe is fully inserted into the valve port, so that the compression olive grips the pipe.

Take the second discharge pipe (with tees). Connect as follows;

- Connect to the cold water discharge pipe with the 15mm compression elbow.
- Connect to the 15mm safety discharge from the boiler with the 15mm compression straight connector.
- Connect to the heating system safety valve discharge.
- The black tundish should be pointing down, and the open part facing forward for clear visibility.

Fit the 3 bar heating system safety valve to the heating return pipe near the boiler, together with a pressure gauge. The 15mm discharge should be linked to a 22mm common discharge pipe connecting the boiler temperature and pressure relief valves, and the cold water safety relief valve. The tundish and safety discharge pipe must be fitted in accordance with the G3 regulations, as described in the Multi installation manual.

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10. Central heating system cold fill valve



A 1/2" filler valve is supplied, which fits between the cold supply and the safety discharge pipe on the heating flow. Fit this as shown, with the flow arrow from right to left, and the small discharge orifice pointing down. Connect each end to the flat face tap washers provided, not forgetting the sealing washers. Take the silicone tube and push over the discharge orifice. Push the other end into the back entry opening of the tundish. Cold fill valve - This valve may be left permanently connected. However, the lever operated fill valve must be turned off once the system is up to pressure. Autofill valve - If this option is used, fit this valve on the cold feed side to the filler valve (inlet side). The filler valve can then be left open.

Use the filler loop provided with the Robokit expansion vessel. Connect as instructions between the cold supply and the heating system. Ensure that the double check valve is connected to the heating side.

The flexible hose must be disconnected at one end once the system is filled.

11. Expansion vessels



Fit the expansion vessel mounting plate (EVMP) to the frame (not shown in this picture). To do this, remove the lower two bolts holding the valve plate. Insert mounting plate and refit the two bolts to hold both the valve plate and EVPM in position.

Sit the red expansion vessel in the left hole and connect to the 3/4" tap connector, not forgetting to insert the sealing washer. Sit the white expansion vessel in the right hand hole and connect to the 3/4" tap connector, not forgetting to fit the sealing washer.

The red heating system expansion vessel is supplied as a Robokit. This includes a wall mounting bracket, a filler loop, safety discharge valve and a system connection. Assemble as per instructions given with the Kit. The white hot water expansion vessel is also supplied with a wall mounting bracket. This must be connected to the secondary pipework as described in section 4 above. Under no circumstances must an isolating valve be fitted between the expansion vessel and the circuit which it serves.

12. Combined condensate waste and safety valve discharge system (Optional extra kit)



Fit the 32mm grey condensate trap to the boiler outlet, ensuring that the trap is pushed fully home (some lubricant will assist) The outlet should face forward. Take the white 32mm compression connector and remove the nut, ring and olive from one end. Discard the olive and ring. Fit the white ring over the female end of the black elbow supplied with the trap. Push the elbow on to the trap outlet. Then screw the white compression connector on to the elbow. Connect the HepVO trap to the tundish using the 1" brass nipple and 1.25" bush, and screw together tightly. Assemble the grey push fit pipe, elbows and tee as illustrated. The discharge pipe should be in polypropylene with push fit fittings, and can be taken to a soil pipe or other drain. The outlet must be protected.

Condensate waste only

Fit the 32mm grey condensate trap to the boiler outlet, ensuring that the trap is pushed fully home (some lubricant will assist) The outlet should face forward.

Take the white 32mm compression connector and remove the nut, ring and olive from one end. Throw away the olive and ring. Fit the white ring over the female end of the black elbow supplied with the trap. Push the elbow on to the trap outlet. Then screw the white compression connector on to the elbow. The 32mm waste pipe can then be connected and run to the selected drainage outlet. (**Note:** the trap connection is a different size to a standard UK 32mm pipe)

13. Finally

Tighten all joints, check over, fill system with water, and test for water tightness. Test for gas tightness.