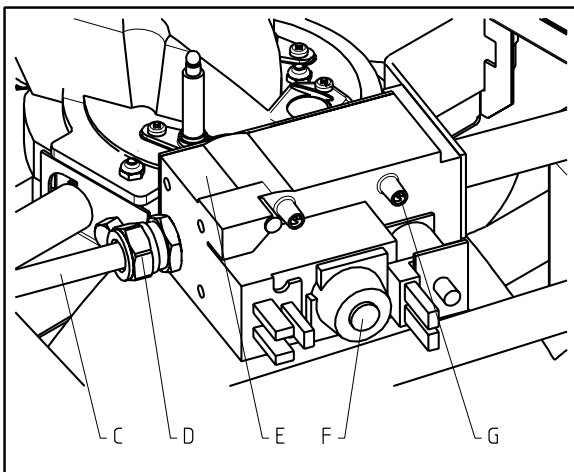
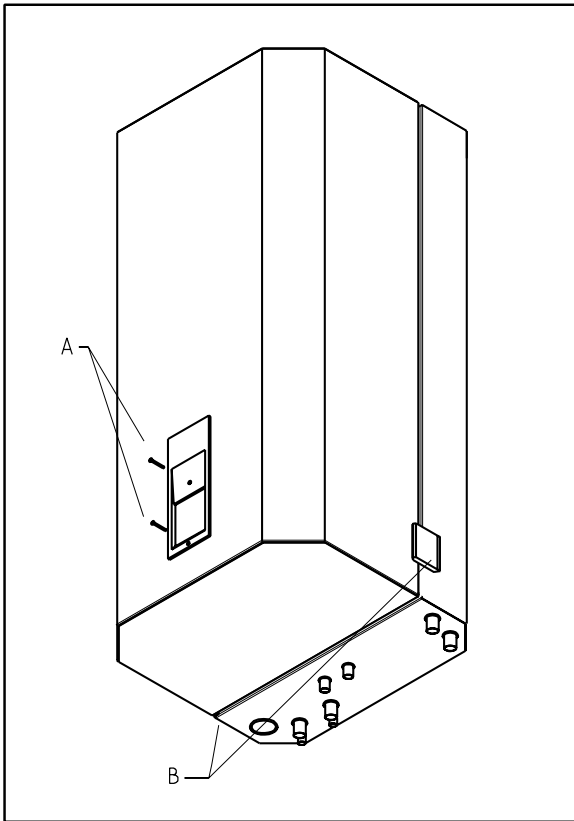


Propane Conversion



Positions

- A Screws to lock the casing
- B Casing Latches
- C Gas injector
- D Nozzle
- E Gas valve
- F Adjusting screw
- G Measurement gas pressure

Modification Requirements

To convert from natural gas to propane, the following components are required:

- 1 Gas injector of correct size (see table 1)
- Reference data
- 2 Propane stickers

1. Opening the Boiler

1. Switch off the power to the boiler,
2. Remove the two screws in the control panel (A),
3. Unclip the casing latches (B) and remove the casing from the appliance,

2. Converting the boiler

1. Unscrew the brass nut on the gas valve and remove the nozzle,
2. Check the marking on the new injector is as the data on table I below,
3. Fit the new injector (C) in the mixing chamber.
4. Reassemble the gas nozzle (D) to the gas valve, not forgetting the sealing ring,
5. Adjust the appliance to the correct settings.

| | 24/80 + | 32/80 (+) |
|-------------------------------|---------|-----------|
| Gas injector code | 24 P | 32 P |
| Injector Diameter Ø (mm) | 4,0 | 4,4 |
| Nom. Power Low fire (kW) | 7,5 | 10,0 |
| CO ₂ -Low fire % | 8,3 | 8,3 |
| O ₂ - Low fire % | 6,0 | 6,0 |
| Nom. Power High fire (kW) | 25 | 32,7 |
| CO ₂ - High fire % | 9,2 | 9,2 |
| O ₂ - High fire % | 4,5 | 4,5 |

Table I: Propane Boiler 24 & 32 kW



Propane Conversion

3. Gas - Air Setup

The gas air mix is set and sealed in the factory. Carry out the following steps to reset the appliance for propane gas.

3.1 Inspection of low and high output setting

The appliance can be operated on low or high output with the aid of the service programme code "A".

Press the **set** button for 10 seconds, when the display panel will show an [A],

- In the central heating display [XX] (a number) will show (indicating the ionisation level at the flame ionisation probe),
- [LL] Burner running at lowest output,
- [HH] Burner running at highest output,
- To scroll between the three codes use the Hot Water On/Off button,
- To exit this programme press the Reset button twice.

The following tests can be made:

- Ionisation level (The display should show a greater value than 40)
- Flame picture (see *Installation manual*)
- Oxygen or carbon dioxide level [3.2]

3.2 Settings

• General

Gas pressure must be about 35 mbar (14 inch WG). The gas - air mixture is adjusted at the gas valve (F).

• Tools required

- Flue gas analyser to measure O₂ or CO₂ to an accuracy of $\pm 0,5\%$
- Torx driver T40 anti tamper, eg the Apex 440-TX-40-H or 5 mm hexagonal wrench.

• Setting

To re-adjust the combustion the following procedure should be followed:

- a) Remove the cap from the test hole of the flue pipe.
- b) Insert the flue gas analyser probe.
- c) Remove the anti tamper cap (F) from the gas valve using the Torx driver .
- d) Set the burner to lowest output. Measure the CO₂ / O₂ readings. Adjust the gas regulator valve, as required, to give the readings shown in Note.
(ie clockwise to increase CO₂ / decrease O₂).

• Warning!

The condensate syphon must be filled with water to obtain correct results. If it is empty flue gas will discharge into the trap.

• Note !

Only small adjustments of the gas valve are required to change the O₂ or CO₂ emissions.

On low output the O₂ or CO₂ readings should be set to:

- O₂ 6,0 \pm 0,50 %
- CO₂ 8,3 \pm 0,25 %

On high output the O₂ or CO₂ readings should be set to;

- O₂ 4,5 \pm 0,50 %
- CO₂ 9,2 \pm 0,25 %

4. Identification Labels

To identify the appliance as being propane gas fired there are two new labels in the conversion pack which must be fitted. (Pt Nos. 07.98.35.504)

- One label must be stuck on the data plate to indicate that the data no longer applies
- The other label must be stuck above the service record label , which is on the front of the hot water insulation jacket, and indicates that the appliance has been converted to propane.

• Note!

For future servicing please keep this document with the other manuals of the Atmos Multi Boiler

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