

# Morco D61B and D61E to MP6 Conversion

## Introduction

Since 1997 Morco have supplied the D61B and D61E LPG water heaters into the holiday home industry. Sadly, the factory in Northern Spain closed in 2017 and Morco have sourced replacement water heaters. We launched the MP6 water heater in September 2018 and appreciate that many of these will be purchased to replace the longstanding D61 models in holiday homes. Gas engineers and home owners alike will wish to know what the differences are and how easy it is to swap a Morco D61 for a Morco MP6. For those reasons we have created this fact sheet. Throughout this document the D61B and D61E will be referred to as the D61 as, in the context of this document they are identical.

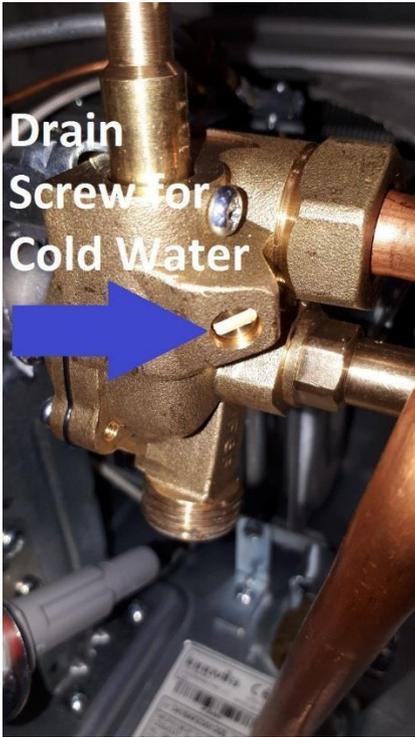
## Things That Remain the Same

- 6 litres of hot water delivery per minute for the MP6 with a temperature lift of 25°C. This can be adjusted down to 3 litres per minute of hot water with a temperature lift of 50°C
- The basic operation of the water heater is identical in that it has a water control assembly containing a diaphragm that opens and closes the gas valve.
- Compact size – the MP6 is slightly narrower and slightly deeper than the D61
- 15mm hot and cold-water pipes – Gas pipes can be 10mm or 15mm for the MP6. Please select the correct fitting/conversion kit for the gas pipe size already installed. MPFK10 for the 10mm and MPFK for the 15mm
- Pilot light ignition of the main burner
- Piezo ignition of the pilot light (the D61E had a battery powered spark generator and this is not being replicated with the MP6)
- Will accept a 90mm flue diameter for an MP6 into the flue spigot on the draught diverter
- Adjustable gas control knob – in reality customers leave this set to maximum
- Air supply and ventilation requirements for the D61 and MP6 are the same – please refer to the installation manual for more information
- Flue lengths and flue terminal design, the D61 and MP6 will work with the same flues and terminals.
- As with the D61 the MP6 will suffer damage if it is not drained in winter and water is allowed to freeze inside it
- There is a thermocouple for the pilot flame and a flue gas stat on the flue diverter hood
- The flue spillage test is carried out in exactly the same way
- As with the D61 there is no need to use gas paste on the washer seal between the Gas isolation valve and water heater

## Things That Are Different

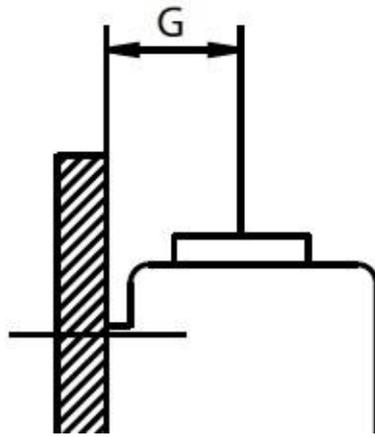
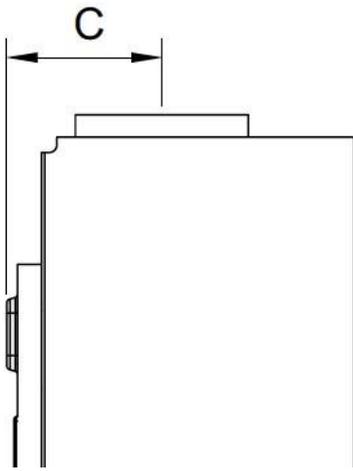
- The control knobs and water filter are stuck to the inside of the front cover in a small polythene bag on the MP6 model.
- The piezo pilot light ignition is now a push button under the boiler and not by rotating the gas control knob (D61B) or via a red ignition button (D61E)
- The gas connection is now ½" BSP and not ¾" BSP – the Fitting/conversion kits MPFK (15mm gas isolation valve) and MPFK10 (10mm gas isolation valve) accommodate this change
- The mounting points on the back plate are in a different position – see later "mounting Screw Position" and photos
- The internal diameter of the flue spigot on the draught diverter on the MP6 is 92.2mm, whereas the internal diameter of the flue spigot on the draught diverter on the D61 is 93.4mm. This means that existing flues will need to be coaxed into position with the new MP6
- The position of the gas and water pipes is different – please see the "Water and Gas Pipe" section at the end of this sheet
- There is a water limit thermostat as an additional safety feature on the heat exchanger. (Open Circuit at 105 °C)

- The MP6 will function with a water supply operating pressure of 0.2bar. The corresponding figure for the D61 was 1 bar
- The hot and cold water connections for the MP6 are both male ½”BSP. On the D61 they are both male 3/8” BSP.



The position of the drain screw on the brass water control valve for the MP6 is in a different position to the D61.

- The distance between the wall and the flue centre line on the D61 is 97mm. The corresponding dimension for the MP6 is 107mm.



Dimension C is for the new MP6 water Heater which is 107mm.

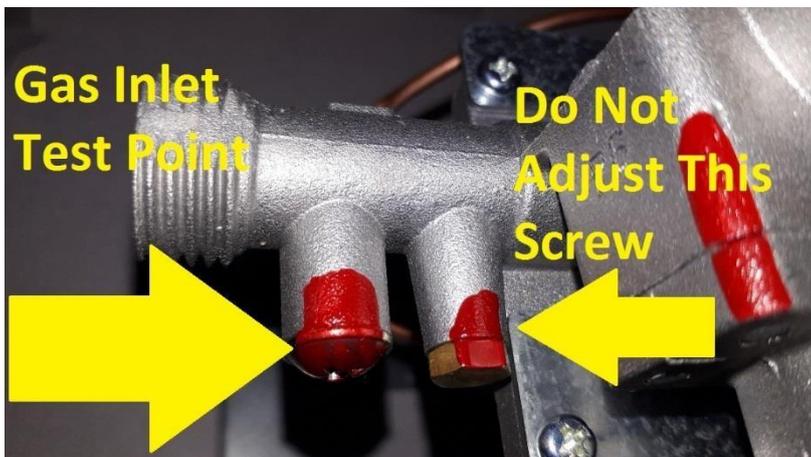
Dimension G is for the old D61 water heater which is 97mm.

C and G measure the distance from the mounting wall and the flue centre line



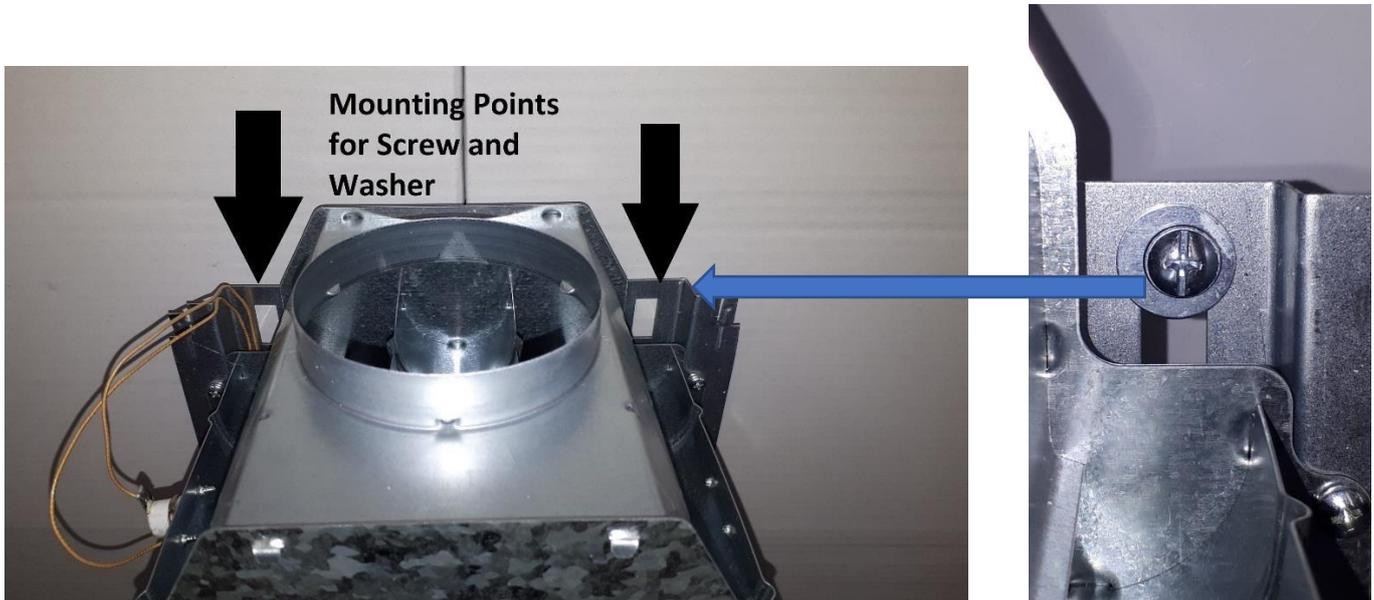
There is a safety valve on the side of the water control assembly set at 10bar. If the cold water supply pressure exceeds 10bar then this will pass water. Freezing conditions may also cause this to pass a small amount of water. Any adjustment of this valve will cause the valve to pass water at pressures lower than 10 bar and could damage furniture local to the heater.

- On the MP6 there are 2 screws on the gas inlet, the bottom one is the gas inlet test point and the top one is a gas adjustment screw that should only be used when converting gas types. DO NOT adjust this screw when using Propane.



### Mounting screw position

The D61 has a large number of holes in the base plate which can be used to mount the heater. The MP6 only has 2 holes designed for this purpose as shown in the photo below. You will need to use a steel repair washer on each screw when mounting the MP6 - see photo



### Water and gas pipe positions



The pipe installations for the D61 are many and varied and it will be up to the engineer to adapt the MP6 fitting/conversion kits (MPFK10/MPFK) to suit the hot, cold and gas pipes. The location of the pipes for both water heaters remains the same with the hot being on the left, the cold on the right and the gas in the centre.