# Morco D61 and G11E to MP6 or MP11 Conversion

## **Introduction**

Since 1997 Morco have supplied the D61B/E and G11E 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 and MP11 water heaters in September 2018 and appreciate that many of these will be purchased to replace the longstanding D61 and G11 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 and G11 for a Morco MP6 or MP11. For those reasons we have created this fact sheet. Throughout this document the MP6 and MP11 will be referenced mainly as MP6/11.

## Things That Remain the Same

- 6 litres of hot water delivery per minute for the MP6 and 11 litres of hot water delivery per minute for the MP11, both with a temperature lift of 25°C. This can be adjusted down to 3 litres (for the MP6) or 6 litres (for the MP11) 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 MP6/11 is slightly narrower and slightly deeper than the D61/G11
- 15mm hot and cold-water pipes Gas pipes can be 10mm or 15mm for the MP6. For the MP11 it must be 15mm
  – 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/G11E had a battery powered spark generator and this is not being replicated with the MP6/11)
- Will accept either a 90mm flue diameter for an MP6 or 110mm flue diameter for an MP11 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, the D61 and MP6 are the same and the G11 and MP11 are the same.
- Flue lengths and flue terminal design, the D61 and MP6 are the same and the G11 and MP11 are the same.
- As with the D61/G11 the MP6/11 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 and a flue gas stat on the flue divertor hood
- The flue spillage test is carried out in exactly the same way
- As with the D61/G11, 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 MP6/11 models.
- The piezo pilot light ignition is now a push button under the boiler and not by rotating the gas control knob
- 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 and for the MP11 it is 112mm, whereas the internal diameter of the flue spigot on the draught diverter on the D61 is 93.4mm and for the G11 it is 112. This means that existing flues will need to be coaxed into position for both water heaters
- The position of the gas and water pipes is different please see the "Water and Gas Pipe" section at the end of this sheet
- The MP6/11 is not certified to run on Butane in the Netherlands

- The MP6/11 water heater is not certified to be installed in Spain or Italy
- There is a water limit thermostat as an additional safety feature on the heat exchanger. (Open Circuit at 105 °C)
- The MP6/11 will function with a water supply operating pressure of 0.2bar. The corresponding figure for the D61/G11 was 1 bar
- The hot and cold water connections for the MP6/11 are both male ½"BSP. On the D61 they are both 3/8" BSP. On the G11 the cold water was 3/8" BSP and the hot water was ½" BSP



The position of the drain screw on the brass water control valve for the MP6/11 is in a different position.

• The distance between the wall and the flue centre line on the D61 is 97mm and for the G11 is 115mm. The corresponding dimension for the MP6 is 107mm and for the MP11 it is 101mm





Dimension C is for the new MP6 water Heater which is 107mm. For the MP11 this is 101mm Dimension G is for the old D61 water heater which is 97mm. For the G11 this is 115mm

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 MP6/11 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/G11 has a large number of holes in the base plate which can be used to mount the heater. The MP6/11 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/MP11 - see photo



#### Water and gas pipe positions



The pipe installations for the D61/G11 are many and varied and it will be up to the engineer to adapt the MP6/11 fitting/conversion kit (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.