

### PRODUCT INSTRUCTIONS

Product Code : **174Z** Product Description : **Monument Air Testing U Gauge Kit**  
(Product Code : **175C** Product Description : **U Gauge (only)**)

The Monument Air Test U Gauge Kit contains the necessary items to air test any size drain pipe. The U Gauge is calibrated to 100mm water gauge pressure (10 mbar (1kPa))

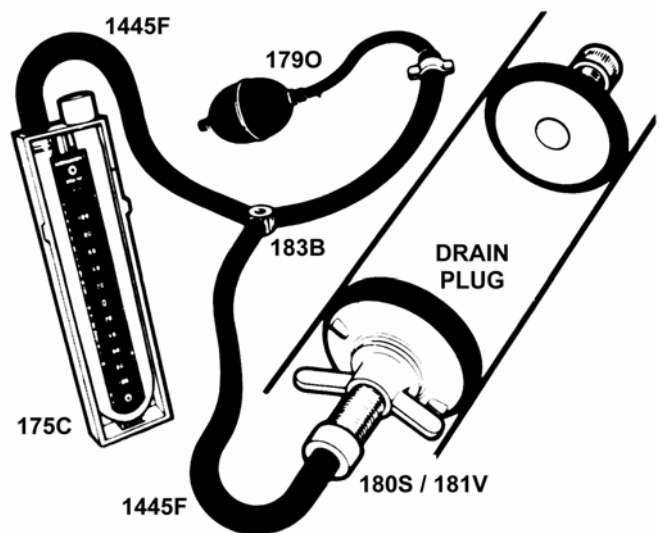
**NOTE: Drain test plugs or bag stoppers are not supplied in the kit.**

The component parts are as follows:

Qty	Order Code	Description	
1	<b>175C</b>	U gauge	Calibrated to 100mm above and below zero
1	<b>1790</b>	Hand Bellows	For pumping the drain under test with air
1	<b>180S</b>	½" BSP Nipple Cap	To replace the top cap of ½" BSP outlet drain plugs
1	<b>181V</b>	1" BSP Nipple Cap	To replace the top cap of 1" BSP outlet drain plugs
1	<b>183B</b>	Tee piece (3 way)	For connecting hose to U gauge, hand bellows and drain plug
3	<b>1445F</b>	10mm (3/8") ID Hose	Sold per metre

#### TO AIR TEST DRAINS OR PIPES :

- ❑ The drain to be tested is completely sealed off using drain testing plugs (or air bag stoppers) in the conventional way. **NOTE : Always test through a drain plug wherever possible – alternatively use Monument 1474R Universal Flexible Plug.**
- ❑ Replace the top cap of one convenient drain testing plug with either the ½" or 1" BSP nipple cap (180S or 181V). **NOTE : Check that the washer supplied with the nipple cap is in the threaded end of the nipple cap.**
- ❑ Connect together the bellows (1790), U gauge (175C) and drain testing plug using the tee piece (183B), as illustrated.
- ❑ Fill the U gauge (175C) with water to the zero level on the scale.
- ❑ In order for air to flow through the tube of the bellows into the drain and U gauge release the shut off clip. **NOTE: The shut off clip is fitted to the bellows in front of the bulb.**
- ❑ A positive pressure should be applied to the bulb of the bellows to allow sufficient volume of air to raise the liquid column of the U gauge to the 100 mark on the open side of the U gauge (and 100 below on the closed side).
- ❑ Close the shut off clip and then release the bulb. **NOTE: if the bulb is released first, the column of water will fall on the open side of the U gauge – but if the shut off clip is closed first, the column should remain static.** If the column has been raised to a higher reading than required, a gentle manipulation of the shut off clip, will allow the column to fall and closing the shut off clip should cause the column to stop falling.
- ❑ If the system under test leaks the water will quickly return to the zero level.
- ❑ If there are no leaks in the system under test, the column will remain at the 100 mark.
- ❑ With both the columns on the 100 mark; the test pressure is 100mm water gauge pressure (10mb (1kPa)).



\*For testing up to **50 mbar (5 kPa)** replace 175C U gauge with **258F 60 mbar (24") Gas Test Gauge** and use **AD01 Hose adaptor** to connect the gas test gauge hose to the drain air test kit hose.

\*For testing up to **100 mbar (10 kPa)** replace 175C U gauge with **48GTG 120 mbar (48") Gas Test Gauge** and use **AD01 Hose adaptor** to connect the gas test gauge hose to the drain air test kit hose.

1 bar = 1000 mbar = 100 kPa = 100 kN/m<sup>2</sup> = 14.5 psi = 14.5 lbf/in<sup>2</sup> = 33.45 ft 'head of water' = 10.2 m 'head of water'  
 1 mbar = 100 Pa = 100 N/m<sup>2</sup> = 0.0145 psi = 0.0145 lbf/in<sup>2</sup> = 0.4 in 'head of water' = 10.2 mm 'head of water'  
 1 psi = 1 lbf/in<sup>2</sup> = 68.97 mbar = 6897 Pa = 6897 N/m<sup>2</sup> = 2.3 ft 'head of water' = 701 mm 'head of water'  
 1 in 'head of water' = 25.4 mm 'head of water' = 0.036 psi = 0.036 lbf/in<sup>2</sup> = 2.48 mbar = 248Pa = 248N/m<sup>2</sup>

For further information on Drain Testing refer to BS EN 1610 : 1997

