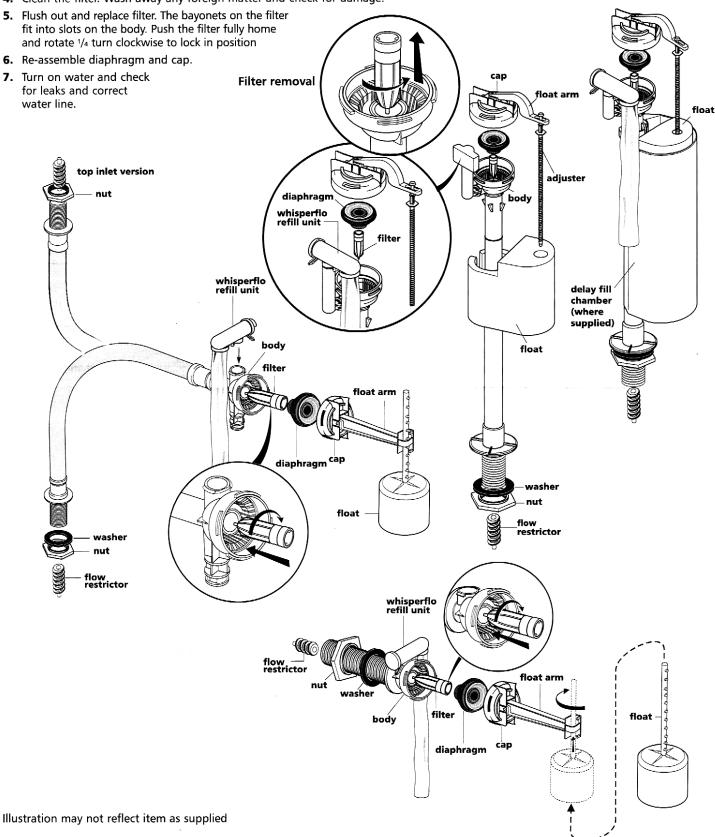
#### **MAINTENANCE**

Valves should be checked and cleaned periodically. The Univalve is fitted with a filter to prevent foreign bodies from impeding the flow. The filter may require occasional cleaning.

- 1. Turn off water.
- 2. Turn the cap 1/8th turn anti-clockwise and remove the cap and diaphragm.
- 3. Carefully remove filter from the valve body. Use long nose pliers to grip the ribs inside the filter, turn the filter 1/4 turn anti-clockwise and pull out, (see insert).
- 4. Clean the filter. Wash away any foreign matter and check for damage.



All cistern components must be installed in accordance with UK water regulations. If in doubt a suitably qualified professional should be consulted.

## UNIVALVE

#### INSTALLATION

Please read these instructions carefully before installation and store safely for future reference.

#### **GENERAL NOTES**

Before fitting any valve the supply pipe should be flushed clear.

Use of the flow restrictor is required if the water pressure exceeds 1.4 Bar (20 p.s.i. or 14 metre head if tank fed).

Univalve maximum working pressure 12.5 Bar, minimum working pressure 0.1 Bar.

Take care to avoid cross threading. Hand tighten nuts, then give 1/8 turn by spanner. Do not overtighten.

The valve is fully tested before leaving the factory, no dismantling is necessary.

#### Chemicals & paints

Do not allow the Univalve to come into contact with jointing compounds, cellulose based paints, paint thinners or strippers, solder flux, acid based descalents or aggressive cleaning products including those below pH4, high in hypochlorite (e.g. bleach) or containing hydrogen peroxide.

#### How to re-fit your Univalve

- 1. Turn off water.
- Flush cistern. For side inlet depress float to drain supply pipe. For bottom inlet sponge out residual water. Disconnect and remove existing inlet valve.
- 3. Fit Univalve using backnut(s) provided and ensure that spigot(s) are used to centralise the tail in the hole. Ensure that rubber sealing washer is in position.
- 4. Connect to the supply pipe.
- 5. Check that the float is not impeding other fittings and that the Whisperflo delivery tube, (where supplied) is pointing downwards and free from obstruction and outside of the delay fill chamber, (where supplied).
- 6. Turn on water and check for any leaks.
- Set water level by adjusting the float. Twist the float stem to raise or lower as required.

#### **OPERATION**

# The Univalve is an equilibrium float valve for use in wc cisterns. It operates as follows:

When the cistern is flushed the float arm (1) drops allowing water to escape through the bleed hole in the cap (2). This reduces the water pressure on the front of the diaphragm (3) allowing the supply pressure to push the diaphragm away from the seating (4) and opening the float valve.

As the cistern fills the rubber billet (5) in the end of the float arm shuts off the bleed hole in the cap, allowing pressure to build in the front of the chamber (6). When this pressure is equal to the supply pressure the diaphragm is pushed onto the inlet and valve closes.

#### **CAUSES OF MALFUNCTION**

### Valve stays open because:

- a) The rubber billet (5) in end of the float arm (1) is damaged, or missing, allowing water to escape through the bleed hole. This prevents the 'closing' pressure build up sufficiently on the front of the diaphragm to close the valve.
- b) The metering valve (7) in the centre of the diaphragm is blocked or damaged. This prevents the passage of water through the diaphragm, not allowing pressure to build on the front of the diaphragm.

#### Valve stays closed/or is sluggish because:

- c) The bleed hole in the cap (2) is blocked or restricted. This prevents water from escaping quickly enough from the front chamber.
- d) The metering valve in the diaphragm (7) is damaged and allows water to pass through quicker than it escapes with the same effect as (d).
- e) The filter (9) has become clogged and has reduced the supply pressure below the operating level. For removal instructions see under 'maintenance'.
- f) The restrictor has been fitted with water pressure below 1.4 bar (20psi or 14 metre head if tank fed). Also note that when at extreme high pressure, the removal of the restrictor can cause continuous siphoning.

