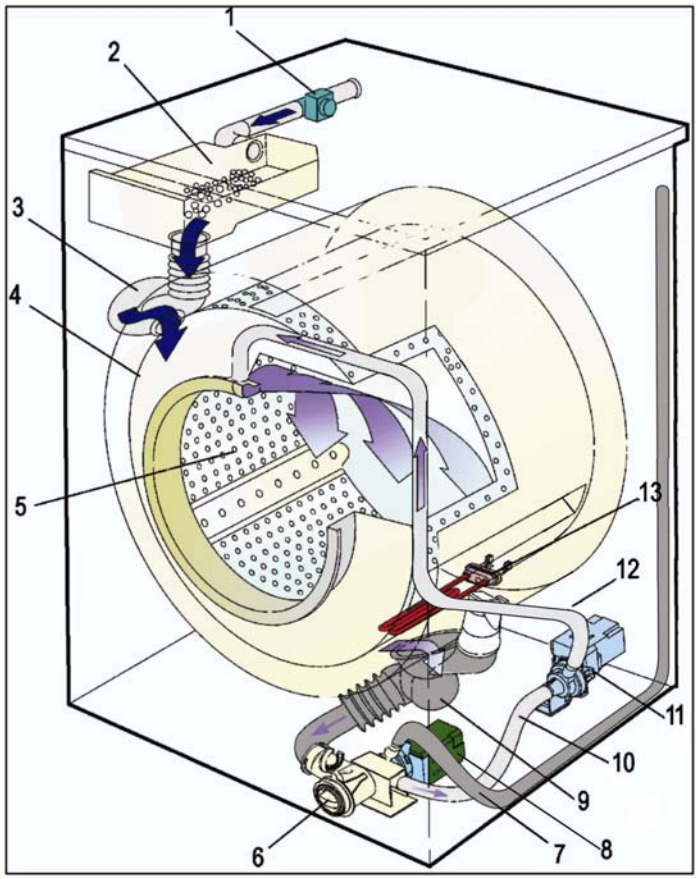
4.1.3 “JETSYSTEM” washing system

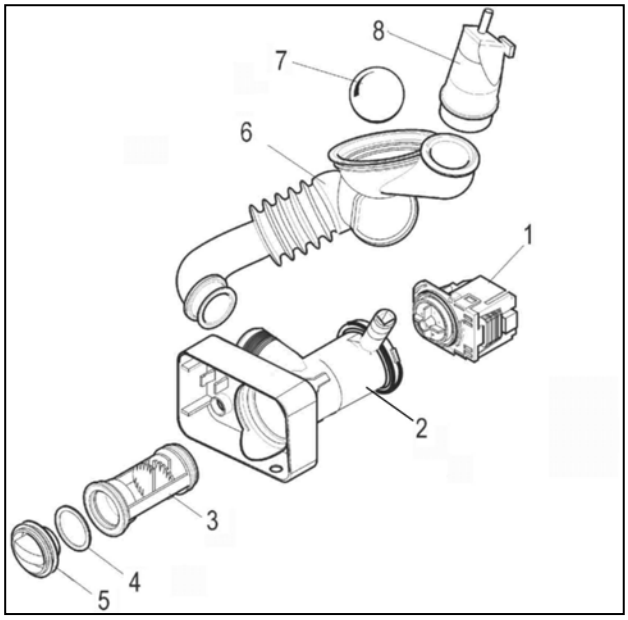
- In the "Jetsystem" washing system, considering that the removal of the dirt is performed solely by the water that passes through the fibres, the remaining part of the washing solution has been eliminated.
- In other words, this system is based on the possibility of washing the fabrics using only the water used to wet them; the quantity of water introduced into the appliance is therefore proportional to the type and quantity of the fabrics in the drum.
- The water is introduced by the solenoid valve; its level is controlled by a pressure switch.
- The water present in the bottom of the tub is circulated by a pump, which ducts it to the fabrics through an aperture in the bellows seal.
- The mechanical action is provided by the bi-directional rotation of the drum at low speed; the wash load is continuously rotated inside the drum by three drum lifters.

4.1.3.1 JETSYSTEM Hydraulic circuit

1. *Water fill solenoid*
2. *Detergent dispenser*
3. *Tube from detergent dispenser to tub*
4. *Tub*
5. *Drum*
6. *Drain filter*
7. *Drain hose*
8. *Drain pump*
9. *Tube between tub and filter body*
10. *Circulation pump intake tube*
11. *Circulation pump*
12. *Circulation tube*
13. *Heating element with NTC*

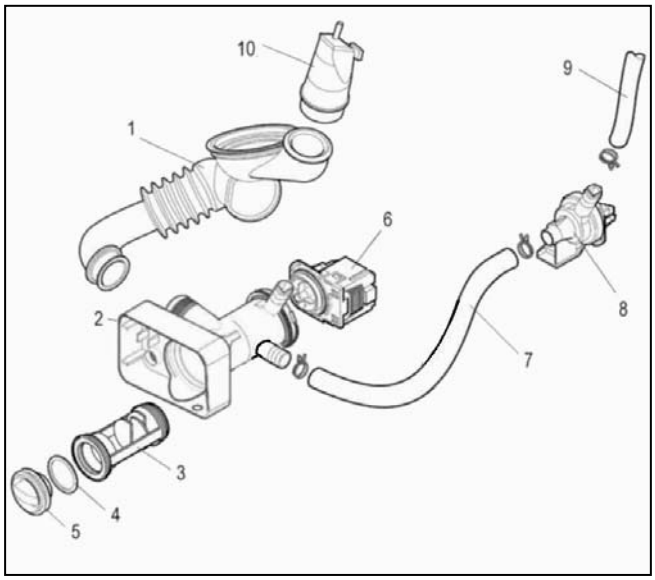


4.7 Washing machine with traditional washing system and “ECO-BALL” ball valve



1. *Drain pump*
2. *Filter body*
3. *Drain filter*
4. *Washer*
5. *Filter knob*
6. *Tube between tub and filter body*
7. *Ball*
8. *Pressure chamber (one or two ways)*

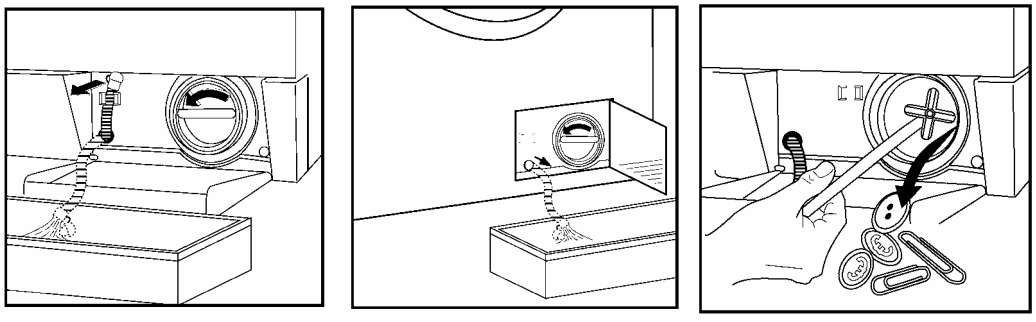
4.8 “NEW JET” circulation circuit



1. *Tube between tub and filter body*
2. *Filter body*
3. *Drain filter*
4. *Washer*
5. *Filter knob*
6. *Drain pump*
7. *Circulation pump intake tube*
8. *Circulation pump*
9. *Circulation tube*
10. *Pressure chamber (one or two ways)*

4.8.1 Drain filter

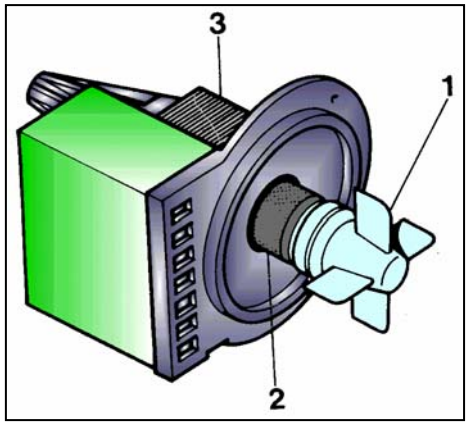
- This drain system is self-cleaning: the filter traps only objects of a certain size.
- The drain tube is used to empty the drain circuit.
- The pump impeller can be inspected after unscrewing the filter.



5.13 Drain pump

5.13.1 General characteristics

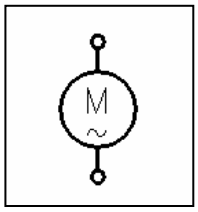
The function of the drain pump is to discharge the water at the end of each phase of the washing cycle. These centrifugal pumps are actioned by a synchronous motor.



1. *Impeller*
2. *Rotor*
3. *Stator*

The rotor consists of a permanent magnet, and may rotate in either direction.
The rotor may rotate for approximately 15 minutes without actioning the impeller. As a result, if the impeller is jammed by a foreign body, the rotor may perform short clockwise and anti-clockwise movements until the blockage is removed.
These pumps have a delivery of about 22-25 litres per minute, and a maximum head of 90 cm.

5.13.2 Electrical symbol



5.13.3 Checking for efficiency

1. Check that the impeller is not jammed and check for slippage.
2. Check the resistance of the stator winding, which should be approximately 150/200 Ω.

Important!

If caused to run empty (i.e. disconnected from the hydraulic circuit), synchronous pumps may fail to start up. This is because, due to their structural characteristics, they require a counter-torque on the impeller to allow the rotor to turn in one direction or the other.
For this reason, the pumps should be tested only when fitted to the appliance and after introducing a certain quantity of water.