

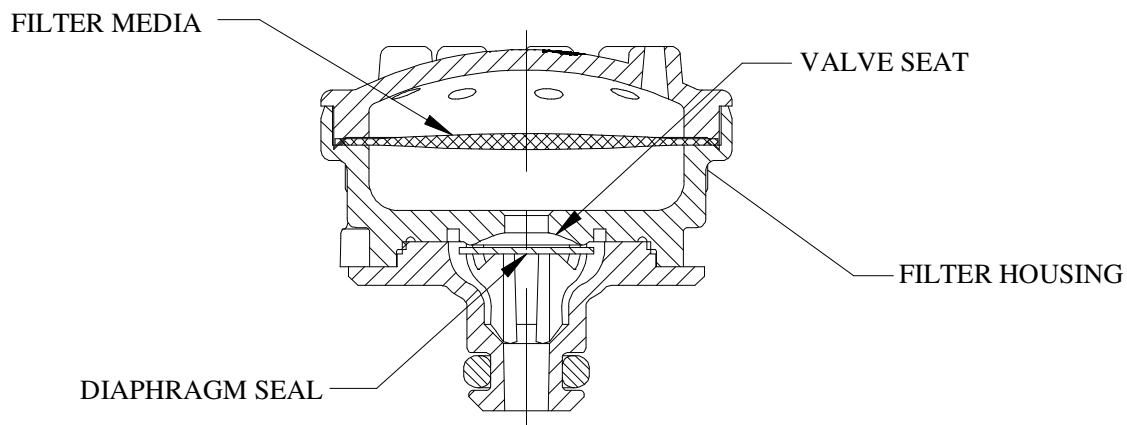
Release of New Air Filter for FreshGuard

In an OASIS bottle cooler the air filter carries out two primary functions:

- Prevents air-borne particles from entering the cooler reservoir
- In the case of a leaking bottle, stops the water from emptying onto the floor.

Current Filter: **033345-001 ASSY, FILTER CK VALVE**

Construction of the filter is shown in the diagram below. When the faucet is opened, air is drawn through the filter into the bottle. This air then pushes water from the bottle into the reservoir. In normal operation, the level of water will stabilise at the bottom of the FreshGuard blade.



In the case of a bottle leak, water flows from the bottle into the reservoir. This water attempts to force the air out of the reservoir – the only possible path is backwards through the air filter. Inside the air filter is a small diaphragm. When the air tries to flow backwards through the air filter (i.e. out of the reservoir), this diaphragm closes. Since the air can no longer escape, the water stops flowing from the bottle. The result is no water on the floor.

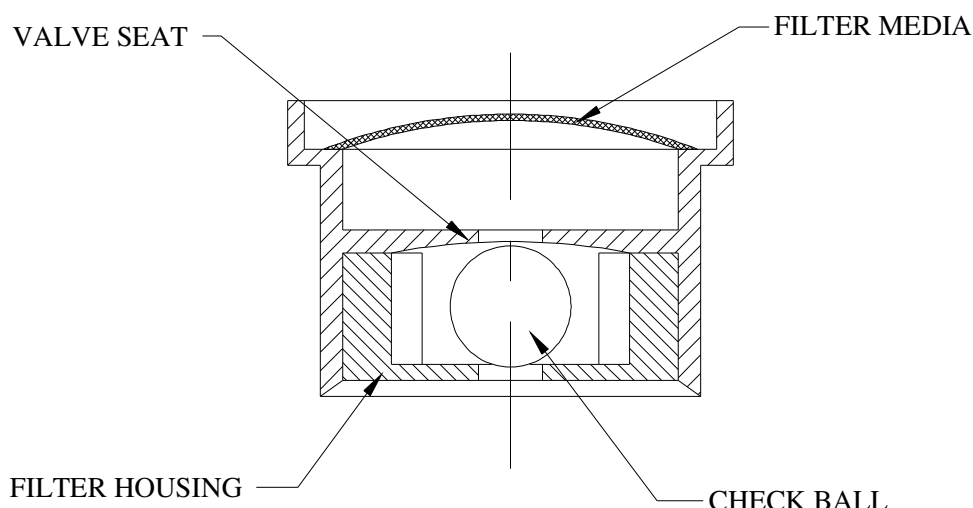
The fact that the reservoir is fully sealed can result in a problem. When an empty bottle is removed from the cooler, it is possible for the FreshGuard gasket to move slightly. When a new, heavy bottle is placed on the cooler, the gasket will move back to its original position. This acts like a pump, pressuring the air in the reservoir. This increase in air pressure can cause water to be pushed back up through the FreshGuard probe into the funnel. As more bottles are replaced, this small amount of water in the funnel can become unsightly as it increases in amount.

New Filter: **034556-001 AIR FILTER ASSY, COMPLETE**

Construction of the filter is shown in the diagram below. In normal operation, this air filter functions in exactly the same way as the 033345-001 filter.

Release of New Air Filter for FreshGuard

In the case of a bottle leak, the filter operates in a different way. As the water starts to flow from the bottle into the reservoir, the filter allows the air to pass backwards through the filter and escape to atmosphere. The water level inside the reservoir rises. As it reaches the bottom of the air filter, the water raises a small ball that is moulded inside the filter housing. This ball seals against a valve seat, preventing water from flowing out of the bottle.



The main advantage of this system is that it avoids the problem seen with the previous filter when small movements of the FreshGuard could result in water settling in the funnel. Because this system does not prevent air flowing out of the cooler, the movement of the gasket does not result in an increase in air pressure so at no time is water forced up the probe.

Part Numbers

034556-001 AIR FILTER ASSY, COMPLETE is made up of the following 3 parts:

034516-002	AIR FILTER COVER
034517-002	AIR FILTER SEAT
034555-001	AIR FILTER

Part number for FreshGuard has been changed to 033752-114

Performance of the New Air Filter

The filter media used is 3M Filtrete G-300 material. This filter media that is rated at over 99% retention for particle sizes of 1 micron (1µm) or greater.