Pubco

Maintenance
B4H-SF

Single Flush Valve
Hydraulic operation

GENERAL DESCRIPTION

The Pubco Model B4H-SF flush valve is designed to provide a full flush of 4.0 or 5.5 litres

The valve operates via a hydraulic button which passes water flow at pressure to the actuator on the valve. This actuator trips the main inner valve allowing a flush to occur.

FLUSH VOLUME

At a particular setting on the adjusting valve there will be a corresponding volume. Static pressure changes should not affect the volume of flush for any given position of the adjusting valve. What will vary is the rate and therefore time of flush depending on the opening of the stop valve.

The adjusting valve is set to the required volume when shipped.

ENSURING THE CORRECT FLUSH

The Pubco flush valve can be adjusted for flow rate and volume.

Toilet pans need to pass the correct volume of water at the correct flow rate to function properly. Today the Australian Standards use performance testing procedures to produce matching pans and cisterns or flushing valves which meet those performance tests.

Generally, though, pans require 1.5 litres per second to perform properly. For example this means a 5.5 litre full flush should be completed in 3.5 to 4 seconds.
The stop valve position determines flow rate and should be set to fully wet the pan surface but not allow any build up of water in the bowl. The stop valve needs to be set for each level in the building as the static pressure varies.

Having set the stop valve correctly, the adjusting valve then can be set to provide a 3.5 to 4 second flush time. This will give a volume of 5.5 litres. The adjusting valve only requires slight adjustment and in or clockwise direction increases flush volume.

VALVE ASSEMBLY

The hoses are coloured to ensure that the connections are correctly made.
The red tubing is pressurized at all times once the stop valve is opened.
The black tubing is only pressurized when the button is pressed.

It is very important that all tubing is fully pressed into the adapters and pulled back to check for soundness. There is a collet which can be held in to release the tubing. **Red tubing always connects to red adapters.**

The black tubing can be disconnected while the valve is pressurized to check for the correct operation of the button. No water should pass unless the button is pressed.

TROUBLE-SHOOTING

The Pubco valve itself has not changed. The internal parts are all identical to previous models.
What has changed is the way the valve is operated and tripped.
Always check that the hoses are correctly fitted and to the correct adapters. This also applies to the button.

Flush not correct.	Check that the flow rate is correctly set on the stop valve to just wet full pan area without build up of water and that the adjusting valve is set to give the correct time.(See above) Clockwise increases volume. Volume can also be measured but this is usually not convenient.
No Flush	Remove the black tube from the actuator and check for a leaking button. If a button leaks it will not allow the operating stem to return and the valve cannot operate. Check actuators for grit or sticking which prevents return. Determine static pressure and if it is at the minimum ie 3 to 4 meters the actuator may not be sealing internally and therefore not providing sufficient operating force. Contact Pubco.
Continuous Flush	Check for correct adjusting valve position. Fully wound down or blocked adjusting valve will lead to continuous flush Check for major contamination in the valve cylinder preventing closure. Check for contamination on the inner valve preventing the trip (auxiliary) valve from sealing.
Leaking into pan	Check for leaking button Check for slight contamination on the main internal seat.

MANUAL OPERATION

The valve can be operated manually to check for button or actuator problems.
Remove the actuators and dis-assemble one to use the operating stem manually. If the valve functions properly it is a button or actuator problem.
If the valve continues to leak or will not operate manually it is a valve problem.