

Technical Service Bulletin:

Resetting the Watervalue

Models: 830ES, 940ES-ESO, C950ES, C1050ES, 1210ES-ESC, T9800/T9900 SE(C)



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A qualified service technician is recommended to perform the work.

Problem

Tankless water heater that doesn't activate, and doesn't show an error code.

Possible Cause

The watervalue may be clogged or needs to be reset.

Overview

Sometimes a tankless water heater doesn't start up when water is turned on (above activation rate), and also doesn't give an error code. This can be due to the impeller in the watervalue being stuck or clogged, the water valve being closed, or even just a clogged inlet filter. Some of the models have an inlet filter accessible from outside the machine, which you can inspect for debris first. Other models have it directly in line with the watervalue, in which you will have to disconnect and remove the watervalue for access.

Procedure

1. Drain the machine down of any water on both the hot and cold sides.
2. Remove the inlet and outlet water clips and remove watervalue from the machine. After it is removed, disconnect all wiring to the watervalue. Inspect the screen for any blockage and clean if necessary.
3. Remove the 2 Phillips head screws that hold the watervalue engine to the watervalue body (Fig. 1).

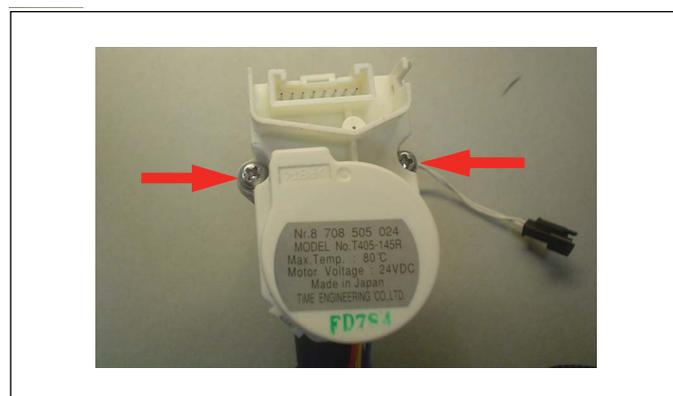


Figure 1

4. Remove the 2 Phillips head screws that hold the watervalue engine to the watervalue body (Fig. 1).
5. Separate the 2 the watervalue body and the watervalue engine.
6. On the valve side, locate the brass gear. Rotate the gear counter clockwise (towards the "0") until it stops (Fig. 2).



Figure 2

7. On the motor side, slowly rotate the gear clockwise to "0" (Fig. 3). There are gears inside this motor that cause resistance, do not try to move it fast or you will damage the gearing.

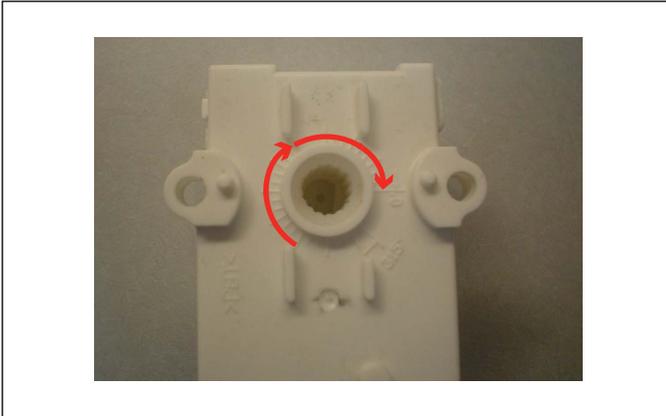


Figure 3

8. Once that is completed, make sure you can blow through the valve freely from the bottom where the cross diverter is (Fig. 4). When you forcefully blow through the valve, you should hear the impeller spinning. If not, use a small pick or similar device to manually move it. It should move freely with no resistance. Any resistance could be signs of buildup inside the valve. Flushing out the valve at this point would be your only way to clear that obstruction. The impeller is not removable on these valves. If it can't spin freely by flushing out the valve or manually rotating it, you may need to replace the valve.

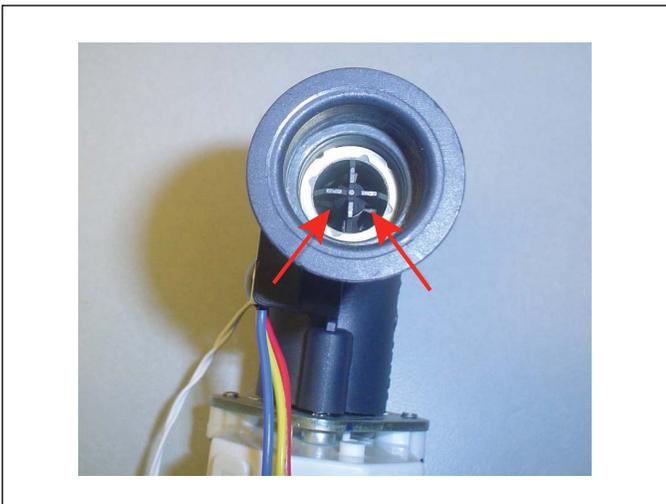


Figure 4

9. After performing the service, attach the watervalue engine to the watervalue body with the 2 phillips head screws as shown in Fig. 1.
10. Plug the wiring back in, and reinstall the clips on both the incoming and outgoing side of the valve.
11. Slowly turn on water supply to check for leaks, before powering up and returning the tankless unit to service



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