

Disassembling and Lubricating Your Joystick Steam/Hot Water Valves

In this writeup we will be looking at disassembling and lubricating your joystick steam and hot water valves. Depending on what you're looking to do with the valve, you may want to remove the whole piece from the machine, or you may just need to remove the front to do some relubrication. This write up is done on an ECM Synchronika, so there might be slight variances in getting through the housing to the valve, but the process should be the same to remove, clean, and lubricate the valve once you have isolated it.

Tools you will need:

17mm wrench

2.5mm Allen key

An adjustable wrench that goes up to 1 ¼ inch

Food-safe silicone lubricant

Removing the valve from your machine:

Remove the housing on your machine, to open up the ECM Synchronika using the x4 2.5mm Allen screws on the top of the machine, the side panels will then fall off.

After removing the x4 housing screws, the side panels should more or less just fall off of the machine.



Removing the Valve Body:

Next is removing the valve from the machine. Once you have removed the casing, look for the hardline at the back of the valve. It should have a 17 mm nut on it. After removing the 17 mm nut, there will be a secondary nut that should be removed too. Undoing this nut will allow you to remove the valve completely.



Opening Up The Valve:

Now that you have the valve removed, it's time to start breaking it down. Use your adjustable wrench to break the spots free as highlighted in the picture below. You may want to cover them or your wrench in electrical tape/microfiber to avoid causing damage.



Once you have opened the valve, you should have the same parts and pieces that are laid out in this picture. Here's where you want to start inspecting for build-up. You can scrub down or try to clean off any visible or built-up scale on the springs and valving itself. If you're experiencing a sticky handle, the internal valve pin may need to be lubricated. You can apply some food-safe silicone grease to the part in the picture right:



If this part is lacking lubrication, the valve can stick, or be slow to close - it could possibly even cause leaking if stuck open. You can spread the lubrication around the o-rings on the valve pin.

The piece in the picture below has a small o-ring in it as well, make sure to check this for any signs of wear and tear, cracking, brittleness:



If it has signs of wear, you may want to replace it, that o-ring being worn can result in leaking.

Once completed, reassemble your valve, and then reattach it to the machine.