

Negative Vibes

A recent customer indicated he had a vibration while his water pump was running. He could feel the vibration in the floor, and the noise was really annoying when the pump kicked in. If he grabbed the water lines where the pump is mounted, it quieted down some but not much. He was concerned he had a major problem and was going to have to tear his RV apart to check it. Is there a chance it could be something easier?

The typical RV comes equipped with a medium cost demand type water pump. These pumps were adequate for the RV water supply systems of a few years ago.

For various reasons, the water supply pipes have changed in the last few years. The popular pipe material is now “pex” type tubing. It is much “harder” than previous tubing and tends to ‘chatter’ or vibrates more with the pulses of the water pump and creates vibrations against the floor, the walls, and the cavities within the cabinet spaces.

There are several things that can be checked or added with minimum effort before tearing your RV apart.

If you haven’t operated your water system recently, make sure you have purged all the air from your system, this will cause the water to spit and sputter and make the pump noisy.

Here’s another easy thing to try; install a flexible braided hose (about 18" in length) to both the inlet and the outlet sides of the water pump. Allow enough length to include a loop in the hose so that the hose has room to move a bit to absorb the vibrations of the pump. Vibration problem should be resolved, it takes about 10 minutes.

Another thing to check would be to make sure you have enough water in your fresh water tank. Low fresh water can make the pump work harder and increase noise level. If you have a pump guard (a filter on the intake side of pump) make sure it is not plugged with plastic shavings, this can also make the pump work harder creating more noise.

You can also install an expansion (accumulator) tank that will help to absorb the shock of the pump.

Also check pump mounting plate, older pumps did not have much vibration material at pump base. You may want to add more rubber padding between pump and floor.

I would make sure that your pump is not loose, and the water lines are secured. If the noise is really annoying, you can wrap the pipes with some water line insulation.

Or your pump may have been overtightened and this would keep the rubber pads from doing their thing. Loosen the screws that secure your pump a few turns.

If you have an older RV or just looking to upgrade, there are two new pumps on the market that sell for approximately \$155 and give you more water flow and quieter operation than the typical demand pump.

Shurflo Smart Sensor Extreme Water Pump—The Smart Sensor precisely monitors your system’s water pressure and adjusts the motor’s speed, thus eliminating the need for a pressure switch. Micro-controller based variable speed pump silently delivers over 5.5 gallons per minute and pressure up to 65 psi.

Aquajet RS Variable Speed Water Pump—The Aquajet RV is dramatically quieter than pumps at similar performance levels. - Patented 5-valve design delivers up to twice the fresh water flow (5 gpm) and pressure (60 psi) of traditional RV water pumps. Exclusive “soft start” feature eliminates rapid cycling noises. The Aquajet RV is a digitally controlled pump that automatically adjusts motor speed to maintain pressure as multiple water fixtures are used. Eliminates irritating pressure drops and the need for bulky accumulator tanks.

There are many types of water pumps and various water lines used in RV’s today and years gone by. The suggestions listed may not help on all of them, but I believe are worth trying before tearing your RV apart.