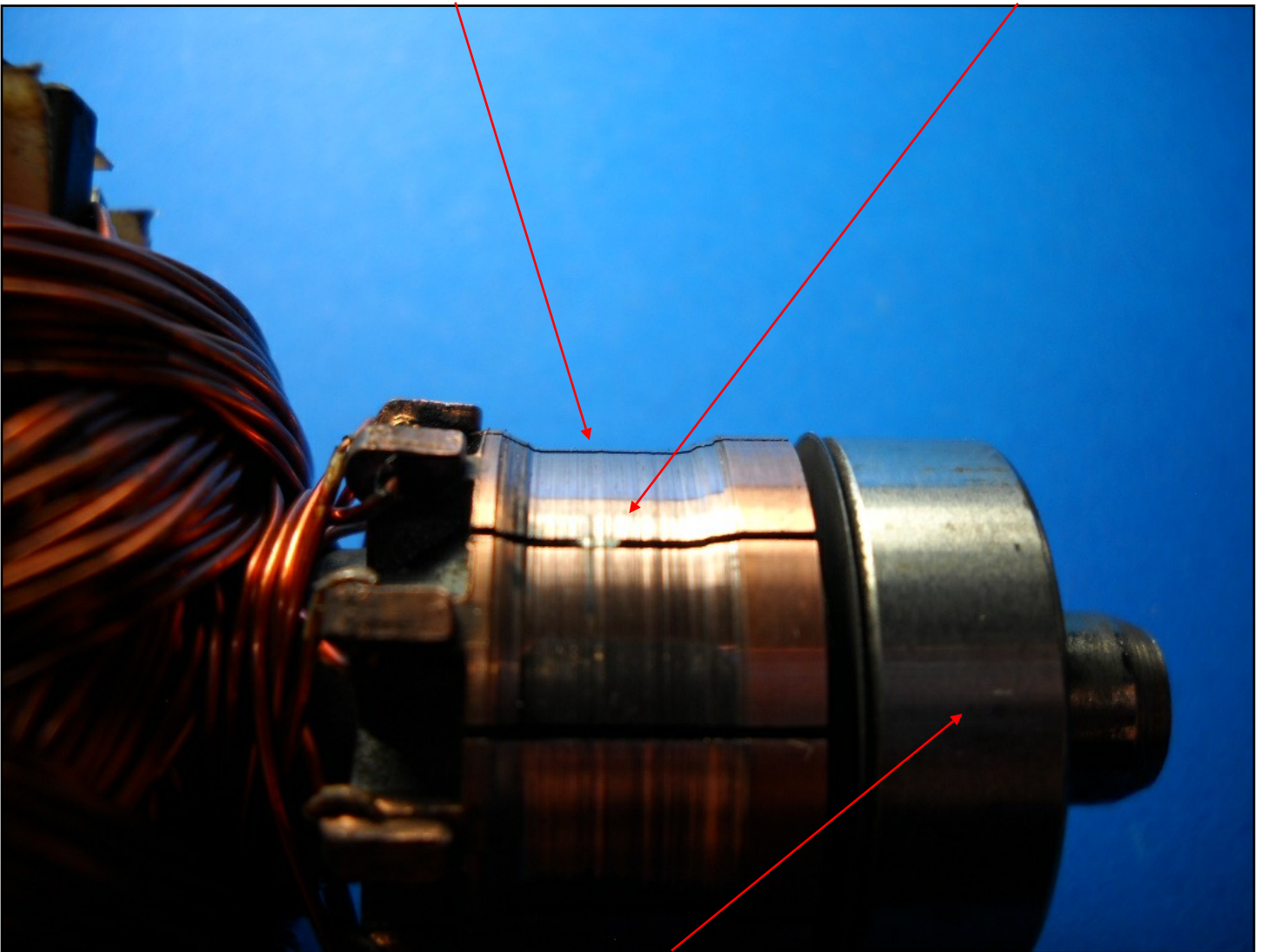


The Shurflo 9300 Solar Submersible Well Pump will generally run for about 5 years in your off grid water system before needing attention, depending on how hard you work it. After several motor brush replacements, you will notice the commutator beginning to wear.

This commutator is very worn out, indicating the motor needs to be replaced. The bars should be flat all the way across with little or no indenting or scoring. An excessively worn commutator will cause brushes to wear out prematurely. The minimum acceptable commutator diameter is .85 inches.

The commutator is a part of the armature assembly. When it has become too worn, you must replace the entire motor, because the armature isn't sold separately for the Shurflo 9300.

Also check the commutator for bridging. This is where metal gets in the gaps which could lead to shorting of the windings. If the commutator only shows little or no wear, it's worth cleaning these out with a sharp exacto knife blade.



Also check for excessive wear in the rear bearing. It should move freely without roughness. The Shurflo 9300 bearings can be damaged if water gets into the motor chamber. They are replaceable with a small bearing puller. Proper maintenance will help your submersible well pump continue to be a dependable part of your off grid water system.