

Hello

I am following up on the Airmax Eco Fountain you purchased. Airmax has sent out an update on the maintenance of the fountain.

Periodically the fountains need torn down and cleaned, down to inside and including the motor. A tedious process but doable if you have the tools.

Below are is the bulletin that was issued to me and details of what to do. On the website there is a maintenance video. Go to <https://www.whatpond.com/product/ecoseries-12-hp-fountain/> scroll down to the video tab, click the tab and continue scrolling to the maintenance video. This will help you to understand how to tear down the fountain. Then proceed to do the below update.

There are two Eco fountains, Gen 1 and Gen 2. The difference being Gen 1 has four bolts on the bottom screen intake. While the Gen 2 has a big nut to twist to remove the screen.

The update difference, Gen 1 you need to drill out the screen, Gen 2 the screen is removable, no need to drill.

ECOSERIES GEN 2

Bearing Holder Screen Removal Tech Tips

2

Airmax® EcoSeries™ Gen2 Fountains

Removing the Bearing Holder Screen for Improved Performance

Depending on the water quality of each pond, some customers may find that one *Airmax EcoSeries Fountain* requires an internal cleaning more frequently than others. The *EcoSeries* is an *internally* cooled motor, meaning that water passes through the motor to provide lubrication and cooling for the rotor and stator. As a result, fountains frequently take in fine particulate that is small enough to pass through the intake screen. Therefore, build up on the rotor as well as the stator wall decreases the tolerance between the two and eventually causes the motor to run hot, or in some cases, shut down altogether. Once the unit accumulates enough debris, it can lead to the clogging of the inlet port on the ceramic rotor shaft which is the primary source of incoming water flow. Recent testing by the Airmax Research and Development team revealed that the bearing holder screen can indeed trap fine debris inside the motor, increasing the likelihood of an unscheduled cleaning. By following the steps below, one can easily **remove** AND **discard** the bearing holder screen during cleaning to improve the unit's performance and, in most cases, increase the duration between cleanings.

Step 1: Remove the snap ring from the rotor shaft, then use your rotor driving rod and *Impeller Removal Stand* to separate the *rotor, impeller* and *bearing holder*.



Figure 1a

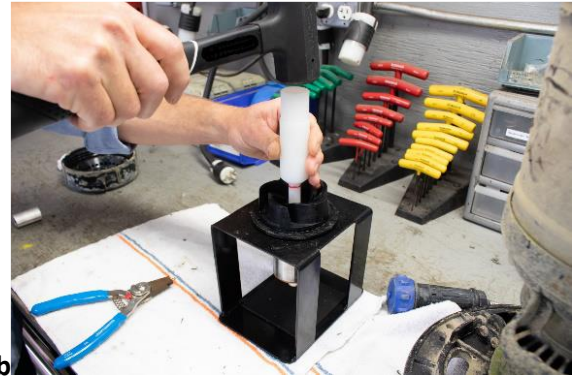


Figure 1b

Step 2: Use a small flat screwdriver to remove the *screen holder* and *screen*. **Discard** both items.



Figure 2a



Figure 2b

Step 3: Clean the rotor and stator thoroughly using *Airmax D-Scale™* and abrasive sponge or brush, making sure to clean out the *center hole* in the rotor shaft using a rigid wire or T-handle wrench.

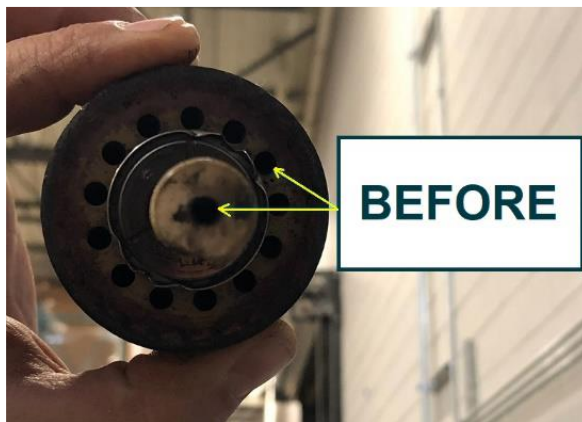


Figure 3a

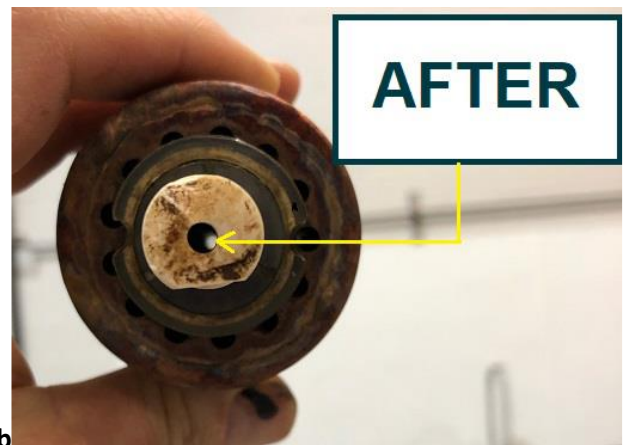


Figure 3b

Step 4: Reassemble the unit after all parts have been thoroughly rinsed with clean water.

For customers who own an *EcoSeries Gen 1 Fountain*, a similar procedure can be performed; however, since the bearing holder screen is not designed for removal, the screens must be drilled out using a $21/32''$ drill bit (*see below*).



These minor modifications have shown marked improvement in *EcoSeries* performance in ponds with significant fine debris and particulate.

None of the procedures outlined above will impact the unit's warranty.

****NOTE: Some ponds with extremely high iron and/or calcium content may not be suitable for EcoSeries units.***

Back to some explanation on my behalf as an owner of a Eco Series pond fountain. I've had mine for 3 seasons and have only cleaned the outside. Have had no problems with the fountain. Other local fountains locally I care for I do the tear down and clean the inside of the fountain. AS the note says above about iron and or calcium the other fountains have been rather dirty. Even the outside of the stainless and float have some pretty good growth.

Every pond is different, we have to and the water make up is different. The pond the fountain is in has some floating inorganics, like clay or a silica and the fountains outside is rather clean still blue. The other ponds are a little clearer but have pretty good growth on them and takes a bit more to get the outside clean. Inside the motor is not horrible but does take some cleaning to get he holes open and cleaned out.

The pump motor is designed so water travels thru the motor to cool it. If these holes get clogged the pump will get hot. Not to worry at first, but if the fountain shuts off and comes back on again that means it may not be getting the cooling it needs. The motor is protected with a thermal overload, so it become hot it will shut down until it cools and come back on again when It cools down.

If you are uncomfortable or unable doing the maintenance or doing the screen update I do the maintenance and have been trained by Airmax as well. Feel free to reply so we can work something out.