



# Repairing Focus ring on Sigma 70-300mm F4-5.6 DG Macro for Sony

Focus ring problem is a common known fault of this Sigma lens for Sony. That happens because metal gear moves plastic focus ring inside the lens and the focus infinity position is being detected when the camera can't move the ring any further.

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## INTRODUCTION

I have already sent my Sigma lens for the replacement of the focus ring before. So when the new ring broke after 1 more year of usage I decided not to waste money any more and to try to fix it by myself.



### TOOLS:

- [Phillips #0 Screwdriver](#) (1)
  - [Tweezers](#) (1)
  - [Soldering Iron or Soldering Satation](#) (1)
  - [Staples from Office stapler](#) (1)
  - [Flush Wire Cutter](#) (1)
  - [Flathead 3/32" or 2.5 mm Screwdriver](#) (1)
  - [Rotary Tool](#) (1)
  - [Super Glue](#) (1)
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## Step 1 — Repairing Focus ring on Sigma 70-300mm F4-5.6 DG Macro for Sony



- Put the lens on the table the way you can access the bottom screws.
- Unscrew the black screws near the contact plate and from the black inner ring (which stands between the optical lens and the top outer ring).

## Step 2



- Remove the inner ring.
- Unscrew the screw from the top outer ring.



### Step 3



- Remove the top outer ring.
- Remove the little shaft with the focus gear and the multiple rings that holds the shaft.

### Step 4



- Unscrew the screws that hold the top plastic ring (which is part of the lens body) and remove it.
- Unscrew the screws that hold microchip plate.
- Unscrew the screws that attach lens outer body part to the inner optical part.

## Step 5



- Now you should be extra aware and do the next operation very carefully!
- Remove the inner optical part from the outer body part of the lens.
- Try to memorize the way the parts were inserted one into another (when assembling the lens I have lost a lot of time figuring out how the optical part should be fitted into the outer body part).
- Put the optical part away very carefully without putting it upside down.
- DO NOT TRY TO DISASSAMBLE THE OPTICAL PART.

## Step 6



- Remove the zoom ring.

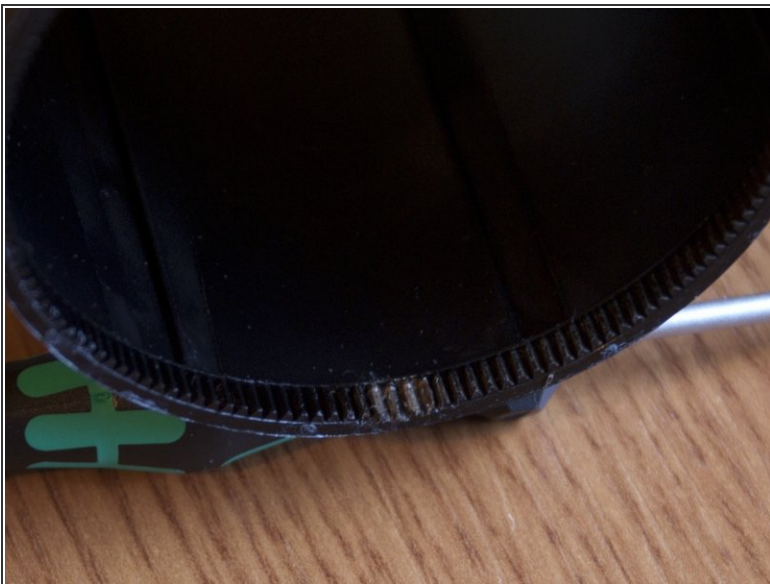


## Step 7



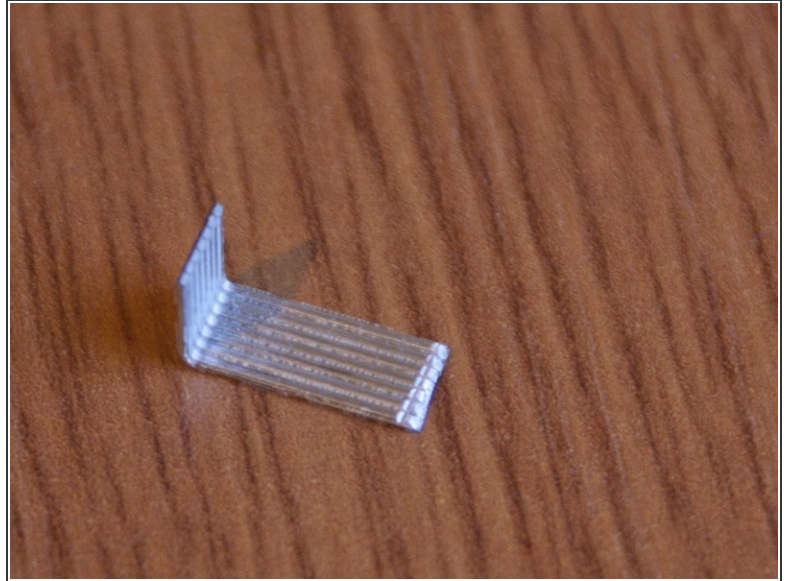
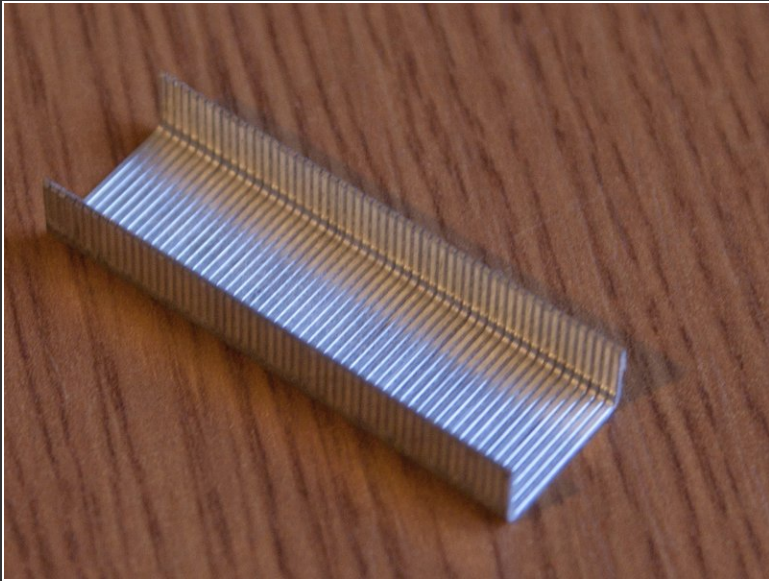
- Unscrew the screw which were hiding under the zoom ring (see right part of this picture).
- Remove the top part from the focusing ring (focusing ring is on the left part of this image).

## Step 8



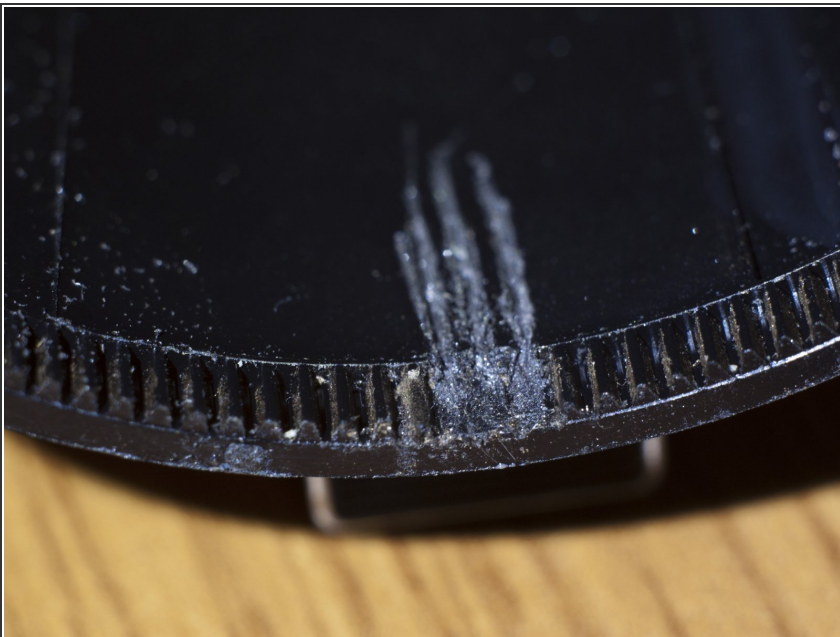
- Now you can clearly see the reason of the problem.
- If you are not sure you can accomplish the further repair steps you order a replacement focus ring and reassemble the lens in the reverse order.

## Step 9



- Take the staple block and detach some staples from it (I actually used 2 of them)
- Cut one staple leg away from the staples.

## Step 10



- Use a dremmel tool to remove the broken cog (I have removed 2 of them).
- Use a small flathead screwdriver to make 2 small grooves on the flat surface of a ring right behind the removed cogs have been placed.



## Step 11



- Use a soldering iron to solder the previously prepared staples into the focus ring.
- Put some super glue over the soldered staples.

To reassemble your device, follow these instructions in reverse order.