



Repairing Alarm Clock Clock Projector

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INTRODUCTION

After several years, the clock projector of my RRM320P was missing some segments.

Suspecting that issue could be related to some poor electrical contact I decided to try to repair it

TOOLS:

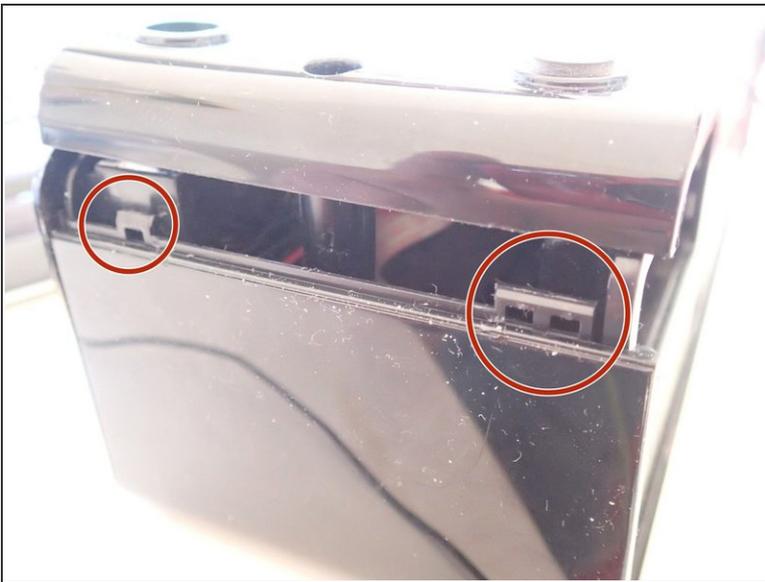
- [Essential Electronics Toolkit](#) (1)
-

Step 1 — The issue



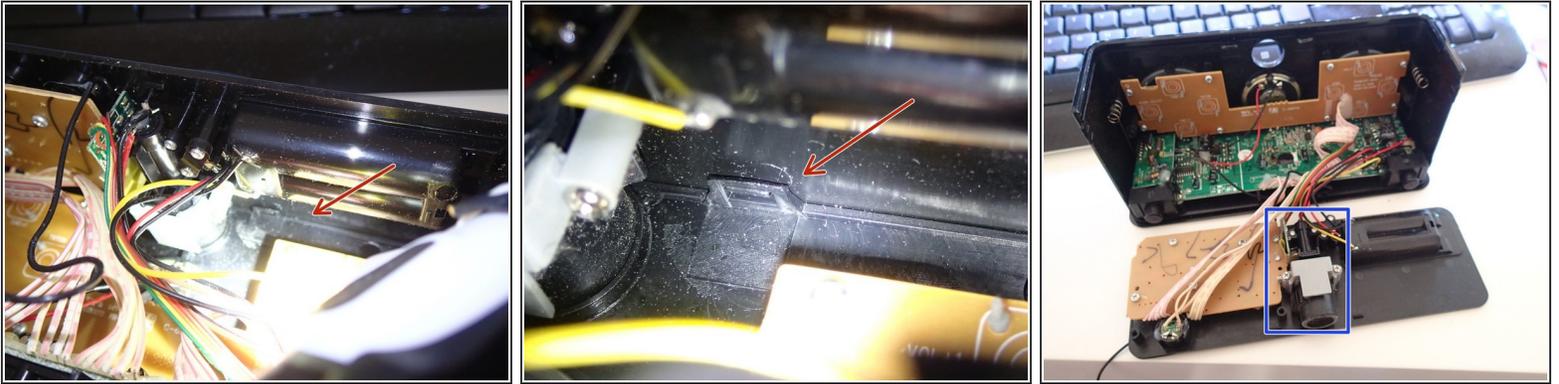
- The Problem: here I should read 12:47

Step 2



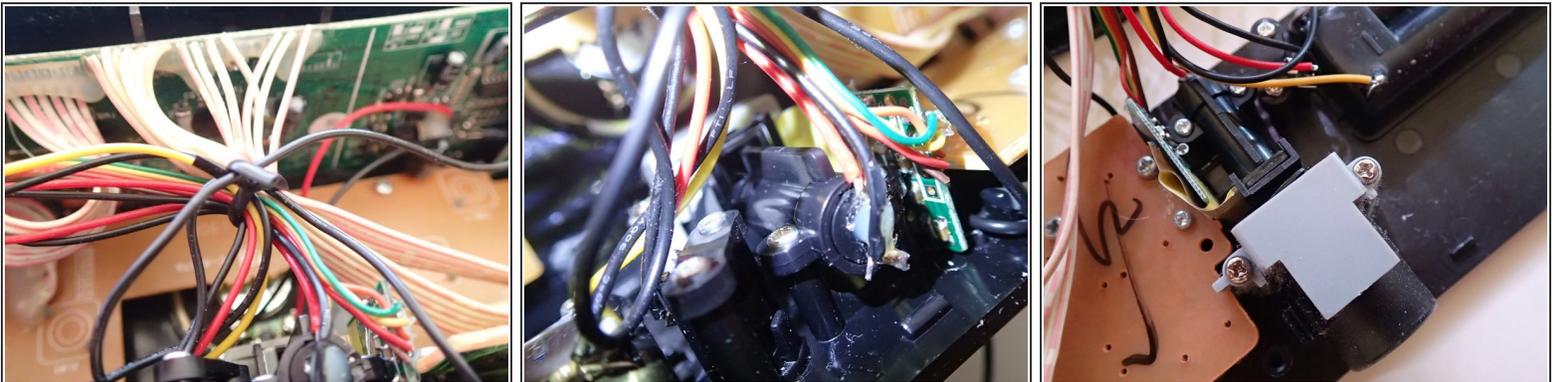
- After removing the 2 screws on the bottom, carefully open the bottom frame, see location of the plastic snaps

Step 3



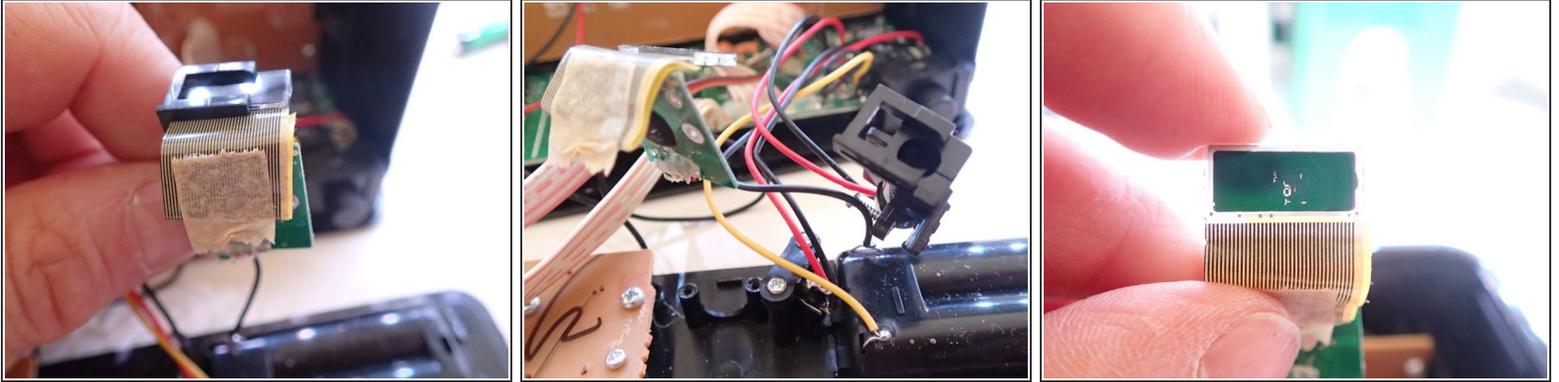
- Removes the back panel, taking care of the other plastic snaps
- The projector and its optics is shown in the blue square

Step 4 — The optics



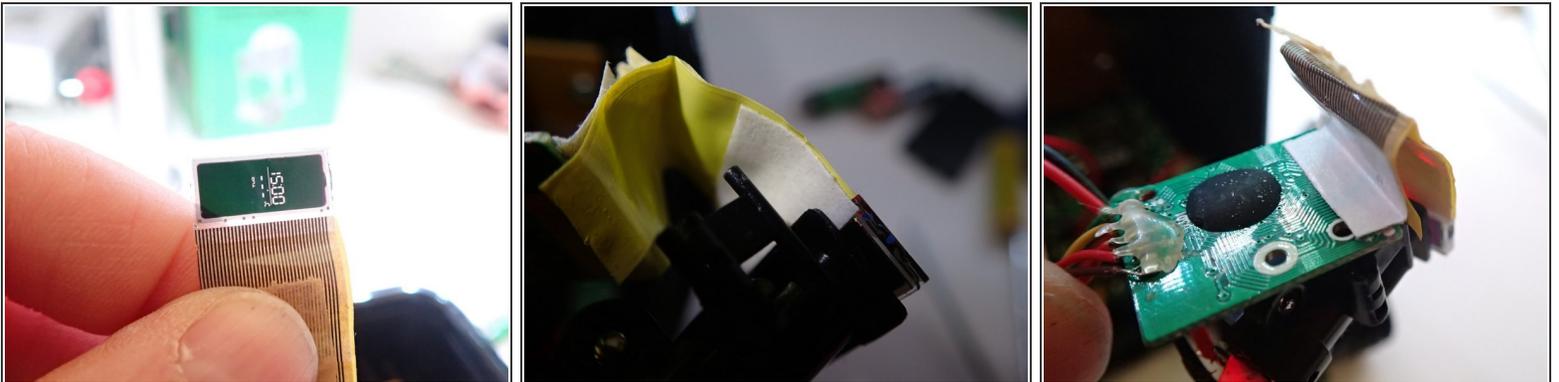
- cables are tied together with a simple ribbon, in general the inner construction seems very cheap
- The Projector is made of three parts:
 - A red LED
 - The display with its controller
 - the lens with focus mechanics
- All parts are kept by tiny screws that you have to remove
- **Take extra caution when handling the display, the flat cable is very weak and can be damaged by improper handling**

Step 5



- Carefully remove display from its supporting frame
- The issue should be related to flat cable connecting display to controller

Step 6



- Verify that moving the flat the display returns to work
- put a stiffener on controller side and close to the display
- if everything is working, reassemble the clock by doing the steps in reverse order

Step 7



- Problem solved.

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