



Alpine MRV-M500 Electrolytic Capacitor Replacement

Replace bulged capacitors on the MRV-M500 circuit board.

Written By: Eric Gaulke



INTRODUCTION

Electrolytic capacitors are electronic components used to store energy. If too much current runs through a capacitor, it may become bulged and need to be replaced. To replace a capacitor on the MRV-M500 you will need previous experience soldering electronics. To learn how to solder, see this [guide](#).



TOOLS:

- [Phillips 3 Screwdriver](#) (1)
 - [Soldering Iron](#) (1)
 - [Desoldering Braid](#) (1)
 - [Solder](#) (1)
-

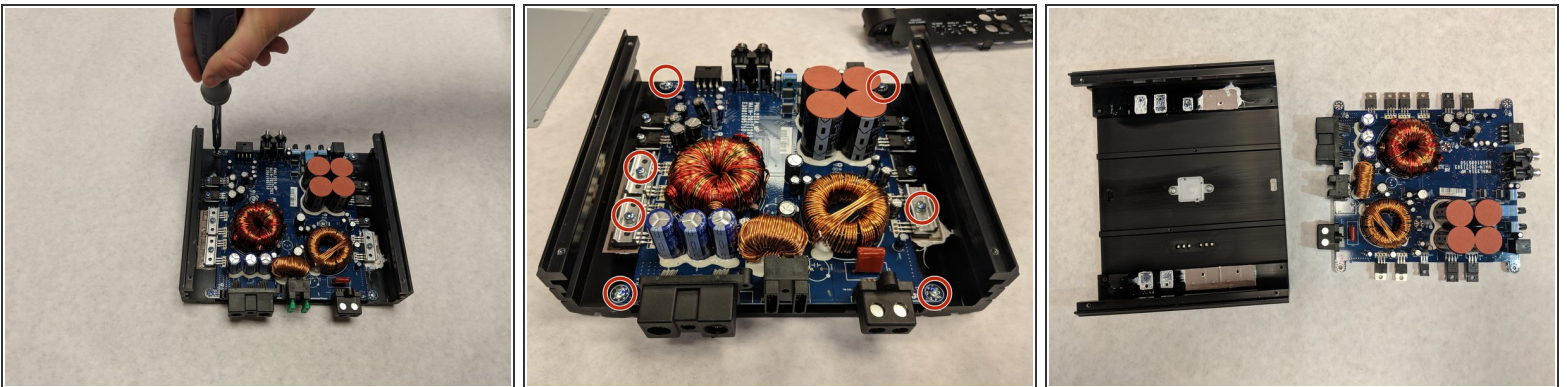
Step 1 — Electrolytic Capacitor



- Remove all the Phillips 10.0mm and 7.0mm screws on the outside of the case.

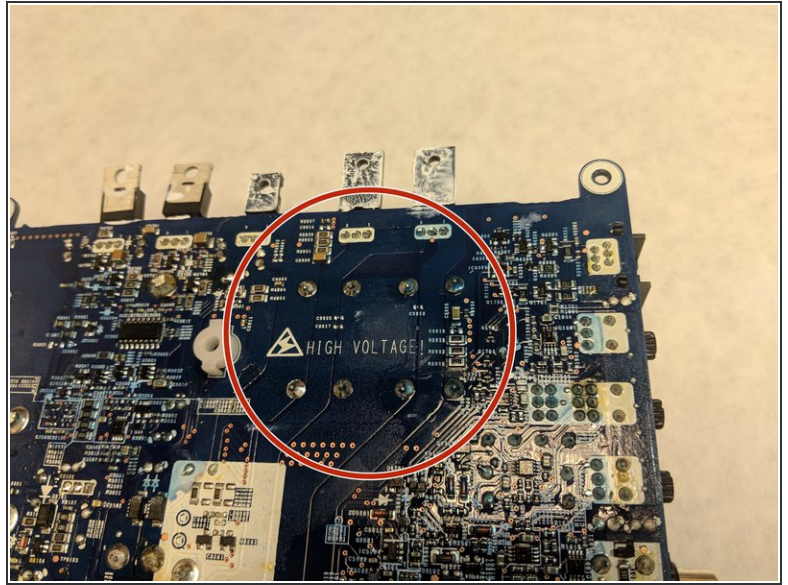
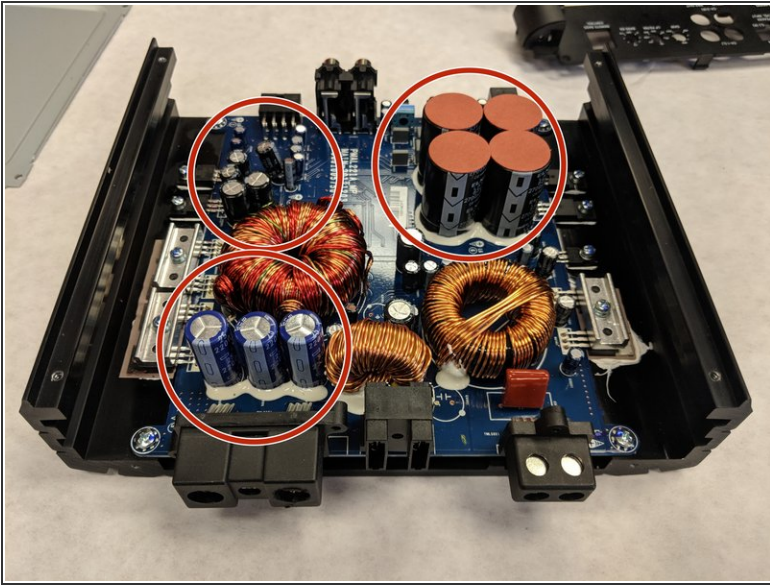
⚠ Make sure the device has been powered off and disconnected from the power source for at least a day before touching the electronic components.

Step 2



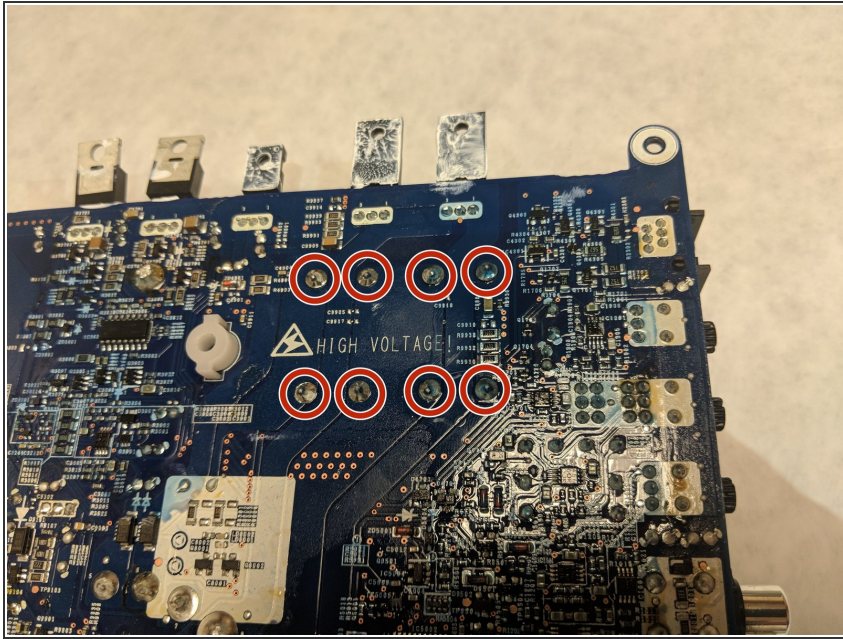
- Remove all Phillips 7.5mm, 12.5mm, and 10.5mm screws holding the circuit board to the case.
- Remove the circuit board from the case.

Step 3



- Find the faulty capacitor.
- Flip the board over and locate the corresponding pins.
- ⓘ If the faulty capacitor is one of the smaller ones, it may be too difficult to replace and [replacing the circuit board](#) itself may be easier.
- ☑ Make sure that the capacitance and voltage rating of the new capacitor match that of the original.

Step 4



- Desolder the pins to remove the capacitor.
- ☑ Solder the new capacitor into its place.
- ⓘ Make sure the polarity of the new capacitor matches the previous polarity.

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