

Spectrotek Services

21 February 2014

Engineering Change Order - PA3-1

Units affected: Serial Numbers 3000 through 3064

There is a minor layout error in the circuit board of the PA3 amplifier. This error causes capacitor C7 to be disconnected from circuit ground, resulting in a distorted drive waveform to the STW20NK50Z.

This error affects both assembled and kit versions of the PA3 amplifier that are numbered between serial numbers 3000 and 3064.

It is recommended that this ECO be applied to units within that serial number range.

Assembled amplifiers will have this ECO applied before shipment. For kit versions of the PA3 amplifier, these instructions will be included with the amplifier kit. It is suggested that you apply this ECO after assembly of your PA3 kit is complete but before the amplifier is attached to the heat sink.

Failure to apply this ECO to affected amplifiers will not seriously impact operation or functionality of the amplifier, nor will the warranty be affected in any way. Customer installation of this ECO will not void or change the warranty.

Amplifiers may be returned to Spectrotek Services at the Customer's expense will have the ECO installed. The amplifier will be fully tested, and then returned to the Customer. There will be no charge to the Customer for installation of the ECO or the return shipment back to the Customer.

Please refer to the following pictures and instructions for applying this ECO to your PA3 amplifier.

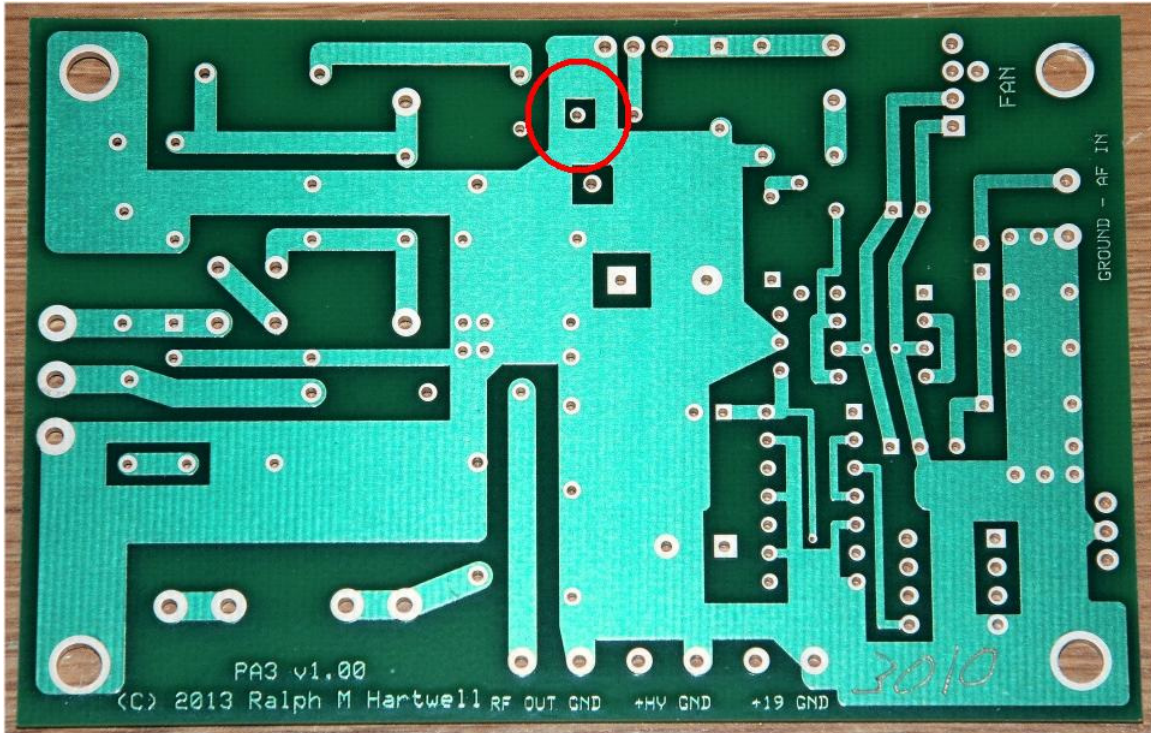


Photo 1

The position of the red circle near the top of the picture shows the location of the ground connection of capacitor C7.

Note that the solder pad is isolated from the larger ground plane of the circuit board. This is incorrect. The solder pad should be embedded into the ground plane of the circuit board.

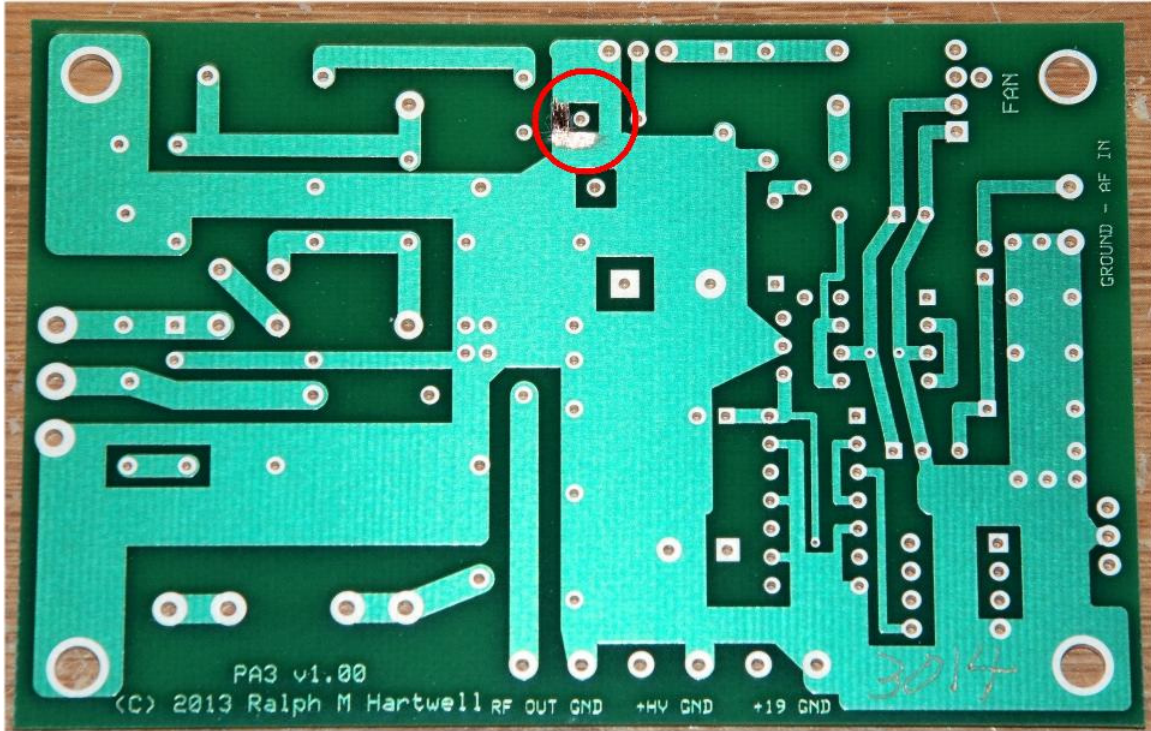


Photo 2

To perform the ECO, the first step is to use a sharp knife or razor blade and carefully remove the solder mask from the ground plane surrounding the C7 solder pad.

The solder mask must be removed from at least two sides of the solder pad as seen in this photo. You may remove the solder mask from all four sides of the solder pad if you wish.

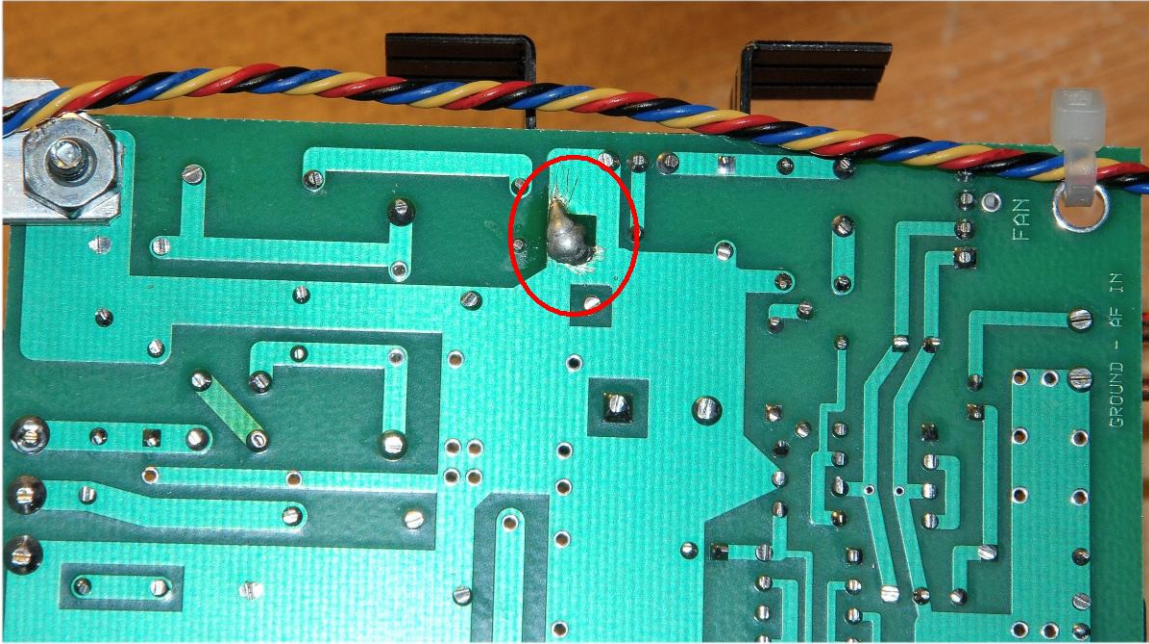


Photo 3

After removing the solder mask, use rosin core solder to connect the C7 solder pad and the lead of capacitor C7 to the ground plane of the circuit board.

Neatness of the solder joint does not matter, so long as the solder pad and the lead of capacitor C7 are electrically connected to the ground plane. If desired, the residual solder flux may be removed from the circuit board using isopropyl alcohol.

DO NOT USE ACID CORE SOLDER – Acid core solder will cause severe circuit board damage which is NOT covered under warranty.

End of PA3 ECO-1