# Spectrotek Services

### 21 July 2015

## Engineering Change Order – SPA4-2

Units affected: PA3, all; SPA4 - All units, v1.00 and v1.01.

#### It is mandatory that this ECO be applied.

This ECO will improve the operation of the heat sink cooling fan of the SPA4 amplifier.

#### PROBLEM

Under some operating conditions, RF interference from the IRF730 may be picked up by the power wires going to the heat sink cooling fan. This may cause the cooling fan to change speed and run too slowly when some modulation frequencies are used. The slow fan speed can result in failure of the STW20NK50Z due to overheating.

It appears that only those fans with part number 1A02C3W00 are affected. This ECO may be applied to fans with other part numbers, but it is not mandatory.

#### SOLUTION

1) Remove the two plastic zip ties that hold the power wires connecting the fan to the SPA4 circuit board connector.

2) Cut and remove both the YELLOW and BLUE wires. Cut the wires at the white plastic plug. Then cut the wires as close to the fan housing as possible.

3) Replace the fan power plug on the circuit board connector.

4) It is not necessary to replace the plastic zip ties for the amplifier to function correctly, but they may be replaced for neatness.