MAC 2000 SMPS UPGRADE PROCEDURE

This document describes how to install the new SMPS module, P/N 50300510, "SMPS Upgrade for MAC2000", in the MAC 2000 series from S/N 4017886001.

This module can be directly inserted instead of the "old" SMPS, P/N 62011510, "PCB 250W PSU, SW mode, ASMB".

The new SMPS module consists of two PCBs: P/N 06150002, "SMPS, 175 W, 32 V", which has a 32 V DC output, and P/N 62011514, "PCB, MAC DC-DC PSU", that converts 32V to 5,12 and 32V DC output to the main PCB.

Remove Old Supply

1 Open the base of the MAC 2000 on the PCB side. Loosen the Allen screws, which hold the metal side with the main PCB, and flip it down.

2 Identify the SMPS as shown on the picture, and remove the 5 Hex nuts, which hold the SMPS (marked with a yellow circle).



Fig. 1 Remove 5 hex nuts

3 Remove the Allen screw on the old SMPS bracket to remove it.



Fig. 2 Remove screw from bracket

Install New Supply

1 The new SMPS module is mounted with two self tap screws onto a U-shaped bracket. With the small PCB (DC-DC PCB) pointing up, remove the screw to the right, which holds the module onto the bracket.

2 Flip up the new SMPS module to get access to the middle hole.

3 Use the Allen screw from the old SMPS bracket to mount the new U-shaped bracket onto the pan frame as shown.



Fig. 3 Fasten bracket to chassis

4 Flip down the new SMPS module, and replace the screw to the right that you removed in step 1.



Fig. 4 Fasten module to bracket

Connect New Supply

1 Connect the blue and brown main power wire to the DC-DC PCB as shown in the picture. Blue is to be mounted on PL104 or PL105 or PL106 and brown is to be mounted on PL107, PL108 and PL109. GND (not used) is PL110 + PL111.



Fig. 5 Connect DC-DC PCB

2 Connect the plug to the main PCB, and check that all other wires are properly connected to the main PCB. Flip up the PCB side and reassemble the base.