

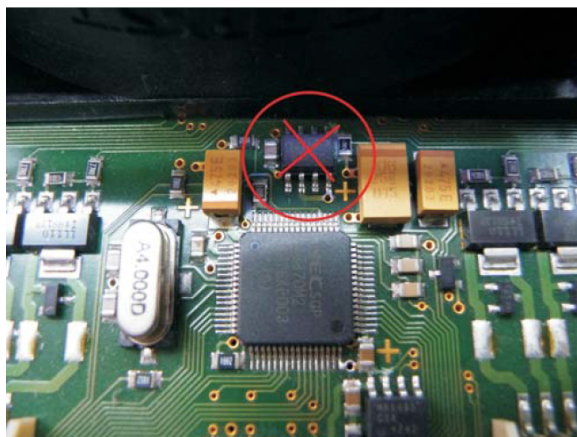
MAC 301 Reset modification

On some early MAC 301s, the LED, zoom and fans on the units could shut down for no reason. Our investigations suggest that this is due to slight corrosion on the connectors which connect the power supply to the LED driver board and the P/T processor board. On these boards, there is a reset IC which triggers at a relatively high level (approx. 4.6 V). If there is a bad connection to the power supply and this voltage is sensed by the reset IC, it will trigger and send reset commands to the CPU.

The CPUs on these boards also contain their own internal reset functions which trigger at a much lower level (approx. 3.3 V). This gives reduced sensitivity to noise compared to the external reset ICs.

If you experience the unexpected shutdowns described above, the solution is to simply remove the external reset ICs, using the following instructions as a guide:

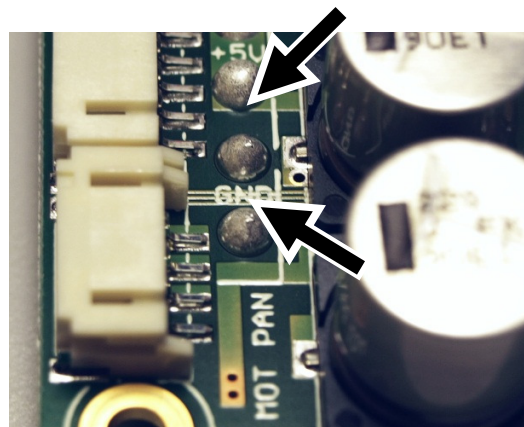
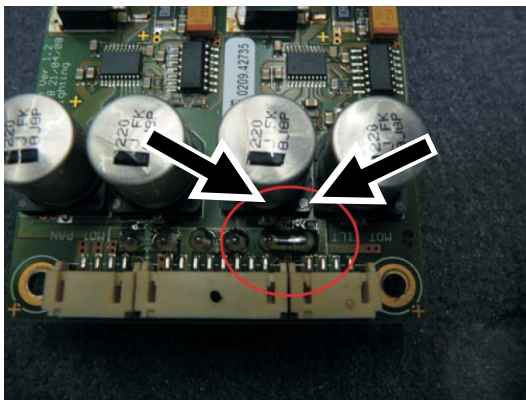
1. Follow the safety precautions in the MAC 301 user manual.
2. Remove the rear head cover and yoke covers.
3. Remove the reset IC ADM 705 from the head PCB JBL0106.



4. Remove the pan/tilt driver PCB. On the PCB JBL0104 you will find the pan/tilt processor PCB JBL0098. Remove the reset IC ADM 705 from PCB JBL0098.



5. Solder a short wire that bridges the soldered GND pins (arrowed) on the pan/tilt driver PCB JBL0104 in the yoke arm.



6. Reinstall all components. The external reset ICs are now removed and bypassed, and unexpected shutdowns should be eliminated.