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**Ref:** 174/MKT/Q/58

**SUBJECT** **BQA – Halogen Lamp Power  
Supply failure - Switching  
regulator HSV4-50F**



**We would like to inform you about a new change on the BQA instrument.**

**Symptom**

Halogen Lamp does not light.

**Cause**

The zener diodes ZD1 and ZD2 on the switching regulator HSV4-50F (003B0561500), which are utilized to stabilize input voltage, become deteriorate due to the following reasons. In the worst case, the fuse blows when abnormal high current flows due to the zener diodes deterioration.

- The zener diodes deteriorate due to incoming rush current at power on.
- The variation of the voltage characteristics of the zener diodes is from 298V to 329.6V. When a diode has characteristic at lower end, it tends to increase current running through the diode increasing its temperature. This high temperature deteriorate the diode.

- The zener diode radiates its heat to circuit board through the leads but as the lead is formed to protect circuit board from heat, the zener diode had to bear extra heat.

### **Permanent Remedy**

Replace the Switching regulator HSV4-50F:

Biokit code	Description	Manufacturer code
3410-1067	Switching regulator HSV4-50F	003B0561500

*This new switching regulator will be included on BQA instruments from serial number 5802-0158.*

### **Procedure**

Contact Biokit, S.A. to receive this new part.

**We extremely recommend reading carefully the service manual before proceeding.**

**Please, do not hesitate to contact us if you need further details.**