

Date 21/01/11

BULLETIN # 231

## **W60 & W61 WIREFEEDER**

### POWER LED NOT LIT - FAILURE OF 5 V POWER SUPPLY

We have had instances where diode D1, on the PWA008 wirefeed pcb used on W60 wirefeeder, or PWA009 wirefeed pcb used on W61 wirefeeder, may fail short circuit. This causes the 5 volt power supply on the wirefeed pcb to fail. The power indicator led on the front of the wirefeeder is not lit, and there is no wirefeed, gas flow or weld current when the trigger is activated.

Diode D1 has been changed from a 60 volt, 1 amp device to a 150 volt, 2 amp device and this has been very effective in preventing D1 failures. Where D1 has failed in the field, replacement with the upgraded D1 is generally all that is required to repair the pcb.

W61 wirefeeders after serial number W610C0510029001 (May 2010 production) have the upgraded D1 fitted to the wirefeed pcb.

D1 is a surface mount device located as in the picture on the following page. It is located in close proximity to component C4. Consequently it requires personnel with considerable skill in surface mount repair, and with access to specialized equipment to replace D1 reliably.

The upgraded D1 is a Vishay ES2D ultrafast diode. This component is available from WIA technical Service coordinator, also available from Farnell (element 14) as part number 954-9269.

If in circuit measurement reveals that D1 is short circuit and replacement is to be undertaken, it is recommended to:

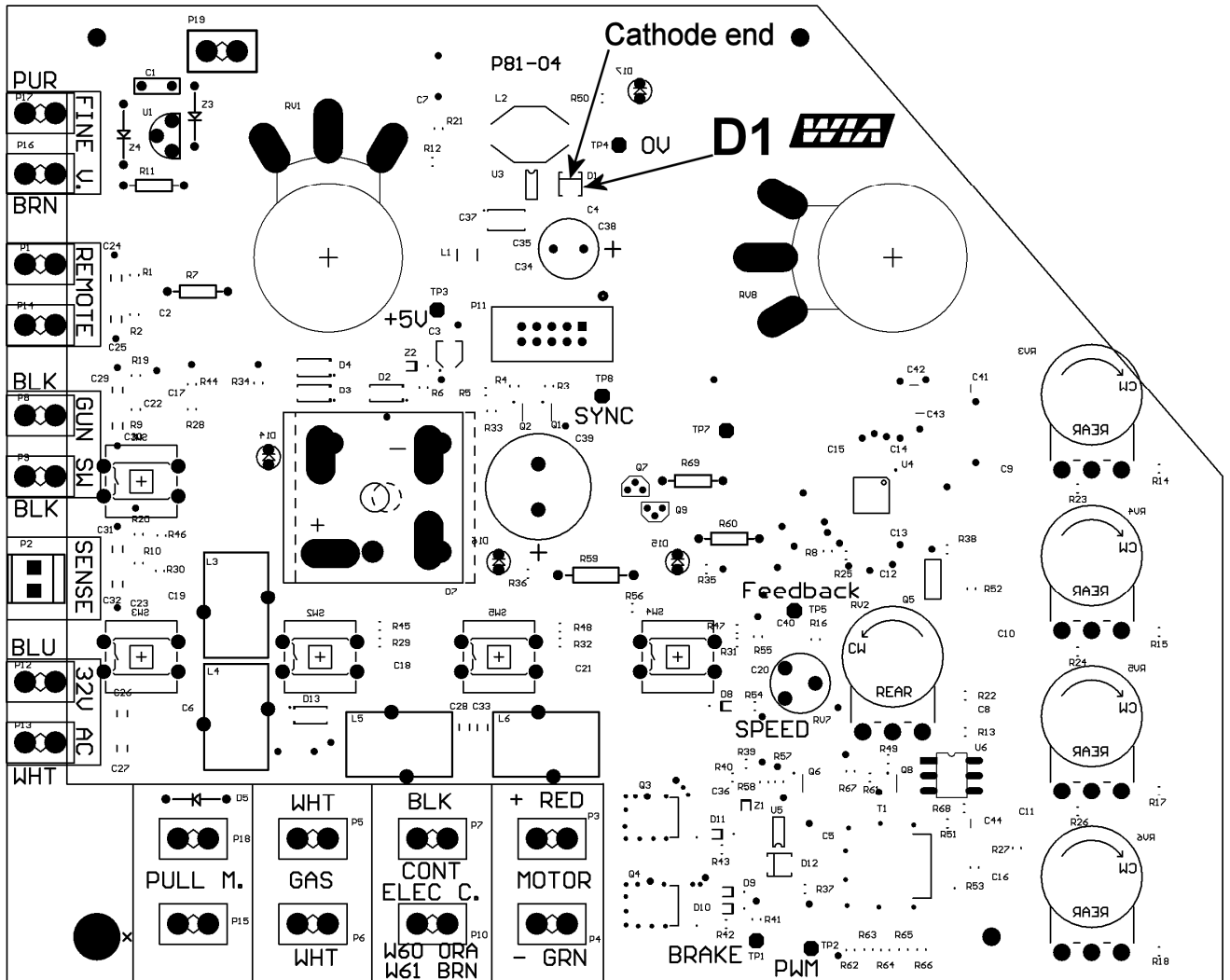
1. De-solder D1, being careful to only use enough heat to remove.
2. Test that the measurement between the pads where D1 sits is not a short circuit. (if any other component that is in parallel with D1 is shorted, then the pcb is unlikely to be economically repairable.)
3. Locate the cathode of replacement D1. This is shown by a line on the cathode end of the device, or use the diode test on a DMM.
4. Solder D1 into position (cathode to correct end as per diagram), ensuring a reliable bond to both pads, but without enough heat to damage the pads.
5. Install the wirefeed pcb into the wirefeeder and test that all functions work correctly.

If a service agent is not confident that a pcb repair will be 100% effective, please contact WIA Technical Service for a replacement wirefeed pcb.

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