

11 Sept 2007

BULLETIN #208

W19

INTERMITTENT GAS VALVE OPERATION

The gas valve on a W19 wirefeeder may intermittently fail to open after a period of use. This is because the voltage provided to the gas valve from the W19-10 or W19-11 wirefeed pcb is higher (from 35 to 40 volts) than specified. Because of this high voltage, the gas valve heats up and the connections in the coil may open, allowing the valve to stay shut during welding. The connection may temporarily come good again once the coil has cooled down, giving intermittent operation.

The wirefeed pcb has been modified so that the gas valve is supplied by a more suitable voltage (from 26 to 29 volts). This change has been implemented in the factory from wirefeeders starting with serial number W193A0906009002.

Although the W19-10 wirefeed pcb has been in use since the W19 was introduced in 2003, this problem has only been noticed recently. The supplier and specification for the gas valve (part number CP101-0/18) hasn't changed, but the recent failures suggest that there has been some small change in the gas valve which has made it more susceptible to failure at the higher voltage.

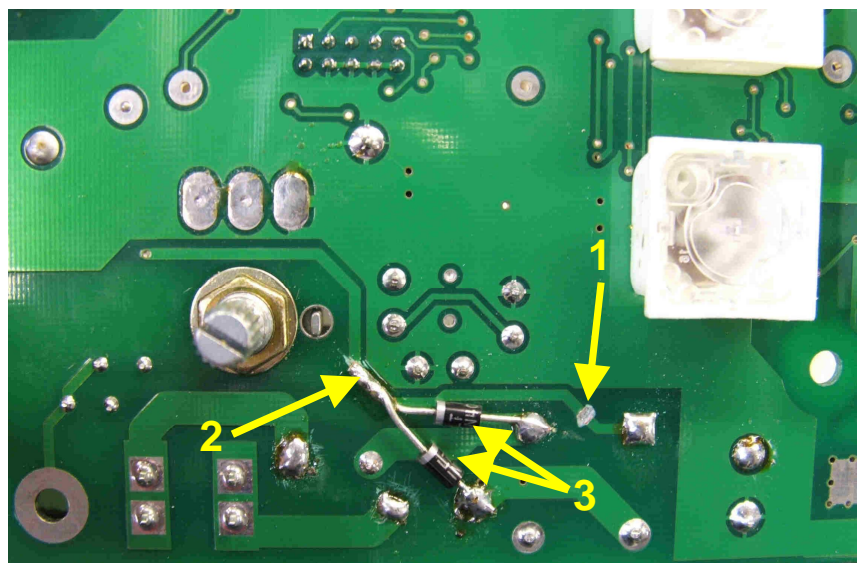
There are 2 types of wirefeed pcb used on W19 wirefeeder. The W19-10 was used from the start of W19 production up until recently. None of these have been modified. In August 2006 we began using the new W19-11 pcb. Only a very few of these would have been used in production before the modification described below.

Action Required

If a problem with the gas valve is found in the field, the wirefeed pcb should be modified **and** the gas valve replaced so that the same problem will not happen again. If a service agent does not have the facilities to modify the pcb, contact WIA to arrange an alternative.

Modifying W19-11 Wirefeed PCB: (for W19-10, see next page)

1. Cut track on solder side of pcb as shown.
2. Carefully prepare track for soldering – scrape just enough to remove the varnish from on top of the track without damaging the track itself.
3. Solder two diodes (1N4004 or 1N4007) in place with cathodes together as shown.

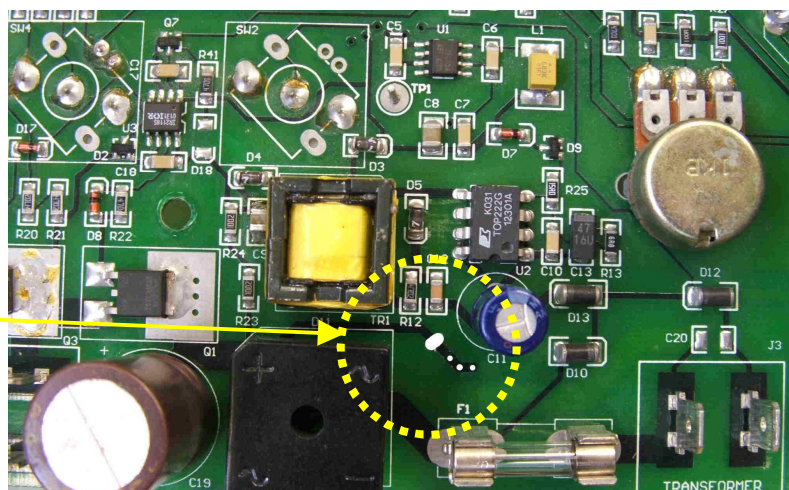


QUALITY WELDING PRODUCTS, SYSTEMS AND SERVICES

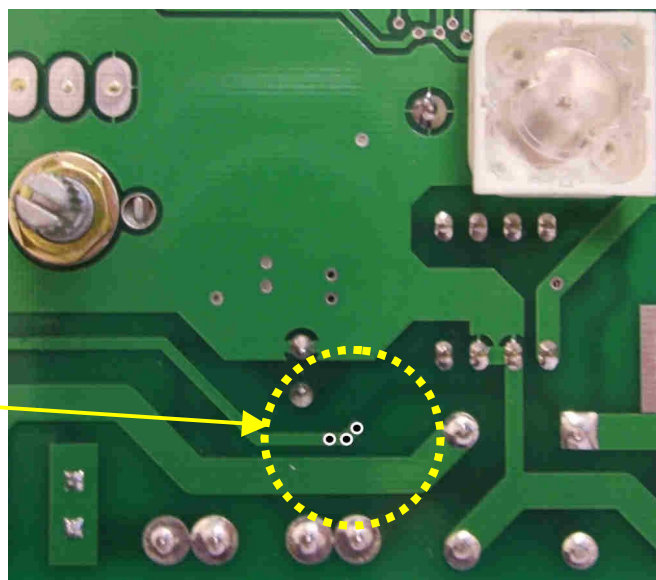
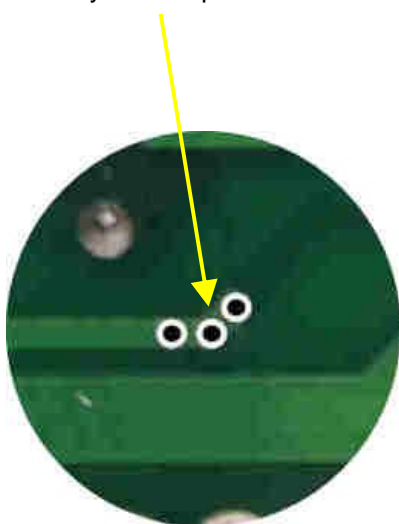
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Modifying W19-10 Wirefeed PCB:

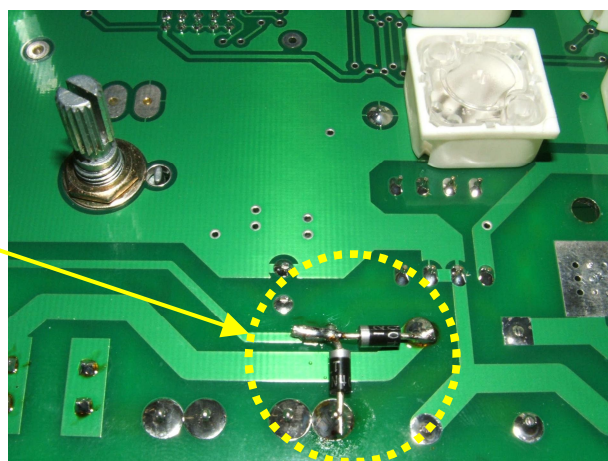
1. Cut a track on the component side of the pcb at the position indicated.



2. Carefully remove the varnish from the track at the position shown ready for components to be soldered on.



3. Solder 2 diodes (1N4004 or 1N4007) into position with cathodes together as shown.



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