



Service Bulletin



Date 31/01/2020

BULLETIN # 260

WELDMATIC 200I/250I

TEST OF CAPACITORS UNDER FAILURE CONDITIONS

CAUTION: The following information is intended for use by qualified service personnel. When the unit is energised LETHAL VOLTAGES are present on the electrical and electronic components. It is not intended that persons without suitable training and knowledge attempt to perform service tasks on the components of welding equipment.

There have been some reported fault condition of no weld output or no wirefeed, Occasionally, this may be accompanied by one or more failure LED being illuminated on the display.

The cause has been attributed to failures of timing capacitors E301, E302, E303, E304 .

The problem appears to be a batch problem with capacitors. Not all machines are effected.

If a check of connections does not solve the problem, and IGBTs are OK then perform the following test on capacitors on the main control boards (PWA019 and PWA040).

Testing of the capacitors (refer to Figure 1);

Voltage from GND to top of E302 = 14.8V

Voltage from GND to top of E303 = 11.6V

The voltage is to be measured with the machine turned on but not triggered.

Sharp probes are required to cut through the varnish on the PCB.

If the voltage measured differs by more than 10% from the specified value, the capacitors will require replacement.

If any of the listed capacitors E301, E302, E303, E304 are found to be faulty, it is recommended that all four are replaced.

WIA can supply Capacitors.

Alternatively Capacitors can be ordered directly from suppliers Element 14;

Order code 2218912

Manufacturer part number GRM32ER71E226ME15L

Type 22 μ F, 25Volts ceramic capacitor.

A leaded capacitor can also be substituted, the lead can be bent and soldered to the pad. Either a ceramic, electrolytic, or tantalum, 22 μ F minimum 25V will be suitable.

The information provided in this sheet is accurate and reliable, however no warranty of accuracy or reliability is given and no responsibility arising in any other ways by errors or omissions is accepted.



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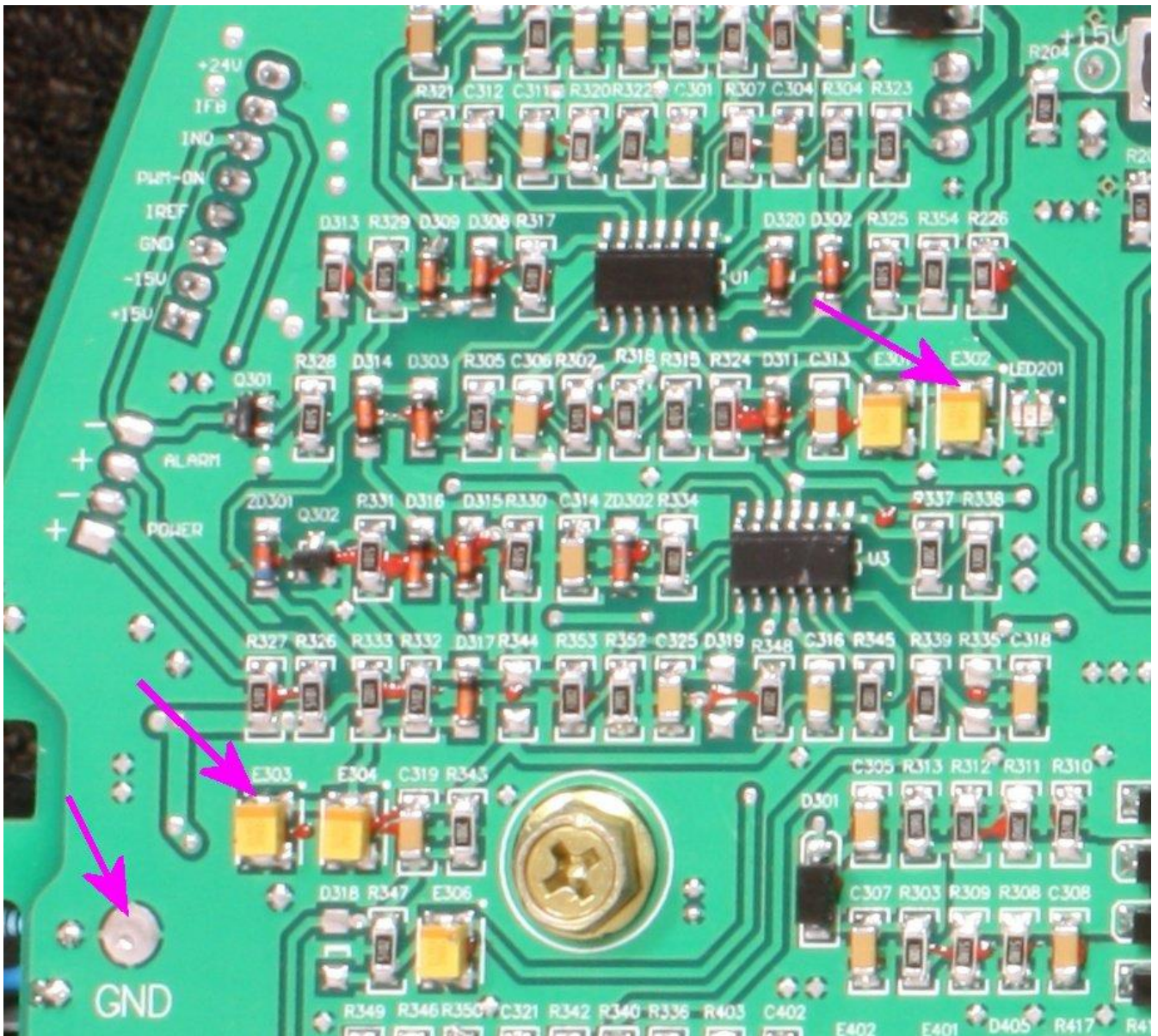


Figure 1 - Capacitors and Test Probe Positions

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