



Service Bulletin



Date 04/03/2019

BULLETIN # 258B

WELDMATIC 350I/500I

REMOVAL OF SHUNT, UPDATED MAIN CONTROL PCB PWA036

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.

The current shunt has been removed from CP139 and CP140, Weldmatic 350i and 500i. The existing hall device which is used to measure current in stick and TIG mode is now used to measure current in MIG mode as well.

The Main Control PCB, part number PWA036, has been updated so that information from the hall device is now presented to the current measurement circuit in MIG mode as well as stick and TIG mode.

If this updated pcb is fitted to an older version machine with shunt, the current measurement circuit will ignore any signal values from the shunt and operate correctly on signals from the hall device.

It is best to leave the shunt in place, however it is strongly recommended that the wiring from the shunt is **not** connected to the Main Control pcb. This connection is normally made at CN402 (immediately to the right of the daughter board when observing from the front of the machine). To ensure that it is not connected, the plug may be cable tied back out of position or removed and wires insulated.

The only problem occurs when an older version Main Control pcb is fitted to a newer machine without shunt. In this case there would be no valid signal representing current value in MIG mode, resulting in maximum voltage and current in MIG mode. Stick and TIG will operate correctly.

The part number for the Main Control PCB remains the same, PWA036.

If necessary, the updated version can be identified by careful examination.

The original PWA036 has zero ohm resistor R431 present and R132 is absent.

The modified PWA036 has zero ohm resistor R132 present and 431 is absent

The modified pcb has resistor at R14 on the daughter pcb changed from 8.2k to 15k.

Affected serial number:

Model CP139, Weldmatic 350i, C1390A0918001 and later.

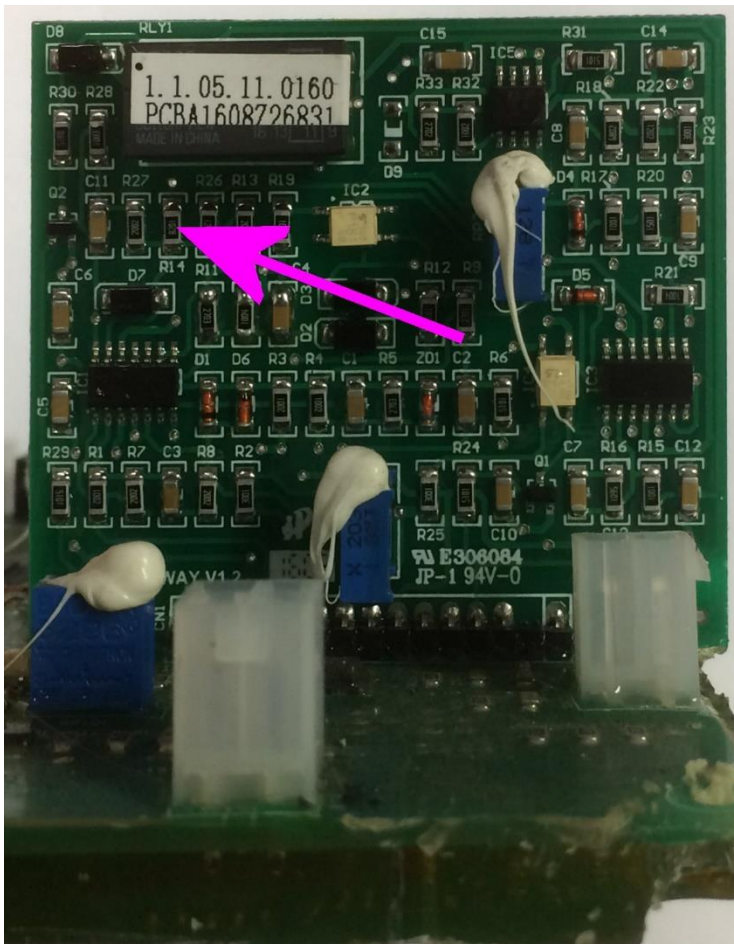
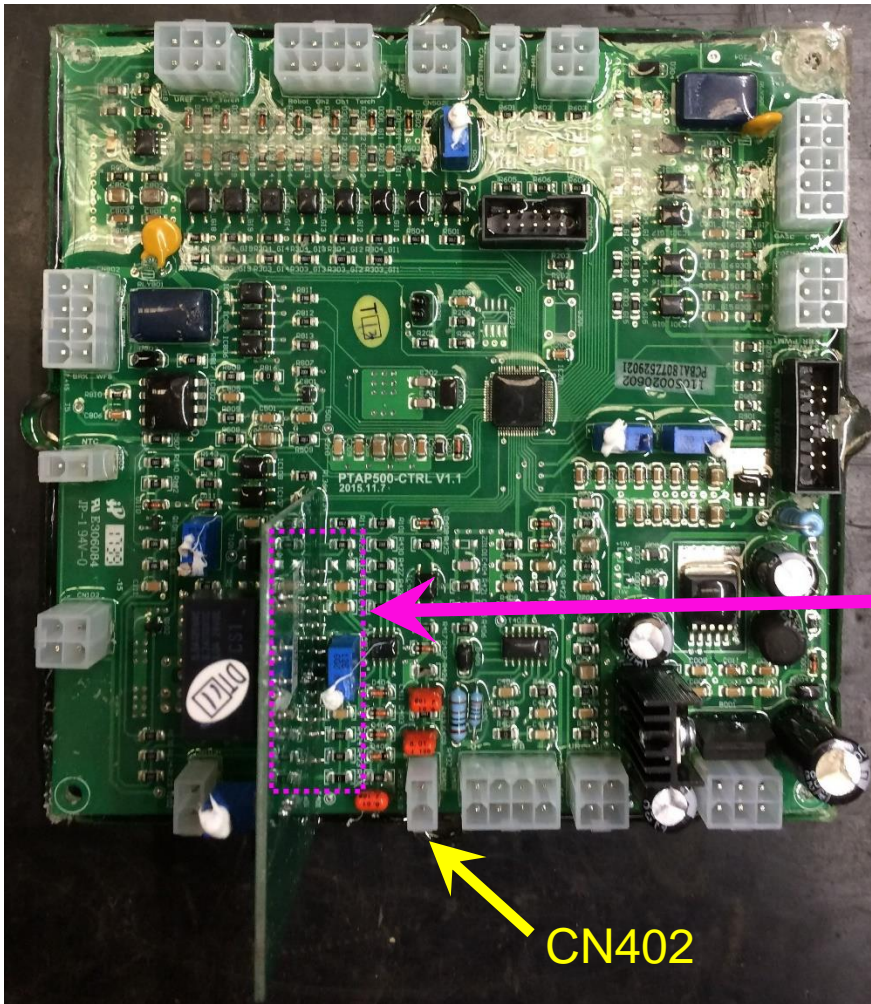
Model CP140, Weldmatic 500i, C1400A0918001 and later.

Cont overleaf.

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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The photos above show the original style PWA036 which has resistor R431 present and R132 absent.

The photo to left shows location of R14 on the daughter pcb.

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