

Date: 09 Sept 2004

BULLETIN # 182-B

CP38 SYNCRO-PULSE CDT

MODIFICATION TO CP38-16 WIRE GAS CONTROL BOARD FOR W37

This service bulletin concerns the **CP38-16** wirefeeder circuit board (as used in CDT's manufactured before June 2002).

We have recently become aware that when this revision board is used in conjunction with a **W37** type wirefeeder (incorporating the Miller 2RD) the circuit does not provide sufficiently accurate control of the motor speed. The motor runs slower than its target speed at low to mid speed settings. The error reduces as the speed setting is increased.

This results in two main symptoms;

- Long arc length at mid to low Current settings.
 - Operators can largely correct for this by setting their Arc Length control to the negative.
 - Alternatively, others have compensated by calibrating the motor to a higher than recommended max. speed (118rpm is correct for the Miller 2RD in a CDT)
- Creep speed is very slow, and the motor torque during creep is low. Operators can correct for this by selecting a higher on-screen Creep speed setting.

The modifications below correct this problem at its source, and will make the board suitable for use with both Yaskawa (used in W35 wirefeeder) and Miller drives.

As a reminder, Yaskawa type drives should be calibrated to 126 rpm, Miller drives should be calibrated to 118 rpm.

Modifications for CP38-16 (all variants, Issue A to F)

1. Remove diode D18 entirely, no longer required
2. Remove capacitor C7, replace with 0.1uf 100v polyester or MKT type

PTO for diagrams

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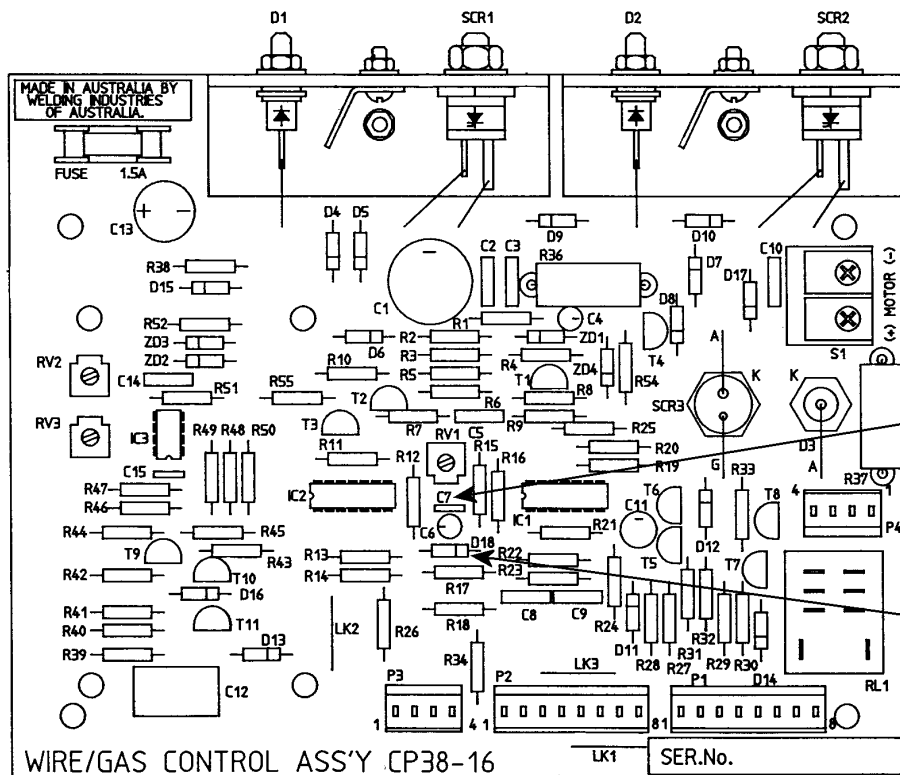


Fig 1 CP38-16 (early version) pcb

C7, remove & replace with 0.1uF, 100v polyester or MKT

D18 (possibly mislabelled as D1) Remove completely

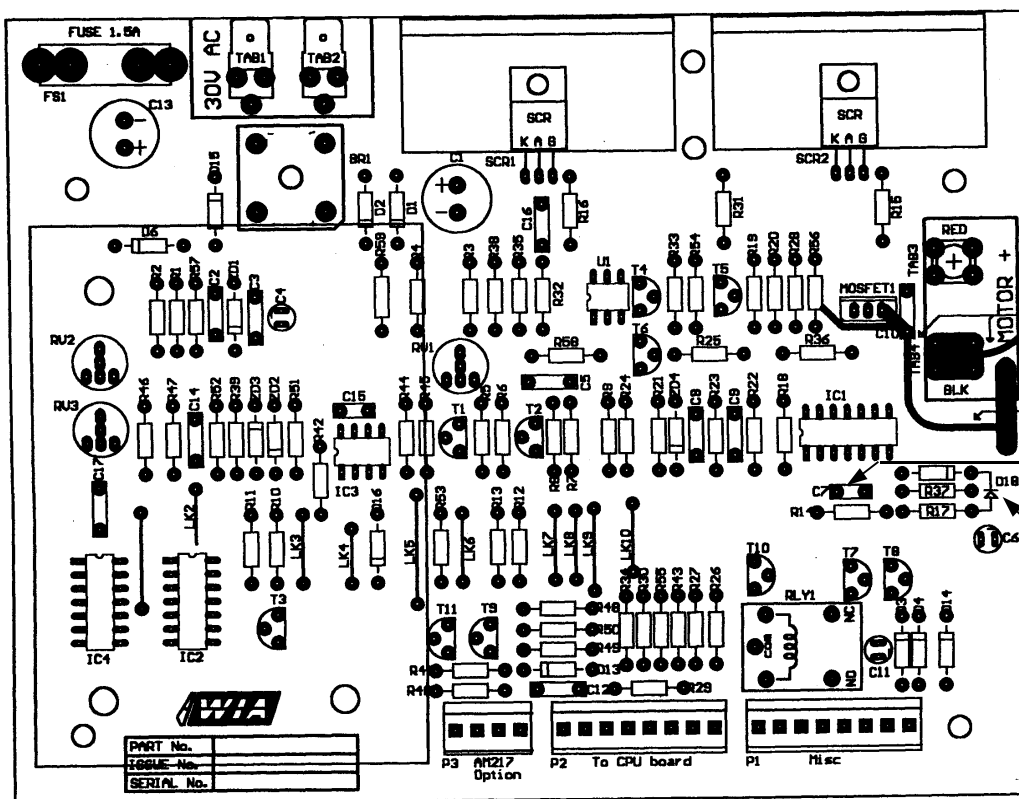


Fig 2 CP38-16 (later version) pcb

C7, remove & replace with 0.1uF, 100v polyester or MKT

D18, remove completely