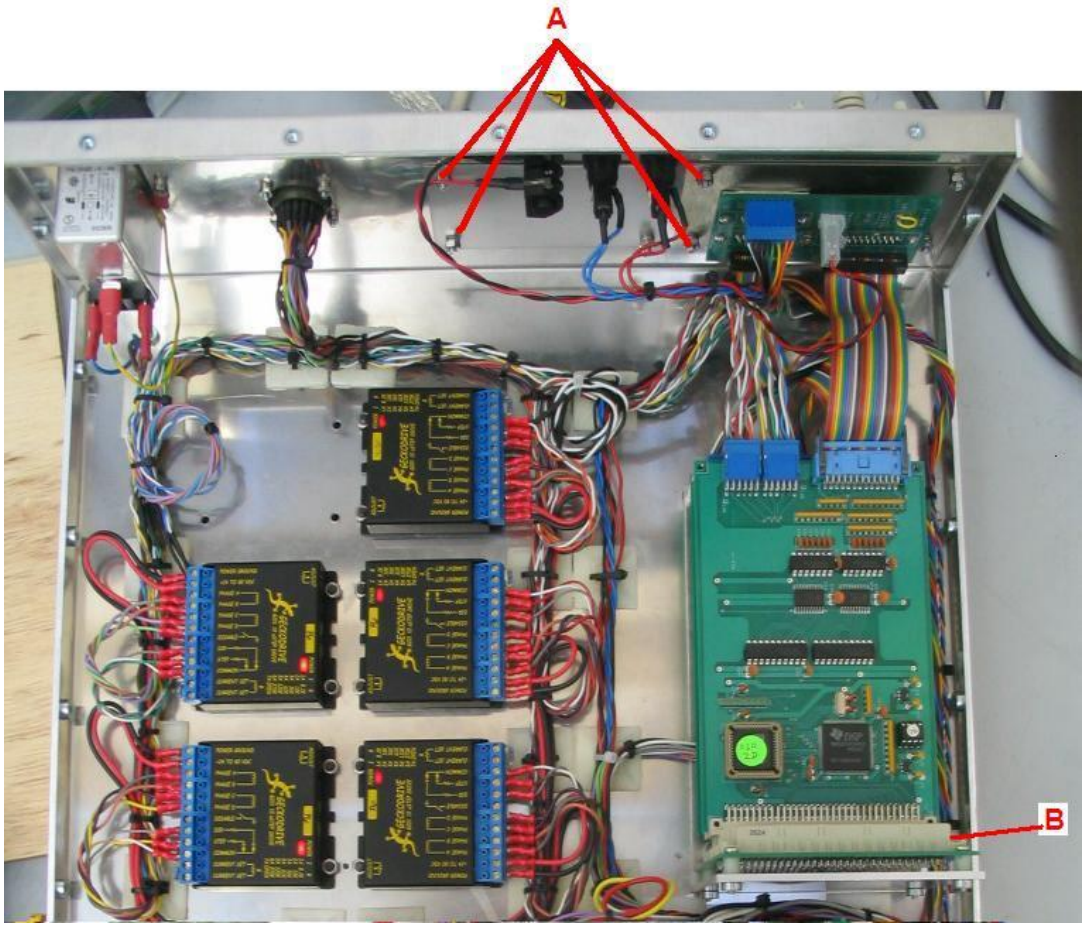
Instructions for fitting and using the multi-function I/O card Mk2 (11-48A)

With power off and the power lead disconnected please remove the cover. There are a lot of screws because the spacing is necessary to meet FCC and EC EMC (electro-magnetic interference) regulations.

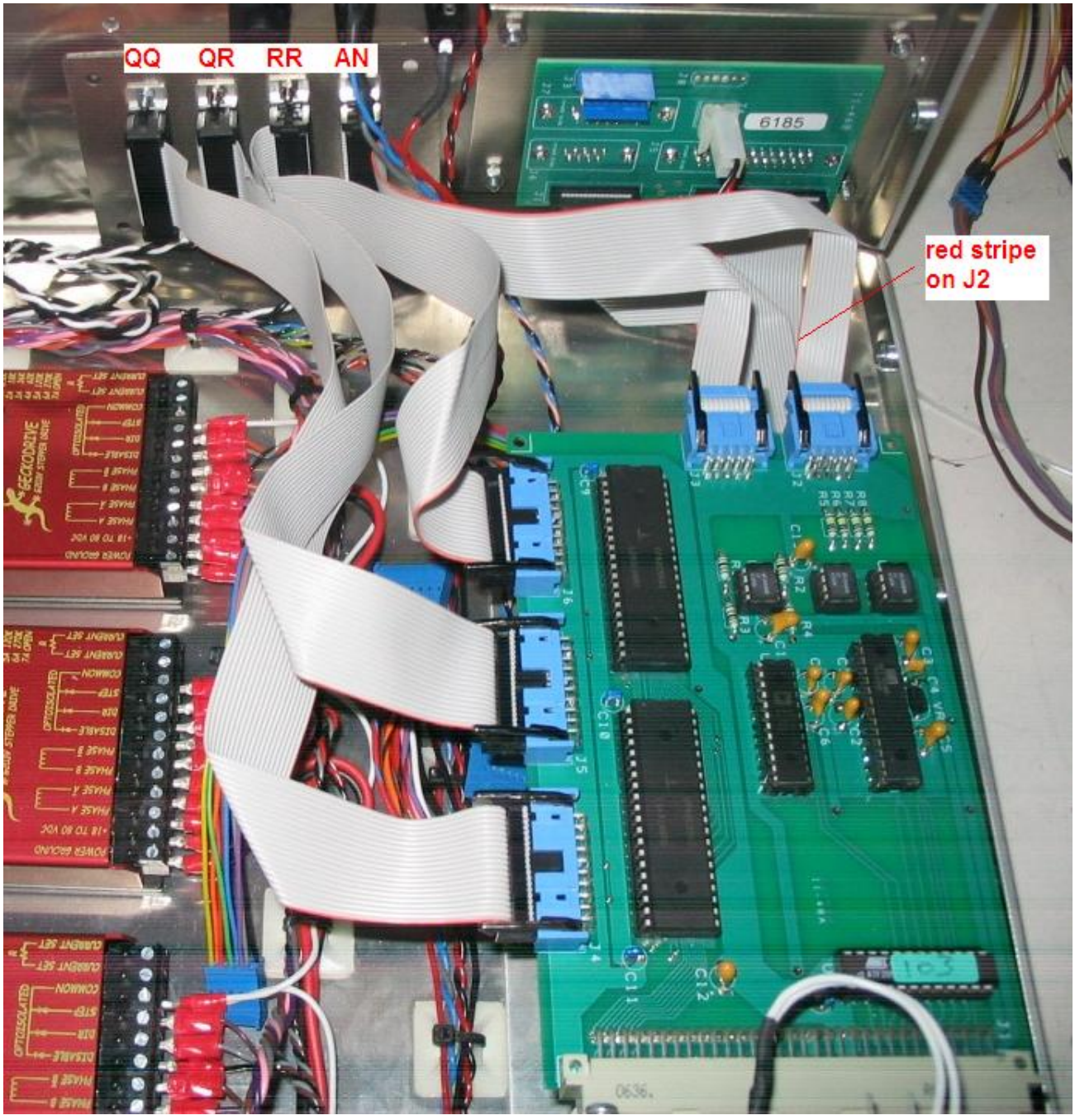
You will need to remove the rear blanking panel shown below **A**



Remove the two screws holding the top PCB and insert the two tapped pillars provided.
Next fit the new board in the spare socket (3rd one up), **B.**
Use the screws from above to secure the new board.

The new board has 4 connectors. From left to right
QB,QC QA,RB RC,RA Analog

See below picture of board fitted. As you can see the Analog connectors AN to J2 and J3 pass behind a cable from the CPU card to the rear panel. Therefore you will need to unplug the two connectors at the rear of the new card, pass them behind the existing wiring and back on to the card.
Disconnect all 4 cables and fit the rear panel with screws provided as shown.
Refit cables as shown. The strip with the red trace is J2 and the other strip is J3.



Simple test that the software and hardware are working correctly:

Quick test of the PIA (programmable interface adaptor)

Enter

```
PROGPIA
HEX 55 QA OUT
QA IN X.
```

Answer should be 55

```
AA QA OUT
QA IN X.
```

Answer AA
Repeat for port RA

Quick test of the analog input-output

Connect AN connector pins 2 and 8 (DACA to ADC channel 0)
Enter

`0 DACA 0 ADC .` - answer should be roughly zero
`1000 DACA 0 ADC .` – answer should be roughly 1000
etc.

Contents of kit

Multi-I/O board
Bunch of 4 cables fitted to a rear panel of 4 25w D connectors.
4 mating 25w D connectors.
4 hoods
2 screw pillars

J4, J5, J6 pin (on the card)	QQ, QR, RR pin (25 w D)	J4 & QQ function	J5 & QR function	J6 & RR function
1	1	QB0	QA0	RC0
2	14	QB1	QA1	RC1
3	2	QB2	QA2	RC2
4	15	QB3	QA3	RC3
5	3	QB4	QA4	RC4
6	16	QB5	QA5	RC5
7	4	QB6	QA6	RC6
8	17	QB7	QA7	RC7
9	5	+5V	+5V	+5V
10	18	GND	GND	GND
11	6	QC0	RB0	RA0
12	19	QC1	RB1	RA1
13	7	QC2	RB2	RA2
14	20	QC3	RB3	RA3
15	8	QC4	RB4	RA4
16	21	QC5	RB5	RA5
17	9	QC6	RB6	RA6
18	22	QC7	RB7	RA7
19	10	+5V	+5V	+5V
20	23	GND	GND	GND