

CSC40 CALIBRATION

Date:

Done by:

Board S/N:

I. Materials Needed

1. Decade box with leads
2. Self Check FDM
3. Q8000 Tester
4. Terminal with interface

II. Attach Jumper

See attached engineering change: "CSC40-101"

III. Set Up

1. Install **Self Check FDM** into Q8000 Tester
2. Set CSC40 Rotary Switch to "C" position
3. Plug in CSC40 LB into Tester
4. Power up Tester

IV. Calibration

WARNING: DO NOT LEAVE V1 CURRENT LIGHT ON. Excessive current WILL damage the decade box. Use the decade box to add lower resistance BEFORE removing the higher resistance.

A. V1 Power Supply - R1, R2

1. Set Decade Box to **1 Meg ohm**
2. Connect Decade Box from **AGND** to Resistor **R1** (or R2) as shown (**A**) on layout
3. Type: **T=951**
4. Type: **IV1=392**
5. Type: **PV** (to verify that IV1 changed to 392)
6. Find valve by adding and removing resistance using the Decade Box
7. Write the value in the box

R1, R2 =

8. Reset Decade Box back to 1 Meg ohm, clear all other values
9. Press **BEGIN** on tester or Type: **B** (make sure "**READY**" light is on)

B. V2 Power Supply - R3

1. Verify/Set decade box to **1 Meg ohm**
2. Connect Decade Box from **AGND** to Resistor **R3** as shown (**B**) on layout
3. Type: **T=961**
4. Type: **IV2=196**
5. Type: **PV** (to verify that IV2 changed to 196)
6. Find valve by adding and removing resistance using the Decade Box
7. Write the value in the box

R3 =

8. Reset Decade Box back to 1 Meg ohm, clear all other values
9. Press **BEGIN** on tester or Type: **B** (make sure "**READY**" light is on)

C. V3 Power Supply - R4

1. Verify/Set decade box to **1 Meg ohm**
2. Connect Decade Box from **AGND** to Resistor **R4** as shown (**C**) on layout
3. Type: **T=971**
4. Type: **IV3= -196**
5. Type: **PV** (to verify that IV3 changed to -196)
6. Find valve by adding and removing resistance using the Decade Box
7. Write the value in the box

R4 =

8. Reset Decade Box back to 1 Meg ohm, clear all other values
9. Press **BEGIN** on tester or Type: **B** (make sure "**READY**" light is on)

D. Parametric Unit - R13

1. Verify/Set decade box to **1 Meg ohm**
2. Connect Decade Box from **AGND** to Resistor **R13** as shown (**D**) on layout
3. Type: **T=801**
4. Type: **IPAR=50**
5. Type **PV** (to verify that IPAR changed to 50Ma)
6. Find valve by adding and removing resistance using the decade box
7. Write the value in the box

R13 =

8. Reset Decade Box back to 1 Meg ohm, clear all other values
9. Press **BEGIN** on tester or Type: **B** (make sure "**READY**" light is on)

V. Selecting Resistors

Take the values entered in the boxes above and fill in the table below. Then chose a resistor from stock that best fits the resistor value needed.

Resistor designation	Measured Resistor Values	Closest Resistor from stock
R1, R2		
R3		
R4		
R13		

VI. Install Resistors

Install resistors on bottom of board in the designated holes, except for R13 which must be put across resistor on bottom of board.

VII. Checkout

From terminal, select values to find pass/fail point. Values should be within the ranges determined below.

	Resistor	Ideal Value	Range	Actual Value
V1 power supply	R1, R2	392 Ma	387.2 to 396.8 Ma	
V2 power supply	R3	196 Ma	193.6 to 198.4 Ma	
V3 power supply	R4	-196 Ma	-192.8 to -199.2 Ma	
Parametric unit	R13	50 Ma	49.4 to 50.6 Ma	

If any measurement is out, or close to being out, remove added resistor and repeat that stage of the calibration.