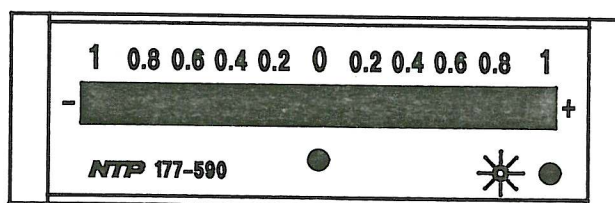
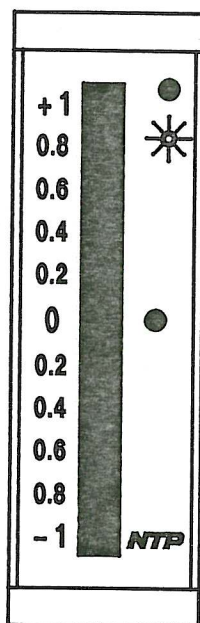


Compatibility meter 177-590 B

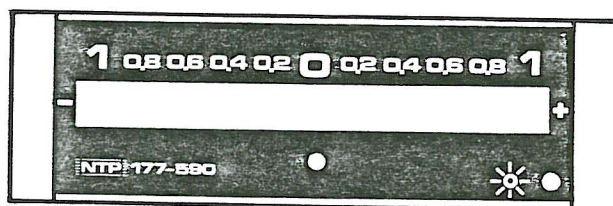
Contents:

Draw.No.:

Frontplate lay-out	: 177-5909-B-4
Technical specifications	: 177-5911-B-3
Mechanical outline	: 177-5903-A-3
Instruction for alignment	: 177-5922-A-3
Schematic diagram	: 177-5930-B-3
Components lay-out	: 177-5941-B-3
Parts list	: 177-5931-B-3
Components lay-out, display board	: 177-5943-B-4
Parts list, display board	: 177-5933-B-3
Aux. and mechanical parts	: 177-5904-A-3



Blank piece:	Material:	Treatment:	Page of
Scale : 1:1	Compatibility Meter 177-590B Frontplate Layout		NTP
Tolerance :			
Design : 810225.BJ			177-5909-B-4
Layout :			
Revised : 1/920414			



GENERAL SPECIFICATIONS:

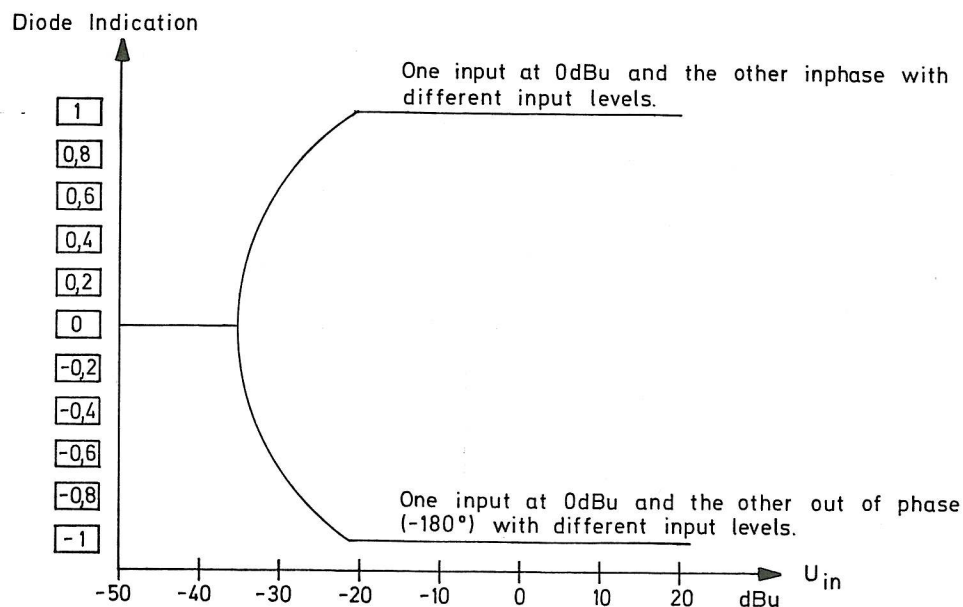
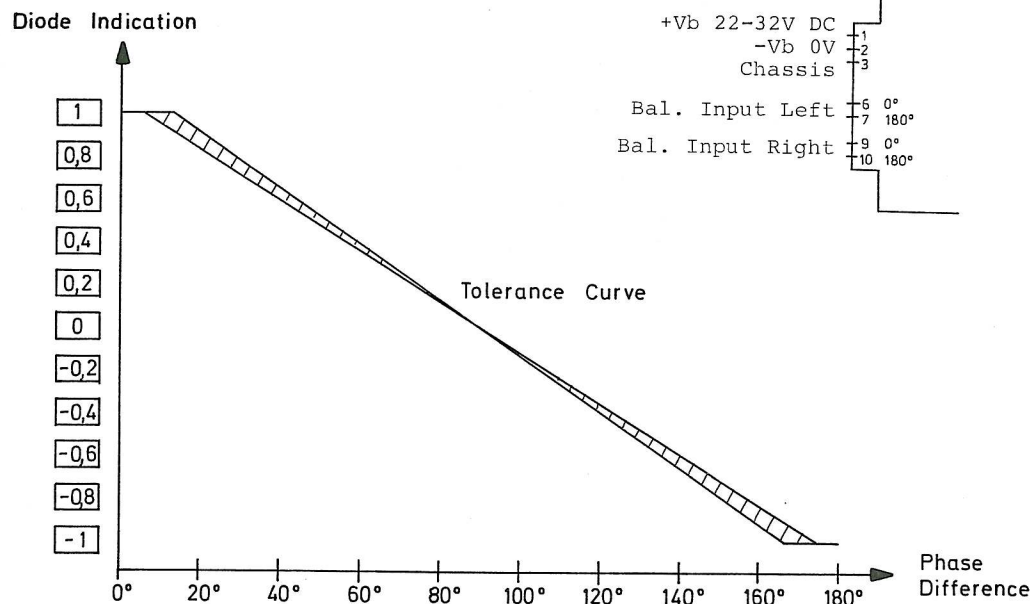
Supply voltage	: 22 to 32 V DC
Current consumption	: approx. 45 mA at 32 V DC
Input level range, full scale indication	: -21 dBu to +21 dBu
Input common mode rejection ratio	: better than 40 dB

INDICATION:

No signals on both inputs	: "0"
No signal at one input	: "0"
Random phase signals on both inputs	: "0"
In phase signals on both inputs	: "+1"
Out of phase signals on both inputs	: "-1"
Integration time constants	: 1 sec. selectable 50ms by connecting term. 4 to +supply

Connections:

+Vb 22-32V DC	1
-Vb 0V	2
Chassis	3
Bal. Input Left	6 0°
	7 180°
Bal. Input Right	9 0°
	10 180°



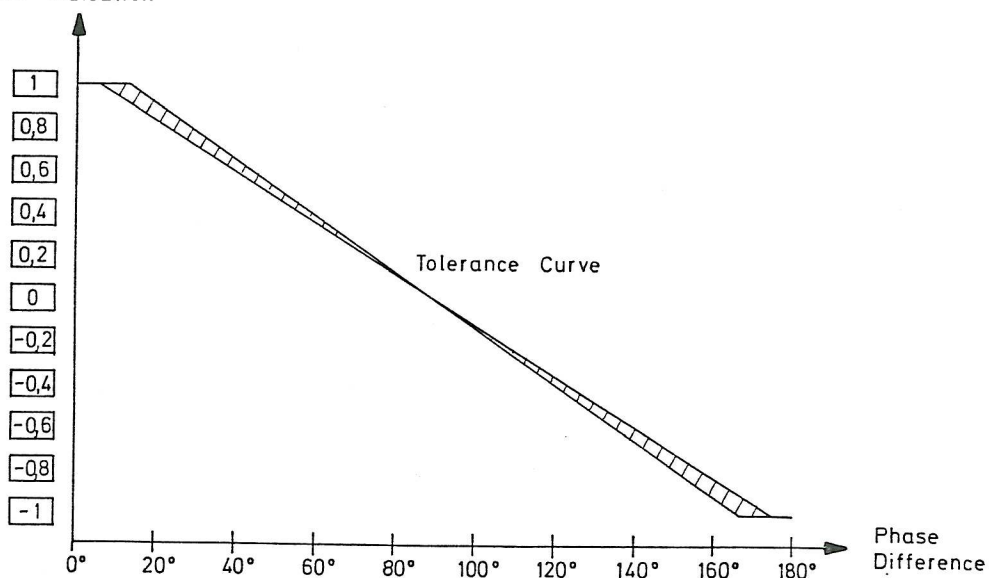
GENERAL SPECIFICATIONS:

Supply voltage	: 22 to 32 V DC
Current consumption	: approx. 45 mA at 32 V DC
Input level range, full scale indication	: -21 dBu to +21 dBu
Input common mode rejection ratio	: better than 40 dB

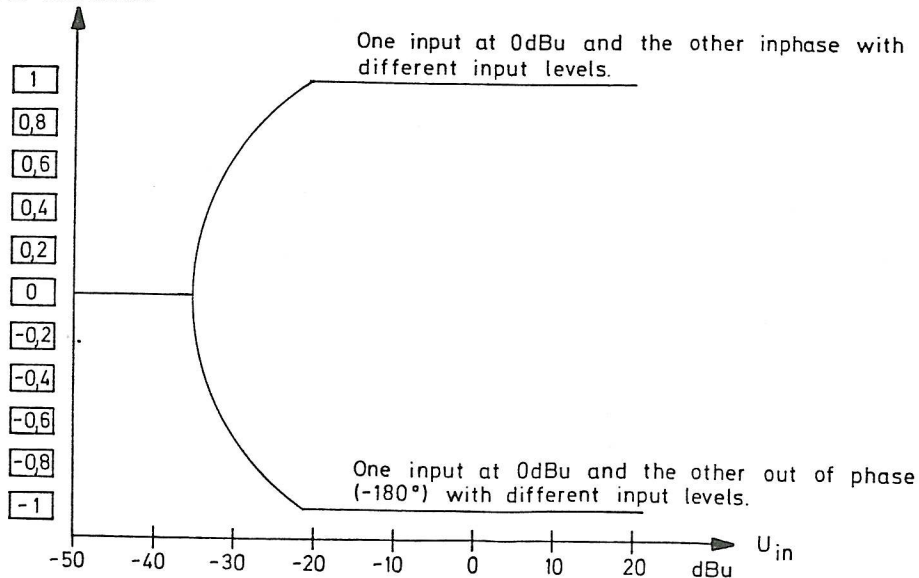
INDICATION:

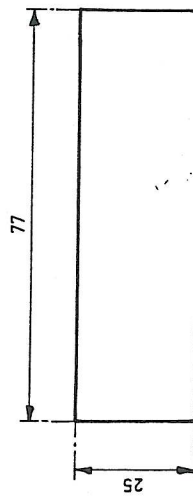
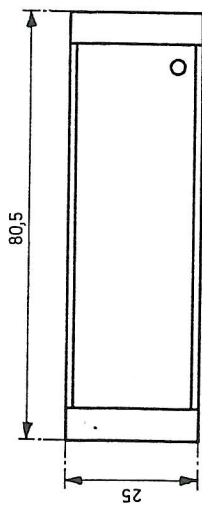
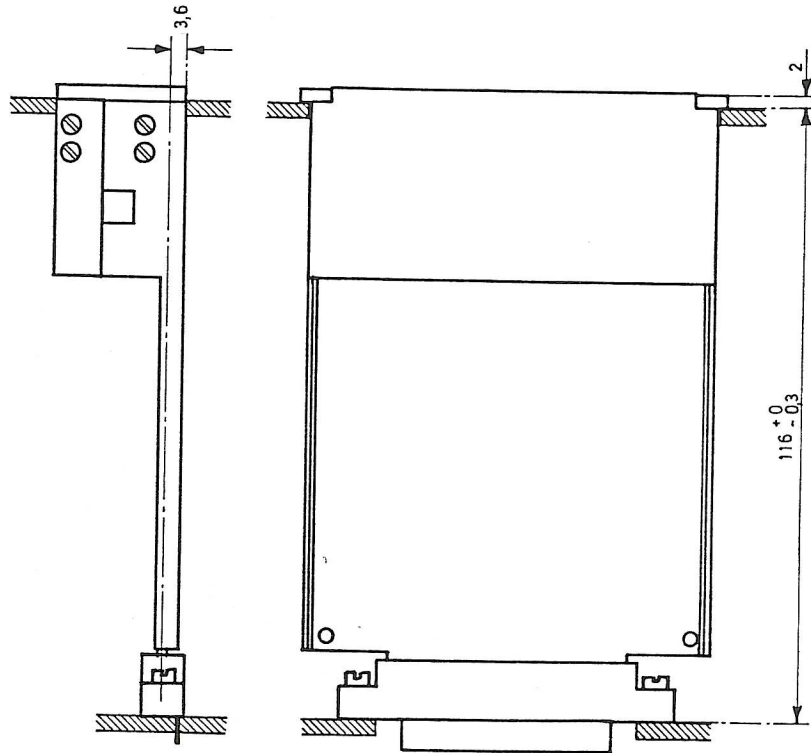
No signals on both inputs	: "0"
No signal at one input	: "0"
Random phase signals on both inputs	: "0"
In phase signals on both inputs	: "+1"
Out of phase signals on both inputs	: "-1"
Integration time constants	: 1 sec. selectable 50ms by connecting term. 4 to +supply

Diode Indication



Diode Indication





Panel cut-out
Max. panel thickness 10 mm

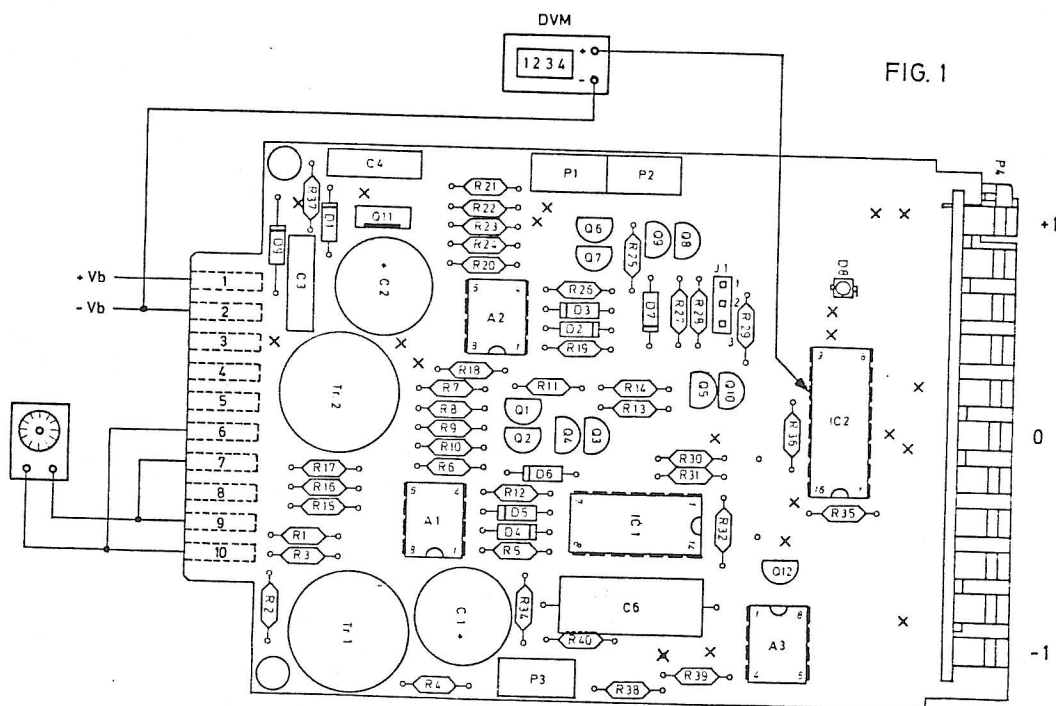
Normally the compatibility meter will stay correctly adjusted, except when a component has proven faulty and has been replaced; then it may be necessary to make certain adjustments. Before attempting to make any adjustments, note the permissible display tolerance stated in the technical specifications, draw.no. 177-5911-B-3.

The function of the trimpots are as follows:-

- P1: Zero crossing detector trigg point, right channel
- P2: Zero crossing detector trigg point, left channel
- P3: Display "-1" adjust.
- P4: Display brightness adjust.

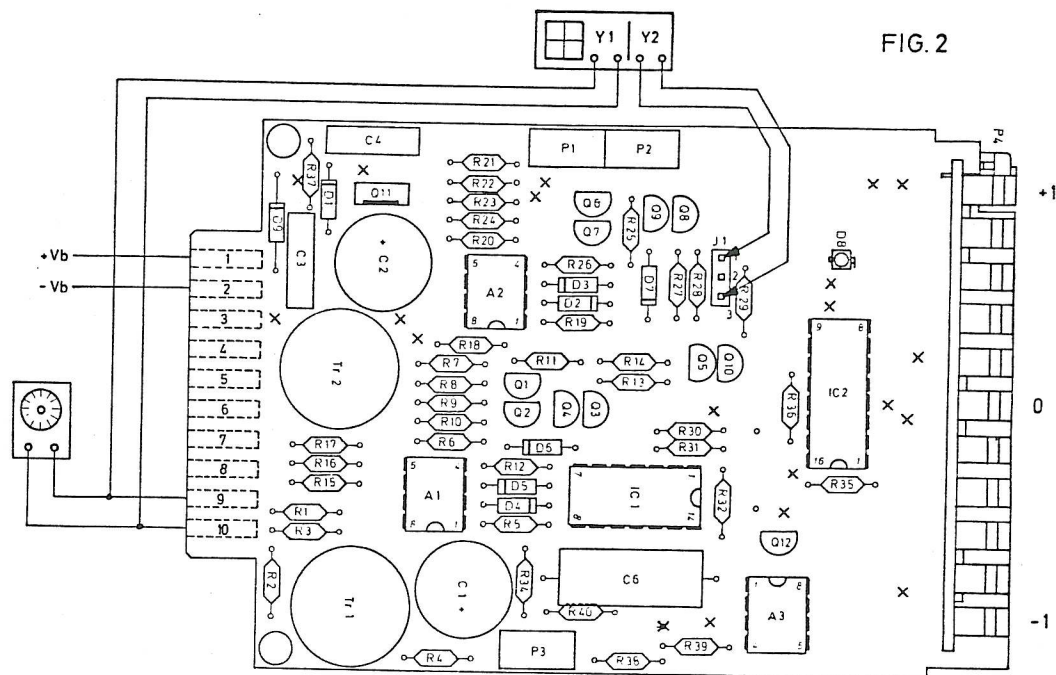
Correct adjustment sequence:-

1. Conditions: Out of phase signals on inputs. Connect a digital voltmeter as shown in fig. 1

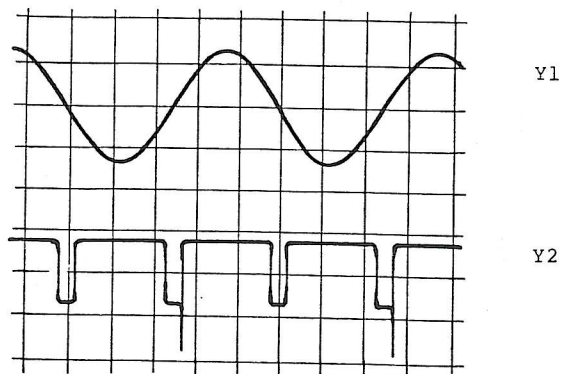


Turn P3 clockwise until the "-1" diode just turns off and D8 turns on.
Read the voltmeter. Turn P3 counterclockwise until the "-1" diode just turns off and the "-0,8" diode turns on.
Read the voltmeter.
Adjust P3 until the meter reading is the exact mean value of the earlier performed measurements.

2. Conditions: Signal on right input only.
Connect an oscilloscope as shown in fig. 2.



Adjust P1 until the positive periods as shown in fig. 3 is about the same length.

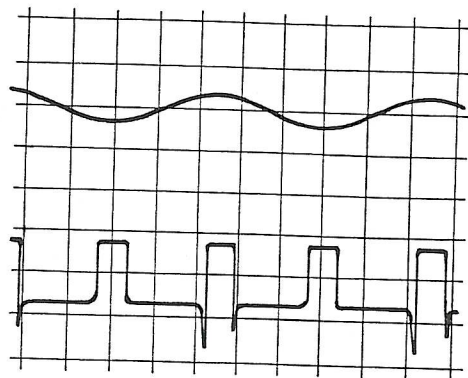


Input: -33dBu, 1kHz.
Y1 : 20mV/div.
Y2 : 200mV/div.
X : 0,2mS/div.

Reduce the input signal and repeat this adjustment.

When the input signal has been reduced to approx. -40 dBu, a picture like that shown in fig. 4 will appear.

Correct setting of P1 will be the point where the positive pulses shown in fig. 4 will arise simultaneously.



Y1

Input: -43dBu, 1kHz.

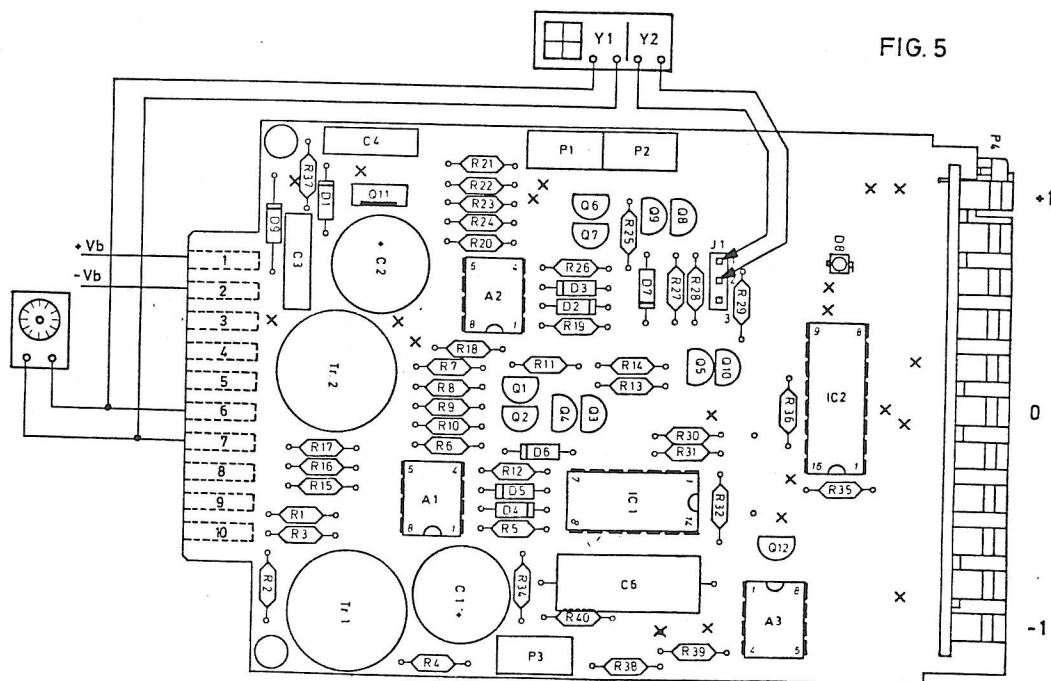
Y1 : 20mV/div.

Y2 : 200mV/div.

X : 0,2mS/div.

Y2

3. Conditions: Signal on left input only.
Connect an oscilloscope as shown in fig. 5.



Make the same adjustments as in 2, just use P2 this time.

4. Conditions: No input signal.
Adjust P4 to the required display brightness.

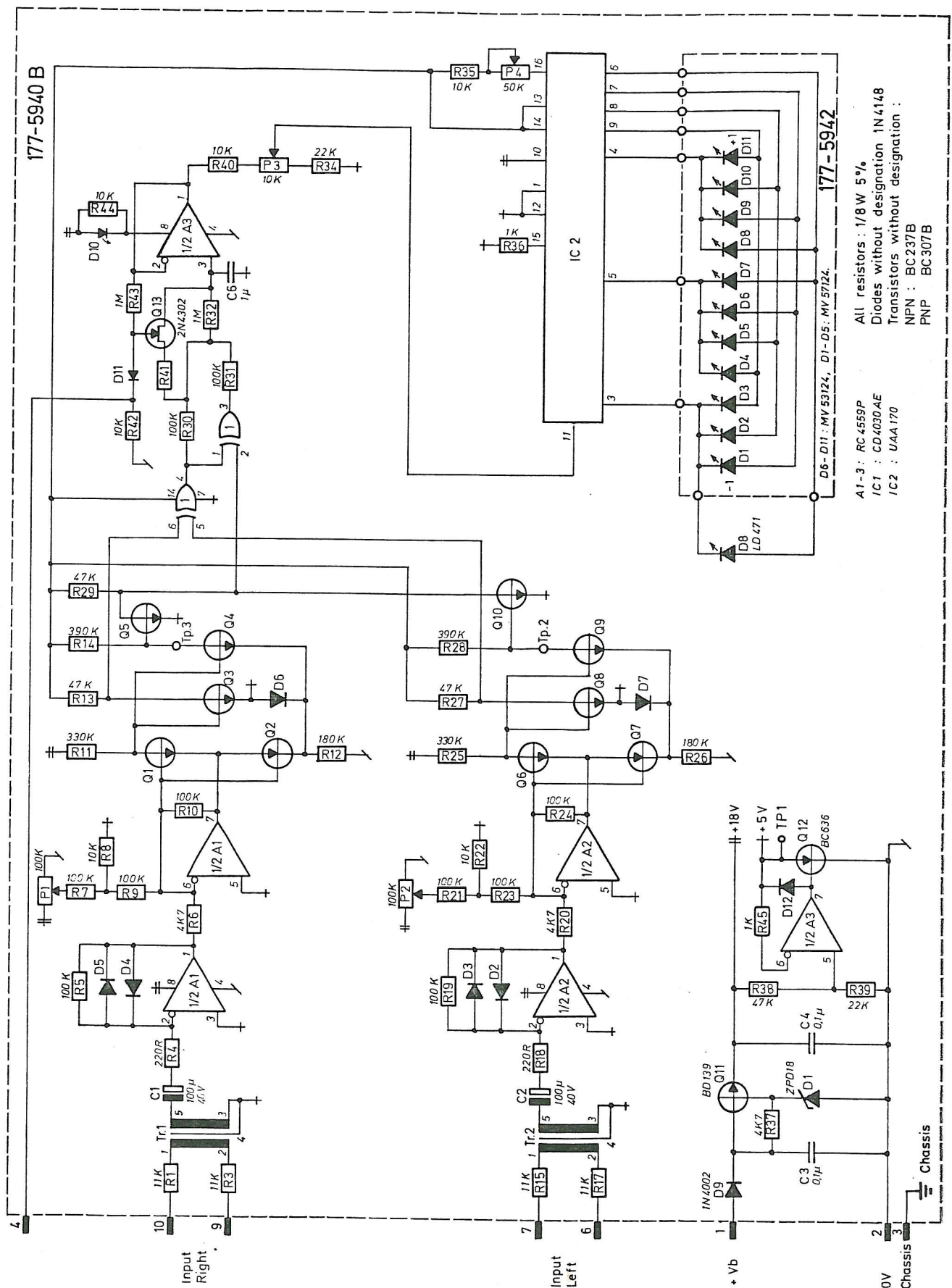
Målestok :	
Konstruktør : BH	
Tegnet : 27.5.84. T.L.	
Godkendt :	
Revideret :	

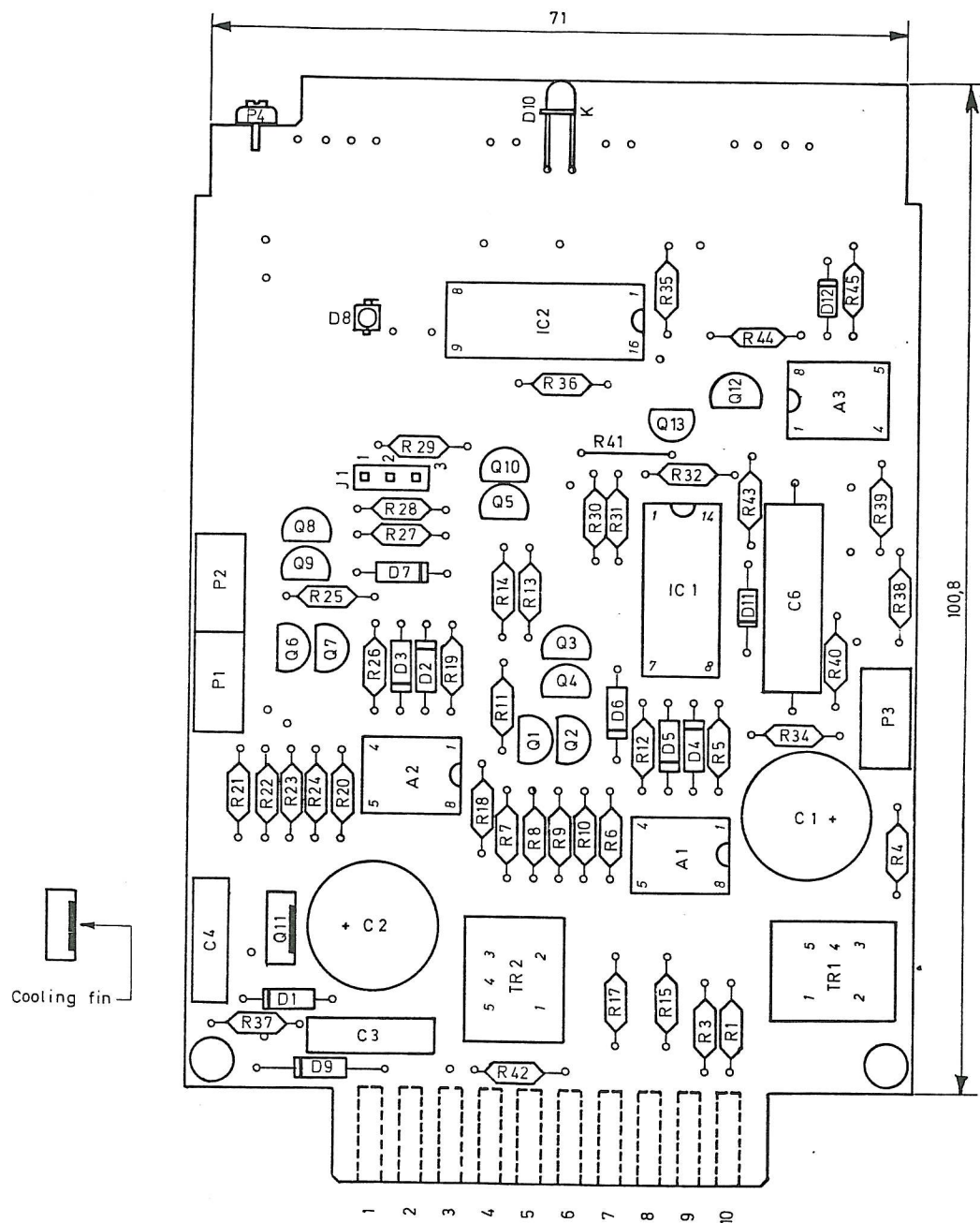
Compatibility Meter 177-590 B

Schematic Diagram.

NTP
NTP ELEKTRONIK A/S

177-5930-B-3





Målestok :	
Konstruktør :	BH
Tegnet :	27.9.84. T.L.
Godkendt :	
Revideret :	1.

Compatibility meter 177 - 590B

Components Lay-out.

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177 - 5941 - B - 3