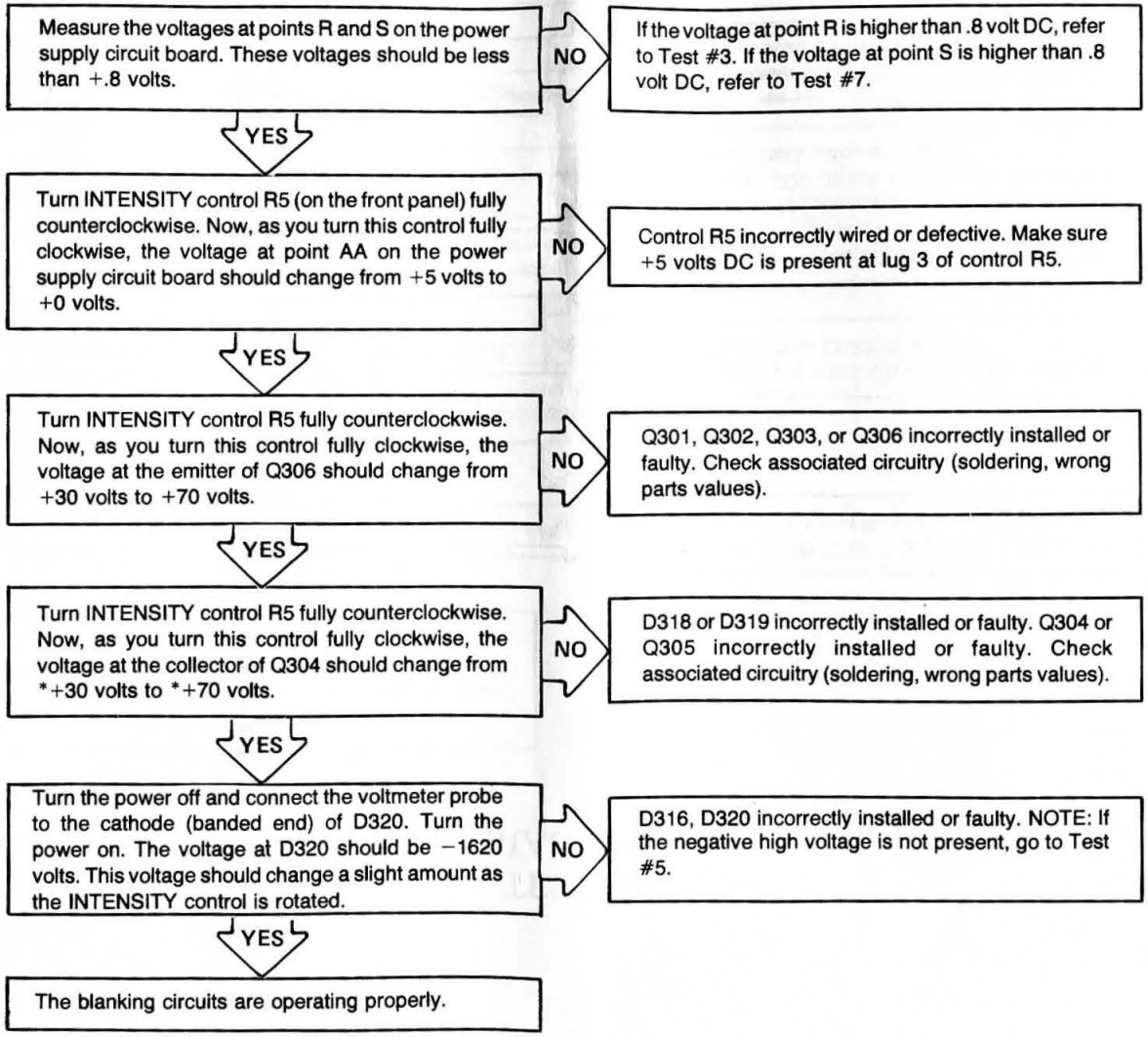
TEST #4
BLANKING CIRCUIT

WARNING: You will be making voltage measurements in the high voltage area of the Oscilloscope. Be very careful not to contact this high voltage. See Page 26 of this Booklet.



*These voltage readings depend on the setting of the INTENSITY BIAS control and can vary 40 volts.

TEST #5
CRT BIAS CIRCUITS

CAUTION

When you make any of the following tests, first turn the Oscilloscope off. Then connect the voltmeter to the circuit and turn the Oscilloscope back on again.

Check the voltage at the junction of C301 and R301. It should read −2000 VDC.

NO → Check D301, D302, C301, C302, and T1. Check the voltage between A and B. It should be 360 VAC.

YES

Check the voltage at the junction of C303 and R301. It should read −1650 VDC.

NO → Check C303 and R301. Check for open or shorted foils. Check D316, D320, and D314.

YES

Check the voltage at AE. It should read −1350 VDC.

NO → If it is lower than −1350 VDC, check D317 and C320. Also check divider string R17, R6, R309, and R310 for open and bad connections. If the voltage is higher than −1350 VDC, check for shorts in the divider string, and check wires and foils.

YES

Check the voltage at point W. It should read −1568 VDC.

NO → Check for solder bridges and incorrect wiring to the CRT socket. Also check C320.

YES

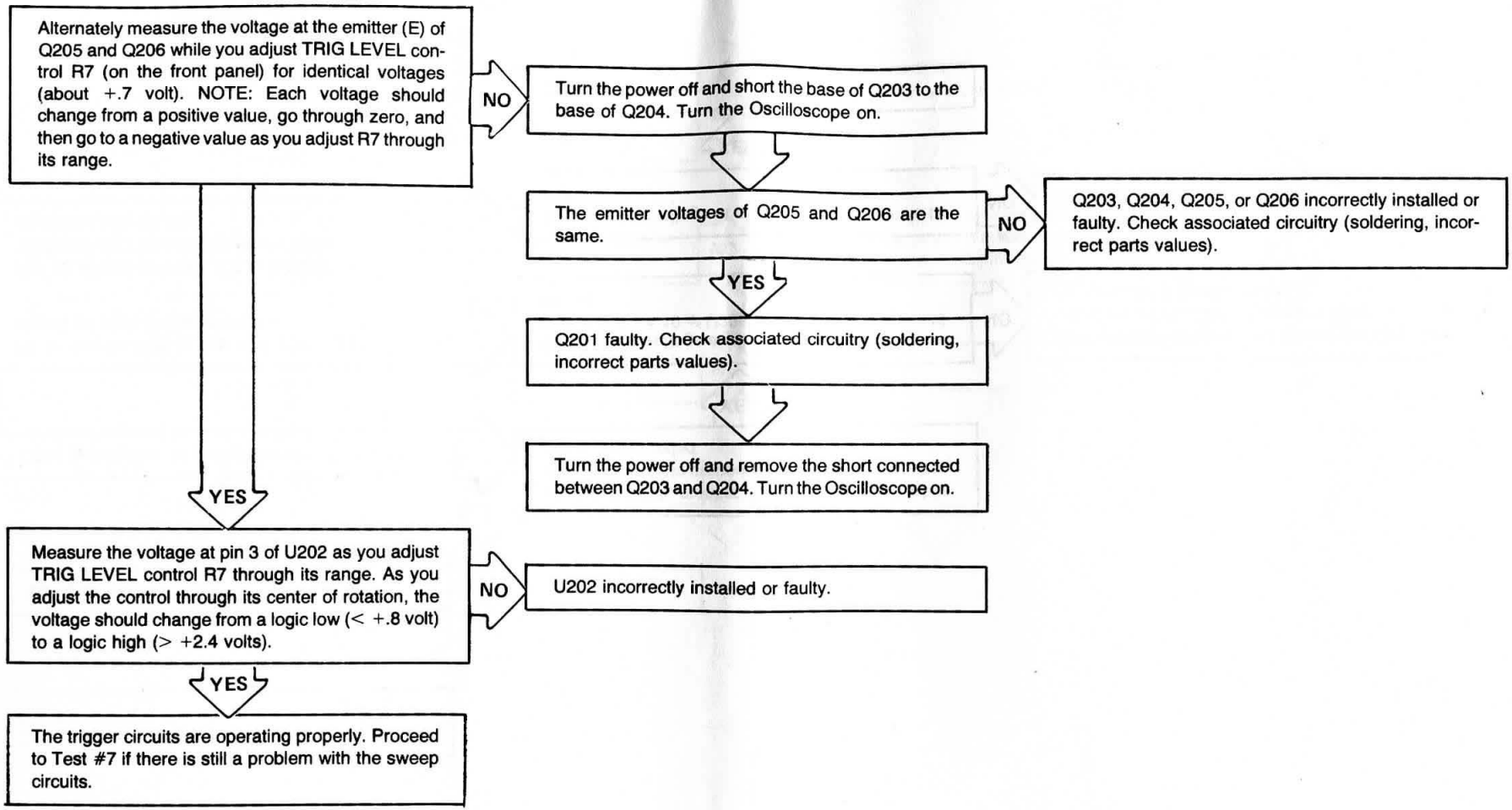
Check the voltage at point Y. It should read +95 VDC. (Adjust it if necessary.)

NO → Check Q307 and associated circuitry.

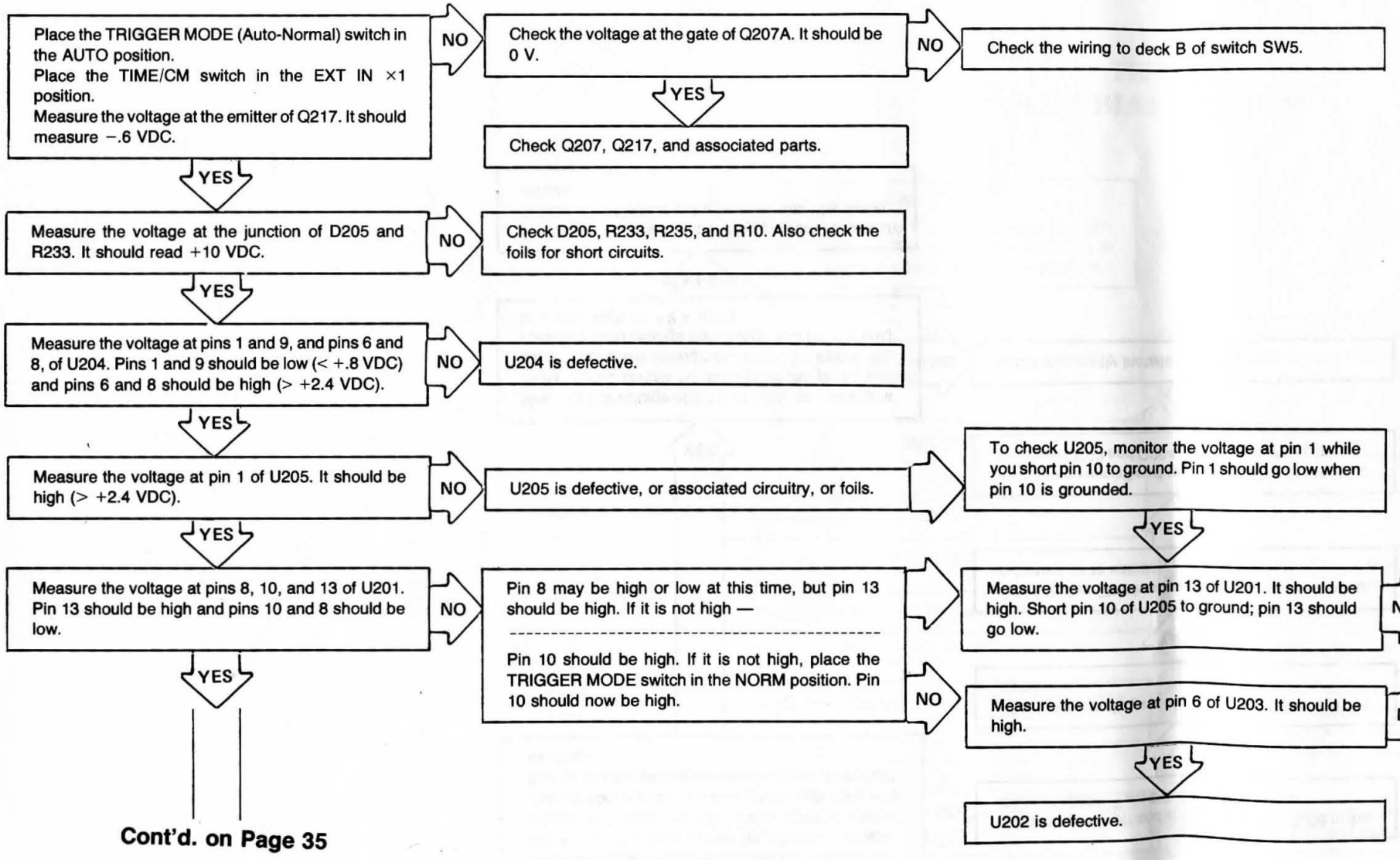
YES

CRT bias circuits are all operating properly.

TEST #6
TRIGGER CIRCUITS



TEST #7
SWEEP CIRCUITS



Cont'd. on Page 35

TEST #7
SWEEP CIRCUITS

ge at the gate of Q207A. It should be

NO → Check the wiring to deck B of switch SW5.

YES

217, and associated parts.

33, R235, and R10. Also check the
cuits.

e.

e, or associated circuitry, or foils.

To check U205, monitor the voltage at pin 1 while you short pin 10 to ground. Pin 1 should go low when pin 10 is grounded.

YES

igh or low at this time, but pin 13
lf it is not high —

---

e high. If it is not high, place the
E switch in the NORM position. Pin
e high.

Measure the voltage at pin 13 of U201. It should be high. Short pin 10 of U205 to ground; pin 13 should go low.

NO → Measure the voltage at pins 11 and 8 of U202 while you short pin 10 of U205 to ground. Pin 11 should go high and pin 8 should go low.

NO → U202 is defective.

NO → Measure the voltage at pin 6 of U203. It should be high.

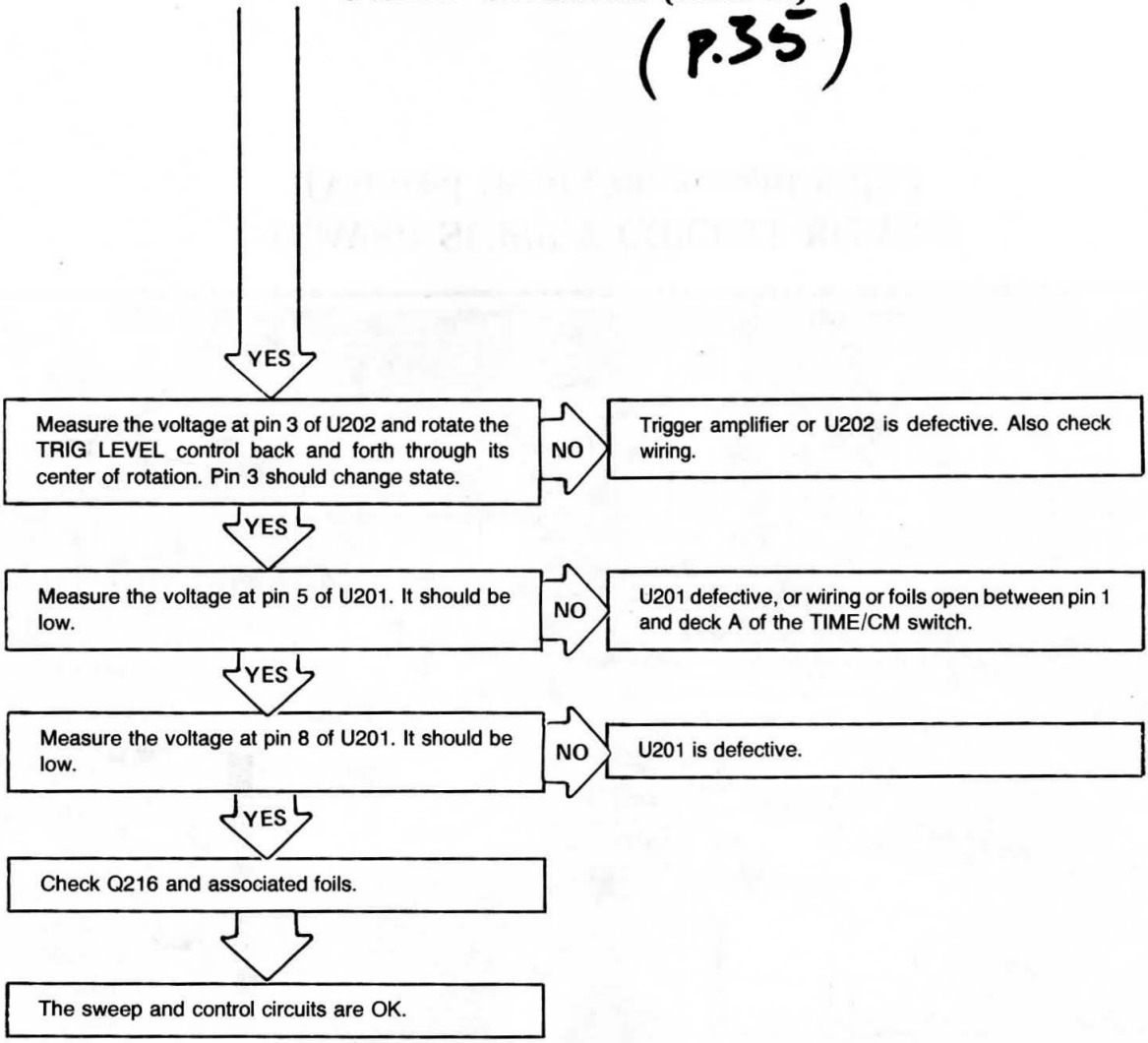
NO → U203 is defective.

YES

U202 is defective.

TEST #7
SWEEP CIRCUITS (Cont'd.)

(P.35)



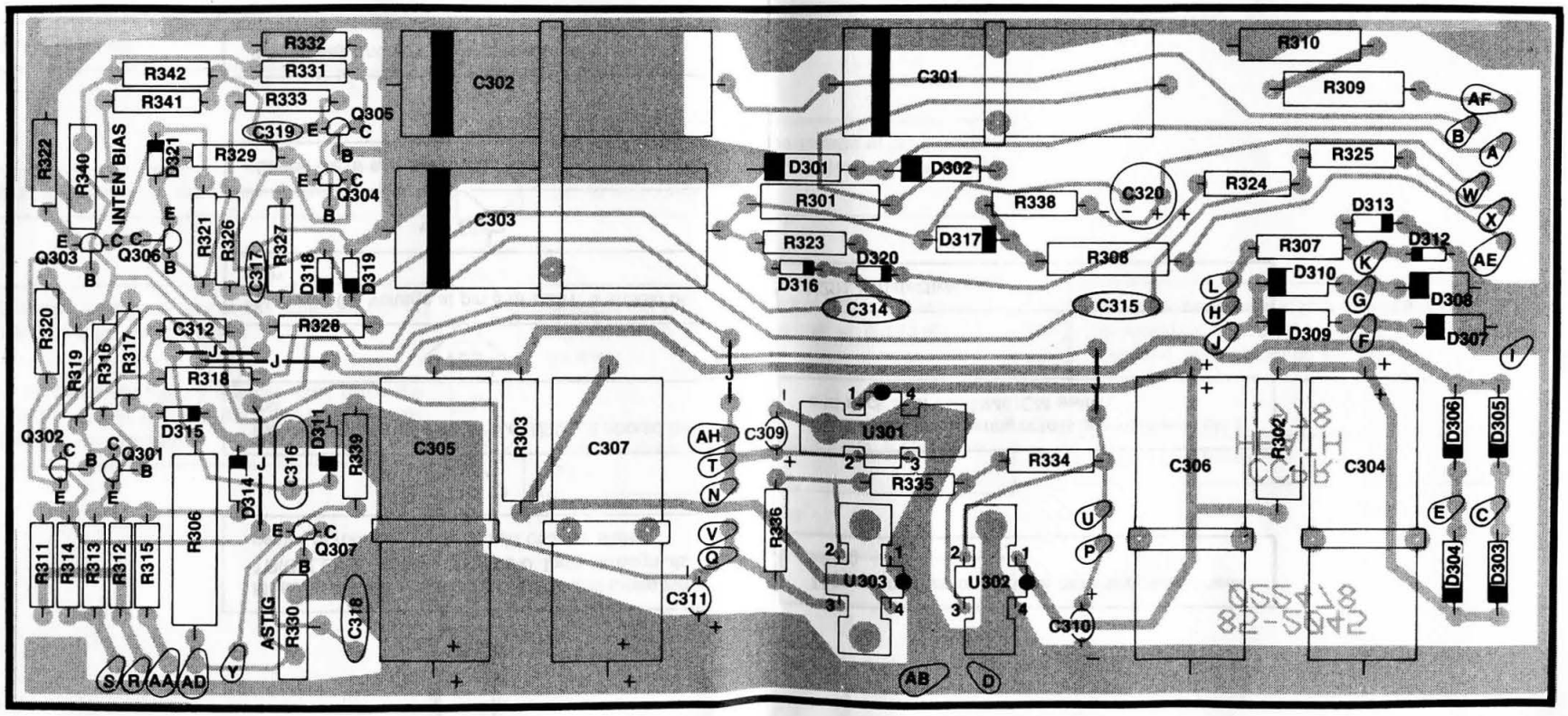
CIRCUIT BOARD X-RAY VIEWS

NOTE: To find the PART NUMBER of a component for the purpose of ordering a replacement part:

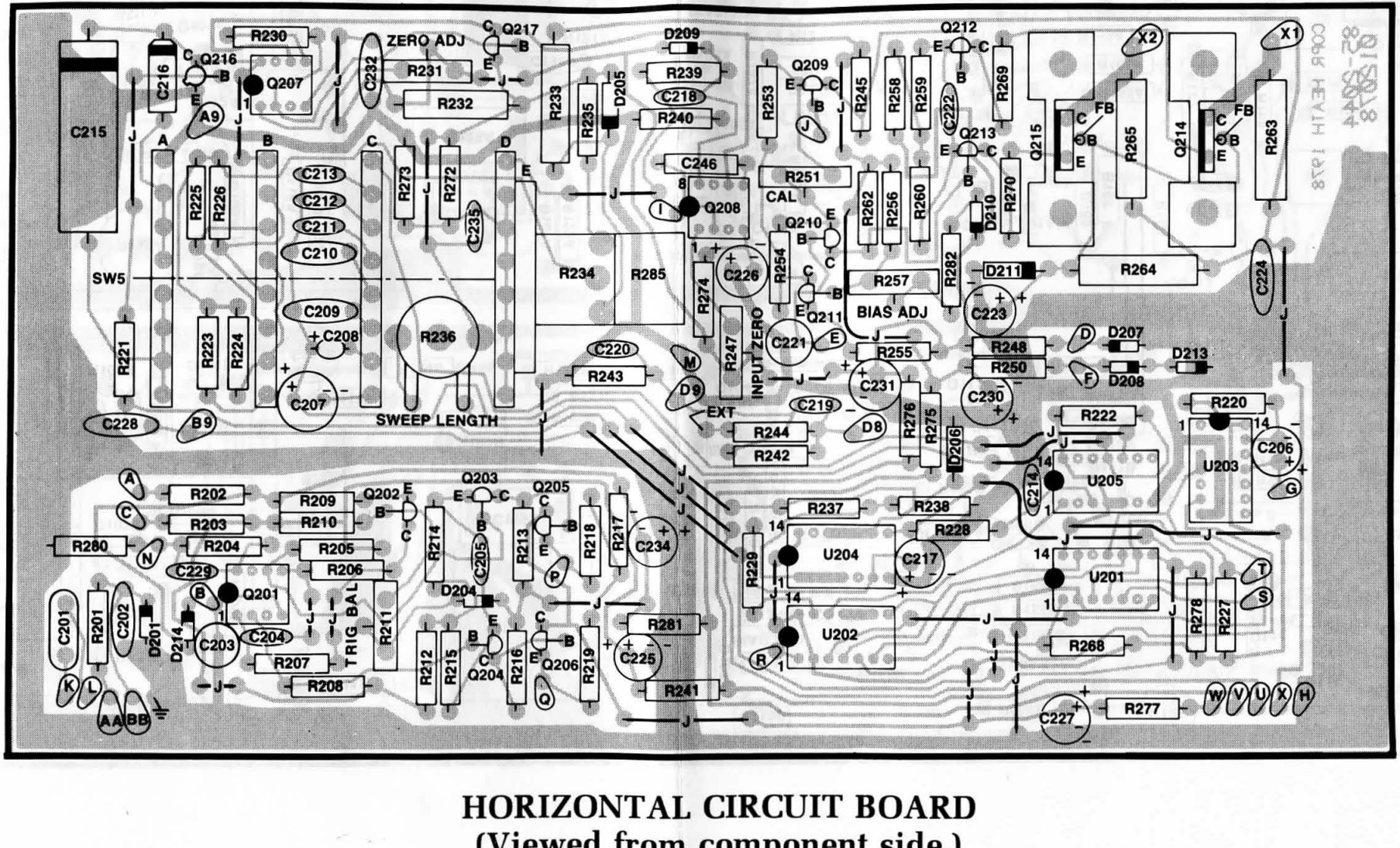
A. Find the circuit component number (R5, C3, etc.) on the "X-Ray View."

B. Locate this same number in the "Circuit Component Number" column of the "Parts List."

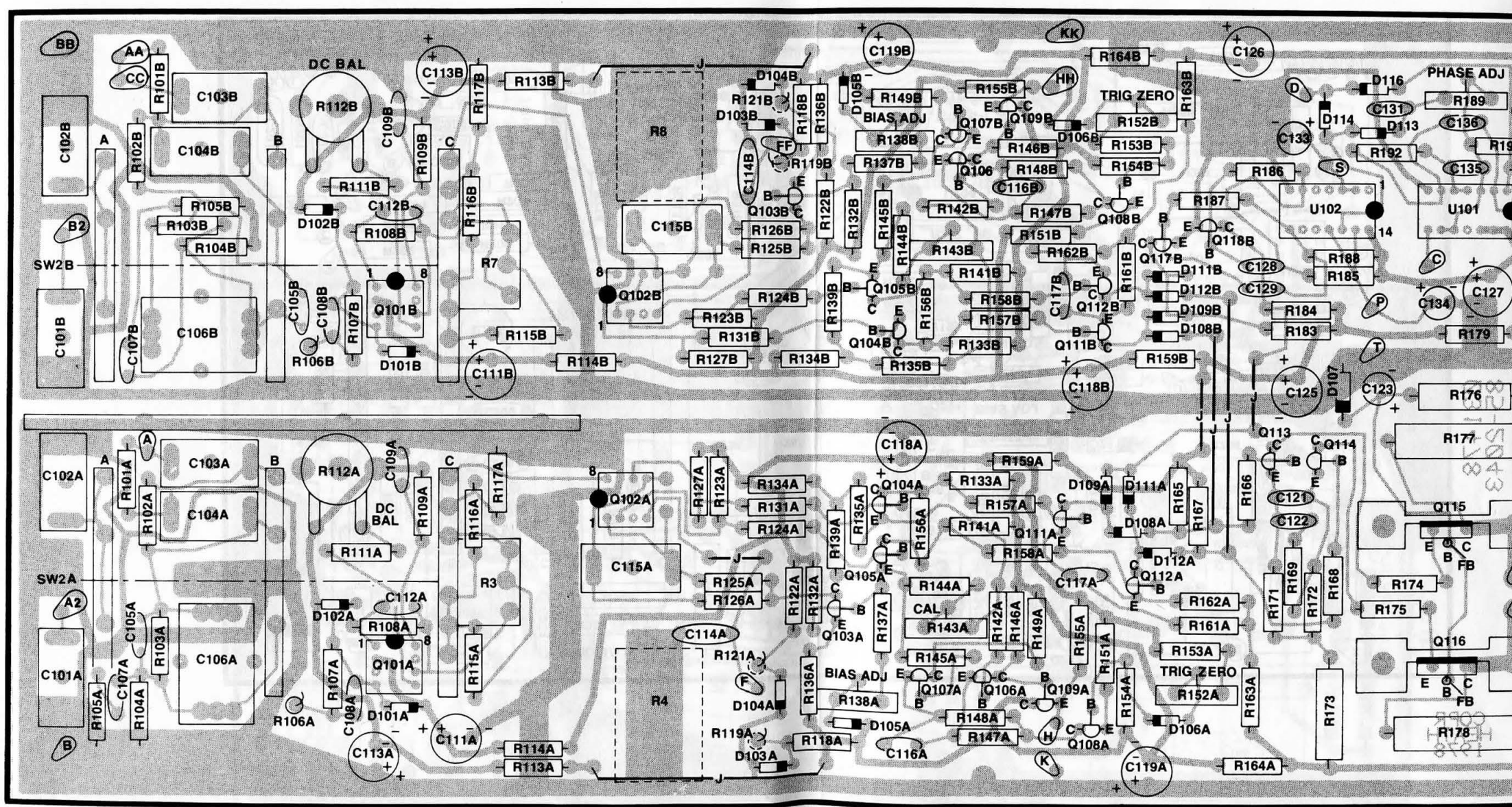
C. Adjacent to the circuit component number, you will find the PART NUMBER and DESCRIPTION which must be supplied when you order a replacement part.



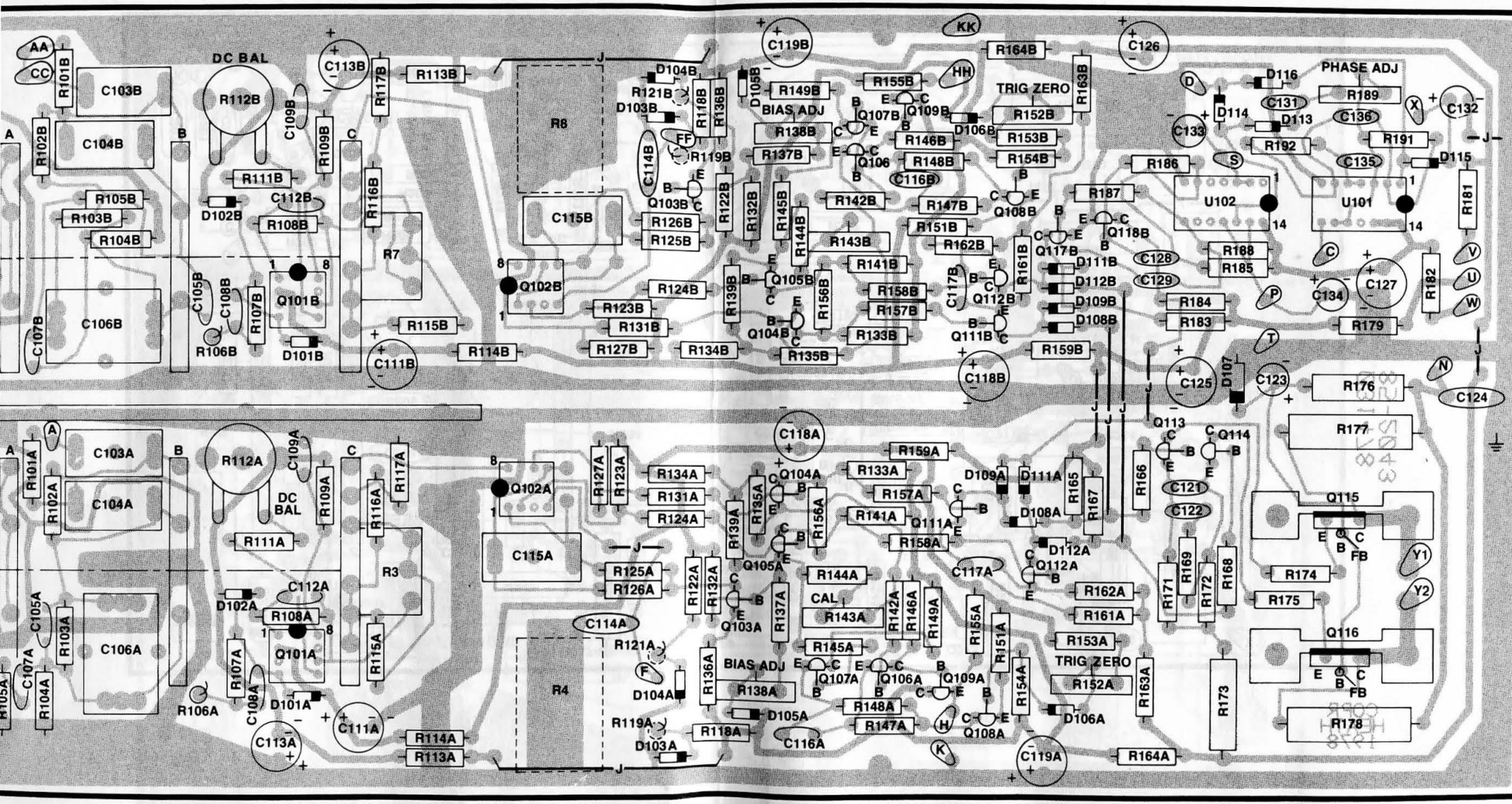
POWER SUPPLY CIRCUIT BOARD
(Viewed from Component side.)



HORIZONTAL CIRCUIT BOARD
(Viewed from component side.)



VERTICAL CIRCUIT BOARD



VERTICAL CIRCUIT BOARD
(Viewed from component side.)