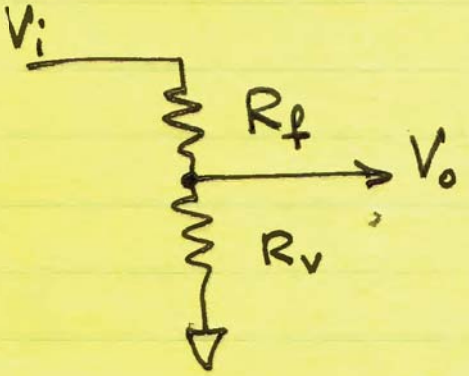
Production Beans, and Notes 27NOV2014RAG

The LED-LDR is mounted in a carrier along with two selected Resistors
One for the Audio Control, the other for the Gain Reduction Metering

The Value of the LDR resistance for a Current input to the LED is unique to each Module
A simple Test Fixture, and Procedure is used to pair the LED-LDR with the proper Resistors
Later the “Beans” are assembled. Tested, and Serialized…

Two packaging Versions of the “Bean”

feed forward Gain Control Module



$$\frac{V_o}{V_i} = \frac{R_v}{R_v + R_f}$$

for $R_f \gg R_v$

$$\frac{V_o}{V_i} \sim \frac{R_v}{R_f}$$

therfore: $V_i R_v = R_f V_o$

since:

$$R_v \sim \beta V_i^{-1}$$

$$\beta = R_f V_o$$

therefore

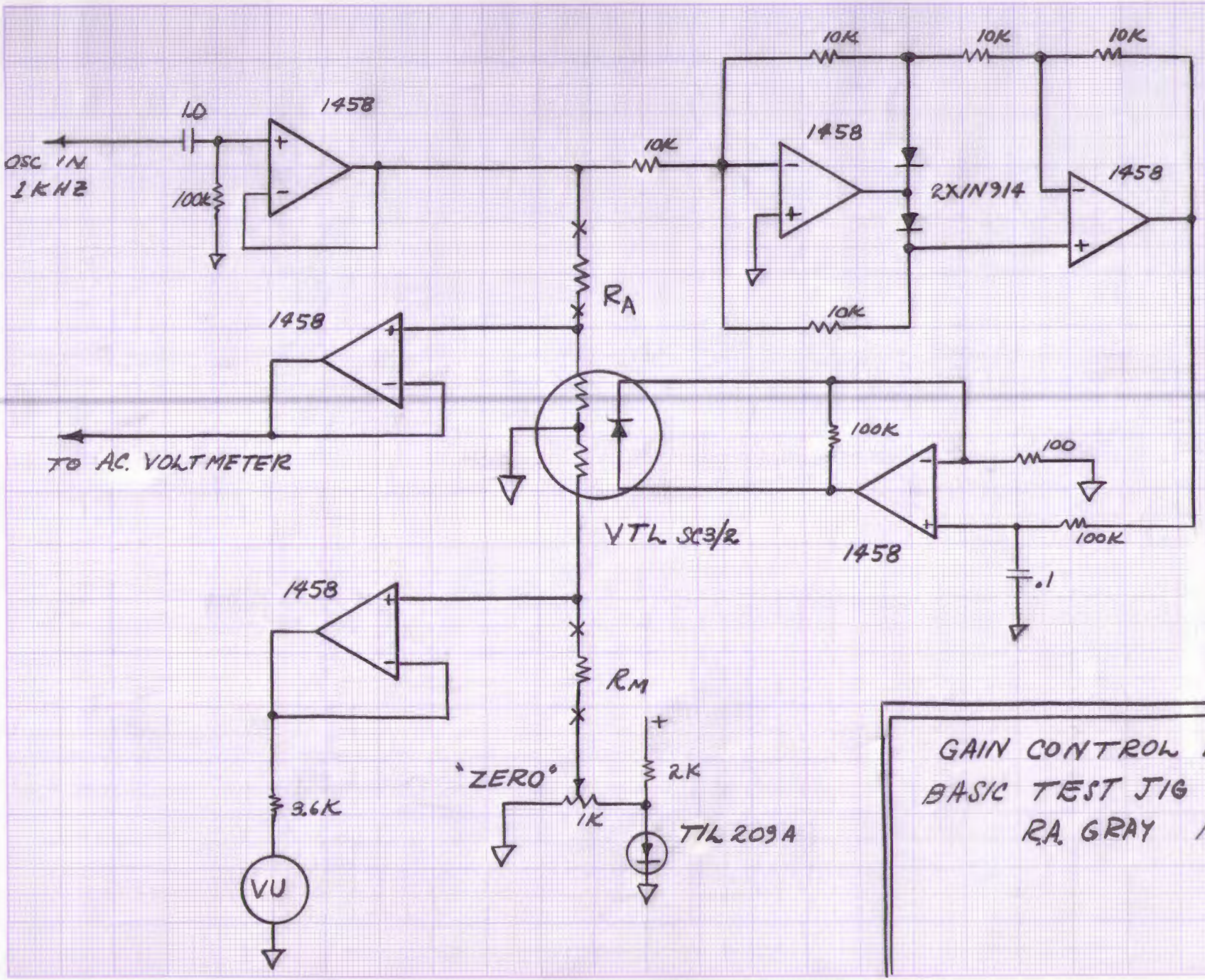
$$V_o = \frac{\beta}{R_f} = \text{Constant} .$$


K&E LOGARITHMIC 46 7522
3 X 5 CYCLES MADE IN U.S.A.
KEUFFEL & ESSER CO.
Ohms
10³
10⁴
10⁵
10⁶
.1
1.0
10
100
CURRENT
MA.

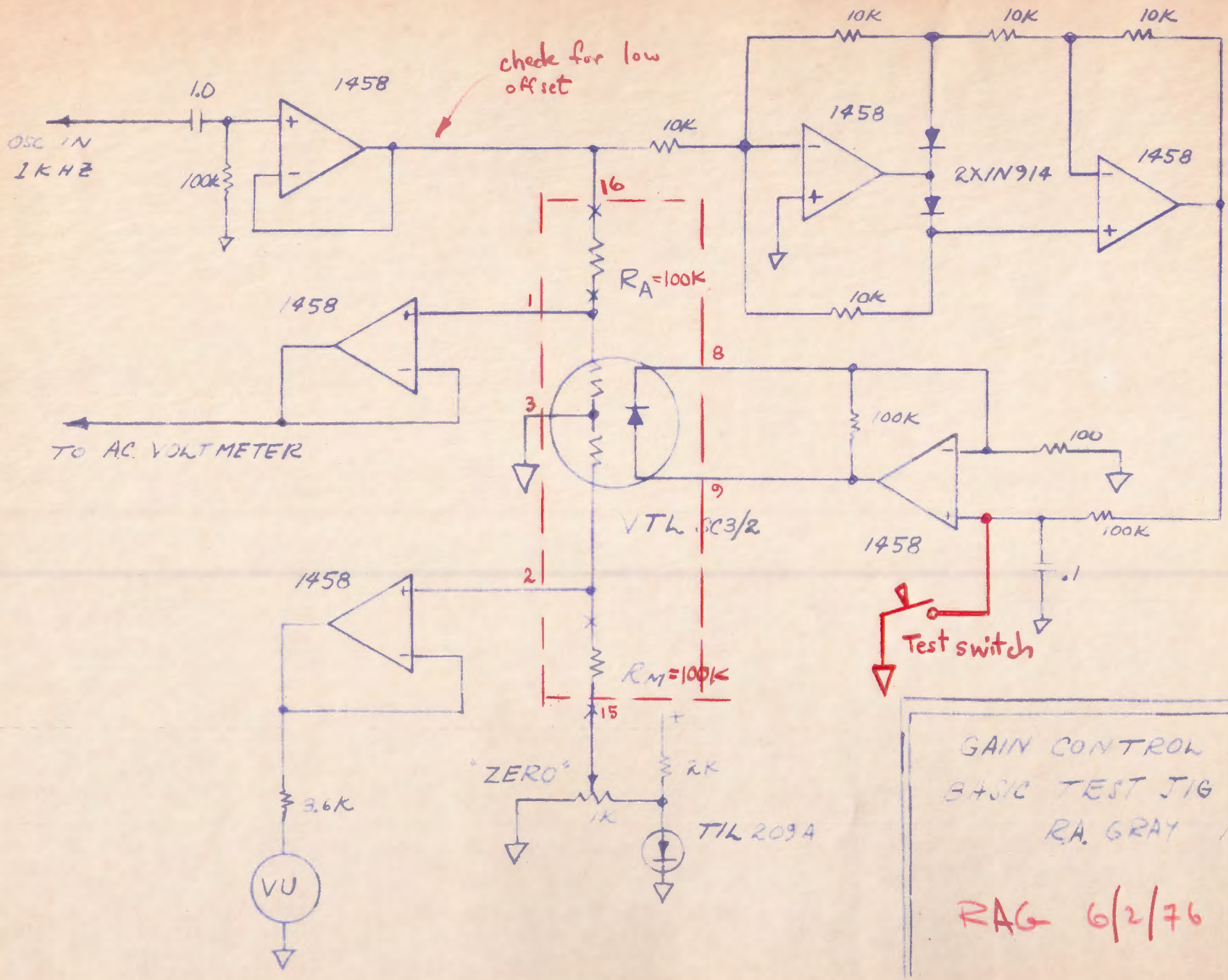
R.A.G. 6/2/76

GCM Test procedure..

1. No signal
2. Zero Meter.
3. Inject signal for -6db g.r.
4. Read input.. (Module rating)
5. Read output.
6. Short control ... output should increase 6db ± 2 db.
7. release control
8. Increase input 10 db (+16db g.r.)
9. Out put should remain constant ±3d



GAIN CONTROL MODULE
BASIC TEST JIG
R.A. GRAY 1-15-76



GAIN CONTROL MODULE
B+J/C TEST JIG
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