



II. ADJUSTMENTS

21P --- Differential balance adjustment for the operational amplifier.

22P --- Common mode balance adjustment for the operational amplifier.

III. EXTERNAL RESISTANCE SELECTION

If an external gain adjustment is not used, the circuit configuration will be as shown in Figure 2.

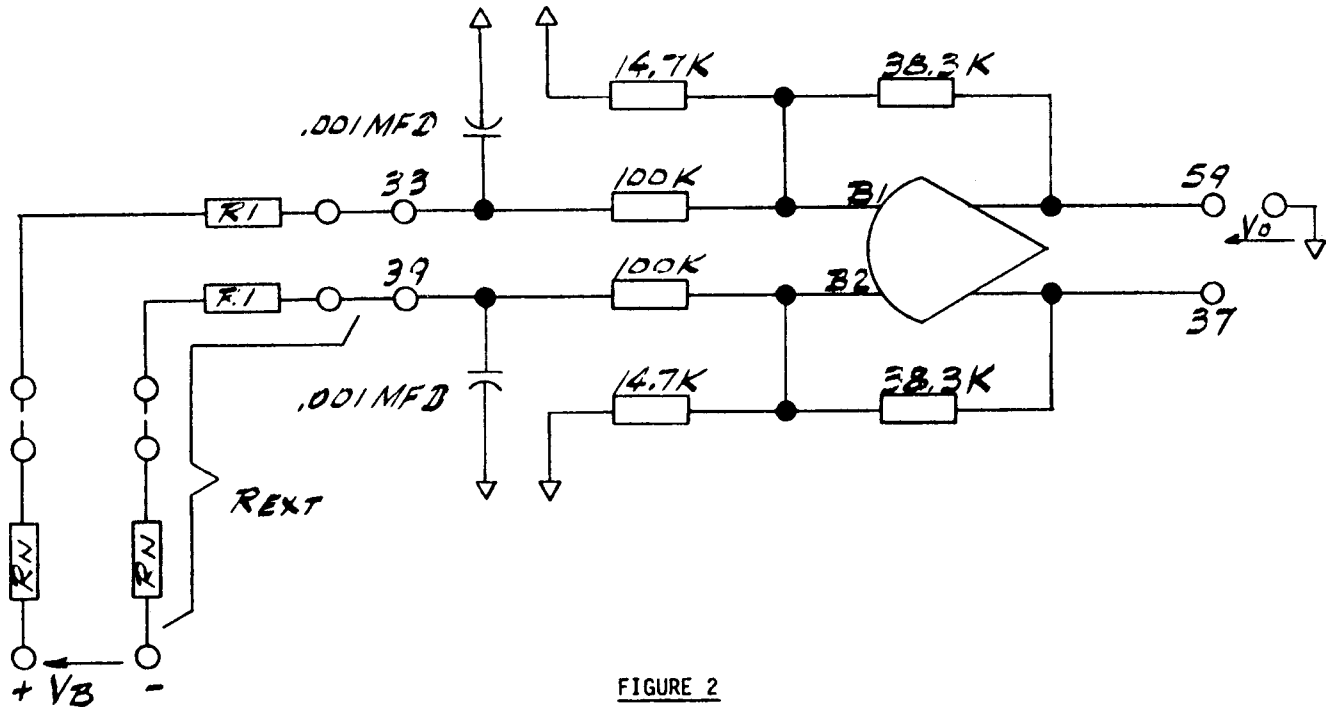


FIGURE 2

The external dropping resistors can be determined from

$$V_o(T_{59}) = - \frac{1}{2} \times \frac{38.3k}{(100k + R_{EXT}k)} \times V_B$$

$$R_{EXT}k = - \frac{38.3k}{2} \times \frac{V_B}{V_o(T_{59})} - 100k$$

The output voltage on terminal 59 is opposite in polarity to a +V<sub>B</sub> as shown. The external resistors must be paired as shown and appropriately selected from a wattage standpoint.

If an external gain adjustment is used, the circuit configuration will be as shown in Figure 3.

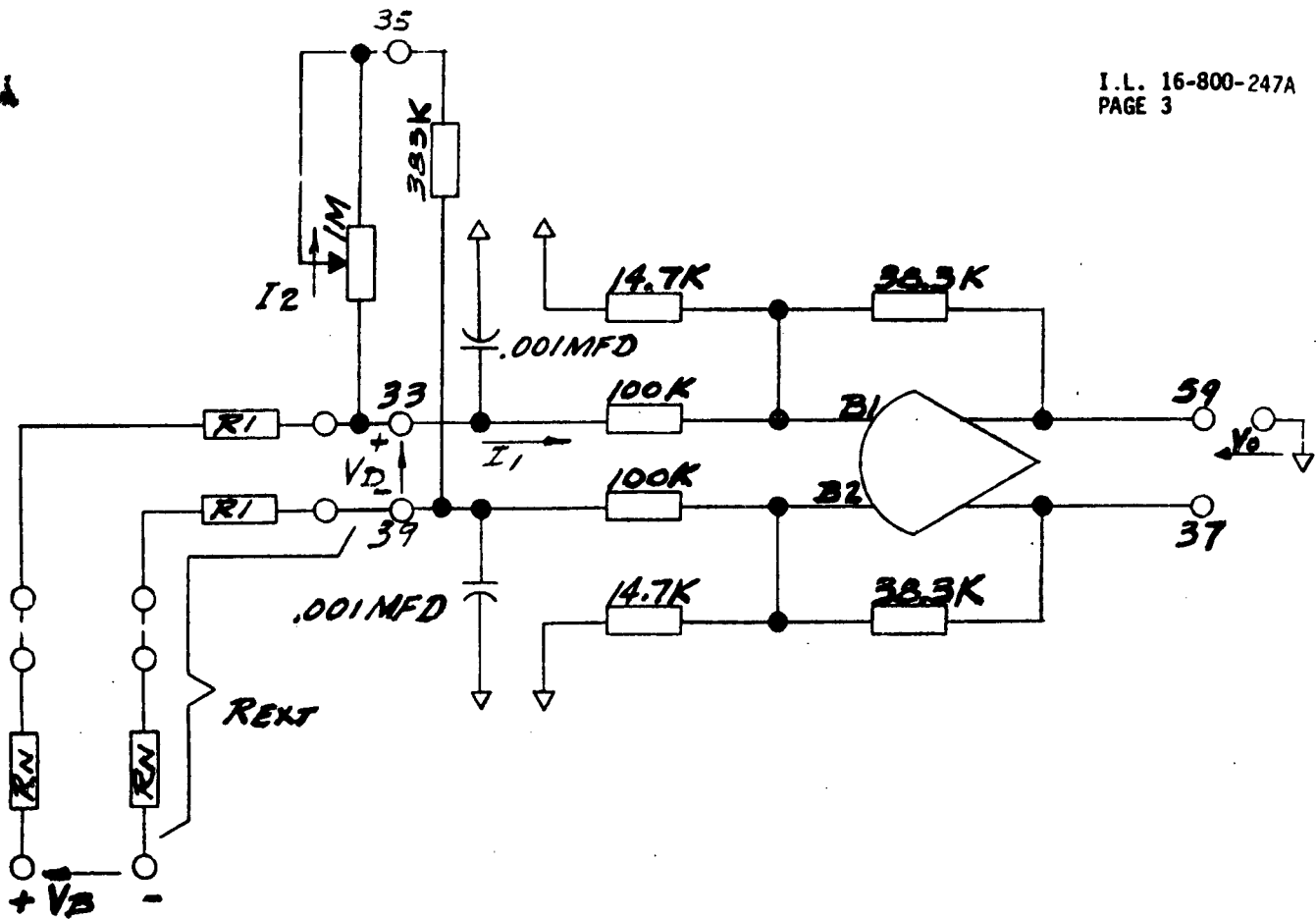


FIGURE 3

To determine the values for  $R_{EXT}$ , the following steps can be used.

1. Calculate  $V_D$  for the desired  $V_O$  at rated  $V_B$

$$V_D = -2 V_O (T_{59}) \times \frac{100k}{38.3k}$$

2. Assume a floating  $V_B$  and calculate  $I_1$

$$I_1 = \frac{V_D/2}{100k} \text{ ma}$$

3. Calculate  $I_2$  based on a specific setting of the potentiometer.

$$I_2 = \frac{V_D}{383k + R_{POT}} \text{ ma}$$

4. Calculate  $R_{EXT}$

$$R_{EXT} = \frac{V_B/2 - V_D/2}{I_1 \text{ ina} + I_2 \text{ ma}} \text{ k}$$

IV. CHARACTERISTICS AND RATINGS

Output load and voltage:

Load 2k ohm maximum  
 Voltage  $T_{37}, T_{59} = \pm 13V$  maximum

DC Power Requirements:

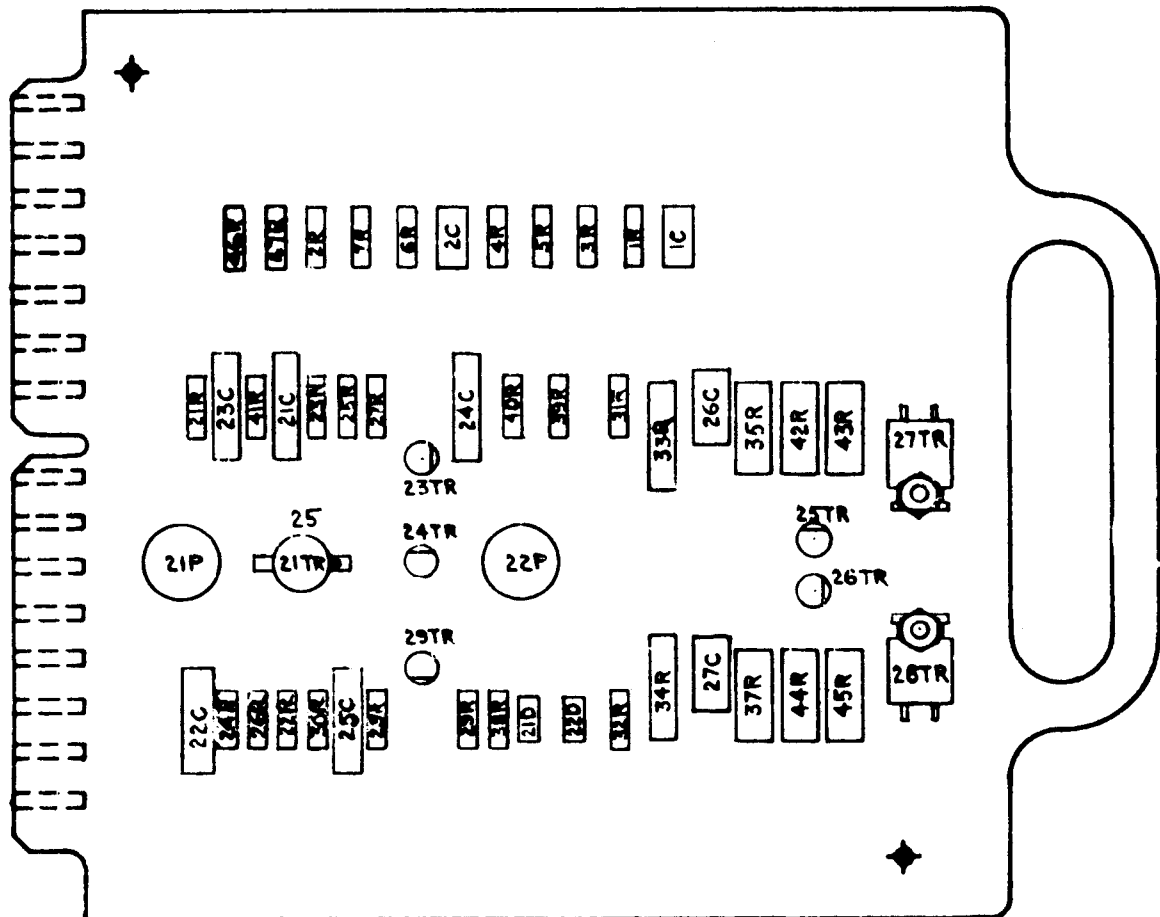
PSP +24V  $\pm 5\%$  55ma maximum  
 PSN -24V  $\pm 5\%$  55ma maximum

Common Mode Rejection Ratio:

With 1% resistors in external attenuater ...  $> 30$

Maximum common mode level at the summing junctions:  $\pm 10V$

Ambient Temperature:  $0^{\circ}C$  to  $55^{\circ}C$ .



PC CARD (FRONT VIEW)

FIGURE 4