

(-18)

**MCGERDY RADIO INDUSTRIES LIMITED**  
TORONTO - ONTARIO

AT-296

MEDIUM LEVEL INPUT AMP  
WITH EXT. ATTENUATOR  
BLOCK DIAGRAM.

|                      |                     |
|----------------------|---------------------|
| DRAWN-<br>✓✓         | APPROVED-           |
| CHECKED-             | SCALE-              |
| DESIGN-<br>J. VISSEK | DATE-<br>July 15/71 |

ALL DIMENSIONS IN INCHES  
DO NOT SCALE

TOLERANCES UNLESS OTHERWISE SPECIFIED  
DECIMAL ± .005  
FRACTIONAL ± 1/64  
ANGULAR ± 1/2°

MATERIAL-

FINISH-  
If You Didn't Get This From My Site,  
Then It Was Stolen From....  
www.SteamPoweredRadio.Com

UNIT-  
AT-296 A-296/1-2  
DRAWING NO.

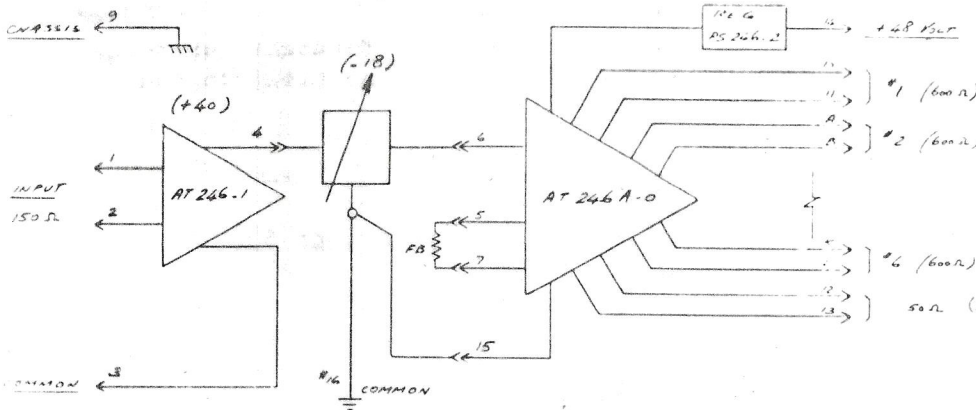


Figure 3-1. Block Diagram of AT246A with Attenuator.

Table 3.01. Feedback Resistor Values.

| Gain (dB) | Res (ohms) | Gain (dB) | Res (ohms) | Gain (dB) | Res (ohms) | Gain (dB) | Res (ohms) | Gain (dB) | Res (ohms) |
|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|
| 18        | -          | 24        | 620        | 30        | 200        | 36        | 75         | 42        | 20         |
| 19        | 5.6K       | 25        | 470        | 31        | 180        | 37        | 62         | 43        | 15         |
| 20        | 2.4K       | 26        | 430        | 32        | 150        | 38        | 51         | 44        | 12         |
| 21        | 1.8K       | 27        | 360        | 33        | 120        | 39        | 39         | 45        | 7.5        |
| 22        | 1.2K       | 28        | 300        | 34        | 100        | 40        | 33         | 46        | 4.7        |
| 23        | 910        | 29        | 240        | 35        | 91         | 41        | 27         |           |            |

1. Feedback resistor connects between pins 5 & 7 (alt 6 & 7)
2. Some Gain values are  $\pm 0.5$  dB due to standard resistor values.
3. Gain given is for 600-ohm input to 600-ohm output. For 50-ohm output (pins 12 & 13) add 6 dB to Gain Figure.
4. Load for 600-ohm or 50-ohm outputs is 600-ohms or higher.

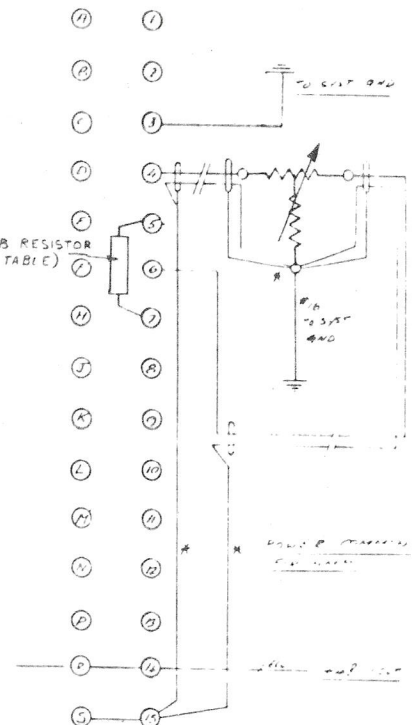


Figure 3-2. Connector Wiring w/Attenuator.

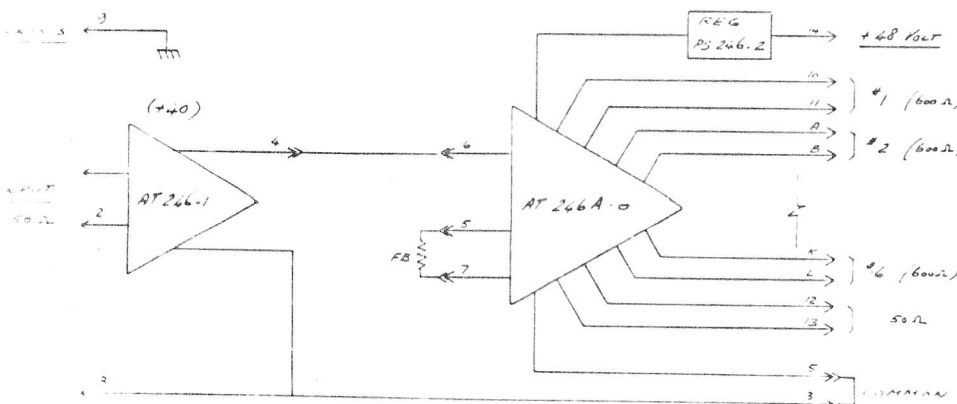


Figure 3-3. Block Diagram of AT246A w/o Attenuator.

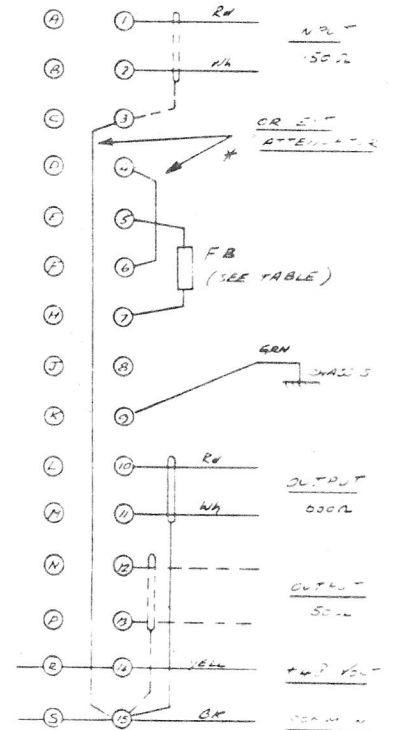


Figure 3-4. Connector Wiring w/o Attenuator.



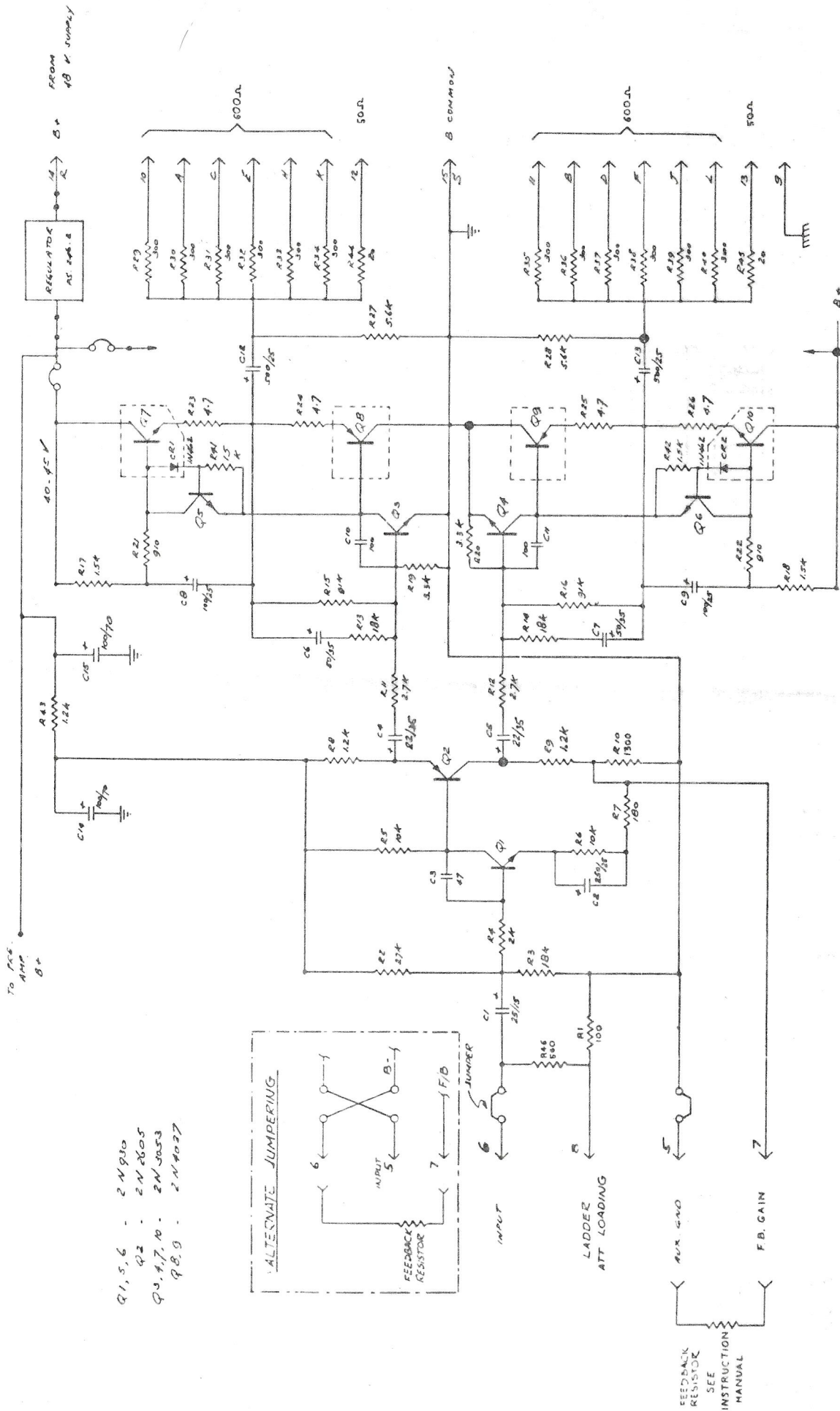


Figure 4-1. Schematic of 246A-0 Output Section.



- Q1 - 2N4312
- Q4 - 2N3053
- Q2,3 - 2N930
- Q5 - 2N4027

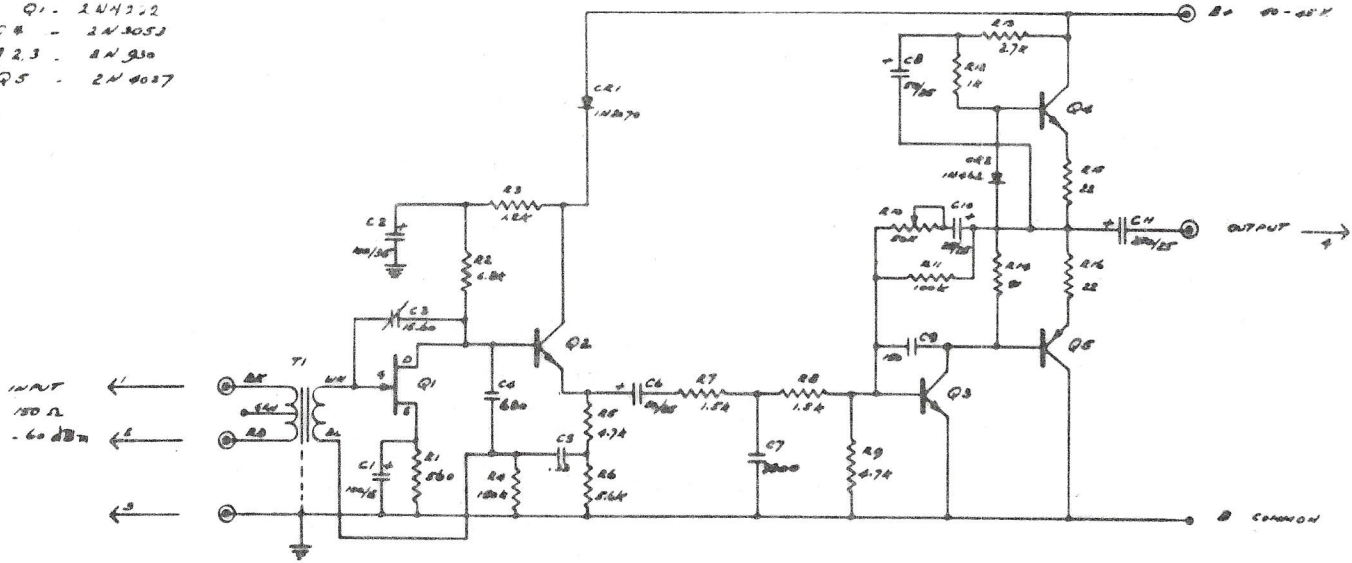


Figure 4-2. Schematic of 246-1 Input Section.

- Q201 - 2N3054
- Q202 - 2N3053
- CR201 - 6Z00623A

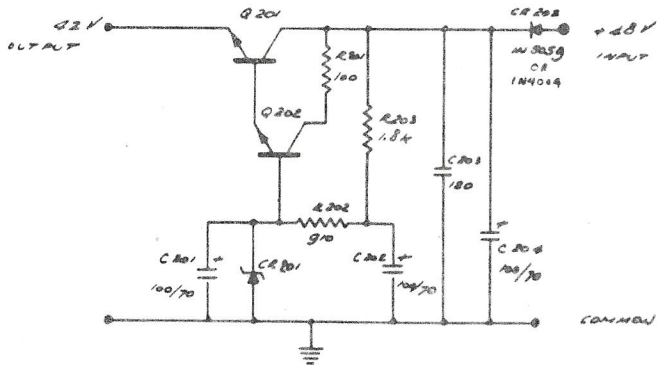


Figure 4-3. Schematic of 246-2 Regulator.

- Q201 - 2N3054
- Q202 - 2N3053
- CR201 - 1N5165

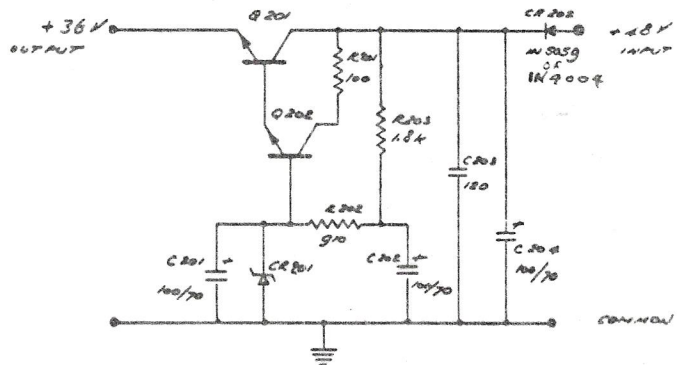
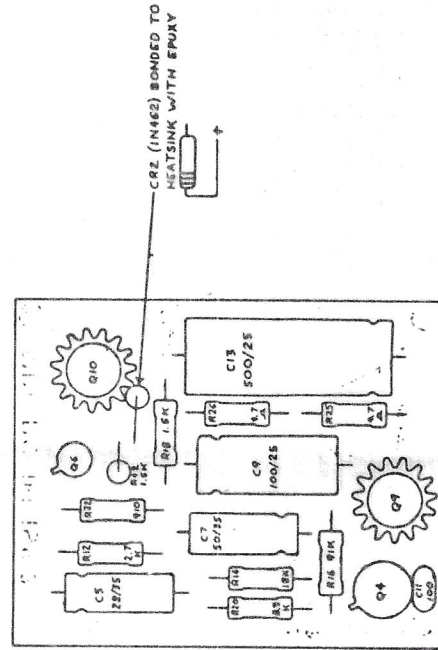
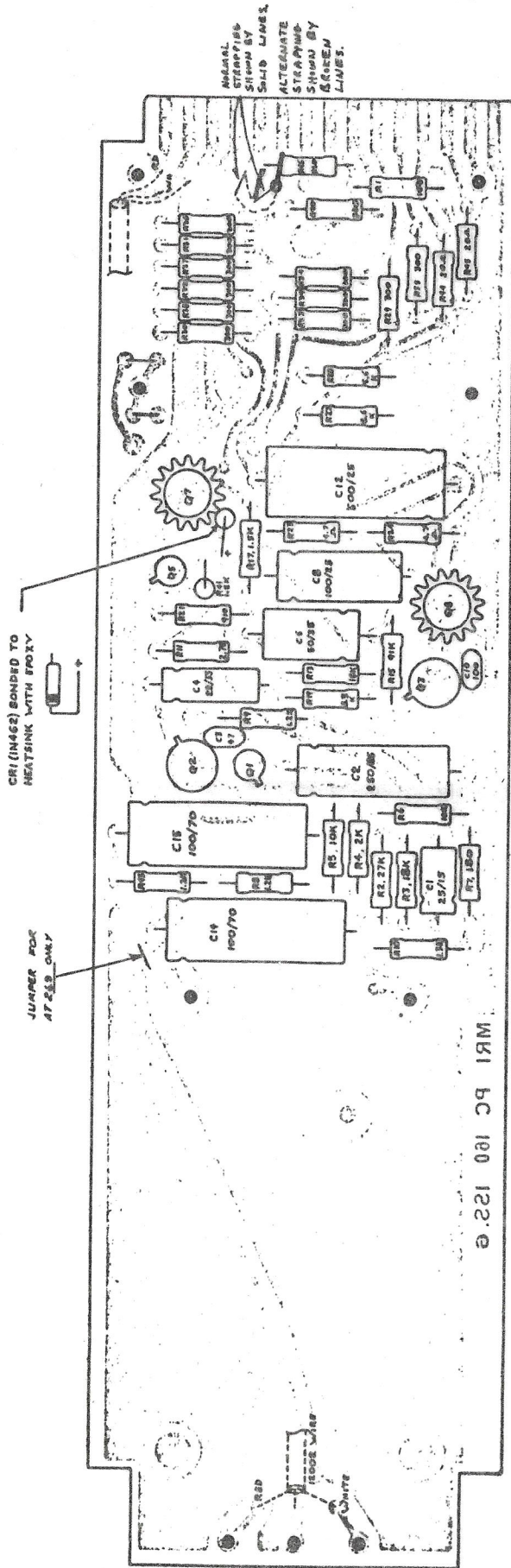


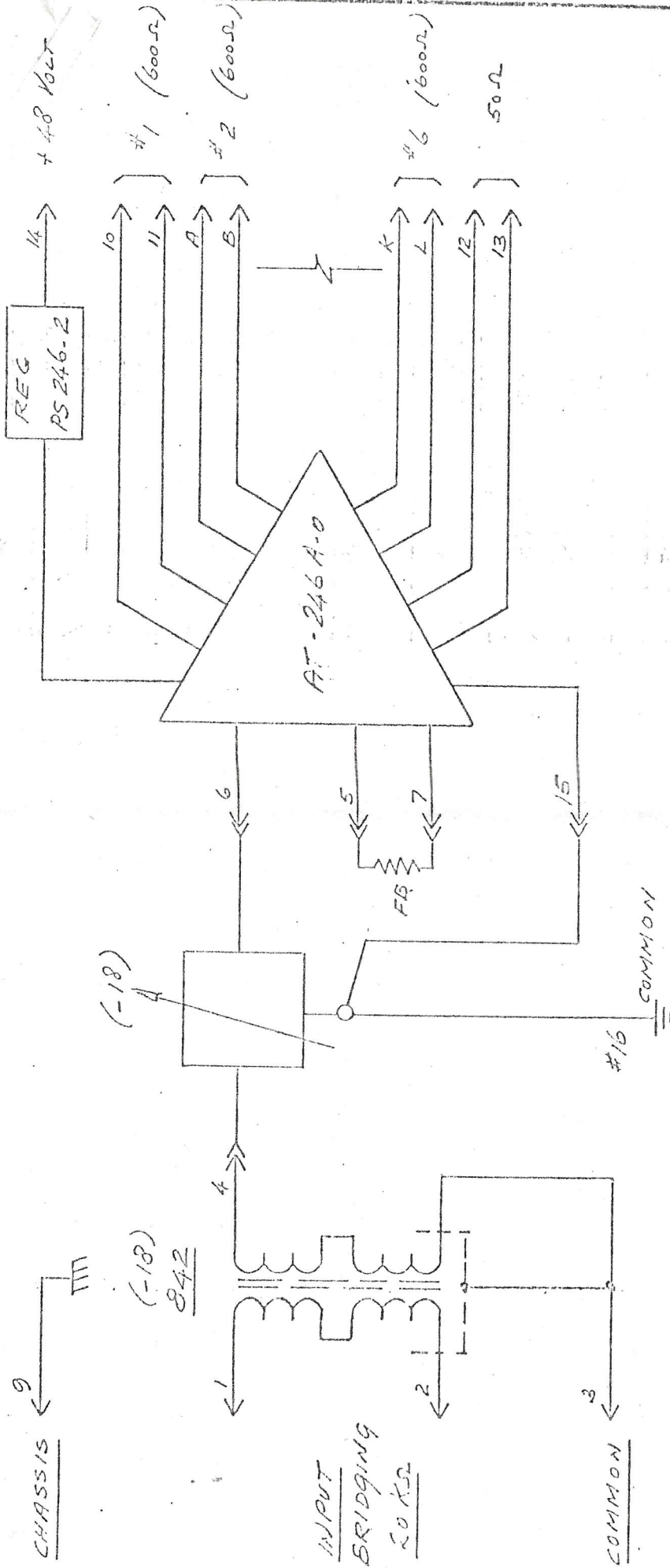
Figure 4-4. Schematic of 246-6 Regulator.

NOTE: No schematic is shown for the 246-7 as it is a dummy card containing only CR202.



- Q1, Q5, Q9 2N970
- Q2, Q4, Q7, Q10 2N3053
- Q3, Q6, Q8 2N4037
- Q11 2N2805
- Q12 2N2805

Figure 6-1. Component Layout, 246A-0.



MCQUADY RADIO INDUSTRIES LIMITED  
TORONTO - ONTARIO

AT-297

HIGH LEVEL INPUT AMP  
WITH EXT. ATTENUATOR  
BLOCK DIAGRAM

|                       |                     |
|-----------------------|---------------------|
| DRAWN-<br>J.V.        | APPROVED-           |
| CHECKED-              | SCALE-              |
| DESIGN-<br>J. V. SSEC | DATE-<br>July 15/71 |

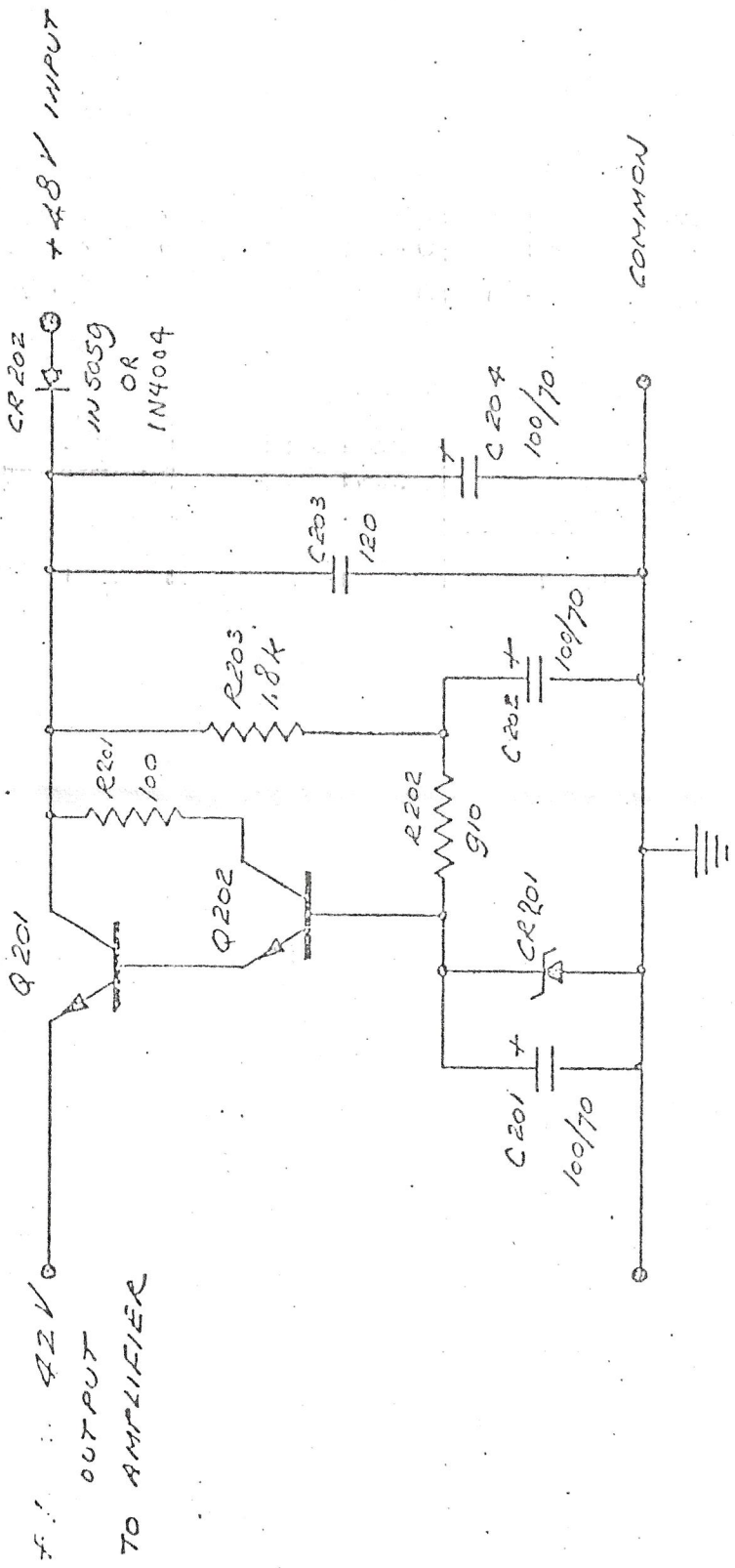
ALL DIMENSIONS IN INCHES  
DO NOT SCALE

|                                       |                   |
|---------------------------------------|-------------------|
| TOLERANCES UNLESS OTHERWISE SPECIFIED | DECIMAL ± .005    |
|                                       | FRACTIONAL ± 1/64 |
|                                       | ANGULAR ± 1/2°    |
| MATERIAL-                             |                   |
| FINISH-                               |                   |

UNIT-  
DRAWING NO.  
AT-297 A-297 K-E



Q201 - 2N305A  
 Q202 - 2N3053  
 CR201 - GZ00623A



REGULBY RADIO INDUSTRIES LIMITED  
 TORONTO - ONTARIO

PS-246-2

PLUG-IN REGULATOR

42 Volt Output

|           |         |          |
|-----------|---------|----------|
| APPROVED- | SCALE-  | DATE-    |
| CHECKED-  | DESIGN- | MAY 3/70 |

|                                       |                   |
|---------------------------------------|-------------------|
| TOLERANCES UNLESS OTHERWISE SPECIFIED | DECIMAL = .005    |
|                                       | FRACTIONAL = 1/64 |
|                                       | ANGULAR = 1/2°    |
| MATERIAL-                             |                   |
| FINISH-                               |                   |

ALL DIMENSIONS IN INCHES

DO NOT SCALE