

# VOLTAGE & RESISTANCE MEASUREMENTS FROM SOCKET TERMINALS TO FLOATING GROUND

## VOLTAGE

## RESISTANCE

### WITH SLIDE SWITCH IN ELECTRIC POSITION

| TUBE | 1   | 2  | 3   | 4     | 5     | 6    | 7   | 8   | 1    | 2    | 3     | 4     | 5      | 6    | 7    | 8    |
|------|-----|----|-----|-------|-------|------|-----|-----|------|------|-------|-------|--------|------|------|------|
| 1R5  | 2.8 | 95 | 48  | **    | 2.8   | *1.8 | 4.2 |     | 39   | 3.5K | 25.5K | 100K  | 39     | 4.3M | 50   |      |
| 1U4  | 0   | 95 | 95  | *1.8  | 0     | 0    | 1.4 |     | 0    | 3.5K | 3.5K  | 4.3M  | 0      | 10M  | 22   |      |
| 1S5  | 2.8 | 0  | *2  | *20   | *50   | *1   | 1.4 |     | 39   | Inf. | 1M+   | 4.75M | 333.5K | 4.7M | 22   |      |
| 3V4  | 4.2 | 95 | 95  | 7     | 5.6   | 0    | 7   |     | 50   | 3.5K | 3.5K  | 65    | 60     | 2.2M | 65   |      |
| OY4  | 0   | 0  | +DC | 117AC | 117AC | 0    | 120 | 120 | 330K | Inf. | Inf.  | Inf.  | Inf.   | Inf. | 1889 | 1889 |

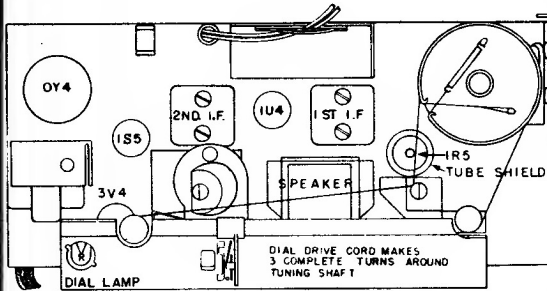
### WITH SLIDE SWITCH IN BATTERY POSITION

| TUBE | 1   | 2  | 3  | 4    | 5   | 6    | 7   | 8 | 1    | 2    | 3     | 4     | 5    | 6    | 7    | 8    |
|------|-----|----|----|------|-----|------|-----|---|------|------|-------|-------|------|------|------|------|
| 1R5  | 3.0 | 90 | 48 | **   | 3.0 | *1.8 | 4.5 |   | 39   | *    | **    | 100K  | 39   | 4.3M | 50   |      |
| 1U4  | 0   | 90 | 90 | *1.8 | 0   | 0    | 1.5 |   | 0    | *    | **    | 4.3M  | 0    | 10M  | 22   |      |
| 1S5  | 3.0 | 0  | *2 | *20  | *50 | *1   | 1.5 |   | 39   | Inf. | 1M+   | 4.75M | 390K | 4.7M | 22   |      |
| 3V4  | 4.5 | 90 | 90 | 0    | 6.0 | 0    | 7.5 |   | 50   | *    | *     | 680   | 60   | 2.2M | 72   |      |
| OY4  | 0   | 0  | 0  | 0    | 0   | 0    | 0   |   | 330K | Inf. | 10.3M | 330K  | 330K | Inf. | 2.5K | 2.5K |

ARVIN Model 140P

Chassis RE-209

Noblitt-Sparks In.



All voltage measurements are made with a line voltage of 117V AC or a battery having 90 VB and 7.5 VA; with no signal using a 1000 ohm per volt voltmeter and are +DC unless otherwise indicated.

\* Measured with a vacuum tube voltmeter.

\*\* The oscillator voltage measured with a vacuum tube voltmeter from the oscillator grid to floating ground will vary from approx. -6V with the variable condenser closed to -12V with the condenser open. The true oscillator voltage measured from the grid to the negative filament lug should be from -10 to -20V.

\* The resistance reading at this point is the leakage across the electrolytic condenser and will vary with different condensers and different ohmmeters. With the negative lead of the ohmmeter to floating ground, the reading may vary anywhere from 50K to 1M depending on the type meter used.

\*\* 22K higher than the electrolytic condensers leakage  
K equals 100 ohms  
M equals 1 megohm

### FREQUENCY RANGE

Broadcast ..... 540-1600 kc  
IF ..... 455 kc

