






| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MRC (BG), (FB), (FH), 5-51 |  |  |  |  |  |  | LEVER |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{gathered} \text { FIL. } \\ \text { CONT. } \end{gathered}$ | COMMENT |
| 5B8 | Pent | 1 | 4 | 5 | 29 | 6 | --- | 8 | 9 | 6 | 4-5 |  |
| 5 J 6 | Triode-1 | 1 | 3 | 16 | 13 | 6 | --- | --- | 2 | 5 | 3-4 |  |
| 5 J 6 | Triode-2 | 1 | 3 | 16 | 13 | 6 | --- | --- | 1 | 6 | 3-4 |  |
| 5T4 | Plate-1 | 2 | 2 | 0 | 4 | 6 | --- | --- | 4 | --- | 2-8 |  |
| 5T4 | Plate-2 | 2 | 2 | 0 | 4 | 6 | --- | --- | 6 | --- | 2-8 |  |
| 5V3 | Plate-1 | 2 | 2 | 0 | 4 | 6 | --- | --- | 4 | --- | 2-8 |  |
| 5V3 | Plate-2 | 2 | 2 | 0 | 4 | 6 | --- | --- | 6 | --- | 2-8 |  |
| 5V4 | Plate-1 | 2 | 2 | 0 | 2 | 6 | --- | --- | 4 | --- | 2-8 |  |
| 5V4 | Plate-2 | 2 | 2 | 0 | 2 | 6 | --- | --- | 6 | --- | 2-8 |  |
| 5W4 | Plate-1 | 2 | 2 | 0 | 9 | 6 | --- | --- | 4 | --- | 2-8 |  |
| 5W4 | Plate-2 | 2 | 2 | 0 | 9 | 6 | --- | --- | 6 | --- | 2-8 |  |
| 5X4 | Plate-1 | 2 | 7 | 0 | 5 | 6 | --- | --- | 3 | --- | 7-8 |  |
| 5X4 | Plate-2 | 2 | 7 | 0 | 5 | 6 | --- | --- | 5 | --- | 7-8 |  |
| 5Y4 | Plate-1 | 2 | 7 | 0 | 8 | 6 | --- | --- | 3 | -- | 7-8 |  |
| 5Y4 | Plate-2 | 2 | 7 | 0 | 8 | 6 | --- | --- | 5 | --- | 7-8 |  |
| 5Z3 | Plate-1 | 2 | 1 | 0 | 5 | 6 | --- | --- | 2 | --- | 1-4 |  |
| 5 Z 3 | Plate-2 | 2 | 1 | 0 | 5 | 6 | --- | --- | 3 | --- | 1-4 |  |
| 5Z4 | Plate-1 | 2 | 2 | 0 | 2 | 6 | --- | --- | 4 | --- | 2-8 |  |
| 5Z4 | Plate-2 | 2 | 2 | 0 | 2 | 6 | --- | --- | 6 | --- | 2-8 |  |
| 6A3 |  | 1 | 1 | 40 | 4 | 7 | --- | --- | 2 | 3 | 1-4 |  |
| 6A4-LA |  | 1 | 1 | 30 | 10 | 7 | --- | 4 | 2 | 3 | 1-5 |  |
| 6A5 |  | 1 | 8 | 40 | 4 | 5 | --- | --- | 3 | 5 | 2-7-8 |  |
| 6A6 | Triode-1 | 1 | 1 | 36 | 7 | 7 | --- | --- | 6 | 5 | 1-7 |  |
| 6A6 | Triode-2 | 1 | 1 | 36 | 7 | 7 | --- | -- | 2 | 3 | 1-7 |  |
| 6A7 | Amp | 4 | 1 | 40 | 19 | 7 | --- | 3 | 2 | 11 | 1-7 |  |
| 6A7 | Osc | 1 | 1 | 28 | 31 | 7 | --- | --- | 4 | 5 | 1-7 |  |
| 6A8 | Amp | 4 | 2 | 29 | 24 | 7 | --- | 4 | 3 | 11 | 2-7 |  |
| 6A8 | Osc | 1 | 2 | 33 | 28 | 7 | --- | --- | 6 | 5 | 2-7 |  |
| 6AB5 | Triode | 1 | 1 | 23 | 19 | 7 | --- | --- | 2 | 3 | 1-6 |  |
| 6AB5 | Eye | 1 | 1 | 0 | 0 | 7 | --- | --- | 2-4 | --- | 1-6 | See instructions for eye test. |
| 6AB6 | Input | 1 | 2 | 31 | 18 | 7 | --- | --- | 4 | 5 | 2-7 |  |
| 6AB6 | Output | 1 | 2 | 34 | 10 | 7 | --- | 4 | 3 | 5 | 2-7 |  |
| 6AB7 |  | 1 | 2 | 12 | 22 | 7 | --- | 6 | 8 | 4 | 2-7 |  |
| 6AC5 |  | 1 | 2 | 37 | 8 | 7 | --- | --- | 3 | 5 | 2-7 |  |
| 6AC6 |  | 1 | 2 | 29 | 8 | 7 | --- | 4 | 3 | 5 | 2-7 |  |
| 6AD6 |  | 1 | 2 | 0 | 0 | 7 | --- | --- | 3-4-5 | --- | 2-7 | See instructions for eye test. |
| 6AE6 | Triode-1 | 1 | 2 | 18 | 35 | 7 | --- | --- | 3 | 5 | 2-7 |  |
| 6AE6 | Triode-2 | 1 | 2 | 18 | 38 | 7 | --- | --- | 4 | 5 | 2-7 |  |
| 6AE7 | Triode-1 | 1 | 2 | 34 | 7 | 7 | --- | --- | 3 | 6 | 2-7 |  |
| 6AE7 | Triode-2 | 1 | 2 | 34 | 7 | 7 | --- | --- | 3 | 4 | 2-7 |  |
| 6AF3 |  | 3 | 4 | 0 | 15 | 7 | 2 | --- | 9 | --- | 4-5 | May show short on 2-9 |


| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  | Z | $\begin{gathered} \text { FIL. } \\ \text { CONT. } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MRC (BG), (FB), (FH), 5-51 |  |  | B | C | D | E | LEVER$w$ | X | Y |  |  | COMMENT |
| TUBE | SECTION | A |  |  |  |  |  |  |  |  |  |  |
| 6AF6 |  | 1 | 2 | 0 | 0 | 7 | --- | --- | 3-4-5 | --- | 2-7 | See instructions for eye test. |
| 6AG6 |  | 1 | 2 | 22 | 10 | 7 | --- | 4 | 3 | 5 | 2-7 |  |
| 6AH4 |  | 2 | 2 | 27 | 7 | 7 | --- | --- | 5 | 1 | 2-7 |  |
| 6AH5 |  | 1 | 2 | 24 | 9 | 7 | --- | 1 | 4 | 6 | 2-7 |  |
| 6AH6 |  | 1 | 3 | 8 | 25 | 7 | --- | 6 | 5 | 1 | 3-4 |  |
| 6AH7 | Triode-1 | 1 | 7 | 29 | 10 | 7 | --- | --- | 3 | 1 | 7-8 |  |
| 6AH7 | Triode-2 | 1 | 7 | 29 | 10 | 7 | --- | --- | 6 | 5 | 7-8 |  |
| 6AJ4 |  | 2 | 7 | 21 | 18 | 7 | * | --- | 5 | 9 | 7-8 | *Throw levers 1-3-4-6 to "W"; Must show short on 1-3-4-6-9; Grid short test - <br> Depress 1-3-4-6-9 together |
| 6AK4 |  | 2 | 3 | 12 | 18 | 7 | --- | --- | 8 | 1 | 3-6 |  |
| 6AK7 |  | 1 | 2 | 14 | 13 | 7 | --- | 6 | 8 | 4 | 2-7 |  |
| 6AK8 | Triode | 4 | 4 | 14 | 10 | 7 | --- | --- | 9 | 8 | 4-5 |  |
| 6AK8 | Diode-1 | 3 | 4 | 0 | 24 | 7 | --- | -- | 6 | --- | 4-5 |  |
| 6AK8 | Diode-2 | 3 | 4 | 0 | 16 | 7 | --- | --- | 2 | --- | 4-5 |  |
| 6AK8 | Diode-3 | 3 | 4 | 0 | 16 | 7 | --- | --- | 1 | -- | 4-5 |  |
| 6AL6 |  | 1 | 2 | 24 | 9 | 7 | --- | 4 | 11 | 5 | 2-7 |  |
| 6AL7 |  | 7 | 2 | 7 | 0 | 7 | --- | --- | 3 | 4-5-6 | 2-7 | See instructions for FM/AM eye tests. |
| 6AN5 |  | 1 | 3 | 13 | 7 | 7 | --- | 6 | 5 | 1 | 3-4 | Must show short on 2-7; Cathode short test <br> - Depress 2-7 together |
| 6AQ7 | Triode | 1 | 7 | 15 | 30 | 7 | --- | --- | 5 | 4 | 7-8 |  |
| 6AQ7 | Diode-1 | 3 | 7 | 0 | 23 | 7 | --- | --- | 3 | --- | 7-8 |  |
| 6AQ7 | Diode-2 | 3 | 7 | 0 | 23 | 7 | --- | --- | 1 | --- | 7-8 |  |
| 6AS6 |  | 1 | 3 | 11 | 32 | 7 | --- | 6 | 5 | 1 | 3-4 |  |
| 6AS7 | Triode-1 | 1 | 7 | 30 | 4 | 7 | --- | --- | 5 | 4 | 7-8 |  |
| 6AS7 | Triode-2 | 1 | 7 | 30 | 4 | 7 | --- | --- | 2 | 1 | 7-8 |  |
| 6AU7 | Triode-1 | 1 | 9 | 27 | 10 | 5 | --- | --- | 1 | 2 | 4-5-9 |  |
| 6AU7 | Triode-2 | 1 | 9 | 27 | 10 | 5 | --- | --- | 6 | 7 | 4-5-9 |  |
| 6AX7 | Triode-1 | 1 | 9 | 8 | 38 | 5 | --- | --- | 6 | 7 | 4-5-9 |  |
| 6AX7 | Triode-2 | 1 | 9 | 8 | 38 | 5 | --- | --- | 1 | 2 | 4-5-9 |  |
| 6B4 |  | 1 | 2 | 40 | 4 | 7 | --- | --- | 3 | 5 | 2-7 |  |
| 6B5 | Input | 1 | 1 | 40 | 15 | 7 | --- | --- | 3 | 4 | 1-6 |  |
| 6B5 | Output | 1 | 1 | 38 | 9 | 7 | --- | 3 | 2 | 4 | 1-6 |  |
| 6B6 | Triode | 1 | 2 | 12 | 37 | 7 | --- | --- | 3 | 11 | 2-7 |  |
| 6B6 | Diode-1 | 3 | 2 | 0 | 27 | 7 | --- | --- | 5 | -- | 2-7 |  |
| 6B6 | Diode-2 | 3 | 2 | 0 | 27 | 7 | --- | --- | 4 | --- | 2-7 |  |
| 6B7 | Pent | 1 | 1 | 29 | 25 | 7 | --- | 3 | 2 | 11 | 1-7 |  |
| 6B7 | Diode-1 | 3 | 1 | 0 | 27 | 7 | --- | --- | 5 | --- | 1-7 |  |
| 6B7 | Diode-2 | 3 | 1 | 0 | 27 | 7 | --- | --- | 4 | --- | 1-7 |  |
| 6B8 | Pent | 1 | 2 | 29 | 25 | 7 | --- | 6 | 3 | 11 | 2-7 |  |
| 6B8 | Diode-1 | 3 | 2 | 0 | 27 | 7 | --- | --- | 4 | --- | 2-7 |  |


| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |  |  | COMMENT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MRC (BG), (FB), (FH), 5-51 |  |  |  |  |  |  | LEVER |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{gathered} \text { FIL. } \\ \text { CONT. } \end{gathered}$ |  |
| 6B8 | Diode-2 | 3 | 2 | 0 | 27 | 7 | --- | --- | 5 | --- | 2-7 |  |
| 6BA7 | Amp | 4 | 4 | 10 | 21 | 7 | --- | 1 | 9 | 7 | 4-5 |  |
| 6BA7 | Osc | 1 | 4 | 32 | 6 | 7 | --- | --- | 1 | 2 | 4-5 |  |
| 6BA8 | Triode | 1 | 4 | 25 | 10 | 7 | --- | --- | 3 | 2 | 4-5 |  |
| 6BA8 | Pentode | 1 | 4 | 5 | 22 | 7 | --- | 8 | 9 | 7 | 4-5 |  |
| 6BC7 | Diode-1 | 3 | 4 | 0 | 16 | 7 | --- | --- | 8 | --- | 4-5 |  |
| 6BC7 | Diode-2 | 3 | 4 | 0 | 16 | 7 | --- | --- | 6 | --- | 4-5 |  |
| 6BC7 | Diode-3 | 3 | 4 | 0 | 16 | 7 | --- | --- | 2 | --- | 4-5 |  |
| 6BF7 | Triode-1 | 5 | 3 | 9 | 13 | 7 | --- | --- | 8 | 7 | 3-6 |  |
| 6BF7 | Triode-2 | 5 | 3 | 9 | 13 | 7 | --- | --- | 1 | 2 | 3-6 |  |
| 6BG7 | Triode-1 | 5 | 3 | 9 | 13 | 7 | --- | --- | 8 | 7 | 3-6 |  |
| 6BG7 | Triode-2 | 5 | 3 | 9 | 13 | 7 | --- | --- | 1 | 2 | 3-6 |  |
| 6BJ7 | Diode-1 | 3 | 4 | 0 | 17 | 7 | --- | --- | 8 | --- | 4-5 |  |
| 6BJ7 | Diode-2 | 3 | 4 | 0 | 17 | 7 | -- | --- | 6 | --- | 4-5 |  |
| 6BJ7 | Diode-3 | 3 | 4 | 0 | 17 | 7 | --- | --- | 2 | --- | 4-5 |  |
| 6BL7 | Triode-1 | 1 | 7 | 27 | 6 | 7 | --- | --- | 2 | 1 | 7-8 |  |
| 6BL7 | Triode-2 | 1 | 7 | 27 | 6 | 7 | --- | --- | 5 | 4 | 7-8 |  |
| 6BN7 | Triode-1 | 1 | 4 | 29 | 5 | 7 | --- | --- | 9 | 7 | 4-5 |  |
| 6BN7 | Triode-2 | 1 | 4 | 10 | 24 | 7 | --- | --- | 1 | 2 | 4-5 |  |
| 6BQ7 | Triode-1 | 1 | 4 | 15 | 11 | 7 | --- | --- | 6 | 7 | 4-5 |  |
| 6BQ7 | Triode-2 | 1 | 4 | 15 | 11 | 7 | --- | --- | 1 | 2 | 4-5 |  |
| 6BR5 | Triode | 1 | 4 | 19 | 20 | 7 | --- | --- | 7 | 1 | 4-5 |  |
| 6BR5 | Eye | 7 | 4 | 0 | 0 | 7 | 3-6 | --- | 7-9 | --- | 4-5 | May show short on 3-6-9; See instructions for eye test |
| 6BY5 | Diode-1 | 3 | 2 | 0 | 16 | 7 | --- | --- | 5 | --- | 2-7 |  |
| 6BY5 | Diode-2 | 3 | 2 | 0 | 16 | 7 | --- | --- | 4 | --- | 2-7 |  |
| 6C5 |  | 1 | 2 | 15 | 18 | 7 | --- | --- | 3 | 5 | 2-7 |  |
| 6C6 |  | 1 | 1 | 28 | 20 | 7 | --- | 3 | 2 | 11 | 1-6 |  |
| 6C7 | Triode | 1 | 1 | 25 | 15 | 7 | --- | --- | 2 | 11 | 1-7 |  |
| 6C7 | Diode-1 | 3 | 1 | 0 | 27 | 7 | --- | --- | 4 | --- | 1-7 |  |
| 6C7 | Diode-2 | 3 | 1 | 0 | 27 | 7 | --- | --- | 5 | --- | 1-7 |  |
| 6C8 | Triode-1 | 1 | 2 | 31 | 11 | 7 | --- | --- | 3 | 11 | 2-7 |  |
| 6C8 | Triode-2 | 1 | 2 | 31 | 11 | 7 | --- | --- | 6 | 5 | 2-7 |  |
| 6CD7 |  | 7 | 2 | 0 | 0 | 7 | --- | --- | 3-6-5 | --- | 2-7 | See instructions for eye test. |
| 6D4 |  | 7 | 3 | 0 | 4 | 7 | --- | --- | 7 | --- | 3-4 |  |
| 6D5 |  | 1 | 2 | 38 | 6 | 7 | --- | --- | 3 | 5 | 2-7 |  |
| 6D6 |  | 1 | 1 | 27 | 19 | 7 | --- | 3 | 2 | 11 | 1-6 |  |
| 6D7 |  | 1 | 1 | 28 | 20 | 7 | --- | 3 | 2 | 11 | 1-7 |  |
| 6D8 | Amp | 4 | 2 | 40 | 20 | 7 | --- | 4 | 3 | 11 | 2-7 |  |
| 6D8 | Osc | 1 | 2 | 30 | 33 | 7 | --- | --- | 6 | 5 | 2-7 |  |
| 6DA5 | Triode | 3 | 4 | 24 | 23 | 7 | --- | --- | 7 | 1 | 4-5 |  |


| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MRC (BG), (FB), (FH), 5-51 |  |  |  |  |  |  | LEVER |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{gathered} \text { FIL. } \\ \text { CONT. } \end{gathered}$ | COMMENT |
| 6DA5 | Eye | 7 | 4 | 0 | 0 | 7 | 3-8 | --- | 7-9 | --- | 4-5 | Must show short on 3-8-9; See instructions for eye test |
| 6DZ7 | Pent-1 | 1 | 2 | 17 | 10 | 7 | --- | 4 | 6 | 5 | 2-7 |  |
| 6DZ7 | Pent-2 | 1 | 2 | 15 | 10 | 7 | --- | 4 | 3 | 1 | 2-7 |  |
| 6E5 | Triode | 1 | 1 | 25 | 24 | 7 | --- | --- | 2 | 3 | 1-6 |  |
| 6E5 | Eye | 1 | 1 | 0 | 0 | 7 | --- | --- | 2-4 | --- | 1-6 | See instructions for eye test. |
| 6E6 | Triode-1 | 1 | 1 | 30 | 9 | 7 | --- | --- | 2 | 3 | 1-7 |  |
| 6E6 | Triode-2 | 1 | 1 | 30 | 9 | 7 | --- | --- | 6 | 5 | 1-7 |  |
| 6E7 |  | 1 | 1 | 29 | 18 | 7 | --- | 3 | 2 | 11 | 1-7 |  |
| 6F4 |  | 1 | 1 | 35 | 5 | 7 | 2-7 | --- | 3 | 8 | 1-4 | Plate short test - Depress 2-3 together; <br> Grid short test - Depress 7-8 together; Must show short on 2-3-7-8 individually |
| 6F5 |  | 1 | 2 | 12 | 33 | 7 | --- | --- | 4 | 11 | 2-7 |  |
| 6F6 |  | 1 | 2 | 32 | 10 | 7 | --- | 4 | 3 | 5 | 2-7 |  |
| 6F7 | Triode | 1 | 1 | 41 | 15 | 7 | --- | --- | 4 | 5 | 1-7 |  |
| 6F7 | Pentode | 1 | 1 | 28 | 27 | 7 | --- | 3 | 2 | 11 | 1-7 |  |
| 6F8 | Triode-1 | 1 | 2 | 15 | 16 | 7 | --- | --- | 3 | 11 | 2-7 |  |
| 6F8 | Triode-2 | 1 | 2 | 15 | 16 | 7 | --- | --- | 6 | 5 | 2-7 |  |
| 6FG6 | Triode | 3 | 4 | 25 | 45 | 7 | --- | --- | 9 | 1 | 4-5 |  |
| 6FG6 | Eye | 4 | 4 | 0 | 0 | 7 | 2-8 | --- | 7-6 | --- | 4-5 | Must show short on 2-6-8; See instructions for eye test |
| 6FH5 |  | 1 | 3 | 21 | 10 | 7 | --- | --- | 5 | 2 | 3-4 | Must show short on 1-7; Cathode short test - Depress 1-7 together |
| 6G5 | Triode | 1 | 1 | 19 | 27 | 7 | --- | --- | 2 | 3 | 1-6 |  |
| 6G5 | Eye | 1 | 1 | 0 | 0 | 7 | --- | --- | 2-4 | --- | 1-6 |  |
| 6G6 |  | 1 | 2 | 32 | 10 | 7 | --- | 4 | 3 | 5 | 2-7 |  |
| 6G7 | Pent | 1 | 1 | 32 | 12 | 7 | --- | 3 | 2 | 11 | 1-7 |  |
| 6G7 | Rect-1 | 2 | 1 | 0 | 5 | 7 | --- | --- | 6 | --- | 1-7 |  |
| 6G7 | Rect-2 | 2 | 1 | 0 | 5 | 7 | --- | --- | 4 | --- | 1-7 | Must show short on 3 |
| 6H4 |  | 3 | 2 | 0 | 18 | 7 | --- | --- | 4 | --- | 2-7 |  |
| 6H5 | Triode | 1 | 1 | 14 | 17 | 7 | --- | --- | 2 | 3 | 1-6 |  |
| 6H5 | Eye | 1 | 1 | 0 | 0 | 7 | --- | --- | 2-4 | --- | 1-6 |  |
| 6H6 | Diode-1 | 3 | 2 | 0 | 18 | 7 | --- | --- | 5 | --- | 2-7 |  |
| 6H6 | Diode-2 | 3 | 2 | 0 | 18 | 7 | --- | --- | 3 | --- | 2-7 |  |
| 6 J 4 |  | 1 | 3 | 33 | 6 | 7 | 1-5 | --- | 7 | 6 | 3-4 | Must show short on 1-5-6; Grid short test Depress 1-5-6 together |
| $6 \mathrm{J7}$ |  | 1 | 2 | 28 | 20 | 7 | --- | 4 | 3 | 11 | 2-7 |  |
| 638 | Triode | 1 | 2 | 20 | 18 | 7 | --- | --- | 6 | 5 | 2-7 |  |
| $6 \mathrm{J8}$ | Heptode | 4 | 2 | 8 | 25 | 7 | --- | 4 | 3 | 11 | 2-7 |  |
| 6K5 |  | 1 | 2 | 11 | 30 | 7 | --- | --- | 3 | 11 | 2-7 |  |



|  |  |  | PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MRC (BG), (FB), (FH), 5-51 |  |  |  |  |  |  | LEVER |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{gathered} \text { FIL. } \\ \text { CONT. } \end{gathered}$ | COMMENT |
| 6S8 | Diode-2 | 3 | 7 | 0 | 27 | 7 | --- | --- | 4 | --- | 7-8 |  |
| 6S8 | Diode-3 | 3 | 7 | 0 | 27 | 7 | --- | --- | 1 | --- | 7-8 |  |
| 6SB7 | Amp | 4 | 2 | 9 | 20 | 7 | --- | 4 | 3 | 8 | 2-7 |  |
| 6SB7 | Osc | 1 | 2 | 37 | 6 | 7 | --- | --- | 4 | 5 | 2-7 |  |
| 6SD7 |  | 1 | 2 | 12 | 27 | 7 | --- | 6 | 8 | 4 | 2-7 |  |
| 6SF5 |  | 1 | 7 | 12 | 32 | 7 | --- | --- | 5 | 3 | 7-8 |  |
| 6SF7 | Pent | 1 | 7 | 28 | 18 | 7 | --- | 4 | 6 | 2 | 7-8 |  |
| 6SF7 | Diode | 3 | 7 | 0 | 27 | 7 | --- | --- | 5 | --- | 7-8 |  |
| 6SG7 |  | 1 | 2 | 10 | 29 | 7 | --- | 6 | 8 | 4 | 2-7 | Must show short on 3-5; Cathode short test <br> - Depress 3-5 together |
| 6SH7 |  | 1 | 2 | 14 | 27 | 7 | --- | 6 | 8 | 4 | 2-7 | Must show short on 3-5; Cathode short test <br> - Depress 3-5 together |
| 6SS7 |  | 1 | 2 | 13 | 30 | 7 | --- | 6 | 8 | 4 | 2-7 |  |
| 6ST7 | Triode | 1 | 7 | 21 | 15 | 7 | --- | --- | 6 | 2 | 7-8 |  |
| 6ST7 | Diode-1 | 3 | 7 | 0 | 27 | 7 | --- | --- | 5 | --- | 7-8 |  |
| 6ST7 | Diode-2 | 3 | 7 | 0 | 27 | 7 | --- | --- | 4 | --- | 7-8 |  |
| 6SU7 | Triode-1 | 1 | 7 | 14 | 30 | 7 | --- | --- | 2 | 1 | 7-8 |  |
| 6SU7 | Triode-2 | 1 | 7 | 14 | 30 | 7 | --- | --- | 5 | 4 | 7-8 |  |
| 6SV7 | Pentode | 1 | 7 | 12 | 29 | 7 | --- | 4 | 6 | 2 | 7-8 |  |
| 6SV7 | Diode | 3 | 7 | 0 | 18 | 7 | --- | --- | 5 | --- | 7-8 |  |
| 6SZ7 | Triode | 1 | 7 | 14 | 30 | 7 | --- | --- | 6 | 2 | 7-8 |  |
| 6SZ7 | Diode-1 | 3 | 7 | 0 | 27 | 7 | --- | --- | 5 | --- | 7-8 |  |
| 6SZ7 | Diode-2 | 3 | 7 | 0 | 27 | 7 | --- | --- | 4 | --- | 7-8 |  |
| 6T5 | Triode | 1 | 1 | 19 | 27 | 7 | --- | --- | 2 | 3 | 1-6 |  |
| 6T5 | Eye | 1 | 1 | 0 | 0 | 7 | --- | --- | 2-4 | --- | 1-6 | See instructions for eye test |
| 6T7 | Triode | 1 | 2 | 20 | 29 | 7 | --- | --- | 3 | 11 | 2-7 |  |
| 6T7 | Diode-1 | 3 | 2 | 0 | 27 | 7 | --- | --- | 5 | --- | 2-7 |  |
| 6T7 | Diode-2 | 3 | 2 | 0 | 27 | 7 | --- | --- | 4 | --- | 2-7 |  |
| 6U4 |  | 1 | 7 | 0 | 4 | 7 | --- | --- | 5 | --- | 7-8 |  |
| 6U5 | Triode | 1 | 1 | 19 | 27 | 7 | --- | --- | 2 | 3 | 1-6 |  |
| 6U5 | Eye | 1 | 1 | 0 | 0 | 7 | --- | --- | 2-4 | --- | 1-6 | See instructions for eye test |
| 6U6 |  | 1 | 2 | 13 | 7 | 7 | --- | 4 | 3 | 5 | 2-7 |  |
| 6U7 |  | 1 | 2 | 27 | 19 | 7 | --- | 4 | 3 | 11 | 2-7 |  |
| 6V7 | Triode | 1 | 2 | 25 | 12 | 7 | --- | --- | 3 | 11 | 2-7 |  |
| 6V7 | Diode-1 | 3 | 2 | 0 | 26 | 7 | --- | --- | 4 | --- | 2-7 |  |
| 6V7 | Diode-2 | 3 | 2 | 0 | 26 | 7 | --- | --- | 5 | --- | 2-7 |  |
| 6V8 | Triode | 5 | 4 | 4 | 40 | 7 | --- | --- | 1 | 6 | 4-5 |  |
| 6V8 | Diode-1 | 3 | 4 | 0 | 24 | 7 | --- | --- | 9 | --- | 4-5 |  |
| 6V8 | Diode-2 | 3 | 4 | 0 | 16 | 7 | --- | --- | 7 | --- | 4-5 |  |
| 6V8 | Diode-3 | 3 | 4 | 0 | 16 | 7 | --- | --- | 2 | --- | 4-5 |  |
| 6W7 |  | 1 | 2 | 18 | 28 | 7 | --- | 4 | 3 | 11 | 2-7 |  |




|  |  |  |  | PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MRC (BG), (FB), (FH), 5-51 |  |  |  |  |  |  | LEVER |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{aligned} & \text { FIL. } \\ & \text { CONT. } \end{aligned}$ | COMMENT |
| 7Q7 | Osc | 1 | 1 | 21 | 9 | 7 | --- | --- | 3 | 4 | 1-8 |  |
| 7R7 | Pent | 1 | 1 | 17 | 26 | 7 | --- | 5 | 2 | 6 | 1-8 |  |
| 7R7 | Diode-1 | 3 | 1 | 0 | 26 | 7 | --- | --- | 3 | --- | 1-8 |  |
| 7R7 | Diode-2 | 3 | 1 | 0 | 26 | 7 | --- | --- | 4 | --- | 1-8 |  |
| $7 \mathrm{S7}$ | Heptode | 1 | 1 | 13 | 34 | 7 | --- | 5 | 2 | 6 | 1-8 |  |
| 757 | Triode | 1 | 1 | 28 | 14 | 7 | --- | --- | 3 | 4 | 1-8 |  |
| $7 \mathrm{T7}$ |  | 1 | 1 | 14 | 27 | 7 | --- | 3 | 2 | 6 | 1-8 |  |
| 7V7 |  | 1 | 1 | 12 | 24 | 7 | --- | 3 | 2 | 6 | 1-8 |  |
| 7W7 |  | 1 | 1 | 12 | 24 | 7 | --- | 3 | 2 | 6 | 1-8 | Must show short on 4-7; Cathode short test <br> - Depress 4-7 together |
| 7X6 | Plate-1 | 1 | 1 | 0 | 5 | 7 | --- | --- | 3 | --- | 1-8 |  |
| 7X6 | Plate-2` | 1 | 1 | 0 | 5 | 7 | --- | --- | 6 | --- | 1-8 |  |
| 7X7 | Triode | 1 | 1 | 13 | 45 | 7 | --- | --- | 2 | 3 | 1-8 |  |
| 7X7 | Diode-1 | 3 | 1 | 0 | 26 | 7 | --- | --- | 5 | --- | 1-8 |  |
| 7X7 | Diode-2 | 3 | 1 | 0 | 26 | 7 | --- | --- | 6 | --- | 1-8 |  |
| 7Y4 | Plate-1 | 2 | 1 | 0 | 4 | 7 | --- | --- | 3 | --- | 1-8 |  |
| 7Y4 | Plate-2 | 2 | 1 | 0 | 4 | 7 | --- | --- | 6 | --- | 1-8 |  |
| $7 \mathrm{Z4}$ | Plate-1 | 2 | 1 | 0 | 7 | 7 | --- | --- | 3 | --- | 1-8 |  |
| $7 \mathrm{Z4}$ | Plate-2 | 2 | 1 | 0 | 4 | 7 | --- | --- | 6 | --- | 1-8 |  |
| 9A8 | Triode | 5 | 4 | 12 | 10 | 8 | --- | --- | 1 | 9 | 4-5 |  |
| 9A8 | Pentode | 1 | 4 | 18 | 19 | 8 | --- | 3 | 6 | 2 | 4-5 |  |
| 9AK8 | Triode | 4 | 4 | 10 | 10 | 9 | --- | --- | 9 | 8 | 4-5 |  |
| 9AK8 | Diode-1 | 3 | 4 | 0 | 23 | 9 | --- | --- | 6 | --- | 4-5 |  |
| 9AK8 | Diode-2 | 3 | 4 | 0 | 16 | 9 | --- | --- | 2 | --- | 4-5 |  |
| 9AK8 | Diode-3 | 3 | 4 | 0 | 16 | 9 | --- | --- | 1 | --- | 4-5 |  |
| 10 |  | 1 | 1 | 32 | 10 | 8 | --- | --- | 2 | 3 | 1-4 |  |
| 11 C 5 |  | 1 | 3 | 13 | 7 | 10 | 2 | 6 | 7 | 5 | 3-4 | Must show short on 2-5; Grid short test Depress 2-5 together |
| 12A |  | 1 | 1 | 23 | 10 | 6 | --- | --- | 2 | 3 | 1-4 |  |
| 12A4 |  | 1 | 3 | 25 | 6 | 7 | 2 | --- | 9 | 7 | 3-4-5 | Must show short on 2-7; Grid short test Depress 2-7 together |
| 12A5 |  | 1 | 6 | 28 | 8 | 7 | --- | 3 | 2 | 4 | 1-6-7 |  |
| 12A6 |  | 1 | 2 | 31 | 11 | 10 | --- | 4 | 3 | 5 | 2-7 |  |
| 12A7 | Pent | 1 | 1 | 34 | 12 | 10 | --- | 3 | 2 | 11 | 1-7 |  |
| 12A7 | Rect | 2 | 1 | 0 | 3 | 10 | --- | --- | 5 | --- | 1-7 |  |
| 12A8 | Amp | 4 | 2 | 29 | 24 | 10 | --- | 4 | 3 | 11 | 2-7 |  |
| 12A8 | Osc | 1 | 2 | 33 | 28 | 10 | --- | --- | 6 | 5 | 2-7 |  |
| 12AV5 |  | 1 | 2 | 9 | 6 | 10 | --- | 8 | 5 | 1 | 2-7 |  |
| 12AW6 |  | 1 | 3 | 9 | 33 | 10 | --- | 6 | 5 | 1 | 3-4 |  |
| 12AY7 | Triode-1 | 1 | 9 | 24 | 20 | 7 | --- | --- | 6 | 7 | 4-5-9 |  |
| 12AY7 | Triode-2 | 1 | 9 | 24 | 20 | 7 | --- | --- | 1 | 2 | 4-5-9 |  |
| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |  |  | COMMENT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MRC (BG), (FB), (FH), 5-51 |  |  |  |  |  |  | LEVER |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{gathered} \text { FIL. } \\ \text { CONT. } \end{gathered}$ |  |
| 12B7 |  | 1 | 1 | 25 | 20 | 10 | --- | 3 | 2 | 6 | 1-8 |  |
| 12B8 | Triode | 1 | 2 | 14 | 25 | 10 | --- | --- | 5 | 8 | 2-7 |  |
| 12B8 | Pent | 1 | 2 | 29 | 12 | 10 | --- | 4 | 3 | 11 | 2-7 |  |
| 12BA7 | Amp | 4 | 4 | 10 | 21 | 10 | --- | 1 | 9 | 7 | 4-5 |  |
| 12BA7 | Osc | 1 | 4 | 32 | 6 | 10 | --- | --- | 1 | 2 | 4-5 |  |
| 12BZ7 | Triode-1 | 1 | 9 | 7 | 25 | 7 | --- | --- | 6 | 7 | 4-5-9 |  |
| 12BZ7 | Triode-2 | 1 | 9 | 7 | 25 | 7 | --- | --- | 1 | 2 | 4-5-9 |  |
| 12C8 | Pent | 1 | 2 | 17 | 34 | 10 | --- | 6 | 3 | 11 | 2-7 |  |
| 12C8 | Diode-1 | 3 | 2 | 0 | 27 | 10 | --- | --- | 4 | --- | 2-7 |  |
| 12C8 | Diode-2 | 3 | 2 | 0 | 27 | 10 | --- | --- | 5 | --- | 2-7 |  |
| 12DQ5 |  | 1 | 2 | 0 | 5 | 10 | 1-4 | 8 | 11 | 5 | 2-7 | Must show short on 1-3-4-5-6-8; Grid short test - Depress 1-5 together; Screen short test - Depress 4-8 together; Cathode short test - Depress 3-6 together |
| 12DW5 |  | 2 | 4 | 0 | 10 | 10 | 3 | 1 | 9 | 6 | 4-5 | Must show short on 3-6; Grid short test Depress 3-6 together |
| 12E5 |  | 1 | 2 | 15 | 17 | 10 | --- | --- | 3 | 5 | 2-7 |  |
| 12F5 |  | 1 | 2 | 12 | 33 | 10 | --- | --- | 4 | 11 | 2-7 |  |
| 12G4 |  | 1 | 3 | 14 | 15 | 10 | 1 | --- | 5 | 6 | 3-4 | Must show short on 1-5; Plate short test Depress 1-5 together |
| 12H4 |  | 1 | 2 | 14 | 15 | 7 | 1 | --- | 5 | 6 | 2-3-4 | Must show short on 1 - 5; Plate short test Depress 1-5 together |
| 12H6 | Diode-1 | 3 | 2 | 0 | 18 | 10 | --- | --- | 3 | --- | 2-7 |  |
| 12H6 | Diode-2 | 3 | 2 | 0 | 18 | 10 | --- | --- | 5 | --- | 2-7 |  |
| 12 J |  | 1 | 2 | 15 | 15 | 10 | --- | --- | 3 | 5 | 2-7 |  |
| 12 J 7 |  | 1 | 2 | 15 | 35 | 10 | --- | 4 | 3 | 11 | 2-7 |  |
| 12 J | Tetrode | 2 | 4 | 5 | 6 | 10 | --- | 3 | 6 | 1 | 4-5 |  |
| 12 J | Diode-1 | 3 | 4 | 0 | 17 | 10 | --- | --- | 9 | --- | 4-5 |  |
| 12 J | Diode-2 | 3 | 4 | 0 | 17 | 10 | --- | --- | 8 | --- | 4-5 |  |
| 12K5 |  | 2 | 3 | 43 | 11 | 10 | 5 | --- | 7 | 6 | 3-4 | Must show short on 5-6; Grid short test Depress 5-6 together |
| 12K7 |  | 1 | 2 | 15 | 33 | 10 | --- | 4 | 3 | 11 | 2-7 |  |
| 12K8 | Triode | 1 | 2 | 28 | 15 | 10 | --- | --- | 6 | 5 | 2-7 |  |
| 12K8 | Hexode | 4 | 2 | 15 | 32 | 10 | --- | 4 | 3 | 11 | 2-7 |  |
| 12Q7 | Triode | 1 | 2 | 13 | 33 | 10 | --- | --- | 3 | 11 | 2-7 |  |
| 12Q7 | Diode-1 | 3 | 2 | 0 | 27 | 10 | --- | --- | 4 | --- | 2-7 |  |
| 12Q7 | Diode-2 | 3 | 2 | 0 | 27 | 10 | --- | --- | 5 | --- | 2-7 |  |
| 12S8 | Triode | 1 | 7 | 12 | 37 | 10 | --- | --- | 6 | 11 | 7-8 |  |
| 12S8 | Diode-1 | 3 | 7 | 0 | 27 | 10 | --- | --- | 3 | --- | 7-8 |  |
| 12S8 | Diode-2 | 3 | 7 | 0 | 27 | 10 | --- | --- | 4 | --- | 7-8 |  |

|  |  |  | PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MRC (BG), (FB), (FH), 5-51 |  |  |  |  |  |  | LEVER |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{gathered} \text { FIL. } \\ \text { CONT. } \end{gathered}$ | COMMENT |
| 14J7 | Triode | 1 | 1 | 20 | 18 | 10 | --- | --- | 3 | 4 | 1-8 |  |
| $14 \mathrm{J7}$ | Hexode | 1 | 1 | 22 | 34 | 10 | --- | 5 | 2 | 6 | 1-8 |  |
| 14N7 | Triode-1 | 1 | 1 | 27 | 10 | 10 | --- | --- | 3 | 4 | 1-8 |  |
| 14N7 | Triode-2 | 1 | 1 | 27 | 10 | 10 | --- | --- | 6 | 5 | 1-8 |  |
| 14Q7 | Amp | 4 | 1 | 8 | 29 | 10 | --- | 3 | 2 | 6 | 1-8 |  |
| 14Q7 | Osc | 1 | 1 | 21 | 9 | 10 | --- | --- | 3 | 4 | 1-8 |  |
| 14R7 | Pent | 1 | 1 | 17 | 26 | 10 | --- | 5 | 2 | 6 | 1-8 |  |
| 14R7 | Diode-1 | 3 | 1 | 0 | 26 | 10 | --- | --- | 3 | -- | 1-8 |  |
| 14R7 | Diode-2 | 3 | 1 | 0 | 26 | 10 | --- | --- | 4 | --- | 1-8 |  |
| 14S7 | Triode | 1 | 1 | 28 | 14 | 10 | --- | --- | 3 | 4 | 1-8 |  |
| 14S7 | Heptode | 1 | 1 | 13 | 34 | 10 | --- | 5 | 2 | 6 | 1-8 |  |
| 14W7 |  | 1 | 1 | 12 | 26 | 10 | --- | 3 | 2 | 6 | 1-8 | Must show short on 4-7; Cathode short test - Depress 4-7 together |
| 14X7 | Triode | 1 | 1 | 13 | 45 | 10 | --- | ---- | 2 | 3 | 1-8 |  |
| 14X7 | Diode-1 | 3 | 1 | 0 | 26 | 10 | --- | --- | 5 | --- | 1-8 |  |
| 14X7 | Diode-2 | 3 | 1 | 0 | 26 | 10 | --- | --- | 6 | - | 1-8 |  |
| 14Y4 | Plate-1 | 2 | 1 | 0 | 3 | 10 | --- | --- | 3 | -- | 1-8 |  |
| 14Y4 | Plate-2 | 2 | 1 | 0 | 3 | 10 | --- | --- | 6 | --- | 1-8 |  |
| 15 |  | 1 | 1 | 24 | 37 | 3 | --- | 3 | 2 | 11 | 1-5 |  |
| 17 |  | 1 | 1 | 27 | 11 | 10 | --- | --- | 2 | 3 | 1-5 |  |
| 18 |  | 1 | 1 | 35 | 10 | 10 | --- | 3 | 2 | 4 | 1-6 |  |
| 18A5 |  | 1 | 2 | 5 | 7 | 11 | --- | 8 | 5 | 1 | 2-7 |  |
| 19 | Triode-1 | 1 | 1 | 20 | 23 | 3 | --- | --- | 2 | 3 | 1-6 |  |
| 19 | Triode-2 | 1 | 1 | 20 | 23 | 3 | --- | --- | 5 | 4 | 1-6 |  |
| 19V8 | Triode | 5 | 4 | 4 | 40 | 11 | --- | --- | 1 | 6 | 4-5 |  |
| 19V8 | Diode-1 | 3 | 4 | 0 | 24 | 11 | --- | --- | 9 | --- | 4-5 |  |
| 19V8 | Diode-2 | 3 | 4 | 0 | 16 | 11 | --- | --- | 7 | --- | 4-5 |  |
| 19V8 | Diode-3 | 3 | 4 | 0 | 16 | 11 | --- | --- | 2 | --- | 4-5 |  |
| 20 |  | 1 | 1 | 29 | 13 | 5 | --- | --- | 2 | 3 | 1-4 |  |
| 22 |  | 1 | 1 | 33 | 25 | 5 | --- | 3 | 2 | 11 | 1-4 |  |
| 24 |  | 1 | 1 | 26 | 25 | 4 | --- | 3 | 2 | 11 | 1-5 |  |
| 25A6 |  | 1 | 2 | 31 | 7 | 12 | --- | 4 | 3 | 5 | 2-7 |  |
| 25A7 | Pent | 1 | 2 | 28 | 9 | 12 | --- | 4 | 3 | 5 | 2-7 |  |
| 25A7 | Rect | 2 | 2 | 0 | 2 | 12 | --- | --- | 6 | --- | 2-7 |  |
| 25AC5 |  | 1 | 2 | 25 | 16 | 12 | --- | --- | 3 | 5 | 2-7 |  |
| 25B5 | Input | 1 | 1 | 36 | 9 | 12 | --- | --- | 3 | 4 | 1-6 |  |
| 25B5 | Output | 1 | 1 | 34 | 6 | 12 | --- | 3 | 2 | 4 | 1-6 |  |
| 25B6 |  | 1 | 2 | 14 | 5 | 12 | --- | 4 | 3 | 5 | 2-7 |  |
| 25C6 |  | 1 | 2 | 14 | 6 | 12 | --- | 4 | 3 | 5 | 2-7 |  |
| 25D8 | Triode | 4 | 2 | 6 | 23 | 12 | --- | --- | 6 | 5 | 2-7 |  |
| 25D8 | Pent | 1 | 2 | 29 | 15 | 12 | --- | 4 | 3 | 11 | 2-7 |  |


|  |  |  | PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MRC (BG), (FB), (FH), 5-51 |  |  |  |  |  |  | LEVER |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{aligned} & \text { FIL. } \\ & \text { CONT. } \end{aligned}$ | COMMENT |
| 70A7 | Rect | 2 | 2 | 0 | 0 | 15 | --- | --- | 6 | --- | 2-6-7 | Rect Test - See Instructions |
| 70 L 7 | Amp | 1 | 2 | 19 | 6 | 15 | --- | 4 | 3 | 5 | 2-7 |  |
| 70 L 7 | Rect | 2 | 2 | 0 | 1 | 15 | --- | --- | 8 | --- | 2-7 |  |
| 71 |  | 1 | 1 | 37 | 5 | 6 | --- | --- | 2 | 3 | 1-4 |  |
| 75 | Triode | 1 | 1 | 12 | 40 | 7 | --- | --- | 2 | 11 | 1-6 |  |
| 75 | Diode-1 | 3 | 1 | 0 | 27 | 7 | --- | --- | 3 | --- | 1-6 |  |
| 75 | Diode-2 | 3 | 1 | 0 | 27 | 7 | --- | --- | 4 | --- | 1-6 |  |
| HY-75 |  | 7 | 2 | 36 | 7 | 7 | --- | --- | 12 | 11 | 2-7 | Red grip cap connects to right hand side of tube, when plugged in |
| 76 |  | 1 | 1 | 15 | 17 | 7 | --- | --- | 2 | 3 | 1-5 |  |
| 77 |  | 1 | 1 | 12 | 39 | 7 | --- | 3 | 2 | 11 | 1-6 |  |
| 78 |  | 1 | 1 | 15 | 32 | 7 | --- | 3 | 2 | 11 | 1-6 |  |
| 79 | Triode-1 | 1 | 1 | 33 | 9 | 7 | --- | --- | 2 | 3 | 1-6 |  |
| 79 | Triode-2 | 1 | 1 | 33 | 9 | 7 | --- | --- | 5 | 11 | 1-6 |  |
| 80 | Plate-1 | 2 | 1 | 0 | 8 | 6 | --- | --- | 2 | --- | 1-4 |  |
| 80 | Plate-2 | 2 | 1 | 0 | 8 | 6 | --- | --- | 3 | --- | 1-4 |  |
| 81 |  | 2 | 1 | 0 | 13 | 8 | --- | --- | 2 | --- | 1-4 |  |
| 82 | Plate-1 | 2 | 1 | 0 | 2 | 4 | --- | --- | 2 | --- | 1-4 |  |
| 82 | Plate-2 | 2 | 1 | 0 | 2 | 4 | ---- | --- | 3 | --- | 1-4 |  |
| 83 | Plate-1 | 2 | 1 | 0 | 2 | 6 | --- | --- | 2 | --- | 1-4 |  |
| 83 | Plate-2 | 2 | 1 | 0 | 2 | 6 | --- | --- | 3 | --- | 1-4 |  |
| 84 | Plate-1 | 2 | 1 | 0 | 4 | 7 | --- | --- | 2 | --- | 1-5 |  |
| 84 | Plate-1 | 2 | 1 | 0 | 4 | 7 | --- | --- | 3 | --- | 1-5 |  |
| G-84 |  | 2 | 1 | 0 | 11 | 4 | --- | --- | 2 | --- | 1-4 |  |
| 85 | Triode | 1 | 1 | 29 | 12 | 7 | --- | --- | 2 | 11 | 1-6 |  |
| 85 | Diode-1 | 3 | 1 | 0 | 26 | 7 | --- | --- | 3 | --- | 1-6 |  |
| 85 | Diode-2 | 3 | 1 | 0 | 26 | 7 | --- | --- | 4 | --- | 1-6 |  |
| 89 |  | 1 | 1 | 33 | 10 | 7 | --- | 3 | 2 | 11 | 1-6 |  |
| 99 |  | 1 | 1 | 27 | 20 | 5 | --- | --- | 2 | 3 | 1-4 |  |
| 101F |  | 1 | 1 | 29 | 11 | 6 | --- | --- | 2 | 3 | 1-4 | Test with pin facing top of panel |
| 117 L 7 | Amp | 1 | 2 | 25 | 7 | 17 | --- | 5 | 3 | 4 | 2-7 | Fil Cont - Set Control "E" to 12 |
| 117 L 7 | Rect | 2 | 2 | 0 | 2 | 17 | --- | --- | 6 | --- | 2-7 |  |
| 117M7 | Amp | 1 | 2 | 25 | 7 | 17 | --- | 5 | 3 | 4 | 2-7 | Fil Cont - Set Control "E" to 12 |
| 117M7 | Rect | 2 | 2 | 0 | 2 | 17 | --- | --- | 6 | --- | 2-7 |  |
| 117N7 | Amp | 1 | 2 | 12 | 7 | 17 | --- | 5 | 3 | 4 | 2-7 | Fil Cont - Set Control "E" to 12 |
| 117N7 | Rect | 2 | 2 | 0 | 0 | 17 | *2 | --- | *7 | --- | 2-7 | Rect Test - See Instructions |
| 117P7 | Amp | 1 | 2 | 25 | 7 | 17 | --- | 5 | 3 | 4 | 2-7 | Fil Cont - Set Control "E" to 12 |
| 117P7 | Rect | 2 | 2 | 0 | 0 | 17 | --- | --- | 7 | --- | 2-7 | Rect Test - See Instructions |
| $117 Z 3$ |  | 2 | 2 | 0 | 1 | 17 | 1 | --- | 5 | --- | 3-4 | Fil Cont - Set Control "E" to 12; May show short on 1 - 5 |
| $117 Z 4$ |  | 2 | 2 | 0 | 1 | 17 | --- | --- | 5 | --- | 2-7 | Fil Cont - Set Control "E" at 12 |
|  |  |  | PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  | $\begin{aligned} & \text { FIL. } \\ & \text { CONT. } \end{aligned}$ | COMMENT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MRC (BG), (FB), (FH), 5-51 |  |  | B | C | D | E | LEVER <br> w | X | Y | Z |  |  |
| TUBE | SECTION | A |  |  |  |  |  |  |  |  |  |  |
| $117 Z 6$ | Plate-1 | 2 | 2 | 0 | 1 | 17 | --- | --- | 3 | --- | 2-7 | Fil Cont - Set Control "E" at 12 |
| $117 \mathrm{Z6}$ | Plate-2 | 2 | 2 | 0 | 1 | 17 | --- | --- | 5 | --- | 2-7 |  |
| X-155 | Triode-1 | 1 | 4 | 14 | 13 | 7 | --- | --- | 1 | 2 | 4-5 |  |
| X-155 | Triode-2 | 1 | 4 | 14 | 13 | 7 | --- | --- | 6 | 7 | 4-5 |  |
| 182-482A |  | 1 | 1 | 37 | 5 | 6 | --- | --- | 2 | 3 | 1-4 |  |
| 182B-482B |  | 1 | 1 | 33 | 6 | 6 | --- | --- | 2 | 3 | 1-4 |  |
| 183-483 |  | 1 | 1 | 35 | 5 | 6 | --- | --- | 2 | 3 | 1-4 |  |
| 205D |  | 1 | 1 | 32 | 10 | 6 | --- | --- | 2 | 3 | 1-4 | Test with bayonet pin towards upper left corner |
| 247A |  | 1 | 1 | 17 | 25 | 3 | --- | --- | 2 | 3 | 1-5 |  |
| 262B |  | 1 | 1 | 21 | 20 | 9 | --- | --- | 2 | 11 | 1-4 |  |
| 264C |  | 1 | 1 | 26 | 18 | 2 | --- | --- | 2 | 3 | 1-4 |  |
| 271A |  | 1 | 1 | 32 | 7 | 6 | --- | --- | 2 | 3 | 1-5 |  |
| 272A |  | 1 | 1 | 30 | 11 | 9 | --- | --- | 2 | 3 | 1-5 |  |
| 274A | Plate-1 | 2 | 1 | 0 | 7 | 6 | --- | --- | 2 | --- | 1-4 |  |
| 274A | Plate-2 | 2 | 1 | 0 | 7 | 6 | --- | --- | 3 | --- | 1-4 |  |
| 300B |  | 1 | 1 | 40 | 4 | 6 | --- | --- | 2 | 3 | 1-4 |  |
| 307A |  | 1 | 1 | 17 | 15 | 6 | --- | 2 | 11 | 3 | 1-5 |  |
| 310A |  | 1 | 1 | 30 | 15 | 9 | --- | 3 | 2 | 11 | 1-6 |  |
| 313C |  | 1 | 5 | 0 | 13 | 8 | --- | --- | 2 | --- | --- | May show short on 1-4 |
| 328A |  | 1 | 1 | 30 | 15 | 8 | --- | 3 | 2 | 11 | 1-6 |  |
| 329A |  | 1 | 1 | 16 | 11 | 8 | --- | 3 | 2 | 11 | 1-5 |  |
| 331B |  | 2 | 1 | 23 | 10 | 9 | --- | 3 | 2 | 11 | 1-5 |  |
| 336A |  | 1 | 1 | 27 | 9 | 9 | --- | 3 | 2 | 4 | 1-6 |  |
| 345A | Plate-1 | 2 | 1 | 0 | 6 | 7 | --- | - | 2 | --- | 1-5 |  |
| 345A | Plate-2 | 2 | 1 | 0 | 6 | 7 | --- | --- | 3 | --- | 1-5 |  |
| 347A |  | 1 | 2 | 16 | 23 | 7 | --- | --- | 4 | 11 | 2-7 |  |
| 348A |  | 1 | 2 | 27 | 17 | 7 | --- | 4 | 3 | 11 | 2-7 |  |
| 349A |  | 1 | 2 | 25 | 10 | 7 | --- | 4 | 3 | 5 | 2-7 |  |
| 350A |  | 7 | 1 | 18 | 7 | 7 | --- | 2 | 11 | 3 | 1-5 |  |
| 350B |  | 7 | 2 | 18 | 7 | 7 | --- | 4 | 3 | 5 | 2-7 |  |
| 351A | Plate-1 | 1 | 2 | 0 | 5 | 7 | --- | --- | 3 | --- | 2-7 |  |
| 351A | Plate-2 | 1 | 2 | 0 | 5 | 7 | --- | --- | 5 | --- | 2-7 |  |
| 352A | Triode | 1 | 1 | 17 | 24 | 9 | --- | - | 2 | 11 | 1-6 |  |
| 352A | Diode-1 | 3 | 1 | 0 | 23 | 9 | --- | --- | 3 | --- | 1-6 |  |
| 352A | Diode-2 | 3 | 1 | 0 | 23 | 9 | --- | --- | 4 | --- | 1-6 |  |
| TS 383 |  | 1 | 4 | 0 | 15 | 7 | --- | --- | 1 | --- | 3-4 |  |
| 398A |  | 1 | 2 | 20 | 7 | 7 | --- | 6 | 8 | 4 | 2-7 |  |
| 401A |  | 1 | 3 | 23 | 13 | 7 | --- | 6 | 5 | 1 | 3-4 | Must show short on 2-7; Cathode short test <br> - Depress 2-7 together |
| 407A | Triode-1 | 1 | 5 | 8 | 15 | 11 | --- | --- | 4 | 3 | 1-5-9 |  |




| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  | Z | $\begin{gathered} \text { FIL. } \\ \text { CONT. } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MRC (BG), (FB), (FH), 5-51 |  |  | B | C | D | E | LEVER <br> W | X | Y |  |  | COMMENT |
| TUBE | SECTION | A |  |  |  |  |  |  |  |  |  |  |
| 5654 |  | 1 | 3 | 22 | 16 | 7 | --- | 6 | 5 | 1 | 3-4 | Must show short on 2-7; Cathode short test <br> - Depress 2-7 together |
| 5663 |  | 1 | 3 | 0 | 5 | 7 | --- | --- | 7 | 1 | 3-4 |  |
| 5670 | Triode-1 | 1 | 1 | 27 | 10 | 7 | --- | --- | 6 | 7 | 1-9 |  |
| 5670 | Triode-2 | 1 | 1 | 27 | 10 | 7 | --- | --- | 4 | 3 | 1-9 |  |
| 5672 |  | 5 | 3 | 14 | 18 | 2 | --- | 2 | 1 | 4 | 3-5 |  |
| 5676 |  | 5 | 2 | 8 | 21 | 2 | --- | --- | 1 | 3 | 2-4 |  |
| 5678 |  | 5 | 3 | 19 | 20 | 2 | --- | 2 | 1 | 4 | 3-5 |  |
| 5679 | Diode-1 | 3 | 4 | 0 | 18 | 5 | --- | --- | 6 | --- | 1-4-8 |  |
| 5679 | Diode-2 | 3 | 4 | 0 | 18 | 5 | --- | --- | 3 | --- | 1-4-8 |  |
| 5686 |  | 1 | 4 | 23 | 14 | 7 | 6 | 9 | 7 | 2 | 4-5 | Screen short test - Depress 6-9 together. <br> Cathode short test - Depress 1-3-8 <br> together. Must show short on 1-3-6-8-9 |
| 5687 | Triode-1 | 1 | 8 | 27 | 5 | 7 | --- | --- | 9 | 7 | 4-5-8 |  |
| 5687 | Triode-2 | 1 | 8 | 27 | 5 | 7 | --- | - | 1 | 2 | 4-5-8 |  |
| 5691 | Triode-1 | 1 | 7 | 15 | 30 | 7 | --- | --- | 2 | 1 | 7-8 |  |
| 5691 | Triode-2 | 1 | 7 | 15 | 30 | 7 | --- | --- | 5 | 4 | 7-8 |  |
| 5692 | Triode-1 | 1 | 7 | 27 | 10 | 7 | --- | --- | 2 | 1 | 7-8 |  |
| 5692 | Triode-2 | 1 | 7 | 27 | 10 | 7 | --- | --- | 5 | 4 | 7-8 |  |
| 5693 |  | 1 | 2 | 27 | 18 | 7 | --- | 6 | 8 | 4 | 2-7 |  |
| 5694 | Triode-1 | 1 | 2 | 28 | 12 | 7 | --- | --- | 3 | 4 | 2-7 |  |
| 5694 | Triode-2 | 1 | 2 | 28 | 12 | 7 | --- | - | 6 | 5 | 2-7 |  |
| 5695 |  | 7 | 1 | 0 | 4 | 4 | --- | --- | 2 | --- | 1-4 |  |
| 5696 |  | 1 | 3 | 0 | 4 | 6 | --- | --- | 6 | 1 | 3-4 | Must show short on 5-7; Screen short test Depress 5-7 together. |
| 5702 |  | 2 | 3 | 15 | 22 | 7 | --- | 2 | 1 | 7 | 3-4 |  |
| 5703 |  | 1 | 3 | 22 | 8 | 7 | --- | --- | 1 | 5 | 3-4 |  |
| 5718 |  | 1 | 3 | 16 | 9 | 7 | --- | --- | 8 | 1 | 3-6 |  |
| 5719 |  | 5 | 3 | 12 | 15 | 7 | --- | --- | 8 | 1 | 3-6 |  |
| 5725 |  | 1 | 3 | 11 | 32 | 7 | --- | 6 | 5 | 1 | 3-4 |  |
| 5726 | Diode-1 | 3 | 3 | 0 | 17 | 7 | --- | --- | 7 | --- | 3-4 |  |
| 5726 | Diode-2 | 3 | 3 | 0 | 17 | 7 | --- | --- | 2 | -- | 3-4 |  |
| 5727 |  | 7 | 3 | 0 | 3 | 7 | -- | --- | 6 | 1 | 3-4 | Must show short on 5-7; Screen short test Depress 5-7 together. |
| 5744 |  | 1 | 2 | 7 | 28 | 7 | --- | --- | 1 | 4 | 2-3 |  |
| 5749 |  | 1 | 3 | 28 | 15 | 7 | --- | 6 | 5 | 1 | 3-4 |  |
| 5750 | Amp | 4 | 3 | 7 | 27 | 7 | --- | 6 | 5 | 7 | 3-4 |  |
| 5750 | Osc | 1 | 3 | 21 | 9 | 7 | --- | --- | 6 | 1 | 3-4 |  |
| 5751 | Triode-1 | 1 | 9 | 9 | 37 | 7 | --- | --- | 6 | 7 | 4-5-9 |  |
| 5751 | Triode-2 | 1 | 9 | 9 | 37 | 7 | --- | --- | 1 | 2 | 4-5-9 |  |
| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |  |  | COMMENT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MRC (BG), (FB), (FH), 5-51 |  |  |  |  |  |  | LEVER |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{gathered} \text { FIL. } \\ \text { CONT. } \end{gathered}$ |  |
| 5755 | Triode-1 | 3 | 9 | 22 | 20 | 7 | --- | --- | 8 | 6 | 4-5-9 |  |
| 5755 | Triode-2 | 3 | 9 | 22 | 20 | 7 | --- | --- | 1 | 3 | 4-5-9 |  |
| 5763 |  | 1 | 4 | 27 | 10 | 7 | 8 | 6 | 1 | 9 | 4-5 | Must show short on 8-9; Grid short test Depress 8-9 together |
| 5784 |  | 5 | 3 | 5 | 27 | 7 | --- | 2 | 1 | 7 | 3-4 |  |
| 5812 |  | 1 | 7 | 20 | 10 | 5 | --- | 6 | 5 | 1 | 3-4-7 |  |
| 5814 | Triode-1 | 1 | 9 | 27 | 10 | 7 | --- | --- | 1 | 2 | 4-5-9 |  |
| 5814 | Triode-2 | 1 | 9 | 27 | 10 | 7 | --- | --- | 6 | 7 | 4-5-9 |  |
| 5823 |  | 7 | 1 | 0 | 0 | 18 | --- | --- | 1 | --- | --- | Must show short on 8-9; Grid short test Depress 8-9 together |
| 5824 |  | 1 | 2 | 14 | 5 | 12 | --- | 4 | 3 | 5 | 2-7 |  |
| CK-5829 | Diode-1 | 3 | 3 | 0 | 17 | 7 | --- | --- | 6 | --- | 3-5 |  |
| CK-5829 | Diode-2 | 3 | 3 | 0 | 17 | 7 | --- | --- | 1 | --- | 3-5 |  |
| 5840 |  | 1 | 3 | 10 | 25 | 7 | --- | 7 | 5 | 1 | 3-6 | Must show short on 2-4-8; Cathode short test - Depress 2-4-8 together |
| 5842 |  | 1 | 3 | 14 | 7 | 7 | 5-7-8 | --- | 1 | 4 | 3-9 | Must show short on 4-5-7-8; Grid short test - Depress 4-5-7-8 together |
| 5847 |  | 1 | 3 | 16 | 10 | 7 | --- | 8 | 6 | 1 | 3-9 |  |
| CK-5854 |  | 3 | 3 | 11 | 29 | 2 | --- | 1 | 2 | 4 | 3-5 |  |
| 5879 |  | 1 | 4 | 20 | 35 | 7 | --- | 7 | 8 | 1 | 4-5 |  |
| 5881 |  | 1 | 2 | 21 | 9 | 7 | --- | 4 | 3 | 5 | 2-7 |  |
| 5899 |  | 5 | 3 | 8 | 14 | 7 | --- | 7 | 5 | 1 | 3-6 | Must show short on 2-4-8; Cathode short test - Depress 2-4-8 together |
| 5902A |  | 5 | 3 | 11 | 9 | 7 | --- | 7 | 5 | 1 | 3-6 | Must show short on 2-4-8; Cathode short test - Depress 2-4-8 together |
| 5915 | Amp | 4 | 3 | 6 | 25 | 7 | --- | 6 | 5 | 7 | 3-4 |  |
| 5915 | Osc | 1 | 3 | 25 | 8 | 7 | --- | --- | 6 | 1 | 3-4 |  |
| 5931 | Plate-1 | 2 | 2 | 0 | 5 | 6 | --- | --- | 4 | --- | 2-8 |  |
| 5931 | Plate-2 | 2 | 2 | 0 | 5 | 6 | --- | --- | 6 | --- | 2-8 |  |
| 5932 |  | 1 | 2 | 24 | 9 | 7 | --- | 4 | 3 | 5 | 2-7 |  |
| 5933 |  | 1 | 1 | 27 | 11 | 7 | --- | 2 | 11 | 3 | 1-5 |  |
| 5963 | Triode-1 | 1 | 9 | 27 | 10 | 7 | --- | --- | 1 | 2 | 4-5-9 |  |
| 5963 | Triode-2 | 1 | 9 | 27 | 10 | 7 | --- | --- | 6 | 7 | 4-5-9 |  |
| 5964 | Triode-1 | 1 | 3 | 21 | 11 | 7 | --- | --- | 2 | 5 | 3-4 |  |
| 5964 | Triode-2 | 1 | 3 | 21 | 11 | 7 | --- | --- | 1 | 6 | 3-4 |  |
| 5965 | Triode-1 | 1 | 9 | 25 | 9 | 7 | --- | --- | 6 | 7 | 4-5-9 |  |
| 5965 | Triode-2 | 1 | 9 | 25 | 9 | 7 | --- | --- | 1 | 2 | 4-5-9 |  |
| 6005 |  | 1 | 3 | 32 | 8 | 7 | 1 | 6 | 5 | 7 | 3-4 | Must show short on 1-7; Grid short test Depress 1-7 together |
| 6021 | Triode-1 | 1 | 3 | 16 | 14 | 7 | --- | --- | 8 | 7 | 3-6 |  |
| 6021 | Triode-2 | 1 | 3 | 16 | 14 | 7 | --- | --- | 1 | 2 | 3-6 |  |
| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MRC (BG), (FB), (FH), 5-51 |  |  |  |  |  |  | LEVER |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{aligned} & \text { FIL. } \\ & \text { CONT. } \end{aligned}$ | COMMENT |
| 6028 |  | 1 | 3 | 10 | 24 | 11 | --- | 6 | 5 | 1 | 3-4 | Must show short on 2-7; Cathode short test - Depress 2-7 together |
| 6029 |  | 5 | 2 | 10 | 14 | 2 | --- | --- | 1 | 3 | 2-4 |  |
| 6046 |  | 1 | 2 | 10 | 6 | 12 | --- | 4 | 3 | 5 | 2-7 |  |
| 6072 | Triode-1 | 1 | 9 | 24 | 20 | 7 | --- | --- | 6 | 7 | 4-5-9 |  |
| 6072 | Triode-2 | 1 | 9 | 24 | 20 | 7 | --- | --- | 1 | 2 | 4-5-9 |  |
| 6080 | Triode-1 | 1 | 7 | 25 | 5 | 7 | --- | --- | 5 | 4 | 7-8 |  |
| 6080 | Triode-2 | 1 | 7 | 25 | 5 | 7 | --- | --- | 2 | 1 | 7-8 |  |
| 6087 | Plate-1 | 2 | 2 | 0 | 8 | 6 | --- | --- | 4 | --- | 2-8 |  |
| 6087 | Plate-2 | 2 | 2 | 0 | 8 | 6 | --- | --- | 6 | --- | 2-8 |  |
| 6088 |  | 5 | 3 | 7 | 29 | 2 | --- | 2 | 1 | 4 | 3-5 |  |
| 6096 |  | 1 | 3 | 22 | 16 | 7 | --- | 6 | 5 | 1 | 3-4 | Must show short on 2-7; Cathode short test <br> - Depress 2-7 together |
| 6097 | Diode-1 | 3 | 3 | 0 | 17 | 7 | --- | --- | 7 | --- | 3-4 |  |
| 6097 | Diode-2 | 3 | 3 | 0 | 17 | 7 | --- | --- | 2 | --- | 3-4 |  |
| 6098 |  | 1 | 6 | 18 | 8 | 7 | --- | 5 | 3 | 7 | 6-8 |  |
| 6111 | Triode-1 | 5 | 3 | 13 | 10 | 7 | --- | --- | 8 | 7 | 3-6 |  |
| 6111 | Triode-2 | 5 | 3 | 13 | 10 | 7 | --- | --- | 1 | 2 | 3-6 |  |
| 6112 | Triode-1 | 5 | 3 | 13 | 13 | 7 | --- | --- | 8 | 7 | 3-6 |  |
| 6112 | Triode-2 | 5 | 3 | 13 | 13 | 7 | --- | --- | 1 | 2 | 3-6 |  |
| 6135 |  | 1 | 3 | 25 | 11 | 7 | 1 | --- | 5 | 6 | 3-4 | Must show short on 1 - 5; Plate short test Depress 1-5 together |
| 6136 |  | 1 | 3 | 13 | 27 | 7 | --- | 6 | 5 | 1 | 3-4 |  |
| 6137 |  | 1 | 2 | 25 | 20 | 7 | --- | 6 | 8 | 4 | 2-7 |  |
| 6146 |  | 1 | 2 | 7 | 6 | 7 | --- | 3 | 11 | 5 | 2-7 | Must show short on 1-4-6; Cathode short test - Depress 1-4-6 together |
| 6159 |  | 1 | 2 | 7(15) | 6(5) | 12 | --- | 3 | 11 | 5 | 2-7 | Must show short on 1-4-6; Cathode short test - Depress 1-4-6 together |
| 6187 |  | 1 | 3 | 11 | 32 | 7 | --- | 6 | 5 | 1 | 3-4 |  |
| 6188 | Triode-1 | 1 | 7 | 14 | 30 | 7 | --- | --- | 2 | 1 | 7-8 |  |
| 6188 | Triode-2 | 1 | 7 | 14 | 30 | 7 | --- | --- | 5 | 4 | 7-8 |  |
| 6189 | Triode-1 | 1 | 9 | 27 | 10 | 7 | --- | --- | 1 | 2 | 4-5-9 |  |
| 6189 | Triode-2 | 1 | 9 | 27 | 10 | 7 | --- | --- | 6 | 7 | 4-5-9 |  |
| 6197 |  | 1 | 4 | 11 | 12 | 7 | 2-3 | 8 | 6 | 9 | 4-5 | Must show short on 2-3-8-9; Screen short test - Depress 3-8 together; Grid short test - Depress 2-9 together |
| 6201 | Triode-1 | 1 | 9 | 32 | 9 | 7 | --- | - | 6 | 7 | 4-5-9 |  |
| 6201 | Triode-2 | 1 | 9 | 32 | 9 | 7 | --- | --- | 1 | 2 | 4-5-9 |  |
| 6202 | Plate-1 | 2 | 3 | 0 | 5 | 7 | --- | --- | 6 | --- | 3-4 |  |
| 6202 | Plate-2 | 2 | 3 | 0 | 5 | 7 | --- | --- | 1 | --- | 3-4 |  |
| 6203 | Diode-1 | 3 | 4 | 0 | 18 | 7 | --- | --- | 9 | --- | 4-5 |  |
| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MRC (BG), (FB), (FH), 5-51 |  |  |  |  |  |  | LEVER |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{gathered} \text { FIL. } \\ \text { CONT. } \end{gathered}$ | COMMENT |
| 6203 | Diode-2 | 3 | 4 | 0 | 18 | 7 | --- | --- | 1 | --- | 4-5 |  |
| 6205 |  | 1 | 3 | 10 | 25 | 7 | --- | 7 | 5 | 1 | 3-6 | Must show short on 2-8; Cathode short test <br> - Depress 2-8 together |
| 6206 |  | 1 | 3 | 11 | 25 | 7 | --- | 7 | 5 | 1 | 3-6 | Must show short on 2-8; Cathode short test - Depress 2-8 together |
| 6211 | Triode-1 | 1 | 9 | 20 | 11 | 7 | --- | --- | 6 | 7 | 4-5-9 |  |
| 6211 | Triode-2 | 1 | 9 | 20 | 11 | 7 | --- | --- | 1 | 2 | 4-5-9 |  |
| 6216 |  | 1 | 4 | 3 | 10 | 7 | 1 | 7 | 6 | 2 | 4-5 | Must show short on 1-3-6-8; Grid short test - Depress 1-6 together; Cathode short test - Depress 3-8 together |
| 6265 |  | 1 | 3 | 26 | 20 | 7 | --- | 6 | 5 | 1 | 3-4 |  |
| 6267 |  | 1 | 4 | 17 | 30 | 7 | --- | 1 | 6 | 9 | 4-5 | Must show short on 2-7 |
| 6336 | Triode-1 | 1 | 7 | 0 | 4 | 7 | --- | --- | 5 | 4 | 7-8 |  |
| 6336 | Triode-2 | 1 | 7 | 0 | 4 | 7 | --- | --- | 2 | 1 | 7-8 |  |
| 6336A | Triode-1 | 5 | 7 | 0 | 7 | 7 | --- | --- | 5 | 4 | 7-8 |  |
| 6336A | Triode-2 | 5 | 7 | 0 | 7 | 7 | --- | --- | 2 | 1 | 7-8 |  |
| 6350 | Triode-1 | 1 | 9 | 10 | 11 | 7 | --- | --- | 6 | 8 | 4-5-9 |  |
| 6350 | Triode-2 | 1 | 9 | 10 | 11 | 7 | --- | --- | 1 | 3 | 4-5-9 |  |
| 6360 | Tetrode-1 | 1 | 9 | 29 | 12 | 7 | --- | 7 | 8 | 3 | 4-5-9 |  |
| 6360 | Tetrode-2 | 1 | 9 | 29 | 12 | 7 | --- | 7 | 6 | 1 | 4-5-9 |  |
| 6386 | Triode-1 | 1 | 1 | 20 | 10 | 7 | --- | --- | 6 | 7 | 1-9 |  |
| 6386 | Triode-2 | 1 | 1 | 20 | 10 | 7 | --- | --- | 4 | 3 | 1-9 |  |
| 6394 | Triode-1 | 1 | 7 | 15 | 4 | 12 | --- | --- | 5 | 4 | 7-8 |  |
| 6394 | Triode-2 | 1 | 7 | 15 | 4 | 12 | --- | --- | 2 | 1 | 7-8 |  |
| 6417 |  | 1 | 4 | 27 | 10 | 10 | 8 | 6 | 1 | 9 | 4-5 | Must show short on 8-9; Grid short test Depress 8-9 together |
| 6463 | Triode-1 | 1 | 9 | 26 | 8 | 7 | --- | --- | 6 | 8 | 4-5-9 |  |
| 6463 | Triode-2 | 1 | 9 | 26 | 8 | 7 | --- | --- | 1 | 3 | 4-5-9 |  |
| 6485 |  | 1 | 3 | 8 | 25 | 7 | --- | 6 | 5 | 1 | 3-4 |  |
| 6550 |  | 1 | 2 | 9 | 9 | 7 | --- | 4 | 3 | 5 | 2-7 |  |
| 6660 |  | 1 | 3 | 28 | 15 | 7 | --- | 6 | 5 | 1 | 3-4 |  |
| 6661 |  | 1 | 3 | 26 | 20 | 7 | --- | 6 | 5 | 1 | 3-4 |  |
| 6662 |  | 1 | 3 | 17 | 20 | 7 | --- | 6 | 5 | 1 | 3-4 |  |
| 6663 | Diode-1 | 3 | 3 | 0 | 17 | 7 | --- | --- | 7 | --- | 3-4 |  |
| 6663 | Diode-2 | 3 | 3 | 0 | 17 | 7 | --- | --- | 2 | --- | 3-4 |  |
| 6669 |  | 1 | 3 | 32 | 8 | 7 | 1 | 6 | 5 | 7 | 3-4 | Must show short on 1-7; Grid short test Depress 1-7 together |
| 6677 |  | 1 | 4 | 11 | 12 | 7 | 2-3 | 8 | 6 | 9 | 4-5 | Must show short on 2-3-8-9; Screen short test - Depress 3-8 together; Grid short test - Depress 2-9 together |

| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MRC (BG), (FB), (FH), 5-51 |  |  | B | C | D | E | LEVER <br> W | X | Y | Z | $\begin{gathered} \text { FIL. } \\ \text { CONT. } \end{gathered}$ | COMMENT |
| TUBE | SECTION | A |  |  |  |  |  |  |  |  |  |  |
| 7167 |  | 2 | 3 | 11 | 20 | 10 | --- | 6 | 5 | 1 | 3-4 | Must show short on 2-7; Cathode short test <br> - Depress 2-7 together |
| 7189 |  | 1 | 4 | 16 | 10 | 7 | 1-6-8 | 9 | 7 | 2 | 4-5 | May show short on 1-2-6-8; Grid short test - Depress 1-2 together |
| 7199 | Triode | 1 | 4 | 21 | 10 | 7 | --- | --- | 1 | 9 | 4-5 |  |
| 7199 | Pentode | 1 | 4 | 16 | 25 | 7 | --- | 3 | 2 | 7 | 4-5 |  |
| 7247 | Triode-1 | 1 | 9 | 33 | 10 | 7 | --- | --- | 6 | 7 | 4-5-9 |  |
| 7247 | Triode-2 | 1 | 9 | 27 | 10 | 7 | --- | --- | 1 | 2 | 4-5-9 |  |
| 7258 | Triode | 5 | 4 | 10 | 13 | 10 | --- | --- | 1 | 2 | 4-5 |  |
| 7258 | Pentode | 4 | 4 | 8 | 10 | 10 | --- | 7 | 6 | 8 | 4-5 |  |
| 7355 |  | 1 | 2 | 6 | 10 | 7 | --- | 8 | 3 | 6 | 2-7 |  |
| 7370 | Triode-1 | 2 | 8 | 18 | 10 | 11 | --- | --- | 9 | 7 | 4-5-8 |  |
| 7370 | Triode-2 | 2 | 8 | 18 | 10 | 11 | --- | --- | 1 | 2 | 4-5-8 |  |
| 7408 |  | 1 | 2 | 31 | 9 | 7 | --- | 4 | 3 | 5 | 2-7 |  |
| 7551 |  | 1 | 4 | 15 | 10 | 10 | 3 | 8 | 6 | 2 | 4-5 | Must show short on 1-3-8-9; Cathode short test - Depress 1-0 together; Screen short test - Depress 3-8 together |
| 7558 |  | 1 | 4 | 14 | 10 | 7 | 3 | 8 | 6 | 2 | 4-5 | Must show short on 1-3-8-9; Cathode short test - Depress 1-9 together; Screen short test - Depress 3-8 together |
| 7581 |  | 1 | 2 | 24 | 10 | 6 | --- | 4 | 3 | 5 | 2-7 |  |
| 7586 |  | 2 | 4 | 18 | 10 | 7 | --- | --- | 1 | 2 | 4-5 | Use red grid cap |
| 7587 |  | 3 | 4 | 0 | 22 | 7 | --- | 1 | 12 | 2 | 4-5 | Red grid cap goes to top of tube |
| 7591 |  | 1 | 2 | 16 | 10 | 7 | 4 | 8 | 3 | 6 | 2-7 | Must show short on 4-8; Screen short test Depress 4-8 together |
| 7687 | Triode | 5 | 4 | 16 | 10 | 7 | -- | --- | 1 | 9 | 4-5 |  |
| 7687 | Pentode | 4 | 4 | 9 | 10 | 7 | --- | 3 | 6 | 2 | 4-5 |  |
| 7695 |  | 1 | 4 | 0 | 6 | 14 | --- | 1 | 9 | 6 | 4-5 | Fil Cont - Set Control "E" at 12 |
| 7701 |  | 1 | 4 | 33 | 10 | 10 | 7 | 9 | 6 | 2 | 4-5 | Must show short on 1-3-7-8-9; Cathode short test - Depress 1-3-8 together; Screen short test - Depress 7-9 together |
| 7716 | Triode | 5 | 4 | 26 | 10 | 10 | --- | --- | 3 | 2 | 4-5 |  |
| 7716 | Pentode | 1 | 4 | 17 | 10 | 10 | --- | 8 | 9 | 7 | 4-5 |  |
| 7728 | Triode-1 | 1 | 9 | 32 | 9 | 7 | --- | --- | 6 | 7 | 4-5-9 |  |
| 7728 | Triode-2 | 1 | 9 | 32 | 9 | 7 | --- | --- | 1 | 2 | 4-5-9 |  |
| 7729 | Triode-1 | 1 | 9 | 12 | 32 | 7 | --- | --- | 6 | 7 | 4-5-9 |  |
| 7729 | Triode-2 | 1 | 9 | 12 | 32 | 7 | --- | --- | 1 | 2 | 4-5-9 |  |
| 7730 | Triode-1 | 1 | 9 | 27 | 10 | 7 | --- | --- | 6 | 7 | 4-5-9 |  |
| 7730 | Triode-2 | 1 | 9 | 27 | 10 | 7 | --- | --- | 1 | 2 | 4-5-9 |  |
| 7731 | Triode | 1 | 4 | 28 | 8 | 7 | --- | --- | 1 | 9 | 4-5 |  |


