| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LEVER |  |  |  |  |  |  |  |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{gathered} \text { FIL. } \\ \text { CONT. } \end{gathered}$ | COMMENT |
| Information from MRC-(C2A); (F2B); (G2K); (H2G) |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0A4 |  | 7 | 1 | 0 | 10 | 1 | --- | --- | 5 | --- |  | May show short on 2-7. |
| 0Z4 | Plate-1 | 7 | 1 | 0 | 4 | 18 | * | --- | 5 | --- |  |  |
| 0Z4 | Plate-2 | 7 | 1 | 0 | 4 | 18 | --- | --- | 3 | --- |  |  |
| 1A7 | Amp | 4 | 2 | 25 | 29 | 2 | --- | 4 | 3 | 11 | 2-7 |  |
| 1A7 | Osc | 2 | 2 | 14 | 36 | 2 | --- | --- | 4-6 | 5 | 2-7 |  |
| 1AB5 |  | 1 | 1 | 35 | 13 | 2 | 7 | 3 | 2 | 6 | 1-7-8 |  |
| 1AB6 | Amp | 5 | 7 | 27 | 40 | 2 | --- | 6 | 2 | 3-4 | 1-7 |  |
| 1AB6 | Osc | 5 | 7 | 13 | 19 | 2 | -- | --- | 3 | 4 | 1-7 |  |
| 1AC5 |  | 5 | 4 | 7 | 23 | 2 | --- | 8 | 7 | 2 | 4-5 |  |
| 1AC6 | Amp | 1 | 7 | 50 | 31 | 2 | --- | 6 | 2 | 3-4 | 1-7 |  |
| 1AC6 | Osc | 1 | 7 | 36 | 10 | 2 | --- | 5 | 3 | 4 | 1-7 |  |
| 1AD4 |  | 5 | 5 | 7 | 21 | 2 | --- | --- | 1-2 | 4 | 3-5 |  |
| 1AD5 |  | 5 | 4 | 7 | 36 | 2 | --- | 8 | 7 | 2 | 4-5 |  |
| 1AE4 |  | 1 | 7 | 10 | 44 | 2 | --- | 3 | 2 | 6 | 1-5-7 |  |
| 1AF4 |  | 5 | 7 | 9 | 28 | 2 | --- | 3 | 2 | 6 | 1-5-7 |  |
| 1AF5 | Pentode | 5 | 1 | 11 | 33 | 2 | --- | 4 | 5 | 6 | 1-7 |  |
| 1AF5 | Diode | 3 | 1 | 0 | 45 | 2 | --- | --- | 3 | --- | 1-7 | OK Above 14 on Meter Scale |
| 1AG4 |  | 5 | 3 | 4 | 17 | 2 | --- | 2 | 1 | 4 | 3-5 |  |
| 1AG5 | Pentode | 5 | 4 | 7 | 44 | 2 | --- | 2 | 1 | 5 | 4-6 |  |
| 1AG5 | Diode | 3 | 4 | 0 | 25 | 2 | --- | --- | 3 | --- | 4-6 |  |
| 1AH4 |  | 5 | 3 | 5 | 38 | 2 | --- | 2 | 1 | 4 | 3-5 |  |
| 1AH5 | Pentode | 4 | 7 | 17 | 41 | 2 | --- | 4 | 5 | 6 | 1-7 |  |
| 1AH5 | Diode | 3 | 7 | 0 | 28 | 2 | --- | --- | 3 | --- | 1-7 |  |
| 1AJ4 |  | 5 | 7 | 6 | 37 | 2 | --- | 3 | 2 | 6 | 1-5-7 |  |
| 1AJ5 | Pentode | 5 | 4 | 8 | 40 | 2 | --- | 2 | 1 | 5 | 4-6 |  |
| 1AJ5 | Diode | 3 | 4 | 0 | 24 | 2 | --- | --- | 3 | --- | 4-6 |  |
| 1AK4 |  | 3 | 3 | 10 | 32 | 2 | --- | 2 | 1 | 4 | 3-5 |  |
| 1AK5 | Pentode | 3 | 4 | 10 | 45 | 2 | --- | 2 | 1 | 5 | 4-6 |  |
| 1AK5 | Diode-1 | 3 | 4 | 0 | 29 | 2 | --- | --- | 3 | --- | 4-6 |  |
| 1AN5 |  | 5 | 7 | 16 | 33 | 2 | --- | 3 | 2 | 6 | 1-5-7 |  |
| 1AX2 | * | 7 | 2 | 0 | 32 | 2 | 5-8 | --- | 11 | --- | ** | * CAUTION - Levers 5-8 shall be thrown to position "W" before inserting tube and shall remain in position "W" throughout all tests, including short tests. ** Shall show short on 1 2-4-6-9. May show short on 3-7. |


| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | V |  |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{gathered} \hline \text { FIL. } \\ \text { CONT. } \end{gathered}$ | COMMENT |
| 1B3 |  | 7 | 2 | 0 | 18 | 2 | --- | --- | 11 | --- |  | May show short on 1-3-5-8. This tube is being tested at a relatively low potential. This test is therefore not indicative of operation at rated high-voltage. |
| 1DN5 | Pentode | 4 | 1 | 12 | 30 | 2 | --- | 3 | 2 | 6 | 1-7 |  |
| 1DN5 | Diode | 3 | 1 | 0 | 39 | 2 | --- | --- | 4 | --- | 1-7 |  |
| 1G3 |  | 7 | 2 | 0 | 18 | 2 | --- | --- | 11 | --- | 2-7 | May show short on 1-3-5-8. |
| 1H2 | * | 2 | 5 | 0 | 49 | 2 | 2-8 | --- | 11 | --- | ** | * CAUTION - Levers $2-8$ shall be thrown to "W" before inserting tube. ** Shall show short on 1-4-5-6-9. |
| 1H5 | Diode | 3 | 2 | 0 | 27 | 2 | --- | --- | 5 | --- | 2-7 |  |
| 1H5 | Triode | 5 | 2 | 12 | 46 | 2 | --- | --- | 3 | 11 |  |  |
| 1 J 3 |  | 4 | 2 | 0 | 30 | 2 | --- | --- | 11 | --- | 2-7 |  |
| 1K3 |  | 4 | 2 | 0 | 30 | 2 | --- | --- | 11 | --- | 2-7 |  |
| 1 L 4 |  | 1 | 7 | 27 | 29 | 2 | 5 | 3 | 2 | 6 | 1-5-7 |  |
| 1LA4 |  | 1 | 1 | 33 | 17 | 2 | --- | 3 | 2 | 6 | 1-8 |  |
| 1LA6 | Amp | 4 | 1 | 26 | 30 | 2 | --- | 5 | 2 | 6 | 1-8 |  |
| 1LA6 | Osc | 1 | 1 | 30 | 45 | 2 | --- | --- | 3 | 4 | 1-8 |  |
| 1LB4 |  | 1 | 1 | 26 | 23 | 2 | --- | 3 | 2 | 6 | 1-8 |  |
| 1LC5 |  | 1 | 1 | 18 | 40 | 2 | 5 | 3 | 2 | 6 | 1-5-8 |  |
| 1LC6 | Amp | 4 | 1 | 28 | 25 | 2 | --- | 5 | 2 | 6 | 1-8 |  |
| 1LC6 | Osc | 1 | 1 | 30 | 40 | 2 | --- | --- | 3 | 4 | 1-8 |  |
| 1LD5 | Pentode | 1 | 1 | 27 | 31 | 2 | --- | 3 | 2 | 6 | 1-8 |  |
| 1LD5 | Diode | 3 | 1 | 0 | 27 | 2 | --- | --- | 4 | --- | 1-8 |  |
| 1LE3 |  | 1 | 1 | 13 | 24 | 2 | --- | --- | 2 | 6 | 1-8 |  |
| 1LF3 |  | 1 | 1 | 13 | 24 | 2 | --- | --- | 2 | 6 | 1-8 |  |
| 1LG5 |  | 1 | 1 | 21 | 35 | 2 | 5 | 3 | 2 | 6 | 1-8 | Shall show short on 5. |
| 1LH4 | Triode | 5 | 1 | 12 | 46 | 2 | --- | --- | 2 | 6 | 1-8 |  |
| 1LH4 | Diode | 3 | 1 | 0 | 27 | 2 | --- | --- | 4 | --- | 1-8 |  |
| 1LN5 |  | 1 | 1 | 25 | 35 | 2 | 5 | 3 | 2 | 6 | 1-5-8 |  |
| 1M3 | Eye | 3 | 4 | 0 | 0 | 2 | --- | --- | 1-8 | --- | 4-5 | See instructions for eye test. |
| 1N3 | Eye | 3 | 4 | 0 | 0 | 2 | --- | --- | 1-8 | --- | 4-5 | See instructions for eye test. |
| 1N5 |  | 1 | 2 | 25 | 40 | 2 | --- | 4 | 3 | 11 | 2-7 |  |
| 1P5 |  | 1 | 2 | 22 | 42 | 2 | --- | 4 | 3 | 11 | 2-7 |  |
| 1Q5 |  | 1 | 2 | 26 | 12 | 2 | --- | 4 | 3 | 5 | 2-7 |  |
| 1R5 | Amp | 4 | 7 | 9 | 39 | 2 | 5 | 3 | 2 | 6 | 1-5-7 |  |
| 1R5 | Osc | 2 | 7 | 10 | 39 | 2 | 5 | --- | 3 | 4 | 1-5-7 |  |


| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LEVER |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { FIL. } \\ \text { CONT. } \end{gathered}$ | COMMENT |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z |  |  |
| 1S2 | * | 7 | 2 | 0 | 14 | 2 | 5-8 | --- | 11 | --- | ** | * CAUTION - Levers $5-8$ shall be thrown to position "W" before inserting tube and shall remain in position "W" throughout all tests, including short tests. ** Shall show short on 1 2-4-6-9. May show short on 3-7. |
| 1S4 |  | 1 | 7 | 26 | 15 | 2 | 5-6 | 4 | 2 | 3 | 1-5-7 | Shall show short on 2-6. Plate short test Depress 2-6 together. |
| $1 \mathrm{S5}$ | Pentode | 1 | 1 | 26 | 35 | 2 | --- | 4 | 5 | 6 | 1-7 |  |
| 1S5 | Diode | 3 | 1 | 0 | 29 | 2 | --- | --- | 3 | --- | 1-7 |  |
| 1T4 |  | 1 | 7 | 32 | 22 | 2 | 5 | 3 | 2 | 6 | 1-5-7 |  |
| 1 T 5 |  | 1 | 2 | 33 | 15 | 2 | --- | 4 | 3 | 5 | 2-7 |  |
| 1 4 4 |  | 1 | 7 | 27 | 32 | 2 | 5 | 3 | 2 | 6 | 1-5-7 |  |
| 1 U | Pentode | 1 | 1 | 26 | 35 | 2 | --- | 3 | 2 | 6 | 1-7 |  |
| 1 U 5 | Diode | 3 | 1 | 0 | 29 | 2 | --- | --- | 4 | --- | 1-7 |  |
| 1V |  | 2 | 1 | 0 | 3 | 7 | --- | --- | 2 | --- | 1-4 |  |
| 1V2 |  | 7 | 4 | 0 | 29 | 1 | * | --- | 9 | --- | 4-5 | * Levers 1-2-3-6-7-8 Shall be thrown to "W". May show short on 1-2-3-6-7-8-9. |
| 1X2 | * | 7 | 2 | 0 | 16 | 2 | 5-8 | --- | 11 | --- |  | * CAUTION - Levers 5-8 shall be thrown to position "W" before inserting tube and shall remain in position "W" throughout all tests, including short tests. ** Shall show short on 1 2-4-6-9. May show short on 3-7. |
| 172 | * | 7 | 2 | 0 | 23 | 2 | 5-7 | --- | 11 | --- |  | * CAUTION - Levers 5-7 shall be thrown to position "W" before inserting tube and shall remain in position "W" throughout all tests, including short tests. Shall show short on 1-2 3-4-6. |
| 2A3 |  | 1 | 1 | 40 | 4 | 4 | --- | --- | 2 | 3 | 1-4 |  |
| 2AF4 |  | 2 | 3 | 24 | 11 | 4 | 1-2 | - | 7 | 6 | 3-4 | Shall show short on 1-2-6-7. Grid short test Depress 2-6 together. Plate short test depress 1-7 together. |
| 2B4 |  | 2 | 1 | 0 | 2 | 4 | --- | --- | 3 | --- | 1-5 |  |
| 2B6 | Input | 1 | 1 | 26 | 27 | 4 | --- | --- | 3 | 4 | 1-7 |  |
| 2B6 | Output | 1 | 1 | 34 | 8 | 4 | --- | --- | 2 | 5 | 1-7 |  |
| 2BN4 |  | 5 | 4 | 12 | 11 | 3 | --- | --- | 5 | 2-7 | 3-4 | Shall show short on 1-2-6-7. Grid short test Depress 2-7 together. Plate short test depress 1-6 together. |
| $2 \mathrm{CY5}$ |  | 2 | 3 | 11 | 20 | 4 | --- | 6 | 5 | 1 | 3-4 | Shall show short on 2-7. Cathode short test Depress 2-7 together. |


| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LEVER |  |  |  |  |  |  |  |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{gathered} \text { FIL. } \\ \text { CONT. } \end{gathered}$ | COMMENT |
| 2EA5 |  | 1 | 3 | 27 | 10 | 4 | --- | 6 | 5 | 1 | 3-4 | Shall show short on 2-7. Cathode short test Depress 2-7 together. |
| 2EN5 | Diode-1 | 3 | 3 | 0 | 16 | 3 | --- | --- | 7 | --- | 3-4 |  |
| 2EN5 | Diode-2 | 3 | 3 | 0 | 16 | 3 | --- | --- | 2 | --- | 3-4 |  |
| 2ER5 |  | 1 | 3 | 17 | 10 | 4 | --- | 6 | 5 | 2 | 3-4 | Shall show short on 1-7. Cathode short test Depress 1-7 together. |
| 2ES5 |  | 1 | 3 | 20 | 10 | 3 | --- | 6 | 5 | 2 | 3-4 | Shall show short on 1-7. Cathode short test Depress 1-7 together. |
| 2EV5 |  | 3 | 3 | 5 | 19 | 3 | --- | 6 | 5 | 1 | 3-4 | Shall show short on 2-7. Cathode short test Depress 2-7 together. |
| 2FH5 |  | 1 | 3 | 21 | 10 | 4 | --- | --- | 5 | 2 | 3-4 | Shall show short on 1-7. Cathode short test Depress 1-7 together. |
| 2FV6 |  | 1 | 3 | 25 | 10 | 4 | --- | 6 | 5 | 1 | 3-4 |  |
| 2FY5 |  | 1 | 3 | 13 | 10 | 4 | --- | --- | 5 | 2 | 3-4 | Shall show short on 1-7. Cathode short test Depress 1-7 together. |
| 2 T 4 |  | 2 | 3 | 23 | 11 | 4 | 1-2 | --- | 7 | 6 | 3-4 | Shall show short on 1-2-6-7. Grid short test Depress 2-6 together. Plate short test depress 1-7 together. |
| 2X3 |  | 2 | 2 | 0 | 8 | 4 | --- | --- | 4 | --- | 2-8 |  |
| 3A2 | * | 7 | 2 | 0 | 14 | 5 | 5-8 | --- | 11 | --- | ** | * CAUTION - Levers 5-8 shall be thrown to position "W" before inserting tube and shall remain in position "W" throughout all tests, including short tests. ** Fill Cont - Shall show short on 1-2-4-6-9. May show short on 3-7. |
| 3A3 |  | 7 | 2 | 0 | 22 | 5 | --- | --- | 11 | --- | 2-7 | May show short on 1-3-5-8. |
| 3A4 |  | 1 | 5 | 26 | 12 | 2 | 6 | 3 | 2 | 4 | 1-5-7 | Shall show short on 2-6. Plate short test Depress 2-6 together. |
| 3A5 | Triode-1 | 1 | 4 | 20 | 14 | 2 | --- | --- | 2 | 3 | 1-4-7 |  |
| 3A5 | Triode-2 | 1 | 4 | 20 | 14 | 2 | --- | --- | 6 | 5 | 1-4-7 |  |
| 3A8 | Diode | 3 | 1 | 0 | 27 | 2 | --- | --- | 8 | --- | 1-2-7 |  |
| 3A8 | Triode | 1 | 1 | 20 | 50 | 2 | --- | --- | 6 | 5 | 1-2-7 |  |
| 3A8 | Pentode | 1 | 1 | 27 | 34 | 2 | --- | 4 | 3 | 11 | 1-2-7 |  |
| 3AF4 |  | 2 | 3 | 24 | 11 | 5 | 1-2 | --- | 7 | 6 | 3-4 | Shall show short on 1-2-6-7. Grid short test Depress 2-6 together. Plate short test depress 1-7 together. |
| 3AL5 | Diode-1 | 3 | 3 | 0 | 17 | 5 | --- | --- | 7 | --- | 3-4 |  |
| 3AL5 | Diode-2 | 3 | 3 | 0 | 17 | 5 | --- | --- | 2 | --- | 3-4 |  |
| 3AU6 |  | 1 | 3 | 13 | 27 | 5 | --- | 6 | 5 | 1 | 3-4 |  |
| 3AV6 | Triode | 1 | 3 | 12 | 32 | 5 | --- | --- | 7 | 1 | 3-4 |  |
| 3AV6 | Diode-1 | 3 | 3 | 0 | 27 | 5 | --- | --- | 6 | --- | 3-4 |  |


|  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{gathered} \text { FIL. } \\ \text { CONT. } \end{gathered}$ | COMMENT |
| 3AV6 | Diode-2 | 3 | 3 | 0 | 27 | 5 | --- | --- | 5 | --- | 3-4 |  |
| 3B2 | * | 7 | 2 | 0 | 28 | 5 | * | --- | 11 | --- | 2-7 | * CAUTION - Levers 1-3-5-6-8 shall be thrown to position "W" before inserting tube and shall remain in position "W" throughout all tests including short tests. |
| 3B4 | * | 1 | 2 | 23 | 11 | 2 | 6 | 1 | 7 7 | 3 | 2-4-5 | * CAUTION - Lever 6 shall be thrown to position "W" before inserting tube and shall remain in position "W" throughout all tests including short tests. |
| 3B5 |  | 1 | 8 | 22 | 13 | 2 | --- | 4 | 3 | 5 | 2-7-8 |  |
| 3B7 | Triode-1 | 1 | 4 | 17 | 18 | 2 | --- | --- | 7 | 6 | 1-4-8 |  |
| 3B7 | Triode-2 | 1 | 4 | 17 | 18 | 2 | --- | --- | 2 | 3 | 1-4-8 |  |
| 3BA6 |  | 1 | 3 | 28 | 15 | 5 | --- | 6 | 5 | 1 | 3-4 |  |
| 3BC5 |  | 1 | 3 | 9 | 32 | 5 | --- | 6 | 5 | 1 | 3-4 | Shall show short on 2-7. Cathode short test Depress 2-7 together. |
| 3BE6 | Amp | 4 | 3 | 7 | 27 | 5 | --- | 6 | 5 | 7 | 3-4 |  |
| 3BE6 | Osc | 1 | 3 | 21 | 9 | 5 | --- | --- | 6 | 1 | 3-4 |  |
| 3BN4 |  | 5 | 4 | 12 | 11 | 4 | --- | --- | 5 | 2-7 | 3-4 | Shall show short on 1-2-6-7. Grid short test Depress 2-7 together. Cathode short test Depress 1-6 together. |
| 3BN6 |  | 4 | 3 | 6 | 41 | 5 | --- | 5 | 7 | 2-6 | 3-4 |  |
| 3BU8 | Sect-1 | 4 | 4 | 10 | 27 | 5 | --- | 2 | 8 | 7 | 4-5 |  |
| 3BU8 | Sect-2 | 4 | 4 | 10 | 27 | 5 | --- | 2 | 3 | 7 | 4-5 |  |
| 3BX6 |  | 1 | 4 | 8 | 29 | 5 | --- | 8 | 7 | 2 | 4-5 | Shall show short on 1-3. Cathode short test Depress 1-3 together. |
| 3BY6 | Sect-1 | 1 | 3 | 18 | 10 | 5 | --- | --- | 6 | 1 | 3-4 |  |
| 3BY6 | Sect-2 | 4 | 3 | 6 | 25 | 5 | --- | 6 | 5 | 7 | 3-4 |  |
| 3BY7 |  | 4 | 4 | 5 | 10 | 5 | --- | 8 | 7 | 2 | 4-5 | Shall show short on 1-3. Cathode short test Depress 1-3 together. |
| 3BZ6 |  | 1 | 3 | 8 | 30 | 5 | --- | 6 | 5 | 1 | 3-4 |  |
| 3C4 |  | 1 | 5 | 30 | 10 | 2 | --- | 3 | 2 | 6 | 1-5-7 |  |
| 3 C 5 |  | 1 | 8 | 27 | 13 | 2 | --- | 4 | 3 | 5 | 2-7-8 |  |
| 3CB6 |  | 1 | 3 | 8 | 30 | 5 | --- | 6 | 5 | 1 | 3-4 |  |
| 3CE5 |  | 1 | 3 | 9 | 30 | 5 | --- | 6 | 5 | 1 | 3-4 | Shall show short on 2-7. Cathode short test Depress 2-7 together. |
| 3CF6 |  | 1 | 3 | 7 | 30 | 5 | --- | 6 | 5 | 1 | 3-4 |  |
| 3CS6 | Amp | 4 | 3 | 7 | 28 | 5 | --- | 6 | 5 | 7 | 3-4 |  |
| $3 \mathrm{CS6}$ | Osc | 1 | 3 | 22 | 10 | 5 | --- | --- | 6 | 1 | 3-4 |  |
| $3 \mathrm{CY5}$ |  | 2 | 3 | 11 | 20 | 4 | --- | 6 | 5 | 1 | 3-4 | Shall show short on 2-7. Cathode short test Depress 2-7 together. |
| 3D6 |  | 1 | 7 | 18 | 15 | 2 | --- | 3 | 2 | 6 | 1-7-8 |  |


| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LEVER |  |  |  |  |  |  |  |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{gathered} \text { FIL. } \\ \text { CONT. } \end{gathered}$ | COMMENT |
| 3DG4 | Plate-1 | 1 | 1 | 0 | 4 | 5 | --- | --- | 7 | --- | 1-3 |  |
| 3DG4 | Plate-2 | 1 | 1 | 0 | 4 | 5 | --- | --- | 5 | --- | 1-3 |  |
| 3DK6 |  | 1 | 3 | 6 | 29 | 5 | --- | 6 | 5 | 1 | 3-4 |  |
| 3DT6 |  | 1 | 3 | 18 | 29 | 5 | --- | 6 | 5 | 1-7 | 3-4 |  |
| 3E6 |  | 1 | 5 | 21 | 26 | 2 | --- | 3 | 2 | 6 | 1-5-8 |  |
| 3EA5 |  | 1 | 3 | 27 | 10 | 4 | --- | 6 | 5 | 1 | 3-4 | Shall show short on 2-7. Cathode short test Depress 2-7 together. |
| 3ER5 |  | 1 | 3 | 17 | 10 | 4 | --- | 6 | 5 | 2 | 3-4 | Shall show short on 1-7. Cathode short test Depress 1-7 together. |
| 3ES5 |  | 1 | 3 | 20 | 10 | 5 | --- | 6 | 5 | 2 | 3-4 | Shall show short on 1-7. Cathode short test Depress 1-7 together. |
| 3EV5 |  | 3 | 3 | 5 | 19 | 4 | --- | 6 | 5 | 1 | 3-4 | Shall show short on 2-7. Cathode short test Depress 2-7 together. |
| 3FH5 |  | 1 | 3 | 21 | 10 | 5 | --- | --- | 5 | 2 | 3-4 | Shall show short on 1-7. Cathode short test Depress 1-7 together. |
| 3FY5 |  | 1 | 3 | 13 | 10 | 5 | --- | --- | 5 | 2 | 3-4 | Shall show short on 1-7. Cathode short test Depress 1-7 together. |
| 3LF4 |  | 1 | 7 | 26 | 12 | 2 | --- | 3 | 2 | 6 | 1-7-8 |  |
| 3Q4 |  | 1 | 5 | 27 | 15 | 2 | 2 | 4 | 6 | 3 | 1-5-7 | Must show short on 2-6. Plate short test Depress 2-6 together. |
| 3Q5 |  | 1 | 8 | 26 | 12 | 2 | --- | 4 | 3 | 5 | 2-7-8 |  |
| 3S4 |  | 1 | 5 | 27 | 14 | 2 | 6 | 4 | 2 | 3 | 1-5-7 | Must show short on 2-6. Plate short test Depress 2-6 together. |
| 3V4 |  | 1 | 5 | 27 | 15 | 2 | --- | 3 | 2 | 6 | 1-5-7 |  |
| 4A6 | Triode-1 | 1 | 8 | 25 | 22 | 3 | --- | --- | 6 | 5 | 2-7-8 |  |
| 4A6 | Triode-2 | 1 | 8 | 25 | 22 | 3 | --- | --- | 3 | 4 | 2-7-8 |  |
| 4AU6 |  | 1 | 3 | 13 | 27 | $5 z-*$ | --- | 6 | 5 | 1 | 3-4 | Set switch "E" to 6 if there is no 5 z position. |
| 4AV6 | Triode | 1 | 3 | 12 | 32 | $5 z-*$ | --- | --- | 7 | 1 | 3-4 | Set switch " $E$ " to 6 if there is no $5 z$ position. |
| 4AV6 | Diode-1 | 3 | 3 | 0 | 27 | $5 z-*$ | --- | --- | 6 | --- | 3-4 | Set switch "E" to 6 if there is no 5 z position. |
| 4AV6 | Diode-2 | 3 | 3 | 0 | 27 | 5 z -* | --- | --- | 5 | --- | 3-4 | Set switch "E" to 6 if there is no $5 z$ position. |
| 4BA6 |  | 1 | 3 | 28 | 15 | $5 z-*$ | --- | 6 | 5 | 1 | 3-4 | Set switch "E" to 6 if there is no $5 z$ position. |
| 4BC5 |  | 1 | 3 | 9 | 32 | $5 z-*$ | --- | 6 | 5 | 1 | 3-4 | Set switch "E" to 6 if there is no $5 z$ position. Shall show short on 2-7. Cathode short test Depress 2-7 together. |


| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LEVER |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \hline \text { FIL. } \\ \text { CONT. } \end{gathered}$ | COMMENT |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | z |  |  |
| 4BC8 | Triode-1 | 5 | 4 | 13 | 10 | $5 z-*$ | --- | --- | 6 | 7 | 4-5 | Set switch "E" to 6 if there is no $5 z$ position. |
| 4BC8 | Triode-2 | 5 | 4 | 13 | 10 | $5 z-*$ | --- | --- | 1 | 2 | 4-5 | Set switch "E" to 6 if there is no $5 z$ position. |
| 4BE6 | Amp | 4 | 3 | 7 | 27 | $5 z-*$ | --- | 6 | 5 | 7 | 3-4 | Set switch "E" to 6 if there is no $5 z$ position. |
| 4BE6 | Osc | 1 | 3 | 21 | 9 | $5 z-*$ | --- | --- | 6 | 1 | 3-4 | Set switch " $E$ " to 6 if there is no $5 z$ position. |
| 4BL8 | Triode | 1 | 4 | 14 | 10 | 6 | --- | --- | 1 | 9 | 4-5 |  |
| 4BL8 | Pentode | 1 | 4 | 23 | 16 | 6 | --- | 3 | 6 | 2 | 4-5 |  |
| 4BN4 |  | 5 | 4 | 12 | 11 | $5 z-*$ | --- | --- | 2-7 | 3-4 | 3-4 | Set switch "E" to 6 if there is no $5 z$ position. Shall show short on 1-2-6-7. Grid short test Depress 2-7 together. Cathode short test Depress 1-6 together. |
| 4BN6 |  | 4 | 3 | 6 | 41 | $5 z-*$ | --- | 5 | 7 | 2-6 | 3-4 | Set switch " $E$ " to 6 if there is no $5 z$ position. |
| 4BQ7A | Triode-1 | 1 | 4 | 15 | 11 | $5 z-*$ | --- | --- | 6 | 7 | 4-5 | Set switch " $E$ " to 6 if there is no $5 z$ position. |
| 4BQ7A | Triode-2 | 1 | 4 | 15 | 11 | 5 z -* | --- | --- | 1 | 2 | 4-5 | Set switch " $E$ " to 6 if there is no $5 z$ position. |
| 4BS8 | Triode-1 | 5 | 4 | 9 | 12 | $5 z-*$ | --- | --- | 6 | 7 | 4-5 | Set switch " $E$ " to 6 if there is no $5 z$ position. |
| 4BS8 | Triode-2 | 5 | 4 | 9 | 12 | $5 z-*$ | --- | --- | 1 | 2 | 4-5 | Set switch "E" to 6 if there is no $5 z$ position. |
| 4BU8 | Sect-1 | 4 | 4 | 10 | 27 | $5 z-*$ | --- | 2 | 8 | 7 | 4-5 | Set switch " $E$ " to 6 if there is no $5 z$ position. |
| 4BU8 | Sect-2 | 4 | 4 | 10 | 27 | $5 z-*$ | --- | 2 | 3 | 7 | 4-5 | Set switch " $E$ " to 6 if there is no $5 z$ position. |
| 4BX8 | Triode-1 | 1 | 4 | 20 | 8 | $5 z-*$ | - | --- | 6 | 7 | 4-5 | Set switch "E" to 6 if there is no $5 z$ position. |
| 4BX8 | Triode-2 | 1 | 4 | 20 | 8 | $5 z-*$ | --- | --- | 1 | 2 | 4-5 | Set switch " $E$ " to 6 if there is no $5 z$ position. |
| 4BZ6 |  | 1 | 3 | 8 | 30 | $5 z-*$ | -- | 6 | 5 | 1 | 3-4 | Set switch " $E$ " to 6 if there is no $5 z$ position. |
| 4BZ7 | Triode-1 | 5 | 4 | 13 | 10 | $5 z-*$ | - | --- | 6 | 7 | 4-5 | Set switch "E" to 6 if there is no $5 z$ position. |
| 4BZ7 | Triode-2 | 5 | 4 | 16 | 10 | $5 z-*$ | --- | --- | 1 | 2 | 4-5 | Set switch " $E$ " to 6 if there is no $5 z$ position. |
| 4BZ8 | Triode-1 | 1 | 4 | 14 | 13 | $5 z-*$ | --- | --- | 1 | 2 | 4-5 | Set switch "E" to 6 if there is no $5 z$ position. |


| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LEVER |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { FIL. } \\ \text { CONT. } \end{gathered}$ | COMMENT |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z |  |  |
| 4BZ8 | Triode-2 | 1 | 4 | 14 | 13 | $5 z-*$ | --- | --- | 6 | 7 | 4-5 | Set switch "E" to 6 if there is no $5 z$ position. |
| 4CB6 |  | 1 | 3 | 8 | 30 | $5 z-*$ | --- | 6 | 5 | 1 | 3-4 | Set switch "E" to 6 if there is no $5 z$ position. |
| 4CE5 |  | 1 | 3 | 9 | 30 | $5 z-*$ | --- | 6 | 5 | 1 | 3-4 | Set switch "E" to 6 if there is no $5 z$ position. Shall show short on 2-7. Cathode short test Depress 2-7 together. |
| 4CM4 |  | 2 | 4 | 19 | 10 | 5 | 1-2-6 | --- | 9 | 8 | 4-5 | Shall show short on 1-2-3-6-7-8-9. Plate short test - Depress 1-9 together. Grid short test - Depress 2-6-8 together. Cathode short test - Depress 3-7 together. |
| 4CS6 | Amp | 4 | 3 | 7 | 28 | $5 z-*$ | --- | 6 | 5 | 7 | 3-4 | Set switch " $E$ " to 6 if there is no $5 z$ position. |
| 4CS6 | Osc | 1 | 3 | 22 | 10 | $5 z-*$ | --- | --- | 6 | 1 | 3-4 | Set switch "E" to 6 if there is no $5 z$ position. |
| 4CY5 |  | 2 | 3 | 11 | 20 | 6 | --- | 6 | 5 | 1 | 3-4 | Shall show short on 2-7. Cathode short test Depress 2-7 together. |
| 4DE6 |  | 1 | 3 | 4 | 30 | $5 z-*$ | --- | 6 | 5 | 1 | 3-4 | Set switch "E" to 6 if there is no $5 z$ position. |
| 4DK6 |  | 1 | 3 | 6 | 29 | $5 z-*$ | --- | 6 | 5 | 1 | 3-4 | Set switch "E" to 6 if there is no $5 z$ position. |
| 4DT6 |  | 1 | 3 | 18 | 29 | $5 z-*$ | --- | 6 | 5 | 1-7 | 3-4 | Set switch "E" to 6 if there is no $5 z$ position. |
| 4ES8 | Triode-1 | 2 | 4 | 12 | 10 | $5 z-*$ | --- | --- | 6 | 7 | 4-5 | Set switch "E" to 6 if there is no $5 z$ position. |
| 4ES8 | Triode-2 | 2 | 4 | 13 | 10 | $5 z-*$ | --- | --- | 1 | 2 | 4-5 | Set switch "E" to 6 if there is no $5 z$ position. |
| 4EW6 |  | 1 | 3 | 19 | 21 | $5 z-*$ | --- | 6 | 5 | 1 | 3-4 | Set switch " $E$ " to 6 if there is no $5 z$ position. |
| 4GM6 |  | 4 | 3 | 4 | 10 | $5 z-*$ | --- | 6 | 5 | 1 | 3-4 | Set switch "E" to 6 if there is no $5 z$ position. |
| 5AM8 | Pentode | 1 | 4 | 8 | 29 | 6 | --- | 3 | 6 | 2 | 4-5 |  |
| 5AM8 | Diode | 3 | 4 | 0 | 17 | 6 | --- | --- | 8 | --- | 4-5 |  |
| 5AN8 | Triode | 5 | 4 | 10 | 13 | 6 | --- | --- | 1 | 2 | 4-5 |  |
| 5AN8 | Pentode | 4 | 4 | 8 | 10 | 6 | --- | 7 | 6 | 8 | 4-5 |  |
| 5AQ5 |  | 1 | 3 | 32 | 8 | 6 | 1 | 6 | 5 | 7 | 3-4 | Shall show short on 1-7. Grid short test Depress 1-7 together. |
| 5AR4 | Plate-1 | 1 | 2 | 0 | 4 | 6 | --- | --- | 4 | --- | 2-8 |  |
| 5AR4 | Plate-2 | 1 | 2 | 0 | 4 | 6 | --- | --- | 6 | --- | 2-8 |  |



| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | LEVER |  |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{aligned} & \text { FIL. } \\ & \text { CONT. } \end{aligned}$ | COMMENT |
| 5CL8 | Triode | 1 | 4 | 32 | 7 | 6 | --- | --- | 2 | 1 | 4-5 |  |
| 5CL8 | Tetrode | 1 | 4 | 25 | 17 | 6 | --- | 7 | 6 | 9 | 4-5 |  |
| 5CM6 |  | 1 | 4 | 17 | 13 | 6 | 3 | 1 | 9 | 6 | 4-5 | Shall show short on 3-6. Grid short test Depress 3-6 together. |
| 5CM8 | Triode | 1 | 4 | 14 | 31 | 6 | --- | --- | 1 | 9 | 4-5 |  |
| 5CM8 | Pentode | 1 | 4 | 9 | 26 | 6 | --- | 7 | 6 | 2 | 4-5 |  |
| 5CQ8 | Triode | 1 | 4 | 28 | 9 | 6 | --- | --- | 1 | 9 | 4-5 |  |
| 5CQ8 | Tetrode | 1 | 4 | 27 | 18 | 6 | --- | 3 | 6 | 2 | 4-5 |  |
| 5CX8 | Triode | 1 | 4 | 28 | 11 | 6 | --- | --- | 3 | 2 | 4-5 |  |
| 5CX8 | Pentode | 1 | 4 | 18 | 11 | 6 | --- | 8 | 9 | 7 | 4-5 |  |
| 5CZ5 |  | 1 | 4 | 25 | 10 | 6 | 3 | 1 | 9 | 6 | 4-5 | Shall show short on 3-6. Grid short test Depress 3-6 together. |
| 5DH8 | Triode | 1 | 4 | 39 | 7 | 6 | --- | --- | 2 | 1 | 4-5 |  |
| 5DH8 | Pentode | 1 | 4 | 23 | 18 | 6 | --- | 7 | 6 | 9 | 4-5 |  |
| 5EA8 | Pentode | 1 | 4 | 20 | 23 | 6 | --- | 3 | 6 | 2 | 4-5 |  |
| 5EA8 | Triode | 1 | 4 | 18 | 11 | 6 | --- | --- | 1 | 9 |  |  |
| 5EH8 | Pentode | 2 | 4 | 8 | 45 | 6 | --- | 8 | 9 | 7 | 4-5 | Shall show short on 1-6. Cathode short test Depress 1-6 together. |
| 5EH8 | Triode | 2 | 4 | 32 | 11 | 6 | --- | --- | 3 | 2 | 4-5 |  |
| 5ES8 | Triode-1 | 2 | 4 | 12 | 10 | 6 | --- | --- | 6 | 7 | 4-5 |  |
| 5ES8 | Triode-2 | 2 | 4 | 13 | 10 | 6 | --- | --- | 1 | 2 | 4-5 |  |
| 5EU8 | Triode | 1 | 4 | 22 | 10 | 5 z - * | --- | --- | 3 | 2 | 4-5 |  |
| 5EU8 | Pentode | 4 | 4 | 8 | 10 | 5 z - * | --- | 9 | 1 | 7 | 4-5 |  |
| 5FG7 | Triode | 1 | 4 | 24 | 10 | 6 | --- | --- | 2 | 1 | 4-5 | Shall show short on 3-8. Cathode short test Depress 3-8 together. |
| 5FG7 | Pentode | 1 | 4 | 17 | 21 | 6 | --- | 7 | 6 | 9 | 4-5 |  |
| 5FV8 | Triode | 1 | 4 | 18 | 10 | 6 | --- | --- | 2 | 1 | 4-5 |  |
| 5FV8 | Pentode | 4 | 4 | 6 | 10 | 6 | --- | 7 | 6 | 9 | 4-5 |  |
| 5GM6 |  | 4 | 3 | 4 | 10 | 6 | --- | 6 | 5 | 1 | 3-4 |  |
| 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 |  |
| 5R4GY | Plate-1 | 2 | 2 | 0 | 6 | 6 | --- | --- | 4 | --- | 2-8 |  |
| 5R4GY | Plate-2 | 2 | 2 | 0 | 6 | 6 | --- | --- | 6 | --- | 2-8 |  |
| 5 T 8 | Triode | 1 | 4 | 9 | 38 | 6 | --- | --- | 9 | 8 | 4-5 |  |
| 5 T 8 | Diode-1 | 3 | 4 | 0 | 16 | 6 | --- | --- | 6 | --- | 4-5 |  |
| 5 T 8 | Diode-2 | 3 | 4 | 0 | 16 | 6 | --- | --- | 2 | --- | 4-5 |  |
| 5 T 8 | Diode-3 | 3 | 4 | 0 | 16 | 6 | --- | --- | 1 | --- | 4-5 |  |
| 5 U 4 | Plate-1 | 2 | 2 | 0 | 5 | 6 | --- | --- | 4 | --- | 2-8 |  |
| 5 U 4 | Plate-2 | 2 | 2 | 0 | 5 | 6 | --- | --- | 6 | --- | 2-8 |  |
| 5 U 8 | Triode | 1 | 4 | 28 | 8 | 6 | --- | --- | 1 | 9 | 4-5 |  |
| 5 U 8 | Pentode | 1 | 4 | 14 | 29 | 6 | --- | 3 | 6 | 2 | 4-5 |  |


|  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PRECISION 10-12, $10-15,10-20,10-22,10-54$ TUBE TEST DAT |  |  |  |  |  |  |  |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{aligned} & \text { FIL. } \\ & \text { CONT. } \end{aligned}$ | COMMENT |
| 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 |  |
| 5V6 |  | 1 | 2 | 31 | 9 | 6 | --- | 4 | 3 | 5 | 2-7 |  |
| 5W4 | Plate-1 | 2 | 2 | 0 | 9 | 6 | --- | --- | 4 | --- | 2-8 |  |
| 5W4 | Plate-2 | 2 | 2 | 0 | 9 | 6 | --- | --- | 6 | --- | 2-8 |  |
| 5X8 | Triode | 1 | 4 | 12 | 14 | 6 | --- | --- | 3 | 2 | 4-5 |  |
| 5X8 | Pentode | 1 | 4 | 8 | 30 | 6 | --- | 8 | 9 | 7 | 4-5 |  |
| 5 Y 3 | Plate-1 | 2 | 2 | 0 | 8 | 6 | -- | --- | 4 | --- | 2-8 |  |
| 5Y3 | Plate-2 | 2 | 2 | 0 | 8 | 6 | --- | --- | 6 | --- | 2-8 |  |
| $5 \mathrm{Z3}$ | Plate-1 | 2 | 1 | 0 | 5 | 6 | --- | --- | 2 | --- | 1-4 |  |
| $5 \mathrm{Z3}$ | Plate-2 | 2 | 1 | 0 | 5 | 6 | --- | --- | 3 | --- | 1-4 |  |
| 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 |  |
| 6AB4 |  | 1 | 3 | 30 | 10 | 7 | --- | --- | 1 | 6 | 3-4 |  |
| 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 |  |
| 6AB8 | Pentode | 1 | 4 | 26 | 10 | 7 | --- | 8 | 6 | 9 | 4-5 |  |
| 6AB8 | Triode | 1 | 4 | 34 | 10 | 7 | --- | --- | 1 | 2 | 4-5 |  |
| 6AC6 |  | 1 | 2 | 29 | 8 | 7 | --- | 4 | 3 | 5 | 2-7 |  |
| 6AC7 |  | 1 | 2 | 6 | 26 | 7 | --- | 6 | 8 | 4 | 2-7 |  |
| 6AD4 |  | 1 | 3 | 6 | 33 | 7 | --- | --- | 8 | 1 | 3-6 |  |
| 6AD5 |  | 1 | 2 | 12 | 33 | 7 | --- | --- | 3 | 5 | 2-7 |  |
| 6AD6 |  | 1 | 2 | 0 | 0 | 7 | --- | --- | 3-4-5 | --- | 2-7 | See instructions for eye test. |
| 6AD7 | Triode | 1 | 2 | 30 | 23 | 7 | --- | --- | 6 | 1 | 2-7 |  |
| 6AD7 | Pentode | 1 | 2 | 32 | 10 | 7 | --- | 4 | 3 | 5 | 2-7 |  |
| 6AE5 |  | 1 | 2 | 29 | 6 | 7 | --- | --- | 3 | 5 | 2-7 |  |
| 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. |
| 6AF4 |  | 2 | 3 | 24 | 11 | 7 | 1-2 | --- | 7 | 6 | 3-4 | Shall show short on 1-2-6-7. Plate short test Depress 1-7 together. Grid short test Depress 2-6 together. |


| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | LEVER |  |  |  |  |  |  |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{gathered} \text { FIL. } \\ \text { CONT. } \end{gathered}$ | COMMENT |
| 6AF5 |  | 1 | 2 | 25 | 7 | 7 | --- | --- | 3 | 5 | 2-7 |  |
| 6AF6 | Eye | 1 | 2 | 0 | 0 | 7 | --- | --- | 3-4-5 | --- | 2-7 |  |
| 6AG5 |  | 1 | 3 | 9 | 33 | 7 | --- | 6 | 5 | 1 | 3-4 | Shall show short on 2-7. Cathode short test Depress 2-7 together. |
| 6AG6 |  | 1 | 2 | 22 | 10 | 7 | --- | 4 | 3 | 5 | 2-7 |  |
| 6AG7 |  | 1 | 2 | 14 | 13 | 7 | --- | 6 | 8 | 4 | 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". Shall show short on 1-3-4-6-9. Grid short test - Depress 1-3-4-6-9 together. |
| 6 AJ5 |  | 1 | 3 | 13 | 17 | 7 | --- | 6 | 5 | 1 | 3-4 | Shall show short on 2-7. Cathode short test Depress 2-7 together. |
| 6AJ7 |  | 1 | 2 | 6 | 26 | 7 | --- | 6 | 8 | 4 | 2-7 |  |
| 6AJ8 | Amp | 1 | 4 | 14 | 31 | 7 | --- | 1 | 6 | 2 | 4-5 |  |
| 6AJ8 | Osc | 1 | 4 | 25 | 10 | 7 | --- | -- | 1 | 2 | 4-5 |  |
| 6AJ8 | Triode | 1 | 4 | 25 | 13 | 7 | --- | - | 8 | 9 | 4-5 |  |
| 6AK4 |  | 2 | 3 | 12 | 18 | 7 | --- | --- | 8 | 1 | 3-6 |  |
| 6AK5 |  | 1 | 3 | 22 | 16 | 7 | --- | 6 | 5 | 1 | 3-4 | Shall show short on 2-7. Cathode short test Depress 2-7 together. |
| 6AK6 |  | 1 | 3 | 32 | 10 | 7 | --- | 6 | 5 | 1 | 3-4 |  |
| 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 |  |
| 6AL5 | Diode-1 | 3 | 3 | 0 | 17 | 7 | --- | --- | 7 | --- | 3-4 |  |
| 6AL5 | Diode-2 | 3 | 3 | 0 | 17 | 7 | --- | --- | 2 | --- | 3-4 |  |
| 6AL6 |  | 1 | 2 | 24 | 9 | 7 | -- | 4 | 11 | 5 | 2-7 |  |
| 6AL7 | Eye | 7 | 2 | 7 | 0 | 7 | --- | --- | 3 | 4-6-5 | 2-7 | See instructions for FM/AM eye tests. |
| 6AM4 |  | 1 | 7 | 13 | 18 | 7 | * | --- | 5 | 9 | 7-8 | Throw levers 1-3-4-6 to "W". Shall show short on 1-3-4-6-9. Grid short test - Depress 1-3-4-6-9 together. |
| 6AM6 |  | 4 | 3 | 10 | 10 | 7 | --- | 7 | 5 | 1 | 3-4 |  |
| 6AM8 | Pentode | 4 | 4 | 7 | 10 | 7 | --- | 3 | 6 | 2 | 4-5 |  |
| 6AM8 | Diode | 3 | 4 | 0 | 16 | 7 | --- | --- | 8 | --- | 4-5 |  |





| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | LEVER |  |  |  |  |  |  |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{gathered} \text { FIL. } \\ \text { CONT. } \end{gathered}$ | COMMENT |
| 6BM8 | Triode | 1 | 4 | 31 | 11 | 7 | --- | --- | 9 | 1 | 4-5 |  |
| 6BM8 | Pentode | 1 | 4 | 10 | 12 | 7 | --- | 7 | 6 | 3 | 4-5 |  |
| 6BN4 |  | 5 | 4 | 12 | 11 | 7 | --- | --- | 5 | 2-7 | 3-4 | Shall show short on 1-2-6-7. Grid short test Depress 2-7 together. Cathode short test Depress 1-6 together. |
| 6BN5 |  | 1 | 4 | 30 | 10 | 7 | 1 | 9 | 7 | 2 | 4-5 | Shall show short on 1-2-6-8. Grid short test Depress 1-2 together. Cathode short test Depress 6-8 together. |
| 6BN6 |  | 4 | 3 | 6 | 41 | 7 | --- | 5 | 7 | 2-6 | 3-4 |  |
| 6BN7 | Triode-1 | 1 | 4 | 29 | 5 | 7 | --- | --- | 9 | 7 | 4-5 |  |
| 6BN7 | Triode-2 | 1 | 4 | 10 | 24 | 7 | --- | --- | 1 | 2 | 4-5 |  |
| 6BN8 | Triode | 1 | 4 | 35 | 7 | 7 | --- | --- | 7 | 8 | 4-5 |  |
| 6BN8 | Diode-1 | 3 | 4 | 0 | 17 | 7 | --- | --- | 6 | --- | 4-5 |  |
| 6BN8 | Diode-2 | 3 | 4 | 0 | 17 | 7 | --- | --- | 1 | --- | 4-5 |  |
| 6BQ5 |  | 1 | 4 | 28 | 7 | 7 | 1 | 9 | 7 | 2 | 4-5 | Shall show short on 1-2. Grid short test Depress 1-2 together. |
| 6BQ6 |  | 1 | 2 | 16 | 5 | 7 | --- | 4 | 11 | 5 | 2-7 |  |
| 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 | May show short on 3-6-9. |
| 6BR5 | Eye | 7 | 4 | 0 | 0 | 7 | 3-6 | --- | 7-9 | --- | 4-5 | See instructions for eye test. |
| 6BR8 | Triode | 1 | 4 | 15 | 14 | 7 | --- | --- | 2 | 1 | 4-5 |  |
| 6BR8 | Pentode | 1 | 4 | 10 | 33 | 7 | --- | 7 | 6 | 9 | 4-5 |  |
| 6BS8 | Triode-1 | 5 | 4 | 9 | 12 | 7 | --- | --- | 6 | 7 | 4-5 |  |
| 6BS8 | Triode-2 | 5 | 4 | 9 | 12 | 7 | --- | --- | 1 | 2 | 4-5 |  |
| 6BT8 | Pentode | 1 | 4 | 5 | 33 | 7 | --- | 7 | 6 | 8 | 4-5 |  |
| 6BT8 | Diode-1 | 3 | 4 | 0 | 20 | 7 | --- | --- | 2 | --- | 4-5 |  |
| 6BT8 | Diode-2 | 3 | 4 | 0 | 20 | 7 | --- | --- | 1 | --- | 4-5 |  |
| 6BU6 | Triode | 1 | 3 | 28 | 11 | 7 | --- | --- | 7 | 1 | 3-4 |  |
| 6BU6 | Diode-1 | 3 | 3 | 0 | 23 | 7 | --- | --- | 6 | --- | 3-4 |  |
| 6BU6 | Diode-2 | 3 | 3 | 0 | 23 | 7 | --- | --- | 5 | --- | 3-4 |  |
| 6BU8 | Sect-1 | 4 | 4 | 10 | 27 | 7 | --- | 2 | 8 | 7 | 4-5 |  |
| 6BU8 | Sect-2 | 4 | 4 | 10 | 27 | 7 | --- | 2 | 3 | 7 | 4-5 |  |
| 6BV8 | Triode | 1 | 4 | 22 | 10 | 7 | --- | --- | 3 | 2 | 4-5 |  |
| 6BV8 | Diode-1 | 3 | 4 | 0 | 17 | 7 | --- | --- | 9 | --- | 4-5 |  |
| 6BV8 | Diode-2 | 3 | 4 | 0 | 17 | 7 | --- | --- | 6 | --- | 4-5 |  |
| 6BW4 | Plate-1 | 2 | 4 | 0 | 7 | 7 | --- | --- | 7 | --- | 4-5 |  |
| 6BW4 | Plate-2 | 2 | 4 | 0 | 7 | 7 | --- | -- | 1 | -- | 4-5 |  |
| 6BW8 | Pentode | 2 | 4 | 5 | 37 | 7 | --- | 8 | 9 | 6 | 4-5 | May show short on 7. |
| 6BW8 | Diode-1 | 3 | 4 | 0 | 16 | 7 | --- | --- | 3 | --- | 4-5 |  |
| 6BW8 | Diode-2 | 3 | 4 | 0 | 16 | 7 | --- | --- | 1 | --- | 4-5 |  |



| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LEVER |  |  |  |  |  |  |  |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{gathered} \text { FIL. } \\ \text { CONT. } \end{gathered}$ | COMMENT |
| 6CG7 | Triode-2 | 1 | 4 | 15 | 16 | 7 | --- | --- | 1 | 2 | 4-5 |  |
| 6CG8 | Triode | 1 | 4 | 18 | 12 | 7 | --- | --- | 2 | 1 | 4-5 |  |
| 6CG8 | Pentode | 1 | 4 | 25 | 28 | 7 | --- | 7 | 6 | 9 | 4-5 |  |
| 6CH6 |  | 1 | 4 | 20 | 12 | 7 | --- | 8 | 7 | 2 | 4-5 |  |
| 6CH7 | Triode-1 | 5 | 4 | 11 | 15 | 7 | --- | --- | 6 | 7 | 4-5 |  |
| 6CH7 | Triode-2 | 5 | 4 | 10 | 15 | 7 | --- | --- | 1 | 2 | 4-5 |  |
| 6CH8 | Triode | 5 | 4 | 8 | 15 | 7 | --- | --- | 9 | 8 | 4-5 |  |
| 6CH8 | Pentode | 1 | 4 | 14 | 21 | 7 | --- | 3 | 2 | 7 | 4-5 |  |
| 6CK4 |  | 2 | 2 | 16 | 11 | 7 | 1 | --- | 5 | 3 | 2-7 | Shall show short on 1-3. Grid short test Depress 1-3 together. |
| 6CL5 |  | 2 | 2 | 10 | 5 | 7 | 1-4 | 8 | 11 | 5 | 2-7 | Shall show short on 1-3-4-5-6-8. Grid short test - Depress 4-5 together. Screen short <br> test - Depress 1-8 together. Cathode short <br> test - Depress 3-6 together. |
| 6CL6 |  | 1 | 4 | 21 | 10 | 7 | 2-3 | 8 | 6 | 9 | 4-5 | Shall show short on 2-3-8-9. Screen short test - Depress 3-8 together. Grid short test Depress 2-9 together. |
| 6CL8 | Triode | 1 | 4 | 32 | 7 | 7 | --- | --- | 2 | 1 | 4-5 |  |
| 6CL8 | Tetrode | 1 | 4 | 25 | 17 | 7 | --- | 7 | 6 | 9 | 4-5 |  |
| 6CM6 |  | 1 | 4 | 17 | 13 | 7 | 3 | 1 | 9 | 6 | 4-5 | Shall show short on 3-6. Grid short test Depress 3-6 together. |
| 6CM7 | Triode-1 | 1 | 4 | 16 | 16 | 7 | --- | --- | 6 | 7 | 4-5 |  |
| 6CM7 | Triode-2 | 1 | 4 | 22 | 9 | 7 | --- | --- | 1 | 8 | 4-5 |  |
| 6CM8 | Triode | 1 | 4 | 14 | 31 | 7 | --- | --- | 1 | 9 | 4-5 |  |
| 6CM8 | Pentode | 1 | 4 | 9 | 26 | 7 | --- | 7 | 6 | 2 | 4-5 |  |
| 6CN6 |  | 1 | 2 | 13 | 10 | 6 | --- | 4 | 11 | 5 | 2-7 |  |
| 6CN7 | Triode | 1 | 9 | 9 | 39 | 5 | --- | --- | 8 | 7 | 4-5-9 |  |
| 6CN7 | Diode-1 | 3 | 9 | 0 | 17 | 5 | --- | --- | 2 | --- | 4-5-9 |  |
| 6CN7 | Diode-2 | 3 | 9 | 0 | 17 | 5 | --- | --- | 1 | --- | 4-5-9 |  |
| 6CQ4 |  | 3 | 7 | 0 | 16 | 7 | --- | --- | 5 | --- | 7-8 |  |
| 6CQ6 |  | 4 | 3 | 14 | 10 | 7 | --- | 7 | 5 | 1 | 3-4 |  |
| 6CQ8 | Triode | 1 | 4 | 28 | 9 | 7 | --- | --- | 1 | 9 | 4-5 |  |
| 6CQ8 | Tetrode | 1 | 4 | 27 | 18 | 7 | --- | 3 | 6 | 2 | 4-5 |  |
| 6CR6 | Pentode | 1 | 3 | 24 | 22 | 7 | --- | 6 | 5 | 7 | 3-4 |  |
| 6CR6 | Diode | 3 | 3 | 0 | 24 | 7 | --- | --- | 2 | --- | 3-4 |  |
| 6CS6 | Amp | 4 | 3 | 7 | 28 | 7 | --- | 6 | 5 | 7 | 3-4 |  |
| 6CS6 | Osc | 1 | 3 | 22 | 10 | 7 | --- | --- | 6 | 1 | 3-4 |  |
| 6CS7 | Triode-1 | 1 | 4 | 25 | 19 | 7 | --- | --- | 1 | 3 | 4-5 |  |
| 6CS7 | Triode-2 | 1 | 4 | 23 | 14 | 7 | --- | --- | 6 | 7 | 4-5 |  |


|  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DAT |  |  |  |  |  |  |  |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{gathered} \hline \text { FIL. } \\ \text { CONT. } \end{gathered}$ | COMMENT |
| 6CU5 |  | 1 | 3 | 10 | 7 | 7 | 2 | 6 | 7 | 5 | 3-4 | Shall show short on 2-5. Grid short test Depress 2-5 together. |
| 6CU6 |  | 1 | 2 | 12 | 5 | 7 | --- | 4 | 11 | 5 | 2-7 |  |
| 6CU7 | Triode | 1 | 1 | 30 | 10 | 7 | --- | --- | 3 | 4 | 1-8 |  |
| 6CU7 | Hexode | 1 | 1 | 5 | 38 | 7 | --- | 5 | 2 | 6 | 1-8 |  |
| 6CU8 | Pentode | 1 | 4 | 7 | 27 | 7 | --- | 3 | 2 | 7 | 4-5 |  |
| 6CU8 | Triode | 1 | 4 | 23 | 10 | 7 | --- | --- | 9 | 8 | 4-5 | May show short on 1-6. |
| 6CV7 | Triode | 4 | 1 | 13 | 10 | 7 | --- | --- | 2 | 3 | 1-8 |  |
| 6CV7 | Diode-1 | 3 | 1 | 0 | 22 | 7 | --- | --- | 5 | --- | 1-8 |  |
| 6CV7 | Diode-2 | 3 | 1 | 0 | 22 | 7 | --- | --- | 6 | --- | 1-8 |  |
| 6CW5 |  | 1 | 4 | 0 | 10 | 6 | 1-6-8 | 9 | 7 | 2 | 4-5 | May show short on 1-2-6-7-8-9. Grid short test - Depress 1-2 together. Plate short test Depress 7-8 together. Screen short test Depress 6-9 together. |
| 6CW7 | Triode-1 | 5 | 4 | 9 | 10 | 7 | --- | --- | 9 | 6 | 4-5 | Shall show short on 7-8. Cathode short test, Section 1 - Depress 7-8 together. |
| 6CW7 | Triode-2 | 5 | 4 | 9 | 10 | 7 | --- | --- | 3 | 2 | 4-5 |  |
| 6CX8 | Triode | 1 | 4 | 28 | 11 | 7 | --- | --- | 3 | 2 | 4-5 |  |
| 6CX8 | Pentode | 1 | 4 | 18 | 11 | 7 | --- | 8 | 9 | 7 | 4-5 |  |
| 6CY5 |  | 2 | 3 | 11 | 20 | 7 | --- | 6 | 5 | 1 | 3-4 | Shall show short on 2-7. Cathode short test Depress 2-7 together. |
| 6CY7 | Triode-1 | 2 | 4 | 20 | 30 | 7 | --- | --- | 6 | 7 | 4-5 | May show short on 2-3. |
| 6CY7 | Triode-2 | 2 | 4 | 20 | 5 | 7 | 2 | --- | 1 | 3 | 4-5 |  |
| 6CZ5 |  | 1 | 4 | 25 | 10 | 7 | 3 | 1 | 9 | 6 | 4-5 | Shall show short on 3-6. Grid short test Depress 3-6 together. |
| 6D4 |  | 7 | 3 | 0 | 4 | 7 | --- | --- | 7 | --- | 3-4 |  |
| 6D5 |  | 1 | 2 | 38 | 6 | 7 | --- | --- | 3 | 5 | 2-7 |  |
| 6D8 | Amp | 4 | 2 | 40 | 20 | 7 | --- | 4 | 3 | 11 | 2-7 |  |
| 6D8 | Osc | 1 | 2 | 30 | 33 | 7 | --- | --- | 6 | 5 | 2-7 |  |
| 6DA4 |  | 5 | 7 | 0 | 6 | 7 | --- | --- | 5 | --- | 7-8 |  |
| 6DA5 | Triode | 1 | 4 | 34 | 24 | 7 | --- | --- | 7 | 1 | 4-5 | Shall show short on 3-8-9. |
| 6DA5 | Eye | 7 | 4 | 0 | 0 | 7 | 3-8 | --- | 7-9 | --- | 4-5 | See instructions for eye test. |
| 6DA6 |  | 1 | 4 | 8 | 28 | 7 | --- | 8 | 7 | 2 | 4-5 | May show short on 1-6. |
| 6DB5 |  | 1 | 4 | 10 | 9 | 7 | 3 | 1 | 9 | 6 | 4-5 | Shall show short on 2-3-6-7. Grid short test Depress 3-6 together. Cathode short test Depress 2-7 together. |
| 6DB6 |  | 1 | 3 | 6 | 41 | 7 | --- | 6 | 5 | 1 | 3-4 |  |
| 6DC6 |  | 1 | 3 | 8 | 28 | 7 | --- | 6 | 5 | 1 | 3-4 |  |
| 6DC8 | Pentode | 1 | 4 | 27 | 17 | 7 | --- | 1 | 6 | 2 | 4-5 |  |
| 6DC8 | Diode-1 | 3 | 4 | 0 | 11 | 7 | --- | --- | 7 | --- | 4-5 | Diode section OK above 1/4 on meter scale. |


| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LEVER |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { FIL. } \\ \text { CONT. } \end{gathered}$ | COMMENT |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z |  |  |
| 6DC8 | Diode-2 | 3 | 4 | 0 | 11 | 7 | --- | --- | 8 | --- | 4-5 | Diode section OK above 1/4 on meter scale. |
| 6DE4 |  | 1 | 7 | 0 | 4 | 6 | --- | --- | 5 | --- | 7-8 |  |
| 6DE6 |  | 1 | 3 | 4 | 30 | 7 | --- | 6 | 5 | 1 | 3-4 |  |
| 6DE7 | Triode-1 | 1 | 4 | 20 | 14 | 7 | --- | --- | 6 | 7 | 4-5 | Shall show short on 2-3. Grid short test Depress 2-3 together. |
| 6DE7 | Triode-2 | 2 | 4 | 17 | 6 | 7 | 3 | --- | 1 | 2 | 4-5 |  |
| 6DG6 |  | 1 | 2 | 9 | 7 | 7 | --- | 4 | 3 | 5 | 2-7 |  |
| 6DJ8 | Triode-1 | 1 | 4 | 6 | 12 | 7 | --- | --- | 6 | 7 | 4-5 |  |
| 6DJ8 | Triode-2 | 1 | 4 | 6 | 12 | 7 | --- | --- | 1 | 2 | 4-5 |  |
| 6DK6 |  | 1 | 3 | 6 | 29 | 7 | --- | 6 | 5 | 1 | 3-4 |  |
| 6DL5 |  | 1 | 3 | 25 | 10 | 7 | 1 | 6 | 5 | 7 | 3-4 | May show short on 1-7. Grid short test Depress 1-7 together. |
| 6DN6 |  | 1 | 2 | 0 | 6 | 7 | --- | 8 | 11 | 5 | 2-7 |  |
| 6DN7 | Triode-1 | 1 | 7 | 32 | 11 | 7 | --- | --- | 5 | 4 | 7-8 |  |
| 6DN7 | Triode-2 | 1 | 7 | 16 | 10 | 7 | --- | --- | 2 | 1 | 7-8 |  |
| 6DQ5 |  | 1 | 2 | 0 | 5 | 7 | 1-4 | 8 | 11 | 5 | 2-7 | Shall 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. |
| 6DQ6 |  | 1 | 2 | 8 | 4 | 7 | --- | 4 | 11 | 5 | 2-7 |  |
| 6DR7 | Triode-1 | 1 | 4 | 37 | 10 | 7 | --- | --- | 6 | 7 | 4-5 | Shall show short on 2-3. Grid short test Depress 2-3 together. |
| 6DR7 | Triode-2 | 1 | 4 | 0 | 7 | 7 | 2 | --- | 1 | 3 | 4-5 |  |
| 6DR8 | Pentode | 1 | 4 | 20 | 19 | 7 | --- | 1 | 6 | 2 | 4-5 |  |
| 6DR8 | Diode-1 | 3 | 4 | 0 | 21 | 7 | --- | --- | 7 | --- | 4-5 |  |
| 6DR8 | Diode-2 | 3 | 4 | 0 | 21 | 7 | --- | --- | 8 | --- | 4-5 |  |
| 6DS5 |  | 1 | 3 | 13 | 14 | 7 | 1 | 6 | 5 | 7 | 3-4 | Shall show short on 1-7. Grid short test Depress 1-7 together. |
| 6DS8 | Amp | 1 | 4 | 17 | 29 | 7 | --- | 1 | 6 | 2 | 4-5 |  |
| 6DS8 | Osc | 3 | 4 | 10 | 23 | 7 | --- | --- | 1 | 2 | 4-5 |  |
| 6DS8 | Triode | 1 | 4 | 27 | 10 | 7 | --- | --- | 8 | 9 | 4-5 |  |
| 6DT5 |  | 1 | 4 | 13 | 11 | 7 | 3 | 1 | 9 | 6 | 4-5 | Shall show short on 3-6. Grid short test Depress 3-6 together. |
| 6DT6 |  | 1 | 3 | 18 | 29 | 7 | --- | 6 | 5 | 1-7 | 3-4 |  |
| 6DT8 | Triode-1 | 1 | 4 | 26 | 13 | 7 | --- | --- | 6 | 7 | 4-5 |  |
| 6DT8 | Triode-2 | 1 | 4 | 26 | 13 | 7 | --- | --- | 1 | 2 | 4-5 |  |
| 6DW5 |  | 2 | 4 | 0 | 10 | 7 | 3 | 1 | 9 | 6 | 4-5 | Shall show short on 3-6. Grid short test Depress 3-6 together. |
| 6DY7 | Pent-1 | 2 | 2 | 18 | 10 | 7 | --- | 4 | 6 | 5 | 2-7 |  |



| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | V |  |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{aligned} & \text { FIL. } \\ & \text { cONT. } \end{aligned}$ | COMMENT |
| 6EV7 | Triode-2 | 1 | 4 | 28 | 10 | 7 | --- | --- | 1 | 2 | 4-5 |  |
| 6EW6 |  | 1 | 3 | 19 | 21 | 7 | --- | 6 | 5 | 1 | 3-4 |  |
| 6EW7 | Sect-1 | 5 | 4 | 17 | 10 | 7 | --- | --- | 6 | 7 | 4-5 | Shall show short on 2-3. |
| 6EW7 | Sect-2 | 2 | 4 | 1 | 10 | 7 | 3 | --- | 1 | 2 | 4-5 | Grid short test, Sect 2 - Depress 2-3 together. |
| 6EY6 |  | 1 | 2 | 30 | 10 | 7 | --- | 4 | 3 | 5 | 2-7 |  |
| 6EZ5 |  | 1 | 2 | 27 | 10 | 7 | --- | 4 | 3 | 5 | 2-7 |  |
| 6EZ8 | Triode-1 | 1 | 4 | 33 | 10 | 7 | --- | --- | 8 | 9 | 5 ? |  |
| 6EZ8 | Triode-2 | 1 | 4 | 33 | 10 | 7 | --- | --- | 6 | 7 | 5 ? |  |
| 6EZ8 | Triode-3 | 1 | 4 | 31 | 10 | 7 | --- | --- | 3 | 2 | 5 ? |  |
| 6F4 |  | 1 | 1 | 35 | 5 | 7 | 2-7 | --- | 3 | 8 | 1-4 | Shall show short on 2-3-7-8 individually. Plate short test - Depress 2-3 together. Grid short test - Depress 7-8 together. |
| 6F5 |  | 1 | 2 | 12 | 33 | 7 | --- | --- | 4 | 11 | 2-7 |  |
| 6F6 |  | 1 | 2 | 32 | 10 | 7 | --- | 4 | 3 | 5 | 2-7 |  |
| 6FA7 | Diode | 3 | 4 | 0 | 27 | 7 | --- | --- | 3 | --- | 4-5 |  |
| 6FA7 | Tetrode | 5 | 4 | 11 | 17 | 7 | --- | 8 | 1-9 | 7 | 4-5 |  |
| 6FG5 |  | 4 | 3 | 14 | 32 | 7 | --- | --- | 5 | 1 | 3-4 | Shall show short on 2-7. Cathode short test Depress 2-7 together. |
| 6FG6 | Triode | 1 | 4 | 45 | 36 | 7 | --- | --- | 9 | 1 | 4-5 | Shall show short on 2-6-8. |
| 6FG6 | Eye | 4 | 4 | 0 | 0 | 7 | 2-8 | --- | 7-6 | --- | 4-5 | See instructions for eye test. |
| 6FG7 | Triode | 1 | 4 | 24 | 10 | 7 | --- | --- | 2 | 1 | 4-5 | Shall show short on 3-8. Cathode short test Depress 3-8 together. |
| 6FG7 | Pentode | 1 | 4 | 17 | 21 | 7 | --- | 7 | 6 | 9 | 4-5 |  |
| 6FH5 |  | 1 | 3 | 21 | 10 | 7 | --- | --- | 5 | 2 | 3-4 | Shall show short on 1-7. Cathode short test Depress 1-7 together. |
| 6FH6 |  | 1 | 2 | 0 | 7 | 7 | --- | 4 | 11 | 5 | 2-7 |  |
| 6FH8 | Triode | 1 | 5 | 27 | 10 | 7 | --- | --- | 3 | 2 | 4-5 |  |
| 6FH8 | Tetrode-1 | 4 | 5 | 15 | 10 | 7 | --- | 7 | 9 | 6 | 4-5 |  |
| 6FH8 | Tetrode-2 | 4 | 5 | 18 | 19 | 7 | --- | 7 | 8 | 6 | 4-5 |  |
| 6FH8 | Tetrode-3 | 4 | 5 | 18 | 18 | 7 | --- | 7 | 1 | 6 | 4-5 |  |
| 6FM8 | Triode | 1 | 4 | 31 | 10 | 7 | --- | --- | 9 | 8 | 4-5 |  |
| 6FM8 | Diode-1 | 3 | 4 | 0 | 16 | 7 | --- | --- | 2 | --- | 4-5 |  |
| 6FM8 | Diode-2 | 3 | 4 | 0 | 16 | 7 | --- | --- | 6 | --- | 4-5 |  |
| 6FS5 |  | 4 | 3 | 20 | 33 | 7 | --- | --- | 5 | 1 | 3-4 | Shall show short on 2-7. Cathode short test Depress 2-7 together. |
| 6FV6 |  | 1 | 3 | 25 | 10 | 7 | --- | 6 | 5 | 1 | 3-4 |  |
| 6FV8 | Triode | 1 | 4 | 18 | 10 | 7 | --- | --- | 2 | 1 | 4-5 |  |
| 6FV8 | Pentode | 4 | 4 | 6 | 10 | 7 | --- | 7 | 6 | 9 | 4-5 |  |
| 6FW5 |  | 1 | 2 | 5 | 5 | 7 | --- | 8 | 5 | 1 | 2-7 |  |
| 6FW8 | Triode-1 | 2 | 4 | 15 | 10 | 7 | --- | --- | 6 | 7 | 4-5 |  |



| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | V |  |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{aligned} & \text { FIL. } \\ & \text { cONT. } \end{aligned}$ | COMMENT |
| 6L6 |  | 1 | 2 | 24 | 9 | 7 | --- | 4 | 3 | 5 | 2-7 |  |
| 6L7 | Amp | 4 | 2 | 10 | 29 | 7 | --- | 4 | 3 | 5 | 2-7 |  |
| 6L7 | Osc | 3 | 2 | 12 | 25 | 7 | --- | --- | 4 | 11 | 2-7 |  |
| 6M3 |  | 5 | 8 | 0 | 6 | 7 | 1-5-7 | --- | 3 | --- | 2-8 | Shall show short on 1-3-5-7. Plate short test Depress 3-5-7 together. |
| 6N4 |  | 1 | 3 | 25 | 8 | 7 | 1 | --- | 5 | 7 | 3-4 | Shall show short on 1-2-6-7. Grid short test Depress 1-7 together. Cathode short test Depress 2-6 together. |
| 6N5 | Triode | 1 | 1 | 6 | 24 | 7 | --- | --- | 2 | 3 | 1-6 |  |
| 6N5 | Eye | 1 | 1 | 0 | 0 | 7 | --- | --- | 2-4 | --- | 1-6 | See instructions for eye test. |
| 6N8 | Pentode | 1 | 4 | 14 | 31 | 7 | --- | 1 | 6 | 2 | 4-5 |  |
| 6N8 | Diode-1 | 3 | 4 | 0 | 23 | 7 | --- | --- | 7 | --- | 4-5 |  |
| 6N8 | Diode-2 | 3 | 4 | 0 | 23 | 7 | --- | --- | 8 | --- | 4-5 |  |
| 6Q4 |  | 1 | 1 | 35 | 5 | 7 | 2-7 | --- | 3 | 8 | 1-4 | Shall show short on 2-3-7-8 individually. Plate short test - Depress 2-3 together. Grid short test - Depress 7-8 together. |
| 6Q7 | Triode | 1 | 2 | 13 | 33 | 7 | --- | --- | 3 | 11 | 2-7 |  |
| 6Q7 | Diode-1 | 3 | 2 | 0 | 27 | 7 | --- | --- | 4 | --- | 2-7 |  |
| 6Q7 | Diode-2 | 3 | 2 | 0 | 27 | 7 | --- | --- | 5 | --- | 2-7 |  |
| 6R6 |  | 1 | 2 | 15 | 33 | 7 | --- | 3 | 5 | 11 | 2-7 |  |
| 6R7 | Triode | 1 | 2 | 18 | 15 | 7 | --- | --- | 3 | 11 | 2-7 |  |
| 6R7 | Diode-1 | 3 | 2 | 0 | 27 | 7 | --- | --- | 4 | --- | 2-7 |  |
| 6R7 | Diode-2 | 3 | 2 | 0 | 27 | 7 | --- | --- | 5 | --- | 2-7 |  |
| 6R8 | Triode | 1 | 4 | 24 | 14 | 7 | --- | --- | 9 | 8 | 4-5 |  |
| 6R8 | Diode-1 | 3 | 4 | 0 | 16 | 7 | --- | --- | 2 | --- | 4-5 |  |
| 6R8 | Diode-2 | 3 | 4 | 0 | 16 | 7 | --- | --- | 1 | --- | 4-5 |  |
| 6R8 | Diode-3 | 3 | 4 | 0 | 16 | 7 | --- | --- | 6 | --- | 4-5 |  |
| 6S2 | $*$ | 7 | 2 | 0 | 14 | 7 | 5-8 * | --- | 11 | --- | ** | * CAUTION - Levers 5-8 shall be thrown to position "W" before inserting tube and shall remain in position "W" throughout all tests, including short tests. ** Shall show short on 1 2-4-6-9. |
| 6S4 |  | 1 | 4 | 28 | 8 | 7 | 1-3-7-8 | --- | 9 | 6 | 4-5 | May show short on 1-3-6-7-8. |
| 6S7 |  | 1 | 2 | 26 | 20 | 7 | --- | 4 | 3 | 11 | 2-7 |  |
| 6S8 | Triode | 1 | 7 | 12 | 37 | 7 | --- | --- | 6 | 11 | 7-8 | May show short on 2. |
| 6S8 | Diode-1 | 3 | 7 | 0 | 27 | 7 | --- | --- | 3 | --- | 7-8 |  |
| 6S8 | Diode-2 | 3 | 7 | 0 | 27 | 7 | --- | --- | 4 | --- | 7-8 |  |
| 6S8 | Diode-3 | 3 | 7 | 0 | 27 | 7 | --- | --- | 1 | --- | 7-8 |  |
| 6SA7 | Amp | 4 | 2 | 11 | 28 | 7 | --- | 4 | 3 | 8 | 2-7 |  |
| 6SA7 | Osc | 1 | 2 | 24 | 9 | 7 | --- | --- | 4 | 5 | 2-7 |  |
| 6SB7Y | Amp | 4 | 2 | 9 | 20 | 7 | --- | 4 | 3 | 8 | 2-7 |  |











| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | EVE |  |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{gathered} \hline \text { FIL. } \\ \text { CONT. } \end{gathered}$ | COMMENT |
| 12CR6 | Diode | 3 | 3 | 0 | 26 | 10 | --- | --- | 2 | --- | 3-4 |  |
| 12CS6 | Amp | 4 | 3 | 7 | 28 | 10 | --- | 6 | 5 | 7 | 3-4 |  |
| 12CS6 | Osc | 1 | 3 | 22 | 10 | 10 | --- | --- | 6 | 1 | 3-4 |  |
| 12CT8 | Triode | 1 | 4 | 37 | 8 | 10 | --- | --- | 1 | 2 | 4-5 |  |
| 12CT8 | Pentode | 1 | 4 | 13 | 16 | 10 | --- | 7 | 6 | 8 | 4-5 |  |
| 12CU5 |  | 1 | 3 | 10 | 7 | 10 | 2 | 6 | 7 | 5 | 3-4 | Shall show short on 2-5. Grid short test Depress 2-5 together. |
| $12 \mathrm{CU6}$ |  | 1 | 2 | 12 | 5 | 10 | --- | 4 | 11 | 5 | 2-7 |  |
| 12CX6 |  | 2 | 3 | 16 | 10 | 10 | --- | 6 | 5 | 1 | 3-4 |  |
| 12D4 |  | 1 | 7 | 0 | 4 | 10 | --- | --- | 5 | --- | 7-8 |  |
| 12DB5 |  | 1 | 4 | 10 | 9 | 10 | 3 | 1 | 9 | 6 | 4-5 | Shall show short on 2-3-6-7. Grid short test Depress 3-6 together. Cathode short test Depress 2-7 together. |
| 12DE8 | Pentode | 4 | 4 | 18 | 3 | 10 | --- | 8 | 6 | 1 | 4-5 |  |
| 12DE8 | Diode | 3 | 4 | 0 | 16 | 10 | --- | --- | 3 | --- | 4-5 |  |
| 12DF5 | Diode-1 | 3 | 9 | 0 | 22 | 7 | --- | --- | 6 | --- | 4-5-9 |  |
| 12DF5 | Diode-2 | 3 | 9 | 0 | 22 | 7 | --- | --- | 1 | --- | 4-5-9 |  |
| 12DF7 | Triode-1 | 3 | 9 | 0 | 22 | 7 | --- | --- | 1 | 2 | 4-5-9 |  |
| 12DF7 | Triode-2 | 3 | 9 | 0 | 22 | 7 | --- | --- | 6 | 7 | 4-5-9 |  |
| 12DK7 | Tetrode | 5 | 4 | 5 | 6 | 10 | 8 | 3 | 7 | 1 | 4-5 |  |
| 12DK7 | Diode-1 | 3 | 4 | 0 | 20 | 10 | --- | --- | 6 | --- | 4-5 |  |
| 12DK7 | Diode-2 | 3 | 4 | 0 | 21 | 10 | --- | --- | 9 | --- | 4-5 |  |
| 12DL8 | Tetrode | 5 | 4 | 0 | 6 | 10 |  | 3 | 6 | 7 | 4-5 |  |
| 12DL8 | Diode-1 | 5 | 4 | 0 | 14 | 10 | --- | --- | 1 | --- | 4-5 |  |
| 12DL8 | Diode-2 | 5 | 4 | 0 | 14 | 10 | --- | --- | 9 | --- | 4-5 |  |
| 12DN6 |  | 1 | 2 | 0 | 6 | 10 | --- | 8 | 11 | 5 | 2-7 |  |
| 12DQ5 |  | 1 | 2 | 0 | 5 | 10 | 1-4 | 8 | 11 | 5 | 2-7 | Shall 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. |
| 12DQ6 |  | 1 | 2 | 8 | 4 | 10 | --- | 4 | 11 | 5 | 2-7 |  |
| 12DQ7 |  | 1 | 6 | 21 | 10 | 7 | --- | 8 | 7 | 2 | 4-5-6 | Shall show short on 3-9. Suppressor short test - Depress 3-9 together. |
| 12DS7 | Tetrode | 2 | 4 | 33 | 10 | 10 |  | 7 | 6 | 3 | 4-5 |  |
| 12DS7 | Diode-1 | 3 | 4 | 0 | 24 | 10 | --- | --- | 9 | --- | 4-5 |  |
| 12DS7 | Diode-2 | 3 | 4 | 0 | 25 | 10 | --- | --- | 1 | --- | 4-5 |  |
| 12DT5 |  | 1 | 4 | 13 | 11 | 10 | 3 | 1 | 9 | 6 | 4-5 |  |
| 12DT6 |  | 1 | 3 | 18 | 29 | 10 | --- | 6 | 5 | 1-7 | 3-4 |  |
| 12DT8 | Triode-1 | 1 | 4 | 26 | 13 | 10 | --- | --- | 6 | 7 | 4-5 |  |
| 12DT8 | Triode-2 | 1 | 4 | 26 | 13 | 10 | --- | --- | 1 | 2 | 4-5 |  |








| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LEVER |  |  |  |  |  |  |  |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{aligned} & \text { FIL. } \\ & \text { CONT. } \end{aligned}$ | COMMENT |
| 20EQ7 | Diode | 3 | 4 | 0 | 28 | 11 | --- | --- | 8 | --- | 4-5 |  |
| 20EQ7 | Pentode | 4 | 4 | 10 | 10 | 11 | --- | 6 | 7 | 2 | 4-5 |  |
| 20EZ7 | Triode-1 | 4 | 3 | 14 | 10 | 9 | --- | --- | 7 | 8 | 1-2-3 |  |
| 20EZ7 | Triode-2 | 4 | 3 | 14 | 10 | 9 | --- | --- | 6 | 5 | 1-2-3 |  |
| 25AV5 |  | 1 | 2 | 9 | 6 | 12 | --- | 8 | 5 | 1 | 2-7 |  |
| 25AX4 |  | 2 | 7 | 0 | 3 | 12 | --- | --- | 5 | --- | 7-8 |  |
| 25BK5 |  | 1 | 4 | 17 | 11 | 12 | 3 | 8 | 1 | 7 | 4-5 | Shall show short on 3-7. Grid short test Depress 3-7 together. |
| 25BQ6 |  | 1 | 2 | 16 | 5 | 12 | --- | 4 | 11 | 5 | 2-7 |  |
| 25C5 |  | 1 | 3 | 8 | 8 | 12 | 2 | 6 | 7 | 5 | 3-4 | Shall show short on 2-5. Grid short test Depress 2-5 together. |
| 25CA5 |  | 1 | 3 | 13 | 9 | 12 | 2 | 6 | 7 | 5 | 3-4 | Shall show short on 2-5. Grid short test Depress 2-5 together. |
| 25CD6 |  | 1 | 2 | 0 | 5 | 12 | --- | 8 | 11 | 5 | 2-7 |  |
| 25CU6 |  | 1 | 2 | 12 | 5 | 12 | --- | 4 | 11 | 5 | 2-7 |  |
| 25DN6 |  | 1 | 2 | 0 | 6 | 12 | --- | 8 | 11 | 5 | 2-7 |  |
| 25DQ6 |  | 1 | 2 | 8 | 4 | 12 | --- | 4 | 11 | 5 | 2-7 |  |
| 25EC6 |  | 1 | 2 | 5 | 8 | 12 | --- | 8 | 11 | 5 | 2-7 |  |
| 25EH5 |  | 2 | 3 | 9 | 12 | 12 | 2 | 6 | 7 | 5 | 3-4 | Shall show short on 2-5. Grid short test Depress 2-5 together. |
| 25EZ5 |  | 2 | 2 | 0 | 5 | 12 | 1-3 | 4 | 11 | 5 | 2-7 | Shall show short on 1-3-4-8. Cathode short test - Depress 1-8 together. Screen short test - Depress 3-4 together. |
| 25F5 |  | 1 | 3 | 16 | 7 | 12 | 2 | 6 | 7 | 5 | 3-4 | Shall show short on 2-5. Grid short test Depress 2-5 together. |
| 25FY8 | Triode | 2 | 4 | 27 | 12 | 12 | --- | --- | 9 | 1 | 4-5 |  |
| 25FY8 | Pentode | 2 | 4 | 0 | 10 | 12 | --- | 7 | 6 | 3 | 4-5 |  |
| 25L6 |  | 1 | 2 | 10 | 6 | 12 | --- | 4 | 3 | 5 | 2-7 |  |
| 25W4 |  | 1 | 7 | 0 | 4 | 12 | --- | --- | 5 | --- | 7-8 |  |
| 25W6 |  | 1 | 2 | 10 | 5 | 12 | --- | 4 | 3 | 5 | 2-7 |  |
| 25 Z 5 | Plate-1 | 2 | 1 | 0 | 2 | 12 | --- | --- | 5 | --- | 1-6 |  |
| 2575 | Plate-2 | 2 | 1 | 0 | 2 | 12 | --- | --- | 2 | --- | 1-6 |  |
| 2576 | Plate-1 | 2 | 2 | 0 | 2 | 12 | --- | --- | 5 | --- | 2-7 |  |
| 2576 | Plate-2 | 2 | 2 | 0 | 2 | 12 | --- | --- | 3 | --- | 2-7 |  |
| 26BK6 | Triode | 1 | 3 | 31 | 11 | 12 | --- | --- | 7 | 1 | 3-4 |  |
| 26BK6 | Diode-1 | 3 | 3 | 0 | 23 | 12 | --- | --- | 6 | --- | 3-4 |  |
| 26BK6 | Diode-2 | 3 | 3 | 0 | 23 | 12 | --- | --- | 5 | --- | 3-4 |  |
| 31A3 |  | 2 | 1 | 0 | 3 | 13 | --- | --- | 2 | --- | 1-8 | Fil Cont - Set Control "E" at 12. |
| 32ET5 |  | 2 | 3 | 11 | 10 | 13 | 2 | 6 | 7 | 5 | 3-4 | Shall show short on 2-5. Grid short test Depress 2-5 together. Fil Cont - Set Control "E" at 12. |


| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | LEVER |  |  |  |  |  |  |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{gathered} \text { FIL. } \\ \text { CONT. } \end{gathered}$ | COMMENT |
| 34GD5 |  | 1 | 3 | 8 | 10 | 13 | 2 | 6 | 7 | 5 | 3-4 | Fil Cont - Set Control "E" at 12. |
| 35A5 |  | 1 | 1 | 19 | 6 | 13 | --- | 3 | 2 | 6 | 1-8 |  |
| 35B5 |  | 1 | 3 | 20 | 8 | 13 | 1 | 6 | 5 | 7 | 3-4 | Shall show short on 1-7. Grid short test Depress 1-7 together. |
| 35C5 |  | 1 | 3 | 13 | 7 | 13 | 2 | 6 | 7 | 5 | 3-4 | Shall show short on 2-5. Grid short test Depress 2-5 together. |
| 35CD6 |  | 1 | 2 | 0 | 5 | 13 | --- | 8 | 11 | 5 | 2-7 |  |
| 35EH5 |  | 2 | 3 | 9 | 12 | 13 | 2 | 6 | 7 | 5 | 3-4 | Shall show short on 2-5. Grid short test Depress 2-5 together. |
| 35GL6 |  | 2 | 3 | 3 | 10 | 13 | --- | 5 | 7 | 2 | 3-4-6 |  |
| 35L6 |  | 1 | 2 | 20 | 6 | 13 | -- | 4 | 3 | 5 | 2-7 |  |
| 35W4 |  | 2 | 3 | 0 | 1 | 13 | 6 | --- | 5 | --- | 3-4-6 |  |
| 35Y4 |  | 2 | 8 | 0 | 1 | 13 | 4 | - | 2 | - | 1-4-8 |  |
| 3573 |  | 2 | 1 | 0 | 1 | 13 | --- | --- | 2 | --- | 1-8 |  |
| 35Z4 |  | 2 | 2 | 0 | 1 | 13 | --- | --- | 5 | - | 2-7 |  |
| 3575 |  | 2 | 7 | 0 | 1 | 13 | 3 | --- | 5 | --- | 2-3-7 |  |
| 36AM3 |  | 1 | 3 | 0 | 4 | 13 | 6 | --- | 5 | --- | 3-4-6 |  |
| 38A3 |  | 3 | 4 | 0 | 16 | 13 | 1-6 | --- | 9 | --- | 4-5 | May show short on 1-6-9. Plate short test Depress 1-6-9 together. |
| 45A5 |  | 1 | 1 | 4 | 10 | 14 | --- | 5 | 2 | 6 | 1-8 | Shall show short on 3-7. Cathode short test Depress 3-7 together. Fil Cont - Set Control "E" at 12. |
| 45B5 |  | 1 | 4 | 5 | 9 | 13 | 1-6-8 | 9 | 7 | 2 | 4-5 | May show short on 1-2-6-8-9. Grid short test Depress 1-2 together. Screen short test Depress 6-8-9 together. Fil Cont - Set Control "E" at 12. |
| $45 Z 3$ |  | 2 | 1 | 0 | 2 | 14 | 6 | --- | 2 | --- | 1-7 | Shall show short on 2-6. Plate short test Depress 2-6 together. Fil Cont - Set Control "E" at 12. |
| 50A5 |  | 1 | 1 | 18 | 5 | 14 | --- | 3 | 2 | 6 | 1-8 | Fil Cont - Set Control "E" at 12. |
| 50B5 |  | 1 | 3 | 13 | 6 | 14 | 1 | 6 | 5 | 7 | 3-4 | Shall show short on 1-7. Grid short test Depress 1-7 together. Fil Cont - Set Control "E" at 12. |
| 50BK5 |  | 1 | 4 | 17 | 11 | 14 | 3 | 8 | 1 | 7 | 4-5 | Shall show short on 3-7. Grid short test Depress 3-7 together. Fil Cont - Set Control "E" at 12. |
| 50 C 5 |  | 1 | 3 | 8 | 8 | 14 | 2 | 6 | 7 | 5 | 3-4 | Shall show short on 2-5. Grid short test Depress 2-5 together. Fil Cont - Set Control "E" at 12. |
| 50C6 |  | 1 | 2 | 14 | 6 | 14 | --- | 4 | 3 | 5 | 2-7 | Fil Cont - Set Control "E" at 12. |


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| PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DAT |  |  |  |  |  |  |  |  |  |  |  |  |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{gathered} \hline \text { FIL. } \\ \text { CONT. } \end{gathered}$ | COMMENT |
| 50CA5 |  | 1 | 3 | 14 | 7 | 14 | 2 | 6 | 7 | 5 | 3-4 | Shall show short on 2-5. Grid short test Depress 2-5 together. Fil Cont - Set Control "E" at 12. |
| 50DC4 |  | 3 | 3 | 0 | 16 | 14 | 6 | --- | 5 | --- | 3-4 | Fil Cont - Set Control "E" at 12. |
| 50EH5 |  | 2 | 3 | 9 | 12 | 14 | 2 | 6 | 7 | 5 | 3-4 | Shall show short on 2-5. Grid short test Depress 2-5 together. Fil Cont - Set Control "E" at 12. |
| 50FK5 |  | 1 | 3 | 11 | 10 | 14 | 2 | 6 | 7 | 5 | 3-4 | Shall show short on 2-5. Grid short test Depress 2-5 together. Fil Cont - Set Control "E" at 12. |
| 50FY8 | Triode | 2 | 4 | 27 | 12 | 14 | --- | --- | 9 | 1 | 4-5 | Fil Cont - Set Control "E" at 12. |
| 50FY8 | Pentode | 2 | 4 | 0 | 10 | 14 | --- | 7 | 6 | 3 | 4-5 |  |
| 50 L 6 |  | 1 | 2 | 18 | 5 | 14 | --- | 4 | 3 | 5 | 2-7 | Fil Cont - Set Control "E" at 12. |
| 50X6 | Plate-1 | 2 | 1 | 0 | 2 | 14 | --- | --- | 3 | --- | 1-8 | Fil Cont - Set Control "E" at 12. |
| 50X6 | Plate-2 | 2 | 1 | 0 | 2 | 14 | --- | --- | 6 | --- | 1-8 |  |
| 50Y6 | Plate-1 | 2 | 2 | 0 | 2 | 14 | --- | --- | 3 | --- | 2-7 | Fil Cont - Set Control "E" at 12. |
| 50 Y 6 | Plate-2 | 2 | 2 | 0 | 2 | 14 | --- | --- | 5 | --- | 2-7 |  |
| $50 Y 7$ | Plate-1 | 1 | 2 | 0 | 4 | 14 | --- | --- | 3 | --- | 2-6-7 | Fil Cont - Set Control "E" at 12. |
| $50 Y 7$ | Plate-2 | 1 | 2 | 0 | 4 | 14 | --- | --- | 5 | --- | 2-6-7 |  |
| 60FX5 |  | 1 | 3 | 6 | 10 | 14 | 2 | 6 | 7 | 5 | 3-4 | Shall show short on 2-5. Grid short test Depress 2-5 together. Fil Cont - Set Control "E" at 12. |
| 70 L | Amp | 1 | 2 | 19 | 6 | 15 | --- | 4 | 3 | 5 | 2-7 | Fil Cont - Set Control "E" at 12. |
| 70 L 7 | Rect | 2 | 2 | 0 | 1 | 15 | --- | --- | 8 | --- | 2-7 |  |
| 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 |  |
| 84 | Plate-1 | 2 | 1 | 0 | 4 | 7 | --- | --- | 2 | --- | 1-5 |  |
| 84 | Plate-2 | 2 | 1 | 0 | 4 | 7 | --- | --- | 3 | --- | 1-5 |  |
| 117L7 | Amp | 1 | 2 | 25 | 7 | 17 | --- | 5 | 3 | 4 | 2-7 | Fil Cont - Set Control "E" at 12. |
| 117M7 | Rect | 2 | 2 | 0 | 2 | 17 | --- | --- | 6 | --- | 2-7 | Fil Cont - Set Control "E" at 12. |
| 117N7 | Amp | 1 | 2 | 12 | 7 | 17 | --- | 5 | 3 | 4 | 2-7 | Fil Cont - Set Control "E" at 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" at 12. |
| 117P7 | Rect | 2 | 2 | 0 | 0 | 17 | --- | --- | 7 | --- | 2-7 | Rect Test - See instructions. |
| 117 Z 3 |  | 2 | 3 | 0 | 1 | 17 | 1 | --- | 5 | --- | 3-4 | May show short on 1-5. Fil Cont - Set Control "E" at 12. |
| $117 Z 4$ |  | 2 | 2 | 0 | 1 | 17 | --- | --- | 5 | --- | 2-7 | Fil Cont - Set Control "E" at 12. |
| $117 Z 6$ | Plate-1 | 2 | 2 | 0 | 1 | 17 | --- | --- | 3 | --- | 2-7 | Fil Cont - Set Control "E" at 12. |


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| PRECISION 10-12, $10-15,10-20,10-22,10-54$ TUBE TEST DAT |  |  |  |  |  |  |  |  |  |  |  | COMMENT |
| TUBE | SECTION | A | B | C | D | E | W | X | Y | Z | $\begin{aligned} & \hline \text { FIL. } \\ & \text { CONT. } \end{aligned}$ |  |
| 117 Z 6 | 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 |  |
| FM-1000 | Amp | 4 | 1 | 5 | 24 | 7 | --- | 5 | 4 | 2 | 1-8 |  |
| FM-1000 | Osc | 1 | 1 | 15 | 8 | 7 | --- | --- | 5 | 2 | 1-8 |  |
| 2050 |  | 7 | 2 | 0 | 3 | 7 | --- | --- | 3 | 5 | 2-7 |  |
| 2051 |  | 7 | 2 | 0 | 3 | 7 | --- | --- | 3 | 5 | 2-7 |  |
| XXB | Triode-1 | 3 | 7 | 22 | 24 | 2 | --- | --- | 6 | 5 | 1-7-8 |  |
| XXB | Triode-2 | 3 | 7 | 22 | 24 | 2 | --- | --- | 3 | 4 | 1-7-8 |  |
| XXD | Triode-1 | 1 | 1 | 15 | 15 | 10 | --- | --- | 6 | 5 | 1-8 |  |
| XXD | Triode-2 | 1 | 1 | 15 | 15 | 10 | --- | --- | 3 | 4 | 1-8 |  |
| XXFM | Triode | 1 | 1 | 13 | 45 | 7 | --- | --- | 2 | 3 | 1-8 |  |
| XXFM | Diode-1 | 3 | 1 | 0 | 26 | 7 | --- | --- | 5 | --- | 1-8 |  |
| XXFM | Diode-2 | 3 | 1 | 0 | 26 | 7 | --- | --- | 6 | --- | 1-8 |  |
| XXL |  | 1 | 1 | 23 | 10 | 7 | --- | --- | 2 | 6 | 1-8 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

