

**STARK ELECTRONIC INSTRUMENTS LIMITED  
AJAX ONTARIO**

**SUPPLEMENTARY TUBE TEST DATA**

**STARK EMISSION TUBE TESTERS  
MODELS 9-11, 9-11A, 9-54T, 9-55, 9-56**

**NOTE;**

Columns 2, 3 and 4 indicate socket number to be used for a given model at the head of this column. In the case of models 9-11, 9-55 and 9-54T where the socket number is not given use the unmarked socket which applies to the tube to be tested.

STARK ELECTRONIC INSTRUMENTS LTD.

| <u>TUBE<br/>TYPE</u> | <u>9-56</u> | <u>9-11A</u> | 9-11<br>9-55<br><u>9-64T</u> | <u>fil.</u> | <u>Shunt</u> | <u>Sel.</u> | <u>NOTES</u>                                                                           |
|----------------------|-------------|--------------|------------------------------|-------------|--------------|-------------|----------------------------------------------------------------------------------------|
| OA2                  | 11          | 12           | X                            | 1           | 100          | 1           | OK : " below "P" in poor.<br>Short on "A,2,B,C,4,D"                                    |
| OA3                  | 1           | 4            | -                            | 1           | 100          | C           | Shows short on 1,A,C,E,<br>D,OK if pointer reads up<br>to "P" on Poor.                 |
| OA4                  | 1           | 4            | -                            | 1           | 100          | C           |                                                                                        |
| OB2                  | 10          | 11           | W                            | 1           | 100          | 6           | Shows short on 1,A,2,B,C,<br>4,D,5,E, OK if pointer<br>moves 1 division.               |
| OB3                  | 1           | 4            | -                            | 1           | 100          | C           | Shows short on 1,A,C,4,D,<br>OK if pointer reads up<br>to "P" in Poor.                 |
| OC3                  | 1           | 4            | -                            | 1           | 100          | C           | Same as above.                                                                         |
| OD3                  | 13          | 8            | #2 Octal                     | 1           | 100          | A           | Shows short on 1,A, OK<br>if tube strikes and<br>meter moves 1 division.               |
| OG3                  | 3           | 10           | -                            | 1           | 100          | E           | Shows short on 1,A,2,B,<br>C,4,D,5,E, OK if pointer<br>reads above first 0 in<br>poor. |
| OY4                  | 1           | 4            | -                            | 1           | 67           | 4           | Short on 1,A,E,6                                                                       |
| 1A4P                 | 2           | 2            | -                            | 2           | 100          | B           | Connect cap OK above<br>diodes OK                                                      |
| 1AB6                 | 3           | 10           | -                            | 1           | 72           | 4           |                                                                                        |
| 1AH5                 | 3           | 10           | -                            | 1           | 100          | A           | Diode sect.                                                                            |
|                      | 3           | 10           | -                            | 1           | 80           | 5           | Pentode sect.                                                                          |
| 1AX2                 | 1           | 4            | -                            | 1           | 100          | 3           | Reads at "P" in poor.<br>Use Stark "A" adapter<br>connect cap lead to tube<br>cap.     |
| 1B3                  | 1           | 4            | -                            | 1           | 100          | B           | OK if above first "0" in<br>Poor                                                       |
| 1B4P                 | 2           | 2            | -                            | 2           | 72           | B           | Connect cap.                                                                           |

| <u>TUBE</u><br><u>TYPE</u> | <u>9-56</u> | <u>9-11A</u> | 9-11<br>9-55<br><u>9-54T</u> | <u>fil.</u> | <u>Shunt</u> | <u>Sel.</u> | <u>Notes</u>                                                                   |
|----------------------------|-------------|--------------|------------------------------|-------------|--------------|-------------|--------------------------------------------------------------------------------|
| 1B5, 25S                   | 2           | 2            | -                            | 2           | 90           | 5           | Triode Sect.                                                                   |
|                            | 2           | 2            | -                            | 2           | 100          | 4           | Diode No. 1 OK above $\frac{1}{4}$ "                                           |
|                            | 2           | 2            | -                            | 2           | 100          | 2           | Diode No. 2 OK above $\frac{1}{4}$ "                                           |
| 1C21                       | 1           | 4            | -                            | 1           | 100          | 4           |                                                                                |
| 1D5/GP                     | 1           | 4            | -                            | 2           | 75           | 3           | Connect Cap                                                                    |
| 1DN5                       | 12          | 13           | Y                            | 1           | 70           | 1           |                                                                                |
| 1E3                        | 4           | 1            | -                            | 1           | 70           | 1           | Short on C, 4, D.                                                              |
| 1E5GP                      | 1           | 4            | -                            | 2           | 75           | 3           | Connect Cap                                                                    |
| 1L6                        | 3           | 10           | -                            | 1           | 77           | 4           |                                                                                |
| 1S2A                       | 1           | 4            | -                            | 1           | 100          | 3           | Use Stark A adapter Good<br>tube reads above R in Poor                         |
| 1U6                        | 3           | 10           | -                            | 1           | 70           | C           |                                                                                |
| 1V2                        | 4           | 1            | -                            | 1           | 100          | A           | OK if pointer reads above<br>first "O" in poor.                                |
| 1Z2                        | 1           | 4            | -                            | 1           | 100          | 3           | Reads diodes OK place cap<br>lead on tube cap Use Stark<br>C adapter.          |
| 1X2B<br>1X2A<br>1X2        | 1           | 4            | -                            | 1           | 100          | 3           | Reads above Diode OK<br>connect cap lead to tube<br>cap use Stark "A" adapter. |
| 2AF4<br>2AF4A              | 10          | 11           | W                            | 4           | 100          | D           | Shows short on A-2-B-C-4-<br>5-E-6                                             |
| 2BN4                       | 10          | 11           | W                            | 2           | 100          | 1           | Good tube reads above R<br>in Poor Short on A, 2, B, C,<br>4, D, 6.            |
| 2C52                       | 13          | 8            | #2 octal 7                   |             | 29           | C           |                                                                                |
|                            | 13          | 8            | #2 octal 7                   |             | 29           | D           |                                                                                |
| 2C53                       | 1           | 4            | -                            | 6           | 54           | 4           | Connect cap lead to tube<br>cap.                                               |
| 2CY5                       | 11          | 12           | X                            | 4           | 23           | 1           | Short on A, 2, B, C, 4, D                                                      |
| 2E25A                      | 1           | 4            | -                            | 6           | 32           | 4           | Place cap lead on cap.                                                         |
| 2T4                        | 10          | 11           | W                            | 4           | 88           | D           | Shows short on A-2-B-C-<br>5-E-6                                               |

| <u>Tube</u><br><u>Type</u> | <u>9-56</u> | <u>9-11A</u> | 9-11<br>9-55<br><u>9-54T</u> | <u>fil.</u> | <u>Shunt</u> | <u>Sel.</u> | <u>Notes</u>                                                 |
|----------------------------|-------------|--------------|------------------------------|-------------|--------------|-------------|--------------------------------------------------------------|
| 3A2                        | 1           | 4            | -                            | 4           | 100          | 3           | Use A adapter good tube on P of Poor.                        |
| 3A3                        | 1           | 4            | -                            | 4           | 100          | B           | Pointer must read up to P in Poor.                           |
| 3AF4A                      | 10          | 11           | W                            | 4           | 100          | D           | Short on A-2-B-C-4-5-E-6<br>Good tube reads above R in Poor. |
| 3AL5                       | 11          | 12           | X                            | 4           | 30           | C           |                                                              |
| 3AU6                       | 11          | 12           | X                            | 4           | 30           | A           |                                                              |
| 3AV6                       | 11          | 12           | X                            | 4           | 36           | 1           |                                                              |
| 3B4                        | 1           | 4            | -                            | 4           | 45           | 1           | Use Stark C adapter                                          |
| 3BA6                       | 11          | 12           | X                            | 4           | 36           | 1           |                                                              |
| 3BC5                       | 11          | 12           | X                            | 4           | 29           | 1           | Shows short on A-2-B-C-4-D                                   |
| 3BE6                       | 11          | 12           | X                            | 4           | 30           | 1           |                                                              |
| 3BN6                       | 10          | 11           | W                            | 4           | 100          | A           | OK if above first "O" in Poor.                               |
| 3BU8                       | 4           | 1            | -                            | 4           | 100          | E           | Pentode #1                                                   |
|                            | 4           | 1            | -                            | 4           | 30           | 6           | Pentode #2                                                   |
| 3BY6                       | 11          | 12           | X                            | 4           | 32           | 1           |                                                              |
| 3BZ6                       | 11          | 12           | X                            | 4           | 25           | 1           | Make line test at mark between "weak and good"               |
| 3C6/XXB                    | 7           | 5            | -                            | 4           | 45           | 4           | Triode No. 1 short on E, 6                                   |
|                            | 7           | 5            | -                            | 4           | 100          | 2           | Triode No. 2 OK above $\frac{1}{4}$ "                        |
| 3CB6                       | 11          | 12           | X                            | 4           | 26           | 1           |                                                              |
| 3CB5                       | 11          | 12           | X                            | 4           | 26           | 1           | Short on A, 2, B, C, 4, D                                    |
| 3CF6                       | 10          | 11           | W                            | 4           | 23           | E           |                                                              |
| 3CS6                       | 10          | 11           | W                            | 4           | 31           | D           |                                                              |
| 3CY5                       | 11          | 12           | X                            | 4           | 30           | 1           | Short on A, 2, B, C, 4, D.                                   |

| Tube<br>TYPE | 9-56 | 9-11A | 9-11<br>C-55<br>9-54T | fil. | Shunt | Sel. | Notes                     |
|--------------|------|-------|-----------------------|------|-------|------|---------------------------|
| 3DK6         | 11   | 12    | X                     | 4    | 23    | 1    |                           |
| 3DT6         | 10   | 11    | W                     | 4    | 29    | E    |                           |
| 4AU6         | 11   | 12    | X                     | 5    | 22    | 1    |                           |
| 4BA6         | 11   | 12    | X                     | 5    | 23    | 1    |                           |
| 4BC5         | 11   | 12    | X                     | 5    | 21    | 1    | Short A,2,B,C,4,D         |
| 4BC8         | 4    | 1     | -                     | 5    | 20    | A    | Triode No. 1 short on B-D |
|              | 4    | 1     | -                     | 5    | 20    | E    | Triode No. 2 short on B-D |
| 4BQ7A        | 4    | 1     | -                     | 5    | 28    | A    | Shows short on B and D    |
|              | 4    | 1     | -                     | 5    | 28    | E    |                           |
| 4BU8         | 4    | 1     | -                     | 5    | 100   | B    | OK above P in Poor        |
|              | 4    | 1     | -                     | 5    | 24    | 6    | Second test               |
| 4BS8         | 4    | 1     | -                     | 5    | 30    | A    | Shows short on B and D    |
|              | 4    | 1     | -                     | 5    | 30    | 2    |                           |
| 4BX8         | 4    | 1     | -                     | 5    | 22    | A    | Short on B and D          |
|              | 4    | 1     | -                     | 5    | 22    | E    | Short on B and D          |
| ABZ7         | 4    | 1     | -                     | 5    | 28    | A    | Shows short on B and D    |
|              | 4    | 1     | -                     | 5    | 28    | E    |                           |
| 4BZ7A        | 4    | 1     | -                     | 5    | 28    | A    | Shows short on B and D    |
|              | 4    | 1     | -                     | 5    | 28    | E    |                           |
| 4BZ8         | 4    | 1     | -                     | 5    | 20    | A    | Triode #1 Short on B & D  |
|              | 4    | 1     | -                     | 5    | 20    | E    | Triode #2                 |
| 4CB6         | 11   | 12    | X                     | 5    | 21    | 1    |                           |
| 4CE5         | 11   | 12    | X                     | 5    | 21    | 1    | Short on A,2,B,C,4,D      |
| 4CY5         | 11   | 12    | X                     | 5    | 23    | 1    | Short on A,2,B,C,4,D      |
| 4DT6         | 11   | 12    | X                     | 5    | 22    | 1    |                           |
| 5AM8         | 4    | 1     | -                     | 5    | 30    | B    |                           |
|              | 4    | 1     | -                     | 5    | 30    | D    |                           |
| 5AN8         | 4    | 1     | -                     | 5    | 32    | A    |                           |
|              | 4    | 1     | -                     | 5    | 32    | B    |                           |
| 5AQ5         | 10   | 11    | W                     | 5    | 36    | D    | Shows short on C,4,5,E    |

| Tube Type | 9-56 | 9-11A | 9-11<br>9-55<br>9-54T | Fil. | Shunt         | Sel. | Notes                                                                                  |
|-----------|------|-------|-----------------------|------|---------------|------|----------------------------------------------------------------------------------------|
| 5AS4      | 1    | 4     | -                     | 5    | 32            | 2    | Short on 6,E                                                                           |
|           | 1    | 4     | -                     | 5    | 32            | D    |                                                                                        |
| 5AS8      | 4    | 1     | -                     | 5    | 30            | A    | Short on B,D,                                                                          |
| 5AT8      | 1    | 4     | -                     | 5    | 22            | A    | Triode Sect. Use Stark B                                                               |
|           | 1    | 4     | -                     | 5    | 22            | 4    | Pent. Sect. Adapter<br>Connect cap<br>lead to shell cap.                               |
| 5AU4      | 1    | 4     | -                     | 7    | 48            | 2    | Short on 6,E, Rect.No.1                                                                |
|           | 1    | 4     | -                     | 7    | 48            | D    | Short on 6,E, Rect.No.2<br>High drain test very<br>quickly.                            |
| 5AV8      | 4    | 1     | -                     | 5    | 32            | B    | Triode                                                                                 |
| 5AW4      | 1    | 4     | -                     | 6    | 40            | A    | Shows short on 6,E                                                                     |
| 5B8       | 4    | 1     | -                     | 5    | 26            | D    | Test 1 shows partial<br>short on 1,A                                                   |
|           | 4    | 1     | -                     | 5    | 30            | 2    | Test 2                                                                                 |
| 5BE8      | 4    | 1     | -                     | 5    | 30            | 1    | Short on B,                                                                            |
|           | 4    | 1     | -                     | 5    | 30            | A    |                                                                                        |
| 5BK7A     | 4    | 1     | -                     | 5    | 27            | A    | shows short on B & D                                                                   |
| 5BQ7A     | 4    | 1     | -                     | 5    | 22            | A    | Short on B & D                                                                         |
|           | 4    | 1     | -                     | 5    | 22            | E    |                                                                                        |
| 5BR8      | 4    | 1     | -                     | 5    | 29            | 1    | Triode Sect short on B                                                                 |
|           | 4    | 1     | -                     | 5    | 100           | 6    | Pent.Sect. ok if needle<br>moves 1/8"                                                  |
| 5BT8      | 4    | 1     | -                     | 5    | 35            | 1    | Diode #1                                                                               |
|           | 4    | 1     | -                     | 5    | 35            | 2    | Diode #2                                                                               |
|           | 1    | 4     | -                     | 5    | 20            | 2    | Pent.Sect.use Stark D<br>Adapter Pent.Sect.only                                        |
| 5CG8      | 1    | 4     | -                     | 5    | 21            | 1    | Triode Sect. Use Stark B                                                               |
|           | 1    | 4     | -                     | 5    | 19            | 4    | Pent.Sect Adapter<br>connect cap to<br>side pin                                        |
| 5CL8      | 1    | 4     | -                     | 5    | 24            | 1    | Pent Sect.                                                                             |
|           | 1    | 4     | -                     | 5    | <del>24</del> | D    | Triode Sect. short on B<br>& <del>C</del> . Use Stark D adapter                        |
| 5CZ5      | 4    | 1     | -                     | 6    | 30            | D    | short on C,4,5, & E                                                                    |
| 5DH8      | 4    | 1     | -                     | 5    | 24            | 1    | Triode Sect. short on E<br>this sect. only.                                            |
|           | 1    | 4     | -                     | 5    | 22            | 4    | Pent.Sect.Use Stark D<br>adapter this sect. only<br>do not connect cap to<br>side pin. |

| <u>Tube Type</u> | <u>9-56</u> | <u>9-11A</u> | 9-11<br>9-55<br><u>9-54T</u> | <u>Fil</u>  | <u>Shunt</u>   | <u>Sel</u>  | <u>Notes</u>                                                                            |
|------------------|-------------|--------------|------------------------------|-------------|----------------|-------------|-----------------------------------------------------------------------------------------|
| 5CM8             | 4<br>1      | 1<br>4       | -<br>-                       | 5<br>5      | 25<br>27       | 2<br>4      | Short on B<br>Use Stark D adapter this<br>sect only. do not connect<br>cap on side pin. |
| 5J6              | 11          | 12           | X                            | 5           | 32             | 1           |                                                                                         |
| 5K6GT            | 1           | 4            | -                            | 5           | 40             | C           |                                                                                         |
| 5T8              | 4<br>4<br>4 | 1<br>1<br>1  | -<br>-<br>-                  | 5<br>5<br>5 | 35<br>35<br>40 | 1<br>2<br>3 | shows short on C, D<br>Diode<br>Triode                                                  |
| 5U4GA/GB         | 1<br>1      | 4<br>4       | -<br>-                       | 5<br>5      | 33<br>33       | 2<br>D      | short on 6,E                                                                            |
| 5U8              | 4<br>4      | 1<br>1       | -<br>-                       | 5<br>5      | 36<br>36       | A<br>2      | shows short on B & C                                                                    |
| 5V4GA            | 1<br>1      | 4<br>4       | -<br>-                       | 5<br>5      | 30<br>30       | 2<br>D      | second test                                                                             |
| 5V6              | 1           | 4            | -                            | 5           | 33             | C           |                                                                                         |
| 5X8              | 4<br>4      | 1<br>1       | -<br>-                       | 5<br>5      | 30<br>100      | A<br>3      | Ok if meter reads above first<br>"0" in Poor                                            |
| 6AF4             | 10          | 11           | W                            | 6           | 100            | D           | shows short on A,2,B,C,4,5,<br>E,6                                                      |
| 6AH4             | 1           | 4            | -                            | 6           | 95             | 4           |                                                                                         |
| 6AH6V            | 11          | 12           | X                            | 6           | 27             | A           |                                                                                         |
| 6AJ5             | 11          | 12           | X                            | 6           | 29             | 1           |                                                                                         |
| 6AJ8             | 4<br>4      | 1<br>1       | -<br>-                       | 6<br>6      | 28<br>100      | 2<br>3      | Hep. Sect.<br>Triode sect Ok if pointer<br>reads half way to P in Poor                  |
| 6AK8             | 4<br>4<br>4 | 1<br>1<br>1  | -<br>-<br>-                  | 6<br>6<br>6 | 34<br>30<br>30 | 3<br>1<br>2 | triode sect short on C,D<br>Diode<br>Diode                                              |
| 6AL5             | 10<br>11    | 11<br>12     | W<br>X                       | 6<br>6      | 31<br>31       | 2<br>C      |                                                                                         |
| 6AM5             | 11          | 12           | X                            | 6           | 32             | 1           |                                                                                         |

| <u>Tube Type</u> | <u>9-56</u> | <u>9-11A</u> | <u>9-54T</u> | <u>Fil.</u> | <u>Shunt</u> | <u>Sel</u> | <u>Notes</u>                                     |
|------------------|-------------|--------------|--------------|-------------|--------------|------------|--------------------------------------------------|
| 6AM8             | 4           | 1            | -            | 6           | 30           | B          |                                                  |
|                  | 4           | 1            | -            | 6           | 30           | C          |                                                  |
| 6AN4             | 10          | 11           | W            | 6           | 100          | D          |                                                  |
| 6AN8             | 4           | 1            | -            | 6           | 32           | A          |                                                  |
|                  | 4           | 1            | -            | 6           | 32           | B          |                                                  |
| 6AQ4             | 11          | 12           | X            | 6           | 23           | 1          |                                                  |
| 6AQ8             | 4           | 1            | -            | 6           | 21           | A          | short on B & D Triode No.1                       |
|                  | 4           | 1            | -            | 6           | 21           | E          | Triode No. 2                                     |
| 6AR5             | 11          | 12           | X            | 6           | 37           | 1          |                                                  |
| 6AR8             | 4           | 1            | -            | 6           | 28           | D          |                                                  |
| 6AS6             | 11          | 12           | X            | 6           | 29           | 1          |                                                  |
| 6AS8             | 4           | 1            | -            | 6           | 26           | 2          | Triode sect short on B,D                         |
|                  | 4           | 1            | -            | 6           | 29           | 5          | Diode Sect.                                      |
| 6AT6             | 11          | 12           | X            | 6           | 32           | 1          | Triode Sect.                                     |
|                  | 10          | 11           | W            | 6           | 100          | 1          | Diode No. 1                                      |
|                  | 10          | 11           | W            | 6           | 70           | 6          | Diode No. 2                                      |
| 6AT8             | 1           | 4            | -            | 6           | 22           | A          | Triode Sect. Use Stark B                         |
|                  | 1           | 4            | -            | 6           | 22           | d          | Pent.Sect. Adapter connect cap lead to shell cap |
| 6AU4GTA          | 13          | 8            | #2 Octal     | 6           | 25           | D          |                                                  |
| 6AU7             | 4           | 1            | -            | 6           | 33           | A          | Shows short on B & D                             |
|                  | 4           | 1            | -            | 6           | 33           | E          |                                                  |
| 6AU8             | 4           | 1            | -            | 6           | 31           | 6          | Pent.Short on D                                  |
|                  | 4           | 1            | -            | 6           | 100          | C          | Triode                                           |
| 6AV5GA           | 1           | 4            | -            | 6           | 69           | E          |                                                  |
| 6AV6             | 11          | 12           | X            | 6           | 32           | 1          | Triode Sect.                                     |
|                  | 10          | 11           | W            | 6           | 100          | 1          | Diode No. 1                                      |
|                  | 10          | 11           | W            | 6           | 100          | 6          | Diode No. 2                                      |
| 6AW8             | 4           | 1            | -            | 6           | 25           | 2          | Triode Sect short on D                           |
|                  | 4           | 1            | -            | 6           | 20           | 6          | Pent. Sect.                                      |
| 6AX4             | 13          | 8            | #2 Octal     | 6           | 38           | 5          |                                                  |
| 6AX6             | 4           | 1            | -            | 6           | 30           | 1          |                                                  |

| <u>Tube Type</u> | <u>9-56</u> | <u>9-11A</u> | 9-11<br>9-55<br><u>9-54T</u> | <u>Fil</u> | <u>Shunt</u> | <u>Sel.</u> | <u>Notes</u>                                                                                               |
|------------------|-------------|--------------|------------------------------|------------|--------------|-------------|------------------------------------------------------------------------------------------------------------|
| 6AX7             | 4           | 1            | -                            | 6          | 30           | A           | shows short on B & D                                                                                       |
|                  | 4           | 1            | -                            | 6          | 30           | E           |                                                                                                            |
| 6AX8             | 4           | 1            | -                            | 6          | 30           | A           | shows short on B & D                                                                                       |
|                  | 4           | 1            | -                            | 6          | 30           | 2           |                                                                                                            |
| 6AZ8             | 4           | 1            | -                            | 6          | 27           | 5           | Pent. Sect. short on C, E                                                                                  |
|                  | 4           | 1            | -                            | 6          | 100          | 3           | Triode Sect. ok if needle moves $\frac{1}{4}$ "                                                            |
| 6BA7             | 4           | 1            | -                            | 6          | 28           | 2           |                                                                                                            |
| 6BA8             | 4           | 1            | -                            | 6          | 35           | 2           | shows short on D                                                                                           |
|                  | 4           | 1            | -                            | 6          | 35           | B           |                                                                                                            |
| 6BA8A            | 4           | 1            | -                            | 6          | 26           | B           | Triode Sect. short on D                                                                                    |
|                  | 4           | 1            | -                            | 6          | 22           | 6           | Pent. Sect. short on D                                                                                     |
| 6BC8             | 4           | 1            | -                            | 6          | 32           | A           | Shows short on B, D                                                                                        |
|                  | 4           | 1            | -                            | 6          | 32           | E           |                                                                                                            |
| 6BD4A            | 1           | 4            | -                            | 6          | 45           | C           |                                                                                                            |
| 6BD6             | 11          | 12           | X                            | 6          | 35           | A           |                                                                                                            |
| 6BG6GA           | 1           | 4            | -                            | 6          | 35           | C           |                                                                                                            |
| 6BH8             | 4           | 1            | -                            | 6          | 20           | 2           | Triode sect. short on D                                                                                    |
|                  | 4           | 1            | -                            | 6          | 20           | 6           | Pent. Sect.                                                                                                |
| 6BJ7             | 4           | 1            | -                            | 6          | 30           | 2           |                                                                                                            |
|                  | 4           | 1            | -                            | 6          | 30           | B           |                                                                                                            |
|                  | 4           | 1            | -                            | 6          | 30           | D           |                                                                                                            |
| 6BJ8             | 1           | 4            | -                            | 6          | 100          | 6           | Triode Sect short on D Use Stark B adapter connect shell cap OK if needle moves $\frac{1}{4}$ "            |
|                  | 1           | 4            | -                            | 6          | 31           | 5           | Diode No. 1                                                                                                |
|                  | 1           | 4            | -                            | 6          | 34           | 1           | Diode No. 2                                                                                                |
| 6BK5             | 1           | 4            | -                            | 6          | 24           | 6           | Use Stark B adapter do not connect shell cap                                                               |
| 6BK7             | 4           | 1            | -                            | 6          | 27           | A           |                                                                                                            |
|                  | 4           | 1            | -                            | 6          | 27           | E           |                                                                                                            |
| 6BK7A            | 4           | 1            | -                            | 6          | 27           | A           |                                                                                                            |
|                  | 4           | 1            | -                            | 6          | 27           | E           |                                                                                                            |
| 6BL8             | 4           | 1            | -                            | 6          | 24           | 2           | Pent Sect short on B & C                                                                                   |
|                  | 1           | 4            | -                            | 6          | 25           | 4           | this sect only. Triode sect. short on B Use Stark D adapter this sect. only connect cap to side pin TS1158 |

| <u>Tube Type</u> | <u>9-56</u> | <u>9-11A</u> | <u>9-11<br/>9-55<br/>9-54T</u> | <u>Fil</u> | <u>Shunt</u> | <u>Sel.</u> | <u>Notes</u>                                                  |
|------------------|-------------|--------------|--------------------------------|------------|--------------|-------------|---------------------------------------------------------------|
| 6BN4             | 10          | 11           | W                              | 6          | 100          | 1           | Short on A,2,B,C,4,D,6 good tube reads above first 0 in Poor. |
| 6BN6             | 10          | 11           | W                              | 6          | 100          | A           | OK above first 0 in Poor                                      |
| 6BN7             | 4           | 1            | -                              | 6          | 30           | A           |                                                               |
|                  | 4           | 1            | -                              | 6          | 30           | B           |                                                               |
| 6BN8             | 4           | 1            | -                              | 6          | 18           | 1           | Diode #1                                                      |
|                  | 4           | 1            | -                              | 6          | 18           | 5           | Diode #2                                                      |
|                  | 1           | 4            | -                              | 6          | 22           | 2           | Triode Sect, Use Stark D adapter triode sect only             |
| 6BQ5             | 4           | 1            | -                              | 6          | 27           | A           | Short on 1,2,B                                                |
| 6BQ6GA/GTA 1     | 4           | -            | -                              | 6          | 57           | B           |                                                               |
| 6BQ7             | 4           | 1            | -                              | 6          | 32           | A           | shows short on B & D                                          |
|                  | 4           | 1            | -                              | 6          | 32           | E           |                                                               |
| 6BQ7A            | 4           | 1            | -                              | 6          | 32           | A           | Shows short on B & D                                          |
|                  | 4           | 1            | -                              | 6          | 32           | E           |                                                               |
| 6BR8             | 4           | 1            | -                              | 6          | 29           | 1           | Triode sect. short on B                                       |
|                  | 4           | 1            | -                              | 6          | 100          | 6           | Pent. sect. OK if needle moves 1/8"                           |
| 6BS7             | 4           | 1            | -                              | 6          | 32           | 3           | Connect cap                                                   |
| 6BS8             | 4           | 1            | -                              | 6          | 29           | 2           | Triode No.1 short on B,D                                      |
|                  | 4           | 1            | -                              | 6          | 29           | 6           | Triode No. 2                                                  |
| 6BU8             | 4           | 1            | -                              | 6          | 100          | B           | OK above "P" in Poor                                          |
|                  | 4           | 1            | -                              | 6          | 30           | 6           | Test 2                                                        |
| 6BW4             | 1           | 4            | -                              | 6          | 38           | 1           | Plate 1 use Stark D adapter                                   |
|                  | 1           | 4            | -                              | 6          | 38           | 6           | Plate 2 do not connect cap on side pin                        |
| 6BW8             | 1           | 4            | -                              | 6          | 22           | D           | Pent sect. short on 6                                         |
|                  | 1           | 4            | -                              | 6          | 20           | 1           | Diode #1 Use Stark B adapter                                  |
|                  | 1           | 4            | -                              | 6          | 20           | 3           | Diode #2 connect cap to side pin                              |
| 6BX6             | 4           | 1            | -                              | 6          | 25           | B           | short on 1,A,C,4,D                                            |
| 6BX7             | 13          | 8 #2 Octal   |                                | 6          | 23           | C           |                                                               |
|                  | 13          | 8 #2 Octal   |                                | 6          | 23           | D           |                                                               |

| <u>Tube Type</u> | <u>9-56</u> | <u>9-11A</u> | <u>9-11<br/>9-55<br/>9-54T</u> | <u>File</u> | <u>Shunt</u> | <u>Sel</u> | <u>Notes</u>                                        |
|------------------|-------------|--------------|--------------------------------|-------------|--------------|------------|-----------------------------------------------------|
| 6BY5GA           | 1           | 4            | -                              | 6           | 32           | 2          | Plate # 1                                           |
|                  | 1           | 4            | -                              | 6           | 32           | 4          | Plate # 2                                           |
| 6BY6             | 11          | 12           | X                              | 6           | 32           | 1          |                                                     |
| 6BY7             | 4           | 1            | -                              | 6           | 27           | 2          | Short on 1,A,C,4,D                                  |
| 6BY8             | 1           | 4            | -                              | 6           | 23           | 1          | Short on B,D. Use Stark B                           |
|                  | 1           | 4            | -                              | 6           | 20           | 5          | adapter Place grid cap on shell pin                 |
| 6BZ6             | 11          | 12           | X                              | 6           | 25           | 1          |                                                     |
| 6BZ7             | 4           | 1            | -                              | 6           | 21           | A          | short on B & D                                      |
|                  | 4           | 1            | -                              | 6           | 21           | E          |                                                     |
| 6BZ8             | 4           | 1            | -                              | 6           | 21           | A          | Triode 1 short on B & D                             |
|                  | 4           | 1            | -                              | 6           | 21           | E          | Triode 2                                            |
| 6CE5             | 11          | 12           | X                              | 6           | 21           | 1          | short on A,2,B,C,4,D                                |
| 6CD6GA           | 1           | 4            | -                              | 6           | 24           | C          | High drain-test quickly and remove                  |
| 6CF6             | 10          | 11           | W                              | 6           | 23           | E          |                                                     |
| 6CG7             | 4           | 1            | -                              | 6           | 36           | A          | Triode No. 1                                        |
|                  | 4           | 1            | -                              | 6           | 36           | E          | Triode No 2                                         |
| 6CG8             | 1           | 4            | -                              | 6           | 22           | 1          | Triode Sect.(Use Stark B                            |
|                  | 1           | 4            | -                              | 6           | 22           | 4          | Pent.Sect(adapter,connect cap to side pin.)         |
| 6CH6             | 4           | 1            | -                              | 6           | 22           | 2          |                                                     |
| 6CH8             | 4           | 1            | -                              | 6           | 22           | 6          | Pent.Sect.short on A                                |
|                  | 4           | 1            | -                              | 6           | 22           | 3          | Triode sect. short on A                             |
| 6CJ6             | 4           | 1            | -                              | 6           | 23           | 2          | Cap P short on 1,A,B,3,C,D, 5,E,6                   |
| 6CK6             | 4           | 1            | -                              | 6           | 28           | 2          |                                                     |
| 6CL6             | 4           | 1            | -                              | 6           | 28           | 2          | shows short on B,3,4,D                              |
| 6CL8             | 4           | 1            | -                              | 6           | 22           | 1          | Triode short B, this sect. only.                    |
|                  | 1           | 4            | -                              | 6           | 22           | 4          | Pent. Use Stark D adapter this sect. only,short A,C |
| 6CM6             | 4           | 1            | -                              | 6           | 28           | D          |                                                     |

| <u>Tube Type</u> | <u>9-56</u> | <u>9-11A</u> | 9-11<br>9-55<br><u>9-54T</u> | <u>Fil</u> | <u>Shunt</u> | <u>Sel.</u> | <u>Notes</u>                                                                                  |
|------------------|-------------|--------------|------------------------------|------------|--------------|-------------|-----------------------------------------------------------------------------------------------|
| 6CM7             | 4           | 1            | -                            | 6          | 35           | E           |                                                                                               |
|                  | 4           | 1            | -                            | 6          | 35           | 6           |                                                                                               |
| 6CN6             | 1           | 4            | -                            | 6          | 21           | 4           |                                                                                               |
| 6CN7             | 4           | 1            | -                            | 6          | 32           | 6           | Triode short on C                                                                             |
|                  | 4           | 1            | -                            | 6          | 15           | 1           | Diode #1                                                                                      |
|                  | 4           | 1            | -                            | 6          | 15           | 2           | Diode #2                                                                                      |
| 6CQ6             | 11          | 12           | X                            | 6          | 28           | 1           |                                                                                               |
| 6CQ8             | 4           | 1            | -                            | 6          | 22           | 2           | Test 1, short on B & C                                                                        |
|                  | 1           | 4            | -                            | 6          | 23           | 4           | Test 2, Use Stark D Adapter                                                                   |
| 6CR6             | 10          | 11           | W                            | 6          | 30           | 4           | Green                                                                                         |
|                  | 10          | 11           | W                            | 6          | 30           | B           | Diodes OK                                                                                     |
| 6CS6             | 10          | 11           | W                            | 6          | 31           | D           |                                                                                               |
| 6CS7             | 1           | 4            | -                            | 6          | 24           | 3           | Use Stark D adapter place cap                                                                 |
|                  | 1           | 4            | -                            | 6          | 35           | 6           | on side pin short on A,B,D                                                                    |
| 6CU5             | 10          | 11           | W                            | 6          | 25           | A           | Short on 2,B,1                                                                                |
| 6CV6             | 1           | 4            | -                            | 6          | 53           | B           |                                                                                               |
| 6CU8             | 4           | 1            | -                            | 6          | 22           | 6           | Pent.Sect.                                                                                    |
|                  | 1           | 4            | -                            | 6          | 22           | 6           | Triode Sect. short on D, Use Stark D adapter this sect. only. Do not connect cap on side pin. |
| 6CW5             | 4           | 1            | -                            | 6          | 22           | A           | Short on 1,2,B,3,C,E,6,                                                                       |
| 6CX8             | 4           | 1            | -                            | 6          | 28           | 2           | Test 1 short on D                                                                             |
|                  | 4           | 1            | -                            | 6          | 22           | 6           | Test 2 short on D                                                                             |
| 6CY5             | 11          | 12           | X                            | 6          | 23           | 1           | Short on A,2,B,C,4,D                                                                          |
| 6CZ5             | 4           | 1            | -                            | 6          | 29           | D           | Short on C,4,5,E                                                                              |
| 6DA4             | 13          | 8            | #2 Octal                     | 6          | 22           | 5           |                                                                                               |
| 6DB5             | 1           | 4            | -                            | 6          | 27           | 5           | Short on A,2,B,E,6, Use Stark B adapter. Do Not Connect Cap Lead.                             |
| 6DC6             | 10          | 11           | W                            | 6          | 20           | 5           |                                                                                               |
| 6DC8             | 4           | 1            | -                            | 6          | 23           | 2           | Pent. Sect.                                                                                   |
|                  | 4           | 1            | -                            | 6          | 40           | 6           | Diode No. 1                                                                                   |
|                  | 4           | 1            | -                            | 6          | 70           | 3           | Diode No. 2                                                                                   |

| <u>Tube Type</u> | <u>9-56</u> | <u>9-11A</u> | <u>9-11<br/>9-55<br/>9-54T</u> | <u>Fil.</u> | <u>Shunt</u> | <u>Sel</u> | <u>Notes</u>                                                                                                                     |
|------------------|-------------|--------------|--------------------------------|-------------|--------------|------------|----------------------------------------------------------------------------------------------------------------------------------|
| 6DE6             | 11          | 12           | X                              | 6           | 27           | 1          |                                                                                                                                  |
| 6DE7             | 1           | 4            | -                              | 6           | 22           | 3          | Triode 1(use Stark D<br>Triode 2(adapter connect<br>cap to side pin short on<br>A,B,D, )                                         |
|                  | 1           | 4            | -                              | 6           | 30           | 6          |                                                                                                                                  |
| 6DL5             | 10          | 11           | W                              | 6           | 27           | D          | short on C,4,5,E,                                                                                                                |
| 6DN6             | 1           | 4            | -                              | 6           | 25           | 4          |                                                                                                                                  |
| 6DQ6             | 1           | 4            | -                              | 6           | 34           | C          |                                                                                                                                  |
| 6DT6             | 11          | 12           | X                              | 6           | 28           | 1          |                                                                                                                                  |
| 6HS6             |             |              |                                | 6           | 30           | A          |                                                                                                                                  |
| 6J5              | 1           | 4            | -                              | 6           | 34           | C          |                                                                                                                                  |
| 6J5GT            | 1           | 4            | -                              | 6           | 34           | C          |                                                                                                                                  |
| 6J6              | 10          | 11           | W                              | 6           | 27           | 1          | Triode No. 1                                                                                                                     |
|                  | 11          | 12           | X                              | 6           | 27           | 1          | Triode No. 2                                                                                                                     |
| 6L6GA/B          | 1           | 4            | -                              | 6           | 33           | C          |                                                                                                                                  |
| 6R3              | 4           | 1            | -                              | 6           | 30           | 2          | Connect cap                                                                                                                      |
| 6R4              | 4           | 1            | -                              | 6           | 28           | A          |                                                                                                                                  |
| 6R8              | 1           | 4            | -                              | 6           | 13           | 2          | Diode#1 (Use Stark B ada-<br>Diode#2 (pter place grid<br>Diode#3 (cap on side pin<br>Triode sect.(short on C )<br>short on C & D |
|                  | 1           | 4            | -                              | 6           | 13           | 1          |                                                                                                                                  |
|                  | 1           | 4            | -                              | 6           | 13           | D          |                                                                                                                                  |
|                  | 4           | 1            | -                              | 6           | 36           | 3          |                                                                                                                                  |
| 6S4A             | 4           | 1            | -                              | 6           | 30           | D          |                                                                                                                                  |
| 6SF7             | 13          | 8 #2 Octal   |                                | 6           | 40           | 1          | Pent.Sect.<br>Diode sect OK above line<br>Test.                                                                                  |
|                  | 13          | 8 #2 Octal   |                                | 6           | 100          | 5          |                                                                                                                                  |
| 6SH7             | 1           | 4            | -                              | 6           | 22           | 2          | short on 1,A,C,4,D                                                                                                               |
| 6SN7GTA          | 13          | 8 #2 Octal   |                                | 6           | 37           | C          |                                                                                                                                  |
|                  | 13          | 8 #2 Octal   |                                | 6           | 37           | D          |                                                                                                                                  |
| 6SN7GTB          | 13          | 8 #2 Octal   |                                | 6           | 37           | C          |                                                                                                                                  |
|                  | 13          | 8 #2 Octal   |                                | 6           | 37           | D          |                                                                                                                                  |
| 6SS7             | 1           | 4            | -                              | 6           | 34           | B          |                                                                                                                                  |

| Tube<br>Type | 9-11<br>9-55 |       |          | Fil. | Shunt | Sel | Notes                                                           |
|--------------|--------------|-------|----------|------|-------|-----|-----------------------------------------------------------------|
|              | 9-56         | 9-11A | 9-54T    |      |       |     |                                                                 |
| 6S27         | 13           | 8     | #2 Octal | 6    | 43    | 1   |                                                                 |
|              | 13           | 8     | #2 Octal | 6    | 100   | C   |                                                                 |
|              | 13           | 8     | #2 Octal | 6    | 100   | 5   |                                                                 |
| 6T4          | 10           | 11    | W        | 6    | 88    | D   | Shows short on A,2,B,C,5,E,6                                    |
| 6T8          | 4            | 1     | -        | 6    | 35    | 1   | Diode No.1 short on C,D                                         |
|              | 4            | 1     | -        | 6    | 35    | 2   | Diode No 2                                                      |
|              | 4            | 1     | -        | 6    | 40    | 3   | Triode Sect.                                                    |
| 6U4V         | 13           | 8     | #2 Octal | 6    | 27    | D   |                                                                 |
| 6U8          | 4            | 1     | -        | 6    | 36    | A   | Shows short on B,C                                              |
|              | 4            | 1     | -        | 6    | 36    | 2   |                                                                 |
| 6V3A         | 1            | 4     | -        | 6    | 25    | 6   | Reads in green connect cap lead to tube cap use Stark A adapter |
| 6V4          | 4            | 1     | -        | 6    | 35    | A   |                                                                 |
|              | 4            | 1     | -        | 6    | 35    | E   |                                                                 |
| 6V8          | 4            | 1     | -        | 6    | 34    | 5   | Triode Sect short on B                                          |
|              | 4            | 1     | -        | 6    | 27    | 6   | Diode No 1                                                      |
|              | 4            | 1     | -        | 6    | 27    | 2   | Diode No 2                                                      |
|              | 1            | 4     | -        | 6    | 100   | 4   | Diode No 4 for diode #4 use Stark B adapter connect shell cap   |
| 6W4          | 13           | 8     | #2 Octal | 6    | 27    | 5   |                                                                 |
| 6X8          | 4            | 1     | -        | 6    | 25    | 2   | Triode Sect.                                                    |
|              | 4            | 1     | -        | 6    | 25    | 6   | Pent. Sect.                                                     |
| 6Y6GA        | 1            | 4     | -        | 6    | 27    | D   |                                                                 |
| 7AB7         | 1            | 4     | -        | 6    | 30    | D   |                                                                 |
| 7AD7         | 7            | 5     | -        | 6    | 30    | D   |                                                                 |
| 7AE7         | 4            | 1     | -        | 6    | 33    | A   | short on B & D                                                  |
|              | 4            | 1     | -        | 6    | 33    | E   |                                                                 |
| 7E5          | 9            | 6     | -        | 6    | 35    | 6   | short on 1,A,B,3,C,4,5,E                                        |
| 7F7          | 7            | 5     | -        | 6    | 32    | 4   |                                                                 |
| 7G7          | 7            | 5     | -        | 6    | 30    | D   |                                                                 |
| 7H7          | 7            | 5     | -        | 6    | 30    | D   |                                                                 |
| 7J7          | 7            | 5     | -        | 6    | 30    | D   | Heptode Sect.                                                   |
|              | 7            | 5     | -        | 6    | 100   | 2   | OK above $\frac{1}{4}$ "                                        |

| <u>Tube Type</u> | <u>9-56</u> | <u>9-11A</u> | <u>9-11<br/>9-55<br/>9-54T</u> | <u>Fil</u> | <u>Shunt</u> | <u>Sol</u> | <u>Notes</u>                                 |
|------------------|-------------|--------------|--------------------------------|------------|--------------|------------|----------------------------------------------|
| 7K7              | 7           | 5            | -                              | 6          | 100          | 2          | Triode sect ok if needle moves $\frac{1}{4}$ |
|                  | 7           | 5            | -                              | 6          | 36           | D          | Diodes                                       |
| 7L7              | 7           | 5            | -                              | 6          | 30           | D          |                                              |
| 7N7              | 7           | 5            | -                              | 6          | 30           | 4          | Triode No 1                                  |
|                  | 7           | 5            | -                              | 6          | 100          | 2          | Triode No 2 OK above P in Poor               |
| 7Q7              | 7           | 5            | -                              | 6          | 31           | D          | Ampl. Sect.                                  |
|                  | 7           | 5            | -                              | 6          | 100          | A          | Cos.Sect. OK above R in Poor                 |
| 7R7              | 7           | 5            | -                              | 6          | 30           | D          | Pent. Sect.                                  |
|                  | 7           | 5            | -                              | 6          | 100          | 2          | Diode OK above line test                     |
| 7S7              | 7           | 5            | -                              | 6          | 29           | D          | Heptode Sect.                                |
|                  | 7           | 5            | -                              | 6          | 45           | 4          | Triode Sect.                                 |
| 7V7              | 7           | 5            | -                              | 6          | 28           | D          |                                              |
| 7W7              | 7           | 5            | -                              | 6          | 29           | 5          | Short on C,4,D,E,6                           |
| 7X7              | 7           | 5            | -                              | 6          | 37           | 2          | Short on D                                   |
| 7XL              | 7           | 5            | -                              | 6          | 34           | 2          | Plate No 1                                   |
|                  | 7           | 5            | -                              | 6          | 34           | D          | Plate No 2                                   |
| 7ZL              | 7           | 5            | -                              | 6          | 42           | D          | Plate No.1                                   |
|                  | 7           | 5            | -                              | 6          | 42           | 2          | Plate No. 2                                  |
| 8A08A            | 4           | 1            | -                              | 7          | 25           | 2          | Triode Sect. short on D                      |
|                  | 4           | 1            | -                              | 7          | 21           | 6          | Pent. Sect.                                  |
| 8A08A            | 4           | 1            | -                              | 7          | 25           | 2          | Triode Sect. Short on D                      |
|                  | 4           | 1            | -                              | 7          | 21           | 6          | Pent. Sect.                                  |
| 8BA8A            | 1           | 4            | -                              | 6          | 26           | 2          | Triode Sect. Use Stark B adapter             |
|                  | 1           | 4            | -                              | 6          | 22           | 6          | Pent.Sect. connect cap to side pin.          |
| 8BH8             | 1           | 4            | -                              | 6          | 24           | 2          | Triode Sect. Use Stark B adapter             |
|                  | 1           | 4            | -                              | 6          | 24           | 6          | Pent.Sect. connect cap to side pin.          |
| 8BN8             | 4           | 1            | -                              | 7          | 25           | 1          | Diode No.1                                   |
|                  | 4           | 1            | -                              | 7          | 25           | 5          | Diode No.2                                   |
|                  | 1           | 4            | -                              | 7          | 22           | 2          | Triode Sect. Use Stark D adapter             |
|                  |             |              |                                |            |              |            | Triode Section only.                         |
| 8CQ7             | 4           | 1            | -                              | 7          | 29           | 4          | Triode 1 short on B & D                      |
|                  | 4           | 1            | -                              | 7          | 29           | 6          | Triode No.2                                  |
| 8CM7             | 1           | 4            | -                              | 7          | 26           | 2          | Triode 1 short on B,D, Use Stark             |
|                  | 1           | 4            | -                              | 7          | 30           | 7          | Triode 2. "D" adapter connect cap lead       |

| <u>Tube</u><br><u>Type</u> | <u>9-56</u>    | <u>9-11A</u>   | 9-11<br>9-55<br><u>9-54T</u> | <u>Fil</u>  | <u>Shunt</u>     | <u>Sel</u>  | <u>Notes</u>                                                                                           |
|----------------------------|----------------|----------------|------------------------------|-------------|------------------|-------------|--------------------------------------------------------------------------------------------------------|
| 8CS7                       | 1<br>1         | 4<br>4         | -<br>-                       | 7<br>7      | 25<br>33         | 3<br>6      | Triode 1, short on B,D, use Stark<br>Triode 2, 'D' adapter connect cap<br>lead.                        |
| 9U8                        | 4<br>4         | 1<br>1         | -<br>-                       | 6<br>6      | 36<br>36         | A<br>2      | Short on B,C, Set line test to<br>mark between weak and good                                           |
| 10C8                       | 4<br>1         | 1<br>4         | -<br>-                       | 7<br>7      | 22<br>22         | 2<br>2      | Triode Sect.<br>Pent. Sect. Use Stark D adapter<br>this section only do not connect<br>cap to side pin |
| 10DE7                      | 1<br>1         | 4<br>4         | -<br>-                       | 7<br>7      | 24<br>34         | 3<br>6      | Use Stark D adapter place cap on<br>side pin, short on A,B,D,                                          |
| 12                         | 2              | 2              | -                            | 5           | 36               | A           |                                                                                                        |
| 12A4<br>12A4A              | 1              | 4              | -                            | 7           | 98               | 4           | short on A,2,B,E,6 do not connect<br>cap lead. Use Stark B adapter                                     |
| 12AB5                      | 4              | 1              | -                            | 7           | 32               | D           | short on 1,A,B,3,C,4,5,E,                                                                              |
| 12AD7                      | 4<br>4         | 1<br>1         | -<br>-                       | 7<br>7      | 31<br>31         | E<br>A      | Triode No 1 short on B,D,<br>Triode No. 2                                                              |
| 12AF6                      | 11             | 12             | X                            | 7           | 30               | 1           |                                                                                                        |
| 12AQ5                      | 10             | 11             | W                            | 7           | 35               | D           | short on C,4,5,E                                                                                       |
| 12AS5                      | 11             | 12             | X                            | 7           | 33               | 2           |                                                                                                        |
| 12AT6                      | 11<br>10<br>10 | 12<br>11<br>11 | X<br>W<br>W                  | 7<br>7<br>7 | 32<br>100<br>70  | 1<br>1<br>6 | Triode Section<br>Diode No.1<br>Diode No.2                                                             |
| 12AU6                      | 11             | 12             | X                            | 7           | 30               | A           |                                                                                                        |
| 12AV5                      | 1              | 4              | -                            | 7           | 74               | E           |                                                                                                        |
| 12AV6                      | 11<br>10<br>10 | 12<br>11<br>11 | X<br>W<br>W                  | 7<br>7<br>7 | 32<br>100<br>100 | 1<br>1<br>6 | Triode Section<br>Diode No.1<br>Diode No.2                                                             |
| 12AU7A                     | 4<br>4         | 1<br>1         | -<br>-                       | 7<br>7      | 33<br>33         | A<br>E      | Triode No1 short on B.D<br>Triode No. 2                                                                |
| 12AV7                      | 4<br>4         | 1<br>1         | -<br>-                       | 7<br>7      | 27<br>27         | A<br>E      | Shows short on B & D                                                                                   |
| 12AX4GT                    | 13             | 8              | #2 Octal                     | 7           | 38               | 5           |                                                                                                        |

| Tube<br>Type | 9-56 | 9-11A      | 9-11          | Fil | Shunt | Sel | Notes                                                          |
|--------------|------|------------|---------------|-----|-------|-----|----------------------------------------------------------------|
|              |      |            | 9-55<br>9-54T |     |       |     |                                                                |
| 12AX4GTA     | 13   | 8 #2 Octal |               | 7   | 32    | 5   |                                                                |
| 12AY7        | 4    | 1          | -             | 7   | 35    | E   | short on B,D, triode 1                                         |
|              | 4    | 1          | -             | 7   | 35    | A   | Triode 2                                                       |
| 12AZ7        | 4    | 1          | -             | 7   | 24    | A   |                                                                |
|              | 4    | 1          | -             | 7   | 24    | E   |                                                                |
| 12B4         |      |            |               |     |       |     |                                                                |
| 12B4A        | 1    | 4          | -             | 7   | 52    | 4   | short on A,2,B,E,6 do not connect cap lead use Stark B adapter |
| 12BD6        | 11   | 12         | X             | 7   | 35    | A   |                                                                |
| 12BF6        | 11   | 12         | X             | 7   | 42    | 1   |                                                                |
| 12BH7A       | 4    | 1          | -             | 7   | 29    | A   | short on B & D                                                 |
|              | 4    | 1          | -             | 7   | 29    | E   |                                                                |
| 12BH7B       | 4    | 1          | -             | 7   | 29    | A   | short on B & D                                                 |
|              | 4    | 1          | -             | 7   | 29    | E   |                                                                |
| 12BK5        | 4    | 1          | -             | 7   | 100   | B   | shows short on C,4,D,E,6 OK if above first 0 in Poor           |
| 12BN6        | 10   | 11         | W             | 7   | 100   | A   | OK if approaches P in Poor                                     |
| 12BQ6A       | 1    | 4          | -             | 7   | 57    | B   |                                                                |
| 12BQ6GTA     | 1    | 4          | -             | 7   | 51    | B   |                                                                |
| 12BQ6GTB     | 1    | 4          | -             | 7   | 57    | B   |                                                                |
| 12BR7        | 4    | 1          | -             | 7   | 24    | 2   | Triode Sect short on B,D                                       |
|              | 4    | 1          | -             | 7   | 23    | 5   | Diode No 1                                                     |
|              | 4    | 1          | -             | 7   | 23    | 6   | Diode No.2                                                     |
| 12BT6        | 10   | 11         | W             | 7   | 80    | 1   |                                                                |
| 12BV7        | 4    | 1          | -             | 7   | 24    | 2   | short on D,5,E                                                 |
| 12BY7A       | 4    | 1          | -             | 7   | 27    | B   | short on D,5,E                                                 |
| 12BZ7        | 4    | 1          | -             | 7   | 23    | A   |                                                                |
|              | 4    | 1          | -             | 7   | 23    | E   |                                                                |
| 12C5         | -    | 11         | -             | 7   | 22    | A   | short on 1,2,B                                                 |
| 12CA5        | 11   | 12         | X             | 7   | 32    | B   |                                                                |
| 12CR6        | 10   | 11         | W             | 7   | 35    | 4   | Pent. Sect.                                                    |
|              | 10   | 11         | W             | 7   | 100   | 2   | Diode Sect.                                                    |
| 12CS6        | 10   | 11         | W             | 7   | 30    | 5   |                                                                |
| 12CU5        | 10   | 11         | W             | 7   | 25    | A   | short on 2,B,1                                                 |

| <u>Tube Type</u> | <u>9-56</u> | <u>9-11A</u> | <u>9-11<br/>9-55<br/>9-54T</u> | <u>Fil</u> | <u>Shunt</u> | <u>Sel</u> | <u>Notes</u>                                                                                      |
|------------------|-------------|--------------|--------------------------------|------------|--------------|------------|---------------------------------------------------------------------------------------------------|
| 12CU6            | 1           | 4            | -                              | 7          | 53           | B          |                                                                                                   |
| 12D4             | 13          | 8            | #2 Octal                       | 7          | 24           | 5          |                                                                                                   |
| 12DB5            | 1           | 4            | -                              | 7          | 25           | 5          | Short on A,2,B,E,6, Use Stark B adapter do not connect cap lead                                   |
| 12DQ6A           | 1           | 4            | -                              | 7          | 25           | 4          |                                                                                                   |
| 12DT5            | 1           | 4            | -                              | 7          | 100          | 1          | Use Stark D adapter connect cap to side pin Short on B,3,C,D,5, E, Good tube read above R in Poor |
| 12G4             | 10          | 11           | W                              | 7          | 30           | 6          |                                                                                                   |
| 12I6             | 1           | 4            | -                              | 7          | 36           | A          |                                                                                                   |
| 12SN7GTA         | 13          | 8            | #2 Octal                       | 7          | 37           | C          |                                                                                                   |
|                  | 13          | 8            | #2 Octal                       | 7          | 37           | D          | Second Test                                                                                       |
| 12V6GT           | 1           | 4            | -                              | 7          | 31           | C          |                                                                                                   |
| 12SX7            | 13          | 8            | #2 Octal                       | 7          | 38           | C          | Only check one section needs adapter for other section.                                           |
| 12X6             | 1           | 4            | -                              | 7          | 33           | C          |                                                                                                   |
| 12W6             | 1           | 4            | -                              | 7          | 33           | C          |                                                                                                   |
| 12X4             | 10          | 11           | W                              | 7          | 34           | E          | Diode No.1                                                                                        |
|                  | 10          | 11           | W                              | 7          | 40           | 5          | Diode No.2                                                                                        |
| 14F8             | 9           | 6            | -                              | 7          | 31           | 2          | Shows short on D triode No.1                                                                      |
|                  | 9           | 6            | -                              | 7          | 31           | 3          | Triode No.2                                                                                       |
| 17AX4            | 13          | 8            | #2 Octal                       | 8          | 26           | 5          |                                                                                                   |
| 17D4             | 13          | 8            | #2 Octal                       | 8          | 26           | 5          |                                                                                                   |
| 17DQ6A           | 1           | 4            | -                              | 8          | 25           | C          |                                                                                                   |
| 17H3             | 1           | 4            | -                              | 8          | 26           | 3          | Use Stark B adapter connect cap to side pin                                                       |
| 18A5             | 1           | 4            | -                              | 8          | 74           | 6          |                                                                                                   |
| 19AU4            | 13          | 8            | #2 Octal                       | 12         | 25           | D          |                                                                                                   |
| 19D8             | 4           | 1            | -                              | 8          | 29           | A          | Test 1                                                                                            |
|                  | 4           | 1            | -                              | 8          | 100          | 3          | Test 2 OK if needle moves $\frac{1}{4}$ "                                                         |

| Tube<br>Type | 9-56 | 9-11A | 9-11<br>9-55<br>9-54T | Fil | Shunt | Sel | Notes                                                                                               |
|--------------|------|-------|-----------------------|-----|-------|-----|-----------------------------------------------------------------------------------------------------|
| 19V8         | 4    | 1     | -                     | 8   | 34    | 5   | Triode Sect. short on B                                                                             |
|              | 4    | 1     | -                     | 8   | 27    | 6   | Diode No.1                                                                                          |
|              | 4    | 1     | -                     | 8   | 27    | 2   | Diode No.2                                                                                          |
|              | 1    | 4     | -                     | 8   | 100   | 4   | Diode No.4 for diode No.4 use<br>Stark B adapter connect shell<br>cap                               |
| 19X8         | 4    | 1     | -                     | 8   | 28    | 6   |                                                                                                     |
|              | 4    | 1     | -                     | 8   | 28    | A   |                                                                                                     |
| 24A          | 2    | 2     | -                     | 4   | 43    | B   | connect cap                                                                                         |
| 25AV5        | 1    | 4     | -                     | 8   | 74    | E   |                                                                                                     |
| 25AX4        | 13   | 8     | #2 Octal              | 8   | 33    | D   |                                                                                                     |
| 25BK5        | 1    | 4     | -                     | 9   | 24    | 6   | Use Stark B adapter do not<br>connect shell cap                                                     |
| 25BQ6GA      | 1    | 4     | -                     | 9   | 61    | B   |                                                                                                     |
| 25BQ6GTB     | 1    | 4     | -                     | 9   | 61    | B   |                                                                                                     |
| 25CA5        | 11   | 12    | X                     | 8   | 32    | 2   |                                                                                                     |
| 25CD6/GA/B   | 1    | 4     | -                     | 9   | 29    | 4   |                                                                                                     |
| 25CU6        | 1    | 4     | -                     | 9   | 61    | B   |                                                                                                     |
| 25DN6        | 1    | 4     | -                     | 9   | 28    | 4   |                                                                                                     |
| 25DQ6        | 1    | 4     | -                     | 9   | 31    | 4   | Set line test $\frac{1}{4}$ " below line test<br>mark                                               |
| 25W6         | 1    | 4     | -                     | 8   | 30    | C   |                                                                                                     |
| 25Y5         | 2    | 2     | -                     | 9   | 35    | 1   | Plate No.1                                                                                          |
|              | 2    | 2     | -                     | 9   | 35    | 5   | Plate No. 2                                                                                         |
| 35C3         | 10   | 11    | W                     | 9   | 23    | A   |                                                                                                     |
| 35Z5         | 14   | 9     | -                     | 8   | 29    | 4   |                                                                                                     |
| 50C5         | 11   | 12    | X                     | 10  | 32    | 2   |                                                                                                     |
| 71A          | 2    | 2     | -                     | 5   | 39    | A   |                                                                                                     |
| VR105        | 1    | 4     | -                     | 1   | 100   | C   | Shows short on 1,A,C,4,D, OK if<br>pointer reads up to P in Poor                                    |
| GL-502A      | 1    | 4     | -                     | 6   | 30    | C   |                                                                                                     |
| 809          | 2    | 2     | -                     | 6   | 37    | B   | Test quickly high drain tube.                                                                       |
| 814          | 2    | 2     | -                     | 6   | 42    | A   | Tube tested with 6.3 volts on<br>filament because of high current<br>drain test quickly and remove. |

| Tube<br>Type | 9-11<br>9-55 |       |          | Fil | Shunt | Sel | Notes                                         |
|--------------|--------------|-------|----------|-----|-------|-----|-----------------------------------------------|
|              | 9-56         | 9-11A | 9-54T    |     |       |     |                                               |
| 816          | 2            | 2     | -        | 4   | 30    | 3   | Connect cap                                   |
| 829B         | 1            | 4     | -        | 6   | 57    | 5   | short on C,4,D,E,6, Use Stark<br>832 adapter. |
| 832A         | 1            | 4     | -        | 6   | 75    | 5   | As above                                      |
| 884          | 1            | 4     | -        | 6   | 35    | 1   |                                               |
| 885          | 2            | 2     | -        | 4   | 30    | A   |                                               |
| 959          | -            | -     | -        | 1   | 72    | D   | Use Stark Z adapter                           |
| E1148        | 1            | 4     | -        | 6   | 40    | 3   | Place cap lead on left front cap              |
| 1201         | Same as 7E5  |       |          |     |       |     |                                               |
| HY1269       | 2            | 2     | -        | 7   | 34    | A   | short on D,5,E                                |
| 1299A        | 7            | 5     | -        | 4   | 38    | 5   | Short on E,6                                  |
| 1614         | 1            | 4     | -        | 6   | 35    | C   |                                               |
| 1620         | 1            | 4     | -        | 6   | 40    | C   |                                               |
| 1625         | 2            | 2     | -        | 7   | 35    | 2   |                                               |
| 1629         | 1            | 4     | -        | 7   | 60    | 4   | Eye dim on A bright on 2,B                    |
| 1851         | 1            | 4     | -        | 6   | 27    | B   |                                               |
| 2050         | 1            | 4     | -        | 6   | 25    | A   |                                               |
| 2051         | 1            | 4     | -        | 6   | 27    | 4   | shows partial short on D,6,                   |
| 5608         | 6            | 3     | -        | 4   | 30    | A   |                                               |
|              | 6            | 3     | -        | 4   | 30    | E   |                                               |
| 5610         | 10           | 11    | W        | 6   | 29    | E   |                                               |
| 5654         | 11           | 12    | X        | 6   | 27    | 1   | Shows short on A,2,B,C,4,D                    |
| 5686         | 4            | 1     | -        | 6   | 33    | 2   | shows short on 1,A,B,3,C,4,D                  |
| 5687         | 4            | 1     | -        | 7   | 31    | 6   |                                               |
|              | 4            | 1     | -        | 7   | 31    | 2   |                                               |
| 5692         | 13           | 8     | #2 Octal | 6   | 40    | C   |                                               |
|              | 13           | 8     | #2 Octal | 6   | 40    | 4   |                                               |
| 5693         | 1            | 4     | -        | 6   | 37    | B   |                                               |
| 5725         | 11           | 12    | X        | 6   | 25    | 1   |                                               |

| <u>Tube</u><br><u>Type</u> | <u>9-56</u> | <u>9-11A</u> | 9-11<br>9-55<br><u>9-54T</u> | <u>Fill</u> | <u>Shunt</u> | <u>Sel.</u> | <u>Notes</u>                                                        |
|----------------------------|-------------|--------------|------------------------------|-------------|--------------|-------------|---------------------------------------------------------------------|
| 5726                       | 10          | 11           | W                            | 6           | 33           | B           |                                                                     |
|                            | 10          | 11           | W                            | 6           | 33           | 4           |                                                                     |
| 5749                       | 11          | 12           | X                            | 6           | 26           | A           |                                                                     |
| 5750                       | 11          | 12           | X                            | 6           | 25           | 1           |                                                                     |
| 5751                       | 4           | 1            | -                            | 7           | 32           | A           | Shows short on B & D                                                |
|                            | 4           | 1            | -                            | 7           | 32           | E           |                                                                     |
| 5763                       | 4           | 1            | -                            | 6           | 30           | B           |                                                                     |
| 5814                       | 4           | 1            | -                            | 7           | 35           | A           | Shows short on B & D                                                |
|                            | 4           | 1            | -                            | 7           | 35           | E           |                                                                     |
| 5824                       | 1           | 4            | -                            | 8           | 35           | C           |                                                                     |
| 5845                       | 10          | 11           | W                            | 4           | -            | 6           | Continuity test only, tube will glow do not test                    |
| 5871                       | 8           | 7            | -                            | 6           | 40           | 4           |                                                                     |
| 5879                       | 4           | 1            | -                            | 6           | 43           | A           |                                                                     |
| 5881                       | 1           | 4            | -                            | 6           | 32           | C           |                                                                     |
| 5932                       | 1           | 4            | -                            | 6           | 33           | C           |                                                                     |
| 5933                       | 2           | 2            | -                            | 6           | 35           | 2           |                                                                     |
| 5963                       | 4           | 1            | -                            | 7           | 35           | A           | Triode No.1                                                         |
|                            | 4           | 1            | -                            | 7           | 35           | E           | Triode No.2 shows short on B,D,                                     |
| 5964                       | 10          | 11           | W                            | 6           | 25           | A           |                                                                     |
|                            | 10          | 11           | W                            | 6           | 25           | E           |                                                                     |
| 6087                       | 1           | 4            | -                            | 5           | 42           | 2           | Plate 1 short on E,6                                                |
|                            | 1           | 4            | -                            | 5           | 42           | D           | Plate 2                                                             |
| 6136                       | 10          | 11           | W                            | 6           | 30           | E           |                                                                     |
| 6146                       | 1           | 4            | -                            | 6           | 30           | 4           | short on A,2,B,D,5,E,place cap lead on cap                          |
| 6201                       | 4           | 1            | -                            | 7           | 26           | 2           | short on B, D                                                       |
| 5915                       | 11          | 12           | X                            | 6           | 33           | 1           |                                                                     |
| 6202                       | 11          | 12           | X                            | 6           | 26           | 1           |                                                                     |
| 6267                       | 1           | 4            | -                            | 6           | 27           | 4           | short on A,2,B,E,6 use Stark B adapter connect grid cap to side pin |
| 6374                       | 4           | 1            | -                            | 6           | 24           | 3           |                                                                     |
| 6550                       | 1           | 4            | -                            | 6           | 29           | 4           |                                                                     |