# SUPREME 385 AUTOMATIC TUBE TESTING OPERATING DATA

**PRELIMINARY ADJUSTMENTS.** Set the "ANALYZING METER CIRCUIT SELECTOR" switch to the "A. C. V." position and rotate the "ADJUST TO LINE VOLTAGE" control knob to the "OFF" position. Depress the "A. C. LINE VOLTAGE" switch and the "A. C. V.-MFDS." switch to determine the local power supply voltage. After releasing these push button switches rotate the "ADJUST TO LINE VOLTAGE" control knob to the nearest corresponding voltage reading. Then (1) locate in the first column of the "TUBE LIST" below, the tube which is to be tested, (2) observe the corresponding "FILAMENT VOLTAGE SELECTOR" setting, and (3) the proper setting for the "FILAMENT RETURN SELECTOR" control knob when testing octal tubes.

**LEAKAGE TEST.** After completing the preliminary adjustment (1) set the "FILAMENT VOLTAGE SELECTOR" switch control knob (and the "FILAMENT RETURN SELECTOR" control knob, when testing octal tubes) to the proper position and set "TUBE TEST METER CIRCUIT SELECTOR" switch to "LKG" position, (2) place the tube in the proper socket and connect the top cap terminal, if any, to the "TUBE TEST TOP CAP" pin jack, and (3) depress the switch buttons, one at a time, so as to reveal any inter-elemental leakages or "shorts" by a glow of **BOTH** elements of the neon lamp; if more than one switch button is indicated in the last column, the indicated switch buttons should be depressed and released together. A momentary glow or "flicker" of one element, only, of the neon lamp, indicates a capacity surge rather than a tube defect. Intermittent tube leakages may be revealed by gently thumping the tube as each button is depressed.

**WARNING—FILAMENT RETURN SELECTOR SWITCH MUST BE SET IN CORRECT POSITION otherwise shorting of the transformer and consequent DAMAGE of the equipment may result.**

**QUALITY TEST.** After completing the preliminary adjustment and the leakage test (1) set the "TUBE TEST METER CIRCUIT SELECTOR" switch to the "TUBE" position, (2) set the "QUALITY TEST SELECTOR" control to the position indicated in the next-to-the-last column and (3) depress the button (or buttons) indicated in the last column for observing the meter indication of the tube condition. A short-circuited tube will cause the meter pointer to vibrate violently about its zero position, and if such phenomena is observed, the depressed buttons should be released **IMMEDIATELY.**

## TUBE LIST

**GROUP "A"**
**(Most Popular Tubes)**

| Type | Fil.V. Selctr. | Qlty. Selctr. | Buttons |
|---|---|---|---|
| 01-A | 5.0 | 71.5 | F |
| 24-A | 2.5 | 68.0 | 4 |
| 26 | 1.5 | 69.5 | F |
| 27 | 2.5 | 67.5 | 4 |
| 35/51 | 2.5 | 67.5 | 4 |
| 45 | 2.5 | 66.0 | F |
| 47/PZ | 2.5 | 66.0 | F |
| 71-A | 5.0 | 66.5 | F |
| 80 | 5.0 | 64.5 | F |

**GROUP "B"**
**(Glass Tube List)**

| Type | Fil.V. Selctr. | Qlty. Selctr. | Buttons |
|---|---|---|---|
| 1A4 | 2.0 | 75.0 | F |
| 1A6 | 2.0 | 74.0 | F |
| 1B5/25S | 2.0 | 73.0 | F |
| 1C6 | 2.0 | 69.0 | F |
| **2A3/2A3-H** | **2.5** | **46.0** | **F** |
| 2A5 | 2.5 | 66.0 | 5 |
| 2A6 | 2.5 | 66.0 | 5 |
| 2A7 | 2.5 | 68.0 | 6 |
| 2B6 | 2.5 | 68.0 | 5&6 |
| 2B7 | 2.5 | 68.0 | 6 |
| 2Y4 | 2.5 | 50.5 | 4 |
| 2Z2/G84 | 2.5 | 73.0 | F |
| 5Z3 | 5.0 | 54.0 | F |
| 6A3 | 6.3 | 51.0 | F |

| | | | |
|---|---|---|---|
| 6A4/LA | 6.3 | 66.0 | F |
| 6A6 | 6.3 | 45.5 | 4 |
| 6A7 | 6.3 | 63.0 | 6 |
| 6A8 | 6.3 | 68.5 | F&5 |
| 6B4 | 6.3 | 66.0 | 5&6 |
| 6B7 | 6.3 | 68.0 | 6 |
| 6C6 | 6.3 | 63.0 | 5 |
| 6C7 | 6.3 | 65.5 | 6 |
| 6D6 | 6.3 | 65.5 | 5 |
| 6D7 | 6.3 | 63.0 | 6 |
| 6E6 | 6.3 | 50.0 | 4 |
| 6E7 | 6.3 | 65.5 | 6 |
| 6F7 | 6.3 | 66.0 | 6 |
| 6G7 | 6.3 | 47.0 | 3&5 |
| 6H7 | 6.3 | 66.0 | 6 |
| 6Y5-S | 6.3 | 43.0 | 4 |
| 6Y5 | 6.3 | 45.0 | 4 |
| 6Z3/1v | 6.3 | 48.0 | 3 |
| 6Z4/84 | 6.3 | 43.5 | 4 |
| 6Z5 | 12.6(a) | 44.0 | 4 |
| **12A5** | **12.6(b)** | **66.0** | **5** |
| 12A7 | 12.6 | 43.0 | 4&6 |
| 12Z3 | 12.6 | 41.5 | 3 |
| 12Z5 | 12.6(c) | 37.0 | 3&5 |
| 25Y5 | 25.0 | 47.5 | 3&4 |
| 25Z5 | 25.0 | 37.5 | 3&4 |
| **00A** | **5.0** | **72.0** | **F** |
| 01A | 5.0 | 71.5 | F |
| 1 | 6.3 | 66.0 | 3 |
| 1v/6Z3 | 6.3 | 48.0 | 3 |
| 2S/4S | 2.5 | 72.5 | 4 |
| **10** | **7.5** | **70.0** | **F** |

| | | | |
|---|---|---|---|
| 10-X | 7.5 | 70.0 | F |
| 12-A | 5.0 | 68.0 | F |
| 14 | 14.0 | 67.5 | 4 |
| 15 | 2.0 | 76.5 | 4 |
| 17 | 14.0 | 67.5 | 4 |
| 18 | 14.0 | 59.5 | 5 |
| 19 | 2.0 | 64.0 | F |
| **20** | **3.3** | **81.5** | **F** |
| 22-o | 3.3 | 71.5 | F |
| 22-T | 3.3 | 86.0 | F |
| 24-A | 2.5 | 68.0 | 4 |
| 25S/1B5 | 2.0 | 73.0 | F |
| 26 | 1.5 | 69.5 | F |
| 27 | 2.5 | 67.5 | 4 |
| 29 | 2.5 | 67.5 | 5 |
| **30** | **2.0** | **73.5** | **F** |
| 30-X | 2.0 | 76.0 | F |
| 31 | 2.0 | 72.0 | F |
| 32 | 2.0 | 75.0 | F |
| 33 | 2.0 | 69.0 | F |
| 34 | 2.0 | 70.5 | F |
| 35/51 | 2.5 | 67.5 | 4 |
| 36 | 6.3 | 65.0 | 4 |
| 37 | 6.3 | 66.0 | 4 |
| 38 | 6.3 | 67.5 | 4 |
| 39/44 | 6.3 | 68.0 | 4 |
| **40** | **5.0** | **70.0** | **F** |
| 41 | 6.3 | 61.5 | 5 |
| 42 | 6.3 | 66.0 | 5 |
| 43 | 25.0 | 50.5 | 5 |
| 44/39 | 6.3 | 68.0 | 4 |
| 45 | 2.5 | 68.0 | F |

| | | | |
|---|---|---|---|
| 46 | 2.5 | 66.0 | F |
| 47/PZ | 2.5 | 66.0 | F |
| 48 | 30.0 | 50.0 | 5 |
| 49 | 2.0 | 69.5 | F |
| **50** | **7.5** | **69.5** | **F** |
| 51/35 | 2.5 | 67.5 | 4 |
| 52 | 6.3 | 63.5 | F |
| 53 | 2.5 | 47.5 | 4 |
| 55 | 2.5 | 66.0 | 5 |
| 56 | 2.5 | 66.0 | 4 |
| 56AS | 6.3 | 67.0 | 4 |
| 57 | 2.5 | 63.0 | 5 |
| 57AS | 6.3 | 63.0 | 5 |
| 58 | 2.5 | 62.5 | 5 |
| 58AS | 6.3 | 67.0 | 5 |
| 59 | 2.5 | 66.0 | 6 |
| 59-B | 2.5 | 64.5 | F |
| **64-A** | **6.3** | **64.0** | **4** |
| 64 | 6.3 | 68.5 | 4 |
| 65-A | 6.3 | 65.5 | 4 |
| 65 | 6.3 | 65.5 | 4 |
| 67-A | 6.3 | 63.5 | 4 |
| 67 | 6.3 | 67.5 | 4 |
| 68-A | 6.3 | 66.5 | 4 |
| 68 | 6.3 | 66.0 | 4 |
| 69 | 6.3 | 66.0 | 5 |
| **70** | **6.3** | **73.0** | **5** |
| 71-A | 5.0 | 66.5 | F |
| 75 | 6.3 | 57.0 | 5 |
| 76 | 6.3 | 67.0 | 4 |
| 77 | 6.3 | 57.5 | 5 |
| 78 | 6.3 | 67.0 | 5 |

| | | | |
|---|---|---|---|
| 79 | 6.3 | 45.5 | 4 |
| **80** | **5.0** | **64.5** | **F** |
| 81 | 7.5 | 74.0 | F |
| 82 | 2.5 | 25.5 | F |
| 83 | 5.0 | 15.0 | F |
| 83-V | 5.0 | 39.0 | F |
| G84/2Z2 | 2.5 | 73.0 | F |
| 84/6Z4 | 6.3 | 43.5 | 4 |
| 85 | 6.3 | 62.5 | 5 |
| 85AS | 6.3 | 63.0 | 5 |
| 87-S | 6.3 | 60.0 | 5 |
| 88-S | 6.3 | 63.5 | 5 |
| 89 | 6.3 | 65.5 | 5 |
| 89-RS | 6.3 | 66.0 | 5 |
| 99-O | 3.3 | 83.0 | F |
| 99-T | 3.3 | 77.0 | F |
| **182-B** | **5.0** | **68.0** | **F** |
| 183/483 | 5.0 | 67.0 | F |
| 205-D | 5.0 | 69.5 | F |
| 257 | 5.0 | 67.5 | F |
| 401 | 3.3 | 70.0 | F&TC |
| 403 | 3.3 | 68.0 | F&TC |
| 482-A | 5.0 | 67.5 | F |
| 482-B | 5.0 | 66.0 | F |
| 483/183 | 5.0 | 67.0 | F |
| 484 | 3.3 | 62.5 | 4 |
| 485 | 3.3 | 66.0 | 4 |
| 486 | 3.3 | 72.0 | F |
| 585/586 | 7.5 | 69.5 | F |
| 950 | 2.0 | 68.0 | F |
| 951 | 2.0 | 70.0 | F |
| **AF** | **2.5** | **18.5** | **F** |

| | | | |
|---|---|---|---|
| AG | 5.0 | 14.5 | F |
| GA | 5.0 | 66.0 | F |
| LA/6A4 | 6.3 | 66.0 | F |
| PA | 6.3 | 66.0 | 4 |
| PZ/47 | 2.5 | 66.0 | F |
| PZH | 2.5 | 60.0 | 6 |
| WUND-A | 2.5 | 68.0 | 5 |
| WUND-AA | 6.3 | 66.0 | 5 |

**GROUP "C"**
**(Octal (Metal) Tubes)**

| Type | Fil.V. Selctr. | Fil.Rt. Slctr. | Qlty. Slctr. | But. tons |
|---|---|---|---|---|
| 5Y3 | 5.0(d) | 8 | 66.0 | F |
| 5Z4 | 5.0 | 8 | 40.0 | F |
| 6A8 | 6.3(d) | 7 | 61.0 | 8 |
| 6B6 | 6.3(d) | 7 | 64.0 | 8 |
| 6C5 | 6.3(d) | 7 | 65.0 | 8 |
| 6D5 | 6.3(d) | 7 | 66.0 | 8 |
| 6F5 | 6.3 | 7 | 63.0 | 8 |
| 6F6 | 6.3(d) | 7 | 66.0 | 8 |
| 6H6 | 6.3 | 7 | 88.5 | 4&8 |
| 6J7 | 6.3 | 7 | 65.0 | 8 |
| 6K7 | 6.3(d) | 7 | 62.5 | 8 |
| 6L7 | 6.3(d) | 7 | 53.0 | 8 |
| 6P7 | 6.3(d) | 3 | 67.0 | 8 |

**GROUP "D"**
**(Future Tubes)**

| Type | Fil.V. Selctr. | Fil.Rt. Slctr. | Qlty. Slctr. | But. tons |
|---|---|---|---|---|
| | | | | |
| | | | | |

**(a) Throw the "6Z5" tumbler switch from the "NORMAL" to the "6Z5" position during the test.**
**(b) Throw the "12A5" tumbler switch from the "NORMAL" to the "12A5" position during the test.**
**(c) Throw the "12Z5" tumbler switch from the "NORMAL" to the "12Z5" position during the test.**
**(d) Throw the "12A5" and "12Z5" tumbler switches from the "NORMAL" to the "12A5" and "12Z5" positions during the test.**

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