

NON-WESTERN ELECTRIC ELECTRON TUBE TEST DATA

KS-15750 L1 TUBE TESTER

1. GENERAL

- 1.01** Methods for making tests with the KS-15750 L1 tube tester are covered in Section 100-636-101.
- 1.02** This section is reissued to update information with respect to roll chart procurement and to eliminate pricing information.
- 1.03** As of the date of this section, the latest issue of the roll chart giving information for this tester is code No. 3200-290, dated 1972. It may be obtained in accordance with usual Company routines directly from the Hickok Electrical Instrument Company, 10514 Dupont Avenue, Cleveland, Ohio, 44108. The KS model and serial numbers of the tester involved should be included with the order. *The importance of having the testers equipped with the latest issue of the roll chart needs to be emphasized, since experience to date has indicated that the number of charts ordered seldom comes anywhere near the number of sets which have been shipped.*
- 1.04** Obsolete tubes of other than Western Electric Company manufacture which do not appear on this chart may be found on a special addendum list of test data furnished with the instruction booklet delivered with the tester.
- 1.05** Subminiature tubes of the battery type tested at 0.6 or 1.1 volts when new are sometimes thermionically instable (erratic meter reading) without previous production stabilization. Accordingly, Gm tests should be made rapidly, noting maximum values observed after an interval of not more than 10 seconds. Repeat tests with the filament turned off and cooled between tests may be made to obtain reliable indicated Gm readings. For the same reason, diode tests should be limited to less than 5 seconds.
- 1.06** Cathode activity tests (@) are not required for subminiature low-filament voltage types (1.1 or 0.6 volt FIL) and therefore do not appear on the roll chart.
- 1.07** Cases may occur where, although a LOW 6000 micromhos range with PLT-SCRN VOLTS-LOW is specified, Gm readings observed below 600 micromhos should preferably be read on the 600 micromhos range; eg, 1AG4 type.
- 1.08** Grid current tests sometimes require special bias operating conditions, which differ from the Gm test. In such cases they are given under NOTATIONS; eg, 6BF7, 6021.
- 1.09** For test sets having serial numbers up to 800, it is advantageous to install 3-unit replaceable socket sets (socket extenders) having ferrite ceramic beads. This is particularly important where tests are to be made on high Gm tubes, including certain subminiature types such as the 5639. Such replaceable socket sets may be obtained from the Hickok Electrical Instrument Company under their code No. 1050-75, as indicated in 4.13 of the main section. The set provides for the octal socket and the 7- and 9-pin miniature sockets.
- 1.10** The 5639 subminiature tube is a slow heating tube, and may take two or three times as long to reach a stable reading as compared to other 6.3-volt heater types.
- 1.11** In basing inline submarine tubes, the red dot lead (designating pin 1) should always be inserted in the corresponding red dot, #1, position of the test socket or adapter regardless of the number of tube leads.
- 1.12** In a few cases standard subminiature tubes have been modified by the set manufacturer to provide an offset pin arrangement. Tubes with offset pins cannot be tested with the selector settings shown on the roll chart. They require specially wired adapters. These adapters are not being standardized and should be made up locally when needed.

1.13 Codes 2E41 and 2E42 are tube codes which are now obsolete. The 2E41 with long leads should be tested as the 1AG5, and with short leads it should be tested as the 2E42. The data in Table A apply to the 2E42, and special attention is called

to Note 2 under the title "Subminiature Electron Tube Test Data" on the roll chart. It is suggested that where this test information is needed, it be written below the CK6029 tube data on the roll chart.

TABLE A

TUBE TYPE	FIL	SELECTORS	BIAS VOLTS	FUNCT OR SHUNT	PRESS	MIN TRANSCOND	NOTATIONS
2E42	1.1	EW-5120-3	6.5	600	P4	165	LOW SHORTS TEST. Directly in Panel Socket. (Early sets need Vector 1175 Adapter.)
2E42	1.1	EW-0300-0	0	SH-0	P1	—	Diode Test. OK above 500 on 3000 scale.