

TM 11-6625-274-35

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

FIELD AND DEPOT MAINTENANCE
MANUAL

TEST SETS, ELECTRON TUBE TV-7/U,
TV-7A/U, TV-7B/U, AND TV-7D/U

This reprint includes all changes in
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*This manual, together with TM 11-6625-274-12, 14 June 1960, supersedes TM 11-5083, 29 September 1953, including C1, 2 September 1955; C2, 8 February, 1956; C3, 1 April 1959; and C4, 26 August, 1959.

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CHAPTER 1

THEORY

Section I. GENERAL

1. Scope

a. This manual covers field and depot maintenance for Test Sets, Electron Tube TV-7/U, TV-7A/U, TV-7B/U, and TV-7D/U. It includes instructions appropriate to fourth and fifth echelons for troubleshooting, testing, calibrating, and repairing the equipment; and lists the tools, materials, and test equipment required for fourth and fifth echelon maintenance. Detailed functions of the equipment are covered in paragraphs 3 through 12.

b. The complete technical manual for this equipment includes three other publications: TM 11-6625-274-12, TM 11-6625-274-12P, and TM 11-6625-274-35P.

c. Forward comments concerning this manual to the Commanding Officer, U. S. Army Signal Materiel Support Agency, ATTN: Publications Engineering Department, Fort Monmouth, N. J.

Note. For applicable forms and records, see paragraph 2, TM 11-6625-274-12

2. Internal Differences in Models

a. An antiparasitic bead' (fig. 1) made of ferrite is placed on the lead soldered to terminal 5 of tube test socket X105 and on the lead soldered to terminal 2 of tube test socket X106 in the TV-7B/U. Antiparasitic beads are also placed on the leads soldered to all tube test sockets of the TV-7D/U, except on the sockets and the terminals listed below.

- (1) Tube test sockets X109 and X110.
- (2) Pins 1 and 4 of tube test socket X103.
- (3) Pins 1 and 4 of tube test socket X105.
- (4) Pin 8 of tube test socket X111.

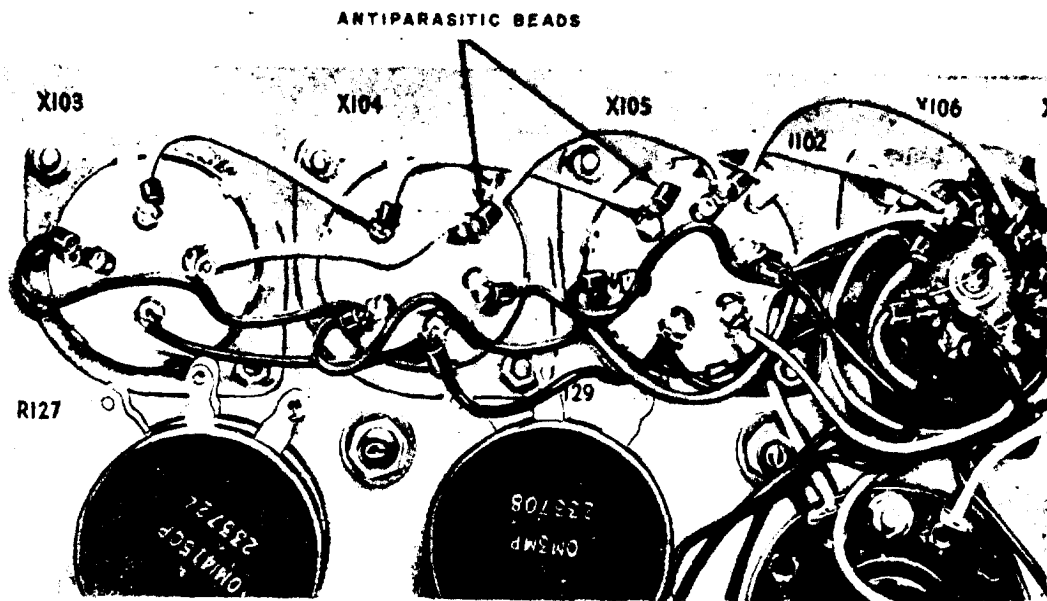
b. Other internal differences are listed in the chart below. For external differences, see TM 11-6625-274-12.

Component	Test set, electron tube				
	TV-7/U	TV-7A/U		TV-7B/U	TV-7D/U
		Serial numbers 1 through 1200	Serial numbers 1201 through 9492		
R113	41 ohms, fixed	41 ohms, variable	1,000 ohms, variable	1,000 ohms, variable	1,000 ohms, variable
R114	280 ohms, fixed	280 ohms, variable	280 ohms, variable	350 ohms, variable	350 ohms, variable
R115	41 ohms, fixed	41 ohms, variable	1,000 ohms, variable	1,000 ohms, variable	1,000 ohms, variable
R117, R123, R124, and R125	Mounted on E106	Mounted on E106	Mounted on E106	Mounted on resistor mounting board	Mounted on resistor mounting board
R124	245K ohms	245K ohms	245K ohms	225K ohms	225K ohms
R130	8,500 ohms, no C tap	8,500 ohms, no C tap	9,500 ohms, C tap used	9,500 ohms, C tap used	9,500 ohms, C tap used
R131 and R132	Not used	10,000 to 20,000 ohms*	10,000 to 20,000 ohms*	Not used	Not used
R133	Not used	680 ohms	Not used	Not used	Not used
R134 (45 ohms)	Not used	Not used	Used	Designated as R135	Designated as R135

*The value of resistors R131 and R132 (if used), which ranges from 10,000 to 20,000 ohms, is determined in production.

Component	Test set, electron tube				
	TV-7/U	TV-7A/U		TV-7B/U	TV-7D/U
		Serial numbers 1 through 1200	Serial numbers 1201 through 9492		
R134 (40,000 ohms)	Not used	Not used	Not used	Used	Used
R135 (45 ohms)	Not used	Not used	Used	Designated as R137	Designated as R137
R137	Not used	Not used	Not used	45 ohms	45 ohms
R139	Not used	Not used	Not used	Not used	350 ohms, variable
R140	Not used	Not used	Not used	Not used	2,700 ohms
R141	Not used	Not used	Not used	Not used	47,000 ohms
CR101	Mounted on E106 or S110	Mounted on S110	Mounted on S110	Mounted on S110	Mounted on S110
S109	6 sections	6 sections	6 sections	6 sections	8 sections
V102	5Y3GT ^b	5Y3WGT ^b	5Y3WGT ^b	5Y3WGTA	5Y3WGTA

^bWhen replacing, use a 5Y3WGTA.



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Figure 1. Antiparasitic beads (used on TV-7B/ U and TV-7D/U), typical application.