Save Eb

SERVICING CENTER TESTS USING 5U (J98705U) TEST SET
J98703AC DEVIATION REGULATOR—N CARRIER SYSTEM
J98703AE AMPLIFIER UNIT TESTS

The amplifier unit of a deviation regulator receives signals at high group frequencies (176-264 kc) from the regulating networks and amplifies them by an amount equal to the flat loss of the regulating networks. A pickoff amplifier delivers the twelve carrier signals from the output to the regulating circuits without disturbing the energy levels at the amplifier output. The tests outlined herein are designed to check the operation of the line amplifier, and pickoff amplifier of the amplifier unit.

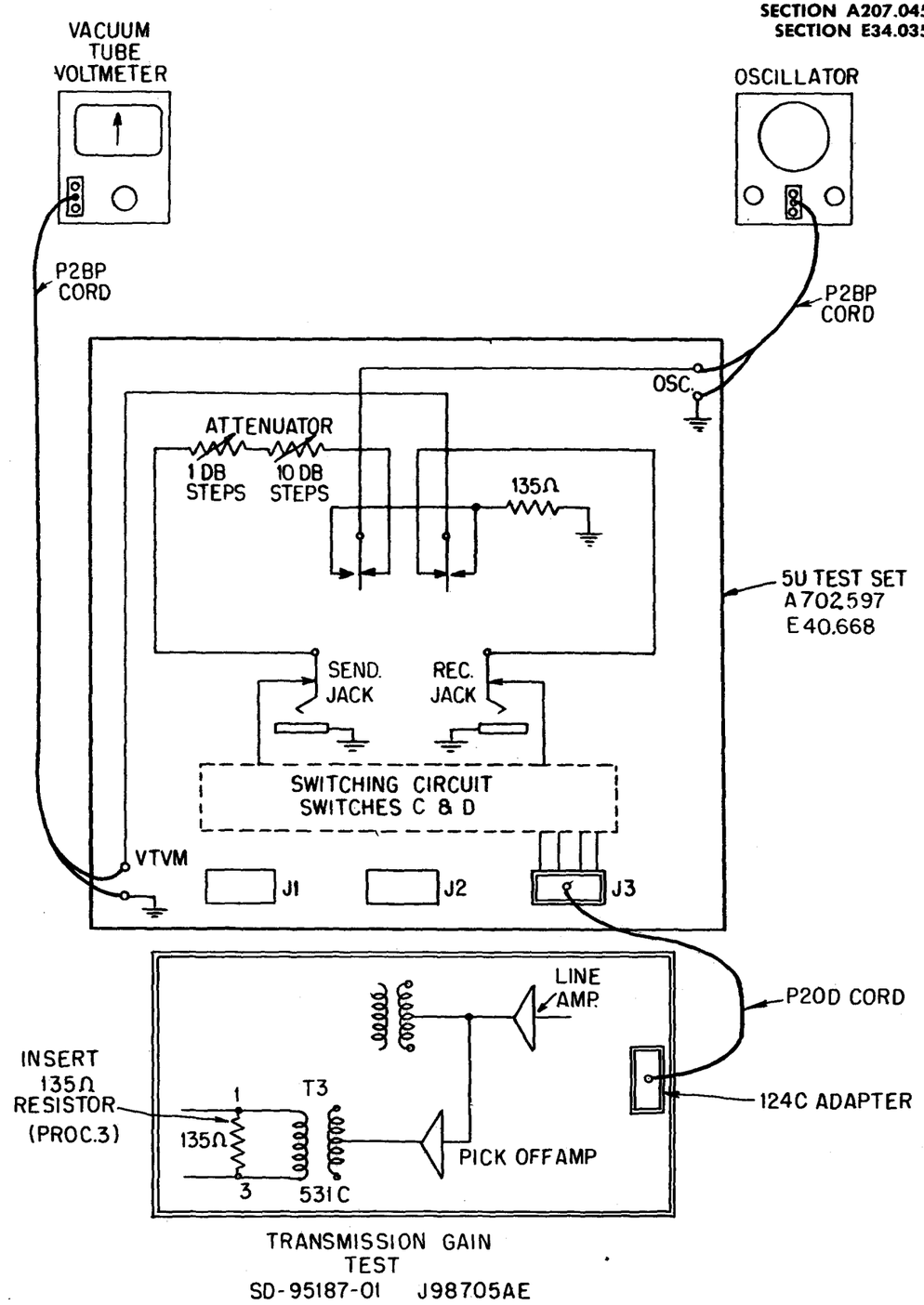
APPARATUS:

1—Vacuum Tube Volmeter
1—Oscillator
1—P2OD Cord
2—P2BP Cords
1—124C Adapter
1—135-Ohm Resistor (145A)

STEP	PROCEDURE
1	Switches A and B on 5U test set on OFF position.
2	Connect amplifier, oscillator, and vacuum tube voltmeter to 5U test set as shown on associated sketch.
3	Adjust filament and plate voltage. ***Requirement:*** Filament 38.5 volts Plate 128-130 volts
4	Make tests on Chart 1.
5	Connect a 135-ohm resistor between terminals 1 and 3 of T3 as shown on associated sketch for Trans Gain Test.
6	Remove 135-ohm resistor between term. 1 and 3 of T3 for Pickoff Amplifier Gain.

CHART 1

PURPOSE OF TEST	SWITCH POS C	SWITCH POS D	ATT SET (DB)	CAL LEV (DB)	OSC FREQ (KC)	TEST LIMITS (db) MIN	TEST LIMITS (db) MAX	TS TST	TEST CONDITIONS AND REMARKS
1.									See Test Proc. 5, Page 1.
TRANS GAIN TEST	18	11	0	+9	176	+3.2	+6.2		Measured value between these limits is M value.
					264	M −1.2	M +0.8		
	12	11	0	+9	176	+3.2	+6.2		Measured value between these limits is N value.
					264	N −1.2	N +0.8		
2.									See Test Proc. 6, Page 1.
PICKOFF AMP GAIN	11	10	2	+9	176	M +1.5	M +3.5		Measured value between these limits is P value.
					264	P −1.2	P +0.8		



TRANSMISSION GAIN TEST
SD-95187-01 J98705AE