

DATE SH. <u>1</u> OF <u>3</u>	TMC SPECIFICATION NO. S-139-A	
COMPILED BY A.J.J.	TITLE: LFA - PRODUCTION TEST	JOB109
APPROVED <u>A.J.J.</u>		

PURPOSE:

The purpose of this specification is to establish a test procedure for production testing of the L.F.A.

EQUIPMENT REQUIRED:

- 1-Signal Generator operating at 2 mc having an adjustable output of 2.5 volts or better.
- 2-H.P. 410-B Voltmeter or equivalent.
- 3-Simpson Multimeter Model #260 or equivalent.
- 4-C.R.O., Dumont 304-H or equivalent.
- 5-75 ohm, 10 Watt non-inductive load.
- 6-1-2.05mc, 1-2.25mc, 1-2.5mc Crystal.

PROCEDURE:

Insert tubes 6C4, 6BE6, 6C4, 12AT7, 6AQ5, 6AQ5, 5V4G, 0A2 into V101, V102, V103, V104, V105, V106, V107, V108 respectively. Insert crystals, 2.05mc, 2.25mc, 2.5mc into Y101, Y102, Y103 respectively. Connect the 75 ohm load between J103 and ground. Turn R-111 and R-112 full clockwise.

CHECK:

Oven Cycle
Power and Oven Indicators
Line voltage to be 110V.

TEST:

- 1-Perform A.C. & D.C. voltage checks and data recorded on data sheet.
- 2-Meter & Output test taken and data recorded on test sheets.
- 3-Distortion test taken and test sheet signed.

Copies of Data Sheets should be prepared on ditto forms, from the sample copies shown in this specification.

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TEST DATA SHEETS

Test-1

A.C. Voltage: *

V101-Pin 3 _____ (5.8 to 6.3) _____ Vac

Test-1

D.C. Voltage: *

TEST POINT	NORMAL VALUE	MEASURED VALUE
V101- Pin 1	79 to 84 V.	_____ V.
V102- 5	171 to 189 V.	_____ V.
V103- 1	180 to 299 V.	_____ V.
V104- 1	192 to 218 V.	_____ V.
V105- 6	192 to 218 V.	_____ V.
V105- 5	228 to 252 V.	_____ V.
V106- 5	228 to 252 V.	_____ V.
V108- 1	143 to 158 V.	_____ V.
V107- 2	290 to 320 V.	_____ V.
V107- 8	290 to 320 V.	_____ V.

* ALL VOLTAGE READINGS TAKEN WITH REFERENCE TO GROUND AND A LINE VOLTAGE OF **110 VAC.**

Test-2

Output and Meter Test:

(a) Feed a 2 Mcs Signal into J102 of 2.5 to 3.5 Volts in amplitude. Connect the VTVM to J103 and tune Z101 for maximum output.

(b) Adjust the input Signal level to obtain an output of 20V @ J103 when the crystal switch is at position 1 (50 Kc). Do not reset input level during the following test:

Turn crystal switch through all three positions and take these readings:

CRYSTAL SWITCH POSITION	OUTPUT	
	NORMAL	MEASURED
1	20 V.	
2	18.-22 V	_____ V.
3	16.-22 V	_____ V.

	METERS	
	NORMAL	MEASURED
1	.80-.9 ma	_____ ma
2	.80-.9 ma	_____ ma
3	.70-.85 ma	_____ ma

Reject units which do not fall in the normal limits.

DATE _____

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Test-3

Distortion:

Connect the C.R.O. at J103 and note that there is no visible distortion or flattening off at 50 Kc with 20V output.

TESTED BY: _____

DATE: _____

ACCEPTED: _____ REJECTED: _____