

DATE 7/17/56

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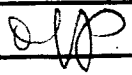
COMPILED BY

TMC SPECIFICATION NO. S-301

TITLE: PRODUCTION TESTING OF MODEL RTP

JOB E271P

APPROVED



COMPLETE INSTRUCTIONS

for  
the

PRODUCTION TESTING of

the

MODEL RTP

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TITLE: PRODUCTION TESTING OF MODEL RTP

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1. Purpose and Description:

SEE: Instruction Book

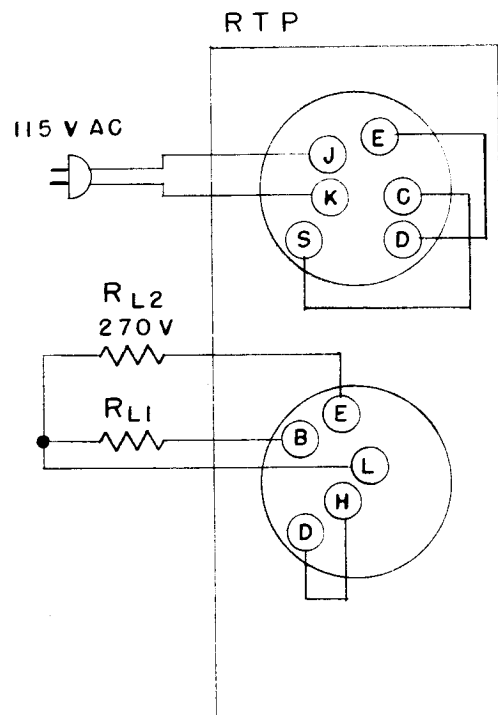
2. Test Equipment Required:

- a. Volt Ohmmeter, Simpson, Model 260 or equivalent
- b. AC Voltmeter, Heathkit, Model AV-2
- c. Load Resistor,  $2500\Omega$ , 160W
- d. Load Resistor,  $1400\Omega$ , 80W

3. General Instrument Layout:

AC VOLTMETER  
HEATHKIT MODEL  
AV-2

VOLT OHMMETER  
SIMPSON MODEL  
260  
OR EQUIVALENT



$R_{L1} = 2,500\Omega$ , 160W

$R_{L2} = 1,400\Omega$ , 80W

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#### 4. Test Instructions:

- A. Proceed as outlined in Test Sequence and Procedure paragraph #5 to follow.
- B. Fill in blanks on Report Sheet, in the first part only, rejecting those units which do not meet the specifications stated herein.
- C. Sign Report Sheet and submit it to your supervisor.

#### 5. Test Sequence and Procedure:

##### A. General Inspection

- 1. Inspect the unit for obvious Mechanical Imperfections.
- 2. Inspect the unit for obvious Electrical errors.
- 3. Inspect all relays.

##### B. Continuity Test

- 1. J601
  - a. Place Final Plate switch into ON position.
  - b. Place Mode switch into Phone position,
  - c. Take following readings:

PIN #	Continuity to Ground	Continuity to
A	Short	-----
B	Short	-----
I	0-30 ohms	P601, 25K--35K
L	Open	Pin 13 & 14 of E602, Short
P	45-55K	-----
S	-----	Pin X of J602, Short
T	Open	Pin 15 & 16 of E602, Short
U	25-35K	Pin B of J602 0 -- 1000 dims

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PIN #	Continuity to Ground	Continuity to	
V	Open	Pin F of J602 Short	Open circuit to Pin F when Mode Switch is in any other position
W	Open	Pin I of J602, Short	
X	Short	-----	Open circuit when Mode-Switch is in CW-FS pos.

2. J602

1. Pin #W Relative to Ground -- Open Circuit.
2. Pin #R short relative to Ground when Mode Switch is in position "PHONE" and "TUNE".

Open circuit relative to ground  
in CW-FS position.

3. Pin #C short relative to ground when Mode-Switch in Phone.  
Open circuit relative to ground when Mode-Switch in Tune  
or CW-FS position.

C. Transmitter Plates Relay Test

Caution: Set the filament line adjust switch to the extreme counter-clockwise position before applying power.

1. Connect the power to the unit as shown in paragraph #3, General Instrument Layout.
2. Turn on the Main Circuit Braker, wait one minute to allow the time delay Relay to close.
3. Observing the relay, K602, flip the Transmitter Plates' switch on and off a few times. The Relay, K-602, must follow with no or very little backlash.
4. Rotate the Mode Switch. The Transmitter plates' pilot light must go off when the switch is not in an active position (CW-FS, TUNE or PHONE.)

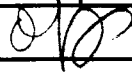
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D. Voltage Test

- a. Observe if Final Plate Pilot Light is ON.
- b. Rotate the Filament Line. Adjust step switch until Filament line meter will read 115V.
- c. Place the Final Plate Switch into operate position.
- d. Set the Mode Switch to CW-FS position.
- e. Take following Readings, using Simpson Model 260, or equivalent.

From	To	Volts	Remarks
Pin "B" of J602	Ground	450-550 VDC	
Pin "E" of J602	Ground	240-300 VDC	
Pin "P" of J601	Ground	240-300 VDC	
Pin "A" of J602	Ground	240-300 VDC	Must be no Voltage when Transmitter Plates switch is in stand-by/remote pos.
Pin "F" of J602	Ground	450-550 VDC	No Voltage if either Transmitter Plates or Final Plate switch is OFF.
Pin "F" of J602	Ground	225-275 VDC	Mode Switch in TUNE position. No voltage if either Transmitter Plates or Final Plates switch is OFF.
Pin "F" of J602	Ground	0	Mode Switch in PHONE position.
Pin "U" of J602	Ground	-205-- -215 VDC	Voltage Must be unchanged with Transmitter plates switch in either position.

Chart continued on pag #7

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From	To	Volts	Remarks
Pin "N" of J602	Ground	-100-- -170 VDC	Voltage Must be unchanged with Transmitter plates switch in either position.
Pin "M" of J601	Pin "T" of J602	110-120 VAC	No voltage when F601 (Oven Fuse) is removed.
Pin "M" of J601	Pin "X" of J602	---	Voltage is variable by the filament adjust and must correspond to the readings of the Filament line meter.
Pin "J" of J602	Ground	6.0-8.0 VAC	
Pin "W" of J602	Pin "K" of J602	6.0-8.0 VAC	
Pin "W" of J602	Pin "V" of J602	12.0-16.0 VAC	

E. Hum Level Test

1. Place the Transmitter Plates switch into operate position.
2. With AC Voltmeter at pin B of J602 measure the voltage. Voltage must not be greater than 1.5V RMS.
3. With AC Voltmeter at pin E of J602 measure the voltage. Voltage must not be greater than 1V RMS.

Units which meet the specifications above are not ready for shipment. Final Test must be given in the assigned Cab/Frame as described in TMC Specification S-302.

One copy of Report Sheet must accompany each Model RTP.

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## REPORT SHEET Model RTP

<u>Part I</u>		<u>Accept</u>	<u>Reject</u>
TEST A	General Inspection	_____	_____
TEST B	Continuity Test	_____	_____
TEST C	Transmitter Plates Relay	_____	_____
TEST D	Voltage Test	_____	_____
TEST E	Hum Level Test	_____	_____

Accepted \_\_\_\_\_ Date \_\_\_\_\_

Rejected \_\_\_\_\_

Tested By: \_\_\_\_\_

### Part II

The sensitivity of P.A. Plate overload is set at approx. \_\_\_\_\_ Ma.

The sensitivity of P.A. Screen Grid overload is set at approximately  
\_\_\_\_\_ Ma.

Serial Number \_\_\_\_\_

Date: \_\_\_\_\_

Tested By: \_\_\_\_\_



