DATE_11_18_60
SH. _____OF16
COMPILED BY
O.P. TITLE:

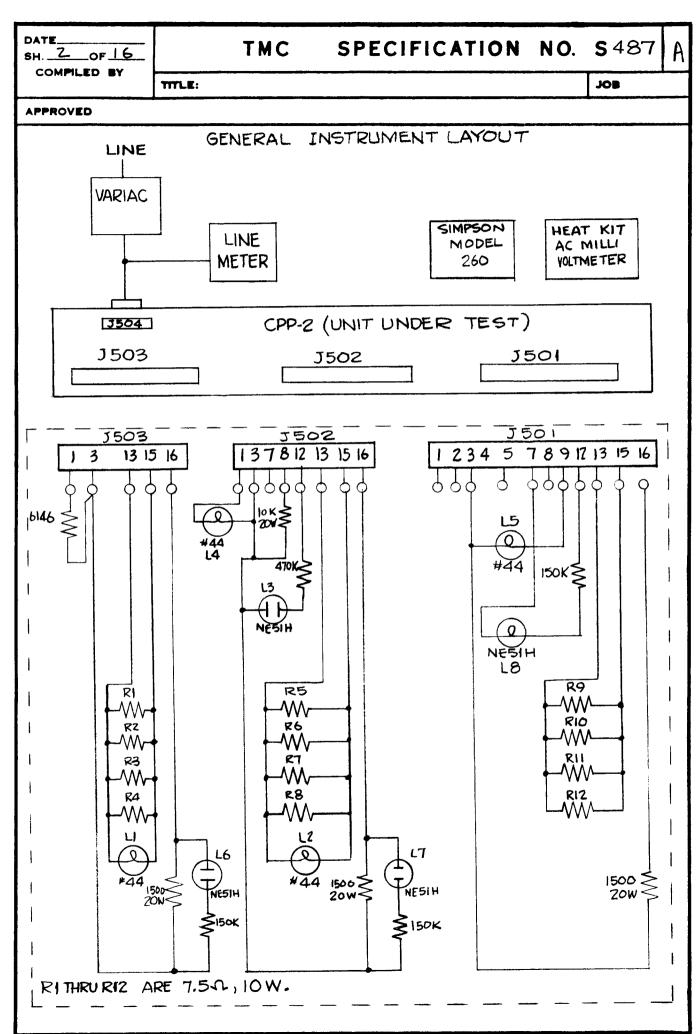
APPROVED

TMC SPECIFICATION NO. S 487 A

COMPLETE TEST INSTRUCTIONS

FOR

TMC MODEL CPP-2



DATE 11-18-60 SH. 3 OF 16		TMC	SPECIFICATION	NO.	S	487	A
O.P.	TITLE:				JOB	1	

A. GENERAL INSPECTION

- 1. Inspect the unit for obvious mechanical errors.
- 2. Inspect the unit for obvious electrical errors.
- 3. Check if CR 501 and CR 502 have been properly inserted.
- 4. Set Voltage Adjust pot., R514 approx. in the center.

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COMPLED BY	TITLE:				JOB	

- B. Regulating Transformer T502.
- 1. Check all terminal connections at the transformer.

NOTE: For the test purposes it must be wired for 60 cps.

Damage to the transformer will otherwise result.

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COMPILED BY	TITLE:			JOB		

C. OVEN Circuitry.

- 1. Connect Test loads as shown in General Instrument Layout.
- 2. Place Power Switch in "stand-by" position.
- 3. Set Variac to 115v/60 cps.
- 4. The Stand-By pilot light must light. (The power-ON light-OFF).
- 5. With AC Voltmeter, measure voltage at J-502 (on the Test Jig) across terminals 7 and 12; it must be 115 VAC.
- 6. The L8 must light.
- 7. Place Power Switch in "Power". Position.
- 8. Observe L3, L5 and L6; this light must go on after approx. 50 seconds.
- 9. With AC Voltmeter measure Voltage at J502 across terminals 7 and 12; it must be 115 VAC.
- 10. With voltmeter still connected to terminals 7 and 12 at J-503, remove Oven Fuse, F-502; the voltage must disappear. Replace the fuse.

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D. Filament Voltage Regulation.

6.3 VAC

- 1. The L1 and L2 must light.
- 2. Connect AC Voltmeter to terminals 13 and 15 at J501; it must be 6.0 6.5 VAC. Record this voltage in the Report Sheet.
- 3. Leave the meter connected as in step 2; set Variac for 100 VAC input, the meter must still read the same voltage as in step 2.
- 4. Set Variac for 130 VAC input, the meter must still read the same voltage as in step 2.
- 5. Set Variac for 115 VAC input.

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TITLE:					•							•										

E. 6.3v DC

- 1. The L4 and L5 must light.
- 2. Connect DC voltmeter to terminals 1 and 3 at J503 the voltage must be -5.8 to -6.8 volts; record this voltage in the Report Sheet and leave the voltmeter connected.
- 3. Set Variac to 100 VAC input; the DC Filament Voltage must not change by more than 0.1 volt below recorded voltage.
- 4. Set Variac to 130 VAC input; the DC Filament Voltage must not change by more than 0.1 volt above the recorded voltage.
- 5. Reset Variac for 115 VAC.

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F. B+ Voltage Regulation.

- 1. The L5 and L7 must light.
- 2. Connect Voltmeter to terminals 15 and 3 at J501.
- 3. Set Voltage Adjust pot., R514 for 160v DC output, and leave the meter connected.
- 4. Set Variac to 100 VAC input. The DC Voltage must not below 156v DC.
- 5. Set Variac to 130 VAC input. The DC Voltage must not rise above 164vDC
- 6. Reset the Variac to 115 VAC.

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G. Power Amplifier B+ Voltage.

1. Connect Voltmeter to terminals 8 and 3 at J502; the voltage must be 200 - 250 v DC.

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H. Scope B+ Voltage.

1. Connect Voltmeter to terminals 8 and 3 at J501; the voltage must be 270 - 400v DC.

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O.P.	TITLE:				JOI	•	

I. Scope B- Voltage.

- 1. Connect Voltmeter to terminals 5 and 3 at J501; the voltage must be 400 500 v DC.
- 2. Remove Scope Fuse, F504, the voltage must disappear.
- 3. Replace the fuse.

DATE 11-18-60 SH. 12 OF 16		TMC	SPECIFICATION	NO.	S	487	A
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J. B- Regulated Voltage.

1. Connect Voltmeter to terminals 4 and 3 at J501 the voltage must be 70 - 80 v DC.

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K. Scope Filament Voltage.

1. With AC Voltmeter measure voltage between terminals 1 and 2 at J501. It must be 6.0 - 7.0 v AC.

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O.P.	TITLE:	i- i i			JOB	

L. Ripple Test.

1. With AC Mili-voltmeter measure following voltages in respect to terminal 3.

J - 501

Terminal	AC Ripple Voltage
15	.00101 VAC
9	.011 VAC
8	.1 - 1 VAC
5	.0212 VAC
4	.00101 VAC

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NO LOAD

	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5	PIN 6	PIN 7	PIN 8
V501	5.4	38 0	150	5.4	380	160	6.3 VAC	5.3 VAC
V502	5.4	380	160	5.4	380	160	6.3 VAC	6.3 VAC
V503		380		450 VAC		450 V AC	**************************************	380
V504	-1.6	0	6.3 VAC	ნ.3 VAC	5.2	160	0	war shirt da are
V505	0	-70		-70	0		-70	

FULL LOAD								
	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5	PIN 6	PIN 7	PIN 8
V501	115	300	165	115	300	165	6.3 VAC	6.3 VAC
V502	115	300	165	115	300	165	6.3 VAC	6.3 VAC
V503		310		415 VAC		415 V A C	•	310
V504	-3.6	0	ó.3 VAC	6.3 VAC	110	150	0	u.====
V505	0	-70		-70	0	emelopedame	- 70	

ALL VOLTAGES EXCEPT FILAMENT VOLTAGES MEASURED TO CHASSIS GROUND.

ALL VOLTAGES ARE #10%.

DATESH. 16 OF 16 COMPILED BY		TMC	SPECIFICATIO	N N	О.	s	487	A
		TITLE:				JOB		
APPROVE	(0			<u> </u>				
		CPP-2 TEST	REPORT SHEET					
Α.	GENERAL	INSPECTION:		ACCEPT	ED			
В.	REGULATI	NG TRANSFORMER, T 502	2:					
C.	OVEN CIR	CUITRY						
D.	6.0 Must		ATION: O.1 VAC. from recorded (115 VAC input)					··+)
В.	DC FILAMI	ENT VOLTAGE REGULATION -5.8 to -6.8 VDC not vary more than the them that the them the the the them the them the them the them the them the them the the the the the them the		value	 at 11	15VAC		:
F.	100 Y 115		(160 - 4VDC) (160 <u>+</u> OVDC) (160 + 4VDC)					
G.	POWER AM	PLIFIER B+ VOLTAGE (200 - 250 VDC)		- 1-1-1-1-1				
Н.	SCOPE B+	VOLTAGE: (270 - 400 VDC)						
I.	SCOPE B-	VOLTAGE: (-400 to-500 VDC	3)	•				
Ј.	B- REGULA	ATED VOLTAGE: (-70 to -80 VDC)			 -			
К.	SCOPE FIT	LAMENT VOLTAGE: (6.0 - 7.0VAC)						
L.	(D.C. (Powe (Scop	VAC B+) (.001 . Filament) (.01 er amplifier B+) (.1 pe B-) (.02-	*					

REVISION SHEET THE TECHNICAL MATERIEL CORP. S 487 MODEL _____ PROJECT NO _____ DATE REV. PAGE EMN# DESCRIPTION CHK. APP. Deleted Less than .001 and added .001 - .01 VAC 14 11-21-6b 16 11-28 60 Revised Sheet. 8/8/67 A 7,16 18449 Revised per EMN