

TMC SPECIFICATION

NO. S 1241

REV:

COMPILED:

CHECKED:

APPD:

SHEET

OF

TITLE:

J. D. Marco
9/17/70

TEST PROCEDURE

FOR

RTPH-3,4

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SHEET 1 OF 5

TITLE: TEST PROCEDURE FOR RTPH-3, 4

I. EQUIPMENT REQUIRED

- A. VOM, Simpson Model 260, or equivalent.
- B. Oscilloscope, Tektronic (dual trace), or equivalent.
- C. Electronic Counter, Hewlett-Packard 5244, or equivalent.
- D. DDDR-10() Remote Test Set
- E. CK1401, 02, 03, 04, 05 and CK1406 Schematic Diagrams.
- F. CH 801 Timing Chart

II. PRELIMINARY ELECTRICAL TESTS

CAUTION: Be sure AC power is removed from the RTPH-3,4.

- A. Connect ohm-meter across AC input of unit. Be sure fuses F1 and F2 are in place.
- B. Set AC switch S1 to ON. Continuity should exist across the AC input (approximately 4 ohms). Removing either F1 or F2, or setting S1 to OFF will break continuity.
- C. Continuity should not exist between AC leads and ground. Set S1 to OFF and remove ohm-meter from unit.
- D. Record preliminary Electrical Test on Test Data Sheet.

III. POWER SUPPLY VOLTAGE CHECKS

- A. Insert PC-378/A-4601 into A1 and Connect AC power to unit.
- B. Set S1 to ON. Power light DS1 will light. Removing either fuse will cause the power light to go out.
- C. Meter the voltage levels at test points +12V and -12VDC. Voltages should be as indicated ± 1 VDC. Record on Test Data Sheet.
- D. Monitor TP +12 and jumper TP+12 to ground. Remove ground. Voltage level should return to +12VDC. Repeat for test point -12VDC. Record on Test Data Sheet.
- E. Monitor TP +12 with the high gain scope. The ripple present on TP +12 should be no more than 20 millivolts peak to peak. Repeat for test point -12VDC. Record on Test Data Sheet.

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- F. Set AC power switch S1 to OFF. Connect scope probe to DC reset test point.
- G. Set AC power switch S1 to ON. Level on DC reset test point should rise to approximately +7VDC and then fall and remain at approximately -6 volts. Record on Test Data Sheet.

IV. MEASURE THE FOLLOWING POINTS FOR VOLTAGES AND GROUNDS:

CONNECTOR	PIN CONNECTIONS		
	+12VDC	-12VDC	GRD
A2	20	4	1,22,A,Z
A3	20	4	1,22,A,Z
A4	20	4	1,22,A,Z

Set the AC power switch S1 to OFF.

V. PROGRAM TEST:

PC-333/A-4518

- A. Insert PC-333/A-4518 into A3 and set AC power ON.
- B. Monitor TP3 with the scope and observe a free running "clock".
- C. Connect frequency counter to TP8 and adjust R1 for 27.00* milliseconds (100 wpm), \pm 0.05 milliseconds. Set AC power OFF. Record on Test Data Sheet.
- D. Insert PC-375/A-4598 into A4 and PC-290/A-4453 into A5. Set AC power ON.
- E. Monitor TP3 on PC-333/A4518 with scope probe.
- F. Depress any pushbutton and observe the "clock" pulses \pm start and then stop (approximately 135 milliseconds, 100 wpm). Set AC power OFF.
- G. Insert PC-331/A-4516 into A2 and interconnect RTPH-3 (J2) to DDRR-10() Remote Test Set.

- * 44.00 milliseconds (60 wpm)
+ 220 milliseconds (60 wpm)

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VI. OPERATIONAL CHECKS

- A. Depress each pushbutton in turn and observe the bit indicators on the test fixture. Reference should be made to Chart #1 for proper bit information.

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TOP FRONT

2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	3	3		3	3		3	3		3	3		3	3
			4	4	4	4								4
							5	5	5	5	5			5

1														
														2
														3
														4
														5

FUNCTION

1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2		2		2		2		2		2		2		2
	3	3		3	3		3	3		3	3		3	3
			4	4	4	4						4	4	4
							5	5	5	5	5	5	5	5

EQUIPMENT SELECTION

1	1	1	1	1										
		2	2		2	2	2		2					2
3	3					3		3	3	3			3	
	4	4		4	4	4						4	4	4
5			5	5					5	5	5	5	5	5

CHART #1

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TITLE: TEST PROCEDURE FOR RTPH-3, 4

RTPH-3,4 TEST DATA SHEET

ACCEPT

I. Preliminary Electrical Tests

II. Power Supply

A. Voltage

1. TP +12 _____ VDC
2. TP -12 _____ VDC

B. Ripple

1. TP +12 _____ Millivolts
2. TP -12 _____ Millivolts

C. Shorting

1. TP +12 _____ OK
2. TP -12 _____ OK

D. DC Reset TP _____ OK

III. PC Cards

- A. PC-333/A-4518 _____ OK
- B. PC-375/A-4598 _____ OK
- C. PC-290/A-4453 _____ OK
- D. PC-331/A-4516 _____ OK
- E. PC-378/A-4601 _____ OK

IV. Clock Period Adjusted to _____ milliseconds

TESTED BY: _____

DATE: _____

