

TMC SPECIFICATION

NO. S -1161

REV:

Ø A

COMPILED: BL

CHECKED: RB

APPD: RB

SHEET 1 OF 5

TITLE:

jb 11/18/66

TEST PROCEDURE

for

KMCI-1

TMC SPECIFICATION

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SHEET 2 OF 5

TITLE:

General

The Keyer-Monitor Control Indicator, Model KMCI-1, is used to indicate the operational status of 10 transmitters. The KMCI has a step down transformer, that could be used with either 115 VAC @ 60 cps or a 230 VAC @ 60 cps depending on which is available, to provide a 28 VDC @ 2.25 amps source for the operation of the Status lights, latching relays and audio alarm circuit. The audio alarm circuit is used in conjunction with the KMCU-1 or -2 and a suitable audio amplifier to give an audible failure indication. There are 3 frequencies that can be used; 500 Hz, 1000 Hz or 1500 Hz to give an audible failure indication. When the push button switch light is pushed in to remove the audible failure indication, a red light will appear on the push button light switch. The light on the push button light switch will remain on until the fault is cleared.

INDICATION OF LIGHTS

Green Light - On Air

Indication that the transmitter is functioning properly.

Amber Light - Ready

Indication that the transmitter is ready to transmit and is just waiting for intelligence.

Red Light - Steady - Fault

Indication that there is a voltage failure in the transmitter.

Red Light on Push Button Switch Light - Alarm

Indication that the audible alarm is off.

A. Mechanical Inspection

1. Inspect for any damage incurred during construction.
2. Inspect for correct hardware used.
3. Inspect for security of all parts and tightness of hardware.
4. Inspect for correct fuses used. Refer to CK1239.

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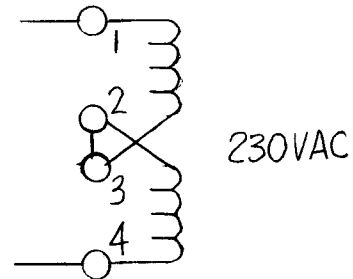
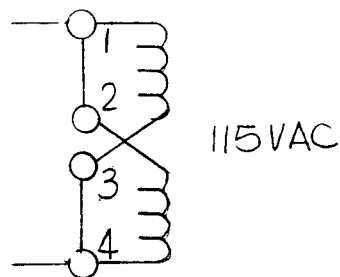
5. Inspect sockets of relays for proper pin setting and proper installation of relay clips.
6. Inspect for correct insertion of pins in proper pin holes in Jacks.

B. Electrical Inspection

Equipment needed:

- 1) Frequency Counter
- 2) VTVM
- 3) BSP-1D

1. Check for proper wiring of transformer for 115VAC or 230VAC wiring diagram shown below.



2. Hook up frequency counter to TB101 terminal 1 and 3.
3. Apply 115VAC or 230VAC to AC Connector (J101) making sure transformer is properly wired for voltage used.
4. Place power switch to ON position; power light should come on.
5. Set frequency to 500 Hz, by turning switch S-112 to proper position.
6. Place a jumper across Pins 5 and 6 at J-102. Counter should read 500 cps \pm 20 cps. If it does not read 500 cps adjust R-1 on PC Board to get proper setting of 500 cps.
7. Repeat steps 5 and 6 for 1000 cps and 1500 cps.
 - a. adjusting R-2 for 1000 cps
 - b. adjusting R-3 for 1500 cps
8. Remove jumper from Pins 5 and 6, disconnect counter, check voltage across C101 (should be 26 volts \pm 20%).
9. Check voltage across C102 (should be 12 volts \pm 5%).

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C. Power Check

1. Connect toggle switch (DPDT) to test Jack as shown below, Fig. 1 and BSP to KMCI as shown Fig. 2.

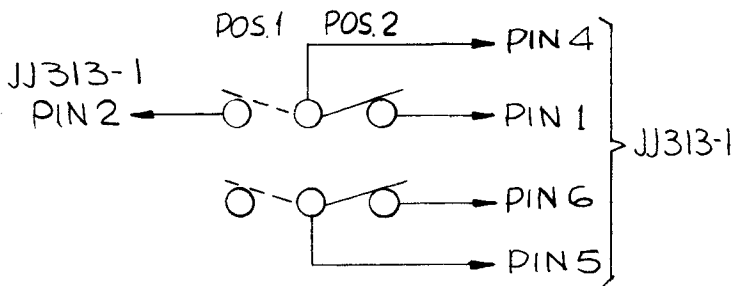


FIG-1

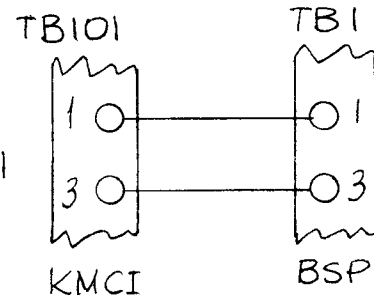


FIG-2

2. Connect test Jack to J-102, set frequency desired for audio alarm circuit.
3. Apply 115VAC @ 60 cps or 230VAC @60 cps at AC Connector (J-101).
4. Place AC Power Switch to ON position, power light should come on.
5. Place toggle switch to Position 1, On Air light should come on.
6. Place toggle switch to Position 2, On Air light goes off, fault light comes "on" and audio alarm comes "on". (BSP)
7. Push alarm button in, audio alarm goes off and alarm light comes "ON".
8. Place toggle switch to Position 1, fault light goes off, alarm light goes off and On Air light comes on.
9. Repeat steps 5 thru 8 for J103 thru J111.
10. Record all test data on test sheet.

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KMCI-1 TEST DATA SHEET

- A. Mechanical Inspection
2. Hardware (nuts and bolts)
 3. Mechanical Connections
 - Electrical Connections
 4. Fuses
 - 5,6. Relay installation

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- B. Electrical Inspection
1. Transformer Hook Up for 115VAC or 230VAC
 - 6,7.. Frequency of Audio Alarm
 - 8,9.. Voltage Check C101
 - C102

VOLTS

CYCLES

VOLTS

VOLTS

- C. Power Check (Operation of Lights)
- 4.. AC Power Switch
 - 5-8. J102
 9. J103
 - J104
 - J105
 - J106
 - J107
 - J108
 - J109
 - J110
 - J111

Accept

DATE _____

TESTER _____

