

DATE 4/16/58  
SH. 1 OF 4  
COMPILED BY  
George A. Fagg

TMC SPECIFICATION NO. S-369

TITLE: TEST SPEC FOR ATS-50-70TU & ATS-MCU

JOB

APPROVED

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1.0 MECHANICAL INSPECTION

- MCU 1.1 Check for any damage to components during inspection.
- 1.2 See that all switches are in proper working order.
- TU 1.1 Check for any damage to components during installation.
- 1.2 Check switch J-204 for proper working order.
- 1.3 See that L-201 is properly aligned.

2.0 ELECTRICAL TEST

- 2.1 Adjust tap on terminal strip E-101 (MCU) so that there is 100 volts at the junction of R-202 & 204 (TU).

3.0 SYSTEM ALIGNMENT

IMPORTANT

THE SURFACE OF THE HUMIDITY SENSING ELEMENT MUST NOT BE TOUCHED BY THE HANDS OR ANY OBJECTS WHICH MIGHT DEPOSIT FOREIGN MATTER UPON IT. IT IS SUGGESTED THAT SOFT, CLEAN PAPER BE PLACED AROUND THE ELEMENT BEFORE IT IS HANDLED IN ANY WAY

3.1 ADJUSTMENT OF ROTARY SWITCH (S204) DRIVE SYSTEM

The motor control switch (S203) is activated mechanically by the position of the spring loaded arm of the rotary switch (S204) detent mechanism. S-203 is wired to open the motor circuit when its plunger is extended. Once the plunger is depressed the circuit closes and the motor runs until the rotary switch reaches its next position whereupon the detent falls causing S-203 to open and stop the motor.

1. The motor circuit must be opened by S-203 slightly before the rotary switch is fully in position. The inertia of the moving parts in the drive train might otherwise cause rotation to continue until S-203 again closed the motor circuit; thus beginning a cycling operation which would not allow the system to come to rest. Because of slight variations in friction the position of S-203 varies from unit to unit. In most cases it will be found that a clearance of 1/32 inch between the plunger of S-203 and the arm of the S-204 detent mechanism when S-204 is at rest in one of its six positions will be approximately corr ct.

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<p>2. Be sure S-203 mounting screws are tight. Try the system. If it begins to cycle continuously as described above stop the motor and readjust the position of S-203 for a little more clearance between its plunger and detent arm. If the motor responds to action of the RESISTANCE switch (S104) of the MCU only, the clearance must be decreased.</p> <p><b>3.2 ADJUSTMENT OF INDUCTANCE (L201) DRIVE SYSTEM</b></p> <ol style="list-style-type: none"> <li>1. Connect Tuner Unit to Control Monitor.</li> <li>2. Remove cover from Tuner case.</li> <li>3. Loosen set screws that hold worm gear and switch actuating levers to control shaft of R-203.</li> <li>4. Turn POWER switch to SHORT position.</li> <li>5. Hold REACTANCE switch in DECR. position until the motor driven tap of L-201 is 1/4 turn from end of coil (end nearest motor). Set R108 to approximately 1/2 its range. (50K).</li> <li>6. Turn R-203 control shaft by hand until reading on M101 is 0.</li> <li>7. Tighten worm gear set screws.</li> <li>8. Turn POWER switch OFF.</li> <li>9. Turn lever that actuates S-201 until it depresses the switch plunger.</li> <li>10. Tighten set screws that lock lever in place on shaft.</li> <li>11. Turn POWER switch to SHORT position.</li> <li>12. Hold REACTANCE switch in INCR position until the motor driven tap is 1/4 turn from the other end of the coil.</li> <li>13. Turn POWER switch OFF.</li> <li>14. Turn lever that actuates S-202 until it depresses the switch plunger.</li> <li>15. Lock lever in place on shaft by tightening set screws.</li> <li>16. Mechanism should now stop automatically and the stop indicator should light when the motor driven tap reaches 1/4 turn from either end of the coil. Adjust R108 so that M102 reads 100 on the REACTANCE scale when L201 is in fully increased position.</li> </ol>		

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3.3 CALIBRATION OF METER M102 (HUMIDITY)

1. Disconnect cable from J-102 on the control monitor.
2. Turn POWER switch to SHORT position.
3. Hold METER switch in HUMIDITY position.
4. If METER does not indicate 0 adjust CAL (R113) until it does.

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TMC SPECIFICATION NO. S-369

TITLE: TEST DATA SHEET JOB

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ATS-50-70TU ATS-MCU

Serial No's. \_\_\_\_\_

1.0 Mechanical Inspection \_\_\_\_\_

2.0 Electrical Inspection \_\_\_\_\_

3.0 System Alignment \_\_\_\_\_

DATE \_\_\_\_\_

TESTED BY \_\_\_\_\_

