

**L MULTIPLEX TERMINALS**  
**LMX-1**  
**CARRIER AND PILOT SUPPLY**  
**24-VOLT AC-DC POWER SUPPLY AND FUSE**  
**DISTRIBUTING CIRCUITS TESTS**

The distributing circuit is designed to supply 24 volts to the thermostatically controlled ovens surrounding the varistors used in the L3 pilot generator circuits. The ovens are normally supplied with ac power but are automatically switched to dc standby power in case of ac power failure. A fuse alarm is included to indicate a blown fuse.

In this test, a voltmeter (ac or dc) is used to measure the voltage levels (supplied to the ovens) present at the following points:

- (a) Between E1 and E2 (energizing voltage for relay K1)
- (b) Between E3 and E4 (energizing voltage for relay K2) when a fuse alarm is present. The voltage may be either ac or dc depending on whether or not K1 is energized.

**Note:** The voltage available for the ovens at the bus may be either ac or dc depending on operation of K1.

The alarm circuit is self checking when the following conditions exist:

- (a) The **blown** fuse alarm condition is caused by inserting a **blown** fuse in one of the fuse holders at the distribution fuse panel.
- (b) By operating the ALM CO key, the office alarm silencing circuit is checked.

This section is reissued due to a general reorganization of the 356 division. The information in this section was previously in Section 356-074-501. **Equipment Test Lists are affected.**

**APPARATUS**

1—*KS-14510 ( ) Volt-ohm-milliammeter (VOM)*

1—*Blown 70-type fuse*

**STEP**

**PROCEDURE**

**Note:** Commercial power, properly fused, should be applied for start of tests.

STEP	PROCEDURE
1	Remove the dust cover of the J68828F, 24-volt ac-dc power supply and fuse distribution circuit to expose the test points.
2	Adjust the KS-14510( ) VOM to the 60-volt dc range.
3	Measure the voltage between E1 (+) and E2 (-) terminals. (Relay K1 should be operated.)  <b>Requirement:</b> More than 12 volts dc
4	Remove VOM leads from E1 and E2.
5	Adjust the VOM to measure 60 volts ac.
6	Connect the VOM from the bus to chassis ground.  <b>Requirement:</b> 24.0 $\pm$ 2.0 volts ac
7	Remove test leads from bus and ground.
8	Insert a <b>blown</b> 70-type fuse in one of the fuse holders of the distribution fuse panel.  <b>Requirement 1:</b> Relay K2 operates.  <b>Requirement 2:</b> The ac-dc fuse alarm lamp lights.  <b>Requirement 3:</b> Office audible alarm sounds.
9	Operate the ALM CO key to silence the alarm.  <b>Note:</b> The ac-dc fuse alarm lamp should remain lighted.
10	Adjust the VOM to measure 12 volts dc.
11	Measure the voltage between E3 (-) and E4 (+).  <b>Requirement:</b> At least 7 volts dc
12	Remove the <b>blown</b> fuse (installed in Step 8) and replace with the proper <b>good</b> fuse.  <b>Requirement 1:</b> Relay K2 releases and VOM indication drops to 0.  <b>Requirement 2:</b> The ac-dc fuse alarm lamp is extinguished; office alarm sounds.
13	Remove the VOM leads from E3 and E4; restore ALM CO key to normal.
14	Remove the fuse from the 115-volt commercial power circuit.  <b>Requirement 1:</b> K1 releases.  <b>Requirement 2:</b> AC FAIL lamp lights and office alarm sounds.

STEP	PROCEDURE
15	<p>Operate ALM CO key to silence office alarm.</p> <p><i>Note:</i> The AC FAIL lamps should remain lighted.</p>
16	<p>Adjust the VOM for a 60-volt dc range.</p>
17	<p>Measure the voltage between the bus and chassis ground.</p> <p><i>Requirement:</i> Same as the 24-volt office battery <math>\pm 2.0</math> volts dc</p>
18	<p>Reinstall the fuse in the 115-volt commercial power circuit (removed in Step 14).</p> <p><i>Requirement 1:</i> Relay K1 operates.</p> <p><i>Requirement 2:</i> AC REST lamp lights.</p> <p><i>Requirement 3:</i> AC FAIL is extinguished.</p> <p><i>Requirement 4:</i> Office alarm sounds.</p>
19	<p>Restore the ALM CO key to its original position.</p> <p><i>Requirement 1:</i> Office alarm is silenced.</p> <p><i>Requirement 2:</i> AC REST lamp is extinguished.</p>
20	<p>Replace the dust cover on the unit. This completes the test.</p>