

Audible and Visual Power Equipment Alarms Test Procedures

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1. General

- 1.1 Purpose** . This practice provides typical test procedures for the audible and visual alarms associated with power equipment located in the Central Office. Refer to GTE Telephone Operations Practice 205-605-501, Electromechanical Alarms, Audible and Visual, for test procedures associated with this equipment.
- CAUTION: Perform the tests described in this section during light traffic ("maintenance window").**
- 1.2 Filing Instructions** File this practice in numerical order in your practices set. Remove the previous issue of this practice and replace it with this new Issue.
- 1.3 Copyright and Responsibility** This practice was written by the Network Operations Department and published by the Telephone Operations Administrative Services Department. For more information about this practice contact the COE Engineering Department.
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1. General, continued

1.4 Disclaimer

This **practice** has been prepared for GTE Telephone Operations employees, customers, and end users' employees who operate and maintain the equipment engineered and installed by GTE. The information in this practice **is** subject to change and may not be suitable in all situations. GTE Telephone Operations acknowledges that a customer's special requirements or practices may take precedence over those supplied in this practice if a conflict develops during installation or ongoing operation. GTE Telephone Operations hereby disclaims any responsibility or liability for any consequential or inconsequential damages that may result from the use of this practice.

2. Test Procedure

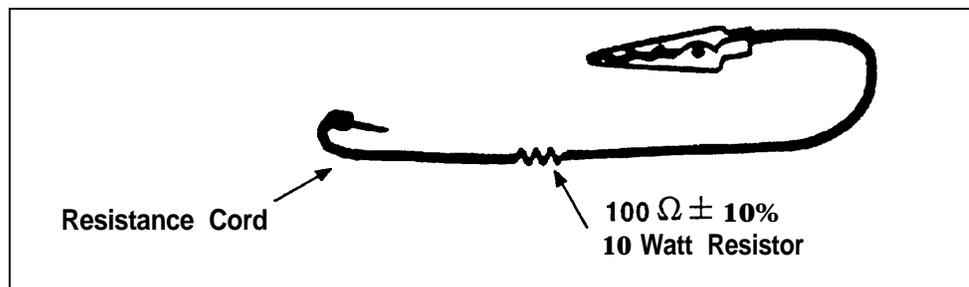
2.1 Remote Testing

All alarms being tested in this practice must occur locally and remote. Before testing any alarms, call the remote alarm monitoring location and ask for a report on the alarm indications received during the test.

2.2 Test Apparatus

The following equipment is necessary to perform the tests in this section:

- Resistance cord. (An example of a **typical locally fabricated resistance cord** is illustrated below.)
- Test set, Noise Measuring, Northeast Electronics TTS-46A, or equivalent.



2.3 Power Distribution Boards

Use the resistance cord to check the fuses on the power distribution board by installing the cord from the load side of an alarm fuse to each alarm telltale strip or terminal.

In the case of pilot/tracer type fuses (fuses that parallel other larger fuses), a blown fuse can be inserted to bring about the alarm for testing purposes. Also, a blown fuse can be inserted in a vacant fuse position, if available, for testing.

If the proper alarm indication is not observed, consult the alarm circuit drawing involved and used normal trouble shooting procedures.

2. Test Procedure, continued

2.4 Battery Chargers

A typical battery charger is the LORAIN® RL100F50. To check a battery charger, or equivalent, follow the steps in the chart below.

CAUTION: If the DC output circuit breaker is turned off, you must consult GTE Telephone Operations Practice 205-I 00-200, Battery Charger Installation, for proper “turn-up” procedures. This is necessary because the filter capacitors will:

- Discharge when the breaker is off.
- Produce a spike to the output if they are not properly charged before the DC breaker is switched on.

Step	To Check the Batter Charger
1	Trip the AC circuit breaker at the breaker box.
2	Check the Rectifier Failure Alarm (RFA) lamp lights.
3	If the RFA lamp lights, the circuitry is functioning properly.
4	Reset the breaker.
5	Check the RECT ON Lamp lights.
6	Connect a noise measuring test set, NORTHEAST ELECTRONICS® TTS-46A or equivalent, across the battery string fed by the battery charger.
7	The reading must never be higher than 56 dBnC. If a higher reading is observed, a filter capacitor fuse may be blown in one or more chargers. To isolate the charger producing the noise, proceed as follows: <ol style="list-style-type: none">a. Shut down one charger while monitoring the noise meter, If the noise does not change, turn the charger back on and do the same with succeeding chargers until the noise is reduced when a charger is shut down.b. Inspect the suspect charger from step a for a blown filter fuse or filter capacitor and replace as required.

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2. Test Procedure, continued

2.5 DC-to-DC Converters

A typical DC-to-DC converter is the LORAIN® HSB6H. To check the converter, or equivalent, follow the steps outlined below:

Step	To Check the DC-to-DC Converter
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1	Remove the output fuse.
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2	Check if the Output Failure (OF) lamp lights.
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3	If the OF lamp lights, the circuit is functioning properly.
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4	Replace the output fuse.
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2.6 Ringing Generators

A typical ring generator is the Lorain T50P. This generator can be tested by:

- Removing the 5 amp GMT input fuse on the face of the unit and observing the alarm condition and transfer to a standby generator (ensure the standby generator is working properly before doing this procedure).

OR

- Inserting a blown GMT fuse in place of the fuse removed in step 1, and observe a fuse alarm.

2.7 Reports

Complete the applicable routine job tickets and distribute according to Area procedures.