

SSIT-1001(g)1 Hold/Clear Devices - Electrical

Purpose

These instructions describe the tests and inspections of hold/clear devices and motor control relays required when installed at grade crossing warning systems equipped with gates to verify they are functioning properly.

Test Intervals

Tests are performed when installed, as required, and at least once every four (4) years as prescribed in *SSIT-7 Signal System Inspection and Test Intervals*.

Rail Safety

Employee shall ensure the site is safe for employees, the public, vehicular traffic and train operations as defined in *SSIT-8 Protecting Train Operations* prior to performing tests and inspections. Proper fall arrest protocols must be followed when performing inspections at height.

Equipment Manuals

A copy of the relay manufacturer's manual should be on hand for reference when performing tests.

Procedure

The following tests are to be performed at each crossing warning system location equipped with gates:

Step	Procedure
1. Test Hold/Clear Device	<ul style="list-style-type: none"> Test hold/clear operation and clearances. Electrical tests of hold/clear device(s) shall be done as outlined in manufacturer's manual (if applicable).
2. Test Motor Control Relay (if applicable)	<ul style="list-style-type: none"> Electrical tests of motor control relays shall be done as outlined in manufacturer's manual (if applicable). Subsequent tests may be required as defined in manufacturer's manual (if applicable).
3. Test Motor Control Solid State Device (if applicable)	<ul style="list-style-type: none"> Measure current draw on solid state controller to ensure device is working within manufacturer's specifications. Perform additional testing as outlined in manufacturer's manual (if applicable).
4. Check Normal States	<ul style="list-style-type: none"> Perform isolation fault tests as outlined in <i>SSIT-201 Circuit Grounds & Isolation Faults Test</i>. → Check relays are in normal state prior to leaving site.
5. Update Log Book	<ul style="list-style-type: none"> Add any notes of issues observed, or adjustments made.
6. Complete Test Form	<ul style="list-style-type: none"> Record the test as completed on Grade Crossing Warning System Test Form. Complete Relay Inspection and Test Form.