

SSIT-1001(b)7 Vehicle Traffic Systems - Preemption

Purpose

These instructions describe the tests for verifying the vehicle traffic system pre-emption or advanced pre-emption circuit operation at grade crossing warning systems, where equipped.

Test Intervals

Tests are performed when installed, as required, and at least once a month 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.

Procedure

The following tests are to be performed at each crossing warning system location equipped with vehicle traffic pre-emption or advance pre-emption control circuits for external vehicle traffic controllers or active advance warning systems:

Step	Procedure
1. Check Wires and Terminations	→ Check all external interface cables are buried or suitably protected from environmental or physical damage. → Check wires are properly tagged at terminals in bungalow. If problems with terminal or tagging: Update tags, fix and/or replace damaged terminals.
2. Activate Warning System	If train traffic: visual inspection shall be performed at a safe distance from rail. If no train traffic: Open Test Switch.
3. Check Pre-emption functionality	→ Check vehicle traffic control lights cycle operate as per design (if applicable). → Check AAWS lights start with or before crossing activation (if applicable). If error with vehicle traffic control lights cycle or AAWS: Advise the ONR S&C Supervisor. Make immediate arrangements with the Road Authority to repair. Provide temporary positive protection as instructed.
4. Restore Warning System	If train traffic: wait for train to pass crossing. If no train traffic: Restore Test Switch..

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**ONR Signal Standards
Signal System Inspections & Tests (SSIT)**

Step	Procedure
5. Check Pre-emption Approach DC Circuits (if applicable)	Shunt farthest DC track for pre-emption. → Check vehicle traffic control lights cycle operate as per design (if applicable). → Check AAWS lights flash (if applicable). • Remove shunt. → Check vehicle traffic control lights cycle returns to regular operation (if applicable). → Check AAWS lights return to dark state (if applicable). • Repeat for each approach.
6. Update Log Book	• Add any notes of issues observed, or adjustments made.
7. Complete Test Form	• Record the test as completed on Grade Crossing Warning System Test Form.