



## WSDOT Test Method T 424

### *Test Method for Traffic Controller Power Interruption Test Procedure*

#### 1. SCOPE

This test method is intended to evaluate traffic signal controllers for the Power Interruption test defined in NEMA TS-1 2.2.7, as modified, and is not required for the Type 2070 controllers. This test is to be performed at normal voltage and room temperature.

#### 2. REFERENCE DOCUMENTS

NEMA Publication TS-1

#### 3. SAFETY

Use proper equipment and training to reduce the risk of electrical shock

#### 4. APPARATUS

A power interrupting device capable of interrupting the controller power for supplied to the controller cabinet of predetermined time intervals as defined in NEMA TS1.

#### 5. PROCEDURE

- a. Program the controller unit to cycle on minimum recall.
- b. Connect the controller cabinet to the power interrupting device as outlined by the manufacture's instructions.
- c. Apply power to the system with the power line modifier connected as required.
- d. NEMA Remove the input voltage for a period of 450 milliseconds. Upon restoration of the input voltage, check to insure that the controller unit continues normal operation as though no power interruption had occurred. Repeat this test three times.
- e. Type 170 Remove the input voltage for a period of 1500 milliseconds. Upon restoration of the input voltage, check to insure that the controller unit continues normal operation as though no power interruption had occurred. Repeat this test three times.
- f. NEMA Remove the input voltage for a period of > 500 milliseconds. Upon restoration of the input voltage, check to insure that the controller unit reverts to its start up sequence. Repeat this test three times.
- g. Type 170 Remove the input voltage for a period of > 2000 milliseconds. Upon restoration of the input voltage, check to insure that the controller unit reverts to its start up sequence. Repeat this test three times.
- h. Restore normal supply to the cabinet.

#### 6. REPORT

Record any response found to be in disagreement with the published standards.  
Report pass or fail and any corrective actions taken on the test report.



### Performance Exam Checklist

#### Test Method for Traffic Controller Power Interruption Test Procedure WSDOT Test Method T 424

Participant Name \_\_\_\_\_ Exam Date \_\_\_\_\_

<b>Procedure Element</b>	<b>Yes</b>	<b>No</b>
1. Program traffic controller for minimum recall.	<input type="checkbox"/>	<input type="checkbox"/>
2. Connect traffic controller to power interrupter per the manufactures recommendations.	<input type="checkbox"/>	<input type="checkbox"/>
3. Verify traffic controller operates normally for the prescribed interruption.	<input type="checkbox"/>	<input type="checkbox"/>
4. Verify traffic controller reverted to the start-up sequence.	<input type="checkbox"/>	<input type="checkbox"/>
5. Restore normal power to the cabinet.	<input type="checkbox"/>	<input type="checkbox"/>
6. Document test results on test report.	<input type="checkbox"/>	<input type="checkbox"/>

First attempt: Pass  Fail                       Second attempt: Pass  Fail

Signature of Examiner \_\_\_\_\_

Comments:

