

Document Control Record

1. Document Details:

Name: ELECTRICAL MAINTENANCE SCHEDULE

Number STM6099

Version Number: 1.2

- Document Status:** Working Draft
 Approved for Issue
 Archived

Next Scheduled Review Date: _____

2. Version History:

Version Number	Date	Reason/Comments
1.0	20/12/2006	Initial draft
1.1	21/08/2008	Modified the layout
1.2	8/50/2020	-Add pantograph to the schedule

Approved by _____ **Signature & Date** _____

3. Distribution List

Position	Date	Location of Documents
Rail Safety Manager		Original held on GOOGLE secure Website
STM WEB SITE		Updated regularly and put onto the STM Web site.
STM Office		STM Office Computer
STM Office		STM Office cupboard

SYDNEY TRAMWAY MUSEUM

ELECTRICAL MAINTENANCE SCHEDULE

Car No.: _____

Date: _____

EMS 1

**CHECK DEFECTS BOOK FOR ANY RELEVANT INFORMATION
BEFORE COMMENCING WORK**

WITH THE POWER ON COMPLETE THE FOLLOWING

STEP	ITEM	INITIAL
1	Check operation of all Lighting and Light Switches. Visually inspect the condition of all Light Fittings and Switches. Remarks:	
2	Check operation of Air Compressor and Record Settings. Cut in: _____ lbs/sq.in. Cut-out: _____ lbs/sq.in.	
3	Check the operation of all Control & Power Isolation Switches & Circuit Breakers.	
4	Check the operation of the Electric Buzzer (where fitted)	

**ENSURE THAT THE OVERHEAD POWER IS ISOLATED FROM THE TRANCAR AND
TAGGED BEFORE PROCEEDING TO THE NEXT SECTION OF THIS ELECTRICAL
MAINTENANCE SCHEDULE**

5	Inspect Trolley Poles or pantograph for condition and alignment. Check Trolley Ropes, replace if defective. Check that Trolley Wheels/Carbon Shoes are in good condition & free movement.	
6	Check that the Pole Hooks and Pole Bumpers (if fitted) are secure.	
7	Remove Equipment Covers; visually inspect condition and operation of all control and Power Isolation Switches and Circuit Breakers. Repair or replace if necessary.	
8	Inspect Air Compressor for any obvious defects, ensure Compressor Mountings are in good condition and secure.	
9	Check the operation of Controllers, clean all Contact Surfaces on Main and Reverser Spindles clean Contact Fingers. Lubricate all Contact Surfaces with Petroleum Jelly Lubricate with Oil: - Star Wheel Mechanism, Main Spindle Bearings, and Reverser Drum Bearings. Check and Service Line Breaker Ratch Switch Mechanism.	
10	Inspect the Traction Motors. Check the condition of the Commutator. Check the condition of Brush boxes and mounting insulators. Ensure all internal Cable Terminators are in good condition and properly insulated when required. Ensure that Traction Motor Leads are in good condition, Motor Lead Terminals are in good condition and Terminal Screws are tight, replace any broken screws. Check the condition and security of Main Earth cable. When the Traction Motor service is completed, replace inspection Cover and check operation of latching handle.	
11	Inspect Air Compressor Motor. Check the condition of Commutator, Brush boxes, Brushes, Insulators, Fields, Internal connections and leads.	
12	Check condition of Air Compressor Governor Switch.	

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ELECTRICAL MAINTENANCE SCHEDULE (CONT'D)

Car No.: _____

Date: _____

EMS 2

ENSURE THAT THE OVERHEAD POWER IS ISOLATED FROM THE TRANCAR AND TAGGED BEFORE PROCEEDING TO THE NEXT SECTION OF THIS ELECTRICAL MAINTENANCE SCHEDULE

STEP	ITEM	INITIAL
13	Inspect Line Breaker or line Switch. Check condition of the Main Contact Tips, movement of Main Breaker Armature. Check the condition of Auxiliary and Overload Equipment, Overload Setting, Reset Springs, Internal Resistors and Magnetic Coils. Check the condition of Arc Chutes and Equipment Covers.	
14	Inspect Remote Reverser. Check the condition of Contact Fingers and Reverser Drum Contacts. Clean and Lubricate Contact Surfaces with petroleum Jelly. Check and Service Auxiliary Contacts. Check Reversing Mechanism's action and lubricate, Check the condition of Actuating Coils and Auxiliary Equipment.	
15	Inspect the Switch Group. Check the condition of Main Contact Tips, Movement of Contactor Armature, and the condition of Auxiliary Contacts. Check the condition of Main Contact Coils. Check the condition of Internal Resistors. Check the condition of the Arc Chutes and Equipment Covers.	
16	Inspect Resistor Units. Ensure Resistor Units are reasonably clean. Check all Cable Terminations are tight and in good condition. Check that NO Grid Castings are broken. Check the tension on the Grid Clamping Studs.	
17	On all Electrical Equipment mounted beneath the car, ensure all mounting bolts are tight and all insulators are clean and in good condition.	
18	On all cars fitted with Automatic Couplings. Check the operation and condition of Cut-Out Switches. Check the condition of Flexible Conduits mounted on the Coupling. Check the condition of Control Contact Faces mounted on the Coupling.	
19	On all tramcars fitted with Electrical Coupling Sockets on the end of the tram, check, clean and lubricate with Petroleum Jelly, the Coupling Pins.	
20	Check the condition and operation of Motor Cut-out Equipment.	
21	Before returning the tramcar to Traffic ensure all Equipment Covers and Hatches have been replaced & are secure. All Switches & Circuit Breakers are correctly set. Remove the Tag from where you isolated the Power. Raise the Pole and when ready, test Run the car to check operation all systems.	

COMMENTS: _____

Serviced By (name): _____

Signature: _____

Membership No.: _____