



Maintenance Report

Report ID : KMD/MAINT/2023/10/076

DEPOT: MUTTOM DEPOT & WORKSHOP

REPORT DATE : SEPTEMBER 16, 2025

1.1 Exclusive Summary

This report documents the completion of a scheduled Trip Inspection (TI) and subsequent unscheduled corrective maintenance performed on KMRL Train Set 07 (TS-07). The inspection was conducted on October 25, 2023, at the Muttom Depot. During the routine TI, a minor fault was identified in the Door Control Unit (DCU) of Car 07B. A corrective maintenance task was immediately initiated and successfully completed. The train has been certified as "Safe to Run" and is ready for passenger service.

Work Order: WO-KMD-231025-14

Train Set: TS-07 (6-Car Formation: 07A-07B-07C-07D-07E-07F)

Maintenance Type: Scheduled Trip Inspection (TI) + Unscheduled Corrective Maintenance

Date of Inspection: October 25, 2023

Date of Report: October 26, 2023

Status: COMPLETED & CERTIFIED

Personnel Involved

1. Maintenance Team Lead: Mr. S. Kumar, Senior Technician
2. Inspecting Technicians: Ms. R. Nair, Mr. P. George
3. Quality Assurance Inspector: Mr. A. Menon

2. Details of Scheduled Inspection

The Trip Inspection was carried out as per KMRL Maintenance Manual Ref: KMRL/MM/EMU/004. The following key systems were inspected:

INSPECTION FINDINGS SUMMARY

System: Brakes

- Parameters Checked: Air pressure, brake pad thickness, functionality
- Status: OK

System: Traction System

- Parameters Checked: Power converters, circuit breakers
- Status: OK

System: Doors

- Parameters Checked: Opening/Closing timing, obstacle detection
- Status: FAULT - Car 07B, Door 4 (DCU Error Code: E05)

System: Passenger Information System (PIS)

- Parameters Checked: Display screens, audio announcements
- Status: OK

System: Air Conditioning

- Parameters Checked: Cooling performance, filters
- Status: OK

System: Bogie & Suspension

- Parameters Checked: Visual inspection for cracks, leaks
- Status: OK

System: Couplers

- Parameters Checked: Integrity and alignment check
- Status: OK

System: Head/Tail Lights

- Parameters Checked: Functionality
- Status: OK

2.2 Conclusion of TI

The Trip Inspection was completed satisfactorily for all systems except for the Door System on Car 07B. A fault was logged, prompting an unscheduled corrective maintenance action.

Specifications

3. TESTING, CERTIFICATION, AND RECOMMENDATIONS

3.1 Post-Maintenance Testing Protocol

After the corrective action, the following tests were conducted to ensure full system integrity:

Functional Test: Manual and automatic operation of all doors on TS-07.

Integration Test: Door system interface with Train Control and Management System.

Safety Test: Obstacle detection functionality verified for Door 4, Car 07B.

Dynamic Test: A short test run on the depot track to validate performance under.

All tests were passed successfully.

3.2 Certification

This is to certify that KMRL Train Set 07 has undergone and passed all required inspections and maintenance tasks as detailed in this report. The rolling stock is confirmed to be in a fully serviceable and "Safe to Run" condition.

Signature of Maintenance Team Lead:

Name: S. Kumar

*Date:** 26-08-2025

Signature of Quality Assurance Inspector:

Name: A. Menon

Date: 26-10-2023

3.3 Recommendations

Monitor the performance of Door 4, Car 07B, over the next three Trip Inspection cycles.

The replaced faulty sensor (Serial No: SN784521) is to be sent to the Component Repair Shop for failure analysis.

Milestones

4. ANNEXURE – MAINTENANCE DATA LOG

4.1 Maintenance History (Last 3 Entries for Train Set 07)

October 15, 2023

- Work Order: WO-KMD-231015-08

- Maintenance Type: Trip Inspection (TI)
- Description: Routine 10-day inspection
- Status: Completed

October 5, 2023

- Work Order: WO-KMD-231005-22
- Maintenance Type: IA Inspection
- Description: 45-day periodic overhaul
- Status: Completed

September 25, 2023

- Work Order: WO-KMD-230925-11
- Maintenance Type: Corrective Maintenance
- Description: Replaced PIS speaker in Car 07C
- Status: Completed

5.2 Next Scheduled Maintenance

The following maintenance activities are scheduled for Train Set 07:

- Next Trip Inspection (TI): November 4, 2023
- Next IA Inspection: December 9, 2023
- Next Periodic Overhaul (POH): April 15, 2024

5.3 Additional Notes

All maintenance activities were completed within the scheduled timeframe. The corrective action for Door 4, Car 07B has been successfully closed. The train set is currently operating at optimal performance levels with no recurring issues reported.

The maintenance team has been commended for their efficient fault identification and timely resolution, ensuring minimal disruption to passenger services.



END OF REPORT

Document Classification: Internal Use Only

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