

South Eastern Railway

Office of The
Pr. Chief Electrical Engineer
11, Garden Reach, Kolkata-43.
Date: As signed

No. PCEE/RS/268/Misc./26/105

Sr. DEE/OP/KGP, CKP, ADRA &RNC

Subject: Additional Troubleshooting for WAP-7 Locomotives Working with HOG.
Ref.: OPR of Loco No. 39224/WAP-7/SRCE dated 01.09.2026

- a) WAP-7 locomotives working in HOG mode with power cars have experienced failures due to tripping of the following control circuit MCBs such as :
- 127.7 – Brake Electronics Circuit Breaker
 - 127.81 & 127.82 – Commissioning Circuit Breakers
 - 127.2/1 & 127.2/2 – Monitoring Circuit Breakers
 - 129.2/1-1 – Hotel Load Circuit Breaker
- b) In many cases, indications such as "Brake electronics failed" or "MR pressure low" have been logged, despite the MR pressure being available and within normal limits.
- c) In such cases, disconnecting the HOG UIC coupler has resulted in the locomotive functioning normally. Hence, it is recommended that in the event of such failures, the HOG UIC coupler should be disconnected once and the loco shall be re-checked for recurrence of the trouble.

Concerned LIs and TLCs may be advised accordingly to follow this procedure to guide the crew as an added troubleshooting procedure.

Encl.:Ref.


(Atul Kumar) 18/09/2026
Chief Loco Electrical Engineer

Copy to:

1. Principal ELTC/TATA
2. Sr.DEE/TRS/TATA

South Eastern Railway

Failure Report:

- Loco No. 39224/WAP7/SRCE failed on 01-09-2026 of Train No. 22841 (SRC-TBM) having load of 21 LHB Coaches at Gopalapatnam – Visakhapatnam (GPT-VSKP) Section of VSKP Division of SCoR due to VCB tripping with BP pressure dropped, causing Indirect punctuality loss of Train Nos. 12718 by 70min, 12717 by 74min, 12840 by 79min, 11019 by 37min, 13352 by 70min, 12774 by 44min, 18190 by 62min, 18510 by 52min, 18511 by 79min, 18525 by 80min, 20708 by 72min.
- Date of Commissioning of Loco: 15-02-2023
- Last Major schedule inspection: TOH on 21-05-2025 at SRCE
- Last Minor schedule inspection: IA on 06-06-2026 at SRCE
- Propulsion: IGBT Medha; Brake System: E70

Brief Description of Incidence:

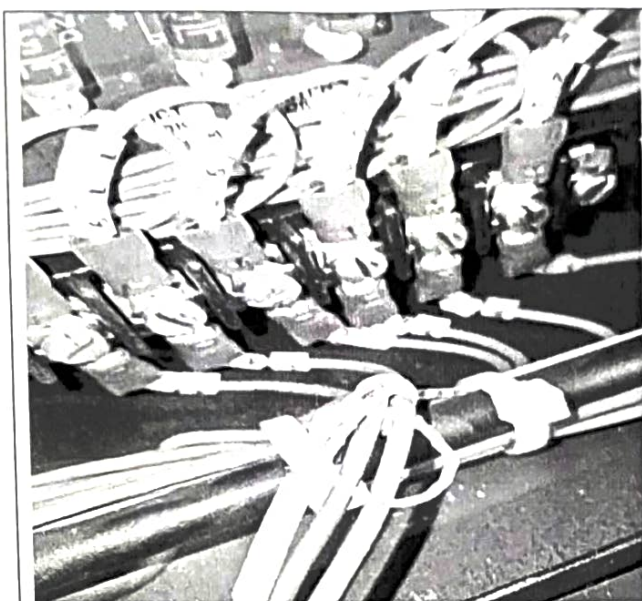
- While train running between GPT-VSKP, LP experienced VCB Tripping with auto application brakes with MR Pressure & BP Pressures dropped. On checking, MCB 127.7 (Pneumatic Panel Circuit Breaker) in SB-2 panel was found tripped and could not be reset.
- LP put CE OFF/ ON but unsuccessful and tried to reset MCB 127.7 two times but unable to reset. VCD isolated and tried but MCB 127.7 not reset. LP switched the Battery OFF/ON, following which MCB 127.7 reset. However, on switching the battery ON again, MCB 127.7 tripped again, and Fault Message F1001P1 – "Brake Electronics Failed, Emergency Brakes Applied and No Traction Allowed" was displayed on the DDU. Fresh Loco provided.

Outstation Investigation Report:

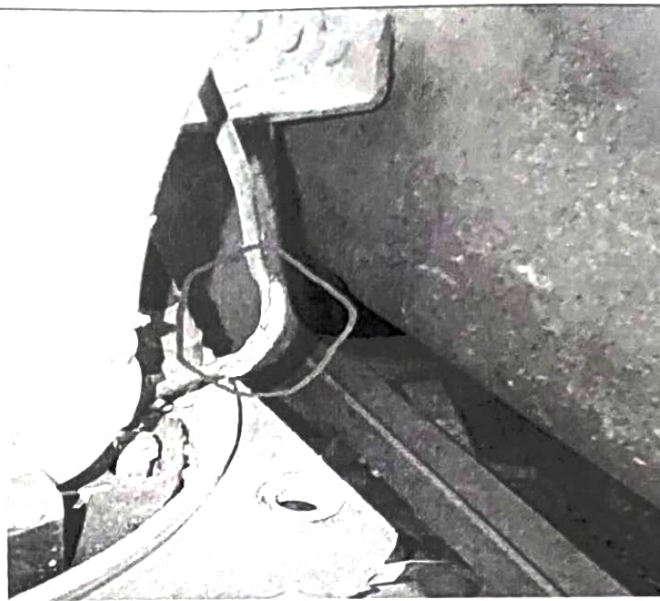
- Loco jointly inspected at Trip shed VSKP in dead condition. MCB 127.7 at SB2 panel and MCB 129.2/1-1 (HOG) found in tripped condition. Remaining MCBs in normal condition
- MCB 127.7 made normal and both cabs pneumatic testing done found normal. Brake electronics failure not experienced. Loco made live and found earth fault in battery circuit logged
- In 'D' panel of both cabs HLC2 lamp glowing without jig that indicates +ve earth fault in loco. When MCB 127.7 was intentionally tripped, this lamp extinguished.
- VCU data downloaded and following faults logged at the time of failure:

Date	Time	Faults
01-09-2026	02:35:25	[F0905P2] MCC: Earth Fault in Battery circuit
01-09-2026	11:51:55	[[NODISP] MCC: Emergency Pressure Switch Acting
01-09-2026	11:51:55	[F1005P1] MCC :S/R Interlock - Auto Brake
01-09-2026	11:51:56	[F1002P1] MCC :S/R Interlock - Main Res Low
01-09-2026	11:51:57	[F0103P1] MCC: Low Panto Pressure VCB off
01-09-2026	11:51:57	[F1005P1] MCC :S/R Interlock - Auto Brake RECOVERED
01-09-2026	11:51:58	[F1001P1] MCC: Brake Electronics Failed
01-09-2026	11:51:59	[F0103P1] MCC: No Pressure in Panto 2
01-09-2026	11:56:21	[F0106P2] MCC: AFL Activated
01-09-2026	11:56:30	[F0106P2] MCC: AFL Activated RECOVERED

- Loco further checked on 02/09/26 by FTIL firm representative, SSE/ELS and SSE/OP.
- In pneumatic panel, Positive cables **16B** and **57A** found pressed and punctured at snubber circuit PCB board.
- Cab1 LP side HOG IV coupler **cap short link plate** for pin number 7&10 got earthed causing positive earth fault of HOG.
- Cab2 LP IV coupler cables pressed and insulation damage causing positive earth fault of HOG.



In pneumatic panel, Positive cables 16B and 57A are pressed and punctured at Snubber circuit PCB board.



Cab2 LP IV coupler cables pressed and insulation damage causing positive earth fault of HOG

- Joint checking was done at VSKP on 02-09-26 between CLI/VSKP, SSE/OP/VSKP & JE/Elect/G/VSKP of Train No. 22842, Loco 37200/BZA, PC 138853. Train arrived on HOG working normal. After removing UIC, B-side fixed coupler Pin-12 of Power Car No. 138853 found permanently earthed (-ve). While A-side OK. **Loco display showed earth fault which vanished after removing UIC.** Rake previously worked with 39224/SRC (22841).

Cause of Failure:

- The positive earth fault in the loco and negative earth fault associated with HOG Power Car No. 138853 resulted in tripping of MCB 127.7 (Brake Electronics Circuit) and consequent Brake Electronics Failure indication.

Equipment Details:

- Brake System: Make: FTIL (Under Warranty)



Power Car UIC Fixed Coupler
Pin No. 12 Earthed

Responsibility:

- Primary: Carriage & Wagon (Traffic/wrongly logged)
- Secondary: Brake Panel FTIL

Action Taken / Action Plan:

- RDSO MS-488, Rev.1 dated 12.03.2026 to be completed in all HOG locos.
- One cycle checking of all cables and connectors of E70 brake system.

18/09/2026
Chief Electrical Loco Engineer