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भारत सरकार – रेल मंत्रालय  
अनुसंधान अभिकल्प और मानक संगठन  
लखनऊ – 226011  
Govt. of India - Ministry of Railways  
Research, Designs & Standards Organization,  
LUCKNOW - 226011

No. EL/11.5.5/21

Dated: 26.07.2021

**Principal Chief Electrical Engineers;**

- Central Railway, HQs Office, 2<sup>nd</sup> floor, Parcel Office Bldg., Mumbai – 400 001
- East Central Railway, Hajipur (Bihar) – 844 101
- Eastern Railway, Fairlie Place, Kolkata – 700 001
- East Coast Railway, Railway Complex, Bhuvneshwar – 751 023
- Northern Railway, Baroda House, New Delhi – 110 001
- North Central Railway, Allahabad – 211 001
- North Eastern Railway, Gorakhpur – 273 001
- Southern Railway, Park Town, Chennai – 600 003
- South Central Railway, HQs Office, Rail Nilayam, Secunderabad – 500 071
- South Eastern Railway, Garden Reach, Kolkata – 700 043
- South East Central Railway, Bilaspur – 495 004
- South Western Railway, Hubli – 580020
- West Central Railway, HQs Office, Opp. Indira Market, Jabalpur – 482 001
- Western Railway, Churchgate, Mumbai – 400 020
- Banaras Locomotive Works, Varanasi – 221004
- Chittaranjan Locomotive Works, Chittaranjan – 713331 (WB)
- Patiala Locomotive Works, Patiala – 147 003

**Sub:** Modification Sheet No. RDSO/2022/EL/MS/0489 (Rev. '0') dtd. 26.07.2022 for provision of HOG indication lamp in driver desk for HOG ON command from Power Car.

Please find enclosed herewith a copy of Modification Sheet No. RDSO/2022/EL/MS/0489 (Rev. '0') dtd. 26.07.2022 for provision of HOG indication lamp in driver desk for HOG ON command from Power Car. This is for information and necessary action.

*Himanshu*  
*26/7/2022*

Himanshu Bansal  
For Director General (Elect.)

Encl: As above.

Copy to:

1. **Secretary (Electrical), Railway Board, Rail Bhawan, New Delhi-110 001.** For kind information. (Kind Attn.: Shri Kishore Vaibhav, DEE/RS).
2. **Sr. Divisional Electrical Engineer (TRS), Electric Loco Shed,**  
➤ Central Railway, Ajni (Nagpur)-440008.

- Central Railway, Kalyan-421304 (Maharashtra)
- East Central Railway, Gomoh – 828 401
- East Central Railway, Barauni – 851112
- Eastern Railway, Howrah-711 106
- Eastern Railway, Sialdah-711 106
- East Coast Railway, Vishakhapatnam – 530 001.
- Northern Railway, Ghaziabad (UP) - 201 001.
- Northern Railway, Tughlakabad (D) – 110 020
- North Central Railway, Fazalganj, Kanpur – 208 003
- North Eastern Railway, Gonda (D)
- Southern Railway, Royapuram, Chennai-600 013.
- Southern Railway, Erode.
- South Central Railway, Lallaguda, Secunderabad – 500 017.
- South Central Railway, Vijayawada
- South Eastern Railway, Tatanagar-831 002.
- South Eastern Railway, Bondamunda
- South Eastern Railway, Santragachi
- South East Central Railway, BMY Complex, Bhilai, Durg-490 025.
- South Western Railway, Krishnarajapuram
- West Central Railway, Tughlakabad, New Delhi-110 044.
- West Central Railway, Itarsi ,
- Western Railway, Vadodara-390 002.

For information &  
necessary action  
please.

Encl: as above.

*Himanshu*  
*26/7/2022*

Himanshu Bansal  
For Director General (Elect.)



सत्यमेव जयते

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No. EL/11.5.5/21

Dated: 26.07.2022

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**MODIFICATION SHEET NO. RDSO/2022/EL/MS/0489 (Rev. '0') dated 26/07/2022**

**1.0 Title:**

Provision of HOG indication lamp in driver desk for HOG ON command from Power Car.

**2.0 Brief History:**

- 2.1** To switch on hotel load converters, BLHO switch on 'A' panel on driver desk is put in ON position. 110V control supply is extended from locomotive to power car through UIC coupler. Further, Power Car staff will select the number of hotel load converters required for service. On selection of the number of converters for service, the ON command to the hotel load converter will extend from power car to the locomotive hotel load converter through IV Coupler and the hotel load converter will start.

- 2.2** In case of any problem in UIC coupler/Power Car ON command circuit, the ON command will not extend to hotel load converter and hotel load converter will not start with message displaying as 'Waiting for ON command'.
- 2.3** Many a times it has been observed that hotel load converter does not start functioning. It may be due to ON command is not extended from power to hotel load converter. There is always a confusion between locomotive staff and power car staff to identify the exact problem of non-working of HOG whether the problem is with the power car or with locomotive.

### **3.0 Objective:**

- 3.1** To identify the location of problem, it is advised to provide HLC ON command indication lamps in both Cabs of locomotive duly tapping the control supply from HLC ON command circuit at IV coupler.
- 3.2** If HLC indication lamp glows but hotel load converter does not work, then it will indicate that the problem is with the HLC converter i.e, loco side. If HLC indication lamp does not glow then it will indicate that the problem is with the Power Car ON command circuit.

### **4.0 Instructions:**

Following instructions may please be followed for this modification:-

<b>SN</b>	<b>Instruction</b>
<b>1</b>	Tapping to be taken from HL01 cable at cab1/2 ALP side IV coupler pin No. 7 or 10 (for respective cabs).
<b>2</b>	Tapping to be taken from HL02 cable at cab1/2 LP side IV coupler pin No. 7 or 10 (for respective cabs).
<b>3</b>	<p><b>a.</b> Run cable no.2050 cable (B-) from cab 'F' panel (Cab1 side XF 13A01-5 or 6 or 7 to lamps) &amp; (Cab2 side XF 86A01-5 or 6 or 7 to lamps).</p> <p><b>b.</b> Lamps to be provided at 'D' panel and to be named as "HL1/2 ON COMMAND".</p>

## 5.0 Modified Scheme:

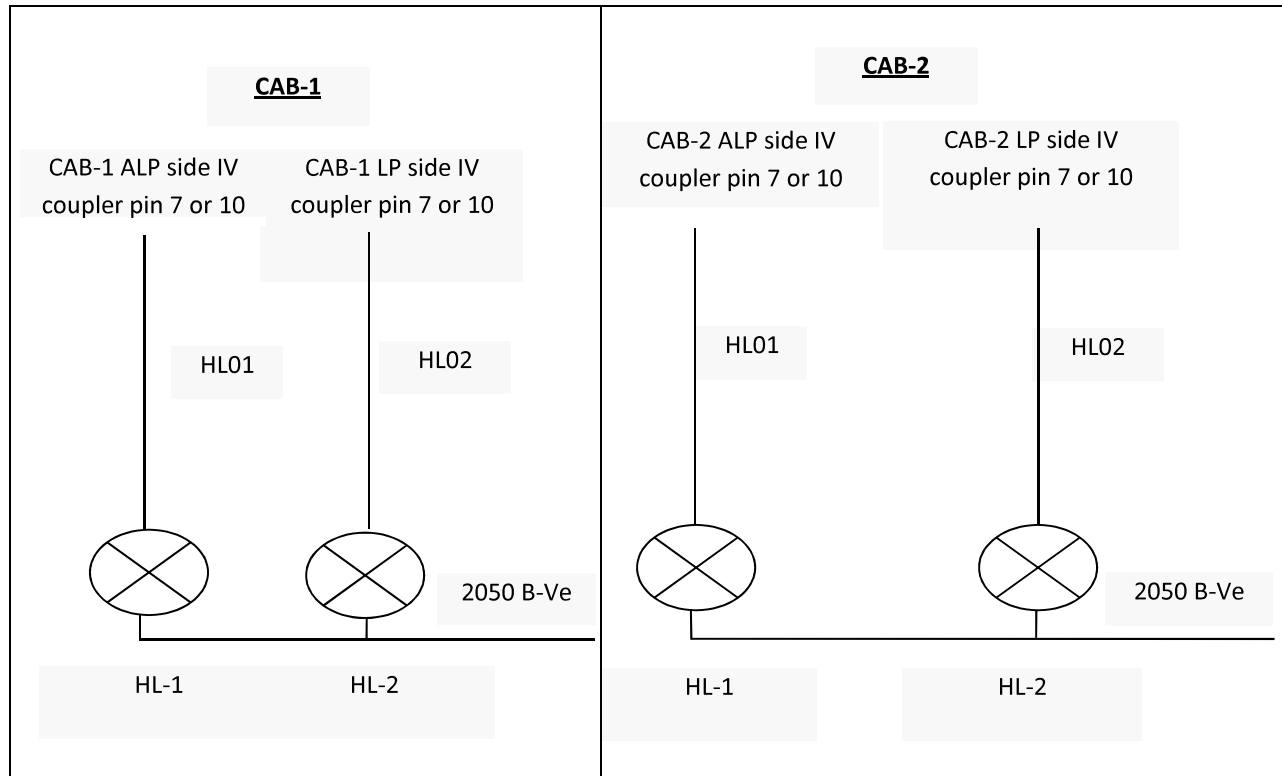


Figure – 1: Modified Scheme for HOG ON Command Indication Lamp

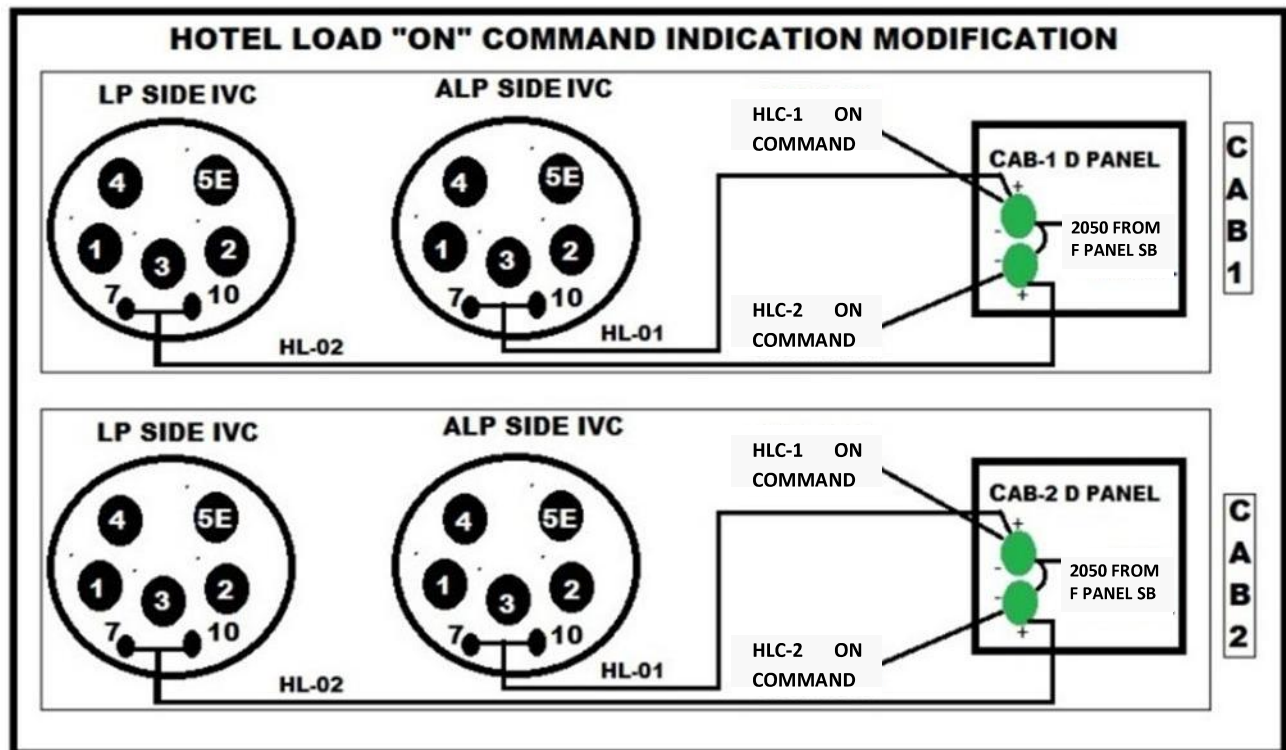
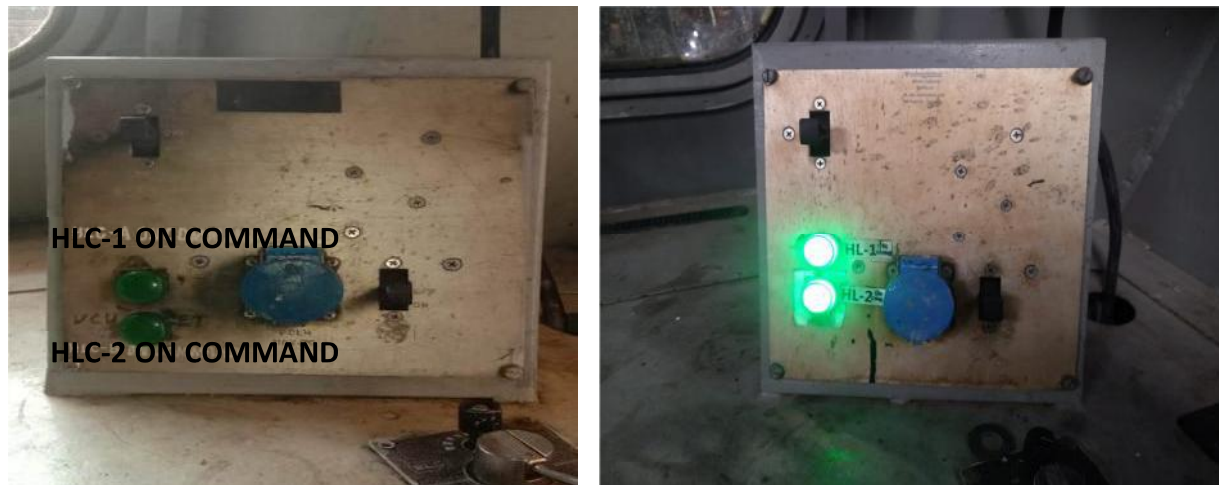


Figure – 2: Modified Scheme for HOG ON Command Indication Lamp





**Figure – 3: Provision of Indication Lamp at D Panel**

**6.0 Material required:**

- i. LED lamps (110V/DC) with holders: 04 nos. (Green Colour – Low Intensity)
- ii. 1.5Sqmm cable: 20 Mtrs.

**7.0 Application to the class of locomotive:**

All HOG compliant WAP-7/WAP-5 type 3-Phase electric locomotives.

**8.0 Agency of Implementation:**

All PUs, POH Shops, Electric Loco Sheds Holding 3-Phase Electric Locomotives.

**9.0 Periodicity of Implementation:**

Commissioning, POH, all major and minor schedule.

Encl: Nil

Digitally Signed by Amit  
Kumar Saraf  
Date: 26-07-2022 12:38:37  
Reason: Approved  
For Director General (Elect.)