

**Government of India Ministry of Railways  
Research Designs & standards Organisation**

**Manak Nagar, Lucknow 226011.**

No.EL/3.2.12/THY

Dated 17th Nov./12.12.83

**SPECIAL MAINTENANCE INSTRUCTION No.RDSO/EL.RS/SMI/108**

**1. TITLE**

Setting of simplified battery chargers on ac electric locomotives for 110 V dc battery (50 cell).

**2. OBJECT**

To prevent over charging of lead acid battery provided on ac locomotives. Simplified battery charger for ac locomotives are provided with 3 or 5 tapping to set the charger at the required tap. It is suggested that the simplified charger should be set at the normal tap giving output voltage of 98/100V rms. (without the battery in circuit) with input voltage between 360 to 400 V rms.

**3. WORK TO BE DONE:**

Check the existing setting and set the simplified battery charger at normal tap giving 98/100 V rms. with input voltage of 360 to 400 V rms.

**4. Reference Drawing:**

Nil.

**5. AGENCY FOR IMPELMENTATION**

Electric Loco Sheds and POH Shops.

**6. MATERIAL AND EQUIPMENT REQUIRED:**

Material Required: Nil.

Equipment Required: Precision grade voltmeter having a sensitivity of not less than 24 K Ohm per volt for measuring the voltage. Tools to open and reconnect the charger lead at different tap if required.

**7. DISTRIBUTION:**

As per enclosed list.

**NOTE:-**

The locomotive where the battery does not pick-up the charge shall be charged externally or replaced by a fully charged battery.

*S. Kumar*

Encl: Distribution list.

(S. Kumar)  
for Director General(Elect.)