# Train Lighting System



DEPTFORD LONDON ENGLAND

#### THE LAMP RESISTANCE



## FINISH

8-COIL (DOUBLE) BOX

Both Lamp Resistance Boxes are heat resisting, being constructed of heavy sheet metal; large ventilating apertures are let into the sides.

#### ROUTINE MAINTENANCE

Examine Lamp resistance, and see that the correct number of coils are in circuit and that all connecting nuts are tight.

As the voltage of any battery rises with its charging, it is necessary to absorb the excess voltage.

The efficiency of the system is improved if the watts lost in heat in the lamp resistance is kept as low as possible, and the battery recharging time is not unduly prolonged. With the latest "Tonum "System. it is possible to charge the battery at the maximum rate, utilising the entire generator output for this purpose, and yet limit the voltage across the lamp resistance to a minimum.

To avoid complication, a standard coil has been adopted, which by parallel or series connection can be adapted to all lamp loads.

### RATING OF COILS

10 AMP, COIL-When each Resistor drops 3 yolrs at a current of 10 amperes.

8 AMP. COIL When each Resistor drops 4 voles at a current of 8 amperes.

6 AMP, COIL-When each Resistor drops 5.5 volts at a current of 6 amperes.

Where maximum lamp loads are not multiples of this current, the approximate voltage drop can be obtained with the nearest equivalent. For instance, if the maximum lamp load is 38 amperes, four 10 amp, coils connected in parallel should give satisfactory results.

The Standard Lamp Resistance Box is manufactured in two sizes, fitted with 4 and 8 coils respectively, and a complete set of links make up any combination of 4. 6. 8 or 10 amperes Units.

#### MOUNTING

The Lamp Resistance Boxes are suitable for mounting either on the underframe of the carriage or inside the coach.

CALIBRATION OF LAMP RESISTANCE See Maintenance Handbook Data Sheets.

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