



CHICAGO NORTH SHORE AND MILWAUKEE RAILROAD

Shop at Highwood, Illinois

The following information covers

MODERNIZED CARS FOR SERVICE ON THE SKOKIE VALLEY ROUTE
HIGH SPEED HEAVY WEIGHT INTERURBAN EQUIPMENT FOR DOUBLE-END OPERATION, TWO MAN

GENERAL INFORMATION:

Built by the Pullman Car & Mfg. Co., 1928. Equipped by Westinghouse E & M Co. Exterior color scheme: Green with gray and red trim, light gray roof. Seating capacity: 39 in main compartment, 13 in smoker, total of 52 seats. Total weight of car, equipped but without load: 104,460 lb. 551-311 Length over anti-climbers: Width over side sheathing: 81-81 Height, top of rail to top of roof: 121-8" 321-811 Spacing of truck centers: Wheelbase of trucks: (Baldwin MCB type) 71-01 41-811 Track gage: Wheel diameter: (Nominal) 36"

(For additional dimensions refer to CERA Bulletin 1, November, 1938, Page 8)

MOTORS & CONTROL:

Motors: Four Westinghouse 557R5, 140 hp. each at 900 rpm., 202 amperes. Control: Westinghouse HLF, electro-pneumatic with field tap control. Master controller: 28A3; Line Switch: 480G2; Switch Group: 480S2; Reverser:178F. Overload trip relay: 371C set to open at 1300 amperes.

Line Voltage: (Nominal) 650 v. DC

AIR BRAKES:

Engineer's Valve: M-23 Universal Valve: U4
Feed Valve: c6 Brake Cylinder: 16" x 12"
Compressor: DH25 Governor: S16

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BULLETIN OF THE

CENTRAL ELECTRIC RAILFANS' ASSOCIATION CHICAGO, ILLINOIS

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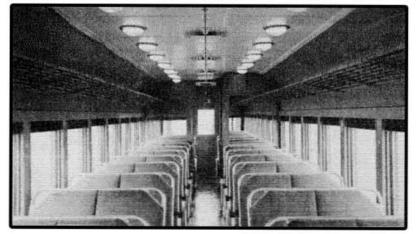
MISCELLANEOUS:

Number Series: Initial program, cars 741-744, 746-751, modernized Feb., 1940. Seats: Coach & Car Equip. special high-back walkover type, dull chrome finish. Gear Ratio: 25/52. Balancing speed: 72 mph. Couplers: Tomlinson form 13 (MCB) Lighting: Bulls-eye reflector, one over each seat, 600 v. series circuits. Heating: All-electric comprising truss-plank side heaters (at floor level); duct heaters in two stages, acting on fresh air intake; and cab heaters, both permanent and portable. Of the interior heaters, the side heaters may be controlled separately from the duct heaters, while thermostats automatically cut heat in or out in three stages as temperature of intake air and car interior require. A total of 27,600 watts of heaters is available in the car body. Ventilation: Fresh air is drawn in thru a louvre in the side of the car, blown over the banks of duct heaters, and on into the car body thru a duct concealed by a false ceiling, by a powerful electric fan operated from the storage battery.

POINTS OF MODERNIZATION:

The principal changes in these cars thru this modernization are:

- 1. New brightly colored rubber-like floor covering.
- 2. New and more seats of a modern walkover design.
- 3. Complete electrification of heating system and finer control.
- 4. Increased and better distributed lighting of interior.
- 5. Forced ventilation system independent of motion of car or of air currents around car, with provision for preheating intake air.
 - 6. Material improvement in soundproofing thru double ceiling.
- 7. Improved visibility thru removal of obstructions to forward view along one side of car.
 - 8. Increased space on luggage racks, thru extension of these.
 - 9. More cheerful use of color on interior walls and ceiling.
 - 10. Handy mirror installed adjacent to water cooler.
- 11. Newly developed special diaphragms installed to make easy passage between moving cars, of especial value on dining car trains.
 - 12. Modern "packaging" effected by judicious use of exterior color.



SERVICE CONDITIONS:

Chicago-Milwaukee Limited service, hourly headway. Refer to CERA Bulletin 1, November, 1938, for details of North Shore Line.

DATA COMPILED BY Robt. H. Konsbruck

PHOTOGRAPHS BY
Byron Bock

The first trip of the first of these modernized cars was operated on February 18, 1940, for the benefit of members of the Central Electric Railfans' Association.

CERA Data Sheet March 30, 1940