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MOST POWERFUL ENGINE BUILT HAULS PASSENGER TRAIN INTO C.N.R. STATION

Giant "9000 Diesel Electric" Makes Test Run Between Toronto and London

Forecasting a new era in London divisional railroad history, a "9000 Diesel-electric" oil-burning locomotive for the first time drew a train into the C. N. R. depot this morning.

Giant engines of this type, it is stated, will soon take the "International Limited" over the rails between Montreal and Chicago. This will make the run the speediest, most punctual and cleanest in the world. The latest type locomotive has 1,340 horsepower and is the most powerful in the world. In a high speed schedule it will draw the heaviest passenger train to its destination on time. In a test it has done 65 miles an hour and had power to spare.

To-day's run between London and Toronto via Stratford was intended to instruct engineers trained to operate steam engines in the command of the greatest and most powerful locomotives in the world.

Experts from Glasgow and the Canadian National locomotive works were shoulder to shoulder with the road's crack engineers. Engineer Roberts brought his train into the city, in charge of Conductor John Marshall, at 11.10. Engineer Johnston and Conductor William Van Horn were in charge of the return trip.

GETS AWAY FAST

The Diesel-electric at the station was obviously not as smoky, not as noisy, faster on the get-away and less bulky than the greatest steam-powered locomotives. It drew in almost silently. For a while as it stood on the third track from the platform a number of interested onlookers drew around. Then, uncoupled, it whirred away with the snappy pick-up of a fine small automobile down the tracks out of vision. Among railroad men it created no slight stir of excitement.

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As railroaders say, the "Diesel-Electric 9000" represents an advance beyond the objectives of its famous predecessors in the Canadian National family of locomotives. It outclasses the "6000" and the sturdy and powerful "6100." It is greater than its real ancestor, the oil-electric car "15820" which ran from Montreal to Vancouver in 87 hours to write a new chapter in railroad history.

Briefly, "9000" is the application of the principle of oil-electric car to the locomotives. Oil fuel is used to operate an engine which drives the electric generator. The power from the generator furnishes the energy to turn the propulsion motors. The huge motor in the "9000" has 12 cylinders. It generates a horsepower of 1,[illegible]. In a previous test the locomotive has gone 85 miles per hour and had plenty of power to spare.

WEIGHS 650,000 POUNDS.

The engine consists of two units. Fully equipped it weighs 650,000 pounds. Of this weight 130,000 pounds is carried on the driving wheels. Each unit consists essentially of an oil engine generator set, mounted on the locomotive frame, boiler equipment for steam heating of passenger coaches, four traction motors for propelling the locomotive, air brake and other auxiliary equipment.

The power developed by the oil engine is converted into electric energy by the generator, transmitted to the traction motors geared to the driving axles, where it is used to develop tractive effort and speed.

With the present gear ratio, which was laid out for high-speed passenger service, the locomotive will develop a tractive effort (driving power) of 100,000 pounds during accelerating periods and 45,000 pounds on continuous running. It will, by itself, handle the heaviest passenger trains on a high-speed schedule.

As to freight, officials speak as follows:

"With the present gear ratio in freight service the tonnage which can be handled will depend upon the ruling grade and is limited by the rating of the electrical equipment.

"[illegible] ruling grades of [illegible] per cent, it will handle trains of [illegible] tons, made up of 45-ton cars, under average weather conditions, at a speed of approximately 19 M. P. H. on this grade, with a balancing speed of approximately 40 M. P. H. on level track.

"Assuming a freight gear ratio of 15:73, the locomotive will be capable of developing a maximum tractive effort of 130,000 during accelerating periods, with momentary tractive efforts limited by adhesion. It will handle a trailing load of 2,100 tons, made up of 45-ton cars, under average weather conditions, on a ruling grade of 0.4 per cent, at approximately 16 M. P. H. and it will have a balancing speed of approximately 25 M. P. H. on level track.

"The oil engines of both units are arranged for the future application of a super-charger, one of which has been built and tested on both engines. The super-charger will be installed on one of the units for service tests in operation on the Canadian National Railways lines."

UNABLE TO APPEAR—Albert Murray of this city, was charged with in-