4000 H.P. DIESEL PASSENGER LOCOMOTIVE . . DESIGNED AND BUILT BY ELECTRO-MOTIVE DIVISION . . GENERAL MOTORS . . LA GRANGE, ILLINOIS, U. S. A.

4000 H. P. DIESEL PASSENGER LOCOMOTIVE

Designed and Built For

THE GREAT NORTHERN RAILWAY COMPANY

BY ELECTRO-MOTIVE DIVISION • GENERAL MOTORS • LA GRANGE, ILLINOIS

This Diesel passenger locomotive consists of two lead units. Each unit is equipped with two General Motors 12 cylinder, V-type, 2-cycle Diesel engines having a bore of 8½ inches, stroke 10 inches and a unit fuel injection system. These engines are rated at 1000 HP each at 800 RPM, providing a total of 4000 HP for the locomotives. Each engine is directly coupled to a DC generator. Current from these generators is fed through control apparatus to four traction motors—two to each truck—and geared directly to the driving axles. Two six-wheel trucks are used in each of these units for smoother operation in the upper high speed range, middle wheels being designed to aid in weight distribution only.

SPECIFICATIONS

DIMENSIONS

Overall length over couplers	142′-2½″
Maximum width over grab irons	10′-6⅞″
Width over body posts	9′-10″
Height overall above rails	14′-10″
Wheel diameter	36″
Rigid wheel base of trucks	14′-1″
Roller bearing journals	6½″x12″
Truck swing designed for 21° curve or 274-foot radius	
Distance between truck centers (each unit)	43′-0″

SUPPLIES

Fuel oil	2400 gals.
Sand	32 cu. ft.
Lubricating oil	560 gals.
Engine cooling water	600 gals.
Boiler water	2400 gals.

WEIGHTS

Total weight fully loaded	634,240 lbs.
Weight with one half of variable supplies	613,500 lbs.
Maximum tractive effort at rim of driving wheels at 25% adhesion	103,380 lbs.

GENERAL MOTORS LOCOMOTIVES