

4000 H. P. DIESEL PASSENGER LOCOMOTIVE

Designed and Built for

SOUTHERN RAILWAY SYSTEM

This Diesel passenger locomotive consists of one lead and one booster unit, each equipped with two 12-cyclinder, V-type, 2-cycle GM Diesel engines having a bore of $8\frac{1}{2}$ ", stroke 10" and a unit fuel injection system. The engines are rated a full 1000 horsepower for propulsion at 800 RPM, providing a total of 2000 horsepower per unit and 4000 horsepower for the locomotive.

Each engine is directly coupled to a DC generator. The direct current is fed through control apparatus to the eight traction motors—two per truck—geared directly to the driving axles. There are two six-wheel trucks under each unit. The traction motors power only the front and rear axles of each truck. The center axle is load bearing.

SPECIFICATIONS

DIMENSIONS (per unit)

Overall length over couplers, lead unit	71'-63/4"
Overall length over couplers, booster unit	70'-0"
Maximum width over grab irons	10'-67%"
Maximum height above rail.	.14'-11"
Distance between truck centers	43'-0"
Truck rigid wheel base	
Wheel diameter	36"

SUPPLIES (per unit)

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Fuel oil																
Sand, lead unit	on	ly	١.			 										.16 cu. ft.
Lubricating oil						 										.330 gals.
Cooling water.						 			•	•	•					.400 gals.

WEIGHTS (per unit - approximate)

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Total loaded weight on rails, lead unit 313,300 lbs.
Total loaded weight on rails, booster unit 303,000 lbs.
Loaded weight on drivers, lead unit 211,164 lbs.
Loaded weight on drivers, booster unit204,222 lbs.

