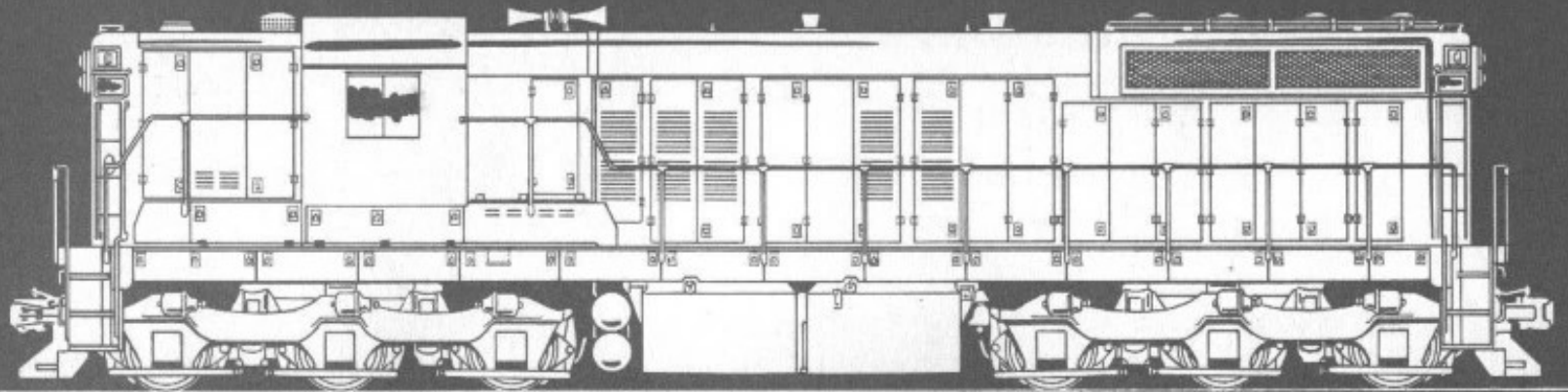


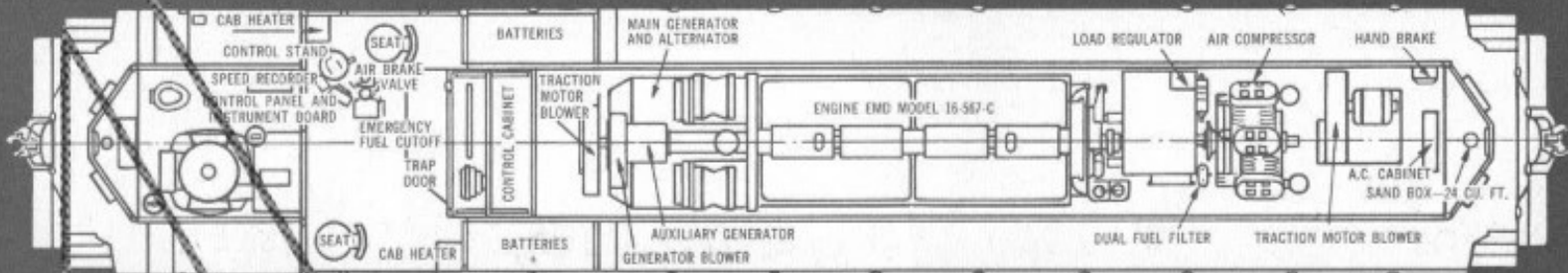
**SD
9**



GENERAL MOTORS

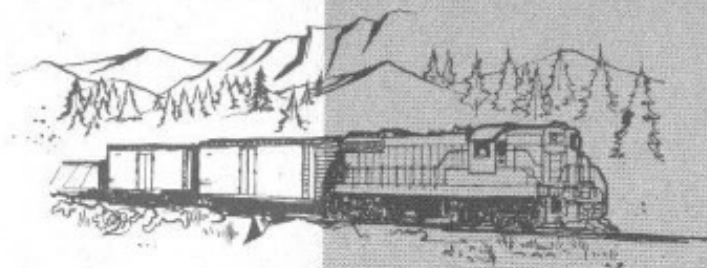
1750 H.P. 6-MOTOR ROAD SWITCHER

for passenger, freight and switching service



**SD
9**

*higher power and greater tractive effort
in the world's easiest-riding
6-motor road switcher*



GENERAL MOTORS SD9 ROAD SWITCHING LOCOMOTIVE

This sure-footed heavy hauler—a highly improved version of the first 6-motor Road Switcher with fully flexible trucks—delivers phenomenal drawbar pull.

With its FLEXI-COIL trucks and automatic wheel-slip control, this unit has already demonstrated its superior qualities of adhesion under all types of rail conditions.

The new SD9 is ideally suited to light rail applications where axle loading is limited and heavy tonnages prevail. With its horsepower increased to 1,750 and available with an axle loading of less than 50,000 lbs., it readily lends itself to secondary and branch line operation.

• Railroad men have high praise for this

locomotive's amazing roadability, its exceptionally good adhesion under poor rail conditions; its smooth floating ride at all speeds (can be geared for speeds up to 89 m.p.h.); its automatic sanding and its high-capacity dynamic braking. Maintenance crews are quick to note the simplicity, accessibility and general arrangement of the equipment. And on those roads where 6-motor trucks are serviced, ease of access to the traction motors and the renewal of brake shoes without need for a pit come in for special acclaim.

In addition, high interchangeability of parts with other types of General Motors locomotives makes the SD9 very desirable for use in pools.

SPECIFICATIONS

DIMENSIONS

Length over coupler pulling faces	60' - 8½"
Width over grab irons	10' - 8"
Height above rails	15' - 0"
Distance between truck centers	35' - 0"
Truck rigid wheelbase	13' - 7"
Wheel diameter	40"
Minimum curve radius	250' - 0"

SUPPLIES

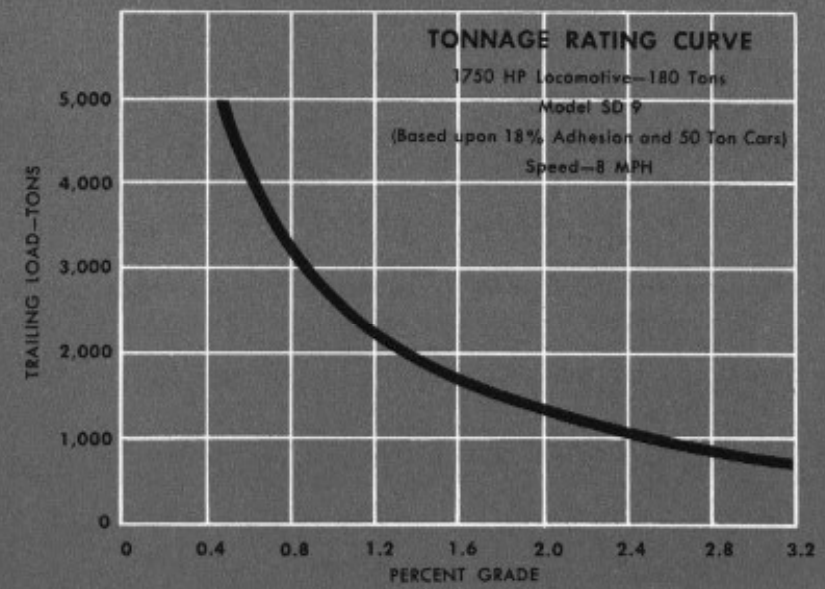
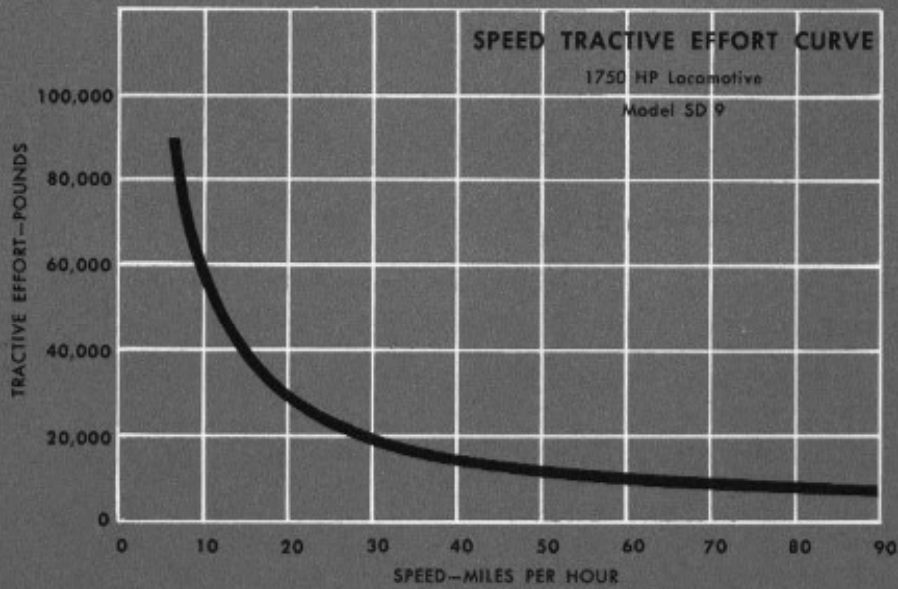
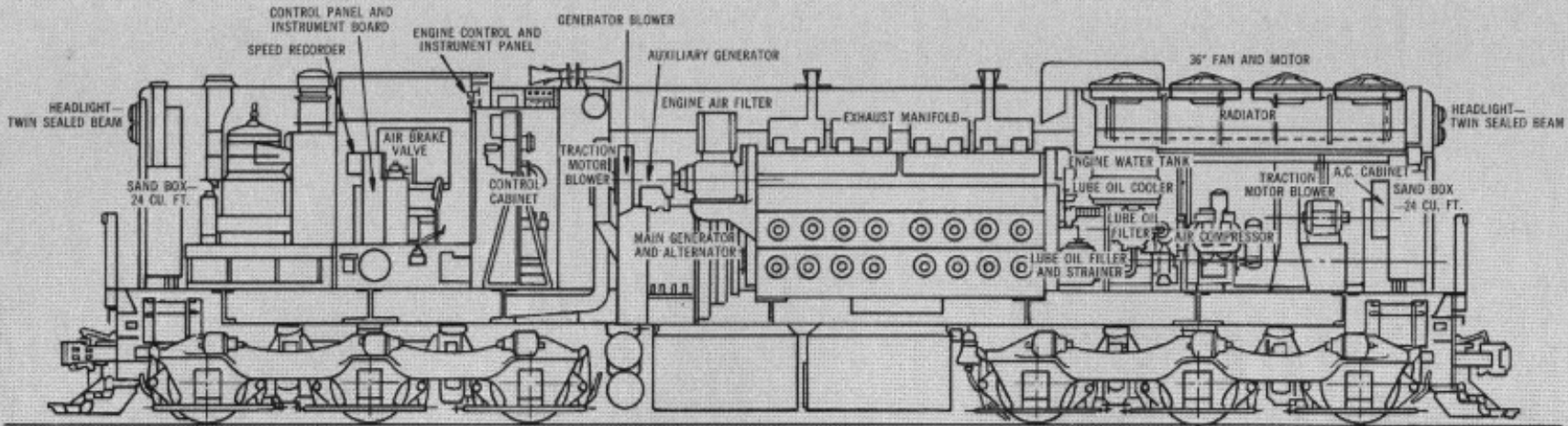
Fuel oil	1,200 gals.
Boiler water (opt.)	1,200 gals.
Lubricating oil	200 gals.
Cooling water	260 gals.
Sand	50 cu. ft.

WEIGHT

Total weight fully loaded, depending on modifications, approximately	300,000 to 360,000 lbs.
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CAPACITY (Approximate)

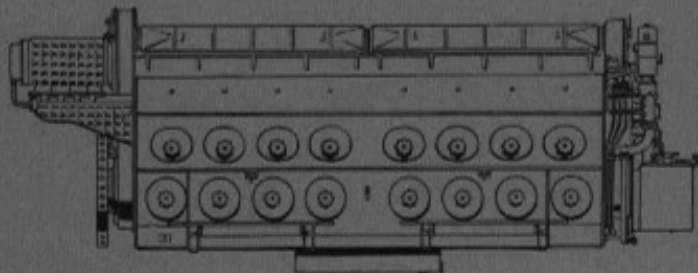
Starting tractive effort at 25% adhesion, depending on weight	75,000 to 90,000 lbs.
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For heavy tonnage applications the SD9 locomotive is equipped with 62:15 gear ratio. With this gearing the traction motor is self-protecting in most applications, with operation being limited only by available adhesion. Other gear ratios are available for applications where schedule, rather than tonnage, is the important consideration.

GEAR RATIO						
Option	1	2	3	4	5	6
Gearing	65:12	62:15	61:16	60:17	59:18	58:19
Max. Speed	55	65	71	77	83	89

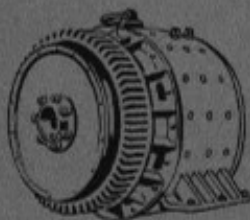
This curve serves as a general guide to locomotive use. In most cases the locomotive may be operated up to the limit of the adhesion obtainable.

**SD
9****ENGINE**

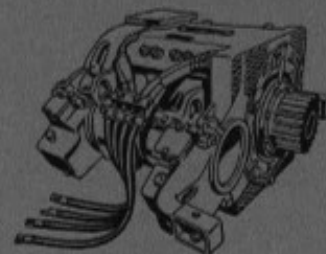
Prime mover for this locomotive is a 16-567C Diesel engine rated at 1750 H.P. The new "C" model is the latest development in the 567 series of General Motors 2-cycle V-type engines which power 70% of the world's main line Diesel trains. Designed for longer service life with greatly reduced maintenance, this new engine features the following improvements: 1) Entirely new crankcase with heavier frame members, 2) New cylinder head, 3) new cylinder liner with extended water jacket, 4) new replaceable-tube water inlet manifold, 5) new water jumper lines to individual liners and heads, 6) new trunnion rod and piston carrier, 7) new replaceable wear ring between liner and stress plate, 8) new hand-hold covers and seals, 9) new top deck covers and seals.

MAIN GENERATOR

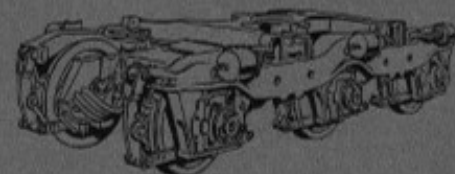
The new AC-DC generator, really two generators in one, provides direct current for driving the traction motors and alternating current for operating the engine cooling fans and traction motor blowers. It is the result of more than a quarter century of experience—dating back to the development of the first successful variable voltage generator which made possible the practical application of the internal combustion engine to railroad service. It is a rugged, compact unit, easily accessible for service. The same generator is used on the F9 and GP9 models.

**TRACTION MOTOR**

The new D37 traction motor, used on all General Motors locomotives, comprises a number of electrical and mechanical improvements that substantially increase performance, while eliminating short-time ratings in most applications. Due to these improvements both stator and armature can operate at higher ratings with lower temperatures, resulting in longer life, less maintenance, and fewer removals for dipping and baking. New grease-lubricated pinion-end armature bearings, sealed for the regular overhaul period, further reduce maintenance. And all new features are in line with Electro-Motive's policy of designing improvements to be applicable to older assemblies.

**TRUCKS**

The SD9 locomotive uses the world's first fully flexible 3-motor 6-wheel truck, developed by Electro-Motive in 1951, which employs an entirely new principle in railroad car springing. Four sets of vertical coil springs permit full-floating action between the bolster and truck frame, resulting in riding characteristics comparable to a fine passenger car truck. This allows high-speed Diesel operation even in districts with light rail and uneven track. The ruggedness and simplicity of design not only assures ease of inspection and servicing, but also eliminates the possibility of excessive flange wear and high maintenance cost. Roller bearing journals, brake rigging stabilizers, and the new sealed gear case are standard equipment.



ELECTRO-MOTIVE DIVISION GENERAL MOTORS

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