SPECIFICATIONS

GENERAL MOTORS

2250 H.P. "LEAD" UNIT

DIESEL-ELECTRIC

PASSENGER

LOCOMOTIVE

ELECTRO-MOTIVE DIVISION

GENERAL MOTORS CORPORATION

LA GRANGE, ILLINOIS, U. S. A.

Specification 8016
February 10, 1949
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GENERAL MOTORS

2250 H.P. "LEAD" UNIT

DIESEL-ELECTRIC

PASSENGER LOCOMOTIVE

INDEX

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SECTION 1

General Information and Identification

GENERAL MOTORS LOCOMOTIVES

Model E8-A—"Lead"—2250 Horsepower Locomotive.

Type A.A.R. designation (A1A-A1A). Common designation (0660).

Arrangement The general arrangement of the locomotive is shown on Elevation and Floor Plan Drawing attached.

The locomotive consists of one unit complete with two independent 1125 H.P. power plants, trucks and all necessary auxiliaries, with a control cab at the front which identifies it as a "Lead" unit.

Major Dimensions

Distance, pulling face of front coupler to centerline of No. 1 truck	13′ 9″
Distance between bolster centers	43′ 0″
Truck—rigid wheel base	14′ 1″
Distance, pulling face of rear coupler to centerline of No. 2 truck	13′ 6″
Distance, pulling face front coupler to rear coupler	70′ 3″
Width over body posts	9′ 10″
Width over handholds	10′ 8″
Height, top of rail to top of carlines	13′ 11″
Overall height, over horns, maximum	14′ 10½″

Drive

Driving motors	Four
Driving wheels	4 Pair
Diameter wheels	36″
Gear ratio	52:25
Maximum locomotive speed	117

Weights and Supplies

Loaded weight on drivers	(Approximately) 210,750 lbs.
Total loaded weight on rails	(Approximately) 316,500 lbs.
Carbody and Equipment	(Approximately) 213,600 lbs.
Truck—Total 2	102,900 lbs.
Fuel	1200 gal.
Steam Generator water	1350 gal.
Sand	16 cu.ft.
Cooling water—Total 2 engines	400 gal.
Lubricating oil—Total 2 engines	330 gal.

SECTION 1

General Information and Identification

Clearances EMD Clearance Diagram 8133329 illustrates clearance conditions for Body, Truck, Motors, Running Gear and miscellaneous underneath equipment. Truck swing designed for 21° curve or 274′ radius, with 2¼″ free lateral motion in the truck bolster and ⅜″ in Hyatt journal boxes.

Safety Appliances All steps, grab handles and other safety appliances cover EMD interpretation of Interstate Commerce Commission requirements.

SECTION 2

Carbody Construction

GENERAL MOTORS LOCOMOTIVES

Framing Carbody framing designed to simulate bridge construction using a modified Howe truss arrangement. The underframe has center sills joined to the side framing through cross members and side sills. The upper or roof portion is tied together with arched frames and carlines to form a turtle back roof. Ample jacking pads are provided for blocking the locomotive. Front and rear framing is arranged to provide collision protection. The complete assembly is of welded construction throughout, with reinforcing plates used at joints, placed so that no transverse welds are used.

Hatches Hatches designed to blend with the contour of the turtle back roof and located to provide access for removal of equipment.

Outside Finish The outside finish consists of paneling, mounted by use of battens, with allowance for deflection of body without buckling of panels. The finish does not assist in the support of the carbody.

Flooring Consists of plates welded to the underframe. Anti-skid surface provided.

Body Center Plates High grade steel forging, welded to body bolster assembly. Wear plates applied to bottom and outside surfaces.

Control Cab The control cab, an integral part of the body, is located ahead and above the locomotive floor, leaving an unobstructed view for the operating crew.

The cab is insulated where possible with 3″ insulation, fire and moisture proof, and equipped with two upholstered swivel type seats having arm and back rests. The inside finish consists of ceiling lined acoustical treatment, while the cab floor is wood within steel framing, linoleum covered.

Cab Sash Windshield sash, stationary 9/16″ safety plate glass. Mounted in a frame at an approximate angle of 15° from vertical and also slanting toward outside of car from center to form a wide "V" which, in combination with the vertical slant, will tend to shed rain, offering better visibility.

SECTION 2

Carbody Construction

GENERAL MOTORS LOCOMOTIVES

Side Sash — Retractable ¼" safety plate glass in the doors and windows next to the operators, mechanically operated with a crank. Forward portion pivoted for controlled ventilation.

Engine Compartment Sash — ¼" safety plate glass. Round sash; two on each side are hinged to swing outward and two are stationary.

Steam Generator Compartment — A partition in the rear of carbody provides a separate compartment for steam generator and batteries.

Gutters — Gutters are provided above doors and cab windows.

Couplers — A.A.R. Tight Lock coupler, with heavy swivel butt.

Draft Gear — National Malleable type M-380 rubber draft gear (front and rear).

Yoke — Special EMD design.

Draw Bar Carrier — Spring supported.

Uncoupling Device — Operated from both sides of locomotive.

Coupler Swing — Normal 13° swing.

Front and Rear Connections — Air brake, signal lines, and steam conduit fitted with shut-off valves.

Pilots — Pilot designed to withstand substantial shock, braced firmly laterally and longitudinally with hinged cover doors to enclose coupler when not in use.

Anti-Climbers — An anti-climber is placed at the intersection of the pilot and underframe.

Body end and Side Doors — Side, rear and front end doors are hinged type.

The cab doors are arranged so that the cab can be reached directly from the outside or engine compartment. The door locks are of special EMD design "L" handle, latched in horizontal position. Outside cab doors locked by inside latch, left and right hand doors of engine room provided with a lock and Railway Coach key.

Carbody Construction

Weather Stripping — For sash—rubber of special design to provide good cushioning and water-tight assembly. For outside doors—extruded rubber section.

Signal Brackets — Combination flag and oil marker light brackets located at rear of unit. Flags and marker lights furnished by railroad. Five-digit illuminated number box formed to contour of nose providing visibility from front and side. Classification light arranged for Red, Green, or White indication. Classification flag brackets located within arm's reach outside cab side windows.

Blue flag bracket placed at end of anti-climber in plain view from cab right side only.

Diaphragms — Attached to body end posts, with standard EMD face plate.

Vestibule Light — Vestibule light provided at rear end and operated on same circuit with engine room lights.

Foot Plate — Foot plate provided for passageway between locomotive units at rear end.

Ground Lights — Ground lights located on each side under cab.

SECTION 3

Trucks

GENERAL MOTORS LOCOMOTIVES

Truck Assemblies

Two (2) six (6) wheel truck assemblies are provided per locomotive unit, interchangeable. Improved riding qualities and greater stability in negotiating curves at high speeds are obtained by an EMD design of load suspension.

Truck frame supported at four points by twin group coil springs which ride on four equalizers carried between journals. Swing bolster supported by full elliptic springs. These springs ride on each end of two spring planks, which in turn are carried by swing hangers pivoted from outside of truck frame.

Traction motors geared direct to outer axles of each truck are carried in conventional manner between the driver axles and truck transoms. Center axle is idle, and necessary for load carrying and braking purposes only.

Clean air is forced to the motors by blowers direct driven from engine. Air is directed to motors through openings in bolster and body center plates, and from the bolster to the hollow truck transoms through matched openings in each. The passages between the swing bolster and transom sections are sealed by a special gasket and steel slide plate arrangement. Air passes from the transom to the motors through flexible rubber ducts, applied between motor and transom openings.

Axles

Modified E-12 with oversize wheel and gear seat and journals to suit Hyatt Roller Bearings. A.A.R. material specification M-126, Class D.

Wheels

Rolled steel heat treated, 36″ diameter, 2½″ rim. Wheel tread ground smooth and concentric after assembly on axle.

Journal Boxes

Locomotive equipped with Hyatt Roller Bearings 6½″ journals of special EMD design. Lateral thrust is taken through a cushioning arrangement directly by the box. Journal box pedestal guides provided with spring steel wear plate.

Truck Frame and Bolster

Steel casting, heat treated, EMD design.

Pedestals

Lined with spring steel plates bolted to frame.

Pedestal Tie Bars

Fitted and applied at the lower end of the pedestal legs, held in position by bolts.

SECTION 3

Trucks

GENERAL MOTORS LOCOMOTIVES

Truck Center Plates	Truck center plate provided with wear plates, dust guard, and lubricating arrangement.
Side Bearings	Friction type side bearings.
Interlocks	Body and truck interlocks provided each side of the center plate, serving as anti-sluing device in case of derailment.
Swing Hangers	Made from the same kind of steel as the axles.
Bolster Springs	Full elliptic.
Truck Brakes	Clasp brake rigging provided on each wheel, operated by four brake cylinders per truck. Each cylinder fitted with automatic slack adjuster.
Brake Pins	All pins and bushings hardened and ground, large size. All holes in brake rigging bushed.
Hand Brake	Hand brake provided for the locomotive connected to one brake cylinder lever only. All trucks provided with lever for hand brake connection, making trucks interchangeable.

SECTION 4

Power Plant and Transmission

GENERAL MOTORS LOCOMOTIVES

Engine G.M. Diesel twelve (12) cylinder, 2 cycle, bore 8½″, stroke 10″, unit injection, Roots blower scavenging through cylinder wall intake, and multi-valve exhaust. Water cooled cylinder liners and heads, oil cooled pistons, seven (7) bearing crankshaft, drop forged connecting rods, floating piston pin and bushing, and full floating piston assembly. Isochronous governor speed control and separate overspeed trip.

Main Generator EMD, nominally 600 volt direct current, ventilated by blower. Single bearing direct connected to engine crankshaft through alternator rotor and flexible coupling. Capacity suitable to continuously transmit to traction motors the rated output of the engine under all conditions for which the locomotive is offered.

Alternator EMD A.C. 149V, 3 phase, 16 pole, built integral with main generator, to supply A.C. power to induction motors driving engine cooling fans and engine room ventilating fans.

Traction Motors EMD direct current, series wound, roller bearings, force ventilated, axle hung motors.

Auxiliary Generator Direct current generator, provides current for control circuits, lighting, battery charging, and separate excitation of main generator. The voltage is automatically controlled by a voltage regulator.

Load Regulator A load regulator is provided which automatically maintains a constant horsepower output, corresponding to each throttle position, over the entire range of locomotive speeds.

Engine Starting By motoring of the main generator through use of special starting fields energized by the locomotive storage battery.

Cooling System Each engine has a separate cooling system consisting of two direct driven centrifugal water pumps on the engine, radiators and three A.C. motor driven cooling fans located in hatch above engine. Full ceiling with removable light weight sections separates cooling air from engine room. The water cooled oil cooler and water tank mounted as a unit directly in front of the governor end of engine. Automatic water temperature control and hot engine alarm.

SECTION 4

Power Plant and Transmission

GENERAL MOTORS LOCOMOTIVES

Engine Lubrication

The engine lubricating oil system is a pressure system using two positive displacement gear type pumps combined in a single unit. One pump delivers oil for the pressure lubricating system, the other for piston cooling. The oil supply to these pumps is drawn from the oil strainer chamber through a common suction pipe.

A scavenging oil pump is used to draw oil from the engine oil pan through a strainer, pump it through the cooler core to the lube oil filter and return it to the strainer chamber. Low oil pressure and high suction protection is provided.

Engine Fuel System

Return flow, with a single D.C. motor driven gear pump for each engine, protected by suction filter in addition to discharge filters to insure clean fuel for the engine. An assembly of sight glasses and relief valves offers visual indication of any system trouble plus protection against excessive pressures.

Engine Exhaust

Dual fabricated chambers with one exhaust outlet for each engine.

Combination Fuel and Water Tank

Combination fuel oil and water tank constructed with water tank surrounding the fuel tank on bottom and sides with continuous $\frac{1}{4}''$ plate separating the fuel and water. Design provides protection to fuel portion of tank and keeps the fuel warm during cold weather.

Capacity 1200 gallons fuel and 1350 gallons water, located underneath the locomotive body. Filling stations each side, fuel tank vents equipped with flame arrestors. Double sumps with cleanout plugs and non-removable water drains located at bottom of tank.

Each fuel filling station has I.C.C. approved direct reading fuel gauge, indicating fuel level $4\frac{1}{2}''$ from top of tank. Tank is also supplied with a hydrostatic distant type level gauge, indicating levels to within $1''$ of the bottom.

Each fuel filling station fitted with pull ring for emergency fuel cut-off. Similar pull cords located at operator's control station and in engine room.

Electrical Control Cabinets

Cabinet for each power plant houses the locomotive high and low voltage control equipment.

1) High and low voltage control for Main Generator and Traction Motors.
2) Battery charging control.
3) Engine starting.

A panel located in the No. 1 electrical control cabinet comprises starting fuse, distribution circuit breakers, train control circuit breaker and fuses and switches for control and lighting.

SECTION 4

Power Plant and Transmission

Locomotive Control — Automatic forward transition of motor connections between Series, Parallel, and Shunt. Backward transition is automatic between Shunt and Parallel, and manual between Parallel and Series. High voltage circuits safeguarded by ground protective relay.

Storage Battery — 32 cell, 64 volt, 426 ampere hour—(8 hour rating) battery and cut-out switch located in steam generator compartment and serviced from inside of locomotive. Insulated from steam generator heat and ventilated through air ducts to the locomotive roof.

Engineer's Control Station — Engineer's control station located conveniently to the left of the engineer's seat, includes the engine speed throttle and locomotive reverse lever. The lever arrangements are such that the throttle must be in "Idle" before the reverse lever can be removed to isolate the controller. Translucent illuminated dial indicates position of throttle.

Engineer's Control Switch — Multiple circuit breakers for control and lighting located within reach of the engineer.

Attendant's call	Number & Gauge lights
Control	Classification lights
Generator field	Headlight dim
Fuel pump	Headlight bright
Defrosters	Cab heater

Signal light (*if required*)

Order Lights — Separate order lights provided for the engineer and fireman.

Local Control Station — A local control station for each engine located at the governor end of engine is used to individually control each engine and includes the following apparatus:

a) Engine start and stop buttons.
b) Isolation switch.
c) Master relay for electro-hydraulic throttle.
d) Fuel pump circuit breaker.
e) Oil pressure and engine water temperature gauges.
f) Four signal lights.

Signal Alarm System — Two alarm bells and two groups of signal lights indicate low oil pressure or high oil pump suction pressure, power failure, ground relay action, and hot engine. Steam generator indicator light located in steam generator compartment. Alarm sounds in all units and lights operate in unit affected. Pneumatic control switch, with indicating light on engineer's instrument panel is provided with automatic reset when throttle is returned to idle.

Engineer's Instrument Panel Directly in front of the engineer on the dash is located a panel having air brake gauges, overload light, traction motor ammeter, windshield wiper valve, gauge light rheostat and heater and defroster switches.

Fireman's Instrument Panel Directly in front of the fireman on the dash is located a panel having remote steam generator control and trainline steam gauge, cab heater switch and windshield wiper valve.

Speedometer A combination speedometer, recorder and odometer located to the left of the engineer's instrument panel.

Engine Turning Jack Provided for engine timing and inspection. Constructed for one man operation.

SECTION 5

Air Brakes

GENERAL MOTORS LOCOMOTIVES

Air Brakes Type 24-RL with independent brake valve to the left of the automatic brake valve.

Foundation Brakes 11″ x 10″ cylinders, 7.3:1 lever ratio, 18″ brake shoes, 554,500 lb. braking force @ 100 lb. cylinder pressure.

Brake Piping I.P.S. copper tubing and A.A.R. 300 lb. solder fittings except at end valves where wrought iron pipe with A.A.R. malleable iron fittings are used. All piping $\frac{5}{8}$″ O.D. and under uses nominal size copper tubing with S.A.E. tube fittings.

All brake equipment mounted on a rack requiring a minimum amount of piping and readily accessible for inspection or replacement.

Main Reservoir Main reservoirs are carbon steel with all-welded seams and heads, capacity 50,000 cubic inches. Reservoirs are mounted under the locomotive, one at each end of the fuel tank.

Air Compressor Each engine drives a two stage, two cylinder, water cooled direct coupled compressor having a displacement of 89.0 cu. ft. per min. at 800 RPM. Pro rata delivery in proportion to engine speed.

Air compressor governor adjusted to provide constant main reservoir pressure with 10 lb. differential.

Brake Cooling System Cooling system placed between air compressor and first main reservoir.

Sanding Sanding controlled by manually operated valve. (See Section 7.)

Sand Capacity Four sand boxes, capacity 4 cu. ft. each, total 16 cubic feet.

SECTION 6

Equipment

GENERAL MOTORS LOCOMOTIVES

Cab Heaters Two steam cab heaters with fan driven air circulating system in each cab. Each heater has a three speed switch for the fan. Fresh air from nose compartment may be circulated through cab heater if desired.

Defroster Two motor driven defroster blowers using cab heater air.

Sun Visors Four adjustable metal sun visors per cab.

Warning Devices One large and one small diaphragm type air horn, both pointing forward.

One 12″ locomotive bronze bell with internal ringer.

Fire Extinguishers One (*1*) 1-quart carbon tetrachloride—in control cab.

Two (*2*) 1-gallon carbon tetrachloride—in engine room.

Window Wipers Two large size—pneumatic type.

Toilet Coach type—double hopper, foot operated, with seat but without lid, independent water tank.

Steam Generator Control Remote control of steam generator from locomotive cab.

Steam Trainline 2½″ diameter, 300 lb. extra heavy fittings and necessary end valves. Lagging over complete length.

Both ends of locomotive provided with 2½″ steam connection. Steam trap provided at front end of locomotive.

Engine Room Ventilation Two A.C. motor driven fans, identical to engine cooling fans, discharge outside air through panel type air filters into the engine room. For winter operation, each ventilating fan can receive warm air from one engine cooling fan discharge through an air duct equipped with manually controlled shutters.

Headlight 14″ Clear glass reflector mounted in headlight barrel with 250 watt, 32 volt medium screw base lamp. Hinged assembly for access from nose compartment.

SECTION 7

Modifications

GENERAL MOTORS LOCOMOTIVES

The following modifications can be supplied on request to satisfy various operating requirements. The base price of the locomotive which is described in this specification does not include any of these modifications.

Air Brakes: The following modifications in the brake schedule may be obtained:

a) Electro-Pneumatic braking.

b) Automatic sanding in emergency.

c) Safety control from foot pedal and/or brake valve handle with or without time delay.

d) Independent sanding valve and/or sanding from bail on brake valve handle.

e) Overspeed control with or without time delay and suppression features.

Signal Light: Red and White signal light.

Dynamic Brakes: Variable dynamic brakes available on request. The traction motors are used as generators, the power being dissipated through force ventilated grid resistors located in the roof hatch. Excitation control lever mounted on control stand.

Electric Water Cooler: Electric water cooler in cab with removable one gallon jug. Total capacity, including cooling coil, approximately two gallons capacity.

Third Cab Seat: Third cab seat can be provided.

Steam Generator: The following steam generators are available:

1. One (1) 4000#/hr.
2. Two (2) 2500#/hr. (Requires deletion of toilet)

Water Supply: A 600 gallon hatch tank can be supplied in addition to basic 1350 gallon tank giving a total of 1950 gallons of water when dynamic brakes are *not* supplied.

SECTION 8

Painting

GENERAL MOTORS LOCOMOTIVES

General Only the best quality materials available are used, with special attention given to both the selection of materials and methods of application to insure a maximum of protection and durability.

Cab Inside finished in Suede Grey, trimmed in black.

Engine Room Inside finished in Suede Grey, trimmed in black.

All air, fuel, water and lube oil piping color coded at points of connection.

Outside Finish Color arrangement and design to agree with Railroad's requirement.

Under Carriage Black unless otherwise specified.

Trucks & Tanks Black unless otherwise specified.

SECTION 9

Performance Data

GENERAL MOTORS LOCOMOTIVES

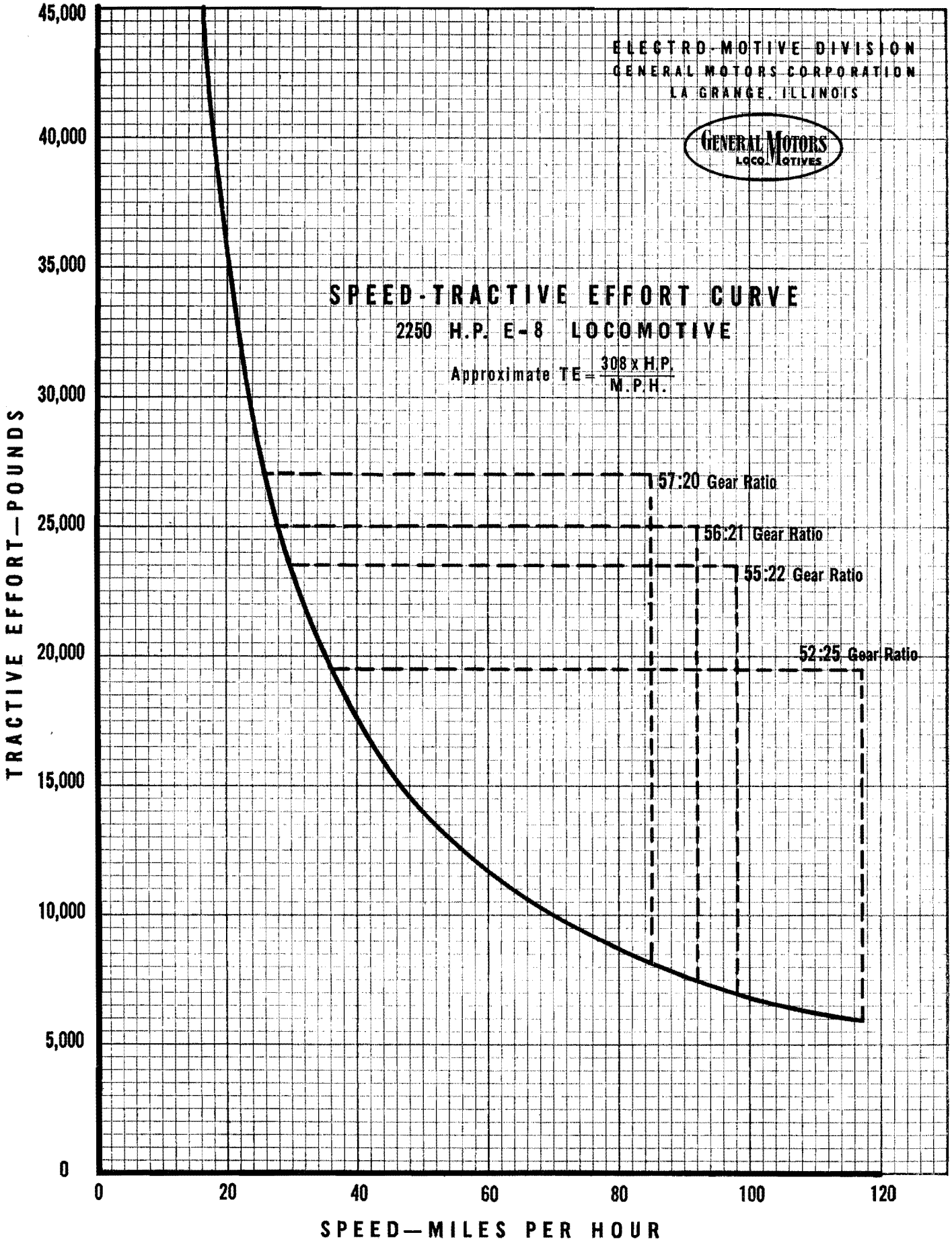
Although Section 1 specifies 52:25 gear ratio, other gear combinations are available when requested to suit operating requirements. The following table and curve show the characteristics of these gear combinations:

Gear Ratio:

Option	1	2	3	4
GEARS	52:25	55:22	56:21	57:20
RATIO	2.08	2.50	2.66	2.85
CONT. T.E.*	19,500	23,500	25,000	27,000
MAX. SPEED	117	98	92	85

*Continuous tractive effort is given per 2250 H.P. unit.

See speed-tractive effort curve.


ELECTRO-MOTIVE DIVISION
GENERAL MOTORS CORPORATION
LA GRANGE, ILLINOIS
GENERAL MOTORS
LOCOMOTIVES
SPEED-TRACTIVE EFFORT CURVE
2250 H.P. E-8 LOCOMOTIVE
Approximate TE = 308 x H.P. / M.P.H.
57:20 Gear Ratio
56:21 Gear Ratio
55:22 Gear Ratio
52:25 Gear Ratio
TRACTIVE EFFORT—POUNDS
45,000
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
0
20
40
60
80
100
120
SPEED—MILES PER HOUR

SECTION 10

Warranty and Patents

GENERAL MOTORS LOCOMOTIVES

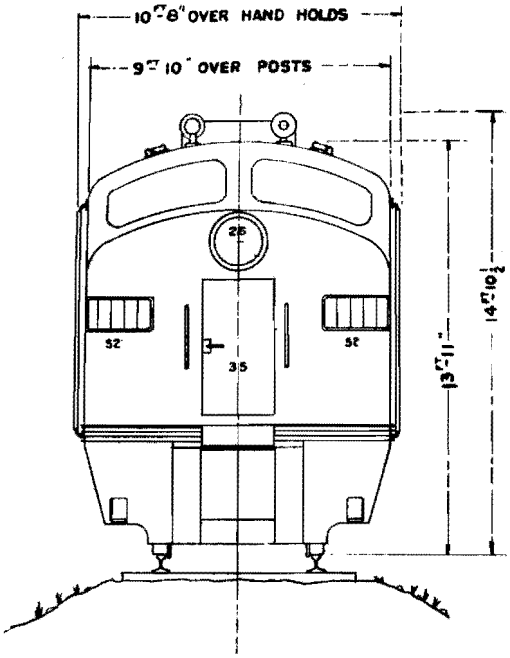
Warranty: THIS IS TO CERTIFY that we, ELECTRO-MOTIVE DIVISION, GENERAL MOTORS CORPORATION, LaGrange, Illinois, warrant all new locomotives manufactured by us to be free from defects in material and workmanship under normal use and service; our obligation under this Warranty being limited to making good at our factory any part or parts thereof, which shall within one (1) year after delivery of such equipment to the original purchaser, or before the locomotives have been 100,000 miles in scheduled service, whichever event shall first occur, be returned to us with transportation charges prepaid, and which our examination shall disclose to our satisfaction to have been thus defective.

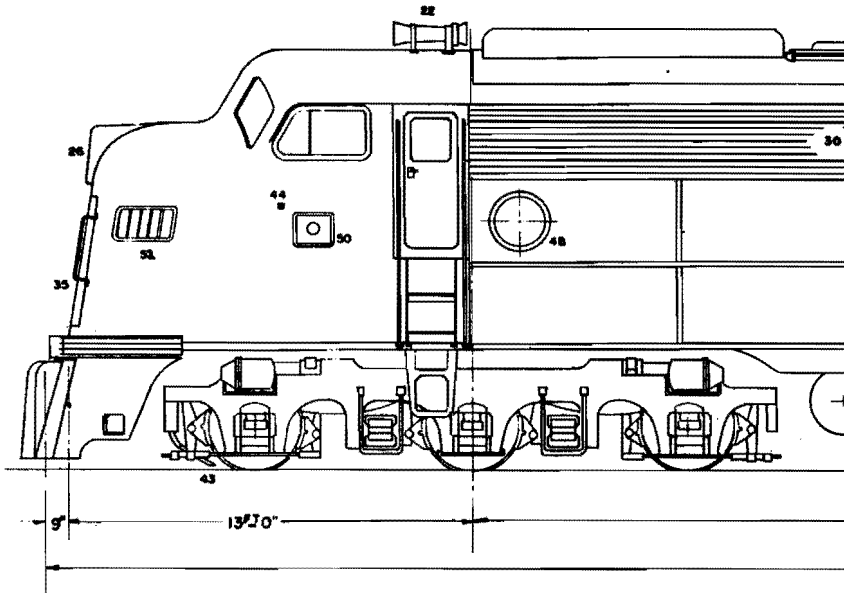
This Warranty being expressly in lieu of all other Warranties expressed or implied and of all other obligations or liabilities on our part, and we neither assume nor authorize any person to assume for us any other liability in connection with the sale of our equipment.

This Warranty shall not apply to any locomotive components which shall have been repaired or altered unless repaired or altered by us or by our authorized service representatives, if, in our judgment, such repairs or alterations affect the stability or reliability of the equipment, or if the equipment has been subject to misuse, negligence or accident.

We reserve the right to make changes in design or add any improvements on equipment at any time without incurring any obligation to install same on equipment previously purchased.

Patents: The Electro-Motive Division, General Motors Corporation, will not assume liability for patent infringement by reason of purchase, manufacture, sale, or use of devices or equipment not included in and covered by this Specification.


10'-8" OVER HAND HOLDS
9'-10" OVER POSTS
13'-11"
14'-10½"
28
52
52
35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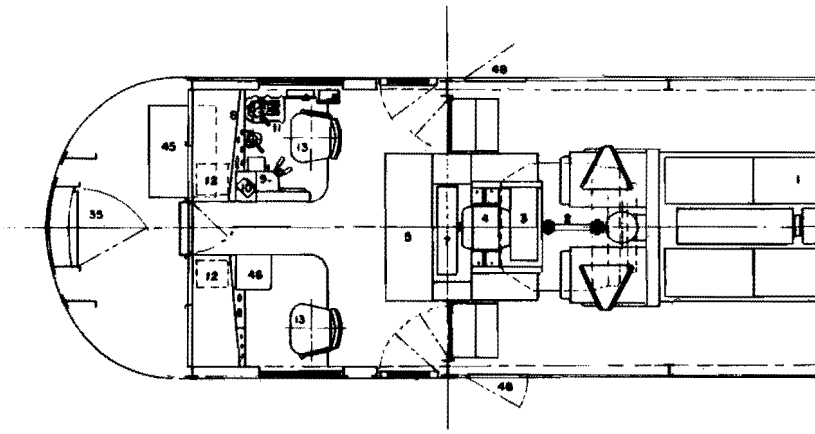
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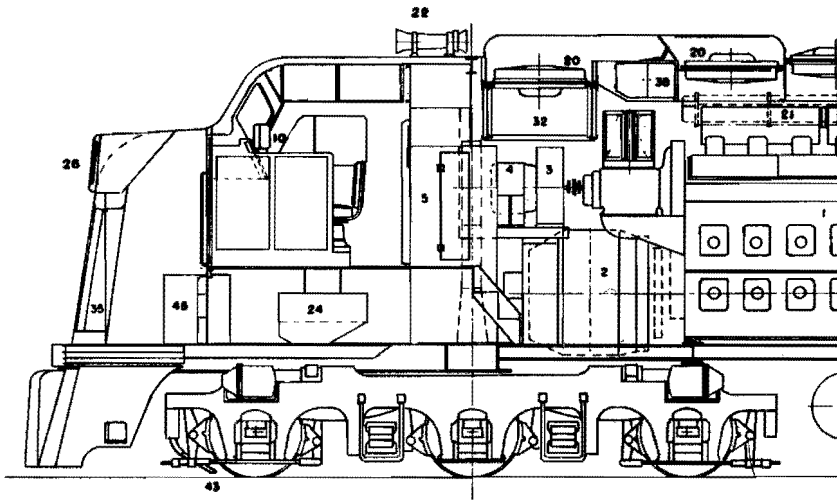
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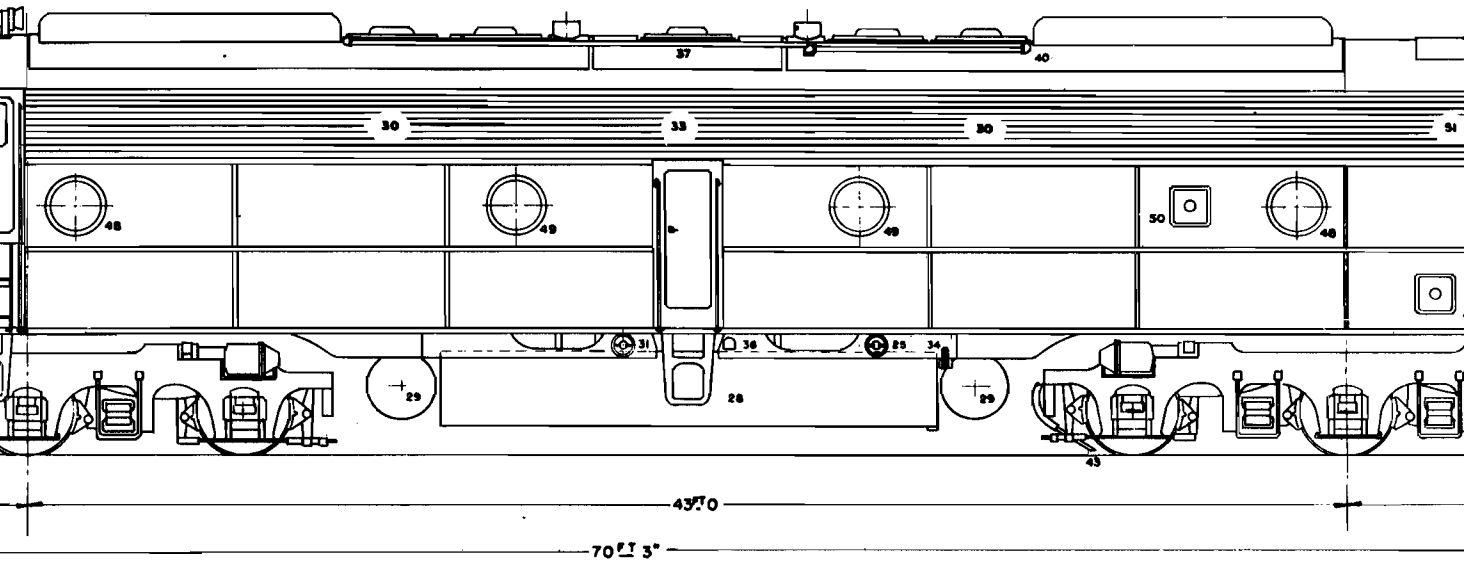
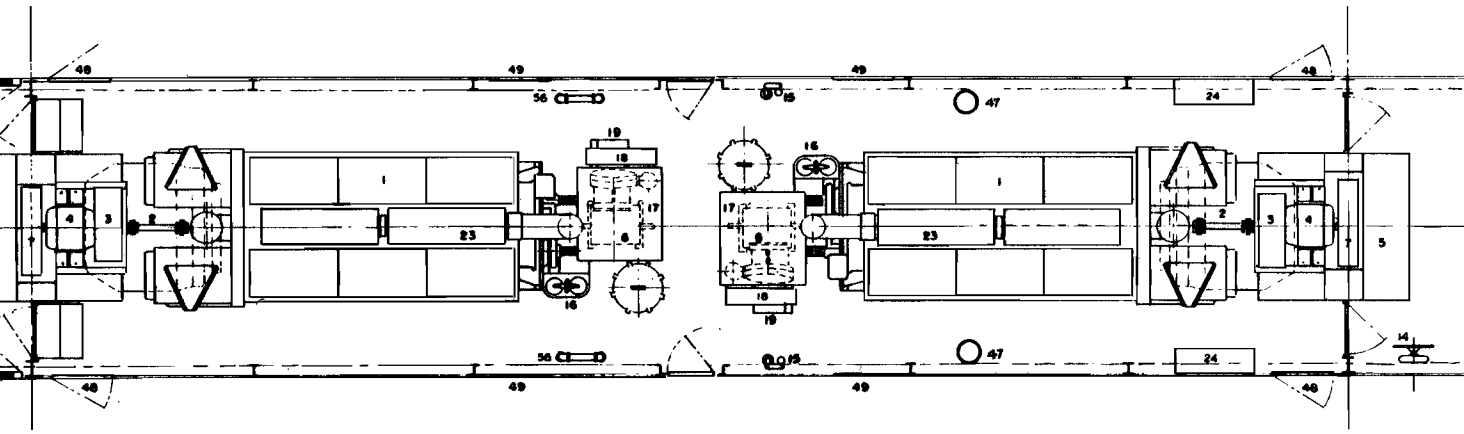
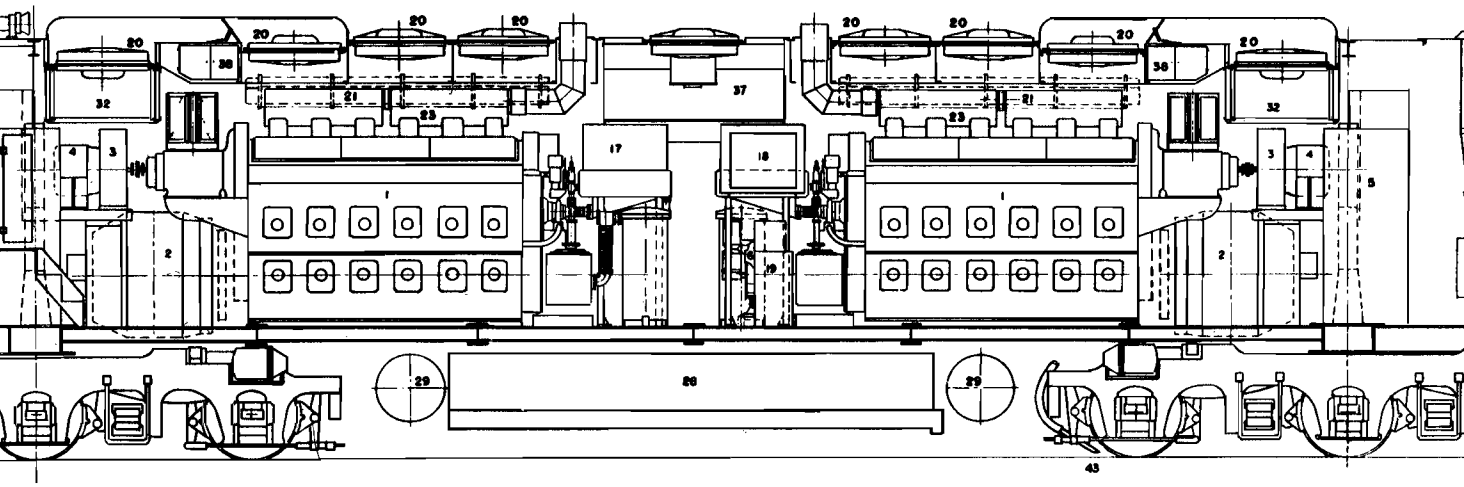
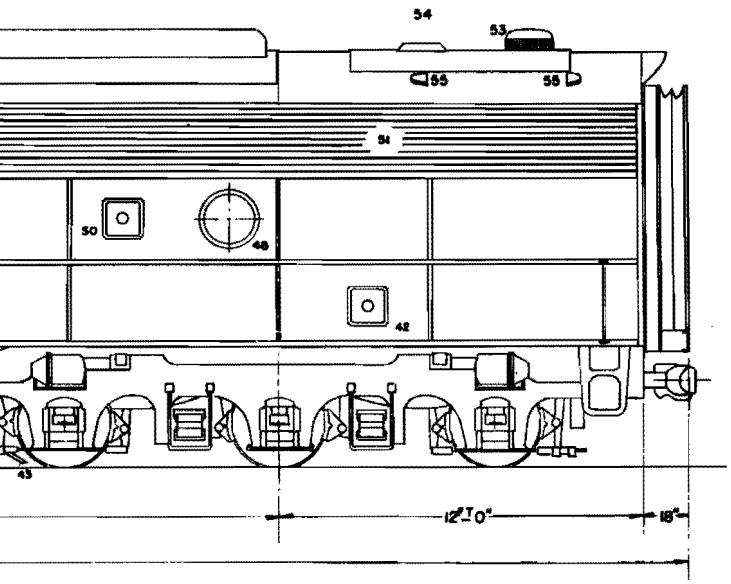
2250 H.P. M

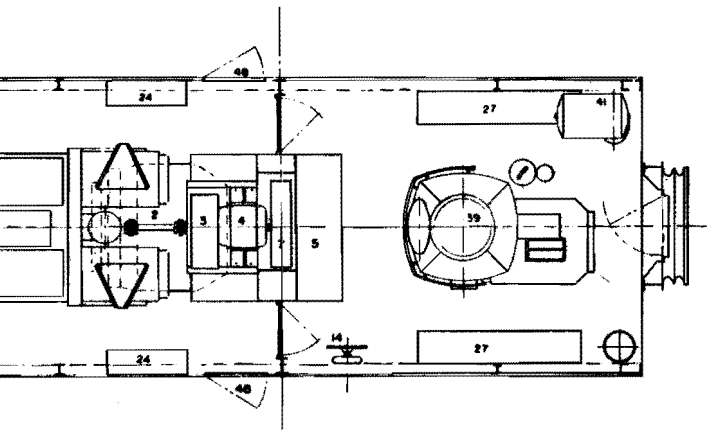


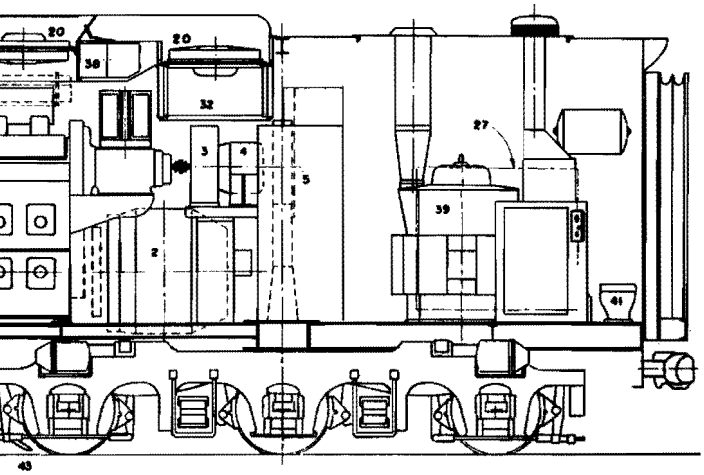




2250 H.P. MODEL E8 LOCOMOTIVE "LEAD" UNIT







● MODIFICATIONS

56 WATER TANK VENT
55 BATTERY BOX VENTS
54 STEAM GENERATOR STACK
53 STEAM GENERATOR AIR INTAKE
52 NUMBER BOX
51 STEAM GENERATOR ROOM SHUTTERS
50 SAND BOX FILLER
49 FIXED SASH
48 HINGED SASH
47 M.P. PIPE LINE FILTER
● 46 WATER ~~FAUX VENT~~ COOLER
45 AIR BRAKE RACK
44 BLUE FLAG BRACKET
43 SANDING NOZZLES
42 BATTERY CHARGING RECEPTACLE
41 TOILET
40 AIR COMPRESSOR AFTERCOOLER
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38 "A-C" CONTACTOR CABINET
● 37 DYNAMIC BRAKE HATCH
36 EMERGENCY FUEL CUT-OFF
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34 FUEL TANK GAUGE
33 AIR INTAKE FOR GRIDS
32 ENGINE ROOM VENTILATOR
31 BOILER WATER FILLER
30 AIR INTAKE & SHUTTERS
29 MAIN AIR RESERVOIR
28 FUEL (1200 GAL.) & WATER (1200 GAL.) TANK
27 BATTERIES
● 26 HEAD LIGHT
25 FUEL FILLER
24 SAND BOX
23 EXHAUST MANIFOLD
22 HORN
21 RADIATOR
20 FAN & MOTOR
19 LOAD REGULATOR
18 ENGINE CONTROL & INSTRUMENT PANEL
17 ENGINE WATER TANK & LUB. OIL COOLER
16 LUB. OIL FILLER
15 FUEL TANK VENT WITH FLAME ARRESTOR
14 HAND BRAKE
13 SEAT
12 CAB HEATER
11 AIR BRAKE STAND
10 SPEEDOMETER RECORDER
9 CONTROLLER
8 INSTRUMENT PANEL
7 TRACTION MOTOR BLOWER
6 AIR COMPRESSOR
5 CONTROL CABINET
4 AUX. GENERATOR
3 GENERATOR BLOWER
2 MAIN GENERATOR & ALTERNATOR
1 ENGINE—MODEL 12-567-B

GENERAL MOTORS LOCOMOTIVES

,, UNIT

ELECTRO-MOTIVE DIVISION
GENERAL MOTORS CORPORATION
LA GRANGE, ILLINOIS