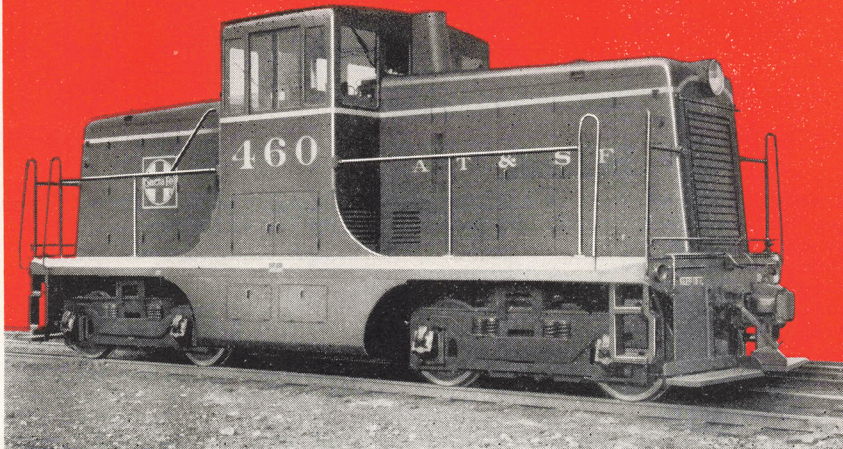


DIESEL-ELECTRIC RAILROAD LOCOMOTIVE

For Switching and Road Service—Maximum Speed 35 mph



44 TONS

4 AXLES

380 HP

Weight

- Normal weight 88,000 lb
- Total locomotive, light 85,000 lb
- On drivers, fully loaded 89,000 lb
- Per driving axle, fully loaded 22,250 lb

Traction Effort—Starting effort (30 per cent adhesion), 26,400 lb.

Minimum Radius of Curve—50 feet (locomotive alone).

Engines—Two Caterpillar D-17000 diesel engines; nominal rating of each, 190 hp at 1000 rpm.

Fuel-tank Capacity—250 gallons.

Generators—Two, Type GT-555, shunt-wound, direct-current, single-bearing, direct-connected to engine flywheel through a flexible steel-disk coupling. Class B insulated. Also used to crank the engine from the 32-cell, 64-volt storage battery.

Traction Motors—Four, Type GE-733, 6-pole, direct-current commutating-pole, 250-volt,

railroad-type with integral double-reduction gear drive. Class B insulated. Geared for 35 mph.

Auxiliary Generators and Exciters—Two Type GMG-140 sets; belt-driven from generator shafts. Auxiliary generators furnish constant-voltage power for battery charging, lights, and control. The split-pole exciters supply excitation for the main generators.

Control—Single-station, single unit. Two motors connected permanently in parallel to each generator.

Air Brakes—Straight and automatic schedule 14-EL. Two, belt-driven, two-stage air compressors. Piston displacement, 50 cfm at full engine speed. Reservoir capacity, 30,000 cu in.

Accessories—Four air-operated sanders, bell, horn, headlights, cab heater, air-operated window wipers, side-vision mirrors, fire extinguisher, and extension lamp are included in basic price.

Meets I.C.C. Requirements

BASIC NET PRICE, F.o.b. ERIE, PA. . . \$37,500

Price includes the services of a field engineer for one week. Any additional time is billed at \$2.60 per hour plus living and traveling expenses. Forty-four-ton locomotives are shipped on their own wheels, and messenger service is billed at \$12 per calendar day, plus living and traveling expenses. Purchaser may provide the messenger if he so desires.

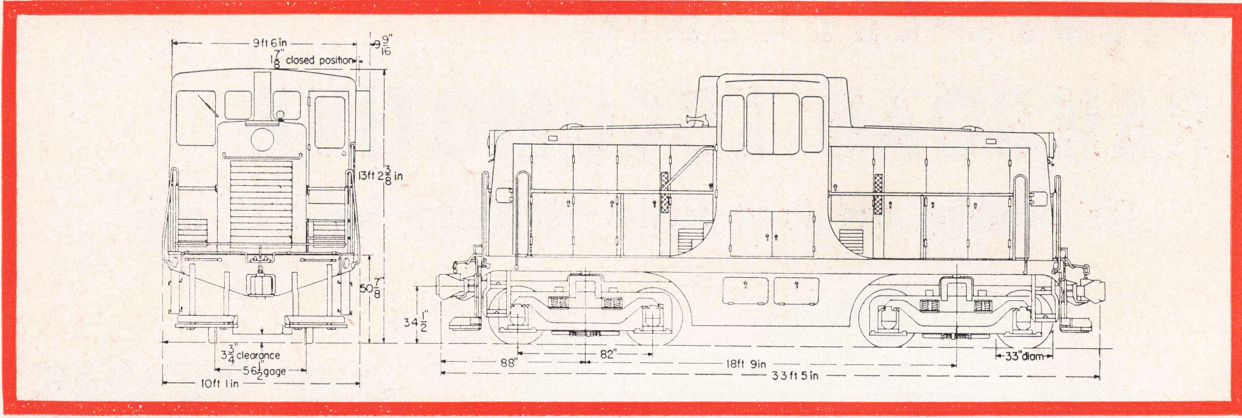
Add for the following features

- Deadman Control \$250
- Speedmeter, G-E electric Type CM4J 210
- Multiple-unit Control price on request

General changes since June 15, 1942 issue.

For complete description:

- Specification RY-24147.
- Bulletin GEA-3958.
- Address Transportation Department, Erie.



Underframe and Trucks

The two 2-axle, equalized swivel trucks have frames of rolled carbon-steel plates and shapes, electric welded to form a rigid structure. Center plates are integral with the frame and are arranged for oil lubrication. Pedestal jaws and center plate are equipped with replaceable steel wearing plates. Spring rigging consists of carbon-steel coil springs, resting on twin equalizers of the drop-center type. Wheels are solid rolled steel with American Association of Railroad's standard tread and flange. Axles are forged carbon steel with 5-inch by 9-inch steel collar-type journals. Journal boxes are cast steel with malleable-iron lift-type lids. They are fitted with deep-sided babbitted brasses of standard A.T.A. design for 5-inch by 9-inch journals. The welded underframe has built-in fuel tank with baffles and sumps.

Couplers

A.A.R. standard "E" coupler with 6-inch by 6-inch shank and pocket bolted to the end frame.

Superstructure

The cab and hoods are welded from rolled carbon-steel sheets and plates by electric welding. The roof and exterior sides of operator's cab are heat-insulated and sheet-metal lined. All windows have metal sash and are glazed with safety glass. The engine hoods are equipped with steel doors on both sides to give access to equipment from the platform. Deck plates have roughened surfaces on the walkway. Switchmen's divided end steps and steps on each corner of the platform are provided. Full tongue-and-grooved maple floor in operator's cab.

NET TONS THIS LOCOMOTIVE CAN HAUL

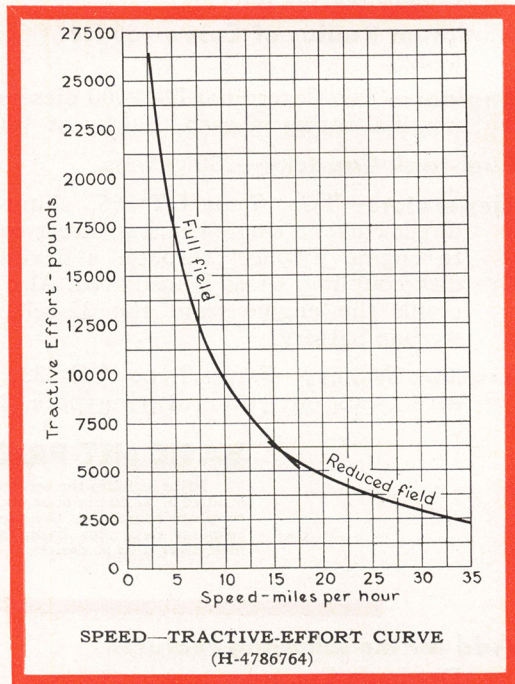
(Not Including Locomotive Weight)

Hauling capacity is conservatively based on 20 per cent maximum running adhesion, thus allowing for starting trains. There are no restrictions on the tonnages listed for 6 mph and above. Loads which restrict speeds to 5 mph should be confined to train movements of less than 1/2-hour continuous duration.

380-HP LOCOMOTIVE

Speed, MPH	Tractive Effort in Lb	Per Cent Grade (Compensated)				
		Level	0.5	1.0	1.5	2.0
5	17500	2016	902	570	411	317
7.5	12300	1405	622	388	276	210
10	9650	1091	478	285	206	154
15	6600	734	313	188	128	92
20	4750	516	213	123	79	54
25	3750	398	159	88	54	33
30	3050	315	121	63	35	19
35	2350	233	83	39	17	5

(Based on 8.5-lb-per-ton train resistance)

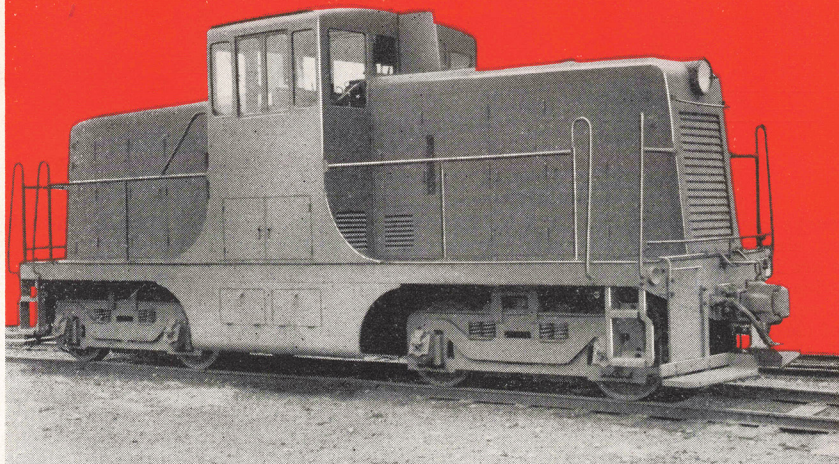


General changes since June 15, 1942 issue.



DIESEL-ELECTRIC RAILROAD LOCOMOTIVE

For Switching and Road Service—Maximum Speed 35 mph



44 TONS

4 AXLES

410 HP

Weight

Normal weight	88,000 lb
Total locomotive, light	85,000 lb
On drivers, fully loaded	89,000 lb
Per driving axle, fully loaded	22,250 lb

Traction Effort—Starting effort (30 per cent adhesion), 26,400 lb.

Minimum Radius of Curve—50 feet (locomotive alone).

Engines—Two Buda 6-DH-1742 diesel engines; nominal rating of each, 205 hp at 1050 rpm.

Fuel-tank Capacity—250 gallons.

Generators—Two, Type GT-555, shunt-wound, direct-current, single-bearing, direct-connected to engine flywheel through a flexible steel-disk coupling. Class B insulated. Also used to crank the engine from the 32-cell, 64-volt storage battery.

Traction Motors—Four, Type GE-733, 6-pole, direct-current commutating-pole, 250-volt, rail-

road-type with integral double-reduction gear drive. Class B insulated. Geared for 35 mph.

Auxiliary Generators and Exciters—Two Type GMG-140 sets; belt-driven from generator shafts. Auxiliary generators furnish constant-voltage power for battery charging, lights, and control. The split-pole exciters supply excitation for the main generators.

Control—Single-station, single unit. Two motors connected permanently in parallel to each generator.

Air Brakes—Straight and automatic schedule 14-EL. Two, belt-driven, two-stage air compressors. Piston displacement, 50 cfm at full engine speed. Reservoir capacity, 30,000 cu in.

Accessories—Four air-operated sanders, bell, horn, headlights, cab heater, air-operated window wipers, side-vision mirrors, fire extinguisher, and extension lamp are included in basic net price.

Meets I.C.C. Requirements

BASIC NET PRICE, F.o.b. ERIE, PA. . . \$38,150

Price includes the services of a field engineer for one week. Any additional time is billed at \$2.60 per hour plus living and traveling expenses. Forty-four-ton locomotives are shipped on their own wheels, and messenger service is billed at \$12 per calendar day, plus living and traveling expenses. Purchaser may provide the messenger if he so desires.

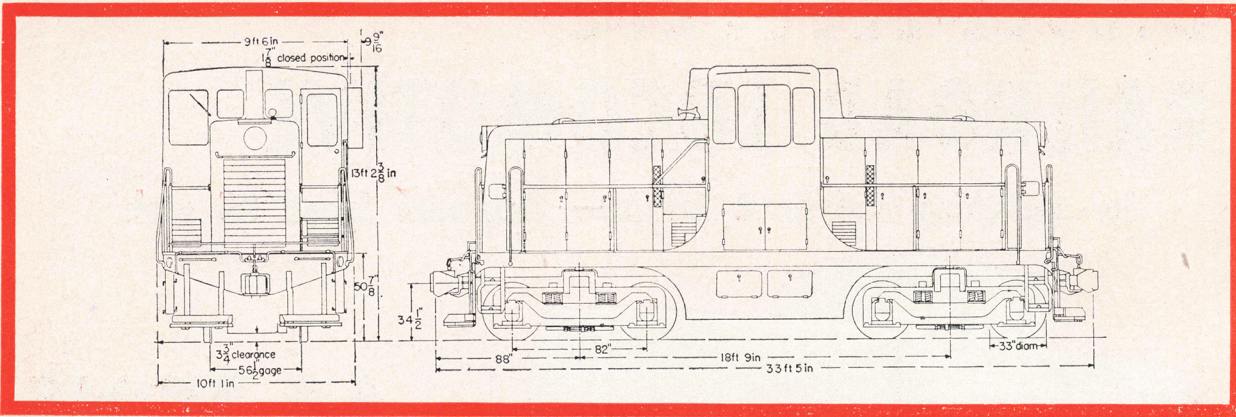
Add for the following features

Deadman Control	\$250
Speedmeter, G-E electric Type CM4J	210
Multiple-unit Control	Price on request

New information.

For complete description:

Specification RY-24163.
Bulletin GEA-3958.
Address Transportation Department, Erie.



Underframe and Trucks

The two 2-axle, equalized swivel trucks have frames of rolled carbon-steel plates and shapes, electric welded to form a rigid structure. Center plates are integral with the frame and are arranged for oil lubrication. Pedestal jaws and center plate are equipped with replaceable steel wearing plates. Spring rigging consists of carbon-steel coil springs, resting on twin equalizers of the drop-center type. Wheels are solid rolled steel with American Association of Railroad's standard tread and flange. Axles are forged carbon steel with 5-inch by 9-inch steel collar-type journals. Journal boxes are cast steel with malleable-iron lift-type lids. They are fitted with deep-sided babbitted brasses of standard A.T.A. design for 5-inch by 9-inch journals. The welded underframe has built-in fuel tank with baffles and sumps.

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NET TONS THIS LOCOMOTIVE CAN HAUL

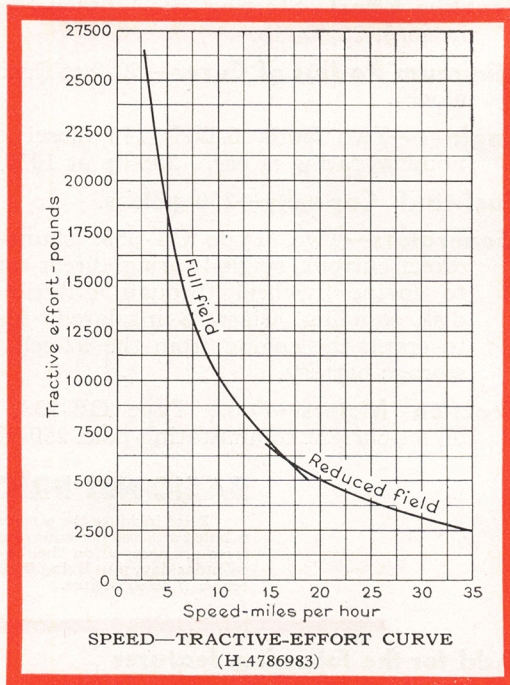
(Not including locomotive weight)

Hauling capacity is conservatively based on 20 per cent maximum running adhesion, thus allowing for starting trains. There are no restrictions on the tonnages listed for 6 mph and above. Loads which restrict speeds to 5 mph should be confined to train movements of less than 1/2-hour continuous duration.

410-HP LOCOMOTIVE

Speed, MPH	Tractive Effort in Lb	Per Cent Grade (Compensated)				
		Level	0.5	1.0	1.5	2.0
5	18300	2110	946	598	432	333
7.5	13150	1504	668	418	298	229
10	10250	1162	510	316	222	168
15	6850	762	326	196	134	97
20	5050	550	229	133	88	60
25	3850	409	164	91	56	35
30	3150	327	126	67	38	21
35	2500	250	91	44	21	8

(Based on 8.5-lb-per-ton train resistance)



New information.

