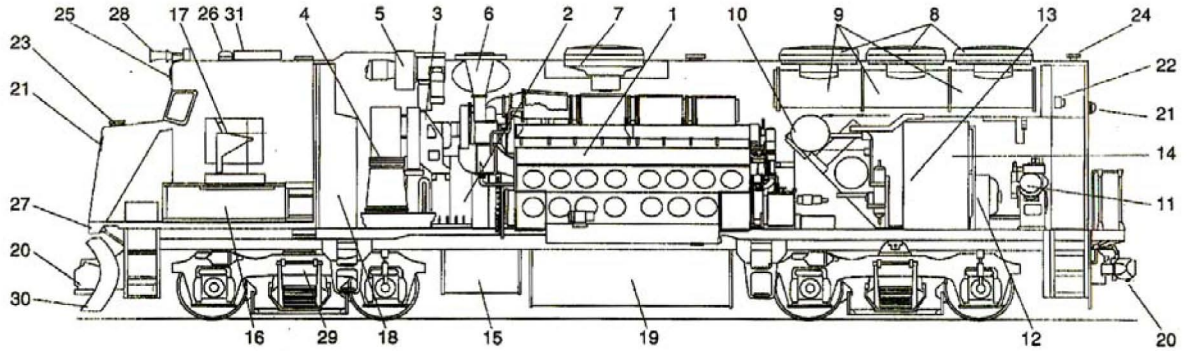


EMD F 40 PH-2 Diagram



1.	16-645 E3B Engine	12.	800kW Delco Head End Power Plant w/Gear Box	22.	Front/Rear Marker Lights
2.	AR 10 A9/D 14 Alternator Main Generator w/Companion Alternator	13.	HEP Contractor Cabinet	23.	Front Sand Fill
3.	18kW Auxiliary Generator	14.	HEP Relay Cabinet	24.	Rear Sand Fill
4.	Equipment Blower	15.	Battery Compartment	25.	Number Boards
5.	Inertial Filters, Blower & Hatch	16.	Air Brake Compartment	26.	Strobe Light
6.	Exhaust Stack & Silencer	17.	Control Stand	27.	Ditch Lights
7.	Dynamic Brake Grid Fan	18.	"Dash-Two" Electric Control Cabinet	28.	5-Chime Horn
8.	Cooling Fan	19.	2,000 – 2,900 Gallon Fuel Tank	29.	Two Axle Truck Assembly (Both Front & Rear)
9.	Radiators	20.	Coupler/Draft Gear (Both Front & Rear) Assembly	30.	Snow Plow
10.	Equipment Rack	21.	Front/Rear Head Lights	31.	Air Conditioner
11.	WBO Air Compressor				

EMD F 40 PH-2 Locomotive Specifications

EMD F 40 PH-2 Locomotive	
Model Designation	F 40 PH-2
Locomotive Type	(B-B) 0440
Locomotive Horsepower	3000
Control System	DASH-II
Air Brake Type	26L
Gear Ratio	57:20
Top Speed	103 MPH
Minimum Continuous Speed	16.5 MPH
Diesel Engine	
Model	16-645E3B
Type	Turbocharged
Number of Cylinders	16
Cylinder Arrangement	45 "V"
Cylinder Bore and Stroke	9 - 1/16" x 10"
Operating Principle	2 Stroke Cycle, Turbocharged, Unit Injection, Water Cooled
Maximum Speed	893 RPM
Idle Speed (Normal)	410 RPM
Idle Speed (Low)	255 RPM
Traction Alternator	
Traction Alternator	AR10
Maximum Continuous Current Rating	4200 Amperes
Number of Poles	10
Normal Voltage (DC)	600
Frequency (at 720 RPM)	60Hz
Companion Alternator	D14
Nominal Voltage (AC)	215
Auxiliary Generator	
Auxiliary Generator Model	D14
Voltage (DC)	74
Rating	18kW
Traction Motors	
Model	D77 or D78
Maximum Continuous Current Rating	1050 Amperes
Truck Assemblies	
Model	Bloomberg
Bearings	Timken
TM Support	Standard or BTR
Air Compressor	
Model	WBO
Drive	Shaft
Type	2 Stage
Number of Cylinders	3
Air Compressor Cooling	Water
Lube Oil Capacity	10.5 Gal.
Capacity (at 900 RPM)	254 cu. ft./min.

Storage Battery

Number of cells	32
Voltage	64
Rating (8 hour)	500 Amps. Hr.

Head End Generator

Model	Delco No. 2801458
Available Power Output	800kW
Nominal Voltage (AC)	480
Maximum Continuous Current Rating	1200Amperes per phase
Frequency (at 1800 RPM)	60Hz

Major Dimensions

Loaded Weight on Rails (nominal)	262,000 lbs.
Height Over Cooling Fan Guard	15' 6"
Width Over Hand Rails	10' 8-5/8"
Distance Over Coupler Pulling Faces	56' 2"

Supplies

Lubricating Oil Capacity	243 Gal
Cooling System Capacity	254 Gal.
Fuel Capacity	~ 2,000 - 2,900 Gal.
Sand Capacity	Front: 13 Cu. Ft. / Rear: 13 Cu. Ft.