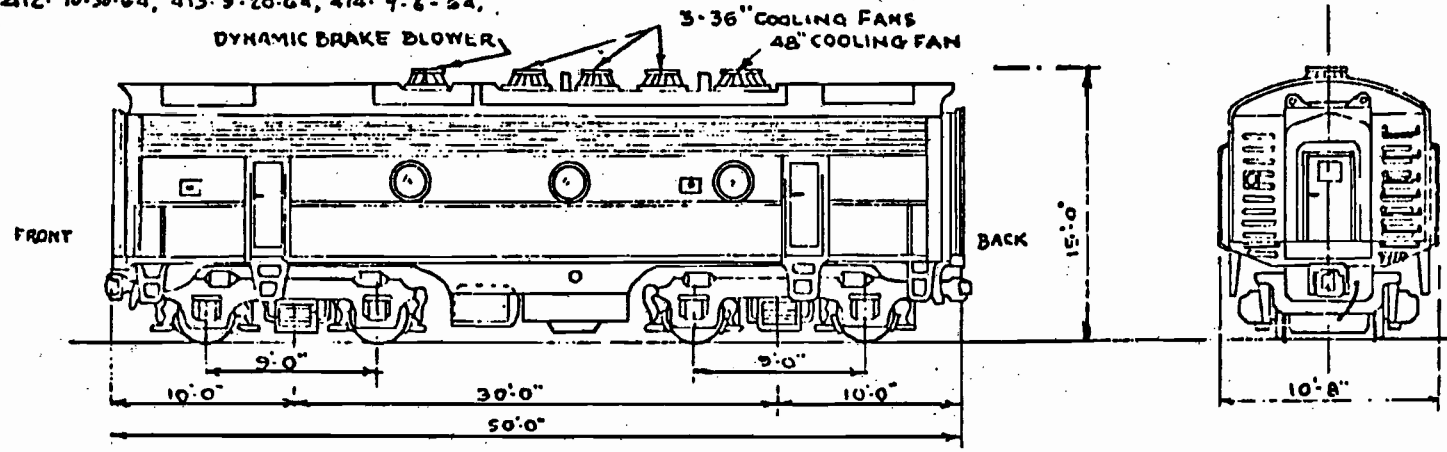


ELECTRO-MOTIVE DIVISION - GENERAL MOTORS  
 BUILT 1953, JAN. 1954, BUILDER'S NOS 19026-19030  
 CONVERTED FROM 1500 TO 1750 H.P. 410-12-4-64, 411-10-29-64  
 412-10-30-64, 413-9-20-64, 414-9-6-64.

Diesel-Electric Booster Locomotive Units 410-414  
 ( ) BS DF-22



NO. 11 - 48" COOL. FAN 12-1-66		MU CONNECTIONS - FRONT & BACK		COBRA BRAKE SHOE NO V-144,		3 RELAY TRANSITION LIFTING LUGS FRONT AND BACK.	
1. Weight - Working Order	246,000 lbs.	CAPACITY		28. Fuel Oil - 1200 gals.	Lubricating Oil 200 gals.		
2. Horsepower	1750	29. Cooling Water	215 gals.	Sand 16 cu.ft.			
3. Ratio of Gears	62-15	MISCELLANEOUS					
4. Maximum Speed	65 MPH	30. Sanders - 8 traps per unit, "One Line" Duplex	Prize				
ENGINE		31. End Ladders	Both Ends "E" Units.				
5. Type	Two Cycle Vee Type No. 567C General Motors	32. Air Filters - Body 16	Engine - Oil Bath Air-Flare				
6. Cylinders - Bore and Stroke	16 - 8-1/2" x 10"	33. Blower (Scavenger)	2 - EMD. Low Pressure				
7. Speed Idling 275 RPM At Rated H.P. -	835 RPM	34. Fire Extinguishers	2 - 30 lbs. Ansul				
8. Governor	Woodward PQ Electro-Hydraulic	35. Uncoupling Rigging	E.M.D.				
ELECTRICAL		36. Draft Gear	-A-121-X Miner				
9. 1 - EMD Main Generator Model D12, 600V, 2200 Amp. Cont. DC		37. Couplers	AAR Tightlock "H"				
10. 1 - EMD Aux. Generator Model A-7159, 10 KW, 74 V, 125 Amps.		BRAKE EQUIPMENT					
11. 1 - EMD Alternator Model D14, 100 KW, 165 V., 3 Ph. AC		38. Dynamic Brake	700 Amps. max. Model A-8103, 48" dia. EMD				
12. 4 - EMD Traction Motors Model D-37-B, 900 Amos. DC		39. Dynamic Braking Power	52,500 lbs. @ 21 MPH				
13. 4 - EMD Traction Motor Blowers 3P, 149V, 5 HP, 3100 RPM AC		40. Air Brake Schedule	Westinghouse 24-PL				
14. 1 - EMD Dyn. Brake Blower A-8103 48", 125V, 18HP, 1300 RPM DC		41. Air Brake Power	145,000 lbs. @ 50 lbs. Cyl. Pressure				
15. 4 - Cooling Fans 1-48", 3-36" dia. Motor 3 Ph. 149V. 9 HP, 1550 RPM AC		42. Air Compressors	Gardner-Denver W80				
16. M.U. Control Cable - 27 wires, 27:27 Length 48"		43. Air Compressor Capacity	235 CFM @ 835 RPM				
17. 1 - Fuel Pump Motor 1/4 HP, 74 Volts, 1100 RPM DC		44. Air Reservoir Capacity	25,000 cu. in.				
18. Batteries	32 Cells, 64 Volts, Exide MV25D	45. Hand Brake	Peacock No. 1030-NS				
19. Lighting Circuit	74 Volts	TRUCKS					
20. Back-up Lights Sealed Beam, 200 W, 30 V, Pyle-National		46. Type	E.M.D. Type Cast Steel				
TRACTION POWER		47. Axles-Heat Trt. 6 1/2"x12" Journals for Hyatt Roller Ergs.					
21. Starting @ 25% adhesion	61,500 lbs.	48. Wheels	40" dia. Rolled Steel				
22. 15 M.P.H.	35,500 lbs.	49. Brake Cylinders	8 - 9" x 8", Side Bearings Plain Steel				
23. 25 M.P.H.	21,500 lbs.	LIMITING DIMENSIONS					
24. 35 M.P.H.	16,500 lbs.	50. Maximum Length Coupled	50'-0"				
25. 45 M.P.H.	12,000 lbs.	51. Maximum Width	10'-7"				
26. 55 M.P.H.	10,000 lbs.	Maximum Height	15'-0"				

1-10-64 11-10-64 12-1-66 1-14-67