



1 F9



2 GP9

The EMD 567 is a line of large medium-speed diesel engines built by General Motors' Electro-Motive Division. This engine, which succeeded Winton's 201A, was used in EMD's locomotives from 1938 until its replacement in 1966 by the EMD 645. It has a bore of 8.5 in (216 mm), a stroke of 10 in (254 mm) and a displacement of 567 cu in (9.29 L) per cylinder. Like the 201A, the EMD 645 and the EMD 710, the EMD 567 is a two-stroke cycle engine. It is a V engine with an angle of 45° between cylinder banks (the 201A was 60° between cylinder banks; 45° later proved to be significant when EMD subsequently adapted the road switcher concept for most of its locomotives, and which required the narrower (albeit taller) engine which 45° provides).

The EMD 567 16cyl. is used in many prototypes:

F7, FP7, GP7, SD7, F9, GP9, SD9, G16, NSB Di 3, DSB Class MY, etc.

Source Wikipedia

Project settings and information:

- The decoder software must be at least version 35.15.
- The ditch lights will be activated, if the bell or horn is played (CV 393 Bit0 = 1 activates ditch light if bell is played, CV 393 Bit1 = 1 activates ditch light if horn is played).
- If you want the mars light effect, just change the value in CV 125 to 4. The mars light effect will be configured on function output 0 forward and can be toggled with the F9-key.
- **Attention:** Please note that this project use a special brake button on F6. Decrease the throttle to zero. While the loco is coasting, push F6 to actually engage the brakes. This simulates a far more realistic brake operation. If you don't want to use the brake button for braking, you have to modify the CV 4 to a lower value, for example 20.
- This project includes various horns: Nathan K3H long (33), Nathan K3H short (34), Nathan K5LLA (35), Nathan M5 (36), Nathan M3 (37), Nathan P3 (38), Nathan P5 (39), Leslie RS3K (40), Leslie RS3L (41) and Leslie RS5T (42). You can easily switch the horns in ZIMO Sound Programmer (ZSP) or modify CV 516 by changing its value to the above mentioned. You can also add other horns/sounds into this project in ZSP. You can switch the bells by modifying CV 513 from 30 to 31 or 32.



Function	Arrangement	Function output	Sound-function
F0	Lights on/off	Front light white right (function output 0 forward), front light white left (function output 1) and front headlight (function output 7) in forward direction; Back light white right (function output 0 reverse), back light white left (function output 3) and back headlight (function output 8) in reverse direction	
F1	Bell	Toggles ditch lights	Bell
F2	Horn	Toggles ditch lights	Horn M5
F3	Coupling		Coupling
F4	Number board light	function output 4	
F5	Cab light	function output 5	
F6	Brake button		Dynamic brake
F7	Coasting (Notch 1)		
F8	Sound on/off		
F9	Toggles ditch lights	Front light white right (FOF), front light white left (FO1), back light white right (FOr) and back light white left (FO3) ditch lights	
F10	Volume +		
F11	Volume -		
F12	Mute		
F13	Notch 2		
F14	Notch 3		
F15	Notch 4		
F16	Notch 5		
F17	Notch 6		
F18	Notch 7		
F19	Notch 8		
F20 – F28	Reserved for user assignment		

Modified CVs:

CV# 1 = 3	CV# 37 = 0	CV# 126 = 34	CV# 309 = 6	CV# 434 = 8	CV# 395 = 90
CV# 3 = 20	CV# 40 = 0	CV# 127 = 37	CV# 311 = 0	CV# 380 = 6	CV# 396 = 11
CV# 4 = 200	CV# 41 = 0	CV# 129 = 38	CV# 312 = 0	CV# 381 = 80	CV# 397 = 10
CV# 9 = 77	CV# 42 = 0	CV# 132 = 80	CV# 313 = 112	CV# 382 = 255	CV# 430 = 29
CV# 17 = 0	CV# 43 = 0	CV# 158 = 76	CV# 314 = 0	CV# 383 = 30	CV# 431 = 253
CV# 18 = 0	CV# 44 = 0	CV# 275 = 200	CV# 339 = 13	CV# 384 = 255	CV# 432 = 7
CV# 29 = 14	CV# 45 = 0	CV# 276 = 200	CV# 340 = 97	CV# 385 = 1	CV# 434 = 8
CV# 33 = 5	CV# 46 = 0	CV# 283 = 200	CV# 349 = 20	CV# 386 = 8	CV# 436 = 9
CV# 34 = 18	CV# 57 = 140	CV# 286 = 200	CV# 351 = 0	CV# 389 = 255	CV# 437 = 253
CV# 35 = 0	CV# 64 = 175	CV# 287 = 50	CV# 352 = 0	CV# 393 = 3	CV# 438 = 14
CV# 36 = 0	CV# 125 = 33	CV# 288 = 40	CV# 374 = 7	CV# 394 = 64	