**Murphy Models DCC Sound chips for Class 121**

N.B. For convenience and to avoid confusion note that the CAB end is designated the front of the loco.

The EMD 567 series family of diesel engines and the subsequent 645 series were designed and manufactured by the Electro-Motive Division of General Motors.

The DCC and DCC sound chips were designed, in conjunction with the PCB, specifically for the MM Class 121 loco. They have not been tested in MM Class 141/181 locos. Consequently, MM can give no guarantee as to their operation in those locos. Conversely, 3rd. party chips may not operate in a satisfactory manner. Any damage arising from such use is not covered by warranty. Access to fit a DCC sound chip is obtained by removing the larger top panel. The smaller panel allows access to the light switches. These should be set in the ON/OFF position in conjunction with F4/F5 for DCC only. DC users can set them as required.

This project has ‘Run 8’ mode. When turning on F14 with F16 off, the prime mover goes to Run 8. Turning off F14 returns the prime mover sounds back to normal mode.

This project has ‘Coast’ mode. When turning on F15 with F16 off the prime goes to idle for coasting purposes. Turning off F15 returns the prime mover sounds back to normal mode.

You can still use F14 & F15 for manual notching. With both F14 & F15 turned off, press F16 to turn on manual notching. Once F16 is on you can use F14 to notch up and F15 to notch down. F14, F15 & F16 must be turned off to return to normal mode.

This file is also equipped with a Smart Start feature that cycles the prime mover on and off at intervals of your choice if the throttle is left at idle and the loco is stopped.

Key Function

F0 Headlights Front/Rear

F1 Sound on/off

F2 Air Horn (high)

F3 Air Horn (low)

F4 Rear lights off/on (bonnet end)

F5 Front lights off/on (cab end)

F6 Acceleration/brake time, shunting mode/shunting speed

F7 Curve Squeal

F8 Hand Brake

F9 Radiator Fan

F10 Compressor

F11 Coupler Clank

F12 Brake release / Brake apply

F13 Open / Close Cab Door

F14 Diesel manual notching (up)

F15 Diesel manual notching (down)

F16 Manual Notching Logic

F17 Automatic Brake Emergency

F18 Dynamic Brake

F19 Conductor's Signal 10 331 80

F20 Sound Fader

F21 Isolation Switch (disconnect diesel engine from generator)

F22 Sanding Valve

F23 Air Dryer

F24 RailClank (4 different Rail Clank Sounds. Select via CV164 Value 0-3)

F25 Valve

F26 Disable Brake Squeal Sound

**Smart Start (Sound CV14)**

CV168=0 No Smart Start- default

CV168=1 3-minute cycle

CV168=2 6-minute cycle

CV168=3 9-minute cycle

CV168=4 12-minute cycle

Etc……

CV168=255 765-minute cycle

Air Dryer (Sound CV12)

CV166=0

CV166=1

CV166=2

CV166=3