

Digital Train Model



EMD SD45

**EMD SD45
for
Train Simulator 2013
Owner's Manual**





A little bit of history

The EMD SD45 is a six-axle diesel-electric locomotive built by General Motors Electro-Motive Division between December, 1965, and December, 1971. Power was provided by an EMD 645E3 twenty-cylinder engine which generated 3,600 HP. This locomotive shared the same common frame with the EMD SD38, EMD SD39, EMD SD40, and EMD SDP40.

A total of 1,260 units were built for American railroads. Following this, the SD45-2 was released as its upgraded replacement. Additional models, like the SD45T-2, featuring the Tunnel Motor[disambiguation needed] design, were released.

SD45s had several teething problems. Reliability was not as high as anticipated, due to the twenty-cylinder prime mover's propensity to break its own crankshaft. Even though it created an extra 600 horsepower (450 kW) from the 16-645 in the SD40, some railroads felt it just wasn't worth it, even after EMD redesigned the block to reduce crankshaft flexing.

Buyers included the Southern Pacific, Santa Fe, the Great Northern Railway and the Northern Pacific Railway. (Contrary to what many believe, the SD45 was not a "gas guzzler." It produced more power per unit of fuel than its 3,000 hp (2,240 kW) counterpart, the SD40. However, it did consume much more fuel at idle than the 16 cylinder prime mover in the SD40, and at the time, standard operating practice amongst US railroads was to leave a diesel locomotive idling when not in use.) Many SD45s can still be found, some rebuilt with sixteen-cylinder 645s, operating for lease companies. SD45s and SD45-2s owned by Montana Rail Link have maintained their 20 cylinder prime movers. Wisconsin Central used to roster a large fleet of SD45s, but its sale to CN has recently retired the entire fleet, with mass scrappings. Montana Rail Link is now also starting to sell some engines for scrap.

Source: http://en.wikipedia.org/wiki/EMD_SD45





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Cab Controls

Cab Controls are identical to the default locomotives with some extra ones.

L: Cab Lights

I: Selector shift up

K: Selector shift down

M: Toggle front mirrors

Shift + M: Toggle rear mirrors

N: Strobe

O: Hand brake

G: Classlight Colour

Shift + G: Classlight Colour

Cab doors and windows can be opened with the mouse.



- 1) Engine Start / Shut down
- 2) Numberboards lights
- 3) Class lights
- 4) Platform lights
- 5) Train brake
- 6) Loco brake
- 7) Horn
- 8) Air gauges
- 9) Ammeter
- 10) Speed recorder
- 11) Warning lights
- 12) Sander
- 13) Selector indicator
- 14) Throttle indicator
- 15) Selector
- 16) Throttle
- 17) Reverser
- 18) Indicator lights
- 19) Cab lights
- 20) Front Dim lights
- 21) Rear Dim lights
- 22) Bell

Note: To use dynamic brakes within the cab you should place the selector lever in DYN position, then move the Throttle lever to apply brakes.



Included Scenarios

1) PUSHING AND PULLING

The timber industry is going through a good season and railroad should be at height of the circumstances satisfy enterprises demand.

Your Job is to deliver ten empty wagons and pick up all the loaded in Cheyenne before going into the main route to Speer House.

Tasks:

- Drop off wagons at Cheyenne - Nortrack 2.
- Couple wagons at Cheyenne - Nortrack 1.
- Couple Wagons at Cheyenne - Govt Yard 4.
- Couple wagons at Cheyenne - Govt Yard 3.
- Go to Main Line.
- Stop at Speer House Track.

2) EXPRESS TO SUNRISE

An Express train was assigned to you and it must leave Laramie a few minutes past 7:00 am. You must take this train to Speer, where another crew will take care of it.

Tasks:

- Leave Laramie.
- Stop at Speer Center Siding East.

3) EMERGENCY TO SHERMAN

One of the crew members has a medical emergency and the train remains at Sherman. Medical services already attend him, and he is ok, but will not be able to continue with the trip. We call you to take this train to Laramie, we are 1 hour late!

Tasks:

- Leave Sherman.
- Stop at Laramie - Misc West.

4) GAS INLET & OUTLET

You must move the three tank wagons groups and place it with the train in Wycon Nitrate 1. Before your departure to Cheyenne you must put in place the empty tank wagons. There is a lot of traffic in the line so we hope to have a chance to do your way to Cheyenne.

- Couple wagons at Wycon - Nitrate 2.
- Drop off wagons at Wycon - Nitrate 1.
- Couple wagons at Wycon - Nitrate 3.
- Drop off wagons at Wycon - Nitrate 1.
- Couple wagons at Wycon - Nitrate 4.



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- Drop off wagons at Wycon - Nitrate 1.
- Couple wagons at Wycon 1 - Scale.
- Drop off wagons at Wycon - Nitrate 2.
- Couple wagons at Wycon 1 - Scale.
- Drop off wagons at Wycon - Nitrate 3.
- Couple wagons at Wycon 1 - Scale.
- Drop off wagons at Wycon - Nitrate 4.
- Couple at wagons Wycon - Nitrate 1.
- Couple to train at Cheyenne - North 7 West.





How to use this in your own scenario



- 1) Open your desired route.
- 2) Press Esc key.
- 3) Click on World editor from the pop up menu.



- 4) Go to the Tool Box panel.
- 5) Click on the Scenario icon.
- 6) Click yes from the warning pop up.



- 7) Go to the Browser panel.
- 8) Click on the Object Set Filter icon.



- 9) Go to the Browser Panel at the right of the screen.
- 10) Click the roll out menu.
- 11) From the roll out menu click on DTM.



- 12) Click the SD 45-UP checkbox.



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- 13) Return to the Browser panel.
- 14) Click on Engines & Tenders icon.
- 15) Click the EMD_SD 45_UP_adv.
- 16) Click on the track to place it.



- 17) Return to the Tool Box panel.
- 18) Click the Driver icon.
- 19) Click on the engine.



- 20) Click the Play icon.
- 21) Save the changes in your scenario.
- 22) Drive your SD 45.



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Included rolling stock



Airslide Hopper UP



Boxcar 50ft ComboDoor UP



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Gondola 52 ft UP with three loads: Lumbre, mt, and pipes.



Hopper 100t UP



Caboose CA-4 UP

Union Pacific mark used under license

Thanks to:

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