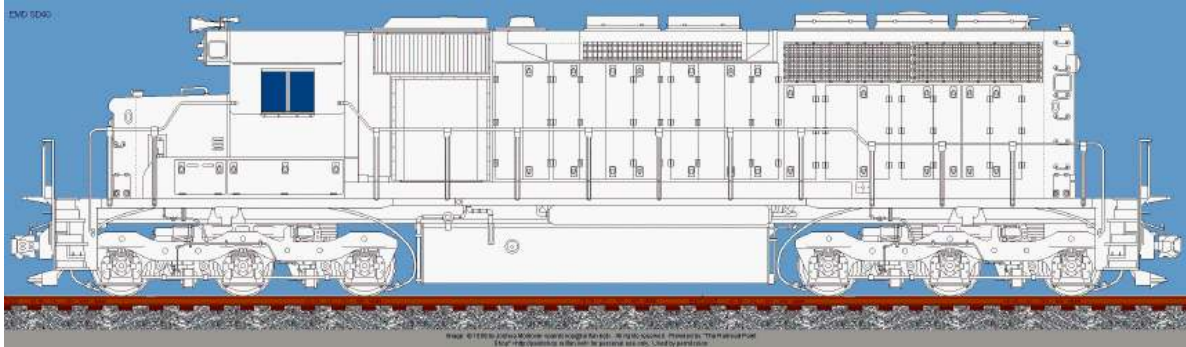




SD40/SD40-2



The SD40/SD40-2 combination was by far the most popular diesel locomotive to come out of the shops of a US manufacturer. The SD40 was produced from Jan of 1966 to Dec of 1971 (with a few exceptions) with 883 going to US roads, 330 to Canadian roads and 62 to Mexican roads. They were produced by GMD in Canada into 1972 to match existing unit-train power and EMD built 5 for Detroit Edison in July of 1972. The first SD40-2 rolled off the assembly line in Jan or 1972 and production continued until Feb of 1986. The main reason for the switch to the -2 line was the complexity and unreliability of the electrical system in the older models. The SD40-2 was not the most powerful locomotive available, but because it was reliable and economical it was a success. 3,957 SD40-2's were built over the 14-year period it was in production. Biggest buyers were BN(779), UP(686) and CP (484). 128 went to Mexico and 11 to a project in Boke.



As you can see by the comparison chart there are many similarities between the two models, the main differences being the upgraded electrical equipment and the switch to the HT-C (High adhesion) trucks which, incidentally were not interchangeable with the older trucks. There were a couple of one-off models of the SD40 built. The Illinois Central wanted SD40's with extra fuel capacity so EMD built 18 and gave them the unofficial designation of SD40A. Incidentally, these units were among the first to use the water-level sight gauge, a spotting feature on the SD40-2. They also built 20 SDP40's, a passenger version of the SD40, which carried a steam generator in the extended rear hood. Only Great Northern and Nacional de Mexico purchased these models.

Side by side comparison of the: SD40

SD40-2

Horsepower	3000	3000
Prime Mover EMD	645E3	645E3B
Full Speed	900 RPM	904 RPM
Idle Speed	315 RPM	255 RPM
Main Generator	ARD14	AR10A7
Traction Motors	D77	D77
Trucks	Flexicoil "C"	HT-C
Wheels	40"	40"
Fuel Tank (Basic)	3200 Gal	3200 Gal
Lube Oil (Basic)	243 Gal	243 Gal
Coolant	254 Gal	275 Gal
Sand	56 cu ft	56 cu ft
Length	65' 8"	68' 10"
Weight	368,000 lbs	368,000 lbs



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A tribute to the SD40-2 can be seen in the fact that large numbers of them have been rebuilt and up-graded and are now operating nationwide in the various lease fleets that the railroads use to augment their own fleets. Leasing locomotives has become a profitable business for companies like Alstom and Helm and Morrison-Knudsen.

Bison rail still has a large fleet of SD40-2's operating systemwide, all of them having been upgraded to the latest standards by our own shops. Our once fairly good-sized fleet of SD40's has been replaced by newer models, with the exception of one which was painted in BiCentennial colors. The 1776 is maintained in pristine condition and is the pride of the BRS fleet.

