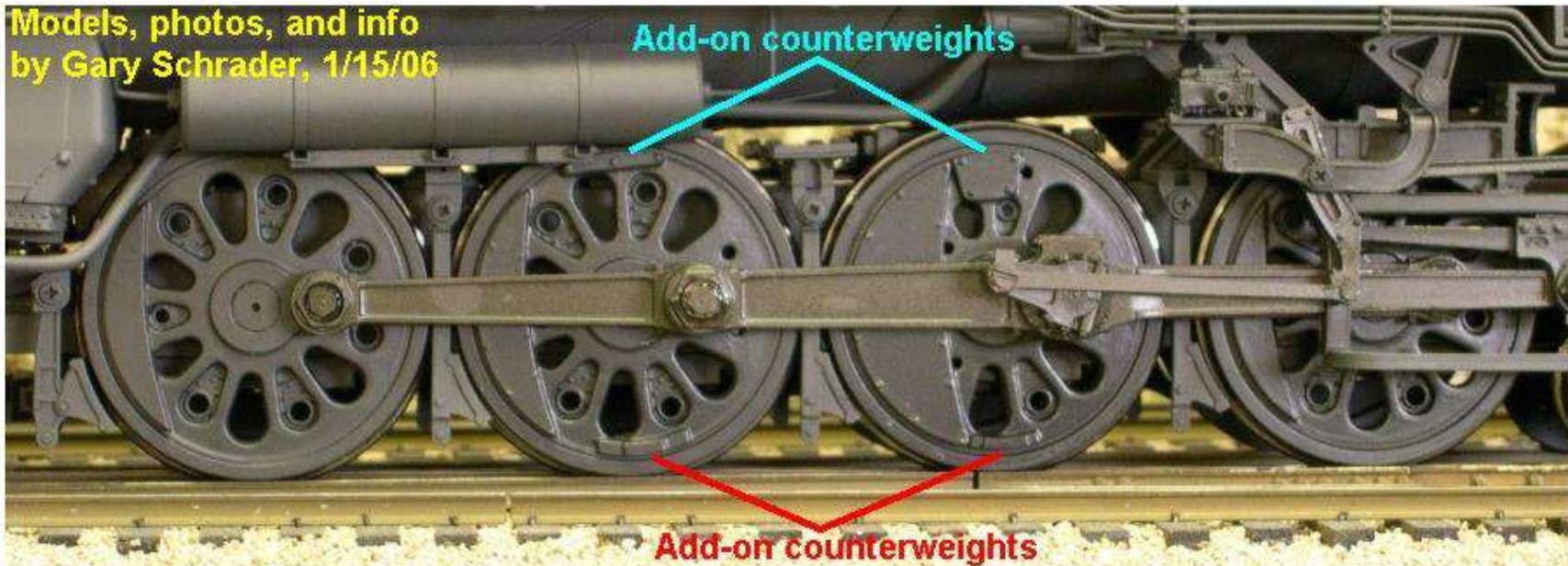


Santa Fe Northern (4-8-4) Drives

By Gary Schrader

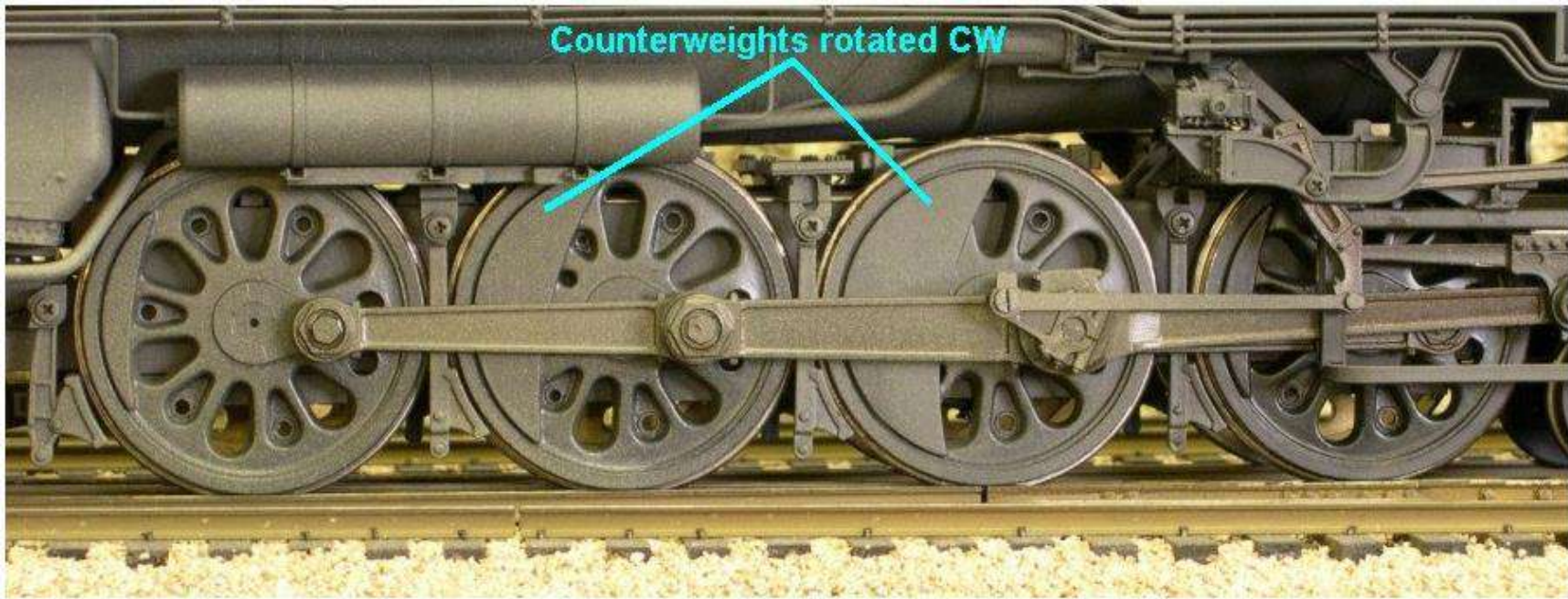
Models, photos, and info
by Gary Schrader, 1/15/06



Boxpok Drivers with Add-on Counterweights: About 2/3 of the 3751 class engines received these when rebuilt with 80" drivers (last engines rebuilt, including #3751). These were probably the prototype for the 2900's, as all 2900's got this style driver as delivered. Note the somewhat rectangularly shaped add-on counterweights on the 2nd and 3rd drivers with a slightly larger add-on clockwise of the main counterweight. Also note that Boxpok drivers in general have every other large hole filled with a thin fillet containing a small round hole. The filled holes are just slightly smaller than the open ones.

Santa Fe Northern (4-8-4) Drives

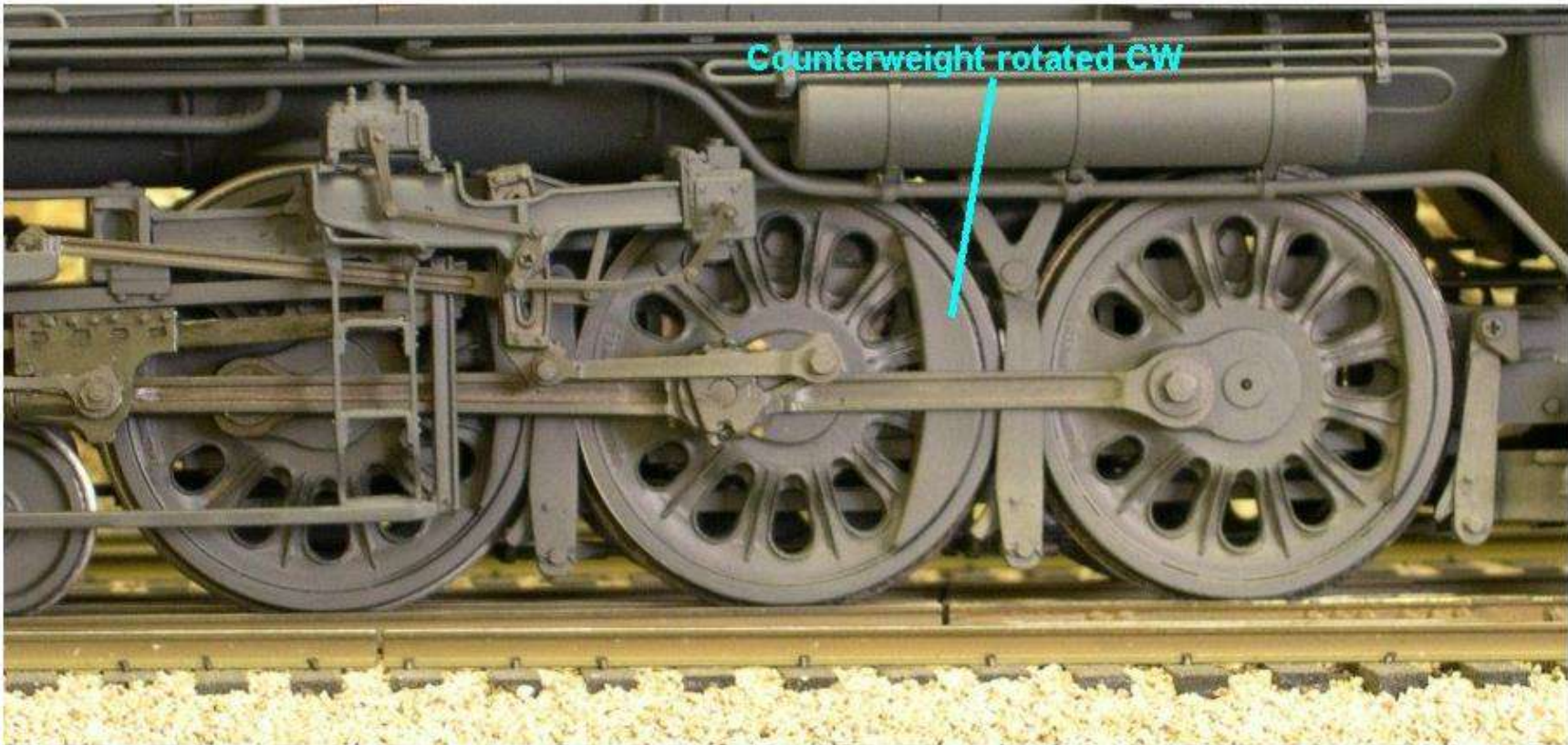
By Gary Schrader



Regular Boxpok Drivers: The first 3751's rebuilt with 80" drivers (about 1/3 of the class) used this popular style of driver. There are no add-on counterweights, but the counterweights on the 2nd and 3rd drivers are rotated slightly clockwise, i.e., they are not centered about a line drawn through the crankpin and driver center, but are rotated slightly clockwise of it. This rotation was apparently an earlier attempt to accomplish whatever was accomplished later with the add-on counterweights. I have noticed this rotation on many other engines, not just ATSF ones, and it is clockwise on both sides of the engine in all cases.

Santa Fe Northern (4-8-4) Drives

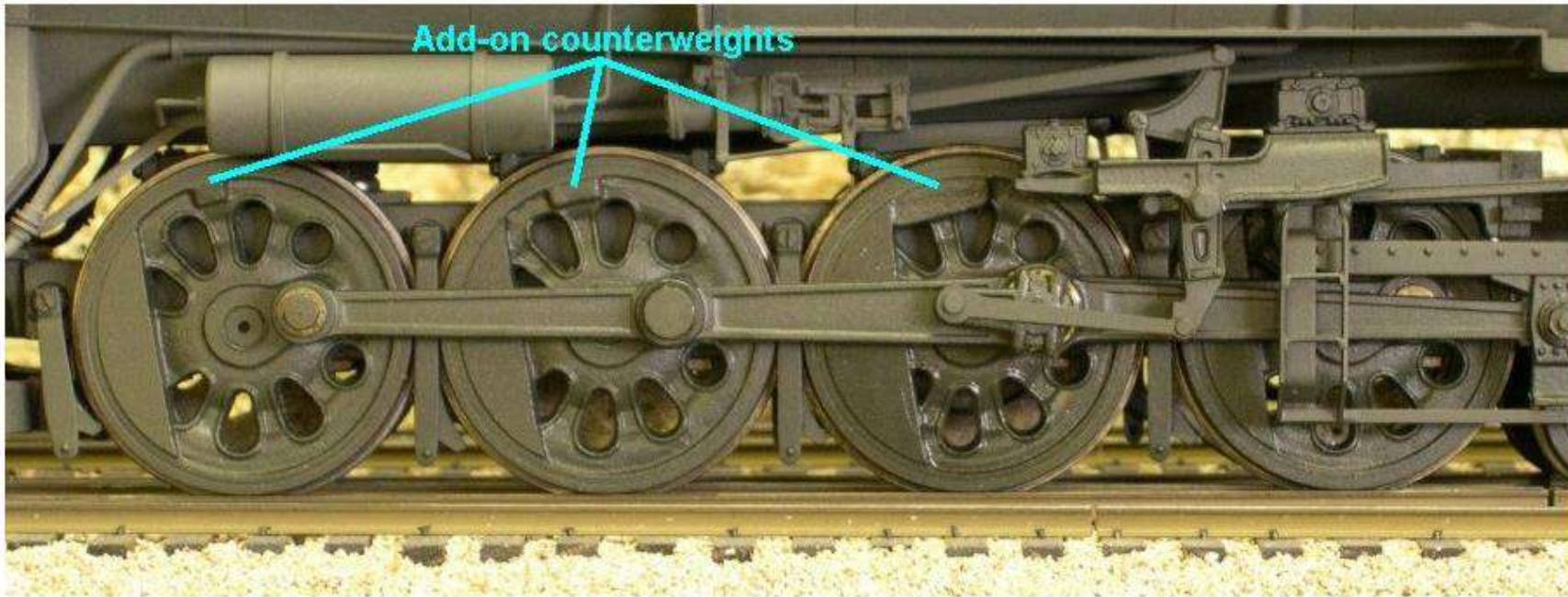
By Gary Schrader



Original Baldwin Disc Drivers: The photo is of a 3460 class Hudson, but the driver centers looked exactly the same on the 3765 class Northerns as delivered. Both classes were built at the same time. Note the uniform size of the holes, the raised rim around the holes, and distinctive rib between pairs of holes. There are no filled holes versus the Boxpoks. The counterweight on the center driver is rotated slightly clockwise as on the regular Boxpoks. On the 3765's, both the 2nd and 3rd drivers had rotated counterweights similar to the regular Boxpoks.

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Ribless Baldwin Disc Drivers: The 3776 class was delivered with a later Baldwin Disc driver without ribs between the holes. There were fewer large holes, but they retained the raised rim around the holes. Note that these drivers also had centered counterweights with add-on counterweights similar to the ones on 2900 class Boxpoks. In fact, some of the engines (such as the one pictured) had an add-on counterweight on the 3rd axle as well. Evidently, this type of driver proved to be the most successful, as Ribless Baldwin Disc drivers were frequently used to replace regular Baldwin Discs on the main drivers of 3765's, 3460's, and 5001's. All the 2900's got Ribless Baldwin Discs on their 4th axle when the 2900's and 3776's were retrofitted with roller bearing siderods.

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