

*The Pullman Project and Steam Ejector Air Conditioning*  
*Material contributed by Tom Madden*

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Thomas C. Madden has devoted the last few years and a lot of his personal finances to cataloguing and copying the records of the Pullman Company. ~~You can see part of his Pullman Project on line.~~

Tom makes the following report:

I can't sell or even give you copies of the germane documents in my possession, for two reasons. First, all of them came from the Newberry Library. One of their restrictions is the prohibition on further distribution or publication without their written permission. That's why I'm redrawing all the floor plans, roof layouts and equipment - to get around that limitation. I'm also preparing these drawings for New England Rail Service and Branchline Trains so they can add correct SE components to their respective product lines.

One thing I can do is give you a list of the Santa Fe steam ejector drawings at the Newberry. The drawing numbers are Santa Fe's. I don't know what the first two digits represent, but the letter following those two digits is the size, the last four digits are the sequence number, and the appended letter (if present) shows the issue. The Newberry cannot photocopy anything larger than a "C"-size drawing, and those only in overlapping 8.5x14 or 11x17 sheets. All those large "A" and "B" drawings I had copied were photographed in overlapping 35mm or 4x5 transparencies.

~~Here is the list in Adobe Acrobat PDF form.~~

The quality of the drawings is shaky. They're not particularly fragile, but they're blueprint copies of the original linens. They are all folded and creased, and many have faded areas where the features are difficult to distinguish. Being blueprints, most are blue with white lines, although many of the underneath equipment drawings are second generation black-with-white-lines. Tough to get clear photocopies, and I'm constantly adding to my "list of clarifications" for the next Newberry visit, for drawings I already have.

Hatches applied to Pullmans were completely different from hatches applied to the Santa Fe's own cars. I don't know why this should be, considering that the Santa Fe ordered all the parts and installed the AC on most of those Pullmans at the Topeka Shops at the same time they were doing their own cars, but there you are. There were four different hatches used on AC units during the 1934 to 1937 program, and three

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different ones for the cooling tower. (That's what the Santa Fe called the steam ejector unit.) I have completed drawings for all of them.

The hatches marketed by Coach Yard and PRB both came from the same Bob Darwin patterns, and he took his info from a Santa Fe parlor-obs at Calistoga, California. It's still there, hatches and all, and houses several gift shops.

Pullman hatches never had clamps on the ridge center lines, and the grabs extended away from the hatch covers parallel to the surfaces. The grabs on Santa Fe hatches were upright, 90 degrees to the surface, and many Santa Fe hatches had clamps on the ridge center lines.

*San Bartolo* is one of my favorites. It has the make-up tank and steam control box mounted so close together they look like one unit. The steam control box (the unit on the right) is the left-handed version of the 1934 design. I'm working on the drawing of that now. It's left-handed because the motorized steam valve housing is to the left. (The motor that operates the valve is that round object sticking out at you, with the cover cut out to accommodate it.) The 1935 steam control box had the valve mounted at the back corner, away from the car side, rather than the front, so the access door was just a rectangular plate. The access door on San Bartolo's steam control box has that extra extension on the upper left, to cover the steam valve compartment. Both the 1934 and 1935 designs could be built left- and right-handed. There were similar variations in the makeup tanks, and the cold-water pump housing. Many combinations!

Maybe we're just lucky that the Santa Fe sent a full drawing set to Pullman. There must have been equivalent drawings for their own cars, but I guess they never left Topeka.

Below are links that are lined-out in the above document. These links appear to be broken but are provided for reference.

<http://atsfrr.net/resources/Madden/StEAC.pdf>

<http://home.att.net/~pullmanproject/index.htm>