

# The 805A Report

by  
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Last time, I promised a list of tasks and a schedule of work weekends for this issue. The list of tasks for the cosmetic restoration is 3 pages long, which is too much to print here. A copy is taped to the side of the locomotive; if you'd like your own copy write to me c/o the Museum.

The list of 805A work weekends presently looks like this: June 2,3, June 23,24, July 14,15, and August 4,5. Please get in touch with me if you'd like to help out; there are plenty of things to do. Unfortunately, I have a conflict on the May 19/20 Spring Work Weekend as I'm scheduled to present a seminar at the NMRA PCR (Pacific Coast Region) convention. There may be an 805-related job on the list for that weekend, but there are numerous other tasks around the museum which should probably take precedence.

Under the heading of additions, I should note that in last issue's summary of work I should have mentioned that Wayne Monger made the set of 805A number boards which are presently installed in the locomotive.

## Recent Results

Having pulled the #4 head and liner in January and found the bad spot on the lower liner seal, we were all set to pull #5 and replace the seals on both liners. Mother Nature had a different idea. As the targeted weekend of Feb. 17 approached, so did ominous storm clouds from the Pacific. You may remember the resulting blizzard which dropped over 3 feet of snow both at Portola and as far down the Hill as Auburn.

On March 3/4, Steve Habeck, Dave McClain, Ski, and I pulled #5 head and liner, then cleaned, resealed, and reinstalled both liners and heads. Dave brought along his video camera and recorded the process. We stopped short of torquing down the head nuts and crab nuts as we lacked a sufficiently large torque wrench.

On March 25, having obtained a 250 lb-ft torque wrench, we first tightened the head nuts. Then, for the crab nuts, we used the 10X torque multiplier which Hank Stiles had previously acquired for the Museum. We brought all 4 crab nuts on #5 cylinder to the specified 1800 lb-ft, but as we completed the pass on #4 at 600 lb-ft the input shaft to the torque multiplier failed. Arrrghh!!! (Luckily, it came with a lifetime warranty, and Hank is getting it replaced). Despite the

low torque values on #4, we decided to test for water leaks anyway.

Meanwhile, Ski had been trying to loosen some of the rusted bolts which retain the filter grilles to the carbody by using the impact driver he had just acquired for that purpose. After a lot of "Knock-er Loose" and an hour of trying it was evident that we still need a better way. Next time we'll heat the retaining nuts from the inside of the carbody while using the impact driver on the bolts.

We then spotted the 805A by the water riser on #4 rail. In a few short minutes, the verdict was in---leaks from liners #4, #5, and #13. I had been told to expect leaks because this was our first attempt at this job, but I thought we could beat the odds. We didn't. At least the leaks from #4 and #5 were far smaller than before. The good news, however, is that *only* those 3 liners leak. After draining the cooling system, we set the 805A back in the shop and loosened the crab nuts on the 3 offending liners. Following a fast trip down the Hill, Dave just barely made his plane for LA, and I collapsed onto a comfortable couch.

Odie Lorimer had been in contact with me about painting issues and procedures, and has volunteered to prep the nose and then paint on the red/white wings. This will also serve as a test of our planned painting technique for the rest of the exterior. He is also planning to make up metal WP nose heralds for both 805 and 921, following the original EMD drawings.

On April 8, Jack Palmer wirebrushed, sanded, and spot-primed the worst of the rust pits on the nose. The next day, he tested various paint strippers on the grungy red paint and found the killer "Paint and Epoxy Stripper" from Jasco to be most effective. The right rear lower side panel and handrails are now freed of the red stuff and are in fine shape, and the slight discoloration left on the side panel should polish off readily.

## Next Steps

- \* Remove #5 head and liner; inspect for cause of leaks; reinstall.
- \* Prepare exterior of nose for painting (sanding, Bondo, etc.
- \* Chemically strip red paint from lower side panels.
- \* Clean out dirt, rust, etc. from interior of nose and spot prime.

See you next time.....