



**JULY /AUGUST 2009**

## A TRAIN FOR SC:

Part 25, by Ken Bain

I took a pair of saw horses out to the Park to hold the cab base plate at a convenient height for the next learning experience. For this locomotive the gasoline engine mounts to the cab base plate at a fixed location. The transmission bracket rides in slots for adjusting the belt tension to the gasoline engine. The whole base plate with engine and transmission then moves back and forth in the cab to adjust the chain tension between the transmission and the rear driver of the locomotive. To maintain the alignment of all the component parts the centrifugal clutch on the gasoline engine must be in a specific location.

When Paul Pisto donated this locomotive, he said that the gasoline engine was "worn out". He had obtained a new replacement engine which he included in the donation. Here is where the fun starts. The installed engine was a 7 1/2 horsepower Wisconsin. The new engine is a 12 1/2 horsepower Kohler. Rough measurements indicate that there is enough room in the cab for the new engine. That's the good news. The Wisconsin has cast mounting lugs. The Kohler has tapped holes in the underside of the crankcase. There is a mounting plate for the Kohler that can be machined to be an adapter.

First we needed to get the centrifugal clutch off the Wisconsin. With Jerry Oyler's help plus penetrating oil the clutch was removed. The drum clutch bearings felt bad

to me, and unfortunately Perry McCully and Cliff Fought felt the same way. I was in hopes they would say the bearings felt good enough to use. Hope springs eternally. So I needed two new bearings. The first supplier said he didn't carry these bearings. The second supplier said he could get them but it would be a lot of trouble and he recommended that I call Kaman Industrial. I called Kaman. They said they did not have them in stock but could get them from their warehouse. So several days later and \$44 lighter (with industrial discount) I was the owner of a pair of new ball bearings.

Now to get them installed. Because there is a shoulder between the bearings in the clutch drum I decided to find a machine shop that had the fixtures to press out the old bearings and press in the new bearings. First shop only does new work. Second shop only does aircraft work. The third shop said they would do the job for \$20. Off I went to shop number three. It turned out that they build drag racing cars, beautiful work on the ones in progress. The precision removal and installation consisted of two guys with a steel rod and a big hammer working on a welding table. So much for the precision press fitting.

With a little work I was able to fit the clutch drum bearings to the Kohler crankshaft with a nice light press fit. The clutch shoes looked OK. A plywood template was made and with the help of Jerry Oyler and Bob Alkire it was attached to the Wisconsin engine. The centrifugal clutch was reinstalled on the Wisconsin and the

### Sahuaro Central Officers and Directors

**Pres:** Larry Hatch, [sales@crimeye.com](mailto:sales@crimeye.com), **VP:** Jerry Oyler, 623-816-1939, [jerryoyl147@msn.com](mailto:jerryoyl147@msn.com),  
**Treas:** Ken Bain, 480-895-2592, [kabtrains@earthlink.net](mailto:kabtrains@earthlink.net), **Sec:** Arlene Ford, 602-938-9684, [aford71@cox.net](mailto:aford71@cox.net)

### Directors:

Cliff Fought, 623-386-0822, [enginear1963@msn.com](mailto:enginear1963@msn.com), Perry McCully, [pmccully3@cox.net](mailto:pmccully3@cox.net),

Bob Rys, [fixitbobbe@cox.net](mailto:fixitbobbe@cox.net),

**Museum Curator:** Jerry Oyler, [jerryoyl147@msn.com](mailto:jerryoyl147@msn.com)

Donald Bauer, Editor  
7150 E. Acre Way  
Prescott Valley, AZ 86315

Please Deliver to :

---

---

clutch dimensions drawn on the template. The clutch was then installed on the Kohler and the engine located on the template to duplicate the original clutch location. The engine location was then marked on the template. With this information I should be able to machine an adapter for mounting the Kohler engine on the base plate.

Bit by bit **progress is being made!**

### **SUMMER SHUTDOWN:**

As most readers know by now, summer does not stop the progress at the park. A few folks go on vacations. A few stay home in the heat. But the intrepid are out at the park working on track (MLS) or building mountains (AMRS). But there has to be a temporary halt to the visits from the public. Both MLS and AMRS have stopped rides and Sunday visits to the model railroads.

September is the magic day when the people come back to Adobe Mtn. It's a little like the swallows at Mission San Juan Capistrano. Or, Field of Dreams"; If you build it, they will come. Hmmm!

### **GET YOUR SPOONS:**

Before the next SC newsletter, MLS will host another Ice Cream Social. August 8<sup>th</sup> is the next Maricopa Live Steamers membership meeting and it is traditionally an ice cream social gathering as well. This year there will be a "Friends Evening Run" as well following the sticky fingers time. So, members and friends, mark your calendars.

### **Train Schedule – Arrivals -2009-**

Adobe Mountain Desert Railroad Park is located on 43<sup>rd</sup> Avenue, just south of Pinnacle Peak Road, Phoenix, Arizona

**Jul 11, AMRS Member Meeting, 9 am,**  
Adobe Mountain Desert RR Park

**Jul 11, Sahuaro Central Board Mtg.**  
**10:30am,** Museum Bldg,  
Adobe Mountain Desert RR Park

**Aug 8, AMRS Member Meeting, 9 am,**  
Adobe Mountain Desert RR Park

**Aug 8, MLS Business Meeting and Ice  
Cream Social, 6 pm,**  
Adobe Mountain Desert RR Park

**Sep 12, MLS Business Meeting, 1 pm,**  
Adobe Mountain Desert RR Park

**Sep 12, AMRS Member Meeting, 9 am,**  
Adobe Mountain Desert RR Park

**Sep 13, Public rides and visitors return**

**Oct 15-18, MLS FALL MEET**

**Oct 17, SC/AMRS Swap Meet**