

The Bowser HO scale New Orleans Streetcars are being shipped from China this n

The New HO Scale SEPTA (Philadelphia) Kawasaki Single-End Light Rail Vehicle Model! (Part III)

In our previous two issues, we have been examining the IHP souvenir model of the SEPTA (Philadelphia) Kawasaki Single End Light Rail Transit Vehicle that has been operating on Philadelphia's subway-surface routes 10 (Lancaster Avenue), 11 (Woodland Avenue), 13 Chester Avenue, 34 (Baltimore Avenue) and 36 (Elmwood Avenue). They have seen sporadic service over the years on surface route 15 (Girard Avenue). These 112 vehicles have all performed excellently on their over thirty year life span and all 112 are still in service, a feat only matched by the original 315 cars of the Market-Frankford Subway Elevated that were withdrawn from service in 1960. All of them had operated on the line since 1922 and some of them had operated on that line since 1906.

We have found so far that this is an excellent model with only minor points at issue. The model was designed primarily as a souvenir display piece because that market may have great potential. We noted that IHP assisted the running modeler by making a floor available for the rugged and proven Bowser 125100 traction mechanism. We found the floor with the mounted 125100 Bowser mechanism will work satisfactorily in the two-rail mode on curves as small as nine-inch radius. To be honest, nine-inch radius curves are the smallest that the Con-Cor Air-electric PCC would do despite its eight wheel drive. But Trolleyville is a site for modelers who run cars powered from live overhead wires so we have been trying to get the model to operate successfully in that arena.

We detailed our modifications to the model in the previous issues, but we are still convinced that this model has insufficient weight, 5 ounces, so we began our next round of tests by adding some more weight under the floor behind the weight we originally added and in front of the motor above the floor before we resumed testing. In the next two exhibits, the green arrows point to the added weight. We also shaved a little material from the floors. In the next two exhibits, the red arrows point to area where we removed some of the floor material to allow more truck swing. We were very conservative in this area as we did not wish to weaken what we perceive as potentially weak plastic floor.

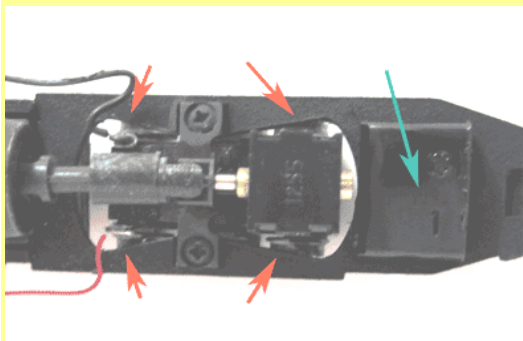


Exhibit A. Chassis view from the top.

Rail Resource Express (RR-X)! Model Train Collection Consultants!

Many of you modelers have acquired some very valuable collections and you have spent many years collecting it. At some point in your life, you may want or find it necessary to "thin out" your collections. Most of you know the value of your hobby items but your descendants normally do not. We cannot tell you how many wives of deceased modelers have accepted prices of 10 cents on the dollar for items worth much more.

Consider RR-X when you wish to thin out your collection but also let your survivors know about RR-X. They will save all of you a lot of grief handling your precious items.



Brian Brooks and fiancée Karin Wiesbaden, owners of Rail Resource Express (RRX) and shown above, have developed their company to serve all of your needs. They are now at 900 South Magnolia, Avenue F, Monrovia, CA 91016. They outgrew their older location and opened this new location recently. We visited their first open house on Saturday, February 22, 2014 and enjoyed their hospitality.

Better yet, give Brian a call at 626-353-0383 and check out their web site at www.RR-Express.com. You can also email them at info@rr-express.com.

Golden Empire Historical & Modeling Society Annual Train Show!

(Another great local show!)

Most of you hobbyists out there have noticed that the national train shows that used to be a staple in our hobby are shrinking. The Great American Train Show that used to present over 80 shows each year is long gone. The replacement, Great Train Expo, does not present that many. The World's Greatest Hobby on Tour (WGHoT) does six to eight shows each winter. What has not changed are the great shows sponsored by model train clubs. These clubs depend on these shows for their support and for that reason, they have placed their hearts and souls into these shows. One of these shows is held each November in Roseville, CA, sponsored by three clubs. Another is presented each March in Bakersfield, CA, sponsored by the [Golden Empire Historical & Modeling Society](http://www.GoldenEmpireHistoricalModelingSociety.com).

As both the national shows continue to get fewer and fewer and the number of local hobby shops continue to dwindle, we feel that we should support these local shows. Hobby shops

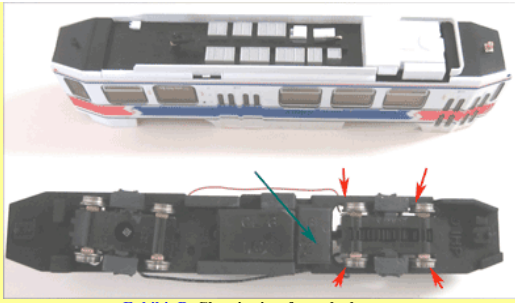


Exhibit B. Chassis view from the bottom.

By now the model weighed 6.1 ounces versus our desired goal of 10.0 ounces. The arrows in the next photo point to our modifications. We have also asked Train Control Systems to program a decoder for us that will allow the simulation of the alternating brake lights but have not received a response as we went to press.

We still were not able to get the model to negotiate 6" radius curves but we will continue to try both established methods and some new tricks. What is helpful is what we have learned from Volkmar Meier on one of the yahoo traction sites. His car at first gave the same results until he discovered that the power truck was hitting a part of the interior window casting.

Custom Traxx ordered a second Kawasaki Car directly from IHP and another floor from Shapeways. The floor arrived on March 21st. Immediately out of the box it appears that the opening for the Bowser power truck has been enlarged. Compare the photo below in Exhibit C with the photo of our modified first floor shown earlier in Exhibit A:



Exhibit C. Second Floor view from the bottom.

Anyway, IHP disavowed any connection with our perceived changes. In fact, we were told that "...once you finish your evaluation, if you can suggest how to improve the truck swing, send a data sheet with some measurements. I will then make whatever improvements are practical..." We will be installing a Bowser mechanism on this floor along with some weights and expect this to be completed before this article goes to press. The Bowser 125100 mechanism that we plan to use will have the older nickel silver wheels so we will be able to use the wheels covers provided by IHP with the car.

There are three variations of the Bowser traction drive that modelers may be familiar with at the current time. The first is the stock Bowser drive sans flywheel that is currently marketed in their metal bodied cars and the 1251XX mechanisms. A typical 125141 mechanism with floor for the older Bowser metal bodied PCC cars is shown in Exhibit D below:

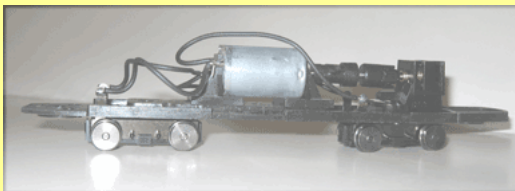


Exhibit D. Bowser Stock 125141 Traction Drive

Then there is the more commonly used Bowser mechanism with the A-line 20040 flywheel kit. This uses a entirely different drive line which we have found to be more quiet than the baseline drive. This drive was used in our first

continue to disappear, with the closing of well known and long established Franciscan Hobbies in San Francisco earlier this year. So if our readers know of a great local show, we ask that you let us know about it so we can promote it. We could be in a "world of hurt" if these shows start to disappear also. The club is both HO and N scale, with HO scale work sessions each Tuesday at 7:00 PM and Saturday at 10:00 AM on the third floor of their clubhouse. At the same times, the N scale work sessions are held on the second floor. Their clubhouse is located in downtown Bakersfield on Eye Street, between 19th and 20th Streets. For more information contact Larry Saslaw, President at 661-558-2770 or Larry7719@sbcglobal.net.

This years show was held at the Kern County Fairgrounds at P and Ming Streets on March 8-9, 2014 and was another great time for all. For more on the history of this great club and their annual show, [click here](#).

[China, from column 1]

Each time we visit the facility we have noted great improvements and growth in machinery and number of workers. There are other intangibles that you can only appreciate by seeing or hearing them for yourself. One of those things is the level of proficiency in the English language with whom you will communicate in both the business area and the manufacturing plant. Although English is taught in many of the schools now, in many cases there are not many opportunities to speak and write English often. We can not emphasize this too much. We are aware of many unfortunate production mistakes made because of different translations of words. You must adjust how you communicate with people for whom English is a second language to their level of knowledge of the English language. They sometimes do not know that they have misunderstood something and assumed the answer. A simple phrase like "Send the trolley poles separately" could be mistranslated and get you something that you did not like.

So on March 17-18, 2014, the BCT team was back in the facilities for our fourth visit that would encompass just two days. The team believes in spending just enough time in the plant to conduct business so two days is usually more than enough. It does not seem to make sense to spend less time in the manufacturing facility considering the time it takes to go to and from China. Total length of the trips have been reduced from 7 to 6 days. Still most of the time consumed on the trip is travel. The team usually arrives in Hong Kong a about 36 hours before the visit to the plant to both relax, and to organize their visit to the plant. Items to see are the machines being used and the processes being employed. It is very educational to see your product being fabricated, painted and assembled. And this helps when you are making business decisions later back home. Members of the BCT team have attended courses on doing business in Asia and have found that following those instructions have paid off. Both mainland Chinese and Hong Kong residents are very proud of their countries and want to show them off to visitors. Taking time to allow this is not only enjoyable but good for business. We have found that developing a relationship with the supplier results in fewer problems, usually a great time and possible lower costs and faster turn around times. Foreign business persons who do business with Chinese suppliers and have never visited their facilities are making a mistake, and possibly a huge one, in our opinion. By the way, everyone knows about the pollution in China. Stay away from that topic unless they bring it up for some reason. Remember those factories polluting the skies are making stuff and some of it is for U.S. consumption.

The team arrived in Hong Kong on Saturday afternoon, March 15. The Bowser portion of the team had left Montoursville early Thursday morning to fly out of Harrisburg, through Charlotte, NC to arrive in Los Angeles about 7:00 PM. The Custom Traxx team met them at LAX about 9:00 PM and on Friday at 1:40 AM, they all boarded a fifteen hour Air China Flight for Hong Kong with a stop in Beijing. The team arrived in Kong Kong Saturday afternoon about 1:30 PM. After such a long plane trip, some rest is required so the team did not meet socially with our hosts until Sunday.

Meanwhile, on Sunday morning, there was a ferry trip from Kowloon to Hong Kong and the traditional ride on the double deck four-wheel trams which travel on the main road from the eastern end to the western end of the island.

Kawasaki LRV, SEPTA 9111 and is shown in Exhibit E below:

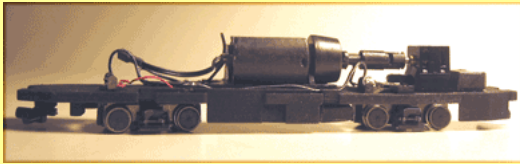


Exhibit E. Bowser Traction Drive with A-line 20040 Flywheel kit.

For our second LRV, SEPTA 9000, we will be using the drive line and flywheel from a RTR Bowser PCC fabricated in China. Each flywheel-motor combination is dynamically balanced at the supplied prior to being used. Note the difference in the flywheel and the drive train. This drive, including the balanced motor-flywheel combination will eventually be used in all the Bowser traction mechanisms when the current supply of motors is exhausted. See Exhibit F below:

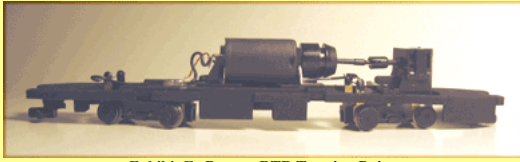


Exhibit F. Bowser RTR Traction Drive

With the Bowser drive installed on the floor, the complete assembly weighed 2.7 ounces so we added 1.5 ounces of weight under the motor and another .3 ounces on top of the floor in front of the power truck similar to what we did with the first Shapeways floor. We replaced the brass worm axle bearings, Bowser part 1257, with some Delrin bearings that are slated to replace the brass bearings in future mechanisms, pending the results of our testing. With the ability of the Southern California Traction Club to run items for hours at a time at shows using very sharp curves, the club is a great test bed for Bowser Manufacturing. Volkmar Meier reported earlier that he felt that the power truck was striking the window plastic preventing the negotiation of sharp (6" radius) curves. So in Exhibit G, you can see the Delrin bearings and the beveled corners on the gear tower.

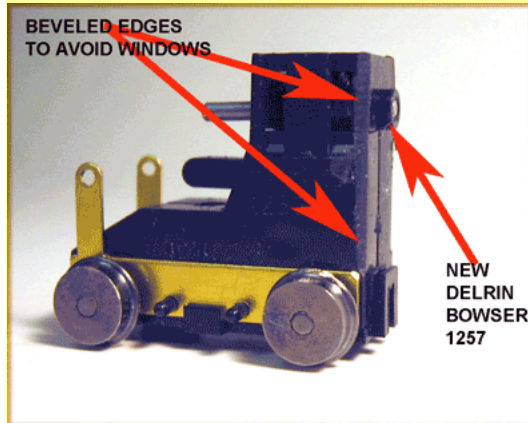


Exhibit G. Bowser Traction Mechanism Power Truck.

We hope to be able to report the results of the tests on these bearings in a later issue. We then installed the wheel covers supplied with the car and the Custom Traxx SCTC-3 brake assemblies. Our final chassis looked as shown in Exhibit H just before we installed it in the SEPTA 9000 shell.

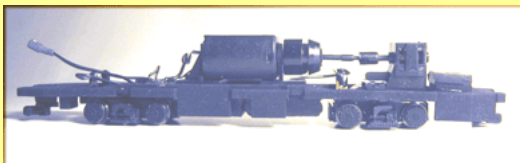


Exhibit H. SEPTA 9000 completed Bowser RTR powered chassis.

We added a Bowser 12600 trolley pole, installed and the pivot in the shell, connected the shell to the chassis with a



The last photo was taken from the second floor McDonald's Fast Food restaurant while the team had lunch.

On Monday morning, the team along with our host, used public transit to get to the Metal Manufactory in Dongguan Shijie. The trip, consists of a one hour trip via the MTR from Kowloon to Lo Wu and then a forty-five minute trip on the high speed rail (160-180 km/hr) from ShenZhen to Dongguan station. A brief car trip from the station to the plant follows. The team made the return trip late Tuesday. Accommodations are always great, bordering on fabulous. The hotels that the BCT team has used in mainland China are especially ornate with the main purpose of impressing the visitor. Saturday, Sunday and Tuesday evenings were spent in the Holiday Inn, Golden Mile in Kowloon in the midst of shops and a very huge mall. Monday evening was spent in the Grand Mercure Hotel in Dongguan Shijie. Click here for views of the [entrance](#), [lobby](#) and [main restaurant](#).

At least at our China facility, the hours for the workers are 8:00 AM to 12:00PM and 2:00PM to 6:00 PM with a normal two-hour lunch break. While the workers take lunch and return to their on-site dormitory rooms for a nap, we are taken to a local restaurant where he have a very enjoyable and enlightening time. This year, after learning that George Huckaby (Custom Traxx) had been taking classes in Mandarin Chinese for some time, everyone demanded that he display his knowledge at lunch on both Monday and Tuesday. No matter how tough the workday is, lunch is a happy time. In the photo below, the three gentlemen are all members of the Yuen family, who have for centuries owned the land on which the restaurant is located along with a farm that produces all the animal and vegetable food served at the restaurant. The gentleman in the center of the next photo is the owner of the restaurant and came to visit us. He was already very happy due to something he had ingested prior to our meeting. We learned all about this after George Huckaby greeted them with "Ni jiao shenme ming zi?"



This means "What is your full / first name?" If this phrase sounds familiar, you may have seen the 2010 movie, Karate Kid, with Taraji P. Henson and Jaden Smith. They were

Miniatronics mini plug. While we are currently running both cars in the Analog/DC mode, we intend to install the ESU decoders being designed for these cars as soon as they become available.

We have also learned that there is a Halling drive and a floor being developed for these cars. We would love to obtain one of these for testing. Meanwhile, our two cars, shown below as Exhibit J returned to the SCTC Test Track on Thursday, March 27th. More in a later issue!



Just in! Matt Herman of ESU LokSound has offered to configure and install a sound decoder in one of our test cars so we are sending him car 9111 this week. The decoder will operate the two front headlights, two rear taillights, alternate flashing stop/brake lights, turn signals and possibly the front subway light (above the destination sign) and the rear back-up light (above the rear window.) We will also get a bell and some other sounds. Stay tuned!

The Bowser/Custom Traxx Team Returns to China

By now, most readers know that the Bowser HO scale Ready-to-run (RTR) trolleys are being made in the Guangdong province in Southern China. Guangdong is located on the South China Seacoast of the People's Republic of China (PRC). It is also known as Canton or Kwangtung province. It surpassed Henan and Sichuan to become the most populous province in mainland China in January 2005, registering over 79,000,000 permanent residents and 31,000,000 migrant workers. The total population by the 2010 census was over 104,000,000 accounting for almost 8% of the total mainland Chinese population.

The current Bowser HO scale trolley program began with the San Francisco F-line PCC cars. The entire program, started in 2007, was sparked by a thirty-one page Powerpoint presentation made by Custom Traxx to the CEO of Bowser Manufacturing, Lee K. English. The presentation was made in the lobby of the local Hampton Inn in Williamsport, PA. Bowser accepted the proposal and work started. Custom Traxx' responsibility was the paint schemes, destination signs exterior configurations and recording sound. This was reasonable since Custom Traxx (George Huckaby) was originally from Philadelphia and rode most of the F-line cars to High School when they were assigned to Route 15. Also no one a Bowser had even even seen a "live" PCC car at that time. The first team visit to China was made April 4-12, 2008 to evaluate suppliers and to select one for the then new F-line PCC project. The success of this project would depend on the ability of the supplier to design and produce what we wanted at a cost that the market could support. We also wanted to choose a supplier that had growth potential and would keep up with the changes in technology that keep coming. We would visit more than one supplier on the initial trip. We rejected one outright and chose one that met our current and future requirements.

The first San Francisco's F-line PCC cars were available to the public in both powered and souvenir versions by the end of 2009. Subsequent modifications to the cars such as simulated super resilient wheels, windshield wipers, B-2 truck details, operational trolley poles and sound were added over the years and the Bowser/Custom Traxx (BCT) team has made it a practice to visit their supplier every two years to review both the past and the future. So after the initial visit, the team has traveled to the supplier facility in May 2010 and

practicing that line in that movie on the plane on the way to Beijing.



In the next photo are the members of the Yuen Family with (facing the camera) our host, George Huckaby and Lee English enjoying a fine Chinese lunch in one of the restaurant's private rooms.



Back at the manufacturing plant, factory workers are seen in the next two photographs assembling HO scale Bowser Covered Hoppers:



April 2012. These subsequent visits are to see how the supplier has adapted to technology. Since we first visited the supplier, he has added buildings, machinery, tooling and employees and seems to have kept up with the times. We have been very successful in dealing with our China suppliers because of some things that we have done and things we do not do.

The first thing we discovered is that the Chinese, just like minorities in our own country, can pick out people with prejudice against them or their country. If any company has people who have those feelings, do not send them to China. The Chinese will not say anything but it could cost you in the end. Leave the bigotry at home. There are some Americans with very strong feelings about Asian people so we strongly suggest that they stay away.

[See **China**, column 2]

The Trolleyville Staff wishes to thank those modelers who take time to write and submit articles. We deeply appreciate your efforts!

Again, be aware that most of these workers are not local residents. Some of them live far enough from the factory that it takes over a day to get home. This is why most manufacturing plants completely shut down twice a year for both spring and fall festivals so these workers can visit their families. It is normal for factories to lose as much as 60% of their basic entry level labor force during these shutdowns as these workers find other jobs either closer to home or with higher salaries.

So ended our fourth short but enjoyable trip to China. Next visit 2016!