We have been involved in several hundred passenger car Head End Power conversions, and passenger cars using Northwest Rail Electric systems are operating from Panama to Alaska, in service on everything from tourist railroad baggage cars to business cars owned by the largest of North American railroad companies. We have evaluated passenger cars for customers, and worked with many different car builders, tourist railroads, cruise lines, railroad museums, private car owners, several transit agencies and class 1 railroads, and one entertainment company.

#### **Standard Electrical Equipment**

The electric locker packages we manufacture for the North American railroad passenger car market are built to fit in almost all common passenger car electrical lockers. If you are converting a car from low-voltage DC, you will be surprised how much less space is required for the modern, higher voltage equipment. HVAC controls are of a rugged industrial design, and have proven reliability in many passenger car applications.

#### **Custom Electrical Equipment**

In cases where one of our standard electrical packages will not suit the need, we have produced a number of custom variations of our standard models, as well as completely custom electrical packages to suit the requirements of various customers. The 480 volt power distribution system for the Colorado Railcar Ultra Dome® cars, pictured on the front of this brochure, is an example of custom electrical equipment for a particular unique situation.

### **Standard and Custom HVAC Equipment**

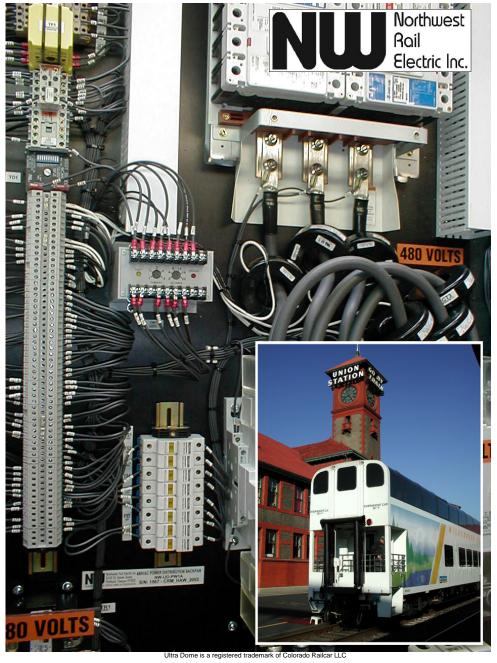
We manufacture a series of air conditioning condensers and HVAC blower and evaporator equipment that fit most passenger cars. Custom units can be manufactured for unique situations.

Get in touch with us today to see how we can help you with all your railroad passenger car needs.



Northwest Rail Electric Inc. 2630 SE Steele Street Portland, Oregon 97202

503/231-4808, fax 503/230-0572



Northwest Rail Electric
Railroad Passenger Car
Electrical and HVAC Equipment



**HEP Connectors** 



**Head End Power Parts** 



**HEP Specialty Hardware** 



Communications and MU cables and jumpers



Wire Lugs

## Passenger Car Heating, Venting and Air Conditioning Equipment



HVAC Heater, Evaporator and Blower Enclosures Standard Units fit most Passenger Cars. Custom Units Built to Order for Special Cases, including Stainless Steel for Diners.



Solid Element Heaters for Overhead (shown) or Baseboard



Air Conditioning Condensers designed for Under-Car Mounting, Copper Coils for Best Survival in Railroad Environment, and Wide Fin Spacing for Easier Cleaning. NOT A MODIFIED building unit!

### Passenger Car Electrical Locker Equipment and Packages



**HVAC Control, Emergency Lights, and Circuit Breakers** 





Power Car Generator Controls and Power Feed Equipment



HVAC Control, Circuit Breakers, Generator Auto-Start, DC System Control, and Power Selection

# Other Electrical Equipment



Yard Power Units, in 200 Amp, 400 amp, and 800 Amp, various configurations for various needs



Various Custom Equipment (Condenser and Under-Car Transformer Shown)