Module Building Techniques
Module Legs & Overhead Wire

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The following drawings were taken from a presentation made by Gary Reighn at the 1995 East Penn Trolley Meet. The presentation was one in a series on new techniques and tips for building trolley modules as defined by the East Penn Traction Club’s module standards. These drawings provide additional material or clarification of material described in the standards and are, for the most part, self explanatory. The standards should be referenced when viewing these drawings and to obtain detailed technical specifications. To obtain a copy of the standards, visit the East Penn Traction Club web site at: http://www.eastpenn.org.

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Optional Leg Levelers

(Design by Bob Dietrich)

Why ¾" Plywood?
Because it is exactly ¾" thick! Other woods can be used as long as they are exactly ¾" thick.
Module Joint Detail

Note the 3/8" overhang at the end of each module.

3/8" 3/8" 3/4" Wide Leg

Typical Module Overhead

Block Insulators (Optional)

Insulated

Brass

Insulator

Outbound → Inbound ← Outbound →

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Overhead Wiring - Module Joint Detail

Temporary Wire Section
Fiberglass Plate
Brass Plate
Direction of Travel
Outbound
Module Joint
Minimum 4", maximum 8" from joint to line pole

Module A
Leg
Module B

Overhead Wiring
Module Joint Detail

Brass Plate
Span Wire
Insulated Plate
Detail
Temporary Wire Sections
Module Joint
Overhead Connectors
Span Wire Connector
(Used at Module Interfaces)

Breadboard or Fiberglass Material for Insulated;
.025 Brass for Non-insulated

Remember: Insulated connector on the outbound track;
Non-insulated connector on the inbound track.

Simple Overhead Connector

Breadboard or Fiberglass Material for Insulated;
.025 Brass for Non-insulated

Note: The non-insulated version of this connector is used to insulate span wires when they bridge overhead sections or to isolate overhead sections for block control.
Other Overhead Connectors

#90 Washer (HO Scale) (Non-insulated)

Sharp 90° Bends

Breadboard or Fiberglass (Insulated)

Note, for these connectors to work properly the overhead must be under tension.

Trouble-Free Block Insulators
(Design by Gary Reighn)

Use Copper Clad Printed Circuit Board Material

For more information on these insulators, refer to the article written by Bob Dietrich and posted on the East Penn Web Site.