



**POWAY STATION**  
**ALL SCALE MODEL RAILROAD CLUB**  
a California 501c3 Non-Profit Corporation  
[www.powaystation.org](http://www.powaystation.org)

## **ROLLING STOCK STANDARDS & RECOMMENDED PRACTICES**

Poway Station subscribes to all the NMRA Standards & Recommended Practices (RPs), with specific exceptions and additions noted below. Unless otherwise indicated, NMRA RPs are Poway Station minimum standards. Questions on these standards should be directed to the Poway Station Standards Committee, who will make a recommendation to the Board for final action regarding any deviations from these standards.

NMRA Standards and RPs have not been reproduced here, but are available at the NMRA web page, <http://www.nmra.org/standards/>. Printed copies of all NMRA Standards and RPs will be available for review at most club meetings.

For the purpose of the discussion in these Standards and Recommended Practices, the term "in interchange" shall mean "used with other members' equipment to constitute an operating consist."

### **I. Standards**

Poway Station has adopted the following specific standards to supplement NMRA Standards for equipment to be used "in interchange":

- A. Cars to be used "in interchange" at public shows and operating sessions must be equipped with operating knuckle couplers.

An exception will be granted for a "unit consist" that will not be coupled to, or used with, equipment other than that provided in the original consist.

- B. Cars to be used "in interchange" at public shows and operating sessions must be weighted to the minimum weight specified by NMRA RP 20.1.
- C. Cars to be used in operating sessions must exhibit unique (different from all others) reporting marks. (No two cars should operate with the same road name and car number.) The Standards Committee shall maintain a list of registered reporting marks at the time equipment is certified and identified (see G. below). Reporting marks will be registered on a first come, first served basis.

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- D. Electronics that are not compatible with the operation of club throttles are prohibited at operating sessions. (This means constant lighting, sound, or motion, for instance, must not inordinately overload, or short out, the throttles being used.)
- E. Diaphragms (on passenger cars) must not interfere with the ability of rolling stock to negotiate the track work in the layout in such a manner as to cause derailments.
- F. Any second adverse event (defined as a derailment or train separation - uncoupling) during the same operating session will cause the offending car/consist to be removed from the layout for the remainder of the show, or until certified for operation by a member of the Standards Committee.
- G. Rolling stock to be operated at a public show **MUST** contain the member's color code to show ownership. The member will select a color code by the time the first piece of equipment is certified. Color codes will be assigned on the basis of membership seniority. The presence of the color code will signify the equipment has been certified, as well as denoting ownership.
- H. Certification will be documented on the Certification Checklist Form 3, Cars (copy attached).

## II. Recommended Practices

In addition to the supplemental Standards described above, Poway Station has adopted the following supplemental Recommended Practices. Although not mandatory, Poway Station strongly encourages the use of these practices.

- A. Wheels should be metal, with flange contours that conform to RP-25 or Finescale dimensions. Metal wheels track better (plastic wheels "pick" irregularities in the track, causing derailments), and RP-25 or Finescale flanges are required to negotiate the Code 83 track work reliably.
- B. Couplers should be metal, similar to Kadee brand couplers. Although many of the newer R-T-R and kit rolling stock is delivered with plastic operating knuckle couplers, we have found that the length of trains operated on club layouts, and the resulting weight, develop stresses that exceed the capability of these plastic couplers. The resulting failures cause un-couplings, and possible derailments.
- C. Rolling stock should be weighted at least 125%, but not more than 150%, of the weight specified in NMRA RP 20.1, to provide reliable operations. (This means, for instance, if the NMRA recommended weight is 4 ounces, the car must weigh **AT LEAST** four ounces, but the Poway Station recommended weight is not less than 5, nor more than 6, ounces.) This helps to keep cars on the track with the long trains we run at shows.

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- D. Cars to be used "in interchange" should have at least minimal weathering applied, to improve the illusion that these are real trains in miniature.

An exception will be granted for a "unit consist" that will not be coupled to or used with equipment other than that provided in the original consist.

- E. Cars to be used "in interchange" should not exceed the AREMA Plate H clearance specifications. (No over-height or width cars.) Plate H accommodates double-stack cars and tri-level autoracks. The NMRA gauge currently available is the Plate C profile. Plate H is significantly higher and slightly wider, and raises the outside shoulders of the profile, resulting in a much flatter appearance across the top. A Plate H diagram is included in the Poway Station HO Module and Track Standards. For more information on Plates and clearances refer to the discussion of the NMRA gauge and Clearances at <http://www.nmra.org/standards/gauge.html>.