A guide to using the restoration / refinished items grading standards
Introduction

This program is on grading restorations and refinished items. This project has been the collaborative effort of many people. However, the main work was done by and credit goes to Glenn Stinson with the help of Bob Robinson, Richard Zipin, Clem Clement and Jim Kelly.
The program will show you specific examples in each grade and explain why they are so graded. You will then be able to effectively grade your restored and refinished items easily and accurately.
The complete “Guide to Understanding the TCA Grading Standards” is available in the Standards section of the TCA website. Included are guides to grading pre and post war trains and accessories; paper and boxes and restorations.
TCA Standards Committee Display 2006-07
National Toy Train Museum,
Strasburg, Pa.
TCA Standards Committee Display
2009 - National Toy Train Museum,
Strasburg, Pa.
TCA Standards Committee Display – 2010
National Toy Train Museum, Strasburg, Pa.
TCA Grading Standards for Restored and Refinished Items

Restored/refinished toy trains and related accessory items must continue to be marked as such using pressure sensitive labels available from the TCA. All replacement parts considered “major component parts” such as an engine frame, boiler or cab that have been used in the restoration of an item must include the required identification marks of the manufacturer.

R-5 Professional Grade- Restored in all aspects of finish and detail as when manufactured. Finished in correct type paint, color, texture and gloss. All wiring exactly matches the original. All trim in correct finish or plating. Virtually identical to the original. No surface imperfections in the metal work. No wear or evidence of use present. Authentic in all aspects.

R-4 Very Good—Restored to a general high standard. However, noticeable differences exist particularly with respect to the color, finish and texture of paint when compared to an original piece.

R-3 Good- A restored piece that has signs of play wear with minor dents and scratches.

R-2 Fair – A non-professional restoration. Color, texture and finish clearly different from the original. Other items, such as non-authentic wiring are also evident.

R-1 Poor- A poorly constructed restoration in all respects. May be a candidate for restoration. Includes dents or rust pitting under the finish.
These grading standards apply to all toy train and related items that have been either restored or refinished. However, they do not apply to fantasy or customized items since the goal of the standards is to be virtually identical to the original. They were prepared to act as guidance and to encourage usage of common terminology when describing the category of grading condition for specific items.
For an item to be graded at a specific level it cannot exhibit any of the flaws noted in lower grades. No flaw is too small not to be considered in grading.

These standards do not consider the age of an item when assigning a grade. Items are graded as they are presented at the time they are examined.
The overall condition of an item needs to be considered with the most severe flaw(s) being the limiting grading factor. However, the grade of an item need not be a single grade. For example, it is acceptable to grade an item as R-2 due to non-authentic wiring but otherwise R-4.
This slide shows two different approaches to restorations. The top example shows a high gloss finish, highly polished, sparkling like a jewel, while the bottom example shows a more conservative approach saving original components and details when possible.
This very early example shows a conservative approach to its restoration that preserved many original features.
The mission statement of the TCA recognizes the importance of restorations “… to preserve an important segment of history- Tinplate Toy Trains_ through … establishment of collecting standards…”

Careful restoration has preserved this example for the future
When grading restorations, a complete knowledge of every detail of the original is of the utmost importance. This example can be very difficult to grade without direct comparison to an original.
When possible compare the restored item to a known original. Shown are three restored engines and one original.
TCA rules regarding the identification and marking applies to all restored and refinished items.
R-5    Professional Grade- Restored in all aspects of finish and detail as when manufactured. Finished in correct type paint, color, texture and gloss. All wiring exactly matches the original. All trim in correct finish or plating. Virtually identical to the original. No surface imperfections in the metal work. No wear or evidence of use present. Authentic in all aspects.
This grade is reserved for the highest quality restorations that are “Virtually identical to the original”. This applies not only to the quality of the workmanship itself but also to the details necessary for the piece to accurately represent an original. These would be the pieces that fool the experts. No examples meeting this grade were found for this project.
The term “Professional grade” does not relate to the use of a paid individual but reflects the highest quality workmanship along with a great attention to authentic details. Many of the items reviewed during the preparation of this guide exhibited Professional Grade workmanship but lacked the proper authentic original finish and details to make the R-5 grade.
The most common reason an item can not be graded as R-5 is that the finish does not accurately replicate the finish as the item originally appeared when new. How well the color matches the original is a primary factor. But the type of finish, it’s texture, gloss and quality of application must also be considered.
The stuff that dreams are made of. Lionel warehouse, Hillside NJ. Summer 1931. No restorations here. (Just a few factory repaints.)
R-4 Very Good—Restored to a general high standard. However, noticeable differences exist particularly with respect to the color, finish and texture of paint when compared to an original piece.
This grade accounts for the vast majority of restored examples. The common flaw is the difficulties matching original finish colors, textures and gloss. The chemistry of finishes has changed greatly since many of our restoration candidates were originally made compounding the difficulty of achieving a “virtually identical” match.
This example shows very high quality workmanship, good attention to original details and a beautiful gloss finish with a deep mirror like shine. But the sparkling finish is questioned as over-restored, too smooth and much too glossy when compared to period originals.

R-4
This slide shows the restored 42 next to an original 33. The gloss level of the restored 42 is very similar to the original 33. Detailed knowledge of the original is essential for proper grading.
Attention to small details is critical for a restoration to be graded highly. Three engines showing different trim details—couplers, headlights, trim. Knowledge of the proper details is essential for accurate grading. R-4
The restored example on the right looks pretty close to the original shown on the left. But the smallest of details cannot be overlooked. Note the original has brass door knob while the restored piece has the knobs painted. R-4
This example shows a very smooth, high gloss finish. While very attractive, it is not “virtually identical” to the original.
This photo shows close up the original finish. Notice the rough, orange peel texture. This is rarely duplicated in restored pieces. Other texture flaws such as runs in original finishes are common.
This example shows high quality workmanship, but many collectors question the finish as too smooth when original typically show orange peel texture and runs. R-4
This beautifully restored set shows high quality workmanship and good attention to authentic details. Notice how the rough edge of the gold stripes and the gold on the boiler front show hand painting. The paint gloss should be compared to a known original. R-4
This example shows a very smooth, high gloss finish and high quality workmanship. But when examined in direct comparison to an original, it is not “virtually identical”. R-4
R-3 Good- A restored piece that has signs of play wear with minor dents and scratches.
The engine on the right is original while the engine on the left was restored over 40 years ago. It shows high quality workmanship and good attention to original details.
But over the years, wear and some paint loss on the frame has occurred limiting it’s grade to R-3
R-2 Fair – A non-professional restoration. Color, texture and finish clearly different from the original. Other items, such as non-authentic wiring are also evident.
This example shows nice workmanship but poor finish match to an original, non authentic wiring and use of decal lettering. R-2
The engine on the right is 100% original while the one on the left is restored. The restored piece is generally well done but lacks details and the finish is poor. R-2
R-1 Poor- A poorly constructed restoration in all respects. May be a candidate for restoration. Includes dents or rust pitting under the finish.
This engine shows poor finish quality, missing parts, non-authentic details and wear and dirt. A prime candidate for re-restoration. R-1
General Comments and Guidance
Use of the grading standards is subjective at best. It is important and logical that wishful thinking not be allowed to influence the choice of grade. It is the nature of the market for a seller to see an item in a very positive light and to assign the most favorable description while a buyer may see the item in a less favorable light.

When evaluating the significance of any flaw on an item, not only the size of these flaws must be considered but also the location on the item and their size in relation to the item’s size.
It can be a very difficult determination to make and requires an experienced and knowledgeable individual. Close examination of the item comparing colors, textures, patina, and other details to a known original is often necessary.
Knowledgeable Standards Committee members are available at every TCA-sponsored train meet to assist members on questions of originality, authenticity, and condition by offering relevant opinions.

When considering a non-person-to-person transaction such as through the TCA Interchange or the internet, a written narrative that details the condition of an item and its flaws should be provided. Statements claiming that “Photos describe condition” should be taken with extreme caution.
When a Standards Committee member is asked for an opinion on an item, he/she may need to handle the item in order to properly examine it. It is of utmost importance that the committee member handles the item with extreme care and respect. Remember that your actions represent the TCA. Neither the Association nor an individual committee member can risk liability associated with accidental damage.
Proceed with the same care for a R-1 item as for a R-5 item. If possible, sit down at a table that is covered with a clean, soft towel or blanket. If you need to pick up the item, hold it over the table at a minimum height off the table. Beware of loose pieces that might fall off. Always use both hands to lift an item. Place hands on the items in strategic locations so as to minimize handprints or damage. Handle the item as little as possible and return possession to the owner quickly.
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