NMRA RECOMMENDED PRACTICES	
STANDARDS GAGE	
Issued Feb 2009	RP-2
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The NMRA currently sells three styles of the Type I gage as follows: N-Scale – Mark IV; HOn3-Scale – Mark III; HO-Scale – Mark IV; Sn3-Scale – Mark III and O-Scale – Mark V. The Type II gage (square gage) is no longer available for the larger scales and a drawing of that gage has been removed from this RP. The difference in the three style Type I gages (III, IV, V) is primarily the location of the tabs and slots on the gage. Also the tabs on the top of the gage for the Mark III and IV have been renamed from "Flangeways" to "Checkgage" for the Mark V.

The Type I, Mark III gage is not shown in this RP, it has the Flangeway tab between the Checkgage tabs along the top of the gage.

This GAGE checks the following dimensions:

Dimensions G, C, S, F, H, and P	**STANDARD S-3.2**
Dimensions K B, N, and D	**STANDARD S-4.2**
Dimensions A, B, C, D, E, F, G, H, and P	**STANDARD S-7**

WARNING: This GAGE is intended only for checking STANDARD dimensions.

Misuse as a tool may damage the accuracy of the GAGE.

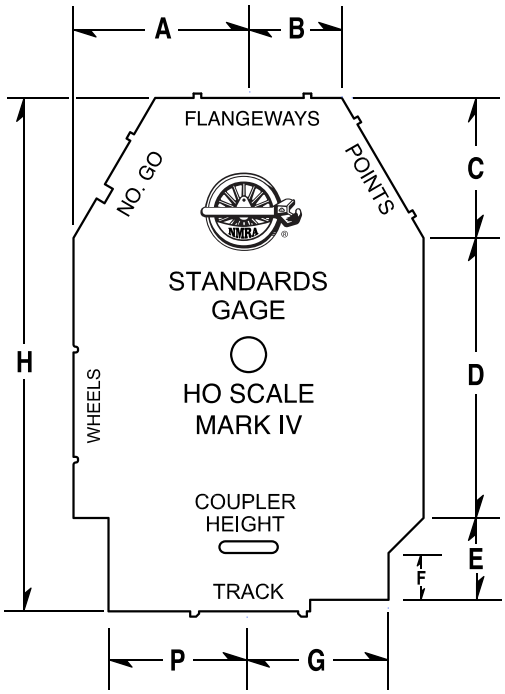


Figure 1

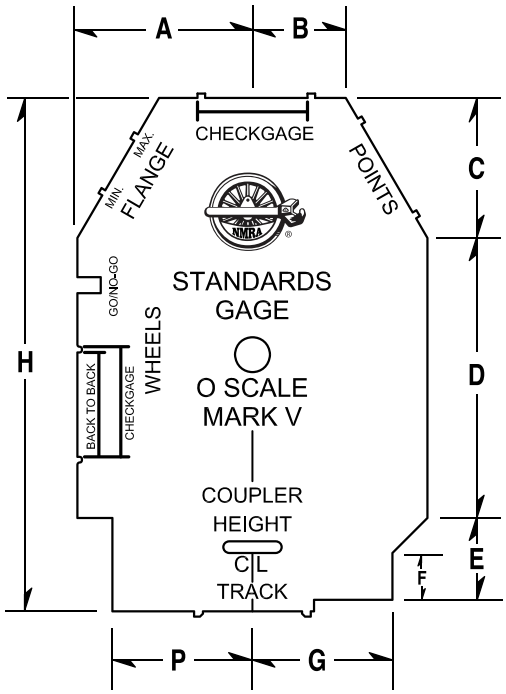


Figure 2

Figures 3 and 4 below identify the different Components of a turnout for use with the Instructions on the reverse side.

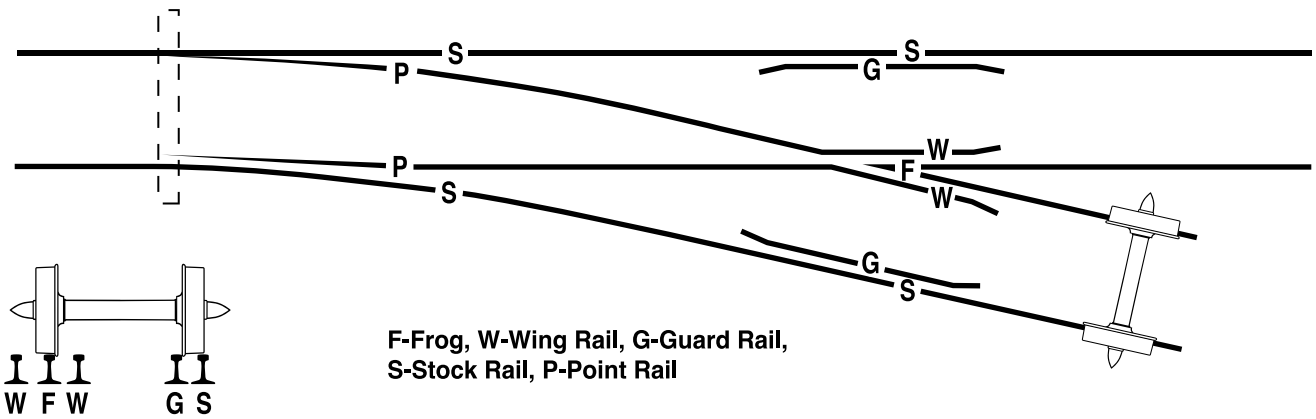
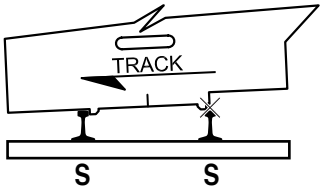


Figure 3

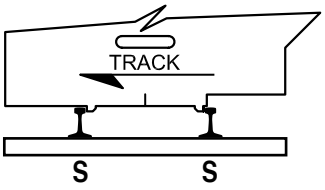
F-Frog, W-Wing Rail, G-Guard Rail,
S-Stock Rail, P-Point Rail

Figure 4

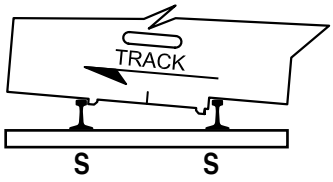
1. TRACK marks the side of the gage used for checking Track Gage through all trackwork, including turnouts and other special work. Apply light pressure in the direction of the arrow. See figures A, B and C for interpretation of results. (Note that the prongs of the Gage must clear spikes.)



A: Track Gage Too Tight

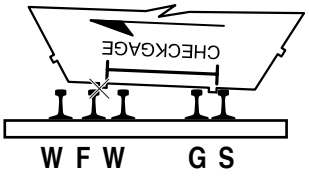


B: Track Gage Correct

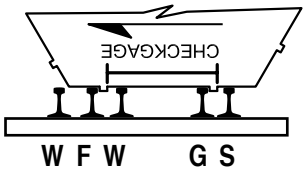


C: Track Gage Too Wide

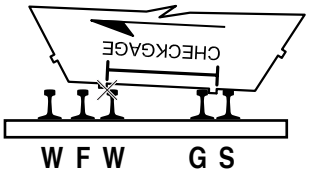
2. CHECKGAGE, spacing of Guard Rails, Wing Rails and Frogs are checked with this side of the Gage. Apply light side pressure toward the Frog and against the Guard Rail (see arrows). See figures A, B and C for interpretation of results. Gage prongs must clear all obstructions below the rail head as in figure D. Use NO-GO prong of Gage to check Flangeway width at the Frog in figures E and F.



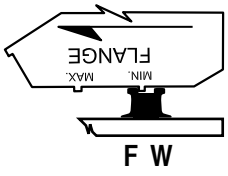
A: Check Gage Too Tight



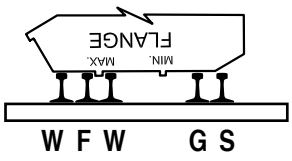
B: Check Gage & Span Correct



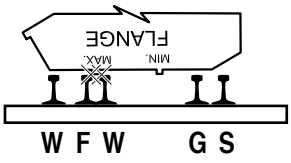
C: Span Too Wide



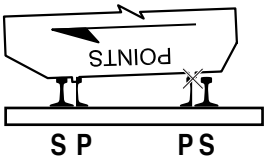
D: Flangeway Depth Correct



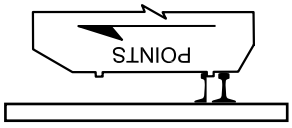
E: Flangeway Width Too Wide



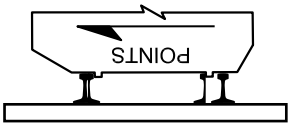
F: Flangeway Width Correct
Prong Should NOT Enter Flangeway



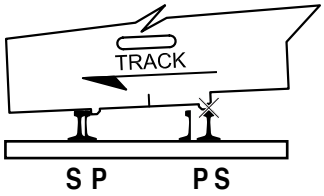
A: Point Spread Too Wide



B: Electrical Spread Correct



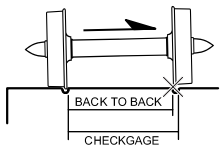
A: Mechanical Spread Correct



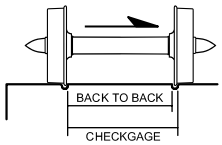
B: Track Gage Too Narrow

3. POINTS are checked against excessive Spread by applying light side pressure against the Gage side of the closed switch point rail as shown by the arrow. The opposite prong on the GAGE dropping fully into the gap between the open switch point rail and the adjacent stock rail ensures adequate Electrical Spread, while dropping only to the step on the inside of the prong shows adequate Mechanical Spread. Clearance of the outside of the prong checks Track Gage. Make this check along the entire length of the switch point rail.

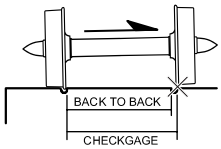
4. WHEELS are checked by applying light side pressure in the direction of the arrow. Each wheel must be checked - reverse the direction of pressure and check the other wheel. See figures A, B, C and D for interpretation of results. Use the wide NO-GO slot to check Tire Width as in E and F.



A: Back To Back Narrow

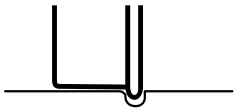


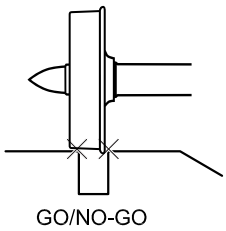
B: Back to Back & Gage Correct



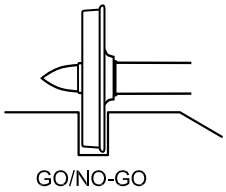
C: Check Gage Too Wide

5. CLEARANCE may be checked only with the Type I GAGE in the position of 1.B., seeing that no obstruction interferes with passage of the GAGE along the track. CAUTION: This check is valid only for tangent track and curves of very wide radius. Refer to NMRA STANDARD S-8 for increased Clearances in sharper curvatures.


D: Tire Depth Correct
Tread Rests on Gage



E: Tire Width Correct
Wheel Should NOT Enter Slot



F: Tire Width Too Narrow

6. COUPLER HEIGHT is checked by mounting a coupler of your choice in the center of the slot and matching all other couplers to this height when the GAGE is in the position of 1.B. above.

WARNING: WHILE THESE GAGES ARE VERY DURABLE, THEY ARE MEASURING DEVICES AND NOT METAL CUTTING TOOLS. THE USE OF THE GAGE TO REMOVE METAL (EVEN SOFT SOLDER) WILL CAUSE WEAR ON THE MEASURING SURFACES AND DESTROY THE DEVICE AS A MEASURING INSTRUMENT.