



NMRA TN	
Standards Gauge	
Jan 15, 2024	TN-2

1 General

5 The NMRA currently sells five styles of the Type I gauge as follows: N-Scale – Mark VI; HOn3-Scale – Mark III; HO-Scale – Mark V; Sn3-Scale – Mark III and O-Scale – Mark V. The Type II gauge (square gauge) is available for On3, On30, OO, S and Sn3. The difference in the four styles of Type I gauges (III, IV, V & VI) is primarily the location of the tabs and slots on the gauge. Also the tabs on the top of the gauge for the Mark III and IV have been renamed from “Flangeways” to “Checkgage” for the Mark V.

2 Use of the Gauge

2.1 This GAUGE checks the following dimensions;

Dimensions G, C, S, F, H, and P

Dimensions K, B, N, and D

10 Dimensions A, B, C, D, E, F, G, H, and P

STANDARD S-3.2

STANDARD S-4.2

RECOMMENDED PRACTICE RP-7

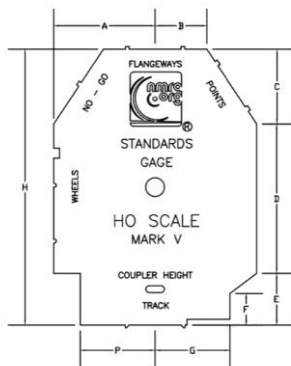


Fig 1

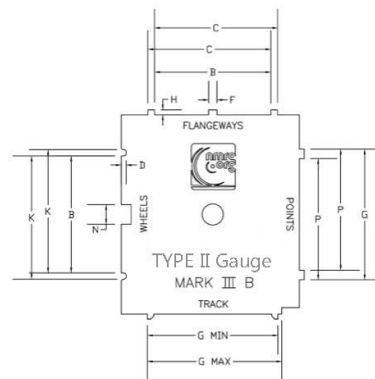


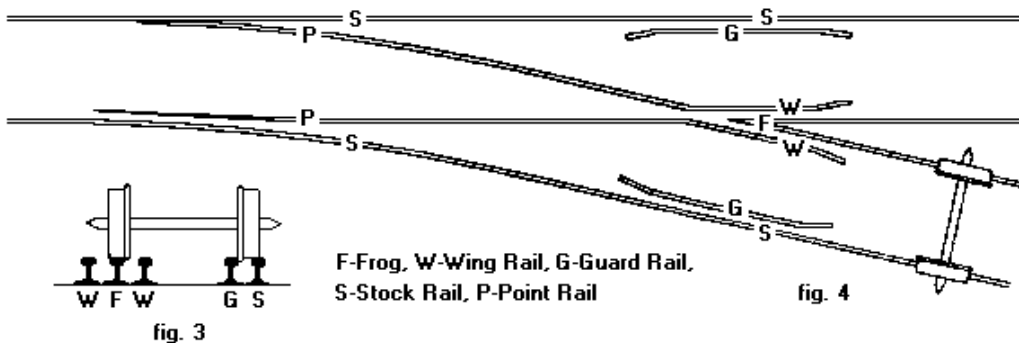
Fig 2

The Type I, Mark III gauge is not drawn in this RP but has the Flangeway NO-GO tab between the Flangeway tabs along the top of the gauge.

15 NOTE: This GAUGE is intended only for checking STANDARD dimensions. For proto and fine scale dimensions refer to S-4.1.

2.2 Components of a Turnout

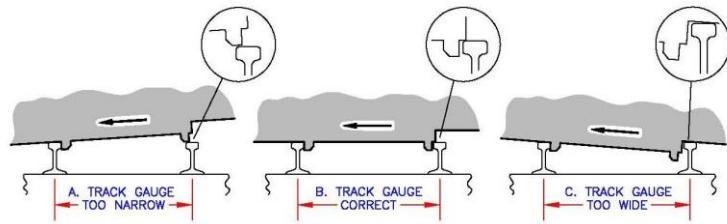
Figures 3 and 4 below identify the different Components of a turnout for use with the Instructions on the reverse side.



NOTE: The drawings on how to use the NMRA Gauge are for the Type I, Mark V and Type II Mark IIIB gauge. Please check your gauge to insure you know which tab to use when checking a measurement.

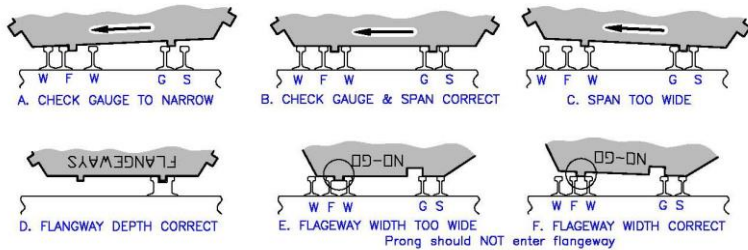
2.3 Check Track gage

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



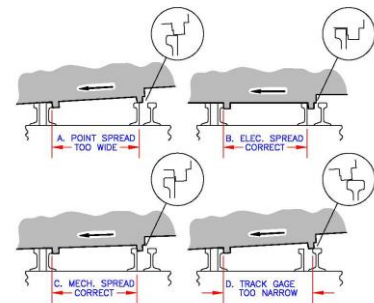
2.4 Checkgage

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



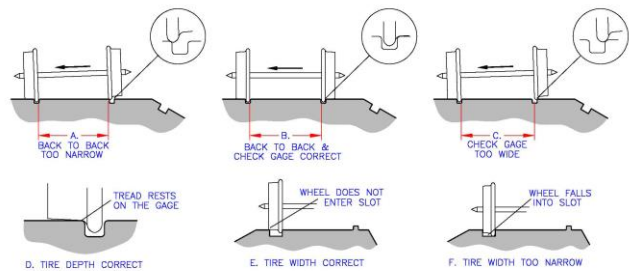
2.5 Points

40 POINTS are checked against excessive Spread by applying light side pressure against the Gauge side of the closed switch point rail as shown by the arrow. The opposite prong on the GAUGE 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.



2.6 Wheels

45 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 to the right for interpretation of results. Use the wide NO-GO slot to check Tire Width as in E and F.



50 In checking wheels be sure that;
 Wheel treads and flanges are free of "flash" and other projections.
 Wheel flanges have proper contour (see D).
 55 Wheels spin freely and "true" in the trucks without excessive wobble.
 When wobble is observed, check wheels at several points to insure the entire wheel is within limits.

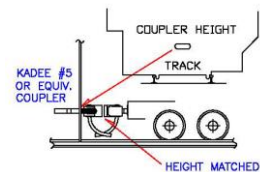
2.7 Clearance

60 Clearance may be checked only with the Type I GAUGE in the position shown in 2.2.B above, seeing that no obstruction interferes with passage of the GAUGE along the track. CAUTION: This check is valid only for tangent track and curves of very wide radius. Refer to NMRA STANDARD RP-7.3 for increased Clearances in sharper curvatures.

For oversized rolling stock and modern equipment snap on the plastic modern clearance gauge for your scale.

2.8 Coupler Height

65 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 GAUGE is in the position shown in the figure to the right.



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