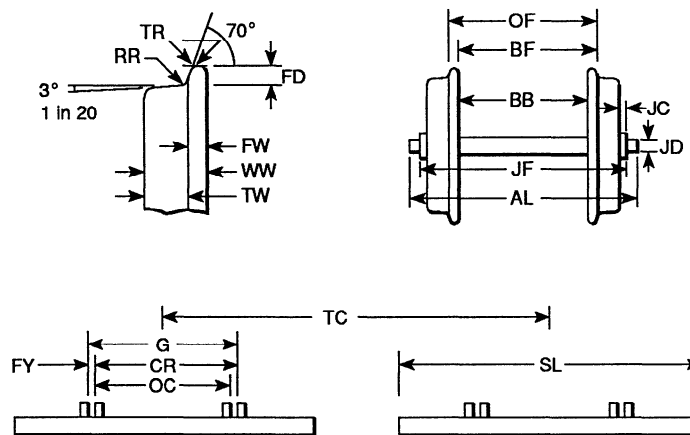


Dimensions and Compatibility with Standard Tracks of Carriage and Wagon Wheelsets Not in Current Production

During the development of Gauge O to its present standard many types of wheel have been manufactured and a surprisingly large number of these remain in use long after their manufacture has ceased. In order to enable modellers to determine the suitability of these older wheelsets for running on standard tracks this Data Sheet lists the dimensions of some of the more common types, but it does not claim to be comprehensive as it is impracticable to list the dimensions of every wheelset made.

The dimensional requirements for full compatibility of a wheelset with the track are as follows:-



The minimum back to back (BB) dimension must be greater than the maximum dimension over the check rails (OC). The maximum back to flange face dimension (BF) must be equal to or less than the minimum check rail to opposite rail face dimension (CR). The minimum wheel width (WW) must be equal to or greater than twice the minimum flangeway (2FY).

The Track Standards do not specify a minimum dimension from the running surface to the top of the chairs or other type of rail support. A minimum dimension of 1.6mm will ensure clearance to the flanges of any of the wheels listed in this Data Sheet.

The dimensions have been obtained from published data supplemented by measurement of wheelsets believed to be in their original condition. However, many wheelsets still in existence have been modified since they were manufactured, particularly those for carriages and wagons which permit modification of the back to back and the back to opposite flange face dimensions by simply moving the wheels on the axle. Also, the dimensions of many carriage and wagon wheelsets were not maintained as accurately as were those for locomotives because the axles did not have a locating shoulder and manufacturers sometimes varied the dimensions, particularly after the publication of the BRMSB Standards. Most of the wheelsets listed below can be adjusted by moving the wheels on the axle but the difference between the BF and BB dimensions will remain constant unless the wheel itself is modified. Because of the possibility of modification the dimensions of a particular wheelset which comes into a modeller's possession can only be confirmed by actual measurement.

The data is confined to the compatibility of the wheelset with the track. It does not include information such as axle dimensions which affect the mounting of the wheelset in the vehicle.

Key to the table

c = Fully compatible with the track standard.

x = Not compatible with the track standard.

Overall compatibility

*** = These wheelsets are fully compatible with this track.

* = Although slightly outside the requirements for full compatibility, which are based on both the track and wheelsets being at the extremes of their respective tolerances and the flange being square, these wheelsets will run satisfactorily on this track.

NC = These wheelsets are not compatible with this track.

Track Standard

Track Dimensions	Guild		Greenly (1935)		BRMSB			Scale	NMRA	AMRA	European NEM
	Fine	Coarse	Ordinary	Special	Fine	Coarse	Unified	Seven			
Over check rails OC	28.5	27.6	25.5	27.0	28.5	27.0	28.0	30.94	28.27	28.13	28.0
Check to opp. face CR	30.25	29.8	28.0	29.5	30.0	29.5	30.0	31.99	29.77	29.87	30.0
Twice flangeway 2FY	3.5	4.4	6.5	5.0	3.5	5.0	3.2	1.94	3.0	3.28	4.2
Wheelset Dimensions											
Hornby Standard	These wheels are loose on the axle and are not compatible with any listed track standard										
Hornby BB 27.0	x	x	c	x	x	x	x	x	x	x	x
Mansell BF 28.5	c	c	x	c	c	c	c	c	c	c	c
WW 6.8	c	c	c	c	c	c	c	c	c	c	c
Compatibility	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
If opened up to 28mm BB these wheelsets are compatible with the Guild and BRMSB Coarse Standards											
Hornby Spoked BB 27.0	x	x	c	x	x	x	x	x	x	x	x
BF 28.3	c	c	x	c	c	c	c	c	c	c	c
WW 5.7	c	c	x	c	c	c	c	c	c	c	c
Compatibility	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
If opened up to 28mm BB these wheelsets are compatible with the Guild and BRMSB Coarse Standards											
Bassett-Lowke BB 27.0	x	x	c	x	x	x	x	x	x	x	x
BF 29.0	c	c	x	c	c	c	c	c	c	c	c
21.5mm dia WW 6.0	c	c	x	c	c	c	c	c	c	c	c
Compatibility	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
If opened up to 27.5mm BB these wheels are compatible with the BRMSB Coarse Standard											
Bassett-Lowke BB 27.0	x	x	c	x	x	x	x	x	x	x	x
BF 28.5	c	c	x	c	c	c	c	c	c	c	c
25mm dia WW 6.0	c	c	x	c	c	c	c	c	c	c	c
Compatibility	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
If opened up to 28mm BB these wheelsets are compatible with the Guild and BRMSB Coarse Standards											
LMC BB 27.5	x	x	c	c	x	c	x	x	x	x	x
BF 28.5	c	c	x	c	c	c	c	c	c	c	c
WW 6.0	c	c	x	c	c	c	c	c	c	c	c
Compatibility	NC	NC	NC	***	NC	***	NC	NC	NC	NC	NC
If opened up to 28mm BB these wheels are also compatible with the Guild Coarse Standard and with the corresponding Fine Standards if opened out to 29mm.											
Gainsborough BB 27.0	x	x	c	x	x	x	x	x	x	x	x
BF 28.7	c	c	x	c	c	c	c	c	c	c	c
WW 6.0	c	c	x	c	c	c	c	c	c	c	c
Compatibility	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
If opened up to 27.8mm BB these wheels are compatible with the Guild and BRMSB Coarse Standards											