

## Masterclass Models

### GWR Loriot B,D,E and M/BR D2-241 Lowmac instructions

#### Historical Notes

The Great Western had two major groups of low-loading wagons, to which it assigned the telegraphic code Loriot, both forming fleets of just over 100 vehicles. In addition there were lighter carriage carrying trucks (Hydras). The earlier in origin of the Loriot, having a wheelbase of 21', were those forming Loriot B,D,E and M. It is these that this kit represents. They were first built in 1889/90 to two widths with lever brakes, and these were later allocated diagram numbers G1 and G2 (not in chronological order). New batches were built from 1907 onwards, again to two widths, with Dean-Churchward brakes and with slightly increased overall length (G18 and G20). In 1925 5 were constructed to G14, with strengthened cross members to allow the maximum load to increase to 20T. Finally as it did with many other pre-nationalisation designs, BR built 30 more to diagram 2-241, reverting to conventional brake levers. There is photographic evidence to show that at least one of the original 1889 build remained in service in engineers stock into the 1980s.

Diagram	Year	No built	Width	Length	Name (GWR/BR)	Load	Brakes	Numbering
G1	1890	10	8'	26'6"	Loriot D	15T	Lever	42041 - 42050
G2	1889	40	8'6"	26'6"	Loriot B, Lowmac WB	12T	Lever	
G18	1907	18	8'	27'	Loriot D, Lowmac WR		DC	42138 - 42155
G20	1908-27	13	8'8"	27'	Loriot E	15T	DC	42156 - 42164 42202 - 42205
G14	1925-27	5	8'8"	27'	Loriot M, Lowmac WM	20T	DC	42197 - 42201
2-241	1949.57	30	8'8"	27'	Lowmac WE	15T	Lever	

The kit can be used to represent any of the diagrams, although the builder will have to reduce the width and/or overall length to be 100% accurate in the case of G1, G2 and G18.

#### Assembly instructions

##### Parts required

1 x Lowmac etch  
4 x 2-041 Rolling stock axle bearing cups  
2 x 2-201 5.25mm plain disc wagon wheels  
4 x 2-443 Plain wagon buffers (or similar according to prototype).

0.3mm brass or nickel silver rod  
solder and tools

##### General

Certain parts of the etch are very delicate, and therefore care is needed when cutting both them and adjacent parts out. Spares are provided of certain small or delicate items.

Although it is possible to assemble the kit using superglue, for these instructions soldered construction is assumed.

Unless otherwise indicated, fold lines for 90 degree folds are on the inside of the fold, for 180 degree lines on the outside of the fold.

Parts on the etch are numbered. An enlarged picture of the etched fret is provided for clarification. Study this and the instructions carefully before beginning assembly.

## Assembly

1. Cut out the main underframe unit (part 1) and solder four axle bearings into the recesses provided. Do not fold up the underframe unit at this stage. At one end it has DC brake hangers which should be removed if building G1, G2 or D2-241. If you want to reduce the length to 26'6" to accurately represent G1 and G2 the small sections at each end can also be removed.
2. Select and cut out the set of solebar overlays to use to represent your chosen prototype. There are three sets, the first for G1/G2, the second for G14/G18/G20 and the third for 2-241
3. Using the bearings as locators, solder the selected solebar overlays on to the underframe unit, ensuring the slots in the two parts line up.
4. The solebar bottom angle should now be soldered onto the solebar overlay. This is best done before cutting it from the etch, carefully checking it is accurately aligned.
5. Solder the four layers of axlebox overlay onto the assembly. Please note that these parts are spaced on the etch so that both axleboxes on one side can be done at once. **Therefore only cut out the axlebox layers after you have soldered them to the underframe assembly.** As an alternative a separate set of foldup axlebox layers is provided for those that prefer that method of construction.
6. Now fold up the underframe assembly, sides first and then ends. Insert the wheels into the bearings and check for free running. Remove them again.
7. If necessary, clear the slots in the solebars using a piece of scrap etch. Insert the cross members into their respective slots, ensuring they are sitting down snugly. Deeper main cross members are provided if you are building G14.
8. Cut out the floor base and floor planking. If required, reduce in length and/or width to match your prototype (I doubt if anyone will notice to be honest) Bend to match the profile of the underframe and solder in place.
9. Solder plain or perforated floor sides in place.
10. If building G1, G2 or D2-241 foldup and add the brake ratchets in the holes provided in the solebars. Please note that G1 and G2 had both brake levers at the same end.
11. Choose the appropriate brake levers to be fitted. Fit them to the holes in the solebar using a piece of 0.3mm brass rod, and solder them to the brake ratchets.
12. Fold up the brake blocks, and solder the brake stretchers in place. Fit the brakes to the slots provided in the underframe. Note that G1 and G2 only had brakes at the end the brake levers are.
13. Fix the bufferbeams (part 9) to the ends of the underframe, ensuring they are sitting flush against the ends. Add the coupling housing cover (part 17) and coupling hook (part 18).
14. Fit buffers.

## References

G2 - <http://paulbartlett.zenfolio.com/gwrloriotlowmac/h90499c2#h90499c2>

G18 - <http://paulbartlett.zenfolio.com/gwrloriotlowmac/h90499c2#h1b30c6f>

D2-241 - <http://www.kesr.org.uk/visitor-information/about-kesr/stations/wittersham-road/15-stock/wagons/159-176>