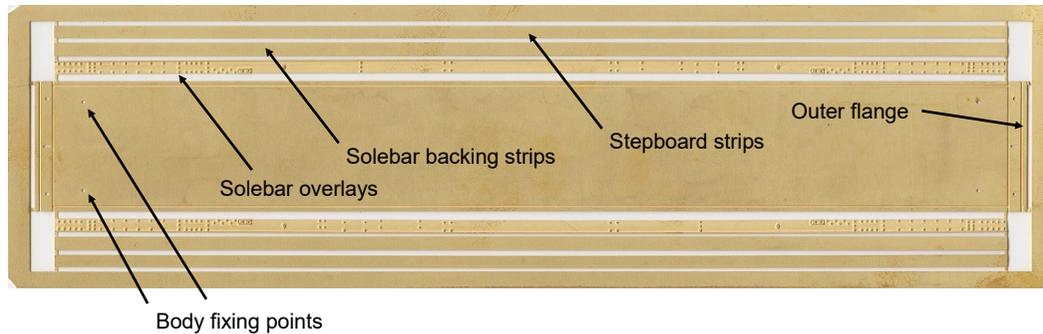


## GNRC005 GNR/ECJS Gresley 57' Carriage Underframe

From 1905 when he was appointed Carriage & Wagon Superintendent of the GNR until the formation of the LNER in 1923, the majority of Gresley's distinctive carriages were built on 57' underframes rather than the later post-Grouping 60' standard. (The body length is usually quoted as 58'6" due to the bow ends.)

It is not possible within the scope of these instructions to cover all the vehicle types that this underframe was fitted to so you should take care to get drawings and photos of your chosen prototype - paying particular attention to the location of extra battery boxes and gas lighting/cooking cylinders. Check carefully for the use of Mansell or plain disc coach wheels - for example the ECJS 1914 Flying Scotsman dining saloons used Mansell wheels in standard Gresley bogies.



### Assembly instructions

Although there should be no particular problems for the inexperienced modeller, great care should be taken to follow the order of construction outlined below and to use the appropriate solder - 188°C unless mentioned otherwise. Folds are on the inside of the half-etched lines.

1. We regret that the locations of the bogie fixing holes are not etched on the fret. Mark them out and drill to suit your usual bogie fixing screws, typically 8BA or M2.5. They should be on the longitudinal centre line, 32mm from the half-etched line between the floor pan and the headstock, for both Fox and Gresley bogies.
2. Drill out the holes in the floor pan to suit your usual body fixing screws, typically 10/12BA or M2.
3. Tin the solebar overlays and their backing strips. Remove the backing strips and overlays from the fret, and after coating with flux, clamp them together. Note that the backing strip is slightly wider than the overlay, and the overlay has a flange along one edge (this is the bottom edge of the finished solebar). The excess backing strip should therefore be at the top of the solebar to provide a tab for fixing into the slot on the floor pan. Solder the backing strips and overlays together - you may need to use a small gas torch to make the joints well. Drill holes in the solebars for step support wires - refer to photographs and drawings for their position.
4. Drill holes in the headstocks for vacuum, Westinghouse and steam heating pipes as required.
5. Fold the outer flanges at 90° to the headstocks, then fold the headstocks at 90° to the floor pan. Clamping in a vice will help in producing a good sharp fold.

6. Fit the solebar assemblies from step 3 into the slots on the floor pan. Use 145°C solder, working from the back, and do not dwell with the iron to prevent the overlays becoming detached from their backing strips. Fill the headstock folds with solder for strength, and tin the entire rear of headstocks to aid fixing buffers and couplings later on.

Check the fit of the carriage body to the underframe at this point before proceeding any further.

7. Cut the stepboard strips to length, and fit them with wire supports into the previously drilled holes.
8. Fit your chosen bogie mountings to the floorpan using the previously drilled holes.
9. Fit your chosen turnbuckle underframe trussing.
10. Fit the vacuum cylinder vee hangers followed by the cylinders themselves (e.g. Comet Models C11 and C35 respectively).
11. Add all the remaining fittings, such as brake hoses, buffers, couplings, battery boxes (51L's GNRC001 are ideal) and gas cylinders. Brass or nickel silver items should be added first, followed by those made from whitemetal, to avoid embarrassing accidents with a hot soldering iron. As far as we are aware, all carriages with this underframe were fitted with drop buckeye couplings.

### Livery

GNR/ECJS/LNER: Solebars and wheel centres painted in 'Coach Brown'; wheel rims picked out in white; all other parts black.

BR: Everything black!