



BALDWIN 4-6-0T

009

ORIGINAL DESIGN

Requires Farish diesel chassis 1009

GENERAL:

Read through instructions carefully to familiarise yourself with parts and procedure. **DO NOT TAKE OUT PIECES OF THE FRET AT THIS STAGE;** leave them where they are until needed and avoid losses.

The kit may be assembled with adhesive. UHU is recommended. Do not overfill joints if using epoxy resin because this can distort the model. Allow all adhesives to cure naturally.

Low-melt solder, like GEM LEAD-FREE SOLDER is essential if this method of assembly is chosen.

Letters on drawings refer to cast parts, numbers to etched parts.

PREPARATION:

Remove extended portion of plastic keeper plate at the front of GRAFAR chassis, leaving 1mm protruding. See * on drawing.

Drill cylinder backcovers (A) 1 mm diameter. Do not break through frontcovers.

Prepare castings for handrails, pipes and stays made from wire provided while the kit is unassembled. Fitting them at this stage is often easier. Consult photographs because these arrangements vary. To fit stays from smokebox to footplate notch the upper edge of the lower smokebox casting 1mm back from front face (B1), just enough to take the wire, and drill holes in footplate 2mm back from leading edge and just outside the fillets underneath (C).

USEFUL SUB-ASSEMBLIES:

Bufferbeam (D) to footplate (C). Dragbeam (E), bunker apron (F) and cab front and sidesheets (G) to cab floor (H). Chimney, steam and sand domes to top half of boiler (J). Leave whistle and pop valves (K) until later. Water filler caps (L) to tank tops (M). Prepare bogie (N): trap wheels in slots formed in castings, push castings together and lightly rivet over the cast pins. **DO NOT GLUE.** The larger slot in the castings (N1) is for the screw head and should face downward when the bogie is in place.

ASSEMBLY:

Fit boiler halves together (B and J). Add tank sides (M), ensuring squareness.

Using the 10BA screw, clamp and fix permanently the footplate (C) and the steamchest (cylinder block) (A) to the underside of the smokebox (B). The holes in the cylinders face rearward. When the adhesive has cured, remove the screw; this will be used as the bogie pivot later.

To assist mounting the cab sub-assembly squarely insert the GRAFAR chassis under the boiler; two lugs protruding rearward from the cast footplate (C1) locate in recesses in the chassis front plate. Cab frontsheet (G) fits over flange on firebox wrapper (J1). Bolt cab floor to chassis, check for squareness and make the boiler/cab frontsheet join permanent.

When fitting the etched couplers (5 front, 6 rear) push them through the bufferbeam (D) and dragbeam (E) apertures **BEFORE** folding the buffing faces downward. The rear coupler is rigid and stuck between the two fillets on the underside of the floor. The rear of the front coupler locates over bogie pivot screw.

Follow the drawing and prepare the 'standing motion' (1 and 2); no drilling is required, the pop marks are decorative. The peg at the front of parts 1 and 2 fits in the cylinder backcover as far as it will go and the shoulder created by folding the top of the motion fret should be glued to the underside of the tank, tight in the angle formed by the tank and frame side.

The eccentric rod (1a) must be cranked outward to provide clearance for the connecting rod (3 and 4). The big end of the connecting rod is a snap-fit over the central crankpin of the chassis and fits outside the coupling rod. This rod must be cranked immediately in front of the big end (1b). The forward end of the connecting rod hangs on the slide by pushing the tongue at the front end through part 1 (2) AS SHOWN and folded down. See drawing detail. Please note: etched parts can usually be folded only once, so double check before folding.

The steps to cab (7), to front tanks (8), various straps (9) and spectacle shades (10) are taken from the fret and fitted, along with cab roof (P), smokebox door (Q), whistles and pops (K). The bogie is hung on the 10BA screw passing up through the footplate to the smokebox.

The cast length of angle iron (R) is an option for the back of the bunker apron (F). It was issued with these locomotives and intended to carry a lengthy hosepipe through which water from shell holes and ditches could be obtained.

PROTOTYPE:

Built by the Baldwin Locomotive Company, USA to the order of the British War Office during the first World War. A total of 495 engines were built and some, sold as war surplus, found their way to Britain after the conflict.

- Ashover Light Railway 6 locomotives
- Snailbeach District Railway 1 locomotive
- Glyn Valley Tramway 1 locomotive
- Welsh Highland Railway 1 locomotive

The latter two companies modified their engines, the GVT locomotive being subject to an extensive rebuild that included a new, capped chimney and an enclosed cab.

GEM MODEL RAILWAYS
 31a Rhos Road
 Rhos-on-Sea, Colwyn Bay
 Clwyd, UK, LL28 4RR



OPTIONAL

