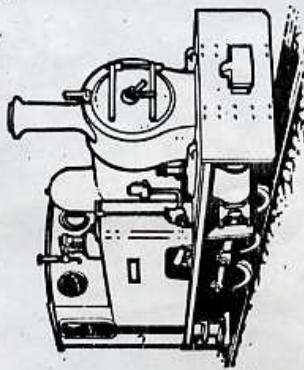




BAGNALL FOR 009

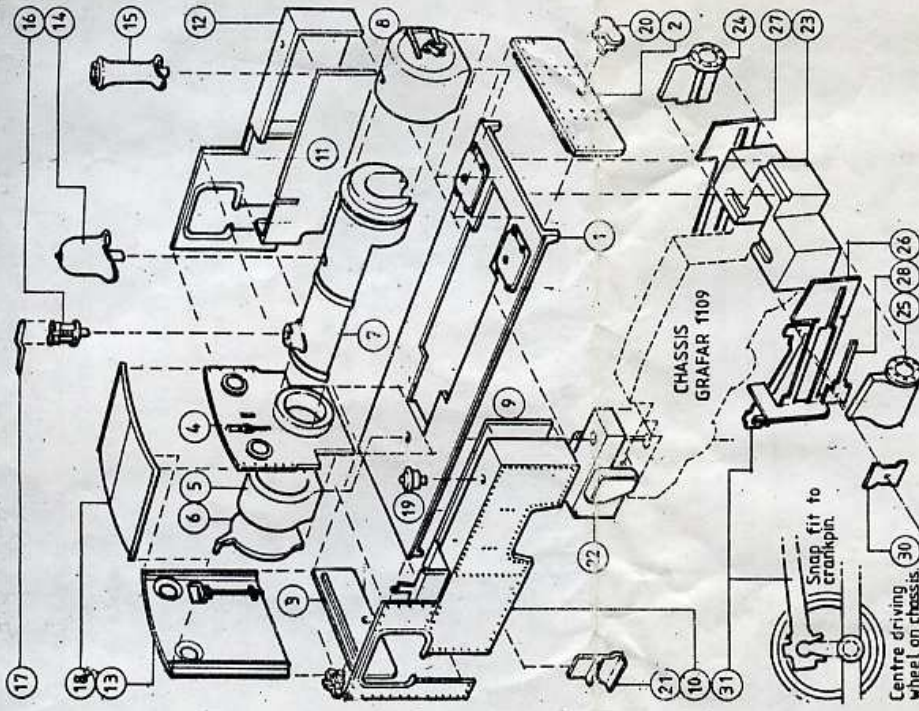
Read through instructions carefully, familiarising yourself with parts. A dry run assembly is recommended. Use glue (UHU recommended) unless experienced at soldering. Allow glue to cure at room temperature. Use GEM low melt-solder if assembling with an iron. Wash model prior to painting in lukewarm soapy water and allow to dry naturally under a dust cover.

Remove any parting lines from castings carefully. Smooth the working edges of etched slide bars while they are still in the fret; do not remove parts from fret until needed.

SUPERSTRUCTURE

Commence assembly by fitting buffer beams (2 and 3) to running plate (1), the beams are identical. Push firebox (5) on the rear face of spectacle plate (4), the face with the chamfered viewing ports, ensuring the tapped hole in the bottom of 5 is closer to the REAR of the engine. Align this hole with that in the running plate and, using the - at this stage - overlong screw to aid location, ensure the sub-assembly is central and square on the running plate and attach permanently. Don't trip the screw!

Join boiler (7) and smokebox (8) with a push fit and ensure they are true before pushing the rear of the boiler on the front of the spectacle plate. Make certain this sub-assembly is aligned centrally before attaching smokebox to running plate. Add the backhead (6) to rear of firebox. The regulator on top of the backhead is strengthened with a web; some of which may be removed gently affecting an improved profile AFTER the backhead is in place.



Fit tank filler caps (19) on top of tanks (10 and 12) before adding bunkers (9 and 11). Mount these sub-assemblies on running plate, using spectacle plate and cab rear sheet (13) to locate. Part 13 sits flush on top of rear buffer beam (3). Add steam dome, chimney and safety valve casing (14, 15 and 16) to top of boiler and smokebox. Take part 17 from fret and attach to cast safety valve, passing the etched tail through the spectacle plate. Fit steps (21 and 22) beneath cab entrances so that step edges are flush with running plate. Add couplers (20).

CHASSIS

The kit is designed to use the Grafer Pannier chassis No. 1109, which is installed backwards and to which no alteration is necessary apart from making sure the plastic keeper plate is flush with the chassis at each end.

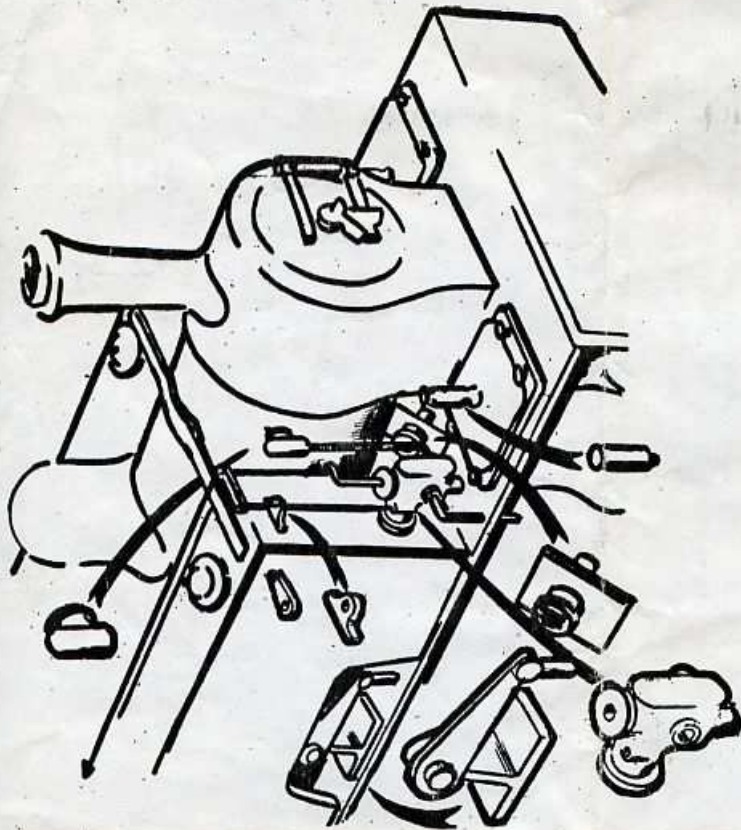
Glue the rear chassis extension block (22) in place on front of chassis. Ensure it is square and stays that way while glue cures. The horns on the rear of Grafer chassis fit recesses on top of extension block 23. We suggest this block is NOT glued in place at this juncture; it will stay in position while you offer up the lengthened chassis to the running plate, passing the screw (already referred to) up through the (now) rear hole in the Grafer keeper plate, through cast extension and into the firebox. Face the ends of the cast extensions to ensure a snug fit between buffer beams and good screw location.

Take out slides/motion plates (26 and 27) from fret, look carefully at the exploded view and bend out the motion plate at right angles to the slides and set aside. Note: there is a left and righthand unit!

Take out piston rods and crossheads (28 and 30). Attach the back of the crosshead squarely to the plate at the end of the piston rod, ensuring alignment of hole. Make sure the shoulder formed by the top and bottom edges of the piston rod plate and the back of the crosshead are square and clearly defined. Get rid of the gunge!

Make a temporary assembly to check the motion by trapping the slides between the T-pieces on extension 23 and the cylinder wrappers (24 and 25) while the extension is in place on the chassis, holding the lot together with tape. Insert a piston rod and establish smooth running between slides. Repeat for other side. Take the connecting rods (31) from the fret and Z-bend these to locate from back of crosshead (with a pin) to a snap fit to the crank on the centre driving wheel, as shown, BUT DO NOT CONNECT TO THE WHEEL AS YET.

Take down the cylinder/slide assembly and clean off the tape. The connecting rod must pivot freely behind the crosshead. Insert a pin from front of crosshead and fix at back of connecting rod. Repeat for other side. It is easier to work with extension block free from chassis. Reassemble the cylinder unit permanently ensuring that piston rod recesses in T-pieces remain clear. Remount the assembly on the chassis and check position of your connecting rod big ends (circlips). When satisfied, mount extension block to keeper plate permanently with glue and snap fit rods to centre drivers. Do not over-tighten circlips. When in position smooth down the depth of the circlip horns gently to clear track. Chassis is held in place under running plate by screw through to firebox.



SMALL PARTS (Optional)

Generally speaking the addition of small external detail is left until after the painting of the superstructure but this is optional, as is the use of the detail parts included in this kit. In a plastic bag will be found a strap to link tank tops at their leading ends, injectors, brackets and levers for their actuating rods, check valves, cylinder lubricators, sand bin filler caps and two small sections of simulated motion to fit above the running plate in the recesses in the tanks. Wires of different thicknesses are included for rods, stanchions and pipes.

Manufactured by:-

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