MODEL SIGNAL ENGINEERING

MSE

Part of WIZARD MODELS LIMITED

PO BOX 70 BARTON upon HUMBER DN18 5XY

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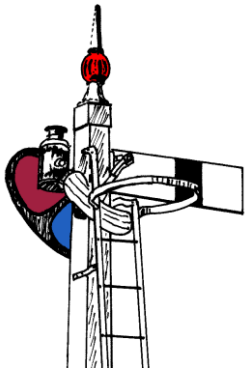
SCALE	CODE	
7mm	S7/14	

GWR



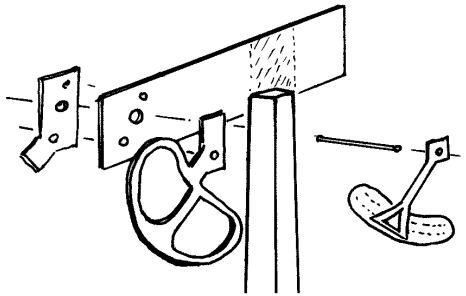
WOODEN SIGNAL ARMS

4' home, 4' distant or 3' goods arm

Etched parts to build one arm, including spindle and back blinder

Assembly instructions: The parts are designed for soldered assembly. Use a 25-40W pencil bit iron with 145° and 188° solders and a liquid flux. Burnish both sides of the fret before removing any parts. It may be easier to tin some parts before removal.

Identify the correct arm and motion plate for the signal you are building. The top plate on the fret is for the 4' home or distant arms, whilst the lower plate is for the 3' goods arm. Scribe painting lines on the chosen arm using the half-etched marks as a guide. Open out the large holes in the plate and arm to 1.0mm. Tin (188°) both sides of the arm around the three holes. Place the arm face up on the workbench, lay the plate on top and align the spindle holes as shown opposite. Solder (188°) the plate and arm together. Lay the arm assembly face down, and place the spectacle plate on top, with the half-etched portion on this component being face down, and with the smaller aperture to the bottom. Solder (188°) the two together.



Drill a 1.0mm hole in a wooden block. Insert the spindle in the hole, ensuring it is perpendicular. Drop the arm face down onto the spindle, and solder it (145°). Do not tilt the arm when making this joint. Remove the excess front spindle using a bearing made from *T200* tube.

Wash the assembly thoroughly in detergent water. Spray it with white matt car primer, then paint the spectacle and motion plates black. Paint the front and edges of the arm red (home) or yellow (distant) except the home's white band or distant's black chevron. Add the black band or chevron to the arm's rear. Using MSE *LENS* material, glaze the top spectacle hole red or yellow to suit, and the lower one blue-green.

Open out the hole in the back blinder arm to 1.0mm, and solder (188°) it to the smooth side of the back blinder as shown above. After completing and painting the rest of the signal, remove any excess spindle length with the slitting disc, but leave enough protruding through the bearing to solder the back-blinder on. Lightly tin the spindle end, and push it through the bearing. Place an oiled paper washer over the spindle end, then solder on the back blinder, with the corrugations facing the front of the signal. Adjust its position so it just clears the lamp rear lens when the arm is horizontal, and push it sufficiently far on to the spindle to remove any fore and aft spindle motion. Wash off any surplus flux, then prime and paint black. Finally, connect the motion plate's lower hole to the balance lever using 0.45mm brass wire.