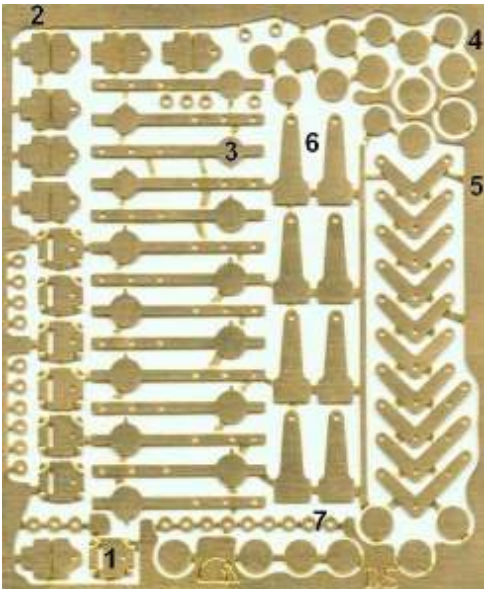




SIGNAL POST FITTINGS

Balance lever and crank assemblies



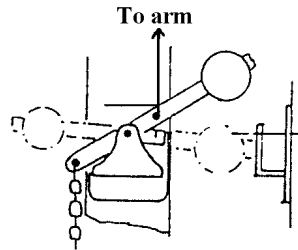
Identification and quantity of components on fret:

1. Balance lever bracket backplates (7)
2. Balance lever bracket jaws (7)
3. Balance levers (7 in two sizes)
4. Balance weights (21 in two sizes)
5. Cranks (10 in two sizes)
6. Crank brackets (8)
9. Washers (28)

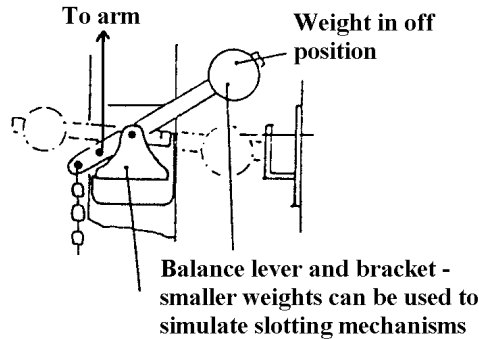
ASSEMBLY

Balance levers

Lower quadrant



Upper quadrant



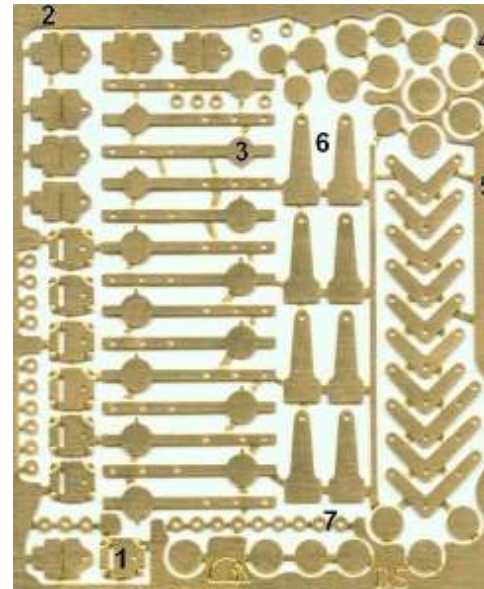
Sweat two balance levers (3) together, ensuring they are of the same size. Add weights (4) either side to increase the thickness as desired (leave the half-etched tab on one side of the weight to represent the fixing bolt). Fold up a bracket jaw (2), with the half-etched line on the **inside** of the bend. Solder the jaw's tab into the slot on the backplate (1), using a 0.5mm wire axle for alignment.

Working from photographs, solder the bracket to the appropriate side of the signal post or doll. Note that the jaw was sometimes oriented vertically, as in the photo above. For straight posts, the bearing hole is typically 16mm (4ft) above the baseplate/ground level, unless the signal is in a public area, when it should be 16mm (4ft) below the arm centre line.



SIGNAL POST FITTINGS

Balance lever and crank assemblies



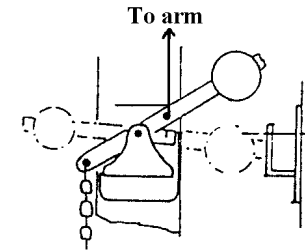
Identification and quantity of components on fret:

1. Balance lever bracket backplates (7)
2. Balance lever bracket jaws (7)
3. Balance levers (7 in two sizes)
4. Balance weights (21 in two sizes)
5. Cranks (10 in two sizes)
6. Crank brackets (8)
9. Washers (28)

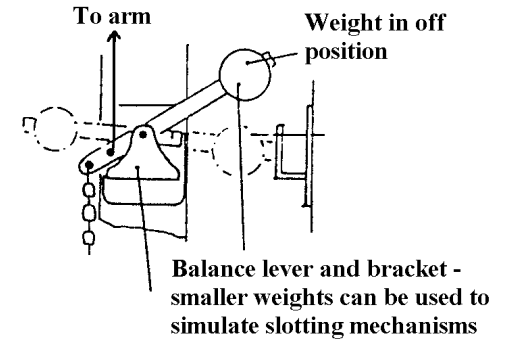
ASSEMBLY

Balance levers

Lower quadrant



Upper quadrant

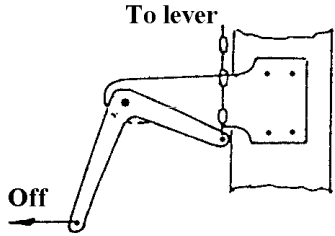


Sweat two balance levers (3) together, ensuring they are of the same size. Add weights (4) either side to increase the thickness as desired (leave the half-etched tab on one side of the weight to represent the fixing bolt). Fold up a bracket jaw (2), with the half-etched line on the **inside** of the bend. Solder the jaw's tab into the slot on the backplate (1), using a 0.5mm wire axle for alignment.

Working from photographs, solder the bracket to the appropriate side of the signal post or doll. Note that the jaw was sometimes oriented vertically, as in the photo above. For straight posts, the bearing hole is typically 16mm (4ft) above the baseplate/ground level, unless the signal is in a public area, when it should be 16mm (4ft) below the arm centre line.

Using the bracket bearing holes as a guide, drill no.76 (0.50mm) right through the post/doll. Insert a 0.5mm wire axle through the hole in a washer (7) and solder it in place. Pass the axle through the bracket holes, trapping the balance weight arm in the bracket such that the weight is positioned correctly according to your photographs. Make sure you use the centre hole for a lower quadrant signal, and the one nearest the weight for an upper quadrant arm. Any slop may be removed by adding washers inside the jaw. Oil the balance weight arm bearing, then solder the wire at the rear face of the post. Remove excess wire and tidy up the joints.

Cranks



Crank fitted at base of post to change motion from horizontal to vertical

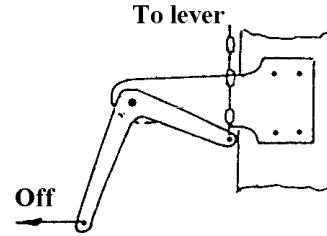
Consider from which direction the signal box operating wire would have approached the signal. Solder a crank (5) to the front of a bracket (6), using a 0.5mm wire axle, such that when the bracket is soldered to the post as appropriate, a horizontal pull on the lower lever will translate into a downwards pull on the other lever. Use one of the washers to space the crank off the bracket. There is no need to make the crank work, unless it is to form part of the eventual operating mechanism (as it will on bracket signal dolls). In this case, solder a washer (7) to the axle, pass it through the crank and bracket, and then fix it at the rear of the bracket. Multiple cranks on the same bracket should be spaced away from each other with washers. Finally, solder the bracket to the post, so the lowest crank hole is just above the baseplate/ground level, and the rectangular section of the bracket is symmetrical about the post.

PAINTING

Usually black, with grey becoming more common in recent years. The Southern Region always used grey. Often the balance lever and weight are painted white for better visibility, especially on walking routes.

Using the bracket bearing holes as a guide, drill no.76 (0.50mm) right through the post/doll. Insert a 0.5mm wire axle through the hole in a washer (7) and solder it in place. Pass the axle through the bracket holes, trapping the balance weight arm in the bracket such that the weight is positioned correctly according to your photographs. Make sure you use the centre hole for a lower quadrant signal, and the one nearest the weight for an upper quadrant arm. Any slop may be removed by adding washers inside the jaw. Oil the balance weight arm bearing, then solder the wire at the rear face of the post. Remove excess wire and tidy up the joints.

Cranks



Crank fitted at base of post to change motion from horizontal to vertical

Consider from which direction the signal box operating wire would have approached the signal. Solder a crank (5) to the front of a bracket (6), using a 0.5mm wire axle, such that when the bracket is soldered to the post as appropriate, a horizontal pull on the lower lever will translate into a downwards pull on the other lever. Use one of the washers to space the crank off the bracket. There is no need to make the crank work, unless it is to form part of the eventual operating mechanism (as it will on bracket signal dolls). In this case, solder a washer (7) to the axle, pass it through the crank and bracket, and then fix it at the rear of the bracket. Multiple cranks on the same bracket should be spaced away from each other with washers. Finally, solder the bracket to the post, so the lowest crank hole is just above the baseplate/ground level, and the rectangular section of the bracket is symmetrical about the post.

PAINTING

Usually black, with grey becoming more common in recent years. The Southern Region always used grey. Often the balance lever and weight are painted white for better visibility, especially on walking routes.