4. DCC Decoder - *Fitting a 21Pin DCC Decoder*

Digital Command Control (DCC) allows for greater functionality and control over the Locomotives on your layout: such as the simultaneous control of speed & direction of multiple Locomotives and enables the use of DCC controlled track, points and other DCC Decoder fitted accessories. DCC also allows the addition of DCC Sound which brings a whole new level of realism to your model railway.
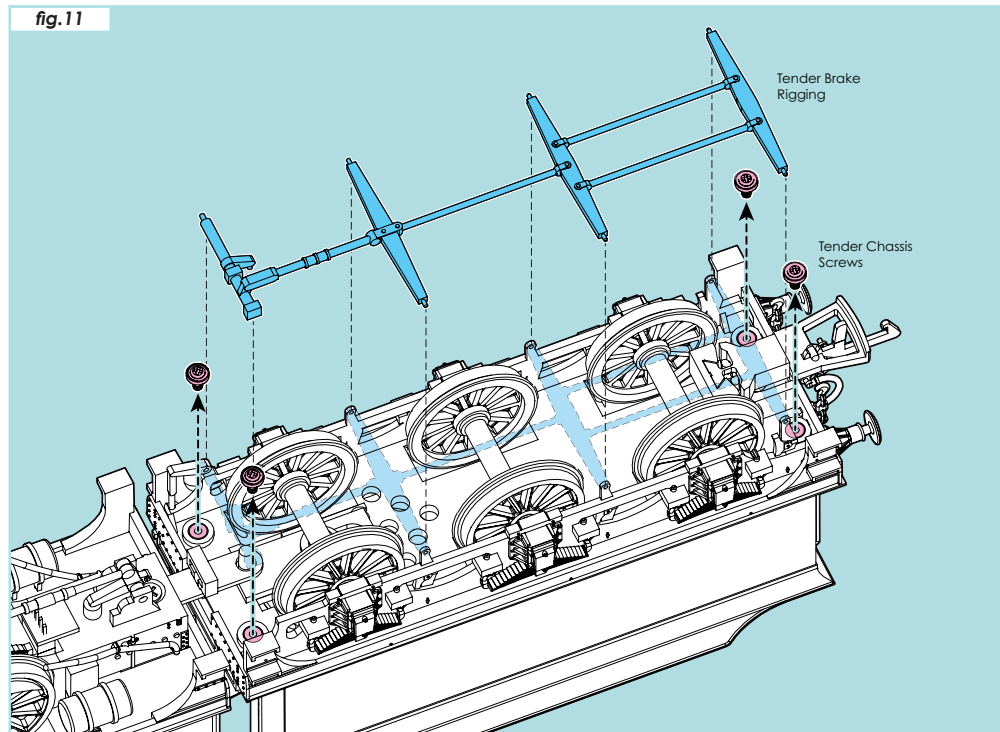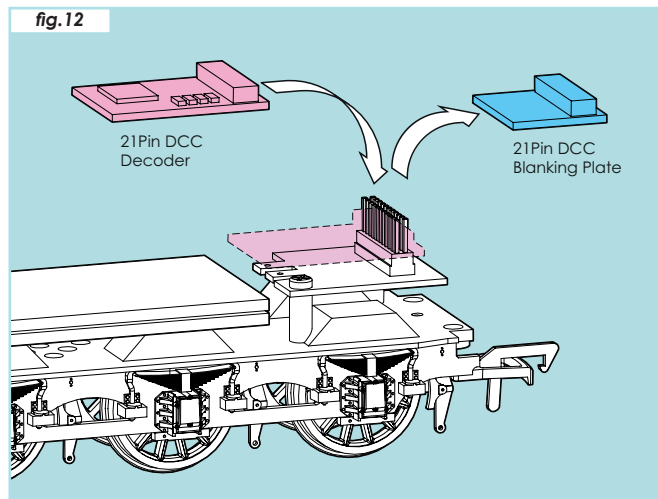
fig.11

Tender Brake Rigging

Tender Chassis Screws

fig.12

21Pin DCC Decoder

21Pin DCC Blanking Plate

1. If fitted, remove the Tender Brake Rigging, then remove the four tender chassis screws. Turn the Tender over and carefully remove the body whilst holding the chassis. (*fig.11*).

2. Remove the 21 Pin DCC blanking plate and push-fit the 21 Pin DCC Decoder onto the pins of the PCB as shown (*fig.12*).

5. DCC Sound - *Installing DCC Sound*

The following equipment is required for DCC Sound.
- 1 x 21 Pin DCC Sound Decoder (pre-programmed with the relevant sound file of your choice).
- 1 x 20 x 40mm Speaker.
- 2 lengths of suitable wire to connect the speaker to the PCB Board.

Please note: It's recommended that the DCC Decoder and Speaker are both from the same manufacturer and the speaker specifications are compatible with the decoder. Please consult your retailer for advice.

1. Remove the Tender body as shown in *figure 11*.

2. Remove the Capacitor and move aside (*fig.13*).

3. Remove the Tender weights, held in by two screws*, and the 21 Pin DCC blanking plate (*fig.13*).
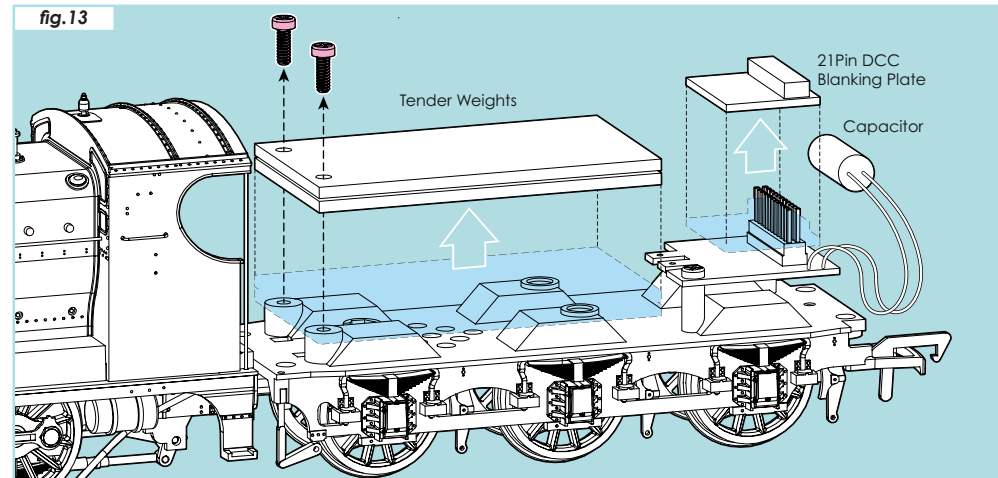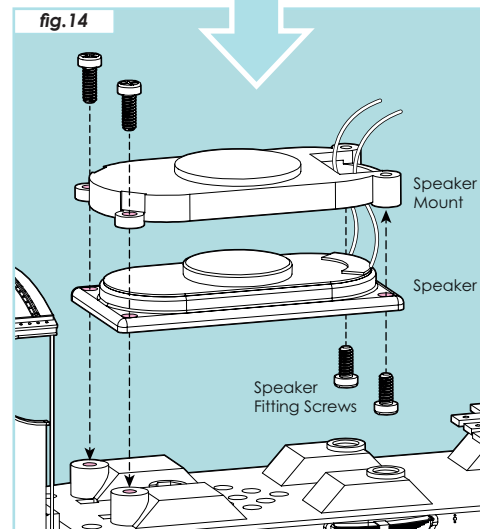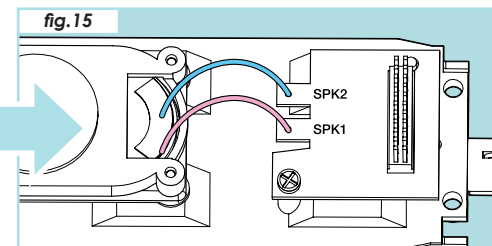*You will need these screws to fit the speaker mount later.*

fig.13

21Pin DCC Blanking Plate

Capacitor

Tender Weights

fig.14

Speaker Mount

Speaker

Speaker Fitting Screws

fig.15

SPK2

SPK1

6. Solder the speaker wires to the SPK1 & SPK2 soldering pads on the PCB board (*fig.15*).

7. Push-fit your 21 Pin DCC Sound Decoder onto the pins on the PCB board as shown below (*fig.16*).

fig.16

21Pin DCC Sound Decoder

3. Attach the Speaker to the Speaker Mount with the two screws provided in the accessory bag (*fig.14*).

4. Attach the Speaker and Mount to the Tender Chassis with the two screws that held the Tender Weights in place (*fig.14*).