

Motorising Set for KW Trams Toastracks

The KW Trams Blackpool & Rothesay 11 toastrack kits are designed to be motorised using Halling bogies plus motors, wires and silicon tubing.

The Blackpool toastrack kit already has the bogie fittings mounted in the base, but these need to be fitted to the Rothesay 11 toastrack.

Note, because of the low toastrack floor, the top of the “worm case” needs to be cut off the bogies before fitting them. In addition, you need to trim the top of the gear casing at the inner end to allow the silicon tube to turn easily.



Rothesay Bogie Mounting Fitting instructions

Determine where the bogie needs to be mounted – mark the centre line of the bottom of the tram, then mark 18mm in from the inner edge of the bumper piece.

In the motor kit is the bogie mount spacer (a solid cylinder 10mm in diameter). Stand this in the centre of the cross you have marked. Then the blocks are fixed in place each side of the spacer, touching the spacer. Then repeat at the other end of the tram.



Motor Fitting instructions

The motor is fitted in the centre of the tram.

The Blackpool toastrack has the position for this already marked.

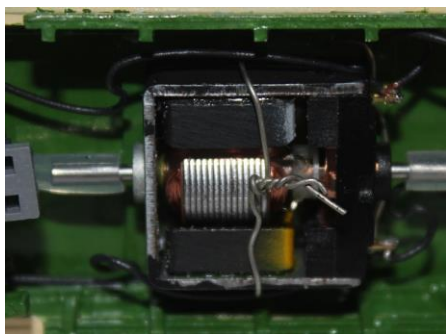
You can fix the motor direct to the bottom of the tram floor, or you can fix it so that it can be removed / replaced if required.

To make the motor replaceable, a suggested method is to glue a piece of metal or plastic tube against each side of the motor position. The tube should be half of the length of the motor and should be fixed so that one end of the tube is at the end of the motor and the other in the middle.



Then feed a thin wire through the tubes, passing at the end of the motor, then pass over the top of the motor and twist the ends together to hold the motor in place.

Note, there is a semi-circular notch in the plastic block at the end of the motor. When mounting these particular motors, this should be on the underside of the motor (closest to the track).



Finishing instructions

With the bogies & motor in place, cut the silicon tube to the correct length to fit onto the motor shaft and the bogie shaft, then fit in place.

Both bogies should have both sides wired to the motor, this gives the best contact.

The wires should be soldered to the sides of the pickup strips, then run forward then loop back to the motor.



Wiring for overhead power

The motor bogies are supplied for 2-rail pickup.

If you wish to wire for overhead power, then connect all wires to one side of the motor, then connect the other side to the trolley pole.

Running and servicing

The bogies are as produced by Halling. If extra oil is required, use a light general purpose oil, such as sewing machine oil. Apply a single drop about 1mm diameter on the motor axle bearings only outside the motor (ensure none gets inside the motor) and underneath on the steel axles. Avoid oil and dirt contaminating the pickups on the backs of the wheels, which may cause insulation. Clean the wheel treads regularly.

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