



# RT Models

## INSTRUCTIONS

***This Kit requires the Bachmann / Graham Farish new style outside framed 08 chassis***

### Chassis

First turn to the Bachmann/ Graham Farish 08 shunter, you will need to first remove brake gear on both sides with a pair of pliers, there is a strong chance of damaging these as they tend to be glued in well but are not required for this loco kit.

Next the 4 tiny screws around the corners of the chassis need un-screwing to release the body, don't forget to remove small wire at the front of the loco as well.

Finally you need to remove the 08's outside frames, to achieve this carefully pull this upwards whilst resting your finger on the motor, the frame may be glued in place just like the brake gear may have been.

Now you can turn your attention to adding the jackshaft drive to the chassis.

Take E9. Coupling rods and drill all the holes with a 1.4mm drill or preferably broach *EXCEPT* for where it is marked at the end "JACK SHAFT DRIVE".

Once done remove these from the fret with a Stanley knife or Xuron etch shears, note which end is the Jackshaft drive. Clean the tops of the coupling rods of the tabs and also the oil fillers as this could later on in the construction foul the weights on the body should you wish to fit them.

Remove the Coupling rod pins on the Graham Farish chassis, these are a push fit so will pull out easily. Do this in something like a shoebox should you drop one then at least it hasn't gone anywhere.

Put the replacement etched coupling rods on to test the chassis runs well, if it doesn't then the holes may need opening up. Check also that the Pickups are all in contact with the backs of the wheels as sometimes they cannot be and will affect the running of the chassis.

Once you are happy you can turn to the E10. Outside cranks. Remove the cranks and B4 washers from the crank etch. Carefully solder or glue the 3 cranks together for each side. Now drill the smaller hole with a 0.55mm drill to accept the pin if it already doesn't.

Take B1. 1.5mm brass rod and file the ends clean, the overall length is recommended at 19mm. Now file the ends with a flat to accept the cranks, make sure they are at 90 degrees to each other and facing the correct way according to the cranks on the 08 chassis's wheels.

Check that the Cranks are a tight fit onto the axle. If they don't go on then some cleaning of the cranks holes may be required.

Once done fix them onto the axle with Loctite 603 or superglue.

Remove the replacement coupling rods from the chassis and fit one of them onto the Crank with the jackshaft ends making sure it is the correct Jackshaft drive end.

Place a E11. Nickel Silver washer into B5. the pin so when pushed through the coupling rod, it's on the outside. Then place a B4. Brass washer between the Crank and the coupling rod with the pins secured with a small amount of Loctite 603 from behind.

Repeat for the other side.

Once satisfied, fix the coupling rods back onto the chassis with its pins.

The final job to do is to clean up R1, the replacement keeper plate with a small needle file.

Snap off the small rectangle at the jackshaft end, clean both parts up and glue onto the top of the jack shaft drive of the keeperplate to form the axle casing for the jackshaft drive

The Jackshaft's axle needs to be flush the 08's chassis block.

Check the Jackshaft axle fits in place, once done you can fit the keeperplate, note that it is wider than the actual chassis to stop side play in the locos wheels which can end up squashing the pickups causing a short or erratic running, if the keeperplate doesn't fit between the wheels or a very tight fit, file down the sides a bit until it does fit.

Remove the first 3 screws from the front of the chassis and remove the old keeper plate.

Now screw the replacement one into place.

A good indication of testing how well the chassis runs is to remove the motor and push the chassis up and down, if it runs smoothly then it should run without any problems in service, if it binds in a certain spot then it could be one of the jackshaft cranks is not 90 degree's to each other.

Once you are happy with the running of the chassis without the motor, then fix the motor back into place and test the motorized chassis, do check the pickups are making contact with the backs of the wheels, if not they will need tweaking.

## Chassis conversion assembly diagram

