



# Class 414 / 2HAP Electrical Multiple Units Owner's Information

## Welcome

Many thanks for purchasing one of our **Bachmann Branchline** Class 414 / 2HAP Electrical Multiple Units. A lot of care was taken producing your model and we hope you enjoy it for many years to come.

**Please note:** This model has been designed to run on curves of **no less than 2nd Radius (438mm)**. We recommend that you don't use anything smaller as this may result in the model derailling.

## 1. Model Spec.

**Motor Type:** 5 Poles 13000 RPM, Dia 15 x 42mm

**Decoder:** 21 Pin

**Speaker Mount:** 11 x 15mm Speaker

## 2. Running-in

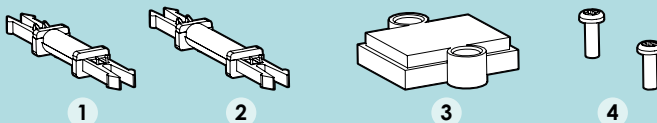
It is necessary that this Locomotive is 'run-in' to allow the mechanism and gears to settle. This requires the model to be run without a load (wagons, coaches, etc.) for 30 minutes in each direction at half speed.

## 3. Accessories

Although our models are highly detailed and ready to run straight from the box we also supply optional accessories to be fitted by the owner if they wish.

- 1 **Short Coupling** (No less than Third Radius)
- 2 **Long Coupling** (No less than Second Radius)
- 3 **Speaker Mount** (11x15mm Speaker)
- 4 **Speaker Mount Screws**

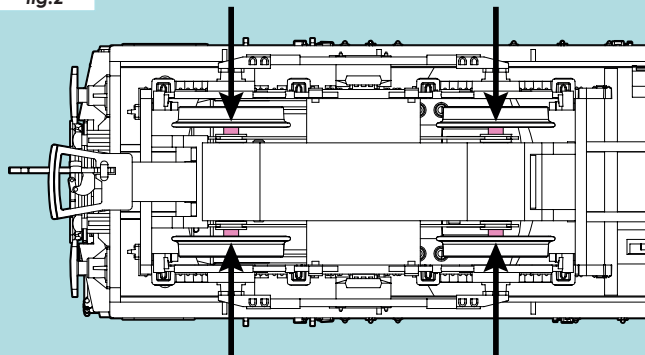
fig.1



## 4. Lubrication

All Bachmann Branchline Multiple Units are supplied ready lubricated and can be used straight from the box. Over time your locomotive will require some additional lubrication, when will depend on the frequency of use and storage, so please inspect your model on a regular basis.

fig.2



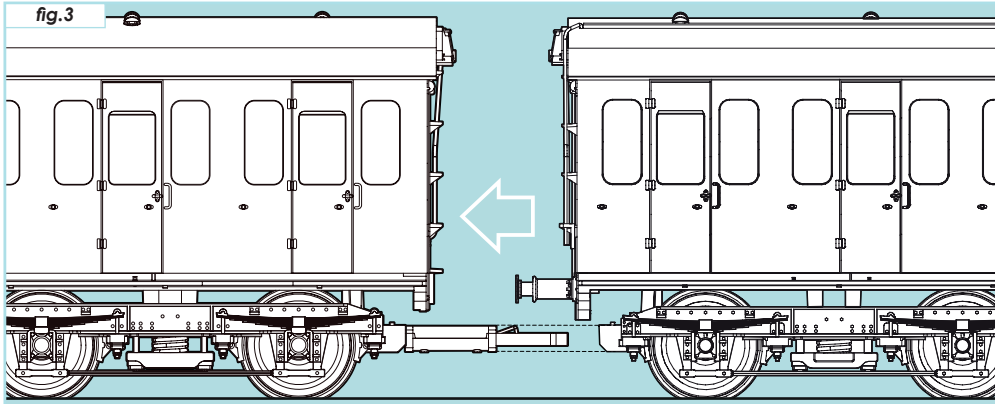
If the driving wheel axles appear dry and no lubricant is visible (where shown pink in **fig.2**), it would be advisable to lubricate your model.

**Please note:** A plastic compatible lubricant is required. Suitable products from both the Bachmann Trains & Woodland Scenics ranges are available from your local Bachmann retailer.

## 5. Coupling

The Class 414 / 2HAP multiple units couple together with an electrical coupling, this allows for full DCC control of both cars without the need for multiple decoders. Two lengths of coupling bars are included in the accessories, we recommend the shorter only be used on layouts with no less than a third Radius curve.

fig.3



## 6. 21Pin DCC Decoder Fitting

Digital Command Control (DCC) allows for greater functionality and control over the models 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.

1. To fit a 21Pin DCC Decoder to your model firstly remove the body of your DMBSO, this is held together by Four Chassis Clips on either side. Gently ease the sides of the body out and use some plasticard, or similar material, to prevent the clips from re-securing (fig.4).

fig.4

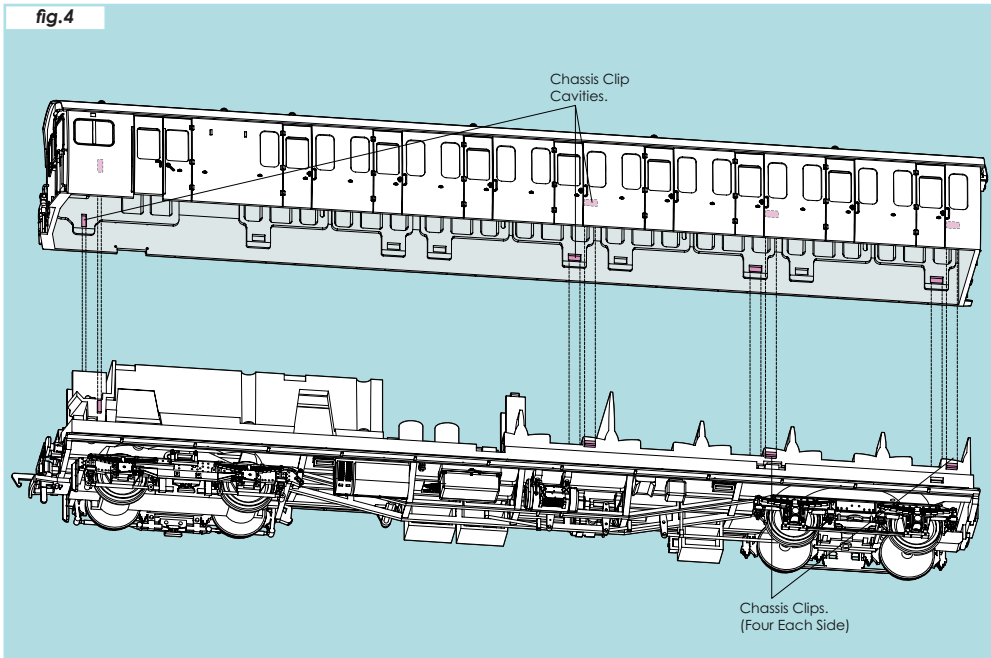
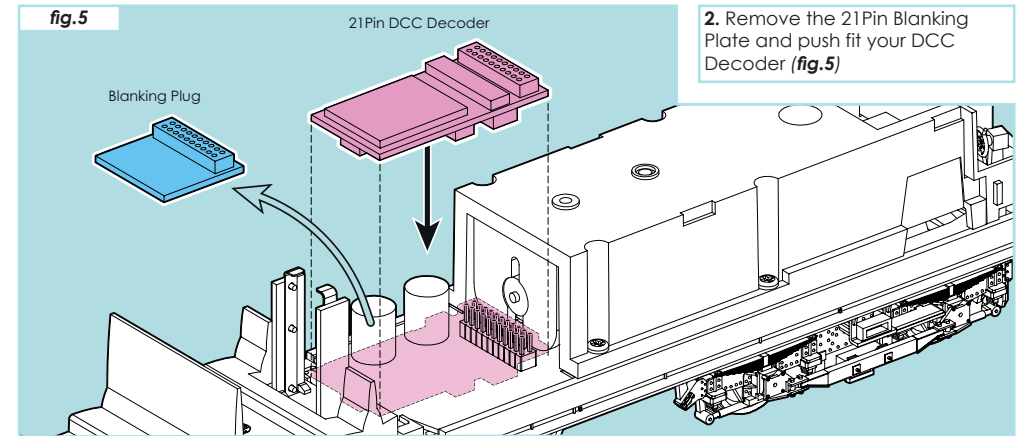


fig.5



## 7. DCC Sound Installation

The following equipment is required for DCC Sound installation.

- 1 - 21Pin DCC Sound Decoder (pre-programmed with the sound file of your choice).
- 1 - 11 x 15mm Speaker.

**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. To fit a Speaker and a 21Pin DCC Sound Decoder to your model firstly remove the body of your DMBSO as shown previously in fig.4.

2. To fit the 21Pin DCC Sound Decoder please follow fig.5 as shown above.

3. Remove the small section of seating held in place with a securing screw (fig.6).

4. Firstly fit your 11 x 15mm speaker to the speaker mount with the self adhesive gasket or a small amount of PVA Glue, then secure the mount to the chassis with the two screws provided. Please ensure that the speaker is positioned so that the speaker contacts align with the contact pads on the PCB underneath. (fig.7).

fig.6

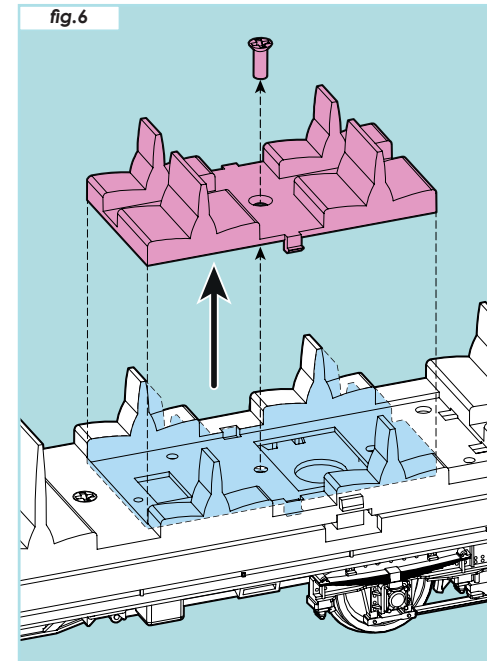
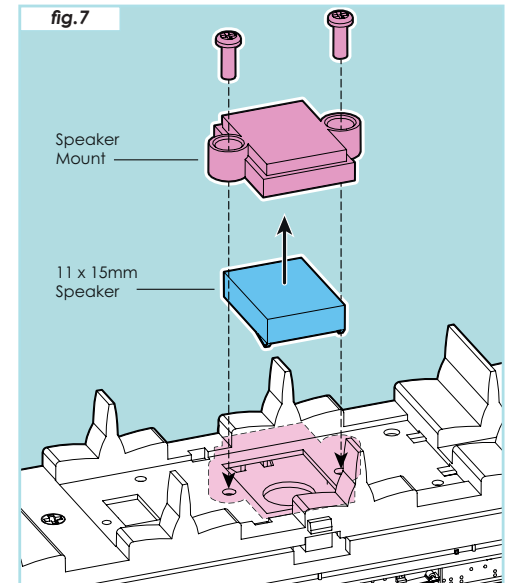


fig.7



## 8. Lighting Features

The Class 414 / 2HAP multiple units come with a variety of lighting features, when operated on an analogue layout these features can be controlled via the chassis switches.

- The switch closest to the cab turns the Directional Lights On and Off.
- The switch furthest from the cab turns the Interior Lights On and Off.

If your unit has been fitted with a 21Pin DCC Decoder you will be able to turn the lights on and off with F0.

## 9. Spare Parts

Selected spare parts are available from the Bachmann Europe Service Department. For further information and enquiries please contact the Service Department directly by email on [service@bachmann-europe.co.uk](mailto:service@bachmann-europe.co.uk) or by phone **01455 245575**.

## 10. Warranty

This product has a Warranty for 12 months from the date of purchase against faulty materials or workmanship subject to the following conditions. During this period such defects that occur will be repaired or defective parts replaced free of charge.

1. This Warranty applies only if the item was purchased from an authorised retailer of Bachmann Europe PLC ('Bachmann') within the United Kingdom, European Union & European Economic Area. This Warranty does not confer any rights other than those expressly set out above and does not cover any claims for consequential loss or damage. The Warranty is offered as an additional benefit and does not affect your statutory rights as a consumer.
2. For claims under this Warranty, in the first instance the product must be returned to the retailer with evidence of the purchase date in the form of retailer receipt/invoice accompanied by a letter or Service Request form setting out the date and place of purchase, giving a brief explanation of the problem that has led to the claim. It is essential that the claim reach the retailer on or before the last day of this Warranty period. Late claims will not be considered.
3. This Warranty is only available to the original retail purchaser of this product and is non-transferable.
4. The Warranty does not extend to cover damage resulting from misuse or careless handling, accidental damage, wear and tear, or use on a voltage supply other than that stamped on the product.
5. The Warranty may be considered void if repairs have been attempted other than by Bachmann staff.
6. The Warranty is on the original product in its entirety and does not extend to individual components removed from the product. In respect of train sets the warranty applies to motorized units and controllers only.
7. If Bachmann chooses to replace a product it will be with the nearest appropriate model of its choice.
8. Bachmann reserves the right to decline service to any model that has been fitted with a decoder after manufacture.
9. Bachmann will not be held responsible for damage to or loss of an after market decoder fitted to a model submitted for service under the Warranty.
10. The fitting of a Bachmann decoder with a current Warranty shall not be deemed to change the position regarding a product that is otherwise outside its own Warranty. It may be necessary to change decoder settings during service.
11. Bachmann's liability under this Warranty will in no case exceed the price paid for the product as originally manufactured.



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