

Great British Model Railways

### Welcome

Thank you for purchasing this EFE Rail Adams O2 model locomotive. This highly detailed working replica will give you years of pleasure and reliable operation if it is handled with care and regularly serviced.

### Running In

This locomotive is a carefully engineered scale model, and will require a short period of running in time before operating at its best. Run for about half an hour at a moderate speed in each direction to allow the gears in the mechanism to bed in for smooth operation.

### Model Spec

**Motor:** Coreless

**Decoder:** 6 Pin DCC Decoder, socket located behind smokebox.

### Cleaning and Maintenance

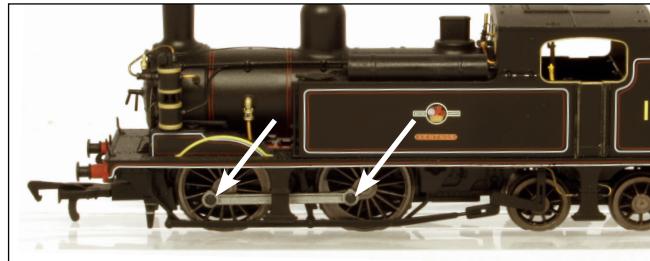
Please take care when removing your model from its packaging, as EFE models incorporate many small parts.

Run your model on track laid on a firm surface - not on carpet - to avoid dust and fibres entering the working parts of your model.

Care must be taken to clean and maintain your model for optimum performance. When required, wipe the rails and exposed portions of your locomotive's wheels with a soft, lint-free cloth or cotton swab to ensure good electrical contact. Do not use steel wool to clean your track. Take care to avoid scenic material from the layout entering the mechanism.

### Lubrication

After every 24 hours of operation, your locomotive will require light lubrication to keep it in top operating condition. Use a plastic compatible lubricant suitable for models carefully applied to the gear train and connector rods.



## Storage

It is important to retain your packaging and associated information for future reference and storage.

## DCC Decoder Fitting

Your EFE Rail Adams O2 model comes ready to be adapted for Digital Command Control (DCC). The conversion of this locomotive to DCC operation is a simple task.

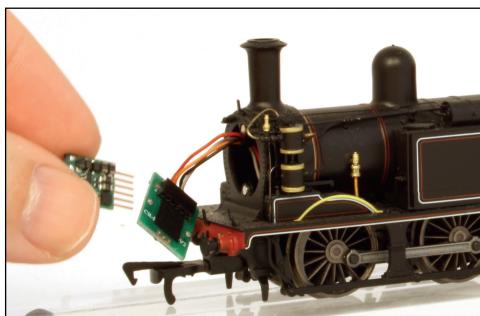
The 6-Pin DCC Decoder Socket has been cleverly hidden behind the locomotive smokebox door. This is held in place with magnets and can be removed by gently pulling it away.



1. Remove smokebox door.



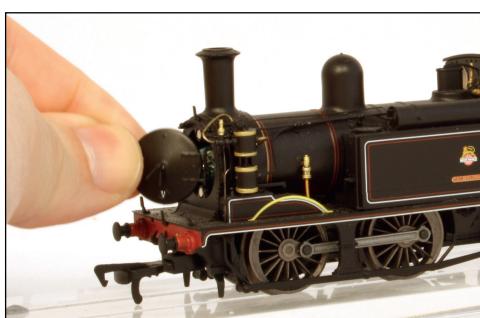
2. Remove Circuit board from smokebox.



3. Remove blanking plate & replace with 6-Pin DCC Decoder.



4. Replace circuit board and decoder back into smokebox.



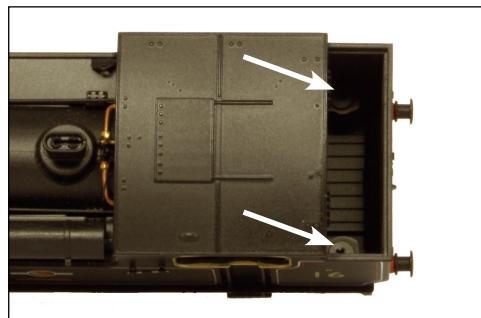
5. Replace smokebox door, avoiding damage to small fragile parts.

## Accessories

This locomotive comes with a bag of Accessories, this includes; vacuum pipes, couplings, fire irons and route indicator discs. Vacuum pipes will interfere with the couplings when used at the same time and may cause the locomotive to derail, you may need to shorten the vacuum pipe or remove the coupling to avoid this.

## Cab Removal

The coal load is removable. Removing this (using a very thin flat screwdriver if required) reveals two screws. Undo these two screws and the cab roof will lift off, allowing access to the cab to insert loco crews or fitting of a speaker for DCC Sound.



## History

In 1888 William Adams, the Chief Mechanical Engineer of the London & South Western Railway, decided that it was time to replace all the small Beattie tanks, mostly the well-known Well Tanks, on the London suburban services. During the following four years Adams produced 60 small but powerful tank locomotives, to a new 0-4-4T design. As was common practice on the LSWR at the time, the class designation was taken from the initial order for 10 locomotives, Nine Elms Works order number O2. The last ten, ordered in 1893, differed slightly from the first 50 by having modified stove pipe chimneys and 6 inch higher cab roofs. A further ten had been ordered by Adams but this order was cancelled when Drummond took over at Nine Elms in 1895.

Although the design can be traced back to an Adams design on the GER, the O2 was a compact, up-to-date and business-like design, very powerful for its size. Within a couple of years of the completion of the 60 locomotives, they had become so useful to the operating authorities that almost all sheds on the South Western had a few on their rosters. As more and more of Drummond's M7 tanks were introduced at the end of the 19th century, for many of the London suburban duties, the O2s were moved to rural areas, except for a few still being used on Clapham Junction to Waterloo empty stock workings.

After Grouping in 1923, the Southern were forced to resolve the desperate locomotive power situation on the Isle of Wight. As electrification spread over

the suburban lines of the LSWR, with a subsequent cascading down of M7s and T1s, several O2s became surplus to mainland requirements. Initially nine O2s were sent over to the Island, but they were so successful that a further 14 were sent over, the final two being sent over in 1949. None of those sent over were from the final series of 10 with the higher cab roofs. They were ideal for Island duties except for the lack of adequate coal bunker space, so in 1932 a much larger extended bunker was fitted to W19 (formerly 206), and this design subsequently became the standard for all the Island locomotives.

All the Island O2s had been named, using Isle of Wight place names. Only one mainland O2 had ever carried a name before, number 185 being named "Alexandria" for a short period in 1890. 8 of the mainland locomotives were withdrawn in the 1930s and 4 more in the 1940s with the remainder lasting well into BR days. As closure of various branch lines began to take place in the late 1950s and early 1960s, the mainland O2s became redundant and the last to go was number 225 in 1962. A gradual withdrawal of some of the Island locos had begun just before that, but some of the class lasted until the end of steam on the Island in 1966. Fortunately one of the remaining ones, W24 Calbourne, was rescued by the Wight Locomotive Society and remains as an active locomotive today on the Isle of Wight Steam Railway.

[www.iwsteamrailway.co.uk](http://www.iwsteamrailway.co.uk).

## Acknowledgements

This model was developed by Kernow Model Rail Centre (KMRC). KMRC wish to thank The Isle of Wight Steam Railway for allowing access to “Calbourne” and subsequent assistance, in particular Bob Huxtable and Stuart Butt. Keith McCrory and Tim Rothwell of Scantech International for the laser scanning. Graham Muspratt and Andy York at RMweb.

## 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 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.



Great British Model Railways

Bachmann Europe PLC  
Moat Way,  
Barwell,  
Leicestershire,  
LE9 8EY  
[www.bachmann.co.uk](http://www.bachmann.co.uk)