# **Beattie Well Tank Locomotive**

Owner's Information

## **Great British Model Railways**

FE Rail

#### Welcome

Thank you for purchasing this **EFE Rail** LSWR Beattie Well Tank 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 Type: Coreless Decoder: 6 Pin Decoder, socket behind smokebox door.

#### Accessories

This bag includes: vacuum pipes, couplings, fire irons and route indicator discs. Vacuum pipes will interfere with couplings when used at the same time. You may need to shorten the vacuum pipe to avoid this.

## **Cleaning & Maintenance**

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

Run your model on a track laid on a firm and dust free surface - not on a 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, accessable through the small holes located between the driving wheels on the underside of the model, and connector rods pivot points.

## Storage

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

## **DCC Decoder Fitting**

operation is a simple task.

Step 1: Gently remove smokebox door (secured by 2 small magnets) avoiding damage to small fragile parts.

Step 2: Remove the Printed Circuit Board from the smokebox.

Step 3: Insert decoder into DCC socket.



Your EFE Rail Beattie Well Tank model comes The 6 Pin DCC Decoder Socket has been cleverly ready to be adapted for Digital Command Control hidden behind the locomotive smokebox door. (DCC). The conversion of this locomotive to DCC This is held in place with magnets and can be removed by gently pulling it away.

Step 4: Correct position of decoder in socket.

Step 5: Place circuit board and decoder back into smokebox.

Step 6: Replace smokebox door, avoiding damage to small fragile parts. Gently rotate to position if required.

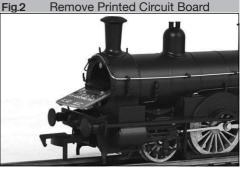
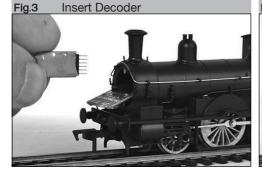
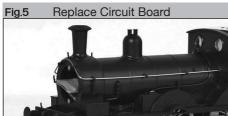
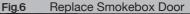


Fig.4 **Correct Position** 





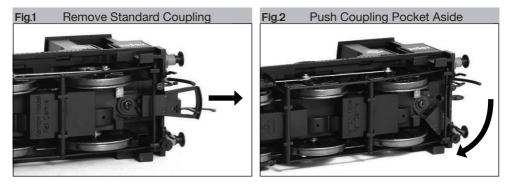






#### **Body Removal**

To remove the body you will need to remove the cab end Standard Coupling, this is push fitted so can be removed by pulling it out whilst holding the coupling frame, don't pull on the hook as this may become disconnected (**Fig.1**). Gently push the coupling pocket to one side to reveal the fixing screw (**Fig.2**). Remove this screw and then gently prise body from chassis.



## History

The LSWR 0298 Class Beattie Well Tank was originally built between 1863 and 1875 for use on passenger services in the suburbs of London. Joseph Hamilton Beattie, the LSWR Mechanical Engineer, prepared a standard design of 2-4-0 well tank; and the LSWR began to take delivery of these in 1863. The new design eventually totalled 85 locomotives; most came from the Manchester firm of Beyer, Peacock and Company between 1863 and 1875, but three were built in the LSWR workshops at Nine Elms during 1872.

In a well tank locomotive, the water tanks are not mounted above the footplate, but are set low down. On these locomotives, there were two tanks, both between the frames; one was above the leading axle, the other beneath the cab footplate. The three Nine Elms locomotives, and the last six of 1875, exhibited more obvious detail differences compared to the other 76: the leading wheels were 3 ft 7 3/4 in (1.111 m) diameter instead of 3 ft 6 in (1.07 m): two of the four safety valves were larger; but the most noticeable difference was that the splasher were rectangular instead of round. These resembled side tanks, but carried no water - this feature was introduced by J.H. Beattie's son and successor. William George Beattie, who had taken office on 23 November 1871 after his father's death on 18 October.

They handled heavy loads with ease, and were fast runners. From 1890, when newer locomotives became available for the London suburban services, the Beattie 2-4-0WTs were sent to depots outside the London area. Some of their new duties required a greater water capacity than the tanks could contain, and so 31 were converted to tender engines between 1883 and 1887: these were withdrawn between 1888 and 1898. Of the remainder, most were withdrawn between 1888 and 1899, but six were modernised between 1889 and 1894 for use on branch lines such as those to Exmouth and Sidmouth. Three of these were withdrawn between 1896 and 1898. The other three locomotives (298, 314 and 329) were transferred to the Bodmin and Wadebridge Railway in 1895, which was one of the earliest railways in Cornwall and isolated from the main network until that year. These three remained in service because of the sharp curves of that railway's freight branch to Wenford Bridge, which carried china clay traffic to the main line. They were finally withdrawn in 1962 and replaced by GWR 1366 Class 0-6-0PT tanks.

Two of the locomotives have been preserved. Number 298 (later renumbered 30587) is owned by the National Railway Museum and is loaned to, and normally based at, the Bodmin and Wenford Railway

(www.bodminandwenfordrailway.co.uk). Number 314 (30585) is owned by the Quainton Railway Society and normally based at their Buckinghamshire Railway Centre (www.bucksrailcentre.org).

## 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.



Bachmann Europe PLC Moat Way, Barwell, Leicestershire, LE9 8EY www.bachmann.co.uk