

# MAINLINE RAILWAYS

## 4300 Class 2-6-0 Locomotive

### Brief History of the Class

This highly versatile and useful class of 2-6-0 (Mogul) was introduced in 1911, the design arose from Churchwards desire to have a new range of types for operating secondary services. Holcroft, Churchwards assistant, had recently visited Canada where he had been particularly impressed with the versatility of the Mogul or 2-6-0 type, with this in mind Churchward instructed him to prepare drawings for a new 2-6-0 with 5ft 8ins wheels, outside cylinders and the standard No. 4 boiler using as many standard parts as possible. The new design was produced very quickly, no prototype was considered necessary being basically a tender version of the 3150 2-6-2 tank locos of 1906. An order for 20 locomotives was placed with the works, these locos proved to be so successful and equally at home on passenger or goods duties that other proposals for medium locos for secondary services were dropped.

The second batch and subsequent batches of Moguls had the rear frames lengthened by 9ins to accommodate a County type cab giving more room on the foot plate compared with the first 20 which had the shorter Saint type cabs.

The last batch 9300 — 19 were built in 1932 and were fitted with improved cabs incorporating a side window.

In all 342 locos were built to this design, all were coupled to a standard Churchward 3500 gallon tender.

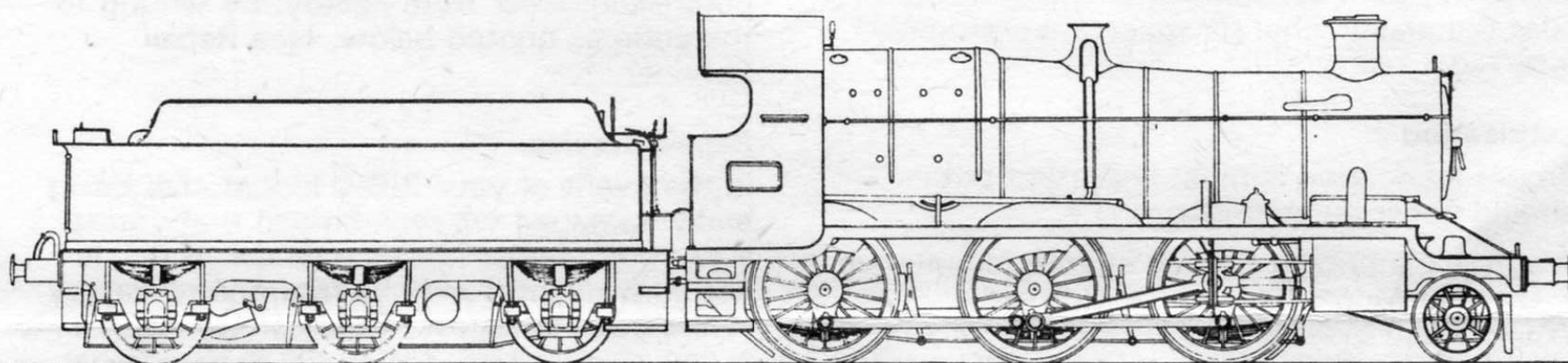
The first withdrawals took place in 1936 it was originally intended to withdraw all the 2-6-0's and replace them with Grange and Manor class 4-6-0's. Both designs utilising various parts from the 2-6-0's. 100 moguls were withdrawn and replaced with 80 Granges and 20 Manors before the out-break of World War II ended this modernisation programme.

In G.W.R. days the first few locos were painted in lined green livery, later all were painted in unlined green. British Railways originally painted them in unlined black but Nos. 7313 and 5370 received standard mixed traffic lined black livery. After 1957 many examples were painted in lined green whilst others appeared in unlined green.

The class were a true mixed traffic design, appearing in a wide spectrum of duties on all parts of the great Western system. In B.R. days they could also be found regularly on the southern region, West of England mainline. During World War I, eleven of the class in the 5300 series saw service with the Railway operating Division (ROD) in France.

The Mainline model represents the members of the class from 4321 to 5383, these locomotives embodied the longer (county type) cab introduced with 4321, the thin plate motion bracket and the enlarged centre splashes on the right hand side of the loco.

5322 is preserved by the Great Western Society at Didcot and 9303 is being restored for use on the Seven Valley Railway.



### Cleaning and Maintenance

Please read these instructions carefully. Regular maintenance as described in this leaflet will help ensure a trouble free life for your 2-6-0 locomotive

IT IS ADVISABLE NOT TO STORE THE LOCOMOTIVE IN DIRECT SUNLIGHT AS LIVERY COLOURS MAY FADE AND PROLONGED PERIODS MAY CAUSE PERMANENT BODY DAMAGE

### Removal of the body

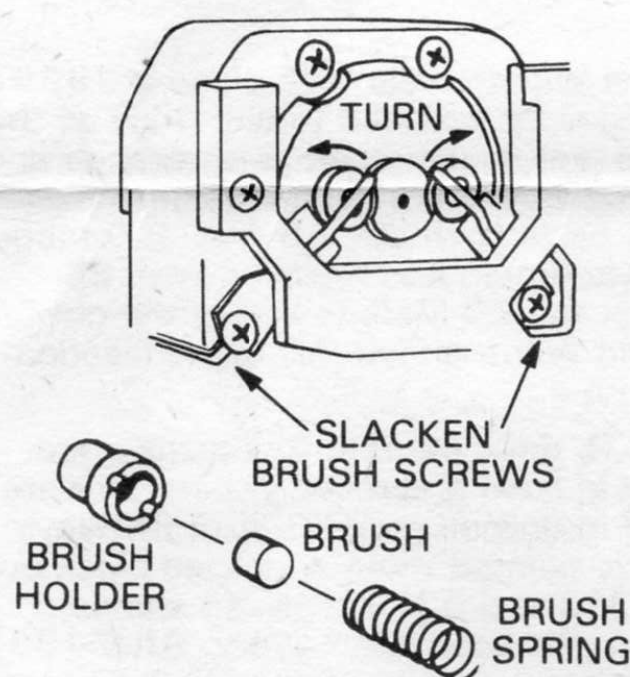
The body shell is removed by undoing the two recessed screws located at either end of the base plate. The rear one is located under the cab, the front screw is located above the leading wheels of the bogie. Remove the body carefully.

### Brush replacement and Motor cleaning

After a considerable period of use (approximately 100 hours), the two motor brushes will need to be examined and may need replacement.



This is done by slackening the two brush screws. Once the pressure is off the brushes may be released by turning the clip to one side (see diagram). The spring can be lifted clear and the brushes will tap out by turning the chassis so that the motor faces downwards. Replacement is carried out by dropping the brushes into place, placing the spring on top, holding this down, swing the spring retainer back and tighten the screw.



Cleaning of the commutator can be carried out by removing the brushes. This allows room for a paint brush, dipped in methylated spirit or lighter fuel, to be inserted gently. It will be found that by turning the wheels of the locomotive slowly a new area of commutator face can be brought into view, which may be cleaned in this way.

If for any reason the motor 'pod' has to be removed it can be done in the following manner. Remove the base plate by removing the two screws, carefully drop out the wheels, removing the crossheads from the slidebars of the cylinders. Undo the screw on the lefthand side of the chassis located between the front and centre driving axle slots. Remove the motor fixing screws (four screws, two on each side of the motor). The two halves of the chassis should now release the motor pod. When re-assembling make sure the plastic chassis spacers are properly inserted.

### Lubrication

Proper lubrication is most important but should never be overdone.

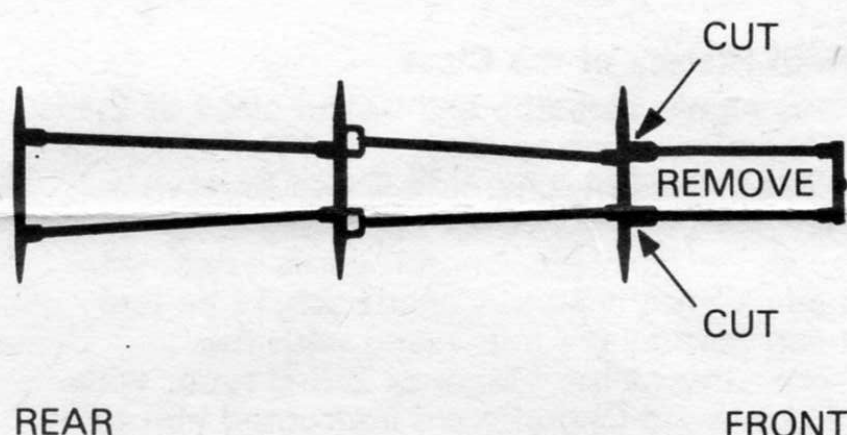
A suitable lubricant for use in your locomotive is Daywat Model Railway Oil (formerly Walkers Oil) available from most model shops. On no account must a mineral based oil be brought into contact with plastic parts. Ensure no oil gets onto the carbon brushes or onto the commutator or onto the traction tyres. The motor spindle is self-lubricating and so requires no oil. It may be easiest to apply the oil with a fine paint brush. A drop of oil may be placed onto the axles, onto each coupling rod pin, and a small drop onto each of the gears.

### Fitting brake rods and Chain link

The brake rods for your 2-6-0 are found in the slot in the top of the styrene foam tray. Before fitting the front section must be trimmed off just in front of the cross member (see the diagram). These are fitted by holding

the loco upside down and slotting the ends of the rods into the holes in the bottom of the brakes on one side of the loco. Then easing the other end of the rod in the opposite hole in turn along the loco taking care not to damage or distort the projecting pins on the rodding cross pieces.

### LOCO BRAKE RODDING



The straight tender brake rods are fitted in much the same way with the cut-away cross rod nearest the coupling, flat face uppermost. The dummy non-working front coupling can be fitted as an option, if the working Mainline coupler is not required. First unscrew the Mainline coupler from the front pony truck and store this safely away with its screw, if this may be required at a later date. The dummy coupling can then be clipped into the holes in the front hook on the buffer beam.

### Guarantee

This product is guaranteed against faulty materials or workmanship for 3 months from the date of purchase, in the event of such a fault Palitoy will repair or replace the product free of charge. This guarantee is in addition to all legal rights under the Sales of Goods Act, etc.

### Spare Parts

Carbon brushes, springs, motor parts, etc., may be purchased from your local Mainline stockist if he is an appointed service agent. In case of difficulty, spare parts may be purchased direct from Palitoy, by writing to the address quoted below, (see Repair Service).

### Repair Service

In the event of your 2-6-0 locomotive being badly damaged we recommend that you take it to your nearest Mainline dealer. If this is not convenient it may be returned to Palitoy at the address below. Take care to see that it is securely packed, preferably in its original protective tray if purchased as an individual locomotive.

NOTE — make sure you enclose YOUR NAME AND ADDRESS, clearly printed in block capitals plus a note detailing the fault, to: —  
CONSUMER SERVICES (MAINLINE),  
PALITOY,  
COALVILLE,  
LEICESTER LE6 2DE