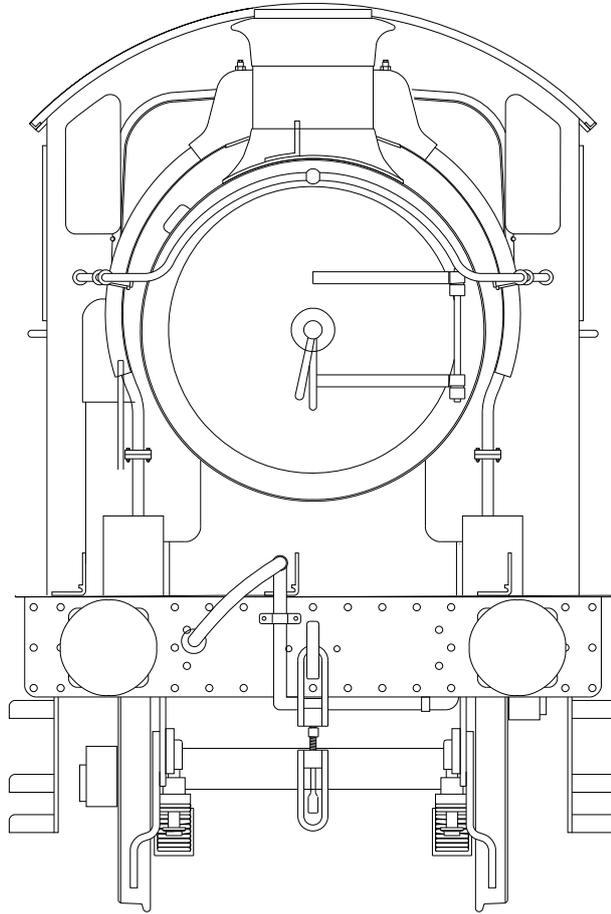


## GWR 2251 CLASS LOCOMOTIVE



### **CAUTION.**

This product contains etched parts with very sharp edges and castings that may contain lead. Neither the Manufacturer, Distributor or Retailer can accept any liability for illness, injury or consequential damage caused when handling or building this product.

Read any instructions before assembly. Do not eat or drink whilst handling. Wash hands after use.

## BRIEF HISTORICAL DETAILS

For a detailed history of this class Part Four of 'Locomotives of the Great Western Railway' published by the RCTS. is essential reading. From this kit any of the 2251 class (2200 - 2299) can be built from circa 1930 to the end of steam.

The following Swindon drawings were used in designing the kit:

87873	9/1929	Lot 261	Erecting plan
87875	6/1929	Lot 261	General arrangement
102601	1/1934	Lot 283	General arrangement
114627	3/1940	Lot 337	Arrangement of boiler mountings in cab

Lot	Numbers	Built	Reverse	Cab	Original Tender
261	2251-2270	1930	Lever	1	Dean/Churchward 3000G
283	2271-2280	1934	Screw	2	Dean/Churchward 3000G
298	2281-2286	1936	Screw	2	ROD 4000G - GC Design
	2287-2290	1936	Screw	2	Dean/Churchward 3000G
312	2291-9 , 2200	1938	Screw	2	Dean/Churchward 3000G
322	2201-2210	1939	Screw	2	Dean/Churchward 3000G
337	2211-2230	1940	Screw	3	Collett 3000G
347	2231-2250	1944-45	Screw	3	Collett 3000G
360	3200-3219	1946-48	Screw	2	Collett 3000G

## CABS.

Lot 261 were built with lever reverse and the cab sides and roof overlapped the cab front and are designated Type 1 cab in these instructions. These cabs featured a single cab side handrail below the window. All were later rebuilt (in the mid 1930s) with screw reverse retaining the original cabs. Lot 283 onward were built with screw reverse with cabs that had sides and roof flush with the cab front and are designated Type 2. These cabs gained a second vertical hand rail in front of the window. Those built during the war years had windowless cab sides and are designated Type 3; they had a combined L shaped hand rail. Subsequently these cabs were fitted with windows although at least one (2239) was unaltered in September 1957.

## TENDERS.

All the engines built before the War were paired with second-hand tenders. From Lot 337 new 3000 gallon tenders of Collett pattern were provided although not all the new engines received new tenders as only fifty tenders of this design were produced. After the war many of the older engines and indeed some of the newer ones received second-hand Churchward 3500 gallon tenders.

## VARIATIONS POSSIBLE WITH THE KIT

**Rear sandboxes.** Fitted to Lot 360 causing the injectors to be mounted further to the rear; not included in the kit.

**Whistle manifold cover.** Fitted from Lot 283 onward.

**Whistle shield.** Fitted from Lot 298 onward but removed from many engines during works visits.

**Smokebox lamp bracket.** Moved to the smokebox door on a few members of the class (2204 and 2297 are the only examples we can find).

**Cab side handrails.** Three different configurations as described above. See Fig.13.

**Balance weights.** A bewildering variety - we have attempted to include all the different permutations.

## CHASSIS OVERVIEW

Note that many of the components for both chassis and body are handed left/right and care must be taken to ensure the correct component is used. Components are not always identified left/right separately but with care and common sense no problems should arise.

Before construction can commence you have to decide which particular chassis you are going to construct. The options are:

### Gauge.

For Finescale, where little sideplay is required, the widest spacers can be used but they will need careful filing to make their width 26.0mm. If you require your engine to negotiate sharp curves then the middle width spacers should be used.

The widest frame spacers supplied are suitable for Scaleseven and care will be needed to allow sufficient sideplay, especially in the leading axle to enable the model to negotiate moderate curves.

### Suspension.

**Rigid.** The kit is supplied with top hat bearings to build a rigid chassis. Open out the main axle holes to accept top hat bushes and solder them in place. If the leading axle is 5/32" diameter then reduce the bearing diameter accordingly by fitting a sleeve from short lengths of the 3/16" tubing provided.

**Sprung.** If you are going to fit sprung horn blocks, you should open out the frame slots by cutting up the half etched lines and follow the manufacturers instructions.

**Compensated.** The simplest and most reliable suspension system is beam compensation and the necessary compensation beams are provided in the kit. Not provided are the hornblocks and bearings which are available as an extra item which includes instructions for aligning the hornblocks accurately.

**Pickups.** No pickup material is provided. The options are:

**Scrapers.** Attached to the middle frame spacer using printed circuit board.

**Plunger.** Open out holes P and fit according to the manufacturers instructions. It may not be possible to use plunger pickups if you wish to fit the inside motion because they may foul each other.

**Split axle/frame.** We leave this to you! Some useful information can be found at <http://www.euram-online.co.uk/tips/splitaxle/splitaxle.htm>.

## COMPONENTS NOT SUPPLIED

### WHEELS

Driving wheel - 5' 2", 16 spoke, 3/16" diameter axle (3) Slater's Ref.7862GW

### MOTOR/GEARBOX

A Canon motor with a SDMP 40L/15 gearbox (available from Finney7) or an alternative such as an ABC VML2 gearbox.

### CRANKPINS

Steel crankpins are available from Finney7.

### INSIDE MOTION

A separate kit is available from Finney7 to construct the working inside motion.