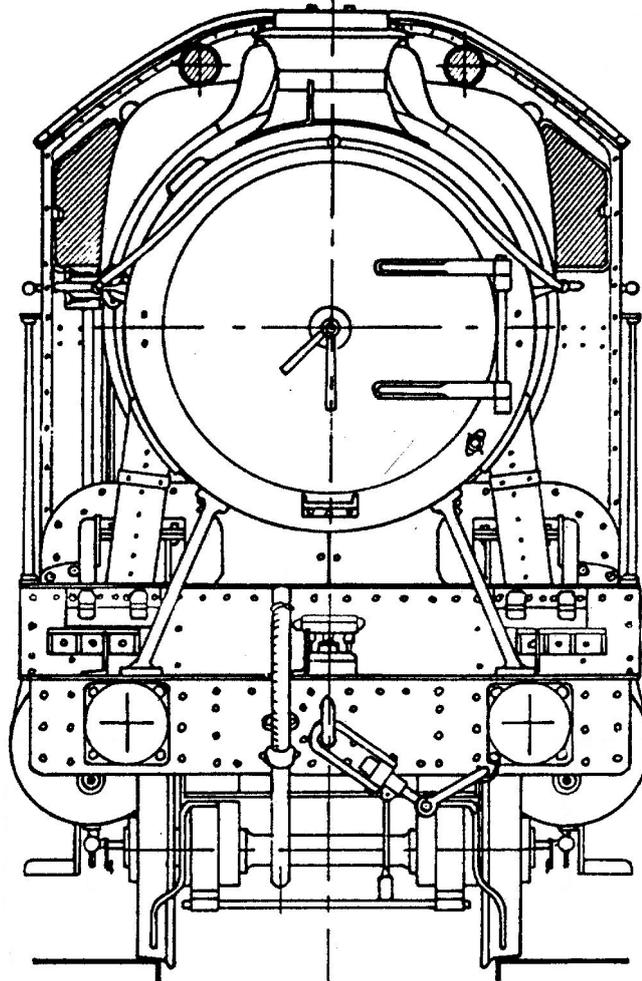


GWR 47XX CLASS LOCOMOTIVE



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

George Jackson Churchward's final engine design prior to retirement in 1921 was this mixed-traffic 2-8-0 with 5' 8" wheels. They were to prove to be outstanding performers and most imposing to watch at speed.

For a detailed history of this long lived class, Part Nine of 'The Locomotives of the Great Western Railway' published by the RCTS is essential reading. Also Railway World, January 1966, contains a very interesting article by R.C.Riley, and most recently the excellent article by John Copsey in the first edition of Great Western Railway Journal (Wild Swan) contains many useful photographs and drawings.

The following Swindon Drawings were used in designing the kit:

60040	10/1920	Lot 214,221	General arrangement
60041	12/1920	Lot 214,221	Cross sections
60040	12/1920	Lot 214,221	Erecting plan

Part of drawing 60040 is reproduced in G.W.Engines - Vol 2 by J.H.Russell, on page 122, as are some useful photographs.

The locomotives were built, with the Standard No. 7 boiler, under 2 Lots as follows:

Lot	Numbers	Built	Snifting valve position	4000 gal tender	Lined green livery (BR)	Condemned
214	4700	5/1919*	Steam chest	2/1932	7/1957	10/1963
221	4701	1/1922	Steam chest	4/1932	11/1958	9/1963
	4702	2/1922	Steam chest	6/1932	8/1959	6/1962
	4703	3/1922	Steam chest	9/1932	9/1959	5/1964
	4704	4/1922	Steam chest	4/1933	10/1957	5/1964
	4705	4/1922	Smokebox saddle	6/1929	9/1958	12/1963
	4706	3/1923	Smokebox saddle	11/1931	4/1958	2/1964
	4707	4/1923	Smokebox saddle	8/1933	2/1959	5/1964
	4708	4/1923	Smokebox saddle	3/1932	8/1958	10/1962

* Built with Standard No. 1 boiler. Rebuilt with Standard No. 7 boiler 5/1921.

VARIATIONS POSSIBLE WITH THE KIT

Cab roof. About 1927 the cab roofs were extended at the back.

Snifting valves. The position varied as indicated above.

Cab spectacle windows. These were plated over during the late 1920's.

ATC equipment. This was fitted to the entire class between 1/1930 and 7/1931.

Smokebox chin step. There are two different designs.

Lamp bracket. This was moved to smokebox door in 1934-37.

Vacuum pipe. Originally this was tall but later a shorter pattern was introduced.

Pony truck spring housing. Originally uncovered but subsequently fitted with a bell shaped cover.

TENDERS

When built the engines were paired with new (probably!) 3500 gallon tenders of standard Churchward design with visible, snap head rivets, on the tanks and coal plates. At least two (4704 & 4706) were subsequently fitted with Dean 4000 gallon tenders with flush rivets until all the class were paired with new Collett 4000 gallon tenders, which became standard for the class, on the dates given above.

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 26.0 mm. 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

Pony Wheel - 3'2", 10 spoke, 5/32" diameter axle (1)

Slater's Ref. 7837MF

Driving wheel - 5' 8", 18 spoke, 3/16" diameter axle (4)

Slater's Ref. 7868W

Available from Slaters' (Plastikard) Ltd'

MOTOR/GEARBOX

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

CRANKPINS

Heavy duty crankpins are available from Finney7.