

Thompson Class O1 Locomotives

By Peter Sheppard

The Thompson O1 class consisted of the 58 locomotives in the table below . Please note the blank spaces in the table are deliberate. For example No. 63571 became a class O1 locomotive in BR days so the only number it carried as a Class O1 was 63571. A second example is No. 3594 which was rebuilt after the 1946 numbering scheme had been introduced so it received the LNER 1946 number 3594 and then the BR number 63594. A further example is Class O4/1 No. 5408 which was rebuilt as a class O1 before 1946 so retained its 1924 LNER number of 5408. Under the 1946 renumbering scheme it was renumbered twice firstly on 1 September 1946 to No. 3529 and secondly on 26 February 1947 to 3678. British Railways renumbered it to 63678 on 4 September 1948. Please note that the different type faces for the BR numbers is deliberate. It is either assumed or known that the locomotives carried the correct Gil Sans style numerals, e.g. 63652, on their smokebox door unless photographic evidence shows the contrary e.g. 63663.

Class rebuilt from	LNER 1924 number	LNER 1946 Number	B.R. Number	Class rebuilt from	LNER 1924 number	LNER 1946 Number	B.R. Number
O4/1			63571	O4/3	6513	3768	63768
O4/1	6231	3578	63578	O4/1	6213	3560 & 3773	63773
O4/5		E3579	63579	O4/1	6214	3561 & 3777	63777
O4/5			63589	O4/3	6505	3780	63780
O4/1	6243	3590	63590	O4/3	6507	3784 & E3784	63784
O4/1	6244	3591	63591	O4/3	6515	3786	63786
O4/1	6245	3592	63592	O4/1	6216	3563 & 3789	63789
O4/1		3594	63594	O4/3	6283	3792	63792
O4/7			63596	O4/3	6595	3795	63795
O4/1	5385	3610	63610	O4/3		3796	63796
O4/1	5394	3619	63619	O4/1	6220	3567 & 3803	63803
O4/3	6555	3630	63630	O4/3	6601	3806	63806
O4/3	6374	3646 & E3646	63646	O4/3	6519	3808	63808
O4/3	6545	3650	63650	O4/3	6263	3817	63817
O4/4	6371	3652	63652	O4/3			63838
O4/3	6359	3663	63663	O4/3	6526	3854	63854
O4/3	6356	3670	63670	O4/3			63856
O4/3	6350	3676	63676	O4/3	6533	3863	63863
O4/1	5408	3529 & 3678	63678	O4/3	6535	3865 & E3865	63865
O4/3	6324	3687	63687	O4/3	6624	3867	63867
O4/3	6341	3689	63689	O4/3	6625	3868	63868
O4/1	6195	3542 & 3711	63711	O4/3	6626	3869	63869
O4/3	6334	3712	63712	O4/3		3872	63872
O4/2	6328	3725	63725	O4/3	6630	3874	63874*
O4/3	6566	3740	63740	O4/2	6288	3879	63879
O4/3			63746	O4/3		3886	63886
O4/3	6575	3752 & E3752	63752#	O4/3	6636	3887	63887
O4/3	6578	3755	63755	O4/3		3890	63890
O4/3		3760	63760*	O4/3	6642	3901	63901

*63760 by Sep 1960, and 63874 by 1963, had had the incorrect curly six corrected to the correct Gil Sans style.

#63752 ran with the incorrect cabside number E63752 for a short time from 11 November 1948.

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Background

The Great Central Railway (GCR) Class 8K 2-8-0 heavy freight locomotive was designed by John George Robinson in 1911. Robinson was a Chief Mechanical Engineer (CME) of the GCR Gorton Works, Manchester from 1902 until he was succeeded by Nigel Gresley in 1922. The 2-8-0 configuration quickly became the standard for heavy freight steam locomotives in the early part of the 20th Century. A total of 521 Class 8K were built, 130 at GCR Gorton Works, Manchester and the remainder built by other companies. The Class was adopted by the Railways Operating Department (R.O.D.) during WWI for use in Europe. It became known as the locomotive that won the war (i.e. 1914-1918 war).

At the "Grouping" in 1923 the GCR which included the Manchester, Sheffield and Lincolnshire Railway was merged with a number of other railway companies including the North British Railway, the North Eastern Railway and the Great Eastern Railway to form the London & North Eastern Railway (LNER) and the Class 8K locomotives were re-classified as LNER Class O4.

Following the sudden death of Sir Nigel Gresley in 1941, Edward Thompson was appointed as CME to the LNER where he immediately started a badly needed programme of reform and standardisation, discarding many of his predecessors designs and methods.

Modifications to Class O4.

Over the years there had been many modifications to the class O4. Major modifications were referred to as parts of a class. The locomotives retaining their original features formed part one and were classified O4/1. In 1917 the R.O.D introduced locomotives with a steam brake only and no scoop these were classified O4/2. Other parts were subsequently introduced culminating in 1944 with part 8 (Class O4/8). These were given major modifications with the 100A boiler that had successfully been used on the B1 class and with a new cab but retaining the original motion and cylinders. In total between 1944 and 1958 no fewer than 99 Class O4 locomotives received these modifications and became class O4/8.

Rebuilding Class O4 to Class O1

Due to wartime restrictions on the building of new locomotives it was decided to rebuild some of the Class O4s to meet the need for heavy freight locomotives. It was initially planned that a total of 160 Class O4s would be rebuilt as Class O1. However the programme was stopped in 1949 by BR who had just received a large number of WD Austerity 2-8-0s. Thus only 58 Class O4s from various parts were rebuilt between 1944 and 1949, and re-classified as Thompson Class O1, the first being LNER 6595 (63795) in February 1944 and the last being number 63856 in October 1949 for the newly nationalised British Railways (BR). The main modifications to the original GCR Class 8K design was the incorporation of a standard LNER 100A boiler, Waltschaert valve gear, new cylinders and and a new cab. It weighed 73 tons 6 cwt plus a tender of 48 tons 6 cwt. Thus the only

noticeable difference between Class O4/8 and Class O1 was the provision of Walschaerts valve gear and new cylinders. This change meant an increase in power classification from 7F to 8F.

In July 1943 the LNER formulated a new numbering scheme which commenced in 1946. Thus when the scheme was formulated Class O1 had not come into being. The rebuilds therefore took the same number as if they had remained in Class O4. In BR days the Class O1 and the various class O4 locomotives were numbered in the series 63570 to 63920 inclusive. It was thus not easy to tell quickly from the number whether the locomotive was from the O1 or O4 class. The secret was to look at the cylinders and valve gear. The locomotives should not be confused with the earlier Gresley Class O1 often known as "Tangos" which were reclassified as O3.

Withdrawal

Withdrawal of Class O1 began in the late 1950s. The final seven withdrawals were from Langwith Junction (Shirebrook) (5), and Barrow Hill (2) all on 11 July 1965. They were sent to A. Drapers of Hull for scrapping. Unfortunately none have been preserved. One of the original Robinson Class O4/1 locomotives numbered 63601 built in 1912 has been preserved.

O1s with Westinghouse pumps.

In 1952 the following five locomotives were fitted with Westinghouse pumps to supply compressed air to operate doors on bogie wagons used for working Tyne Dock – Consett iron ore trains.
63712, 63755, 63760, 63856, 63874.

O1s in Scotland

Whilst the class mainly worked in the North East of England, Yorkshire and Lancashire, two were sent to Thornton Junction in August 1944 where they remained for well over four years finally being sent south to Annesley on 23 January 1949. Whilst based at Thornton they were nevertheless overhauled at Gorton. The two locomotives were:

6249 a few days after building this locomotive was sent to Thornton on 20 Aug 1944, it was renumbered on 27 Oct 46 to 3610, and left 23 Jan 49

6601 a few days after building this locomotive was sent to Thornton on 30 Aug 1944, it was renumbered on 3 Aug 46 to 3806, and then on 31 Dec 48 it was renumbered again to 63806, and then left on 23 Jan 49.

O1 Models

Hornby have produced three OO scale models of the O1 class, they are:

3755 in LNER livery DCC fitted , R3088X

63670 in BR livery with the early emblem, it is weathered and DCC fitted, R3089X

63789 In BR livery with the late crest, DCC ready, R3090.