

Class 45/1 High Intensity Headlights

The fitting of headlights to British Rail locomotives began in the 1970s, with car type headlamps installed on many Class 24s and 26s that worked on the far north lines in Scotland, followed later by a small round headlight fitted to Class 47/7s on the Edinburgh – Glasgow services. Headlights were also mandated for new build locomotives, with Class 56s and 87s fitted with built in headlights from new. Class 50s also received similar fittings during their refurbishment programme from 1980 onwards.

The Wipac headlights in a square metal housing became standard for fitting to older loco types from 1983, with Class 47s progressively fitted at depots and at Crewe Works and a number of Class 31/4s fitted at Doncaster Works during ETH conversion in 1984.

By 1985, BR policy was to gradually fit headlights to all traction that had an expected service life of 8 years or more. However, following an accident at Severn Tunnel Junction on 11th February 1985, in which several permanent way workers were struck down and killed by a train not fitted with a headlight, a recommendation in the investigation report was that 'The current programme of fitting headlights to certain traction units should be extended to all prime movers, urgently, to cut down the period of danger caused by some being fitted whilst others are not.'

As far as Class 45s were concerned, Class 45/0s were being withdrawn and BR was actively looking to eliminate the sub-class within a couple of years. The Class 45/1 fleet however was virtually intact and being intensively used on Trans-Pennine and other passenger services. At the time it was thought they may stay in service until 1990. It is very likely that on this basis BR decided to fit headlights to the 45/1s but not the 45/0s.

Toton Depot was given the task of fitting headlights to the 45/1s as they passed through for major exams or repairs and fitting commenced in October 1985, the first locos treated being 45105/125 and 148. The headlights were fitted centrally on the nose end, between the marker lights and some of the first recipients were released to traffic with the headlights in unpainted grey and with unsightly sealant splashed around the edges. Usually though, the headlight and the area around it were painted yellow to match the rest of the front end, with some benefitting from a repaint of the whole yellow end.

Fitting proceeded apace at the start, with around 21 locos completed by the end of 1985. It then took another six months to fit another 21 locos by June 1986, leaving 45110/129 and 150 to be fitted in July, 45114/118/133 in August and finally finishing with 45107 in early September. It is noteworthy that Toton did all the fitting and not Derby Works, even though some locos passed through the Works for overhaul in late 1985/early 1986. These were released without headlights and perhaps accounts for the late fitting to 45107/110/114 and 118. 45133 was one of the last due to it being in Derby Works from August 1985 to June 1986 for unclassified repairs.

Headlights were fitted to 49 of the 50 locos in the sub-class. 45147 was scrapped in March 1985 after its serious collision at Eccles, so was never fitted. It seems that 45109 was fitted at Toton in January 1986 whilst it was in for exam and repair. However, the loco was then found to have serious segmental bearing damage due to a collision and subsequently became the second 45//1 to be withdrawn. So it apparently never carried the headlights in service and they were removed again before the loco was taken to Derby Works for spares recovery.

Generally, the headlights were fitted with the top edge in line with the top of the marker light fittings. However there were some variations. 45133 was found to have the headlight mounted slightly lower at No.1 end (discovered when we were trying to make a headboard fit!). Conversely, 45114 had the headlight mounted slightly higher at No.1 end only.

Of note is that not all the named 45/1s carried nameplates and headlights at the same time. 45104 had already lost its nameplates and 45118, 137 and 144 had their nameplates removed and headlights fitted during the same exam at Toton. 45111,112,123,135 (one side) and 143 did all carry both for a few months.

The table below details when each loco was headlight fitted. Exact dates are not known, but are between the dates in the two columns. This is a work in progress, so if any readers have photographic evidence that narrows the dates down further, please get in touch by emailing me at dexter.skiddaw@gmail.com.



An early recipient of high intensity headlights was 45148, seen here with as yet unpainted headlights on a snowy 28th November 1985 working 5N24 Newcastle to Sunderland empty parcels vans past Gateshead TMD. Photo: RobT653

Loco	Latest date without headlight	Earliest date with headlight
45101	15/10/1985	19/12/1985
45102	17/11/1985	09/01/1986
45103	21/12/1985	15/03/1986
45104	22/10/1985	14/12/1985
45105	01/10/1985	22/10/1985
45106	08/03/1986	24/04/1986
45107	03/09/1986	14/09/1986
45108	15/03/1986	04/04/1986
45109	01/10/1985	25/01/1986
45110	20/07/1986	06/08/1986
45111	18/09/1985	21/12/1985
45112	02/11/1985	30/11/1985
45113	08/02/1986	25/04/1986
45114	17/08/1986	28/08/1986
45115	15/03/1986	04/04/1986
45116	09/04/1986	26/06/1986
45117	15/11/1985	28/12/1985
45118	02/08/1986	25/08/1986
45119	30/03/1986	25/04/1986
45120	22/10/1985	20/04/1986
45121	26/04/1986	25/05/1986
45122	26/06/1986	19/07/1986
45123	16/10/1985	24/11/1985
45124	02/11/1985	17/11/1985
45125	01/10/1985	22/10/1985

Loco	Latest date without headlight	Earliest date with headlight
45126	22/10/1985	23/11/1985
45127	02/11/1985	29/12/1985
45128	13/10/1985	27/12/1985
45129	03/07/1986	18/07/1986
45130	26/10/1985	28/11/1985
45131	17/09/1985	30/11/1985
45132	22/10/1985	15/12/1985
45133	22/08/1986	03/09/1986
45134	26/04/1986	11/05/1986
45135	31/10/1985	12/01/1986
45136	01/10/1985	30/11/1985
45137	22/02/1986	26/04/1986
45138	02/11/1985	28/12/1985
45139	28/09/1985	12/11/1985
45140	14/10/1985	25/01/1986
45141	06/02/1986	09/04/1986
45142	01/03/1986	24/05/1986
45143	07/10/1985	03/01/1986
45144	26/04/1986	02/05/1986
45145	01/10/1985	04/11/1985
45146	22/10/1985	04/04/1986
45147	Scrapped 03/85	Never fitted
45148	01/10/1985	20/10/1985
45149	15/12/1985	26/01/1986
45150	16/07/1986	15/08/1986

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