

45147 Remembered

45147 was involved in an accident on 4th December 1984, resulting in the worst damage to ever be inflicted on a peak whilst in service. This resulted in the premature withdrawal of the loco, which became the first Class 45/1 to be scrapped. This article was first written several years ago, but the content has been revised in 2024 with new information and photos to chronicle the loco's history and details of its untimely demise.

45147 began life as D41, delivered new from Derby Works to Derby Depot on 29th July 1961 in all over lined green livery and fitted with centrally mounted split headcode boxes. Initially it was allocated to Bristol Bath Road for haulage trials and crew training to commence work on South West – North East, cross country services.



D41 powers a 12 coach Up 'The Devonian' towards the summit of the Lickey Incline on 18th August 1962.
Photo: Neville Simms

It then returned to Derby where it immediately began work on the Midland Mainline expresses from St Pancras to Derby, Nottingham, Sheffield, Manchester and Glasgow, and on other mixed traffic. For the first thirteen years of service D41 could turn up on just about any type of train on midland metals, proving the versatility for which the peaks became well known. At some point the loco received collision damage to the No.2 end and during repair the original split centre headcode boxes were replaced just at that end by a one piece centre headcode panel.

In 1973 BR decided to undertake the conversion of 50 class 45s to enable them to haul electrically heated air conditioned coaches on the revamped St Pancras to Sheffield service, their steam heating boiler being replaced by a Brush alternator. D41, by now in BR blue livery, became the 47th member of the class to be selected for conversion and emerged from Derby Works in January 1975 bearing its new TOPS number of 45147.

Now a dedicated passenger locomotive allocated to Toton, 45147 once again pounded the metals out of St Pancras, its next significant change not coming until its call to Crewe works during the second week of June 1982. By that time 45147 had become more distinctive in that it was among the last four 45/1s to retain its headcode panels, the others being 45128/134/144. In 1982 classified overhauls of class 45s had been transferred from Derby to Crewe and in the second week of June that year 45147 became the third loco to enter Crewe Works for its Heavy General Overhaul (joining 45124/146). However, it did not immediately enter the works, being noted still in the yard outside during August 1982.



Having entered Crewe Works for a Heavy General Overhaul during the second week of June 1982, 45147 spent several weeks in the yard outside before entering the workshops. It is noted here in the works yard on 1st August 1982.

Unlike Derby Works, who used to remove the nose ends for removal of the headcode boxes and fitting of sealed beam marker lights, Crewe would cut out the headcode boxes with the nose end still in situ and then plate in new steel for fitting of the lights. When this was done to 45147, all the nose end fittings were removed (including the handrails next to the tail lights!), except the centre lamp bracket at No.1 end!



45147 is seen here inside Crewe Works on 26th September 1982, showing the nose end steel work removed from No.1 end and a new piece of metal welded in to replace the head code boxes with marker lights. Note the single centre lamp bracket left in place just above the new steel. Photo: Stephen Widdowson



In this photo taken on 17th October 1982, reconstruction of the No.1 end nose is nearly complete. However, the small handrails by the tail lights have not been replaced and the centre lamp bracket is still in place at the top. Photo: Kevin Connolly



At the No.2 end of the loco, reconstruction was done in the same way, but the centre top lamp bracket was also removed, as seen here when the overhaul was nearly complete in January 1983. Photo: Eric Lonie

The loco was noted being finished off in the erecting shop on January 9th 1983 and when painted gained the usual Crewe trademark of only having two BR logos applied (under each drivers side window).



45147 undergoing static testing following overhaul at Crewe Works in January 1983, prior to main line testing. Photo: John Ashton

The loco was released to work a test train to Church Stretton and back on January 14th 1983 and this was the only known time it was photographed in traffic without the centre lamp bracket at the No.2 end, as shortly afterwards it was fitted with a bracket that end so that both ends matched. It is not known whether this was done back at Crewe Works or at Toton depot, but because it was fitted as an afterthought it was in an unpainted black finish, in contrast to the yellow bracket at No.1 end. This feature made 147 unique and therefore easily identifiable from the front end.



45147 can be seen at Shrewsbury on 14th January 1983 during its first test run from Crewe Works. Note that the leading No.2 end does not have the upper lamp bracket fitted. Photo: Steven Clements.

The loco was released to traffic, but on January 25th 1983, whilst working the 12.05 Liverpool-Scarborough, 45147 failed at Eccles (ironically, the very place it was to meet its end the following year) and had to be rescued by Manchester Victoria pilot 25221. 147 therefore returned to Crewe for rectification, re-emerging later in February 1983. It was seen at Saltley depot on 28/02/83 and 05/03/83, presumably still giving trouble, as on 09/03/83 it was noted on test from Derby, piloting 45142 as far as Leicester with 1C19 10:19 to St Pancras.



45147 seen at Leicester in April 1983, with the additional lamp bracket now fitted at No.2 end to match the other end.

45147 then spent a period in traffic, being seen on Midland Main Line services on 4th and 5th April 1983, but was back at Crewe Works for more repairs on 03/05/83 and was still there on 28/05/83.

It was then released to traffic again, being noted at Gateshead depot on 05/06/83 before working a service to Liverpool. It was at Toton Depot on 11/06/83, presumably stopped, as it was back at Crewe Works on 13/06/83!

Crewe must have decided to keep the loco to sort out the problems once and for all, as it remained at the Works for the next 4 months, being noted there on 04/07, 29/07, 31/07, 29/08, 25/09, 04/10 and 30/10/83. The loco was finally returned to traffic in the first week of November 1983 and at last seemed to operate reliably after that.



45147 undergoing rectification work inside Crewe Works on 25/09/83

45147 then settled down to regular Trans-Pennine workings in 1984 plus a variety of other traffic, including the 13.07 Paddington-Birmingham (via Banbury) on 20th April, the 20.15 St Pancras-Derby parcels on 13th June and a Derby-St Pancras passenger turn on 17th June. It was also noted at Saltley Depot on 25th August.



45147 was a regular on Trans-Pennine services, seen here alongside 25307 at Manchester Victoria with a Newcastle train on 20-06-84. Photo: Neville Wellings



Also a regular on NE-SW services, 45147 pauses at Redruth with a Cross Country service on 13th October 1984. Photo: Steve Cole

The week ending 1st December 1984 saw 45147 back on Trans-Pennine duties. On Wednesday 28th November it had new brake blocks fitted at Gateshead and was released to traffic on Friday 30th November.

However, on Monday 3rd December it was stopped at Newton Heath for replacement of an air cock on its auxiliary air brake reservoir cylinder.

The following day, Tuesday 4th December 1984, 45147 was rostered to work the 07.20 Manchester Victoria-Liverpool from where it was to work the 10.05 Liverpool-Scarborough, 13.55 return to Liverpool and 19.05 Liverpool-Manchester.

However, things were not running smoothly on the Liverpool to Manchester route that morning. Firstly, the rostered driver for the 10.05 Scarborough train was delayed on another duty, so the Liverpool train crew supervisor had to ask another driver on a 'spare' ECS duty to take the train as far as Manchester. Meanwhile, at Eccles signal box (4 miles west of Manchester Victoria) the signalman found that due to a track maintenance gang adjusting rail gaps, a track circuit had failed meaning he could not clear his up section signal. Therefore all trains heading for Manchester would have to be stopped at this signal and the driver told to pass it at danger.

Despite these problems, 45147 departed on time with the 10.05 Liverpool-Scarborough after successfully completing a brake test. St. Helens Junction was also reached on time and the guard carried out his usual loading of mail.

Meanwhile, the signalman at Eccles was awaiting the arrival of the 09.00 Stanlow to Leeds oil train loaded with gas oil. This duly passed his box, slowly drawing to a stop at his up section signal behind 47310. The signalman then sent 'train out of section' to the previous box and correctly accepted the 10.05 Liverpool-Scarborough behind it. He then (over the telephone) gave the driver of 47310 instructions to pass the section signal at danger, at the same time expecting 45147 to stop at his home signal, which was at danger, behind the oil train (therefore theoretically protecting it). Instead he was shocked to see 45147 run straight past the danger signal and pass his box at an estimated 60mph and out of sight towards the oil train.

The driver of 47310 had climbed back into his cab and had just begun to pass the Eccles section signal at about 10mph when 45147 collided violently with the rear of his train.

The front end (no.2 end) of 45147 was completely destroyed and the cab bulkhead driven almost horizontal into the engine compartment, although both bogies remained largely intact. The roof of no.1 end cab was also crushed by a derailed tank wagon and almost the entire loco, the rearmost three tank wagons, and the first passenger coach were engulfed in a ferocious fire. This was probably caused by escaping gas oil being ignited by 45147's hot exhaust.

The fire service arrived on the scene within minutes, but were unable to approach the front of the train due to the intensity of the fire, which took over an hour to extinguish using over 5000 gallons of foam compound. The incident was declared safe at 13:14hrs and examination of the wreckage commenced. Around 200 passengers had been on the train, with 63 taken to hospital, 8 with serious injuries. Sadly, the driver of the passenger train and one passenger died at the scene and one passenger died later in hospital.



Above: The intense fire at the front of 45147 is tackled by the GMC Fire Service using foam compound. It took over an hour for the fire to be extinguished.



Above: The rear cab of 45147 and the remains of the leading Mk1 coach No. E3603. The front half of the coach body has been completely destroyed and the whole coach gutted by fire. A bogie from a tank wagon can be seen lying against it.



Above: The scene looking from alongside the second coach of the Scarborough train (MK2 No.E5289), past the wreckage of the leading coach, to the crushed rear cab of 45147, where the fire fighters are in the centre.

Debris was strewn across a wide area, including the adjacent M602 motorway, resulting in several cars being damaged by flying parts or colliding as they swerved to avoid the carnage. By chance, a photographer from a local newspaper 'The Advertiser' was in a vehicle on the motorway and witnessed the crash. His article, with first hand pictures of passengers evacuating the train, appeared in the newspaper two days later.

Horror on the 10.05 am

THE 10.05 am express train from Liverpool Lime Street was fated never to reach its destination.

As it sped towards Scarborough disaster struck just outside Manchester.

An explosion leaving in its wake a scene resembling "the aftermath of a nuclear attack" signalled the end of its journey at Wessau.

The four-coach passenger train had crashed into the back of a train of 13 oil tankers.

Immediately the area was engulfed with thick black smoke and was rife with the desperate cries of passengers trying to escape from the wreckage.

It was just 10.37 when a van driver hurtled into the E1F garage on nearby Eccles New Road.

The panic-stricken traveller urged garage operator, Brian Brobury into life-saving action.

"I'd heard a bang but hadn't realised the scale of the disaster," said a pale-faced Brian.

"But the driver's face left me in no doubt something very serious had happened."

"I rang 999 and told



Passengers help each other to safety

them to send all the emergency services."

Within minutes fire, police and ambulance men were converging from all parts of Greater Manchester.

Wessau had been declared a major accident area.

Road blocks were set up by the police at Eccles New Road, Trafford Road and Wessau Lane.

And traffic from the M602 was halted at the Eccles turn-off and diverted along Eccles Old Road.

At the scene of the disaster, firemen were busy trying to prevent further tragedies.

Others of fire engines and nine foam tenders battled to bring the inferno under control.

Other public services were also playing an important part.

Greater Manchester Transport laid on a double-decker bus to ferry those passengers shocked but not injured to Salvation Army hostels for a well-earned cup of tea.

And a rewording convoy of ambulances rushed the injured to three local hospitals — Hope, Salford Royal and Park Hospital.

'It's a major tragedy this should happen before Christmas' On-scene policeman



Dazed passengers watch in horror as the fire rages.

Stafford. Doctors at Hope were put on emergency standby to deal with passengers suffering from "shocking" burns and head injuries.

Back at the scene a stunned police officer

summed up the devastation: "It's a major disaster... a tragedy just before Christmas."

Earlier in the day fire officers were unable to search for those travellers unaccounted for — because of the intense heat.

By mid-afternoon the flames had eventually been smothered with foam.

But as officers crawled through the disintegrated wreckage, fire chiefs confirmed that three people were still missing. Two were

dead and 77 had been injured.

Greater Manchester Council had set up a special inquiry line for worried relatives.

And the one question on everyone's lips was: "Just how could it have happened?"

British Rail investigators had been surveying the debris from mid-morning, looking for vital clues to the cause of the tragedy.

And when the full extent of the horror became clear, the Government ordered a full inquiry.

Whitehall's decision follows a series of rail accidents this year, including a crash in Longsight earlier this week.

By Tuesday night Eccles New Road and Trafford Road had been re-opened.

But the police warned local residents that the M602 and Wessau Lane would remain closed until Friday morning.

Disaster report by Frank Worrall

On-the-spot pictures by Howard Potts

It's Unique . . .

The Fingerprint is unique to the individual

Just as the area illustrated is to the Advertiser . . .



The Advertiser gives you virtually full household coverage of the West-Manchester, Prestwich, Whitefield and Radcliffe areas

OVER 120,000 COPIES CURRENTLY DELIVERED FREE EVERY WEEK

No other newspaper, weekly or evening, can give this unique concentration of readers for so little money . . . Which means if you wish to sell your house, car or any other item, place your business, factory or shop, or fill that vacancy . . .

... ADVERTISING IN THE ADVERTISER AND IT'S AS GOOD AS DONE!

In fact out of the 120,000 homes in the area above shown, over 80,000 homes are only one newspaper — "The Advertiser," making it truly unique!

Major national and local companies have advertised in the paper from the outset, with no increase. We are confident that we will do the same for you.



THE Advertiser
30A CHURCH STREET, ECCLES
TELEPHONE 061-788 9623

By mid-afternoon the flames had eventually been smothered with foam. But as officers crawled through the disintegrated wreckage, fire chiefs confirmed that three people were still missing. Two were



The first passenger carriage engulfed in flames and black smoke.

Our lensman's lucky escape



Howard Potts.

ADVERTISER photographer, Howard Potts, will always remember the day he was asked to take some copy into Manchester.

As he headed down the M602 he became an eyewitness to one of the worst tragedies Salford has seen in recent years.

Flying debris wrecked the car in front of him, Lucky Howard escaped.

This is what he saw.

"I SAW the goods train moving very slowly on the track and out of the corner of my eye the passenger train coming up behind — it was doing about 60 miles an hour.

It smashed into the back oil container of the goods train and I saw the whole back end of the tank catapult about 15 feet into the air. Before it started to come back down the whole tank flashed and burst into flames.

The flames mushroomed into the air just like a nuclear explosion. Then thick black smoke streamed into the air and across the motorway.

I covered on to the hard shoulder in front of a car which was a write-off. It had been hit by a piece of metal from the explosion.

Luckily there was no traffic on the crash-side of the motorway otherwise they would have perished in the explosion or in a pile up.

The whole of the front carriages was a mass of flames and smoke. People in there had no chance of getting out.

Passengers were climbing out of the second carriage which was smoking. Old ladies had to be helped down because of the big drop to the ground, and a few seconds later that carriage caught fire too.

Everyone was fairly calm but there were some with bloody faces and cuts and grazes.

It was ambulance that arrived first and within five minutes all the services arrived and started clearing people away from the wreckage. Debris had travelled about 60 feet across the motorway.



Firemen pinned back by fierce flames and dense smoke.



The blazing tanker lies across the track.

We'll be back with your letters next week

This article and the fire service pictures are courtesy of the "Fireground Museum, Rochdale"

MAJOR RAIL CRASH SALFORD

AT 1037 HOURS ON 4 DECEMBER 1984, GMC FIRE SERVICE CONTROL RECEIVED A CALL BY EXCHANGE TELEPHONE TO AN EXPLOSION IN TOOTAL GROVE, WEASTE, TO WHICH A NORMAL 2 PUMP ATTENDANCE FROM A10 SALFORD WITH A STATION OFFICER IN CHARGE WAS DESPATCHED AT 1038 HOURS.

As large volumes of smoke were present it was difficult to determine the full extent of the emergency and a message "Make Pumps 4" was sent by the Assistant Divisional Officer at 1040 hours, only 3 minutes after the initial call.

A 5x foam making branch and 2 cooling jets were immediately got to work whilst the Assistant Divisional Officer made a further assessment of the scene. It then became apparent that a serious rail accident had occurred between an 8 coach passenger train and another consisting of 5 x 100 ton and 10 x 70 ton tank wagons containing Petroleum Based Gas Oil. Both trains were travelling in the same direction. It was learnt later that the two trains involved were the Liverpool to Scarborough passenger train and the Stanlow to Leeds tanker train.

The Assistant Divisional Officer then declared the situation a "Major Accident". The motorway was subsequently closed to traffic and residents from nearby houses were evacuated by the Police due to the danger of an explosion from the burning tankers.

Over the next 15 minutes, no less than 20 calls were received at Brigade Control indicating that a serious rail accident had occurred. On being informed of the major accident message, the County Fire Officer and Deputy County Fire Officer proceeded to the incident.

On arrival the Officer-in-Charge was confronted with two trains impacted together with a severe fire involving two 100 ton tank wagons and the locomotive and first two coaches of the passenger train. There were some 200 passengers on the train at the time of the accident. 63 passengers were quickly removed to hospital by a fleet of ambulances, where 2 male casualties subsequently died, 8 were found to have serious injuries and 53 minor injuries.

At 1123 hours the Deputy County Fire Officer assumed command of the incident and "Made Pumps 20, Foam Tenders 3", ordering 5 of these pumps to report to the Divisional Commander for search and rescue purposes.

At this stage British Rail confirmed that the tank wagons contained a petroleum based gas oil and as crews continued to contain the fire, a thorough search of the coaches for any remaining passengers was undertaken by breathing apparatus teams. However no signs could be found of the driver of the passenger train and it was assumed that he was trapped in the wreckage at the front end of the locomotive.

As there was concern that one of the tank wagons might explode, efforts were then concentrated on extinguishing the fire using a Jetmaster, 2 x No. 10 x 5x foam making branches with an application rate

of finished foam of 6,500 gallons per minute.

A further assistance message to "Make Foam Tenders 4" was sent at 1133 hours due to the condition of the burning tank wagons, as result of which the Brigade's Bulk Foam transfer scheme was put into operation utilising pumping appliances in a shuttle service to and from bulk foam reserves held at Stretford and Philips Park Fire Stations. A total of 5,100 gallons of foam compound was used during the incident.

The fire took approximately one hour to extinguish, due mainly to the fact that the two tank wagons had ruptured in a number of places and were providing a steady supply of fuel to the flames.

When the fire was eventually extinguished, Brigade personnel sealed the ruptured tanks to prevent any possibility of re-ignition.

The body of the driver of the train was eventually located, as originally thought, in the wreckage at the front end of the locomotive and although operations were started immediately to release him it was not until 1620 hours, with the assistance of a large crane, that this particular part of the operation was completed.

British Rail Recovery Teams then commenced the task of recovering the unaffected carriages and tank wagons, whilst discussions took place concerning the removal of the damaged units.

Due to the amount of fuel that had spilled onto the track and impregnated the whole area, hot cutting techniques could not be used for fear of re-igniting the fuel.

The Shell Company made arrangements to empty the tank wagons into a fleet of road tanker vehicles and whilst this operation proceeded, the Brigade maintained a foam blanket over the whole incident site. High expansion foam was used to good effect to seal off the area around a third tank wagon which had ruptured and discharged approximately half its contents around the incident.



The amount of fuel spilled resulted in large quantities, estimated to be in excess of 1,000 gallons, running into the surface drains of the motorway which subsequently discharged into the Manchester Ship Canal, approximately half a mile away. As a result, it was necessary for tests to be carried out on the Canal to establish that there was no danger of a second incident occurring. However, this contamination was sprayed with oil dispersant by the Ship Canal Company and the risk dissipated.

A "Fire Surrounded" message was sent by the County Fire Officer at 1314 hours and the "Stop" message at 1622 hours, stating that there would be further protracted operations throughout the night and that pumps were being reduced in number.

Close liaison between the Brigade and British Rail Recovery Engineers continued throughout the night as gradually the damaged tank wagons, coaches and locomotives were removed.

The Fire Service used cold cutting equipment to assist rail recovery teams to disentangle the tank wagons which had become firmly locked together in the impact. Relief crews continued to be provided throughout the following day and the incident was finally closed at 1930 hours on 5 December 1984.



The driver's air brake control from 45147's leading cab was found on the motorway. Subsequent tests showed that the controls were working correctly and that the lever was in the full emergency brake position. It could not be proved, however, that the lever had not been moved to this position after the collision when it was ejected from the cab and struck the motorway. Tests on the coach brakes also showed that these had all been working correctly and evidence from the Scarborough train's guard that the train juddered severely before impact, indicated the emergency brakes were working well.

Oil was found on the track behind the passenger train, probably spilt from a gear case on 45147 and indicated the start of heavy braking. This, together with skid marks on the rails suggested that 45147 was just 120m from the rear of the oil train when the emergency brakes were applied and was travelling at approximately 45mph at the point of impact.



Above: The completely destroyed leading No.2 end of 45147 seen during recovery operations. Photo: F J Bullock



Above: Recovery of 45147 taking place on Wednesday 5th December. This photo shows the extensive fire damaged and the crushed rear No.1 end cab. Photo: F J Bullock

The Eccles signalman, signalling equipment and train brakes were all found blameless for the accident and it was concluded that the driver simply missed the signals protecting the oil train (there was no AWS fitted to the signal at that time).

During the investigation it was noted that the semaphore ES50 signal, which was passed at danger by 45147, had poor sighting. When the signal arm was in the horizontal (danger) position, it was difficult to see against the background of a recently constructed overbridge built in red brick. The signal was subsequently fitted with a white background.

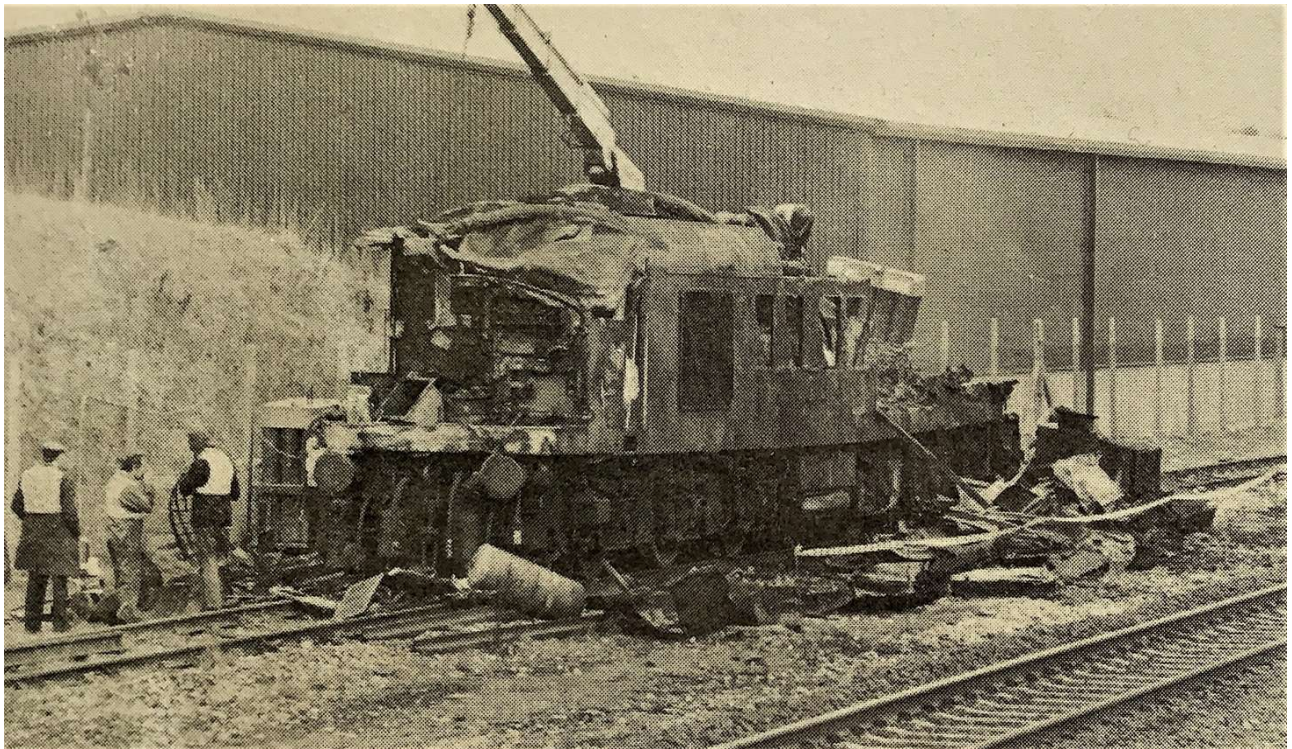


The semaphore Eccles ES50 signal pictured before the crash (left), showing the poor sighting against the bridge in the background, and after the crash (right) when it had been fitted with a white background. Eccles signal box can be seen beyond the bridge in the right hand picture.

45147 was the last damaged vehicle to be removed from the crash site, being rerailed on Wednesday 5th December. The fact that the bogies were badly damaged and the bodysides out of gauge meant that it was not fit to travel far by rail, so it was towed just one mile to a siding near Patricroft to await its fate. It was officially withdrawn on 4th January 1985 and remained at Patricroft until the first week of March 1985 when it was cut up on site by Vic Berrys Ltd.



The remains of 45147 in a siding just west of Patricroft station, where it was recovered to the day after the accident and stayed there until cut up in the first week of March 1985. The loco was initially sheeted over, but the covers quite quickly disappeared. The fact that the loco was in left in full view from the adjacent Liverpool – Manchester main line for 3 months was quite surprising.



45147 being cut up on site at Patricroft by Vic Berrys Ltd during the first week of March 1985. Photo: J. A Oldfield.