Clayton Type 1 - Class 17

Prototype Specification:
Designation: Class 17
Numbers series: D8500-D8616
Built by: Clayton Equipment Co. Ltd., Beyer, Peacock & Co.
Introduced: 1962
Wheel arrangement: Bo-Bo
Weight: 68 tonnes
Engine: 2 Paxman 6ZHXL
Transmission: Electric
Output: Engine horsepower 900hp
Maximum speed: 60mph

AB-VB	Class	17
	Weight tons	68
	Brake force tons	35
	RA	4
	Max speed mph	60

Clayton Type 1 - Class 17 locomotive history

The Clayton Type 1 diesel-electric was introduced from 1963 as the standard BR design in the 'type 1' power category and eventually numbered 117 examples. The unique (for a mainline BR loco) of a large central cab, with the two engines in low bonnets either side, was developed due to the poor visibility from existing type 1's, such as class 15 and class 20, when running bonnet first. The first batch were built at Hatton near Derby and were fitted with GEC electrical equipment and were destined for a (short) life on the Scottish Region with the final 29 locos built by Beyer Peacock for the Eastern and NE regions, these having Crompton Parkinson electrical equipment.

Power was supplied by a pair of Paxman 6-cyl horizontal engines, although two locos, D8586 and D8587 received Rolls Royce 8-cyl D Type engines de-rated to 450hp and could be identified by a raised section in the bonnets necessary to acommodate the engines!

Major problems soon became apparent with the troublesome Paxman engines, which were prone to camshaft failures and fractured crankcases that resulted in newly built locos being placed into store pending rectifications. Unfortunately for the class, the type of work they were designed for, namely trip freight workings was fast disappearing. Their low engine horepower (900bhp) limited the work they could be assigned to and although they were given more strenuous freight work and some passenger turns, these jobs required the locos to work in pairs. With no train heating supply being available for the class, passenger work was limited to summer use only!

The first members of the class were withdrawn in October 1968 and all had gone by the end of 1971.

Three locos were spared and transferred to the research centre at Derby although they appear to have seen little use. Another locomotive has miraculously survived by being sold for industrial use and ending its working life with Ribble Cement before being secured for preservation.
This locomotive, D8568 is currently operational at the Severn Valley Railway.

The Claytons were delivered in an attractive livery of BR green with a lighter green cab and small yellow warning panels on the bonnet ends. They later received full yellow bonnet ends and some of the class survived long enough to receive BR corporate blue livery. Although designated class 17, the class never carried full TOPS numbers.

Heljan would like to express thanks to Clayton Equipment Ltd and the Chinnor & Princes Risborough railway for their invaluable help during the development of this model.

Clayton Type 1 - Class 17

Thank you for purchasing this HELJAN model of a Class 17 locomotive. This highly detailed working replica will give you years of pleasure and reliable operation if it is handled with care and regularly serviced. This 1:76.2 (4mm to 1ft) scale model is designed to operate off 12 Volts direct current supplied from a model railway transformer/controller. The wheelsets are set for 'OO' (16.5mm) gauge track. The model will run over curved track down to a minumum radius of 15 inches (385mm) but, due to its finescale wheel profile, more satisfactory running will be achieved over curved track formations of a larger radius.

A powerful 3-pole motor and heavy die-cast chassis ensure a haulage capacity that will meet most modeller's demands. Tests have shown this model to be capable of hauling over 15 coaches on level track. Running characteristics will improve with use. The locomotive should initially undergo a 'running-in' period to allow all the moving components to seat properly. It is suggested that the model is left to run for at least 30 minutes in each direction at a medium speed. Please ensure that all gear, bearings and axles are lubricated. This has been undertaken during manufacture but periodic cleaning and light re-lubrication using plastic compatible oils and greases is suggested. Good electric continuity is essential for smooth and reliable operation. As well as ensuring the rail head is clean, it is imperative that an uninterrupted supply to the motor is maintained by regular cleaning of the wheel treads and the wiper pick-ups acting on the back of the wheels. Inspect before use and carefully remove any deposits, debris or fluff that may have accumulated. Requests for spare parts should be directed to Gaugemaster Controls Ltd - Gaugemaster House, Ford Road, Arundel, West Sussex - BN18 0BN, stating the model catalogue reference number and specific part numbers.

This model features a number of factory-fitted separate detail parts. A number of sprues are also provided with additional components for the purchaser to fit, to improve authenticity, if so wished.

Digital command control

Your HELJAN Class 17 model comes ready to be adapted for digital command control.
The conversion of this locomotive to DCC operation is a simple task. The printed circuit board mounted over the motor features a NEM652 eight-pin socket into which a dummy plug is inserted. Remove the dummy plug and simply plug in your preferred decoder unit in its place. DCC can also be configured to give constant brightness illumination of the headcode panel and tail lights. Access to the chassis, motor and printed circuit board is gained by removing the bodyshell. Gently ease the body apart from the chassis along its lower edge, unclipping the four securing lugs. The chassis can then be gently drawn out by exerting a gentle separating force. Most retailers can fit DCC decoders if requested. ***SEE PHOTOS ON PAGE 2 AND 3***

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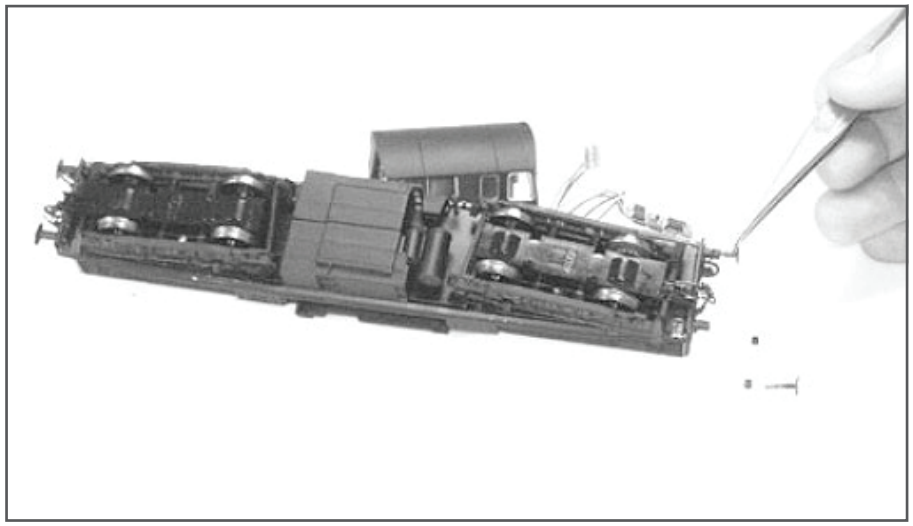
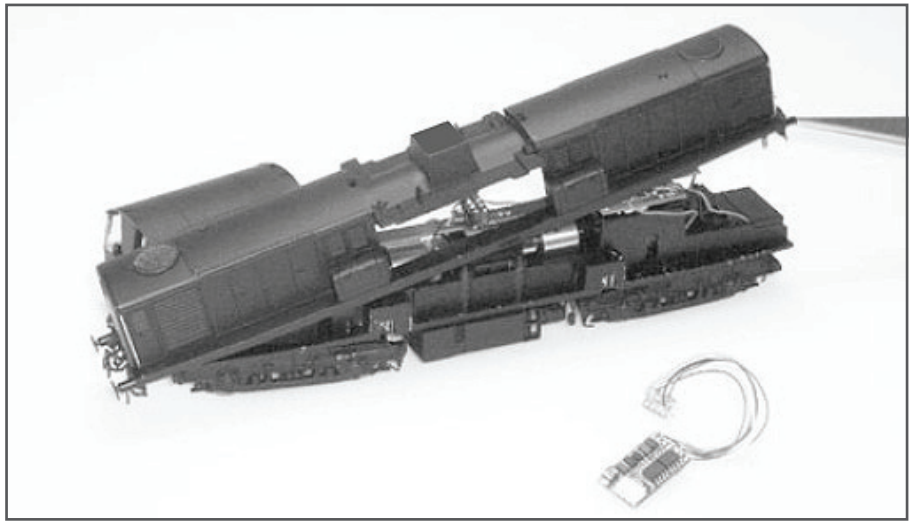
Dismantling your Class 17 for Maintenance / DCC Installation



1. Gently remove the driver's cabin as described on page 1. Remove the 'rings' that attach the buffers to the buffer beam in one of the ends of the loco and the buffers can be removed.



2. Lift the bodyshell and you will gain access to the motor and printed circuit. Remove the dummy plug.

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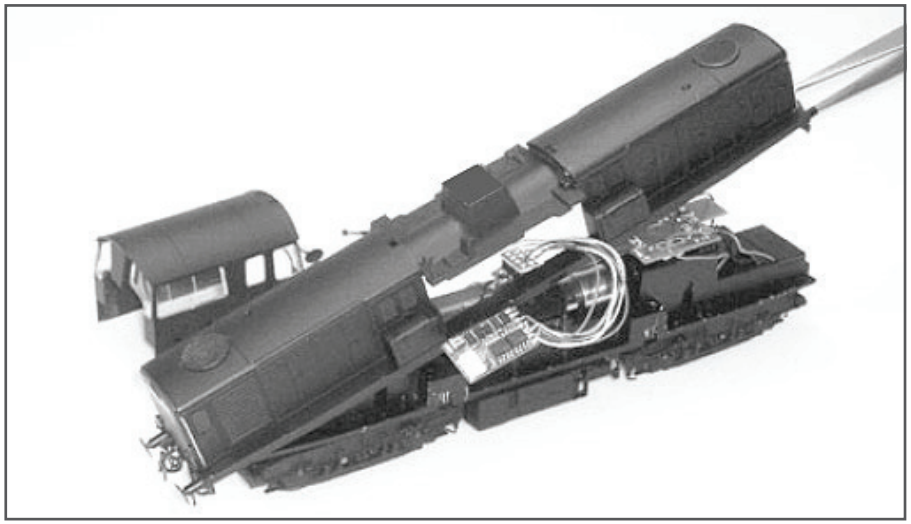
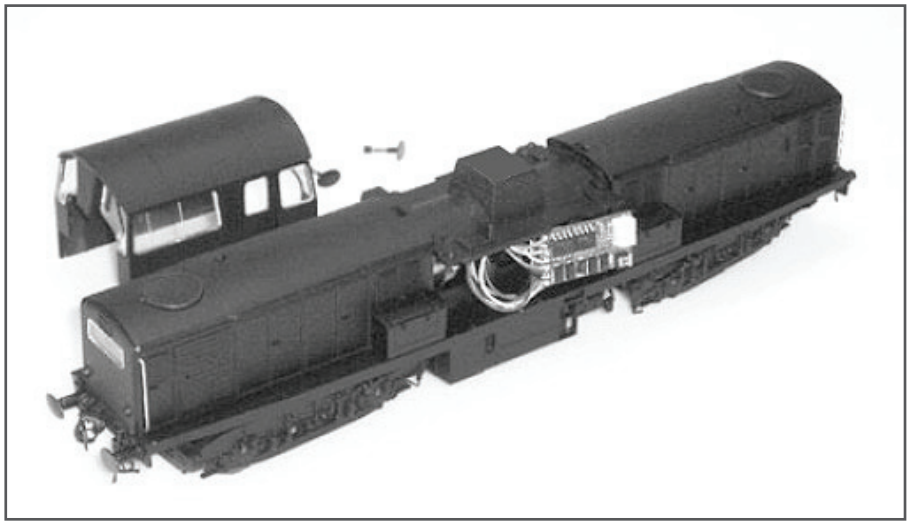


3. Plug in your preferred decoder unit in its place.



Your Class 17 will operate in DCC mode with any compatible 8-pin DCC decoder. It is also possible to install DCC sound using a suitable decoder and speaker but as internal space is limited we recommend consulting a professional DCC sound specialist to advise on the relevant components.

SPARES/REPLACEMENT PARTS

For all enquiries related to spares or replacement parts for this model, please contact the HELJAN spares department at Gaugemaster Controls Ltd, Gaugemaster House, Ford Road, Arundel, West Sussex, BN18 0BN. Telephone 01903 884488, e-mail heljanuk@gaugemaster.com or visit the 24/7 online spares service at www.gaugemasterretail.com.