



3910 - 3999



LNER/BR 2-8-0 CLASS 02 'TANGO'

This highly detailed model in 1:76 scale contains many individual parts and as such requires careful handling to avoid damage. As supplied it is designed to operate from 12v DC supplied from a model railway transformer/controller with the wheelsets set for 'OO' gauge track. Smooth operation will result if periodic cleaning of the wheelsets, pick-ups and track is adhered to. The model should initially undergo a running in period of about 30 minutes in each direction at medium speed. Please ensure that gears, bearings and axles are lubricated. This has been undertaken during manufacture but periodic light re-lubrication using plastic compatible oils and greases is suggested depending upon the models usage. Always inspect before use to ensure that the wheels and pick-ups are clear of any accumulated deposits, debris or fluff.

HELJAN would like to thank Tony Wright and Grahame Wareham for assistance given during the development of this model.

Should you require spare parts please direct any enquiry to ;
HELJAN UK, Unit 2C/D Station Field Industrial Estate, Kidlington, Oxford OX5 1LA
01865 848000
e-mail heljanuk@yahoo.co.uk Please ensure you quote both model and part number(s)

Model produced and distributed by; HELJAN A/S, Rebslaggervej 6, 5471 Sonderso,
DENMARK



Prototype specification

Designed by: Sir Nigel Gresley

Designation: LNER O2/3 & *O2/4 (The O2/4 in this instance being a re-boilered O2/3).

Number Series: LNER 2954-61, 2430-7, 3833-57;
renumbered 1943 to 3947-3987; BR (1948) 63947-63987

Built by: L.N.E.R. Doncaster Works 1932-1943

Wheel arrangement: 2-8-0

Weight: 125t 12cwt (engine & tender)

Engine: 3 cylinder Walschaerts/Gresley conjugated valve gear

Driving Wheel diameter: 4ft 8ins

Power Rating; 8F

The O2/3 and O2/4 were a development of the original GNR Gresley designed O2 2-8-0 heavy freight locomotive introduced in 1918 to haul heavy coal and mineral trains from the Yorkshire pits and foundry's to supply London industry and domestic requirements.

Forty-one O2/3 locomotives emerged from LNER Doncaster Works between 1932 and 1943 in two batches and of these 18 were rebuilt to O2/4, which included the installation of the later 100A boiler as used on the B1 and some B17's, between 1944 and 1959.

Shed allocations were primarily shared between Doncaster, Frodingham, Grantham, March, Mexborough and Retford and daily workings would find them anywhere between Teeside and Peterborough. Up to fifteen of the class were allocated to Grantham for use between High Dyke and the Rotherham and Scunthorpe iron and steel foundry's. These heavy trains were ideally suited to the 'Tango's', as they became known, and the O2 bowed out from Grantham shed. The O2 ended up as the most powerful dedicated freight locomotive in use by BR prior to the building of the BR Standard 9F's.

Withdrawals started in 1960 with the majority going in 1963 with the demise of Grantham shed, with no locomotives surviving into the preservation movement

Liveries

LNER 1932-46: 2954-61; 2430-2437; 3833-3857 black unlined 12" Gill Sans shaded numbers on cab (GS cabs); LNER 12" shaded on tender (*renumbered 3947-87 from 1946*)

LNER 1946-48: 3947-3987 black unlined, yellow Gill Sans un-shaded numbers 10" on GS cabs 10" LNER yellow unshaded on tender. (*renumbered 63947-63987 from 1948*)

BRITISH RAILWAYS 1948-1949: 63947-63987 black unlined, yellow Gill Sans un-shaded numbers 10" on GS cabs 10" BRITISH RAILWAYS yellow un-shaded on tender.

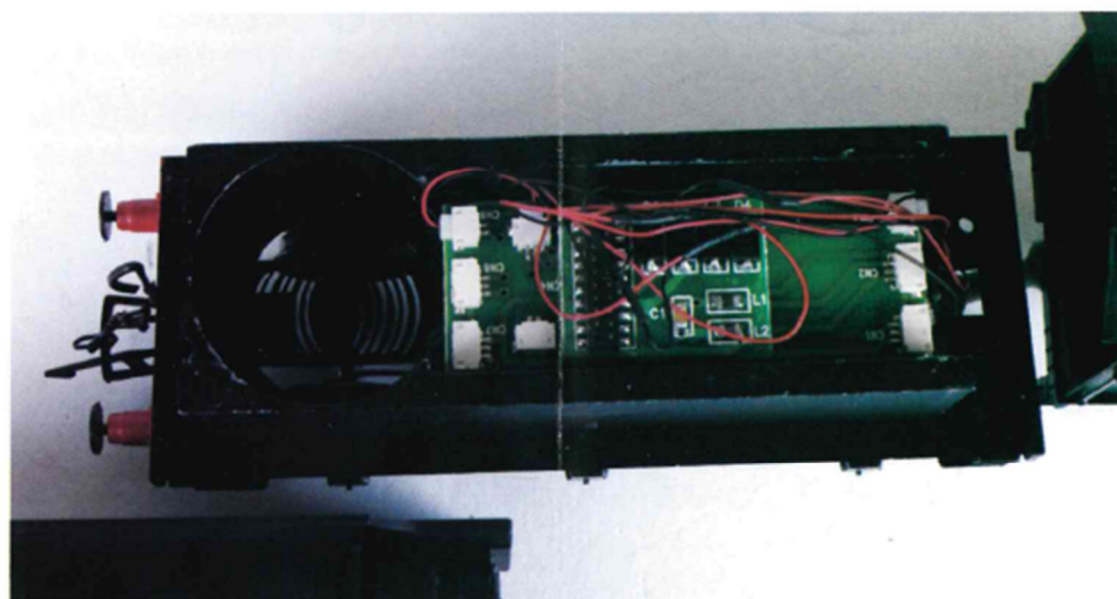
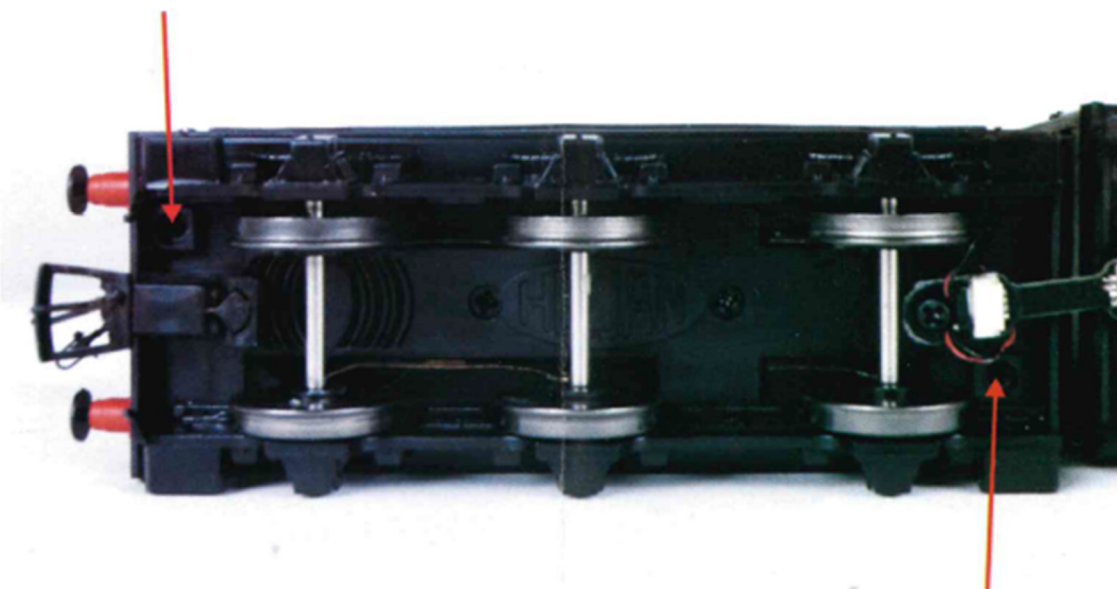
BR 1949-1956: 63947-87 (GS tenders) larger emblem on tender, same style. 12" Gill Sans numbers on cab in yellow. All numbers and lettering in BR style Gill Sans Alphabet

BR 1957-63947-87 (GS tenders) larger later style emblem on tender, same style. 12" Gill Sans numbers on cab in cream. From 1958 all crests were left facing whether on left hand or right hand side of tender. All numbers and lettering in BR style Gill Sans Alphabet

Removing the bodyshell

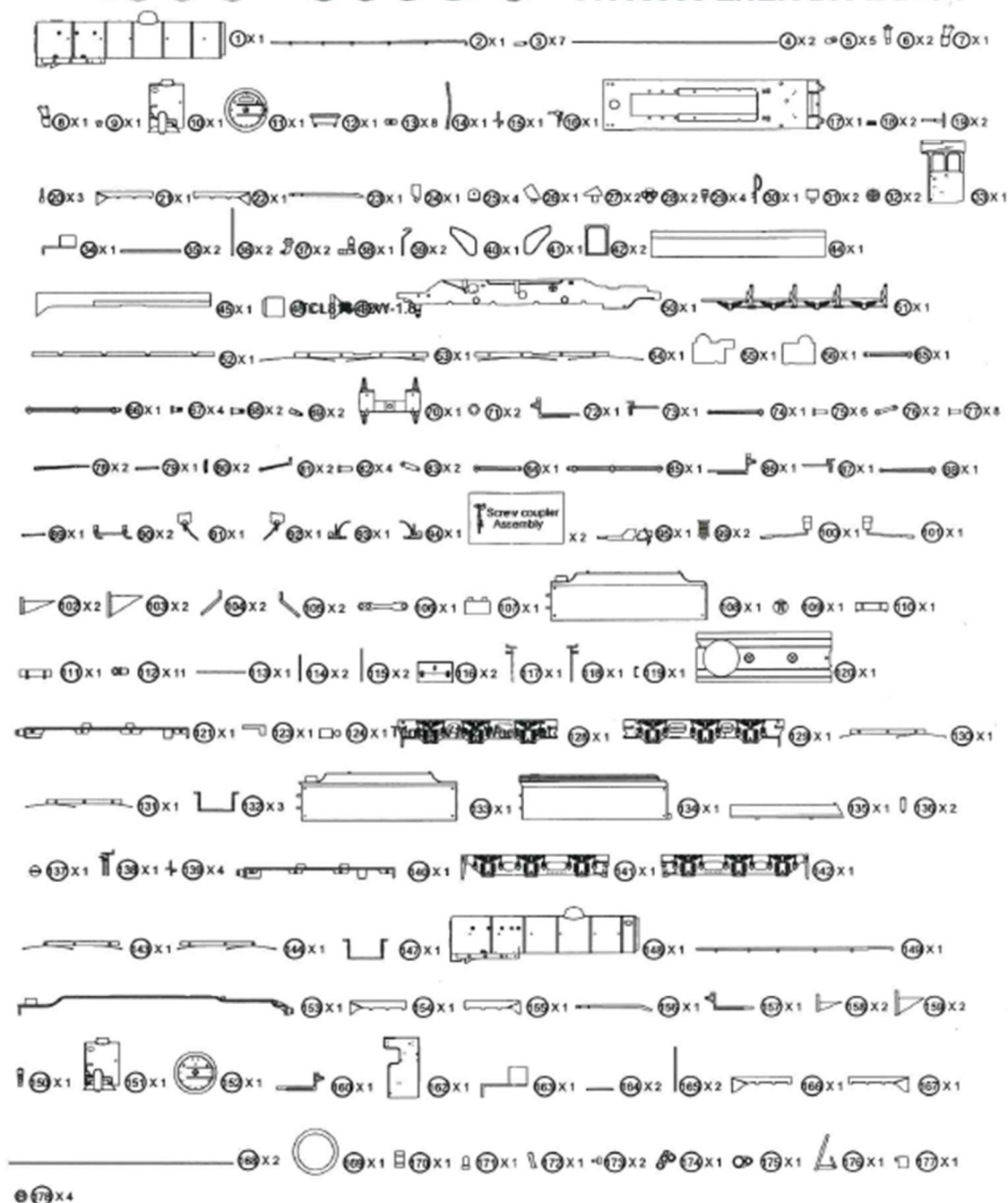
You will need to do this to gain access to the interior and if you wish to fit a DCC decoder;

- 1 – Carefully remove the two screws underneath, as indicated below
- 2 – If you wish to install a DCC decoder please ensure it is suitable for this model.

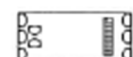




SPARE PART DRAWING 11003900 LNER BR TANGO



Connecting PCB



21 pin Main PCB



Dummy Plug 21 pin Main PCB

- 1 x Motor
- 2 x O-ring
- 1 x Spurgear 19T x 12T M04
- 1 x Pinion Gear 18T M04
- 1 x Pinion Gear 14T M04
- 1 x Pinion Gear 20T M04
- 3 x Wheel set
- 1 x Driving Wheel set
- 1 x Pony Wheel set

- 3 x
- 3 x Tender V3 Wheel set
- 1 x Screw 71.7 x 4.6mm
- 3 x Screw 72.2 x 1.1mm
- 3 x Screw 72.2 x 5.5mm
- 2 x Screw 72.2 x 6.5mm
- 2 x Screw 71.5 x 4mm