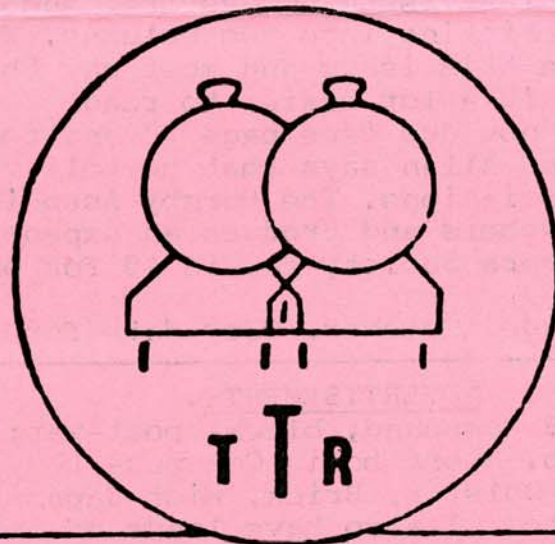


The TTR Gazette

(No. 36/'84).



Collectors' Association

THE T.T.R. GAZETTE

The Journal of the T.T.R. Collectors Association.

Founded by Allan Hinchliffe and Stewart Bean.

Hon. President..Mr E.L.Rozsa, (formerly of Trix now of Liliput Model Rlwys(UK)Ltd

Hon. Member..Mr J.Catalini, (formerly Development, Design Engineer, Trix Ltd).

The TTRCA is a non-profit making organisation devoted to the collecting and operating of T.T.R. '00' gauge trains 1935 - 1971.

Secretary - S.A.Bean, , Walton, PETERBOROUGH. Tel: .

Treasurer - Allan Hinchliffe, , Birkby, HUDDERSFIELD. Tel: (

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The Editor will be pleased to receive contributions for the "GAZETTE" on any matter connected with Trix Railways.

Please notify the Editor in the event of a change of address.

The "GAZETTE" is usually published in January, April, July and October.

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EDITORIAL

I have received many favourable comments from members regarding the pages with smaller print in our last issue and several suggested that it would be a good idea to split the printing into two columns. Well, I have done just that with pages 3 and 4 in this issue and must say that it looks better and I think members will find it a lot easier to read.

SUBSCRIPTIONS - These are now due (see page 3) and the renewal fee has been fixed at £6 for 2 years and Allan says that he believes this compares favourably with other Associations. The Hornby Association fee is £10 per year (but they have 900 members and produce an expensive printed Journal) monthly. The Train Collectors Society fee is £5 for one year, with a bi - monthly News-letter.

Next issue: October. Copy date for adverts 30th Sept.

ADVERTISEMENTS.

FOR SALE: Locos A.C. - LMS Compound, black, post-war; 0-4-0 BR Tanks (3 off); 0-4-0 BR black Tender loco. Short bogie Coaches- LMS, LNER, BR maroon and BR red & cream. Weltrol, Bolster, Brick, High Capacity, Caboose, 4-wheel BR Wagons, Tank Wagons, etc. I also have loads of Bakelite and Fibre based Track - some boxed - some un-boxed. WANTED: BR Blue Scotsman Tender A.C. type in v.good or better condition also a power bogie for a Trix F105 Bo-Bo. Pete Hislop RUGBY

FOR SALE: Ian Paterson expects to have new Sales Lists for Trix, Tri-ang, H.Dublo and other "odds" in July. Please send S.A.E. If anyone wants Bakelite track, please let me know, I have a vast surplus-much of it free providing the carriage can be arranged. WANTS: BING 00 - miscellaneous items or more substantial quantities for the museum history display at Kirton. Condition is not necessarily important. Ian Paterson, Scunthorpe, South Humberside Tel: Scunthorpe (0724)

(More Adverts on page 10).

SHIPTON "GET-TOGETHER" near YORK - An enjoyable day was had by members who attended the "Get-together" at the small village of Shipton on 16th June. Besides Trix and Hornby Trains members had the unique opportunity of seeing British Railways H.S.T. flash by.

TRIX SPARE PARTS.

TRIX D.C. Collector Shoes for the Bo-Bo Electric and Warship Diesel locos are available at £1.25 plus S.A.E. per pack of 4 shoes.
T.T.R. Pre-war Wire Hooks are now available at £3.90 per pack plus S.A.E.
Nylon Reduction Gears for 0-4-0 and 4-4-0 locos £1.30 each plus S.A.E.
Smoke Deflectors for Trix 'Schools' class locos die-cast £1.25 pair plus S.A.E.
Loco Weight Springs for 0-4-0 locos 30p ea. & SAE.
Manyways Station Filler Panels 20p pair plus SAE.
Loco tender plugs with leads 50p pair plus S.A.E.
Coach lighting plugs with leads 50p pr. plus SAE.
4-4-0 TENDER shoes now available 75p pair & SAE.
TTR Badges £1.50 (only two left in stock).
A.C. Carbon Brushes 50p pair plus S.A.E.
MINIATURE POSTERS in colour for Manyways Station Filler Panels and Fences. Small Packet 10p, Large Packet 25p plus large S.A.E.
Our London member Colin Penn can supply a crane hook suitable for the TTR Crane Truck or Crane-on-base at 30p each plus S.A.E. from Mr C. Penn, London.

STANDARD COLLECTOR SHOES: Samples have been received from our supplier and delivery is promised for August.

TTR LOCO INSTRUCTION SHEETS now available.
A number of members have enquired about TTR instructions for the A.C. locos the "Scotsman", 2-4-2 Mixed Traffic Continental Tank loco and the 2-car Diesel Flyer. They are available from Allan Hinchliffe or Dixon Upcott at 50p plus S.A.E. for the Three.

T.T.R. TINPLATE PRIVATE OWNER WAGONS.

At the "Get-together" at Kirton I mentioned to various members if they would be interested if the Association had a number of Tinplate private owner wagon bodies printed in three colours with "Authentic" names, members would fit the body to their own post-war underframe.

The cost of each wagon body would be approx £5 but the manufacturer would require an order for 150 to obtain this price.

The Ten members I spoke to at Kirton said they would be willing to order 30 between them.

I would like members interested to send in provisional orders with a deposit of £1 per wagon body with suggestions for the names of wagons.

"Authentic" names from the 1930 to 1945 period but not any which have been previously issued by any other "00" gauge model railway manufacturer such as Mainline, Lima, Hornby, Wrenn, Graham Farish or Airfix. Separate Order Form enclosed.

Allan Hinchliffe.

SUMMER EXHIBITIONS WHICH FEATURE TRIX RAILWAYS.

KIRTON-IN-LINDSEY Railway Museum and Mill, Kirton Nr. Gainsborough, Lincs. T.T.R. Layout. Open 1st three Sundays in each month until end of Sept.

KIVOLI CENTRE LILIPUT MODEL RAILWAYS, Station Yard, BALA, Gwynedd (North Wales).
Open Mon-Friday 9 to 5. For details of weekends phone (0678) 520753.

"CORNUCOPIA" HAYLE, Near St. Ives, Cornwall.
Large vintage T.T.R. layout. Open every day.

"LILIPUT LAND" Model and Toy Museum, East Sandgate, opposite the Harbour, SCARBOROUGH.
Open every day.

LIGHTWATER VALLEY Leisure Park, Near RIPON, North Yorkshire. Includes Trix Twin layout.
Open every day.

MEVAGISSEY Model Railway and Model Shop, Meadow Street, Mevagissey. Includes Trix Twin and Liliput locos and coaches on display.
Open every day.

THE LONDON TOY & MODEL MUSEUM, Craven Hill, London, W2. Most gauges and makes of Model Railway on display. Open Tuesday to Sunday (Closed Monday).

THE OLD TOWN HALL at RHYL, North Wales has been used as an exhibition of vintage model railways including Trix Twin Railways but no details of opening are known.

TRIX REPLICAS BOXES.

These were on sale at the KIRTON "Get-together" and are well made. A number of members acquired these. The initial order of loco boxes has been sold out, however the next batch will include a modification to the division to enable it to fit better.
Following a number of requests from members Wagon boxes will now be available together with packing inserts for short or long wheelbase rolling stock. Packing inserts for either American bogie stock or short bogie coaches will be included with short coach boxes in future. All boxes include two yellow gummed labels with the TTRCA logo so the contents may be identified. Separate Order Form enclosed.

TRIX ELEVATOR CONVEYOR BELTS.

Following the request for members requiring Conveyor Belts I have only received replies from 6 members, most of them would have been willing to pay up to £4 for the loading belt.

LILIPUT MODEL RAILWAYS can supply the Trix-Liliput type plastic couplings for 2 rail locos and stock:-
10061 for loco or tenders and wagons.
10063 for E3000 loco and Western Diesel loco.

10070 for Inter-City D.M.U. or coaches.
2-rail rolling stock wheels are also available.

PECO Simplex Auto-Coupler-metal.

This has been withdrawn from the Peco range - (tool requires renewal), so only "LILIPUT" have this type available but in plastic as listed above.

SUBSCRIPTION INCREASE.

Due to the ever-increasing cost of stationery and other overheads, the committee has decided that the Two Year subscription will be raised to £6 and £8 for overseas members. It would help if members would send their renewal fees promptly so that reminders do not have to be sent. "Special Concession" for the small number of older senior citizen members are eligible for membership renewal at £4.00.

Membership of the Association entitles you to receive the TTR Gazette, attend Social Get-together meetings which are held from time to time and take part in the running of regional groups.

MEMBERSHIP RENEWALS.

With this issue of the TTR "Gazette" membership renewals are now due from members to receive Gazettes nos. 37 to 44. 8 "Gazettes" for the next Two Year membership. As already mentioned above, the renewal fee is £6 and £8 for overseas members £8 to cover Airmail.

1. The increase will enable illustrations to continue to appear on a regular basis in the "Gazette".
2. meet the initial high cost of ordering reprint Catalogues, also members have been requesting one of the post-war catalogues.
3. help meet the cost of ordering Spare Parts.
4. meet the increase in postal charges.
5. meet any loss on Trix Association "Get-togethers" run by Association members.

Renewals have already been received from -
Don Crocker, Peter Schofield, Mike Joyce, David Mewse, Norman Austin, Dave Best, Franz Nowack, C. van Dyk (Holland), D.I. Mc A Elder (Essex), Jim Whittaker (Rochdale), Martin Drayson (Rayleigh), Dr. E. McKenzie (Australia).
The recent new members listed below are fully paid up until Gazette No. 44. :-
303 R. Kimber, 304 A. McKenna, 305 R.G. Stanley both of Australia, 306 A. Lewis, 307 Rev. D. Eve, 308 P. Tebbutt, 309 J. Dowswell, 310 R. T. Lloyd, 311 Y. Roovet, 312 T. L. Antrobus, 313 R.A.C. Reincke, 314 D. Pilling, 315 H.F.R. Marsh, 316 C. Taylor, 317 Don Holder, 318 Ray Urmston (USA)

TRIX LONDON AREA GROUP.

After the successful "Get-together" at Enfield, North London I have received a donation of £16.50 from Colin Penn towards the Association spare parts fund.
(Allan Hinchliffe).

T.T.R. PAINT MATCHES.

Our Yeoman member Jules Pidd has found that Humbrol LNER Garter Blue is suitable for paint touch-ups on the Trix BR Blue "Warship" bodywork. As with nearly all paint matches it may require very slight alteration, even variations in batches of paint does happen.

(Sheet 1) Shown are the Trix and Minitrix Card Kits - see letter in TTR Gazette No.35. Copy supplied by Norman Austin of Derby.

(Sheet 2) The "Der Adler" loco (1530) by Trix-Express 1962. The American "Santa Fe" (2264) by Trix Express 1962. The BR Southern Region Class E2 0-6-0 Tank loco (1108) by British Trix 1962. Copy from Allan Hinchliffe with acknowledgement to Trix Mangold.

(Sheet 3) The excellent Trix model of the BR Class 124 Inter-City Trans-Pennine D.M.U. of 1967, surely the most stylish D.M.U. of British Railways.

The Artists impression of the proposed Trix "00" gauge Brush type 4 diesel loco of 1968 which was to have been produced by Trix in BR green (1170) and BR rail blue (1171) for 2 and 3 rail operation but regretfully never materialised.

(Sheet 4) A card construction of the Ruston-Hornsby 0-6-0 diesel loco (244) and Shunters Truck of 1957 and a pre-production model with die-cast body (note the variation to the "production" model), see TTR Gazette No.35 page 7. Copy supplied by Tony Thrasher of Ruislip, research by Allan Hinchliffe with grateful acknowledgement to G.H.Deason author of "Cardboard Engineering" and M.A.P. Ltd. (The numbers shown refer to the Trix catalogue nos)

KIRTON GET-TOGETHER Report by Allan Hinchliffe.

The 3rd joint Get-together held at Kirton-in-Lindsey went off very well at least 40 Trix Association members attending.

John Atkins providing the Trix 3-rail AC or DC locos and Chris Thornburn was the able operator from Birmingham. Chris has recently carried out slight alterations to his Diesel Flyer which is now suitable to operate as a 3-car set, this was to be seen running well. George Shaw and his children were in charge of his Fibre track layout on which he operated both 2-rail and 3-rail DC locos and stock.

Bill Bourne (member No.69) had a display of early vintage Trix including a very nice French "Nord" loco. Garth Jeffrey brought along from the archives of the BBC a film made around 1936 showing a Trix set being given as a Christmas present to a delighted young boy, (shown on video). Mrs Jeffrey kindly made the draw of the Association Raffle, the winner was Arthur Jones from Thorne, the prize, the book "Power of the Arthurs, Nelsons and Schools" published recently by O.P.C.

Our enthusiastic member from London, Dave Best and his wife Kim added a bit of glamour to the Get-together. They had a stall with many Trix 3-rail items for sale as Dave is concentrating his collection on 2-rail models but I gather that the Trix Express "Der Adler" loco and coaches wasn't going to be sold said Kim as it is her favourite loco. (Illustrated in this issue).

Another member from Sunny Scarborough was Pat Hammond who had on display over Twenty variations of the "Princess" loco by Rovex, Tri-ang first produced in 1949. I wonder if this was one of the reasons Trix didn't re-issue their own "Princess" after the war as a post-war model. Trix preferring to concentrate on the "Flying Scotsman" loco.

Members who attended included Bob Palmer (Norwich), Garth Jeffrey (Norwich), Bob Hayes (Castle Bromwich), Peter Corley (London), Tony Gould (Watford), Dave Best (London), Stan Anderson and Stewart Bean (Peterborough), Dave Johnson (Birmingham), Chris Thornburn (Birmingham), Pete Hislop (Rugby), John Hopkinson (Leeds), Arnold Ellyard and D.Pilling (Leeds), Bill Bourne (Essex), Martin Drayson and Family (Rayleigh), Alan Hewson and Family (Boston, Lincs), Jules Pidd and Lesley (Yeadon), Mike Barritt and Nikki (Sheffield), Pat Hammond (Scarborough), Dave Norville (York), Dixon Upcott (North Harrow), Peter Urquhart (Stockport), Ron Swires (Doncaster), Arthur Jones (Thorne nr. Doncaster), John Matthews (Alford, Lincs), Ian Paterson (Doncaster), John Atkin (Market Rassen), George Shaw and Family (Lincoln).

Ian Paterson wishes to add to the above report:

Many thanks to Allan for his report on the Trix activities. I always regret after each 'Event' that on the day I do not have time to spare for more 'chat', but other organisers will be familiar with the problems of trying to keep everyone happy!

I would just like to extend my thanks to all those who attended and again made the day a success from the Museum's point of view, and to say that I hope

you all felt the visit to be worthwhile.

My particular appreciation to John Atkin and George Shaw. A tremendous amount of work had gone into the preparation of both their displays.

Provisional dates for 1985 are the 11th or 18th May and I will confirm which as soon as possible.

Change of Address

Ian Paterson has notified a change of address as from June 8th last. He now resides at:-

Scunthorpe, South Humberside,

Tel: Scunthorpe (0724)

If local members - e.g. Doncaster /Thorne/ Hull / Lincolnshire etc., fancy an informal meeting later in the year, would they let Ian know. Also, at present, there will be two vacant seats for travel to Hillmorton on September 23rd from the Scunthorpe area.

NOTES ON THE DIESEL FLYER by Don Crocker.

Many members will know the Diesel Flyer (20/58) and maybe also possess an example. It is, I believe, vulgarly known as the 'Flying Hamburger'. The prototype was described in a short article in the April 1933 issue of Model Railway News. It came into service in that year apparently and some details are given. It achieved a maximum speed of 99.4 m.p.h. and an average speed of 1 1/4 miles a minute for a run of 178.3 miles. It was thus the fastest "train" in the world and linked Hamburg and Berlin. It was evidently 'a technical wonder'.

The train - really a double coach, 137'8" long - had seats for 102 passengers and was powered by two Maybach diesels of 410 h.p. each, driving generators at each end of the unit. The article alluded to the streamlined design of the running gear and other fittings. Safety was also a feature and there were two braking systems - an air operated system (Knorr) and an 'electro-magnetic rail brake'. No doubt some members may have access to fuller technical information but it was interesting to have some details from a model railway magazine, which also described Trix items from time to time, including specially made wooden sections for building up embankments, bridge approaches and so forth, to which I have so far seen no reference anywhere else.

LETTERS TO THE EDITOR.

Further to my notes on 'Trix' Card Kits I can add the following information.

On Saturday 7th April whilst attending the T.C.S.* meeting at Luton, I discussed the kits issue with Roger Willison of Luton, he informed me that he had purchased several kits and promptly returned home to collect them. I had told him that Trix (Thernglade) only issued the tram kit in the 1800 '0' gauge series and had declined to market the other kits in this series. Roger, however, had "found" 2 kits that obviously were to have been part of the Trix collection. One was the American Wood burning loco and the other the A4 (I think). These were produced by Harris Edge Products (no address given) and designed by Roy C. Link LSIA. I have spoken to Mr Rozsa again on this matter, and he does confirm that ALL the card kits were produced by ONE company but does not recall the name of the company. If anyone knows anything of Harris Edge Products perhaps we will be able to confirm that the information I have given is correct. We know that SC1 Tram Kit was issued and Roger is certain that SC2-3-4-5-6 were issued by Harris Edge, but is not sure about SC7. I thank Roger most sincerely for the information given.

*TRAIN COLLECTORS SOCIETY - a most happy, helpful band of enthusiasts about 85 strong with very wide interests (makers/producers) looking for a few more members. At least 4 TTRCA members were present, and some TRIX items were on sale. I could pass on any enquiries.

Re Peppercorn. Yes this is the German Pacific chassis etc., as our French member quotes fitted with the British outline plastic body and the F/Scotsman rear bogie. The reason for its use (apart from the excellence of its construction) was simply one of finance, Messrs Courtaulds, were not, it seems, too generous towards its British Trix subsidiary.

The same financial considerations also apply to the Flying Scotsman chassis, this is simply derived from the Britannia. Remember also, Courtaulds "killed-off" the BRUSH type 4 and the BR Mk11 range of coaches.

The above were given Cat.nos. as follows-
1170 Brush Sulzer Type 4 - Original livery.

1171 " " " " New livery.

1906 BR Mk11 Coach 2nd class open.

1907 " " " "

1933 Pullman Parlour Car 1st class. ...continued

1934 " " " Brake Car. on page 9.

Although this subject has been tackled before, newer members may not have seen the original article, and a fresh look is always worthwhile as a thorough overhaul can transform the running of a.c. locos without resort to radical surgery!

The a.c. motor is more complex than the later permanent magnet d.c. motors and gained in my view, an unjustified reputation for unreliability in spite of its 22 year production span. Certainly it is less tolerant of neglect or abuse, but correctly cleaned, adjusted and lubricated it will run reliably for long periods.

It may help to recap on the reasons for the relatively complex mechanism which would nowadays be considered too expensive to produce regardless of the reliability issue.

- (a) The system had to be able to work on 12 volt d.c. accumulators where no house mains were available or on 14 volts a.c. via a transformer from the mains, as suitable rectifiers were unavailable in the early thirties. Higher voltages were out on safety grounds.
- (b) High-powered rare earth permanent magnets did not exist and limited space precluded the use of available types, hence an electromagnet had to be used for the motor field.
- (c) To reverse the direction of a motor it is necessary to reverse the polarity of the field magnet with respect to the armature. With a wound field coil, obtaining its supply from the rails like the armature, reversal of the loco supply does not reverse the direction of running. It is necessary to reverse the connections of the field magnet with respect to the armature. Trix achieved this very ingeniously by means of a built-in reversing shaft, turned by the remote controlled reversing magnet - necessity being the mother of invention!

Secondhand locos seem to come in two categories :-

- (1) Hardly run because of initial maladjustment or early loss of interest by young owner.
- (2) Loco has failed in service and aforesaid young owner has not appreciated the finer points of the instruction book or sought the help of the Service Dept, but bent every contact blade in sight and broken a few wires in the misguided belief that he was going to effect a repair.

In either case I do a standard overhaul, basically in accordance with the TTR Instruction Book, for which these notes are not intended as a substitute. As with any book, however, there are some questions unanswered and extra points to watch for with locos which have seen long service.

It can be valuable to understand the electrical arrangement of the TTR motor, especially when broken wires are encountered. Referring to Figure 1 it may be seen that there are two distinct parts to the circuit. The first is the reversing magnet which is wired directly across the loco supply. The second is the motor, which is a series-connected "universal" type in which current flows from the insulated (live) collectors, through the field magnet via 'F' to one side of the reversing shaft.

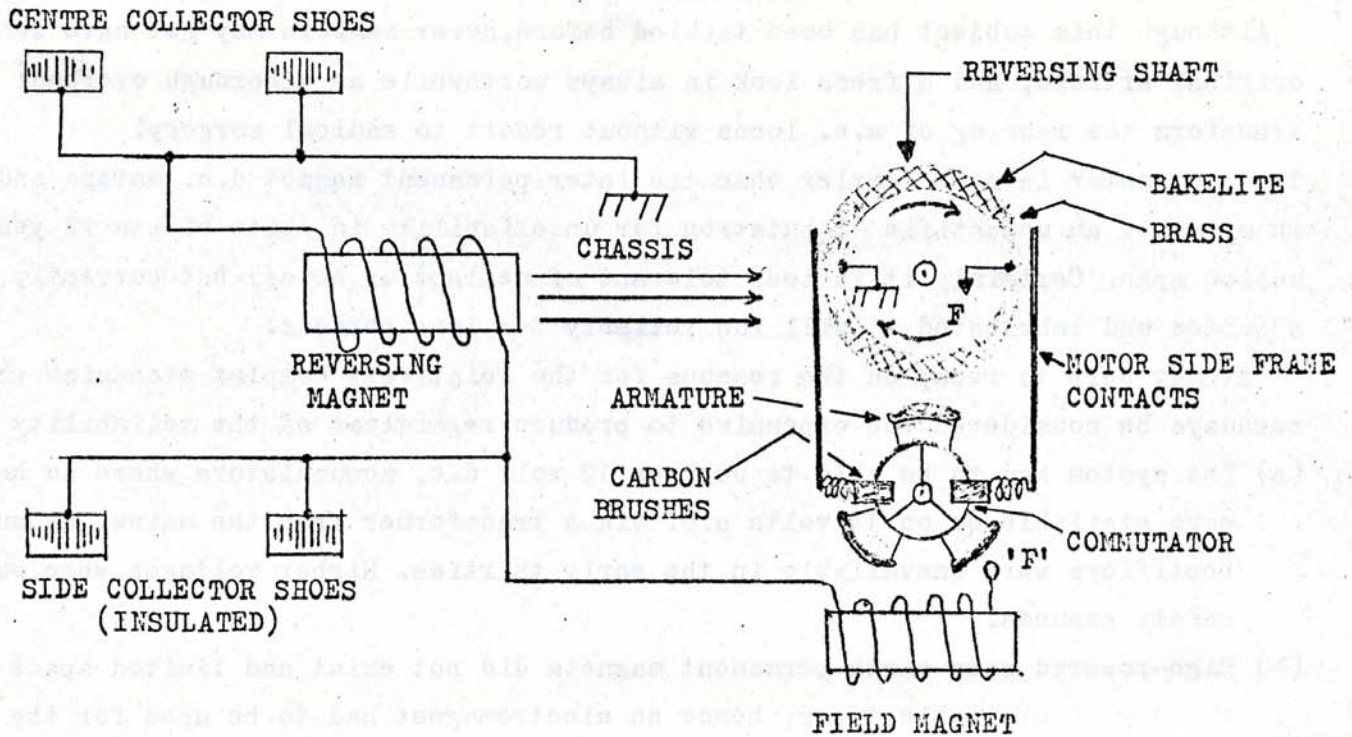


Fig. 1 ELECTRICAL ARRANGEMENT OF TTR A.C. MOTOR

It then flows via the motor side frame and one carbon brush and commutator segment to the three series-connected armature coils. It emerges via another commutator segment to return to the chassis and centre collectors through the other carbon brush, side-frame blade and reversing shaft. A break in either circuit will cause failure of the loco.

The controller direction key breaks the loco supply when depressed, allowing the reversing magnet armature to fall. As the key is released the speed control rheostat is momentarily shorted, applying the full 14 V supply to the magnet. The armature is pulled in causing the reversing shaft to revolve $\frac{1}{4}$ turn, driven by the pawl and pawl-wheel. When the key has been fully released the rheostat is no longer shorted and the loco's current supply depends on its setting.

The armature will remain attracted for any rheostat setting, only falling away when the direction key is operated or the supply is broken through dirty rails etc. Direction is thus unaffected by normal slowing down and stopping using the rheostat.

It is important that the loco is always brought to rest by the rheostat. If it is stopped by means of the direction key with the rheostat left fully clockwise, full power is applied to the reversing magnet and may cause eventual burnout of the coil.

As drawn in Fig. 1, the right hand brush is connected to 'F' and the left hand brush to chassis and the loco will go forwards. On the next $\frac{1}{4}$ turn of the reversing shaft the two bakelite sections of the shaft will abut the side-frame contacts and the loco will stop. On the next $\frac{1}{4}$ turn the brush connections from 'F' and the chassis will be interchanged but the field magnet connections remain as before -- hence the loco will reverse.

On the next $\frac{1}{4}$ turn the insulated sections again about the side frame contacts and the loco will stop.

The cycle then repeats itself.

N.B. The 'Scotsman' reversing shaft has only one insulated quadrant and the loco will go forwards on two consecutive $\frac{1}{4}$ turns. On the second of these an extra contact energises an electromagnet in the tender to operate the remote-controlled uncoupler, allowing the loco to continue travelling forwards, leaving the coaches behind.

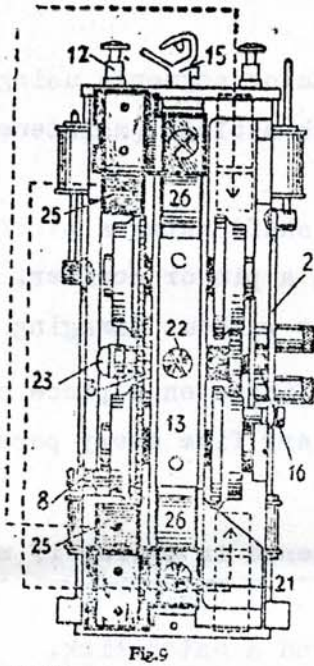


Fig. 9

NOTE.—Diagrams show 0-4-0 mechanism. 4-4-0 mechanism is the same except that no outside shoes or front weight and spring are fitted.

LIST OF PARTS

2. Piston Rod and Crank Arm.
3. Reduction Gear Wheels
4. Driving Wheels
6. Shaft of Reversing Arm
7. Armature of Reversing Magnet
8. Crank Shaft
11. Hinge Pin
12. Buffer
13. Cover for centre Collector Shoes
14. Carbon Brush Caps
15. Coupling Hook
16. Armature Bearing
17. Chassis Frame
19. Middle Contact Spring
20. Outer Contact Spring
21. Screw for Side Collector Shoe
22. Screw for 13
23. Shouldered Screw for Reduction Gear
25. Collector Shoe (side)
26. Collector Shoe (centre)
28. Screw for Reversing Magnet
32. Laminations of Reversing Magnet
34. Weight Spring
35. Coil of Reversing Magnet
35. Screws for Motor Side Frame
37. Bearing for Reversing Ratchet Wheel
38. Reversing Ratchet Wheel
40. Coil of Field Magnet
41. Motor Side Frame
43. Pawl of Reversing Arm
44. Reversing Arm
45. Contact Shaft
46. Laminations of Field Magnet
47. Weight
48. Armature
49. Pawl Return Spring.
50. Anchor Plate.
51. Contact Shaft Retainer.

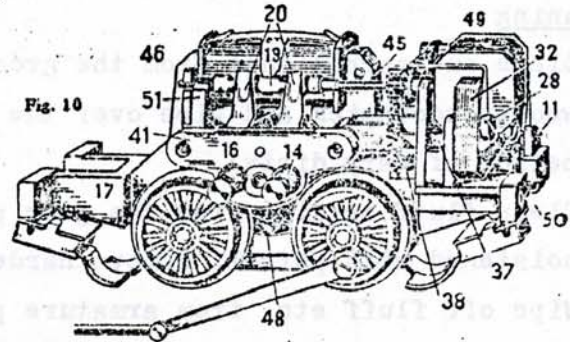


Fig. 10

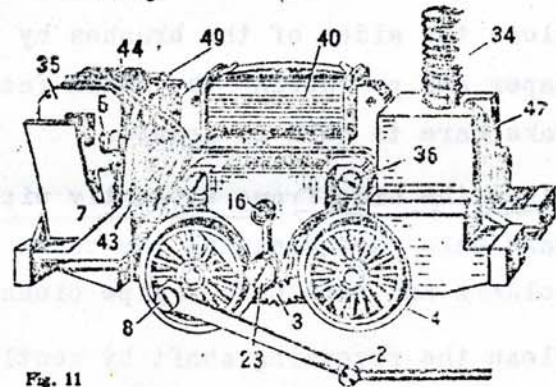


Fig. 11

Fig. 2 MOTOR ASSEMBLY DIAGRAMS

Dismantling (see Fig. 2)

1. Release the motor by undoing the crankshaft bolts (8), the countersunk screws at the rear of the cab, and the buffers at the front of the body (0-4-0 tender loco). Note that the front of the motor on 4-4-0's is secured by the brass screw holding the bogie and that on tank locos the rear of the motor is secured by the rear buffers. The latter are identifiable by the fact that they have longer threads than the front buffers. This is important on reassembly.
2. Gently lower the motor from the body, front end first, as the hinge pin (11) is apt to catch on the rear beam of the cab, and lift off the weight (47).
3. Undo the motor side frame screws (35).
4. Remove the side frame (41), easing it off evenly with a gentle rocking motion, taking care not to bend the spring blades (20). The brushes should spring free and the brush caps (14) should be removed. The reversing shaft retainer assembly (51)

should also come away with the side frame.

5. Remove the reversing contact shaft (45).
6. Turn the armature (48) until one of the poles is centered between the wheels and carefully lift out.
7. Undo the reduction gear screw (23) and remove the reduction gear (3).
8. Undo screw (28) and remove the pawl return spring (49).
9. Undo screw (6) and remove the reversing arm and pawl assembly (44) and (43).
10. Remove all collector shoes from motor chassis.

Cleaning

- (a) Clean out carbon dust from the grooves between the commutator segments using a wooden toothpick and wipe over the commutator surface with a cloth (moistened in petrol if very dirty).
Clean fluff or dirt from the gear pinion on the armature shaft using a stiff brush moistened with petrol. Remove hardened oily deposits with a pin or scriber.
Wipe off fluff etc. from armature poles as far as possible without damaging wires.
 - (b) Clean the sides of the brushes by rolling them beneath a finger on a piece of paper and by rubbing the brush face lightly on paper or very fine emery paper. Take care to hold it square.
 - (c) Clean the side frame by gently wiping with a cloth (moistened in petrol if needed). Take care when cleaning the contact springs not to bend them. Clean the brush holders and caps with a pipe cleaner or cloth wrapped round a matchstick.
 - (d) Clean the reversing shaft by gently wiping with petrol-moistened cloth. Also clean the shaft retainer and contact spring assembly (51).
 - (e) Clean the reduction gear and screw with a petrol moistened cloth. Pick out any hardened oily deposits from the roots of the gear teeth with the aid of a pin and stiff brush.
 - (f) Clean the reversing arm and pawl assembly (44) and (43) by rinsing in petrol and allowing to dry. When oil deposits are successfully removed the brass pawl must be completely free on its pivot. Test this by holding the reversing arm in one hand, lifting the pawl with the other hand and ensuring that it falls freely under gravity. The screw (6) must also be completely clean.
 - (g) Clean the collector shoes and centre collector cover (13) with a cloth. Temporarily replace the centre collector cover to avoid accidentally damaging the leaf springs.
 - (h) Thoroughly clean the chassis frame (17) with a brush, especially where dust accumulates below the reversing magnet and around the laminated pole-pieces of the field coil (46).
 - (i) Clean the wheels inside and out with a stiff brush, removing any hardened oily deposits at the roots of the gear teeth with a pin. Ensure the axles turn freely.
8. to be continued in the next issue.

PRECISION ENGINEERING - IN CARD

★ Full Colour

★ Scale Models

Re-create the Golden Era of Transport

TRIX TRAINS

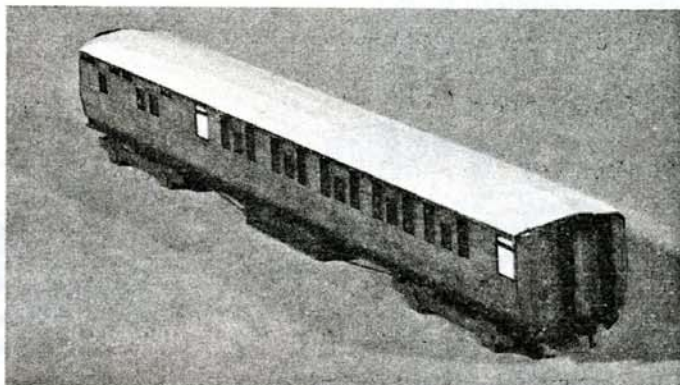
'00' GAUGE COACHES

- Cat. No. C1 L.N.E.R. GRESLEY COACH ALL 1st
- Cat. No. C2 L.N.E.R. GRESLEY COACH BRAKE 3rd (ILLUSTRATED)
- Cat. No. C3 L.N.E.R. GRESLEY COACH 1st/3rd Compo

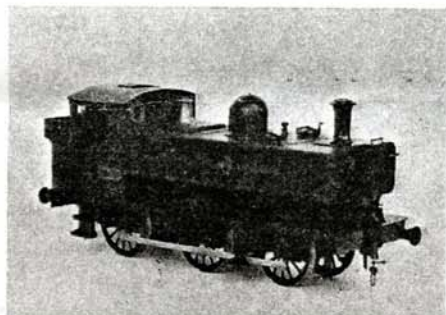
Perhaps the most distinctive items, next to the locomotives possessed by the famous 'Flying Scotsmen' was it's coaching stock.

Designed by Sir Nigel Gresley, these coaches with white, scope ended roofs, teak panelled sides and connecting corridors, were the standard type in use on the L.N.E.R. for almost all its life.

Successfully capturing the spirit of an age.



TRIX 1800 SERIES



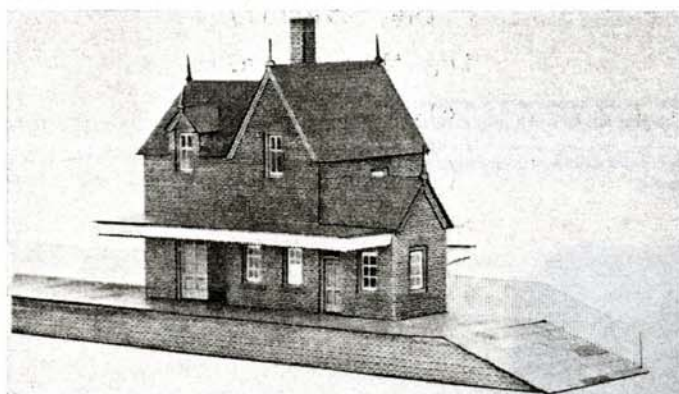
Cat. No. SC7 G.W.R. Pannier Tank Locomotive



Cat. No. SC1 Preston Tramcar

MINITRIX

'N' GAUGE TRACKSIDE MODELS



Cat. No. N1 Station Building

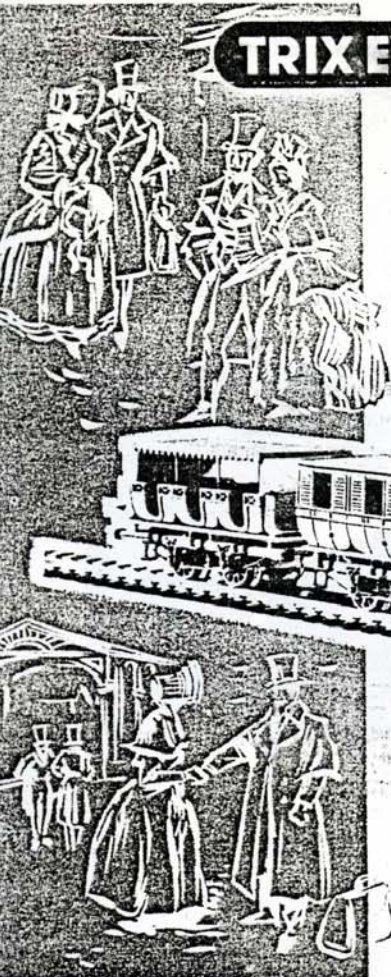


Cat. No. N3 Signal Box & Footbridge

Manufactured in England

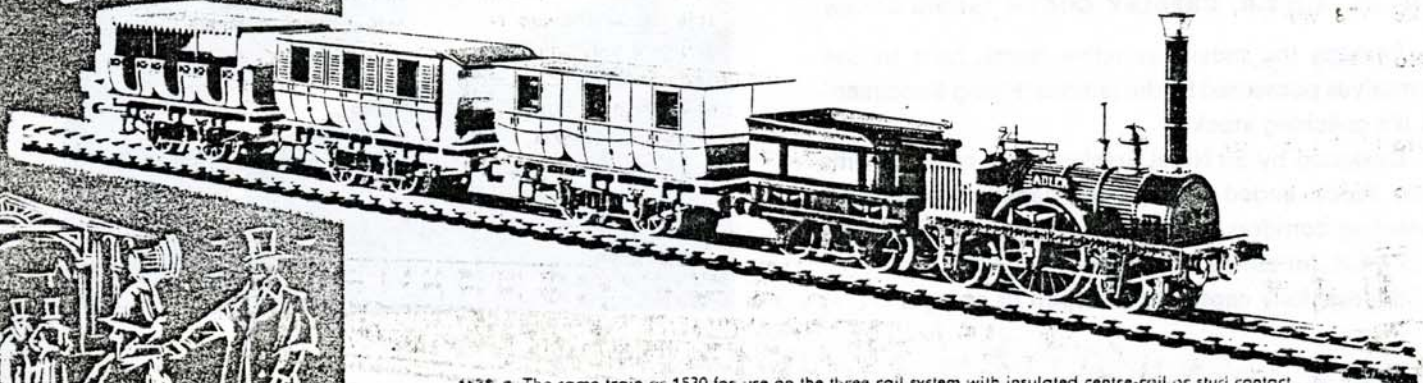
Exclusively for the Trix Trains Division of Thernglade Ltd. Wrexham

TRIX EXPRESS



1530 • Model Train "Der Adler" for D.C. supply • an excellent reproduction of the first train to run between Nuremberg and Furth • Locomotive with tender, closed passenger coach 1st class • Closed passenger coach 2nd class; covered passenger coach 3rd class • Motor is fitted in 1st class passenger coach, coupled to loco, fitted with TRIX EXPRESS standard Permamotor • Rolling stock in plastics, diecast chassis on motor powered coach • Super detailed, a "must" for every enthusiast • Train length approx. 32.5 cm=13 inches • Scale 1:65 • Though smaller than HO the difference in size is only noticeable to a small degree • Correct reduction gear for slow running effect • Packed in presentation box with transparent cover

Every TRIX EXPRESS and Railway enthusiast will wish to be the proud owner of this model of the first German train

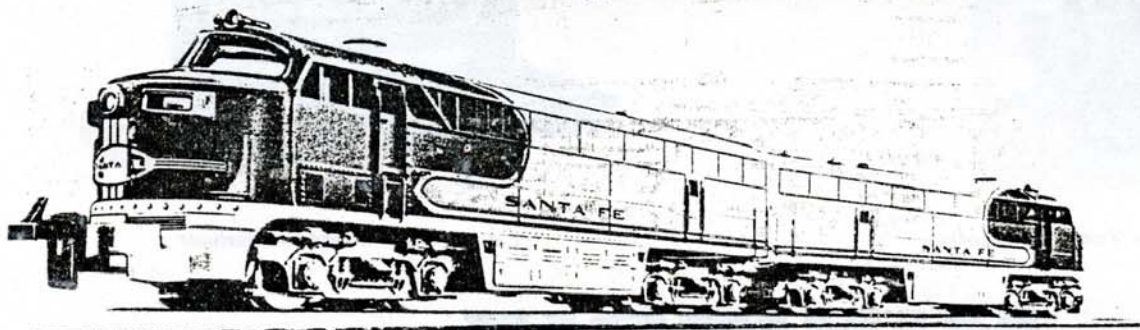


1531 • The same train as 1530 for use on the three rail system with insulated centre-rail or stud contact, in conjunction with our control 5599 or 5549 • Should an A.C. speed control be already available, our unit No. 5530 (see page 26) will be required

1532 • The same train as 1530 but for the German two-rail system only. Track current max. 12 volts D.C

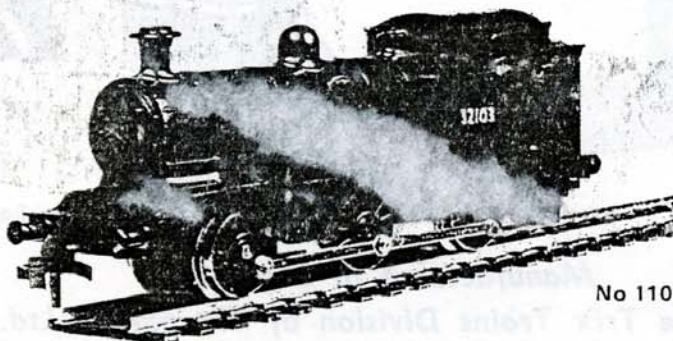
1533 • The same train as 1530 for other two-rail systems (i. e. NMRA etc.)

TRIX EXPRESS



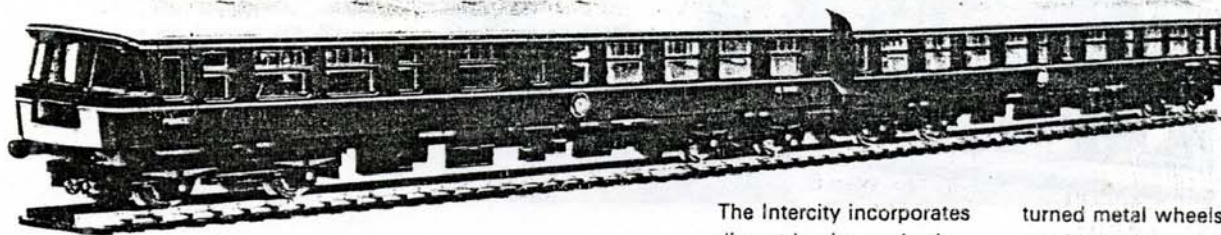
2264 • Diesel locomotive for D.C. systems • Model of the American "Santa Fe" locomotive by Fairbanks Morse • Twin unit • The trailing bogie of the motor unit is powered • fitted with plastic traction tyres • remote control for forward and reverse • Working headlights on motor unit • Plastic • Correctly coloured • An interesting model • Length approx. 41 cm=17 inches For use with this U.S. Diesel unit we call your attention to our series of superdetailed American Freight Cars which are illustrated on pages 40 and 41. The colourful effect of an American Freight Train adds realism to any layout

"E.2" 0-6-0 Tank locomotive of B.R. • Die-cast chassis and plastic superstructure • Fitted with Trix Perma motor and interference suppressors • Colour Black • l.o.b. 5" approx.



No 1108

Intercity



No 1178 with lights

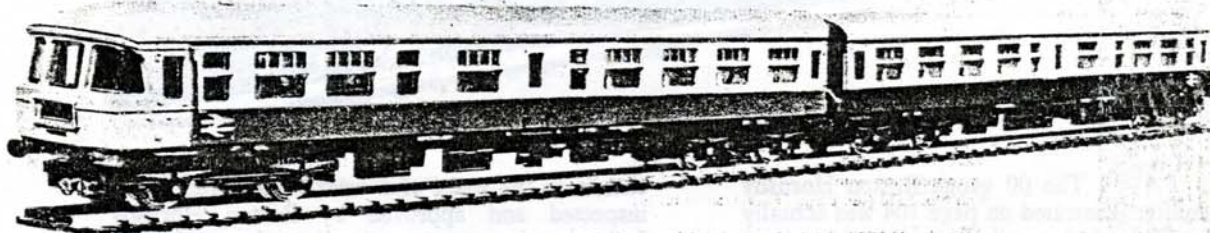
No 1175 no lights

No 1177 with lights

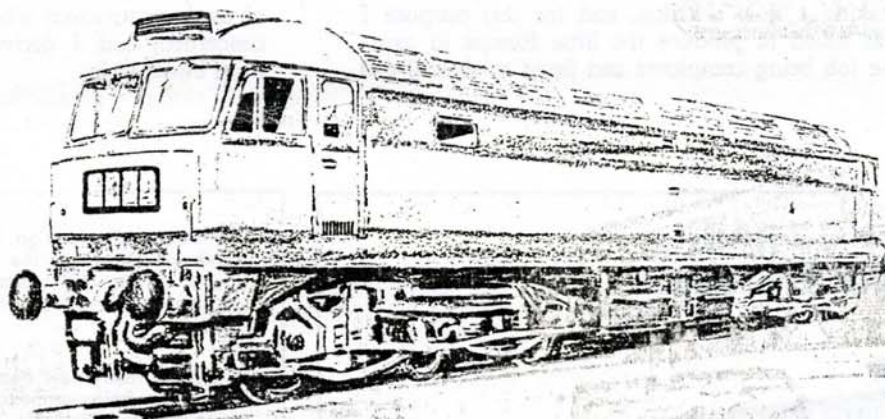
No 1174 no lights

The Intercity incorporates diecast bogies • plastic side frames and superstructure fully painted and printed • Four wheel drive on motorbogie • three pole motor • interference suppressors • traction tyres • interior •

turned metal wheels • moulded windows • yellow warning panels • route-indicators • Length 20 inches

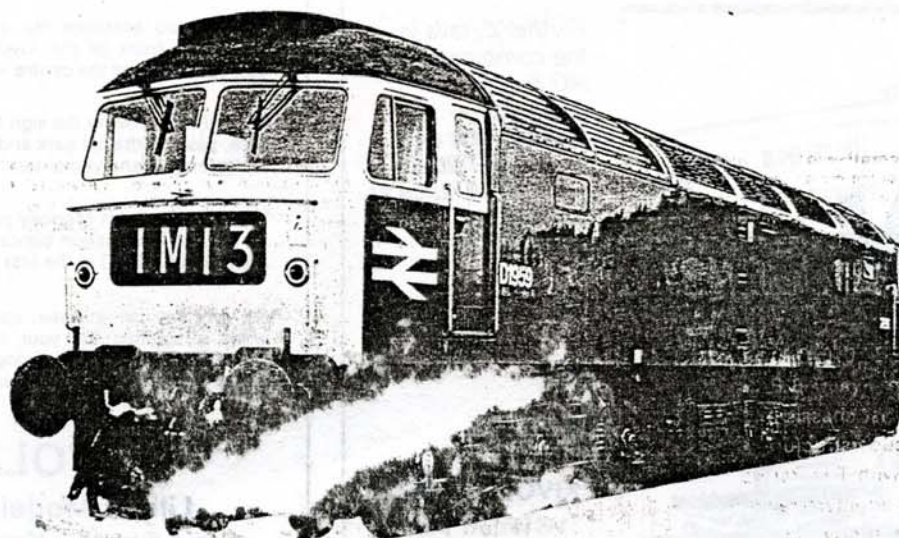


Model of the Brush-Sulzer, Type 4 2750 h.p. Diesel Electric locomotive in the original livery • Diecast chassis • superdetailed plastic superstructure • precision turned metal wheels • traction tyres • Motor fitted with interference suppressor • working headlights • yellow warning panels. Three axle drive on motorbogie. Length over buffers 10 inches.

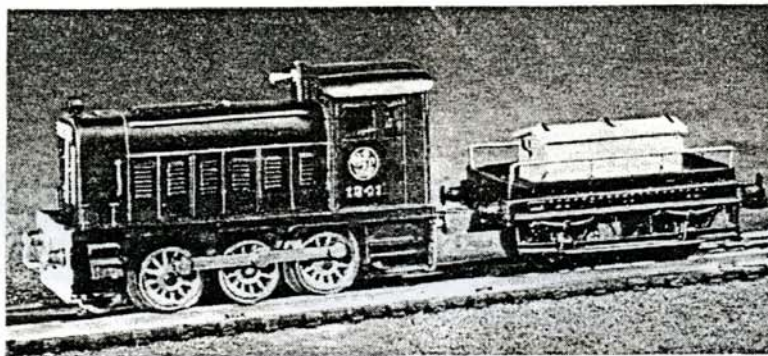


No 1170

The Brush Type 4 in the new livery of British Rail.

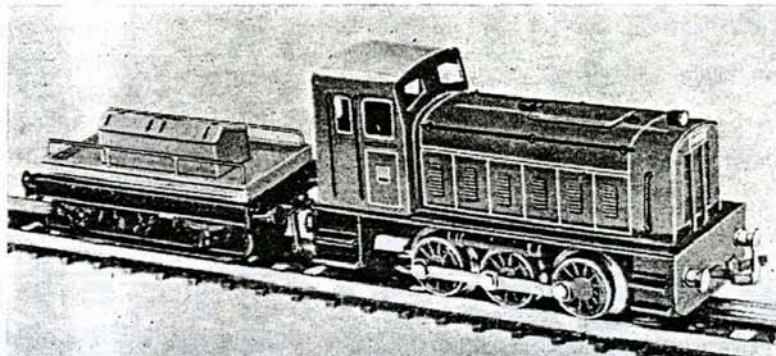


No 1171



(Left): Built in a weekend. The author's card mock-up of a Ruston Hornsby Diesel Shunting Locomotive, constructed for Trix Limited and mounted on a Trix chassis. All loco. detail is from matchstick, fusewire and pins. The shunter's truck is a commercial product.

(Right): How the finished product, the smart little OO Gauge Trix Diesel Shunter appeared in its production form. Slight variations facilitate the die-casting of the body.



The OO gauge Ruston Hornsby diesel shunter illustrated on page 104 was actually built for Trix Ltd., well-known manufacturers of model railway equipment, as a mock-up for their production model, which made its appearance some months later. They were anxious to assess the merits of several prototypes before making a final decision, and for this purpose I was asked to produce the little Ruston in card; the job being completed and fitted to their 0-6-0

chassis in the space of a week-end. After being inspected and approved by Ruston Hornsby Ltd., the mock-up was passed to the production department, and after certain modifications to permit of die-casting the body, the final version appeared as illustrated on the same page. This little episode does, I think, illustrate the value of card construction where prototype models are concerned, and I derived considerable pleasure from building it.

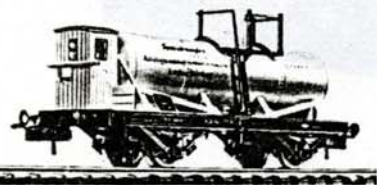
TRIX HO 2-RAIL INTERNATIONAL



Three more models with superb details & exquisite printing of all inscriptions.



Further details in the combined TRIX HO & N gauge catalogue — German text only — Price £1.20, or see the full range at the KIVOLI CENTRE.



KIVOLI CENTRE
1 Station Yard,
Bala.
Tel: 0678 520753

Exhibitions come and go, but LILIPUT MODEL RAILWAYS' own exhibition known as the KIVOLI CENTRE is open all the year round. Nearly 1500 square feet of space is packed with an abundance of models suitable for HO-OO, HOe, HOm, N & Z gauges.

There are many new items on show and needless to say, the displays are being continuously updated with the latest releases as these become available. As we enter the third year of this permanent exhibition which is a Toy Fair in miniature, why not pay us a visit whilst on a day out passing through or during a holiday; even a special journey may not be a waste of time. Though we may not be in your immediate vicinity, we are nevertheless not that far away.

There is no entrance fee and space permitting you can park directly in front of the Kivoli Centre — free, or in the town's carpark adjoining the centre — not free . . .

To find us — follow the sign to the Industrial Estate after reaching Bala, passing the car park and then the Green on your left, turn left and left again and you enter the old Station Yard.

We are open from Monday to Friday 9 a.m. to 4.30 p.m., and for up to date information concerning weekend openings please ring Bala (0678) 520753 in the first instance.

So why not call and see, compare, judge and eventually decide what is suitable for your requirements. This Centre — your reference Centre — displaying the products of some of the leading manufacturers of model railway equipment, is here to help you.

KIVOLI CENTRE
Liliput Model Railways UK Ltd.
1 & 4 Station Yard, Bala, North Wales.
Telephone: (0678) 520753

1935 Pullman Parlour Kitchen Car.

What else Courtaulds "killed-off" is anyones guess.

But do remember, the A2 by Trix is still the only R.T.R. available, and, it is, delightful!

Re AC Locos. These (remaining stocks) were available up to the move from Birmingham to Wrexham when, for some reason, all remaining stock along with some tinplate rolling stock were transported to Wrexham only to be disposed of by using a JCB to dig a large hole and the locos etc tipped in!

These items now repose beneath the concrete of a factory floor somewhere on the Wrexham Industrial Estate. Somewhere along the line, all early tools, dies, etc that had been rusting away were "thrown away". What a pity, we are on the scene 25 years too late, longer even than the "Schools Class!".

John Atkin,

, Mkt.Rasen, Lincs.

I would like to add a few comments to Myke Barritt's letter in TTRCA Gazette No.35. E.W.Twining was certainly part of the circle of talented people around Bassett-Lowke, though the exact relationship does not appear too clear today. Mr Fuller's book mentioned in the same Gazette sheds some light on the rather complex business arrangements of the Northampton companies but does not dwell on Twining in any detail. But it would seem that Mr Twining ran his own small firm, working largely for B-L on "one off" handbuilt railwaymodels and architectural models. He was, I believe, an architect by training, and is supposed to have had a major role in B-L's catalogue design and artwork.

As for his TRIX connection, I would add that Twining also wrote a series of articles in "Practical Mechanics" extolling the "Twin Trains" in 1936. In these articles the various drawings mentioned by Myke appeared, including the Pecket & 2-6-0. Also drawings of both a prototype "Manyways" and the earlier "TRIXBURG" terminus were offered - for home construction. These notes may indeed form the basis of sections of "Indoor Model Railways" (If the Editor is willing I could arrange reproduction of my "PM"s for inclusion in a future Gazette - Allan H. has just confirmed we have permission to copy).

Now there was a close connection between B-L and "PM" - Mr B-L himself often contributing to its pages. This closeness was, according to Mr Fuller, the cause of the eventual split between B-L and Henry Greenly.

Therefore I would suggest that Twining first became involved with TRIX on the architectural side i.e. designing stations etc. However, when B-L needed someone to write some "puff" on the new product for a tame magazine he could not use H.Greenly-the obvious choice-because of that gentleman's dispute with the magazine in question. So who else could do it-why Mr Twining! And as a result Twining did become involved with TRIX more closely. The 2-4-2 that never was and the proposed G.W. 2-4-0 mentioned in an earlier Gazette both, to me, seem to derive from Twining's ideas.

I hope that is of some interest, Myke, and others, and if anybody out there has more information or comment on this topic, I would be very intrigued to read it - Editor permitting of course.

Tony Stanford,

, Hemel Hempstead, Herts,

TRIX "GET-TOGETHER" AT HILLMORTON, SUNDAY 23rd SEPTEMBER.

11 am to 5 pm. Admission 50p Adults and 25p Children at Hillmorton Community Centre (No.326 Hillmorton Road). RUGBY. REFRESHMENTS.

It is hoped to have TRIX and 'O' Gauge Layouts. Members wishing to book a Sales Table please contact Pete Hislop, Rugby

See page 11 for Location Map.

TRIX TWIN RAILWAY AT SOUTHEND.

Our member Martin Drayson has been invited to exhibit his TRIX TWIN RAILWAY layout at the "Southend Festival of Model Railways" at the Cliffs Pavilion, Southend-on-Sea on the dates below:-

Friday 28th Sept. 6 pm to 10 pm. Saturday 29th Sept. 10 am to 8 pm., and Sunday 30th Sept. 10 am to 6 pm.

Martin will be pleased to see members and British, American and German Trix items will be running at various times.

At the request of our new members, here is a list of Association members in the City of Birmingham, West Midlands, Coventry and Kidderminster Areas.

37 D.M.Evans, SUTTON COLDFIELD, W.Midlands.
49 D.A.Johnson, Harborne, Birmingham, 17.
72 N.Ashfield, Penns Lane, SUTTON COLDFIELD, W.Mid.
92 P.D.Sargeant, HALESOWEN, W.Midlands.
93 C.C.Thornburn, ERDINGTON, Birmingham, 24.
144 B.Waite, KIDDERMINSTER, Worcs.
181 F.W.Foxall, Cradley Heath, W.Midlands.
202 C.Newman, SUTTON COLDFIELD, W.Midlands.
213 M.Preston, Park Hill, COVENTRY.
226 R.B.Walker, Binley Woods, COVENTRY.
240 A.P.Corish, WORCHESTER.
247 D.H.Crocker, Greenhill, KIDDERMINSTER, Worcs.
256 J.Leedham, Cleobury Mortimer, KIDDERMINSTER, Worcs.
278 T.D.Holt, WOLVERHAMPTON, W.Midlands.
280 R.Keay, Bournville, Birmingham.
290 R.H.Hayes, CASTLE BROMWICH, W.Midlands.
291 M.Smith, MOSELY, Birmingham.
297 R.J.Saint, Beakes Rd, Bearwood, WARLEY, W.Midlands.
307 Rev.D.Eve, KINGS NORTON, Birmingham.
317 D.Holder, Solihull Lodge, SHIRLEY, W.Midlands.

A D V E R T I S E M E N T S

FOR SALE: A quantity of Trix 3-rail Fibre track has been kindly donated to the Trix Association by our 2-rail Trix enthusiast from London, Dave Best proceeds to the Spares Fund. The lot consists of 12 straights, 21 small radius curves, 1 Diamond Crossing, 3 large radius curves, 3 Terminal rails, plus 10 assorted short straights and curves. The track is in used condition (but not rusty). Price £2.50 the lot from Allan Hinchliffe (0484) 21187. Also 12 (NEW BOXED) Curves No.1702 £1.50 the one box and a quantity of NEW BOXED Remote Control Uncoupler Rails No.1712 most with instructions £1.50 each available from Allan Hinchliffe address on page 2.

TTR Manyways Station Booklet photo-copied 50 pages with spine binder £2.00 (one only), available from Allan Hinchliffe.

WANTED by new member: Trix Manyways Station Buildings and platforms etc., in reasonable condition. Please write to Ray Urmston, Smoke Rise, Kinnelon, NEW JERSEY.

FOR EXCHANGE: I have TE:20/61 (three different pre-war versions), 20/62, 20/68SH, 20/70, 20/70(marked 28/70), 20/74, 20/78BP, 20/80, 20/81, 20/87, 20/88, 20/91, 20/118, 20/120, 428 ARAL, 20/114, 20/154, 20/157, 20/158, 20/162-3, 20/182, 751, 20/52, 3399; TTR:5/570, 2/601, 607 HINCHLIFFES Pre-war, 2/650, 675 pre-war, 5/661, 653, 666, 2/560, 2/570, 2/580. I require: BING 00 Table Railway (any item in British liveries) and TTR: 2/603 "LOCO COAL ONLY", 5/510, Blue 1/520, olive green 5/520, apple green 4/540, Pre-war 5/567, 5/577, 5/587, 0-6-2 T in green, BR black Hunt, Warship in maroon Mint or near-mint black EMI, Engineer's express bogie coach. I will purchase or exchange with the above items. Gerard A.Maugin, 75013 Paris, France.

FOR SALE: BR blood & custard short bogie coaches, very good condition, 2 only B/End, 1 only 1st class (un-boxed) £2.75 each or £8 for the 3, plus one only Restaurant coach 1/580 in original box £3. Wagons, boxed: 643 Tank wagon, Shell red £2.75, Goods Brake LMS (small lettering) £2.75, Coal wagon, low side 'N' £2.50, Coal wagon, low side 'NE' £2.50, 2 only Open wagon, high sided 'NE' £2.50 each, Box van LMS (small lettering) £2.50, 1 only Bogie-Bolster £2.50. 2 only 472 Controllers £2.50 each, 1 Double Transformer £3,50. 1 only Permanent Way Manual (9th Edition Feb 1950) - O.K. but cover a bit tatty £1.00. D.Baker, Wigmore, Gillingham, Kent.

----- More Advertisements on page 2 -----

TTR TANK WAGONS - 1936-56

	U.D. Green	Esso Yellow	Shell Red	Esso Silver	Shell Silver
<u>Pre-War:</u>					
Small lid (black), platform	/	/	/	?	?
Large coloured lid, platform	E	E	/	?	?
Large coloured lid, <u>no</u> platform			/	?	?
<u>Post-War:</u>					
Coloured lid, no platform; transitional couplings		/	/	?	?
Black lid; standard couplings	/W	/	/W	/ 1 W	/W
Black lid; detailed under- frame, no brake gear	?	?		/ 2	/
Black lid; detailed under- frame, with brake gear	?	?	/N	/ 2 N	/
"Cadet" type - no represent- ation at all of axleboxes or brake gear; turned-down axles	?	?	/	/ 2	E

Ladder is always black.

/ I have in my collection
? Do these exist....? - seems doubtful
(Blank) Information needed.

A sub-variety is possible in all cases, according to which side the ladder is fitted; the small print at the bottom of the tank is different on each side.

- 1 Fleet number 1591
- 2 " " 2591
- W Axlebox with "wings" at bottom
- N "Needle" bearings (turned-down axles)
- E Reported to exist (I have not seen myself)

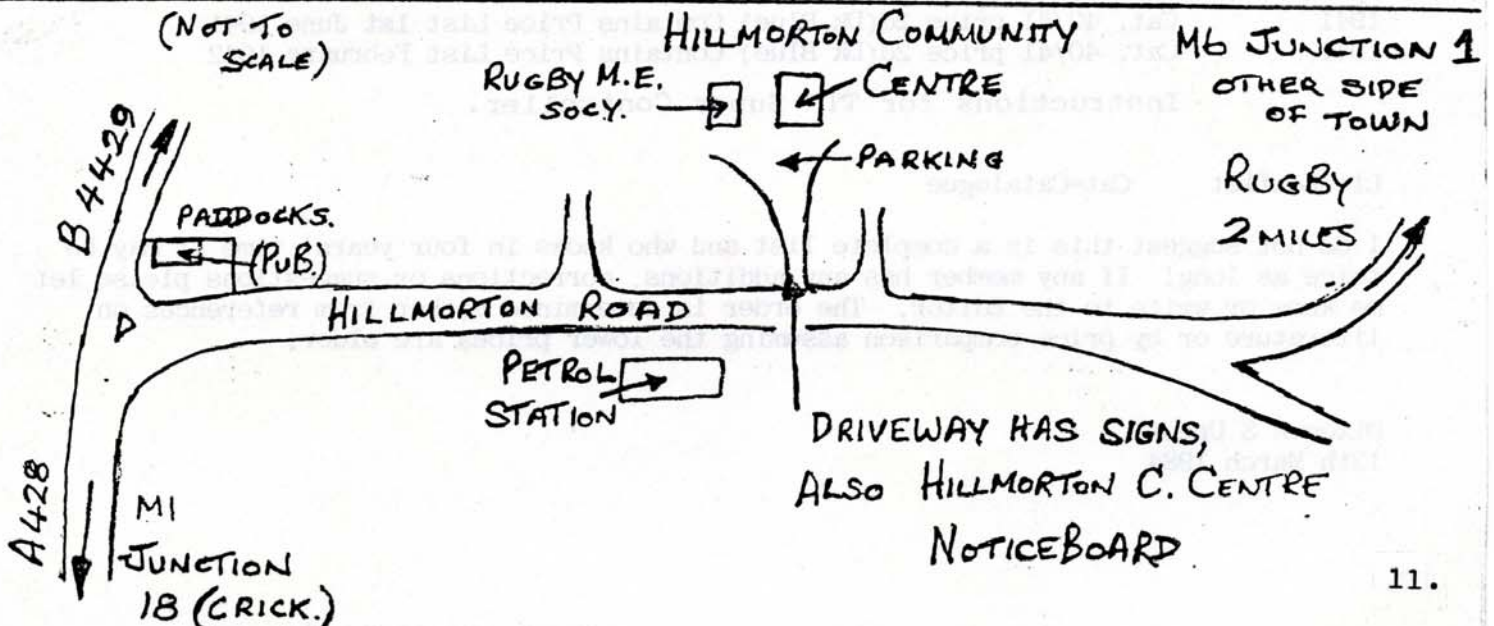
(CCT: 11.83)

There are still some gaps where I lack information, and if anyone can fill these or provide anything more, I shall be very pleased to hear from them.

Chris Thornburn,

Erdington, Birmingham,

LOCATION MAP FOR THE HILLMORTON GET-TOGETHER ON SUNDAY 23rd SEPTEMBER 1984.



TTR Literature List (Revised) Part 1

Four years on, from TTRCA Gazette 20 Summer 1980, the prospect of compiling another list of Trix literature appeared a mammoth task, and one which I have been avoiding for some time. Thanks to the response of several members to my last appeal I have decided to make a start. The list now is an accumulation of information given by many members over the past four years and I am particularly grateful to those who have sent original literature to me.

For the first epistle I have confined the list to pre 1946 material only. I have not listed the different editions of the Permanent Way Manual of which there were six up to May 1941, or the Many Ways Station Sets Book of which there were three. I have also confined myself to English printed matter although there is obviously literature of German and French origin. I have also avoided listing Bassette Lowke material unless it is solely 'Twin Train'. With these qualifications the list I have is as follows:

1936	Leaflet/Booklet (Red)	Here Comes One of the Wonderful Twins.....
March 1937	Leaflet/Booklet	The Bassette Lowke Twin Train Table Railway
1937	Free 12 Page Booklet	Many Ways Station Sets
1937	8 Page Booklet (B & W)	Permanent Way Formations and Units
1937	Double Sided Sheet (Blue)	TTR The Greatest Little Train in the World
June 1937	Booklet 1st Edition	TTR Permanent Way Manual
Sept 1937	Booklet 1st Edition	Instructions For Use
1937	Catalogue 2d	1937/38 Trix Twin Railway
1937	Catalogue 2d	Bassette Lowke Twin Train Table Railway
1937	Sheet Single Sided (B & W)	'The Southern Electric' Latest Twin Train
1937	Special Instructions	for Southern Electric Train No.5/375
1937	Leaflet (Mauve)	Rail Formations
Nov 1937	Booklet 1/- 1st Edition	TTR Many Ways Station Sets
Nov/Dec '37	Gazette No. 1	
Jan/Feb '38	Gazette No. 2	
1938/39	Special Catalog	For American Market
Spring '38	Gazette No. 3	
1938	8 Page Yellow Booklet	True to Time & Scale
1938	8 Page Yellow Booklet	Automatic Uncoupling
1938	Double Sided Sheet (Brown)	TTR The Greatest Little Train in the World
Nov/Dec '38	Gazette No. 4	Contains leaflet Questionnaire
1938/39	Catalogue Price 2d	
Spring '39	Gazette No. 5	Contains Square Deal leaflet (Red)
July 1939	Booklet 2nd Edition	Instructions for Use includes Pacifics
1939	Lge Folded Lft(for Dealers)	Speed up your Model Railway Sales
August 1939	8 Page Yellow Booklet	And Now the Coronation Scot
August 1939	Single Sheet (B & W)	Instructions for Electric Remote Control Points
1939/40	Cat. Price 2d (Blue)	Contains 39/40 Price List
Nov 1939	Lft. sent with above Cat.	To all registered Trix Enthusiasts
1939	Single Sheet	Instructions for erecting span with roof
April 1940	Price List	
1941	Cat. 40/41 price 2d(Dk Blue)	Contains Price List 1st June 1941
1941	Cat. 40/41 price 2d(Dk Blue)	Contains Price List February 1942

..... . Instructions for TTR Super Controller.

Lft=Leaflet Cat=Catalogue

I do not suggest this is a complete list and who knows in four years' time it may be twice as long! If any member has any additions, corrections or suggestions please let me know or write to the Editor. The order is determined either from references on literature or by price comparison assuming the lower prices are older.

Dixon R S Upcott
13th March 1984

To the Treasurer.,
Mr Allan Hinchliffe,

Birkby,
HUDDERSFIELD.

Membership renewal £6.00
Overseas members £8.00
(International Money Orders and Giro
cheques valid in Sterling accepted).
For the 2 YEAR PERIOD TO INCLUDE
TTR GAZETTES Nos: 37 to 44

I enclose a cheque / P.O.
for.....membership renewal.

Name.....
Address.....
.....
.....
.....
.....

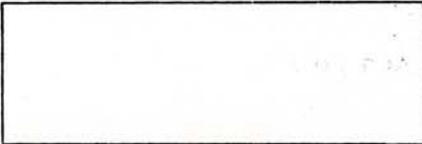
TRIX ASSOCIATION TINPLATE PRIVATE OWNER WAGON BODIES.

I would like to order.....Private Owner Bodies
for which I enclose a £1 deposit for each Body ordered.

I enclose a cheque / P.O.....

The "Authentic" name I suggest is:

Name.....
Address.....
.....
.....
.....
.....



3 Colours, a rough idea of the lettering would be of help.
I would like a TTR Collectors Association Named wagon Body (indicate Yes or No).
Order form and remittance to Allan Hinchliffe.
N.B. If there is insufficient response to place a large order, any money received will be
returned to the sender.

TRIX REPLICA BOXES.

To: David Johnson, Tel:

Harborne,
Birmingham.

Name.....
Address.....
.....
.....
.....

Please supply the following:-

- Locomotive boxes @ £1 each
- Long Coach boxes @ 50p each
- Short Coach boxes @ 40p each
- American Short " @ 40p each
- Wagon boxes for @ 35p each
- Short Wheel-base Stock
- Long Wheel-base Stock

Postage 1 . 00

Cheque, payable to D.A.Johnson for £ . enclosed.