

AIRFIX

CONSTRUCTION KIT

B.R. (WESTERN REGION) 92000 CLASS LOCOMOTIVE

NO. 92220 EVENING STAR

On March 18th, 1960, at Swindon, the last steam locomotive to be built for British Railways was named by Mr. Keith Grand of the British Transport Commission, when he unveiled a plaque on a Class 92000 Locomotive No. 92220 *Evening Star*, marking the end of an era begun by Watt, Trevithick and Stephenson, which lasted for over 150 years.

The occasion of the unveiling was best summed up by Mr. Reginald Hanks, Chairman of the Western Area Board of the British Transport Commission, who said of the steam locomotive: "No other machine, in its day, has been a more faithful friend to mankind and has contributed more to the cause of industrial prosperity. No other machine somehow is so human and so gentle, yet, when unleashed, is capable of such prodigies of strength—nothing quite so graceful in action and nothing quite so romantic. Those of us who have lived in the steam age of railways will carry with us always the most nostalgic memories."

It is sad to realise that the old steam locomotive is on the way out, but we should welcome with open arms the new diesel and electric traction units which is the new and impelling force of the world's railways, and not try to retard progress, as happened in the early days of steam.

It is true to say that the diesel and electric prime movers have inherited a glorious past, and all lovers of railways will pray that the new men and machines will combine to ensure an even more glorious future.

For the *Evening Star* there will be no breaker's yard when her days of toil are over, as she will be retired to Swindon's own Railway Museum.

The leading dimensions of this type of engine are as follows:—

Length over buffers ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	66 ft. 2 in.
Driving wheels ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5 ft. 0 in. diameter
Cylinders (2), diameter by stroke ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	20 in. x 28 in.
Tractive effort ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	39,667 lb.
Weight of engine and tender in working order ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	139 tons 4 cwt.
Maximum speed ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	70 miles per hour

YOUR AIRFIX MODEL

This Locomotive model embodies virtually all the detail and moveable features of the actual Locomotive and has been designed to fit on standard OO and HO track. (16.5 MM).

INSTRUCTIONS

In order to make this model work correctly, the following points should be observed:

- Notice that most parts are identified with a number or letter which is either stamped on the back, or in the case of small pins, on the ends.
- Examine pieces and remove any excess plastic with a special knife or razor blade.
- Use only Polystyrene cement when building the model and apply only to the inside surfaces. Do not get cement on the hands, as you may smear and spoil the outer surface of the model.
- Special care must be taken when cementing pins into position, for no cement must be allowed to get on to the moving parts. To overcome this problem we recommend the following be adopted:—
 - Deposit a small drop of cement on the end of a piece of wire or pin.
 - Push the end of the wire into the hole in which the pin must be fixed. This will leave a small deposit inside the hole when the wire is withdrawn again.
 - Place pin through the hole of moving part, and then push into cemented hole.
 - Study assembly instructions carefully to check which hole to cement.
- It is best to have a "dry run," so that you become familiar with the location of all parts before cementing together.
- Study the painting instructions before assembly as certain parts are easier to paint before cementing. Do not allow paint to come into contact with small pins or moving parts.
- Allow cemented parts ample time to dry. This will result in maximum strength of finished model.

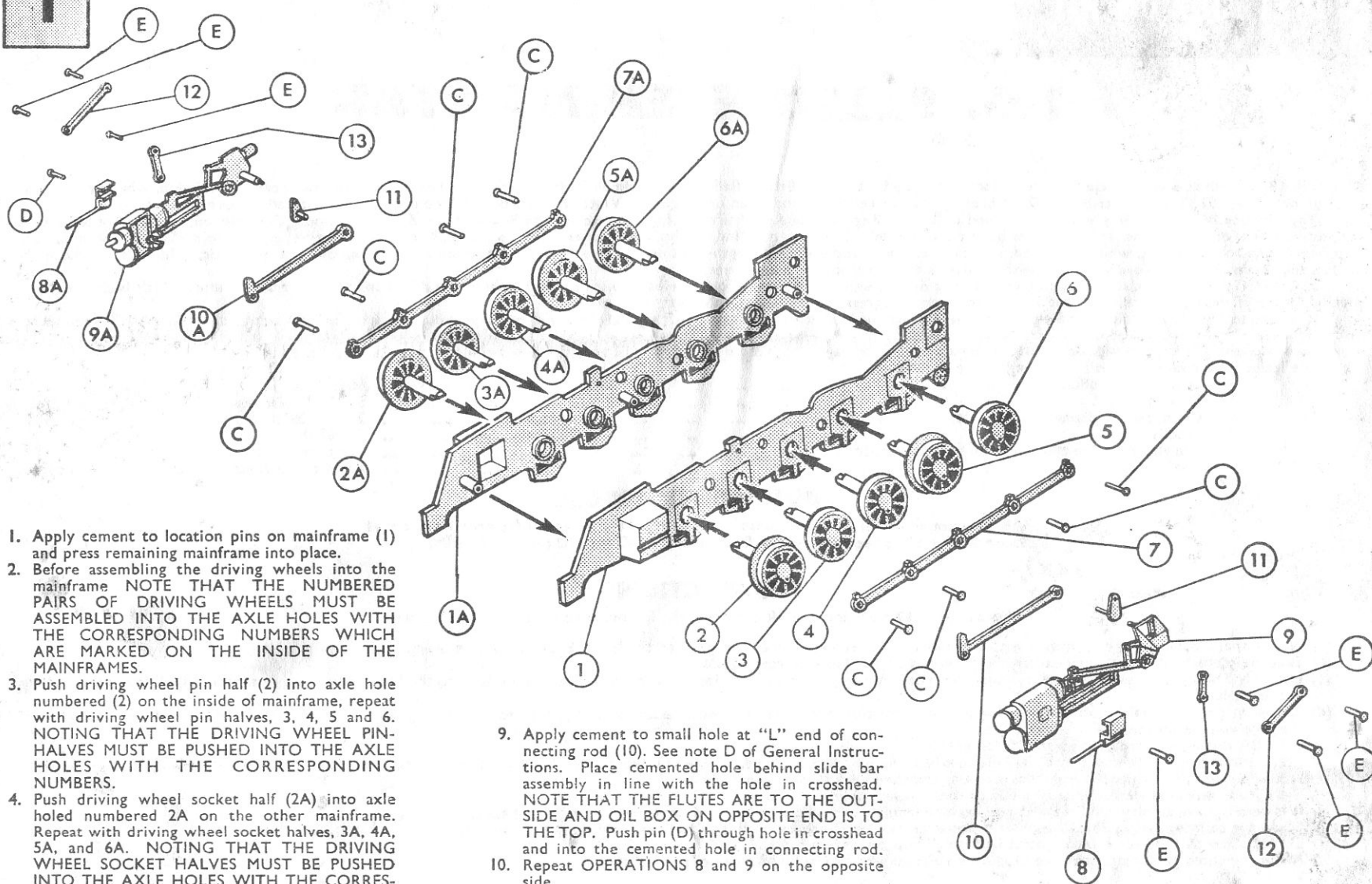
All Airfix are made to a constant scale. All models are designed with the same skill and attention to details so that a large and varied collection can be built up. Each model is true to scale and realistic in relationship to all other models. Other fine Airfix Construction Kits are available in various series such as Historical Ships, Modern Ships and Famous Warships 1 in. to 50 ft. (1/600), 1/72 Aircraft, OO Trackside Houses and Accessories, 1/32 Vintage Cars and 1/12 Model Figures. A list of the many other Airfix models which you can make will be found on a slip in this package.

INSTRUCTIONS

PAINT ALL DETAILS AND LET DRY BEFORE ASSEMBLING (SEE SECTION 4)
N.B. FOR PAINTING USE "AIRFIX" PAINTS, FOR FIXING USE "AIRFIX" POLYSTYRENE CEMENT.

1

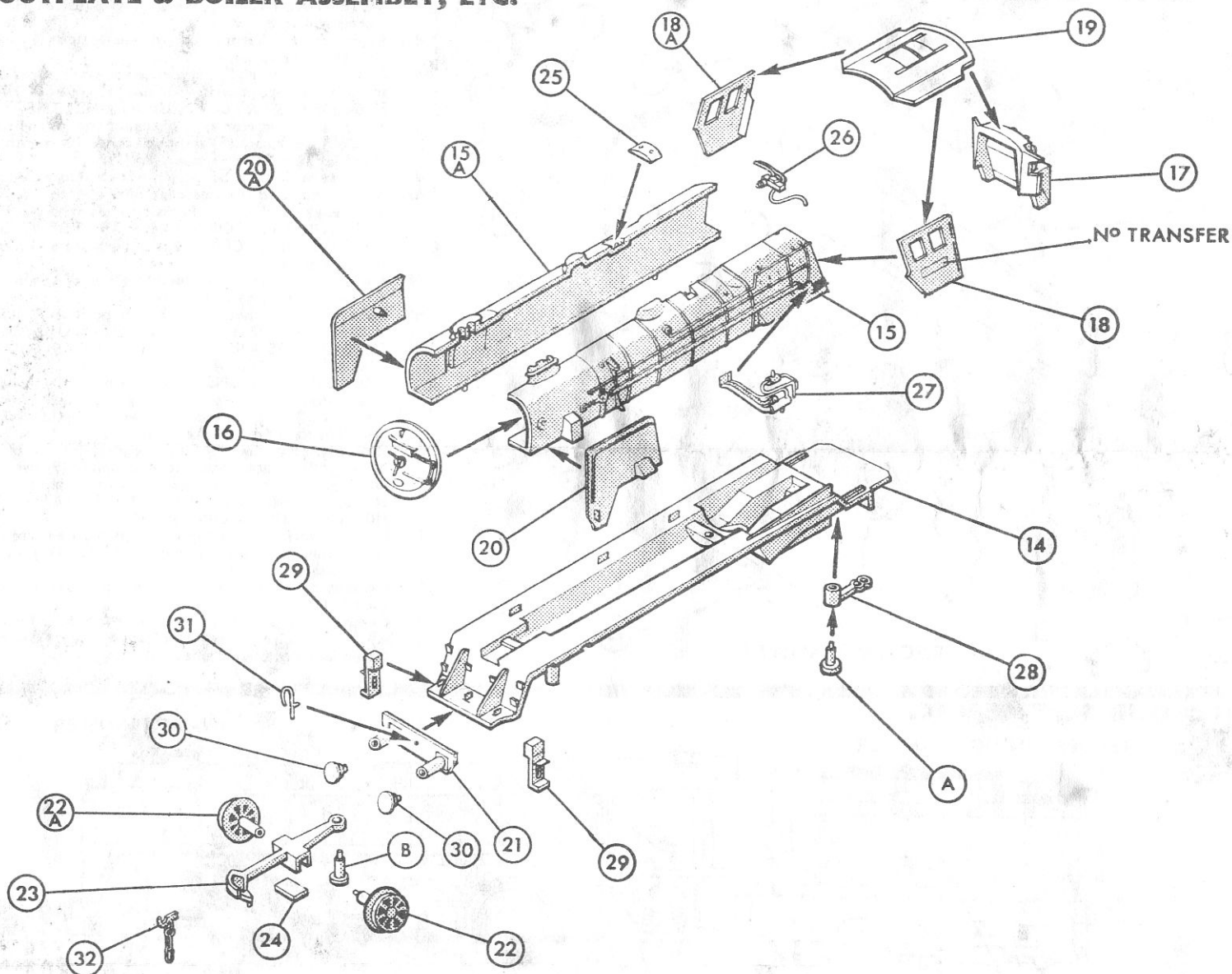
MAINFRAME ASSEMBLY



1. Apply cement to location pins on mainframe (1) and press remaining mainframe into place.
2. Before assembling the driving wheels into the mainframe NOTE THAT THE NUMBERED PAIRS OF DRIVING WHEELS MUST BE ASSEMBLED INTO THE AXLE HOLES WITH THE CORRESPONDING NUMBERS WHICH ARE MARKED ON THE INSIDE OF THE MAINFRAMES.
3. Push driving wheel pin half (2) into axle hole numbered (2) on the inside of mainframe, repeat with driving wheel pin halves, 3, 4, 5 and 6. NOTING THAT THE DRIVING WHEEL PIN-HALVES MUST BE PUSHED INTO THE AXLE HOLES WITH THE CORRESPONDING NUMBERS.
4. Push driving wheel socket half (2A) into axle hole numbered 2A on the other mainframe. Repeat with driving wheel socket halves, 3A, 4A, 5A, and 6A. NOTING THAT THE DRIVING WHEEL SOCKET HALVES MUST BE PUSHED INTO THE AXLE HOLES WITH THE CORRESPONDING NUMBERS.
5. Apply cement to the pins on axles and press together. NOTE THAT D-SHAPED AXLES SHOULD INTERLOCK, AND CHECK THAT WHEELS ROTATE FREELY.
6. Apply cement to the crank pin holes of the driving wheels, 2, 3, 5 and 6. Do not apply cement to hole in driving wheel (4). Place recessed holes of coupling rod (7) over cemented holes in driving wheels. NOTE THAT THE RECESS IS TO THE OUTSIDE AND THE OIL BOXES ARE TO THE TOP. Push pins (C) through holes in coupling rod and press into cemented holes. NOTE THAT THE HEAD OF PIN IS FLUSH WITH THE OUTSIDE OF COUPLING ROD.
7. Repeat OPERATION 6 on the opposite side.
8. Place crosshead (8) into position on lower slide bar of cylinder (9) NOTE THAT PISTON IS ENGAGED IN THE SLOT IN THE CYLINDER END COVER.

9. Apply cement to small hole at "L" end of connecting rod (10). See note D of General Instructions. Place cemented hole behind slide bar assembly in line with the hole in crosshead. NOTE THAT THE FLUTES ARE TO THE OUTSIDE AND OIL BOX ON OPPOSITE END IS TO THE TOP. Push pin (D) through hole in crosshead and into the cemented hole in connecting rod.
10. Repeat OPERATIONS 8 and 9 on the opposite side.
11. Apply cement to the face of the cylinder block on the mainframe (1) and to location pin on cylinder and slide bar assembly. NOTE THAT CEMENT MUST NOT COME INTO CONTACT WITH PISTON ROD GROOVE ON CYLINDER BLOCK.
12. Press cylinder (9) together with crosshead and connecting rod into position on mainframe (1). NOTE THAT THE PIN ON TOP OF SLIDE BARS ENGAGES INTO HOLE IN MAINFRAME.
13. Repeat OPERATIONS 11 and 12 on the opposite side.
14. Apply cement to the D-shaped crank pin hole in the centre driving wheel.
15. Repeat on other side.
16. Push D-pin of eccentric crank (11) through hole in connecting rod (10) and the centre hole of coupling rod (7) in that order and into the cemented D-shaped hole in the centre driving wheel. NOTE THAT D-SHAPED PIN INTERLOCKS INTO D-SHAPED HOLE.

17. Repeat OPERATION 16 on the other side.
18. Push pin (E) through hole at one end of eccentric rod (12) and cement into smaller hole of expansion link (13).
19. Push another pin (E) through remaining hole of expansion link and cement into hole in cylinder and slide bar assembly. NOTE THAT EXPANSION LINK HANGS DOWNWARDS.
20. Push another pin (E) through remaining hole of eccentric rod (12) and cement into hole of eccentric crank (11).
21. Repeat OPERATIONS 19, 20. and 21 to the opposite side.



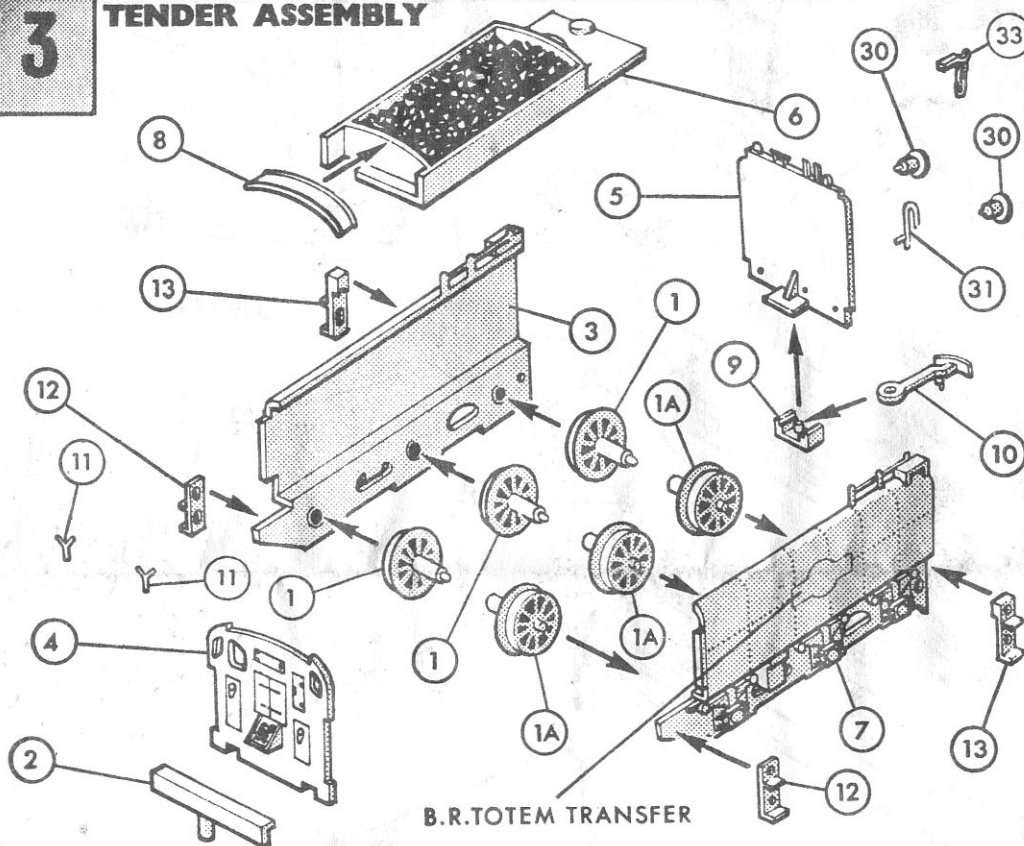
22. Apply cement to the top edges of mainframes which locate on underside of footplate and press into position on footplate (14).
23. Apply cement to the entire edge of boiler half (15) and press remaining boiler half into position.
24. Apply cement to the locating boss on boiler front (16) and press into position on boiler.
25. Cement boiler into position on the footplate.
26. Apply cement to the rear face of boiler and to bottom edge of cab front (17) and press into place at rear end of boiler.
27. Cement cab sides (18) and cab roof (19) into position.
28. Apply cement to the bottom edges of smoke deflector plates (20) and holes on boiler sides and press into position on footplate and boiler assembly.
29. Apply cement to the front edge of footplate and to the leading edges of mainframes. Press front buffer beam (21) into position, NOTE THAT TOP OF BUFFER BEAM IS LEVEL WITH TOP OF FOOTPLATE.
30. Apply cement to pin on leading bogie wheel pin half (22) and press bogie wheel socket half (22A) into place.
31. Place bogie wheel assembly into the axle groove of leading truck (23). DO NOT CEMENT.
32. Apply a little cement to the top edges of bogie axle groove and press bogie wheel retaining plate (24) into position. Check that wheels rotate freely.
33. THE DESIRED COUPLING should now be selected.

NOTE: That in addition to scale coupling hooks for non-working models a working "buckeye" coupling is provided.

34. If a working coupling has been selected, mount leading pony truck assembly to locomotive by means of pivot pin (B). Apply cement to pivot pin housing on the underside of front end of footplate. Push pin (B) through round hole at the pivot end on leading pony truck and press into cemented hole. NOTE THAT THE COUPLING PIN ON OPPOSITE END OF TRUCK IS POINTING DOWNWARDS.
35. If a non-working coupling has been selected cut and remove working coupling and arm from front of axle box on pony truck. Then locate and cement lug on scale coupling hook (32) into central slot in buffer beam.
36. Cement boiler vents (25) into position on boiler top. NOTE PIN LOCATES IN HOLE ON BOILER TOP.
37. Cement whistle assembly (26) into position on the top of boiler.
38. Cement injector assembly (27) into position on mainframe side and NOTE THAT THE TOP OF PIPE ASSEMBLY IS CEMENTED TO THE UNDERSIDE OF FOOTPLATE. See side view of locomotive in section four, for position.
39. Push pin (A) through hole in large boss on coupling (28) and cement into housing under rear end of engine footplate.
40. Apply cement to top edge of steps (29) and fix into position under the front end of footplate.
41. Cement buffers (30) and vacuum pipes (31) into place on front buffer beam.

3

TENDER ASSEMBLY



B.R.TOTEM TRANSFER

42. Cement tender wheel pin halves (1) and socket halves (1A) together. NOTE THAT PIN HALF FITS INTO SOCKET HALF. Check that wheels run true.
43. Apply cement to front edge of tender side (3), and press tender front (4) into position.
44. Apply cement to right-hand edge and front edges of tender top (6) and press into position against side (3). NOTE THAT THE FRONT EDGE OF PART (6) BUTTS UP AGAINST THE TENDER FRONT.
45. Apply cement to rear edge of tender top (6) and to the right-hand edge of tender back (5) and press tender back into position at rear of tender side (3) and tender top (6).
46. Push the stub axles of tender wheels into axle holes of side (3).
47. Apply cement to the side edge of tender top, tender back and to front edge of side (7). Press side (7) into place. NOTE THAT THE STUB AXLES OF WHEELS ARE LOCATED INTO HOLES ON THIS SIDE. Check that wheels rotate freely and tender assembly is square.
48. Apply cement to the underside edges of tender canopy (8) and place in position on tender top (6).
49. Cement tender footplate (2) into position. NOTE THAT THE SIDE EDGES OF FOOTPLATE FIT FLUSH ON LEDGES OF TENDER SIDES AND THE REAR FACE OF FOOTPLATE BUTTS AGAINST THE TENDER FRONT.
50. THE DESIRED COUPLING should now be selected. NOTE that in addition to the scale coupling "buckeye" working coupling the "Peco" coupling can be employed. In this case the stem of the pivot pin should be shortened to suit.
51. For the working coupling apply cement to the top edges of coupling housing (9). Place pivot end of coupling (9) over pin in coupling housing. Push housing together with coupling on to the bracket at rear of tender back. NOTE THAT PIN END OF COUPLING (10) IS POINTING DOWNWARDS.
52. If a non-working coupling has been selected, cement the locating lug on the remaining scale coupling hook (33) into central slot in buffer beam.
53. Cement buffers (30) and vacuum pipes (31) into place on tender back buffer beam.
54. Cement hand brakes (11) into holes in tender front.
55. Apply cement to top edges of steps (12) and (13). Fix into position under ledge of tender sides.

4

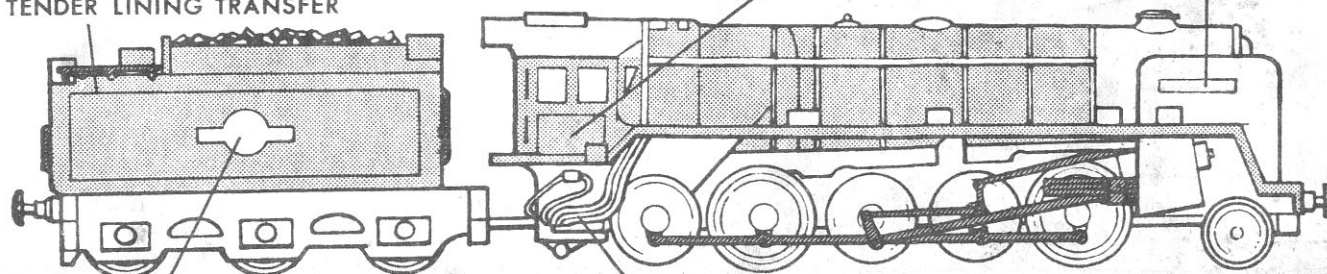
COLOUR SCHEME, ETC.

TENDER LINING TRANSFER

B.R.TOTEM TRANSFER

CAB SIDE TRANSFER

NAME TRANSFER



PIPE ASSEMBLY

B.R. Green

Silver

56. Apply number and name transfers. NOTE THAT IF THE *EVENING STAR* IS BEING MODELLED, THE NAME TRANSFER AND SPECIAL CAB SIDE TRANSFER MUST BE APPLIED.

57. Apply British Railways totem to tender sides as shown. If the *Evening Star* is being modelled, then the tender lining transfer must be applied.

58. We would like to point out that the *Evening Star* is the only engine of its class to be painted green and if you require your models to bear Nos. 92250, 92221 or 92203 they must appear in the black livery.

The GREEN colour scheme for the *Evening Star* model is as follows:

Signal Red ...	Front and rear buffer beams and stocks.
Copper ...	Pipes of cab controls. Flange on top of chimney.
Silver ...	All handrails. Dials of cab controls. Buffer heads. Slide bars. Piston rods. Connecting rods. Coupling rods. Eccentric rods and expansion links. Handles on tender front and ladder on tender back.

B.R. Green ...	Boiler and firebox but not smokebox. Side edges of footplate. Cab front. Cab sides. Sides of cab roof as far as water guttering. Tender sides but not tender frames. Tender back. Side edges and rear face of tender front. Tender top.
-----------------------	---

B.R. Lining	
Orange ...	Boiler bands. Lining on cylinder casing.
Black ...	All remaining parts.

The BLACK colour scheme for your Standard Class 92000 model is as follows:

Signal Red ...	As above.
Copper ...	Pipes of cab control.
Silver ...	As above.
Black ...	All remaining parts.

59. Couple tender to engine.



AIRFIX 00- LIMITED
PRODUCTION
EVENING STAR