

# AIRFIX

CONSTRUCTION KIT

## G.W.R. "CITY" CLASS 4-4-0 LOCOMOTIVE

### 3440 "CITY OF TRURO"

This "City" class locomotive was built at the G.W.R. Swindon Works in 1903 to the designs of G. T. Churchward. It was one of the "City" class developed from the "Atbara" class engine *Mauritius*. The "Cities" were an immediate success and quickly established a reputation for power and speed. A number of runs were made by them in 1903 and 1904. The best being the historic performance put up by No. 3440 "CITY OF TRURO" when hauling an Ocean Mails special from Plymouth to Bristol on May 9th, 1904. During this run, and for the first time in the history of transport, a speed of 100 m.p.h. was reached, if not exceeded, and was timed by two individuals on the train, quite independently. The engine number was changed from 3440 to 3717 in December, 1912. "CITY OF TRURO" was withdrawn from service in March, 1931, and sent to the Railway Museum, York. The locomotive is now restored to its operating condition of 1920 and is to be seen in the Great Western Museum at Swindon.

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

Length over buffers ... ..	56 ft. 4 $\frac{1}{4}$ ins.
Driving wheels ... ..	6 ft. 8 $\frac{1}{2}$ ins. diam.
Cylinders (2), diameter by stroke ... ..	18 in. x 26 in.
Tractive effort... ..	17,790 lbs.
Weight of engine and tender in working order ... ..	92 tons 1 cwt.

### YOUR AIRFIX MODEL

This G.W.R. "CITY OF TRURO" Locomotive Model embodies virtually all the details and movable features of the actual locomotive and has been designed to run on standard OO-HO track. (16.5 mm.)

### INSTRUCTIONS

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

- (a) 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.
- (b) Examine pieces and remove any excess plastic with a special knife or razor blade.
- (c) 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.
- (d) 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:—
  1. Deposit a small drop of cement on the end of a piece of wire or pin.
  2. 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.
  3. Place pin through the hole of moving part, and then push into cemented hole.
  4. Study assembly instructions carefully to check which hole to cement.
- (e) It is best to have a "dry run," so that you become familiar with the location of all parts before cementing together.
- (f) 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.
- (g) Allow cemented parts ample time to dry. This will result in maximum strength of finished model.

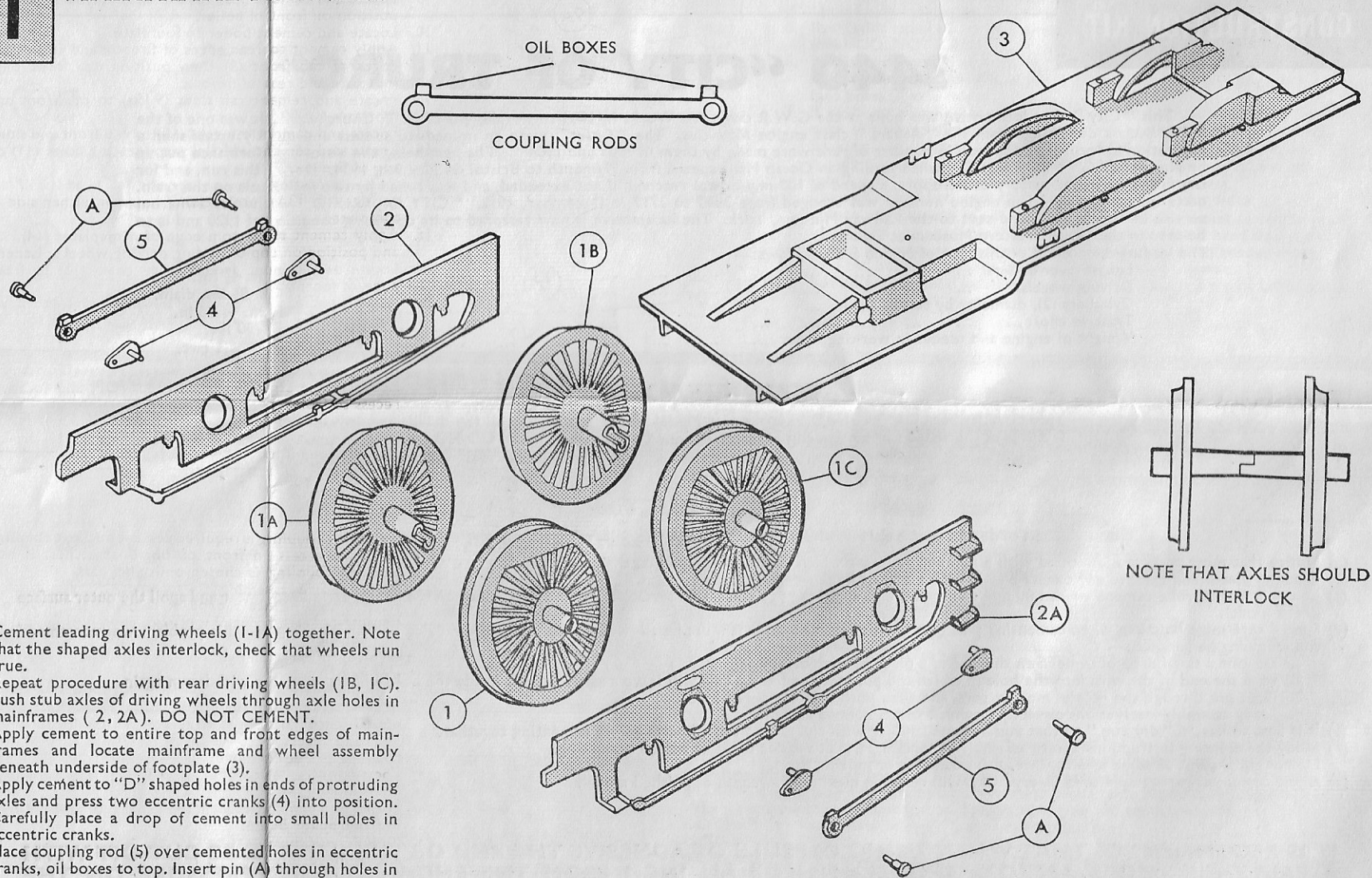
IT IS RECOMMENDED THAT WHEN USING CAPSULE OF ADHESIVE THE END OF THE CAPSULE BE CUT OFF WITH A PAIR OF SCISSORS APPROX: ONE EIGHTH OF AN INCH FROM THE END: EXCESSIVE PRESSURE ON THE CAPSULE IS UNDESIRABLE AS THIS MATERIAL IS IN LIQUID FORM, AND CARE SHOULD BE TAKEN IN WHICH DIRECTION THE CAPSULE IS POINTED TO AVOID GETTING ADHESIVE IN THE EYES OR ON CLOTHING.

# 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

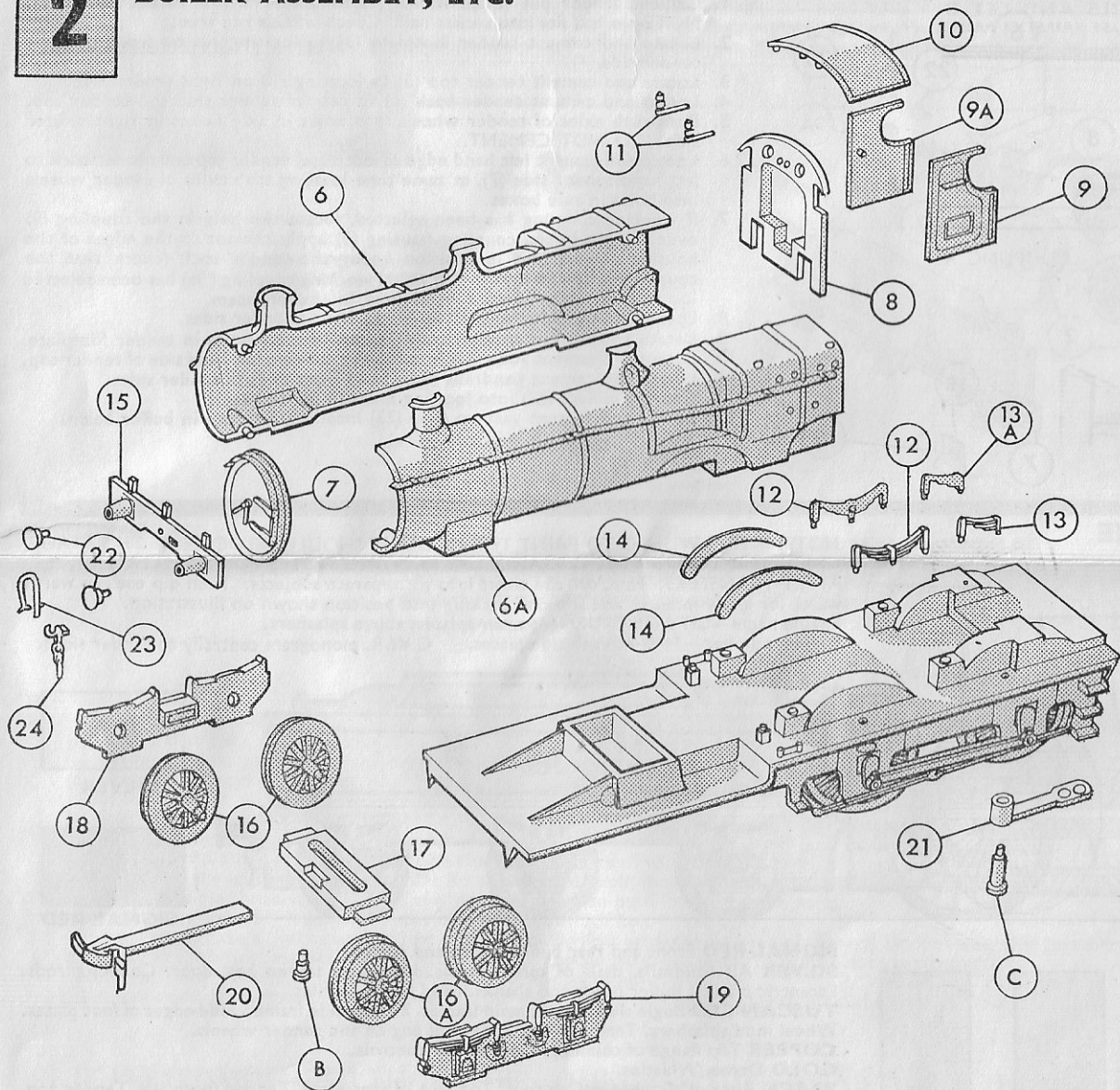
# 1

## MAINFRAME ASSEMBLY



1. Cement leading driving wheels (1-1A) together. Note that the shaped axles interlock, check that wheels run true.
2. Repeat procedure with rear driving wheels (1B, 1C).
3. Push stub axles of driving wheels through axle holes in mainframes ( 2, 2A). DO NOT CEMENT.
4. Apply cement to entire top and front edges of mainframes and locate mainframe and wheel assembly beneath underside of footplate (3).
5. Apply cement to "D" shaped holes in ends of protruding axles and press two eccentric cranks (4) into position.
6. Carefully place a drop of cement into small holes in eccentric cranks.
7. Place coupling rod (5) over cemented holes in eccentric cranks, oil boxes to top. Insert pin (A) through holes in coupling rods and press into holes in eccentric cranks. Keep cement clear of coupling rods. Repeat for opposite side instructions 5, 6, 7.

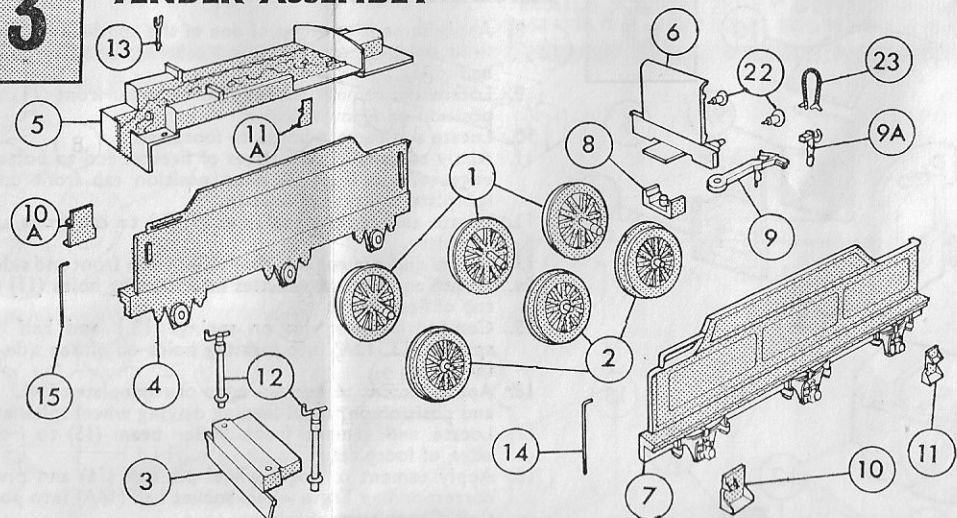
## BOILER ASSEMBLY, ETC.



8. Apply cement to edges of one of the combined boiler-firebox halves (6) locate and cement to other boiler half (6A).
9. Locate and cement boss at rear of boiler front (7) into position on front of boiler.
10. Locate and cement boiler to footplate.
11. Apply cement to rear edges of firebox and to bottom edges of cab front (8) then position cab front onto footplate and rear of firebox.
12. Locate and cement cab sides (9, 9a) to cab front and footplate.
13. Locate and cement cab roof (10) to cab front and sides.
14. Locate and cement whistles into locating holes (11) on top of firebox.
15. Cement locating pins on springs (12.) and half springs (13, 13A) into locating holes on either side of footplate.
16. Apply cement to bottom edge of nameplates (14) and position on top of leading driving wheel splashers.
17. Locate and cement front buffer beam (15) to front edge of footplate.
18. Apply cement to bogie wheel pin half (16) and press corresponding bogie wheel socket half (16A) into position. Check that wheels run true.
19. Locate and cement tongue on side of bogie stretcher (17) into slot in bogie side frame (18). NOTE that top face of bogie stretcher is marked TOP, and locating recess to front.
20. Insert stub axles of bogie wheels (DO NOT CEMENT) into axle holes in bogie side frame.
21. Cement tongue on other side of bogie stretcher into locating slot in remaining bogie side frame (19) and at same time locating, BUT DO NOT CEMENT, ends of stub axles into axle holes on inner face of bogie side frame.
22. If working coupling is required cement buckeye coupling (20) into recess in front of bogie stretcher, if non working coupling is chosen omit this part.
23. Mount bogie assembly to locomotive by means of pivot pin (B). Place a drop of cement into pivot pin housing beneath front of footplate then push pivot pin through slot in bogie stretcher and into housing, taking care top of stretcher is free from cement and swivels easily.
24. Carefully place a drop of cement into tender coupling housing at rear and underside of footplate, press pivot pin (C) through hole at large boss on tender coupling (21) and press into coupling housing. Check that coupling is free to move.
25. Locate and cement buffers (22) into locating holes in front buffer beam.
26. Locate and cement vacuum pipe (23) into locating hole in front buffer beam.
27. If NON working coupling (24) has been selected locate and cement into central hole in front buffer beam.

# 3

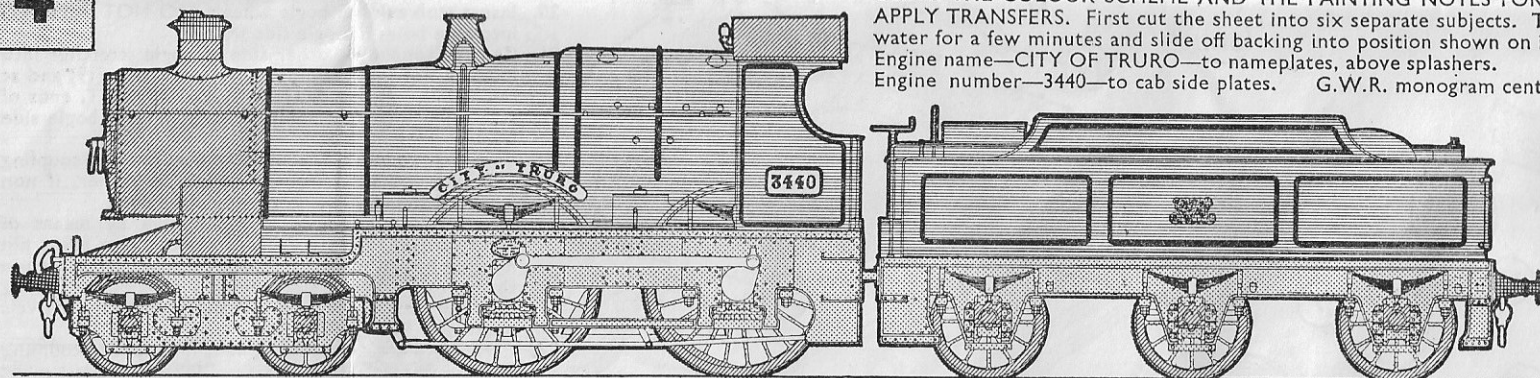
## TENDER ASSEMBLY



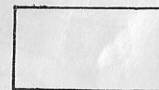
1. Cement tender pin wheel halves (1) to tender wheel socket halves (2). NOTE pin half fits into socket half. Check wheels run true.
2. Locate and cement tender footplate (3) to locating rib on front of right tender side (4).
3. Locate and cement tender top (5) to locating rib on right tender side.
4. Locate and cement tender back (6) to rear of tender side and tender top.
5. Push stub axles of tender wheels into holes in axle boxes in right tender side. DO NOT CEMENT.
6. Locate and cement left hand edge of footplate, tender top and tender back to left hand tender side (7), at same time locating stub axles of tender wheels into holes in axle boxes.
7. If working coupling has been selected, locate the hole in the coupling (9) over the pin in the coupling housing (8) apply cement to the edges of the housing and cement in position under the tender back (check that the coupling is free to move). If NON working coupling (9a) has been selected locate and cement into central hole in buffer beam.
8. Locate and cement steps (10, 10A, 11, 11A) to tender sides.
9. Locate and cement handbrakes (12) into locating holes in tender footplate.
10. Locate and cement yoke (13) into locating hole on left hand side of tender top.
11. Locate and cement handrails (14, 15) to front ends of tender sides.
12. Cement buffers (22) into locating holes in buffer beams.
13. Locate and cement vacuum pipe (23) into locating hole in buffer beam.

# 4

## SUGGESTED COLOUR SCHEME



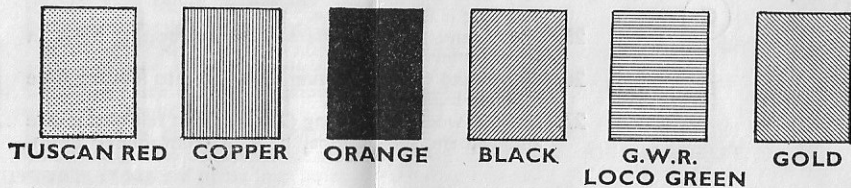
NOTE: IF IT IS WISHED TO PAINT THE MODEL IT SHOULD BE DONE AT THIS STAGE, USING THE COLOUR SCHEME AND THE PAINTING NOTES FOR SMALLER DETAILS. APPLY TRANSFERS. First cut the sheet into six separate subjects. Then dip each in warm water for a few minutes and slide off backing into position shown on illustration. Engine name—CITY OF TRURO—to nameplates, above splashers. Engine number—3440—to cab side plates. G.W.R. monogram centrally to tender sides.



SILVER



SIGNAL RED



TUSCAN RED

COPPER

ORANGE

BLACK

G.W.R.  
LOCO GREEN

GOLD

**SIGNAL RED** Front and rear buffer beams and stocks.

**SILVER** All handrails, dials of cab controls. Hinges of smoke box door. Coupling rods. Eccentric cranks. Buffer heads and shanks, hand brake handles.

**TUSCAN RED** Bogie side frames, main frames. Tender side frames. Side edges of foot plates. Wheel mud splashers. Tender steps. Spokes of engine and tender wheels.

**COPPER** Top flange of chimney. Pipes of cab controls.

**GOLD** Dome. Whistles.

**BLACK** Rims of all wheels. Cab roof. Top face of foot-plate, Tender footplate. Tender top. Hand-brakes. Yoke. All springs. Axle boxes on bogie and tender side. Vacuum pipes. Boiler front. Smoke box and chimney.

**G.W.R. LOCO GREEN** Boiler and fire box. Cab front, cab sides, tender sides and back.

**ORANGE** Lining on cab and tender sides. Boiler bands.