

# AIRFIX

CONSTRUCTION KIT

## CLASS B TANK WAGON

This Class B Tank Wagon model embodies virtually all the detail and features of the actual Wagon and has been designed to fit on standard OO and HO track. (16.5 mm.).

Following publication of the British Railways Modernisation Plan in 1955, it became clear that future passenger and freight schedules would be revised and speeded up with the introduction of high-speed Diesel, Electro Diesel and all Electric Locomotives. Railway rolling stock would, therefore, be redesigned and constructed to operate within conditions envisaged under the new modernisation programme. Whilst future Railway planning covered the design and construction of all stock, including passenger and freight, no general provision had been made for railway tank wagons carrying petroleum products which normally did not operate at speeds in excess of 45 m.p.h. and were subject to frequent examinations during transit.

In 1956 Esso Petroleum Co., Ltd., approached British Railways to design a new tank wagon capable of maximum capacity on four wheels within the 35-ton gross weight permitted under high-speed conditions.

Three prototype wagons were designed and constructed and, following certain trials and shunting tests, the Mark 1 was approved by British Railways. Subsequently over 800 of this type of wagon were ordered by the Esso Company from various builders. Two classes of vehicles were built, Class A for carrying Petrol and Highly Inflammable products, and Class B for carrying Fuel Oils, Diesel Oils and Kerosenes.

The Class B tank barrel is fitted with steam coils to assist the off-loading of heavy fuel oils. Discharge of load is controlled by internal rod and plug, operated by the hand wheel located on top of the tank barrel.

### TECHNICAL DATA

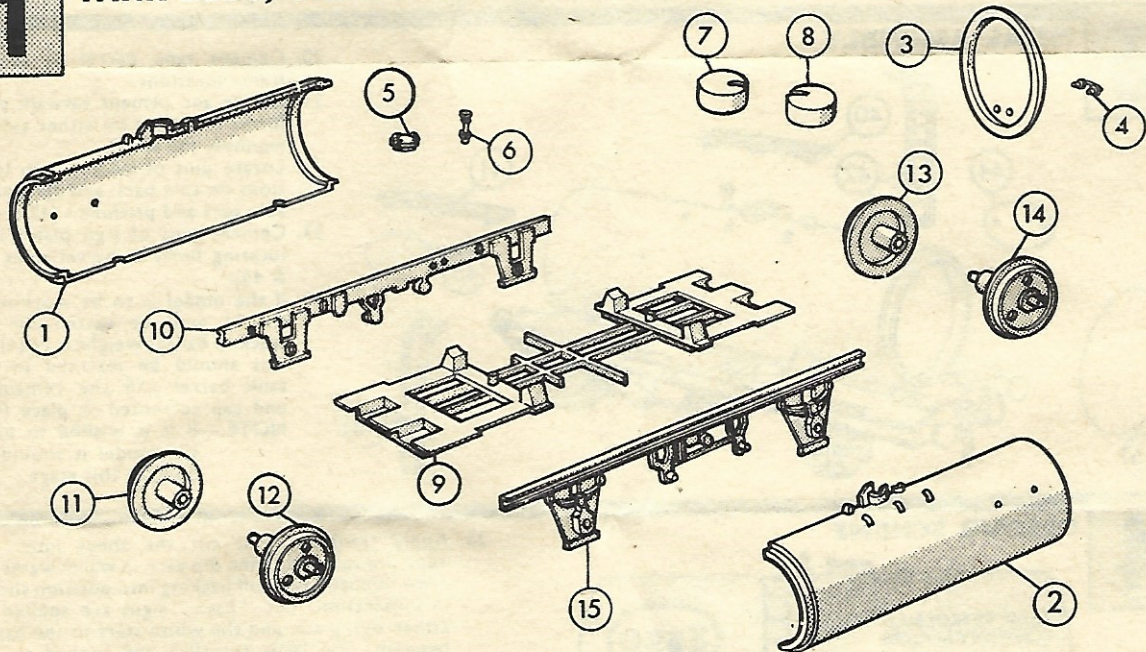
The following general details apply to the Class B tank wagon, which is painted black with two white stars to denote acceptance for higher speed working:

Length over buffers 27 ft. 9½ in.; barrel length 22 ft. 6 in.; overall height 12 ft. 6 in.; and wheel base 15 ft. Fitted vacuum brake with two cylinders operating two brake blocks per wheel with additional hand-brake each side for marshalling only. Four roller bearing axle boxes and either pneumatic or hydraulic buffers.

### 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 TANK BODY, UNDERFRAME & WHEEL ASSEMBLY



It is recommended that the instructions and exploded view are studied and that the assembly is practised before cementing together.

1. Cement together the two halves of tank body (1 & 2).
2. Locate and cement end cap in position on body (3).
3. Locate and cement end valve into locating holes in cap (4).
4. Cement manhole cover in place

on body, note that this can be fixed in either the open or shut position as required (5).

5. Locate and cement screwdown valve into locating hole on top of tank body, place assembly aside to dry (6).
6. Locate vacuum brake cylinders on shorter cross-beam of underframe and cement (7, 8 & 9).
7. Cement sole bar in position on

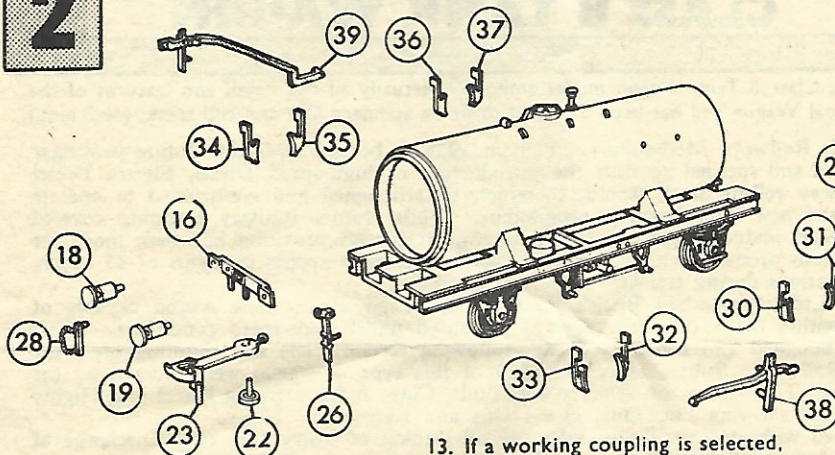
underframe, in line with cross-beams of underframe (10).

8. Apply cement to axle pins of wheels and press into axle holes of the other two wheels. Check that wheels run true (11-14).
9. Locate and cement second sole bar to underframe, at the same time locating wheels in the holes inside each axle box (15).



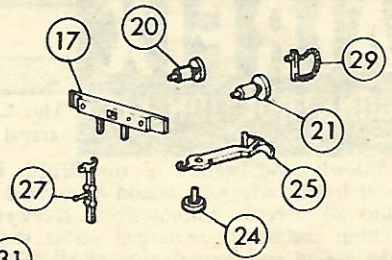
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## COUPLING, BUFFER &amp; BRAKE ASSEMBLY



10. Locate and cement buffer beams to ends of underframe (16 & 17).
11. Cement buffers into locating holes on buffer beams (18-21).
12. The desired coupling must now be selected. Note that in addition to scale coupling hooks for non-working models a working "buck-eye" type of coupling is provided. If desired the "Peco" coupling can be employed, in this case the stem of the pivot pin should be shortened to suit.

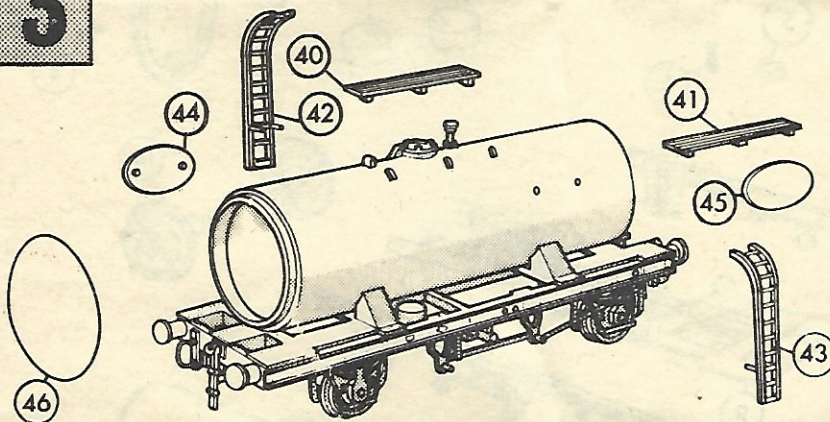
13. If a working coupling is selected, insert the pivot pin through the hole in coupling, and cement into the locating bush beneath underframe. **ENSURE NO CEMENT COMES INTO CONTACT WITH COUPLING** (22 & 23).
14. Repeat this procedure for the second coupling (24 & 25).
15. If non-working couplings have been selected, cement the locating lugs of the scale coupling hooks into central slots of buffer beams (26 & 27).



16. Cement vacuum brake pipes into locating holes in buffer beams. Note that if "Peco" couplings are employed these parts should be omitted (28 & 29).
17. Next locate and cement in position brake shoes. These are positioned on the inside of the sole bars, on either side of the axle box frames. Ensure that the brake shoes are aligned with the wheels (30-37).
18. Locate and cement pins of near-side brake lever to sole bar, the lower pin locating in hole of brake hanger and the upper pin into sole bar (38).
19. Similarly locate and cement in position offside brake lever. In this case the lower pin cements into hole on inside of brake hanger (39).

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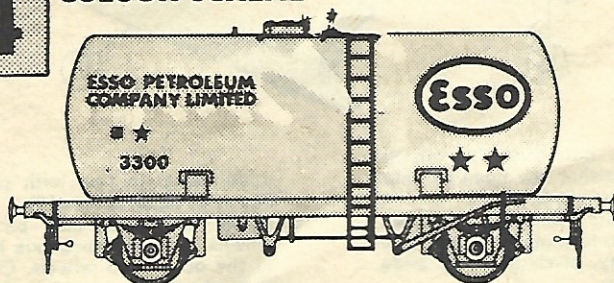
## FINAL ASSEMBLY



20. Cement tank barrel to underframe locations.
21. Locate and cement catwalk platforms into slots on either side of manhole (40 & 41).
22. Locate pins of ladders into locations on sole bars, and cement to sole bars and platforms (42 & 43).
23. Cement pins of sign plates into locating holes in barrel sides (44 & 45).
24. If the model is to be working it should now be tested on the track. If ballast weight is required this should be inserted in the tank barrel and the remaining end cap cemented in place (46).  
**NOTE.**—If it is wished to paint the model it should be done at this stage.

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## COLOUR SCHEME



MATT BLACK

25. Apply transfers, first cut the sheet into separate subjects. Then dip each in warm water for a few minutes, slide off backing into position shown in illustration. The "Esso" signs are applied to either sign plate, and the white stars to the barrel beneath. The large transfers are applied to the barrel sides, opposite the "Esso" signs, and the alternative numbers as selected to the end caps.
26. Finally, if the "buckeye" couplings have been employed, one of the two rubber bands provided should be used to connect the small hooks on the rear of each coupling. This will give a working spring action.

**MATT BLACK MI.:** Complete wagon except for details below.

**SILVER G.8:** Buffer heads.

**RED GI:** Extreme ends of axle boxes.

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