

TB6 Tender Body Pack LMS Stanier Coronation De-streamlined

Components required to turn this body pack into a complete tender:

TC3 7'6" x 7'6" inside frames
TF1 chassis kit
3 axles 4'3" Markits wheels (WH35)

This body pack is intended for use with our tender frame kit TF1, but can also be used for scratchbuilding or to improve an RTR tender.

The streamlined tender was fitted originally to locomotives 6220-9 and 6235-52. The full height side sheets at the rear meant that two hatches had to be provided for water filling, and hence two water fillers, which remained when the tenders were cut down to the standard rear profile when streamlining was abandoned from 1945 onwards. In the de-streamlined condition this was the commonest pattern of tender within the class for the longest period of their existence. The rear ladder meant that no rear lower steps were fitted on the underframe.

The tender underframe had standard axleboxes. Water sieve boxes were an Ivatt introduction fitted to newly built tenders from 1946. Photographs suggest that they were also quickly added to all earlier 10 ton tenders, including those of the non-streamlined welded type, and the rivetted pattern allocated to the Princess Royals.

Etchings list

- | | |
|-------------------------|----------------------------------|
| 1. Front bulkhead | 10. Rear bulkhead overlay |
| 2. Tank rear | 11. Rear tender side supports(2) |
| 3. Tank rear overlay | 12. Coal pusher rams (4) |
| 4. Sides (2) | 13. Front platform |
| 5. Tank top | 14. Front platform inner support |
| 6. Rear bulkhead | 15. Ladder |
| 7. Bunker base | 16. Lifting rings (2) |
| 8. Nearside bunker side | 17. Lifting ring bases (2) |
| 9. Offside bunker side | |

Castings etc. list

- | | | |
|--------------|--------------------|-------------------|
| Tender front | Fire iron tunnel | Handrail knob (6) |
| Water gauge | Coal pusher piston | Handrail wire (2) |
| Dome | Steam valve cover | Tank fillers (2) |

Assembly Sequence

Note: make all folds with the half-etch to the inside of the fold unless stated otherwise.

The instructions assume that the body will be built onto the tender base from our frame kit TF1, which should be completed up to step (8) in its instructions. It is advisable to add whitmetal castings to both the frames and superstructure only when all the hard soldering of etched parts has been completed.

1. Fold up and solder the front bulkhead etch (1), locating it to the tender base by the tabs on its lower edge. Check that it is square to the frame in all directions.
2. Fold up and solder the tank rear (2), again locating it to the tender base by the tabs on its lower edge, tack soldering to the base at the sides only. Check for squareness and when satisfied solder on the tank rear overlay (3), ensuring this is located centrally over the tank rear.
3. Check the fit of the tender sides (4) against the front bulkhead. You may find the top bend needs easing slightly for a perfect fit. Before soldering the sides in place, fold up the front platform (13) and ensure that it will fit between the front edges of the sides - it may be necessary to ease the front bends slightly to achieve this. When satisfied, locate the tabs along the bottom edges of the sides into the slots in the tender base and solder in position (sketch 1).
4. Fold up the rear tender side supports (11), locate them in the slots in the tender rear and solder in place, making sure they lie snugly against the tender sides.
5. If you wish to fully model the coal bunker, fold the tank top (5) as per the sketch - note that the front bend is made with the half-etch to the outside. Slide the tank top into position - the rear end rests on the top return of the tank rear and the front on the lower edge of the cut-out in the front bulkhead, with the intermediate supports resting on the tank base. When satisfied, solder in position (sketches 3 and 5).

Alternatively, if you intend to model the tender coaled up, simply bend down the intermediate supports only. In this case the front of the tank top is supported by the horizontal return of the front bulkhead. Again, slide into position and solder (sketch 2).

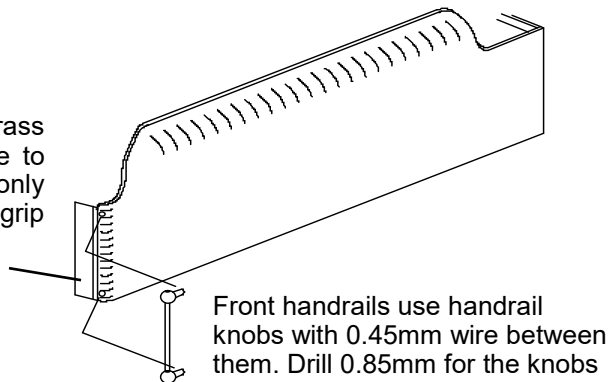
6. Fold the tabs on the rear bulkhead (6) to approximately 45° and solder the bulkhead to the tank top, locating it by the tabs on its bottom edge. The rear bulkhead overlay (10) can now be soldered to the rear bulkhead, ensuring that it is located centrally on the bulkhead. Now file flush the base of the water dome and solder in place with the main part of the dome forward of the bulkhead.
7. Solder the bunker base (7) in position, with the back edge resting on the bulkhead support tabs.
8. If you have decided to fully model the coal bunker, locate and solder in place the nearside bunker side (8). Bend the top of the offside bunker side (9) so that when in position with the top touching the tender side, the top is approximately horizontal (see sketch 4). When satisfied, solder in place. If the bunker is not to be fully modelled discard part 9 and modify the nearside bunker side (8) by separating it along the half-etched line. Discard the smaller piece, and solder the larger one in place as per the sketch. The tender assembly can now be washed to remove flux residues before proceeding (sketches 2 and 3).
9. Fold the platform inner support (14) to shape and solder to the underside of the front platform (13), making sure the top edges of the former are located in the inner half-etched lines of the latter, and that the inner support is the correct way up. File a

notch in both the inner front platform etch and the base of the tender front casting to clear the tender chassis/frame fixing bolt. Fettle the tender front casting and check for fit against the front bulkhead - it should slide into position between the front edges of the tender sides. With the tender front casting in position (but not fixed), slide the front platform up to it and check the fit - the brake and water scoop covers should fit snugly on top of the platform. Fettle as required and when satisfied fix in position with adhesive, since you may find it difficult to make a hidden or neat solder joint.

10. Carefully drill out the holes in the ladder (15) to 0.5mm, and fold up the sides to 90°. Solder short lengths of 0.45mm wire in the holes to form the rungs, taking care to avoid using too much solder. When all the rungs are in place, carefully trim the projecting ends flush with the sides of the ladder, then separate the completed ladder from its stretchers. We recommend that you cut the stretchers in the centre using small side cutters, then fatigue off the remaining halves from the ladder sides. The ladder can now be fitted by feeding the top ends into the locating holes in the tank top then sliding it down until the slot in the bottom of the ladder clears the bottom edge of the buffer beam. Engage the buffer beam into the slot and push the ladder back up until the bufferbeam is fully engaged. Check that the ladder is vertical before final fixing.
11. Fold up the coal pusher rams and solder them in place. Modify slightly the coal pusher piston as per sketch 7 and fix it in position. The remaining detail may be added in any order as per the sketches. The water scoop and brake operating handles are made from handrail knobs and 0.45mm wire as per the sketch below.

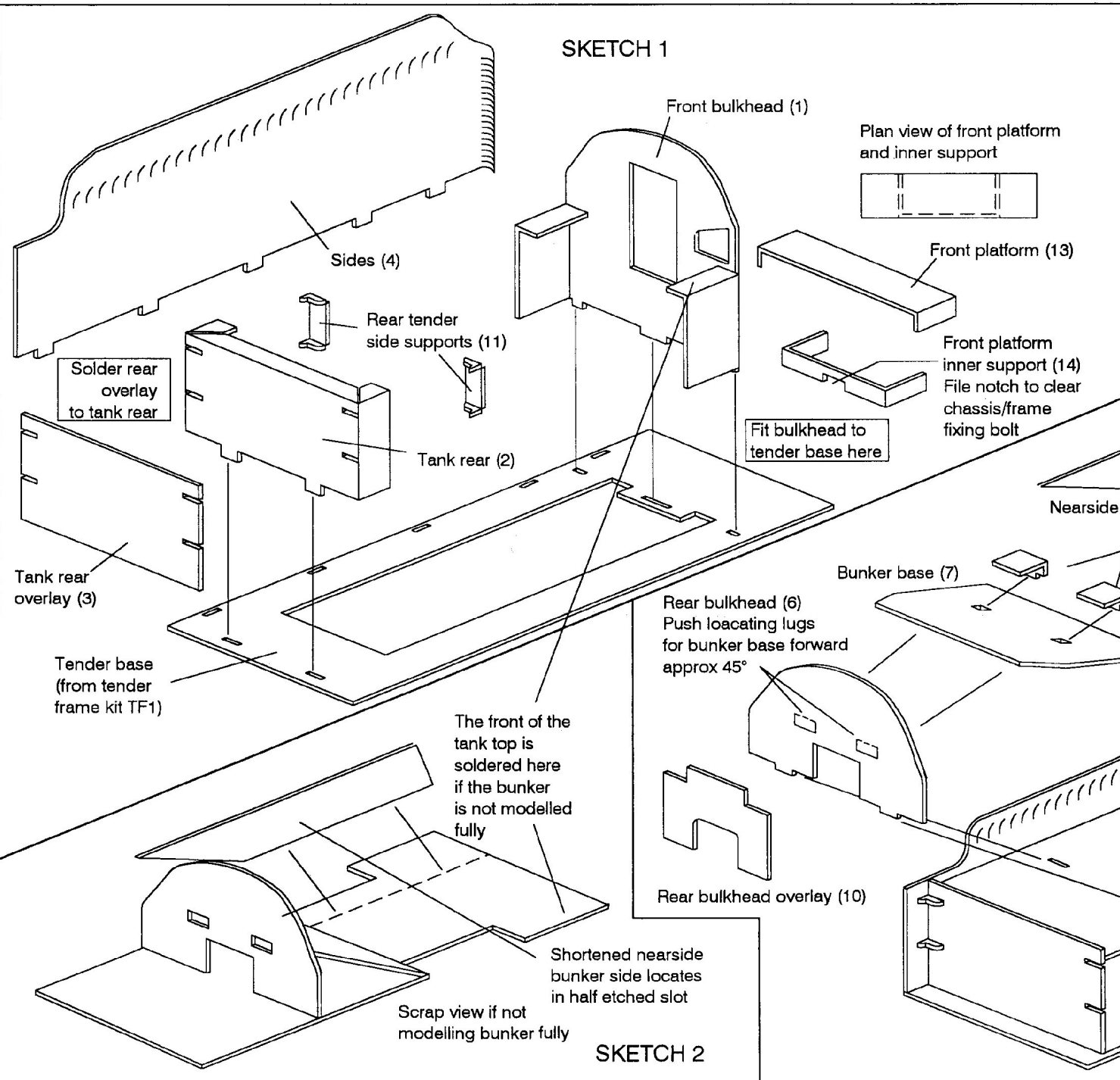
This completes assembly of the tender body, and detailing of the underframe can now be completed as described in the TF1 instructions.

Remove this piece of brass before doing anything else to the tender side. It is used only to give us something to grip whilst forming the curve.

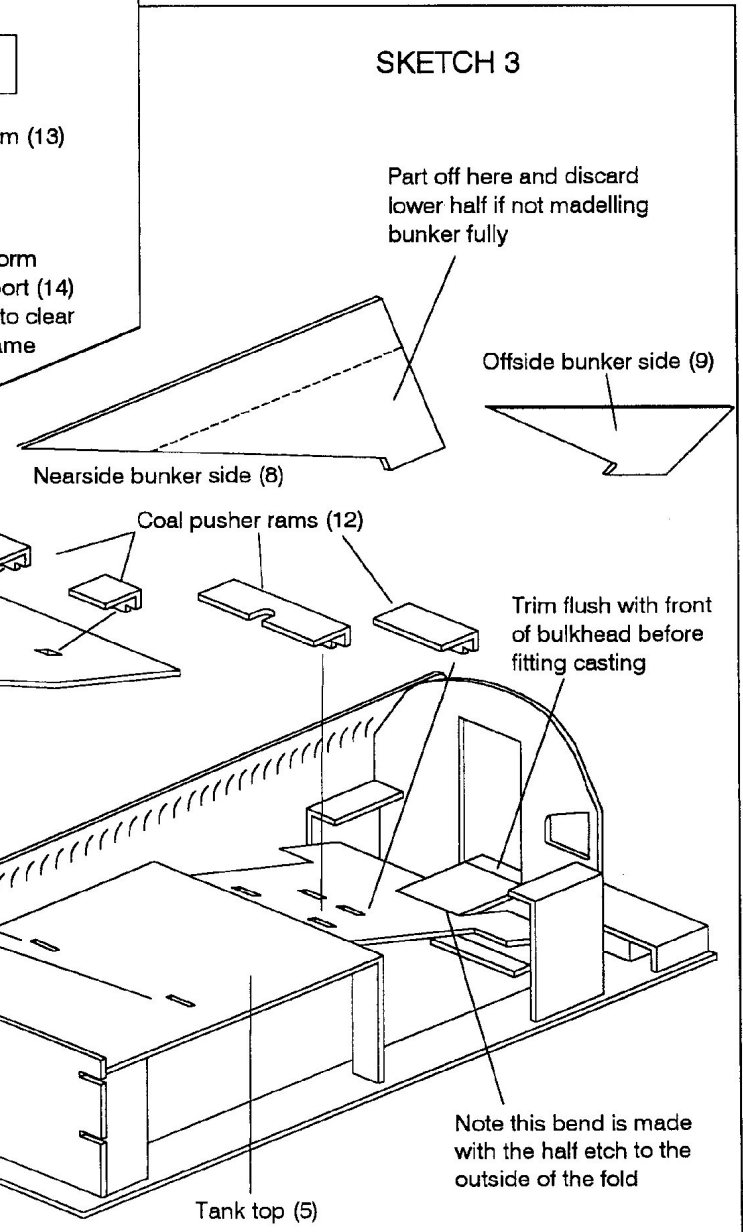


Front handrails use handrail knobs with 0.45mm wire between them. Drill 0.85mm for the knobs

SKETCH 1



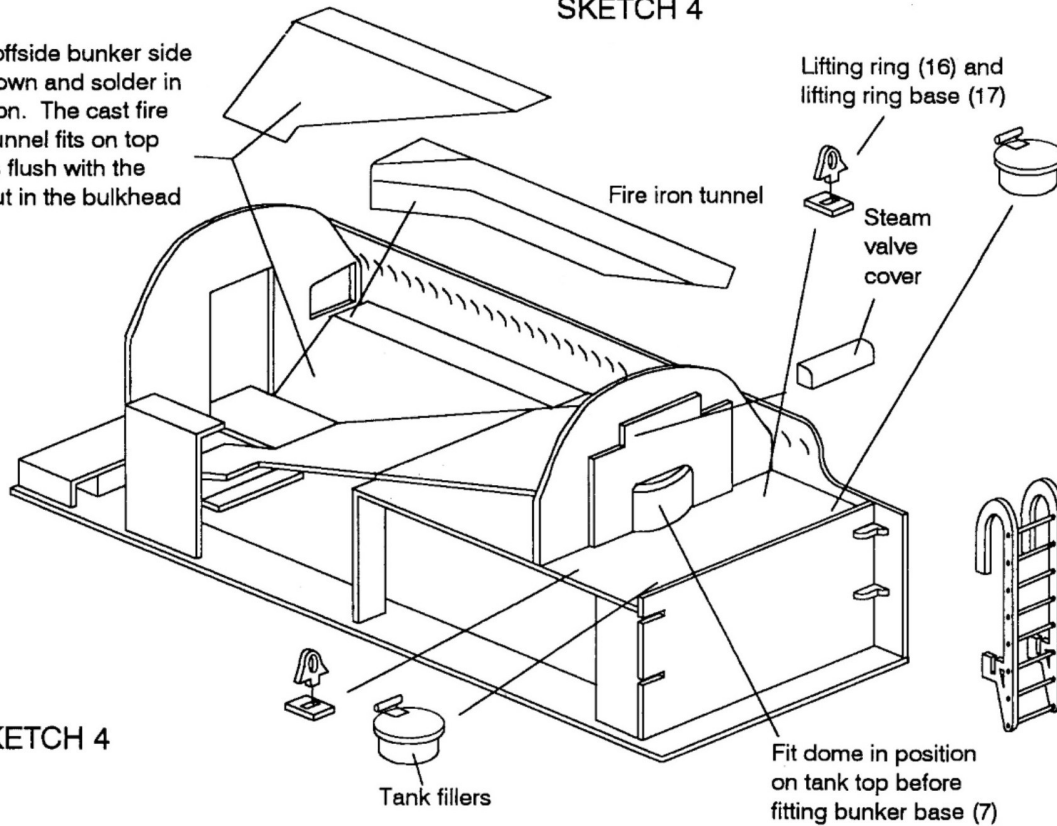
SKETCH 3



SKETCH 2

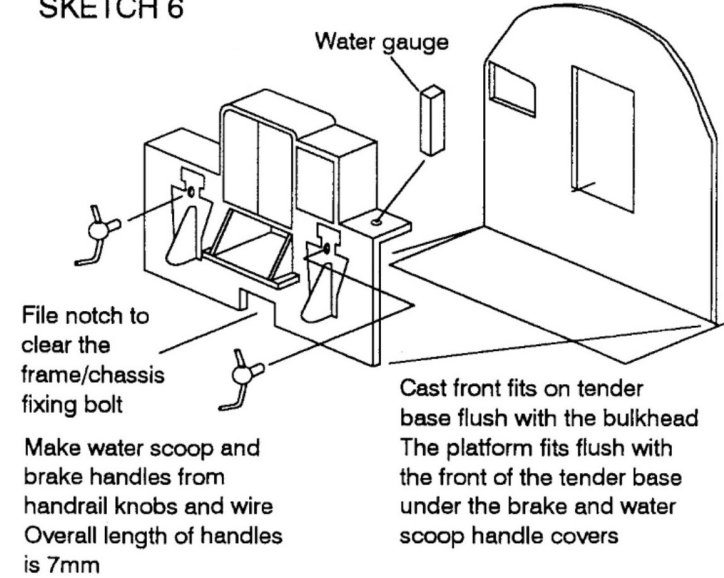
SKETCH 4

Fold offside bunker side as shown and solder in position. The cast fire iron tunnel fits on top of this flush with the cut-out in the bulkhead

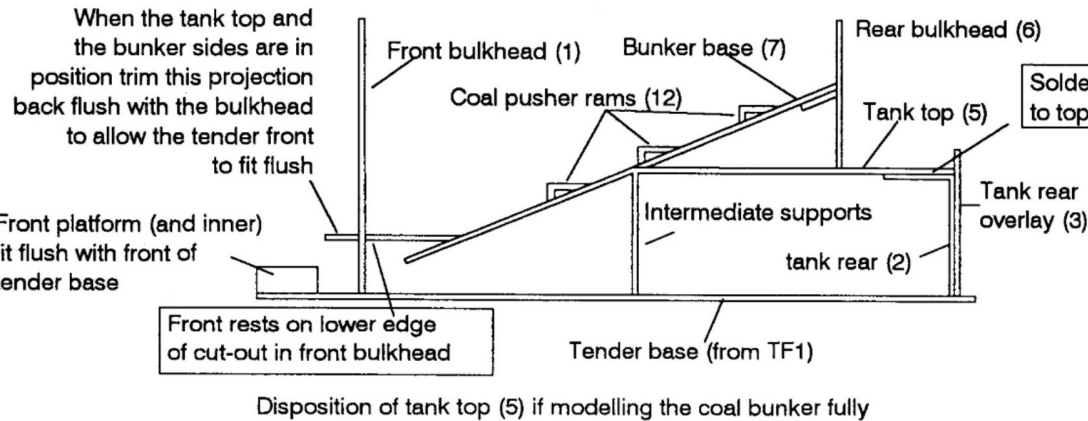


SKETCH 4

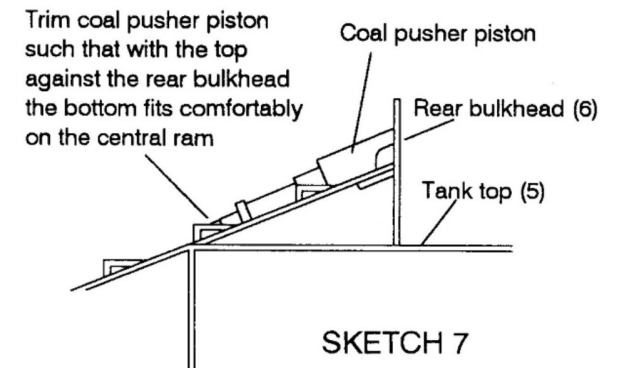
SKETCH 6



Slide ladder into slots in tank top. Hook under buffer beam and lift to fully engage slots in ladder in buffer beam. Solder in position with ladder vertical



SKETCH 5



SKETCH 7