N Gauge Society Kit 75
British Rail VCA Van
NGSK0750

Kit contains plastic parts for <u>body only</u>.

Requires Graham Farish VBA Wagon to complete

To complete this kit you will need: Liquid Plastic Cement, Paint, Decals, and Varnish

This is not a toy. Only suitable for persons over the age of 14. May contain small parts and sharp edges. Keep away from small children.

Getting Started

First, read the instructions thoroughly all the way through and be sure you are confident that you have identified all the parts. It is recommended that you adhere to the suggested order of assembly, though with experience, you may choose to deviate.

General Notes On Construction

Naturally, the N Gauge Society wants you to achieve the best results you can. These simple guidelines should help:

- Read the instructions through fully before you begin
- Use a sharp knife to separate the parts from the sprues
- Clean off any flash or moulding pips with sharp knife and wet 'n' dry sandpaper
- Check fit before gluing
- Use a small paint brush to sparingly liquid polystyrene glue such as Mekpak when joining parts
- Photographs of the prototypes will help you

But above all .... TAKE YOUR TIME!!

Prototype Notes

Built between 1971 and 1974, the VCA van was the second design by British Rail for a modern van on a 20ft 9in chassis (following on from the VBA). Their main use was on the tinplate traffic for Metal Box from Trostre BSC, Llanelli. Yet the two sliding doors per side only gave access to 16ft of the van; this restricted the use of fork-lift trucks and so these vans were never very popular in traffic. They lasted until the 1980s while some remained active into the early 1990s in the engineers department as stores vans (ZRA) or equipment carriers (ZYA/B). Those that did not pass to engineering use usually lost their van body so that the chassis could be repurposed, becoming barrier wagons or carriers for steel, timber or coal containers. While a modern air-braked van was a step change for British Rail in the 1970s, they were an outdated design even when introduced compared to practices in other countries and they were soon eclipsed by the larger VGA van and private owner designs.

Livery and Lettering

When new they received maroon livery or freight brown, then the flame red/rail grey livery, the latter tending to fade badly in service, particularly the red. The chassis was black (the Graham Farish chassis is black, but it will benefit from a coat of paint, at least a matt varnish, to remove the plastic finish) and in service would have weathered to a light rust colour. The roof was black or dark grey. Transfer to engineering service resulted in some varied repaints, notably "Dutch" yellow/grey (with "Civil Link" branding).

BR double arrows were applied on the left-hand side at the top with TOPS panel low down on the left-hand door. Initially, the TOPS panel showed the original code of COV CD before becoming the more familiar VCA. On the red/grey livery the double arrows were in a box with "Railfreight" in an adjacent box.

References

- *BR Air-Braked Wagons in Colour* by David Ratcliffe P20
- *Working Wagons Volume 1 1968 – 1973* by David Larkin: P77
- *Working Wagons Volume 2 1974 – 1979* by David Larkin: P80

- *Working Wagons Volume 3 1980 – 1984* by David Larkin: P45
- *Wagons Of The Early British Rail Period, A Pictorial Study Of The 1969-1982 Period* by David Larkin: P55/6
- *Modern Railways In Profile Series No 1 (British Railway Air-Braked Vans)* by Tom Smith: P58
- *Rolling Stock Recognition 2, BR And Private Owner Wagons* by Colin J Marsden P76/7
- http://paulbartlett.zenfolio.com/ '*Paul Bartlett wagon photographs*' Paul Bartlett's useful web site

Donor Wagon

A donor Graham Farish VBA Wagon is required to complete this kit. These are no longer in production as the tooling is worn out which is why the N Gauge Society are unable to include the chassis and roof parts necessary to complete the model. The donor wagons were a popular model made for many years so they can be obtained second-hand. Alternatively, the chassis for the Graham Farish OBA or SPA opens could be used but then the roof would have to be scratch-built.

Construction

1. Remove the VBA body from the chassis by gently pulling the chassis off the body. The body is located onto the chassis by a number of small spigots that fit into holes on top of the chassis. If they will not separate, insert a knife blade between the body and the chassis and gently lever them apart or cut through the spigots on the body. The VBA body is surplus so it does not matter if it gets damaged.

2. The roof is a little harder to remove as it has two holes underneath that attach to long spigots inside the van body which rise up from the floor. It is possible to carefully separate them by inserting a knife blade between the roof and the top of the van body. Once again, it does not matter if the VBA body gets damaged but take care not to damage the roof. As the VBA body is surplus, an alternative is to drill out and/or cut out a large portion of the floor to release the spigots from the body; this will release the roof and the spigots then just pull off. Finally, the entire body could be cut in half horizontally using a razor saw to cut through the spigots.

3. Remove the slight mould release taper on the top of the ends as this will improve the fit of the roof.

4. Glue the ends to the floor moulding; note that there is a small ledge at the bottom of each end and that the floor goes <u>under</u> this so that the bottom of the floor is flush with the bottom of the end. Also note that the fixing clips under the floor should be at the bottom (these will clip the body to the chassis). Make sure that the floor lines up with the edges of the ledges and that the join between floor and ends is at 90 degrees.

5. Glue the roof to the top of ends. It may be necessary to file a small amount of the framing underneath the roof in order to get a perfect fit if the roof makes the ends bow outwards away from being at 90 degrees.

6. Glue the sides to the roof and ends. Note that the sides have the door handles towards the bottom and that there is a small lip at the bottom that represents the door runner. The sides will sit just slightly inside the ends and should be flush with the floor.

7. The floor is designed to clip fit to the chassis. Make sure that there is no flash around these clips and check that the clips fit correctly around the chassis floor. It will assist final assembly if the clips at one end are filed down slightly on the inner edge. If the floor has been fully clipped home, the flexibility in the chassis and the floor at this stage should ensure that they clips are not damaged if they need to be separated.

8. One the body is fitted, the chassis should be flat and resting on the moulded ledges at each end. It may be necessary to narrow the floor slightly, largely though the removal of mould release taper. Once satisfied, glue in place (an epoxy glue or superglue will be required for this is the chassis is made from a harder plastic than the body).

9. Plastic wagons can be very light and will benefit from some weight. The steel weights from the Graham Farish chassis can be left in place, though they are best glued in position. Alternatively, any amount of weight can be added inside the van body during its construction.

10. The model can be painted in the required livery. It is worth noting that all the parts can be painted prior to assembly, and while the red-grey livery is not overly complex, it may be a lot easier to paint them individually than when the wagon is fully assembled.