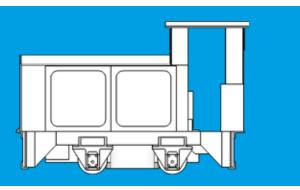
MBVdK

O&K RL2 1:87 scale 6.5mm gauge



About the kit

Our kit is mostly of nickel silver construction, with a 3D printed mounting cradle including axlebox detail. Soldered construction is strongly recommended, but ensure that the plastic cradle is not attached to the metal body during soldering.

The kit is designed to fit the Busch HOf 12199 accessory chassis. It is recommended that the 3D printed cradle is fixed to the chassis before the body is slotted in place, and the chassis can be fitted either way round.

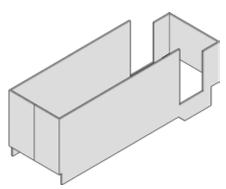
Please note this is a scale model for adult collectors, and not intended for children under 14 years of age.

Prototype information

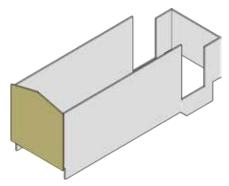
The RL series, introduced in the late 1920s, were Orenstein & Koppel's first range of diesel locomotives. The RL2 was a 2 cylinder machine of around 20hp power, with a 4 speed gearbox.

Assembly sequence

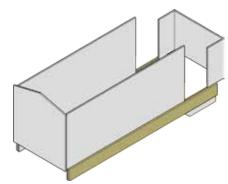
Carefully remove each part from the fret using a sharp knife on a cutting mat or similar hard surface to minimise the risk of damaging thin parts. Once removed from the fret the edges can be smoothed down using a needle file to remove traces of tabs. Note that all folds are made with the half etched fold line on the inside of the bend, unless otherwise noted.



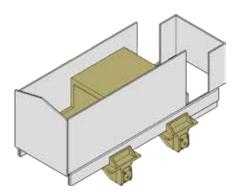
Form the folds in the main body piece (1) ensuring that the front halves are aligned and level.



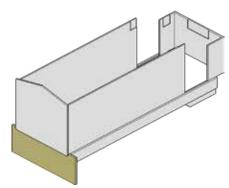
Add the front grille panel (7) on the front of the body, checking the lower edge is level with the body. The grille is slightly wider than the main body.



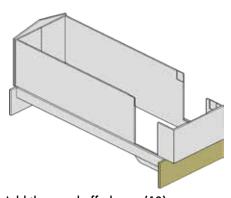
Add the chassis side rails (11) x2, ensuring their alignment is flush with the bottom of the cab door opening.



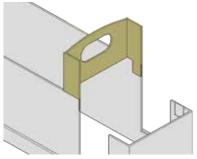
At this stage it is worth verifying that the chassis mounting cradle is a tight fit into the body. If neccessary gently flex the axleboxes to open the locating slots so that the body will slide into place. The wheel centres align with the middle of the body. Remove the cradle again before any further soldered assembly.



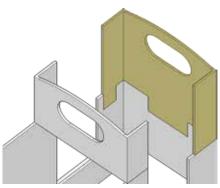
Add the front bufferbeam (10), noting that the body overhangs it slightly. Check the bufferbeam is vertical, if neccessary clean up the front edge of the chassis rails with a file or emery board to form a flat, vertical surface.



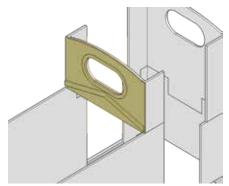
Add the rear bufferbeam (10).



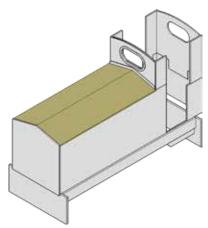
Add the cab front (5), using the halfetched recesses in the body and tabs on the part to locate it accurately. You may need to apply light pressure to the body when fixing the second side to set it to the correct width.



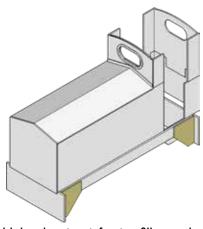
Add the cab rear (6) with the aid of the alignment recesses.



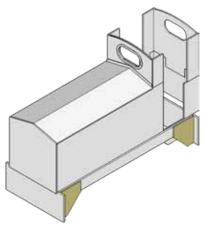
Add the cab front overlay (4), checking that the slots for the bonnet top align with the slots in the main cab front part.



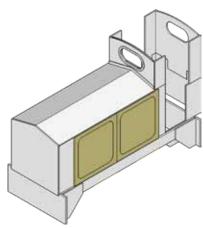
Add the bonnet top (8) by fitting the slots through the cab front and checking it sits inside the top of the grille panel. Solder from the inside at the front first and, if neccessary, at the rear.



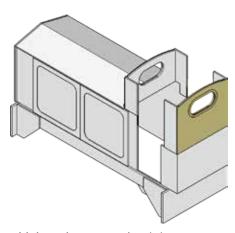
Add the chassis reinforcing fillets on both sides (9) x4. Ensure they are oriented the correct way - as presented on the etch - and that the bottom edges align with the bottoms of the bufferbeams.



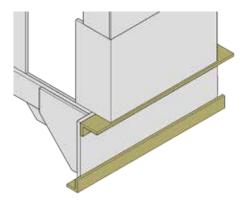
Add the chassis reinforcing fillets on both sides (9) x4. Ensure they are oriented the correct way - as presented on the etch - and that the bottom edges align with the bottoms of the bufferbeams.



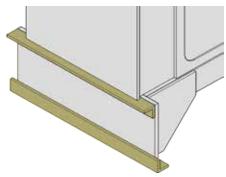
Add the bonnet doors on both sides (2) x 4, noting the alignment of the pressed detail is as presented on the etch.



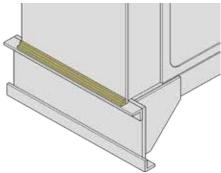
Add the cab rear overlay (3).



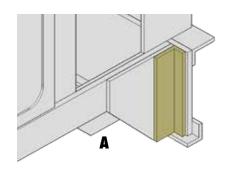
Using the supplied brass L sections, add the reinforcing angle and derailing bar to the rear bufferbeam. Use the $2.0 \, \text{mm} \times 1.5 \, \text{mm}$ section at the top to fill the larger rear overhang. Use the $1.2 \, \text{mm} \times 1.2 \, \text{mm}$ section at the bottom. Note the lower angle is oriented forwards and should be cut $1.5 - 2 \, \text{mm}$ wider than the bufferbeam.



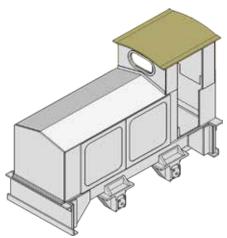
Add the reinforcing angles to the front bufferbeam, both from 1.2mm x 1.2mm section. Again noting that the lower angle is oriented backwards and 1.5 - 2mm wider than the bufferbeam.



Using the smallest brass section, add the reinforcing angle at the bottom of the grille panel, ensuring it is the same width as the panel.



Add reinforcing angles between the insides of the bufferbeams and the chassis side fillets. Either use the $2.0 \, \text{mm} \times 1.5 \, \text{mm}$ section, and file back the overhang to the edges of the bufferbeam, or use the $1.2 \, \text{mm} \times 1.2 \, \text{mm}$ section which will not completely span the bottom edge of the triangular fillet.



Carefully form the roof by rolling it around a small glue tube or something of a similar diameter. Note that the fold lines should be on the *underside* of the roof. Check the fit against the cab and finally form the flat edge of the roof using the fold lines. If you find it difficult to get a soldering iron to the inside edges of the roof through the cab you could carefully solder the eaves to the outside tops of the cab sides instead.

Painting and finishing

Ensure the body is thoroughly cleaned after soldering to remove any traces of flux.

Bolt head detail can be added on the chassis reinforcing fillets and angles, refer to prototype photos online (http://www.industriespoor.nl/ is also a good source).

Cab steps can be fitted using spare 2.0mm x 1.5mm L section under the side frames at the point marked A on the diagram above, ensuring they do not foul the rear axlebox when fitted.

3D printed coupling blocks and small magnets compatible with the Busch HOf range are included, and care should be taken that these are fitted at the correct height to match other stock.

Original prototype information regarding colour has been hard to come by, however in industrial use these locos may have been repainted as required by their owners. Preserved examples seem to be generally green or grey (or rust coloured).

Consider adding additional weight in the void spaces inside the body in front of the motor block and in the cab floor area.

About Narrow Planet

Narrow Planet was founded in 2010 and offers a custom etching service for unique nameplates, works plates and number plates for your model railway locos and stock. In any size or shape from 2mm:ft to 16mm:ft scales. Many manufacturers' styles are available, our full range and ordering information can be found on our website. If you have any queries about the model or instructions please get in touch.

MBDvK is a small additional range focussed on modelling 60cm industrial railways in 1:87 scale.

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