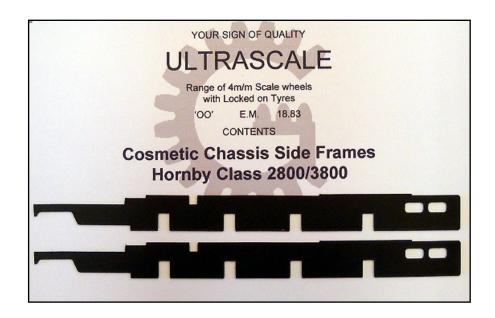
Ultrascale Data Sheet

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Cosmetic Chassis Side Frames - Hornby Class 2800/3800



These polystyrene frames are intended to be used cosmetically, to widen the Hornby 28xx/38xx cast chassis block to a suitable width for EM or P4. There are a few cut-outs and slots that enable them to fit around the various protrusions on the Hornby chassis without alteration. Although they have been designed to be a close fit, it will probably always be necessary to undertake some small fitting work. The frames extend below the bottom line of the chassis as far as the springs on the keeper plate; this preserves the appearance of the bottom line of the frames, although the springs will be set back a little. It is not recommended to try and widen the keeper plate as this contains the pickups.

The axle slots in the frames allow clearance for a 3mm driving axle, but note that if the Ultrascale 'drop in' conversion set is used, this will have to be widened to allow the extended bosses on the rear of the wheels to fit. In this case no additional washers will be required behind the wheels, as indicated below.

Fitting the Frames:

It will be necessary to snip off the small 'spikes' on the Hornby cast frame which represent the top of the brake hangers. The brakes are held securely on the keeper plate and these 'spikes' are merely cosmetic. The brakes may be widened if required, by either 'squeezing' the brackets on the keeper plate with fine pliers (take *great* care) or by cutting off the brakes from the keeper plate and mounting them on new hangers attached to the new dummy frames.

The frames are intended to be spaced away from the cast frame by small blocks of polystyrene sheet glued to the chassis frame. These do not have to be any particular size so long as there is adequate support. We have found that, after degreasing, Loctite Super Glue Gel works well for this. The frames are secured to the blocks with Slater's Mek-Pak solvent. The blocks may be made from either 20 thou, 40thou or even 60 thou material, depending on the gauge and clearance required behind the wheelsets. Generally frames can be widened by a total of 40thou each side for EM, 60 or 80 thou for P4. As the axle slots are a close fit on the axles, often only one brass or steel washer either side is required to adjust sideplay. With a washer in place, there should be no wear issues with the plastic sideframe. Adjustment of sideplay will be for the modeller to decide, dependent upon the radii the model is required to negotiate.

It is recommended that final gluing of frames to packing pieces is undertaken with the body in place on the chassis – using the securing screws to make sure the body is properly located - so that clearance for the axles and fit under the body is optimised before gluing.

Finally:

Please bear in mind that these frames are only an aid to improving the appearance of a model when converted to either EM or P4, mostly to save the time and effort in cutting them out. The final effect will, as always, depend on the modeller's own skills

Further reading:

Model Railway Journal No 205: article on M7 conversions by Philip Hall. Shows use of packing spacers and similar dummy frames.

Model Railway Journal No. 216: article on 2800/3800 conversion by Philip Hall shows use of the cosmetic chassis side frames.

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