

# Towing Jaws and Hooks

British standards require that there should be sufficient room behind the pin of any towing jaw to allow a bar of 31.75mm (1.1/4") to be passed through. This ensures adequate articulation of the eyeshaft in both vertical and horizontal planes. It is also important that this gap is not too great, thus allowing the back of the eye to hit the front of the pin before the front of the eye contacts the throat of the jaw.

A jaw opening that does not comply with the standards and therefore restricts articulation upwards and downwards, is likely to bring about stress fractures on either the coupling or the trailer chassis drawbar. This may be particularly pronounced if the towing vehicle has a long overhang behind the rear wheels and, in such cases, the fitting of more robust, higher capacity equipment than the gross trailer weight might suggest, is often recommended.

The above standards also apply to the jaw on a combination jaw and towball unit. This type of product provides the flexibility of being able to tow trailers fitted with either an eye or 50mm coupling head, without having to change the fittings on the tow vehicle. Where the ballpin is separate, it is also preferable to use a unit that is fitted with a primary locking device to stop the pin/ballpin working loose or rattling unduly. A secondary device such as an "R" clip is also often used, but if this is the only means of securing the ballpin it is insufficient, due to the stresses imposed by the alternating lifting/dropping forces brought about by road conditions and/or poor load distribution.

A hook has no separate pin, but a safety catch should be fitted to prevent inadvertent detachment of the eye. Where a hook has no "chin" or limiting pins on its outer face the towing eye may swing round and underneath the hook if the trailer has been reversed into a jack-knife position. In such a situation, as the towing vehicle moves forward, the eyeshaft and/or drawtube can be severely bent.