



SAFETY ALERT

BOLT-IN TOW-EYE SECURITY

This safety alert has been issued by the NZ Transport Agency following recent incidents where heavy trailers have separated from the towing vehicle, specifically where the drawbar was fitted with a bolt-in tow-eye which pulled out.

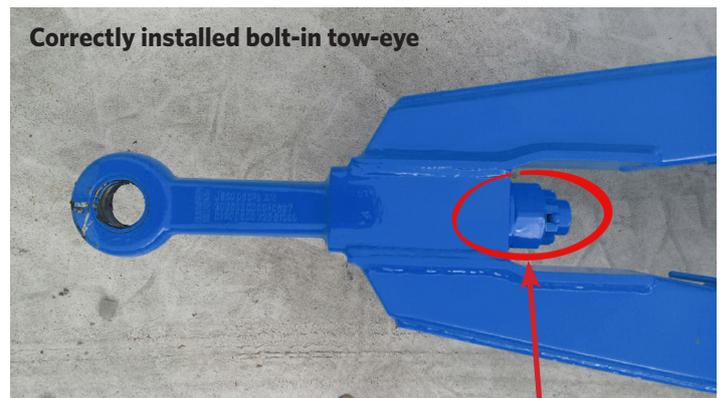
In the case of an incorrectly fitted or maintained bolt-in tow-eye, the large number of stress reversal tension and compression cycles they are subjected to, can cause thread pitches to become worn, loosening the coupling shank or nut, which in turn allows the nut to be pulled over the thread on the shank. This causes the towing eye to pull out of the drawbar, resulting in the trailer becoming detached.

Tightening the nut of a loose bolt-in tow coupling is not acceptable and may increase the potential for earlier catastrophic failure. The complete towing eye and nut must be replaced.

The Transport Agency and the Road Transport Forum have previously issued notifications about the security of bolt-in towing eyes (such as in [CoF news September 2014](#)). However, we are still seeing incidents of towing eyes coming loose and failing in service. This situation has significant safety risk which is being investigated. As a result the Transport Agency may give consideration to phasing out bolt-in towing eyes completely.

Questions related to this should be directed to the towing eye suppliers, or the Transport Agency on 0800 108 809.

Signs of loose nut - fretting, shiny, rusting etc



Bolt-in tow-eye is secure

What you should do

- Check the security of the towing eye as part of the daily walk around.
- If there is any sign of it being loose (eg fretting, shiny, rusting etc) the tow-eye and nut must be replaced - **under no circumstances is it to be tightened.**
- When the tow-eye and nut is replaced, the nut must be torqued to the manufacturer's recommendation (including a greased thread) and then if necessary taken to the next castellation - **in no circumstances backed off.**
- Following initial installation the nut should be re-torqued at the lesser of 5000km or as directed by the manufacturer. If it moves it must be re-torqued. **Note: this is the only time that re-tightening is permitted.**
- One manufacturer recommends checking the tightening torque of the castellated nut every 15,000km. The Transport Agency encourages all operators to follow this recommendation. If the nut is found to be loose the complete towing eye and nut must be replaced.