

SAFETY ALERT

‘Superbell’-brand Ductile Cast Iron Spindles

Major US aftermarket manufacturer ‘Superbell’ has been producing one-piece* spindles that are made from ductile cast iron. These spindles fit vehicles that use a range of early Ford (1928-1948) I-beam axle based front suspension configurations.

These spindles have also been mistakenly marketed by major US website Speedway Motors as manufactured from forged steel meaning that affected vehicle owners may be unaware that these components fitted to their vehicle are made from ductile cast iron. **



LVVTA is aware of a number of ductile cast iron spindle failures both in New Zealand and other countries, and due to the high cyclic loadings on these critical components, LVVTA has taken the step of disallowing the LVV Certification of all one-piece ductile cast iron spindles, or other critically loaded suspension components that are produced from ductile cast iron, irrespective of the manufacturer. ***

Identifying whether spindles are ductile cast iron can be difficult due to a lack of markings or part numbers. As the replacement cost is relatively low LVVTA recommends that affected vehicle owners determine the origin of their spindles and if any doubt exists, the spindles should be removed and replaced with forged steel alternatives.

Pictured above:

Superbell spindle; part # 1104. The spindle pin is integral with the stub axle body. These spindles have no identification and will be difficult to identify. Removal and metallurgical testing may be required to determine suitability. Alternatively, new forged steel spindles can be installed without the need for any further modification.

- * This alert applies only to one-piece spindles. Many aftermarket spindles use a two-piece design which utilises ductile iron for the upright with a pressed-in carbon steel spindle pin. These can still be accepted and approved provided all other LVVTA technical requirements are met.
- ** Speedway Motor’s website is correct as of 10 April 2019, now listing material type as cast iron.
- *** Cast ductile iron aftermarket I-beam axles may still be used provided they have passed LVVTA’s testing, are stamped with an LVVTA-issued sequential number, and have been issued with an LVVTA-issued inspection report that verifies conformance with LVVTA requirements.