

Four-wheel drive strut-spacer warning

A common question asked of the Low Volume Vehicle Technical Association (LVTVA) is the legality of coil spring strut spacers being fitted to late model utes and four-wheel drives.

These types of spacers are usually between 25-40mm in height and bolt in between the top of the front strut platform and the vehicle structure, to raise the ride height of the vehicle.

A lot of people incorrectly assume that coil spring strut spacers do not require low volume vehicle (LVV) certification because some leaf spring blocks don't require LVV certification. However, all strut spacers such as this, do require LVV certification. The clarification of this is on the **tables and images tab of 9-1 Steering and suspension** section in the VIRM. This page lists all suspension modifications that are permitted without LVV certification. Strut spacers are not listed, meaning that LVV certification is required.

LVV inspectors have found multiple issues on vehicles fitted with spring spacers, ranging from ball joint bind through to brake hose and wheel speed sensor wiring problems. There is also concern about the number of brand new vehicles that have been fitted with spring spacers by the dealer, resulting in not only a dangerous modification going unchecked but also in a nasty surprise when the vehicle receives its WoF inspection three years later.

Ball joint spacers, which are also commonly being added to these types of vehicles to correct the top suspension arm angle due to the added spacers, are also a cause for concern due to the added loads they transfer to the suspension arms. There have been multiple cases of cracked and sometimes completely failed upper suspension arms due to ball joint spacers. These modifications not only require LVV certification but may provide a real danger to road users.

If presented with a vehicle which you're unsure about the legality of for a WoF inspection, contact the LVTVA Technical team by phone on 04 238 4343 or email on tech@lvvta.org.nz.



All strut spacers require LVV certification.



This upper suspension arm collapsed under the increased leverage being applied to it due to a ball joint spacer being fitted.



Ball joint spacers such as this increase the load on suspension arms, and as such are not suitable in all instances. LVV certification is required to confirm their suitability.