Low Volume Vehicle Technical Association (inc)

SAFETY ALERT
01 - 2019

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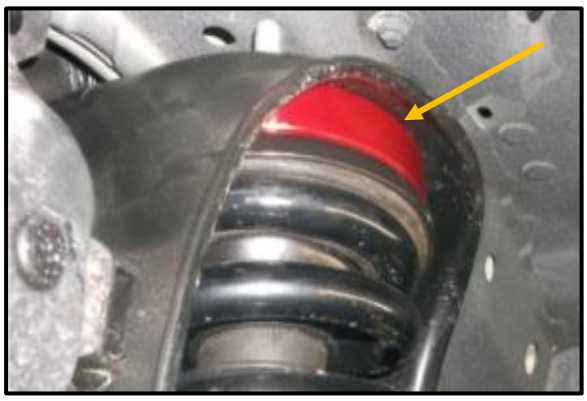
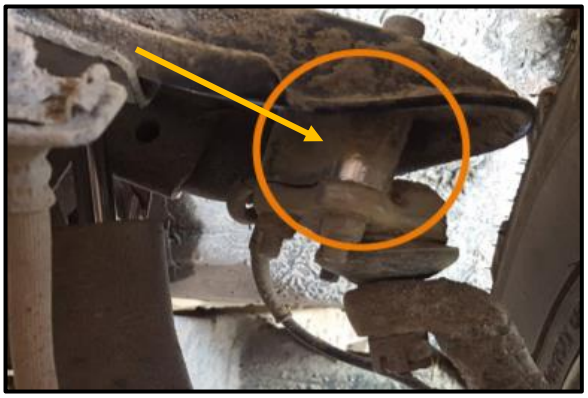
Strut Spacers and Ball-joint Spacers

LVVTA have seen an increase in the fitment of strut spacers and ball-joint spacers to late model utes and four-wheel drives. Concerningly, these modifications are often being done without the required LVV inspection and certification. LVVTA certifiers from around the country have found multiple issues on vehicles fitted with strut spacers and ball-joint spacers, ranging from ball-joint bind, through to brake hose problems, wheel speed sensor wiring problems, and complete mechanical failures.

All strut spacers and ball-joint spacers require LVV Certification.



Above: Common strut spacer



Above: Common ball-joint spacer

The type of strut spacers used 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. There is a common misunderstanding where many AVIs incorrectly believe that strut spacers do not require LVV certification. However, as strut spacers are not listed as a modification that doesn't require LVV certification in the Modification Threshold, they must be rejected for WoF and referred to an LVV Certifier for certification.

Ball-joint spacers, which are 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 that they transfer to the suspension arms. LVVTA has seen multiple cases of cracked, and in the worst cases, completely failed upper suspension arms due to ball-joint spacers. These also require LVV Certification to ensure they are fit for purpose, as confirmed by an LVV Certifier.

For further clarification on the requirements for LVV certification of suspension modifications, please see the 'tables and images' tab of the Steering and Suspension section of NZTA's Vehicle Inspection Requirements Manual (VIRM), or refer to the LVV Certification Modification Threshold Schedule.