Low Volume Vehicle Technical Association (inc)

SAFETY ALERT

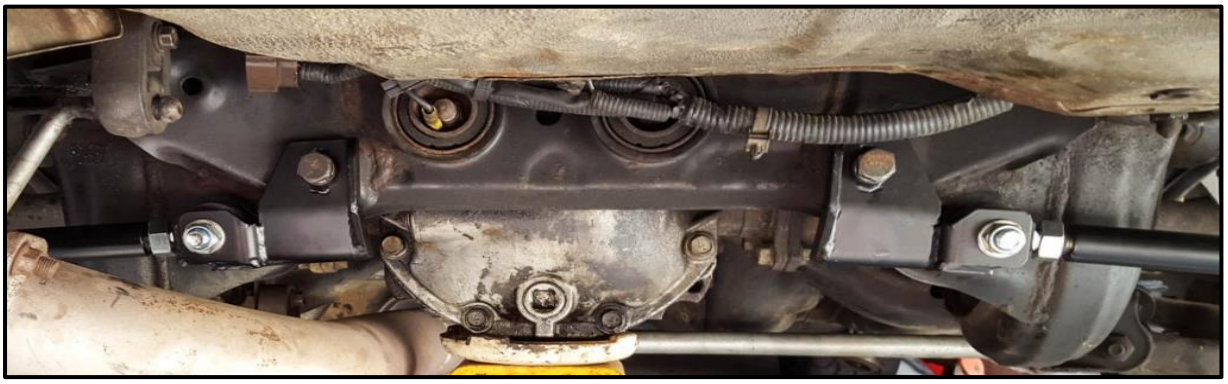
 # 06 – 2020 (December 2020)

SAFETY ALERT

Multi-piece HICAS Lock-bars

An LVV Certifier inspected a vehicle fitted with a multi-piece HICAS (High Capacity Actively Controlled Steering) lock-bar system. Serious concerns were identified by the LVV Certifier regarding the performance of these multi-piece lock-bars, and further investigation by LVVTA technical staff has confirmed that they are not fit for purpose.

As a result, multi-piece lock-bars cannot be LVV certified.



Most lock-bars (fitted to Nissans for the specific purpose of disabling the rear wheel steering mechanism), are a one-piece tubular bar to which standard tie-rod ends are attached after the original rack has been removed. These one-piece bars are typically affixed to the OEM attachment points. However, on inspection, the design of the multi-piece lock-bar utilises two separate assemblies with each part mounted independently, and as they are not supported by two widely-spaced mountings, a much higher bending and fatigue load is applied on each attachment point.

The LVV Certifier inspecting the vehicle with the multi-piece lock-bar filmed the lock-bar in operation, which showed the inner mounting points flexing under moderate driving conditions.

Multi-piece lock-bar kits are available in many different brands, but cannot be accepted for LVV certification.