# Repairer sector

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# Throttle controllers

**Throttle controllers have become somewhat of a topic over the last few years, especially with the rise of the double-cab ute as an everyday vehicle, and the mainstream adoption by vehicle manufacturers of 'fly-by-wire' throttles.**

I'm sure we've all experienced the sensation in a modern vehicle, where we put our foot hard down on the throttle and then count the time before the engine revs catch up. In reality this can be a second or two, but it feels like an eternity. The sensation can be exaggerated when you are towing a heavy load up a steep hill. This is where a throttle controller comes into play.

Vehicle manufacturers compromise between drivability and economy, with economy (or more importantly emissions) usually winning the day. This leads to throttle responsiveness being preset at the factory and often feeling fairly lazy.


Dashboard controller.

## So, what do throttle controllers do?

Throttle controllers intercept the signal being delivered from the accelerator pedal sensor to the throttle body and depending on the parameters set, alter it to either slow the signal down (fuel economy mode) or speed it up to increase throttle responsiveness.

What throttle controllers are not doing is adding power or impacting on factory parameters for fuel pressure, boost pressure or emissions. The engine will still produce the same amount of power irrespective of a throttle controller being fitted or not. What it does do is allow a fully adjustable throttle pedal that is better able to respond the loads placed on the engine.

By far the biggest users of throttle controllers are diesel double-cab utes. One day the vehicle is empty, and relatively light, the next it has a three-tonne trailer attached. The factory throttle response can't account for the different loads, and is either too sharp, or too lazy.

Enter the throttle controller with its dash mounted adjustment. A quick bump of the mode or settings, and the ute has entirely different drivability characteristics depending on the situation.


Motorhomes are also increasingly being fitted with throttle control devices, although they are usually set to an auto mode and hidden behind the dash.

Low Volume Vehicle Technical Association (LVVTA) has reviewed the purpose and function of throttle controllers and believe that they should not require LVV certification.

So if a vehicle is presented for a WoF or CoF and has a throttle controller fitted, they are fine to be passed and do not require any further certification.

This article was written in conjunction with LVVTA and Petroject NZ.