

## Electric Brake Controller resistance issues

A JAS Customer reported a problem with a vehicle fitted with an LV1405 Electric Brake Controller which will most likely be an issue with other brands/types.

The customer called JAS to say he had fitted an LV1405 and the brakes were pulsing on and off on the trailer. A second Brake Controller was fitted and the trailer brakes still pulsed.

The first unit was tested and no issue was found.

The normal questions were asked of where he was picking up the brake light supply as you cannot guarantee that there is a positive feed anymore at the brake light switch.

He had this correct – to the trailer plug brake light supply.

His battery supply circuit breaker was ok. (Low Voltage recommends a fuse)

The customer was asked to try the manual control/override switch and all then worked OK.

So it seemed to be an issue only when supplied from the red wire or brake lights supply.

He had another look at the vehicle and called back to say that his technician had fitted 3mm twin cable to the rear.

1 wire for the Blue wire, (Brakes to the rear) and the second was the Red stop light feed to the controller at the front.

3mm is not heavy enough to carry the Blue wire brake load and the resistance in this was causing interference on the red wire due to them being so close together. This caused the pulsing issue.

Many people do not realise that the red wire has a dual function, firstly to signal that the brakes have been applied and turn on the controller when operated by brakes being applied by foot, and secondly carry power to and turn on the brake lights on the trailer to alert vehicles behind when the trailer brakes are applied manually from the override switch on the dash.

