

LLAMS HEIGHT CONTROLLER

The controller is a driver-operated electronic device for air-suspension Land Rovers to overcome the automatic lowering from off-road height by allowing off-road height to be obtained whilst on-road height mode is in use. Using a 2nd switch setting, a partially raised height of approximately 30 mm (60%) is obtained, which can be very useful to prevent hitting the bump-stops on some faster rough tracks without having to be at full off-road height.

Alternatively, the controller can be setup to provide off-road height on its high setting and lowered by 20 mm (-40%) to high-speed height on the partial setting to improve handling at any speed on smoother roads. This effectively removes the speed limitations of both off-road and high-speed heights.

The extra or reduced height can be used whilst in other height modes although this could cause the suspension to try raising or lowering past its limits. Switching the module to its off setting and restarting the vehicle should restore normal operation.

A plug-in wiring loom will be provided for Discovery 3/4/RRS vehicles.

The controller has not been tested on but is expected to work on the L322 RR, however a partial loom will need to be spliced into the vehicle's looms. Wiring information is available for all L322 models. One connector on L322s with TR appears to use a slightly different shell to the D3/4/RRS otherwise the loom would fit.

The controller must be setup after installation as some model vehicles use different sensor voltage changes to other models.

The controller modifies the voltage from each of the 4 height sensors (1 for each wheel) using a microprocessor for each sensor. Using a setup procedure, it learns and stores for each sensor the difference in sensor voltage between the on-road and off-road heights. When selected, the deltas are applied to the corresponding sensor voltages to cause the suspension ecu to think the vehicle is too low (or high) and thus raise (or lower) the vehicle until the sensor voltages are within tolerance of the expected value. A LED shows green when the partial height is selected and red when the full height is selected. It is possible to setup different height increments, such as by using access height instead of normal height during the learning procedure.

Installing the controller may result in temporary suspension system faults on some models if the battery is not disconnected for the entire installation process but the faults no longer exist once installation is complete. The module can be readily unplugged from its wiring loom and replaced by a dummy plug or the wiring loom can be totally removed.