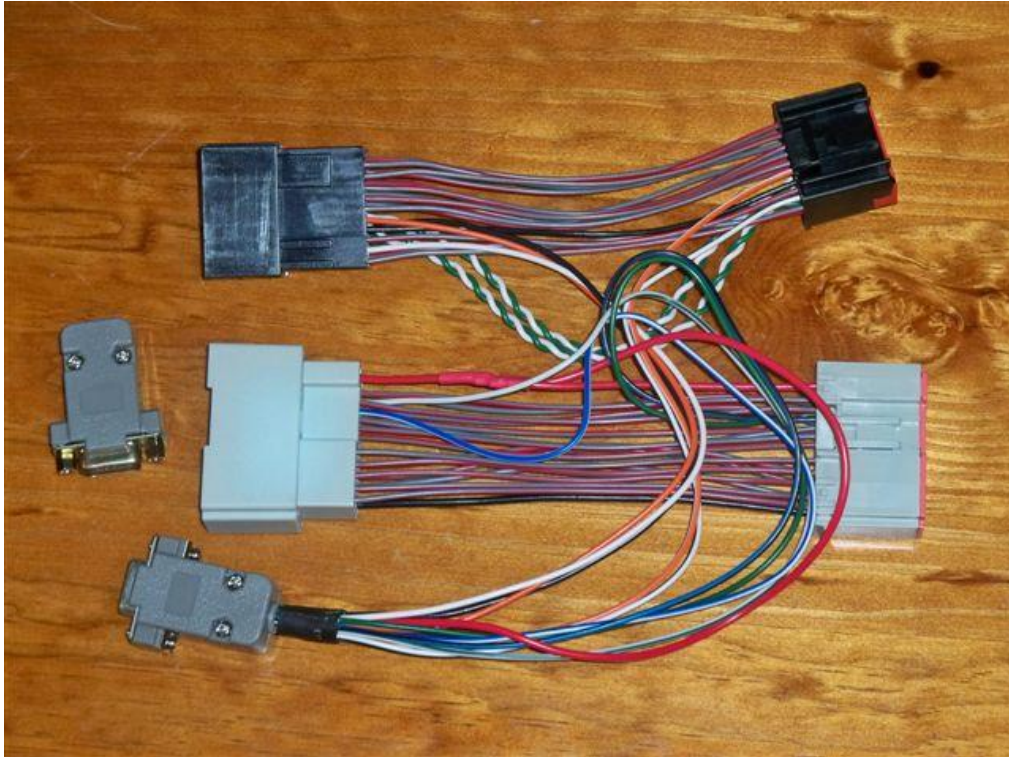


LLAMS Height Controller / Loom & Controller fitment, Calibration.

The LLAMS Height Controller kit for the D3, D4 and RRS consists of:



Loom



Controller Box



Height switch and wire.

In this Data sheet we will show you how to connect the Loom & Controller box,

This data sheet is photographed on a Right Hand Drive D3, while the models may differ slightly the principals will remain the same, as will the position of the suspension CPU. On Left Hand Drive vehicles the instructions will be mirrored to the left hand side of vehicle.

Step 1: DISCONNECT THE CAR BATTERY

If you have a Dual battery set up disconnect the link between the batteries as well as disconnecting the main starting original battery.

Step 2: Remove the Drivers side kick panel by popping up the sill trim then manoeuvre the panel from behind the felt strip.



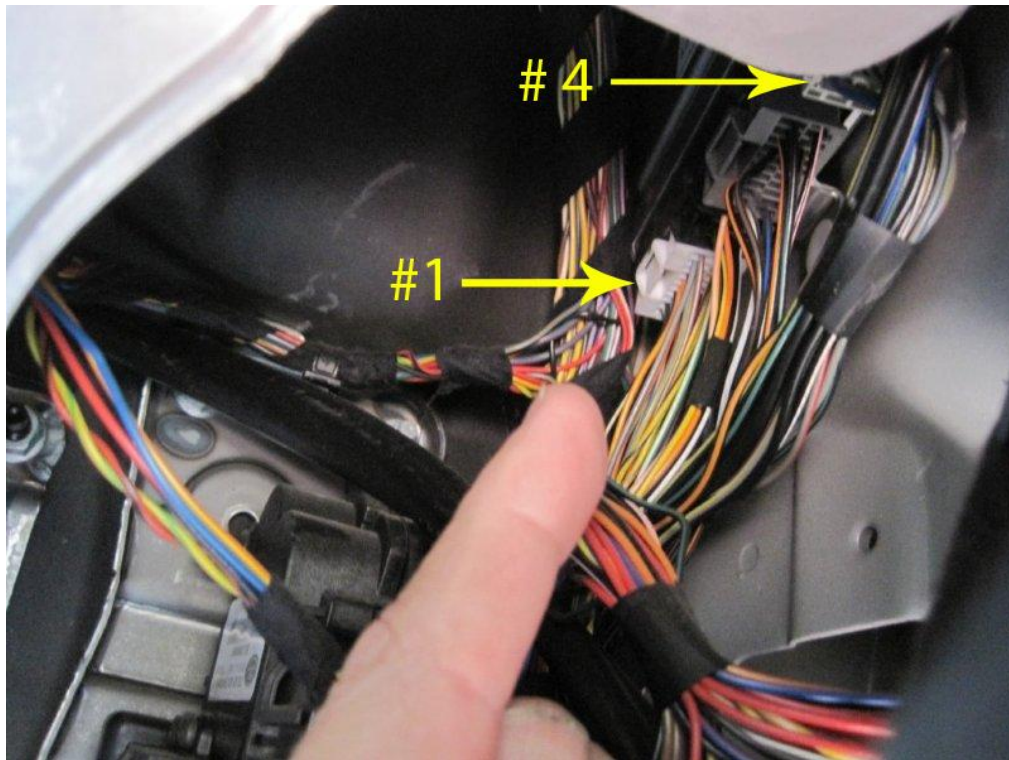
Step 3: Remove the Pedal access panel by unscrewing the 2 Torx screws, pull out the bottom left corner against the transmission tunnel, drop this side down first. Then disconnect the courtesy light from the panel. Pull the Steering column access panel down in the centre top edge, disengage from hooks on bottom edge.



Step 4: This will reveal the access hole that will help you get access to the work area.
You can work both through this hole and also from underneath the dash.



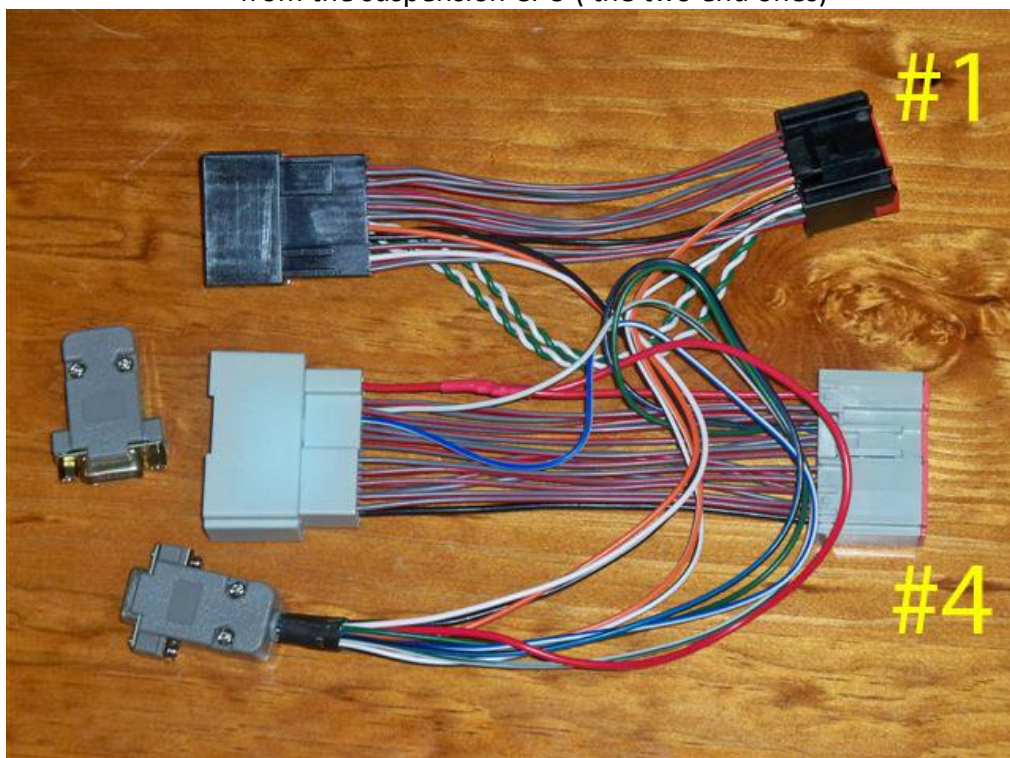
Step 5: With the use of a torch or work light locate the suspension CPU up high on the “A” pillar.



Note there are four connectors plugged into the bottom of the CPU.

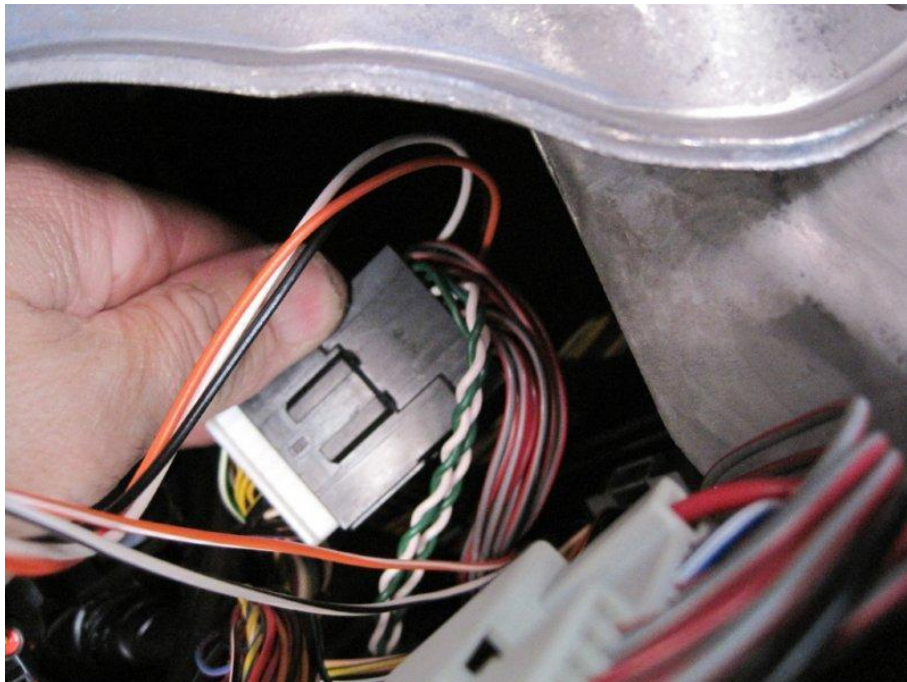
On the left side of the CPU is a narrow light grey connector (# 1) next is a very narrow black connector followed by wide dark grey connector and another wider light grey connector (# 4) on the right side of the CPU.

Step 6: Note how the connectors unplug on the new loom release, then unplug # 1 and # 4 connectors from the suspension CPU (the two end ones)

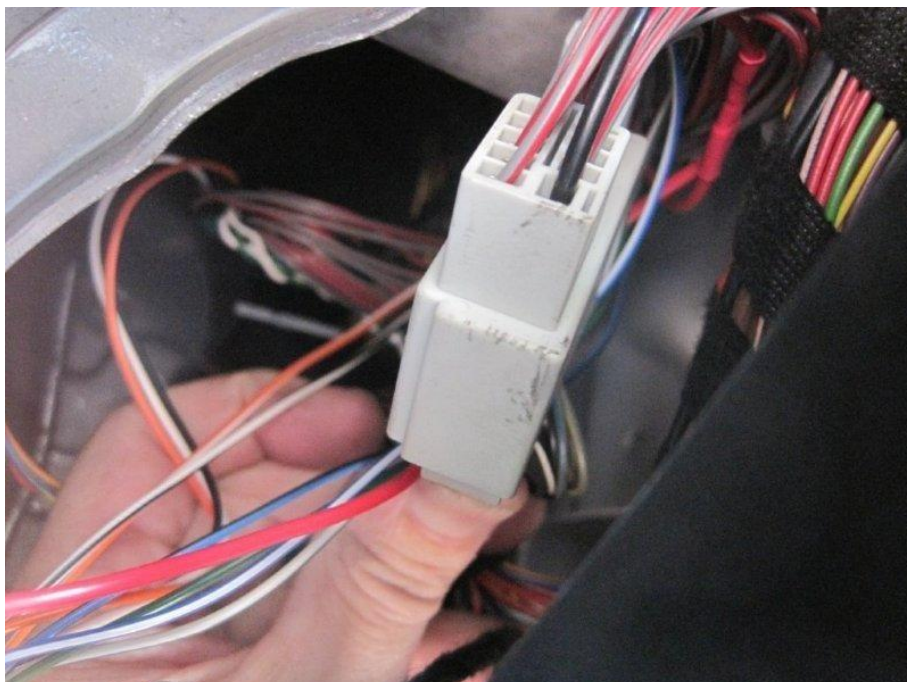


Note the colour of the new loom connector # 1 does not match the existing connector.

Step 7: Connect the # 1 and # 4 Original connectors to the corresponding plugs of the new loom. It is easiest to connect these first before connecting the other end into the CPU. Also ensure you are not trying to fit the plugs both back to front or to the wrong socket.



1 Connectors

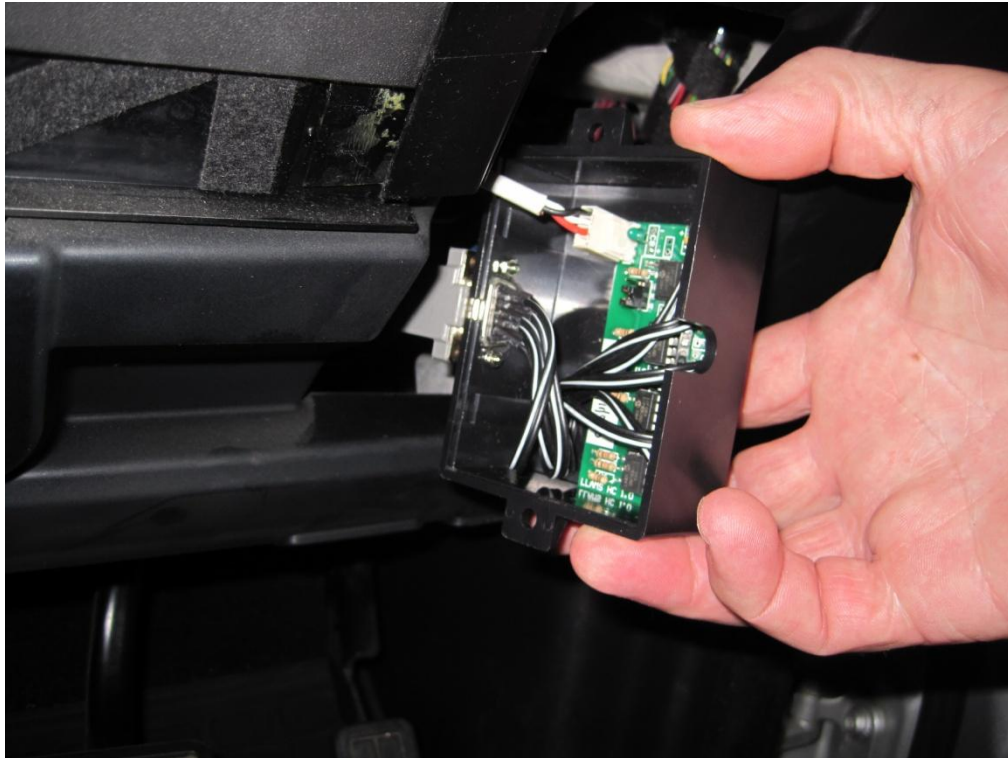


4 Connectors

Step 8: Replace the # 1 and # 4 connectors with the corresponding ones on the new loom, The # 1 connector is the smaller of the two, when seating the connectors make 100% sure they are seated fully and secure within the CPU.

Step 9: Connect the new loom to the Control box.

Bring the metal connector of the loom and the separate White switch wire plug through the access hole. (See separate instructions for fitment of the switch wire)



Note again ensure that connections are fully home.

Step 10: Reconnect the Car Battery.

This concludes the Loom and Controller fitment, next is Calibration of the new Controller.

Calibration

Calibrate Vehicle on a reasonably level / even surface.

Avoid slopes both sideways and fore / aft.

Suspension setting set at "Standard Height"

Note: If at anytime during calibration if you encounter "Suspension Fault" in your display centre switch the vehicle off and restart the procedure. If the Fault still occurs double check all connections.

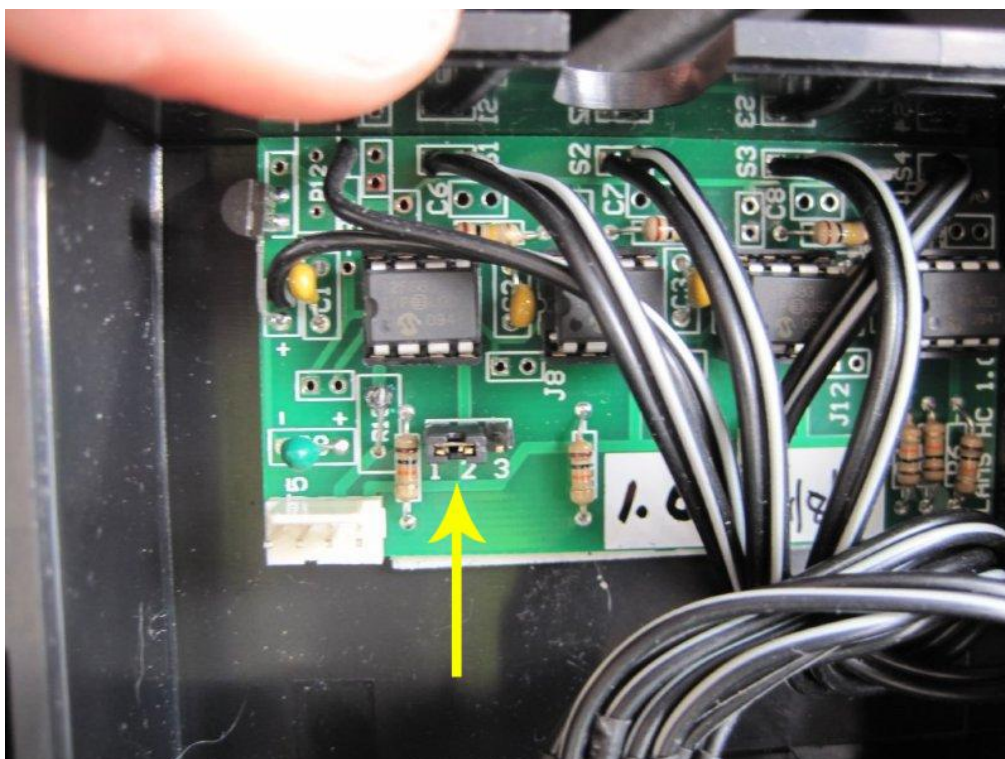
(Disconnect the Battery anytime you are unplugging the new loom)

1. Set the controller switch to "OFF / Normal" as shown:



Note: Line pointing to the Led. (not lit)

2. Fit the jumper pins on the circuit board within the control box to pins 1 & 2 as shown:



3. Start the Engine.
4. Set the controller switch to “HIGHEST” (Red LED +50mm) as shown below to start calibration. Wait momentarily.



5. Set the controller back to “OFF / Normal”
Wait momentarily.
6. Remove the jumper back off pins 1 & 2 and store it on pins 2 & 3.
7. Ensure “Standard Height” (on road) is selected and is stable.
8. Set the controller to “LOW” (Green LED -20mm) as shown below. Wait Momentarily, then return the switch to “OFF / Normal”



9. Select “Off Road Height” and wait until height is stable.
10. Set the controller to “HIGHEST” (Red LED +50mm) Wait Momentarily.
11. Set the controller to any other setting to store calibrations and “Activate” the controller.
This is to allow normal mode to be selected before activation.

If all test and works correctly, refit the controller box cover and place it within the access hole area. Refit the Steering and Pedal cover panels.

NOTES:

- A. The controller can be operated whilst the vehicle is in motion. The vehicle will not self-level during hard acceleration including cornering or braking so if there's a bad patch of track ahead then you need around 5 seconds without jumping on the brakes before the ecu will start to adjust to, eg, +50. A controller height change will be implemented immediately if a change in height mode is also initiated and speed is within the required speed limitations, eg selecting +50 and off-road mode whilst travelling at 30 kph will be implemented together.
- B. The suspension CPU will wait 5 – 10 seconds before adjusting height.
- C. Avoid calibration on a slope as the vehicle may not raise as much on the lower side / end when raising to Off Road height which would cause that side / end to always be lower when +30 or +50 setting is selected.
- D. To obtain the full Off Road height at the +50 setting during calibration ensure that normal height is not unusually high and Off Road height is not unusually low at the appropriate steps.

LLAMS Pty Ltd
Sept 2010.