8.3 GEARSHIFT ISSUES

When first discovering a gear shifting issue, it is important to first follow a few steps before attempting any remedy for the issue.

- o First of all, plug into the car and using the 'Data Analysis Manual' as a reference and download the data. Once the data has been downloaded, review the 'GearShiftDecision' channel to see if any shifts have been disallowed due to a breach in the cars normal parameters, TPS Too High/RPM Too High etc. The shift will not be allowed if it sees any of these.
- Next step is to open up LifeMon and check whether there is any output from the paddles. Do this by viewing the 'PaddleSwitch' channel, this will give a live reading of the paddle inputs, check the switches are registering on this channel by displaying up/down. If there is no output, check the wire from the steering wheel is still plugged in and has no breaks or tight bends.
- o Is it shifting through all gears? Or just having trouble with one specific gear? If one specific gear this suggests it may be a mechanical issue and it is strongly advised to contact an authorised Radical engine shop for details and more advice on what to do. If you have carried out the first two steps and are still having issues shifting through all gears, take a look below for more help.

DOWNSHIFT ISSUES

Ensure the blip is between 20-35% also check it is blipping mechanically at the actuator end. Check actuator bearings for play, check actuator length using the jig, check the TPS is set at 4% at rest and operating normally, check 'GearShiftDecision' for any dis-allowed shifts.

ISSUES GETTING OUT OF NEUTRAL

Check actuator bearings for play, check actuator length using the jig, check the TPS is set at 4% at rest and operating normally, check the clutch switch is sending a signal, check the clutch clearance is correct at the pedal.

UPSHIFT ISSUES

Check actuator bearings for play, check actuator length using the jig, check the TPS is set at 4% at rest and operating normally, check 'GearShiftDecision' for any dis-allowed shifts.

8.4 RELAYS

The fuel pump, fan and water pump relays are all housed behind the ECU panel. The compressor relay is under the left hand sidepod on the outer side of the chassis skin. The charging relay is located on the charging loom which is on the bottom left side of the engine bay.