Serviceability and replacing an instrument pack

None of the components that make up the IPK are serviceable and failure of one or all components requires a new IPK to be fitted. All warning lamps are driven by light emitting diodes (LED).

IPK's should not be exchanged between vehicles. When a replacement is required a new IPK should be ordered. When a replacement IPK is fitted to the vehicle and configured to the vehicle using TestBook it will communicate with the LSM, via K-Bus, and the stored mileage will be transferred to the IPK. The light switch module periodically communicates with the IPK to update the information it stores for back-up purposes. It stores the vehicle identification number, vehicle total mileage and the SIA data. This data is updated every 100 Km (see Figure 40).

When necessary a IPK with less than 255 Km recorded mileage can be reconfigured to match the vehicle it is being fitted to using TestBook. It will then be able to communicate with the LSM when the ignition is switched 'on'. If the LSM recorded mileage is more than the IPK mileage, this figure will be transferred to the IPK odometer.

If the IPK has more than 255 Km recorded mileage it will not accept the LSM recorded figure after configuration. Instead it will attempt to update the recorded mileage stored in the LSM. If a new LSM has been fitted with zero miles recorded the LSM will accept the figure from the IPK. If the LSM has a valid mileage recorded already, it will not accept a new figure from the IPK which exceeds the recorded mileage by more than 1000 Km. For example if a new value of 6,500 Km was sent to an LSM with a recorded mileage of 5,000 Km the LSM would ignore this new figure.

A working/valid LSM will be updated with new mileage figures every 100 Km via K-Bus. Once it has reached 300,000 Km it ceases to update the mileage. It is therefore conceivable that an IPK, of correct specification, could be fitted to a vehicle outside the correct procedure with incorrect mileage data (without configuring it). There are as yet no visible warnings to inform the driver. Once TestBook is connected to the vehicle problems with the central coding key would occur and communication with the IPK would not be possible - making it clear to the dealer that a problem exists. If an IPK of incorrect configuration and specification is exchanged without configuration by TestBook errors will occur - such as the illumination of various warning lamps- indicating a problem exists.