
Information, Gauge and Warning (13.00)

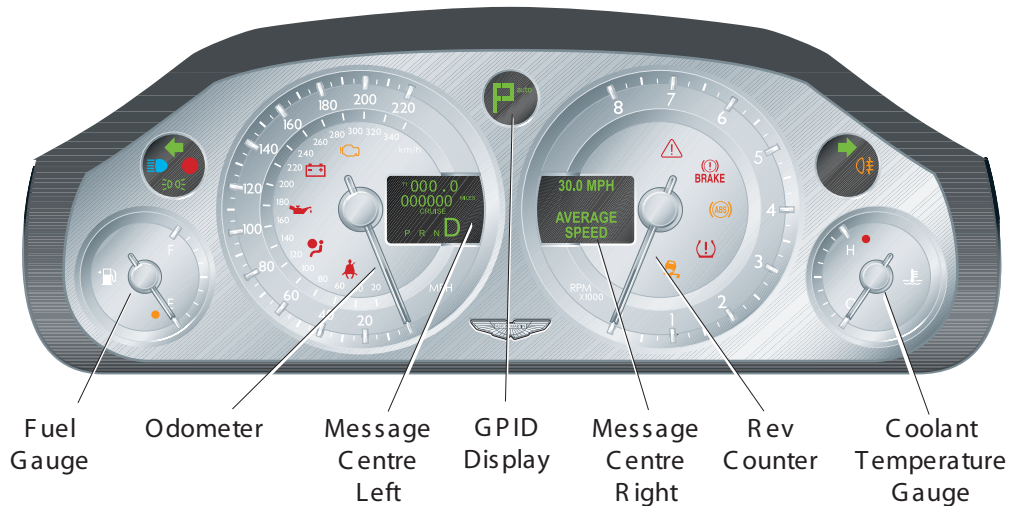
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Information, Gauge and Warning (13.00)

Driver Information Module (DIM) (13.01)

Description



The Driver Information module contains the necessary electronic control units and memories to control, process and present all necessary vehicle information to the driver.

1. Information on vehicle performance is presented in visible form using the instruments and gauges. These devices present such information as Vehicle Speed, Engine Speed, Fuel Level and Coolant Temperature.
2. Information on vehicle status is presented by an array of warning lights.

- Red - indicate immediate danger warnings
- Amber - indicate conditions which are serious but not immediately dangerous
- Green and Blue - indicate normal actuation of items such as turn signals or fog lamps

The message centres and the gear position indicator display (GPID) are used to present information on the distance recorders (trip meters), current gear mode and current gear engaged.

3. The right message centre is used to display any warning / information message text. These text messages may be reinforced in some cases by illumination of the appropriate warning lamps.

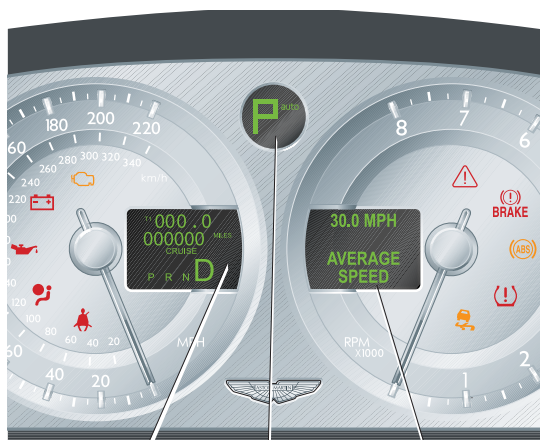
The following table defines all information and warning lamps and their significance:

Information and Warning Lamps

Name / Function	Description	Symbol	Input Signal	Power On Check
General Warning – Amber / Red	Controlled internally by the DIM. It is used in conjunction with several text messages to indicate information to the driver.		Internal	
SRS (Airbag)	Controlled externally by the SRS module and indicates a fault in the SRS module.		CAN	Yes (5 Seconds)
High Engine Coolant Temp	This tell tale is controlled internally by the DIM. Activated when the engine coolant temperature signal from the CAN bus reaches a pre defined value. (The actual symbol is not lit, only the red LED.)		CAN	
DSC	Controlled externally by the ABS / DSC module. Indicates when the system is in operation or when it is turned off. The tell tale is triggered by a CAN signal.		CAN	Yes (5 Seconds)
ABS	Controlled externally by the ABS / DSC module. Indicates a fault in the ABS system. The tell tale is triggered by a CAN signal.		CAN	Yes (5 Seconds)
Rear Fog Lights	Controlled externally by the SRS module. Indicates that the rear fog lights are turned on. The tell tale is triggered by a CAN signal.		CAN	Yes (5 Seconds)
Seat Belts	Controlled externally by the CEM. Indicates that the seat belts are not fastened properly. The tell tale is triggered by a CAN signal.		CAN	Yes (5 Seconds)
Brake (General)	Controlled externally by either the CEM or the ABS / DSC module. It indicates low brake fluid level, brake fault and park brake. The tell tale is triggered by two low side inputs or a CAN signal.		Low side x 2 and CAN	Yes (5 Seconds)
Side Lights	Controlled externally by the CEM. Indicates that the side lights are on.		High side	
Oil Pressure	Controlled externally by the PCM. Indicates low oil pressure. The tell tale is triggered by a CAN signal.		CAN	Yes (5 Seconds)
Battery Charge	Controlled externally by the CEM. Indicates that the alternator is no longer charging the battery properly. The tell tale is triggered by a CAN signal.		CAN	Yes (5 Seconds)
Fuel Level Low	Controlled internally by the DIM. Activated when the fuel level drops below a pre defined value. The fuel information is provided from the CAN bus. The symbol is not lit, only the amber LED.		CAN	
Turn Left / Right	Controlled externally by the CEM. The tell tale is triggered by a CAN signal.		CAN	
High Beam	Controlled externally by the CEM. Indicates that the high beam is switched on. The tell tale is triggered by a CAN signal.		CAN	
Check Engine	Controlled externally by the PCM. Indicates a fault in the engine management system. The tell tale is not connected to the microprocessor.		Low side	
Tyre Pressure	Controlled by the DIM. Indicates a low or rapid change in the tyre pressure or a tyre pressure monitoring system fault.		Low side	Yes (5 Seconds)
Not Used				
PATS	Controlled externally by the PCM. Indicates key acceptance status.		Low side	

DIM Display layout

The DIM contains two displays, which are used to inform the driver about the vehicles status.



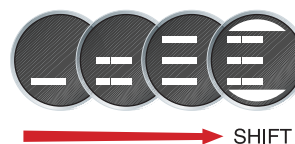
Message
Centre
Left

GPID
Display

Message
Centre
Right

Manual Transmission

On a manual transmission vehicle the GPID display informs the driver when the current gear has reached it's upper rev. limit the GPID will indicate revs increasing. The optimum time to shift gear is when the GPID shows three bars and is red at the top and bottom.



For the first 2000 km (1243 mile) and when ever the engine temperature is below 40°C (104°F) the shift control will indicate early shift changes to protect the engine.

A red 'R' will show when the transmission is in reverse.

Message Centre Right

The Message Centre Right is used to display the trip function information and warning / information messages.



Message Centre Left

The Message Centre left is used to display the odometer (A), the Cruise control status (B), the Gear range (C) and the T1 or T2 trip distance (D).



Gear Position Indicator Display (GPID)

Automatic Transmission

On an automatic transmission vehicle the GPID display contains the two gearbox mode 'tags' (Auto and Touch), and a segmented character area. This segmented display can show P, R, N, D, 1, 2, 3, 4, 5, 6 depending on the current gear engaged. The display is dual colour.



Green - normal operation

Red - defined situations.

Maintenance

Driver Information Module (DIM)

Repair Operation Time (ROT)	
Item	Code
Driver Information Module (DIM) Renew	TBA

Removal

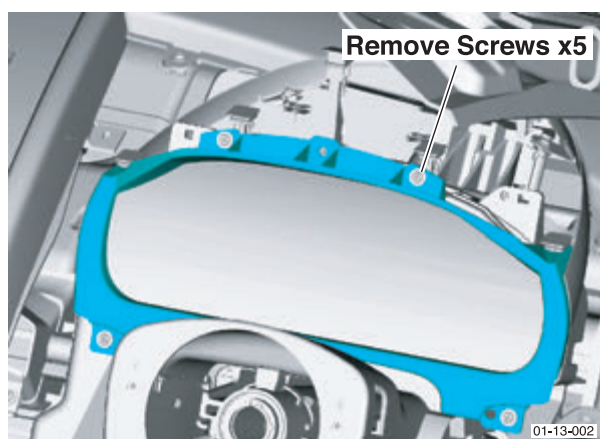
1. Disconnect the vehicle battery.
2. Remove the following items of trim.
 - 2.1 Remove panel (pull off).
 - 2.2 Remove panel (pull off).
 - 2.3 Remove panel (pull off).

Remove Panels x3



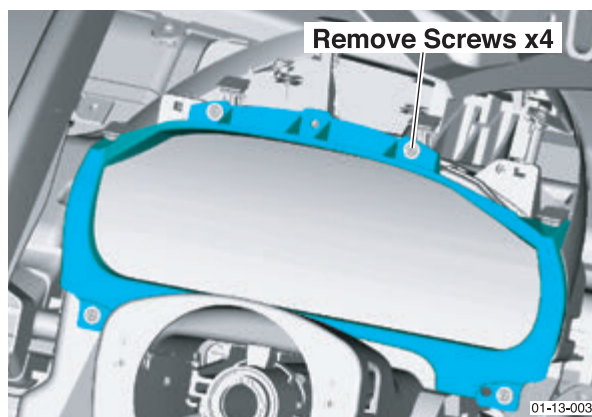
3. Remove the screws that secure the DIM bezel (x5). Withdraw the bezel and lay it on the steering column.

The DIM bezel is attached to the leather trim.



4. Remove the screws (x4) that secure the DIM. Withdraw the DIM to the extent of the wiring harness.

Ensure the spacers are retained.

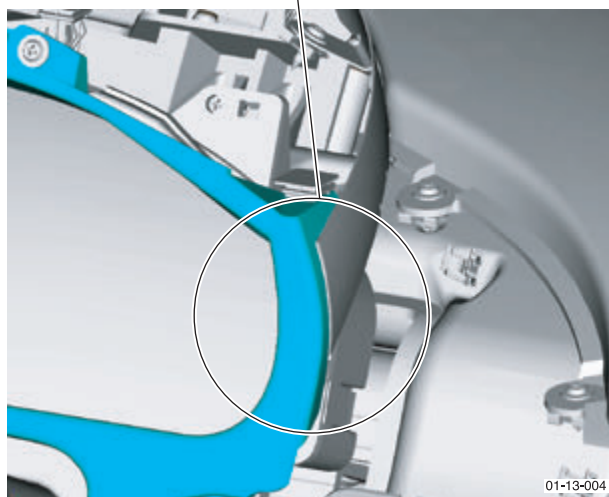
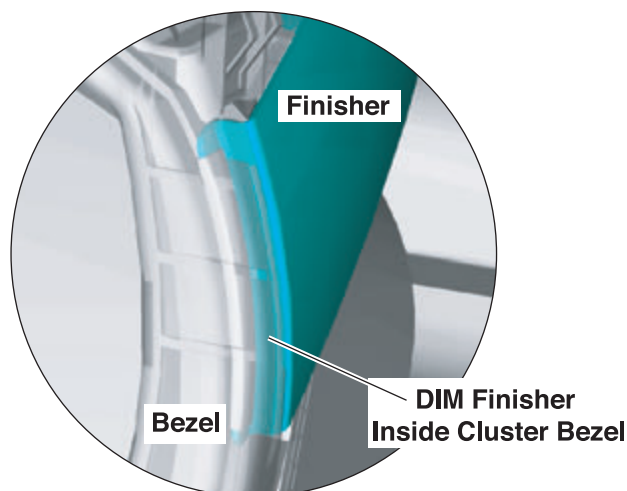


5. Disconnect the wiring harness plug. Withdraw the DIM.

Installation

1. Place the DIM to it's mounting point. Connect the wiring harness plug.
2. Install the DIM (screws x4).
3. Install the DIM bezel (screws x5).

Ensure that the DIM finishers install on the inside of the cluster bezel.



4. Install the trim panels.
5. Connect the vehicle battery.