

Workshop Manual (Issue II - Volume 2)



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ASTON MARTIN LAGONDA LIMITED

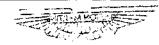
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#### Introduction





### **Workshop Manual Sections**

The DB7 Workshop Manual is divided into 9 sections as follows:

- 1 Engine
- 2. Fuel, Emission Control and Exhaust
- Transmission
- Suspension and Steering
- 5. Brakes, Wheels and Tyres
- Electrics
- 7. Chassis and Body
- 8. Air Conditioning
- 9. Aston Martin Diagnostic System

#### **Procedure Numbering**

The workshop manual procedures are numbered using the parts list numbers as a key. The first two digits of a workshop manual procedure number are also the parts list number (e.g. 1.5.01 Sump Removal relates to PL 1.5 Oil Pump and Sump). Thus when carrying out a procedure, you can quickly locate the relevant parts illustration and spare parts list.

To avoid excessive repetition, each procedure will be fully detailed once in its appropriate place in the manual. In any other location where this procedure is required, it will be referenced only by its title and its procedure number.

#### **Special Tools**

Where special service tools are required to perform an operation, the tool number is recorded at the point of use within the procedure. An index and illustrated list is provided in this section for the purpose of identifying special tools.

#### References

References to the left, right, front or rear of the vehicle or of a component are always made as if sitting in the drivers seat facing forward. Any such references to assemblies removed from the vehicle are to the normal orientation of the assembly when fitted in the vehicle.

#### Repairs and Replacements

Where replacement parts are required, it is essential that only genuine Aston Martin parts are used. Your attention is drawn to the following points concerning repairs and the fitting of genuine Aston Martin parts and accessories:

- Safety features embodied in the vehicle may be impaired if other than genuine Aston Martin parts are fitted.
  In certain territories, legislation prohibits the fitting of parts which are not produced to the manufacturers specification.
- Adhere to torque wrench settings given in this manual.
- Locking devices, where specified, must be fitted. If the efficiency of a locking device is impaired during removal, it must be renewed.
- The vehicle warranty may be invalidated by the fitting of other than genuine Aston Martin parts.

April 1997



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# 6.5.03 Ignition Switch

#### **Procedure**

- Disconnect the battery.
- Remove three screws and the steering column lower cover.

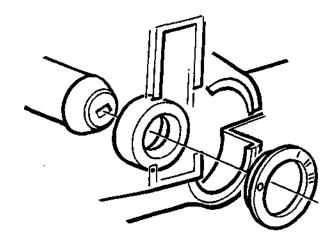


Figure 1. Ignition Switch

- 3. Loosen the grub screw securing the switch and ease the switch from its location.
- Disconnect the switch multi-plug and remove the switch.

### 6.5.04 Instrument Panel

#### **Procedure**

- 1. Disconnect the battery.
- Remove the four screws from the instrument panel surround and remove the surround.

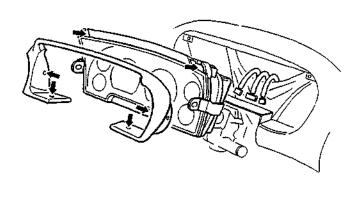


Figure 1. Instrument Panel Removal

- Remove two screws from the top edge of the instrument panel and withdraw the panel.
- 4. Detach the three electrical connectors and remove the instrument panel.
- Panel warning lamps are 1.2W bayonet fit. The larger panel illumination lamps are also 1.2W bayonet fit.

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### 6.5.05 Radio

#### **Procedure**

1. Press the release button and remove the radio front control panel.

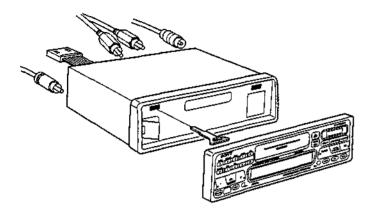


Figure 1. Radio Removal

- 2. Insert the radio removal tool into the slots in the top edge of the radio body to release the catches. Pull forward on the radio and remove it from the centre console.
- 3. Disconnect the speaker, CD, aerial, power and earth connectors.

# 6.5.06 Air Conditioning and Switch Panel

#### **Procedure**

- 1. Remove the radio.
- 2. Pull off the air conditioning control knobs.
- 3. Lift of the console controls finisher panel.

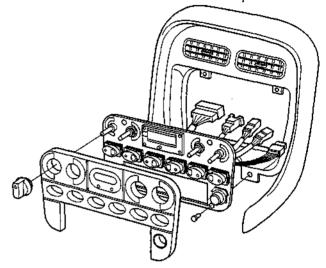
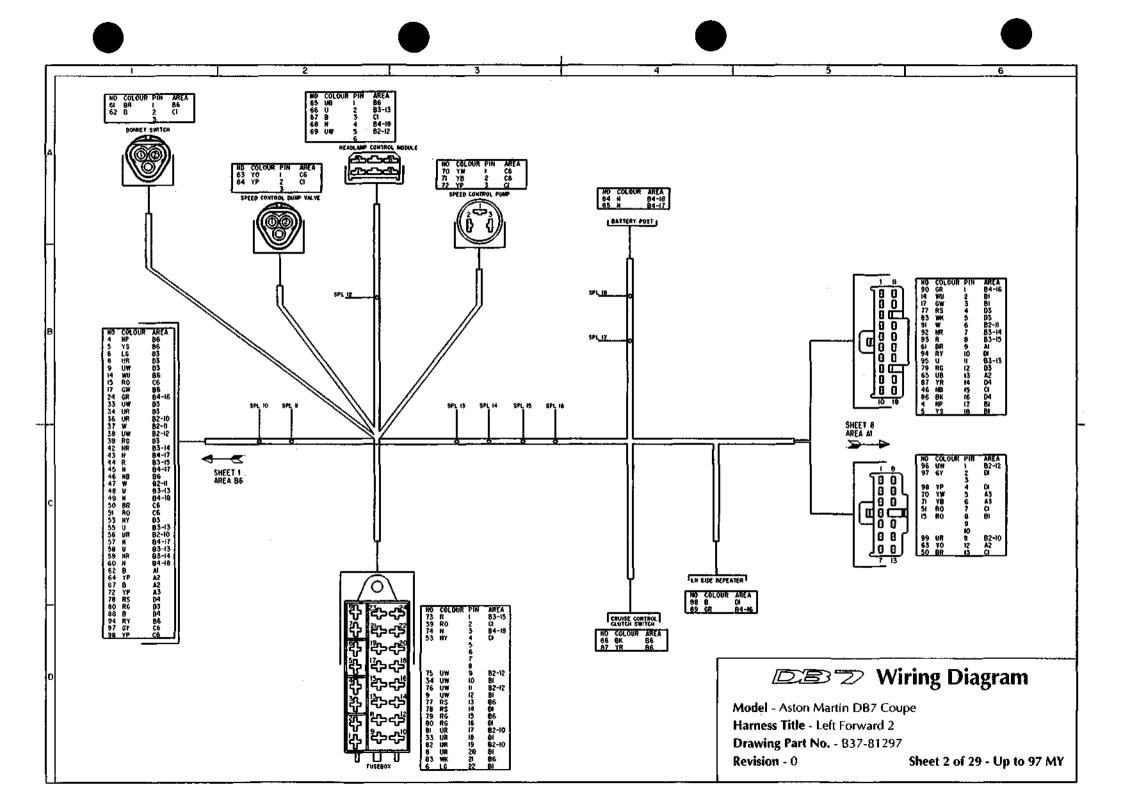


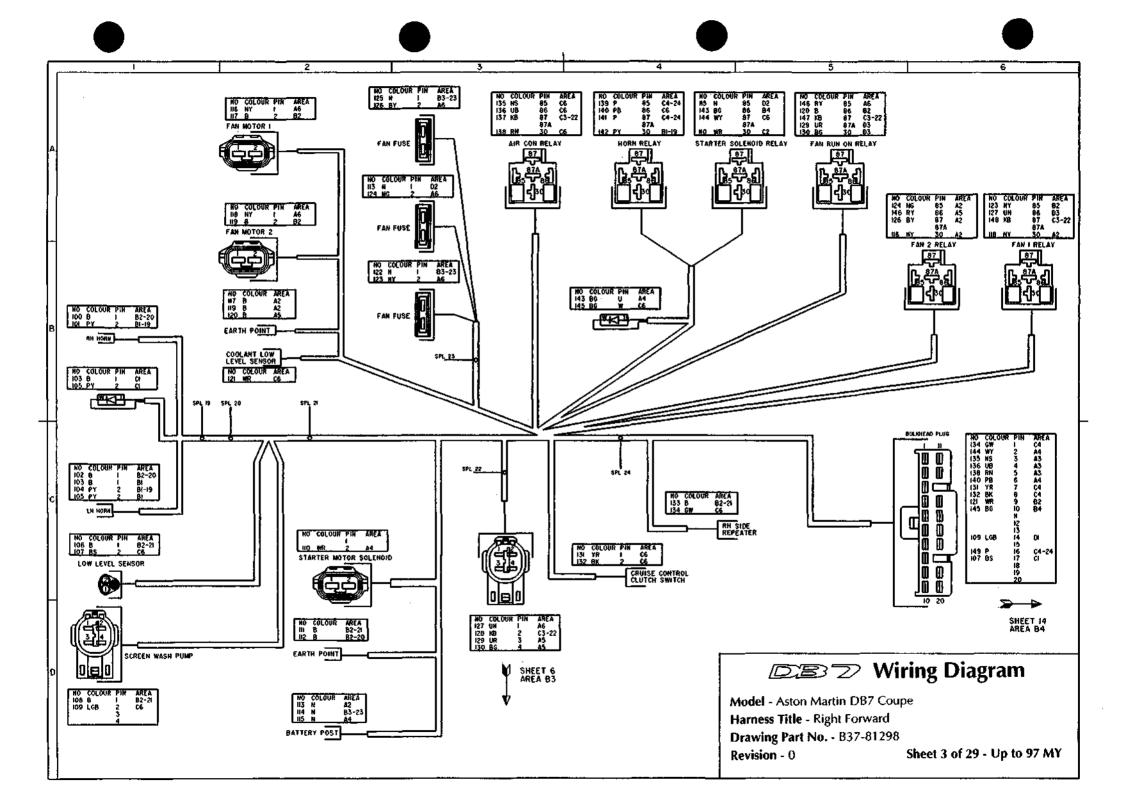
Figure 1. Air Conditioning Panel Removal

- Remove four screws and pull forward the centre console control panel.
- Disconnect the five connectors in the centre console wiring and remove the centre console control panel.





<b>Splice No.</b> Pin No.	<b>Colour</b> Destination
SPL 19 101	Purple/Yellov B1
104	C1
142	A4
SPL 20	Black
100	B1
102	C1
112	D2
SPL 21	Black
106	C1
108	D1
111	D2
133	C4
SPL 22	Pink/Black
128	D3
137	A3
147	A5
148	A6
SPL 23	Brown
114	D2
122	B3
125	A3
SPL 24	Purple
139	A4
141	A4
149	C6





## **System Description**

The in-car temperature and humidity are regulated by the electronically controlled air conditioning system. The system comprises four subsystems:

- heater matrix, supplied with water from the engine cooling system
- refrigeration
- vacuum
- electronic control

Apart from the ambient temperature sensor and the aspirated in-car temperature sensor, most of the components are housed in the air conditioning unit (Fig. 1) situated behind the dash board, or in the engine compartment.

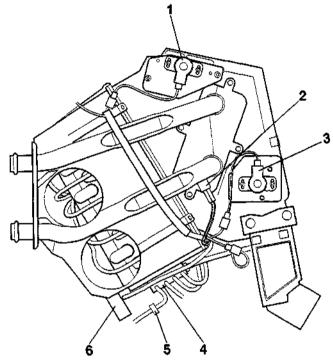


Figure 1.



- 1. Upper feedback potentiometer
- 2. Water temperature switch
- 3. Lower feedback potentiometer
- 4. Vacuum valve block
- 5. Vacuum restrictor
- 6. Condensate drain tube

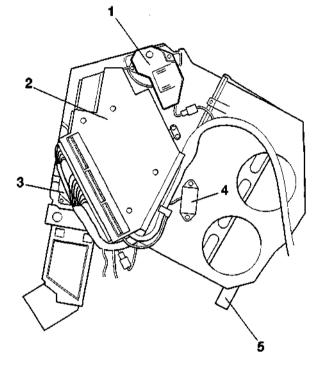


Figure 2.

#### Key to Fig. 2 - Right Hand Air Conditioning Unit

- 1. Upper servo motor
- Electronic control module
- 3. Lower servo motor
- 4. Evaporator sensor
- 5. Condensate drain tube

## **Special Servicing Tools and Equipment**

- 1 PDU system
- 1 Charging station
- 1 Leak detector
- 1 Temperature test box

- 1 Sanden compressor service tool kit
- 1 GM Type compressor service tool kit
- 1 Digital voltmeter
- 1 Multimeter