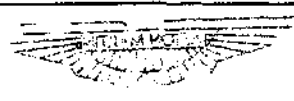
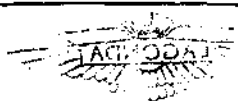


Introduction



Workshop Manual Sections

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

1. Engine
2. Fuel, Emission Control and Exhaust
3. Transmission
4. Suspension and Steering
5. Brakes, Wheels and Tyres
6. 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.

Safety Precautions

All service workshops are a source of potential danger and repair work should only be performed by technically trained staff following the procedures in this manual. A safety conscious approach to the performance of all service procedures must be observed at all times. Statutory requirements governing all aspects of health and safety at work including directives for the proper use of materials and equipment must be implemented.

The following contains a list of particular safety precautions which should be observed; it is not intended to be exhaustive.

Air Conditioning System

Do not disconnect any air conditioning refrigerant system pipes unless trained and instructed to do so. The refrigerant used can cause blindness if allowed to contact your eyes.

Chemical Handling and Storage

Chemicals used in the servicing of motor vehicles include acids, adhesives, antifreeze, brake fluids, coolants, grease, oil, paint, resin and solvents. Exposure to certain chemicals through direct contact or inhalation can be fatal.

Potential hazards may also be present through the incorrect use, storage and handling of chemicals causing a fire risk. The following precautions should be observed.

1. Strictly adhere to handling and safety information found on containers and labels.
2. Do not store chemicals in unlabelled or incorrectly labelled containers.
3. Containers used for storing chemicals should not be left open; there is a risk of spilling, or evaporation of fumes which may be inflammable or toxic.
4. Do not mix chemicals unless instructed to do so following manufacturers guidelines.
5. Do not inhale chemical materials to determine identity, they may be toxic.
6. Do not use petrol, kerosene, diesel fuel, gas oil, thinners or solvents for washing skin.
7. Containers whose capacity is over 25 litres (5 gallons) require a bund wall in order to contain spillages.
8. Chemicals based on solvents such as paint should not be sprayed in a confined space; work areas used for such operations should be well ventilated and fume extraction equipment should be utilised.
9. Ensure that adequate ventilation is provided when volatile de-greasing agents are being used.

WARNING: *Fume extraction equipment must be in operation when solvents are used e.g. trichloroethane, white spirit, SBP3, methylene chloride, perchlorethylene.*

WARNING: *Do not smoke in the vicinity of volatile de-greasing agents.*

10. Avoid splashing the skin, eyes and clothing.
11. Clean chemicals from the skin and clothing as soon as possible after soiling.
12. Wear protective clothing such as goggles, non porous gloves and apron when handling battery acid and other corrosive and toxic substances.

Safety Precautions (continued)**Electrical Equipment**

1. Ensure that electrical equipment is in safe working order before use.
2. Inspect power leads of all mains electrical equipment for damage and security, and check that it is properly earthed.
3. Ensure that electrical equipment is protected by a fuse of the correct current rating.
4. Disconnect the battery before commencing repair operations to the electrical system, fuel system and engine or when working beneath the vehicle.

Exhaust Fumes

Engines should not be run in confined spaces, exhaust fumes contain harmful and toxic substances including carbon monoxide which can prove fatal if inhaled. Engines must only be run where there is fume extraction equipment in operation or where there is adequate ventilation.

Fire Precautions

1. Ensure that a suitable form of fire extinguisher is conveniently located near the work area.
2. Keep oils, solvents and combustible materials away from naked flames and other sources of ignition.
3. Ensure that NO SMOKING signs are posted around areas where combustible materials and vapour may be present and ensure that the warnings are strictly observed.
4. Ensure that dry sand is available to soak up any spillage of fuel or other flammable solutions.
5. Fume extraction equipment must be available and in full working order to remove combustible and toxic vapours.
6. All personnel should be aware of the fire drill procedures and precautions.

Jacking and Lifting

1. The recommended procedures for lifting, jacking and towing are included later in this section and must be strictly observed to ensure personal safety.
2. Always use a vehicle hoist, ramp or pit for working beneath the car in preference to jacking.
3. Never rely on a jack to support a car independently, use axle stands or blocks carefully placed at the jacking points to provide rigid support.
4. When working beneath a vehicle, chock the wheels as well as applying the handbrake.
5. Ensure that the vehicle is standing on firm level ground before jacking or lifting.
6. Check any lifting equipment used has adequate capacity for the load being lifted and is in full working order.

Tools and Equipment

1. Do not leave tools, equipment, spilt oil, etc. around or on the work area.
2. Ensure that tools and equipment used are in good condition; do not use damaged or defective tools or equipment.
3. Do not apply heat in an attempt to free stiff nuts or fittings; as well as causing damage to protective coatings, there is a risk of damage to electronic equipment and brake lines from stray heat.
4. Use the recommended service tool where instructed to do so.

Safety Precautions (continued)

Used Engine Oil

Prolonged and repeated contact with mineral oil will result in the removal of natural fats from the skin, leading to dryness, irritation and dermatitis. In addition, used engine oil contains potentially harmful contaminants which may cause skin cancer. Adequate means of skin protection and washing facilities should be provided.

Health protection precautions:

1. Avoid prolonged and repeated contact with oils, particularly used engine oil.
2. Wear protective clothing, including impervious gloves where practicable.
3. Do not put oily rags in pockets.
4. Avoid contaminating clothes with oil.
5. Overalls must be cleaned regularly. Discard unwashable clothes and oil impregnated footwear.
6. First aid treatment should be obtained immediately for open cuts or wounds.
7. Use barrier creams, apply before each work period to help the removal of oil from the skin.
8. Wash with soap and water to ensure all oil is removed. Preparations containing lanolin replace the natural skin oils which have been removed.
9. Do not use petrol, kerosene, diesel fuel, gas oil, thinners or solvents for washing skin.
10. If skin disorders develop, obtain medical advice.
11. Where practicable, degrease components prior to handling.
12. Where there is a risk of eye contact, eye protection should be worn. In addition, an eye wash facility should be provided.

Environmental Protection

It is illegal to pour used oil on the ground, down sewers or drains, or into water courses. The burning of used engine oil in small space heaters or boilers is not recommended unless emission control equipment is fitted; in case of doubt, contact the Local Authority for advice on disposal facilities.

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