

CAUTION

- 1 The vehicle battery must never be disconnected whilst the engine is running.
- 2 Always disconnect the battery prior to working on electrical units.
- 3 Disconnect the battery if electric arc welding is to be carried out on the vehicle.
- 4 Disconnect the battery prior to boost charging.
- 5 If using a slave battery to aid starting, observe the precautions detailed under "Jump Starting".

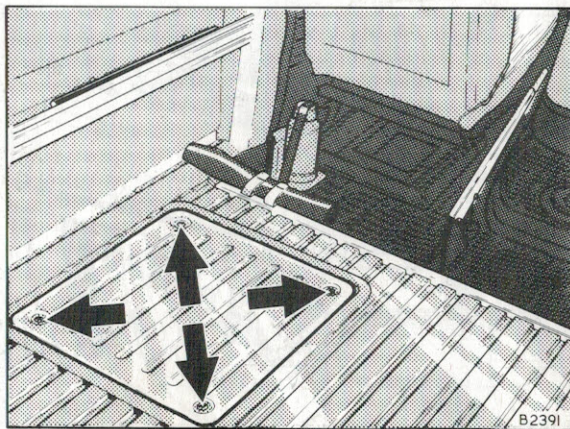
Failure to observe the above instructions can result in serious damage to the alternator, short circuiting or burnt out wiring.

- 6 Always use distilled water for topping-up.
- 7 Never use a naked light to examine the battery.
- 8 Do not transfer electrolyte from one cell to another.
- 9 To prevent personal injury or damage to clothing do not allow battery fluid to contact eyes, skin or fabrics.
- 10 Remove metal jewellery and watch bands. Keep tools well away from electrical connections.

BATTERY

One 12 volt or two 12 volt batteries (in parallel) are mounted on a carrier located behind the cab on the chassis side member.

Access on van models is through the floor panel illustrated below. To remove the panel release the four fasteners.



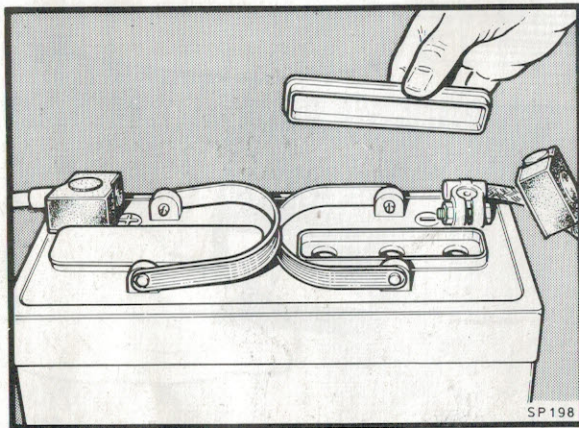
Battery cover – high capacity van

Maintenance

Low maintenance batteries are fitted and under normal operating conditions the battery electrolyte level should be checked annually.

With the battery on a level surface, check the electrolyte level by removing the vent plugs, raising the vent cover or viewing through the container, depending on the type of battery. If the level is below the tops of the separators or splash guards, topping-up is required. Do not top-up unnecessarily as this may overfill the battery – as a general rule, if you can see liquid above the separators, don't add any. If the battery is flat, recharge it before checking the electrolyte level. As a guide, always try to top up when the battery is fully charged.

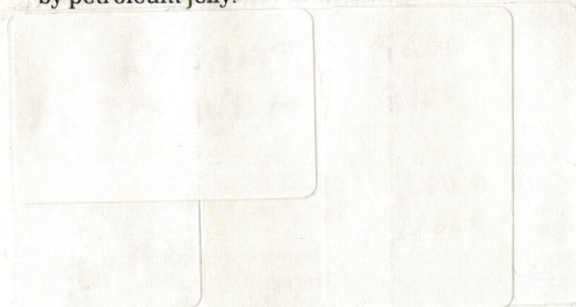
NOTE. When two batteries are fitted always renew them in pairs.



Battery – topping up

Battery Terminals

Terminal posts should be kept clean and protected by petroleum jelly.



Jump Starting with a Booster Battery

Switch off the ignition and headlights.

Remove the filler caps from both the booster battery and the discharged battery. Check that the electrolyte is at the proper level.

Connect one jump cable between the POSITIVE (+) POSTS of the batteries.

Connect one end of the other jump cable to the NEGATIVE (–) POST of the booster battery. Connect the other end of the cable to the engine end of the battery earth cable. **DO NOT CONNECT TO THE NEGATIVE POST OF THE DISCHARGED BATTERY**, as a flash may occur on connection or disconnection.

Switch on the ignition and operate the starter.

After the engine is started, or if it fails to start, the cables must be disconnected in the following order:–

- 1 Negative cable at the battery earth cable.
- 2 Negative cable at the negative post on the booster battery.
- 3 Cable between the positive posts of the batteries.

Alternator and Starter

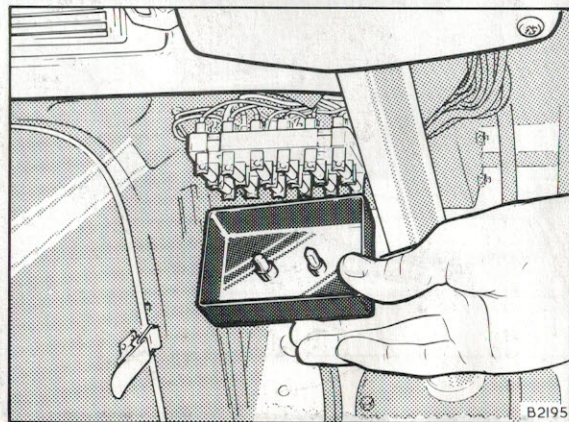
Check the units occasionally to ensure that they are secure. Also check that electrical connections are secure and that wires are not chafing.

Fuse Box

Twelve fuses are carried in a separate fuse box mounted below the facia and to the left of the steering column. Each fuse is of an 8 amp capacity.

Fuses protect the circuits as indicated in the following:-

- Fuse 1 Headlamp dipped beam (right hand).
- Fuse 2 Headlamp dipped beam (left hand).
- Fuse 3 Instruments, switches and gauge illumination, and right hand side, tail and rear number plate lamps.
- Fuse 4 Side, tail and number plate lamps (left hand).
- Fuse 5 Headlamp main beam (right hand).
- Fuse 6 Headlamp main beam (left hand).
- Fuse 7 Horn, interior lights, cigar lighter and brake fluid low level warning light.
- Fuse 8 Flasher unit.
- Fuse 9 Heater blower, coolant temperature and fuel gauges.
- Fuse 10 Rear fog lamps.
- Fuse 11 Screen washer, wiper motor and reversing lamps.
- Fuse 12 Stop lamps.



Fuse box

B2195

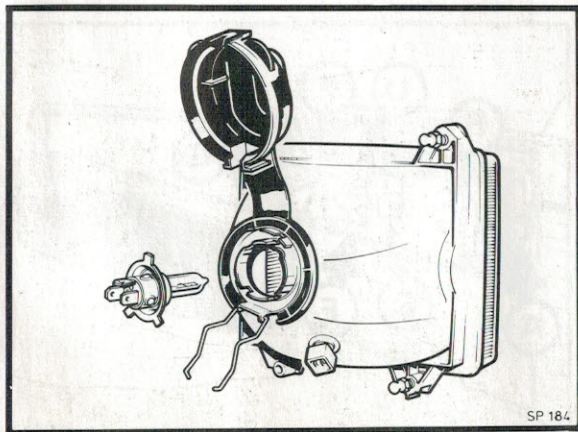
BULB RENEWAL

Side Lamps

These are incorporated in the headlamp reflectors.
Bulb holders are a push fit into moulded rubber reflector mounted grommets.

Headlamp Bulbs

Unclip and hinge away the cover.
Unplug the connector.
Release the spring clip and withdraw bulb unit.
Insert the new bulb unit with the centre lucar uppermost, locating the three lugs properly in the back of the reflector.
Do **not** touch the glass of the bulb with bare fingers.



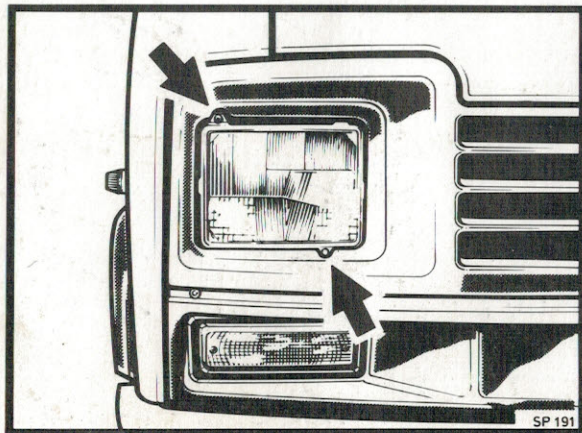
SP 184

Headlamp

electrical equipment

Headlamp Adjustment

Adjustment and alignment is achieved by the diagonally opposite adjusting screws.

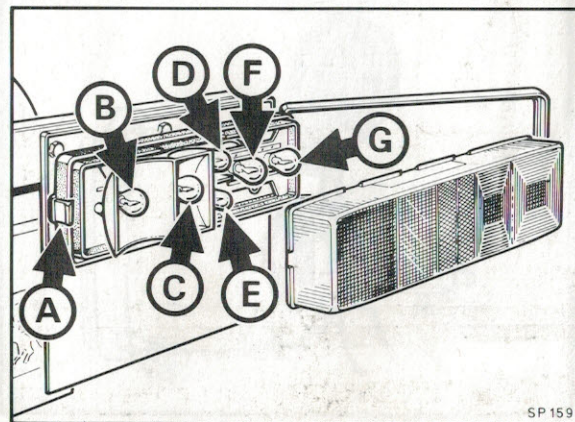


Headlamp adjustment

Rear Lamps - Truck Model

To gain access to a bulb, release clip 'A' and hinge the bezel away from the lens. Remove the lens carefully by easing it out from the lip around the lamp base. To refit lens, ensure the plain window is at the bottom and carefully fit to the lamp base making sure that it fits snugly into the lip which forms a water tight seal. Swing the bezel back over the lens and secure under clip 'A'.

- B - Fog light
- C - Reverse light
- D - Tail light
- E - Number plate light
- F - Stop light
- G - Direction indicator

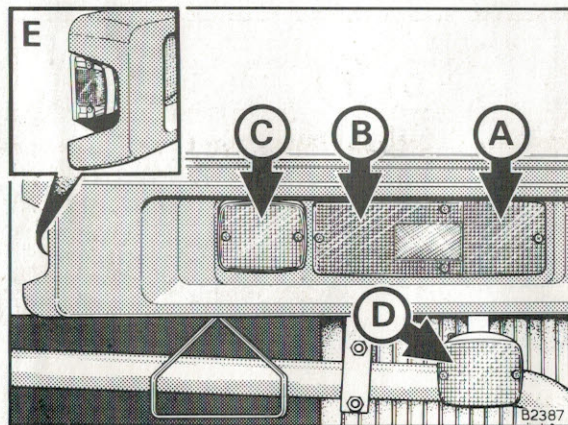


Truck right hand rear lamp

Rear Lamps - Van Model

To renew the bulbs it is necessary to remove the lens. Note that the stop/tail bulb has off-set pins to ensure correct fitting.

- A - Direction indicator
- B - Stop/tail light
- C - Reverse light
- D - Fog light
- E - Number plate light



Van right hand rear lamp

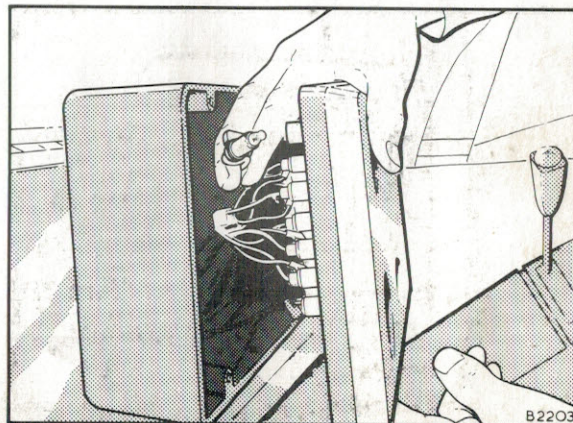
Heater Control Panel Illumination

Removal and replacement of these bulbs necessitate the removal of the rear engine cover, the auxiliary fascia panel surrounding the heater control panel, face level vents and air ducts, the heater control bracket and finally the bulbs from their holders.

We recommend that you have this work carried out by your dealer.

Warning and Instrument Lights

Warning light bulbs are retained in press fit plastic holders behind the light symbols and instrument light bulbs in push fit holders in the backs of instruments.



Warning and instrument lights