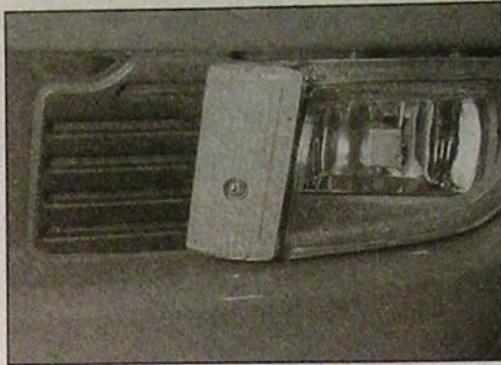




5.11 The front sidelight bulb is a push-fit in the bulbholder



5.14 The front direction indicator bulb is a bayonet fit in the bulbholder



5.20 Undo the front foglight lens surround securing screw and remove the surround

6 When handling the new bulb, use a tissue or clean cloth, to avoid touching the glass with the fingers; moisture and grease from the skin can cause blackening and rapid failure of this type of bulb. If the glass is accidentally touched, wipe it clean using methylated spirit.
 7 Install the new bulb, ensuring that it is correctly located in the light unit. Secure the bulb in position with the retaining clip, then refit the wiring connector and plastic cover.

Front sidelight

8 Open the bonnet.
 9 Unclip the plastic cover from the rear of the inboard headlight.
 10 Withdraw the sidelight bulbholder from the headlight unit. Note that the bulbholder is very tight and access is restricted so it may be necessary to use a small screwdriver to prise the bulbholder free.
 11 Withdraw the push-fit bulb from the bulbholder (see illustration).
 12 Fit the new bulb using a reversal of the removal procedure.

Front direction indicator

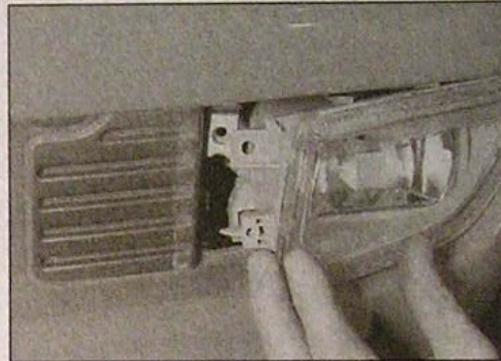
13 Twist the direction indicator bulbholder anticlockwise and withdraw the bulbholder from the light unit.
 14 The bulb is a bayonet fit in the bulbholder (see illustration).
 15 Fit the new bulb, then refit the bulbholder.

Front direction indicator side repeater

16 Push the light unit towards the front of the



5.21a Undo the securing screw (arrowed) ...



5.21b ... and withdraw the foglight from the bumper

vehicle and withdraw the light unit from the wing.
 17 Twist the bulbholder anti-clockwise to release it from the light unit.
 18 The bulb is a push fit in the bulbholder.
 19 Fit the new bulb using a reversal of the removal procedure.

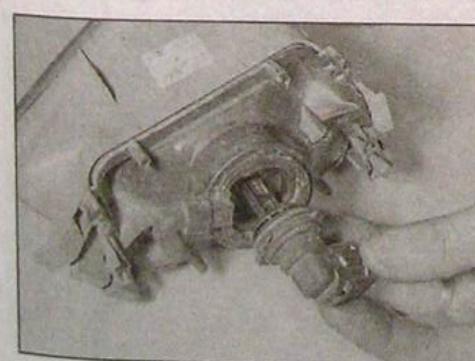
Front foglight

20 Remove the lens surround securing screw, then withdraw the surround (see illustration).
 21 Undo the securing screw and withdraw the light unit from the bumper (see illustrations).
 22 Disconnect the wiring plug and remove the light unit.
 23 Twist the bulbholder anti-clockwise to release it from the light unit (see illustration).
 24 The bulb is a push fit in the bulbholder (see illustration).

25 When handling the new bulb, use a tissue or clean cloth, to avoid touching the glass with the fingers; moisture and grease from the skin can cause blackening and rapid failure of this type of bulb. If the glass is accidentally touched, wipe it clean using methylated spirit.
 26 Fit the new bulb using a reversal of the removal procedure.

Stop/tail light and rear direction indicator light

27 Open the boot lid/tailgate.
 28 Working at the side of the luggage compartment, open the light unit access cover by turning the catch or lifting the flap. On Estate models, withdraw the additional cover panel inside the access aperture.
 29 Depress the bulbholder retaining lugs and withdraw the bulbholder from the rear of the light unit (see illustration).



5.23 Remove the bulbholder ...



5.24 ... and withdraw the push-fit foglight bulb



5.29 Depress the retaining lugs and remove the stop/tail and rear direction indicator bulbholder

undo the side and lower securing screws and remove the diode pack (see illustrations).
52 Refitting is a reversal of the removal procedure.

6 Bulbs (interior lights) - renewal



General

1 Refer to Section 5, paragraph 1.

Courtesy light

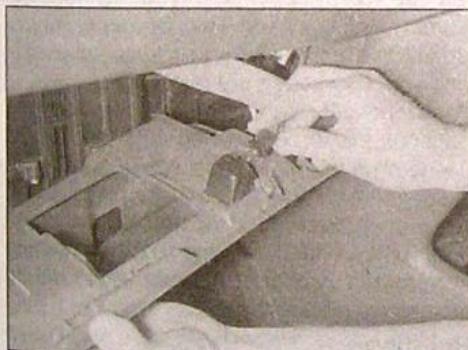
- 2 Carefully prise the lens from the light unit (if necessary, carefully use a flat-bladed screwdriver).
- 3 The bulb is a push fit in the light unit.
- 4 Fit the new bulb using a reversal of the removal procedure.

Map reading light - models with single light

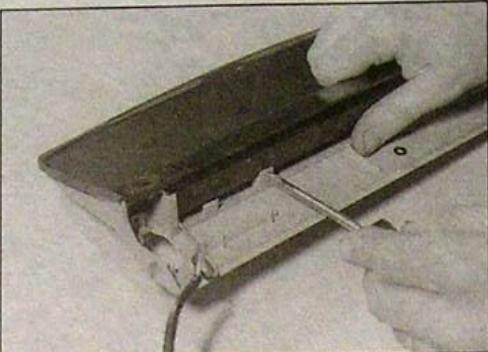
- 5 Proceed as described previously for the courtesy light.

Map reading lights - models with twin lights

- 6 Carefully prise the lens from the light unit (if necessary, use a flat-bladed screwdriver).
- 7 Where applicable, remove the securing screw, and withdraw the light cover plate.
- 8 The bulbs are a push fit in the light unit.
- 9 Fit the new bulb using a reversal of the removal procedure.



6.16 Removing the glovebox illumination bulbholder



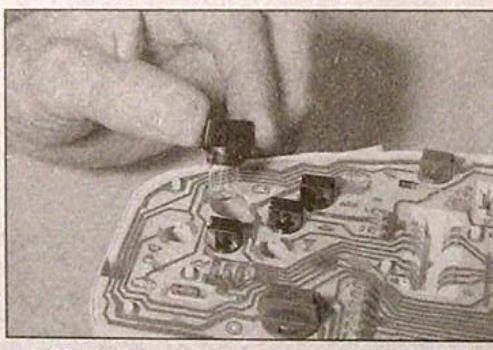
5.51b ... and lower screws to remove the LED pack from the stoplight body

Luggage compartment light

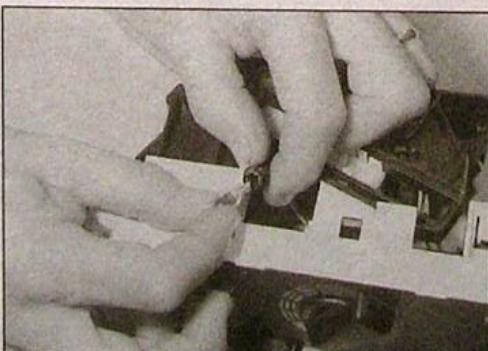
- 10 Open the tailgate or boot lid, as applicable.
- 11 Where applicable, remove the two securing screws, then prise the light assembly from the body panel.
- 12 Unclip the lens from the light.
- 13 The bulb is a push fit in the light assembly.
- 14 Fit the new bulb using a reversal of the removal procedure.

Glovebox light

- 15 Remove the glovebox, with reference to Chapter 11B.
- 16 Pull the bulbholder from the top of the glovebox as it is removed (see illustration).
- 17 The bulb is a push fit in the bulbholder.
- 18 Refitting is a reversal of removal.



6.20 Twist the relevant bulbholder anti-clockwise to remove it from the rear of the instrument panel



6.25 The heater control panel illumination bulbs are a push-fit in the bulbholders

Instrument panel lights

- 19 Remove the instrument panel, as described in Section 9.
- 20 Twist the relevant bulbholder anti-clockwise to remove it from the rear of the instrument panel (see illustration).
- 21 The bulbs are a push fit in the bulbholders (see illustration).
- 22 Refit the bulbholder then refit the instrument panel as described in Section 9.

Heater control panel illumination bulbs

- 23 Remove the heater/ventilation control unit as described in Chapter 3.
- 24 Withdraw the relevant bulbholder from the rear of the control unit.
- 25 The bulbs are a push fit in the bulbholders (see illustration).
- 26 Fit the new bulb using a reversal of the removal procedure, then refit the heater/ventilation control unit as described in Chapter 3.

Switch illumination bulbs

- 27 All of the switches are fitted with illuminating bulbs, and some are also fitted with a bulb to show when the circuit concerned is operating.
- 28 In most cases, if a bulb blows, the complete switch must be renewed, but on certain models, some of the switch bulbs can be renewed. Check with a Nissan dealer for information on the availability of spare bulbs.
- 29 On switches where the bulbs can be renewed, remove the relevant switch as described in Section 4, then pull the bulbholder from the top of the switch. The bulbs are integral with the bulbholders.

Cigarette lighter illumination bulb

- 30 Remove the gear lever gaiter surround from the top of the centre console as described in Chapter 11B, Section 27.
- 31 Working at the rear of the surround, pull out the bulbholder.
- 32 The bulb is a push fit in the bulbholder (see illustration).
- 33 Refitting is a reversal of removal, but refit the gear lever gaiter surround with reference to Chapter 11B.



6.32 Removing the push-fit cigarette lighter illumination bulb

6.21 The bulbs are a push-fit in the bulbholders



7.14 Removing the stop/tail and rear direction indicator light assembly - Estate model shown



7.23 Reversing light and rear foglight outer edge retaining nuts



7.24 Removing the light unit from the tailgate - Hatchback model shown

traces of sealant from the light unit and the rear wing panel.

16 Apply the new sealing strip to the rear of the light unit (the sealing strip is supplied in rolls, and may have to be trimmed to the required length).

17 Refit the light unit using a reversal of the removal procedure.

Reversing light and rear foglight assembly - Saloon and Hatchback models

Removal

18 Remove the bulbholder assembly, as described for the bulb renewal procedure in Section 5.

19 On Hatchback models, remove the tailgate inner trim panel as described in Chapter 11B, Section 26.

20 Undo the two screws each side and withdraw the number plate lights from the boot lid/tailgate outer trim panel/handle. Allow the lights to rest on the boot lid/tailgate without disconnecting the wiring.

21 From inside the boot lid/tailgate, undo the four boot lid outer trim panel/handle securing nuts.

22 Withdraw the outer trim panel/handle, then turn it over and disengage the number plate light wiring from the rear. Remove the outer trim panel/handle.

23 Undo the two nuts on the outer edge of the boot lid/tailgate and the single nut accessible through the inner aperture (see illustration).

24 Withdraw the light unit from the boot lid/tailgate (see illustration). Note that the light

unit is held in place with a sealing compound, and considerable effort will be required to release it.

Refitting

25 Before refitting the light unit, clean all traces of sealant from the light unit and boot lid/tailgate.

26 Apply the new sealing strip to the rear of the light unit (the sealing strip is supplied in rolls, and may have to be trimmed to the required length).

27 Refit the light unit using a reversal of the removal procedure.

Reversing light and rear foglight assembly - Estate models

Removal

28 Remove the bulbholder assembly, as described for the bulb renewal procedure in Section 5.

29 Remove the tailgate inner trim panel as described in Chapter 11B, Section 26.

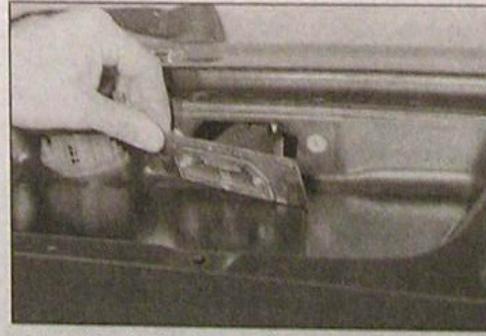
30 From inside the tailgate, undo the tailgate outer trim panel/handle securing nuts and remove the trim panel/handle from the tailgate.

31 Undo the two nuts on the outer edge of the tailgate and the single nut accessible through the inner aperture.

32 Withdraw the light unit from the tailgate. Note that the light unit is held in place with a sealing compound, and considerable effort will be required to release it (see illustration).

Refitting

33 Before refitting the light unit, clean all traces of sealant from the light unit and tailgate.



7.32 Removing the reversing light and rear foglight unit from the tailgate - Estate models

7.40 Undo the two screws and withdraw the number plate light from the tailgate - Estate models

34 Apply the new sealing strip to the rear of the light unit (the sealing strip is supplied in rolls, and may have to be trimmed to the required length).

35 Refit the light unit using a reversal of the removal procedure.

Rear number plate light - Saloon and Hatchback models

36 The procedure is described as part of the bulb renewal procedure in Section 5.

Rear number plate light - Estate models

Removal

37 Remove the bulbholder assembly, as described for the bulb renewal procedure in Section 5.

38 Remove the tailgate inner trim panels as described in Chapter 11B, Section 26.

39 From inside the tailgate, undo the tailgate outer trim panel/handle securing nuts and remove the trim panel/handle from the tailgate.

40 Remove the two securing screws, and withdraw the light assembly from the tailgate (see illustration).

41 Disconnect the wiring connector and remove the light unit.

Refitting

42 Refit the light unit using a reversal of the removal procedure.

8 Headlight beam alignment - general information

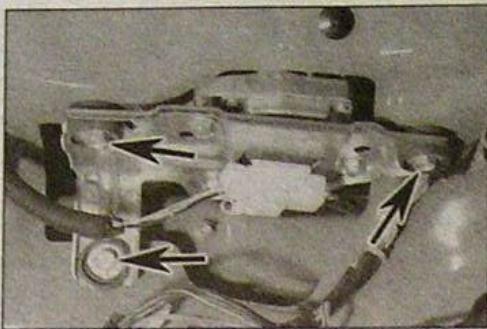
1 Accurate adjustment of the headlight beam is only possible using optical beam-setting equipment, and this work should therefore be carried out by a Nissan dealer or suitably-equipped workshop.

2 Certain models are equipped with a headlight beam adjustment switch, located on the centre console, which allows the aim of the headlights to be adjusted to compensate for the varying loads carried in the vehicle. The switch should be positioned according to the load being carried in the vehicle - eg; position '0' for driver with no passengers or luggage; up to position '3' for maximum load, or towing.

14 Windscreen wiper motor and linkage - removal and refitting

Refer to Chapter 12A, Section 16.

15 Tailgate/rear window wiper motor - removal and refitting



15.5 Tailgate wiper motor mounting bracket retaining bolts (arrowed) - Hatchback models

14 Where applicable, undo the nut and remove the seals and washer securing the spindle shaft to the window glass. Note the arrangement of the seals to ensure correct refitting.

15 Unscrew the three bolts securing the motor bracket, then lift out the motor assembly.

Refitting

16 Refitting is a reversal of removal, but ensure that the seals are correctly located, and refit the wiper arms with reference to Section 13.

16 Windscreen/tailgate washer system components - removal and refitting

Hatchback models

Removal

1 Disconnect the battery negative terminal (refer to *Disconnecting the battery* in the Reference Section of this manual).

2 Remove the tailgate inner trim panels as described in Chapter 11B, Section 26.

3 Remove the wiper arm (see Section 13).

4 Working inside the tailgate, disconnect the tailgate wiper motor wiring plug.

5 Unscrew the three bolts securing the motor mounting bracket to the tailgate (see illustration).

6 Withdraw the motor assembly through the aperture in the tailgate.

7 The motor is secured to the mounting bracket by three bolts.

8 If desired, the motor spindle grommet can be pulled from the hole in the tailgate.

Refitting

9 Refitting is a reversal of removal, but where applicable, ensure that the grommet is correctly located in the tailgate, and refit the wiper arm with reference to Section 13.

Saloon and Estate models

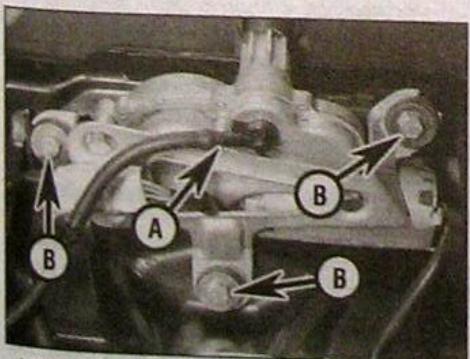
Removal

10 Disconnect the battery negative terminal (refer to *Disconnecting the battery* in the Reference Section of this manual).

11 On Estate models, remove the tailgate inner trim panel, with reference to Chapter 11B, Section 26.

12 Remove the wiper arm with reference to Section 13.

13 Disconnect the motor wiring plug and, where applicable, the washer tube (see illustration).



15.13 Tailgate washer tube (A) and wiper motor mounting bolts (B) - Estate models

11 Disconnect the wiring plug and the fluid hose from the relevant washer pump.

12 Pull the washer pump from the reservoir, and where applicable, recover the grommet. If the reservoir still contains fluid, be prepared for fluid spillage.

Refitting

13 Refitting is a reversal of removal.

Windscreen washer nozzle

Removal

14 Open the bonnet.

15 Working under the bonnet, release the securing tabs using a suitable screwdriver, then push the nozzle from the bonnet. Disconnect the fluid hose, and withdraw the nozzle.

Refitting

16 Refitting is a reversal of removal.

Tailgate washer nozzle - Hatchback models

Removal

17 Open the tailgate.

18 For access to the washer nozzle, unscrew the two securing bolts, and remove the weather-strip securing plate and the weatherstrip.

19 Prise off the rubber cover, then push out the washer nozzle through the outside of the tailgate, and disconnect the fluid hose.

Refitting

20 Refitting is a reversal of removal, but ensure that the fluid hose is securely reconnected before refitting the rubber cover.

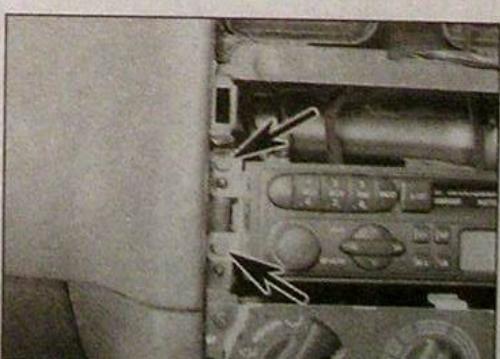
17 Radio/cassette player - removal and refitting

Removal

1 Disconnect the battery negative terminal (refer to *Disconnecting the battery* in the Reference Section of this manual).

2 Remove the facia centre switch/ventilation nozzle housing as described in Chapter 11B, Section 28.

3 Remove the four now-exposed radio/cassette player securing screws (see illustration).



17.3 Undo the radio/cassette player securing screws (arrowed) on each side

Washer fluid reservoir

Removal

1 Working in the engine compartment, twist the reservoir filler neck clockwise, then pull it from the top of the reservoir.

2 Disconnect the battery negative terminal (refer to *Disconnecting the battery* in the Reference Section of this manual).

3 Apply the handbrake, then jack up the front of the car and support it on axle stands (see *Jacking and Vehicle Support*). Remove the front right-hand roadwheel.

4 Remove the wheel arch liner.

5 Disconnect the wiring plug(s) from the washer pump(s), and from the fluid level sensor, where applicable.

6 Disconnect the fluid hose(s) from the washer pump(s) - if the reservoir still contains fluid, be prepared for fluid spillage.

7 Where applicable, release the wiring harness from its clips, and move the harness to one side to allow sufficient clearance to remove the reservoir.

8 Working under the wheel arch, remove the three reservoir securing screws, then lower the reservoir from under the wheel arch.

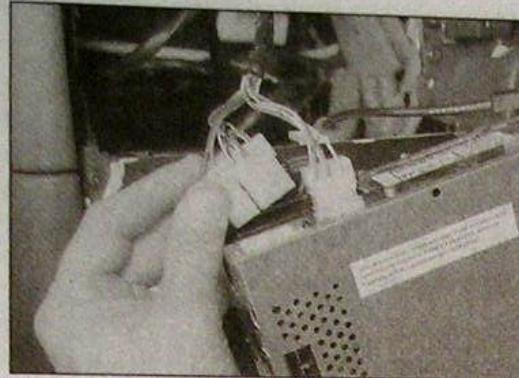
Refitting

9 Refitting is a reversal of removal.

Washer pump(s)

Removal

10 Proceed as described in paragraphs 2 to 4.



17.4a Pull the radio out of the facia and disconnect the wiring plugs ...



17.4b ... and the aerial lead

4 Pull the unit from the facia, then disconnect the wiring plugs and the aerial lead from the rear of the unit (see illustrations).

Refitting

5 Refitting is a reversal of removal, ensuring that the wiring is freely routed behind the unit.

18 Loudspeakers - removal and refitting



Front door-mounted loudspeakers

Removal

1 Disconnect the battery negative terminal (refer to *Disconnecting the battery* in the Reference Section of this manual).

2 Remove the door inner trim panel as described in Chapter 11B.

3 Remove the four securing screws, and withdraw the loudspeaker from the door, then disconnect the wiring plug (see illustration).

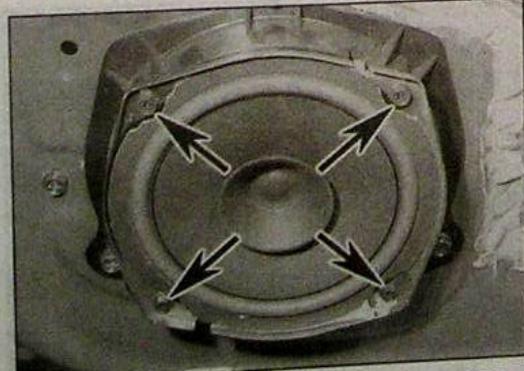
Refitting

4 Refitting is a reversal of removal, but refit the inner door trim panel with reference to Chapter 11B.

Rear parcel shelf-mounted loudspeakers - Saloon models

Removal

5 Disconnect the battery negative terminal (refer to *Disconnecting the battery* in the Reference Section of this manual).



18.3 Front door mounted loudspeaker securing screws (arrowed)

6 Remove the parcel shelf, as described in Chapter 11B, Section 26.

7 Remove the four securing screws, then withdraw the loudspeaker from the body panel, and disconnect the wiring plug (where necessary, release the wiring harness from the securing clips).

Refitting

8 Refitting is a reversal of removal.

Rear loudspeakers - Hatchback and Estate models

Removal

9 Disconnect the battery negative terminal (refer to *Disconnecting the battery* in the Reference Section of this manual).

10 Remove the relevant luggage compartment trim panel, (see Chapter 11B, Section 26).

11 Unscrew the three loudspeaker securing screws, then withdraw the loudspeaker, and disconnect the wiring plug (see illustration).

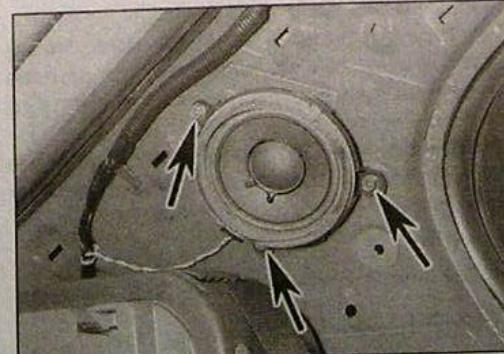
Refitting

12 Refitting is a reversal of removal.

19 Radio aerial - removal and refitting



1 On all models the aerial is mounted on the rear section of the roof panel. Removal of the aerial base is a complicated operation entailing removal of the headlining. If any problems with the aerial or aerial wiring are experienced, contact a Nissan dealer for advice.



18.11 Rear loudspeaker securing screws (arrowed) on Hatchback models

2 The aerial stalk can be unscrewed from the base for security purposes or when using a car wash facility.

20 Anti-theft alarm system - general information

Refer to Chapter 12A, Section 22.

21 Heated front seat components - general information

Refer to Chapter 12A, Section 23.

22 Air bag system - general information and precautions

General information

On all models, an air bag system is fitted, which is designed to prevent serious chest and head injuries during an accident. A driver's air bag is fitted in the steering wheel centre pad. Additionally, on certain models, a passenger's air bag is located in the facia, and side air bags may be located in the front seat backs.

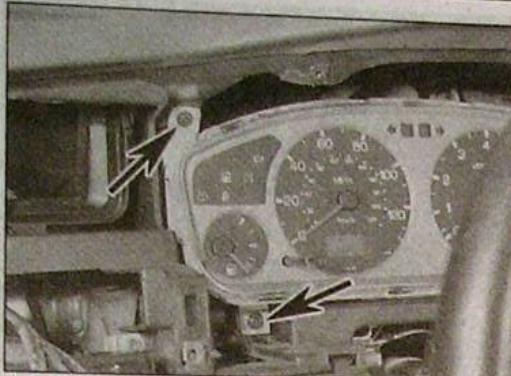
The system is armed when the ignition key is in the 'ON' or 'START' positions (note that the system remains armed for a time after the ignition is switched off), and is activated by a 'g' sensor (deceleration sensor) mounted inside the vehicle in the control unit under the centre console.

The air bag is inflated by a gas generator, which forces the bag out from its location in the steering wheel, facia or seat backs.

Precautions

Warning: The following precautions must be observed when working on vehicles with an air bag system, to prevent the possibility of personal injury.

- Do not attempt to test any of the air bag system circuits using test meters or any other test equipment.
- Before working on any vehicle components located near air bag system components (steering wheel, steering column, facia and centre console), switch the ignition off, and disconnect the battery negative lead, then wait for at least 10 minutes before carrying out any further work.
- Do not attempt to remove the system electronic control unit (located under the centre console).
- Do not attempt to turn the steering wheel or column with the steering gear removed.
- If the air bag warning light comes on, or any fault in the system is suspected, consult a Nissan dealer without delay. Do not attempt to carry out fault diagnosis, or any dismantling of the components.



9.3 Undo the instrument panel retaining screws (arrowed) on each side

9 Instrument panel - removal and refitting



Removal

- 1 Disconnect the battery negative terminal (refer to *Disconnecting the battery* in the Reference Section of this manual).
- 2 Remove the instrument panel surround as described in Chapter 11B, Section 28.
- 3 Remove the four instrument panel securing screws, two on each side (see illustration).
- 4 Withdraw the instrument panel, and disconnect the wiring plugs from the rear of the panel (see illustration).

Refitting

- 5 Refitting is a reversal of removal.

10 Instrument panel components - removal and refitting

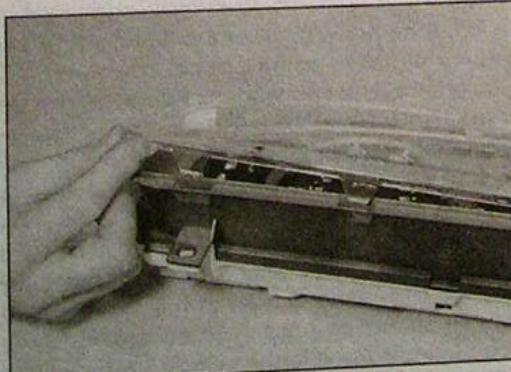


General

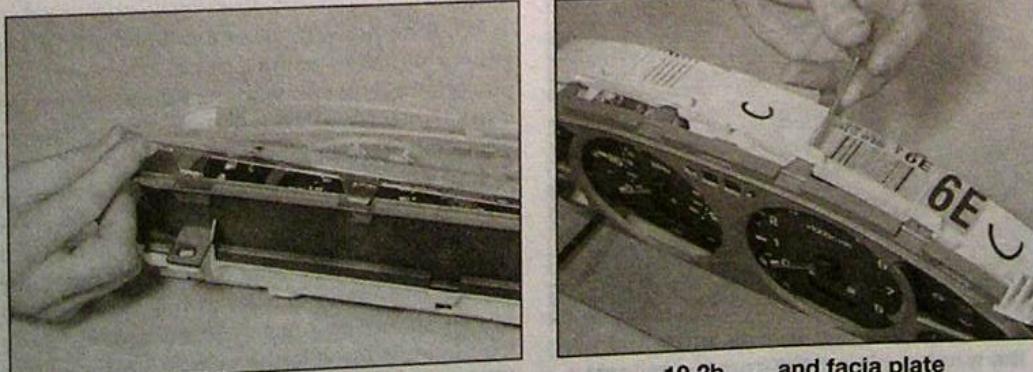
- 1 Remove the instrument panel as described in Section 9, then proceed as described under the relevant sub-heading.

Instruments

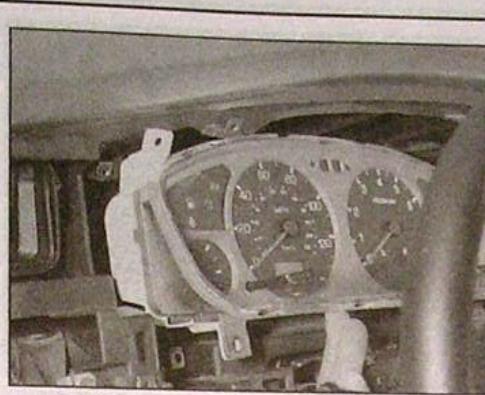
- 2 Using a small screwdriver, unclip the lens assembly and facia plate from the front of the instrument panel (see illustrations).
- 3 Remove the securing screws from the front



10.2a Unclip the instrument panel lens assembly ...



10.2b ... and facia plate



9.4 Withdraw the instrument panel and disconnect the wiring plugs at the rear

of the instrument panel, then withdraw the relevant instrument from the front of the panel.

4 Refitting is a reversal of removal, but refit the instrument panel with reference to Section 9.

Illumination and warning light bulbs

- 5 Twist the relevant bulbholder anti-clockwise to remove it from the rear of the instrument panel.
- 6 The bulbs are a push fit in the bulbholders.

Printed circuit

7 The printed circuit assembly can be removed from the rear of the instrument panel after removing all the instruments, as described previously in this Section, and the instrument panel illumination and warning light bulbs.

11 Cigarette lighter - removal and refitting



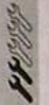
Removal

- 1 Remove the gear lever gaiter surround from the top of the centre console as described in Chapter 11B, Section 27.
- 2 Pull the cigarette lighter from its socket.
- 3 To remove the metal housing, depress the retaining lugs, accessible from inside the plastic housing, then push the metal housing out through the front of the panel.
- 4 The plastic housing can be withdrawn from the front of the panel after releasing the retaining lugs.

Refitting

- 5 Refitting is a reversal of removal, but refit the gear lever gaiter surround with reference to Chapter 11B.

12 Horn - removal and refitting



Removal

- 1 Disconnect the battery negative terminal (refer to *Disconnecting the battery* in the Reference Section of this manual).
- 2 Open the bonnet and disconnect the wiring from the horn.
- 3 Unscrew the securing bolt, and withdraw the horn complete with its mounting bracket.

Refitting

- 4 Refitting is a reversal of removal.

13 Wiper arm - removal and refitting



Removal

- 1 Operate the wiper motor, then switch it off so that the wiper arm returns to the at-rest/parked position.
- 2 Stick a piece of tape along the edge of the wiper blade, to use as an alignment aid on refitting.
- 3 Where applicable, lift up the wiper arm spindle nut cover, then slacken and remove the spindle nut. Lift the blade off the glass, and pull the wiper arm off its spindle. If necessary, the arm can be levered off the spindle using a suitable flat-bladed screwdriver. If both windscreens wiper arms are removed, note their locations, as different arms are fitted to the driver's and passenger's sides.

Refitting

- 4 Ensure that the wiper arm and spindle splines are clean and dry.
- 5 When refitting a wiper arm, refit the arm to the spindle, aligning the wiper blade with the tape fitted before removal. If both windscreens wiper arms have been removed, ensure that the arms are refitted to their correct positions as noted before removal.
- 6 When refitting a headlight wiper arm, hold the arm below the stops at the bottom of the headlight unit, until the spindle nut has been refitted and tightened.
- 7 Refit the spindle nut, tighten it securely, and where applicable, clip the nut cover back into position. If refitting a headlight wiper arm, once the spindle nut has been tightened, position the wiper blade against the upper surfaces of the stops on the headlight.



7.2a Disconnect the headlight wiring plug ...

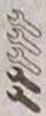


7.2b ... and the beam adjustment motor wiring plug



7.3 Undo the headlight unit upper mounting bolts ...

7 Exterior light units - removal and refitting

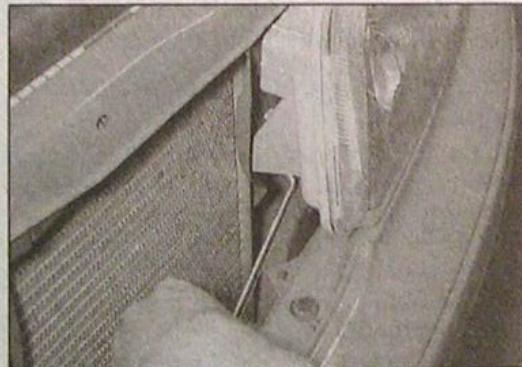


Note: Disconnect the battery negative terminal (refer to *Disconnecting the battery in the Reference Section of this manual*), before removing any light unit, and reconnect the terminal after refitting the light.

Headlight

Removal

- 1 Remove the direction indicator light unit as described later in this Section.
- 2 Disconnect the wiring plugs for the headlight bulbs and headlight beam adjustment motor from the rear of the light unit (see illustrations).



7.4 ... and the bolt located behind the headlight



7.5a Pull the headlight outwards to disengage the side locating lug ...



7.5b ... and remove the headlight unit



7.8 Depress the plastic lug securing the direction indicator to the headlight unit



7.9 Withdraw the direction indicator from the headlight and front wing

- 3 Undo the two upper headlight mounting bracket retaining bolts (see illustration).
- 4 Working behind the headlight, unscrew the headlight rear securing nut (see illustration).
- 5 Pull the headlight outwards at the side to release the locating lug, then withdraw the headlight from the vehicle (see illustrations).

Refitting

- 6 Refitting is a reversal of removal. On completion, it is wise to have the headlight beam alignment checked with reference to Section 8.

Front direction indicator light

- 7 Twist the direction indicator bulbholder anticlockwise and withdraw the bulbholder from the light unit.
- 8 Reach in behind the headlight and depress the plastic lug securing the direction indicator light unit to the headlight (see illustration).

- 9 Withdraw the unit from the headlight and front wing (see illustration).

Front direction indicator side repeater light

- 10 The procedure is described as part of the bulb renewal procedure in Section 5.

Front foglight

- 11 The procedure is described as part of the bulb renewal procedure in Section 5.

Stop/tail and rear direction indicator light assembly

Removal

- 12 Remove the bulbholder assembly, as described for the bulb renewal procedure in Section 5.

- 13 Remove the luggage compartment trim panels (see Chapter 11B, Section 26), for access to the light unit securing nuts. On some models, it will also be necessary to unbolt the rear stiffener brackets, accessible once the trim panels are removed.

- 14 Working inside the luggage compartment, unscrew the three securing nuts (release the wiring clips from the studs, where applicable), then withdraw the light unit from the rear of the vehicle (see illustration). Note that the light unit is held in place with a sealing compound, and considerable effort will be required to release it.

Refitting

- 15 Before refitting the light unit, clean all



5.34 Removing the reversing light and rear foglight bulbholder from the tailgate



5.37 On Saloon and Hatchback models, undo the screws and withdraw the number plate light lens and bulbholder



5.38 The number plate light bulb is a push-fit in the bulbholder



5.40a On Estate models, undo the two screws ...



5.40b ... and lift off the number plate light lens

30 The bulbs are a bayonet fit in the bulbholder.
 31 Fit the new bulb using a reversal of the removal procedure. Note that the stop/tail light bulb has offset pins, to ensure correct installation.



5.41 The number plate light bulb is a push-fit in the bulbholder

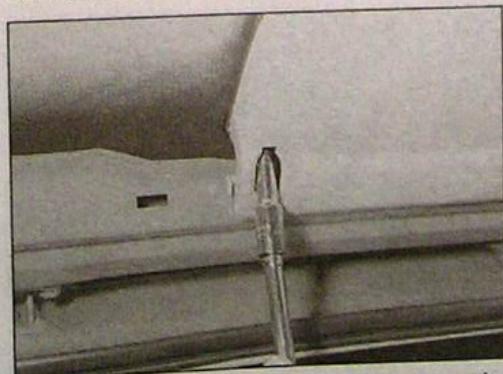
Reversing light and rear foglight
 32 Open the boot lid/tailgate.
 33 On Saloon models, release the securing clips, and remove the inner trim panel from the rear of the boot lid. On Hatchback and Estate models, pull out the light assembly access covers in the tailgate trim panel.
 34 Working through the light aperture, squeeze the bulbholder retaining clips, and withdraw the bulbholder from the boot lid/tailgate (see illustration).
 35 The bulbs are a bayonet fit in the bulbholder.
 36 Fit the new bulb using a reversal of the removal procedure.

Rear number plate light - Saloon and Hatchback models

37 Remove the two securing screws, and withdraw the light unit lens and bulbholder from the boot lid/tailgate (see illustration).



5.48 Disconnect the high-level stoplight wiring connector



5.49 Prise out the trim capping and undo the high-level stoplight securing screws



5.51a Undo the side screws ...

38 The bulb is a push fit in the bulbholder (see illustration).
 39 Fit the new bulb using a reversal of the removal procedure.

Rear number plate light - Estate models

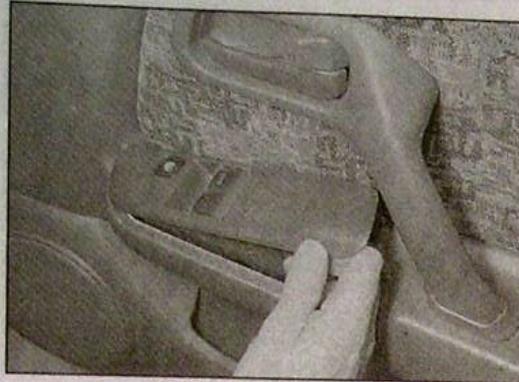
40 Remove the two securing screws, and withdraw the light unit lens from the tailgate (see illustrations).
 41 The bulb is a push fit in the light unit (see illustration).
 42 Fit the new bulb using a reversal of the removal procedure.

High-level stoplight - Saloon models

43 Pull off the trim cover over the high-level stoplight.
 44 Twist the bulbholder and withdraw the bulbholder from the light unit.
 45 The bulb is a bayonet fit in the bulbholder.
 46 Fit the new bulb, then refit the bulbholder and trim cover.

High-level stoplight - Hatchback and Estate models

47 Remove the tailgate inner trim panels as described in Chapter 11B, Section 26.
 48 Disconnect the stoplight unit wiring connector (see illustration).
 49 Prise out the trim cappings and undo the two stoplight unit securing screws (see illustration).
 50 Disengage the locating tag and remove the unit from the tailgate.
 51 To remove the light-emitting diode pack,



4.22a Lift up the switch panel in the driver's door ...



4.22b ... and disconnect the switch wiring



4.26 Lift up the passenger's door switch panel ...

22 Lift the panel up at the rear and disengage the front locating tag. Disconnect the switch wiring and remove the switch panel (see illustrations).

23 Release the plastic lugs securing the switch body to the outer trim panel and remove the switch body.

24 Refitting is a reversal of removal.

Passenger's door switch

25 Carefully prise the upper part of the interior door handle surround from the door panel, then lift it up to disengage the lower location (refer to Chapter 11B, Section 12 for details).

26 Prise up the rear of the electric window switch panel, lift it up at the rear and slide it up the door handle (see illustration).

27 Disconnect the switch wiring, release the plastic lugs securing the switch body to the outer trim panel and remove the switch body (see illustration).

28 Refitting is a reversal of removal.

Electric sunroof switch

29 Carefully prise the lens from the map reading lights in the overhead console.

30 Prise the cover plate from the rear of the overhead console.

31 Remove the two now-exposed securing screws, and lower the console from the roof.

32 Disconnect the wiring plugs.

33 Working at the rear of the panel, remove the two securing screws, and withdraw the switch from the rear of the panel.

34 Refitting is a reversal of removal.

Courtesy light/ door ajar warning switches

35 Open the door to expose the switch in the door pillar.

36 Remove the securing screw, then withdraw the switch from the door pillar. Disconnect the wiring connector as it becomes accessible.

37 Refitting is a reversal of removal, but ensure that the rubber gaiter is correctly seated on the switch.

Glovebox light switch

38 Open the glovebox, then prise the switch from the lower edge of the facia, and disconnect the wiring plug.

39 Refitting is a reversal of removal.

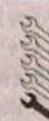
Luggage compartment light switch

40 The switch is integral with the boot lid/tailgate lock. Removal and refitting details for the boot lid/tailgate lock are provided in Chapter 11.

Map reading light switches

41 The switches are integral with the light assembly, and cannot be renewed independently.

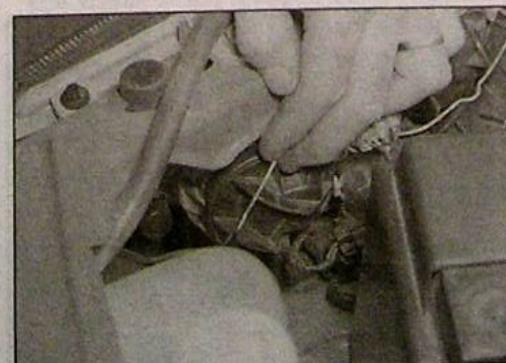
5 Bulbs (exterior lights) - renewal



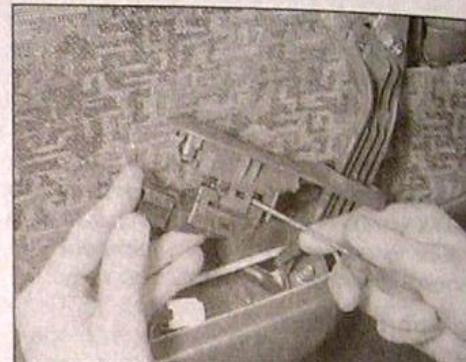
General

1 Whenever a bulb is renewed, note the following points:

- Disconnect the battery negative terminal (refer to Disconnecting the battery in the Reference Section of this manual).
- Remember that, if the light has just been in use, the bulb may be extremely hot.
- Always check the bulb contacts and



5.3 Unclip the plastic cover from the rear of the headlight



4.27 ... and remove the switch body by releasing the plastic lugs

holder, ensuring that there is clean metal-to-metal contact between the bulb and its live contact(s) and earth. Clean off any corrosion or dirt before fitting a new bulb.

d) Wherever bayonet-type bulbs are fitted, ensure that the live contact(s) bear firmly against the bulb contact.

e) Always ensure that the new bulb is of the correct rating (see Specifications), and that it is completely clean before fitting; this applies particularly to headlight/foglight bulbs (see following paragraphs).

Headlight

2 Open the bonnet.

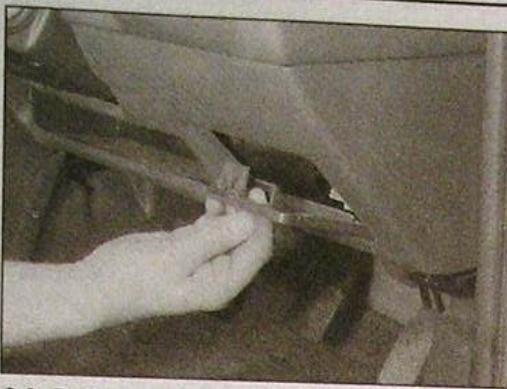
3 Unclip the plastic cover from the rear of the headlight, then pull the wiring connector from the bulb contact (see illustration).

4 Squeeze the retaining spring-clip lugs, and release the clip from the rear of the bulb.

5 Withdraw the bulb (see illustration).



5.5 Release the spring clips and withdraw the headlight bulb



3.3 Pull open the cover flap in the facia for access to the main fuses

1 General information and precautions

General information

The electrical system is of 12-volt negative earth type. Power for the lights and all electrical accessories is supplied by a lead/acid type battery, which is charged by the alternator.

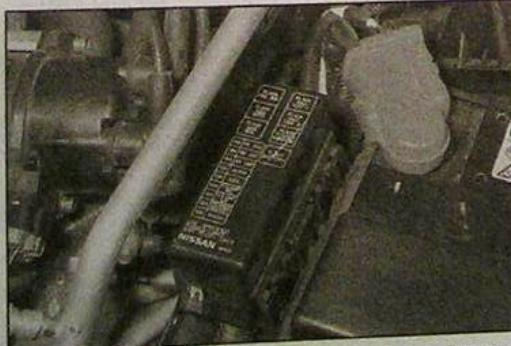
This Chapter covers repair and service procedures for the various electrical components not associated with the engine. Information on the battery, alternator and starter motor can be found in Chapter 5A, and information on the ignition system is contained in Chapter 5B.

It should be noted that, prior to working on any component in the electrical system, the battery negative terminal should first be disconnected, to prevent the possibility of electrical short-circuits and/or fires.

Note: This Chapter is divided into two Parts; A and B. Part A covers the body electrical systems on Phase I models, (1990 to June 1993) and Phase II models (June 1993 to October 1996). Phase III models (October 1996 to September 1999) are covered in Part B of this Chapter.

Precautions

Warning: Before carrying out any work on the electrical system, read through the precautions given in *Safety first!* at the beginning of this manual, and in Chapter 5A.



3.4 Additional fuses and circuit-breakers are located in an auxiliary fusebox in the engine compartment



Warning: All models are equipped with an air bag system. When working on the electrical system, refer to the precautions given in Section 22, to avoid the possibility of personal injury. **Caution:** Before proceeding, refer to *Disconnecting the battery in the Reference Section of this manual* for further information.

2 Electrical fault-finding - general information

Refer to Chapter 12A, Section 2.

3 Fuses and relays - general information

Fuses

1 Fuses are designed to break a circuit when a predetermined current is reached, in order to protect the components and wiring which could be damaged by excessive current flow. Any excessive current flow will be due to a fault in the circuit, usually a short-circuit (see Section 2).

2 The main fuses are located in the fusebox on the driver's side of the facia.

3 For access to the fuses, pull open the cover flap (see illustration).

4 Additional fuses and circuit-breakers are located in an auxiliary fusebox in the engine compartment, attached to a bracket on the left-hand body panel, next to the battery (see illustration).

5 A blown fuse can be recognised from its melted or broken wire.

6 To remove a fuse, first ensure that the relevant circuit is switched off.

7 Using the plastic tool clipped to the main fusebox lid, pull the fuse from its location.

8 Spare fuses are provided in the main fusebox.

9 Before renewing a blown fuse, trace and rectify the cause, and always use a fuse of the correct rating (fuse ratings are specified on the inside of the fusebox cover flap). Never substitute a fuse of a higher rating, or make temporary repairs using wire or metal foil; more serious damage, or even fire, could result.

10 Note that the fuses are colour-coded as follows. Refer to the wiring diagrams for details of the fuse ratings used and the circuits protected.

Colour	Rating
Orange	5A
Red	10A
Blue	15A
Yellow	20A
Clear or White	25A
Green	30A

11 The radio/cassette player fuse is located in the rear of the unit, and can be accessed after removing the radio/cassette player.

Relays

12 A relay is an electrically-operated switch, which is used for the following reasons:

a) A relay can switch a heavy current remotely from the circuit in which the current is flowing, therefore allowing the use of lighter-gauge wiring and switch contacts.

b) A relay can receive more than one control input, unlike a mechanical switch.

c) A relay can have a timer function - for example, the intermittent wiper relay.

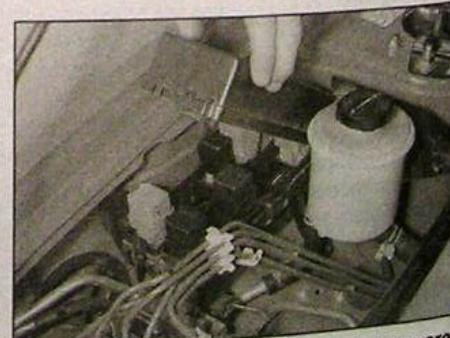
13 Various relays are located behind the facia, next to the fusebox, and in various other locations, depending on model. Most of the engine-related relays are located in the relay box on the right-hand side of the engine compartment (see illustration).

14 On most models, the direction indicator/hazard warning flasher unit is located on a bracket behind the facia, to the left of the steering column, and can be accessed once the driver's side lower facia panel has been removed (see Chapter 11B).

15 Relays may be located in various other locations, depending on model - for example, on Hatchback models, the tailgate wiper relay is located in the luggage compartment, behind the rear trim panel.

16 If a circuit or system controlled by a relay develops a fault, and the relay is suspect, operate the system. If the relay is functioning, it should be possible to hear it 'click' as it is energised. If this is the case, the fault lies with the components or wiring of the system. If the relay is not being energised, then either the relay is not receiving a main supply or a switching voltage, or the relay itself is faulty. Testing is by the substitution of a known good unit, but be careful - while some relays are identical in appearance and in operation, others look similar but perform different functions.

17 To remove a relay, first ensure that the relevant circuit is switched off. The relay can then simply be pulled out from the socket, and pushed back into position.



3.13 Most of the engine-related relays are located in the relay box on the right-hand side of the engine compartment

Chapter 12 Part B:

Body electrical systems - Phase III models

Contents

Air bag system - general information and precautions	22	Instrument panel - removal and refitting	9
Anti-theft alarm system - general information	20	Instrument panel components - removal and refitting	10
Bulbs (exterior lights) - renewal	5	Loudspeakers - removal and refitting	18
Bulbs (interior lights) - renewal	6	Radio aerial - removal and refitting	19
Cigarette lighter - removal and refitting	11	Radio/cassette player - removal and refitting	17
Electrical fault-finding - general information	2	Switches - removal and refitting	4
Exterior light units - removal and refitting	7	Tailgate/rear window wiper motor - removal and refitting	15
Fuses and relays - general information	3	Windscreen/tailgate washer system components - removal and refitting	16
General information and precautions	1	Windscreen wiper motor and linkage - removal and refitting	14
Headlight beam alignment - general information	8	Wiper arm - removal and refitting	13
Heated front seat components - general information	21		
Horn - removal and refitting	12		

Degrees of difficulty

Easy, suitable for novice with little experience		Fairly easy, suitable for beginner with some experience		Fairly difficult, suitable for competent DIY mechanic		Difficult, suitable for experienced DIY mechanic		Very difficult, suitable for expert DIY or professional	
--	--	---	--	---	--	--	--	---	--

Specifications

Bulb ratings

	Watts
Courtesy light	10
Front direction indicator light	21
Front direction indicator repeater light	5
Front foglight	55
Front sidelight	5
Headlights	55
High-level stop-light: Saloon models	5
Hatchback and Estate models*	N/A
Luggage compartment light: Saloon models	3
Hatchback and Estate models	5
Map reading light	10
Rear direction indicator light	21
Rear foglight	21
Rear number plate light	5
Reversing light	21
Stop/tail light	21/5
'Light-emitting diode (LED) sealed unit	



4.3 Undo the two screws securing the relevant steering column switch



4.4a Slide the switch from the steering column bracket ...



4.4b ... and disconnect the wiring plugs

4 Switches - removal and refitting



Note: Disconnect the battery negative terminal (refer to *Disconnecting the battery* in the Reference Section of this manual), before removing any switch, and reconnect the terminal after refitting the switch.

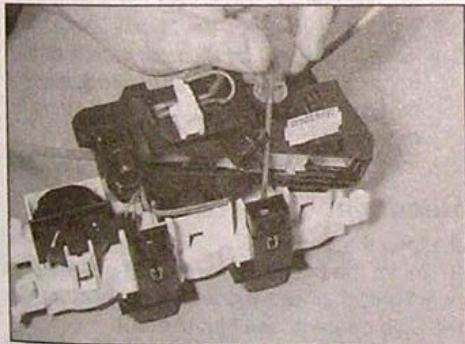
Ignition switch/ steering column lock

1 Refer to Chapter 10.

Steering column combination switches

2 Remove the steering column shrouds, as described in Chapter 11B.

3 Undo the two screws securing the relevant



4.11a Release the heater/ventilation switch securing clips using a small screwdriver ...

switch to the bracket on the steering column (see illustration).

4 Slide the relevant switch from the bracket, and disconnect the wiring plugs (see illustrations).

5 Refitting is a reversal of removal.

Centre facia-mounted pushbutton switches

6 Remove the facia centre switch/ventilation nozzle housing as described in Chapter 11B.

7 Push the switch forwards from the rear of the panel to release the securing clips.

8 Refitting is a reversal of removal.

Heater/ventilation control unit switches

9 Remove the heater/ventilation control unit as described in Chapter 3.

10 If the rotary switches are being removed, carefully pull off the relevant control knob. If using pliers, wrap a suitable piece of cloth or card around the knob to protect it.

11 Release the securing clips, using a screwdriver if necessary, then pull the switch off the control unit (see illustrations).

12 Refit the switch using a reversal of the removal procedure, then refit the heater/ventilation control unit as described in Chapter 3.

Instrument panel surround switches

13 These switches include the electric door mirror switch, the instrument panel illumination switch, and the headlight beam adjustment switch.



4.14 Using a small screwdriver to release the headlight beam adjustment switch

14 To remove the instrument panel illumination switch, and the headlight beam adjustment switch, simply prise the switch from the panel with a small screwdriver, and disconnect the wiring connector (see illustration).

15 To remove the electric door mirror switch, remove the driver's side lower facia panel as described in Chapter 11B.

16 Reach up under the facia and push the switch out of the panel from behind (see illustration). Withdraw the switch and disconnect the wiring connector.

17 Refit the switches by pushing them into position in the panel, after first reconnecting the wiring. Where applicable, refit the driver's side lower facia panel with reference to Chapter 11B.

Centre console-mounted switches

18 Remove the centre console, as described in Chapter 11B.

19 Working at the rear of the centre console, release the securing clips, then push the switch out through the top of the console.

20 Refit the relevant switch using a reversal of the removal procedure, then refit the centre console.

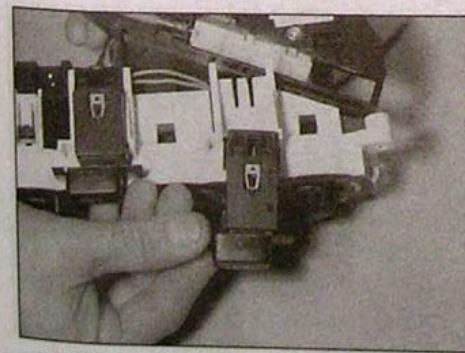
Electric window switches

Driver's door switches

21 Carefully prise up the rear of the electric window switch panel to release the retaining clip.



4.16 Reach up under the facia and push the door mirror switch out of the panel



4.11b ... then pull the switch off the control unit