



Fog lamps

Astra

Scope of supply

- 2 x fog lamps
- 2 x 2 mounting brackets
- 1 x fog lamp switch with plug-in base
- 1 x relay
- 1 x 20 A fuse
- 1 x cable set
- 1 x set of electrical connectors
- 1 x set of mechanical fasteners

Tools

- Screwdrivers (Philips and slot head)
- Spanners
- Jig saw
- Semicircular file
- Crimping tool for electrical connections
- Diagonal cutter
- Cable stripper

Preparation

As always, prior to any work on the vehicle's electrical system, disconnect both battery terminals.

Dismantling the bumper

Remove 2 nuts and 1 expanding rivet in the right hand wheel arch (fig. 1). Remove the wheel arch cladding part (fig. 2). Remove 4 nuts and 2 expanding rivets in each of the 2 wheel arches (fig. 3). Remove the internal wing cladding (fig. 4).

Remove four expanding rivets on the underside of the bumper (fig. 5). Unscrew 2 hexagon screws (fig. 6) and 1 nut (fig. 7) in each of the wheel arches. Disconnect the hoses in the headlamp washer system. Remove the bumper to the front (fig. 8), unhooking it from the radiator grille mountings (fig. 9).

Cutting the recesses for the fog lamps

Saw out the openings for the fog lamps, following the markings on the inside of the bumper (fig. 10). Straighten and deburr the cut edges with a semicircular file (fig. 11).

Fitting the fog lamps

Insert the mounting brackets in the fog lamps (fig. 12). Insert the fog lamps in the bumper. Fasten them at the bottom with 2 screws each (fig. 13) and at the top with 1 clamping hole nut and 1 screw each (fig. 14).

Fitting the fog lamp switch

Remove 3 screws on the underside of the steering column cladding (fig. 15). Remove 2 plugs beside the steering column and unscrew 2 screws (fig. 16). Remove the 2 part steering column cladding to the top and bottom (fig. 17). Replace the blanking plate (fig. 18) with the fog lamp switch. Lever the ventilation nozzle out (fig. 19). Draw off the button from the light switch, using a small screwdriver to disengage the plug on the switch shaft (fig. 20). Remove 3 screws (fig. 21) and remove the dashboard cover (fig. 22).

Dismantling the fuse box

Open the fuse box lid (fig. 23). Remove the screws. Disengage the fuse box and swing it downwards. Insert the fog lamp relay (fig. 24).

Laying the cable

Lay 2 cables from each fog lamp to the battery. From there, lay 2 cables to the fuse box. Tie all cables and bind them fast to standard cable harnesses to avoid rattling noises.



Electrical connections

Fit plugs to the ends of the cable at the fog lamps (fig. 25), using rubber seals. Fit the plugs to the fog lamp connections (fig. 26).

At the battery, connect the minus cables from the fog lamps together and connect them to the minus terminal of the battery with a common chassis earth link (fig. 27). Connect the plus cables from the fog lamps together and connect them to one of the cables leading to the fuse box.

Connect the second cable leading to the fuse box to the plus terminal of the battery.

Connect the plus line for fog lamps at the fuse box to relay contact 4 with a spade connector. Connect the plus cable from the battery to the input of fuse 17 (lower side). Fit the 20 A fuse. Connect the output side of fuse 17 (relay side) to relay contact 5.

Connect relay contact 3 to chassis earth, fitting the short cable with a spade connector and earthing washer. Use the existing bodywork earth screw. Fit all the cables at the switch with spade connectors and insert them in the plug-in switch base. Connect relay contact 1 to switch contact 2. Connect switch contact 1 to earth, fitting the short cable with an earthing washer and using the existing bodywork earth screw. Connect switch contacts 3 and 4 to the output of fuse 19, using slitting connectors. Connect switch contact 5 to relay contact 4, using slitting connectors.

Fit the plug-in base to the switch.

Concluding work

Refit all dismantled parts, reversing the above procedure. Reconnect the battery.

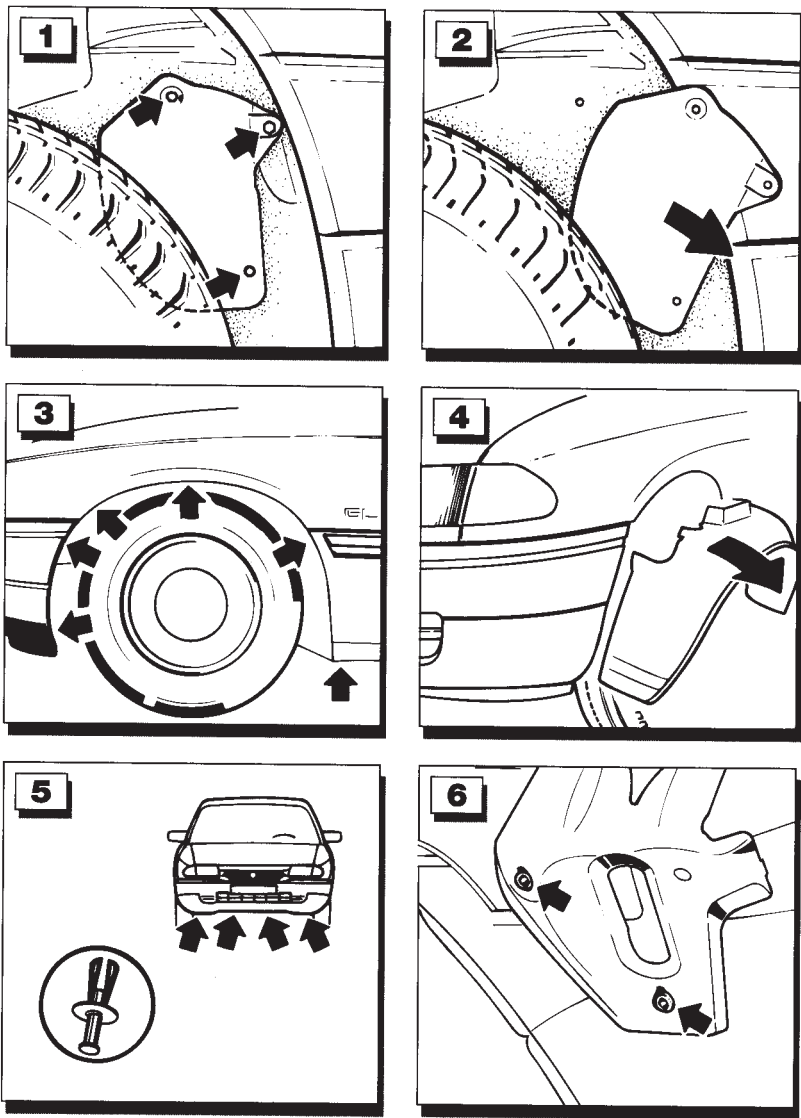
Testing the system

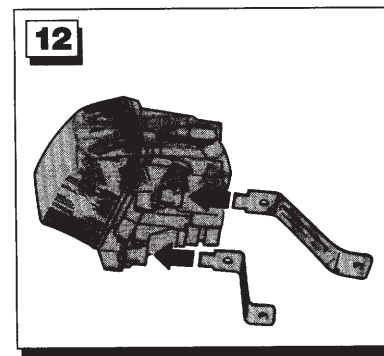
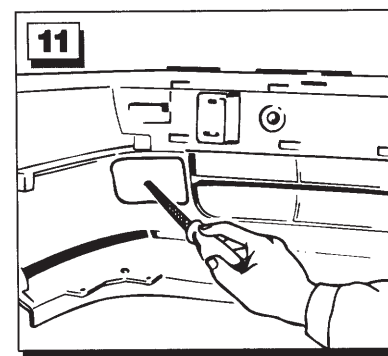
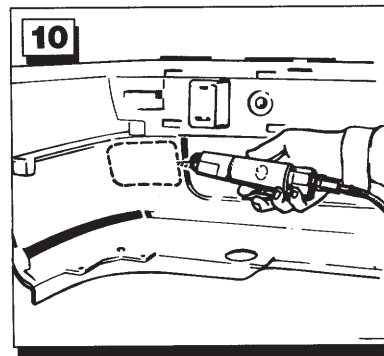
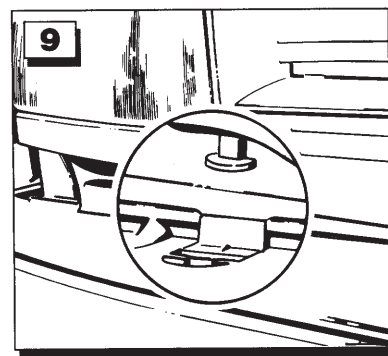
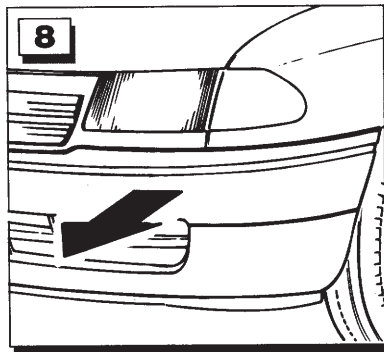
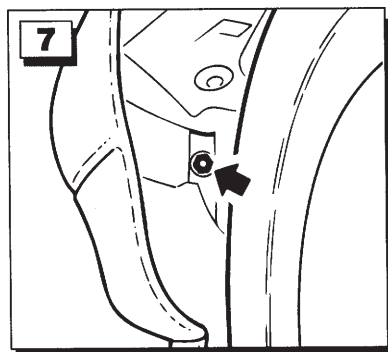
The fog lamps light up in conjunction with parking lamps, dipped and main beam headlamps. The signal lamp in the fog lamp switch indicates when the fog lamps are switched on. The switch symbol is illuminated when the parking lights are on.

Setting the fog lamps

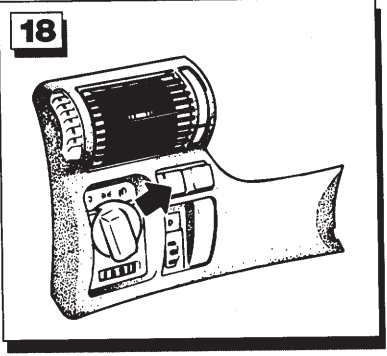
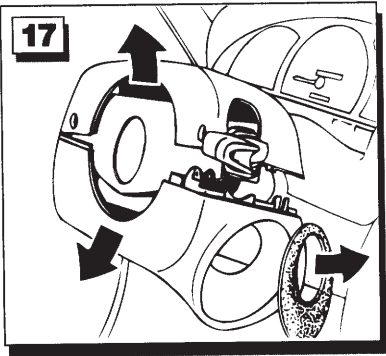
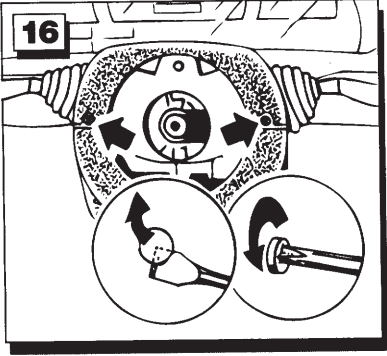
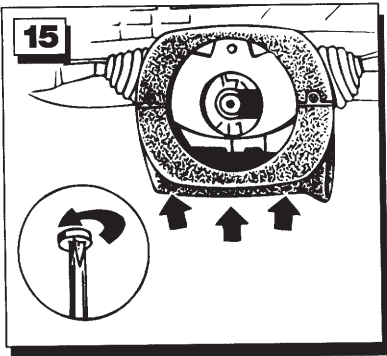
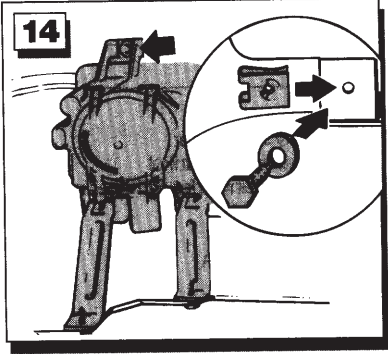
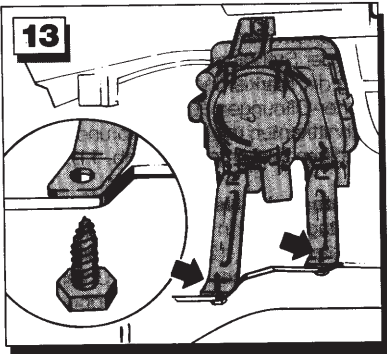
Set the fog lamps as specified, using an optical tester. The setting screws are located at the rear of the fog lamp casings (fig. 28).

part numbers: 90443212 / 90486922

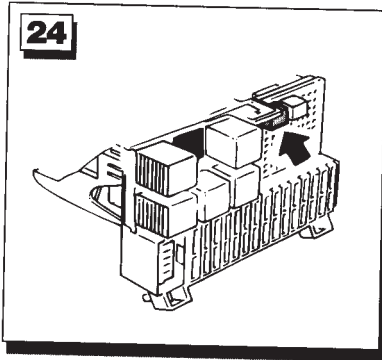
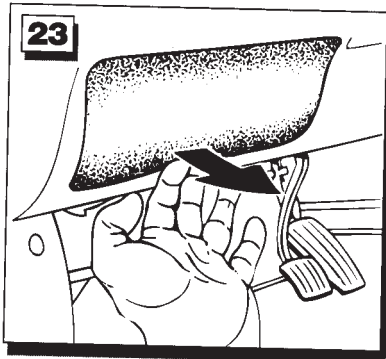
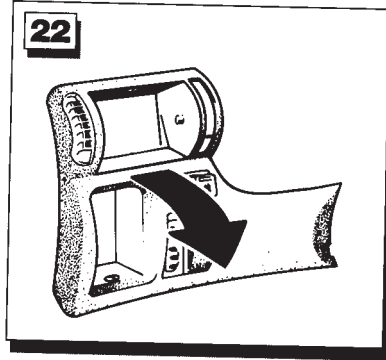
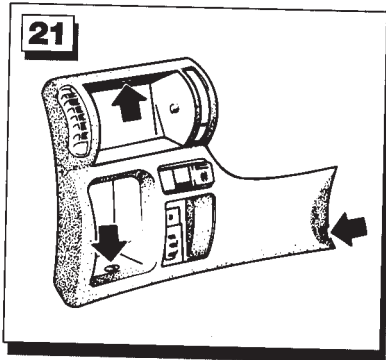
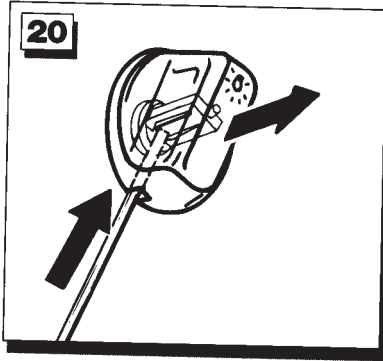
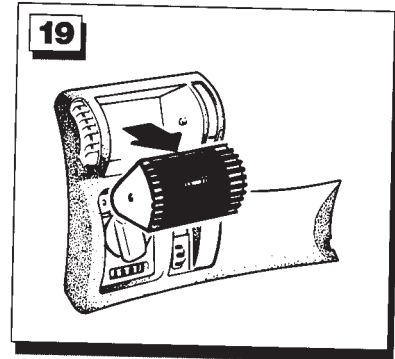




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