

GENERAL DESCRIPTION

The numerous light sources permit easy identification of the controls and switches and, when necessary, suitable lighting of the passenger compartment and/or specific points.

The wiring diagram relating to interior lighting has been divided into three parts; the first part includes the illumination of the ideograms on the controls and switches activated when the sidelights are switched on. The second includes courtesy lights and light points switched on and off by the timer when the doors are opened or closed.

A third specific diagram is dedicated to the dashboard lighting as this can be regulated using the rheostat.

Illumination of controls and ideograms:

When the sidelights are on, the ideograms located on the stalk unit are lit up; controls of the heater or of the manual conditioner (for the automatic heater and automatic air conditioner) control panel are also illuminated (see "Heating-ventilation control unit: supply and diagnosis").

The specific diagrams also illustrate the illumination of the ideograms on the check panel display, and illumination of the ashtray, seat adjustment, fog-light switch and controls for the controlled suspension.

A specific light comes on when the glovebox is opened (see "Boot release control").

N.B. Refer to the various sections for

INTERIOR LIGHTING

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TROUBLESHOOTING 12-16

greater detail and to the fault diagnosis if the ideograms do not light up

Courtesy lights:

A timing device M10 turns the front central courtesy light F35, the rear courtesy light F3 and, where applicable, the lights on the ignition block on or off when the doors are opened or closed. This device operates as follows:

- When any door is opened the lights come on and remain on for between 100 and 200 seconds or until the door is closed;

- when the doors have been closed the lights remain on for approximately 15 seconds and then switch themselves off.

The two courtesy lights can obviously be turned on manually by acting on the switch.

On the front courtesy light there is also a spot-light, powered directly by the battery, which enables a passenger, for example, to read without disturbing the driver.

A special courtesy light F5 illuminates the luggage compartment and comes on when the boot lid is opened.

Instrument panel lighting:

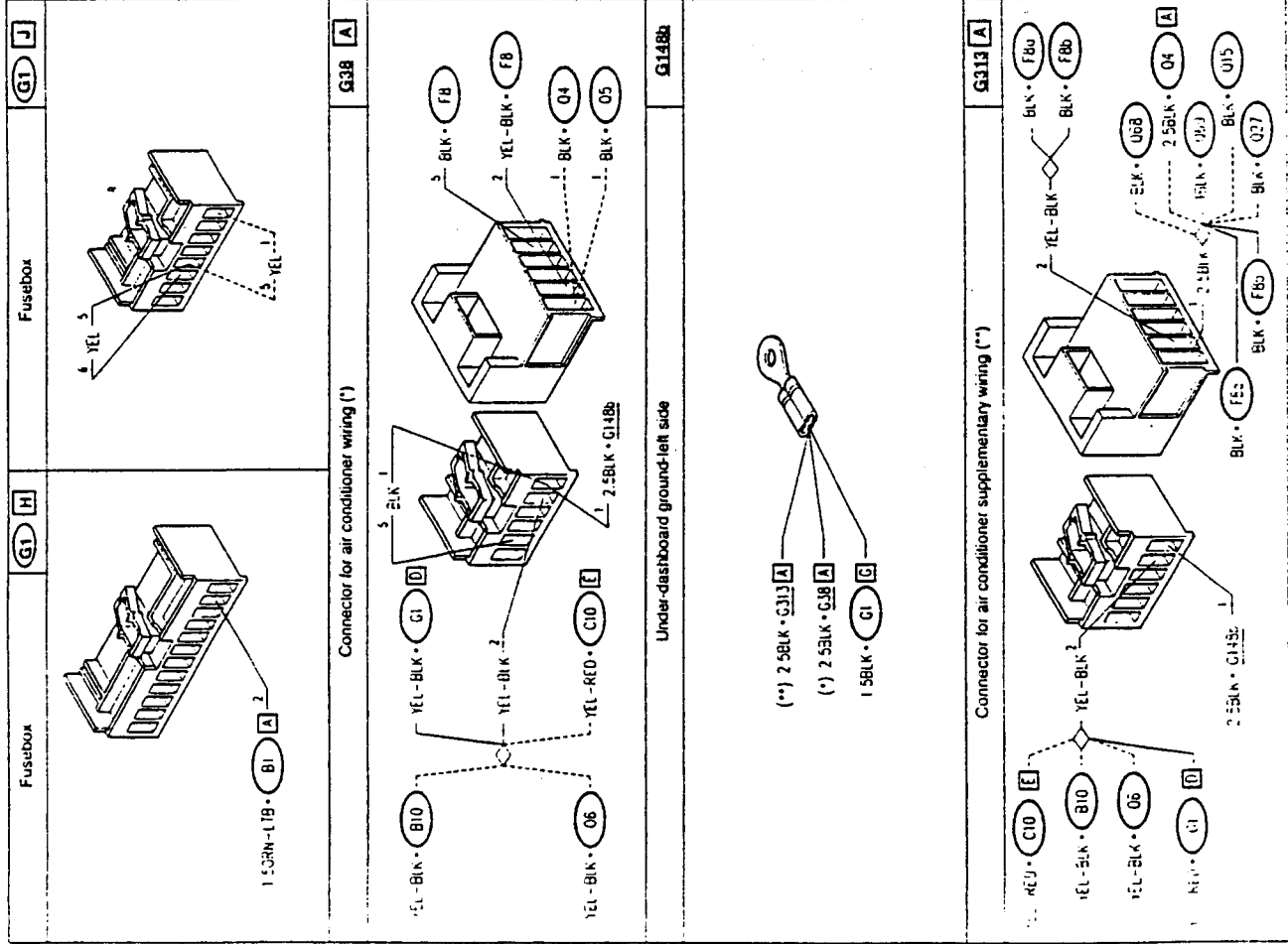
The instrument panel C10 is illuminated by way of a rheostat B16, which permits the lighting intensity to be regulated.

ILLUMINATION OF CONTROLS AND IDEOGRAMS

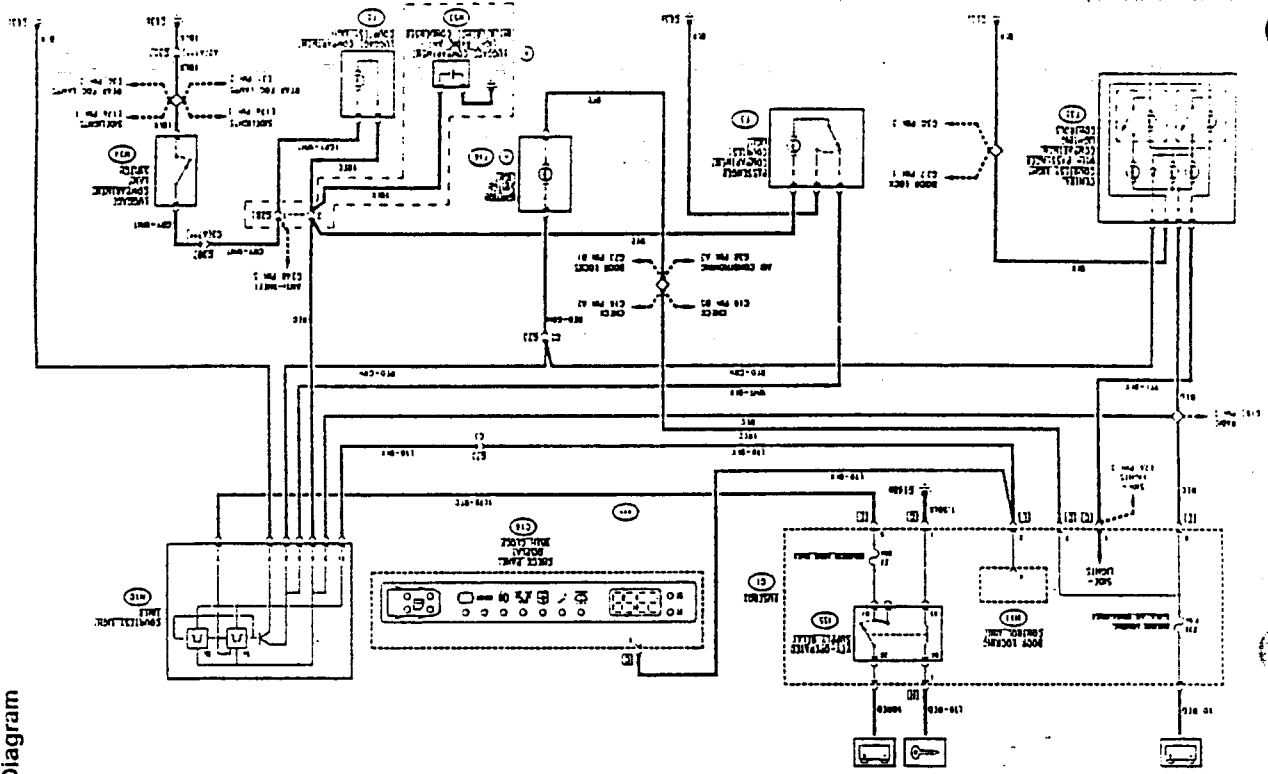
Functional Description

The lever group ideograms B68 are illuminated when the sidelights are switched on; those on the left are activated directly by the light switch itself, while those on the right by a relay returning from the fusebox G1

The controls of the heater F8 on the two lights F8a and F8b of manual air conditioner are supplied by the sidelight relay I64 and fuse F5 (10A) of G1 (see for the automatic conditioner "Heating ventilation control unit: supply and diagnosis").



COURTESY LIGHTS
Wiring Diagram



Functional Description

Passenger compartment courtesy light

The courtesy light with passenger compartment lighting controls (reading light) F35 is supplied directly by the battery. Current through fuse F16 (7.5A) of the fusebox G1 this permits the reading light of courtesy light to be illuminated by acting on the relevant switch.

When the sidelights are on, F35 receives another supply which lights up the diagrams on the controls.

The passenger compartment courtesy light F3 also receives supply direct from the battery and once again is routed through fuse F16 (7.5A)

Timer controlled courtesy light:

The courtesy light electronic timer device N10 controls illumination of the courtesy lights F35 and F3 and of the lamp illuminating the ignition switch F16; where applicable

Battery voltage is supplied through fuse F16 (7.5A) in the fusebox G1 to the Ta and Tb devices of N10. Pin 11 of the device receives the "door open" signal from the Check Panel C16 when any door is opened (this signal is the same as that which prevents locking/unlocking of the doors - see "Door locking system").

The Ta timer sends a ground signal through pins 8 and 9, to the timer controlled lamps F3, F36 and F16 (supplied by battery voltage by the fuse line F16) and illuminates them for 100 to 200 seconds from the moment the door is opened. When the "door open" signal is interrupted, the Tb timer sends the same negative signal and illuminates the lights for a further 10-20 seconds approximately.

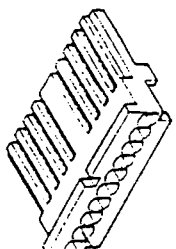
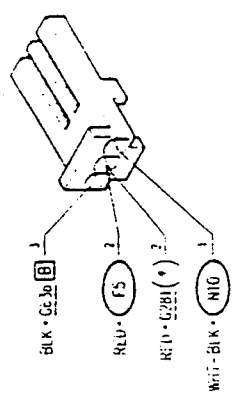
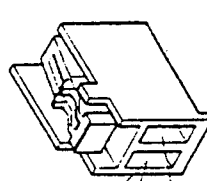
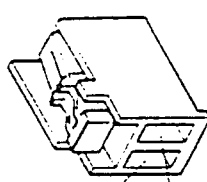
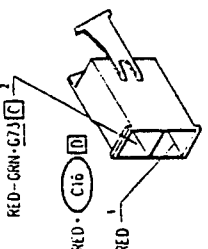
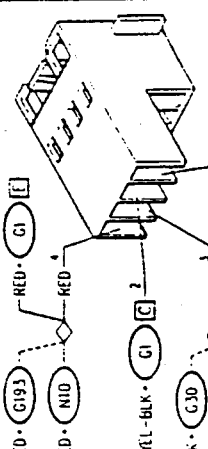

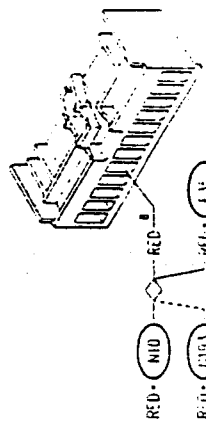
From chassis N... the timer has been modified: the key operated power supply signal which interrupts the timing when the ignition key is engaged reaches pin 2.

Luggage compartment lighting:

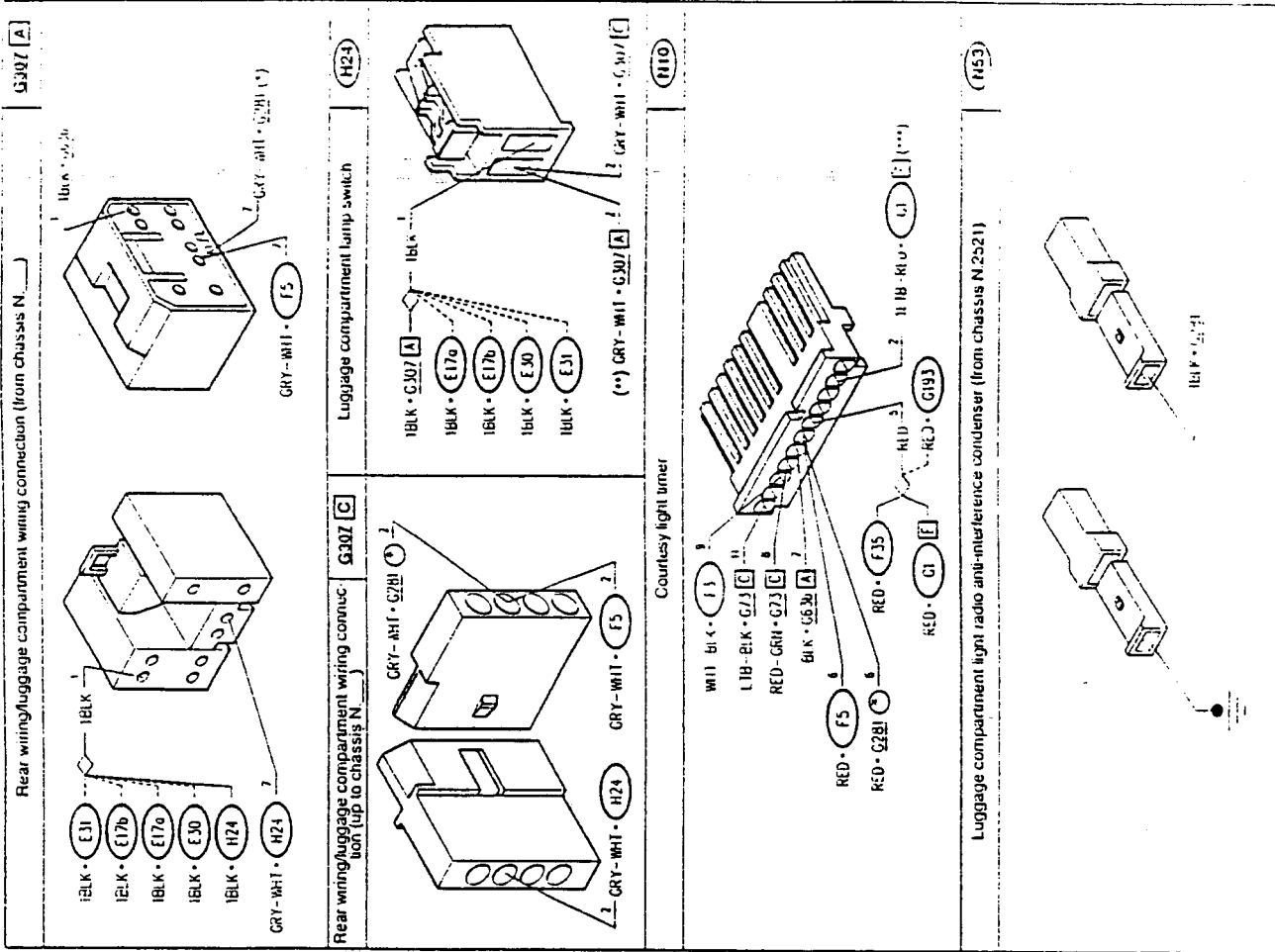
The luggage compartment courtesy light F5 is also illuminated by battery voltage (routed through the line protected by fuse F16 (7.5A); it comes on when the boot lid is opened and switch H24 sends a ground signal

From chassis N.2521 a radio anti-interference condenser N53 is installed to prevent disturbances from the roof light F5.

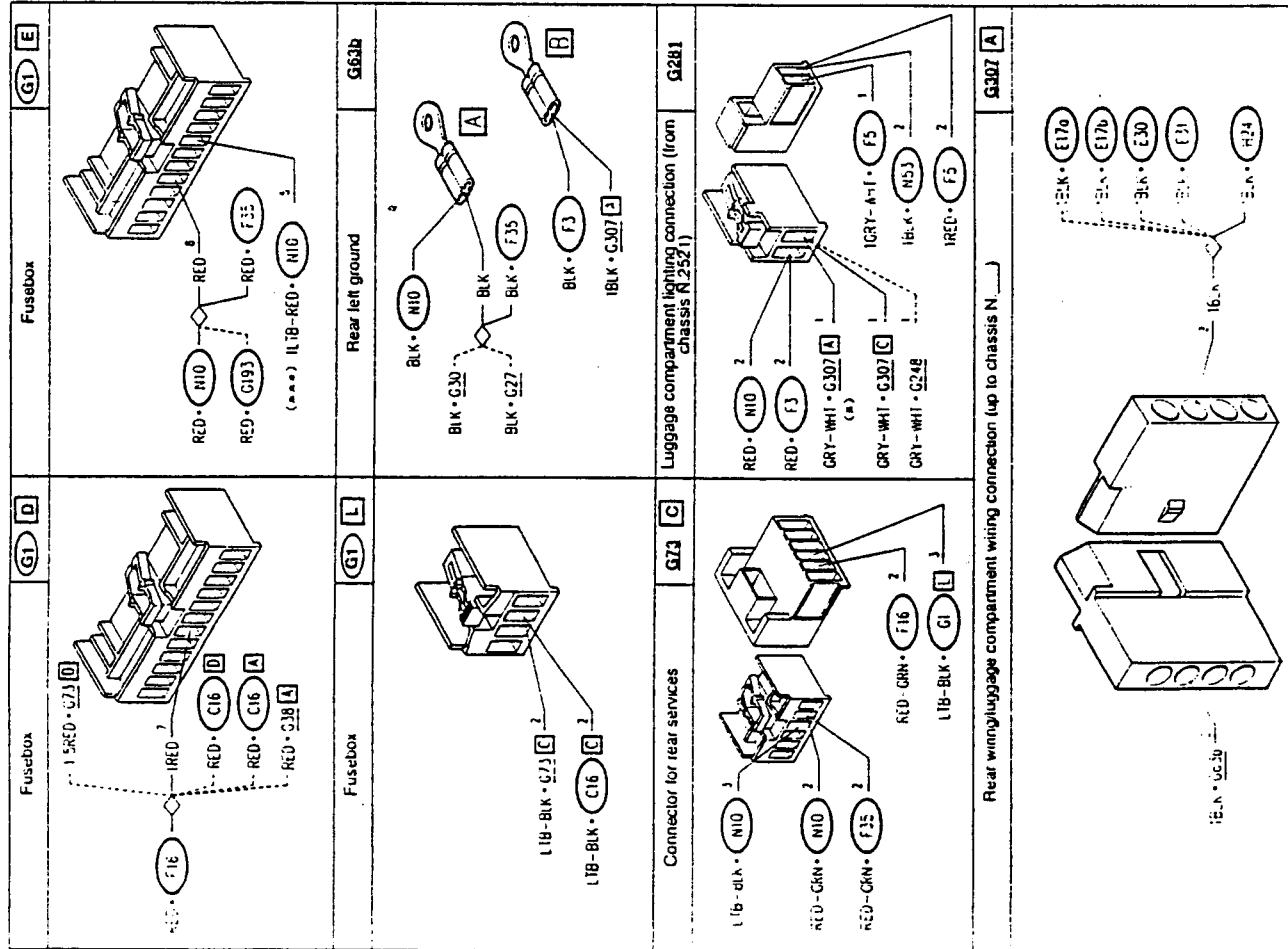
Components and Connectors

<p>Check panel display with clock</p>  <p>110-Blk - G1</p>	<p>Passenger compartment courtesy light</p>  <p>Blk - G2, 3a Rld - F5 RED - G2B1 (*) Whit - Blk - N10</p>
<p>Luggage compartment courtesy light (up to chassis N.2520)</p>  <p>RED - N10 RED - F3 GRY - Whit - G307</p>	<p>Luggage compartment courtesy light (from chassis N.2521)</p>  <p>1RED - G2B1 1GRY - Whit - G2B1</p>
<p>Ignition switch light (present to chassis N...)</p>  <p>RED - GRN - G23 RED - C16 RED - G39 1.5RED - G23 1RED - G1</p>	<p>Central courtesy light with passenger compartment lighting controls</p>  <p>RED - G193 RED - N10 RED - Blk - G1 RED - Blk - G27 RED - N10 - U/13</p>
<p>Fusebox</p>  <p>10 RED - G5c</p>	<p>Fusebox</p>  <p>RED - N10 RED - F35</p>

(*) from chassis N°2521

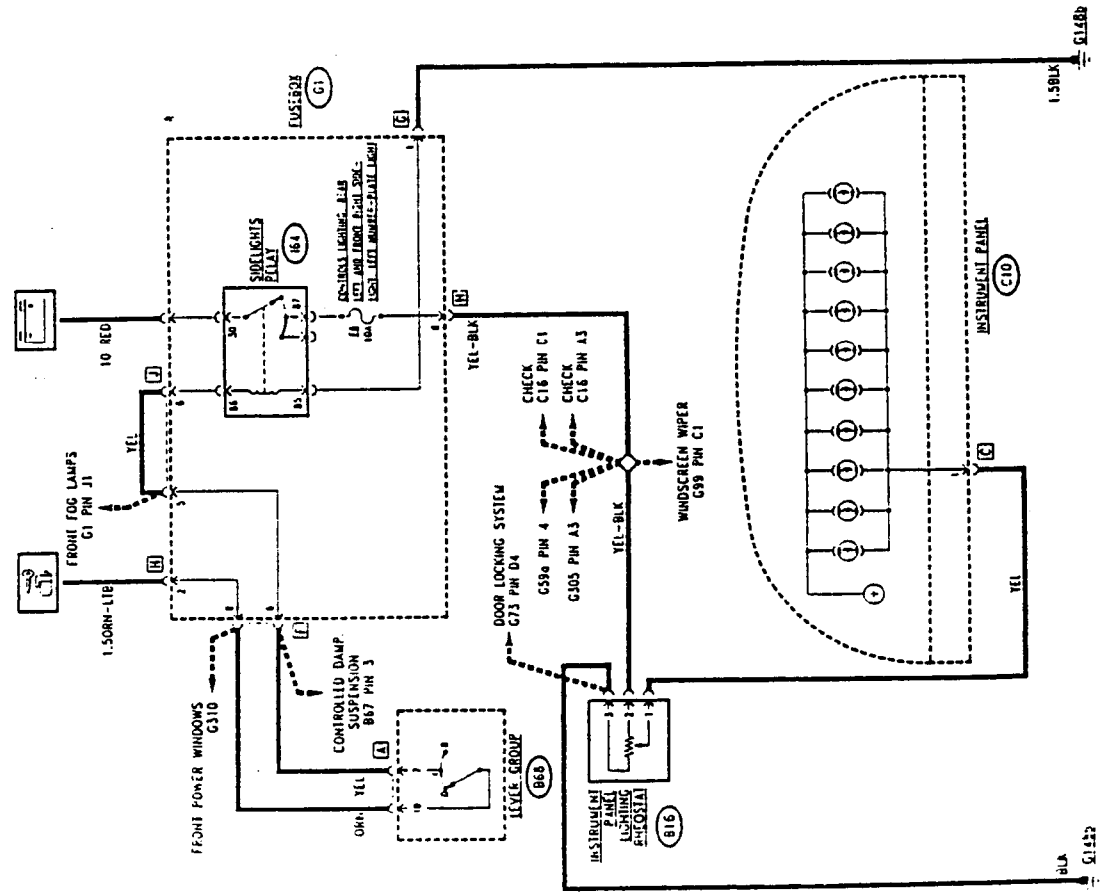


(*) from chassis N.2521 (**) from chassis N. / (***) from chassis N.



(*) from chassis N. / (***) from chassis N.

INSTRUMENT PANEL LIGHTING Wiring Diagram



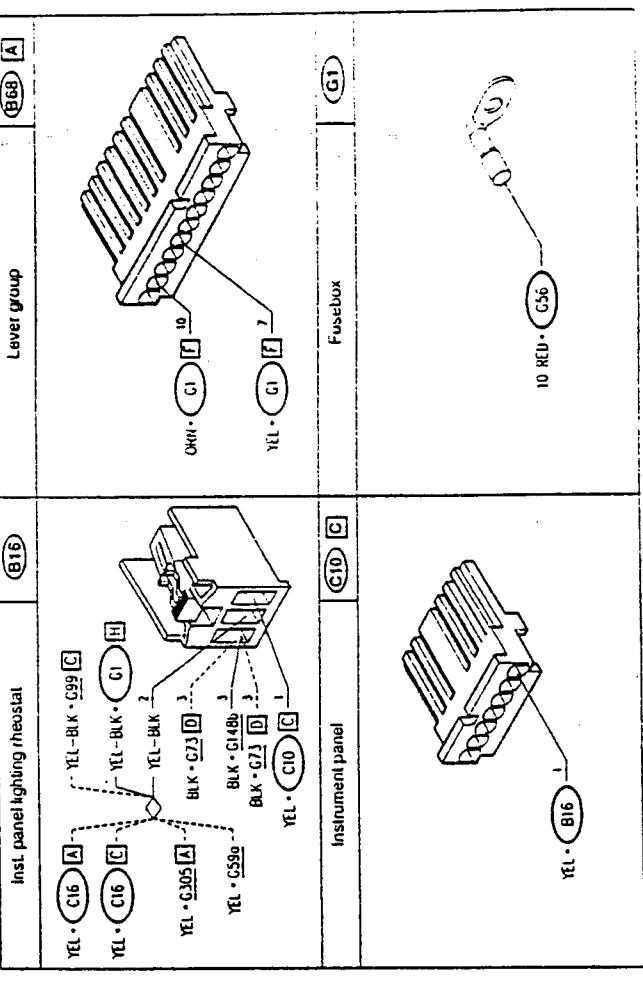
Functional Description

The rheostat B16 is powered by battery voltage, through relay I64 and fuse F6 (10A) of the fusebox G1, when the side lights are switched on using the switch on the lever group B68.

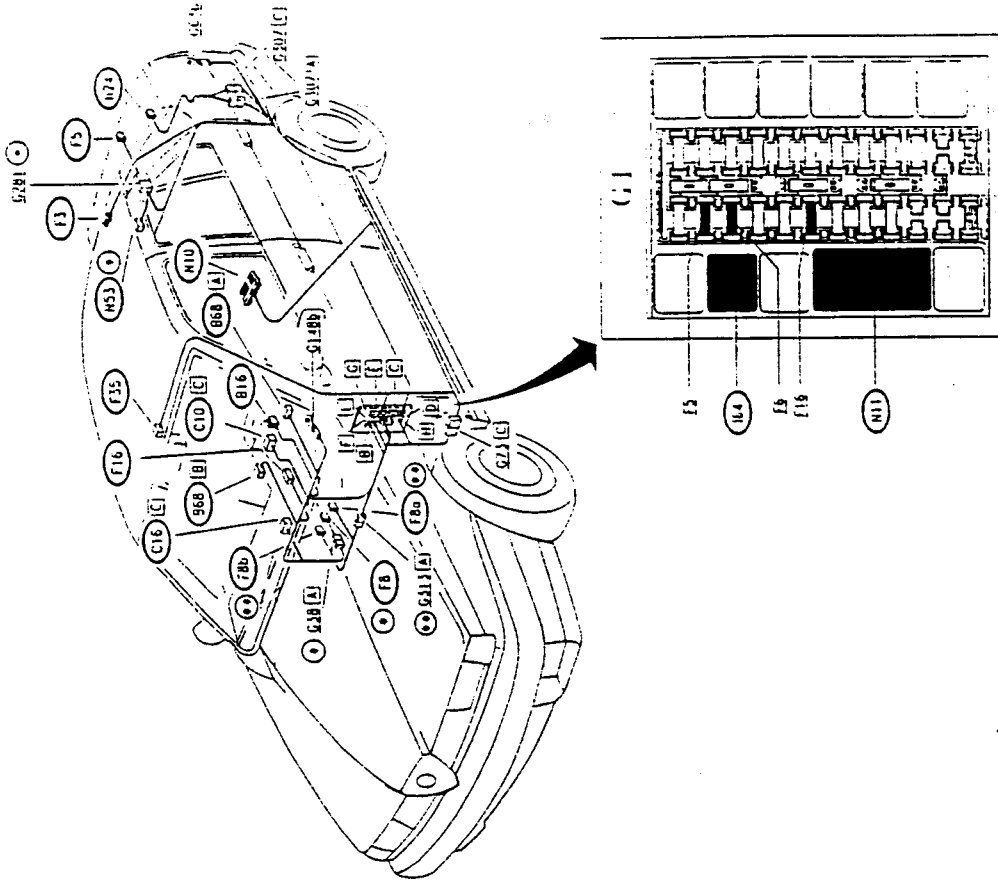
Intensity is regulated by the negative signal which reaches the "key operated" supply instrument panel lamps.

The instrument panel C10 is illuminated by powering a series of inserted lamps; this supply is routed through a dashboard lighting dimmer rheostat B16 which permits the lighting intensity to be adjusted to the desired level.

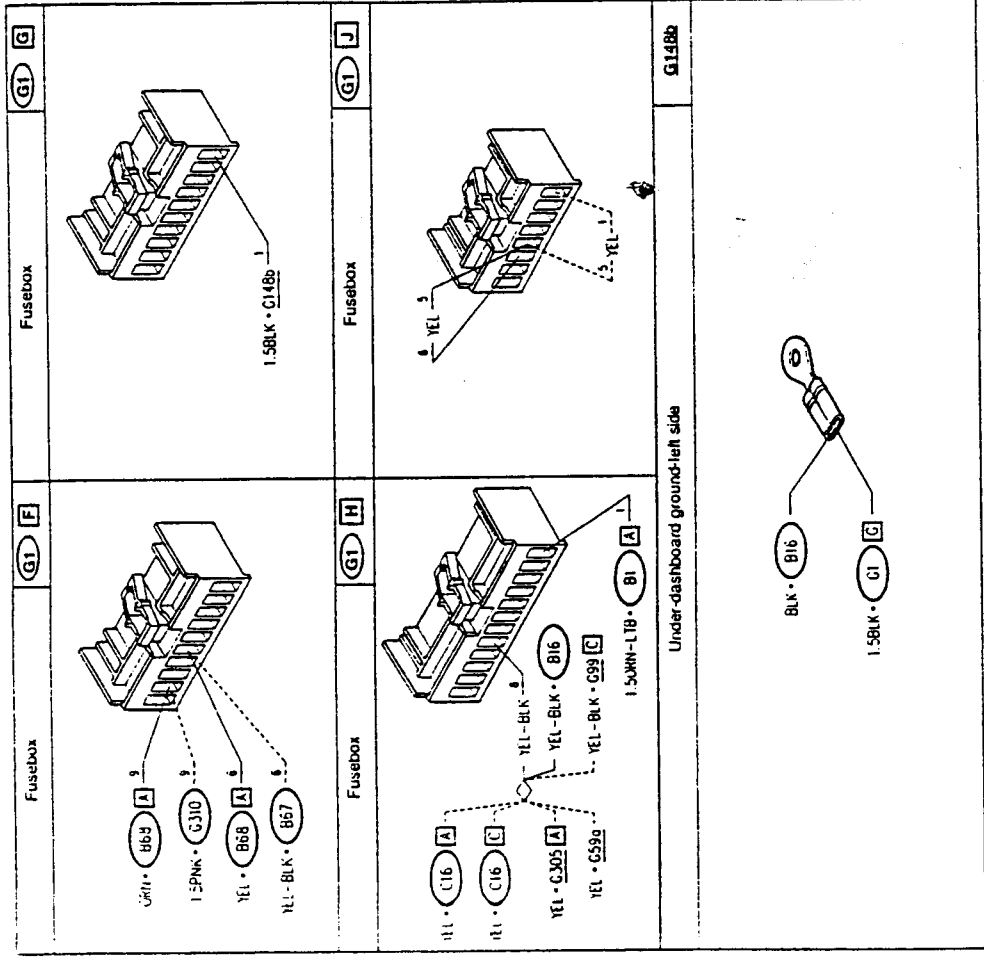
Components and Connectors



LOCATION OF COMPONENTS



(*) from chassis N.2521
 (*) Manual Heater
 (**) Manual combustion



TROUBLESHOOTING

TROUBLESHOOTING TABLE

Malfunction	Component											Test				
	(F8)	(F8a)	(F8b)	(B66)	E16	E1	(N10)	(F35)	(F3)	(F16)	(F5)		(H23)	(C10)	(B16)	
Manual air conditioner lights	•															A
Heater lights	•															B
Level group lights				•												C
All inner controlled courtesy lights					•	•										D
Central courtesy light					•	•	•									E
Passenger compartment courtesy light					•	•	•									F
Ignition switch light (*)					•	•										G
Luggage compartment light										•						H
Inst panel illumination													•			I
Inst panel lighting intensity regulation															•	J

(*) present up to chassis N. _____

THE AIR CONDITIONING CONTROL PANEL LIGHTING DOES NOT COME ON (MANUAL AIR CONDITIONER) TEST A

TEST PROCEDURE	RESULT	CORRECTIVE ACTION
A1 CHECK VOLTAGE - With ignition key engaged and the sidelights on, check for 12 V between pin 1 and 2 of bulbs F8a and F8b	OK	Substitute bulbs F8a or F8b
	OK	Proceed to step A2
A2 CHECK VOLTAGE - With ignition key engaged and sidelights on, check for 12 V at pin 2 of F8a and of F8b	OK	Restore wiring between pins 1 of F8a and F8b and earth G148b, across the solder and pin A1 of connector G313 (BLK)
	OK	Restore wiring between pins 2 of F8a and F8b and pin D10 of fusebox G1, across pin A2 of connector G313 and solder (YEL-BLK)

LIGHTING OF HEATER/VENTILATION SYSTEM CONTROLS NOT WORKING (HEATER) TEST B

NOTE:
Carry out test only for vehicles equipped with manually controlled heater; for vehicles equipped with automatically controlled heater or heating/ventilation system refer to the section "Air conditioning - Control unit: supply and diagnosis".

TEST PROCEDURE	RESULT	CORRECTIVE ACTION
B1 CHECK VOLTAGE - With the ignition switch turned and the sidelights switched on, verify 12V between pin 1 and 2 of the bulb F8	OK	Replace the bulb contained in F8
	OK	Carry out step B2
B2 CHECK VOLTAGE - With the ignition switch turned and the sidelights switched on, verify 12V at pin 2 of F8	OK	Restore wiring between pin 1 of F8 and ground G148b, across pins A5 and A1 of the connector G38 (BLK)
	OK	Restore wiring between pin 2 of F8 and pin D10 of G1, across pin A2 of the connector G38 and the solder (YEL-BLK)

LEVER GROUP CONTROL ILLUMINATION NOT WORKING TEST C

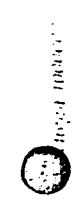
NOTE:
If the sidelight also do not work, first refer to section: "Sidelights".
If some of the lever group controls do not work, first refer to the relative sections.

TEST PROCEDURE	RESULT	CORRECTIVE ACTION
C1 CHECK VOLTAGE - With the ignition switch turned and the sidelights switched on, verify 12V between pins A7 and A11 of the lever group B68	OK OK	Carry out step C2 Carry out step C3
C2 CHECK BULB - Check lever group bulbs B68 for damage	OK OK	Carry out step C4 Replace faulty bulbs
C3 CHECK CONTINUITY - Check continuity between pin A11 of B68 and pin F10 of G1	OK OK	See section "Sidelights" Restore wiring between pin A8 of B68 and pin F10 of G1 (BLK)
C4 CHECK VOLTAGE - With the ignition switch turned and the sidelights switched on, verify 12V between pin B4 and B10 of the lever group B68	OK OK	Replace faulty bulbs Carry out step C5
C5 CHECK VOLTAGE - With the ignition switch turned and the sidelights switched on, verify 12V at pin B10 of lever group B68	OK OK	Restore wiring between pin B4 of B68 and pin B4 of G1 (BLK) Restore wiring between pin B10 of B68 and pin B10 of G1 (YEL)

NONE OF THE TIMER CONTROLLED LIGHTS WORKING (*) TEST D

TEST PROCEDURE	RESULT	CORRECTIVE ACTION
D1 CHECK FUSE - Check that fuse F16 in fusebox G1 is not damaged	OK OK	Carry out step D2 Replace the fuse (7.5A)
D2 CHECK VOLTAGE - Verify 12V at pin 5 of the timer for courtesy light N10	OK OK	Carry out step D3 Restore wiring between pin E8 of G1 and pin 5 of N10, and across the solder (RED)
D3 CHECK GROUND - Verify 0V at pin 7 of the courtesy light timer N10	OK OK	Carry out step D4 Restore wiring between pin / of N10 and ground G63b (BLK)
D4 CHECK SIGNAL - Verify ground signal (0V) at pin 11 of the courtesy light timer N10 when one of the doors is opened (and that this signal disappears when all the doors are closed correctly)	OK OK	Replace the courtesy light timer N10 Restore wiring between pin 11 of N10 and pin 12 of G1, across pin C3 of connector G73 (LTB BLK). Check correct functioning of door open signalling device (refer to "Check Panel")

(*) If the timer is not interrupted when the ignition key is engaged check continuity of the wiring between pin E5 of G1 and pin 2 of N10 (LTB-RED)



PASSENGER COMPARTMENT COURTESY LIGHT NOT WORKING TEST F

TEST PROCEDURE		RESULT	CORRECTIVE ACTION
F1	CHECK FUSE - Check for damage of the fuse F16 in fusebox G1	OK	Carry out step F2
		OK	Replace fuse (7.5A)
F2	CHECK VOLTAGE - Verify 12V between pin 3 and 2 of courtesy light F3	OK	Carry out step F3
		OK	Carry out step F4
F3	CHECK BULB - check for damage of the courtesy light bulb F3	OK	Check and if necessary replace the complete courtesy light F3
		OK	Replace the bulb
F4	CHECK VOLTAGE - Verify 12V at pin 2 of F3	OK	Carry out step F5
		OK	Restore wiring between pin 6 of timer N10 and pin 2 of F3, across courtesy light F5 (RED). If the luggage compartment light also does not work: refer to the successive test H.
F5	CHECK GROUND - Verify 0V at pin 3 of F3	OK	Carry out step F6
		OK	Restore wiring between pin 3 of F3 and ground G63b (BLK)
F6	CHECK GROUND - Open a door, and immediately, verify 0V at pin 1 of F3	OK	Replace the complete courtesy light F3
		OK	Restore wiring between pin 1 of F3 and pin 9 of timer N10 (WHT-BLK). If necessary, check for correct functioning of the timer N10 (refer to the preceding test D)

CENTRAL COURTESY LIGHT NOT WORKING TEST E

NOTE: If the controls of the central courtesy light are not illuminated when the sidelights are on, check the continuity between between pin 2 of F35 and pin C1 of the fusebox G1 (YEL-BLK), and check the sidelights circuitry (refer to "Sidelights")

TEST PROCEDURE		RESULT	CORRECTIVE ACTION
E1	CHECK FUSE - Check that fuse F16 of the fusebox G1 is not outaged	OK	Carry out step E2
		OK	Replace the fuse (7.5A)
E2	CHECK VOLTAGE - Verify 12V between pin 3 and 4 of courtesy light F35	OK	Carry out step E3
		OK	Carry out step E4
E3	CHECK BULBS - Check for damage of the courtesy light bulbs F35: spot light bulb, two bulbs of the courtesy light, two bulbs lighting the controls.	OK	Check and replace the entire group F35 if necessary
		OK	Replace faulty bulbs
E4	CHECK VOLTAGE - Check 12V at pin 4 of F35	OK	Carry out step E5
		OK	Restore wiring between pin E8 of G1 and pin 4 of F35, and across the solder (RED)
E5	CHECK GROUND - Verify 0V at pin 3 of F35	OK	Carry out step E6
		OK	Restore wiring between pin 3 of F35 and ground G63b, and across the solder (BLK)
E6	CHECK GROUND - Open a door, and immediately verify 0V at pin 1 of F35	OK	Replace the complete courtesy light F35
		OK	Restore wiring between pin 1 of F35 and pin 8 of the timer N10, across pin C2 of connector G73 (RED-GRN). If necessary, also check the correct functioning of timer N10. (refer to the preceding test D)

LIGHT ILLUMINATING IGNITION SWITCH NOT WORKING (*)		TEST G
TEST PROCEDURE	RESULT	CORRECTIVE ACTION
G1 CHECK FUSE - Check for damage of fuse F16 in fusebox G1	OK <input checked="" type="checkbox"/> OK <input type="checkbox"/>	Carry out step G2 Replace fuse (7.5A)
G2 CHECK VOLTAGE - Open a door, and immediately, verify 12V between pin 1 and 2 of light F16	OK <input checked="" type="checkbox"/> OK <input type="checkbox"/>	Carry out step G3 Carry out step G4
G3 CHECK BULB - Check for damage of the bulb of light F16	OK <input checked="" type="checkbox"/> OK <input type="checkbox"/>	Check and if necessary replace the complete courtesy light F16 Replace the bulb
G4 CHECK GROUND - Open a door, and immediately, verify 0V at pin 2 of F16	OK <input checked="" type="checkbox"/> OK <input type="checkbox"/>	Restore wiring between pin 1 of F16 and connector D of G1, and across the solder (RED) Restore wiring between pin 2 of F16 and pin 8 of timer N10, across pins C2 of connector G73 (RED- GRN).

(*) present up to chassis N. _____

LUGGAGE COMPARTMENT COURTESY LIGHT NOT WORKING		TEST H
TEST PROCEDURE	RESULT	CORRECTIVE ACTION
H1 CHECK FUSE - Check for damage of fuse F16 in fusebox G1	OK <input checked="" type="checkbox"/> OK <input type="checkbox"/>	Carry out step H2 Replace fuse (7.5A)
H2 CHECK VOLTAGE - With boot open, verify 12V between pin 1 and 2 of luggage compartment courtesy light F5	OK <input checked="" type="checkbox"/> OK <input type="checkbox"/>	Carry out step H3 Carry out step H4
H3 CHECK BULB - Check for damage of the courtesy light bulb F5	OK <input checked="" type="checkbox"/> OK <input type="checkbox"/>	Check and if necessary replace the complete courtesy light F5 Replace the bulb
H4 CHECK VOLTAGE - Verify 12V at pin 2 of F5	OK <input checked="" type="checkbox"/> OK <input type="checkbox"/>	Carry out step H5 Restore wiring between pin 6 of timer N10 and pin 2 of F5 across pin 2 of connector G281 (where applicable) (RED)
H5 CHECK GROUND - Verify 0V at pin 1 of switch H24	OK <input checked="" type="checkbox"/> OK <input type="checkbox"/>	Carry out step H6 Restore wiring between pin 1 of H24 and ground G63B, across the solder and pin A2(A1**) of connector G307 (BLK)
H6 CHECK GROUND - With boot open, verify 0V at pin 2 of H24	OK <input checked="" type="checkbox"/> OK <input type="checkbox"/>	Restore wiring between pin 2 of H24 and pin 1 of F5, across pin C2(A7**) of G307 and pin 1 of connector G281 (where applicable) (GRY-WHT) Replace switch H24

(**) from chassis N. _____

INSTRUMENT PANEL NOT ILLUMINATED	TEST I
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NOTE: if none of the indicators and warning lamps on the instrument panel are working, check for correct supply; refer to "Instrument Panel: Supply and Ground"
If the occasional lamp works, immediately carry out step L2.

TEST PROCEDURE	RESULT	CORRECTIVE ACTION
I1 CHECK GROUND - Verify, with key rotated and rheostat B16 in the position of maximum illumination, 0V at pin C1 of the instrument panel C10	(OK) <input checked="" type="checkbox"/>	Carry out step I2
	(OK) <input checked="" type="checkbox"/>	Restore wiring between pin C1 of C10 and pin 1 of rheostat B16 (YEL), and between pin 3 of B16 and ground G1-48b (BLK)
I2 CHECK BULBS - Check for damage of the ten lamps on the instrument panel C10	(OK) <input checked="" type="checkbox"/>	Check and if necessary replace the complete instrument panel C10
	(OK) <input checked="" type="checkbox"/>	Replace faulty bulbs

INSTRUMENT PANEL ILLUMINATION REGULATION DEVICE NOT WORKING	TEST J
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NOTE: before carrying out the following test, check that the sidelights are working correctly (refer to section "Sidelights")

TEST PROCEDURE	RESULT	CORRECTIVE ACTION
J1 CHECK VOLTAGE - With the ignition switch turned and the sidelights switched on, verify 12V between pin 2 and 3 of rheostat B16	(OK) <input checked="" type="checkbox"/>	Replace rheostat B16
	(OK) <input checked="" type="checkbox"/>	Carry out step J2
J2 CHECK RHEOSTAT - With the ignition switch turned and the sidelights switched on, check that the resistance between pins 3 and 1 of B16 varies when the adjustment wheel is rotated	(OK) <input checked="" type="checkbox"/>	Restore wiring between pin H8 of G1 and pin 2 of B16, and across the solder (YEL-BLK)
	(OK) <input checked="" type="checkbox"/>	Replace rheostat B16