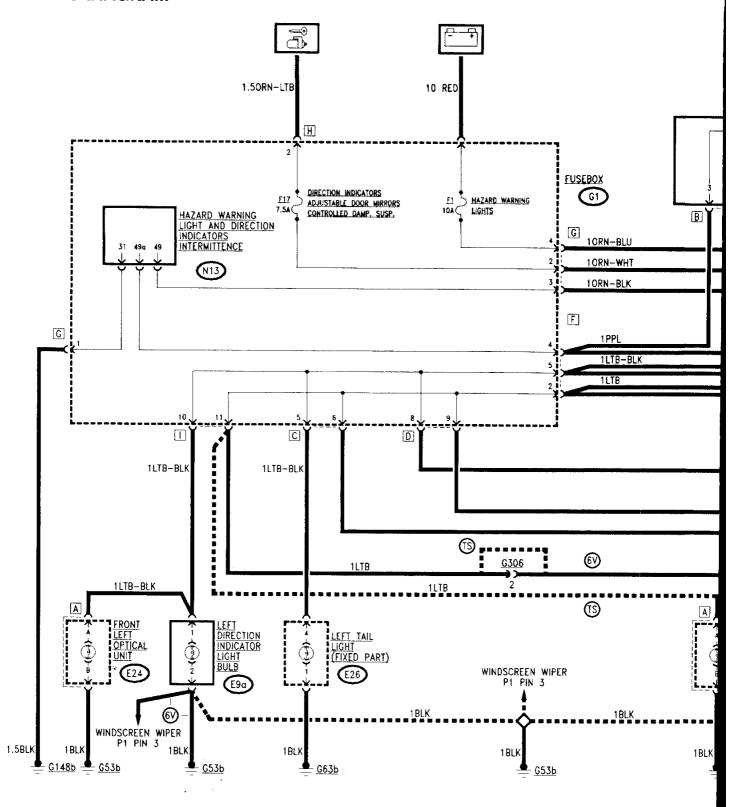
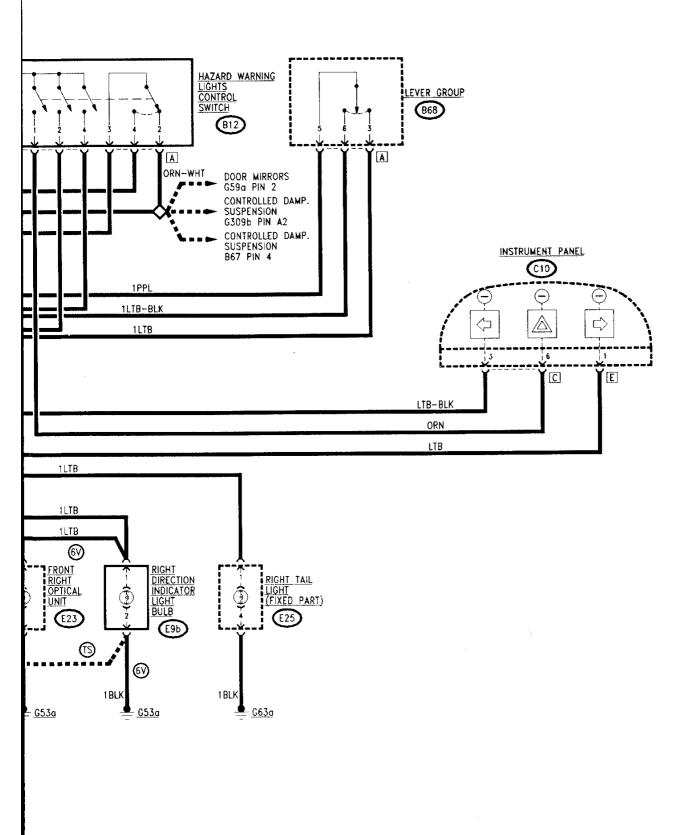


### 1DEX

| 'IRING DIAGRAM           |
|--------------------------|
| ENERAL DESCRIPTION       |
| JNCTIONAL DESCRIPTION    |
| ROUBLESHOOTING TABLE     |
| OMPONENTS AND CONNECTORS |
| DCATION OF COMPONENTS    |
| ROUBLESHOOTING           |

## **WIRING DIAGRAM**





## **GENERAL DESCRIPTION**

The intermittent direction indicators and hazard warning lights are positioned at the corners of the vehicle.

The right and left direction indicators are selected by raising or lowering the specific lever located in the lever group; the hazard warning lights (right and left direction indicators activated simultaneously) are switched on by acting on the switch located behind the steering wheel near the instrument panel.

The direction indicators operate when the ignition key is inserted, the hazard warning lights, for obvious reasons of safety, are supplied directly by the battery.

Two intermittent warning lamps located on the instrument panel flash when either the right or left direction indicator has been selected. Another intermittent warning lamp signals the operation of the hazard warning lights.

The circuits of the direction indicators and the hazard warning lights are both protected by their own separate fuses.

### **FUNCTIONAL DESCRIPTION**

The circuit is controlled by the hazard warning lights and direction indicators intermittence N13 located in fusebox G1.

The intermittence, grounded, pin 31, receives a supply signal, pin 49, throught the hazard warning lights switch **B12**: when these are not selected, supply is key-operated through fuse **F17** (7.5A) of fusebox **G1**; when the hazard warning lights are selected, the supply comes directly from the battery through fuse **F1** (10 A) in **G1**. The device **N13** generates an intermittent signal which leaves pin 49a and supplies the contacts of switch **B12** and the direction indicators switch of lever group **B68**.

By acting on the specific lever in lever group B68, the right-hand direction indicators (E23, E9b and E25) or the left-hand indicators (E24, E9a ed E26) are actuated as is the relative warning lamp on the instrument panel C10.

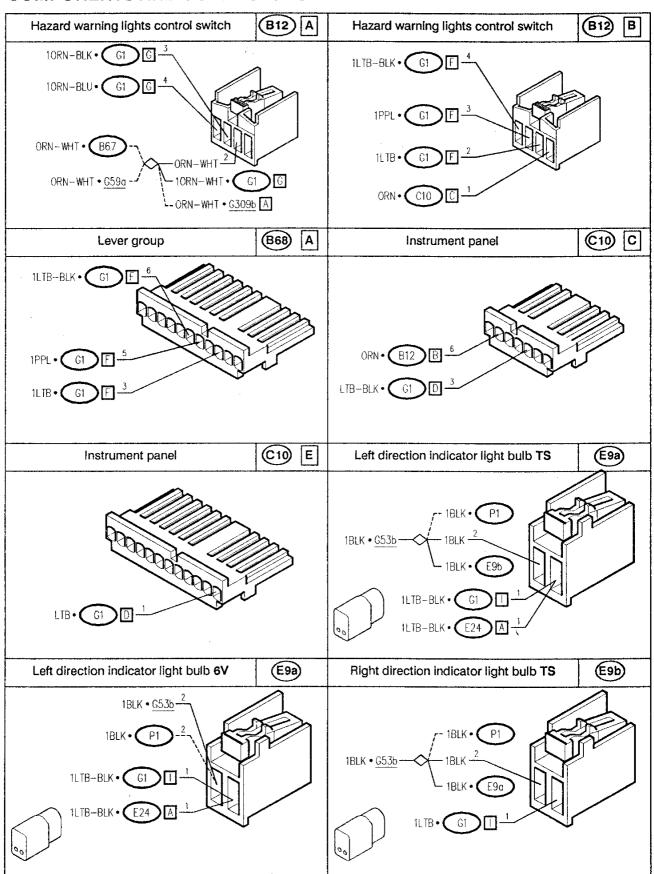
Pressing switch **B12** closes the three contacts which supply the right and left-hand indicators and the hazard warning lights warning lamp on the instrument panel **C10**.

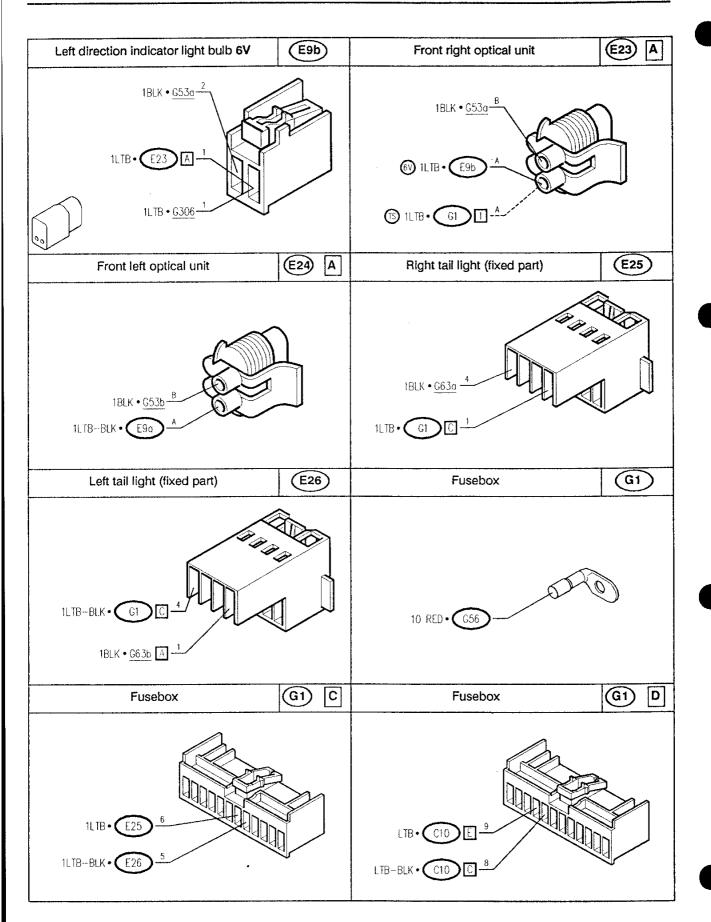
PA4655E100000 7-1991

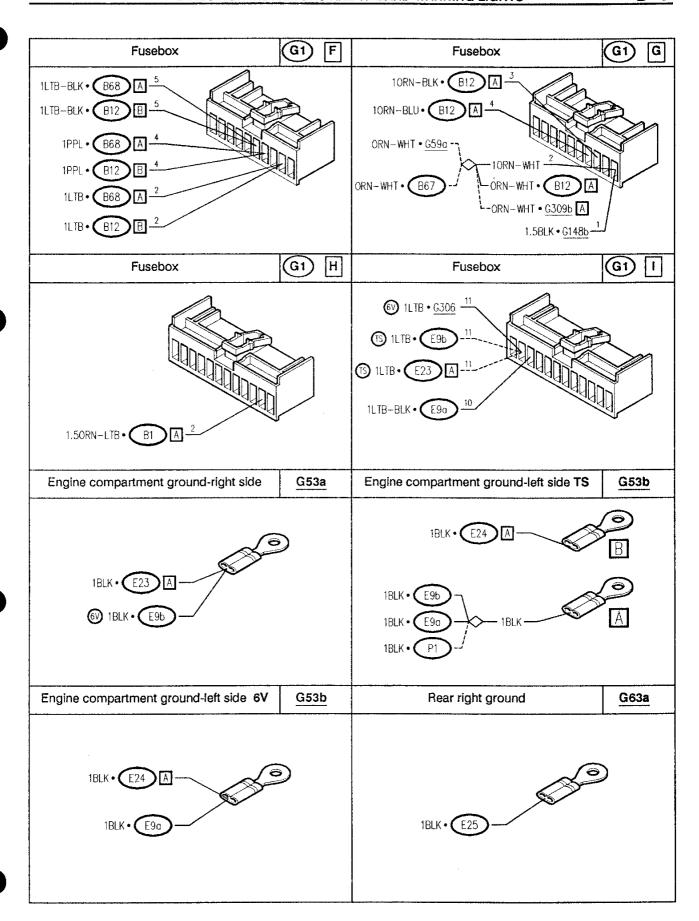
## TROUBLESHOOTING TABLE

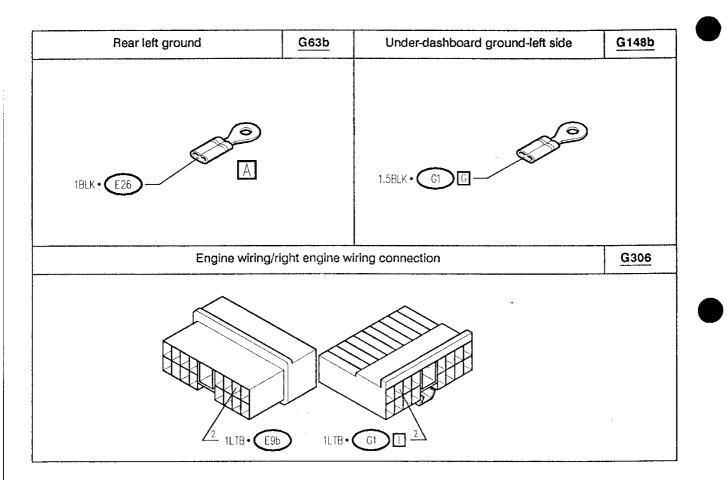
|                                    |           |            |       | · · · · · · · · · · · · · · · · · · · |       | Comp        | onent |      |      |      |       |     | <b>~</b> 4 |
|------------------------------------|-----------|------------|-------|---------------------------------------|-------|-------------|-------|------|------|------|-------|-----|------------|
| Malfunction                        | <u>F1</u> | <u>F17</u> | (N13) | (B68)                                 | (B12) | <b>E</b> 23 | E24)  | E9a) | E9b) | E25) | (E26) | C10 | Test       |
| All direction indicators           |           | •          | •     |                                       | •     |             |       |      |      |      |       |     | Α .        |
| Hazard warning lights              | •         |            | •     |                                       | •     |             |       |      |      |      |       |     | В          |
| RH direction indicator             |           | ,          |       | •                                     |       |             |       |      |      |      |       |     | С          |
| LH direction indicator             |           |            | ., ,  | •                                     |       |             |       |      |      |      |       |     | D          |
| Front right light                  |           |            |       |                                       |       | •           |       |      |      |      |       |     | E          |
| Right side light                   |           |            |       |                                       |       |             |       |      | •    |      |       |     | F          |
| Right rear light                   |           |            |       |                                       |       |             |       |      |      | •    |       |     | G          |
| Front left light                   |           |            |       |                                       |       |             | •     |      |      |      |       |     | Н          |
| Left side light                    |           |            |       |                                       |       |             |       | •    |      |      |       |     | i          |
| Left rear light                    |           |            |       |                                       |       |             |       |      |      |      | •     |     | J          |
| RH warning lamp                    |           |            |       |                                       |       |             |       |      |      |      |       | •   | K          |
| LH warning lamp                    |           |            |       |                                       |       |             |       |      |      |      |       | •   | L          |
| Hazard warning lights warning lamp |           |            |       |                                       |       |             |       |      |      |      |       | •   | М          |

### **COMPONENTS AND CONNECTORS**

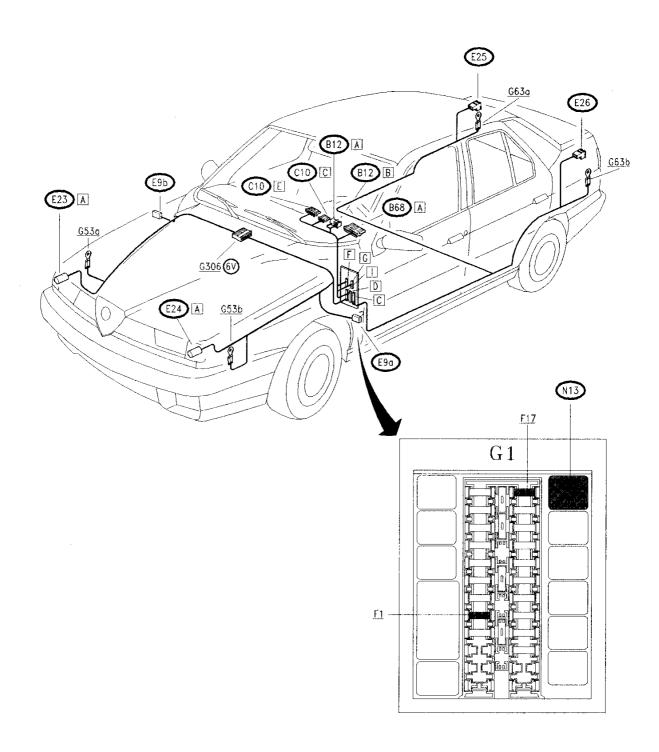








## **LOCATION OF COMPONENTS**



## **TROUBLESHOOTING**

# DIRECTION INDICATORS NOT WORKING TEST A

|                    | TEST PROCEDURE  | RESULT        | CORRECTIVE ACTION   |
|--------------------|---|---------------|---|
| <b>A1</b><br>– Ch  | CHECK FUSE neck for damage of fuse F17 in fusebox G1  | <b>OK</b> ►   | Carry out step A2   |
|                    |   | ØK) ►         | Replace the fuse (7.5A)   |
| A2                 | CHECK SWITCH  | <b>OK</b> ►   | Carry out step A3   |
| lig                | neck for correct functioning of the hazard warning hts switch with the warning lights off: Check conti-<br>uity between pin A2 and pin A3 of <b>B12</b> | OK +          | Replace switch <b>B12</b> (ORN-BLK)   |
| А3                 | CHECK VOLTAGE   | (OK) <b>▶</b> | Carry out step A4   |
| - V∈<br><b>B</b> ′ | erify 12V at pin A2 of the hazard warning lights switch   |               |   |
|                    |   | OK +          | Restore wiring between pin G2 of G1 and pin A2 of B12, also across the solder (ORN-WHT) |
| <b>A4</b>          | CHECK VOLTAGE ith ignition key rotated verify 12V at pin G3 of G1   | OK <b>▶</b>   | Carry out step A5   |
|                    |   | ØK ►          | Restore wiring between pin G3 of G1 and pin A3 of B12 (ORN-BLK)                         |
|                    |   |               | (continues  |

(continues)

# DIRECTION INDICATORS NOT WORKING TEST A

|              | TEST PROCEDURE  | RESULT      | CORRECTIVE ACTION  |
|--------------|---|-------------|--|
|              | CHECK VOLTAGE  ith ignition key rotated, verify 12V -intermittencies - pin F4 of <b>G1</b>      | OK <b>→</b> | Carry out step A6  |
| <del>-</del> |   | OK +        | Replace intermittence N13, located in G1 N.B. In this case the hazard warning lights are also not working. |
|              | CHECK VOLTAGE  th ignition key rotated, verify 12V -intermittencies - pin A5 of lever group B68 | OK ►        | Check and if necessary replace the lever group B68   |
|              |   | OK +        | Restore wiring between<br>pin F4 of G1 and pin A5<br>of B68 (PPL)  |
|              |   |             |  |
|              |   |             |  |

### HAZARD WARNING LIGHTS NOT WORKING

**TEST B** 

NOTE: if the direction indicators are also not working, carry out this test together with the preceding test A

|                   | TEST PROCEDURE  | RESULT      | CORRECTIVE ACTION   |
|-------------------|---|-------------|---|
| <b>B1</b><br>– Ch | CHECK FUSE eck for damage of fuse F1 in fusebox G1  | <b>OK</b> ► | Carry out step B2   |
|                   |   | (OK) ►      | Replace the fuse (10A)  |
| <b>B2</b><br>- Ve | CHECK VOLTAGE rify 12V at pin A4 of the hazard warning lights switch  | OK ►        | Carry out step B3   |
|                   |   | <b>OK</b> ► | Restore wiring between pin G4 of G1 and pin A4 of B12 (ORN-BLU) |
| B3                | CHECK HAZARD WARNING LIGHTS SWITCH  | OK <b>→</b> | Carry out step B4   |
| •                 | neck for correct functioning of the switch <b>B12</b> : with the hazard warning lights on, check continuity between: - pin A3 and A4 pin B3 and B1, B2 and B4 | OK ►        | Replace the switch <b>B12</b>                                   |
|                   |   |             |   |
|                   |   |             |   |

# HAZARD WARNING LIGHTS NOT WORKING TEST B

|    | TEST PROCEDURE  | RESULT      | CORRECTIVE ACTION   |
|----|---|-------------|---|
|    | CHECK VOLTAGE th hazard warning lights on verify 12V at pin G3 of                             | OK +        | Carry out step B5   |
| G1 |   | OK +        | Restore wiring between pin G3 of G1 and pin A3 of B12 (ORN-BLK)   |
|    | CHECK VOLTAGE  th hazard warning lights on, verify 12V -intermittenses at pin F4 of <b>G1</b> | OK <b>→</b> | Restore wiring between<br>pin F4 of <b>G1</b> and pin B3<br>of <b>B12</b> (PPL)                           |
|    |   | ØK +        | Replace intermittence N13, located in G1. N.B. in this case not eve the direction indicators are working. |
|    |   |             |   |
|    |   |             |   |
|    |   |             |   |

## NONE OF LIGHTS ON RIGHT SIDE OF VEHICLE WORKING

TEST C

|   | TEST PROCEDURE   | RESULT        | CORRECTIVE ACTION   |
|---|--|---------------|---|
| C1 CHECK VOLTAGE  With ignition key rotated and the right direction indica- |  | <b>OK</b> ►   | Carry out the successive tests E, F and G   |
| tor   | rs on, verify 12V intermittencies at pin F2 of <b>G1</b>   | (OK) <b>→</b> | Carry out step C2   |
| W   | CHECK LEVER GROUP  neck for correct functioning of lever group: ith right-hand direction indicators on, check conti- uity between pin A5 and A3 of B68 | OK ►          | Restore wiring between pin A3 of B68 and pin F2 of G1, and between pin B2 of B12 and pin F2 of G1 (LTB) |
|   |  | ØK . ►        | Replace the lever group<br>B68, left part   |
|   |  |               |   |
|   |  |               |   |
|   |  |               |   |

# NONE OF THE LIGHTS ON LEFT SIDE OF VEHICLE WORKING TEST D

|   | TEST PROCEDURE  | RESULT      | CORRECTIVE ACTION  |  |
|---|---|-------------|--|--|
| D1 CHECK VOLTAGE  With ignition key rotated and left-hand direction indica- |   | OK ►        | Carry out the successive tests H,I and J   |  |
| toi   | rs on, verify 12V intermittencies at pin F5 of <b>G1</b>  | ØK ►        | Carry out step D2  |  |
| wit   | CHECK LEVER GROUP  neck for correct functioning of lever group: th the left-hand direction indicators on, check conti- ity between pin A5 and A6 of B68 | OK <b>▶</b> | Restore wiring between pin A6 of <b>B68</b> and pin F5 of <b>G1</b> , and between pin B4 of <b>B12</b> and pin F5 of <b>G1</b> (LTB-BLK) |  |
|   |   | ØK) ►       | Replace the lever group <b>B68</b> , left part   |  |
|   |   |             |  |  |
|   |   |             |  |  |
|   |   |             |  |  |
|   |   |             |  |  |

# FRONT RIGHT LIGHT NOT WORKING TEST E

|      | TEST PROCEDURE  | RESULT      | CORRECTIVE ACTION   |
|------|---|-------------|---|
|      | CHECK VOLTAGE ith lights on, verify 12V intermittencies between pin                           | OK <b>→</b> | Carry out step E2   |
| A.A. | and AB of right-hand light assembly <b>E23</b>  | ØK ►        | Carry out step E3   |
| 1    | CHECK BULB neck for damage of direction indicator bulb, located the light assembly <b>E23</b> | <b>OK</b> ► | Check and if necessary replace the complete light assembly E23  |
|      |   | OK) +       | Replace the bulb  |
|      | CHECK VOLTAGE ith lights on, verify 12V intermittencies at pin AA of ht assembly E23          | <b>OK</b> ► | Restore wiring between pin AB of <b>E23</b> and ground <b>G53a</b> (BLK)  |
|      |   | ØK) ►       | Restore wiring between: -(TS) pin 111 of G1 and pin AA of E23 (LTB) -(6V) pin 111 of G1 and pin 2 of G306, and between pin 2 of G306 and pin AA of E23, through pin 1 of E9b (LTB) In this case the right side light E9b is also not working, see test F. |

PA4655E100000 7-1991

## **RIGHT-HAND SIDE LIGHT NOT WORKING**

**TEST F** 

|                 | TEST PROCEDURE   | RESULT      | CORRECTIVE ACTION  |
|-----------------|--|-------------|--|
|                 | CHECK VOLTAGE  ith lights on, verify 12V intermittencies between pin 1 and 2 of right-hand side light <b>E9b</b> | OK ►        | Carry out step F2  |
|                 |  | OK •        | Carry out step F3  |
| <b>F2</b>       | CHECK BULB neck for damage of direction indicator bulb, of <b>E9b</b>  | OK •        | Check and if necessary replace the complete light E9b  |
|                 |  | OK) +       | Replace the bulb   |
| F3<br>- W<br>E9 | CHECK VOLTAGE  ith lights on, verify 12V intermittencies at pin 1 of light  bb                                   | OK <b>→</b> | Restore wiring between: -(TS) pin 2 of E9b and ground G53b, also across the solder (BLK) -(6V) pin 2 of E9b and ground G53a (BLK)                          |
|                 |  | ØK) ►       | Restore wiring between: -(TS) pin l11 of G1 and pin 1 of E9b (LTB) -(6V) pin l11 of G1 and pin 2 of G306, and between pin 2 of G306 and pin 1 of E9b (LTB) |
|                 |  |             |  |

# REAR RIGHT-HAND LIGHT NOT WORKING TEST G

|  | TEST PROCEDURE   | RESULT      | CORRECTIVE ACTION  |
|--|--|-------------|--|
|  | CHECK VOLTAGE  ith lights on, verify 12V intermittencies between pin 1 and 4 of rear right light assembly <b>E25</b> | OK <b>▶</b> | Carry out step G2  |
|  |  | <b>○K</b> ► | Carry out <b>step G3</b>   |
|  | CHECK BULB  heck for damage of direction indicator bulb, located the light assembly E25                              | <b>OK</b> ► | Check and if necessary replace complete light assembly E25               |
| in the second se |  | OK +        | Replace the bulb   |
| <b>G</b> 3   | CHECK VOLTAGE ith lights on, verify 12V intermittencies at pin 1 of E25  | <b>OK ▶</b> | Restore wiring between pin 4 of E25 and ground G63a (BLK)                |
|  |  | ØK ►        | Restore wiring between pin C6 of <b>G1</b> and pin 1 of <b>E25</b> (LTB) |
|  |  |             |  |
|  |  | ,           |  |

# FRONT LEFT LIGHT NOT WORKING TEST H

|    | TEST PROCEDURE  | RESULT      | CORRECTIVE ACTION  |
|----|---|-------------|--|
|    | CHECK VOLTAGE  ith lights on, verify 12V intermittencies between pin A and AB of left light assembly <b>E24</b> | <b>OK</b> ► | Carry out step H2  |
| 74 | tand Ab or left light assembly <b>L24</b>   | <b>OK</b> ► | Carry out step H3  |
|    | CHECK BULB  neck for damage of direction indicator bulb, located the light assembly <b>E24</b>                  | <b>OK</b> ► | Check and if necessary replace the complete light assembly <b>E24</b>  |
|    |   | ØK) ►       | Replace the bulb   |
|    | CHECK VOLTAGE  ith lights on, verify 12V intermittencies at pin AA of ht assembly <b>E24</b>                    | <b>OK</b> ► | Restore wiring between<br>pin AB of E24 and<br>ground G53b (BLK)   |
|    |   | ØK ►        | Restore wiring between pin I10 of G1 and pin AA of E24, through pin 1 of E9a (LTB-BLK) In this case the left side light E9a is also not working, see test I. |
|    |   |             |  |

# LEFT-HAND SIDE LIGHT NOT WORKING TEST I

|     | TEST PROCEDURE  | RESULT      | CORRECTIVE ACTION   |
|-----|---|-------------|---|
| l . | CHECK VOLTAGE  ith lights on, verify 12V intermittencies between pin 1 and 2 of left-hand side light <b>E9a</b> | OK <b>→</b> | Carry out step 12   |
|     |   | OK +        | Carry out step I3   |
| - C | CHECK BULB heck for damage of direction indicator bulb, of E9a  | OK ►        | Check and if necessary replace the complete light assembly <b>E9a</b>   |
|     | •   | OK >        | Replace the bulb  |
| 1   | CHECK VOLTAGE  ith lights on, verify 12V intermittencies at pin 1 of light                                      | OK <b>→</b> | Restore wiring between: -(TS) pin 2 of E9a and ground G53b, also across the solder (BLK) -(6V) pin 2 of E9a and ground G53b (BLK) |
|     |   | OK •        | Restore wiring between pin I10 of G1 and pin 1 of E9a (LTB-BLK)   |
|     |   |             |   |

# REAR LEFT-HAND LIGHT NOT WORKING TEST J

|     | TEST PROCEDURE   | RESULT      | CORRECTIVE ACTION  |
|-----|--|-------------|--|
|     | CHECK VOLTAGE  ith lights on, verify 12V intermittencies between pin 1 and 4 of rear left-hand light assembly <b>E26</b> | <b>OK</b> ► | Carry out step J2  |
|     | ,  | ØK) ►       | Carry out step J3  |
|     | CHECK BULB  neck for damage of direction indicator bulb, located the light assembly E26                                  | <b>OK ▶</b> | Check and if necessary replace the complete light assembly <b>E26</b>        |
|     |  | OK) +       | Replace the bulb   |
| – W | CHECK VOLTAGE ith lights on, verify 12V intermittencies at pin 4 of <b>E26</b>   | OK <b>→</b> | Restore wiring between pin 1 of E26 and ground G63b (BLK)                    |
|     |  | OK) •       | Restore wiring between pin C5 of <b>G1</b> and pin 4 of <b>E26</b> (LTB-BLK) |
|     |  |             |  |
|     |  |             |  |
|     |  |             |  |

## RIGHT-HAND DIRECTION INDICATOR WARNING LAMP ON INSTRU-MENT PANEL NOT WORKING

TEST K

Note: the direction indicators however, are working correctly

|   | TEST PROCEDURE  | RESULT      | CORRECTIVE ACTION   |
|---|---|-------------|---|
|   | CHECK VOLTAGE  ith right-hand indicators on, verify 12V intermitteness at pin E1 of instrument panel C10                | OK <b>▶</b> | Carry out step K2   |
|   |   | ØK ►        | Restore wiring between pin D9 of <b>G1</b> and pin E1 of <b>C10</b> (LTB) |
| j | CHECK WARNING LAMP  neck for damage of right-hand direction indicators arning lamp, located on the instrument panel C10 | OK ►        | Check and if necessary replace complete instrument panel C10              |
|   |   | ØK) ►       | Replace the warning light bulb  |
|   |   |             |   |
|   |   |             |   |
|   |   |             |   |
|   | -   |             |   |

# LEFT-HAND DIRECTION INDICATOR WARNING LAMP ON INSTRUMENT PANEL NOT WORKING TEST L

Note: the direction indicators are however, working correctly

| TEST PROCEDURE   | RESULT        | CORRECTIVE ACTION   |
|--|---------------|---|
| L1 CHECK VOLTAGE   | (OK) <b>▶</b> | Carry out step L2   |
| <ul> <li>With left-hand direction indicators on, verify 12V intermittencies at pin C3 of instrument panel C10</li> </ul> |               |   |
|  | OK +          | Restore wiring between pin D8 of <b>G1</b> and pin C3 of <b>C10</b> (LTB-BLK) |
| L2 CHECK WARNING LAMP  | (OK) <b>▶</b> | Check and if necessary  |
| Check for damage of left-hand direction indicators warning lamp, located on the instrument panel C10                     | 7 \ /         | replace complete instru-<br>ment panel C10                                    |
|  | ØK) ►         | Replace the warning light bulb  |
|  |               |   |
|  |               |   |
|  |               |   |
|  |               |   |
|  |               |   |
|  |               |   |
|  |               |   |

# HAZARD WARNING LIGHTS WARNING LAMP ON INSTRUMENT PANEL NOT WORKING TEST M

Note: the hazard warning lights however, are working correctly

|     | TEST PROCEDURE   | RESULT      | CORRECTIVE ACTION   |
|-----|--|-------------|---|
| 1   | CHECK VOLTAGE  ith hazard warning lights on, verify 12V intermitten-   | OK <b>▶</b> | Carry out step M2   |
| CIE | es at pin B1 of the switch B12   | ØK ►        | Replace the switch <b>B12</b>   |
|     | CHECK VOLTAGE ith hazard warning lights on, verify 12V intermitten-  | OK <b>→</b> | Carry out step M3   |
| Cie | es at pin C6 of instrument panel C10   | ØK ►        | Restore wiring between pin B1 of the switch B12 and pin C6 of C10 (ORN) |
| I   | CHECK WARNING LAMP  neck for damage of hazard warning lights warning mp, located on the instrument panel C10 | <b>ΟΚ ▶</b> | Check and if necessary replace the complete instrument panel C10        |
|     |  | ØK) ►       | Replace the warning light bulb  |
|     |  |             |   |
|     |  |             |   |
|     |  |             |   |

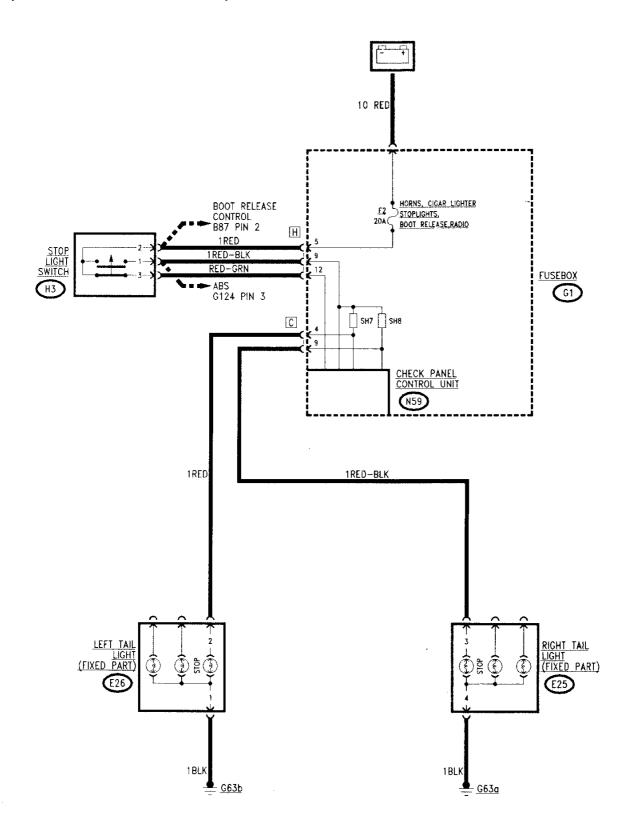
# **STOP-LIGHTS**

## **INDEX**

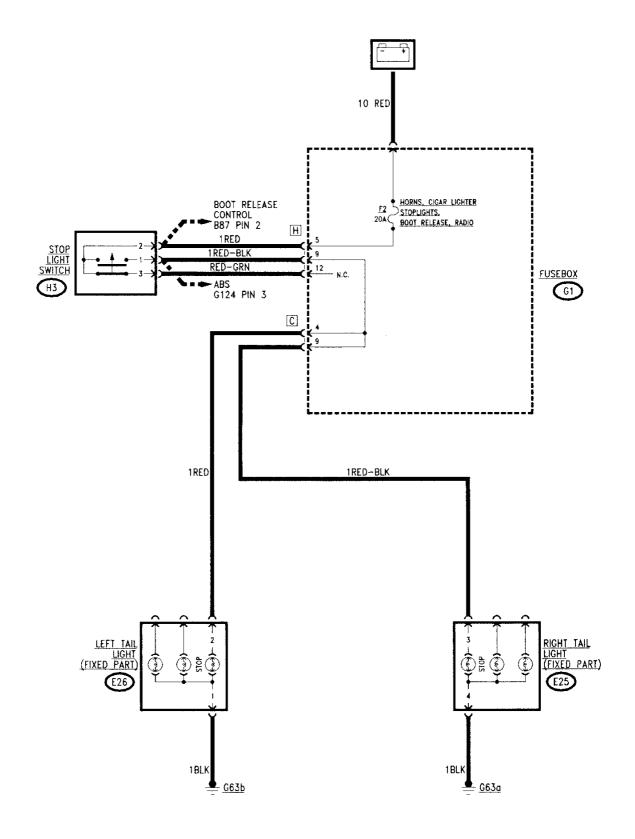
| WIRING DIAGRAM (Version with Check Panel)    | -2         |
|--|------------|
| WIRING DIAGRAM (Version without Check Panel) | -3         |
| GENERAL DESCRIPTION                          | -4         |
| FUNCTIONAL DESCRIPTION                       | -4         |
| TROUBLESHOOTING TABLE                        | -4         |
| COMPONENTS AND CONNECTORS                    | -5         |
| LOCATION OF COMPONENTS                       | -6         |
| TROUBLESHOOTING                              | <b>I-7</b> |

PA4655E1000000 7-1991

# WIRING DIAGRAM (Version with Check Panel)



# WIRING DIAGRAM (Version without Check Panel)



#### **GENERAL DESCRIPTION**

**NOTE:** Two distinct wiring diagrams are given, one for the models equipped with the Check Panel and one for models without this device.

The lights indicating that the vehicle is braking ("stoplights") are operated each time the brake pedal is depressed; they are located at the rear of the vehicle in the side light assemblies.

The lights are illuminated automatically by a switch located on the brake pedal and operate under all conditions, even when the ignition key is disengaged.

The circuit is protected by its own fuse.

The correct functioning of the stop-lights is - for some versions - verified by the Check Panel which immediately alerts the driver in the event of a malfunction in the circuit. This is vital to safety. (see "Check Panel").

The braking signal from the switch is also sent to the ABS system control unit which recognizes the situation and as a consequence controls the braking parameters (see "A.B.S. System").

#### **FUNCTIONAL DESCRIPTION**

The stop-light circuit is supplied directly by battery voltage through fuse F2 (20A) in the fusebox G1.

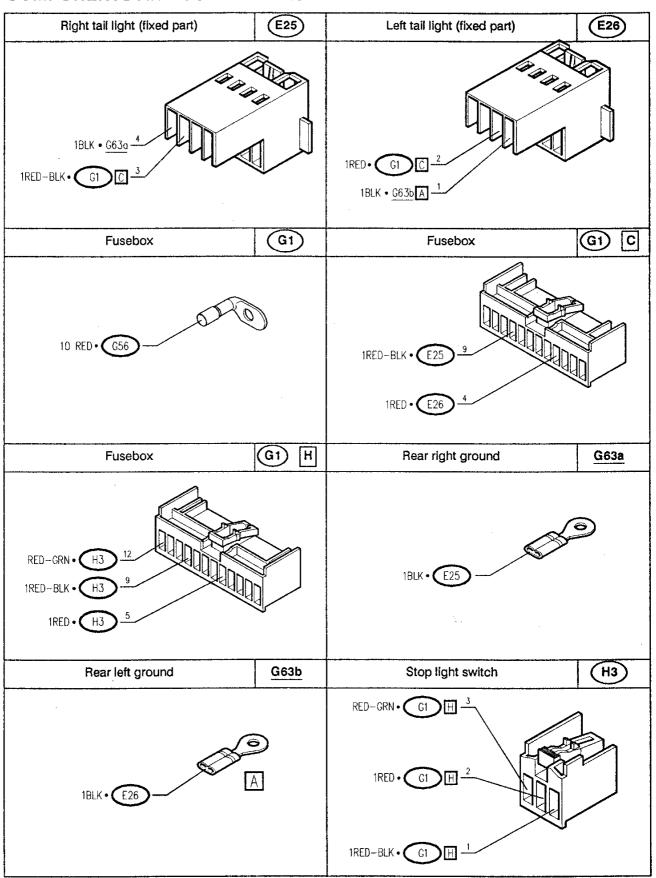
The stop-lights switch **H3** is formed by two contacts: the "rest position" contact is closed when the brake pedal is not depressed and signals the continuity of the circuit to the Check Panel control unit **N59**.

By depressing the brake pedal the "operating position" contact is closed and the stop lights located in the rear light assemblies **E25** (right) and **E26** (left) are then supplied. From these supply circuits the signals (both direct and by "SH" shunt) are then sent to the control unit **N59** which verifies the line load (see "Check Panel").

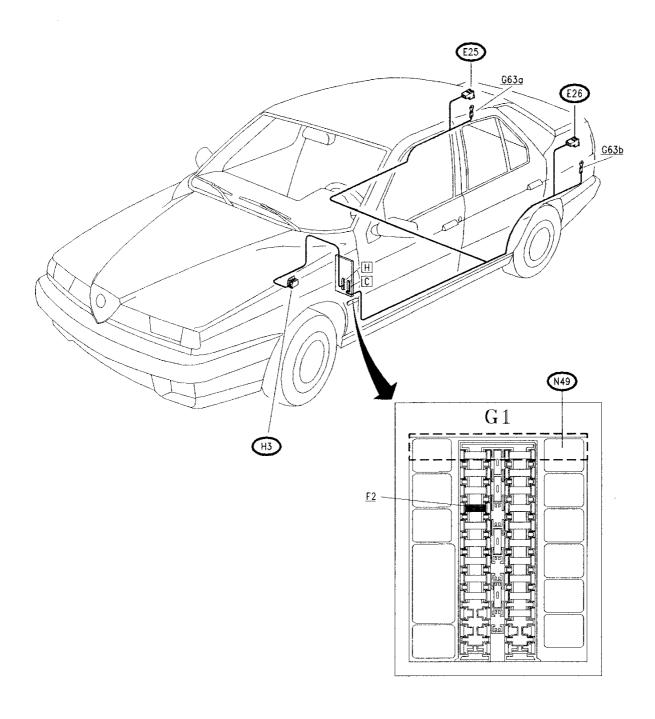
#### TROUBLESHOOTING TABLE

|                  | Component |      |              |       |      |
|------------------|-----------|------|--------------|-------|------|
| Malfunction      | F2        | (H3) | <b>E</b> 26) | (E25) | Test |
| Both stop-lights | •         | •    |              |       | Α    |
| RH stop-light    |           |      |              | •     | В    |
| LH stop-light    |           |      | •            |       | С    |

## **COMPONENTS AND CONNECTORS**



## **LOCATION OF COMPONENTS**



## **TROUBLESHOOTING**

| NONE OF STOP-LIGHTS WORKING | TEST A |
|-----------------------------|--------|
|                             |        |

**NOTE**: for versions equipped with the Check Panel device, refer to section: "Check Panel - Stop-lights check" before carrying out the following checks.

|                   | TEST PROCEDURE  | RESULT       | CORRECTIVE ACTION  |
|-------------------|---|--------------|--|
| <b>A1</b><br>- Ch | CHECK FUSE seck for damage of fuse <b>F2</b> in fusebox <b>G1</b>   | OK ►         | Carry out step A2  |
|                   |   | ØK ►         | Replace fuse (20A)   |
| <b>A2</b><br>- Ve | CHECK VOLTAGE rify 12V at pin 2 of the switch H3  | OK <b>→</b>  | Carry out step A3  |
|                   |   | Ø <b>K</b> ► | Restore wiring between pin H5 of <b>G1</b> and pin 2 of the switch <b>H3</b> (RED) |
| A3                | CHECK SWITCH  | OK <b>▶</b>  | Carry out step A4  |
| • \               | neck for correct functioning of the switch: with brake pedal released verify 12V at pin 3; with brake pedal depressed verify 12V at pin 1 | OK +         | Replace switch <b>H3</b>   |
|                   |   |              |  |
|                   |   |              |  |
|                   |   |              |  |

(continues)

PA4655E1000000

## NONE OF STOP-LIGHTS WORKING

TEST A

|                  | TEST PROCEDURE   | RESULT      | CORRECTIVE ACTION   |
|------------------|--|-------------|---|
| <b>A4</b><br>– W | CHECK VOLTAGE ith brake pedal depressed, verify 12V at pin H9 of <b>G1</b> | <b>OK ▶</b> | Carry out step A5   |
|                  |  | OK +        | Restore wiring between pin H9 of <b>G1</b> and pin 1 of the switch <b>H3</b> (RED-BLK)  |
| <b>A5</b><br>– W | CHECK VOLTAGE ith brake pedal released, verify 12V at pin H12 of G1        | <b>OK</b> ► | See "Check Panel - Stop-<br>lights check".  |
|                  |  | ØK ►        | Restore wiring between pin H12 of <b>G1</b> and pin 3 of the switch <b>H3</b> (RED-GRN) |
|                  |  |             |   |
|                  |  |             |   |
|                  |  |             |   |

# RIGHT-HAND STOP-LIGHT NOT WORKING TEST B

| TEST PROCEDURE   | RESULT | CORRECTIVE ACTION  |
|--|--------|--|
| CHECK VOLTAGE  ith brake pedal depressed, verify 12V between pin 3 and pin 4 of the light assembly <b>E25</b>              | OK ►   | Carry out step B2  |
| ,  | OK +   | Carry out step B3  |
| CHECK BULB  neck for damage of stop light bulb, located in the rear tht assembly <b>E25</b> (the first towards the centre) | OK ►   | Check and if necessary replace the complete light assembly <b>E25</b>        |
|  | OK +   | Replace the bulb   |
| CHECK VOLTAGE ith brake pedal depressed verify 12V at pin 3 of light sembly <b>E25</b>                                     | OK ►   | Restore wiring between<br>pin 4 of E25 and ground<br>G63a (BLK)              |
| •  | OK +   | Restore wiring between pin C9 of <b>G1</b> and pin 3 of <b>E25</b> (RED-BLK) |
|  |        |  |
|  |        |  |

7-1991

# LEFT-HAND STOP-LIGHT NOT WORKING TEST C

|   | TEST PROCEDURE   | RESULT      | CORRECTIVE ACTION  |
|---|--|-------------|--|
| ! | CHECK VOLTAGE  ith the brake pedal depressed, verify 12V between 12 and pin 1 of the light assembly <b>E26</b>                 | OK <b>▶</b> | Carry out step C2  |
|   |  | OK >        | Carry out step C3  |
|   | CHECK BULB  neck for damage of the stop-light bulb, located in the ar light assembly <b>E26</b> (the first towards the centre) | <b>OK ▶</b> | Check and if necessary replace the complete light assembly E26           |
|   |  | OK) >       | Replace the bulb   |
|   | CHECK VOLTAGE Ith the brake pedal depressed, verify 12V at pin 2 of ht assembly <b>E26</b>                                     | <b>OK</b> ► | Restore wiring between pin 1 of E26 and ground G63b (BLK)                |
|   |  | OK >        | Restore wiring between pin C4 of <b>G1</b> and pin 2 of <b>E26</b> (RED) |
|   |  |             |  |
|   |  |             |  |
|   |  |             |  |
|   |  |             |  |

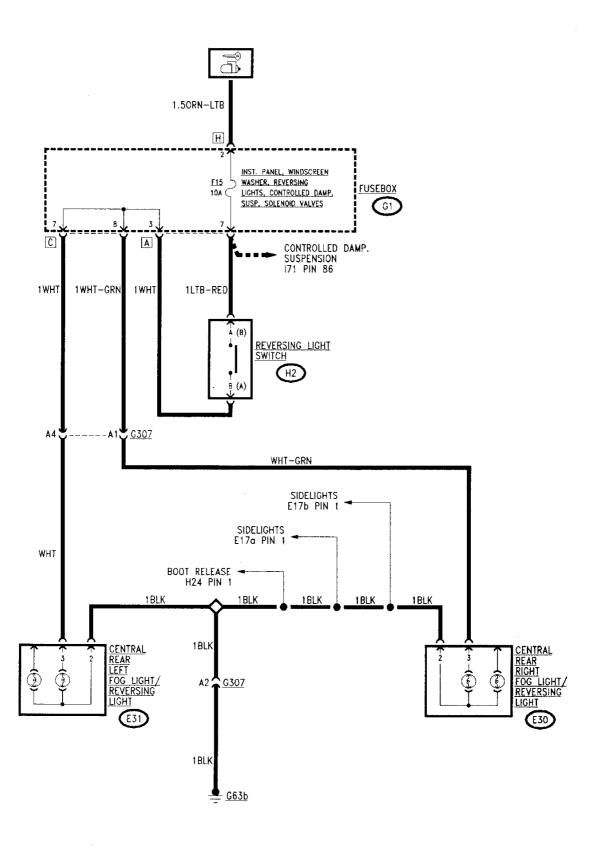
# **REVERSING LIGHTS**

## **INDEX**

| WIRING DIAGRAM            |
|---------------------------|
| GENERAL DESCRIPTION       |
| FUNCTIONAL DESCRIPTION    |
| TROUBLESHOOTING TABLE     |
| COMPONENTS AND CONNECTORS |
| LOCATION OF COMPONENTS    |
| TROUBLESHOOTING           |

PA4655E1000000 7-1991

#### **WIRING DIAGRAM**



#### **GENERAL DESCRIPTION**

The vehicle is equipped with reversing lights located in the central part of the rear light assembly.

When reverse gear is selected, the reversing lights are automatically engaged by way of a switch located on the gearbox.

The circuit is protected by a fuse.

The reversing lights are operated when the ignition key is inserted and are independent from the other lights on the vehicle.

#### **FUNCTIONAL DESCRIPTION**

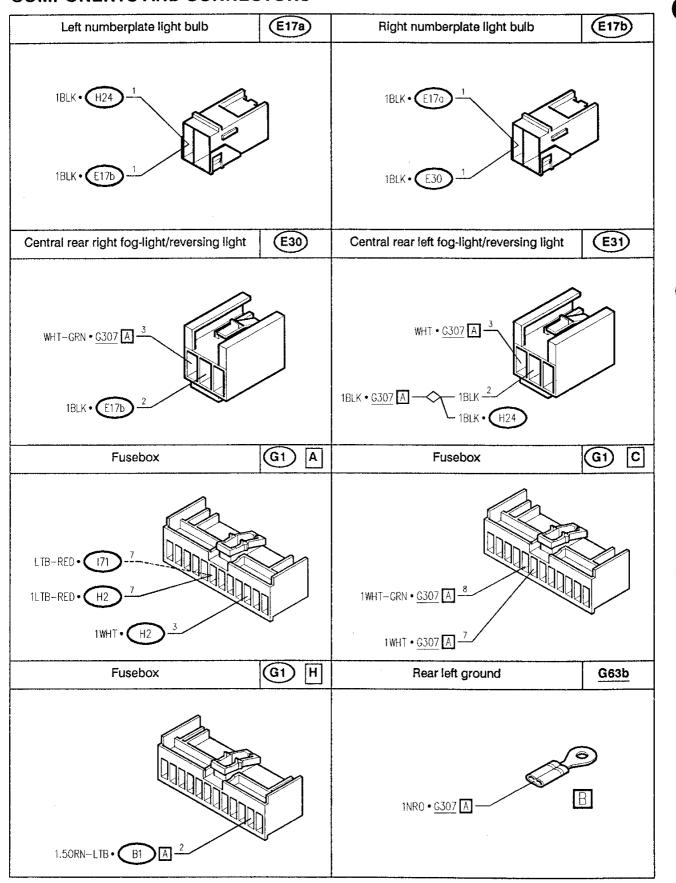
The circuit of the reversing lights is under key operated supply and is routed through fuse **F15** (10A) in fusebox **G1**.

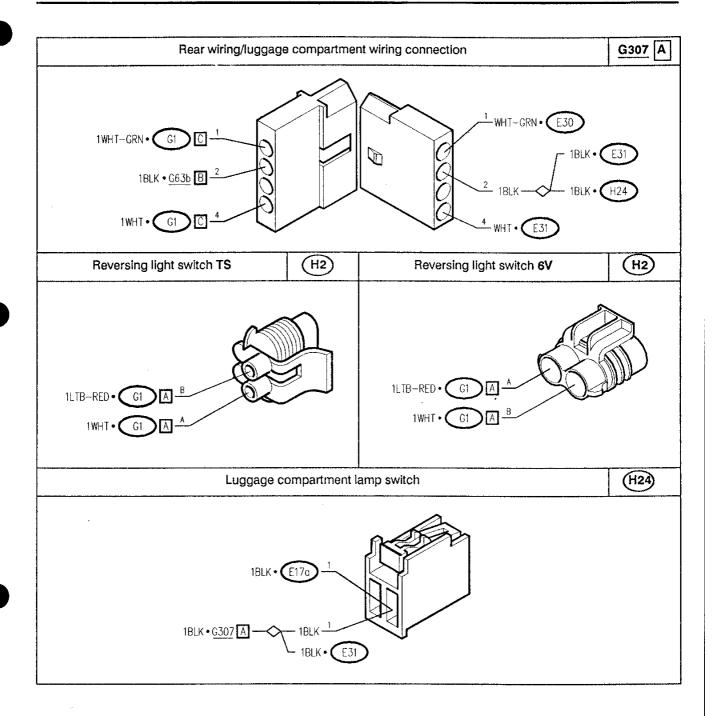
When reverse gear is engaged, switch **H2** supplies the right (E30) and left (E31) reversing lights.

#### TROUBLESHOOTING TABLE

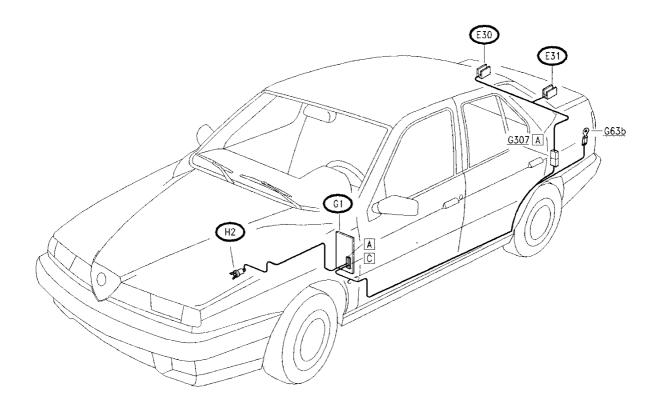
|                       |     | Component |      |      |      |
|-----------------------|-----|-----------|------|------|------|
| Malfunction           | F15 | H2)       | E30) | E31) | Test |
| Both reversing lights | •   | •         |      |      | Α    |
| RH reversing light    |     |           | •    |      | В    |
| LH reversing light    |     |           |      | •    | С    |

#### **COMPONENTS AND CONNECTORS**





### **LOCATION OF COMPONENTS**



# TROUBLESHOOTING

|                                     | 1      |
|-------------------------------------|--------|
| NEITHER OF REVERSING LIGHTS WORKING | TEST A |
|                                     | 1      |

| <del> </del> | TEST PROCEDURE  | RESULT      | CORRECTIVE ACTION  |
|--------------|---|-------------|--|
| <b>A1</b>    | CHECK FUSE heck for damage of fuse F15 in fusebox G1  | <b>OK</b> ▶ | Carry out step A2  |
|              |   | ØK) ►       | Replace fuse (10A)   |
|              | CHECK VOLTAGE  otate the ignition key and verify 12V at pin A reversing ghts switch H2                        | <b>OK</b> ► | Carry out step A3  |
|              |   | OK +        | Restore wiring between pin A7 of G1 and pin A of switch H2 (LTB-RED) |
|              | CHECK SWITCH  heck for correct functioning of switch H2:  with ignition key rotated and reverse gear engaged, | <b>OK</b> ► | Carry out step A4  |
|              | neck continuity between pin A and B of <b>H2</b>  | OK >        | Replace switch <b>H2</b>   |
|              |   |             |  |
|              |   |             |  |
|              |   |             |  |
|              |   |             |  |

(continues)

PA4655E1000000

7-1991

# NEITHER OF REVERSING LIGHTS WORKING TEST A

| *************************************** | TEST PROCEDURE  | RESULT      | CORRECTIVE ACTION   |
|---|---|-------------|---|
|   | CHECK VOLTAGE  ith ignition key rotated and reverse gear engaged, writy 12V at pin A3 of G1 | OK ►        | Carry out step A5   |
|   |   | OK >        | Restore wiring between pin A3 of G1 and pin B of H2 (WHT)                 |
| <b>A5</b>                               | CHECK GROUND  erify 0V at pin A2 of connector G307  | <b>OK</b> ► | Carry out tests B and C   |
|   |   | OK +        | Restore wiring between pin A2 of <b>G307</b> and ground <b>G63b</b> (BLK) |
|   |   |             |   |
|   |   |             |   |
|   |   |             |   |
|   |   |             |   |

#### RIGHT-HAND REVERSING LIGHT NOT WORKING

**TEST B** 

| TEST PROCEDURE  | RESULT     | CORRECTIVE ACTION  |
|---|------------|--|
| B1 CHECK VOLTAGE  With reverse gear engaged, verify 12V between and 3 of the rear central light assembly E30      | pin 2 OK ▶ | Carry out step B2  |
|   | OK +       | Carry out <b>step B3</b>   |
| B2 CHECK BULB  Check for damage of the reversing light bulb in assembly E30 (inner bulb, with white transparence) | -          | Check and if necessary replace the complete light assembly E30                                       |
| , , ,   | ØK ►       | Replace the bulb   |
| B3 CHECK VOLTAGE  With reverse gear engaged, verify 12V at pin 3 of   | E30 OK ▶   | Restore wiring between pin 2 of E30 and the solder, across lights E17a and E17b and switch H24 (BLK) |
|   | OK) +      | Restore wiring between pin C8 of G1 and pin 3 o E30, across pin A1 of connector G307 (WHT-GRN)       |
|   |            |  |
|   |            |  |
|   |            |  |

PA4655E1000000 7-1991

#### LEFT-HAND REVERSING LIGHT NOT WORKING

**TEST C** 

|                  | TEST PROCEDURE  | RESULT              | CORRECTIVE ACTION   |
|------------------|---|---------------------|---|
|                  | CHECK VOLTAGE ith reverse gear engaged, verify 12V between pin 2  | <b>○</b> κ <b>▶</b> | Carry out step C2   |
| an               | d 3 of the rear central light assembly E31  | ØK ►                | Carry out step C3   |
|                  | CHECK BULB  neck for damage of reversing light bulb in light asmbly E31 (inner lamp, with white transparency) | OK <b>▶</b>         | Čheck and if necessary replace the complete light assembly E31                              |
|                  |   | ØK) ►               | Replace bulb  |
| <b>C3</b><br>– W | CHECK VOLTAGE ith reverse gear engaged, verify 12V at pin 3 of E31  | OK <b>▶</b>         | Restore wiring between pin 2 of <b>E31</b> and the solder (BLK)                             |
|                  |   | OK ►                | Restore wiring between pin C7 of G1 and pin 3 of E31, across pin A4 of connector G307 (WHT) |
|                  |   |                     |   |
|                  |   |                     |   |

PA4655E1000000 7-1991

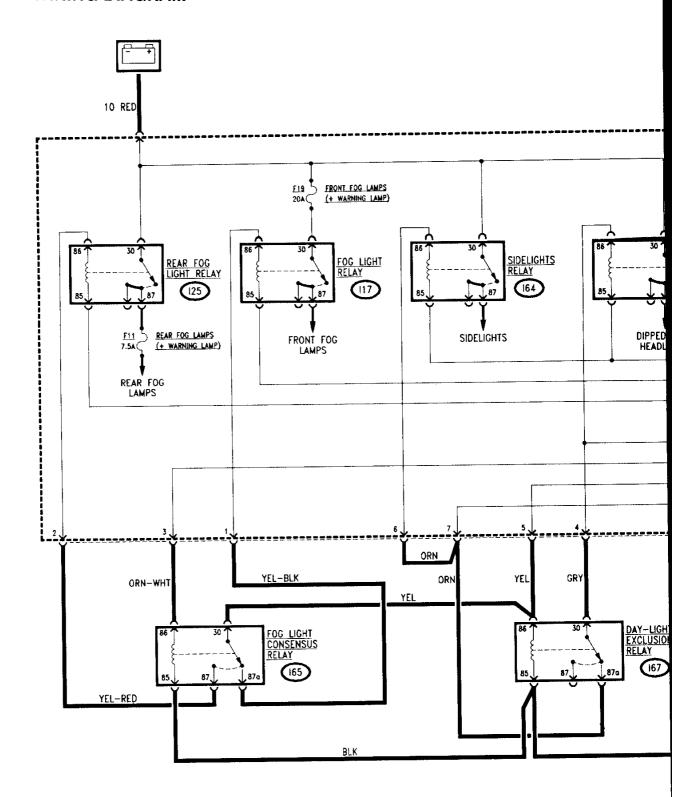
# **DAY-LIGHT**

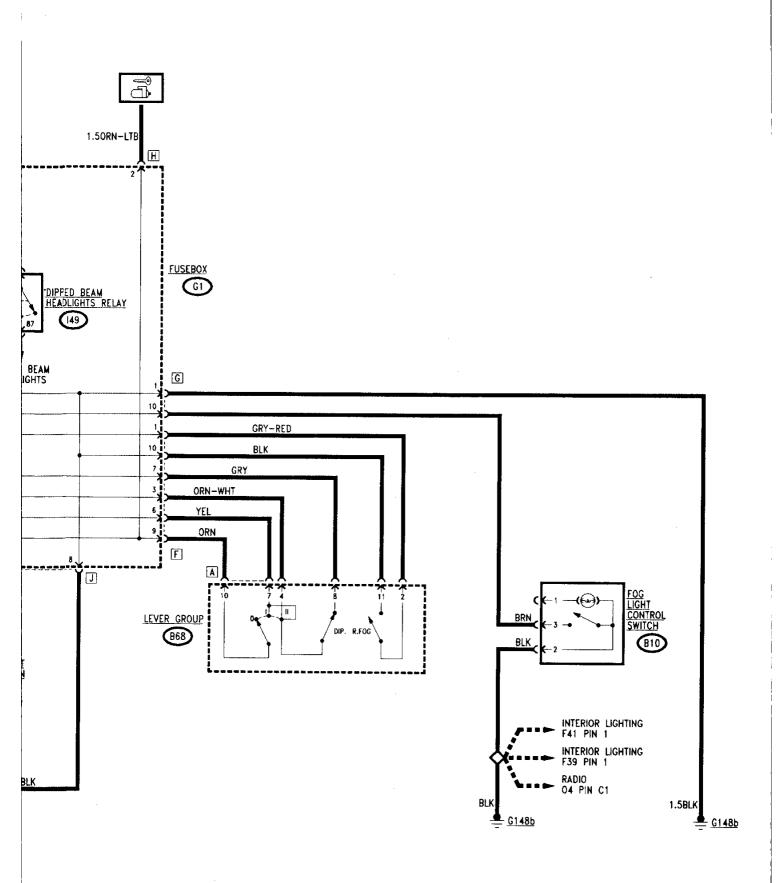
### **NDEX**

| 'IRING DIAGRAM           |
|--------------------------|
| ENERAL DESCRIPTION       |
| UNCTIONAL DESCRIPTION    |
| ROUBLESHOOTING TABLE     |
| OMPONENTS AND CONNECTORS |
| OCATION OF COMPONENTS    |
| ROUBLESHOOTING           |

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# **WIRING DIAGRAM**





#### **GENERAL DESCRIPTION**

Models for some countries may be equipped with a diurnal or **DAY-LIGHT** lighting device.

This device, in compliance with the laws in force in some countries, switches the sidelights on whenever the ignition key is engaged and regulates, following a specific logic, the selection of dipped beam headlights and the rear and front fog lamps:

- with the ignition key at the "RUN" position: the sidelights and dipped beam headlights are switched on;
- sidelights switch rotated to the the first position ("I"):
   only the sidelights stay on and the front foglamps can be turned on;
- sidelights switch rotated to the second position ("II"):
   the dipped beam is once again switched on and the foglamps are switched off; it is then possible to switch on the rear foglamps;
- the main beam headlights are switched on in the same way as for other models.

This logic is made possible with the insertion of two relays with special wiring connected to **connector J** in fusebox **G1**; the day-light exclusion relay **I67** switches on the dipped beam headlights when the ignition switch is at the "RUN" position, and is deactivated when the sidelights switch is at position "I"; the front foglamps consensus relay **I65** supplies the front foglamps line when the switch is at "I", and the rear foglamps line when the switch is at "II".

Apart from these two components, all else remains unchanged in comparison to the other charts valid for the other versions: in this chart only the part relative to the supply is illustrated, up to the relays which activate the various circuits (164 - sidelights; 149 - dipped beam headlights; 117 - front foglamps; 125 - rear foglamps). It is therefore necessary to refer to the relative sections for greater detail regarding the circuits in question.

#### **FUNCTIONAL DESCRIPTION**

The sidelights circuit is directly connected to the keyoperated supply as pins 6 and 7 of **connector J** in the fusebox **G1** are bridged in order to excite the sidelights relay **I64** (see "Sidelights").

This supply also reaches pin 87a of the day-light exclusion relay 167: when the relay is not excited (lever group switch B68 in the rest position), the key operated supply excites the relay 149 and supplies the dipped beam headlight circuit (see "Main and Dipped Beam Headlights").

Rotating switch **B68** to position "I" -pin A7-, the relay **I67**, -pin 85- is excited which then excludes the supply to the dipped beam headlights; at the same time the supply crosses the front foglamps consensus relay **I65** -pin 87a and 30- and supplies the front foglamps relay **I17**: in this way the front foglamps switch **B10** is activated and it is possible to switch them on (see "Rear and Front Foglamps").

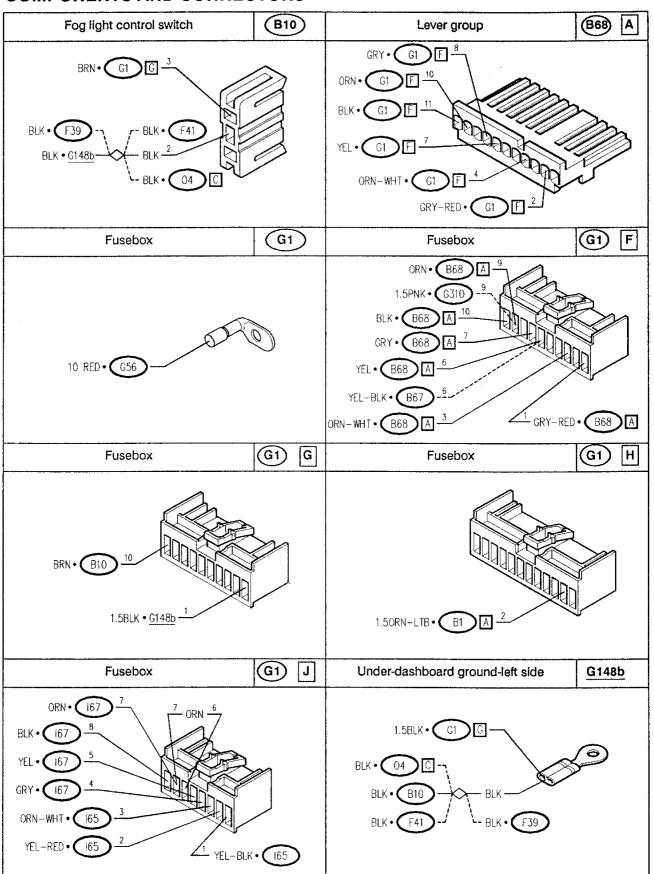
Rotating switch **B68** still further to position "II" -pin A4the relay **I65** is excited -pin 85-, which interrupts the supply to the front foglamps circuit -pin 87a- and deviates it towards relay **I25** and the rear foglamps circuit -pin 87-, which can then be activated via the switch on the lever group **B68** (see "Rear and Front Foglamps").

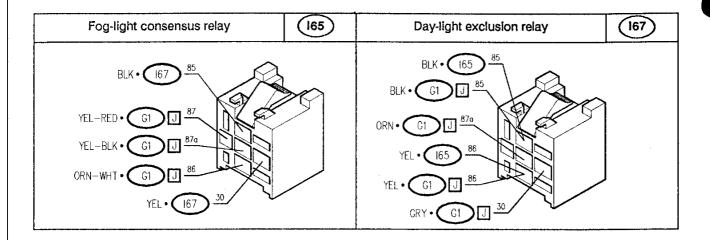
PA4655E1000000 7-1991

### TROUBLESHOOTING TABLE

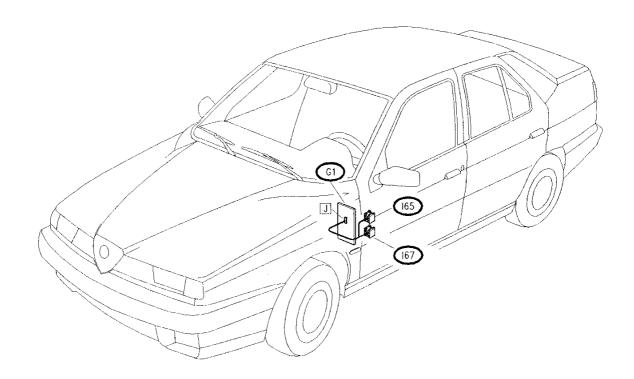
|  | Component |       |      |
|--|-----------|-------|------|
| Malfunction  | (167)     | (165) | Test |
| With ignition key engaged the sidelights and dipped headlights cannot be engaged | •         |       | A    |
| The front foglamps together with the sidelights cannot be engaged                |           | •     | В    |
| The rear foglamps together with the dipped beam headlights cannot be engaged     |           | •     | С    |

#### **COMPONENTS AND CONNECTORS**





# LOCATION OF COMPONENTS



#### **TROUBLESHOOTING**

WITH IGNITION KEY ENGAGED THE SIDELIGHTS DO NOT COME ON (or the dipped beam headlights do not go out when the light switch is at position "I")

TEST A

**NOTE:** sidelights and dipped beam headlights function normally when the lever group **B68** is rotated. If this is not the case refer to the troubleshooting of the relative sections "Sidelights" and "Main and Dipped Beam Headlights".

|                   | TEST PROCEDURE  | RESULT      | CORRECTIVE ACTION  |
|-------------------|---|-------------|--|
| A1                | CHECK RELAY   | <b>OK ▶</b> | Carry out step A2  |
| ſ                 | heck for correct functioning of day-light exclusion lay 167                 | ØK) ►       | Replace relay <b>I67</b>   |
| <b>A2</b><br>- Ro | CHECK VOLTAGE  otate the ignition key and verify 12V at pin J6 of G1        | OK <b>▶</b> | Carry out step A3  |
|                   |   | OK ►        | Restore wiring between pins J6 and J7 of <b>G1</b> (ORN)                   |
| A3<br>- Ro<br>I6  | CHECK VOLTAGE  otate the ignition key and verify 12V at pin 87a of relay  7 | OK <b>▶</b> | Carry out <b>step A4</b>   |
|                   |   | OK >        | Restore wiring between pin J7 of <b>G1</b> and pin 87a of <b>I67</b> (ORN) |
|                   |   |             | (continued)  |

(continues)

WITH IGNITION KEY ENGAGED THE SIDELIGHTS DO NOT COME ON (or the dipped beam headlights do not go out when the light switch is at position "I")

TEST A

| TEST PROCEDURE |  | RESULT        | CORRECTIVE ACTION  |
|----------------|--|---------------|--|
| A4             | CHECK VOLTAGE  | (OK) <b>▶</b> | Carry out step A5  |
|                | otate the ignition key and using lever group <b>B68</b> , vitch the lights to position "I": verify 12V at pin 86 of <b>7</b> | (OK) ►        | Restore wiring between pins 86 of <b>I67</b> and pin J5 of <b>G1</b> (YEL) |
| <b>A</b> 5     | CHECK VOLTAGE  | (OK) <b>→</b> | Restore wiring between   |
| SV             | otate the ignition key and verify 12V at pin J4 of G1; vitching lever group B68 to position "I", check that the rouit opens  |               | pin 85 of <b>I67</b> and pin J8<br>of <b>G1</b> (BLK)                      |
|                |  | OK +          | Restore wiring between pins 30 of <b>I67</b> and pin J4 of <b>G1</b> (GRY) |
|                |  | ·             |  |
|                |  |               |  |
|                |  |               |  |
|                |  |               |  |
|                |  |               |  |
|                |  |               |  |
|                |  |               |  |

7-1991

#### THE FRONT FOGLAMPS DO NOT COME ON

**TEST B** 

Note: if only one front foglamp comes on, refer to the relative test in the section "Rear and Front Foglamps"

|                   | TEST PROCEDURE   | RESULT      | CORRECTIVE ACTION  |
|-------------------|--|-------------|--|
| <b>B1</b><br>- Cl | CHECK FUSE  neck for damage of fuse F19 of fusebox G1                              | OK <b>→</b> | Carry out step B2  |
|                   |  | OK +        | Replace fuse (20A)   |
|                   | CHECK RELAY  neck for correct functioning of front foglamps relay 7, located in G1 | OK ►        | Carry out step B3  |
|                   |  | OK +        | Replace relay I17  |
|                   | CHECK RELAY  neck for correct functioning of front foglamps connsus relay 165      | <b>OK</b> ► | Carry out step B4  |
|                   |  | OK +        | Replace relay <b>I65</b>   |
|                   | CHECK VOLTAGE  otate the ignition key and verify 12V at pin A10 of lever oup B68   | OK ►        | Carry out step B5  |
|                   |  | ØK ►        | Restore wiring between<br>pin F9 of <b>G1</b> and pin A10<br>of lever group <b>B68</b> (ORN) |
|                   |  |             |  |

(continues)

# THE FRONT FOGLAMPS DO NOT COME ON TEST B

|           | TEST PROCEDURE  | RESULT      | CORRECTIVE ACTION   |
|-----------|---|-------------|---|
| <b>B5</b> | CHECK VOLTAGE ith ignition key rotated and and lights switched to   | <b>OK</b> ► | Carry out step B6   |
| po        | sition "I", verify 12V at pin F6 of <b>G1</b>   | <b>⊙κ →</b> | Restore wiring between pin F6 of <b>G1</b> and pin A7 of lever group <b>B68</b> (YEL)                   |
|           | CHECK VOLTAGE  ith ignition key rotated and and lights switched to esition "I", verify 12V at pin 30 of 165 | <b>OK</b> ► | Carry out <b>step B7</b>  |
|           |   | OK >        | Restore wiring between pin 30 of <b>I65</b> and pin J5 of <b>G1</b> , across pin 86 of <b>I67</b> (YEL) |
|           | CHECK VOLTAGE  ith ignition key rotated and and lights switched to  | <b>OK</b> ► | Carry out step B8   |
| ρι        | sition "I", verify 12V at pin J1 of <b>G1</b>   | OK +        | Restore wiring between pin J1 of <b>G1</b> and pin 87a of <b>I65</b> (YEL-BLK)                          |
|           |   |             |   |
|           |   |             |   |

(continues)

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# THE FRONT FOGLAMPS DO NOT COME ON TEST B

|       | TEST PROCEDURE   | RESULT      | CORRECTIVE ACTION   |  |  |  |  |  |  |  |  |
|-------|--|-------------|---|--|--|--|--|--|--|--|--|
| B8 Ve | CHECK GROUND rify 0V at pin 2 of front foglamps switch <b>B10</b>  | OK ►        | Carry out step B9   |  |  |  |  |  |  |  |  |
|       |  | OK ►        | Restore wiring between pin 2 of <b>B10</b> and ground <b>G148b</b> , also across the solder (BLK) |  |  |  |  |  |  |  |  |
| B1    | CHECK SWITCH  neck for correct functioning of front foglamps switch  10: selecting the front foglamps function, check conti- | OK <b>→</b> | Restore wiring between pin G10 of G1 and pin of B68 (BRN)   |  |  |  |  |  |  |  |  |
|       | ity between pins 2 and 3 of <b>B10</b>   | ØK ►        | Replace switch <b>B10</b>   |  |  |  |  |  |  |  |  |
|       |  |             |   |  |  |  |  |  |  |  |  |
|       |  |             |   |  |  |  |  |  |  |  |  |
|       |  |             |   |  |  |  |  |  |  |  |  |

### REAR FOGLAMPS DO NOT COME ON

**TEST C** 

Note: if only one of the rear foglamps is working, refer to the relative test in the section "Rear and Front Foglamps"

| TEST PROCEDURE   | RESULT   | CORRECTIVE ACTION  |  |  |  |  |  |  |
|--|----------|--|--|--|--|--|--|--|
| C1 CHECK FUSE  - Check for damage of fuse F11 in fusebox G1                            | (OK ▶    | Carry out step C2  |  |  |  |  |  |  |
|  | ØK ►     | Replace fuse (7.5A)  |  |  |  |  |  |  |
| C2 CHECK RELAY  - Check for correct functioning of rear foglamps re 125, located in G1 | ay OK ►  | Carry out step C3  |  |  |  |  |  |  |
| izo, iocalca iii a i   | ØK ►     | Replace relay <b>I25</b>   |  |  |  |  |  |  |
| C3 CHECK RELAY  - Check for correct functioning of foglamps consens relay I65          | us OK •  | Carry out step C4  |  |  |  |  |  |  |
|  | ØK ►     | Replace relay <b>165</b>   |  |  |  |  |  |  |
| C4 CHECK VOLTAGE  - Rotate the ignition key and verify 12V at pin A10 of legroup B68   | ver OK ► | Carry out step C5  |  |  |  |  |  |  |
|  | OK +     | Restore wiring between pin F9 of <b>G1</b> and pin A10 of lever group <b>B68</b> (ORN) |  |  |  |  |  |  |
|  |          |  |  |  |  |  |  |  |

(continues)

PA4655E1000000 7-1991

# REAR FOGLAMPS DO NOT COME ON TEST C

| Din F3 of G1 and pir of lever group B68 (WHT)  C6 CHECK VOLTAGE  - With ignition key rotated and lights switched to position "II", verify 12V at pin 86 of I65  C7 CHECK VOLTAGE  - With ignition key rotated and lights switched to position "II", verify 12V at pin 30 of I65  C8 CHECK VOLTAGE  - With ignition key rotated and lights switched to position "II", verify 12V at pin 30 of I65  C8 CHECK VOLTAGE  - With ignition key rotated and lights switched to position "II", verify 12V at pin J2 of G1   |            | TEST PROCEDURE   | RESULT  | CORRECTIVE ACTION   |  |  |  |  |  |  |  |
|--|------------|--|---|---|--|--|--|--|--|--|--|
| Din F3 of G1 and pir of lever group B68 (WHT)  C6 CHECK VOLTAGE  With ignition key rotated and lights switched to position "II", verify 12V at pin 86 of I65  C7 CHECK VOLTAGE  With ignition key rotated and lights switched to position "II", verify 12V at pin 30 of I65  C8 CHECK VOLTAGE  C8 CHECK VOLTAGE  With ignition key rotated and lights switched to position "II", verify 12V at pin 30 of I65  C8 CHECK VOLTAGE  C8 CHECK VOLTAGE | Wi         | ith ignition key rotated and lights switched to position | OK <b>▶</b>   | Carry out step C6   |  |  |  |  |  |  |  |
| With ignition key rotated and lights switched to position "II", verify 12V at pin 86 of I65  C7 CHECK VOLTAGE  With ignition key rotated and lights switched to position "II", verify 12V at pin 30 of I65  C8 CHECK VOLTAGE  With ignition key rotated and lights switched to position "II", verify 12V at pin 30 of I65  C8 CHECK VOLTAGE  With ignition key rotated and lights switched to position "II", verify 12V at pin 30 of I65  C8 CHECK VOLTAGE  With ignition key rotated and lights switched to position "II", verify 12V at pin J2 of G1   |            |  | ØK ►  | Restore wiring between<br>pin F3 of <b>G1</b> and pin A4<br>of lever group <b>B68</b> (ORN-<br>WHT) |  |  |  |  |  |  |  |
| Restore wiring between pin J3 of G1 and pin of I65 (ORN-WHT)  C7 CHECK VOLTAGE  With ignition key rotated and lights switched to position "II", verify 12V at pin 30 of I65  Restore wiring between pin 30 of I65  Restore wiring between pin 30 of I65 and pin of G1, across pin 86 I67 (YEL)  C8 CHECK VOLTAGE  With ignition key rotated and lights switched to position "II", verify 12V at pin J2 of G1   | C6         | CHECK VOLTAGE  | (OK) <b>▶</b>   | Carry out step C7   |  |  |  |  |  |  |  |
| C7 CHECK VOLTAGE  - With ignition key rotated and lights switched to position "II", verify 12V at pin 30 of I65  C8 CHECK VOLTAGE  - With ignition key rotated and lights switched to position "II", verify 12V at pin 30 of I65  C8 CHECK VOLTAGE  - With ignition key rotated and lights switched to position "II", verify 12V at pin J2 of G1   |            |  |   |   |  |  |  |  |  |  |  |
| - With ignition key rotated and lights switched to position "II", verify 12V at pin 30 of I65  Restore wiring between pin 30 of I65 and pin of G1, across pin 86 I67 (YEL)  C8 CHECK VOLTAGE  - With ignition key rotated and lights switched to position "II", verify 12V at pin J2 of G1  Carry out step C9  Carry out step C9   |            |  | ØK <b>→</b>   | Restore wiring between pin J3 of <b>G1</b> and pin 86 of <b>I65</b> (ORN-WHT)                       |  |  |  |  |  |  |  |
| "II", verify 12V at pin 30 of I65  Restore wiring betwee pin 30 of I65 and pir of G1, across pin 86 I67 (YEL)  C8 CHECK VOLTAGE  With ignition key rotated and lights switched to position "II", verify 12V at pin J2 of G1  | <b>C</b> 7 | CHECK VOLTAGE  | (OK) <b>▶</b>   | Carry out step C8   |  |  |  |  |  |  |  |
| pin 30 of 165 and pir of G1, across pin 86 167 (YEL)  C8 CHECK VOLTAGE  - With ignition key rotated and lights switched to position "II", verify 12V at pin J2 of G1  Carry out step C9  |            |  |   |   |  |  |  |  |  |  |  |
| <ul> <li>With ignition key rotated and lights switched to position</li> <li>"II", verify 12V at pin J2 of G1</li> </ul> Carry out step C9  Carry out step C9   |            |  | ØK) ►   | Restore wiring between<br>pin 30 of 165 and pin J5<br>of G1, across pin 86 of<br>167 (YEL)          |  |  |  |  |  |  |  |
| "II", verify 12V at pin J2 of G1   | C8         | CHECK VOLTAGE  | (OK ) <b>▶</b>  | Carry out step C9   |  |  |  |  |  |  |  |
|  |            | - · · · · · · · · · · · · · · · · · · ·                  |   |   |  |  |  |  |  |  |  |
| $+$ $\times$ $/$   |            |  | <b>() ( ) () () () () () () () () ( ) () () () () () () () () ( ) () () () () () () () () ( ) () () () () () () () () () () () () () () () () () ( ) () () () () () () () () ( ) () () () () () () () () ( ) () </b> | Restore wiring between pin J2 of <b>G1</b> and pin 87 of <b>I65</b> (YEL-RED)                       |  |  |  |  |  |  |  |

(continues)

# REAR FOGLAMPS DO NOT COME ON TEST C

|      | TEST PROCEDURE  | RESULT        | CORRECTIVE ACTION   |  |  |  |  |  |  |  |
|------|---|---------------|---|--|--|--|--|--|--|--|
| C9   | CHECK LEVER GROUP   | (OK) <b>▶</b> | Carry out step C10  |  |  |  |  |  |  |  |
| • S  | neck for correct functioning of lever group:<br>selecting the rear foglamps function, verify continuity<br>tween pin A2 and A11 of lever group <b>B68</b> | ØK) ►         | Replace lever group <b>B68</b> , left-hand part                               |  |  |  |  |  |  |  |
| C10  | CHECK GROUND  | (OK) <b>▶</b> | Restore wiring between  |  |  |  |  |  |  |  |
| – Wi | ith rear foglamps on, verify 0V at pin F1 of <b>G1</b>  |               | pin F10 of <b>G1</b> and pin<br>A11 of <b>B68</b> (BLK)                       |  |  |  |  |  |  |  |
|      |   | OK +          | Restore wiring between pin F1 of <b>G1</b> and pin A2 of <b>B68</b> (GRY-RED) |  |  |  |  |  |  |  |
|      |   |               | or bod (districts)  |  |  |  |  |  |  |  |
|      |   |               |   |  |  |  |  |  |  |  |
|      |   |               |   |  |  |  |  |  |  |  |
|      |   |               |   |  |  |  |  |  |  |  |
|      |   |               |   |  |  |  |  |  |  |  |
|      |   |               |   |  |  |  |  |  |  |  |
|      |   |               |   |  |  |  |  |  |  |  |

# **INTERIOR LIGHTING**

#### **INDEX**

| GENERAL DESCRIPTION                    |   |  |  | • |      |   |   |  | 12-2    |
|--|---|--|--|---|------|---|---|--|---------|
| ILLUMINATION OF CONTROLS AND IDEOGRAMS |   |  |  |   |      |   |   |  | 12-3    |
| COURTESY LIGHTS                        |   |  |  |   |      |   |   |  |         |
| INSTRUMENT PANEL LIGHTING              |   |  |  |   |      |   |   |  | . 12-15 |
| LOCATION OF COMPONENTS                 |   |  |  |   | <br> | • |   |  | . 12-19 |
| TROUBLESHOOTING TABLE                  | • |  |  |   | <br> | • |   |  | . 12-20 |
| TROUBLESHOOTING                        | _ |  |  |   | <br> |   | _ |  | . 12-21 |

PA4655E1000000 7-1991

#### **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 ideorams located on the lever group are illuminated as are those on the vehicle's numerous air vents.

The heater conrols or the automatic air-conditioner control panel are also illuminated. (see "Air conditioning 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").

#### Courtesy lights:

A timing device **N10** turns the front central courtesy light **F35**, the rear courtesy light **F3** and 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.

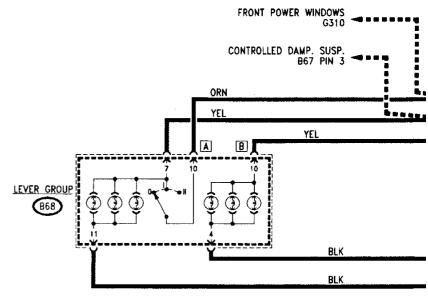
The two courtesy lights can obviously be turned on manually by acting on the switch.

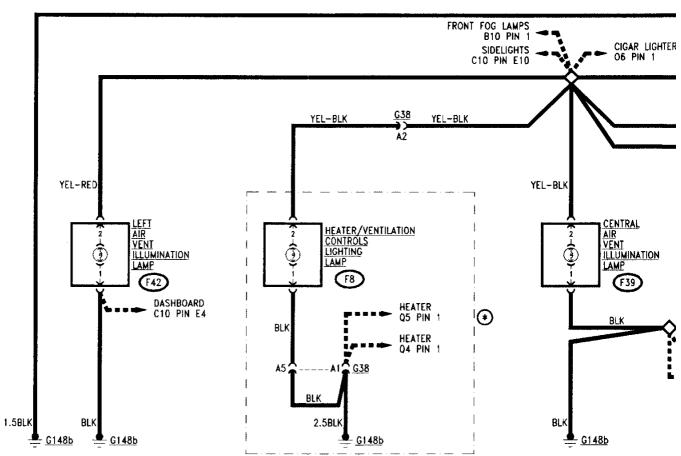
On the front courtesy light there is also a spot-light, powered directly by the battery, which enables a passenger, for example, to read without disturbing the driver.

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

#### Instrument panel lighting:

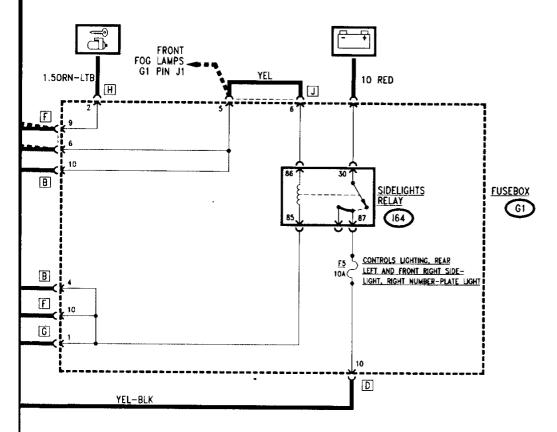
The instrument panel C10 is illuminated by way of a rheostat B16, which permits the lighting intensity to be regulated.

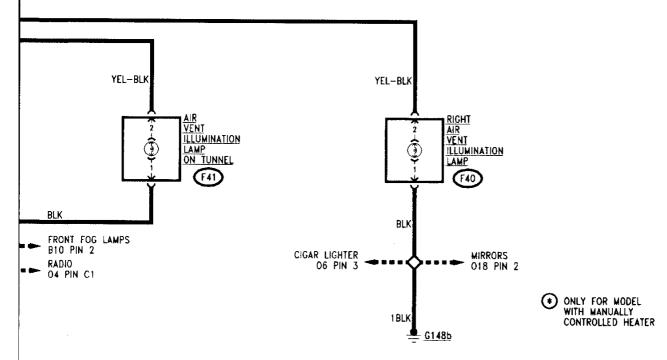




# LUMINATION OF CONTROLS AND IDEOGRAMS

# /iring Diagram





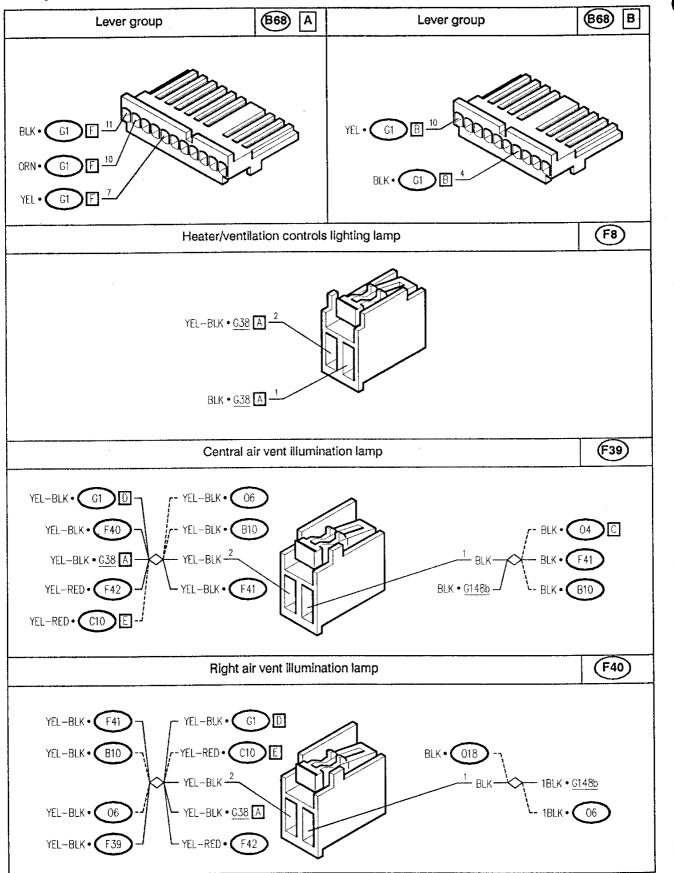
### **Functional Description**

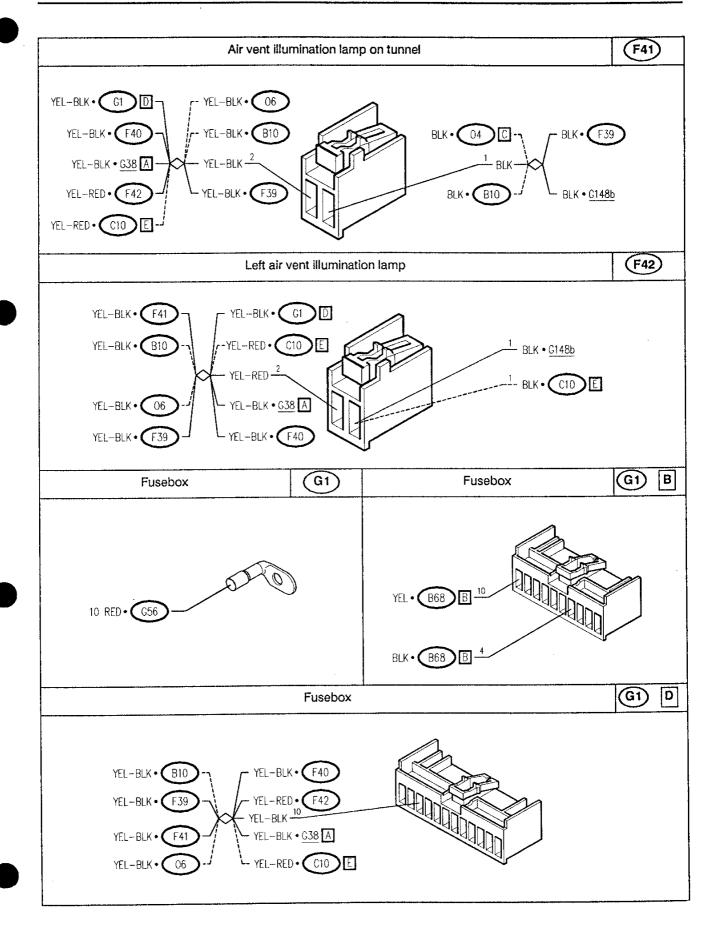
The lever group ideograms **B68** are illuminated when the sidelights are switched on: those on the left are activated directly by the light switch itself, while those on the right by a supply returning from the fusebox **G1**.

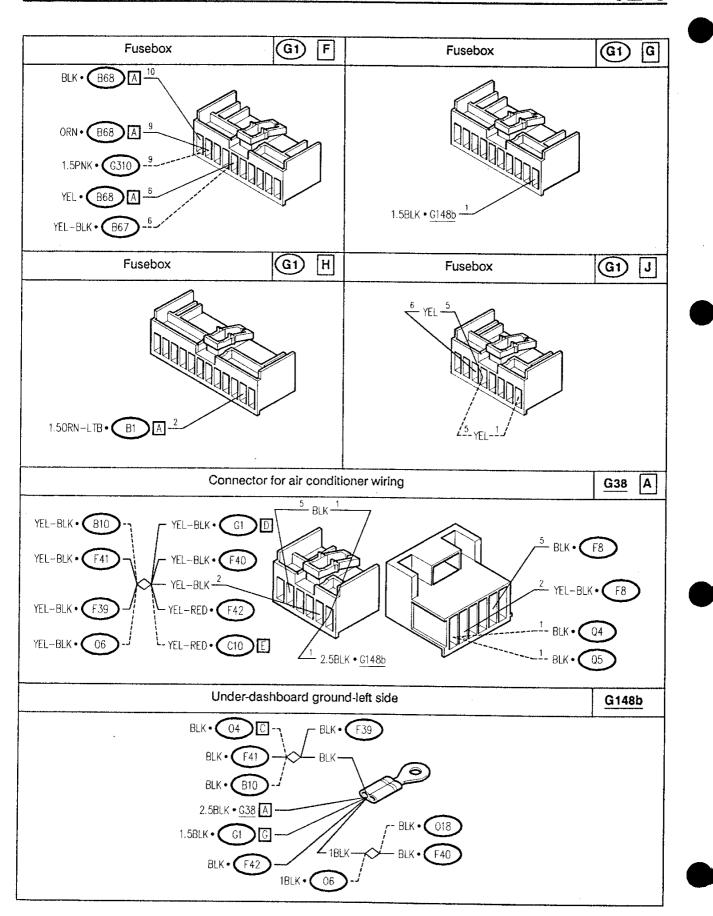
The ideograms on the left F42, central F39 and right F40 air vents along with the one on the tunnel F41 (for the rear seats) are illuminated by way of the sidelights relay I64 and fuse (10 A).

The line also supplies the heater controls **F8** or the air-conditioner (see "Air-conditioning - control unit: supply and diagnosis").

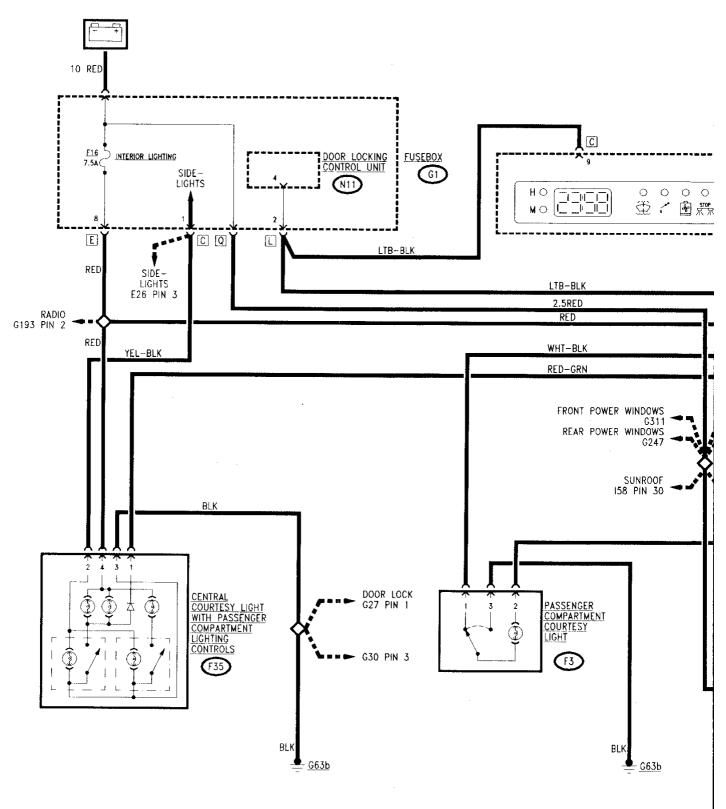
### **Components and Connectors**



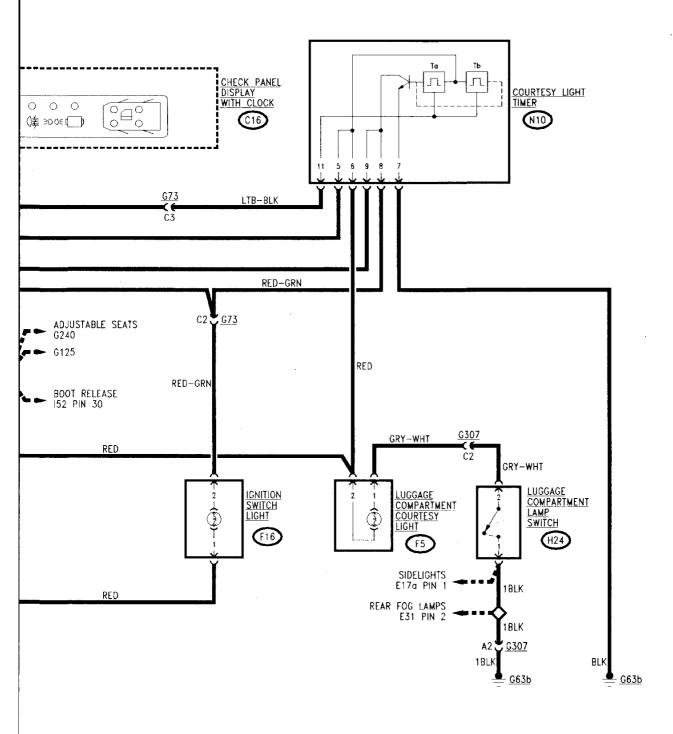




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# OURTESY LIGHTS /iring Diagram



### **Functional Description**

#### Passenger compartment courtesy light

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

When the sidelights are on, **F35** receives another supply which lights up the ideograms 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.

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").

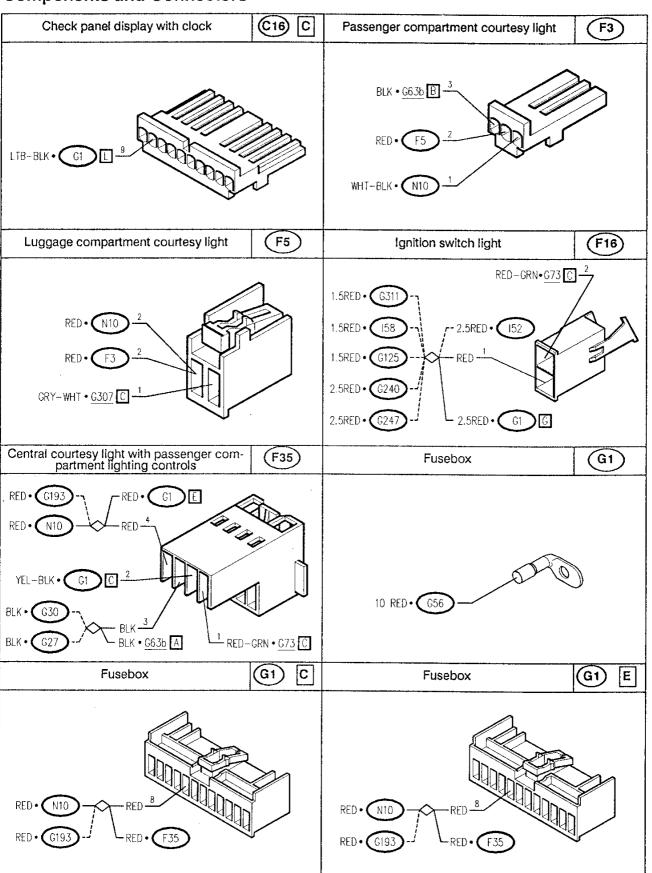
The Ta timer sends a ground signal through pins 8 and 9, to the timer controlled lamps, and illuminates them for 100 to 200 seconds from the moment the door is opened. When the "door open" signal is interrupted, the Tb timer sends the same negative signal and illuminates the lights for a further 15 seconds approximately.

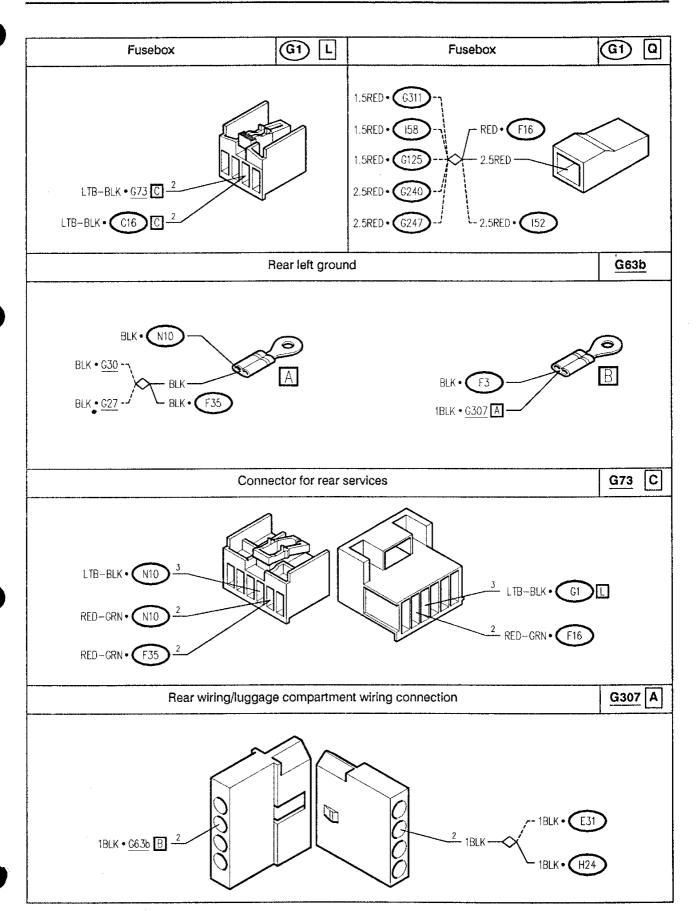
#### Luggage compartment lighting:

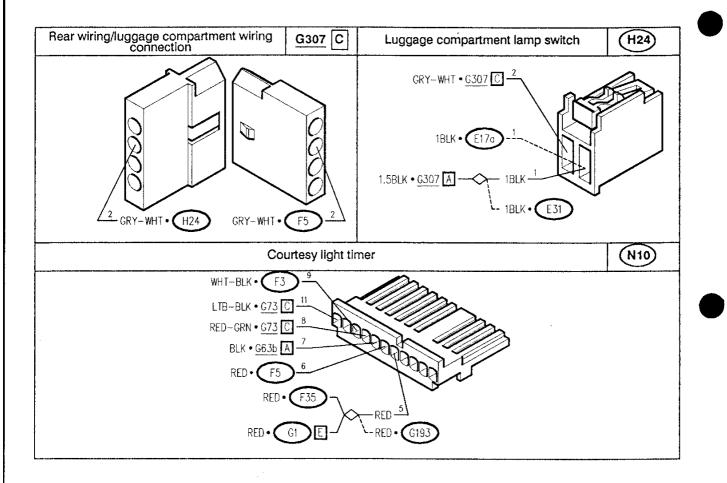
The luggage compartment courtesy light **F5** is also illuminated by battery voltage routed through the line protected by fuse **F16** (7.5A); it comes on when the boot lid is opened and switch **H24** sends a ground signal.

7-1991

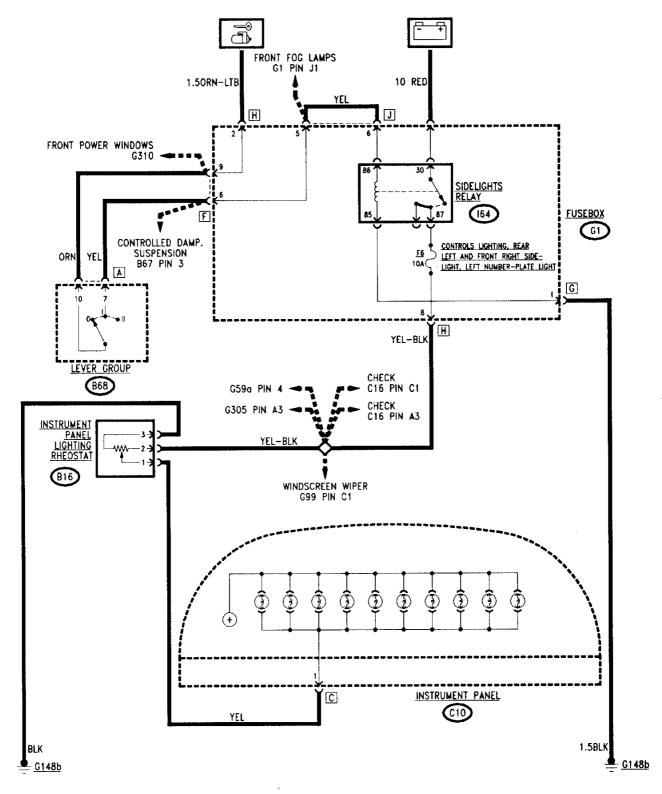
### **Components and Connectors**







## INSTRUMENT PANEL LIGHTING Wiring Diagram



### **Functional Description**

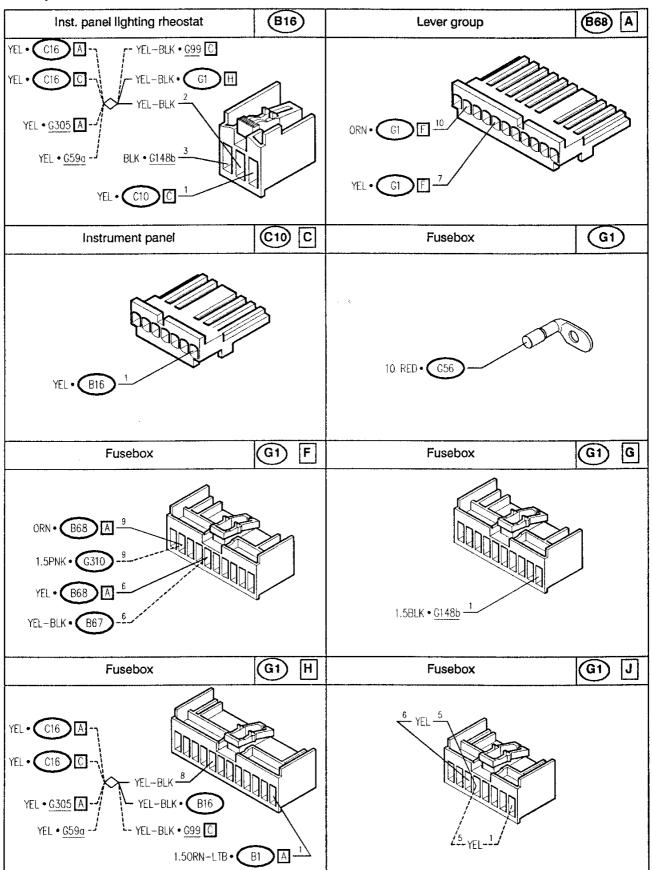
The instrument panel C10 is illuminated by powering a series of inserted lamps; this supply is routed through a dashboard lighting dimmer rheostat B16 which permits the lighting intensity to be adjusted to the desired level.

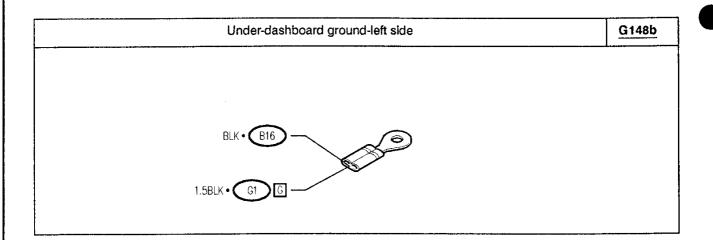
The rheostat **B16** is powered by battery voltage, through relay **I64** and fuse **F6** (10A) of the fusebox **G1**, when the sidelights are switched on using the switch on the lever group **B68**.

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

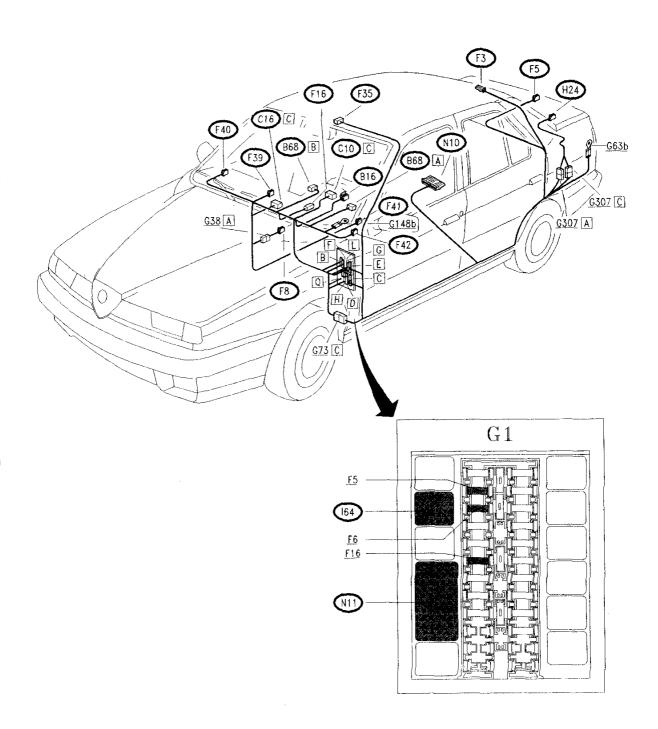
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### **Components and Connectors**





### **LOCATION OF COMPONENTS**



### TROUBLESHOOTING TABLE

|   |       |      |               |       |      | ,     | Co         | mpone | ent   |            |       |      |       |     |              |   |
|---|-------|------|---------------|-------|------|-------|------------|-------|-------|------------|-------|------|-------|-----|--------------|---|
| Malfunction                                       | (F42) | F40) | <b>(</b> F39) | (F41) | (F8) | (B68) | <u>F16</u> | (N10) | (F35) | <b>F</b> 3 | (F16) | (F5) | (H24) | C10 | <b>B</b> 16) |   |
| LH air vent<br>light                              | •     |      |               |       |      |       |            |       |       |            |       |      |       |     |              | A |
| RH air vent<br>light                              |       | •    |               |       |      |       |            |       |       |            |       |      |       |     |              | В |
| Central air vent<br>light                         |       |      | •             |       |      |       |            |       |       |            |       |      |       |     |              | С |
| Tunnel airvent<br>light                           |       |      |               | •     |      |       |            |       |       |            |       |      |       |     |              | D |
| Heat/vent<br>lights                               |       |      |               |       | •    |       |            |       |       |            |       |      |       |     |              | Ε |
| Lever group<br>lights                             |       |      |               |       |      | •     |            |       |       |            |       |      |       |     |              | F |
| All timer<br>controlled<br>courtesy lights        |       |      |               |       |      |       | •          | •     |       |            | -     |      |       |     |              | G |
| Central courtesy light                            |       |      |               |       |      |       | •          | •     | •     |            |       |      |       |     |              | Н |
| Passenger<br>compartment<br>courtesy light        |       |      |               |       |      |       | •          | •     |       | •          |       |      |       |     |              | • |
| Ignition switch                                   |       |      |               |       |      |       | •          | •     |       |            | •     |      |       |     |              | j |
| Luggage com-<br>partment light                    |       |      |               |       |      |       |            |       |       |            |       | •    | •     |     |              | К |
| Inst. panel<br>illumination                       |       |      |               |       |      |       |            |       |       |            |       |      |       | •   |              | L |
| Inst. panel light-<br>ing intensity<br>regulation |       |      |               |       | ,    |       |            |       |       |            |       |      |       |     | •            | М |

### **TROUBLESHOOTING**

## LIGHT ILLUMINATING LEFT AIR VENT NOT WORKING TEST A

#### NOTE:

| TEST PROCEDURE  | RESULT      | CORRECTIVE ACTION   |
|---|-------------|---|
| CHECK VOLTAGE  (ith the ignition switch turned and the sidelights witched on, verify 12V between pin 1 and 2 of bulb F42) | OK <b>▶</b> | Replace the bulb contained in <b>F42</b>  |
|   | ØK ►        | Carry out step A2   |
| CHECK VOLTAGE  With the ignition switch turned and the sidelights witched on, verify 12V at pin 2 of <b>F42</b>           | <b>OK ▶</b> | Restore wiring between pin 1 of <b>F42</b> and ground <b>G148b</b> (BLK)  |
|   | ØK ►        | Restore wiring between pin 2 of <b>F42</b> and pin D10 of <b>G1</b> , and across the solder (YEL-RED and YEL-BLK) |
|   |             |   |
| •   |             |   |

## LIGHT ILLUMINATING RIGHT AIR VENT NOT WORKING TEST B

#### NOTE

|    | TEST PROCEDURE  | RESULT      | CORRECTIVE ACTION   |
|----|---|-------------|---|
|    | CHECK VOLTAGE  ith the ignition switch turned and the sidelights vitched on, verify 12V between pin 1 and 2 of the bulb | OK ►        | Replace the bulb contained in <b>F40</b>  |
| F4 | 10  | ØK ►        | Carry out step B2   |
|    | CHECK VOLTAGE  ith the ignition switch turned and the sidelights vitched on, verify 12V at pin 2 of F40                 | <b>OK</b> ► | Restore wiring between pin 1 of <b>F40</b> and ground <b>G148b</b> , and across the solder (BLK)      |
|    |   | OK •        | Restore wiring between pin 2 of <b>F40</b> and pin D10 of <b>G1</b> , and across the solder (YEL-BLK) |
|    |   |             |   |

## LIGHT ILLUMINATING CENTRAL AIR VENT NOT WORKING TEST C

#### NOTE:

|   | TEST PROCEDURE  | RESULT      | CORRECTIVE ACTION  |
|---|---|-------------|--|
|   | CHECK VOLTAGE  Ith the ignition switch turned and the sidelights witched on, verify 12V between pin 1 and 2 of the bulb | <b>OK</b> ► | Replace the bulb contained in <b>F39</b>   |
| F | 39  | OK +        | Carry out step C2  |
|   | CHECK VOLTAGE  With the ignition switch turned and the sidelights witched on, verify 12V at pin 2 of F39                | <b>OK</b> ► | Restore wiring between pin 1 of <b>F39</b> and ground <b>G148b</b> , and across the solder (BLK)               |
|   |   | OK +        | Restore wiring between<br>pin 2 of <b>F39</b> and pin D10<br>of <b>G1</b> , and across the<br>solder (YEL-BLK) |
|   |   |             |  |
|   |   |             |  |
|   |   |             |  |

## LIGHT ILLUMINATING AIR VENT ON TUNNEL NOT WORKING TEST D

#### NOTE

|    | TEST PROCEDURE  | RESULT        | CORRECTIVE ACTION  |
|----|---|---------------|--|
| 1  | CHECK VOLTAGE  ith the ignition switch turned and the sidelights witched on, verify 12V between pin 1 and 2 of bulb F41 | <b>OK</b> ►   | Replace the bulb contained in <b>F41</b>   |
| 50 | viiched on, verify 12v between pii i rand 2 of builb P41  | (OK) <b>→</b> | Carry out step <b>D2</b>   |
| 1  | CHECK VOLTAGE  ith the ignition switch turned and the sidelights vitched on, verify 12V at pin 2 of F41                 | OK ►          | Restore wiring between pin 1 of F41 and ground G148b, and across the solder (BLK)      |
|    |   | OK) •         | Restore wiring between pin 2 of F41 and pin D10 of G1, and across the solder (YEL-BLK) |
|    |   |               |  |

| LIGHTING OF HEATER/VENTILATION SYSTEM CONTROLS NOT WORK- | TEST E |
|--|--------|
| ING  |        |

#### 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  |
|--|--|--|
| <ul> <li>E1 CHECK VOLTAGE</li> <li>With the ignition switch turned and the sidelights switched on, verify 12V between pin 1 and 2 of the bulb</li> </ul> | OK <b>→</b>  | Replace the bulb contained in <b>F8</b>  |
| F8   | ØK +   | Carry out step E2  |
| E2 CHECK VOLTAGE  - With the ignition switch turned and the sidelights switched on, verify 12V at pin 2 of F8  | ОК ▶   | 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) |
|  | The control of the co |  |

### LEVER GROUP CONTROL ILLUMINATION NOT WORKING TEST F

#### 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 realtive sections.

|                 | TEST PROCEDURE   | RESULT        | CORRECTIVE ACTION  |
|-----------------|--|---------------|--|
| F1              | CHECK VOLTAGE  | (OK) <b>▶</b> | Carry out step F2  |
| sw              | ith the ignition switch turned and the sidelights vitched on, verify 12V between pins A7 and A11 of the ver group <b>B68</b> | ØK <b>→</b>   | Carry out step F3  |
| <b>F2</b><br>Ch | CHECK BULB neck lever group bulbs <b>B68</b> for damage  | <b>OK</b> ►   | Carry out step F4  |
|                 |  | ØK ►          | Replace faulty bulbs   |
|                 | CHECK CONTINUITY  neck continuity between pin A11 of B68 and pin F10  G1   | <b>OK</b> ►   | See section "Sidelights"   |
|                 |  | ØK ►          | Restore wiring between pin A8 of <b>B68</b> and pin F10 of <b>G1</b> (BLK) |
| F4              | CHECK VOLTAGE  | (OK) <b>▶</b> | Replace faulty bulbs   |
| SW              | ith the ignition switch turned and the sidelights ritched on, verify 12V between pin B4 and B10 of the ver group B68         | OK) ►         | Carry out <b>step F5</b>   |
|                 |  |               | (continues)  |

(continues)

## LEVER GROUP CONTROL ILLUMINATION NOT WORKING TEST F

| Restore wiring between pin B4 of <b>B68</b> and pin B4 of <b>G1</b> (BLK)  Restore wiring between pin B10 of <b>B68</b> and pin B10 of <b>G1</b> (YEL) |
|--|
| pin B10 of B68 and pin   |
|  |
|  |
|  |
|  |
|  |
|  |
|  |

### NONE OF THE TIMER CONTROLLED LIGHTS WORKING

TEST G

|                  | TEST PROCEDURE  | RESULT      | CORRECTIVE ACTION  |
|------------------|---|-------------|--|
| <b>G1</b><br>- C | CHECK FUSE  neck that fuse F16 in fusebox G1 is not damaged   | OK ►        | Carry out step <b>G2</b> Replace the fuse (7.5A)   |
| <b>G2</b><br>Ve  | CHECK VOLTAGE erify 12V at pin 5 of the timer for courtesy light N10  | OK <b>→</b> | Carry out step G3  |
|                  |   | ØK ►        | Restore wiring between pin E8 of G1 and pin 5 of N10, and across the solder (RED)  |
| G3<br>- Ve       | CHECK GROUND erify 0V at pin 7 of the courtesy light timer N10  | OK ►        | Carry out step G4  |
|                  |   | OK +        | Restore wiring between pin 7 of <b>N10</b> and ground <b>G63b</b> (BLK)  |
|                  | CHECK SIGNAL erify ground signal (0V) at pin 11 of the courtesy light mer N10 when one of the doors is opened (and that | OK <b>▶</b> | Replace the courtesy light timer N10   |
| th               | is signal disappears when all the doors are closed prrectly)  | OK +        | Restore wiring between pin 11 of N10 and pin L2 of G1, across pin C3 of connector G73 (LTB-BLK). Check correct functioning of door open signalling device (refer to "Check Panel") |

## CENTRAL COURTESY LIGHT NOT WORKING TEST H

#### 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                                   |
|-------------------|--|---------------|---|
| <b>H1</b><br>– Ch | CHECK FUSE  neck that fuse F16 of the fusebox G1 is not damaged  | (OK) <b>▶</b> | Carry out step H2                                   |
|                   |  | (OK) ►        | Replace the fuse (7.5A)                             |
| H2<br>- Ve        | CHECK VOLTAGE rify 12V between pin 3 and 4 of courtesy light F35   | <b>OK</b> ►   | Carry out step H3                                   |
|                   |  | OK +          | Carry out <b>step H4</b>                            |
| sp                | CHECK BULBS  neck for damage of the courtesy light bulbs F35: ot-light bulb, two bulbs of the courtesy light, two lbs lighting the controls. | OK ►          | Check and replace the entire group F35 if necessary |
|                   |  | OK) +         | Replace faulty bulbs                                |
|                   |  |               |   |
|                   |  |               |   |
|                   |  |               |   |

(continues)

### CENTRAL COURTESY LIGHT NOT WORKING TEST H

| TEST PROCEDURE  | RESULT      | CORRECTIVE ACTION  |
|---|-------------|--|
| H4 CHECK VOLTAGE  - Check 12V at pin 4 of F35                           | OK <b>→</b> | Carry out step H5  |
|   | OK) +       | Restore wiring between pin E8 of <b>G1</b> and pin 4 of <b>F35</b> , and across the solder (RED)   |
| H5 CHECK GROUND  Verify 0V at pin 3 of F35                              | OK <b>→</b> | Carry out step H6  |
|   | ØK +        | Restore wiring between pin 3 of <b>F35</b> and ground <b>G63b</b> , and across the solder (BLK)  |
| H6 CHECK GROUND  Open a door, and immediately verify 0V at pin 1 of F35 | ок <b>→</b> | 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 preceeding test G) |

## PASSENGER COMPARTMENT COURTESY LIGHT NOT WORKING TEST I

|                   | TEST PROCEDURE   | RESULT      | CORRECTIVE ACTION   |
|-------------------|--|-------------|---|
| 11<br> - C        | CHECK FUSE  neck for damage of the fuse F16 in fusebox G1                | OK ▶        | Carry out step I2   |
|                   |  | OK •        | Replace fuse (7.5A)   |
| 12<br>- Ve        | CHECK VOLTAGE  erify 12V between pln 3 and 2 of courtesy light <b>F3</b> | OK <b>▶</b> | Carry out step 13   |
|                   |  | ØK) ►       | Carry out <b>step I4</b>                                      |
| <b>13</b><br>– cł | CHECK BULB neck for damage of the courtesy light bulb F3                 | OK ►        | Check and if necessary replace the complete courtesy light F3 |
|                   |  | ØK) ►       | Replace the bulb  |
|                   |  |             |   |
|                   |  |             |   |
|                   |  |             |   |
|                   |  |             |   |

(continues)

### PASSENGER COMPARTMENT COURTESY LIGHT NOT WORKING

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| TEST PROCEDURE   | RESULT           | CORRECTIVE ACTION   |
|--|------------------|---|
| I4 CHECK VOLTAGE  - Verify 12V at pin 2 of F3  | OK ►             | Carry out step 15   |
|  | 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 K. |
| I5 CHECK GROUND  - Verify 0V at pin 3 of F3  | OK <b>→</b>      | Carry out step I6   |
|  | OK +             | Restore wiring between pin 3 of F3 and ground G63b (BLK)  |
| <ul><li>CHECK GROUND</li><li>Open a door, and immediately, verify 0V at page 1</li></ul> | pin 1 of F3 OK ▶ | Replace the complete courtesy light <b>F3</b>   |
|  | 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 preceeding test G)               |

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### LIGHT ILLUMINATING IGNITION SWITCH NOT WORKING TEST J

| TEST PROCEDURE  | RESULT      | CORRECTIVE ACTION   |
|---|-------------|---|
| J1 CHECK FUSE  - Check for damage of fuse F16 in fusebox G1   | OK <b>▶</b> | Carry out step J2   |
|   | OK >        | Replace fuse (7.5A)   |
| <ul> <li>J2 CHECK VOLTAGE</li> <li>Open a door, and immediately, verify 12V between pir 1 and 2 of light F16</li> </ul> | OK <b>▶</b> | Carry out step J3   |
| Tand 2 of fight 1 to  | ØK) ►       | Carry out step J4   |
| J3 CHECK BULB  - Check for damage of the bulb of light F16  | OK ▶        | Check and if necessary replace the complete light F16   |
|   | OK >        | Replace the bulb  |
| J4 CHECK GROUND  Open a door, and immediately, verify 0V at pin 2 of F16  | OK >        | Restore wiring between pin 1 of F16 and connector Q of G1, and across the solder (RED)                  |
|   | OK +        | Restore wiring between pin 2 of F16 and pin 8 of timer N10, across pins C2 of connector G73 (RED- GRN). |
|   |             |   |

### LUGGAGE COMPARTMENT COURTESY LIGHT NOT WORKING TEST K

|           | TEST PROCEDURE  | RESULT      | CORRECTIVE ACTION   |
|-----------|---|-------------|---|
| <b>K1</b> | CHECK FUSE  neck for damage of fuse F16 in fusebox G1   | OK ►        | Carry out step K2   |
|           |   | OK ►        | Replace fuse (7.5A)   |
|           | CHECK VOLTAGE  ith boot open, verify 12V between pin 1 and 2 of ggage compartment courtesy light F5 | OK ►        | Carry out step K3   |
|           |   | OK +        | Carry out step K4   |
| <b>K3</b> | CHECK BULB heck for damage of the courtesy light bulb F5  | <b>OK</b> ► | Check and if necessary replace the complete courtesy light F5 |
|           |   | OK +        | Replace the bulb  |
|           |   |             |   |
|           |   |             |   |
|           |   |             |   |
|           |   |             |   |
|           |   |             |   |

(continues)

## LUGGAGE COMPARTMENT COURTESY LIGHT NOT WORKING TEST K

|                   | TEST PROCEDURE   | RESULT        | CORRECTIVE ACTION   |
|-------------------|--|---------------|---|
| K4                | CHECK VOLTAGE  | (OK) <b>→</b> | Carry out step K5   |
| <b>v</b> e        | erify 12V at pin 2 of <b>F5</b>                              | ØK ►          | Restore wiring between<br>pin 6 of timer <b>N10</b> and<br>pin 2 of <b>F5</b> (RED)                                   |
| <b>K5</b><br>- Ve | CHECK GROUND<br>erify 0V at pin 1 of switch H24              | (OK) <b>→</b> | Carry out step K6   |
|                   |  | ØK ►          | Restore wiring between<br>pin 1 of H24 and ground<br>G63b, across the solder<br>and pin A2 of connector<br>G307 (BLK) |
| <b>K6</b>         | CHECK GROUND ith boot open, verify 0V at pin 2 of <b>H24</b> | OK <b>→</b>   | Restore wiring between<br>pin 2 of <b>H24</b> and pin 1 of<br><b>F5</b> , across pin C2 of<br><b>G307</b> (GRY-WHT)   |
|                   |  | ØK) ►         | Replace switch <b>H24</b>   |
|                   |  |               |   |
|                   |  |               |   |

## INSTRUMENT PANEL NOT ILLUMINATED TEST L

**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 occational lamp works, immediately carry out step L2.

| TEST PROCEDURE  |  | RESULT        | CORRECTIVE ACTION   |
|---|--|---------------|---|
| - Verify, with key rotated and rheostat B16 in the position of maximum illumination, 0V at pin C1 of the instrument |  | <b>OK</b> ►   | Carry out step L2   |
| panel <b>C10</b>  |  | ØK ►          | Restore wiring between pin C1 of C10 and pin 1 of rheostat B16 (YEL), and between pin 3 of B16 and ground G148b (BLK) |
| L2  | CHECK BULBS  | (OK) <b>▶</b> | Check and if necessary  |
|   | neck for damage of the ten lamps on the instrument nel C10 |               | replace the complete instrument panel C10   |
|   |  | OK) ►         | Replace faulty bulbs  |
|   |  |               |   |
|   |  |               |   |
|   |  |               |   |
|   |  |               |   |
|   |  |               |   |

# INSTRUMENT PANEL ILLUMINATION REGULATION DEVICE NOT TEST M WORKING

NOTE: before carrying out the following test, check that the sidelights are working correctly (refer to section "Sidelights")

| TEST PROCEDURE   |  | RESULT   | CORRECTIVE ACTION  |
|--|--|----------|--|
| M1   | CHECK VOLTAGE  | (ок)     | Replace rheostat B16   |
| <ul> <li>With the ignition switch turned and the sidelights<br/>switched on, verify 12V between pin 2 and 3 of rheostat<br/>B16</li> </ul> |  | OK)      | Carry out step M2  |
| M2   | CHECK RHEOSTAT   | <u> </u> | Restore wiring between   |
| sv<br>ar   | ith the ignition switch turned and the sidelights witched on, check that the resistance between pins 3 and 1 of <b>B16</b> varies when the adjustment wheel is tated |          | pin H8 of G1 and pin 2 of<br>B16, and across the<br>solder (YEL-BLK) |
|  |  | OK)      | Replace rheostat B16   |
|  |  |          |  |
|  |  |          |  |
|  |  |          |  |
|  |  |          |  |
|  |  |          |  |
|  |  |          |  |
|  |  |          |  |