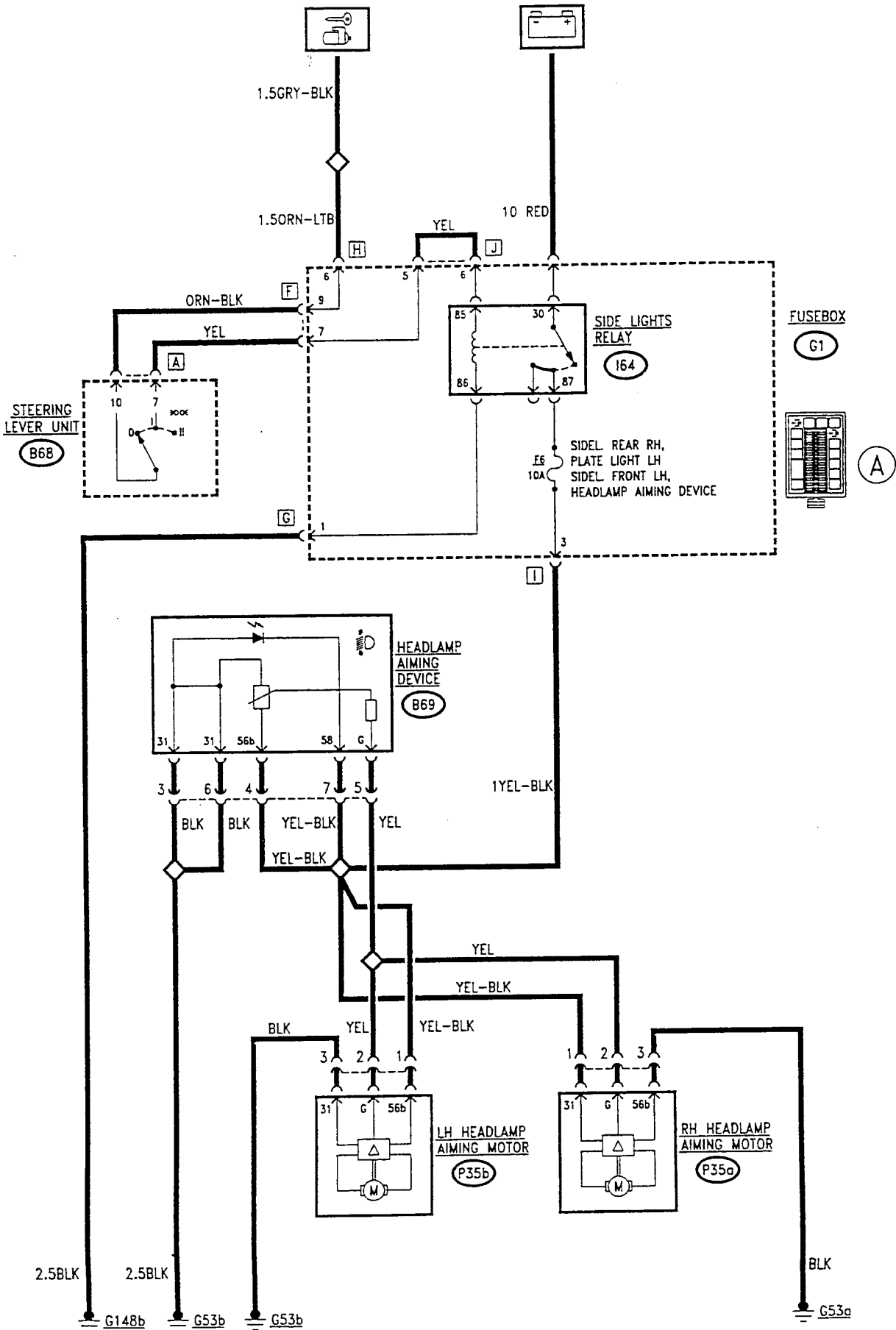


HEADLAMP AIMING DEVICE

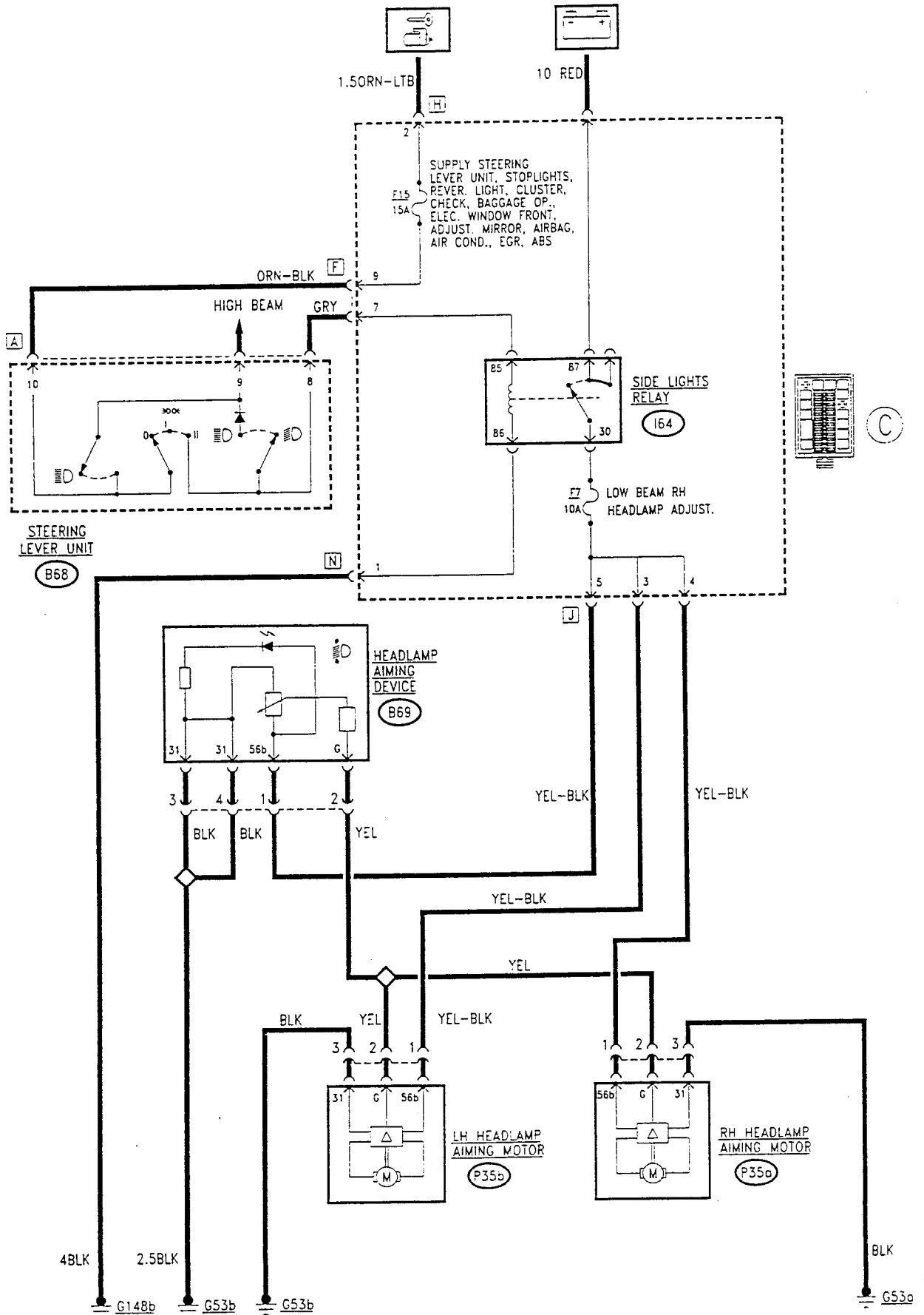
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WIRING DIAGRAM



WIRING DIAGRAM




GENERAL DESCRIPTION

Some versions of the car offer the possibility to adjust the headlight beam in relation to the load directly from the driver's seat.

In this way the problem or inconveniences caused by incorrect headlamp aiming is avoided and the delicate task of direct lamp adjustment is simplified (this is not substituted by the electrical device but integrated with it)

The adjustment device consists of a motor fitted on each of the two headlamps which suitably slopes them to lower the beam when the car is heavily loaded and raise it when the load is lightened.

The driver operates the system directly by turning a knob on the dashboard, which allows four positions to be chosen according to the following table:

Position of knob 	Load conditions
0	driver only or driver and passenger on front seat
1	all seats occupied
2	all seats occupied plus load in luggage compartment (until reaching max. allowed load on rear axle)
3	driver plus load in luggage compartment until reaching max. allowed load on rear axle)

The system can be operated only when the side lights are on; it is completely de-activated when they are off.

NOTE: for safety reasons the system is designed so that in the event of a failure it cannot be moved to a higher position than the one it is already at.

FUNCTIONAL DESCRIPTION

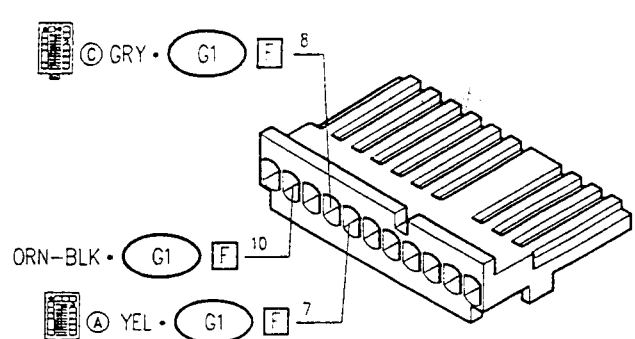
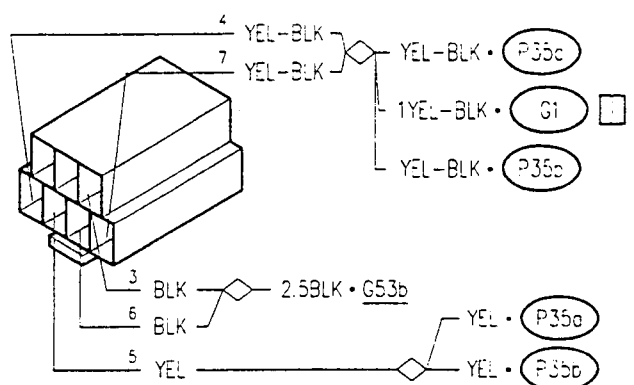
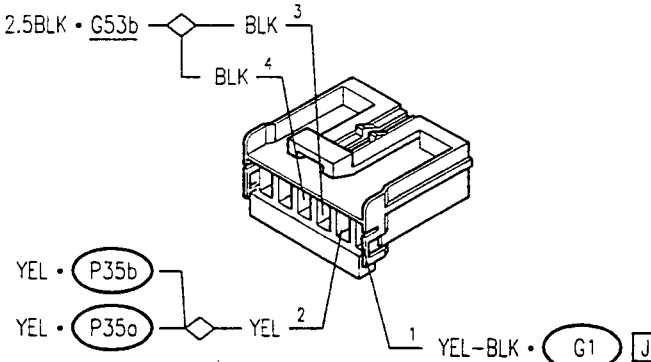
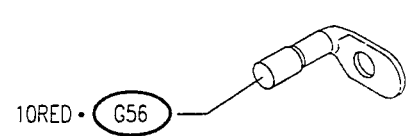
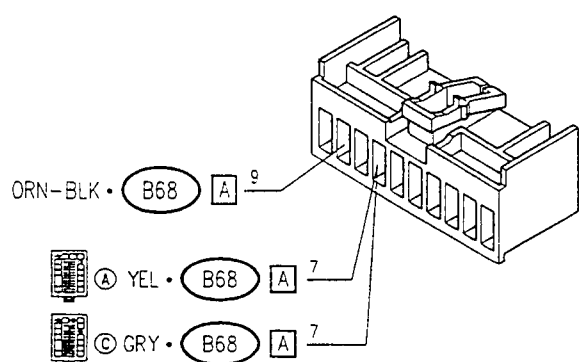
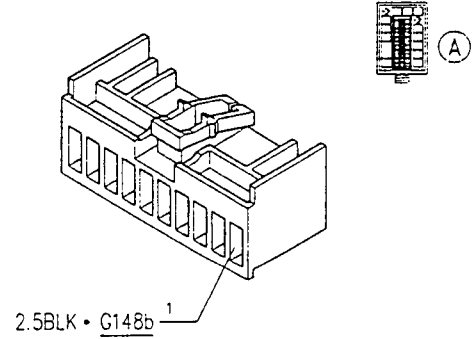
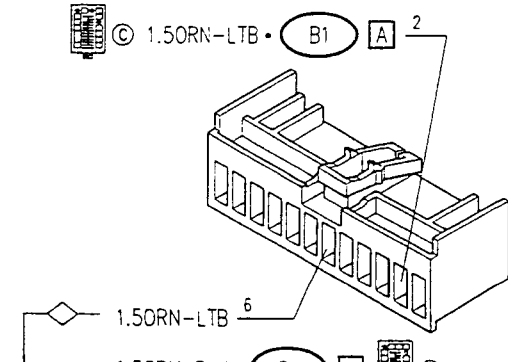
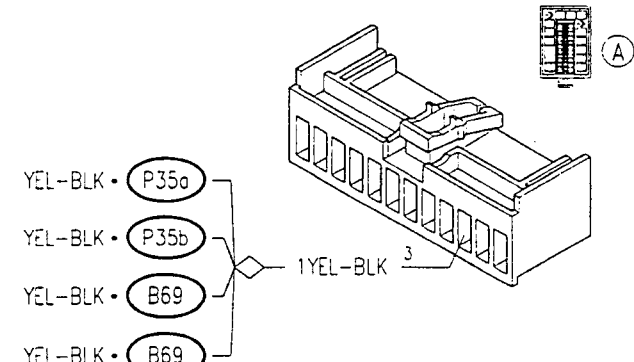
The headlamp aiming device **B69** is supplied at pin 56b by a line leading from the side lights circuit: this line receives voltage only when the side lights are on. The same supply (pin 58) turns on the led inside device **B69** itself which illuminates the ideogram identifying the function.

Pins 31 of device **B69** are earthed, while the adjustment signal obtained by pressing the four-position selection knob leads from pin G. This signal varies the output voltage through a potentiometer (100% voltage at position "0"; with voltage decreasing for the successive positions).

Motors **P35a** and **P35b** are formed by a motor in the strict sense of the word controlled by a transducer and an electronic control unit which establishes the stroke on the basis of the voltage of the adjustment signal reaching pins G from device **B69**.

The devices are supplied, at pin 56b, by the same line that supplies device **B69**, (up to chassis no. ... protected by fuse **F6** of box **G1 "A"** and by fuse **F7** of box **G1 "C"**, while pins 31 are earthed.

COMPONENTS AND CONNECTORS

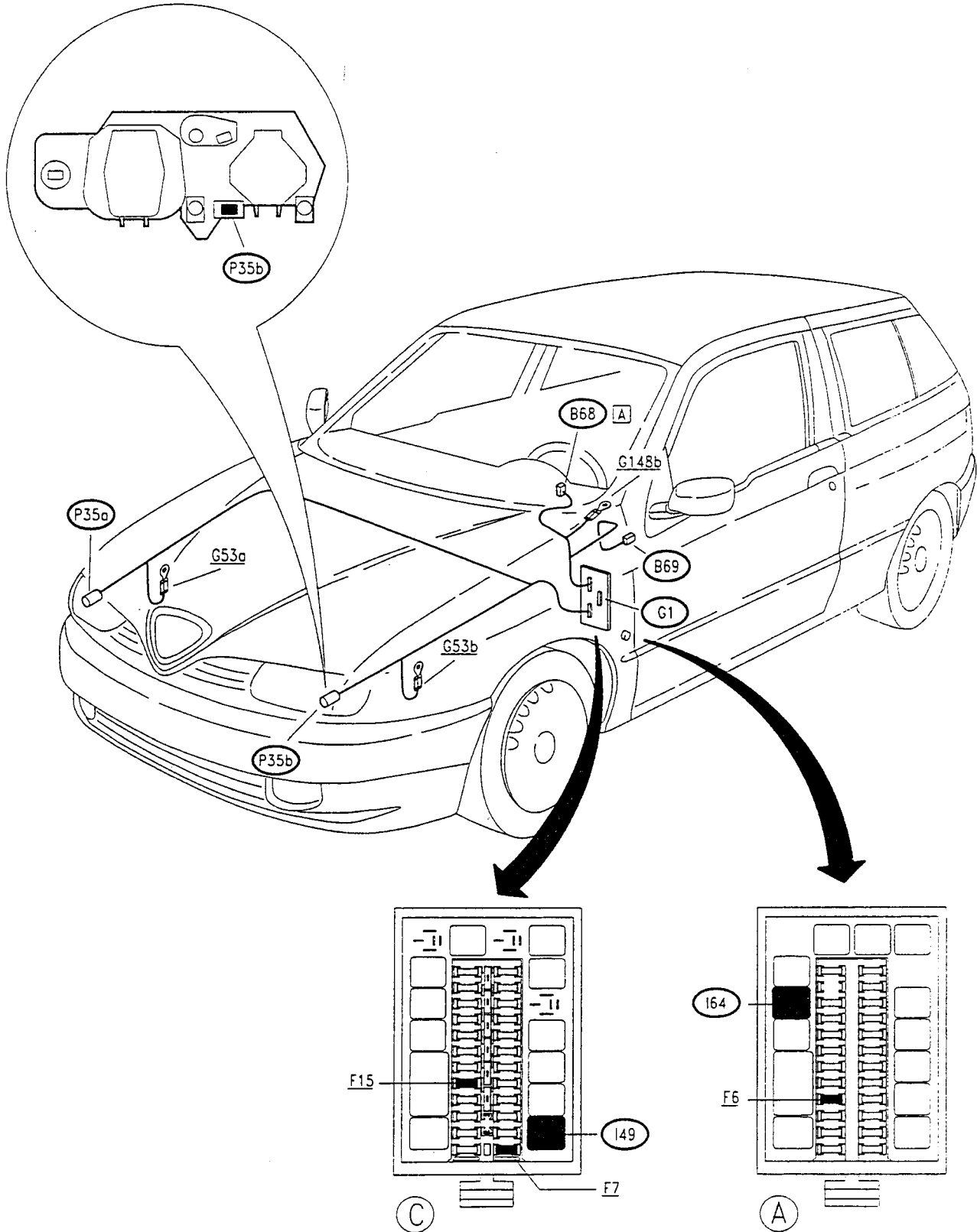
<p>Lever unit</p>	<p>B68 A</p>	<p>Headlamp aiming device</p>	<p>B69</p>
 <p>© GRY • G1 F 8</p> <p>ORN-BLK • G1 F 10</p> <p>Ⓐ YEL • G1 F 7</p>		 <p>4 YEL-BLK • P35c</p> <p>7 YEL-BLK • G1</p> <p>3 BLK • 2.5BLK • G53b</p> <p>6 BLK</p> <p>5 YEL • P35a</p> <p>5 YEL • P35b</p>	
<p>Headlamp aiming device</p>	<p>B69</p>	<p>Fusebox</p>	<p>G1</p>
 <p>2.5BLK • G53b</p> <p>3 BLK</p> <p>4 BLK</p> <p>YEL • P35b</p> <p>YEL • P35a</p> <p>2 YEL</p> <p>1 YEL-BLK • G1 J</p>		 <p>10RED • G56</p>	<p>G1</p>
<p>Fusebox</p>	<p>G1 F</p>	<p>Fusebox</p>	<p>G1 G</p>
 <p>ORN-BLK • B68 A 9</p> <p>Ⓐ YEL • B68 A 7</p> <p>© GRY • B68 A 7</p>		 <p>2.5BLK • G148b 1</p>	<p>G1 A</p>
<p>Fusebox</p>	<p>G1 H</p>	<p>Fusebox</p>	<p>G1 I</p>
 <p>© 1.5ORN-LTB • B1 A 2</p> <p>1.5ORN-LTB 6</p> <p>1.5GRY-BLK • B1 A</p>		 <p>YEL-BLK • P35a</p> <p>YEL-BLK • P35b</p> <p>YEL-BLK • B69</p> <p>YEL-BLK • B69</p> <p>3 1YEL-BLK</p>	<p>G1 A</p>

(*) from chassis no. PA49300000008

COMPONENTS AND CONNECTORS (cont.d)

Fusebox	G1 J	Fusebox	G1 N
RH engine compartment earth	G53a	LH engine compartment earth	G53b
Earth under LH dashboard.	G148b	RH headlamp aiming motor	P35a
LH headlamp aiming motor			P35b

LOCATION OF COMPONENTS

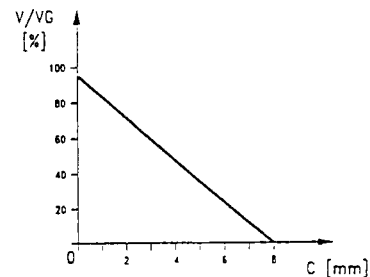
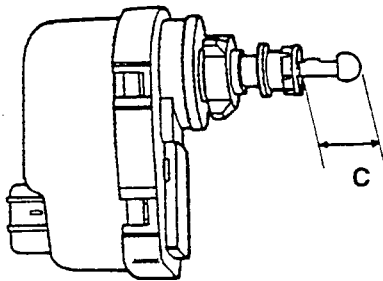


FAULTFINDING TABLE

Failure	Component to be checked		
	P35a	P35b	B69
Complete adjustment			•
RH headlamp aiming device	•		
LH headlamp aiming device		•	
Control device lighting			•

CHECKING COMPONENTS

RH/LH headlamp adjustment motor **P35a** **P35b**

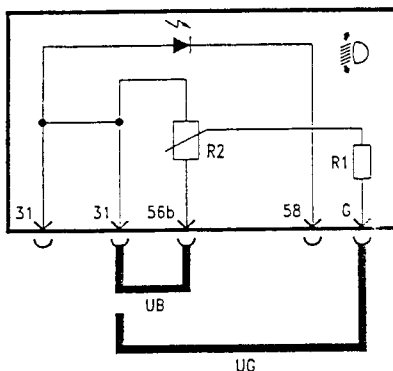


Operating diagram: course of stroke C in relation to the voltage V/VG

V = voltage between pin 56b and pin 31 (12V)

VG = voltage between pin G and pin 31

Headlamp aiming device **B69**



SPECIFICATIONS	
R1	390 Ω ± 3%
R2	4.7 kΩ

Knob position	Voltage between terminals G and 31 (UG)
0	94.9% UB ± 3%
1	86.6% UB ± 7%
2	79.7% UB ± 7%
3	66.4% UB ± 7%
4	51.2% UB ± 7%

(UB: voltage between pins 31 and 56b = 12V)

