# 22.1 Garage Door Opener (GDO)

**Contents** 

### 22.1 Models 129, 163, 170, 202, 208, 210, 215, 220

	Page
Diagnosis	
Function Test	11/1
Complaint Related Diagnostic Chart	13/1
Electrical Test Program	
Component Locations	21/1
Preparation for Test	22/1
Test	23/1

22.1 GDO

### **Diagnosis – Function Test**

#### **Preparation for Test:**

- 1. Review 21, 22,
- 2. Review electrical diagrams:

PE68.00-P-1100D (Model 163)

PE68.00-P-1100C (Model 170)

PE68.00-P-1100B (Models 202, 208)

PE68.00-P-1100A (Model 210)

PE68.00-P-1100SA (Model 220)

For Model 129, see ETM, Vol. 2, Group 68,

- 3. Review section 0,
- 4. Fuses are OK,
- 5. Battery voltage: 11 14 V
- 6. Ignition: ON

Test step/Test scope	Test condition	Nominal value	Possible cause/Remedy 1)
⇒ 1.0 Transmitter pushbuttons	The transmitter pushbuttons are pre- programmed. The vehicle is located within the range of the garage door receiver.		13
	The signal of the garage door receiver is 85% of that of the transmitter, but at least approx. 45 feet.		
	Press transmitter pushbutton:	Garage door is opened.	

<sup>1)</sup> Observe Preparation for Test, see 22.

## **Diagnosis – Complaint Related Diagnostic Chart**

#### **Preparation for Test:**

1. Review 21, 22,

2. Fuses are ok,

3. Battery voltage: 11 – 14 V,

4. Ignition: ON

Complaint/Problem	Possible cause	Test step/Remedy
Garage door does not open when using the vehicle installed pushbutton transmitter	The garage door opener has not been programmed correctly.	See document: GF68.05-P-0001A
	The garage door is defective.	Check the garage door: Using the hand-held transmitter, activate garage door. If the garage door does not open or close, check for a mechanical or electrical fault of the garage door itself.
	The receiver of the garage door and the vehicle installed pushbutton transmitter are not compatible.	Review list of compatible garage door openers as provided in the owners packet. Electrical test of garage door opener system: see 23 Test for garage door opener: see 22, Contact Prince Corporation at 1-800-355-3515

Continued...

13/1

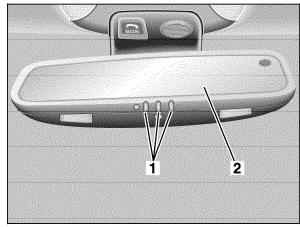
## **Diagnosis – Complaint Related Diagnostic Chart**

Complaint/Problem	Possible cause	Test step/Remedy
Garage door does not open when using the vehicle installed pushbutton transmitter (continued)	Voltage supply to the garage door opener interrupted.	Models 202, 208, 210 as of 06/98, with Code 249a (Automatic dimming inside rearview mirror), see $23 \Rightarrow 8.0$ Model 129 (as of 06/98): see $23 \Rightarrow 3.0$ Model 170 (as of 06/98): see $23 \Rightarrow 5.0$ Model 163 (as of 06/98): see $23 \Rightarrow 6.0$ Model 215, 220: see $23 \Rightarrow 7.0$

### **Electrical Test Program – Component Locations**

Models 129, 202, 208, 210, 215, 220

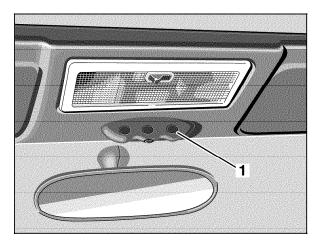
The transmitter pushbuttons as well as the transmitter are integrated within the interior rearview mirror.



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#### Model 170

The transmitter pushbuttons as well as the transmitter are located above the interior rearview mirror.

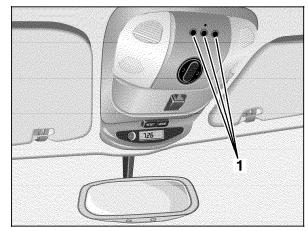


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## **Electrical Test Program – Component Locations**

#### Model 163

The transmitter pushbuttons as well as the transmitter are located in the area between the front dome lamps.



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### **Electrical Test Program – Preparation for Test**

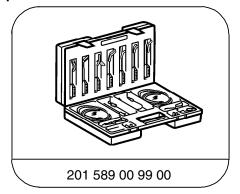
#### **Preparation for Test:**

1. Review 21, 22,

2. Fuses are OK,

3. Battery voltage: 11 - 14 V

#### **Special Tools**



Electrical connecting set

Electrical wiring diagrams:

PE68.00-P-1100D (Model 163),

PE68.00-P-1100C (Model 170),

PE68.00-P-1100B (Models 202, 208),

PE68.00-P-1100A (Model 210),

PE68.00-P-1100SA (Model 220),

Electrical Troubleshooting Manual, Model 129, Vol. 2, group 68

### **Electrical Test Program – Preparation for Test**

#### **Basic Garage Door Opener Test:**

Please refer to the vehicle Owners Manual for specific instructions regarding the programming or reprogramming (including rolling code) of the garage door opener.



Certain types of garage door openers are incompatible with the intregrated garage door opener, please see owners packet.

If, after performing the instructions in the vehicle owners manual, there continue to be problems, please contact:

The Prince Corporation

1-800-355-3515

## **Electrical Test Program – Test**

22.1

$\Rightarrow$	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
1.0	Compatibility Garage door opener to Garage door receiver. (Models 129, 163, 170, 202, 208, 210, as of 06/98), (Model 215, 220)		See: 22/1	The garage door is opened or closed.	The garage door receiver is not compatible with the garage door installed in the interior rearview miror.  Contact Prince Corporation, 1-800-355-3515  Certain types of garage door openers are incompatible with the integrated garage door opener, in this case a universal receiver (fix kit receiver) can be installed, contact Prince Corporation, 1-800-355-3515
2.0	Non-USA vehicles only, continue to next test step.				
3.0	Garage door opener transmitter unit (A67n2) Voltage supply to Interior rear view mirror assembly (A67) (Model 129 as of 06/98)	A67 1.2 <b>( -</b> <sup>-</sup> <b>(!</b> ) <b>- -</b> 1.5	Ignition: <b>OFF</b> disconnect connector 1 at A67 Ignition: <b>ON</b>	11 – 14 V	If values are not OK: Fuse F1f18, Wiring.  If values are OK: Replace A67
4.0	Non-USA vehicles only, continue to next test step.				

## **Electrical Test Program – Test**

$\Rightarrow$	Test scope	Test connection	l	Test condition	Nominal value	Possible cause/Remedy
5.0	Garage door opener control module (N79), (Model 170 as of 06/98)	N79 1 — <b>∢</b> ——————————————————————————————————		Ignition: <b>OFF</b> Disconnect connector at N79 Ignition: <b>ON</b>	11 – 14 V	If values are not OK: Fuse F1f1, Wiring.  If values are OK: Replace N79
6.0	Garage door opener transmitter unit (A26/10) Voltage supply (Model 163 as of 06/98)	A — <b>(</b> ——————————————————————————————————		Ignition: <b>OFF</b> Disconnect connector at A26/10 Ignition: <b>ON</b>	11 – 14 V	If values are not OK: Fuse F1f10, Wiring.  If values are OK: Replace A26/10
7.0	Garage door opener transmitter unit (A67n2) Voltage supply from roof control unit control module (N70), (Model 215, 220)	A26/ 5.11— <b>(</b> —— <b>(</b> •—•••••••••••••••••••••••••••••••••••		Ignition: <b>OFF</b> Disconnect connector at N70 Ignition: <b>ON</b>	11 – 14 V	If values are not OK: Fuse F4f77, Wiring, Check roof control unit control module with DAS (N70)  If values are OK: Replace Interior rear view mirror assembly (A67)

## **Electrical Test Program – Test**

$\Rightarrow$	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
8.0	Garage door opener transmitter unit (A67n2) Voltage supply from roof control unit control module (N70), (Model 202, 208, 210, as of 06/98) (with auto-dimming interior rearview mirror)	N70 C.8 — C.4 (A) (A)	Ignition: <b>OFF</b> Disconnect connector C at N70 Ignition: <b>ON</b>	11 – 14 V	If values are not ok:  Model 202, 208: Fuse F1f19  Model 210: Fuse f4f4, Check N70  If values are ok: Replace Interior rear view mirror assembly (A67)