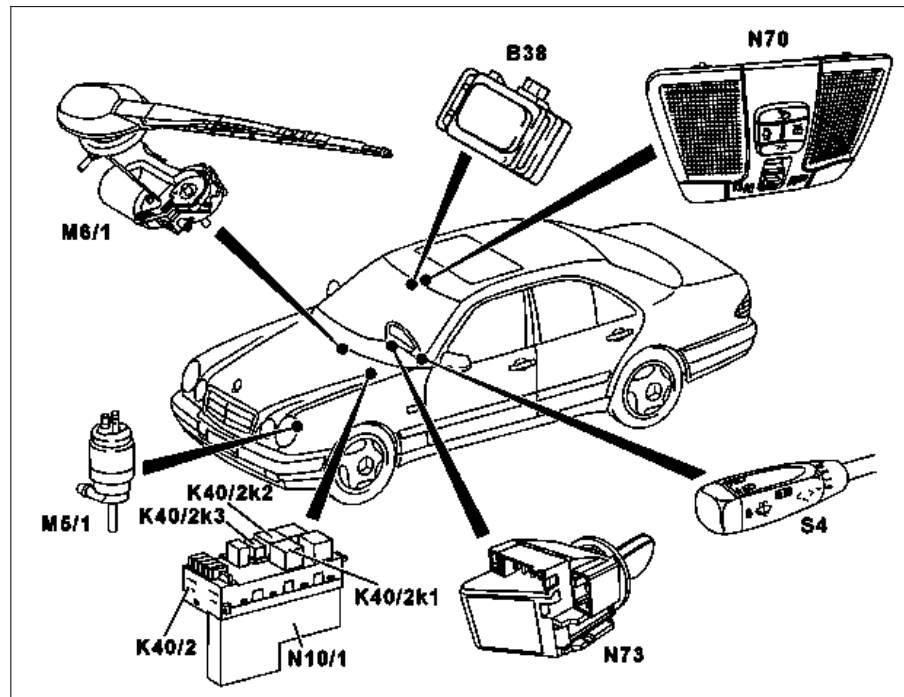


Location of components

B38	Rain sensor
K40/2	Fuse and relay module
K40/2k1	Wiper stage 1 relay
K40/2k2	Wiper stage 2 relay
K40/2k3	Windshield washer relay
M5/1	Windshield washer pump
M6/1	Wiper motor
N10/1	Signal acquisition and actuation module (SAM)
N73	Electronic ignition switch (EIS) control module
S4	Combination switch

Illustrated on model 210 with rain sensor
(code 345)

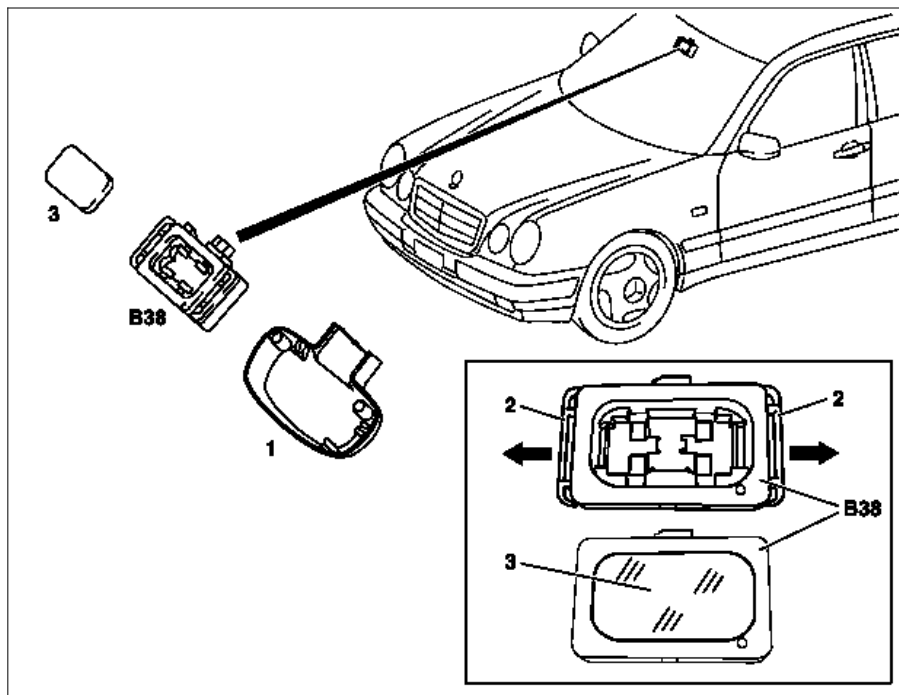


MODELS 129,
202 as of 1.6.97,
208, 210 with CODE (345a) Rain sensor

Shown on Model 210

- 1 Cover
- 2 Retaining clips
- 3 Lens

B38 Rain sensor



P82.30-0211-06

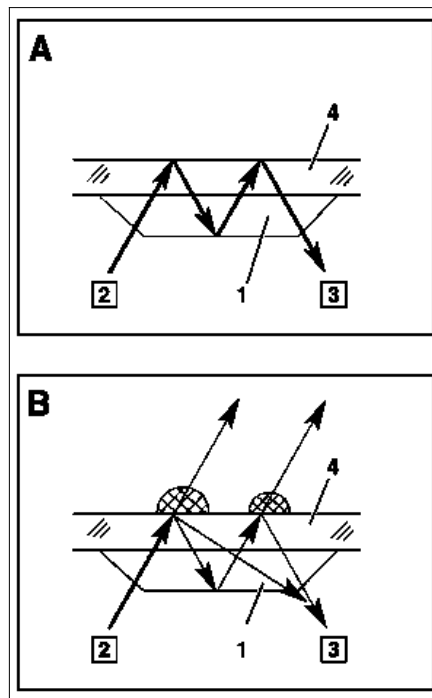
Modification notes

11.4.03	Disconnecting ground lead from battery newly included	Step 1	
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	Remove/Install		
1	Disconnect ground cable of battery		AR54.10-P-0003A
2	Remove cover (1)		
3	Release retaining clamps (2) from rain sensor (B38) on left and right		
4	Remove rain sensor (B38)	⚠ Lens (3) of rain sensor (B38) is bonded to the windshield and may not be removed, otherwise this damages the lens (3).	
5	Separate electrical connector at rain sensor (B38)		
6	Install in the reverse order		
7	Check for proper function		



Function principle

An infrared light beam is radiated by the infrared transmitter unit (2) and focused on the window (4) by the lens (1). If the window is dry in the area of the rain sensor (B38) the light is reflected almost completely (A). An IR receiver unit (3) is located at the other end of the lens which measures the percentage of light reflected. When the windshield in the area of the reflection surface is moist a portion of the light escapes from the glass (B). With increasing moisture the percentage of reflected light decreases. The rain sensor measures this percentage and transmits the reading via the CAN bus on request. The rain sensor (B38) is connected to the overhead control panel control module (N70) by the CAN bus. The signal acquisition and actuation module (SAM) (N10/1) transmits a request to the rain sensor (B38) via the CAN bus and the rain sensor indicates to the SAM the momentary quantity of moisture each time a request is received.



GF82.30-P-4103A	Location/purpose/design/function of rain sensor	14.12.96
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**MODEL 202 as of 1.6.97,
208, 210.081 /281,
210 (except 210.081 /281) as of 1.3.97 with CODE (345a) Rain sensor**

 GF	Location		GF82.30-P-0005-01A
	Purpose	The rain sensor measures the quantity of moisture on the windshield and controls the intermittent time for the wiper.	
	Design	The rain sensor consists of an IR transmitter and receiver and an electronic circuit for evaluation and communication via the CAN bus.	
 GF	Function		GF82.30-P-4103-02A