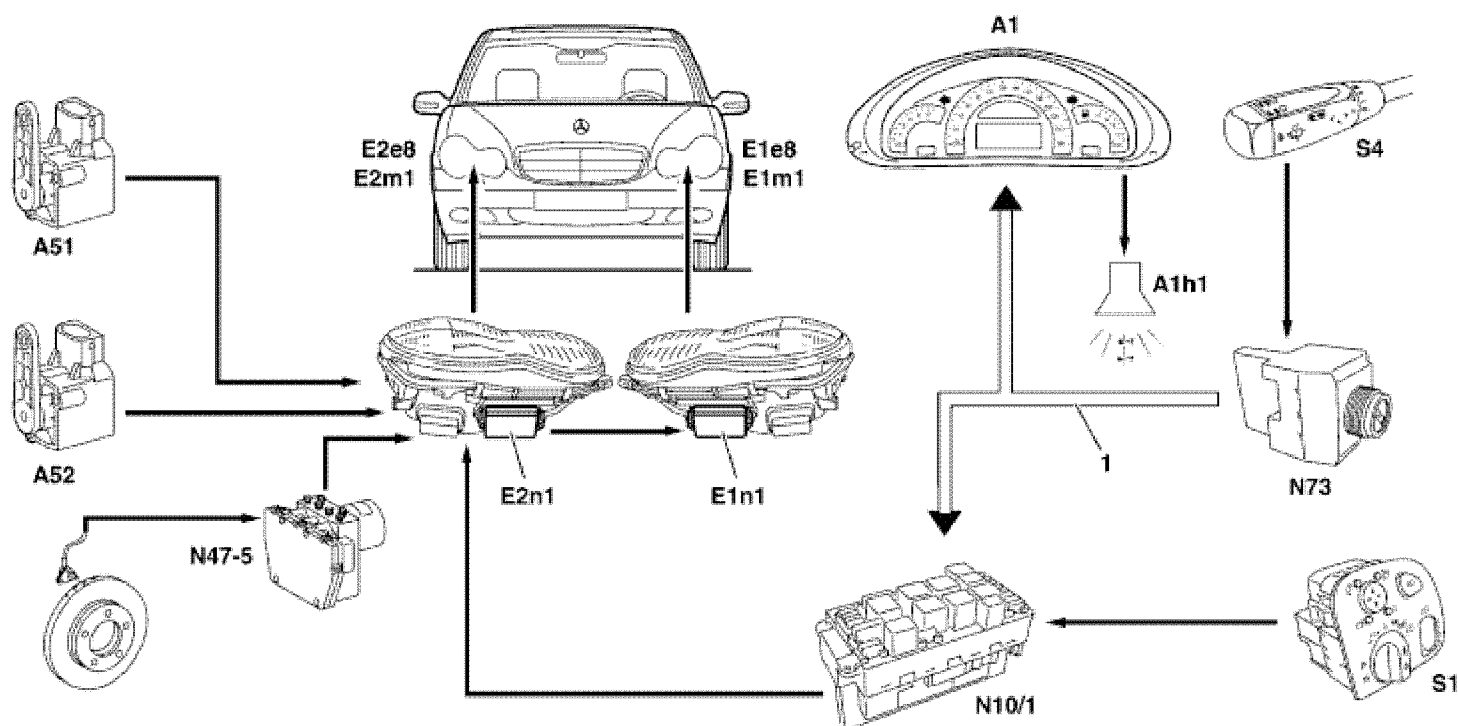


GF82.10-P-3002C

Low-beams actuation, function

24.1.00

MODEL 203 with CODE (612b) Xenon headlamp unit



P82.10-2661-09

Low beam actuation, function

i Up to 30.6.02 the SK designation is Xenon headlamp low beam (E1e8) and Xenon headlamp low beam (E2e8).

1 Interior CAN

A1 Instrument cluster
A1h1 Warning buzzer

A51 Rear axle sensor (headlamp range adjustment)

A52 Front axle sensor (headlamp range adjustment)

E1e8 Xenon headlamp

E1m1 Left headlamp range adjustment motor

E1n1 Xenon headlamp control module

E2m1 Right headlamp range adjustment motor

E2n1 Xenon headlamp control module

N10/1 Front SAM control module with fuse and relay module

N47-5 ESP and BAS control module


N73 DI control module

S1 Lamp switch module

*E2e8 Xenon headlamp**S4 Combination switch***Functional procedure**

Basic conditions:

- Combination switch (S4) set to "Low beam ON" position.
- The electronic ignition switch control module (N73) is programmed to "Xenon headlamp YES" and reports this and the position of the combination switch (S4) over the CAN interior to the front SAM control module with fuse and relay module (N10/1).

1 The exterior lamp switch (S1s1) of the light switch module (S1) is set to the  "headlamps ON" position.

2 The front SAM control module with fuse and relay module (N10/1) registers the applied position of the exterior lamp switch (S1s1).


5 The Xenon headlamp control modules (E1n1 and E2n2) start the low beam (E1e2 and E2e2) and activate at the same time the automatic headlamp range adjustment.

6 The Xenon headlamp control module (E2n1) in the right front headlamp unit (E2) records the signals of the headlamp range adjustment front axle sensor (A52), the headlamp range adjustment rear axle sensor (A51) and the ESP and BAS control modules (N47-5) and sends them to the Xenon headlamp control module (E1n1) in the left front headlamp unit (E1).

7 The Xenon headlamp control modules (E1n1 and E2n1) compare the signals with the headlamp setting at any given time and actuate, if necessary, the left and right headlamp range adjustment motors (E1m1 and E2m1) to correct the low beam incline angle.

3 The front SAM control module with fuse and relay module (N10/1) actuates the standing lamp in the left front headlamp unit (E1) and right front headlamp unit (E2) and simultaneously reports over the CAN interior the "standing lamp ON" signal to the rear SAM control module with fuse and relay module (N10/2) and "low beam ON" to the Xenon headlamp control module (E2n1).

4 The Xenon headlamp control module (E2n1) in the right front headlamp unit (E2) sends the "low beam ON " signal to the Xenon headlamp control module (E1n1) in the left front headlamp unit (E1).

 In the "Driving light ON" position the low beam and standing lamps are driven together.

Driving-speed dependent adjustment rate

- The signal from the ESP and BAS control modules (N47-5) reports the current vehicle status to the Xenon headlamp control modules (E1n1 and E2n1).
- If the vehicle is at a standstill or at constant ground speed the motors operate at a lower angle of adjustment (static mode).
- If the vehicle is accelerating or braking, the adjustment rate is increased (dynamic mode).

Front SAM control module with fuse and relay module, location/task/design	GF54.21-P-4108PP
Lamp switch module, location/task/design	GF54.25-P-4103A