

82-0980 Function of anti-theft warning system (EDW) Standard and versions

For wiring diagrams see Wiring Diagrams
Passenger Cars Volume 3.1 and 4.

A. General

The anti-theft warning system is a contact-controlled system with an audible alarm signal. After the alarm is activated, the audible warning sounds intermittently for about 30 seconds by means of an additional horn.



The anti-theft warning system is a contact-controlled system with an audible and a visual alarm signal. After the alarm has been activated, the audible warning sounds intermittently for about 60 seconds by means of an additional horn and once again for 60 seconds after an interval of about 30 seconds.


Parallel to this, the low beam and the tail lights flash for about 150 seconds. If the side (tail) or parking lamp is switched on when the alarm is activated, only the low beam headlamps flash.

The anti-theft warning system is combined with the locking system. Up to 08/87 the anti-theft warning system can be switched on and off only with the main key at the front doors and at the trunk lock.

With effect from 09/87 the system can also be switched on and off with the secondary key.



The following parts of the car are incorporated in the security system:

- all car doors
- hood and trunk lid
- radio (removal)
- brakes (operation)
- ignition (operation, short-circuiting)
- change in attitude of car at one side (towing-away protection) no longer fitted as of 03/87, for  as of 07/86

If the car is transported by car ferry or on a car-carrying train, or is parked in a double-decker style garage, the system must not be switched on otherwise the alarm will be unintentionally activated. In this case, the car should be locked only with the secondary key.

Car keys

The following keys are supplied with models fitted with anti-theft warning system:

Main key, 2 keys – with angular grip and red clip. The car can be fully operated with this key. The anti-theft warning system is switched on or off from the lock of the front left and front right doors and also from the trunk lid lock.

Main key, 1 key – as replacement key, welded in transparent plastic cover.



Up to 08/87

Secondary key, 1 key – with rounded grip. All points on the car can be operated with this key except for the glove box lock and trunk lid lock. Please note that the anti-theft warning system cannot be switched on or off in this case.

As of 09/87

Secondary key, 1 key – with rounded grip. All points on the car can be operated with this key except for the glove box lock and trunk lid lock. The anti-theft warning system cannot be switched on or off at the lock of the front right and front left doors.

Replacement keys can be ordered by stating the code number or lock number.

Lock cylinder and switch are a unit and can only be replaced complete.

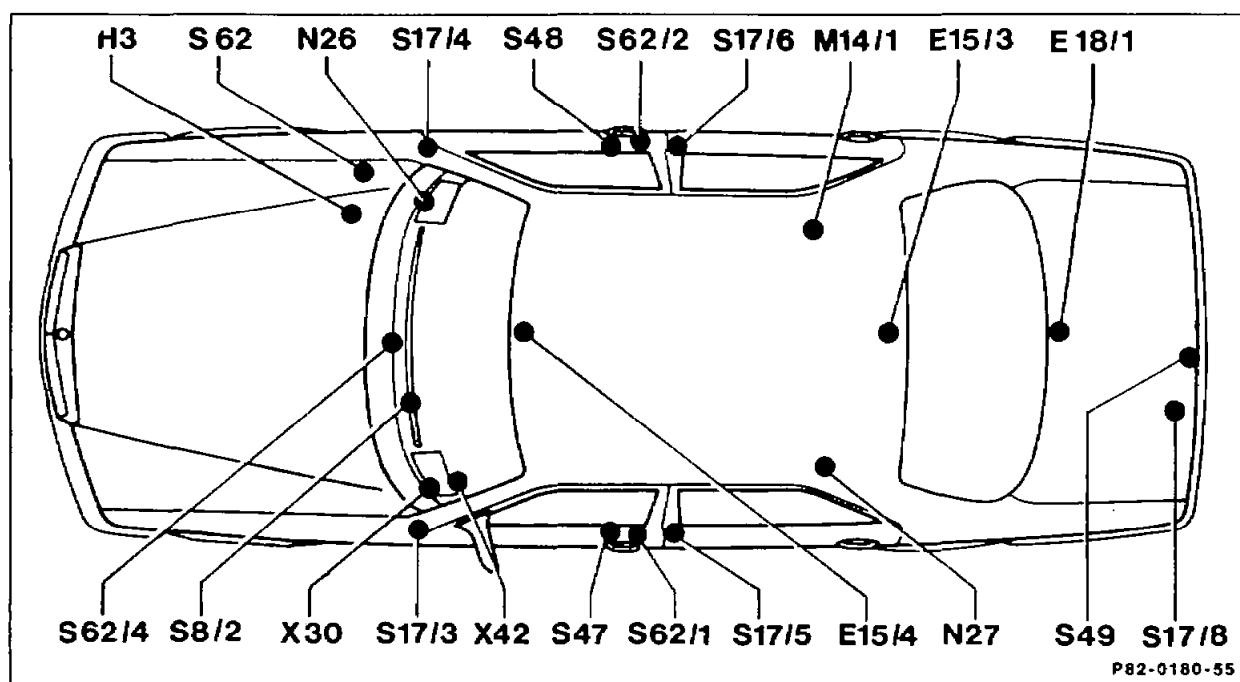


Radio anti-theft protection

If the radio is removed when the anti-theft warning system is switched on, the radio set is rendered unusable and will only operate after being repaired at the maker's Becker.



Arrangement diagram



E15/3	Rear dome lamp
E15/4	Dome lamp with reading lamp and seat belt reminder
E18/1	Trunk lamp
H3	Alarm signal horn
M14/1	Central locking system supply pump
N26	Anti-theft warning system (EDW) control unit
N27	Anti-towing sensor (not applicable as of 03/87, ^{USA} as of 07/86)
S8/2	Warning buzzer contact, exterior light/central locking system
S17/3	Front left door contact switch
S17/4	Front right door contact switch
S17/5	Rear left door contact switch
S17/6	Rear right door contact switch
S17/8	Trunk lamp switch

S47	Front left door actuator
S48	Front right door actuator
S49	Trunk lid lock actuator
S62	Hood switch, anti-theft warning system
S62/1	Front left door switch, anti-theft warning system
S62/2	Front right door switch, anti-theft warning system
S62/4	Radio security contact, anti-theft warning system
X30	Plug connection, optional equipment block
X37/1	Plug connection, anti-theft warning system wiring harness, front left door (not applicable as of 09/87)
X37/2	Plug connection, anti-theft warning system wiring harness, front right door (not applicable as of 09/87)
X42	Plug connection, front/rear anti-theft warning system

B. Switching system on and off

Switching system on

When the front left or front right door is closed, the switch (wiring diagram item S62/1 and S62/2, respectively) is actuated at the same time. The "negative" which is supplied to the switch along the brown cable (connection no. 1) is connected to the yellow/blue cable (connection no. 3) and switched as a pulse to the ATA control unit (N26, connection no. 6 of 8-pin connector). The system is switched on.

When the trunk is closed, the system is switched on by the actuator of the central locking system at the trunk lid lock. The negative voltage which exists at the actuator (S49) (brown/white cable, connection no. 3) is passed via the 3-pin plug connection (X43) with the yellow cable to the ATA control unit (N26, connection no. 4 of the 14-pin connector). The system is switched on.

If a door, the hood or the trunk lid is opened, if the radio is removed, if the ignition lock is switched on or jumpered, or if the service brake is operated, the control unit is activated through the respective contact switch and the alarm triggered.




If the attitude of the protected vehicle is altered at one side, the alarm is likewise triggered.

An additional device developed as a towing-away protection triggers the alarm as follows:

- change in attitude of longitudinal axis by 2.2°
- change in attitude of transverse axis by 1.2°

In other words, if the vehicle is raised, the alarm must be activated after not more than 100 mm (measured at wheelhouse).

Note

Towing-away protection no longer fitted as of 03/87,  07/86.

The system has a cut-in delay of 15 seconds. If individual doors remain open for longer than 15 seconds to remove objects after the system has been switched on, the alarm is not activated after this time delay has elapsed. If the door is closed, this area is switched on, in other words if the door is re-opened, the alarm is triggered.

Alarm signal

Basic version

The alarm horn (H3) is activated intermittently by the control unit for about 30 seconds. This alarm of about 30 seconds' duration continues to sound even if the activator (e.g. the door) is immediately closed again.



Version

The audible alarm horn is activated by the control unit intermittently for about 60 seconds and, following an interval of about 30 second, for a further 60 seconds. The visual alarm signal flashes simultaneously for about 150 seconds. The alarm remains operating even if the activator (e.g. the door) is immediately closed again.

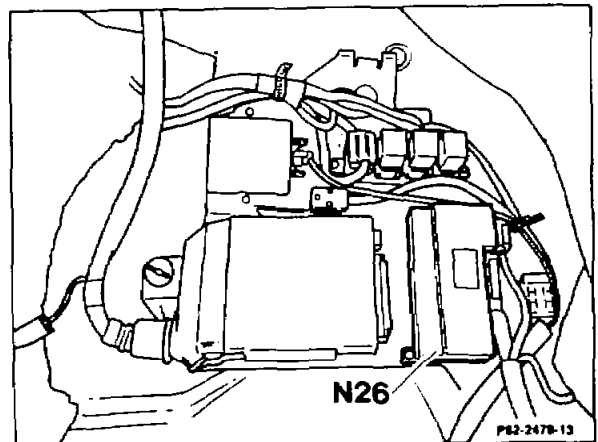
Switching off system

If the front left or front right door is opened, the respective switch (wiring diagram item S62/1 and S62/2, respectively) is activated at the same time. The negative voltage applied to the switch along the brown cable (connection no. 1) is connected with the green/yellow cable (connection no. 2) and is switched as a pulse to the ATA control unit (N26, connection no. 7 of the 8-pin connector). The system is switched off.

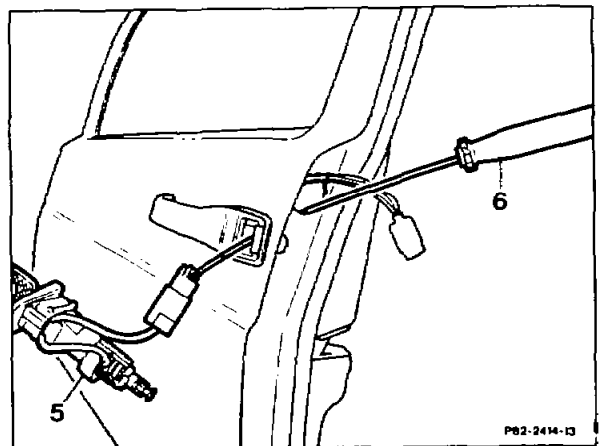
If the trunk is opened, the system is switched off by the actuator of the central locking system at the trunk lid lock. The positive voltage which exists at the actuator (S49) is connected through the 3-pin plug connections (X43) to the yellow cable and to the ATA control unit (N26, connection no. 4 of the 14-pin connector). The system is switched off.

C. Location of components

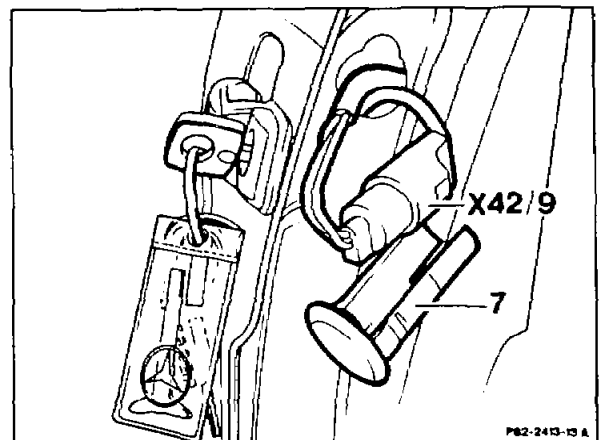
N26 ATA control unit
(in right footwell, below footrest)



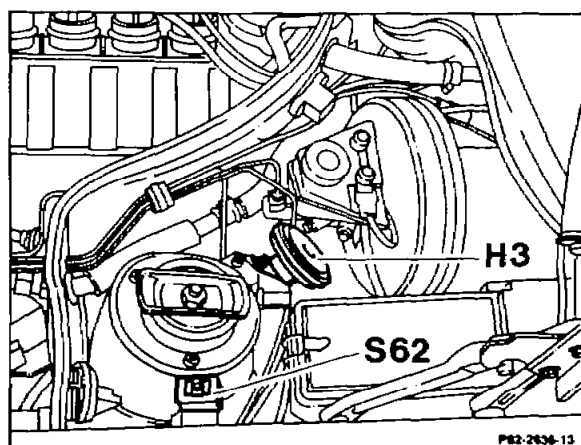
5 Front left door switch at lock (S62/1)
6 Assembly tool




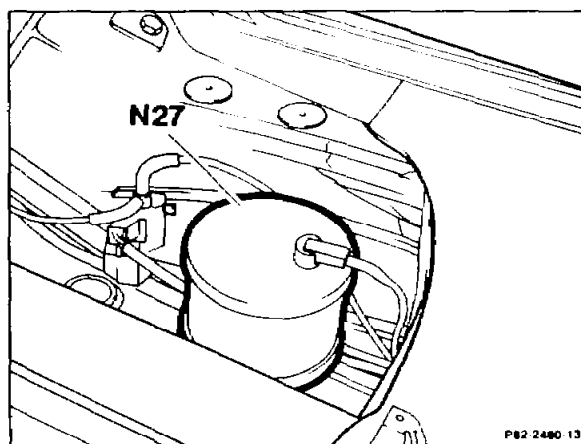
N62/1 Plug connection, anti-theft warning system wiring
harness, front left door
7 Cover



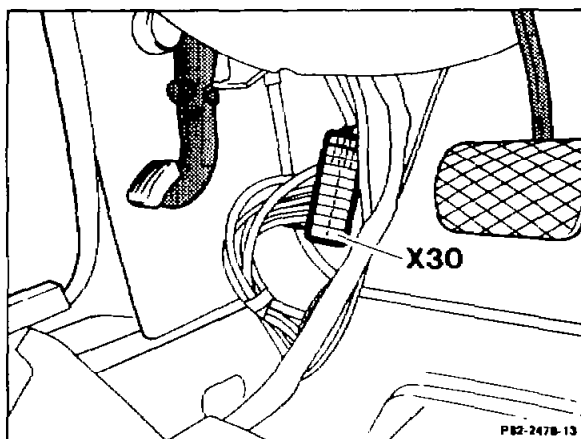
H3 Alarm horn
S62 Hood switch



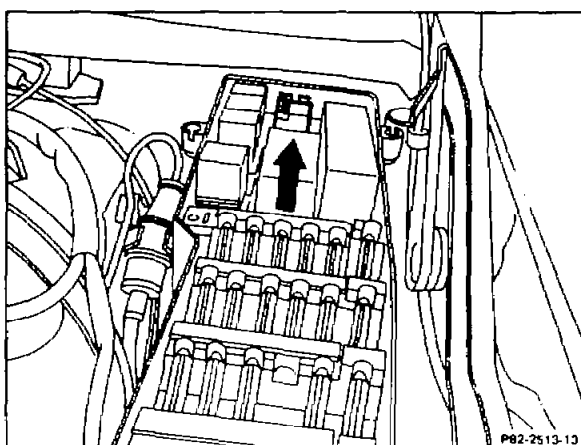
N27 Anti-towing sensor
(n.a. as of 03/87,  as of 07/86)



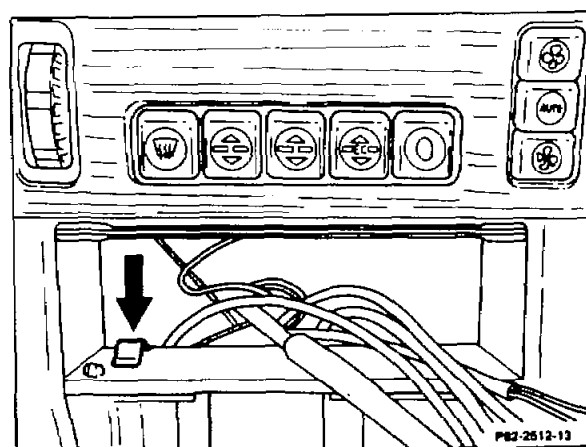
X30 Plug connection, optional equipment block



Auxiliary fuse box, anti-theft warning system 



S62/4 Security contact, anti-theft warning system/radio
up to 08/86



X42/13 Plug connection, anti-theft warning system/radio
(1-pin) as of 09/86

