

The primary tasks of the Extended Activity Module (EAM, N10/1) are as follows:

- D To control the door sill lights
- D To suppress the auto-dimming mirror function
- D To control the headlight cleaning system (HCS)
- D To control the rear window defroster
- D To control seat heating
- D To control the power supply via control console to tilt/sliding or louvered sunroof switch
- D To control the PTC heater booster (R22/3)
- D To control the auxiliary fan (M4)
- D To read the cruise control switch (S40) and relay data to control module (DAS, N73/1)
- D To read the contacts for wiper speed settings 1 and 2 on combination switch (S4) for diagnosis.

To perform these tasks the Extended Activity Module (EAM, N10/1) reads various signals and switch settings directly. The Extended Activity Module (EAM, N10/1) interfaces with other control modules via the engine compartment CAN.

Details:

Door sill lights

When the front interior light is on and one of the front doors is open, or when the rear interior light is on and one of the back doors is open, the door sill lights for the open door will illuminate.

Headlight cleaning system (HCS)

Activating a separate switch causes the EAM to send a turn-on signal to the HCS pump relay.

EAM will send an additional turn-on signal to the HCS pump relay only after the cleaning operation is completed and a "rest period" of approximately 2.5 sec. has passed.

Auto-dimming mirror function

The auto-dimming mirror function is suppressed when the interior light is on or reverse gear is engaged.

Auto-dimming suppression for the outside rearview mirror (slave) is activated by the inside rearview mirror (master).

Heater booster/PTC air heater for diesel engines

EAM monitors system voltage and adjusts heater booster capacity to minimize load on battery.

Diagnosis

Diagnosis is performed using the Star diagnostic tool. To facilitate this task, the Extended Activity Module (EAM, N10/1) is equipped with its own diagnostics cable.

This cable is also used to diagnose the **All Activity Module (AAM, N10)** and the **transfer case control module (N78)**.

- i** The Extended Activity Module (EAM, N10/1) is linked to the All Activity Module (AAM, N10) via the **engine compartment CAN**. Data communication between the All Activity Module (AAM, N10) and the Extended Activity Module (EAM, N10/1) is assumed by the **CAN (N10 - N10/1)** when terminal 15 is off.

- i** The **CAN (N10 - N10/1)** is an independent CAN bus located between the All Activity Module (AAM, N10) and the Extended Activity Module (EAM, N10/1). **No other** control modules are connected to the CAN (N10 - N10/1).
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Rear window defroster

EAM sets maximum ON time for rear window defroster depending on outdoor temperature and current vehicle speed.

- D Standard ON time: 10 min.
- D Outdoor temperature < 5o C: Additional 5 min.
- D Speed >80 km/h: Additional 3 min.

Seat heating

Sets maximum seat heating time.

- D Setting 1: max. 20 min.
- D Setting 2: max. 5 min.

Tilt/sliding or louvered sunroofs

Signal via AAM2 allows operation of tilt/sliding or louvered sunroofs when ignition is on (standard mode) or off (keyless mode).

Ignition authorization via CAN

The EAM issues ignition authorization to AAM2 via the engine compartment CAN depending on the requirements of the engine control unit in connection with the FBM.