## Function

All trucks<sup>1</sup> are equipped with a function for displaying warning messages for open hatches. A warning message can be used for different types of hatches where there is a sensor indicating that the hatch is open or closed.

Warning messages can be displayed for 5 hatches located on the chassis frame and in the bodywork.

For safety reasons, Scania recommends the warning function to be installed.





Function

<sup>1.</sup> The function is not available for tractors.

## **Behaviour**

The warning message is presented as a display message in the instrument cluster (ICL). The message shows where the hatch that generated the warning message is located.





**Behaviour** 





#### Chassis conditions

## **Chassis conditions**

Preparations from the factory			
Option	Alternative	Variant code	
BCI <sup>a</sup> functionality	With	5837A	
If required			
Bodywork cable harness from cab to frame	7-pin	2411B	
	7+7-pin	2411E	
	7+7+7-pin	2411F	
Bodywork cable harness in frame	2 m	3023A	
	8 m	3023D	
	12 m	3023C	

a. Bodywork Communication Interface





Activation

### Activation

Type of activation	Activation method
Internal vehicle signal	A function in the vehicle, fitted at the factory.
Analogue signal	Via connector C259 in the bodywork console.
External CAN <sup>a</sup> network	CAN message

a. Controller Area Network

Information on CAN messages is found in the document External CAN Communication Specification.

#### Activation using internal vehicle signals and analogue signals

Different functions in the vehicle are factors that affect the activation.

Internal signals in the vehicle come from a function fitted at the factory. Examples of factors that can affect the activation by using internal signals are applied parking brake and gearbox in drive mode.

Use analogue signals when a factor does not generate an internal signal as above. Examples of factors that can affect the activation by using analogue signals are an activated switch in the instrument panel or a sensor in the bodywork.

Define when and how the activation is to take place by using BICT (Bodywork Interface Communication Tool) and SDP3 for bodybuilders (Scania Diagnos and Programmer 3):

- 1. Create a logic diagram in BICT that defines which factors shall affect the activation. Factors can be, for example, functions in the vehicle that generate internal signals or switches that generate analogue signals.
- 2. Define parameters in SDP3 which state the conditions for how and when the different factors shall affect the activation.





Activation

The logic diagram is transferred, together with the parameters, to the vehicle's BCI control unit using SDP3 for bodybuilders.

*More information on BICT is found in the document BCI, Bodywork Communication Interface.* 

#### Activation by using external CAN network

When a vehicle is equipped with BCI functionality, a connection to the external CAN network via connector C493 for bodywork is included.

- The external CAN network is activated by using SDP3 for bodybuilders.
- A CAN message defines when and how the function is to be activated.

Connection can be made either via an expansion unit or an external control unit.



# Connection

The examples show a connection where each hatch has its own signal. Several hatches can also be connected in series to a common signal.

#### Example of an analogue connection

Pos.	Designation	Information	
1	Cables	Minimum permitted cable cross section is 0.75 mm <sup>2</sup> .	
		Connect the cables from C259, any position 1-10, to con- nector C494, any free positions. The choice of positions in C494 affects the connection in the DIN connector on the chassis frame.	
2	Cable harness from cab to frame	Installed at factory.	
3	Cables	Connect the cables from the hatch sensor to DIN connec- tor C486, C487 or C488 depending on which positions have been used in C494.	
4	Cables	Connect the sensors to a ground connection in the left- hand frame side member.	

The signal to C259 is active when the hatch is open and the circuit closed.

Information on ground connections is found in the document Power supply and ground connections.

Information on the DIN connectors is found in the document Cable harnesses for bodywork functions.

Information on the connectors is found in the following documents:

- Connector C259 BCI-controlled functions
- Connector C494 Bodywork functions





22:10-771 Issue 1 2016-09-27



Connection

#### Example of a logic diagram in BICT

	Image: Conditional output signal       Image: Condit output signal       Image: Conditional ou		
Pos.	Description	Options	
1	Factors that will affect the activation of the function.	The following options are available to select factors:	
		Specific functions in the vehicle.	
		• Analogue signals via optional position in C259 with connection to the BCI control unit. Settings:	
		<ul> <li>Position in C259, 1-10</li> <li>High or low signal</li> </ul>	
		Rewrite the text in the grey box so that it is clear from where the signal comes, for example a spe- cific switch or sensor.	
2	2 Only used if there are conditions that shall affect the activation of the function.	Conditional output signal.	
		Values for the conditions are defined by using SDP3 for bodybuilders.	
3	The function to be activated if all conditions are fulfilled.	Activate warning message for a hatch.	
		The behaviour cannot be configured.	
		There are 5 functions to choose from depending on the location of the hatch.	

More information on conditional output signals is found in the document Conditional output signals.





Connection

# Example of a connection via an expansion unit or external control unit

Pos.	Designation	Information
1	CAN cable <sup>a</sup>	Connect the CAN cable from C493 to the external control unit/expansion unit A.
2	Cable	Connect to the external control unit/ any position 1-10 on the expansion unit.
		Minimum permitted cable cross section is 1.5 mm <sup>2</sup> .
3	Cable harness	Connect the sensors to a ground connection in the left- hand frame side member.

a. A CAN cable is always pair-twisted. The pair-twisted cable consists of a cable for CAN-high and a cable for CAN-low.

Information on ground connections is found in the document Power supply and ground connections.

Information on connection to C493 is found in the document Connector C493 – BCIcontrolled bodywork functions.

Information on connection to the expansion unit is found in the document Installing expansion units.

*More information on CAN and external CAN network is found in the following doc-uments:* 

- CAN interface for bodywork
- External CAN Communication Specification
- General information on CAN



