

Linde Material Handling

Linde



Motion detection assistance system (Motion Detection)

Original instructions

**120x, 125x,
38x, 39x, 1279**

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Contact



Linde Material Handling GmbH
Carl-von-Linde-Platz
63743 Aschaffenburg, Germany
Telephone: +49 (0) 6021 99-0
Fax: +49 (0) 6021 99-1570
Email: info@linde-mh.de
Website: <http://www.linde-mh.de>

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Motion detection assistance system (Motion Detection)

Introduction

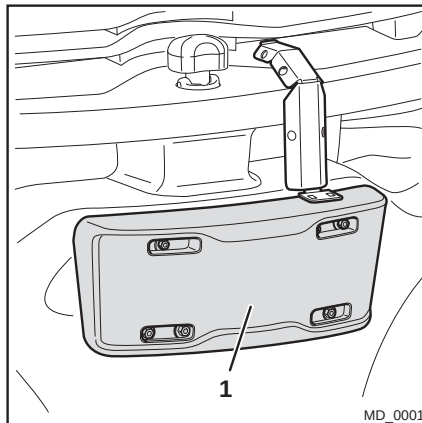
Introduction

The motion detection assistance system (1) supports the driver and helps to avoid possible collisions at the rear of the truck. Moving persons or objects behind the truck are detected by the assistance system.



NOTE

- *The motion detection assistance system changes the operation of the truck and therefore influences the hazard assessment. For this reason, the hazard assessment must be adapted in accordance with the national health and safety directives.*
- *The driver must receive training in the use of the assistance system and familiarise themselves with the operation of the assistance system.*
- *The use of the assistance system is not recommended e.g. in areas where there are lots of objects swirling through the air or in environments with extreme heat (foundry, blast furnace).*
- *Trailer operation is not possible because the towing pin is occupied by the sensor for the motion detection assistance system.*



Restricted approval for use

The motion detection assistance system is approved for use in the European Economic Area, the USA and Japan. Available for other countries on request.

The national regulations for using radar sensors must be observed.

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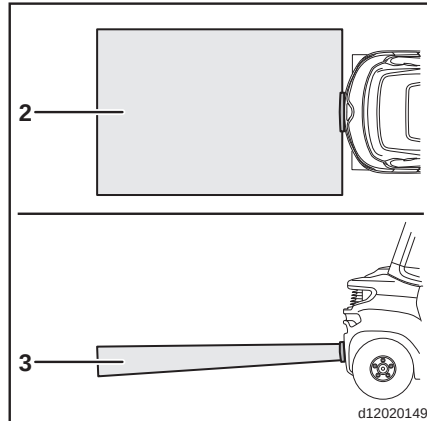
Function

Monitoring area

Monitoring area

The motion detection assistance system is only active when the truck is at a standstill and monitors the area (2) and (3) behind the truck. ▷

If moving persons or objects have been detected, the truck is prevented from moving from a standstill. In addition, a message appears in the display unit and the buzzer sounds.



Operation

⚠ WARNING

Collision with stationary persons or stationary objects is possible.

The motion detection assistance system has a supporting function. The responsibility for operating the truck in a safe manner always lies with the driver.

Persons who remain behind the truck and objects that are no longer moving are no longer detected after 1 s (factory setting).

➤ Check rear area!

⚠ CAUTION

Damage when manoeuvring.

Take into account the overhang of the motion detection assistance system (1) on the counterweight of the truck.

➤ Sit in the driver's seat.



NOTE

The assistance system is active only when the driver's seat is occupied.

➤ Switch on the electrical system.

Once the electrical system is switched on and the symbol (4) in the status bar illuminates in the display unit, the motion detection assistance system is active.



Persons or objects detected

If persons or objects are detected, the message "Check rear area" appears in the display unit and the buzzer sounds.

Moving off in the backwards drive direction is prevented.

- To switch off the message, push the  button or the  "rotary-push button" on the 120x/125x series.

It is also possible to prevent the truck from moving off in the forwards drive direction (optional) when persons or objects are detected behind the truck and a specific steering angle is set.

Persons or objects are no longer detected

When persons or objects are no longer detected in the monitoring area, the message "Check rear area" is cleared after 1 second (factory setting) and the buzzer stops.

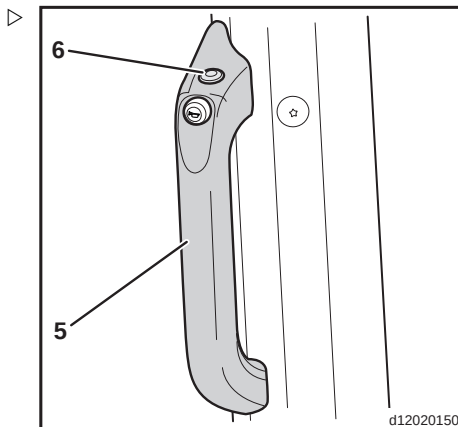
- Moving off in the backwards drive direction is possible again after the accelerator pedal has been moved once to the neutral position.

Operation

Switching off

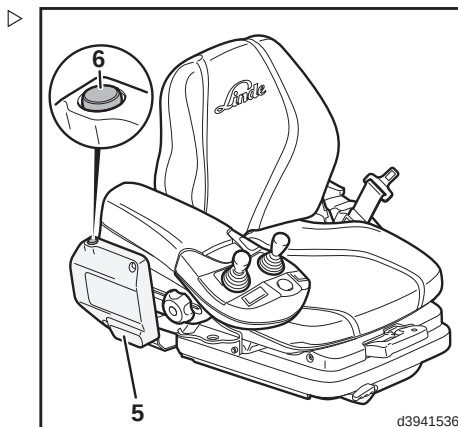
120x and 125x series:

An additional handle (5) with an integrated push button (6) for temporarily deactivating monitoring is installed on the right-hand side at the rear.



39x, 38x and 1279 series:

A console (5) with a push button (6) for temporarily deactivating monitoring is installed on the right-hand side of the driver's seat. In some truck variants, the push button (6) is located behind the armrest for space reasons.



⚠ WARNING

Collision with persons or objects is possible.

Only actuate the push button (6) in exceptional cases and with direct eye contact in the backwards drive direction.

➤ Briefly push the push button (6).

Monitoring is deactivated for approx. 10 seconds (factory setting). The symbol (4) flashes and the message "Check rear area. Assistance system inactive." appears in the display unit.



➤ Moving off in the backwards drive direction is possible again after the accelerator pedal has been moved once to the neutral position.

➤ Check rear area!

Impairments

Contamination

If the message "Clean sensor" appears in the display unit with the symbol (7) and the buzzer sounds briefly, the motion detection assistance system (1) must be cleaned. The motion detection assistance system is deactivated. The truck will then only move at a reduced driving speed.

➤ Clean the sensor.

The symbol (4) is hidden in the status bar of the display unit.

After cleaning, monitoring is automatically re-activated and the reduced driving speed is cancelled.



Heavy rain

In certain ambient conditions, such as heavy rain, the sensor view is limited and the monitoring functionality may be impaired.

The message "Limited sensor view" appears in the display unit with the symbol (7) and the buzzer sounds. The motion detection assistance system is deactivated.



The symbol (4) is hidden in the status bar of the display unit.

When the rain eases, monitoring automatically becomes active again.



Unintentional triggering

In areas where several objects swirl through the air, the truck may also be prevented from moving off.

Daily testing

Daily testing

- Check the motion detection assistance system (1) for contamination and damage before starting each shift. Clean as required.

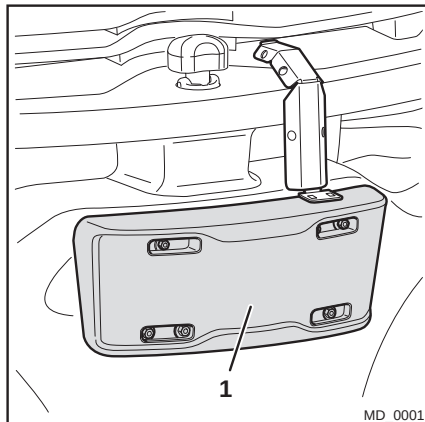


NOTE

Clean with a damp cloth or commercially available cleaners.

- Check the external cable duct for damage.

If there is any damage, contact your service partner.



Settings

The following settings can be configured by the service partner:

- Lateral range: 0...4 m
- Rear range: 0...10 m
- Warning via buzzer: on/off
- Buzzer activation time
- Monitoring time (factory setting: 1 s)
- Monitoring deactivation time via push button (6) (factory setting: 10 s)
- Moving off in the forwards drive direction (optional): on/off

- Contact your service partner.

Malfunctions

In the event of malfunctions in the motion detection assistance system, the symbol (4) in the status bar of the display unit is hidden.

Malfunction due to operating error

The push button for temporarily deactivating the motion detection assistance system was pressed for longer than 10 s.



The truck will then only move at a reduced driving speed.

The message "Check rear area. Assistance system disabled permanently." appears in the display unit with the symbol (8) and the buzzer sounds. The motion detection assistance system is permanently deactivated.

➤ Check rear area!

Remedy

➤ Switch the electrical system off and on again.

The motion detection assistance system is active again and the reduced driving speed is cancelled.

Critical malfunction

Implausible signals or components (e.g. sensor) are defective. The truck will then only move at a reduced driving speed.

The message "Check rear area. Assistance system error. Contact your service partner." appears in the display unit with the symbol (8) and the buzzer sounds. The motion detection assistance system is permanently deactivated.

➤ Check rear area!

Remedy

➤ Decommission the truck. Contact your service partner.



To tow the truck

The course of action and safety information for towing a truck are described in the relevant operating instructions for the truck.

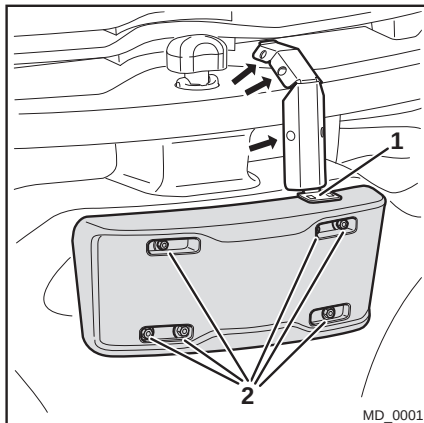
On trucks with a retrofitted motion detection assistance system, the towing pin is occupied by the sensor unit.

The sensor unit must be removed before the towing pin can be used for towing.

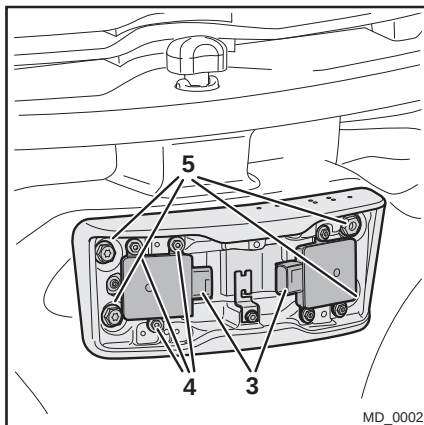
2 Function

To tow the truck

- Remove the cable ties from under the cable duct. ▷
- Unscrew the screws (1) from the cable duct and remove the cable duct.
- Unscrew the six screws (2) from the cover of the sensor unit.



- Disconnect the plug from the sensors (3). When doing so, remove the cable ties. ▷
- Unscrew the three screws (4) from each of the two sensors.
- Unscrew the four screws (5) from the forged part.



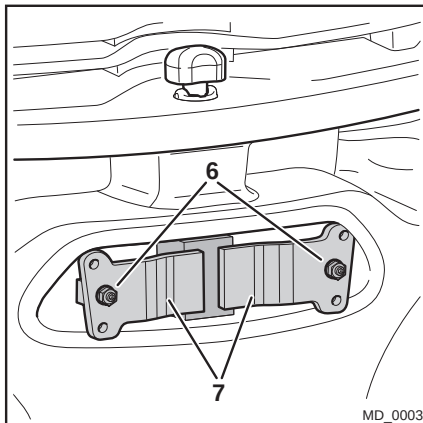
- Loosen the lock screws (6) and remove the support for the forged part (7). ▷
- Secure the cable for the motion detection assistance system to the grille.

The towing pin is now accessible and can be used to tow the truck.



NOTE

After reassembling the sensor unit, the sensors must be reinitialised by the service partner.



2 Function

To tow the truck



