



Service Manual en

VCE150A, 150AC, 125ASF, 125ACSF C15 (serial number: 564221-919698)

Valid from serial number: 919699-

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This manual covers following truck models:

T-code	Model	Serial number
712	C15	564221-919698
712	VCE150A/ VCE150AC	919699-
713	VCE125ASF/ VCE125ACSF	919699-

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2-Presentation of the truck – M2 (t-code 712)

2.1 Ergonomics

VCE150A/VCE150AC has been designed to meet the highest requirements on efficient VNA equipment in terms of high performance, excellent ergonomics, and continuous availability.

The truck has been designed to make both pallet handling and order picking highly ergonomic. The mast, cab front and fork carriage are designed to promote good visibility both to the front and rear, thus allowing safe and efficient handling of goods. The operator's position can be easily adapted to allow a comfortable working position with all controls and information panels within easy reach. Emphasis has been placed on an ideal work environment for the operators with low noise and whenever possible a low stress level to enable them to perform at their best while at the same time feeling well.

2.2 Performance

The truck uses articulated steering allowing smooth manoeuvring both in and outside narrow aisles. It can be ordered both for rail guided and wire guided narrow aisle systems. It has four wheel and two drive motors which together with the rigid mast afford safe and efficient load handling even for high lifts. Thanks to its high stability, the maximum travel speed of 10 km/h can be used even for high cabin heights, adding to the high performance and low operational cost of the truck.

It is equipped with a newly developed fork unit that includes design solutions, which are new for this type of truck. Traversing is controlled by a hydraulic motor and synchronous drive belts allowing close to silent traversing and a design that requires almost no maintenance at all.

To increase the lift speed of the main lift and conserve energy, the truck uses a hydraulic-pneumatic lifting system. A balance cylinder is the main component in this system. The balance cylinder is at the rear of the mast and consists of a pressure chamber filled with gas. Using this design, it is possible to properly balance the weight of the mast and cabin. In actual use, the hydraulic pressure that builds up when the operator cabin is lowered is accumulated in the balance cylinder and used for the next lifting operation.

Together with regenerative feedback of power to the battery during lowering operations, this makes the VCE150A/VCE150AC a truck with impressive lifting performance.

Presentation of the truck – M2 (t-code 712)

Electrical system

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2.3 Electrical system

The truck uses a 48 V electric system and is operated with ergonomic controls and pushbuttons. In the centre of the control panel, a colour Integrated Control Panel (ICP) presents all necessary information of the truck's status to the operator. The electric system of the truck incorporates the latest advances in CAN technologies, thus increasing the number of operating modes while reducing the cabling requirements. The truck's movements are supervised by a microcomputer and controlled by acceleration/retardation sensors. By adjusting the truck parameters in the main computer, it is possible to tailor truck movements and behaviour to an extended range of applications. The drive and lifting movements are smooth and uniform, further enhancing the high level of operator comfort.

2.3.1 Intended application of the truck

The truck is designed and manufactured to carry out order picking and pallet handling inside a warehouse. The truck should be fitted with the appropriate accessories relevant to the application.

2.3.2 Forbidden application of the truck



The truck has been designed for order picking and pallet handling indoors. It is not permitted to use the truck for other purposes including the following:

- In areas that contain dust or gases which can cause fires or explosions
- As a tow-truck for trailers
- To tow other trucks
- To transport/lift passengers
- For work on sloping floors