

Toyota Very Narrow Aisle Trucks

The BT Vector Range



BT Vector R-series

MAN-DOWN VNA TRUCK



Man-down VNA truck suitable for pallet handling in medium-intensity operations. Turret head forks or high speed slide-through fork versions

1.25 – 1.5 TONNES LOAD CAPACITIES

LIFT HEIGHTS UP TO 11.3 M

P. 4-7

BT Vector C-series

MAN-UP VNA TRUCK
WITH TURRET HEAD FORKS



Man-up combi truck performing best in medium to high-intensity pallet handling or order picking applications

1.0 – 1.35 TONNES LOAD CAPACITIES

LIFT HEIGHTS UP TO 15.1 M

P. 8-11

BT Vector A-series

MAN-UP VNA TRUCK WITH ARTICULATED CHASSIS
AND SLIDE-THROUGH FORKS



Trucks with articulated chassis providing high-level order picking and full-pallet handling and the space saving benefits of advanced VNA operation.

1.25 – 1.5 TONNES LOAD CAPACITIES

LIFT HEIGHTS UP TO 14.3 M

P. 12-15

BT Vector A-series

MAN-UP VNA TRUCK WITH ARTICULATED CHASSIS



Trucks with articulated chassis providing high-level order picking and full-pallet handling and the space saving benefits of advanced VNA operation.

1.2 TONNES LOAD CAPACITY

LIFT HEIGHTS UP TO 13.4 M

P. 12-15



TOYOTA BT VECTOR R-SERIES



For man-down work, the BT Vector R-series is based on the class-leading BT Reflex reach truck. It is available with turret-head fork design or shuttle forks (VRE125SF), which require less aisle-width and allow high-speed lateral pallet handling.

SPECIFICATIONS

Load capacity: 1.25, 1.5 t @ 600 mm load centre

Maximum lift height: 11.0 m (11.3 m for VRE125SF)

Maximum battery capacity: 930 Ah

Options available: [I_Site](#)  





Load camera option



Aisle camera option



Auto-rotation option



Easy servicing

● standard ° option

Truck features

	Safety	Durability	Productivity	Driveability	BT Vector VRE 125	BT Vector VRE 125SF	BT Vector VRE 150
Adjustable fork width					●	●	●
Automatic parking brake	●				●	●	●
BT Optipace System	●				●	●	●
Choice of chassis widths					●	●	●
Clear-view mast	●				●	●	●
Clear-view overhead guard					●	●	●
Electronic braking system		●			●	●	●
Electronic regenerative brakes (motor)					●	●	●
Electronic speed control					●	●	●
Electronic support arm brakes					●	●	●
Enclosed cab					°	°	°
Fork spreader					°	°	°
Shuttle forks					●		
Warning beacon	●				°	°	°
Wire/rail guidance					°	°	°
Working lights	●				°	°	°

Controls and instruments

360° progressive steering	●				●	●	●
Access Control (PIN codes)					●	●	●
Adjustable BT Control console					●	●	●
Automatic deceleration	●				●	●	●
Auto-rotation of forks					°	°	°
Camera/monitor system					°	°	°
Drive motor temperature warning	●	●			●	●	●
E-bar					●	●	●
Electronic controller temperature warning		●			●	●	●
Electronic fingertip controls	●				●	●	●
Electronic height indicator					●	●	●
Emergency cut-off	●				●	●	●
Height pre-selector	●				°	°	°
Hour meter					●	●	●
Load information display	●				°	°	°
Mini-joystick electronic controls					●	●	●
Multifunction control					°	°	°
On-board data terminal mount					°	°	°
Parking brake	●				●	●	●
Pedals as in a car					●	●	●

● standard ° option

Controls and instruments

Power/Electronic steering	●				●	●	●
Split control panel					●	●	●
Steering direction indicator	●				●	●	●
Weight indicator					●	●	●

Operator Features

Adjustable seat	●				●	●	●
Adjustable seat with safety belt					°	°	°
Adjustable steering wheel					●	●	●
Driver detection system					●	●	●
Driver-adapted programmable performance	●				●	●	●
Heated seat					°	°	°
Low step-in	●				●	●	●
Storage compartments					●	●	●
Writing table					°	°	°

Maintenance features

Easy access for maintenance		●			●	●	●
Fault diagnosis facility					●	●	●
Historic fault log					●	●	●

Battery management features

Battery change facility					●	●	●
Battery discharge prevention system		●			●	●	●
Battery status indicator					●	●	●
Heavy-duty battery compartments					●	●	●
Regenerative lowering					●	●	●
Sideways battery change					●	●	●

Special applications

Coldstore version		●			°	°	°
Ex version (ATEX compliant)	●				°	°	°

Compact design

The truck has a very small footprint which means less space is needed for aisle transfer allowing better use of storage space.

High performance with TLC

Travel speeds up to 14 km/h and high-speed lifting/lowering ensure maximum productivity. The patented and unique Transitional Lift Control (TLC) system ensures completely smooth, shock-free lifting and lowering, even at maximum speed.

Totalview Concept

The design of the overhead guard is also patented and unique to BT Vector R-series trucks. It provides a clear upward view to the forks when working at height.

BT Optipace

BT Optipace controls the speed of the truck when operating in narrow aisles, providing the highest safe drive speed taking into account the load weight and operating height.

TPS-based reliability

Like all Toyota trucks, BT Vector trucks are built according to the Toyota Production System, assuring the highest levels of quality, durability and reliability.



TOYOTA BT VECTOR C-SERIES

BT Vector C-series models bring full VNA functionality in an extremely compact footprint. A choice of chassis and cab widths mean it is suited to most existing VNA operations, offering class-leading performance and energy efficiency.

SPECIFICATIONS

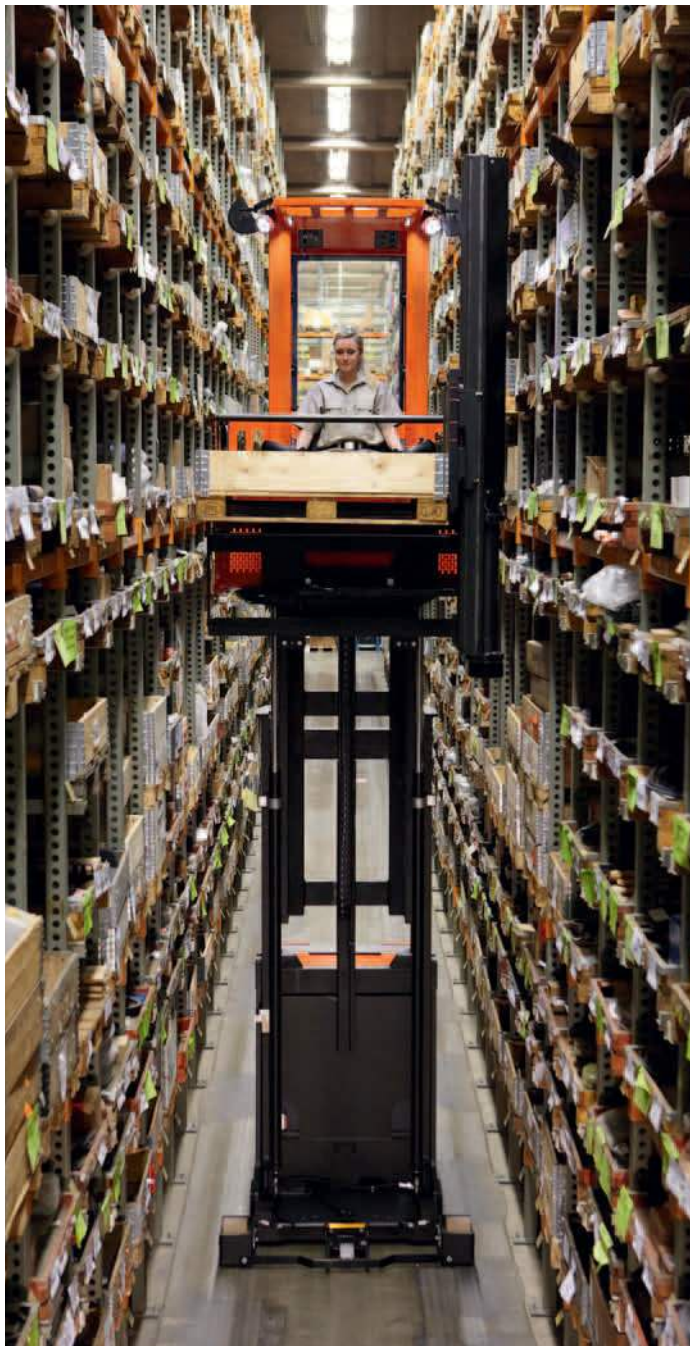
Load capacity: 1.0, 1.20, 1.35 t @ 600 mm load centre

Maximum lift height: 15.0 m

Maximum battery capacity: 930 Ah

Options available: [I_Site](#)





BT Totalview allows optimum visibility



Split control panel lets the operator reach the pallet easily for order picking



LED working lights are powerful and efficient



Battery access is convenient for charging

● standard ○ option

Truck features

	Safety	Durability	Productivity	Driveability	BT Vector VCE100	BT Vector VCE120	BT Vector VCE135
Adjustable fork width			●		●	●	●
Automatic parking brake	●			●	●	●	●
BT Optipace System	●			●	●	●	●
Choice of cab widths			●		●	●	●
Choice of chassis widths			●		●	●	●
Clear-view mast	●			●	●	●	●
Clear-view overhead guard	●			●	●	●	●
Electronic braking system	●	●		●	●	●	●
Electronic regenerative brakes (motor)			●		●	●	●
Electronic speed control			●		●	●	●
Electronic support arm brakes					○	○	●
Elevating platform	●			●	●	●	●
Fork spreader					○	○	○
Shuttle forks					○	○	○
Sideshift	●				○	○	○
Warning beacon			●		●	●	●
Wire/rail guidance				●	○	○	○
Working lights					○	○	○

Controls and instruments

Adjustable BT Control console			●	●	●	●	●
Automatic deceleration	●			●	●	●	●
Auto-rotation of forks					○	○	○
Electronic fingertip controls	●			●	●	●	●
Electronic height indicator			●		●	●	●
Emergency cut-off	●				●	●	●
Height pre-selector	●		●	●	○	○	○
Hour meter					●	●	●
Parking brake	●				●	●	●
Power/Electronic steering			●	●	●	●	●
Split control panel			●	●	●	●	●
Steering direction indicator	●			●	●	●	●
Weight indicator					○	○	○

Operator Features

Adjustable seat	●		●	●	●	●	●
Adjustable steering wheel			●	●	●	●	●

● standard ○ option

Operator Features

	Safety	Durability	Productivity	Driveability	BT Vector VCE100	BT Vector VCE120	BT Vector VCE135
Driver detection system	●				●	●	●
Driver-adapted programmable performance	●			●	●	●	●
Folding seat			●	●	●	●	●
Low step-in	●			●	●	●	●
Writing table			○	○	○	○	○

Maintenance features

Easy access for maintenance		●	●		●	●	●
Fault diagnosis facility			●		●	●	●
Lubrication points					●	●	●

Battery management features

Battery change facility			●		●	●	●
Battery discharge prevention system		●			●	●	●
Battery status indicator			●		●	●	●
Regenerative lowering			●		●	●	●
Sideways battery change			●		●	●	●

Easy delivery and installation

Most VNA trucks require on-site assembly with requirements for heavy lifting to build the mast assembly. The BT Vector C-series has a swing-down mast design, which means it can be shipped on a standard road vehicle and towed into position, with mast repositioning and final commissioning taking less than half a day.

BT Optipace

BT Optipace controls the speed of the truck when operating in narrow aisles, providing the highest safe drive speed taking into account the load weight and operating height.

Totalview Concept

The BT Vector C-series provides a clear view for driving and load handling based on Toyota's Totalview concept.

TPS-based reliability

Like all Toyota trucks, BT Vector trucks are built according to the Toyota Production System, assuring the highest levels of quality, durability and reliability.



TOYOTA BT VECTOR A-SERIES


Toyota's Advanced VNA concept is based on the BT Vector A-series, which has unique space saving and productivity enhancing features. Its articulated chassis provides excellent stability and minimises the space required for aisle-to-aisle transfer, allowing more warehouse space to be used for storage. Productivity levels are exceptional, with outstanding work-rates.

SPECIFICATIONS

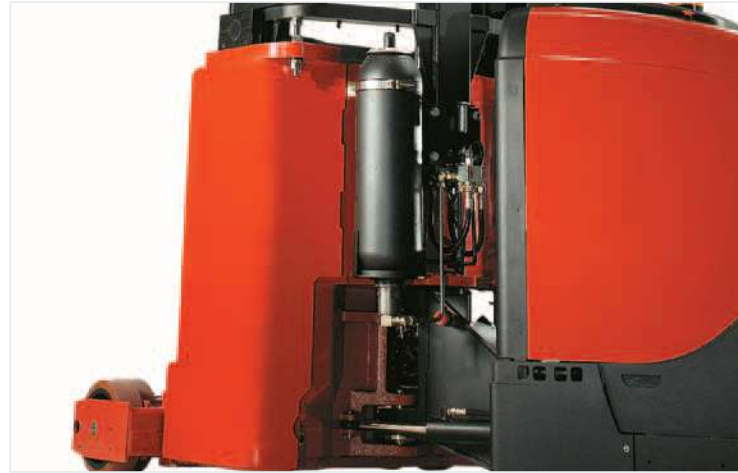
Load capacity: 1.25, 1.5 t @ 600 mm load centre

Maximum lift height: 15.7 m

Maximum battery capacity: 1240 Ah

Options available: [L_Site](#) 





The A-series' BT Advanced Lifting System significantly reduces the amount of battery energy required to lift the cab and load, allowing two-shift operation on a single charge



Staggered front wheel arrangement increases stability while reducing floor loading



Integrated control panel



Shuttle-fork version offers maximal productivity

● standard ◦ option

	Safety	Durability	Productivity	Driveability	BT Vector VCE125ASF	BT Vector VCE150A
Truck features						
Adjustable fork width					●	●
Articulated chassis					●	●
Automatic parking brake	●				●	●
BT Advanced Lifting System (ALS)					●	●
BT Optipace System	●				●	●
Choice of cab widths					●	
Choice of chassis widths					●	●
Clear-view mast	●				●	●
Clear-view overhead guard					●	●
Electronic braking system	●	●			●	●
Electronic regenerative brakes (motor)					●	●
Electronic speed control					●	●
Electronic support arm brakes					◦	◦
Elevating platform	●				●	●
Enclosed cab					◦	◦
Fork spreader						◦
Shuttle forks					●	
Sideshift	●					◦
Warning beacon					●	●
Wire/rail guidance					◦	◦
Working lights	●				◦	◦

● standard ◦ option

	Safety	Durability	Productivity	Driveability	BT Vector VCE125ASF	BT Vector VCE150A
Controls and instruments						
Adjustable BT Control console					●	●
Automatic deceleration	●				●	●
Auto-rotation of forks						◦
Camera/monitor system					◦	◦
Drive motor temperature warning	●	●			●	●
Electronic controller temperature warning		●			●	●
Electronic fingertip controls	●				●	●
Electronic height indicator					●	●
Emergency cut-off	●				●	●
Height pre-selector					◦	◦
Hour meter					●	●
Parking brake	●				●	●
Power/Electronic steering	●				●	●

● standard ◦ option

	Safety	Durability	Productivity	Driveability	BT Vector VCE125ASF	BT Vector VCE150A
Controls and instruments						
Programmable gate security	●				●	●
Steering direction indicator	●		●	●	●	●
Weight indicator	●		●		●	●

● standard ◦ option

	Safety	Durability	Productivity	Driveability	BT Vector VCE125ASF	BT Vector VCE150A
Operator Features						
Adjustable seat	●		●	●	●	●
Adjustable steering wheel	●		●	●	●	●
Driver detection system					●	●
Driver-adapted programmable performance	●				●	●
Folding seat			●	●	●	●
Heated seat					◦	◦
Low step-in	●				●	●
Writing table			●	●	◦	◦

● standard ◦ option

	Safety	Durability	Productivity	Driveability	BT Vector VCE125ASF	BT Vector VCE150A
Maintenance features						
Easy access for maintenance		●	●		●	●
Fault diagnosis facility					●	●
Historic fault log					●	●
Lubrication points					●	●

● standard ◦ option

	Safety	Durability	Productivity	Driveability	BT Vector VCE125ASF	BT Vector VCE150A
Battery management features						
Battery change facility			●		●	●
Battery discharge prevention system		●	●		●	●
Battery status indicator			●		●	●
Regenerative lowering					●	●
Sideways battery change			●		●	●

● standard ◦ option

	Safety	Durability	Productivity	Driveability	BT Vector VCE125ASF	BT Vector VCE150A
Special applications						
Coldstore version		●			◦	◦

Unique articulated chassis design

The BT Vector A-series' unique articulated chassis allows it to drive between aisles using a transfer aisle up to one metre narrower than that required by a non-articulated truck. This means that typically an extra four pallet positions can be provided on each level within an aisle, and with lift heights to well over 14 metres it can result in up to 60 extra pallet positions per aisle. This gives substantial cost savings in terms of space, but not at the cost of productivity, aisle transfer typically takes less than 10 seconds.

Advanced Lifting System

The energy required to lift the cab and load is significantly reduced by Toyota's Advanced Lifting System. It is a fully integrated combination of hydraulic and gas-pressure lifting, using precise electronic control for seamless and smooth operation. Inert nitrogen is compressed in a sealed system as the cab is lowered. The stored energy is then used to aid the next lifting movement. As a result the lift motor is working to lift little more than the weight of load itself, saving energy. Two-shift operation is possible on a single charge.

BT Optipace

BT Optipace controls the speed of the truck when operating in narrow aisles, providing the highest safe drive speed taking into account the load weight and operating height.

TPS-based reliability

Like all Toyota trucks, BT Vector trucks are built according to the Toyota Production System, assuring the highest levels of quality, durability and reliability.