

# Electric Pneumatic Tire Lift Trucks

Capacity: 1.3 - 2.0 ton



Quality

Reliability

Customer Service



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[www.catlifttruck.com.sg](http://www.catlifttruck.com.sg)

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**CAT** Lift Trucks

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## EP-TCB Series

An impressive list of standard features and options means you can experience productive results, shift after shift.

- Operator Restrain System (ORS) Full Suspension Seat
- Wet Disc Brakes
- Electric Power Steering
- Easy-to-Read, Right Side Vacuum Fluorescent Display Panel
- Digital Load Meter
- Hour Meter
- AC Control System
- AC Inverter Control for Traction and Hydraulics
- Mast and Travel Interlock
- Regenerative Functions
- Self Diagnostic System
- Soft-Landing Function of Forks
- IPX4 Waterproof Rating
- Rear Combination Lamps
- Grip Assist with Integrated Horn
- Increased Leg room
- Pitching Control System
- Increased Simplex Mast Backward Tilt to 7.5 Degrees
- Durable Floor Mat
- Emergency Switch
- Back-Up Alarm
- New Floor Step for Easy Operator Access to Truck Cab

### Available Options:

- Rust Resistance Upgrade
- Laser Pointer for Fork Positioning
- Factory Fitted, Integrated Side Shifter
- Side Loading Battery Bay
- Modifications for Cold Storage Environments

Model	Capacity (kg) @ 500mm LC	Battery Voltage / Amp Hr (5 hours)
EP13TCB	1300	48/320
EP15TCB	1500	48/350
EP16TCB	1600	48/350
EP18TCB	1800	48/390
EP20TCB	2000	48/390
EP16TCB	1600	48/730
EP18TCB	1800	48/730
EP20TCB	2000	48/730



Quality, Reliability and Customer Service You Can Depend On — Built Tough for Demanding Applications.

Engineered for superior performance and built with Cat Lift Trucks dependability, the EP-TCB series of 3-wheel electric lift trucks are designed to operate in a variety of demanding manufacturing, warehousing and logistical environments. An impressive list of standard features and useful options makes Cat® lift trucks the natural choice for improving productivity and profitability.

## Quality



Whether you are handling costly materials or shipping products on a tight schedule, the EP-TCB series of highly maneuverable electric lift trucks offers the quality, comfort and Cat® lift truck functionality and reliability you need to stay productive and competitive.



### Unobstructed View

The vacuum fluorescent display (VFD) is located at the right front of the cab so as not to obstruct the driver's view of the forks. At the same time, it allows quick viewing and monitoring of important vehicle information. The VFD display is easy to read even under direct sunlight and bright conditions. Information on traveling speed, battery discharge status, current time and key-on hours are displayed in real time.

### Intelligent Design, Unmatched Comfort

All EP-TCB series lift trucks have comfortable full-suspension seats that are ergonomically designed to help the operator maintain the optimal driving posture, which minimizes fatigue even after extended periods of operation. The seatbelt and the "hip restraint bar" protect the operator in case of an accident.

### Mast and Travel Interlock

The advanced Cat® lift trucks Mast and Travel Interlock System helps protect your operator and your loads by initiating a series of protective actions if your operator leaves the normal seated operating position:

- The Drive function is temporarily disengaged.
- Power temporarily disconnects from the hydraulic lift and tilt functions. These functions will resume when the operator returns to their seat.

The Neutral Safety System also prevents potential accidents caused by unexpected movement of the lift truck at key-on.

### Adjustable Power Settings

The EP-TCB series lift trucks can be configured to function at a particular power level to best suit the lifting task. Eight driving modes can be chosen from the energy-saving "ECONOMY" to the high-performing "POWER" modes according to job requirements. This ensures optimal power is used for the job, resulting in superior performance and vehicle energy savings.



### Powerful and Dependable Brakes

The Wet Disc Brake System on all EP-TCB series electric Cat® lift trucks provides for a more powerful and consistent stopping force to meet more demanding applications. This enclosed-type braking system is resistant to dust and water. Maintenance is easy with only oil replacement at required routine service intervals.



## Reliability

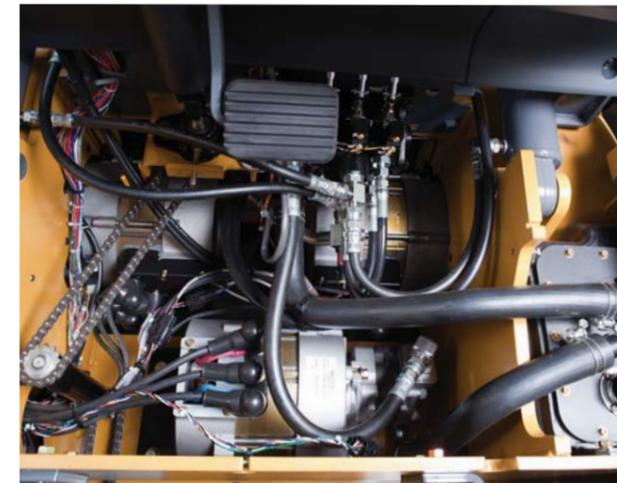


### More Power When it's Needed

The intelligent Advanced AC Power Control System provides smooth and efficient power to the traction and hydraulic motors in the EP-TCB series lift trucks. With high-capacity motors installed, powerful acceleration even on an upslope, is not a problem. And thanks to advanced electronics the operator is able to do very precise inching and control of the lift truck. Maintenance is also reduced due to the absence of carbon brushes in these high performance AC motors.

### Clean, Cool and Environmentally Friendly

EP-TCB series lift trucks are ideal alternatives to often noisy, hot and emission producing gas or diesel powered vehicles. Electric Cat® lift trucks run quiet, clean and cool. They are ideal for organizations or environments where excessive noise, gas emissions are either undesirable or inappropriate.



### An Easy Fix

The EP-TCB series lift trucks' Intelligent Control System provides self-diagnosis at key-on. And if, in the remote chance there is a malfunction, it is rapidly identified, located and rectified within minutes. Vital components such as the controller, batteries and motors can be quickly accessed with simple tools, thereby effectively reducing servicing and maintenance time.

### IPX4 Waterproof Rating

With its excellent IPX4 waterproofing rating the new EP-TCB series lift trucks can be operated outdoors in wet weather conditions with rain or water splashes coming from any angle.



### Pitching Control

Moving delicate cargo takes exceptional care. Now, all EP-TCB lift trucks come standard with a Pitching Control System that reduces cargo vibration or swaying when going over humps or travelling on uneven surfaces.

### Smart Shutdown

With an electric vehicle smart power usage is essential to both productivity and reliability. EP-TCB series Cat® lift trucks are so intelligent that they will shut down automatically after 15 minutes when left in standby mode to conserve battery power. This feature prevents unnecessary power consumption and drained batteries.

### Advanced Energy Conservation and Regeneration

Energy conservation and regeneration is an important feature that the advanced AC System provides on all EP-TCB series lift trucks. Power is channeled back into the battery during simple activities like braking, plugging or even decelerating through the AC Energy Regeneration System, which helps to conserve vital energy.

### Increased Mast Backward Tilting

An improvement on all Simplex Masts, is that backward tilt has been increased to 7.5 degrees. This gives truck operators greater control and handling stability when moving difficult cargo.

### Optional Side Battery Loading

Changing forklift batteries can be a time consuming procedure. When necessary, and to facilitate easier battery changes, Cat® Lift Trucks has developed an optional, side slide in/slide out battery tray for the EP-TCB series. This option saves time and helps increase productivity by making difficult battery changes a thing of the past.

### A Step Up

Getting in and out of an EP-TCB electric lift truck is easy thanks to the newly integrated step and large handgrip.



## Customer Service



Cat® Lift Trucks is committed to providing industry-leading customer service that is delivered by experienced and reliable dealers. Cat® Lift Trucks puts its customer's needs first, with one of the most comprehensive customer support programs in the business today.

### Unparalleled Customer Service — Dealers You Can Depend On

Cat® lift trucks dealers are unsurpassed, delivering superior customer service that sets us apart from the competition — before, during and after the sale.

Our dealers make available leading support programs with every new Cat® lift truck you purchase, including:

- Genuine Cat® lift truck OEM parts
- Planned Maintenance
- Rental fleet availability
- Convenient dealer branch location

#### Planned Maintenance

Proper maintenance of your truck helps assure top performance over the long haul and helps extend truck longevity. That's why every Cat® lift truck is backed by experienced and reliable dealers. With Cat® lift truck Planned Maintenance, you won't have to worry about scheduling maintenance or unexpected downtime. Regular planned maintenance calls are scheduled in advance to avoid interference with your operating schedules. Experienced Cat® lift trucks service technicians will regularly perform all periodic maintenance including fluid and lubricant checks for a predetermined schedule. Cat® lift truck technicians can even identify and fix potential problems before they become major difficulties.



#### Lift Plus Powertrain Warranty *(Optional)*

Confidence you can depend on. Cat® lift trucks are covered by one of the best powertrain warranties in the business. When you choose a Lift Plus warranty for your new Cat® lift truck, you're getting long-term protection against any unforeseen powertrain failures. That means if any major powertrain component fails, it will be replaced without any hassle—it's that simple. And you can be assured that all Lift Plus warranty repairs use only genuine Cat® Lift Truck parts that are made specifically for your vehicle.

With a Lift Plus warranty, your investment is covered for three years or 5,000 hours, whichever occurs first. If a powertrain failure happens to your lift truck, you're covered.

# Standard Specifications

		Item	Summary	Unit	STANDARD SERIES					LONG WHEEL BASE SERIES			
Type	1.2	Model			EP13TCB	EP15TCB	EP16TCB	EP18TCB	EP20TCB	EP16TCB	EP18TCB	EP20TCB	
	1.3	Rated capacity		kg	1300	1500	1600	1800	2000	1600	1800	2000	
	1.4	Load center		mm	500	500	500	500	500	500	500	500	
	1.6	Operator type			Seated	Seated	Seated	Seated	Seated	Seated	Seated	Seated	
Dimensions	2.1	Lift height		mm	3000	3000	3000	3000	3000	3000	3000	3000	
	2.2	Free lift		mm	115	115	115	115	120	115	115	120	
	2.3	Tilt angle	For-/Back-ward <F:Down/Up>	α/β	<Mast> 5/7.5	<Mast> 5/7.5	<Mast> 5/7.5	<Mast> 5/7.5					
	2.4	Carriage			Class II A	Class II A	Class II A	Class II A					
	2.5	Fork	Dimensions (L / W / T)	ℓ / w / t	mm	1070 / 100 / 35	1070 / 100 / 35	1070 / 100 / 35	1070 / 100 / 35	1070 / 122 / 40	1070 / 100 / 35	1070 / 100 / 35	1070 / 122 / 40
	2.6	Spread (Max / Min)		B <sub>1</sub> /B <sub>2</sub>	mm	920 / 240	920 / 240	920 / 240	920 / 240	1000 / 245	920 / 240	920 / 240	1000 / 245
	2.7	Overall length		L <sub>1</sub>	mm	2855	2955	3050	3105	3175	3160	3215	3255
	2.8	Length to fork face		L <sub>2</sub>	mm	1785	1885	1980	2035	2105	2090	2145	2185
	2.9	Width	Overall width	B	mm	1090	1090	1090	1090	1090	1090	1090	
	2.10	Mast lowered		H <sub>1</sub>	mm	1975	1975	1975	1975	1975	1975	1975	
	2.11	Height	Mast extended	H <sub>4</sub>	mm	4015	4015	4015	4015	4000	4015	4015	
	2.12	Overhead guard		H <sub>5</sub>	mm	2050	2050	2050	2050	2050	2050	2050	
	2.13	Overhang	Front overhang	F	mm	375	375	375	375	415	375	375	
2.14	Min. turning radius		R	mm	1410	1510	1605	1660	1690	1715	1770		
2.15	Practical 90° turning aisle	1100 x 1100 Pallet		mm	1930	1960	1990	2000	2020	2030	2040		
2.16	Practical 90° stacking aisle	1100 x 1100 Pallet	As	mm	3185	3285	3380	3435	3505	3490	3545		
Performance	3.1	Travel speed	Laden / Unladen	km/h	15.0 / 16.5	15.0 / 16.5	14.5 / 16.0	14.5 / 16.0	14.0 / 15.5	14.5 / 16.0	14.5 / 16.0	14.0 / 15.5	
	3.3	Lifting speed	Laden / Unladen	mm/s	400 / 610	380 / 610	360 / 610	360 / 610	300 / 500	360 / 610	360 / 610	300 / 500	
	3.4	Lowering speed	Laden / Unladen	mm/s	550 / 500	550 / 500	550 / 500	550 / 500	550 / 500	550 / 500	550 / 500	550 / 500	
	3.5	Max. drawbar pull	3min. rating, 1.5km/h and over	N	7530	7390	6910	7530	7550	6910	7530	7550	
	3.6	Max. gradeability	3min. rating, 1.5km/h and over	%	20 / 20	18 / 20	15 / 20	15 / 20	14 / 17	15 / 20	15 / 20	14 / 17	
	Mass	4.1	Service weight	w/o battery (6.3)	kg	2075	2105	2080	2220	2595	1930	2180	2285
4.2		Laden	(Front / Rear)	kg	3460/465	3735/455	3820/445	4155/515	4650/595	4315/630	4315/785	4815/590	
4.3		Unladen	(Front / Rear)	kg	1230/1395	1245/1445	1235/1430	1245/1625	1355/1890	1505/1545	1485/1815	1615/1790	
Chassis	5.1	Tyres : Number	Front / Rear (X=Drive)		2X / 2	2X / 2	2X / 2	2X / 2					
	5.2	Tyres	Front	mm	18x7-8-14PR	18x7-8-14PR	18x7-8-16PR	18x7-8-16PR	18x7-8 (N.P.) <sup>*)</sup>	18x7-8-16PR	18x7-8-16PR	18x7-8 (N.P.) <sup>*)</sup>	
	5.3	Tyres	Rear	mm	15x4 1/2 -8-12PR	15x4 1/2 -8-12PR	15x4 1/2 -8-12PR	16x6-8-10PR	16x6-8-10PR	15x4 1/2 -8-12PR	16x6-8-10PR	16x6-8-10PR	
	5.4	Wheelbase	L <sub>3</sub>	mm	1220	1320	1415	1415	1415	1525	1525	1525	
	5.5	Tread	Front	mm	920	920	920	920	920	920	920	920	
	5.6	Tread	Rear	B <sub>3</sub>	mm	250	250	250	230	230	250	230	
	5.7	Ground clearance	Min.	m1	mm	85	85	85	85	85	85	85	
	5.8	Ground clearance	Middle of wheelbase	m2	mm	85	85	85	85	85	85	85	
	5.9	Service brake	Mech. / Hydr. / Electr. / Pneum.			Hydr.	Hydr.	Hydr.	Hydr.	Hydr.	Hydr.	Hydr.	
	5.10	Parking brake	Foot / Hand / Deadman			Hand	Hand	Hand	Hand	Hand	Hand	Hand	
Motors	6.1	Battery	Type		BS/JIS	BS/JIS	BS/JIS	BS/JIS	BS/JIS	BS/JIS	BS/JIS	BS/JIS	
	6.2	Battery	Volts / Ampere hrs (5HR)	V/Ah	48 / 320	48 / 350	48 / 350	48 / 390	48 / 390	48 / 730	48 / 730	48 / 730	
	6.3	Battery	Mass (with case)	kg	550	595	595	650	650	1120	1120	1120	
	6.5	Drive motor	60min. rating control	kw	2 x 4.5 Inverter	2 x 4.5 Inverter	2 x 4.5 Inverter	2 x 4.5 Inverter					
	6.6	Hydraulic motor	5min. rating control	kw	9.5 Inverter	9.5 Inverter	9.5 Inverter	9.5 Inverter					
	6.7	Hydraulic motor	60min. rating control	kw	0.3 Chopper	0.3 Chopper	0.3 Chopper	0.6 Chopper	0.6 Chopper	0.3 Chopper	0.6 Chopper	0.6 Chopper	
	6.8	Power steering motor	60min. rating control	kw	0.3 Chopper	0.3 Chopper	0.3 Chopper	0.6 Chopper	0.6 Chopper	0.3 Chopper	0.6 Chopper	0.6 Chopper	
	6.9	Power steering motor	60min. rating control	kw	0.3 Chopper	0.3 Chopper	0.3 Chopper	0.6 Chopper	0.6 Chopper	0.3 Chopper	0.6 Chopper	0.6 Chopper	
	6.10	Charger	Type (Built-in / Stationary)			Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	Stationary	
6.12	Charger	Input	φ/V	3 / 400	3 / 400	3 / 400	3 / 400	3 / 400	3 / 400	3 / 400	3 / 400		
6.13	Charger	Capacity	kVA	4.7	6.5	6.5	6.5	6.5	11.0	11.0	11.0		
7.1	Operating pressure	for Attachments	MPa	13.7	13.7	15.7	15.7	18.1	15.7	15.7	18.1		

Above specifications are based on the standard truck with 3 meters simplex mast. They may vary by mast type & lifting height, tyres, battery capacity and/or warming up condition.

\*1) 200mm clearance included

\*2) N.P. : No puncture tyre

