

Specifications

PC 4500 Series

Center Control Pallet Truck

PC 4500

Series





Center Control Pallet Truck



PC 4500 Series

General Info	1	Manufacturer			Crown Equipment Corporation				
	2	Model			PC 4500				
	3	Load Capacity		lb	6000/8000				
	4	Power	Electric		24 Volts				
	5	Operator Type	Stand-up		Ride				
	8	Lift Height		in	9.	9.25			
suo	9	Lift		in		6			
Dimensions	10	Head Length		in	57	57.31			
Dim	16	Outside Fork Spread	Standard Tip	in	22	22/27			
			Extended Tip	in	23	/28			
Performance	17	Speed Travel			Power Unit First	Forks First			
			Empty	mph	9.0	6.0			
			4000 lb	mph	7.0	5.7			
			6000 lb	mph	6.3	5.1			
			8000 lb	mph	6.0	5.0			

	PC 4500 Series			Standard-Tip Forks					Extended-Tip Forks				
Forks		Nominal Fork Length in			36	42	48	54	60	96	84	93	96
	11	Actual Fork Length		in	35.75	41.75	47.75	53.75	59.75	95.75	83.75	93	95.75
	12	Overall Length		in	93.06	99.06	105.06	111.06	117.06	153.06	141.06	150.31	153.06
	13	Wheelbase	Forks Raised	in	71.25	77.25	83.25	89.25	95.25	133.25	103.25	103.25	103.25
	14	Grade Clearance		%	25	23	21	20	19	13	17	17	17
	15	Turning Radius	Forks Raised	in	81.4	87.4	93.4	99.4	105.4	143.3	113.4	113.4	113.4
	7	Truck Weight w/o battery	6000 lb	lb	1895	1911	1927	1943	1959	2109	2092	2173	2188
			dl 0008	lb	1914	1938	1962	1986	2010	2174	2152	2233	2248

	Model		PC 4500-60 and PC 4500-80					
es	Drive Tire ir		13 x 4.5 x 8 Poly					
Ě	Casters		2 - 4 x 2.5 Poly					
s and	Load Wheels in		2 - 3.25 x 6.5 (-302)					
heels	-301 Moderate cut/tear resistance, high capacity. High capacity transport. Not for dock use.							
ЧМ	-302 Highest cut/tear resistance offered. Extremely high capacity, low rolling resistance. Docks, rough floors and floor debris.							
	-401 Combines good cut/tear resistance and very high capacity. Use where nothing else works.							

Maximum Battery Size

13.19" wide x 31.12" long x 31.62" high

Batteries

24-volt, 750 amp hour, 15.2 Kwh Min/Max weight 975/1500 lb

Standard Equipment

- 24-volt fused electrical system
 Access 123° Comprehensive System Control
- Access 123 Display includes BDI with lift lockout (2 re-keys), hour meters, event codes, PIN-code access and three selectable performance levels
- 4. e-Gen[™] braking system with automatic parking brake
- 5. Crown manufactured AC traction motor
- 6. Ramp hold
- 7. Standard handle includes urethane covered twist grips with cams and full width raise, lower and horn button
- 8. Molded urethane platform cushion *Anti-slip recommended with freezer*
- 9. Padded back cushion
- 10. Preset lift height (adjustable)
- 11. 27.5" wide load backrest
- 12. 43.5" tall load backrest
- 13. InfoPoint[®] System with Quick Reference Guide
- 14. Color-coded wiring
- 15. Steel power unit doors
- 16. Lift-off left and right battery retainers
- 17. Polyurethane load wheels
- 18. Polyurethane drive tire
- 19. Quick adjustment casters
- 20. Short battery wall (use with 23.38" tall battery)
- 21. 175 amp battery connector
- 22. Key switch
- 23. Horn

Optional Equipment

- "T"-type control handle includes urethane covered twist grips with cams, full width raise, lower and horn buttons with automatic park brake
- 2. Molded urethane leg cushion
- 3. Raise, lower and horn control module on load backrest
- 4. Storage tray and bin in load backrest
- 5. Storage module on battery (23.28" high battery only)

- 6. Torsion bar package for quick adjustment casters
- Tall battery wall (use with 31.62" tall battery)
- 8. 22.5" wide load backrest
- 9. 60" or 72" tall load backrest
- Battery compartment rollers
 Battery retainer interlock
- switches
- 12. Quick battery disconnect handle (right side only)
- 13. Left side battery connector (facing power unit door)
- 14. Drive tire and load wheel options
- 15. Toggle switch in lieu of key
- 16. Positive / Negative Accessory Cable
- 17. InfoLink® Ready System (InfoLink module sold separately)
- 18. Travel alarm (requires right side battery connector)
- 19. Freezer conditioning
- 20. Skid Adapter*
- 21. Corrosion conditioning*
- 22. Shrink Wrap holder*
- 23. Strobe Light*
- 24. Second leg cushion (requires 31.62" tall battery)*
- 25. Second level order picking platform*
- 26. Custom paint color*
- 27. Pallet Stop*
- * Extended lead time
- **Operator Area and Controls** The PC 4500 Series incorporates

an operator compartment designed for comfort and productivity. The compartment features

rounded edges, a large operator platform to allow quick entry/exit onto the truck and a choice of handle options. Dual twist grips with soft urethane covering and cams improve operator comfort. Full width raise, lower and horn buttons are employed for easy actuation.

In low level order picking applications, where walking through the compartment is common, the larger compartment, low profile high speed pedal, rounded edges and optional load backrest widths and heights improve order picking efficiency. Preset lift height provides operators with a consistent platform step height and is adjustable to individual operator preference for improved comfort and productivity. When the high speed pedal is engaged, it is approximately flush with the platform cushion for maximum comfort.

A large back cushion and molded urethane platform cushion are standard to minimize fatigue when the operator is in transport position.

Optional leg cushions are available to further reduce fatigue, increase comfort and maximize productivity.

Optional width and height load backrests can be specified for your application. Hip, shoulder and elbow clearance are maximized when this feature is customized to your operators and load sizes.

An optional control module is available to provide raise, lower and horn buttons in the load backrest.

Electrical System

Heavy-duty 24-volt electrical system for demanding warehouse, dock and transport applications. Crown-manufactured AC drive motor delivers powerful performance and proven reliability for long lasting productivity in any environment.

A lift limit switch shuts the pump motor off at full fork elevation. Color coded wiring is used for ease of service.

Access 123° Comprehensive System Control with AC Traction

This system provides unmatched truck control and system performance in:

- * Traction control
- * Operator interface
- * Diagnostics

Crown technology provides a closed-loop traction control system which maintains speed throughout the battery charge and provides optimum acceleration and speed as the load on the forks increases.

Access controller has full-time management control of traction and other system inputs and outputs. Access 123 technology simplifies the system by reducing componentry including contactors, relays and other hard-wired components. The Access 123 system is covered by a 3 year / 6000 hour supplemental warranty. The Access ™ display offers six hour meter readouts and odometer. The operator message mode can be programmed to display model number (default), BDI, truck hours, odometer, trip odometer or timer. Built-in PINcode (up to 25) capability.

The Access display also includes a full featured on-board service tool. Proven Access 123 diagnostics has been extensively developed to provide superior troubleshooting and service ease. The service technician can actively view inputs and outputs during truck operation. Event code history includes the most recent event code plus the previous 15 codes. No service key, laptop or handset required.

Performance tuning is accessed through the display to customize truck performance for specific applications or operator requirements.

The large Crown-manufactured AC drive motor specifically designed for lift truck applications, provides improved acceleration and plug reversal contributing to greater productivity.

InfoPoint®

InfoPoint System allows technicians to troubleshoot without complicated schematics, wiring diagrams or cumbersome service manuals for over 95% of repairs. Simplicity is complete with InfoPoint Quick Reference Guide, color-coded components maps and "information nuggets" located on the truck.

Clearly labeling each component and providing an area map showing component locations helps to minimize downtime. A Quick Reference Troubleshooting Guide is supplied with each truck showing display operation, code definitions, and overall component ID of the entire truck.

Hydraulics

Heavy-duty pump, motor, reservoir and control are assembled into one unit. A centrally located lift cylinder, mounted vertically, is equipped with long-life polyurethane packings. A pressure compensating flow control valve is an integral part of the valve block and regulates lowering speed. Overload valve protects hydraulic components.

Drive Unit

All gear drive from drive motor to drive wheel axle. Crown-manufactured gears are hard finished and dual machined for high quality. Drive tire axle is mounted in the drive unit on both sides for maximum strength in rough floor or docking applications. Drive unit is top and bottom mounted. Top mount is a large, tapered roller bearing for vertical or horizontal forces. Bottom mount has four shock mounted rollers on drive unit running in a hardened steel roller race. Gear train runs in oilfilled, sealed housing.

Caster System

Standard on the PC 4500 Series are the quick adjustment casters. These casters adjust quickly to enable braking, traction, steer effort and stability to be "balanced" based on your specific application. This system can also increase drive tire life by as much as 60% by permitting more tire wear. The optional torsion bar suspension is available to maximize stability on tall, unwieldy and less stable loads.

Fork Assembly

Fork width - 9.12" on standardtip fork models, 10" on extendedtip fork models. Fork spread - 22" and 27" standard on standard-tip models. 23" - 26" spread available in one-inch increments. 23" and 28" standard on models with extended-tip models. Fork spreads from 24" - 27" available in oneinch increments. Fork lengths -36, 42, 48, 54, 60 and 96" with standard tip; 84, 93, and 96" forks available with extended-tip design for shorter wheelbase.

To facilitate pallet entry/exit Crown has engineered several features into their fork assembly. Standard-tip forks have pallet entry rollers to lift fork over bottom board of pallet. Rollers are made of high molecular weight polyethylene with .75" axle and roll pin. Extended-tip fork design has totally enclosed tip, with full length convex bottom surface creating an entry ramp. Ramp design helps fork glide over bottom boards of pallet and keeps welded edges from touching bottom boards of pallet.

Abrasion resistant steel entry/exit slides on both sides of each fork have convex bottom surfaces to prevent snagging as forks move over bottom boards of pallet. One-piece design with radiused edges are welded away from contact point of slide.

Exit roller design prevents load wheel from dropping after crossing bottom board. The 4" wide, steel exit roller is positioned directly behind the load wheel to keep the fork rolling. The entry/exit slide design also assists in trouble-free pallet entry/exit.

Fork adjustment is done at the toe with no need to remove a cover plate. Fork heel height adjustment is done quickly without removing battery. Quick and easy fork adjustment promotes servicing of fork assembly to keep pallet entry/exit productive.

Pull rod design incorporates a replaceable "tenon" design for fast servicing of pull rod while still in the truck.

Power Unit Structure

Heavy gage steel is used in the power unit structure and skirt. Rugged steel power unit doors protects electronic components and swing open providing excellent access. Doors also can be lifted off if desired. Door bolts have exclusive convex design that mate with concave door holes for fast reinstallation of bolts. **Crown provides an exclusive 5 year Supplemental Guarantee on the Power Unit and Fork Weldment structures.**

e-GEN[™] Braking System

Variable regenerative motor braking is optimized and virtually eliminates brake maintenance.

While moving, e-GEN braking is applied if the operator moves the standard handle into the brake zone, activates brake levers on "T" handle, removes travel input request or reverses direction.

The closed loop Access 123 traction control will keep the truck static until a travel input is requested, even when operating on a grade.

Automatic electric parking brake activates when the truck has been stationary for four seconds, the truck is keyed off or the battery has been disconnected.

Pallet Planning Guide

On standard-tip fork models, the load wheel will drop in the second opening of the pallet when "A" or "B" dimension equals the nominal fork length. On extended-tip fork models, the load wheel will drop in the first opening of the second pallet. On models with a single load wheel, the "C" dimension should be 6" maximum and the "D" dimension should be 14" minimum. On models with tandem load wheels, the "C" dimension should be 6" maximum and the "D" dimension should be 17" minimum. Customers that need tandem load wheel trucks, but use pallets with smaller openings, may be accommodated if the maximum lift height of the truck is reduced. Contact your Crown dealer for details.

B→
A
A→

-	First Opening	→ C ← → D → Second Opening

Other Options

- 1. Audible travel alarm
- 2. Flashing lights

Safety considerations and dangers associated with audible travel alarms and flashing lights include:

- Multiple alarms and/or lights can cause confusion.
- Workers ignore the alarms and/or lights after day-in and day-out exposure.
- Operator may transfer the responsibility for "looking out" to the pedestrians.
- Annoys operators and pedestrians.

Dimensions and performance data given may vary due to manufacturing tolerances. Performance is based on an average size vehicle and is affected by weight, condition of truck, how it is equipped and the conditions of the operating area. Crown products and specifications are subject to change without notice.

You can count on Crown to build lift trucks designed for safe operation, but that's only part of the safety equation. Crown encourages safe operating practices through ongoing operator training, safety-focused supervision, maintenance and a safe working environment. Go to crown.com and view our safety section to learn more.

Crown Equipment Corporation

New Bremen, Ohio 45869 USA Tel 419-629-2311 Fax 419-629-3796 crown.com

Because Crown is continually improving its products, specifications are subject to change without notice.

Crown, the Crown logo, the color beige, the Momentum symbol, Access 123, e-GEN, InfoPoint, and InfoLink are trademarks of Crown Equipment Corporation.

Copyright 2008 Crown Equipment Corporation SF18004 8/08 Printed in U.S.A.