

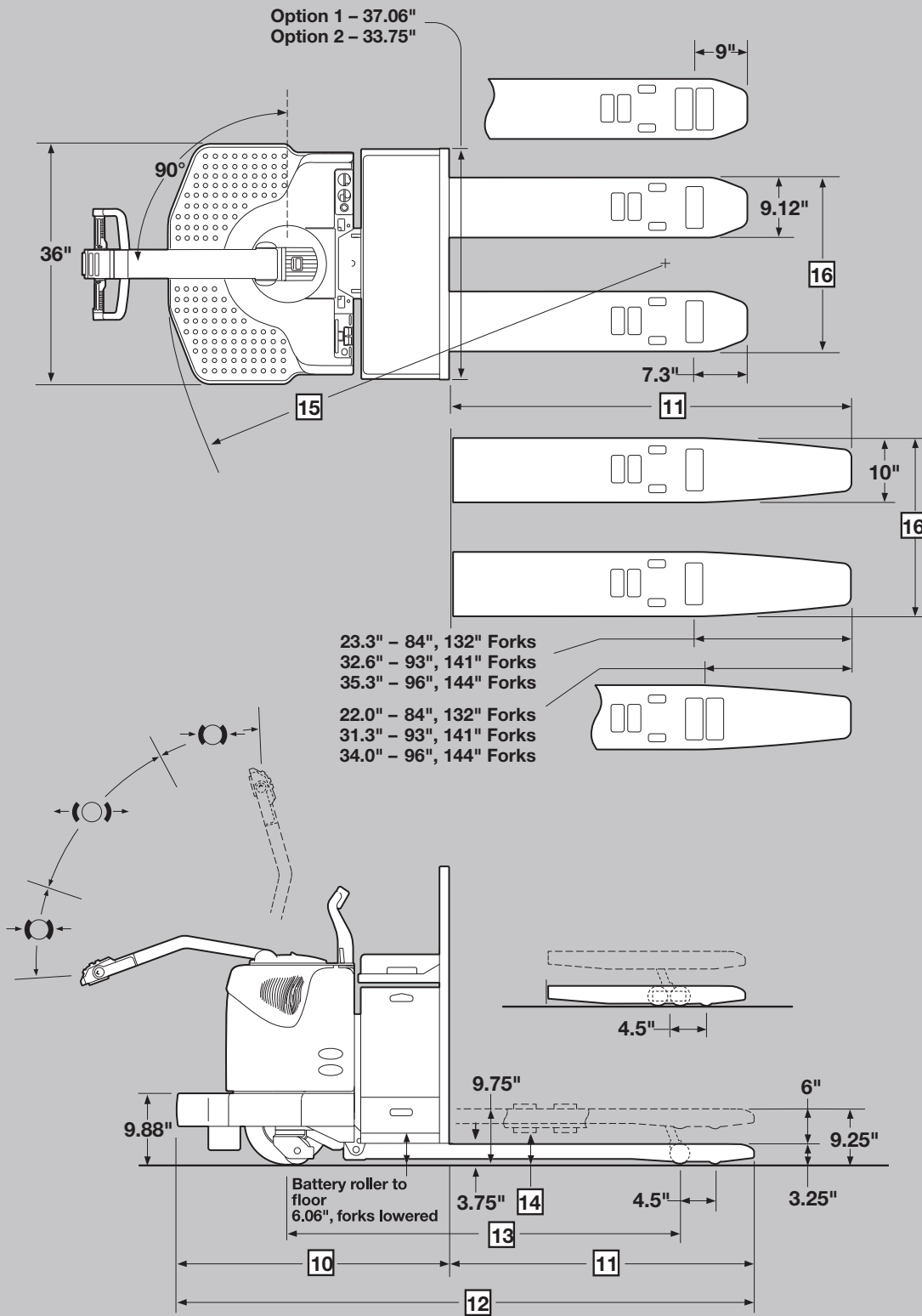
**CROWN**

# PE 4500 SERIES

## Specifications

End Control Pallet Truck





# PE 4500 Series

# Specifications

General Info	1	Manufacturer		Crown Equipment Corporation		
	2	Model		PE 4500		
	3	Load Capacity	lb	6000/8000		
	4	Power	Electric	24 Volts		
	5	Operator Type	Stand-up	Walk/Ride		
Dimensions	8	Lift Height	in	9.25		
	9	Lift	in	6		
	10	Head Length	Option 1/Option 2	36.7/43.2		
	16	Outside Fork Spread	Standard Tip	in	22/27	
Extended Tip*			in	23/28		
Performance	17	Speed Travel		Power Unit First	Forks First	
			Empty	mph	9.0	6.5
			4000 lb	mph	7.0	5.7
			6000 lb	mph	6.3	5.1
			8000 lb	mph	6.0	5.0

\*Add .5" for forks above 102"

PE 4500 Series			Standard-Tip Forks					
	Nominal Fork Length	in	36	42	48	54	60	96
11	Actual Fork Length	in	35.75	41.75	47.75	53.75	59.75	95.75
12	Overall Length	Option 1	in	72.44	78.44	84.44	90.44	132.44
		Option 2	in	78.94	84.94	90.94	96.94	138.94
13	Wheelbase - Forks Raised	Option 1	in	43.12	49.12	55.12	61.12	103.12
		Option 2	in	49.62	55.62	61.62	67.62	109.62
14	Grade Clearance - Forks Raised	Option 1	%	44	38	34	30	18
		Option 2	%	38	33	30	27	17
15	Turning Radius - Forks Raised	Option 1	in	60.95	66.93	72.90	78.88	120.8
		Option 2	in	67.43	73.40	79.38	85.38	127.3
7	Truck Weight w/o battery	6000 lb	lb	1496	1512	1528	1544	1710
		8000 lb	lb	1515	1539	1563	1587	1775

PE 4500 Series			Extended-Tip Forks					
	Nominal Fork Length	in	84	93	96	132	141	144**
11	Actual Fork Length	in	83.75	93	95.75	131.75	140.75	143.75
12	Overall Length	Option 1	in	120.44	129.69	132.44	-	-
		Option 2	in	126.94	136.19	138.94	174.94	183.94
13	Wheelbase - Forks Raised	Option 1	in	75.12	75.12	75.12	-	-
		Option 2	in	81.62	81.62	81.62	129.62	129.62
14	Grade Clearance - Forks Raised	Option 1	%	24	24	24	-	-
		Option 2	%	22	22	22	17	17
15	Turning Radius - Forks Raised	Option 1	in	92.90	92.90	92.90	-	-
		Option 2	in	99.30	99.30	99.30	147.30	147.30
7	Truck Weight w/o battery	6000 lb	lb	1643	1724	1739	2156	2237
		8000 lb	lb	1703	1784	1799		

\*\*Configuration available with shorter wheelbase and turning radius.

Wheels and Tires		PE 4500
Model		
Drive Tire	in	13 x 4.5 x 8 Poly
Casters	in	2 - 4 x 2.5 Poly
Load Wheels		2 - 3.25 x 6.5 (-302)
	-301	Moderate cut/tear resistance, high capacity. High capacity transport. Not for dock use.
	-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**

Option 1 - 6.69" wide x 34.44" long x 31.62" high

Option 2 - 13.19" wide x 31.12" long x 31.62" high

**Batteries**

Option 1 - 24-volt, 330 amp hour, 7.7 kWh

Min/Max weight 360/900 lb

Option 2 - 24-volt, 930 amp hour, 21.5 kWh

Min/Max weight 975/1500 lb

**Standard Equipment**

1. 24-volt fused electrical system
2. Access 1 2 3® Comprehensive System Control with AC Traction (Includes BDI with lift lockout, hour meters, PIN codes and event codes)
3. Polyurethane load wheels
4. Heavy-duty articulating shim free casters
5. Full width, raise, lower, horn, and end mounted reversing button in control handle
6. Raise, lower, horn and high speed button on operator grab bar
7. 175 amp battery connector
8. Key switch
9. Horn
10. Lift-off left and right battery retainers
11. Anti-tie down
12. Platform cushion (non-freezer conditioned trucks)
13. Rubber knee pad
14. One-touch high speed
15. Steel doors
16. Color-coded wiring
17. InfoPoint® - Quick reference guide and maps support diagnostics

**Optional Equipment**

1. Coast control
2. Quick Coast™
3. QuickPick® control handle
4. Quick adjustment caster
5. Quick adjustment caster with torsion bar package
6. Battery retainer interlock switch
7. Quick battery disconnect handle (right side only)
8. Left side battery connector
9. Battery compartment rollers
10. Lift-off load backrest
11. Hinged load backrest with quick release (48", 60" or 72" high)
12. Bolt-on load backrest
13. Work Assist® Accessories:
  - Strobe light
  - Flashing light
  - Work lights
  - Fan

- Storage pouch
  - Pad clip and hook
  - Shrink wrap tray (Option 2 battery only)
14. Storage module (Option 2 battery only)
  15. 7" wide fork (6000 lb only)
  16. Drive tire and load wheel options
  17. Toggle switch in lieu of key
  18. Tandem load wheels
  19. Dual load wheels
  20. Cold and corrosion conditioning
  21. Special color paint
  22. Skid adaptor
  23. Rubber skirt extension
  24. EE Rating

**Operator Area and Controls**

The PE 4500 Series has an operator platform which increases operator comfort and productivity. Rounded edges and careful placement of operator contact points make the PE 4500 Series user friendly. Contoured steel doors allow for maximum operator and foot room.

The Crown PE 4500 Series has a microcellular composition floor mat and a rubber knee pad for improved operator comfort.

The Crown PE 4500 Series has dual, soft urethane twist grips with automatic return to neutral when released. Two textures and a unique "cam" design aid in plugging, steering and long distance travel. On the control pod are full width raise, lower, and horn buttons for easy actuation. Reversing button in control handle reverses direction of travel if button should come in contact with operator. Soft urethane operator grab bar provides operator security and comfort. Grab bar has raise, lower, horn and high speed controls for improved productivity.

One touch high speed allows operators to activate the high speed button once and not have to hold the button down to travel in high speed. High speed is deactivated when the twist grip returns to neutral or when the brake is applied.

The Quick Coast option allows the truck to coast as the operator walks down the aisle performing low-level order picking. The Quick Coast switch is conveniently placed on the grab bar for easy activation. The Quick Coast option includes infinitely variable

handle positioning within the coast range, and the audible and visual feedback features remind operators the Quick Coast option is activated. The Quick Coast option meets current ANSI/ASME requirements.

The QuickPick control handle option, normally used in conjunction with coast control or Quick Coast, assists an operator to perform low-level order picking. The QuickPick control handle has two switches on each side of the handle. The QuickPick control handle activation allows the truck to travel, power unit first, at walking speed.

Many optional features for the operator area and controls are available to suit a wide range of applications.

**Electrical System**

Heavy-duty, 24-volt electrical system for demanding warehouse, dock and transport applications. The Access 3™ traction control system and Crown-manufactured AC drive motor provide unmatched reliability in the toughest applications.

**Access 1 2 3® Comprehensive System Control with AC Traction**

This system provides unmatched truck control and system performance in:

- Traction control
- Operator interface
- Diagnostics

Crown's technology provides a closed-loop traction control system which maintains top speed throughout the battery charge. The large Crown-manufactured AC traction motor specifically designed for lift truck applications, provides improved acceleration and plug reversal which may be an advantage in some applications. The Access™ display offers six hour meter readouts and odometer. The operator message mode includes BDI, truck hours, odometer, trip odometer, or timer.

The Access display also includes a full featured on-board service tool. The service technician can actively view inputs and outputs during truck operation. Event code history including the last 16 event codes are accessible. No service key, laptop, or handset required.

Access 3 controller has full-time management control of traction

and other system inputs and outputs. Access 3 simplifies the system by reducing componentry including contactors, relays, and other hard-wired components.

**Performance Tuning**

Performance Tuning can be accessed at the display to customize truck performance for specific applications or operator requirements. Crown's Integrated System Control provides a responsive, energy efficient and reliable machine.

The proven Access 1 2 3 diagnostics has been extensively developed to address the real world of troubleshooting and repair.

**InfoPoint®**

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

Information on time consists of clearly labeling each component and proving an area map showing the component location. A Quick Reference Troubleshoot Guide is supplied with each truck showing display operation, code definitions, and an 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. 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 oil-filled, sealed housing.

**Caster System**

Standard on the PE 4500 Series are shim free, spring-loaded, articulating, stabilizing casters designed and manufactured by Crown for increased truck performance and service life.

Crown has designed two optional caster systems for the PE 4500 Series to meet high-volume warehouse requirements:

Option 1: Quick adjustment casters enable braking, traction, steer effort and stability to be "balanced" based on your specific applications. This system can also increase drive tire life by as much as 60 percent by permitting more tire wear.

Option 2: All of the advantages of quick adjustment casters are yours, in addition to a torsion bar suspension that maximizes stability on tall, unwieldy and less stable loads.

**Fork Assembly**

Fork width - 9.12" on standard-tip fork models, 10" on extended-tip 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 one-inch increments. Fork lengths - 36, 42, 48, 54, 60, 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. 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**

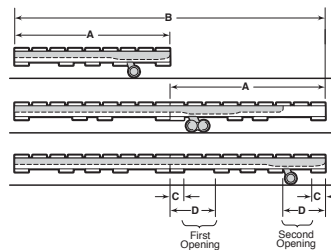
Rugged steel doors are suspended on heavy-duty pin hinges. Doors swing wide for good access. Doors also can be lifted off for unrestricted service access. Door bolts have exclusive convex design that mates with concave door holes for fast reinstallation of bolts. Heavy steel skirt surrounds entire area.

**Brake**

Internal expanding mechanical brake with fin-cooled 6" drum. Braking on PE is actuated by control handle position.

**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 local Crown dealer for details.

**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.



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**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](http://crown.com) and view our safety section to learn more.**

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

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