

**CROWN**

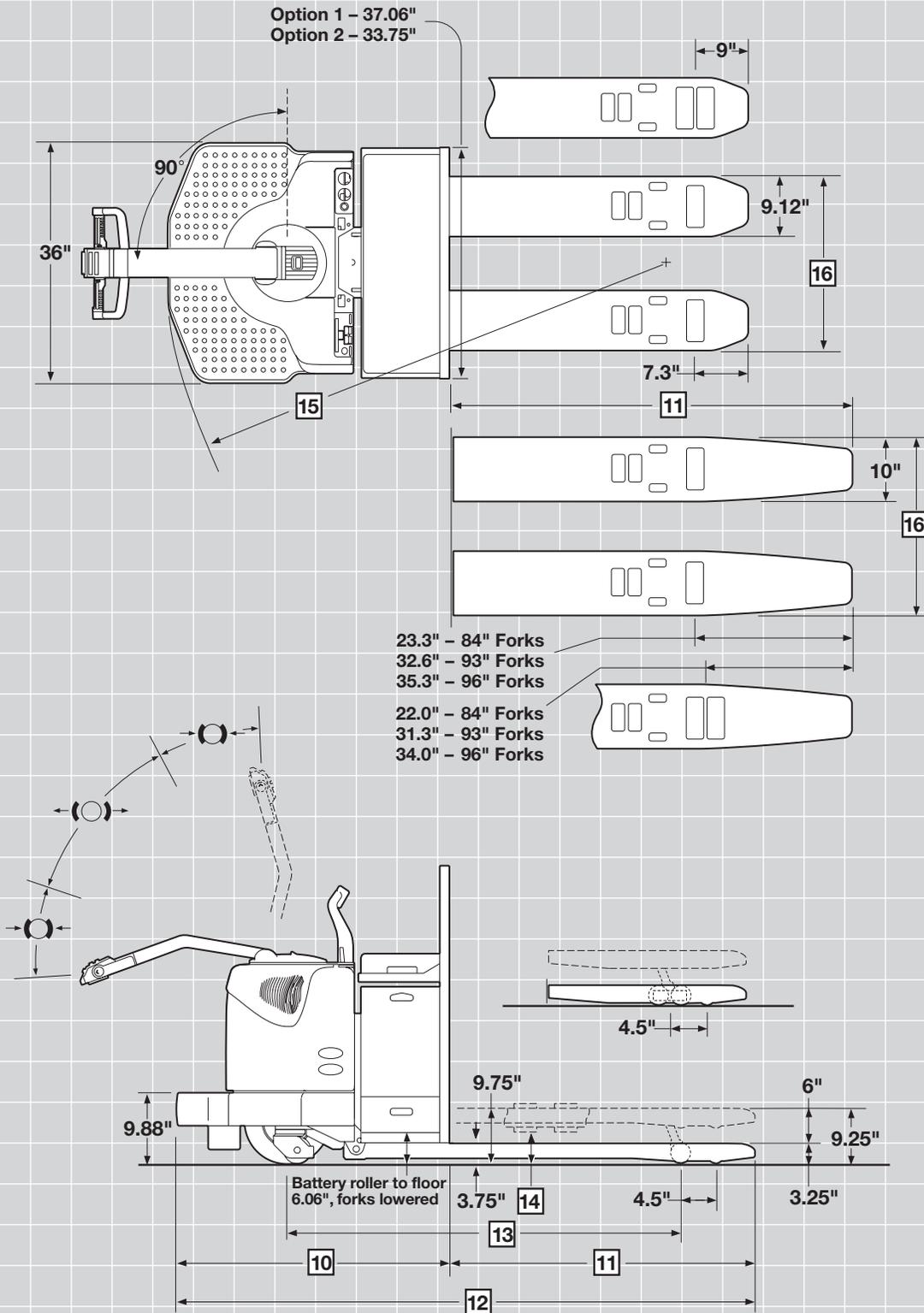
**Specifications**

**PE 4000 Series  
PE 4500 Series**

End Control  
Pallet Truck

# PE 4000 PE 4500 Series





**PE 4000/4500 Series**

Specifications

General Info	1	<b>Manufacturer</b>		<b>Crown Equipment Corporation</b>			
	2	<b>Model</b>		PE 4000/PE 4500			
	3	<b>Load Capacity</b>	lb	6000/8000			
	4	<b>Power</b>	Electric	24 Volts			
	5	<b>Operator Type</b>	Stand-up	Walk/Ride			
Dimensions	8	<b>Lift Height</b>	in	9.25			
	9	<b>Lift</b>	in	6			
	10	<b>Head Length</b>	Option 1/Option 2 in	36.7/43.2			
	16	<b>Outside Fork Spread</b>	Standard Tip in	22/27			
Extended Tip in			23/28				
Performance	17	<b>Speed Travel</b>		<b>Power Unit First</b>		<b>Forks First</b>	
				<b>PE 4000</b>	<b>PE 4500</b>	<b>PE 4000</b>	<b>PE 4500</b>
			Empty mph	8.6	9.0	5.5	6.5
			4000 lb mph	7.0	7.0	5.2	5.7
			6000 lb mph	6.3	6.3	5.1	5.1
			8000 lb mph	6.0	6.0	5.0	5.0

Forks	<b>PE 4000/4500 Series</b>			<b>Standard-Tip Forks</b>						<b>Extended-Tip Forks</b>		
		<b>Nominal Fork Length</b>	in	36	42	48	54	60	96	84	93	96
	11	<b>Actual Fork Length</b>	in	35.75	41.75	47.75	53.75	59.75	95.75	83.75	93	95.75
	12	<b>Overall Length</b>	Option 1 in	72.44	78.44	84.44	90.44	96.44	132.44	120.44	129.69	132.44
			Option 2 in	78.94	84.94	90.94	96.94	102.94	138.94	126.94	136.19	138.94
	13	<b>Wheelbase</b>	Option 1 in	43.12	49.12	55.12	61.12	67.12	103.12	75.12	75.12	75.12
			Option 2 in	49.62	55.62	61.62	67.62	73.62	109.62	81.62	81.62	81.62
	14	<b>Grade Clearance</b>	Option 1 %	44	38	34	30	27	18	24	24	24
			Option 2 %	38	33	30	27	25	17	22	22	22
	15	<b>Turning Radius</b>	Option 1 in	60.95	66.93	72.90	78.88	84.88	120.8	92.9	92.9	92.9
			Option 2 in	67.43	73.40	79.38	85.38	91.38	127.3	99.3	99.3	99.3
	7	<b>Truck Weight</b>	6000 lb lb	1496	1512	1528	1544	1560	1710	1643	1724	1739
8000 lb lb			1515	1539	1563	1587	1611	1775	1703	1784	1799	

Wheels and Tires	Model		<b>PE 4000/4500</b>
	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.	

## PE 4000/4500 Series

## Technical Information

### 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

- 24-volt fused electrical system
- Model 1404C Crown SepEx control (PE 4000 only)
- Access 1 2 3<sup>®</sup> Comprehensive System Control with AC Traction (Includes BDI with lift lockout, hour meters and event codes) (PE 4500 only)
- Polyurethane load wheels
- Heavy-duty articulating shim free casters
- Full width, raise, lower, horn, and end mounted reversing button in control handle
- Raise, lower, horn and high speed button on operator grab bar
- 175 amp battery connector
- Key switch
- Horn
- Lift-off left and right battery retainers
- Anti-tie down
- Platform cushion (non-freezer conditioned trucks)
- Rubber knee pad
- One-touch high speed
- Steel doors
- Color-coded wiring
- InfoPoint<sup>®</sup> - Quick reference guide and maps support diagnostics

### Optional Equipment

- Curtis Spyglass Gage (discharge indicator with lift lockout, hour meter, and event codes) (PE 4000 only)
- Hour meter (PE 4000 only)
- Coast control
- Quick Coast<sup>™</sup>
- QuickPick<sup>™</sup> control handle
- Quick adjustment caster
- Quick adjustment caster with torsion bar package
- Battery retainer interlock switch
- Quick battery disconnect handle (right side only)
- Left side battery connector
- Battery compartment rollers
- Lift-off load backrest
- Hinged load backrest with quick release (48", 60" or 72" high)

- Bolt-on load backrest
- Work Assist<sup>™</sup> Accessories:
  - Strobe light
  - Flashing light
  - Work lights
  - Fan
  - Storage pouch
  - Pad clip and hook
  - Shrink wrap tray (Option 2 battery only)
- Storage module (Option 2 battery only)
- 7" wide fork (6000 lb only)
- Drive tire and load wheel options
- Toggle switch in lieu of key
- Tandem load wheels
- Dual load wheels
- Cold and corrosion conditioning
- Special color paint
- Skid adaptor
- Rubber skirt extension

### Operator Area and Controls

The PE 4000/4500 Series has an operator platform which increases operator comfort and productivity. Rounded edges and careful placement of operator contact points make the PE 4000/4500 Series user friendly. Contoured steel doors allow for maximum operator and foot room.

The Crown PE 4000/4500 Series has a microcellular composition floor mat and a rubber knee pad for improved operator comfort.

The Crown PE 4000/4500 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 1404C SepEx traction control (PE 4000 only) and Access 3<sup>™</sup> AC traction control (PE 4500 only) integrate many of the operating features to provide excellent control and reliability. Directional contactors are eliminated while traction speeds have been improved for optimum productivity. The Crown-manufactured SepEx and large AC drive motors are application designed for reliability and ease of service.

### Access 1 2 3<sup>®</sup> Comprehensive System Control with AC Traction (PE 4500 only)

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<sup>™</sup> 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 (PE 4500 only)

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<sup>®</sup>

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.

## PE 4000/4500 Series

## Technical Information

### 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 4000/4500 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 4000/4500 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

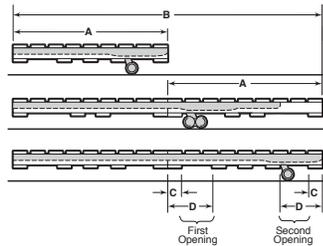
Rugged steel doors are suspended on heavy-duty pin hinges. Doors swing wide for good access. Doors also can be lifted off for unrestricted service access. Door bolts have exclusive convex design that mates with concave door holes for fast reinstallation of bolts. Heavy steel skirt surrounds entire area.

### 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.*



**Crown Equipment Corporation**  
New Bremen, Ohio 45869 USA  
**Tel** 419-629-2311  
**Fax** 419-629-3796  
[crown.com](http://crown.com)

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

Crown, the Crown logo, the Momentum symbol, Access,  
Access 3, Access 1 2 3, InfoPoint, Quick Coast,  
QuickPick, and Work Assist are trademarks of  
Crown Equipment Corporation.

Copyright 2006 Crown Equipment Corporation  
SF14714 10/06