

**CROWN**

**Specifications**

**PW 3500 Series**

Walkie Pallet  
Truck

# PW 3500

# Series





General Info	1	Manufacturer	Crown Equipment Corporation						
	2	Model	PW 3510		PW 3520				
	3	Load Capacity	lb	6000		6000 / 8000			
	4	Power	Electric	12 Volts		24 Volts			
	5	Operator Type	Stand-up	Walkie		Walkie			
Dimensions	8	Lift Height	in	9.25		9.25			
	9	Lift	in	6		6			
	10	Head Length	Option 1 / Option 2	in 30.44		29.19 / 35.69			
	16	Outside Fork Spread	Standard Tip	in 22 / 27		22 / 27			
Performance	17	Speed Travel	Empty	mph	3.3		3.4		
			4000 lb	mph	2.8		3.0		
			6000 lb	mph	2.4		2.8		
			8000 lb	mph	na		2.6		
Forks	PW 3500 Series			Standard-Tip Forks					
		Nominal Fork Length	in	36	42	48	54	60	
	11	Actual Fork Length	in	35.75	41.75	47.75	53.75	59.75	
	12	Overall Length	PW 3510	in	66.19	72.19	78.19	84.19	90.19
			Option 1 PW 3520	in	64.94	70.94	76.94	82.94	88.94
			Option 2 PW 3520	in	71.44	77.44	83.44	89.44	95.44
	13	Wheelbase	PW 3510	in	44.38	50.38	56.38	62.38	68.38
			Option 1 PW 3520	in	43.12	49.12	55.12	61.12	67.12
			Option 2 PW 3520	in	49.62	55.62	61.62	67.62	73.62
	14	Grade Clearance	PW 3510	%	42	37	33	29	27
			Option 1 PW 3520	%	44	38	34	30	27
			Option 2 PW 3520	%	38	33	30	27	25
	15	Turning Radius	PW 3510	in	54.60	60.57	66.56	72.54	78.53
Option 1 PW 3520			in	53.35	59.32	65.31	71.30	77.28	
Option 2 PW 3520			in	59.83	65.81	71.79	77.78	83.77	
7	Truck Weight	6000 lb	lb	1310	1326	1342	1358	1381	
		8000 lb	lb	1329	1353	1377	1401	1432	

		PW 3510-60	PW 3520-60	PW 3520-80	
Wheels and Tires	Model				
	Drive Tire	in 13.5 x 5.5 x 8 (r)	13.5 x 5.5 x 8 (r)	13 x 4.5 x 8 (p)	
	Load Wheels	≤ 60"	4 - 3.25 x 3.25 (-10)	4 - 3.25 x 3.25 (-10)	2 - 3.25 x 6.5 (-35)
		> 60"	2 - 3.25 x 6.5 (-35)	2 - 3.25 x 6.5 (-35)	2 - 3.25 x 6.5 (-35)
	-10	Low rolling resistance, cut/tear resistance. Docks, rough floors, floor debris and traction.			
-30	Moderate cut/tear resistance, high capacity. High capacity transport. Not for dock use.				
-35	Highest cut/tear resistance offered. Extremely high capacity, low rolling resistance. Docks, rough floors and floor debris.				
-40	Combines good cut/tear resistance and very high capacity. Use where nothing else works.				

(r) = rubber, (p) = poly, ≤ = less than or equal to, > = greater than

**PW 3500 Series**

**Technical Information**

**Maximum Battery Size**

PW 3510-60: 7.94" wide x 31.12" long x 23.38" high

**PW 3520-60/80:**

Option 1 - 6.69" wide x 34.44" long x 23.38" high

Option 2 - 13.19" wide x 31.12" long x 23.38" high

**Batteries**

PW 3510-60: 12-volt, up to 660 amp hour, 7.6 Kwh  
Min/Max weight 400/540 lb

**PW 3520-60/80:**

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

Min/Max weight 360/710 lb

Option 2 - 24-volt, 600 amp hour, 13.9 Kwh

Min/Max weight 815/1400 lb

**Standard Equipment**

- 12-volt fused electrical system (PW 3510)  
24-volt fused electrical system (PW 3520-60/80)
- Resistor control
- Polyurethane load wheels
- Lift-off left and right battery retainers
- Full width, raise, lower, horn, and end mounted reversing button in control handle
- Third speed cutout
- 175 amp battery connector (PW 3520-60/80)  
350 amp battery connector (PW 3510-60)
- Key switch
- Horn

**Optional Equipment**

- Transistor on PW 3520-60/80
- EE rating on PW 3520-60/80
- Curtis Unigage (discharge indicator with lift lockout and hour meter)
- Discharge indicator
- Hour meter
- Quick adjustment caster
- Quick adjustment caster with torsion bar package
- Battery retainer interlock switch
- Quick battery disconnect handle (PW 3520, right side only)
- Left side battery connector (right side standard)

- Battery compartment rollers
- Lift-off load backrest
- Hinged load backrest with quick release (48", 60" or 72" high)
- Storage module (Option 2 battery only)
- 7" wide fork (PW 3520-60 only)
- Drive tire and load wheel options
- Toggle switch in lieu of key
- Tandem load wheels
- Cold and corrosion conditioning
- Special color paint
- Skid adapter

**Operator Controls**

The PW 3500 Series has a refined control handle, which improves operator comfort and productivity.

The Crown PW 3500 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. Third speed selector in control handle may be used to shut off high speed when operating in congested areas. Reversing button in control handle reverses direction of travel, if button should come in contact with operator.

**Electrical System**

24-volt electrical system (PW 3520-60/80)  
12-volt electrical system (PE 3510-60)

Series-wound, high-torque, fan-cooled, Crown manufactured drive motor for reliability and ease of service.

Series-wound, high-torque, lift motor

Traction control systems: Resistor control has four heavy-duty contactors with silver tips. Solid-state time relay on resistor control between 2nd and 3rd speeds provide controlled acceleration. Resistor is standard on the PW 3500 Series. Transistor control is optional on 24-volt models.

Transistor control has many benefits; maximum energy efficiency, reduced maintenance and infinite speed control. Crown transistor controls feature a 250 amp rated system; a bypass contactor for maximum current in heavy loading, ramping applications; arc-less contactor operation; ramp start; and a sealed enclosure that protects the transistor control from water, contaminants, etc.

Lift limit switch operates at maximum lift height to shut off pump motor.

Control and power circuits are fused.

Power disconnect

All wiring color coded

Key switch

175 amp SB connector (PW 3520-60/80) 350 amp connector (PW 3510-60)

Horn

**Hydraulic System**

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 packing.

Pressure-compensating flow control valve is integral part of valve block and regulates maximum 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**

Crown has designed two optional caster systems for the PW 3500 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.

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, fork spread - 22" and 27" standard on standard-tip models. 23" - 26" spread available in one-inch increments.

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.

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.

New 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. New 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**

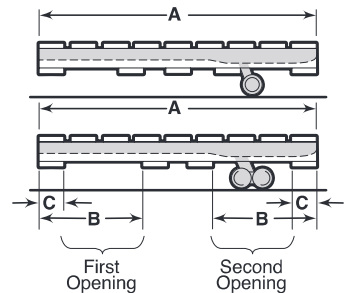
Rugged steel doors are suspended on heavy-duty pin hinges. Doors swing wide for good access. Doors also can be lifted off for unrestricted service access. Door bolts have exclusive convex design that mates with concave door holes for fast reinstallation of bolts. Heavy-steel skirt surrounds entire area.

**Brake**

Internal expanding mechanical brake with 4.5" drum and bonded brake linings. Brake drum is mounted on drive motor shaft and braking effort is transmitted through the gear reductions. Brake is actuated by control handle position.

**Pallet Planning Guide**

On PW models, the load wheel will drop in the second opening of the pallet. When "A" dimension equals nominal fork length, "C" dimension is 6" maximum and "B" is 14" minimum. On models with tandem load wheels, the "C" dimension should be 6" maximum and the "B" 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

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

Crown and the Momentum symbol are trademarks of Crown Equipment Corporation.

Copyright 1993-2005 Crown Equipment Corporation  
 SF12156 Rev. 4/05  
 Printed in U.S.A.