PW 3500
Series

Specifications
PW 3500 Series
Walkie Pallet Truck
# PW 3500 Series Specifications

<table>
<thead>
<tr>
<th>Dimension</th>
<th>General Info</th>
<th>PW 3510</th>
<th>PW 3520</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer</td>
<td>Crown Equipment Corporation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model</td>
<td>PW 3510</td>
<td>PW 3520</td>
<td></td>
</tr>
<tr>
<td>Load Capacity</td>
<td>lb</td>
<td>6000</td>
<td>6000 / 8000</td>
</tr>
<tr>
<td>Power</td>
<td></td>
<td>12 Volts</td>
<td>24 Volts</td>
</tr>
<tr>
<td>Operator Type</td>
<td></td>
<td>Stand-up</td>
<td>Walkie</td>
</tr>
<tr>
<td>Lift Height</td>
<td>in</td>
<td>9.25</td>
<td>9.25</td>
</tr>
<tr>
<td>Lift</td>
<td></td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Head Length</td>
<td>in</td>
<td>30.44</td>
<td>29.19 / 35.69</td>
</tr>
<tr>
<td>Outside Fork Spread</td>
<td>Standard Tip</td>
<td>22 / 27</td>
<td>22 / 27</td>
</tr>
<tr>
<td>Speed Travel</td>
<td>Empty mph</td>
<td>3.3</td>
<td>3.4</td>
</tr>
<tr>
<td></td>
<td>4000 lb mph</td>
<td>2.8</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>6000 lb mph</td>
<td>2.4</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>8000 lb mph</td>
<td>na</td>
<td>2.6</td>
</tr>
</tbody>
</table>

## PW 3500 Series Standard-Tip Forks

<table>
<thead>
<tr>
<th>Forks</th>
<th>Nominal Fork Length</th>
<th>36</th>
<th>42</th>
<th>48</th>
<th>54</th>
<th>60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Length</td>
<td>PW 3510</td>
<td>35.75</td>
<td>41.75</td>
<td>47.75</td>
<td>53.75</td>
<td>59.75</td>
</tr>
<tr>
<td></td>
<td>Option 1 PW 3520</td>
<td>64.94</td>
<td>70.94</td>
<td>76.94</td>
<td>82.94</td>
<td>88.94</td>
</tr>
<tr>
<td></td>
<td>Option 2 PW 3520</td>
<td>71.44</td>
<td>77.44</td>
<td>83.44</td>
<td>89.44</td>
<td>95.44</td>
</tr>
<tr>
<td>Wheelbase</td>
<td>PW 3510</td>
<td>44.38</td>
<td>50.38</td>
<td>56.38</td>
<td>62.38</td>
<td>68.38</td>
</tr>
<tr>
<td></td>
<td>Option 1 PW 3520</td>
<td>43.12</td>
<td>49.12</td>
<td>55.12</td>
<td>61.12</td>
<td>67.12</td>
</tr>
<tr>
<td></td>
<td>Option 2 PW 3520</td>
<td>49.62</td>
<td>55.62</td>
<td>61.62</td>
<td>67.62</td>
<td>73.62</td>
</tr>
<tr>
<td>Grade Clearance</td>
<td>PW 3510 %</td>
<td>42</td>
<td>37</td>
<td>33</td>
<td>29</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Option 1 PW 3520 %</td>
<td>44</td>
<td>38</td>
<td>34</td>
<td>30</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Option 2 PW 3520 %</td>
<td>38</td>
<td>33</td>
<td>30</td>
<td>27</td>
<td>25</td>
</tr>
<tr>
<td>Turning Radius</td>
<td>PW 3510 in</td>
<td>54.80</td>
<td>60.57</td>
<td>66.56</td>
<td>72.54</td>
<td>78.53</td>
</tr>
<tr>
<td></td>
<td>Option 1 PW 3520 in</td>
<td>53.35</td>
<td>59.32</td>
<td>65.31</td>
<td>71.30</td>
<td>77.29</td>
</tr>
<tr>
<td></td>
<td>Option 2 PW 3520 in</td>
<td>59.83</td>
<td>65.81</td>
<td>71.79</td>
<td>77.78</td>
<td>83.77</td>
</tr>
</tbody>
</table>

## Standard Equipment

1. 12-volt fused electrical system (PW 3510)
2. 24-volt fused electrical system (PW 3520-60/80)
3. Resistor control
4. Polyurethane load wheels
5. Lift-off left and right battery retainers
6. Full width, raise, lower, horn, and end mounted reversing button in control handle
7. Third speed cutout
8. 175 amp battery connector (PW 3520-60/80)
9. 350 amp battery connector (PW 3510-60)
10. Key switch
11. Horn

## Optional Equipment

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

### Maximum Battery Size

- **PW 3510-60**: 7.94" wide x 31.12" long x 23.38" high
- **PW 3520-60/80**: 6.69" wide x 34.44" 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**: 24-volt, 330 amp hour, 7.7 Kwh
  - Min/Max weight 360/710 lb

### Wheels and Tires

- **Drive Tire**: 13.5 x 5.5 x 8 (r)
  - 4 x 3.25 x 3.25 (-10)
  - 2 x 3.25 x 6.5 (-35)
- **Load Wheels**: 4 x 3.25 x 3.25 (-10)
  - 2 x 3.25 x 6.5 (-35)

### Performance

- **PW 3500 Series**
- **Standard-Tip Forks**

### General Info

- **Dimensions**
- **Performance**

### Technical Information

11. Battery compartment rollers
12. Lift-off load backrest
13. Hinged load backrest with quick release (48", 60" or 72" high)
14. Storage module (Option 2 battery only)
15. 7" wide fork (PW 3520-60/80 only)
16. Drive tire and load wheel options
17. Toggle switch in lieu of key
18. Tandem load wheels
19. Cold and corrosion conditioning
20. Special color paint
21. Skid adapter

---

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

PW 3500 Series
Technical Information

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.
SF12156 Rev. 4/05
Printed in U.S.A.