



PDX50

Power Drive
Heavy-Duty
Straddle Trucks



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TECHNICAL DATA

ELECTRICAL SYSTEM

All power is routed via "SB" type connector (standard) to primary fuse protection, where power then is separated to drive and lift system subcircuits.

All cables and wiring are numbered for easy service tracing.

Hydraulic pump motor(s) is specially selected for peak electrical efficiency at specific torque and rpm lift pump requirements.

Vehicle controls are CAN based communications using Zapi controller.

PDX50: includes steel-clad 300 amp. hour at 6 hr. rate battery (11.844 kwh) and 83 amp. fully automatic charger.

STRUCTURAL SYSTEM

Mast construction is I-beam, rolled of premium steel specifically for lift truck use.

Fully rolled inner mast and carriage.

Forged forks with undertaper and full upset heel are standard.

Rigid, low profile chassis is continuous welded and distortion-free.

Hook-mounted forks for maximum safety and easy adjustment. Permits easy interchangeability of Big Joe attachments.

DRIVE SYSTEM

Direct drive, full oil bath transmission, operates through 24:1 gear reduction in ductile-iron transmission case with heat-treated gears and premium industrial bearings.

Unit uses automatically applied parking brake and electronically controlled regenerative braking.

Power steering with "fly-by-wire" technology is standard.

HYDRAULIC SYSTEM

10 Gallon Per Minute (GPM) pump standard.

Infinitely variable spool-type lowering and tilt valve with ball checks provides full-range operator control and no-drift, positive system check in neutral.

Full system filtration is provided on the intake side of the pump which prevents foreign matter from entering any part of the system.

Built-in relief valve protects system from overload.

Pressure-compensating flow control valve at base of lift cylinder regulates lowering speed.

Reservoir is removable, and comes equipped with foam-filter cap and dipstick.

SAFETY FEATURES

Automatic high-speed cut-off limits travel speed when forks are elevated above 16".

Large direction reversing "Belly-button" impact switch provides operator protection when traveling. Upon body contact, switch activates low speed away from the operator.

Slip-resistant handgrips provide firm control of steering arm.

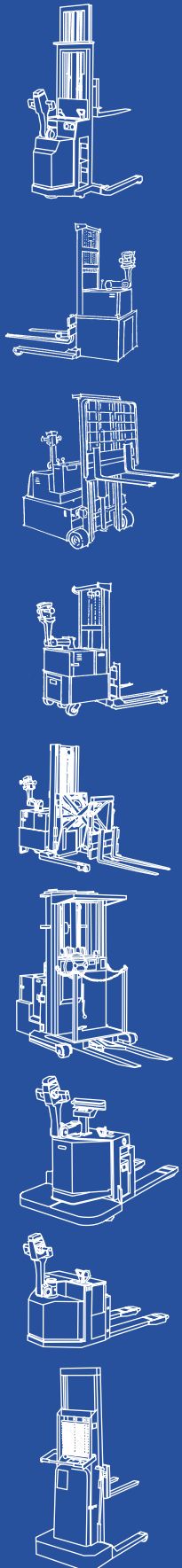
"Dead-man" mechanical braking action occurs when spring loaded control handle is released, applying disc brake.

Externally mounted battery disconnect is accessible to the operator for emergency power interrupt.

All power and control circuits are fuse-protected.

CERTIFICATION

All units are designed to meet the requirements of ANSI-B56.



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Big Lift LLC will not assume liability for injuries or damage arising from, or caused by, the removal of any safety devices from their vehicles by user. Because of the Big Joe policy of continuing product improvements, specifications are subject to change without notice.

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STANDARD EQUIPMENT

- **I-beam Mast.** The premium steel mast construction features I-beam design with roller-bearing surfaces for long mast life. Interlock channel and I-beam mast accom-modates high lifting stresses and maintains load stability.
- **Large Direction Reversing “Belly-button” Impact Switch.** Provides operator protection when traveling. Upon body contact, switch activates low speed away from the operator.
- **Versatile Braking Systems.** When the handle is positioned in the top or bottom of its arc, “Dead-man” feature returns the handle to its upright position, cuts out travel power and automechanically engages the brake if the handle is inadvertently released.
- **Industrial Rated Batteries.** Built to withstand deep-discharge and recharging, industrial rated batteries contain heavy plates and separators. Hinged battery cover provide easy access to batteries for maintenance.
- **Fully Protected Electrical System.** System is fully fuse protected. All wiring is coded for easy servicing.
- **High Strength Construction.** Unitized continuous welded steel in every Big Joe frame minimizes structural deterioration.
- **Emergency Power Disconnect.** Externally mounted, quick-release battery disconnect is readily accessible to remove all power from truck circuits in the event of an emergency.
- **Special Alloy Forks.** Heavy-duty I.T.A. forks are heat-treated alloy steel and formed to preserve full strength at the fork heel. Bottom taper of 14 inches and beveled fork tips allow easy pallet entry and exit.
- **I.T.A. Class II Carriage.** I.T.A. Class II Carriage makes changing from forks to attachments simple. No tools or pin removal are required. Changing outside fork dimension is equally easy.
- **Chrome Plated Lift Cylinder.** For long life and low ram maintenance.
- **Pressure-Compensated Flow Control Valve** at base of lift cylinder regulates lowering speed.
- **V-Boxed Load Wheels on Straddle Legs.** This straddle leg design not only protects load wheels, but its angular shape aids in positioning.
- **Wheels.** 5” polyurethane tandem load wheels standard. Standard drive tire is 10.1” x 5” polyurethane, lug-type cushion tires.
- **Stepless Speed Control.** Infinitely variable speed control is available.
- **Power Steering**



SPECIFICATIONS

- Lifting Capacity:** 5,000 lbs. at 24” load center
- Lift Range:** 60” - 126”
- Power System:** 48V
- Turning Radius:** From 81”
- Travel:** Infinitely variable



Travel speeds (in MPH)	Loaded	Empty
48V	3.0	3.5
Lift speeds (fpm) up to		
48V	24	30

Lower speed (fpm) 36
 Gradeability 10%
 Grade Clearance 10-15% (consult factory)

Sideshift optional

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Specifications For All PDX50 Models

Straddle I.D. and O.D.:

Straddles are built to order. Consult chart for minimums. Consult factory for O.D. greater than 58".

Fork Length x Width x Thickness:

Choice of 36", 42"(STD), 48", 54", 60" x 4" x 2"

Wheel Diameter: Tandem Load Wheels 5"
Caster Wheels 6"
Drive Wheel 10.1"

Battery Compartment Size:

35.5" x 13.1" x 27"

Fork Lowered Height (min.):

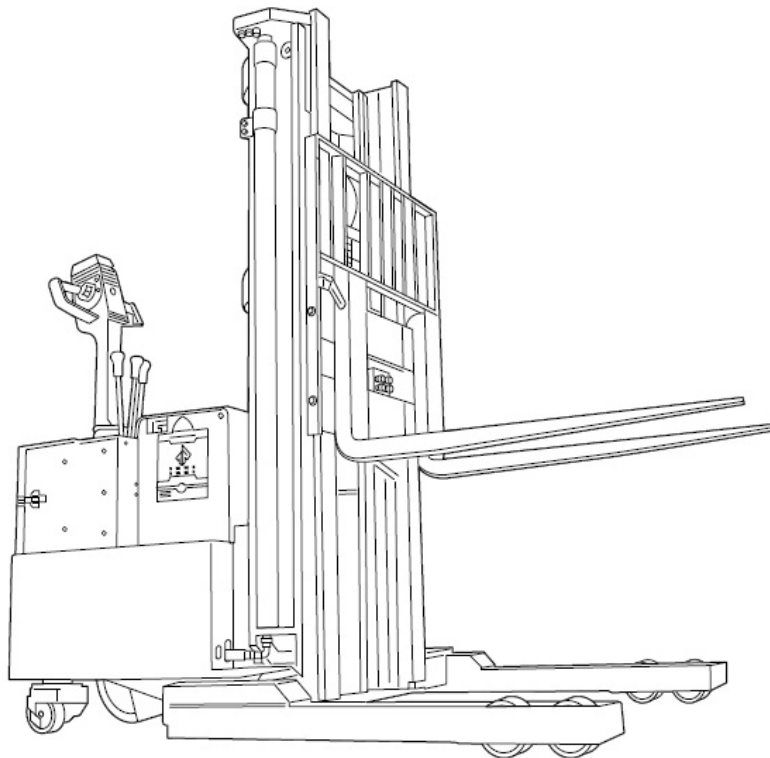
2³/₄" Standard

Fork O.D. Range: 8" (min), 32" (max)

MODEL NO.	CAPACITY AT 24" LOAD CENTER	LIFT HT.	COLL. HT. †	EXT. HT.	FREE LIFT HT.	STRADDLE LENGTH **	OVERALL WIDTH	POWER HEAD LENGTH ***	OVERALL LENGTH	TURN RADIUS	APPROX. SHPG. WEIGHT W/O	STAND. BATTERY (WT. LBS)		STAND. CHARGER (WT. LBS)	
								48V ***	48V ***	48V ***		48V	48V		
A	B	C	D	E	F	G	H					48V	48V		
PDX50-60	5000	60	82*	82	60	27	35.5	54.5	86.5	81	2350	300 A.H.	83 amp		
PDX50-126	5000*	130	84*	146	60	27	36	54.5	86.5	81	3150	(1042)	(90)		

Add additional 16" with load backrest extension **Face of fork to center of load wheels ***To face of fork

Custom Application Options



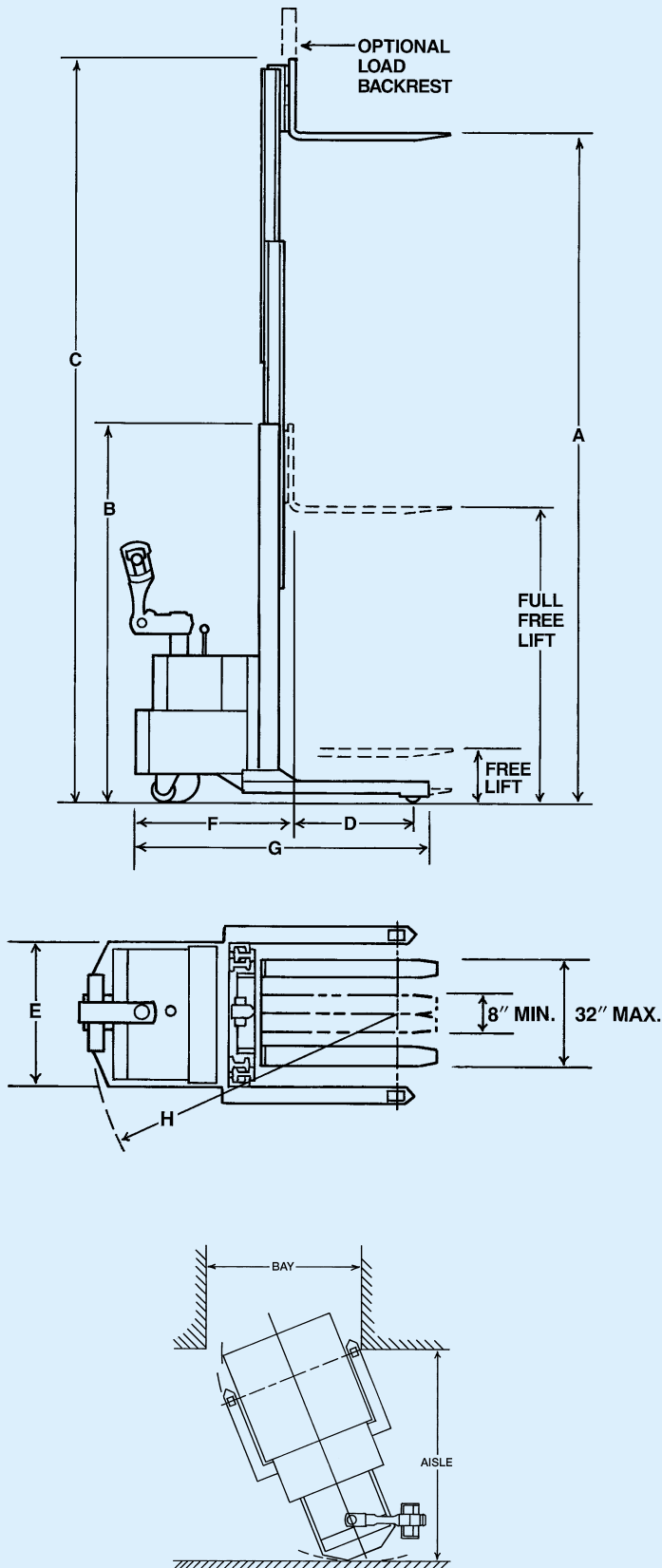
Consult factory for information on a wide range of available X-series custom stacker options including: Furnace loading bar forks, Die handling tables, Specialty attachments, Load platforms, Conveyor and ball type load transfer decks, Coil and roll handling rams, Carpet poles, Booms with lifting hooks, Special hydraulic and speed controls, Wash-down packages, V-groove guidance load wheels, Flow control valves and more.



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DIMENSIONS



FEATURES

▪ Advanced Handle Control

Big Joe Power Drive Heavy-Duty Straddle models come equipped with the industry's most versatile control handle. Forward and reverse speed may be controlled with detent action twist grip or thumb control. Horn is controlled with thumb. Large direction reversing "Belly-button" impact switch, at end of handle provides operator protection when traveling. Upon body contact, switch activates low speed away from the operator.



- Full Free Lift is Standard
- Industry Preferred Controller
- AC Drive
- High-Output Hydraulic System with up to 10 GPM
- Easy Access Service Panel.

Full-access design makes maintenance fast and easy. Hinged doors and removable panels permit quick access to battery, electrical circuitry, drive train and hydraulic components for all normal maintenance. Most major components can be serviced without special tools.