

Yale

Low Lift
Pallet Walkie

MPW060-E

Yale motorized hand trucks combine the latest in state-of-the-art technology and ergonomics making Yale the leader for walkie and/or rider applications.

Controls

Travel direction and speed are selected by rotating the actuator in the desired direction of travel. The butterfly throttle control provides multiple grip positions minimizing operator fatigue. The stationary portion of the handle minimizes wrist movement and provides a solid grip while maneuvering the truck. This provides additional stability while driving the truck. The bottom-mounted tiller handle optimizes the operating position.

Lift, Lower, and Horn pushbuttons are conveniently located on the handle.

The **Reversing Switch** located on top of the handle simultaneously reverses truck direction and sounds the horn should it come in contact with the operator. The wrap around design provides protection through the full range of handle movement. This switch is reset when the direction control is returned to neutral or the handle is moved to the brake "on" position.

Electrical System

The standard 24-volt MPW electrical system has been designed using SEM technology to enhance truck performance and reliability. The forward and reverse direction contactors are replaced by the traction motor controller. A main, or line contactor, is used to provide reverse polarity protection as well as power interrupt to the traction motor in the event of a controller fault. The controller utilizes regenerative braking which significantly reduces the current through the traction motor brushes during "plugging" therefore increasing brush life. SEM also provides improved speed and torque control throughout the range of operation therefore improving productivity.

Master Drive Unit

The heart of the traction system is the master drive unit (MDU). A stationary traction motor eliminates the power cables from the traction motor to the traction controller from rotating or flexing. The MDU features an integrated pinion with a splined motor to MDU coupling. The support bearings and pinion are integral to the MDU eliminating the potential of damaging the gears when assembling the motor to the MDU. By integrating the pinion, the gear mesh can be better controlled resulting in a quieter MDU. The splined coupling allows for quick removal and installation of the traction motor.

Lift Linkage System

Hydraulic Power Unit - A solid-state circuit is used to control the pump motor instead of traditional contactors, which extends the service life of the pump motor. A permanent magnet motor and pressure compensated pump are also utilized. This high efficiency system allows the pump and motor to operate at relatively low RPMs and results in low noise.

Hoist motor - The hydraulic pump motor is controlled electronically. A lift interrupt is standard in order to limit the lift function in the event that

the battery is depleted beyond 80%. A BDI/hour meter display is optional.

Hydraulic reservoir - Provides a large volume of oil, reducing oil heating and allowing higher system efficiency. The reservoir is translucent with graduated fluid level marks for easy fluid level checks.

Lift Linkage Pivots - All lift linkage pivots have bushings with provisions for lubrication. All lift linkage pins are turned, polished and ground cold rolled steel with electroless nickel plating. The electroless nickel plating provides corrosion protection. All lift linkage pins are retained by zinc plated spiral pins.

Pull Rods - The pull rods are two piece construction: 1) welded 1" x 2" flat bar and adapter, and 2) replaceable threaded end. The pull rods are adjustable to compensate for bushing and load wheel wear.

Brake

Power is cut off and brake is applied when steering handle is fully raised or lowered. Handle returns to vertical when released. Regenerative braking is the primary method for the service brake. The traction motor will decelerate the truck when the throttle is returned to the neutral position. The parking brake is an electrically released, spring applied, electromagnetic brake. The brake is released by lowering the tiller handle to the operating position and selecting a direction with the direction/throttle control. The brake is applied when a traction control fault occurs.

Forks

Totally fabricated 9" wide forks are constructed of 1/4" hot rolled steel and formed for strength. The fork nose bottom taper is designed specifically to enter non-chamfered bottom board and "throw away" pallets while maintaining the ability to enter a GMA pallet. The fork nose top profile is tapered to ease exiting the last pallet in a trailer where a grade change exists between the trailer and the dock leveler or dock plate. Pallet exit runners are welded to the underneath of each fork; and center roller on cast steel load wheel links assists exit. Easy pallet fork adjustment from top of fork by lock nut design operating on 7/8" pull rod.

Frame

Heavy gauge plate and bar steel frame is electrically welded into unit structure for rigidity and strength. Battery compartment is an integral part of the fork frame. The front bumper is a full 3/8" thick for toughness and 3 5/8" off the floor to allow good ramp clearance.

Wheels

Load tires - The standard load wheel configuration is single load wheel with two roller bearings and a "knock-out" axle. The load wheel compound is 95 durometer polyurethane molded over a steel wheel and measures 3.25" x 6.5". Grease seal and string guard protection are standard.

Drive tire - The drive tire is 10" x 5" x 6 1/2" electric. Both rubber and 90 durometer polyurethane compounds are available. The drive wheel is secured to the drive axle with 5 bolts.

Options

Cold storage/freezer protection, various fork lengths load backrest, poly drive tire, operator convenience tray, multi-function display w/hour meter, discharge indicator and status code readout, battery rollers, stabilizing casters, various load wheel packages, and creep speed control.

Additional Features

Lubrication - Fill and drain plugs are provided. All frame and drive unit mounting lubricating points are equipped with high pressure grease fittings. Standard is (red) SB 175 amp battery connector.

Paint - Gold and black.

Lift Specifications

6.0" lift 6000 lb. capacity.

Weight

MPW060-E - 1022 lb (464 kg)

Power Voltage

MPW060-E - 6000 lb. cap. - 24V STD.

Travel Speeds

		24 volts	mile/h	km/h
6000 lb	Empty	3.6	5.8	
	Loaded	2.8	4.4	

Load Wheel Positioning

The load wheels of standard trucks handling single pallets (A) will drop in the last opening of the pallet furthest from the operator when the pallet(s) length equals that of the forks. This opening must be at least nine inches in length and begin six inches from the end of the pallet.

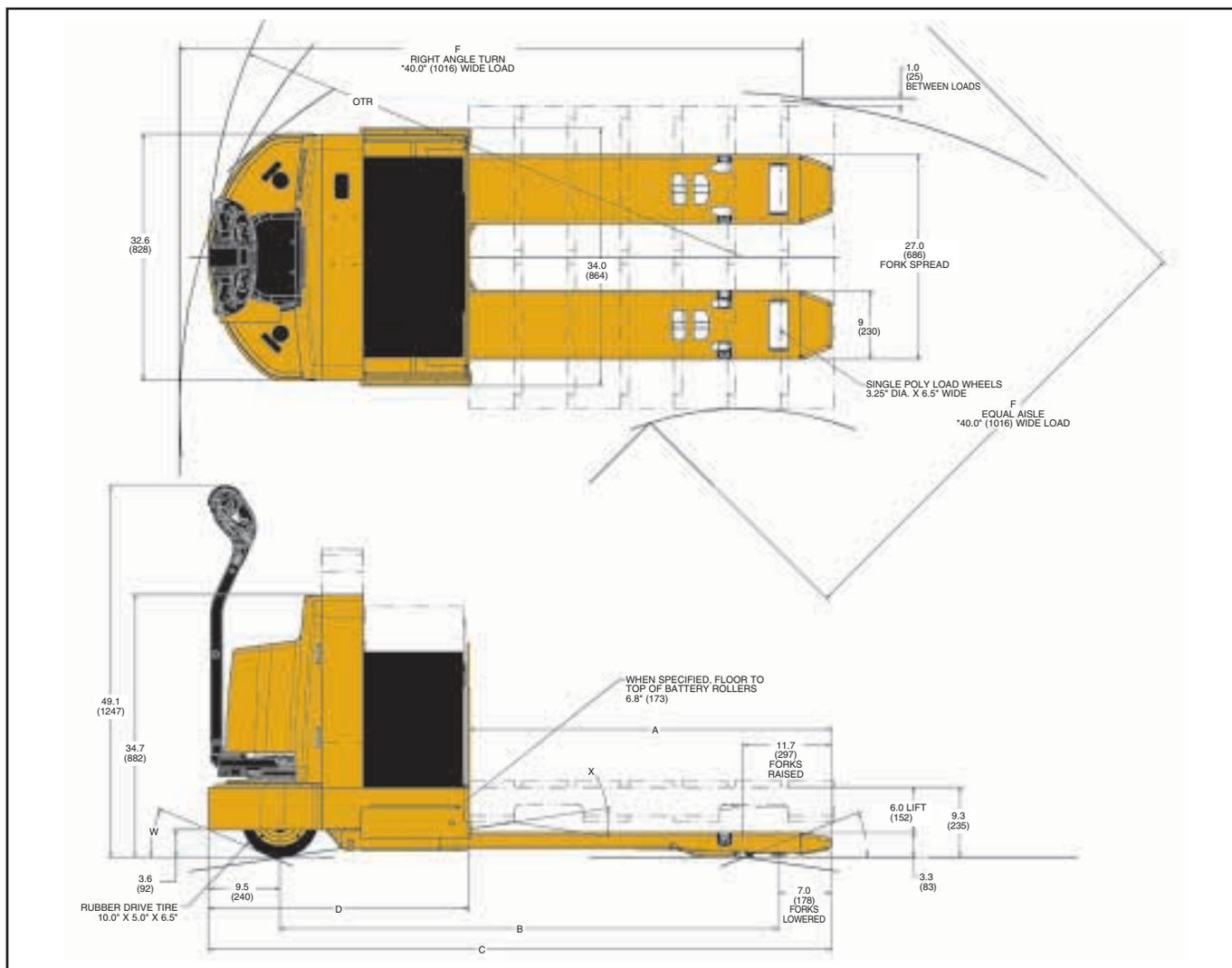
If the opening is less, the truck's lift height must be reduced depending on the opening width or the wheels will push-off the bottom boards. Contact



your Yale Industrial Truck Dealer for details.

Truck performance may be affected by the condition of the vehicle, how it is equipped, and the application. Consult your Yale Industrial Truck Dealer if any of the information shown is critical to your application. Specifications are subject to change without notice.

This truck meets all design specifications of ANSI B56.1 Safety Standard for Powered Industrial Trucks at the time of manufacture. Classified by Underwriters' Laboratories, Inc. as to fire hazard only for Type E industrial trucks.



24V, 6,000 Lbs. Capacity Walkie / Rider

No. of cells	Cell Size	Plates per Cell	Capacity (6 hr rate)		"X" Dim.	"Y" Dim.	"Z" Dim.	Max. Weight
			Amp-Hours	KWH				
12	75	7	225	5.2	25.6"	8.8"	23.3"	536 lbs.
12	85	7	255	6.0	25.5"	8.6"	23.3"	590 lbs.
12	75	11	375	8.7	26.5"	13.0"	23.3"	825 lbs.
12	85	11	425	9.9	26.1"	12.8"	23.3"	865 lbs.
12	75	13	450	10.5	30.9"	13.0"	23.3"	987 lbs.
12	85	13	510	11.9	30.9"	13.0"	23.3"	1035 lbs.

Notes: 1) Steel tray with cover required for all batteries, 2) Battery connector type is SB-175 Red (Gray is optional), 3) Cable lead position "B"
4) 20" cable length, 5) Maximum cable gauge of 1/0

BATTERY COMPARTMENT: 32.0 (812) X 13.4 (340) DEPTH X OPEN										
	DIM	LONG WHEELBASE		LONG WHEELBASE		LONG WHEELBASE		LONG WHEELBASE		
		IN	MM	IN	MM	IN	MM	IN	MM	
FORK LENGTH	A	36.0	915	42.0	1067	48.0	1219	60.0	1524	
WHEELBASE	B*	RAISED	49.1	1247	55.1	1400	61.1	1552	73.1	1857
		LOWERED	53.8	1367	59.8	1519	65.8	1671	77.8	1976
OVERALL LENGTH	C*	70.2	1783	76.2	1935	82.2	2088	94.2	2393	
CHASSIS LENGTH	D*	34.4	874	34.4	874	34.4	874	34.4	874	
OUTSIDE TURNING RADIUS	OTR	RAISED	58.5	1486	64.5	1638	70.5	1791	82.5	2096
		LOWERED	63.2	1605	69.2	1758	75.2	1910	87.2	2215
RIGHT ANGLE STACKING	E*	71.2	1808	76.6	1946	82.1	2085	93.6	2377	
EQUAL AISLE	F	56.5	1435	59.8	1519	62.9	1598	68.9	1750	
GRADE CLEARANCE	W	42%		42%		42%		42%		
	X	39%		34%		31%		26%		
	Y	39%		39%		39%		39%		

Yale Batteries

Battery no.	Size	Volts	A•H	Weight with cover	
12-85Y7	25.62 x 8.81 x 23.25	24	255	542 lb	246 kg
12-75Y11	26.50 x 13.00 x 23.25	24	375	786 lb	357 kg

Anderson SB-175 (grey) connector, lead position "B" – 20" long. Battery with cover.
Max AH – 425 Max Weight – 865 lbs.



Yale Materials Handling Corporation
P.O. Box 7367
Greenville, NC 27835-7367

© Copyright 2002, Yale Materials Handling Corporation

2541-1-2/03-15
Printed in U.S.A.