

Yale

Electric Powered
Cushion Tire TrucksERC040GH
ERC050GH
ERC060GH
ERC065GH

Yale ERC-GH electric trucks are available in 4,000, 5,000, 6,000 and 6,500 pound capacities designed for demanding applications that require clean, quiet-running, heavy-duty capability. These trucks are extremely maneuverable and offer plenty of power and high stacking ability, while also offering excellent ergonomics, reliability and maintenance ease.

AC Transistor Traction Control

AC technology offers smooth acceleration with more responsive direction change, proportional regenerative braking and the Auto Deceleration System. The controller converts battery power to three phase AC power, and adjusts frequency and current to meet performance demands. Performance control settings and extensive diagnostics are accessible by technicians through the dash display or a PC. A master controller utilizing CANbus technology monitors and controls key truck components and systems. The thermal management system monitors component temperature and gradually adjusts performance to prevent damage to key components.

Controller Area Network (CANbus)

CANbus technology streamlines communications between truck systems through one main master controller. Dash display, traction controller and optional pump controller are all controlled via the CANbus network. A connection point is provided for interface with a service PC.

Electrical System

The ERC-GH utilizes AC motor technology designed for exceptional performance. It uses a brushless induction motor for high starting torque and smooth rapid acceleration. A speed sensor built into the motor provides feedback to the control system, allowing motor speed and direction to be continuously monitored. A thermal management system controls the power delivered to the motor during stall conditions, thereby protecting the motors from damage.

Brake

Duo-servo hydraulic brakes are self-adjusting and self-energizing for reduced pedal effort. The master cylinder is sealed and has an external fluid level sensor connected to a warning light on the instrument module. A foot applied/hand-released parking brake is manually adjustable and has an audible warning if the operator leaves the truck without applying the brake. The standard Auto Deceleration System automatically slows the truck when the operator's foot is removed from the accelerator pedal, extending brake life. An optional seat-operated parking brake is available, which engages the brake when the operator leaves the truck.

Voltage

36 or 48 volt systems are available in a series of different battery compartment sizes to meet a variety of application requirements.

A solid-state, return-to-neutral feature reduces the possibility of inadvertent truck movement at start-up. The truck will not start forward or rearward until the direction selector lever has been moved through neutral. The truck is equipped with a direction lever on each side of the steering column.

Dash Display

The dash display includes an hour meter, 40 character LCD display for status codes and descriptions, battery discharge indicator with lift interrupt, warning lights for brake fluid, seat belt indicator, and parking brake indicator. The display also permits access for service technicians to adjust performance control settings, allowing the truck to be customized to meet customer applications. Additionally, extensive diagnostics allow service technicians to quickly troubleshoot problems. The optional premium display adds operator selectable performance modes, operator passwords and a pre-shift operator checklist.

Foot Directional Control Pedal (FDC) (optional)

The foot directional control pedal is a highly productive directional/accelerator pedal. One pedal allows the operator to change direction and acceleration reducing operator movement and resulting in increased productivity.

Hydraulic Components

An optional transistor control hydraulic system is powered by a brushless, AC induction motor with a flexible coupling that joins the motor to the pump for long drive life and low noise. The motor and pump are mounted on rubber isolators for reduced noise and vibration. A combination of flexible wire-braid hoses and steel tubing is used to simplify the hydraulic plumbing. These hydraulic lines are carefully routed and held in place to reduce possible damage. A dip-stick located on the right-hand step area allows checking of hydraulic oil without removing the floor plate. A 10-Micron full flow hydraulic filter located in the return line protects the hydraulic system from contaminants and helps provide long life. A by-pass relief valve permits oil flow in the event of the filter clogging.

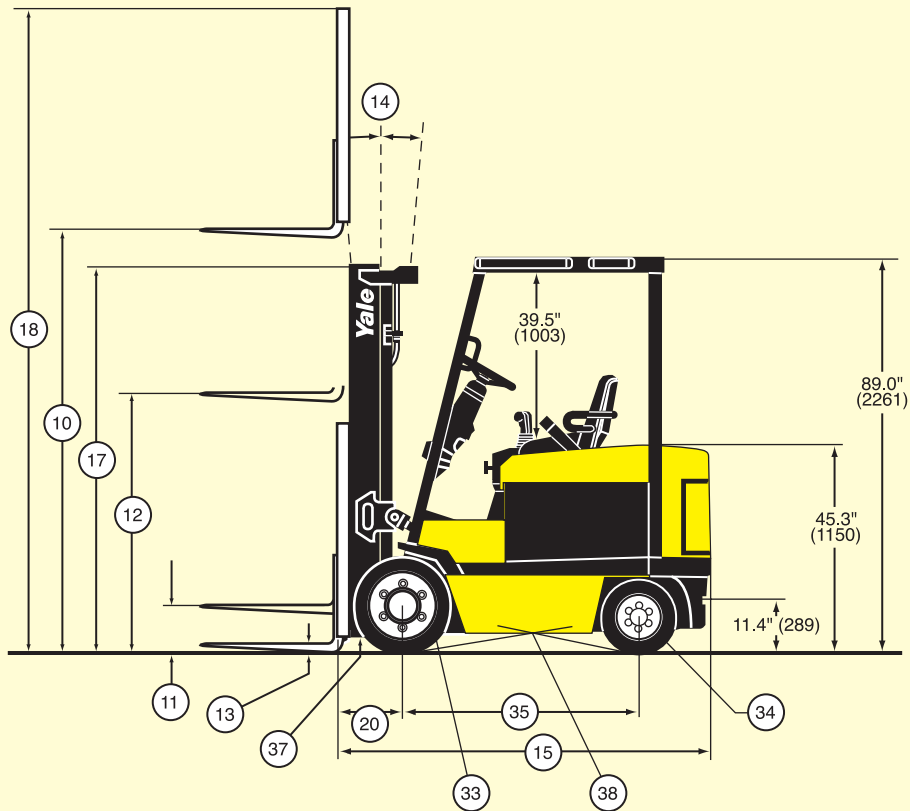
Hydrostatic Power Steering

Hydrostatic power steering is standard and the all-hydraulic design gives precise, reliable control while eliminating mechanical linkages and road shocks at the steering wheel. A seven position tilt steering column provides excellent operator comfort and visibility. A brushless motor is reduced to a very low speed when not in use, conserving energy and lowering noise levels.

(continued on back page)



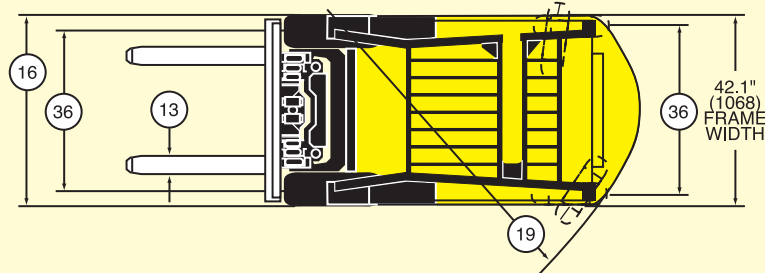
Truck shown with optional equipment



Dimensions displayed in inches. Dimensions in parenthesis represent millimeters.

GENERAL	1	Manufacturer	Manufacturer's Name	YALE	
	2	Model	Manufacturer's Designation	ERC040GH	
	3	Capacity	Rated Capacity	lb. (kg)	4000 (1814)
	4	Load Center	Distance	in. (mm)	24 (610)
	5	Power Type	Electric	Electric	
	6	Operator Type	Sit	Sit	
	7	Tire Type	Cushion, Solid, Pneumatic, Etc.	Front/Rear	C/C
	8	Wheels	Number (x=Driven) Front/Rear	2x/2	
DIMENSIONS	10	Upright Lift	Standard Lift (Top of Fork)	in. (mm)	131 (3332)
	11		Standard Free Lift (Top of Fork)	in. (mm)	5.5 (140)
	12		Opt. Free Lift (TOF) W-W/O LBR	in. (mm)	35.8 (910) / 59.9 (1522)
	13	Forks	Width/Thickness	in. (mm)	4 (100) / 1.50 (40)
	14	Tilt Angle	Standard Upright-Forward/Backward	Degrees	5 / 8
	15		Length to Face of Forks	in. (mm)	81.36 (2065)
	16	Overall	Width (Standard tires)	in. (mm)	42.1 (1068)
	17	Dimensions	Height Std, Upright Lowered	in. (mm)	84 (2131)
	18		Hgt. Std, Upright Ext-W-W/O LBR	in. (mm)	179.3 (4553) / 155.2 (3941)
	19	Turning Radius	Minimum (Outside)	in. (mm)	71.22 (1810)
20	Load Distance	Center of Wheel to Face of Forks	in. (mm)	14.8 (375)	
22	Aisle Width	(Add load Length for 90 Degree Stacking)	in. (mm)	86.02 (2185)	
23	Stability	Comply with ANSI?*	Yes		
PERFORM.	24		Voltage	36	48
			**Travel Speed Std.-No Load/With Load	mph (km/h)	9.9 (15.9) / 9.1 (14.6) 10.7 (17.2) / 10.0 (16.1)
			**Travel Speed Max.-No Load/With Load	mph (km/h)	11.0 (17.7) / 10.0 (16.1) 11.3 (18.2) / 11.3 (18.2)
	25	Speed	Lift Speed - No Load/With Load	ft/min (m/s)	101 (.51) / 61 (.31) 123 (.62) / 82 (.42)
	26		Lowering Speed - No Load/With Load	ft/min (m/s)	100 (.51) / 110 (.56) 100 (.51) / 110 (.56)
30	Total Approximate Weight	Standard Truck (W/O Battery)	lb. (kg)	6469 (2937)	
31	Axle Loading*	Static W/Rated Load-Front/Rear (Max Batt)	lb. (kg)	11374 (5164) / 2815 (1278)	
WHEELS & TIRES	32		Number - Front/Rear	2 / 2	
	33	Tires	Size Front	21 x 7 x 15	
	34		Rear	16 x 5 x 10.5	
	35	Wheelbase	Distance	in. (mm)	51.95 (1320)
	36	Tread	Center of Tires - Front/Rear	in. (mm)	35.1 (890) / 36.9 (935)
	37	Ground	Lowest Point	in. (mm)	3.54 (90)
	38	Clearance	No Load at Center of Wheelbase	in. (mm)	3.82 (97)
	39	Brakes	Service/Parking - Method of Control	Foot / Foot	
	40		Service/Parking - Method of Operation	Hydraulic / Mechanical	
	BATT.	41		Voltage	36
42		Battery	Type	Lead-Acid	
43			Volts/Ampere Hrs. (Max)	36/1320	48/990
44			Minimum Weight	2500 (1135)	
45		Electric Motors	Drive Motor - 60-Min. Rating	hp. (kw)	10 (7.5) 12.9 (9.6)
MOTORS			Pump Motor - 15-Min. Rating	hp. (kw)	9.4 (7) 12.5 (9.3)
			Drive Motor Control Method	Transistor	
			Number of Speeds	Infinitely Variable	
	55	Relief Press.	For Attachments	psi.	2250

* Based on triplex mast with maximum battery weight ** Extended shift enabled



YALE		YALE		YALE		1
ERC050GH		ERC060GH		ERC065GH		2
5000 (2268)		6000 (2722)		6500 (2948)		3
24 (610)		24 (610)		24 (610)		4
Electric		Electric		Electric		5
Sit		Sit		Sit		6
C/C		C/C		C/C		7
2x/2		2x/2		2x/2		8
131 (3332)		126 (3204)		126 (3204)		10
5.5 (140)		5.7 (145)		5.7 (145)		11
35.8 (910) / 59.9 (1522)		35.6 (903) / 56.3 (1430)		35.6 (903) / 56.3 (1430)		12
4 (100) / 1.75 (45)		5 (125) / 1.75 (45)		5 (125) / 1.75 (45)		13
5 / 8		5 / 8		5 / 8		14
82.38 (2090)		86.36 (2195)		89.75 (2280)		15
42.1 (1068)		43.5 (1105)		43.5 (1105)		16
84 (2131)		84 (2131)		84 (2131)		17
179.3 (4553) / 155.2 (3941)		174.5 (4432) / 153.7 (3905)		174.5 (4432) / 153.7 (3905)		18
72.13 (1830)		75.98 (1930)		79.53 (2020)		19
14.8 (375)		15.0 (385)		15.0 (385)		20
86.93 (2205)		90.98 (2315)		94.53 (2405)		22
Yes		Yes		Yes		23
36V / 48V		36V / 48V		36V / 48V		24
9.7 (15.6) / 8.7 (14.0)	10.6 (17.1) / 9.8 (15.8)	9.5 (15.3) / 8.3 (13.4)	10.4 (16.7) / 9.4 (15.1)	9.5 (15.3) / 8.2 (13.2)	10.4 (16.7) / 9.3 (15.0)	24
10.8 (17.4) / 9.6 (15.5)	11.3 (18.2) / 11.3 (18.2)	10.6 (17.1) / 9.1 (14.6)	11.3 (18.2) / 11.3 (18.2)	10.6 (17.1) / 9.0 (14.5)	11.3 (18.2) / 11.3 (18.2)	25
101 (.51) / 56 (.28)	123 (.62) / 74 (.38)	93 (.47) / 49 (.25)	116 (.59) / 64 (.33)	93 (.47) / 47 (.24)	116 (.59) / 62 (.31)	25
100 (.51) / 113 (.57)	100 (.51) / 113 (.57)	90 (.46) / 110 (.56)	90 (.46) / 110 (.56)	90 (.46) / 112 (.57)	90 (.46) / 112 (.57)	26
6969 (3164)		7683 (3488)		7796 (3539)		30
13025 (5913) / 2664 (1209)		14960 (6792) / 2855 (1296)		15724 (7139) / 2904 (1318)		31
2 / 2		2 / 2		2 / 2		32
21 x 7 x 15		21 x 8 x 15		21 x 8 x 15		33
16 x 6 x 10.5		16 x 6 x 10.5		16 x 6 x 10.5		34
51.95 (1320)		54.35 (1380)		57.74 (1465)		35
35.1 (890) / 36.9 (935)		35.5 (905) / 35.9 (910)		35.5 (905) / 35.9 (910)		36
3.54 (90)		3.54 (90)		3.54 (90)		37
3.82 (97)		3.82 (97)		3.82 (97)		38
Foot / Foot		Foot / Foot		Foot / Foot		39
Hydraulic / Mechanical		Hydraulic / Mechanical		Hydraulic / Mechanical		40
36	48	36	48	36	48	
Lead-Acid		Lead-Acid		Lead-Acid		41
36/1320	48/990	36/1430	48/1100	36/1500	48/1210	42
2500 (1135)		2900 (1315)		3100 (1505)		43
10 (7.5)	12.9 (9.6)	10 (7.5)	18.8 (14.0)	13.4 (10.0)	18.8 (14.0)	44
12.6 (9.4)	16.8 (12.5)	12.6 (9.4)	16.8 (12.5)	12.6 (9.4)	16.8 (12.5)	45
Transistor		Transistor		Transistor		
Infinitely Variable		Infinitely Variable		Infinitely Variable		
2250		2250		2250		55

(continued from front page)

Steering Axle

The steering axle is a one-piece ductile iron casting mounted on elastic cushions that reduce shock and provide a softer ride.

Masts\Carriage\Forks\Load Backrest Extension

Yale Global Hi-Vis simplex, duplex, triplex and quadplex masts provide excellent visibility. The mast features flush face design with geometrically matched, angled load rollers, which are canted, yet provide full-face roller contact. The mast front rail flange angle coupled with the inverted "J" inner channel and three degree mast rollers significantly reduces channel web milling and roller wear. Top accessible, "J-hook" mast mounting system allows convenient mast installation and removal. The J-hook mounting is standardized to allow direct mast interchangeability on a variety of Yale truck models without modification. Bronze steel backed bushings reduce mounting wear. Class II and III six-roller carriages are standard. Forks are "upset forged" from a single piece of high-strength steel to give added strength and thickness for wear. A 48" load backrest extension is standard.

Frame

The frame is a unitized construction, stress tested for durability. An integral step on both sides of the truck is provided for easy entry and exit. The truck has a two-piece floor plate that can be easily lifted out for service access without removing any hardware. A large, easily removable counterweight cover gives easy access to componentry. A fiberglass, gas spring-assisted battery cover allows easy changing of the battery. The battery compartment can be fitted with rollers or slides.

Additional Features

Additional features on the ERC-GH include an overhead guard, 42" forks, a contoured bucket type seat (6" fore and aft adjustment) with a hip restraint seat belt and an operator sensing switch. A seven position tilt steering column, rubber floor mat, electric horn and ignition lock are also standard.

Options

- AC transistor hydraulics
- Foot Directional Control Pedal
- Premium dash display
- Convenience Box
- Cold storage/corrosion packages
- Raised battery compartment cover
- Wide tread
- Semi-suspension seats
- Full suspension seats
- Various battery compartment lengths
- Battery rollers/sliders
- Overhead guard mounted headlights
- Lowered overhead guard
- Drive-in rack overhead guard
- Various light packages
- 10° forward tilt
- Integral sideshifter
- 48 volt
- Alarm - Back-up (87 dBA)
- Light - Amber strobe
- Rear work light
- Various type drive tires
- Type "EE" and "ES" UL construction

Lift and Lower Speeds ft/min, Weights

Model	Lift Speed (36V)		Lift Speed (48V)		Lower Speed Empty/Loaded	**Weight Lbs	
	Empty/Loaded	Empty/Loaded	Empty/Loaded	Empty/Loaded			
ERC040GH							
Simplex	101	61	123	82	100	110	6469
Duplex	93	62	123	82	90	100	6507
Triplex	91	61	120	80	92	104	6848
Quadplex	100	59	126	82	77	85	7380
ERC050GH							
Simplex	101	56	123	74	100	113	6969
Duplex	93	58	123	77	90	106	7007
Triplex	91	57	120	75	92	108	7348
Quadplex	100	55	126	77	77	91	7880
ERC060GH							
Simplex	93	49	116	64	90	112	7683
Duplex	82	49	109	65	72	103	7702
Triplex	81	49	105	65	78	105	8086
Quadplex*	100	53	126	72	77	99	8467
ERC065GH							
Simplex	93	47	116	62	90	112	7796
Duplex	82	48	109	63	72	105	7815
Triplex	81	48	105	63	78	107	8199
Quadplex*	100	52	126	70	77	103	8580

*Maximum capacity 5,000 lbs. ** Standard truck w/o battery.

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" and optional "EE" and "ES" for industrial trucks.

Battery and Compartment Specifications

Model	Compartment Size	Battery Specifications												
		Size			Electrical			Weight						
		WD	LG	HT	Dim X Min Max	Dim Y † Min Max	Dim Z Max	Volts	Plates	Max † Amp Hr	Min †	Max		
ERC040-050GH	Std	38.86	30.75	24.41	38.50	38.70	29.09	30.23	24.29	36	25	1320	2500	3500
	Opt	38.86	27.36	24.41	38.50	38.70	26.81	27.20	24.29	36	23	1210	2300	3300
ERC060GH	Std	38.86	33.15	24.41	38.50	38.70	31.50	33.00	24.29	36	27	1430	2900	3900
	48									21	1100			
ERC065GH	Std	38.86	36.54	24.41	38.50	38.70	35.43	36.38	24.29	36	31	1500	3100	4100
										48	23	1210		

36-volt battery uses Anderson SB-350 Gray connector with manual release, lead position "B" — 30" long.
48-volt battery uses Anderson SB-350 Blue connector with manual release, lead position "B" — 30" long.
† Smaller batteries require capacity reduction. ‡ Maximum size.

Standard Lift Specifications

(For other available mast heights - Contact your local Yale Dealer)

Model	O.A.H. Inches	Free Fork Height Inches		Max Fork Height Inches		Tilt Rwd-Fwd		Drive Tire Size Inches				O.A.W. Inches			
		040-050	060-065	040-050	060-065			040	050	060	065	040	050	060	065
Simplex	78	5.5	5.7	119	114	8	5	21 x 7	21 x 7	21 x 8	21 x 8	42.1	42.1	43.5	43.5
	84	5.5	5.7	131	126	8	5	21 x 7	21 x 7	21 x 8	21 x 8	42.1	42.1	43.5	43.5
	94	5.5	5.7	150	145	8	5	21 x 7	21 x 7	21 x 8	21 x 8	42.1	42.1	43.5	43.5
	108	5.5	5.7	170	165	8	5	21 x 7	21 x 7	21 x 8	21 x 8	42.1	42.1	43.5	43.5
Duplex	78	*54.0	*50.4	119	114	8	5	21 x 7	21 x 7	21 x 8	21 x 8	42.1	42.1	43.5	43.5
	84	*59.9	*56.3	130	126	8	5	21 x 7	21 x 7	21 x 8	21 x 8	42.1	42.1	43.5	43.5
	94	*69.8	*66.1	150	145	8	5	21 x 7	21 x 7	21 x 8	21 x 8	42.1	42.1	43.5	43.5
Triplex	76	*53.1	*50.5	171	163	5	5	21 x 7	21 x 7	21 x 8	21 x 8	42.1	42.1	43.5	43.5
	82	*59.0	*56.4	▲189	▲181	5	5	21 x 7	21 x 7	21 x 8	21 x 8	42.1	42.1	43.5	43.5
	84	*60.9	*58.4	▲194	▲187	5	5	21 x 7	21 x 7	21 x 8	21 x 8	42.1	42.1	43.5	43.5
	88	*64.9	*62.3	▲200	▲193	5	5	21 x 7	21 x 7	21 x 8	21 x 8	42.1	42.1	43.5	43.5
	92	*68.8	*66.3	▲212	▲205	5	5	21 x 7	21 x 7	21 x 8	21 x 8	42.1	42.1	43.5	43.5
	94	*70.8	*68.2	▲218	▲211	5	5	21 x 7	21 x 7	21 x 8	21 x 8	42.1	42.1	43.5	43.5
	102	*78.7	*76.1	▲236	▲228	5	5	21 x 7	21 x 7	21 x 8	21 x 8	42.1	42.1	43.5	43.5
Quadplex	84	*59.3	*59.3	▲240	▲240	4	5	21 x 7	21 x 7	21 x 8	21 x 8	42.1	42.1	43.5	43.5

*Without backrest - With backrest subtract 48" from mast O.A.H. ▲ May have reduced capacity - Contact your local Yale Dealer.



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2380-1—1/04—20
Printed in U.S.A.

Courtesy of CraneMarket