

GEX

40/45/50 

ELECTRIC 80 VOLT
8000 / 9000 / 10,000 lbs.
(4000 / 4500 / 4990 kg)



CLARK[®]
THE FORKLIFT



- **Solid pneumatic tires** provide a softer ride and allow for indoor/outdoor operation.

- **Hydraulic levers** are conveniently mounted on the hood beside the operator for comfortable and effortless access.

Highly Maneuverable, Easily Serviceable, Broadly Flexible, Extremely Dependable

In the past, one truck would be used for outdoor applications and another truck would be used for indoor warehousing. Now one GEX can handle both environments, leaving you with the realization... two "hands" aren't always better than one.



80 volt

The 80-Volt high performance drive and lift systems allow the GEX to rival internal combustion truck performance in speed, acceleration and gradeability.

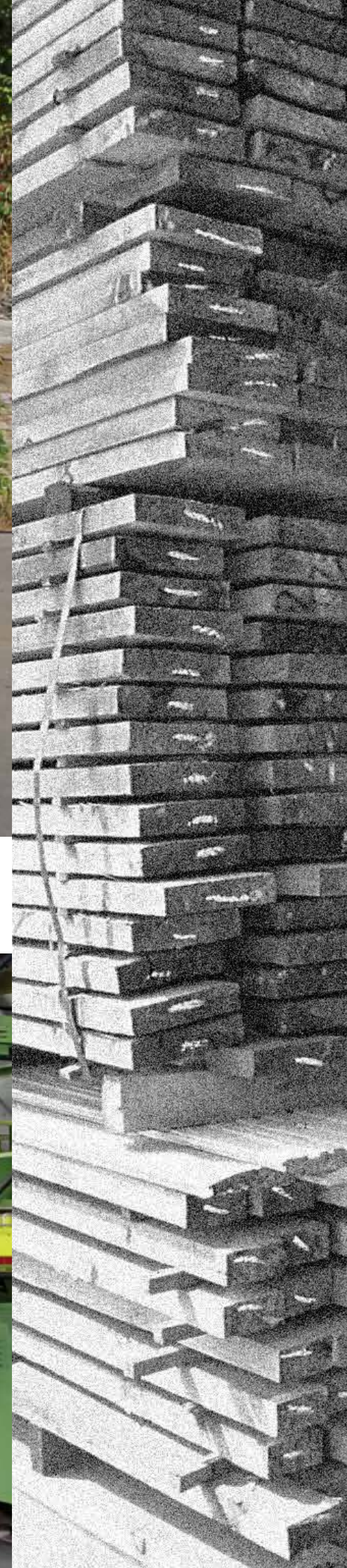
- Speed of the independent dual-drive motors is factored by steer angle; this reduces tire wear and enables gentle start-up, even when steering is fully locked. Solid-pneumatic tires, plus enclosed motors and sealed controls, allow the truck to operate outdoors as well, making the GEX an excellent indoor/outdoor truck. Also ask your local CLARK dealer about the optional armrest fingertip controls that are available.

Maximum Visibility + Minimum Fatigue = Increased Safety & Product Integrity



19.9" H

- The low **step height** means frequent entry/exit is easier and less tiring for the operator.



GEX STANDARD FEATURES & BENEFITS



HEAVY DUTY AC DRIVE MOTORS & AXLES

■ Fewer Parts & Minimum Wear = Less Downtime and Cost = Higher ROI

- Enclosed
- Brushless
- Thermal protection
- Stall protection
- Suitable for wet applications
- Dual-powered, independent control for tight turns
- Same motors for E & EE

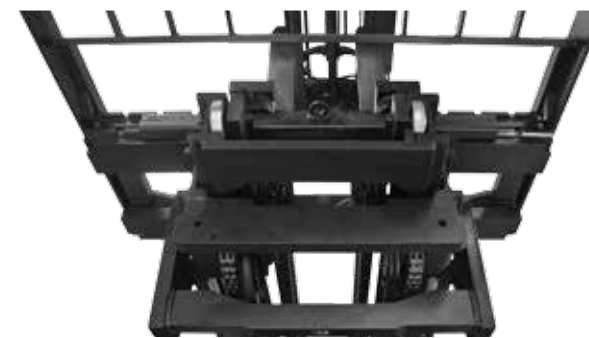
REGEN & WET DISC BRAKES

■ Three Forms of Regen Brake

- Accelerator release. (Proportional to accelerator position)
- Change of direction. (Proportional to accelerator position)
- Service brake. (Foot Brake)

■ Wet Disc Brakes

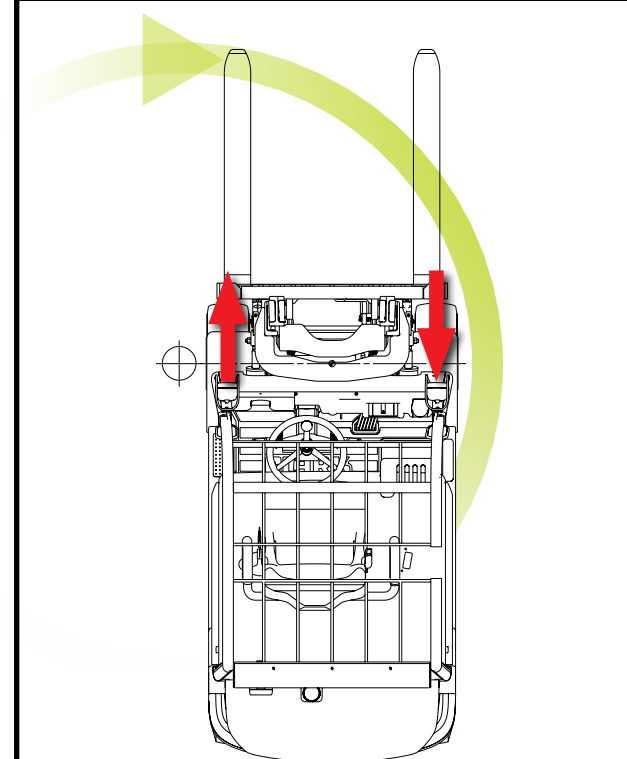
- Enclosed and oil cooled for smooth, quiet operation.
- “Wet” brakes provide long life.
- Less downtime.



RUGGED UPRIGHT AND CARRIAGE

■ Hydraulic Cushioning Valves

- Silent Staging Reduces Shock & Vibration.



POWERED INDEPENDENT DRIVE MOTORS

■ 2-Wheel Drive

- Provides added traction, especially on wet or uneven surfaces.

■ Will Not Scuff Tires

- Inside wheel power decreases in tight turns preventing scuffing of steer tires, unlike conventional four-wheel trucks.

■ Hall Effect Steer Sensor

- Relays steer tire position to controller.



80 VOLT 100% AC SYSTEM

■ High Performance

- Rivals I.C. truck performance in speed, acceleration and gradeability.

■ More Efficient System

- Higher Voltage = Lower Line Loss & Heating = Greater Efficiency

■ Better Suited to Fast/Rapid Charge

- Only requires one receptacle via single battery connector.

■ More Battery Capacity

- GEX 40/45/50 can accommodate a 71.8 Kwh battery.



STABLE PLATFORM

■ Lower Center of Gravity

- Improved driveability by moving the steer axle back while lowering the battery compartment and all major components.

■ Wide Stance

- Increases lateral stability while lifting/lowering loads.

■ Curve Cutback

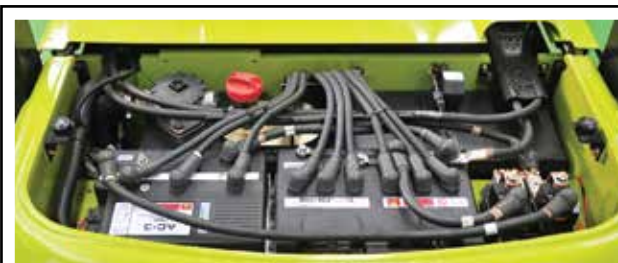
- Reduces truck travel speed in turns.

Standard Equipment

- 80 Volt
- Wet Disc Brakes
- Single Aux Valve
- Tilt Steer Column
- Regenerative Braking
- Solid Pneumatic Tires
- Hood Mounted Levers
- Vinyl Full Suspension Seat
- Hydrostatic Power Steering
- Independent Drive Motors
- OHG Mounted 12 Volt Headlights
- Programmable, Color Dash Display
- 100% AC (drive and pump control)

Optional Equipment

- Sideshifters
- EE Construction
- Armrest Controls
- Double Aux Valves
- 2, 3, & 4-Stage Uprights
- Cold Storage with Heaters
- Lights and Backup Alarms
- Cloth Full Suspension Seat



EASILY SERVICED

- The cover for the rear controls quickly unscrews allowing convenient service access from a standing position. On-board diagnostics allow servicing mechanic to check fault codes without service tool.



INTERACTIVE LCD DASH DISPLAY

■ Fully Adjustable/Programmable

- The operator can select from four pre-set performance modes.
- Additional adjustments can be made to maximize performance in certain operations.

■ Alarm codes

- Indicates the current alarm code and stores previous alarm codes for quick access.

■ Password Protected

- Certain adjustments are password protected to allow only authorized operators to make adjustments.

STANDARD SPECIFICATIONS

GEX40/45/50

GENERAL DATA & STANDARD DIMENSIONS

General Information			Clark	Clark	Clark	
1	Manufacturer		Clark	Clark	Clark	
2	Model	Manufacturer's Designation	GEX40	GEX45	GEX50	
3	Load Capacity	lbs(kg)	8000/4000	9000/4500	10000/4990	
4	Load Center	Fork Face to Load CG	24 (500)	24 (500)	24 (500)	
5	Power Unit	Electric	80 volt	80 volt	80 volt	
6	Operator Type		Rider Counterbalanced	Rider Counterbalanced	Rider Counterbalanced	
7	Tire Type		Solid Pneumatic	Solid Pneumatic	Solid Pneumatic	
8	Wheels (x=driven)	Front/Rear	2X / 2	2X / 2	2X / 2	
Basic Dimensions						
9	Upright ^{1,2}	Maximum Lift Height, Full Capacity	in(mm)	177 (4500)	177 (4500)	177 (4500)
10		Lift Height (Preferred Upright)	in(mm)	177 (4500)	177 (4500)	177 (4500)
11		Freelift w LBR	in(mm)	41 (1049)	41 (1049)	41 (1049)
12	Upright Tilt	Back/Forward (Triple Stage Upright)	degrees	5/6	5/6	5/6
13	Fork	Std. Fork Size (T x W x L)	in(mm)	42X5X2 (1067X122X50)	42X6X2 (1067X150X50)	42X6X2 (1067X150X50)
14	Carriage	Width of Carriage	in(mm)	52 (1324)	57 (1438)	57 (1438)
15	Overall Dimensions	Length to Fork Face (TSU) ²	in(mm)	116.7 (2965)	116.7 (2965)	118.1 (3000)
16		Width Over Tires	in(mm)	55 (1396)	58.7 (1490)	58.7 (1490)
17		Width Over Frame	in(mm)	54 (1372)	58 (1473)	58 (1473)
18		Height, Upright Lowered	in(mm)	89.3 (2269)	89.3 (2269)	89.3 (2269)
19		Height, Upright Extended w/wo LBR	in(mm)	225/207.4 (5715/5269)	225/207.4 (5715/5269)	225/207.4 (5715/5269)
20		Height, Overhead Guard	in(mm)	90.9 (2310)	90.9 (2310)	90.9 (2310)
21	Step Height	Ground to Top of Step	in(mm)	19.9 (506)	19.9 (506)	19.9 (506)
22						
23	Turning Radius		in(mm)	105.3 (2675)	105.3 (2675)	106.3 (2700)
24	Load Center Distance	Center of Drive Axle to Fork Face ²	in(mm)	22.4 (569)	22.4 (569)	22.4 (569)
25	Right Angle Stack Aisle	Add Load Length and Clearance ²	in(mm)	127.7 (3244)	127.7 (3244)	128.7 (3269)
26						
Performance						
27	Stability	According to ANSI B56.1		Yes	Yes	Yes
28	Speeds	Travel Speed, Max, With Load	mph(kph)	12.4 (20.0)	11.8 (19.0)	11.8 (19.0)
29		Travel Speed, Max, Without Load	mph(kph)	13.0 (21.0)	12.4 (20.0)	12.4 (20.0)
30	Lift Speeds, Loaded	Triple Stage Upright	fpm(mps)	69 (0.35)	65 (0.33)	61 (0.31)
31	Lift Speeds, Unloaded	Triple Stage Upright	fpm(mps)	93 (0.47)	93 (0.47)	93 (0.47)
32	Lower Speeds, Loaded	Triple Stage Upright	fpm(mps)	104 (0.53)	104 (0.53)	104 (0.53)
33	Lower Speeds, Unloaded	Triple Stage Upright	fpm(mps)	98 (0.50)	98 (0.50)	98 (0.50)
Weights ³						
34	Service Weight, TSU	w/ Min Battery Weight	lbs(kg)	15477 (7019)	16535 (7499)	17439 (7909)
35	Axle loading	w/ Load, Front	lbs(kg)	21598 (9795)	23692 (10745)	25247 (11450)
36		w/ Load, Rear	lbs(kg)	2701 (1225)	2767 (1255)	3195 (1449)
37		w/o Load, Front	lbs(kg)	8214 (3725)	8635 (3916)	8551 (3878)
38		w/o Load, Rear	lbs(kg)	7265 (3295)	7901 (3583)	8888 (4031)
Chassis						
39	Tires	Number, Front/Rear		2 / 2	2 / 2	2 / 2
40		Size, Front	in	250-15	28x12.5-15	28x12.5-15
		Size, Rear	in(mm)	21x8-9	21x8-9	21x8-9
41	Wheelbase		in(mm)	78.7 (2000)	78.7 (2000)	78.7 (2000)
42	Track	Front	in(mm)	45.3 (1150)	46.5 (1180)	46.5 (1180)
43		Rear	in(mm)	39.4 (1000)	39.4 (1000)	39.4 (1000)
44	Ground Clearance ⁴	Min w/Load	in(mm)	5.3 (135)	5.3 (135)	5.3 (135)
45		At Center of Wheelbase, Loaded	in(mm)	6.0 (152)	6.0 (152)	6.0 (152)
46	Service Brake	Type		Wet Disk	Wet Disk	Wet Disk
47	Parking Brake	Type		Pedal Actuated	Pedal Actuated	Pedal Actuated
	Steering	Type		Hydrostatic	Hydrostatic	Hydrostatic
Drive Line						
48	Battery	Type		Lead-Acid	Lead-Acid	Lead-Acid
		Max Capacity (6 hr. Rate)	kWh	71.8	71.8	71.8
		Weight, Min	lbs(kg)	4562 (2069)	4562 (2069)	4562 (2069)
49	Motors, Controls	Drive Motor, Diameter (Dual)	in(mm)	9.4 X 6.3 (240 x 160)	9.4 X 6.3 (240 x 160)	9.4 X 6.3 (240 x 160)
		Hydraulic Motor, Diameter	in(mm)	9.4 x 9.4 (240 x 240)	9.4 x 9.4 (240 x 240)	9.4 x 9.4 (240 x 240)
		Drive Motor Control		Mosfet	Mosfet	Mosfet
		Speed Control		Solid State	Solid State	Solid State
		Hydraulic Motor Control		Mosfet Inverter	Mosfet Inverter	Mosfet Inverter
57	Hydraulic Pressure			Adjustable	Adjustable	Adjustable
58	Sound Level	Avg. at Operator's Ear Per DIN 12053	dB(A)	74	74	74

Upright Table

Maximum Fork Height	Overall Height Lowered	Free Lift w/LBR	Standard Tilt Spec B°/F°
in mm	in mm	in mm	
Standard Two Stage — GEX40/45/50			
98	2500	78 1975	5 130 8/8
106	2700	82 2075	5 130 8/8
118	3000	88 2225	5 130 8/8
130	3300	94 2375	5 130 8/8
138	3500	97 2475	5 130 8/8
146	3700	101 2575	5 130 8/8
157	4000	107 2725	5 130 5/6
177	4500	117 2975	5 130 5/6
197	5000	127 3225	5 130 5/3

Triple Stage — GEX40/45/50			
146	3700	79 2002	31 782 5/6
157	4000	83 2102	35 882 5/6
169	4300	87 2202	39 982 5/6
177	4500	89 2269	41 1049 5/6
189	4800	93 2369	45 1149 5/6
197	5000	96 2436	48 1216 5/3
216	5500	102 2603	54 1383 5/3
236	6000	109 2770	61 1550 3/3
256	6500	116 2937	68 1717 3/3
275	7000	122 3104	74 1884 3/3

Hi-Lo — GEX40/45/50			
106	2700	83 2099	35 879 8/8
118	3000	89 2249	41 1029 8/8
130	3300	94 2399	46 1179 8/8

• For Triple stage and Hi-lo uprights, free lift increases by 610 mm (24") without LBR.

Battery Compartment Dimensions

Width (W)	Length (L)	Height (H)	Weight
in mm	in mm	in mm	lbs kg
GEX 40/45/50 — Standard			
40.5 (1029)	39.3 (998)	30.8 (782)	4562 (2069)
GEX 40/45/50 — Optional			
40.5 (1029)	33.6 (853)	30.8 (782)	3903 (1770)

• Note: Optional battery will reduce truck capacity. Consult factory for details.

Grade Clearance*

GEX 40	34%
GEX 45	31%
GEX 50	31%

* The GEX is designed for operation on and over grades but must be limited to 20%.

Tilt Specifications*

Upright MFH in. (mm)	Tilt Angle B°/F°
Standard uprights thru 146 in. (3780 mm) and Hi-Lo thru 130 in. (3300 mm)	8 / 8
TSU thru 189 in. (4800 mm), Standard 157 in. (4000 mm) thru 177 in. (4500 mm)	5 / 6
TSU 197 in. (5000 mm) thru 216 in. (5500 mm) and 197 in. (5000 mm) Standard	5 / 3
TSU 236 in. (6000 mm) thru 275 in. (7000 mm)	3 / 3

* Standard tilt with MFH's noted. Contact Clark representative for information on optional tilt.

Notes

Performance may vary +5% and -10% due to motor and systems efficiency tolerance. The performance shown represents nominal values which may be obtained under typical operating conditions of a standard machine.

ANSI/ITSDF and Insurance Classification

Standard truck meets all applicable mandatory requirements of Part III-ANSI/ITSDF B56.1 Safety Standard for Powered Industrial Trucks (latest edition at time of manufacture) and Underwriters Laboratories requirements as to fire and electrical shock hazard only for "E" classification. For further information contact a Clark representative.

Users should be aware of, and adhere to, applicable codes and regulations regarding operator training, use, operation and maintenance of powered industrial trucks, including:

- ANSI/ITSDF B56.1
- NFPA 505, fire safety standard for powered industrial trucks - type designations, areas of use, maintenance and operation.
- Occupational Safety and Health Administration (OSHA) regulations that may apply.

Contact your authorized CLARK forklift truck dealer for further information including operator training programs and auxiliary visual and audible warning systems, fire extinguishers, etc., as available for specific user applications and requirements.

Specifications, equipment, technical data, photos and illustrations are based on information at time of printing and are subject to change without notice. Some products may be shown with optional equipment.

And Don't Forget... Safety Starts With You!

Before operating a lift truck, an operator must:

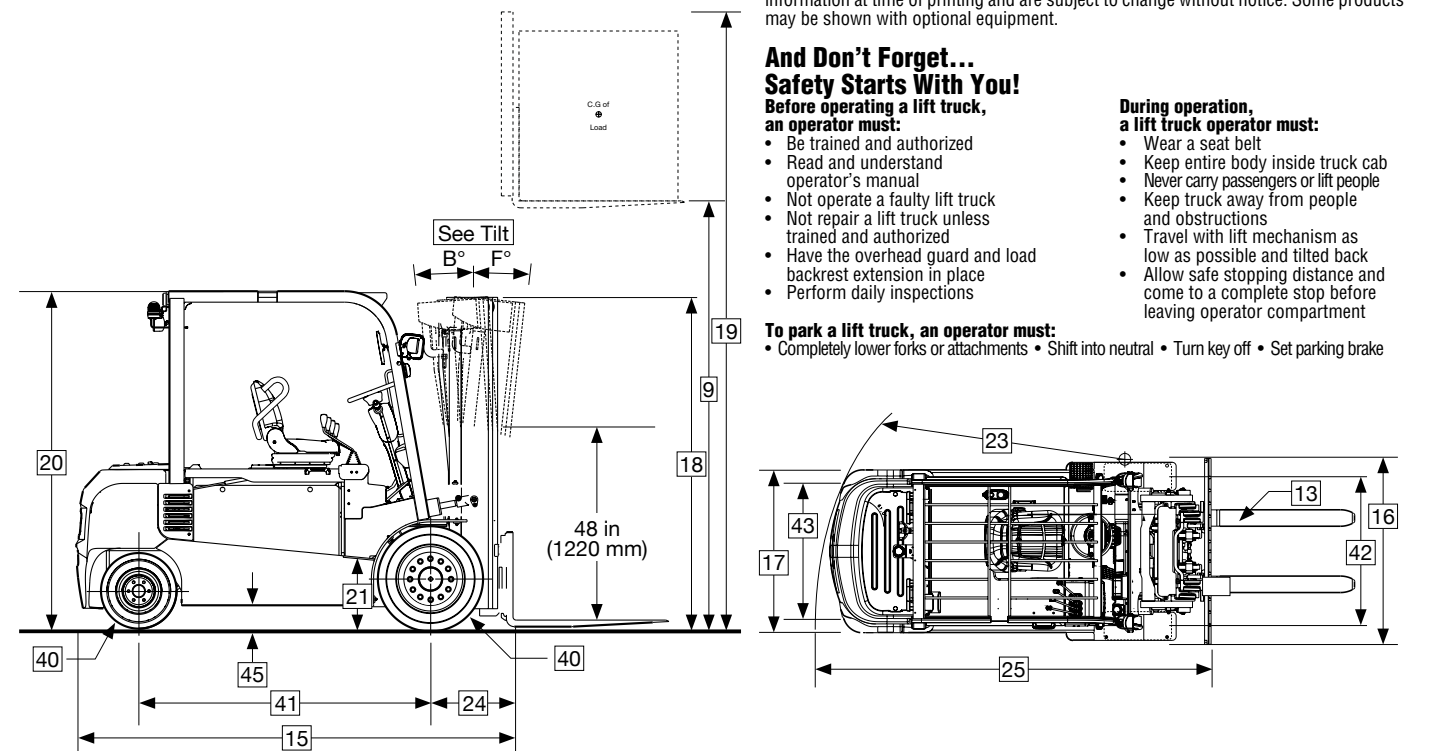
- Be trained and authorized
- Read and understand operator's manual
- Not operate a faulty lift truck
- Not repair a lift truck unless trained and authorized
- Have the overhead guard and load backrest extension in place
- Perform daily inspections

During operation, a lift truck operator must:

- Wear a seat belt
- Keep entire body inside truck cab
- Never carry passengers or lift people
- Keep truck away from people and obstructions
- Travel with lift mechanism as low as possible and tilted back
- Allow safe stopping distance and come to a complete stop before leaving operator compartment

To park a lift truck, an operator must:

- Completely lower forks or attachments
- Shift into neutral
- Turn key off
- Set parking brake



For corresponding data see Specification Chart

Notes: 1 See upright table for other available uprights. 2 Lost load dimension is for standard or Hi-Lo uprights and standard forks. Add 34 mm for triple stage uprights. Add 74 mm for Clark integral side-shifter. Add 78 mm for Clark hang-on side-shifter. 3 Specifications are given with preferred triple stage upright and minimum battery weight. 4 Ground clearance at center of wheelbase is 6.0" and 5.3" at drive tires. 5 All service weights are for units equipped with 130" STD upright.

- We don't just build material handling equipment. As a company, we are also focused on providing our customers with the best possible technical service support and aftermarket parts available.
- Even though our business starts with a quality, cost-effective product, our organization understands that it is the support and services we provide after the sale that help keep your business running at peak efficiency.
- **THE CLARK PartsPRO®Plus SYSTEM** is our industry-leading electronic parts and service documentation tool that provides dealers with a quick and accurate method of identifying parts for every CLARK lift truck built since 1961. PartsPRO® ensures the availability of the most current technical information and has the unique capability to create parts manuals specific to your mixed CLARK fleet, making it simple to positively identify and order the correct part(s) from your local CLARK dealer. The right CLARK parts — The First Time, Every Time.
- **UNRIVALED PARTS SUPPORT** Our Aftermarket Distribution Center provides parts to over 250 North American CLARK dealers and many international dealers. This CLARK operated 184,000 square foot facility is dedicated to supporting the CLARK models built over the last 90 years. This facility is focused on providing excellent off-the-shelf availability, quality parts, quick response time and competitive pricing.

DEPENDABLE PARTS = DEPENDABLE TRUCKS

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