



X Series Lithium-ion Narrow Aisle Pantograph Reach Truck

with capacity of 3,000 to 4,500lbs

The World of Hangcha
SINCE 1956



EFFICIENT TRUCKS



The 3,000-4,500lb lithium-ion pantograph reach trucks are suitable for operations in narrow aisles and limited spaces. These trucks feature a high lift, large load capacity, pantograph, and a small turning radius. Using their advanced performance and technology, the reach trucks add to the efficiency of operations while maintaining reliability and a high level of safety. The X Series Lithium-ion Narrow Aisle Pantograph Reach Truck is the ideal tool for material handling in warehouses, supermarkets, and workshops.

Appearance

The X Series Lithium-ion Narrow Aisle Pantograph Reach Truck is designed to stack and retrieve goods efficiently in narrow warehouses and at high lift heights while still maintaining a lifting capacity of up to 4,500lbs. The exterior of this forklift is powder coated in a durable, easy to see, green finish that designates it as a lithium-ion model.

Stability

- The battery placed at the bottom of the chassis to create a low center of gravity. This allows the truck to have good stability.
- The four-pivot structure provides stability when the truck is being used to perform a high lift.





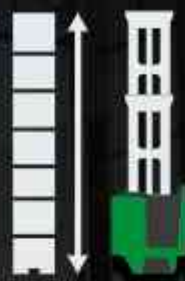
Load Capacity



Reliable & Safe



103.2"
Aisle Width



421"
Max. Lift Height

Highly Efficient

- The truck can operate in narrow aisles thanks to its small turning radius.
- Both a high-power pump motor and a silent gear pump (CONCENTRIC) are used to improve the lifting speed, lowering speed, and operating efficiency.
- With several power modes, the truck is able to adapt to different operating conditions.
- The regenerative braking system provides an increase in the truck's operating time.



Comfort

The hanging pedal alleviates operator fatigue when driving for a long period of time by being placed in a comfortable position for the operator.



The control handle and backrest can be adjusted according to the operator's optimal driving position.



The operator is able to get on and off the truck more comfortably thanks to the low step-on height of the reach truck's operator compartment.



The handle, backrest, instruments, and switches were designed with ergonomics in mind to make operations more comfortable and flexible.



The lifting system is optimized for the operator to have an excellent line of sight through the mast.



The lateral removal of the battery provides easier maintenance and allows for the battery to be swapped out when running in continuous operating conditions.



Reliability and Safety

- The four-pivot structure, low center of gravity, and high strength of the main frame components are designed to withstand the maximum load capacity of the reach truck.
- The controller, connectors, battery plug, and cut-off switch are all parts from industry known suppliers to ensure reliability, performance, and ease of service.
- The ZF transmission, SCHABMULLER drive motor, and the efficient AC power system greatly improve the reliability and service life of the narrow aisle reach truck.
- The controller manipulates the truck's steering angle, lifting height, and traveling speed in unison to provide safer operations.



The multi-function control handle's unique shape and angled design helps to minimize hand movement and muscle fatigue.



With the pedal sensing system, the truck can be driven only if the driver stands on the pedal. If the operator takes their foot off the pedal, active braking is initiated to prevent an accident.



The Full Free Lift 3 Stage Mast provides great visibility for the operator and improves operations safety.



Maintenance

- The brushless AC motor is maintenance-free and significantly reduces the total cost of ownership.
- The maintenance hatch opens wide enough to enable easy repair, maintenance, and tuning of the equipment.
- The battery is maintenance-free meaning that the battery does not need to be watered or checked.
- The controller and electrical components are placed together in the chassis and are highly integrated.



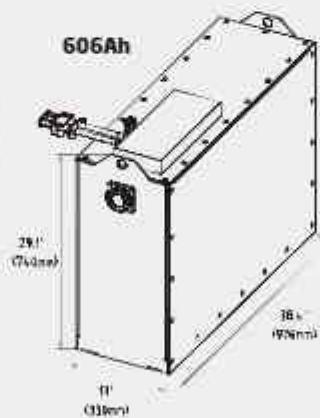
The large-screen LCD display with fault self-diagnosis functions can accurately display information in harsh environments.



CATL Lithium Iron Phosphate Battery Pack

- Integrated Battery Management System (BMS) continually monitors energy management and ensures reliable operation.
- HANGCHA provides these Lithium Iron Phosphate (LiFePO_4) battery packs with up to a 10 year or 20,000 hour warranty.
- See warranty certificate for specific warranty information on the Lithium Iron Phosphate battery packs.

Battery Capacity	Standard	Optional
Battery Capacity (V/Ah) (kW-h)	36V/606Ah 21.82kW-h	36V/813Ah 29.27kW-h



**Standard Titan Charger
(36V/200Ah)**



**Optional Titan Dual
Charging Guns Charger
(36V/400Ah)**



Advancement

- The electronic parking brake greatly improves the safety of the operator and the truck.
- The fast lifting and lowering speeds are highly efficient.
- The suspension system and hanging pedals improve operator comfort.
- The integrated mechanical, electrical, and hydraulic controls work in unison to regulate the speed of the truck when traveling and to move the forks more precisely and stably.
- The newly equipped AC control system supports longer working times by precisely managing and adjusting the performance of the truck.



Standard Specification

- / AC Motor and Controller

/ Multi-Function Instrument Cluster

/ Electric Power Steering System

/ 198" (5.03m) Full Free-Lift Stage 3 Mast

/ Tilting Fork

/ Load Backrest

/ Overhead Guard

/ Soft Landing System
- / Safe Operating System

/ Automatically Decelerates when Cornering

/ Speed Automatic Limit when Mast High Lifting

/ Damper Pedal

/ Adjustable Backrest and Armrest

/ Battery Side Roll Out

/ Multi-Task Control Handle

/ Electro-Hydraulic Proportional Valve System
- / Polyurethane Tire

/ Headlights

/ Clipboard

/ Emergency Cut-Off Switch

/ Electric Horn

/ Static Strap

/ Electric Parking Brake

/ Strobe Light

Options

- / Charger

/ 813Ah Capacity Battery

/ Other Dimensions of Forks

/ Mast Shield

/ Widened or Heightened Load Backrest
- / Sideshifter

/ Blue Light

/ Rear Working Light

/ Cabin Ceiling Light

/ Overhead Fan
- / Camera System

/ 12V Power Plug

/ Freezer

/ Fire Extinguisher

Mast Specification

	Lift	Height, Mast Lowered	Height, Mast Extended		Free lift	Load capacity @610mm/24inch			
			With Backrest	Without Backrest		CQD14	CQD16	CQD18	CQD20
			in(mm)	in(mm)		lb/kg	lb/kg	lb/kg	lb/kg
Full Free Lift 3 Stage Mast	198(5030)	95(2415)	239(6067)	239(6067)	53(1342)	3000(1360)	3500(1588)	4000(1814)	4500(2041)
	210(5330)	99(2515)	251(6367)	251(6367)	57(1442)	3000(1360)	3500(1588)	4000(1814)	4500(2041)
	240(6100)	107(2718)	287(7333)	287(7333)	65(1645)	3000(1360)	3500(1588)	4000(1814)	4000(1814)
	270(6860)	119(3025)	311(7897)	311(7897)	77(1952)	3000(1360)	3500(1588)	3500(1588)	3500(1588)
	299(7600)	133(3380)	340(8633)	340(8633)	91(2307)	3000(1360)	3000(1360)	3000(1360)	3000(1360)

With integral sideshifter minus 2700lb(120kg).

Mast Specification (HEAVY DUTY)

	Lift	Height, Mast Lowered	Height, Mast Extended		Free lift	Load capacity @610mm/24inch			
			With Backrest	Without Backrest		CQD14	CQD16	CQD18	CQD20
			in(mm)	in(mm)		lb/kg	lb/kg	lb/kg	lb/kg
Full Free Lift 3 Stage Mast	270(6860)	129(3225)	311(7897)	311(7897)	77(1952)	3000(1361)	3500(1588)	4000(1814)	4500(2041)
	299(7600)	133(3380)	340(8633)	340(8633)	91(2307)	3000(1361)	3500(1588)	3815(1750)	4000(1814)
	321(8150)	140(3540)	367(9387)	367(9387)	98(2407)	3000(1361)	3500(1588)	3740(1700)	3835(1750)
	343(8660)	144(3705)	387(9897)	387(9897)	107(2712)	3000(1361)	3500(1588)	3527(1600)	3670(1650)
	366(9300)	160(4060)	407(10333)	407(10333)	118(2987)	3000(1361)	3307(1500)	3307(1500)	3417(1550)
	400(10300)	172(4365)	441(11197)	441(11197)	130(3202)	3000(1361)	3000(1400)	3000(1400)	3197(1450)
	421(10700)	179(4545)	462(11733)	462(11733)	137(3467)	2866(1300)	2866(1300)	2866(1300)	2976(1350)

With integral sideshifter minus 2700lb(120kg).

X Series Lithium-ion Narrow Aisle Pantograph Single Reach Truck

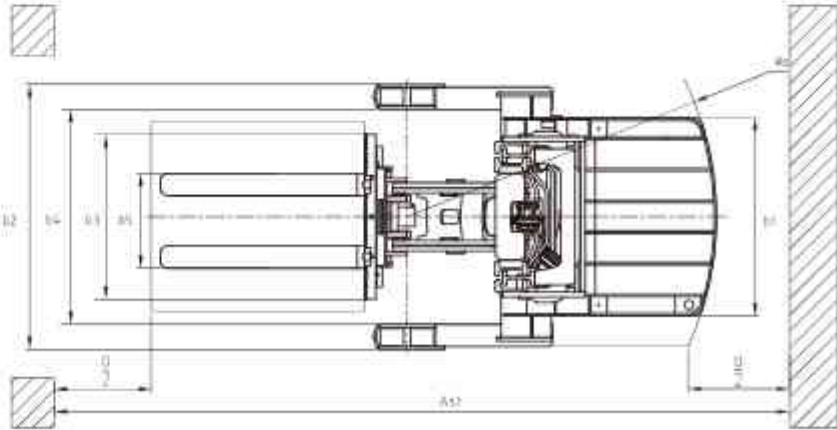
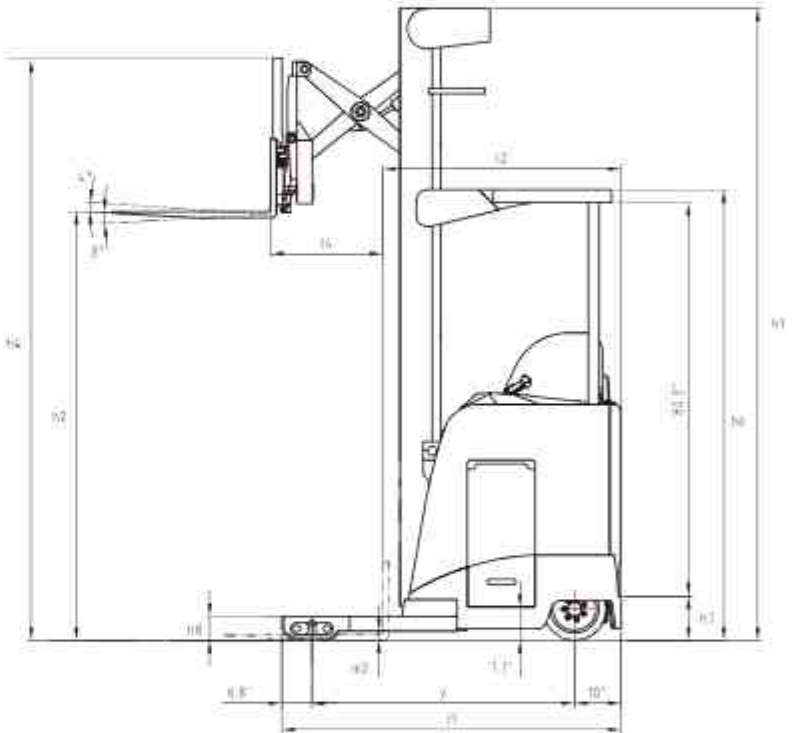
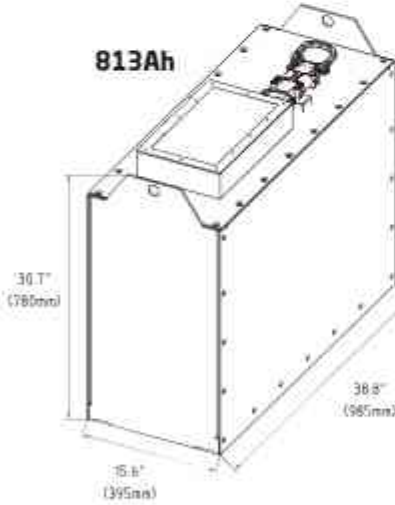
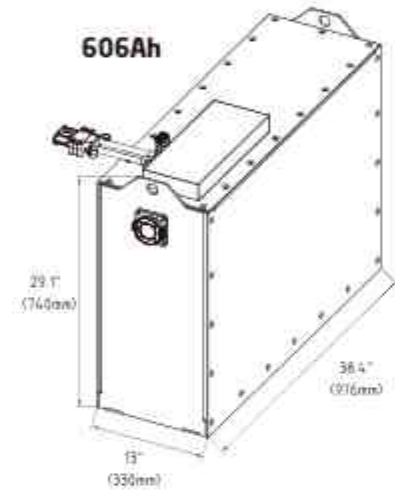
Distinctive Marks	1.1	Manufacturer	HANGCHA GROUP CO., LTD.				
		HCHA Model	SR14G	SR16G	SR18G	SR20G	
	1.2	Manufacturer's Type Designation	C0014 XD2-II	C0016 XD2-II	C0018 XD2-II	C0020 XD2-II	
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas	Electric				
	1.4	Operator type: hand, pedestrian, standing, seated, remote picker	Stand up				
	1.5	Rated Capacity/Rated Load	Q (lb/kg)	2000 (1361)	2500 (1588)	3000 (1814)	4500 (2047)
	1.6	Load Centre Distance	c (in/mm)	24 (600)			
	1.8	Load Distance, centre of drive axle to fork	x (in/mm)	10.8 (270)			
	1.9	Wheelbase	y (in/mm)	See See Table 1			
Weight	2.1	Service Weight, without battery	W (kg)	6750(15040)			7251 (16040)
	2.2	Asle Loading, laden front/rear with assembly retracted	W (kg)	6711(13866)/2580(5674)	7062(15571)/3132(6991)	7311(16171)/3887(1763)	7940(3485)/4222(1915)
	2.3	Asle Loading, unladen front/rear with assembly retracted	W (kg)	2026(1385)/4405(1998)			3034(13376)/4222(1914)
Tires & Chassis	3.1	Tires: solid rubber, vapour elastic, pneumatic, polyurethane	Polyurethane				
	3.2	Wheels Size, load	in/mm)	5x3.90(127x99)			
	3.3	Wheels Size, drive	in/mm)	11.5x5.5(1043x125)			
	3.4	Wheels Size, caster	in/mm)	7.9x2.1(8200x54)			
Dimensions	4.1	Tilt of Mast/Fork Cattleage Forward/Backward	α/β (°)	3/4			
	4.2	Height, mast lowered	h ₁ (in/mm)	95(2415)			
	4.3	Free Lift	h ₂ (in/mm)	53(1342)			
	4.4	Lift	h ₃ (in/mm)	196(5000)			
	4.5	Height, mast extended	h ₄ (in/mm)	239(6063)			
	4.7	Height of Overhead Guard	h ₅ (in/mm)	92.5(2350)			
	4.8	Stand Height	h ₆ (in/mm)	9.5(240)			
	4.10	Height of Wheel Arms	h ₇ (in/mm)	5.3(130)			
	4.19	Overall Length	l (in/mm)	See Table 1			
	4.20	Length to Face of Forks	l ₁ (in/mm)	See Table 1			
	4.21	Overall Width	l ₂ (in/mm)	42.5(1080)			
	4.22	Fork Dimensions, Std.	s/t/l (in/mm)	1.6/9.8/42(40/122/1070)			
		Fork Dimensions, Opt.	s/t/l (in/mm)	1.8/4.8/146(722/1111/1500)			
	4.24	Fork Cattleage Width	l ₃ (in/mm)	37(942)			
	4.25	Distance between Fork Arms	l ₄ (in/mm)	7.9-29.9(200-760)			
4.26	Distance between Wheel Arms/Loading Surfaces	l ₅ (in/mm)	34-500(64-1270) (1" increments)				
4.28	Reach Distance	l ₆ (in/mm)	240(610)				
4.31	Ground Clearance, laden, below mast	m ₁ (in/mm)	25(0)				
4.32	Ground Clearance, centre of wheelbase	m ₂ (in/mm)	25(0)				
4.34	Asle Width for Pallets (clearance 7.5")	A ₁ (in/mm)	See Table 1				
4.35	Turning Radius	W ₁ (in/mm)	See Table 1				
Performance Data	5.1	Travel Speed, laden/unladen	mph km/h	6.5/10.5 10.5/17			
	5.2	Lift Speed, laden/unladen	fpm mm/s	78/105 195/535	77/105 365/535	68/105 345/535	65/105 330/535
	5.3	Lowering Speed, laden/unladen	fpm mm/s	105/105 533/533			
	5.4	Reach Speed, laden/unladen	fpm mm/s	11/35 160/180			
	5.7	Gradability, laden/unladen	%	10/12			
		Parking Brake		Electromagnetic			
Electric Motor	6.1	Drive Motor Rating at 52/60 min	hp/kW	8.6(6.4)			
	6.2	Lift Motor Rating at 53/15%	hp/kW	17.4(13)			
	6.4	Battery Voltage, nominal capacity	V/Wh	38.6/106			
		Battery Voltage, nominal capacity	V/Wh	38.6/813			
	6.5	Max. Battery Weight	lb (kg)	See Table 1			
		Min. Battery Weight	lb (kg)	See Table 1			
		Battery Compartment Size, l/h/s	in/mm)	See Table 1			
Additional Data	10.7	Sound Pressure Level at the Driver's Seat	dB (A)	67			

Note: With min. battery

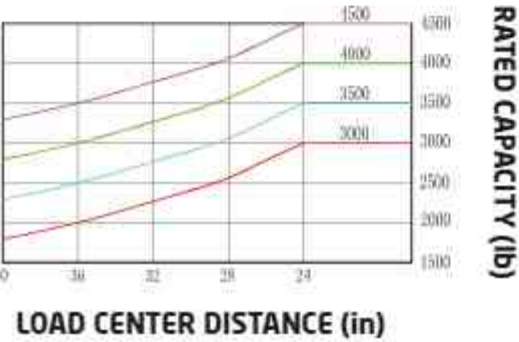
Table 1

Battery and Compartment Size			16.5"	18.5"
6.4	Battery Voltage	V	38.6	38.6
	Battery Capacity Maximum 5 Hr Rate	Ah	606	813
Battery Compartment	T" Max.	in(mm)	38.4(976)	38.8(985)
	T" Max.	in(mm)	33(230)	35.5(299)
	T" Max.	in(mm)	29.1(740)	30.7(780)
6.5	Minimum Battery Weight	lb(kg)	50(22.7)	68(31.0)
	Maximum Battery Weight	lb(kg)	55(25.0)	77(35.0)
1.9	Wheelbase	g in(mm)	57.7(1468)	58.7(1491)
4.19	Overall Length	ft in(mm)	74.7(1898)	76.7(1948)
4.20	Length to Face of Forks	ft in(mm)	57(1448)	59(1500)
4.35	Turning Radius	W in(mm)	67.7(1722)	69.7(1772)
4.34	At 40°(110°mm)×45°W(1220mm) Clearance 7.9"	At in(mm)	105.24(2673)	107.24(2724)
	At 45°(1220mm)×40°W(1026mm) Clearance 7.9"	At in(mm)	112.8(2867)	114.88(2918)
	At 40°(1220mm)×32°W(813mm) Clearance 7.9"	At in(mm)	112.8(2867)	114.88(2918)

Note: Add 1.75(44mm) with side shift



RATED CAPACITY AND LOAD DIAGRAM



X Series Lithium-ion Narrow Aisle Pantograph Double Reach Truck

Dist. Ingoing Mark	1.1	Manufacturer	HANGCHA GROUP CO.,LTD.	
	1.2	Model	DD14L	DD16L
	1.3	Manufacturer's Type Designation	C0014-X07-J01	C0016-X07-J01
	1.4	Drive: electric (battery or main), diesel, petrol, forklift	Electric	Electric
	1.5	Operator type: hand, pedestrian, standing, seated, counter picker	Standing	Standing
	1.6	Rated Capacity/Rated Load	1000(1360)	1500(1580)
	1.7	Load Centre Distance	2400mm	2400mm
	1.8	Load Distance, centre of drive axle to fork	14,230mm	14,230mm
	1.9	Wheelbase	See Table 2	See Table 2
Weight	2.1	Service Weight, without battery	1405(1775)	2165(2140)
	2.2	Asile Loading, laden front/rear with assembly retracted	6790(7890)/4004(1016)	7174(8345)/4073(1025)
	2.3	Asile Loading, unladen front/rear with assembly retracted	2940(1135)/4564(1070)	3102(1407)/4760(1076)
Tires & Chassis	3.1	Tires: solid rubber, superelastic, pneumatic, polyurethane	Polyurethane	Polyurethane
	3.2	Wheels Size, load	5x3.90(177x99)	5x3.90(177x99)
	3.3	Wheels Size, drive	11.5x5.5(0143x115)	11.5x5.5(0143x115)
	3.4	Wheels Size, caster	7.9x2.2(0700x50)	7.9x2.2(0700x50)
Dimensions	4.1	Tilt of Mast/Fork Cattleage Forward/Backward	3/4	3/4
	4.2	Height, mast lowered	952(115)	952(115)
	4.3	Free Lift	53(1142)	53(1142)
	4.4	Lift	198(5010)	198(5010)
	4.5	Height, mast extended	239(6062)	239(6062)
	4.7	Height of Overhead Guard	915(2350)	915(2350)
	4.8	Stand Height	952(40)	952(40)
	4.10	Height of Wheel Arms	5.1(130)	5.1(130)
	4.19	Overall Length	See Table 2	See Table 2
	4.20	Length to Face of Forks	See Table 2	See Table 2
	4.21	Overall Width	42.5(1080)	42.5(1080)
	4.22	Fork Dimensions, Std.	1.6x4.8x127(40x127x1070)	1.6x4.8x127(40x127x1070)
		Fork Dimensions, Opt.	1.8x4.8x145(45x145x1111>2000)	1.8x4.8x145(45x145x1111>2000)
	4.24	Fork Cattleage Width	17(1947)	17(1947)
	4.25	Distance between Fork Arms	7.9-29.9(200-760)	7.9-29.9(200-760)
	4.26	Distance between Wheel Arms/Loading Surfaces	34-50(864-1270)(1" increments)	34-50(864-1270)(1" increments)
	4.28	Reach Distance	42(1067)	42(1067)
	4.31	Ground Clearance, laden, before mast	215(0)	215(0)
	4.32	Ground Clearance, centre of wheelbase	215(0)	215(0)
	4.34	Asile Width for Pallets (clearance 7.5")	See Table 2	See Table 2
	4.35	Turning Radius	See Table 2	See Table 2
Performance Data	5.1	Travel Speed, laden/unladen	6.5(10.5)	6.5(10.5)
	5.2	Lift Speed, laden/unladen	78/105	77/105
	5.3	Lowering Speed, laden/unladen	105/105	105/105
	5.4	Reach Speed, laden/unladen	31/35	31/35
	5.5	Gradability, laden/unladen	10/12	10/12
		Parking Brake	Electromagnetic	Electromagnetic
	6.1	Drive Motor Rating at 52/60 min	8.0(6.4)	8.0(6.4)
Electric Motor	6.2	Lift Motor Rating at 53/15%	17.4(13)	17.4(13)
	6.4	Battery Voltage, nominal capacity	38.6/60%	38.6/60%
		Battery Voltage, nominal capacity	38.6/81%	38.6/81%
	6.5	Max. Battery Weight	See Table 2	See Table 2
		Min. Battery Weight	See Table 2	See Table 2
		Battery Compartment Size, WxH	See Table 2	See Table 2
Additional data	10.7	Sound Pressure Level at the Driver's Seat	62	62

Note: With min. battery

Mast Specification

Full Free Lift 3 Stage Mast	Lift	Height, Mast Lowered	Height, Mast Extended		Free Lift	Load capacity @4inch/1067mm	
			With Backrest	Without Backrest		DB141	DB141
	in(mm)	in(mm)	in(mm)	in(mm)	in(mm)	lb/kg	lb/kg
	198(5030)	95(2415)	239(6063)	239(6063)	53(1347)	3000(1361)	3500(1588)
	210(5330)	99(2515)	251(6363)	251(6363)	57(1447)	3000(1361)	3300(1510)
	240(6100)	107(2710)	281(7133)	281(7133)	65(1645)	2880(1310)	3000(1360)
	270(6860)	119(3025)	311(7893)	311(7893)	77(1952)	2490(1130)	2600(1180)
	299(7600)	133(3380)	340(8633)	340(8633)	91(2307)	2116(960)	2227(1000)

With integral skidshifter motor:2700kg (60kg).

Mast Specification (HEAVY DUTY)

Full Free Lift 3 Stage Mast	Lift	Height, Mast Lowered	Height, Mast Extended		Free Lift	Load Capacity @4inch/1067mm	
			With Backrest	Without Backrest		DB141	DB141
	in(mm)	in(mm)	in(mm)	in(mm)	in(mm)	lb/kg	lb/kg
	270(6860)	119(3025)	311(7893)	311(7893)	77(1952)	3000(1361)	3500(1588)
	299(7600)	133(3380)	340(8633)	340(8633)	91(2307)	3000(1361)	3417(1550)
	321(8150)	140(3560)	362(9183)	362(9183)	98(2487)	3000(1361)	3307(1500)
	343(8660)	149(3785)	382(9693)	382(9693)	107(2712)	3000(1361)	3193(1450)
	366(9300)	160(4060)	407(10333)	407(10333)	118(2987)	2866(1300)	2976(1350)
	400(10160)	172(4365)	443(11393)	443(11393)	130(3297)	2646(1200)	2750(1250)
	421(10700)	179(4545)	462(11733)	462(11733)	137(3477)	2335(1050)	2425(1100)

With integral skidshifter motor:2700kg (60kg).

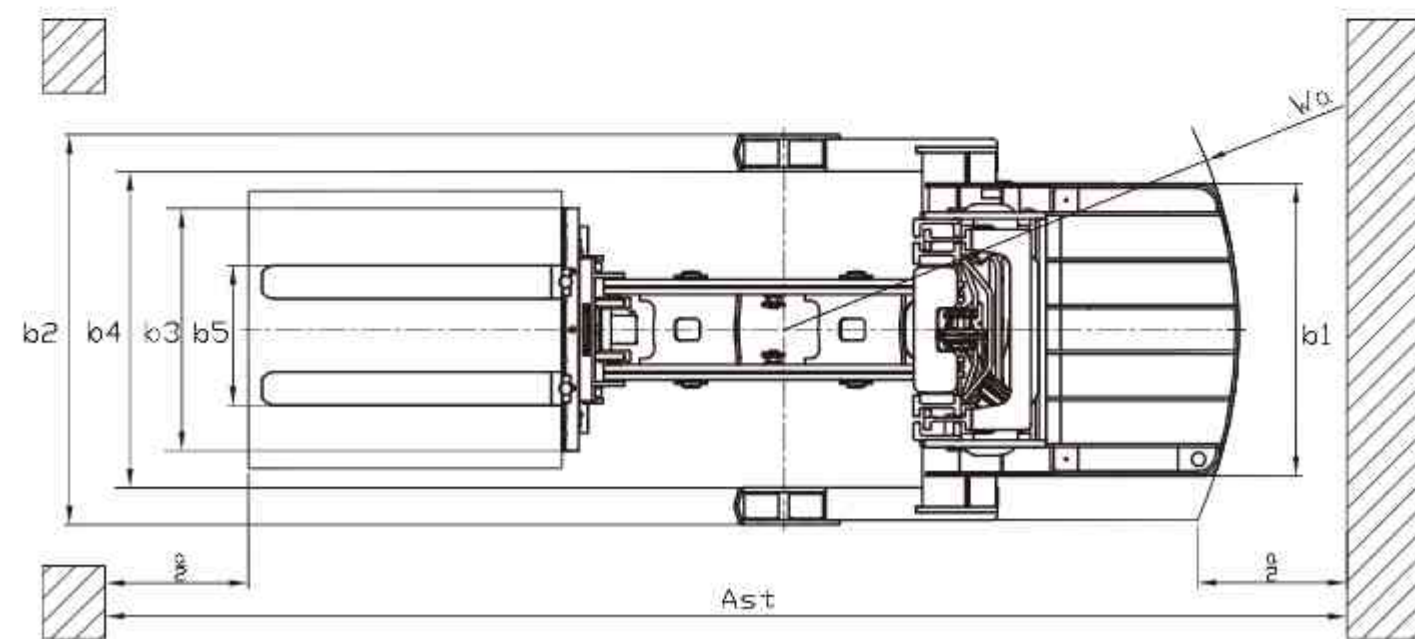
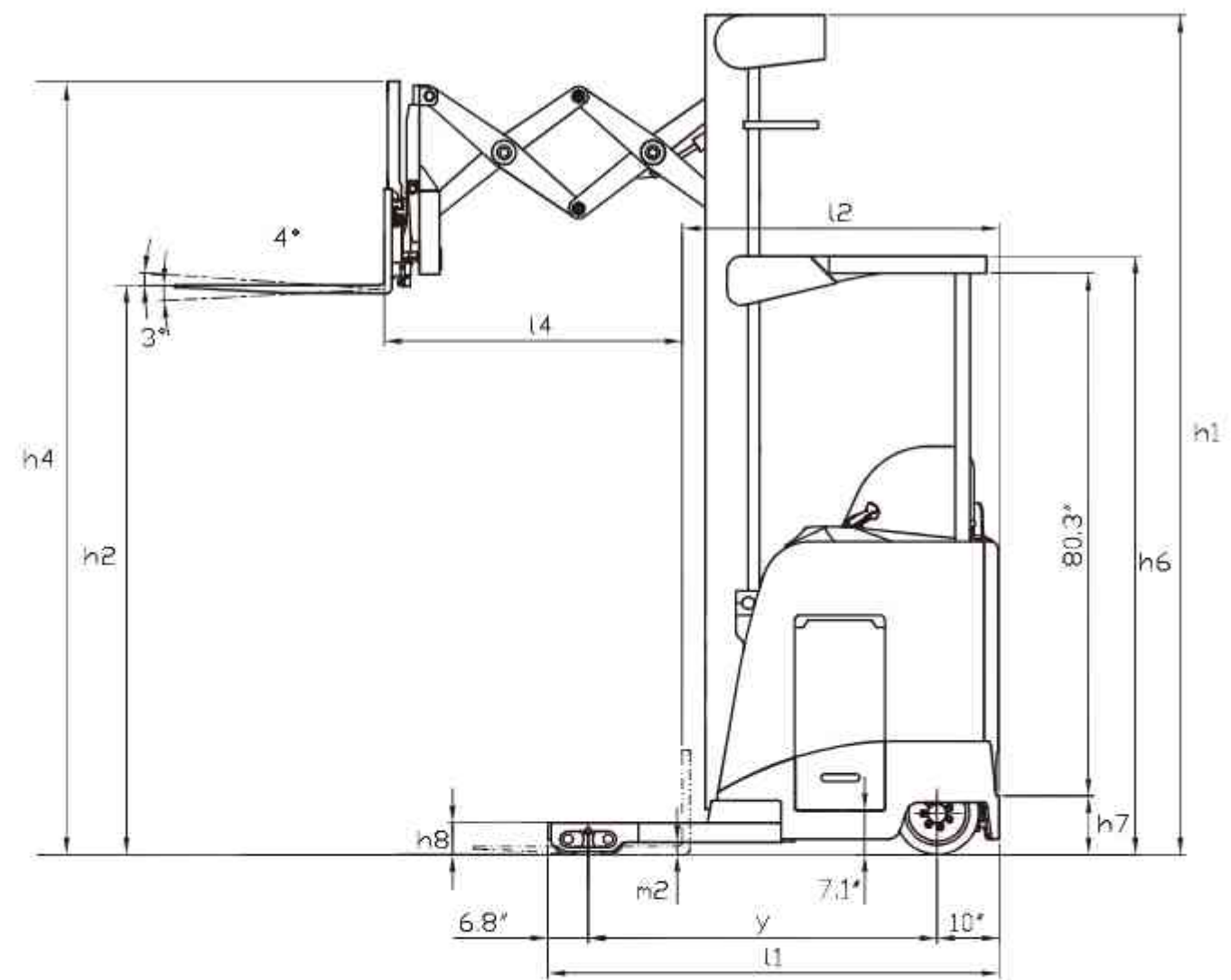
Table 2

Battery and Compartment Size			36.5"		38.5"	
6.4	Battery Voltage	V	38.6		38.6	
	Battery Capacity Maximum 5 Hr Rate	Ah	606		813	
	Battery Compartment	"T" Max.	in(mm)	38.4(974)	38.8(985)	
		"T" Max.	in(mm)	33(838)	33.3(845)	
		"T" Max.	in(mm)	29.3(740)	30.7(778)	
6.5	Minimum Battery Weight	lb/kg	502(228)		600(270)	
	Maximum Battery Weight	lb/kg	55.1(250)		72.7(330)	
1.9	Wheelbase	g (in/mm)	62.29(1592)		64.29(1646)	
4.19	Overall Length	fl (in/mm)	77.7(2025)		79.7(2025)	
4.20	Length to face of forks	l2 (in/mm)	64.6(1647)		67.6(1697)	
4.25	Turning Radius	Wa (in/mm)	72.7(1849)		74.7(1899)	
4.34	Asst 40"1(1016mm)×40"W(1016mm) Clearance 1.9"	Asst in(mm)	306.8(7733)		308.8(7760)	
	Asst 48"1(1220mm)×40"W(1016mm) Clearance 1.9"	Asst in(mm)	314.6(7987)		316.4(7990)	
	Asst 48"1(1220mm)×32"W(813mm) Clearance 1.9"	Asst in(mm)	314.6(7987)		316.4(7990)	

Note: Add 1.5(38mm)with skidshifter

RATED CAPACITY AND LOAD DIAGRAM









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Landline: 450-319-HCFC

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