

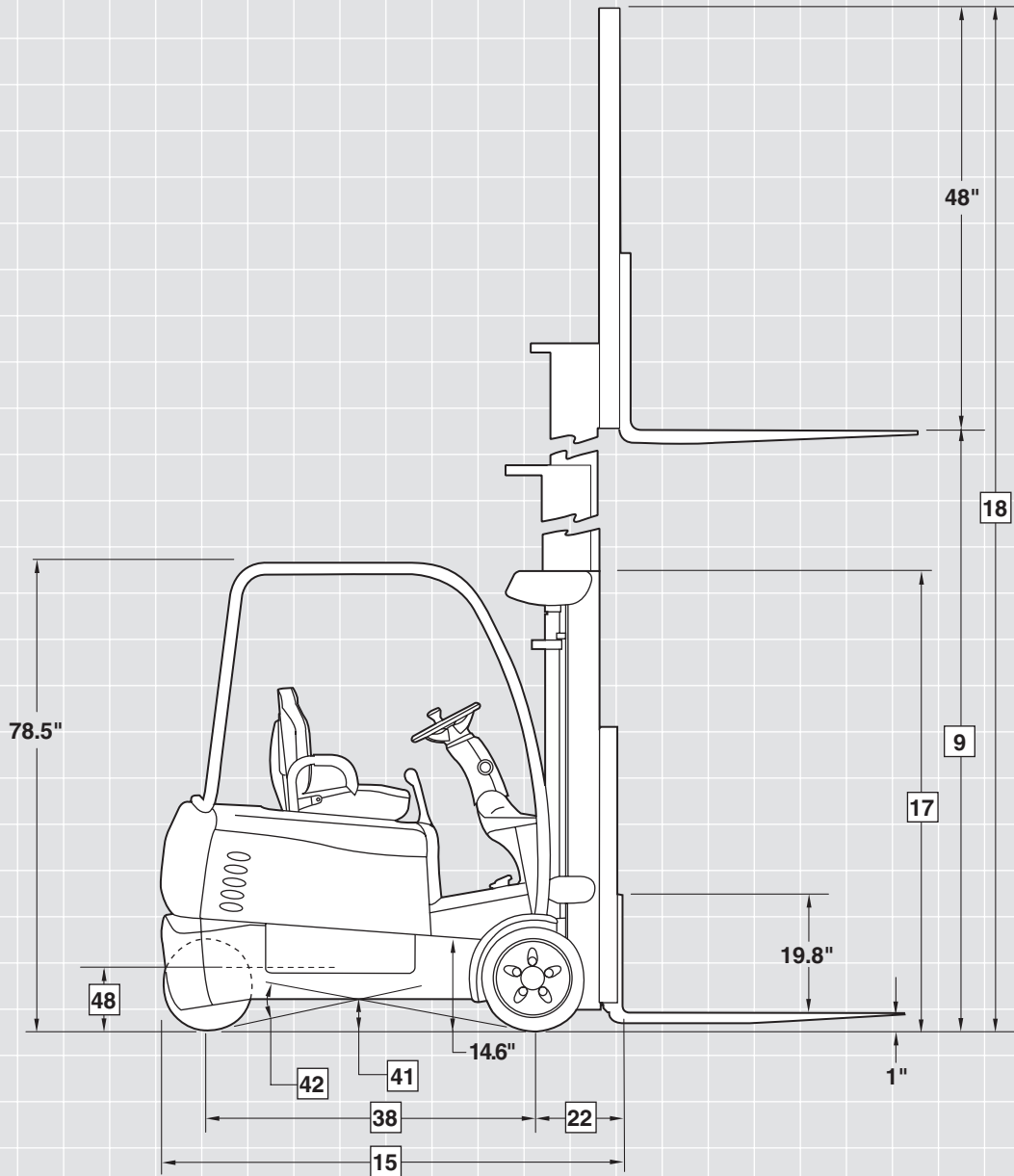
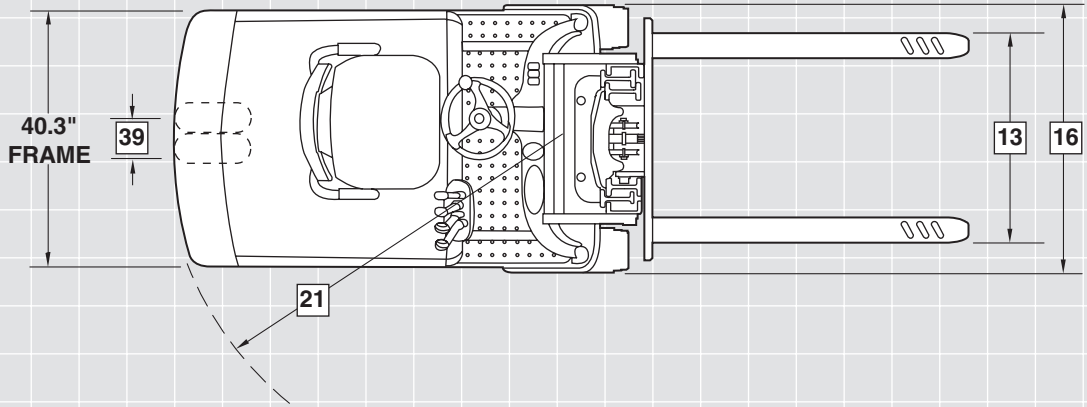
CROWN

SC 5200 SERIES

Specifications

Sit-Down Rider Lift Truck

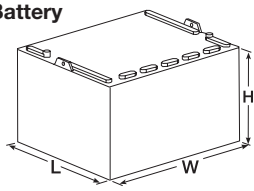




SC 5200 Series

Specifications

General Information		Crown Equipment Corporation						
1	Manufacturer							
2	Model	SC	521X-30	522X-30	522X-35	524X-35	524X-40	
3	Load Capacity*	Rated to 154 in	lb	3000	3000	3500	3500	4000
4	Load Center	Fork Face to Load CG	in	24				
5	Power	Electric	36 / 48 Volts					
6	Operator Type		Sit-down Rider					
7	Tire Type	Press-on Solid	Cushion					
8	Wheels (x = driven)	Number Front/Rear	2x / 2					
9	Mast**	Lifting Height	in	190				
11		Free Lift Height†	in	35				
12	Fork Carriage		ITA Class II					
13	Forks	Standard L x W x T	in	36 x 4 x 1.5	36 x 4 x 1.5	36 x 4 x 1.75	36 x 4 x 1.75	36 x 4 x 1.75
		Optional Lengths	in	30, 39, 42, 45, 48, 54, 60				
		Fork Spread–Min/Max	in	9/33	9/33	9/33	9/33	9.5/36
14	Tilt	B°/F°	degree	5 / 5				
15	Headlength		in	68.5***	72.8***	73.0***	77.2***	77.2***
16	Width Overall	Standard Tread	in	42.0				
17	Height	Mast Collapsed	in	83				
18		Mast Extended†	in	238				
21	Turning Radius		in	54.2	58.5	58.5	62.7	62.7
22	Load Distance	Center of Wheel to Fork Face	in	14.3***		14.5***		
23	Aisle Width	Right Angle Stack	in	Turn Radius + Load Distance + Load Length + Clearance				
24	Speed Travel††	Empty/Loaded	36V/48V mph	8.5/7.6	8.5/7.6	8.5/7.5	8.5/7.5	8.5/7.2
25a	Speed Lift††	Empty/Loaded	36V DC fpm	90/63	90/63	90/60	90/60	90/58
25b	Speed Lift††	Empty/Loaded	36V AC fpm	110/72	110/72	110/69	110/69	110/67
25c	Speed Lift††	Empty/Loaded	48V AC fpm	110/77	110/77	110/75	110/75	110/73
26	Speed Lower	Empty/Loaded	fpm	90/90	90/90	90/90	90/90	90/90
32	Weight, Less Battery		lb	6149	5974	6216	6040	6260
33	Axle Load with Max Battery	Unloaded Front	lb	4047	4300	4316	4518	4506
		Unloaded Rear	lb	3852	3924	4150	4122	4355
35	Tires	Number Front/Rear	2 / 2					
36		Size Front	in	18x7x12.1				
37		Size Rear	in	15 x 5 x 11.25				
38	Wheelbase		in	46.2	50.5	50.5	54.7	54.7
39	Tread Width	Front	in	35.0				
		Rear	in	6.7				
40	Ground Clearance, Loaded	Lowest Point	in	3.0				
41		Center of Wheelbase	in	4.8	5.0	5.0	5.0	5.0
42	Grade Clearance, Loaded		%	27.1	24.6	24.6	22.4	22.4
43	Brakes	Service	Foot - Motor / Electric Assist					
44		Parking	Auto - Electric					
45	Battery	Type	Lead Acid					
		Capacity	AH	510	680	680	850	850
			KWH	17.8	23.7	23.7	29.6	29.6
		Weight - Min	lb	1475	1850	1850	2250	2250
		Weight - Max	lb	1750	2250	2250	2600	2600
		Size - Max	Length	16.63	20.87	20.87	25.13	25.13
			Width	38.81				
	Height	22.80						
48	Battery Floor Height	With Rollers / w/o Rollers	in	10.4/9.8				
49	Motors	Traction Motor, dia	in	7.5				
		Lift Motor, dia	in	6.7				
51	Operating Pressure	For Attachments	psi	Up to 3100 psi				



* Optional masts, attachments, longer load dimensions and higher lifting heights may result in derating of the capacity. Contact your local dealer.
 ** Other mast heights available. See chart for other standard mast heights.
 *** Add 4.25 inches for quad masts.
 † Includes load backrest.
 †† Performance specifications are based on a truck equipped with a 190" triple telescopic mast.

Mast Chart SC 5200 Series			TT					QUAD				
9	Lifting Height	in	172	190	208	226	241	240	246	258	264	276
11	Free Lift Height*	in	29	35	41	47	52	36	38	41	44	47
14	Tilt B/F	degree	5/5	5/5	5/5	3/5	3/5	5/5**	3/5**	3/5**	3/5**	3/5**
17	Mast Collapsed Height	in	77	83	89	95	100	83	86	89	92	95
18	Mast Extended Height*	in	220.5	238.5	256.5	274.5	289.5	288	294	306	312	324

* Includes load backrest.

** Not available with drive-in rack or double-function hydraulics.

SC 5200 Series

Technical Information

Standard Equipment

1. Crown's Access 1 2 3® Comprehensive System Control
2. e-GEN® Braking System with automatic parking brake
3. Intrinsic Stability System®
 - Travel speed reduction and appropriate brake control when forks are above free lift
 - Forward tilt interlock above free lift
 - Controlled tilt speeds
 - Counterweight exceeds required standards
 - Cornering speed control
 - Ramp hold
 - Ramp speed control
4. 36-volt system
5. Driveability standard features
 - 15" step height
 - Large, uncluttered floorboard
 - Rubber floor mat
 - Rubber accelerator and brake pedal
 - Large, entry/exit "window"
 - Contoured battery cover for easy entry/exit
 - Crown FlexSeat™ - fabric with hip restraint and anti-cinch seatbelt
 - Compact steering wheel and steering column
 - Infinitely adjustable tilt steering
 - Operator forward design for enhanced visibility
 - Low cowl for fork and floor visibility
 - Nylon covered control handles with tactile feedback
 - Natural position for forward/reverse selector
 - Automatic parking brake

- Crown FlexSeat with a passive suspension and back flex
6. Crown display
 - Battery discharge indicator with lift interrupt and re-key feature
 - Hour meters / travel distance / stop watch
 - Pin code access capable
 - Event code display with five (5) key navigation
 - Access 1 2 3 diagnostics
 - P1, P2, P3 Performance tuning
 7. 350 amp battery connector
 8. InfoPoint® System with Quick Reference Guide
 9. Color-coded wiring
 10. Lift out or side removal battery access
 11. Dual 15" steer tires
 12. Large 18" cushion drive tires
 13. Crown-manufactured drive and lift motors
 14. Proportional rack and pinion steering
 15. Waterfall design overhead guard
 16. 48" high load backrest
 17. No tool lift out floorboards for service access
 18. High visibility mast with in-line hose routing
 19. O-ring face seal hydraulic fittings
 20. 5° Forward / 5° Back tilt
 21. All AC System
 22. On-Demand Steering

Optional Equipment

1. Battery rollers
2. Freezer and corrosion conditioning
3. Sideshifter

4. Hydraulic valves for attachments
5. Quick disconnect hydraulic connectors
6. Steering spinner knob
7. Storage tray
8. Keyless on/off switch
9. Fork lengths
10. Polished and tapered forks
11. Load backrest heights
12. Non-marking smooth or lug rubber tires
13. Drive-in rack overhead guard
14. Tilt options
15. Working lights
16. Flashing lights
17. Brake, tail and back-up light
18. Audible travel alarms
19. Tilt position assist
20. Arm rest
21. Work Assist™ Accessories
 - Clip pad and hook
 - Clamp
 - Clamp and mounting plate
 - Operator fan
 - Fire extinguisher
 - Mirrors
 - Shrink Wrap Holder
 - Cup Holder
 - Pencil Holder
 - Storage pocket behind seat
22. Suspension Seat - fabric or vinyl
23. Crown FlexSeat - vinyl

Driveability

The SC 5200 Series benefits from Crown's design and engineering excellence. Numerous design features improve operator comfort and productivity.

A low 15" step height first greets the operator. A low battery cover that is streamlined helps the operator glide into the truck's Crown FlexSeat™. The overhead guard is shaped to open up the entry/exit window. The compact tilt steer column and steer wheel further facilitate entry/exit. Floorboards are large, uncluttered and rubber covered to insulate the operator from vibration. Brake and accelerator pedals are rubber covered to provide good grip and comfort.

Several designs contribute to better visibility everywhere you look. A low cowl for fork visibility, a unique waterfall overhead guard for load handling, a high visibility mast and a compact steer column all improve operator visibility around the truck.

Control handles are crafted into the compartment and "fanned" for easy selection. They are nylon covered with tactile feedback for comfort and easy selection. Control actuation forces are minimal and responsive.

Crown Drive System

Crown has applied the latest generation AC drive system, enhanced with Access 1 2 3 technology. The demand for high efficiency systems that closely match customer torque requirements is met with this generation control system. Crown-manufactured, independently controlled, AC drive motors are specifically designed to optimize system integration between the traction and braking controls.

Crown's Access 1 2 3 technology provides optimum performance and control by offering a communication interface for operators and technicians, intelligent coordination of lift truck system and simplified service with advanced diagnostics.

The Crown display is used for easy troubleshooting, access service history and set performance features. Three modes of performance can be selected to accommodate operator experience or application requirements.

e-GEN® Braking System

Variable regenerative motor braking is optimized and assisted with electric friction brakes, eliminating maintenance associated with typical wet, disk or drum and shoe style brakes. The appropriate amount of stopping force is applied to match operator brake input and the current operating conditions of the truck.

The closed loop Access 1 2 3 traction control will keep the truck static until a travel input is requested, even when operating on a grade.

Automatic electric parking brakes activate when the operator leaves the seat, a travel input has not been requested or battery power has been disconnected.

Proportional Rack and Pinion Steering System

Hydrostatic power steering uses a large, totally enclosed rack and pinion gear assembly. Load-sense hydrostatic steering is an on-demand system which reduces energy consumption. Smooth, quiet steering control with minimal operator effort required at the steer tiller. Crown's hydrostatic steering system is simplified with significantly fewer parts, thus reducing maintenance requirements.

The steering geometry is matched to the controller to deliver smooth steering at all angles. The advantage is less tire scrubbing which extends tire life.

Both motors receive power, even in the tightest turns. This helps the truck to accelerate, turn and maneuver even from a full turn start position.

Cornering speed control regulates the drive motor's output by the turning degree of the truck. The advantage is smooth, stable steering which may increase operator confidence and productivity.

Large, (15" diameter) dual steer wheels provide good traction and stability.

Hydraulics

The hydraulic system provides continuous filtration. A heat stabilized polymer hydraulic tank is free from contamination and retains strength over a wide range of temperatures. Hydraulic attachments can be added easily in the field using modular valve bodies. Hydraulic valve handle actuation is precise and oil is controlled using metered spool valves and motor speeds.

Ram displacement type lift cylinders and two double acting tilt cylinders are Crown-manufactured. All rams and piston rods are hard chrome plated to reduce pitting and extend cylinder packing life. O-ring face seal fittings are used to eliminate leaks.

Mast Assembly

Crown-manufactured mast assembly utilizes a "flush-face" interlocked I-beam design to improve visibility and save truck length. Roller bearing studs are welded on both sides of the rails for maximum strength and roller bearings are canted to run in the thick cross section of the rail. Tie bars wrap around the rails for added strength and to resist off-center load forces.

"In-line" hose routing opens up visibility. Cylinders are placed to the sides to create a high visibility design.

The mast has four points of attachment to the truck for good load force distribution. Two mounting points are at the frame, where tilt cylinders attach. Tilt cylinders use spherical bushings to resist off center load distortions. Two large diameter studs secure the mast to the drive units.

Drive Units

Two Crown-manufactured independent double reduction planetary gear drives offer 27 to 1 gear reduction. The first and second reduction use helical gears for low noise and efficiency. The drive unit gear are splash lubricated in an oil bath.

Carriage

An ITA Class II carriage is standard. An optional hook type ITA sideshifter or other attachments are easily added. Optional fork lengths are available.

Other Options

1. Audible travel alarm
2. Flashing lights

Safety considerations and dangers associated with audible travel alarms and flashing lights include:

- Multiple alarms and/or lights can cause confusion.
- Workers ignore the alarms and/or lights after day-in and day-out exposure.
- Operator may transfer the responsibility for "looking out" to the pedestrians.
- Annoys operators and pedestrians.

Other Options Available

Contact your local Crown dealer.

Dimensions and performance data given may vary due to manufacturing tolerances. Performance is based on an average size vehicle and is affected by weight, condition of truck, how it is equipped and the conditions of the operating area. Crown products and specifications are subject to change without notice.



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You can count on Crown to build lift trucks designed for safe operation, but that's only part of the safety equation. Crown encourages safe operating practices through ongoing operator training, safety-focused supervision, maintenance and a safe working environment. Go to crown.com and view our safety section to learn more.

Because Crown is continually improving its products, specifications are subject to change without notice.

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