

CROWN

Specifications

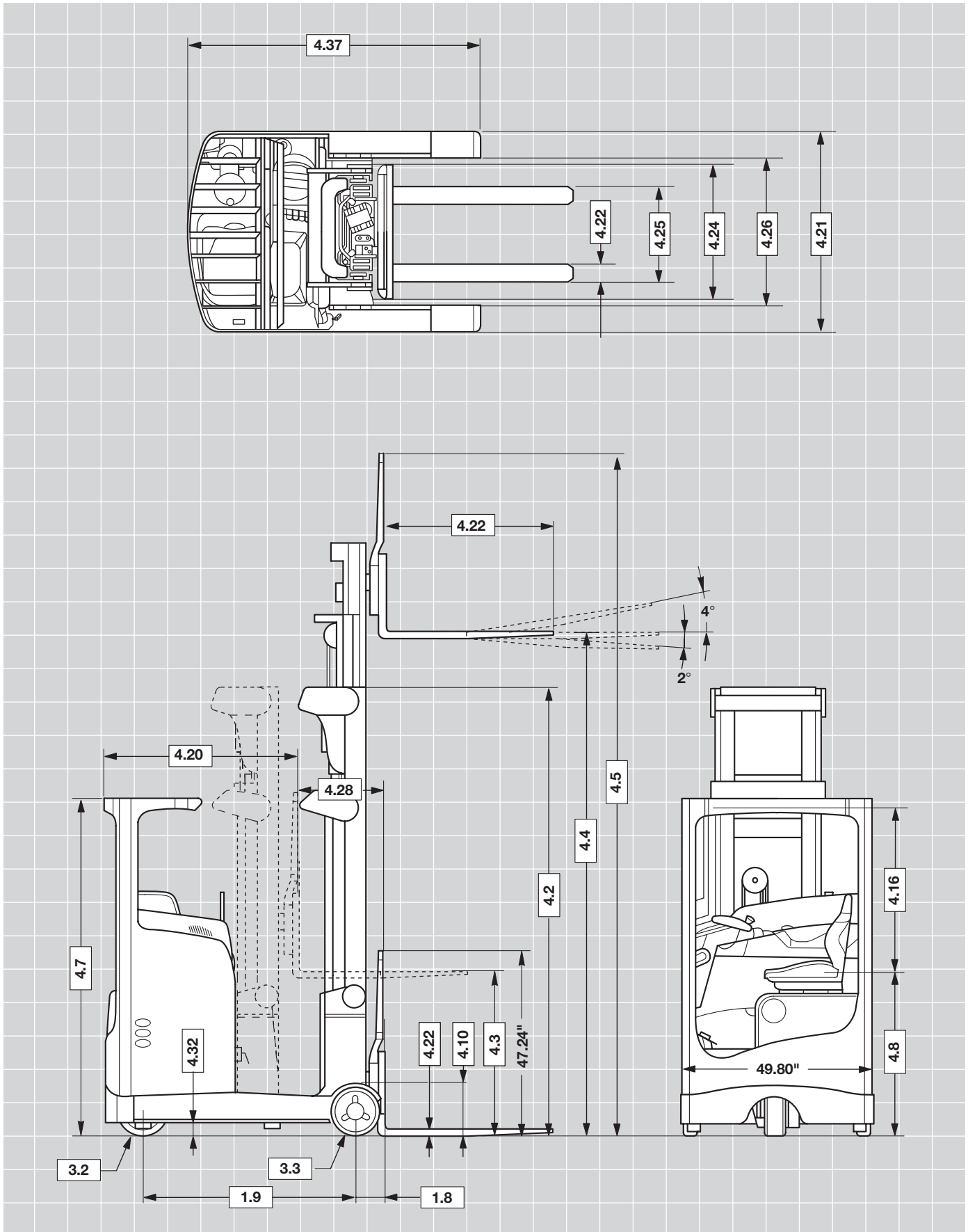
SR 5285H Series

Reach Truck

SR 5285H

Series





General Information	1.1	Manufacturer		Crown Equipment Corporation	
	1.2	Model		SR 5285H	
	1.3	Power		Electric	
	1.4	Operator Type		Rider / Seat	
	1.5	Load Capacity	lb	4500	
	1.6	Load Center	in	24	
	1.8	Load Distance	Mast Extended	in	8.54
	1.9	Wheelbase		in	58.07
	2.1	Weight	Less Battery	lb	8110** (Option 1 Straddle)
Tires	3.1	Tire Type	D / L	in	Vulkollan
	3.2	Tires	Front	in	13.50 x 5.51
	3.3	Tires	Rear	in	13.00 x 3.94
	3.5	Wheels Number (x = driven)	Front / Rear		1x / 2
Dimensions	4.1	Forkcarriage Tilt	Forward / Backward	°	2 / 4
	4.2	Mast	Collapsed Height	in	See Table 3
	4.3	Free Lift*	Load Backrest	in	See Table 3
	4.4	Lift		in	See Table 3
	4.5	Mast* (Extended Height)	With Load Backrest	in	See Table 3
	4.7	Overhead Guard Height		in	84
	4.8	Seat Height	Compressed	in	40.55
	4.10	Outrigger Height		in	13.62
	4.15	Lowered Fork Height		in	1.77
	4.16	Head Room - Overhead Guard	Not Compressed / Compressed	in	39.49 / 40.20
	4.20	Headlength		in	58.03
	4.21	Overall Width		in	See Table 1
	4.22	Forks	Standard H x W x L	in	1.77 x 3.94 x 39.37
			Optional Lengths	in	42.01, 45.28, 48.03
	4.23	Fork Carriage	ISO Class		2 A
	4.24	Fork Carriage Width	With Load Backrest	in	See Table 1
				in	45.67
Optional Fork Carriage Height			in	31.50, 35.43, 39.37, 43.31, 47.24	
4.25	Width Across Forks		in	See Table 1	
4.26	Inside Straddle		in	See Table 1	
4.28	Reach		in	18.70	
4.32	Ground Clearance	Center Wheelbase	in	2.99	
4.37	Length over Outriggers		in	74.92	
Performance	5.1	Travel Speed	With / Without Load	mph	7.45 / 7.45
	5.2	Lift Speed	With / Without Load	fpm	63 / 106
	5.3	Lower Speed	With / Without Load	fpm	112 / 98
	5.4	Reach Speed	With / Without Load	fpm	37 / 37
	5.10	Service Brake			Hydraulic
Battery	6.3	Max Battery Box Size		in	See Table 2
	6.4	Battery Voltage	Max Capacity 6h Rating	V/Ah	48 / 1085
	6.5	Battery Weight	Minimum	lb	2736

* With 47.24" Backrest

**With lift height 426"

Table 1 - Straddle Options

			Option 1	Option 2
4.21	Overall width	in	56.10	62.01
4.24	Fork carriage width	in	30.71	39.76
4.25	Width across forks, max	in	29.52	38.58
4.26	Width inside straddle	in	43.50	49.41
	Sideshift movement in each direction	in	2.75	3.94

Table 2 - Battery Size

6.3	Battery Size L x H x W	46.97 x 30.56 x 19.64
		*48.15 x 30.56 x 19.64

* Remove standard spacer

Table 3

4.4 Lift Height in	4.2 Overall Collapsed Height in	4.3 Free Lift** in	4.5 Overall Extended Height** in
360	145.4	99.8	406.10
378	151.3	105.7	423.81
391	155.6	110.0	436.81
426	167.4	121.8	472.24
450	175.3	129.7	495.87

**With 47.24" backrest

Capacity

Model SR 5285H: 4500 lb at 24" load center

Batteries/Electrical System

The battery is pulled out of the chassis with the reach carriage. The battery can be removed vertically or by rollers provided allowing horizontal removal of the battery from either side.

Standard Equipment

1. Crown Integrated Control System with Access 1 2 3®
2. Virtually maintenance free three-phase (AC) motors for traction, hydraulics and steering
3. Motor controllers for traction, hydraulics and steering
4. CAN-Bus technology
5. Speed-sensitive electric steering with programmable turning ratios
6. Tilting steer column
7. Proportional fingertip control for all hydraulic functions incorporating soft-lift/soft-stop for smooth load movement
8. Information display:
 - Access 1 2 3 on-board diagnostics with real time troubleshooting capabilities
 - Two-line LCD display with 16 characters per line
 - Hour meters for monitoring various truck operating components
 - Travel direction indicator
 - Input for operator PIN
 - Real-time clock and date
 - Three selectable performance profiles
 - Battery discharge indicator with lift lockout
 - Steer wheel position indicator
9. Integrated lift height and load weight indicator with truck performance linked to fork height
10. Rack Height Select with automatic laden/unladen fork positioning starting 19.7" above secondary mast staging
11. Tilt position assist
12. Free lift indicator, warning of fork heights above free lift. Can be programmed to reduce top travel speed.

13. Thumb-operated travel direction switch
14. Automotive type accelerator and brake pedal
15. All-wheel braking
16. Braking systems:
 - Parking brake
 - Mechanical service brake
 - Regenerative direction reversal
 - Regenerative coast braking
17. Electric switch for parking brake activation
18. Truck-Hold automatic braking for slopes or pushback racking
19. Electric power disconnect switch
20. Vulkollan load wheels and drive tire
21. Four easy-access storage compartments
22. Comfortable knee and hip padding within the driver's compartment
23. Comfortable suspension seat with multiple adjustment possibilities
24. Unique offset, wide visibility mast
25. Clear view overhead guard and load backrest
26. Lift slowdown prior to reaching full mast extension
27. Reach-out battery system
28. Reach carriage slowdown prior to reaching full extend or retract position
29. Integrated sideshift with tilting fork carriage
30. ISO Class 2A Forks
31. Battery plug SB 350
32. Battery rollers for horizontal battery extraction
33. Strobe light

Optional Equipment

1. Lift cutout with/without override switch
2. Mast mounted camera with color or B&W monitor
3. Work lights 12-volt
4. Audible travel alarm
5. Dual-axis controls
6. Heated seat
7. Cloth seat
8. OHG covers

9. Work Assist™ Accessories
 - Accessory pad clip and hook
 - Accessory clamp
 - Accessory RF mounting plate
 - Accessory RF mounting bracket
 - Accessory clip pad
 - Accessory hook
 - Accessory pocket
 - Accessory tube
10. Cold storage conditioning for applications to -30° C
11. English/French/Spanish labels

Driver's Compartment and Controls

A comfortable step height, well-positioned grab handle and non-slip floor mat ensure safe and comfortable footing during entry and exit.

Once seated, the operator has the ability to tailor the compartment to "fit". A high quality comfortable seat can be adjusted for the operator's weight. In addition, the seat can be adjusted laterally, as well as for the angle of the seatpad and backrest. These adjustments, coupled with a tilting steer column, ensure a comfortable position for any operator.

The left foot rests on the operator "presence" pedal. The right foot operates an automotive style accelerator and brake pedal arrangement, while the right leg is supported by ergonomically positioned padding for the knee and hip areas. The direction switch is actuated with the right thumb leaving the fingers of the right hand free to operate all the hydraulic controls. The fingertip control levers allow for easy blending of hydraulic functions and are easily understood by new or inexperienced operators. There are four easily accessible storage compartments. The ergonomically formed armrest is well padded and is designed particularly with wrist support in mind.

The display contains information on the truck's operating status, a battery discharge indicator, a travel direction indicator, steer wheel position indicator, hour meters for various truck operations, performance profile selection, and service information for planned maintenance scheduling, fault finding and testing. Coupled with a traditional keyswitch, the information

display also serves as the PIN input for those choosing to employ the on-board user code system thereby preventing unauthorized use. The two-line LCD display with 16 characters per line is well illuminated for excellent visibility. These standard features are complimented by information such as fork height and load weight indicators should these options be chosen.

A further panel is integrated into the chassis column and incorporates optional accessories such as light switches.

Access 1 2 3® Integrated Control System

Crown's Integrated Control System provides unmatched truck control for all primary truck systems:

- Traction motor control
- Hydraulic valve and motor control
- Steer motor control
- Braking
- Information/diagnostic display

Dedicated motor controllers are employed to simplify troubleshooting and minimize replacement cost. All systems are linked through CAN-Bus, which greatly simplifies wiring while improving diagnostic communication.

On ramps, or when interfacing with push back racking, the selectable Truck-Hold feature electronically brakes the truck when the accelerator is released. The operator does not have to apply the brake, improving comfort and control in these applications.

Selected travel speed remains constant regardless of surfaces, load weight or grades. The travel speed, acceleration, and electric braking ratio can be set via the display, facilitating the best possible productivity and energy consumption for each application. Regenerative motor braking helps save energy.

The control system for the hydraulic pump motor and all proportional hydraulics facilitates precise and sensitive execution of all hydraulic functions. All hydraulic parameters such as lift, lower, tilt, sideshift and reach speeds are fully adjustable and can therefore be adapted to different applications.

Access 1 2 3 Integrated Control System (continued)

Crown's Access 1 2 3 Diagnostics is the most comprehensive fault detection system in the industry. A properly trained technician can actively view inputs and outputs during truck operation thereby significantly reducing search and downtime.

The information display is the first point for troubleshooting. All operator information such as travel and hydraulic parameters, truck monitors, etc. can be obtained and adjusted via the display. No handset or laptop is required – all functions are onboard and easy to use.

Performance Profiling

Three pre-set performance profiles can be selected on the display. The pre-set parameters can be changed to a multitude of other traction and hydraulic parameters allowing adaptation to each customer's requirements.

Hydraulic System

Proportional control ensures all hydraulic functions can be individually and precisely actuated regardless of load. Four hydraulic functions (lift/lower, tilt, sideshift, reach) are standard. All hydraulic hoses are internally reeved through the mast.

The utilization of an internal gear pump reduces the noise level and ensures high efficiency in all applications. The hydraulic oil is filtered twice. The return and suction filters can be exchanged without draining the hydraulic tank.

Mast and Reach Carriage

Crown's unique offset, wide view mast delivers excellent visibility at height as well as for low-level operations. Mast cross-bracing and overhead guard bracing have been angled and hose and chain rollers have been canted to further enhance visibility. A load backrest designed for maximum visibility is also standard. The standard three-stage full-free lift mast incorporates integrated sideshift with tilting carriage, hence reducing head length. Mast channels are reinforced to minimize static and dynamic deflection.

Spring dampers are located on the fork carriage to reduce noise while staging and the lifting speed is slowed before reaching the lift limit. Elastomer dampers between the mast stages and hydraulic dampening in the free-lift cylinder reduce noise while lowering.

The anti-friction mast rollers are canted to reduce energy consumption and ensure longer life. The heavy-duty reach carriage moves on four main roller bearings. Two adjustable backing rollers minimize dynamic mast rocking while four adjustable side rollers ensure very smooth movement and precise positioning.

Drive Unit

A highly efficient drive unit with helical gears, integrated pinion and vertically mounted three-phase (AC) traction motor provides quiet, powerful traction performance. A large Vulkollan drive wheel (13.50" x 5.51") offers high load capacity, long life and excellent travel comfort.

Steering

The electric steering system is travel speed sensitive. It provides fast direct response with light effort for controlled maneuverability. Variable steering ratio can be programmed to suit specific needs. A fail-safe control circuit applies motor braking and parking brake if a fault is detected.

Brakes

The foot pedal applies the service brake. The brake pressure is distributed to the load wheels and the drive wheel by a master cylinder in combination with regenerative motor braking. This ensures the truck brakes smoothly and efficiently.

The parking brake is activated by a switch in the operator compartment. The spring-applied / electro-magnetically released brake is applied on the drive wheel. The parking brake is automatically applied when the operator exits the truck.

The truck can also be brought to a stop by reversing the travel direction using the electric regenerative plugging function.

Furthermore, the truck is equipped with an electric auto-brake function, which stops the truck as the accelerator pedal is released (controlled coasting). Both electric braking functions can be set via the display.

Motors

All motors are highly efficient three-phase (AC) which provide high available torque and seamless reversal. Traction and hydraulic motors are oversized for superior thermal capability and are especially suitable for high loads and high ambient temperature applications.

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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