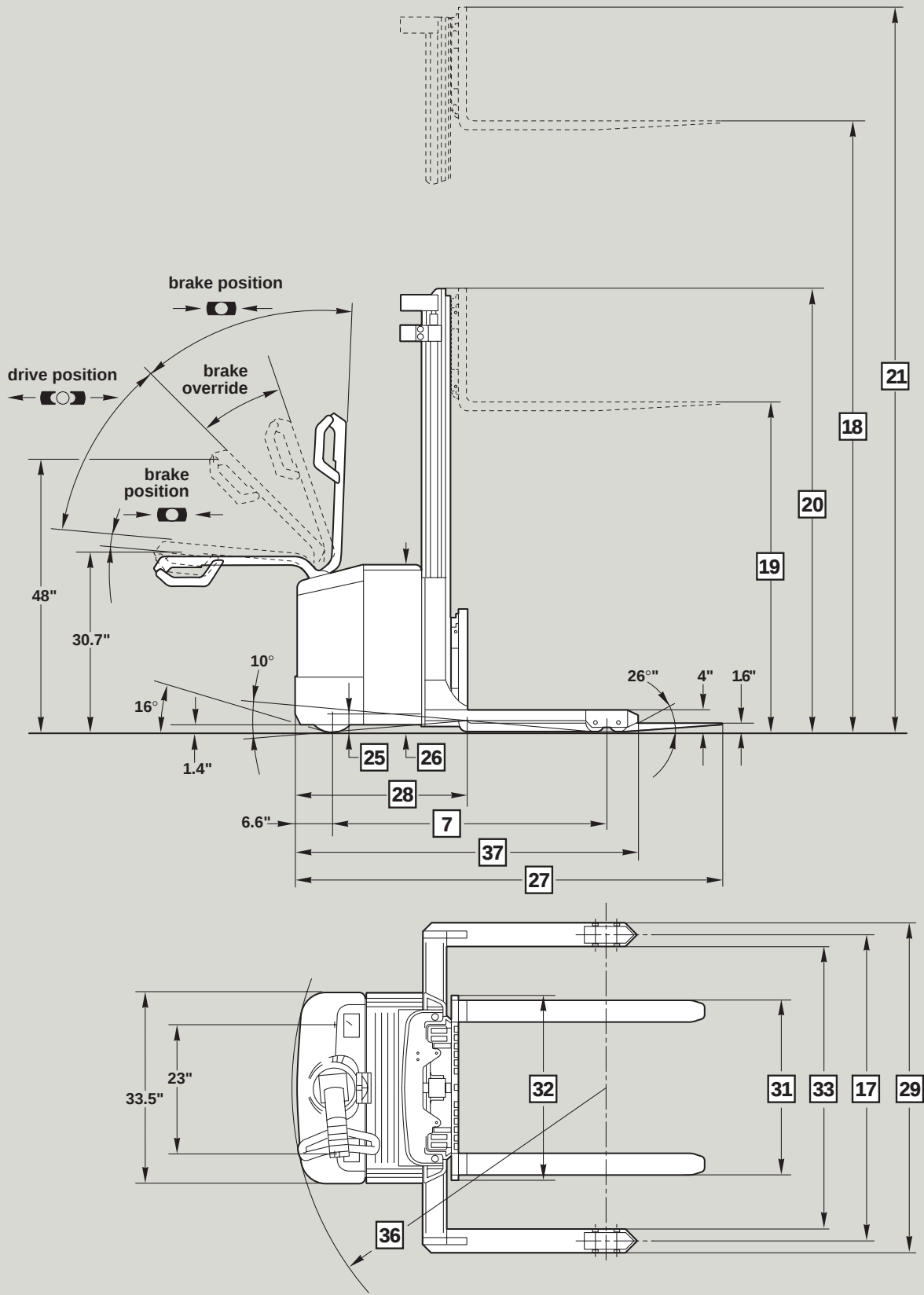


WE/WS 2000 Series
walkie stackers



technical
specifications



Standard Equipment

1. Four point suspension with centrally located handle.
2. Traction speed control (MOSFET).
3. Variable traction speed forward and reverse.
4. One speed lift, two speed lower.
5. Electric brake.
6. Brake override.
7. Key switch.
8. Horn.
9. Compound drive and lift motor.
10. Emergency power disconnect.
11. Battery connector SB-175.
12. Reversing button.
13. Hour meter.
14. Vulkollan tires.

Optional Equipment

1. Pivoting tandem load wheels 3.2" x 2.3"/82 x 60 mm (WE 2000-25 only).
2. Battery compartment rollers.
3. Battery discharge indicator with low battery lift interrupt and hour meter.
4. Freezer corrosion conditioning, continuous -30° C / -22° F, intermittent -40° C / -40° F.
5. Load backrest.

Electrical System

24 volt electrical system incorporating:

1. Transistor "MOSFET" controller, microprocessor controlled with on-board service diagnostic capability. This transistor controller provides many benefits such as maximum energy efficiency, reduced maintenance and infinite speed control capability.

Fault Monitoring System:

Through a fault flash code signaled by an LED, 17 detectable faults can be recognized. Using an optional hand set, faults can be displayed digitally. Controller settings are programmable. Functional tests of components are also possible. Incorporates storage register for fault history that can be interrogated by service personnel.

2. Heavy-duty drive and lift motors provide high reliability and efficiency.
3. Electric panel with swing out feature, allows good accessibility and serviceability to the distribution panel and all other electrical components.
4. Emergency disconnect is easily accessible from all operating positions.
5. Solid state switching ensures high component reliability.
6. Control and power circuits are fused. Distribution panel and controller are short circuit protected.
7. All wiring is color coded.

Hydraulic System

1. Heavy-duty compound motor and gear pump selected for optimum lift performance and low noise.
2. Control block houses proportional pressure compensated flow control valve, check valve, relief valve and direction control valve to select lower function. The proportional valve ensures smooth load handling. Single speed lift and two speed lowering is available to the operator.
3. Cylinder rods are hard plated chrome with polyurethane seals.
4. Relief valve tuned to capacity protects all components in the hydraulic system.

Drive Unit / Brake

Heavy-duty gear box with helical spur input gear for low noise emission. Drive unit is equipped with an electro-magnetic brake, spring applied, electrically released. The brake is activated by the control handle position.

Frame / Pivoting Carriage

Frame and Articulated Truck Suspension system (ATS) are of a rugged design ensuring minimum deflections during operation. Modular pivoting carriage design ensures excellent traction, optimum truck stability and minimum steering effort in all load conditions. Easy serviceability of all components in power unit and simple adjustment to compensate for tire wear is possible. Single swing out door design allows easy access to all components.

Mast

High visibility two and three stage mast design features nested I-beams and canted rollers. Lift cylinders are positioned in outer I-beam profile for best visibility through mast and clear view onto fork tips during load handling. Standard equipment includes full free lift for two and three stage mast. Mast cushioning between stages ensures smooth operation. Heavy-duty mast and chain rollers are sealed and lubricated for life. Easy access to carriage rollers.

Control Handle / Steering

Full function control handle design includes direction of travel, raise, lower and reversing button. The brake is also activated by control handle position. Brake override is possible by releasing and repressing the "cam" direction switch in the control handle. The operator may then drive slowly while the handle is in the "brake override" position.

Battery

Removable side panels and top hinged cover allow easy access to battery, as well as battery change in three directions, either side or top lift out. Compartment rollers are fitted as an option.

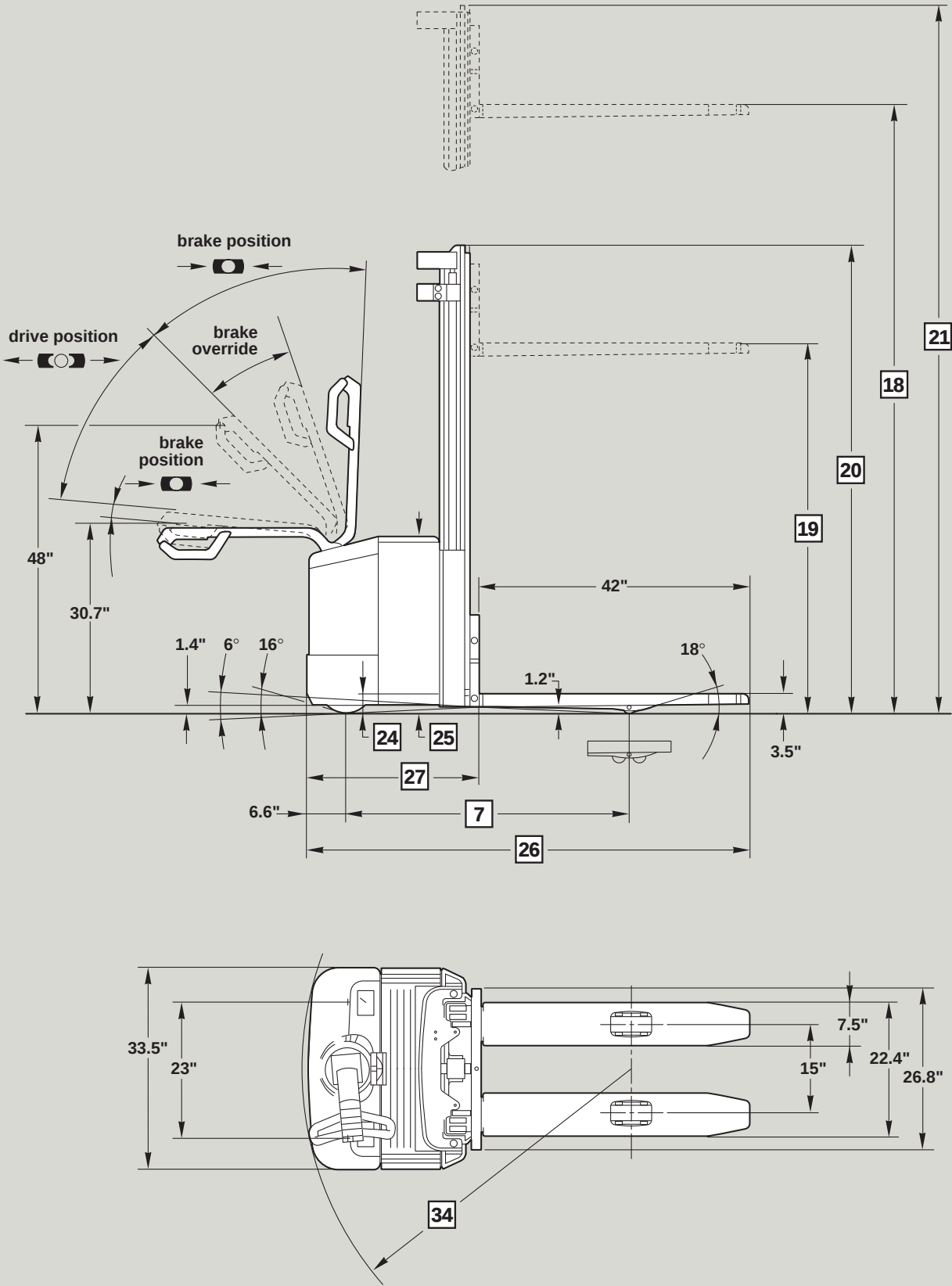
Other Options

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.

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.



General Information	English measurement						Metric				
	1	Manufacturer	Crown Equipment Corporation				Crown Equipment Corporation				
	2	Model	WE 2000-25 TL/TF		WE 2000-30 TL/TF	WE 2000-30 TT	WE 2000-25 TL/TF		WE 2000-30 TL/TF	WE 2000-30 TT	
	3	Power	electric				electric				
	4	Operator Type	walkie				walkie				
	5	Load Capacity	lb	2500	3000**	3000***	metric ton	1.13	1.36**	1.36***	
	6	Load Center	in	24	24	24	mm	600	600	600	
	7	Wheel Base	in	47	50	51	mm	1206	1280	1305	
Weight	8	Weight	less battery	lb	1907	2072	2282	kg	865	940	1035
	9	Axle Load	with load front/rear	lb	1852/3417	1962/4244	1962/4244	kg	840/1550	890/1925	890/1925
Tires	10	Axle Load	w/o load front/rear	lb	1819/694	1918/750	1918/750	kg	825/315	870/340	870/340
	11	Tire Type		vulkollan				vulkollan			
	12	Wheel Size	front (d x w)	in	9.8x3			mm	250x75		
	13	Wheel Size	rear (d x w)	in	3.2x4	3.2x2.3	3.2x2.3	mm	82x100	82x60	82x60
	14	Additional Wheels	caster wheel (d x w)	in	5.9x2				mm	150x50	
	15	Wheels	number (x=driven) front/rear		1x, 1/2	1x, 1/4	1x, 1/4		1x, 1/2	1x, 1/4	1x, 1/4
	16	Track Width	front	in	23			mm	587		
	17	Track Width	rear	in	15			mm	382		
Dimensions	18	Lift Height		in	130	130	161	mm	3300	3300	4100
	19	Free Lift*	w/o load backrest - TL	in	6	6	na	mm	150	150	na
			w/o load backrest - TF/TT*	in	68	68	57	mm	1720	1720	1450
	20	Collapsed Height		in	84	84	73	mm	2130	2130	1860
	21	Extended Height*	w/o lbr.	in	147	147	178	mm	3730	3730	4530
	22	Tiller Arm Height	in drive position min/max	in	31/48			mm	780/1220		
	23	Lowered Fork Height		in	3.5			mm	90		
	24	Batt. Comp. Floor Hght.		in	3.4			mm	85		
	25	Power Unit Height		in	29.75			mm	756		
	26	Overall Length	at fork length: 42"/1067mm	in	71	72	73	mm	1803	1829	1854
	27	Headlength		in	29	30	31	mm	730	753	778
	28	Overall Width		in	33			mm	850		
	29	Fork Dimensions	thickness	in	2			mm	50		
			width	in	7.5			mm	190		
	length		in	36, 42, 48			mm	914, 1067, 1219			
	30	Width Across Forks		in	22.4, 27			mm	570, 686		
31	Fork Carriage Width		in	27			mm	680			
32	Ground Clearance	with load below mast	in	1.4			mm	35			
33	Ground Clearance	center wheelbase	in	1.2			mm	30			
34	Turning Radius		in	55	58	59	mm	1400	1475	1500	
Performance	35	Travel Speed	with/ w/o load	mi/hr	3.3/3.7			km/hr	5.3/6.0		
	36	Lift Speed	with/ w/o load	fpm	31/51	28/43	28/43	m/s	.16/26	.14/22	.14/22
	37	Lowering Speed	with/ w/o load	fpm	71/43	71/43	71/39	m/s	.36/22	.36/22	.36/20
	38	Gradeability	with/ w/o load, 30 min. rating	%	3/9	3/8	3/8		3/9	3/8	3/8
	39	Max. Gradeability	with/ w/o load, 5 min. rating	%	9/17	8/17	8/17		9/17	8/17	8/17
Battery	40	Service Brake		electric				electric			
	41	Maximim Battery Box	LxWxH	in	8.5x32.5x24.7				mm		216x827x627
	42	Battery Voltage	nominal capacity 6h rating	V/Ah	24/240						24/240
	43	Type of Controller	drive	transistor				transistor			
44	Battery Weight		lb	644-712			ka	292-323			

* Subtract 32"/810mm from free lift; add 32"/810mm to extended height if optional 47.25" high load backrest is required.

** Up to 110"/2800mm, 2910 lb up to 130"/3300mm

*** Up to 118"/3000mm, 2248 lb up to 161"/4100mm

English conversions are approximations. Metric conversions should be done to find true values.

As with all performance specifications, actual speeds will depend on how the truck is equipped, component tolerances, break-in period, truck weight, tire selection, floor condition and grade, ambient temperature and battery condition. When specifications are critical, see your Crown dealer for more help with your application.

Standard Equipment

1. Four point suspension with centrally located handle.
2. Traction speed control (MOSFET).
3. Variable traction speed forward and reverse.
4. One speed lift, two speed lower.
5. Electric brake.
6. Brake override.
7. Key switch.
8. Horn.
9. Compound drive and lift motor.
10. Emergency power disconnect.
11. Battery connector SB-175.
12. Reversing button.
13. Hour meter.
14. Vulkollan tires.

Optional Equipment

1. Battery compartment rollers.
2. Battery discharge indicator with low battery lift interrupt and hour meter.
3. Freezer corrosion conditioning, continuous -30° C / -22° F, intermittent -40° C / -40° F.
4. Load backrest.
5. 42" forks.

Electrical System

24 volt electrical system incorporating:

1. Transistor "MOSFET" controller, microprocessor controlled with on-board service diagnostic capability. This transistor controller provides many benefits such as maximum energy efficiency, reduced maintenance and infinite speed control capability.

Fault Monitoring System

Through a fault flash code signaled by an LED, 17 detectable faults can be recognized. Using an optional hand set, faults can be displayed digitally. Controller settings are programmable. Functional tests of components are also possible. Incorporates storage register for fault history that can be interrogated by service personnel.

2. Heavy-duty drive and lift motors provide high reliability and efficiency.
3. Electric panel with swing out feature, allows good accessibility and serviceability to the distribution panel and all other electrical components.
4. Emergency disconnect is easily accessible from all operating positions.
5. Solid state switching ensures high component reliability.
6. Control and power circuits are fused. Distribution panel and controller are short circuit protected.
7. All wiring is color coded.

Hydraulic System

1. Heavy-duty compound motor and gear pump selected for optimum lift performance and low noise.
2. Control block houses proportional pressure compensated flow control valve, check valve, relief valve and direction control valve to select lower function. The proportional valve ensures smooth load handling. Single speed lift and two speed lowering is available to the operator.
3. Cylinder rods are hard plated chrome with polyurethane seals.
4. Relief valve tuned to capacity protects all components in the hydraulic system.

Drive Unit / Brake

Heavy-duty gear box with helical spur input gear for low noise emission. Drive unit is equipped with an electro-magnetic brake, spring applied, electrically released. The brake is activated by the control handle position.

Frame / Pivoting Carriage

Frame and Articulated Truck Suspension system (ATS) are of a rugged design ensuring minimum deflections during operation. Modular pivoting carriage design ensures excellent traction, optimum truck stability and minimum steering effort in all load conditions. Easy serviceability of all components in power unit and simple adjustment to compensate for tire wear is possible. Single swing out door design allows easy access to all components.

Mast

High visibility two and three stage mast design features nested I-beams and canted rollers. Lift cylinders are positioned in outer I-beam profile for best visibility through mast and clear view onto fork tips during load handling. Standard equipment includes full free lift for two and three stage mast. Mast cushioning between stages ensures smooth operation. Heavy-duty mast and chain rollers are sealed and lubricated for life. Easy access to carriage rollers.

Fork Carriage

WS-model features a standard fork carriage ISO class 2A, width across forks adjustable from 10"/253 mm to 31"/790 mm. For WS, the fork length of 39"/1067 mm is standard, optional fork lengths are available.

Control Handle / Steering

Full function control handle design includes direction of travel, raise, lower and reversing button. The brake is also activated by control handle position. Brake override is possible by releasing and repressing the "cam" direction switch in the control handle. The operator may then drive slowly while the handle is in the "brake override" position.

Battery

Removable side panels and top hinged cover allow easy access to battery, as well as battery change in three directions, either side or top lift out. Compartment rollers are fitted as an option.

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.

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.

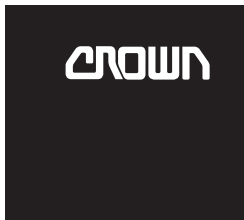
			English measurement				Metric					
			Crown Equipment Corporation				Crown Equipment Corporation					
General Information	1	Manufacturer										
	2	Model		WS 2000-30 TL/TF	WS 2000-40 TL/TF	WS 2000-40 TT		WS 2000-30 TL/TF	WS 2000-40 TL/TF	WS 2000-40 TT		
	3	Power										
	4	Operator Type										
	5	Load Capacity	lb	3000	4000	4000*	metric ton	1.35	1.8	1.8*		
	6	Load Center	in	24	24	24	mm	600	600	600		
	7	Wheel Base	in	48	51	51	mm	1220	1300	1300		
Weight	8	Weight	less battery	lb	1907	2072	2282	kg	865	940	1035	
	9	Axle Load	with load front/rear	lb	1896/3616	2006/4630	2006/4630	kg	860/1640	910/2100	910/2100	
Tires	10	Axle Load	w/o load front/rear	lb	1830/705	1918/750	1918/750	kg	830/320	870/340	870/340	
	11	Tire Type				vulkollan				vulkollan		
	12	Wheel Size	front (d x w)	in		9.8x3		mm		250x75		
	13	Wheel Size	rear (d x w)	in		3.3x2.8		mm		85x70		
	14	Additional Wheels	caster wheel (d x w)	in		5.9x2		mm		150x50		
	15	Wheels	number (x=driven) front/rear			1x, 1/4				1x, 1/4		
	16	Track Width	front	in		23		mm		587		
	17	Track Width	rear	in		46, 54		mm		1167, 1370		
	Dimensions	18	Lift Height		in	128	128	160	mm	3250	3250	4050
		19	Free Lift**	w/o load backrest - TL	in	4	4	na	mm	100	100	na
			w/o load backrest - TF/TT**	in	64	62	51	mm	1620	1575	1305	
20		Collapsed Height		in	84	84	73	mm	2130	2130	1860	
21		Extended Height**	w/o lbr.	in	149	151	182	mm	3780	3825	4625	
22		Tiller Arm Height	in drive position min/max	in		31/48		mm		780/1220		
23		Outrigger Height		in		4		mm		100		
24		Lowered Fork Height		in		1.6		mm		40		
25		Batt. Comp. Floor Hght.		in		3.4		mm		85		
26		Power Unit Height		in		29.75		mm		756		
27		Overall Length	at fork length: 42"/1067 mm	in	72	73	74	mm	1827	1850	1875	
28		Headlength		in	30	31	32	mm	760	783	808	
29		Overall Width	front	in		33		mm		850		
			rear	in		50, 58		mm		1267, 1470		
30		Fork Dimensions	thickness x width	in		1.6x4		mm		40x100		
31		Width Across Forks	adjustable min/max	in		10/31.1		mm		253/790		
32		Fork Carriage Width		in		32.5		mm		825		
33		Inside Straddle		in		42, 50		mm		1067, 1270		
34		Ground Clearance	with load below mast	in		1.4		mm		35		
35		Ground Clearance	center wheelbase	in	2	1.6	1.6	mm	50	40	40	
36	Turning Radius		in	56	59	59	mm	1415	1490	1490		
Performance	37	Length Over Outrigger		in	57	60	60	mm	1460	1535	1535	
	38	Travel Speed	with/ w/o load	mi/hr		3.3/3.7		km/hr		5.3/6		
	39	Lift Speed	with/ w/o load	fpm	30/51	26/43	26/43	m/s	.15/ .26	.13/ .22	.13/ .22	
	40	Lowering Speed	with/ w/o load	fpm	71/41	71/39	71/39	m/s	.36/ .21	.36/ .20	.36/ .20	
	41	Gradeability	with/ w/o load, 30 min. rating	%	3/9	2/8	2/8		3/9	2/8	2/8	
	42	Max. Gradeability	with/ w/o load, 5 min. rating	%	9/17	7/17	7/17		9/17	7/17	7/17	
	43	Service Brake										
Battery	44	Maximim Battery Box	LxWxH	in		8.5x32.5x24.7		mm		216x827x627		
	45	Battery Voltage	nominal capacity 6h rating	V/Ah		24/240				24/240		
	46	Type of Controller	drive			transistor				transistor		
	47	Battery Weight		lb		644-712		kg		292-323		

* Up to 144"/3658mm, 3548 lb up to 160"/4050mm

** Subtract 28"/710mm (WS 2000-30 TF) and 26"/665mm (WS 2000-40 TF/TT) from free lift; add 28"/710mm (WS 2000-30 TL/TF) and 26"/665mm (WS 2000-40 TL/TF/TT) to extended height if optional 47.25" high load backrest is required.

English conversions are approximations. Metric conversions should be done to find true values.

As with all performance specifications, actual speeds will depend on how the truck is equipped, component tolerances, break-in period, truck weight, tire selection, floor condition and grade, ambient temperature and battery condition. When specifications are critical, see your Crown dealer for more help with your application.



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