

CAT

214B 214B FT*

EXCAVATOR

*214B FAST TRAVEL EXCAVATOR

Maximum:

**Lift Capacity At

Ground Level 6860 kg/15,110 lb

Reach At Ground Level . . 9400 mm/30' 10"

Digging Depth 6000 mm/19' 8"

Travel Speed

214B 20.0 km/h / 12.4 MPH

214B FT 32.0 km/h / 20.0 MPH

**Over Front at 4.5 m/15' Reach (Two Sets of Outriggers On Ground, One-Piece Boom, 2800 mm/9' 2" Stick, 810 mm/32" General Purpose Bucket)

■ Flywheel Power

214B 82 kW/110 HP

214B FT 101 kW/135 HP

■ Operating Weight . . 16 455 kg/36,280 lb to 18 355 kg/40,465 lb

■ General Purpose Bucket Capacity (SAE) 450 to 980 L/ 0.58 to 1.28 yd³

Machine shown may include optional equipment.



FEATURES

Engine

Reliable power from the durable turbocharged Cat 3116 diesel Engine.

■ Conservative 82 kW/110 FWHP (214B) or 101 kW/135 FWHP (214B FT) rating, high displacement-to-power ratio of 3.66 and low RPM operation ensure long life and exceptional reliability.

■ Turbocharging increases performance and efficiency, especially at high altitudes up to 3000 m/10,000 ft altitude.

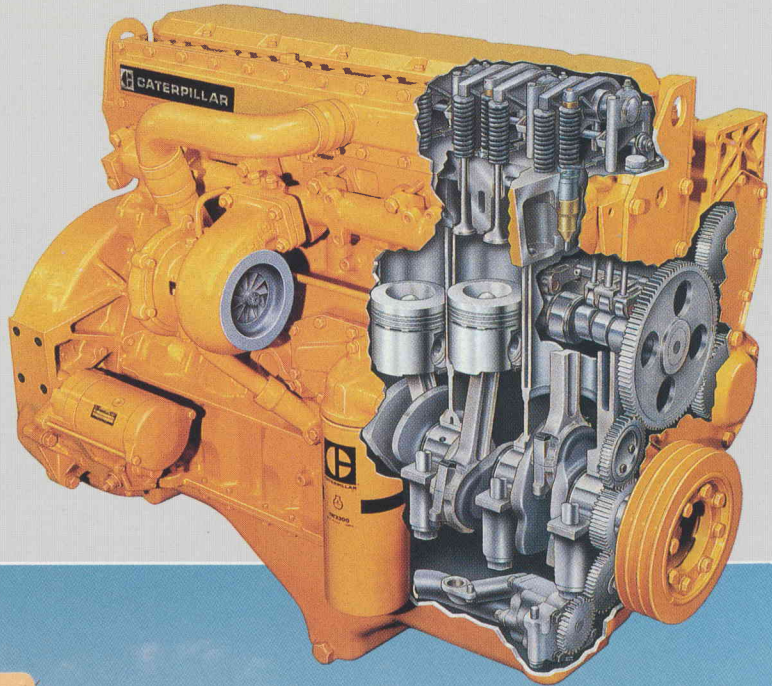
■ Direct-injection fuel system with adjustment-free pumps gives efficient, accurate fuel metering. High injection pressures mean added fuel savings.

■ Four-stroke-cycle design uses long power strokes for more complete fuel combustion and efficiency.

■ Long-life design includes:

- Large bearing surfaces;
- Alloy steel valves;

- Lightweight cam roller followers;
- Easily replaceable crankshaft seals.



Hydraulic System

Advanced load-sensing hydraulics redefine productivity and efficiency.

One-pump system

■ A single main variable-flow axial piston pump of swashplate design powers the implement, travel and swing systems.

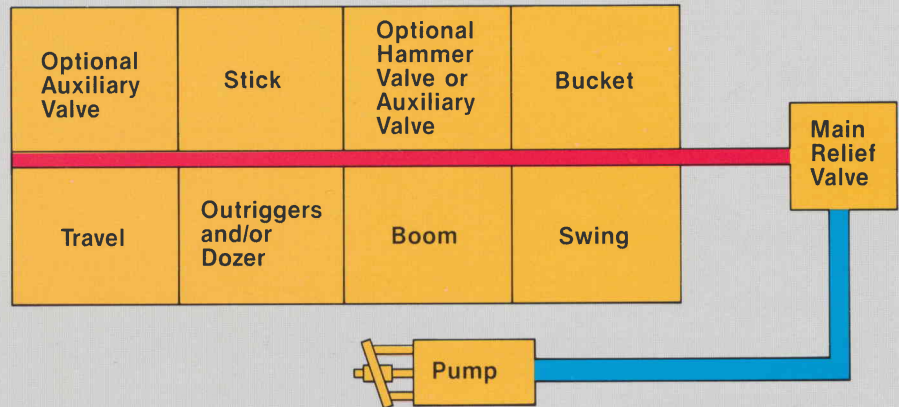
■ Two gear-type pump sections attached to main piston pump supply:

- Pilot control system and fan drive for hydraulic oil cooler;
- Oil cooler flow.

■ Two auxiliary pumps supply:

- Steering system;
- Brake system.

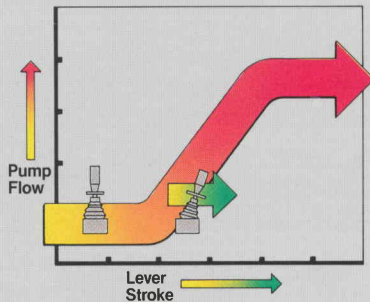
■ Load-sensing system automatically adjusts flow rate to loads encountered.



■ Simultaneous proportioned operation of all functions, including travel, decreases cycle times.

■ O-ring face seals and SAE four-bolt flanges give extra-tight sealing of hydraulic hose, tube and port connections.

Load-sensing feature



■ Load-sensing system reduces pump flow to a minimum when joysticks and travel controls are in neutral...cutting fuel consumption, extending pump life and reducing hydraulic oil heating.

■ Pump flow increases in direct proportion to lever movement...giving operator precise control from feathering to full speed.

■ Operator controls movements more precisely...especially important for smooth starts and stops when handling suspended loads.

■ Hydraulic shock is eliminated...extending life of cylinders, hoses and valves.

High-pressure cutoff

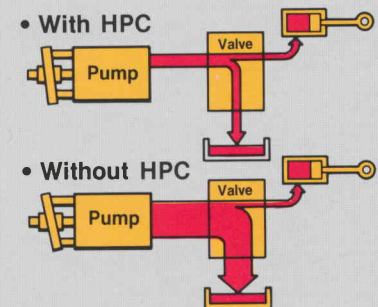
■ Pump flow decreases to minimum when hydraulic system pressure reaches a point just below the relief valve setting.

■ Reduced flow conserves fuel...prevents hydraulic oil deterioration from high system temperatures...lessens wear on hydraulic pumps.

■ Relief valve noise decreases.

Power selector

■ Allows the operator to choose the best hydraulic power setting for the job. Light (I) setting is designed for lighter working conditions, increasing fuel economy and grading precision. Standard (II) setting should be used in normal or heavy conditions. Third setting, Travel (III), on the 214B FT, is actuated when the forward travel pedal is depressed — for faster travel speeds.



FEATURES

Operator's Compartment

Spacious, efficient design provides day-long comfort and operating ease.

- 920 mm/36.22" wide (inside) cab.
- Pressurized ventilation with filtered incoming air.
- Pilot-operated joysticks for short-throw, fingertip operation and precise control. Oblique joystick movement also provides simultaneous actuation of more than one function.
- Single lever sets oscillating axle lock, parking brake and four-wheel brakes simultaneously. Can also be individually controlled.
- Pedal-operated swing brake with a brake lock detent. Brake applies automatically after engine is stopped.
- Retracting front windshield (stores under cab roof) and transparent skylight for excellent visibility and lighting.
- In Western Hemisphere, break-resistant polycarbonate windows (except windshield).
- Fully adjustable suspension seat . . . up/down, forward/back, backrest angle, and to the operator's weight. Operator can adjust seat in relation to hand controls and then move both as a unit for optimum steering wheel and pedal reach.
- Exceptionally low sound levels for less distraction to operator and spectators . . . easier communication with workers in the trench.



Undercarriage

Wheels offer fast travel on and between job sites.

- Hydrostatic four-wheel drive with on-the-go shifting.
- Two forward and reverse speed ranges: work and travel.
- Overspeed valve limits downhill speed in forward and reverse gears.
- Downshift inhibitor prevents machine from downshifting too early.
- Optional creeper speed for precise travel control under heavy load or when very low travel speed is needed while maintaining full engine RPM.
- Four-wheel oil-disc service brakes are all hydraulic... pedal controlled and fully lockable... maintenance-free and completely enclosed in the final drive of each hub unit.
- Blue light in steering wheel center helps alert operator when upperstructure is turned within 60° of center when over the fixed rear axle.



- Oscillating front axle helps keep all four wheels on the ground for maximum traction and a smoother ride. Lever in cab locks axle hydraulically for a solid work platform... improving over-the-side stability by over one-third.
- Excellent ground clearance... 390 mm/15.4".
- Standard dual 10.00-20 tires, with eight options available... including 18.00-19.5 singles.

- 214B: 67% gradeability with 10.00-20 tires; 214B FT: 50%.
- Lifting stability is superior to track excavators when dozer/outriggers used. Available with:
 - One set of rear outriggers.
 - Two sets of outriggers.
 - Rear dozer blade.
 - Rear dozer blade and set of front outriggers.
- Optional individually controlled outriggers (from cab) to level the machine on uneven terrain.

Service and Maintenance

Convenience and simplicity mean more time on the job.

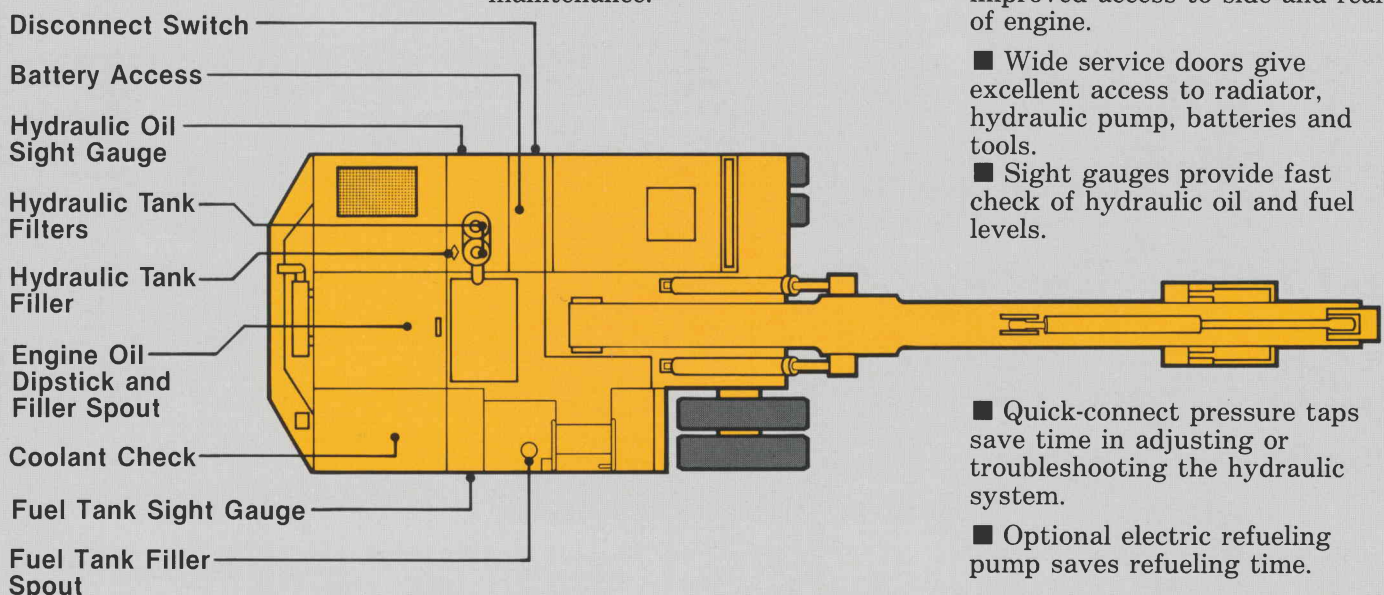
- The all-hydraulic brake system has eliminated the air compressor, air tanks and service points required with an independent compressed air system.

- Transmission clutch housing, swing drive brake system and axle oscillation system are connected to the main hydraulic circuit for lubrication and cooling and require no specific maintenance.

- Hood opening on top of machine makes engine inspection points easy to reach. Engine spray shield easily removable using quarter-turn quick-disconnect screws, giving improved access to side and rear of engine.

- Wide service doors give excellent access to radiator, hydraulic pump, batteries and tools.

- Sight gauges provide fast check of hydraulic oil and fuel levels.



- Quick-connect pressure taps save time in adjusting or troubleshooting the hydraulic system.

- Optional electric refueling pump saves refueling time.

FEATURES

Versatility A wide range of work tools extends job opportunities.

■ Short, medium and long sticks... plus a 4.0 m/13' 2" stick for extra reach in applications such as ditch cleaning.

■ One-piece and two-piece booms.

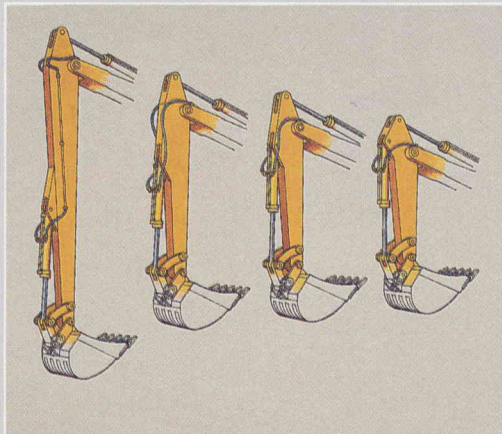
■ Wide range of buckets... general purpose, rock and ditch cleaning.

■ Dozer blade for light dozing; also functions as an outrigger.

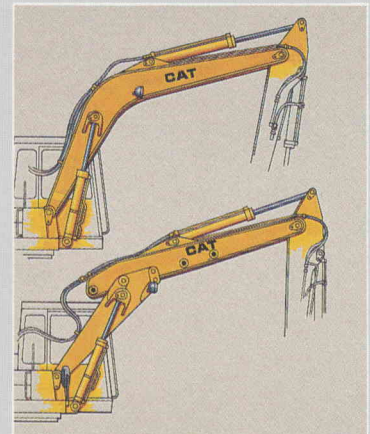
■ Auxiliary hydraulic circuits for tilting ditch cleaning bucket, rotating grapples and clamshells, and other attachments with similar pressure and flow demands.

■ Hydraulic hammer arrangement that carries hammer hydraulics to the end of the stick; also can be used to drive rotary mowers and other similar work tools.

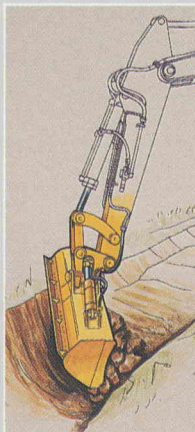
■ Other specialized attachments such as electro-magnet and multi-tine and wood grapples available through your Caterpillar Dealer.



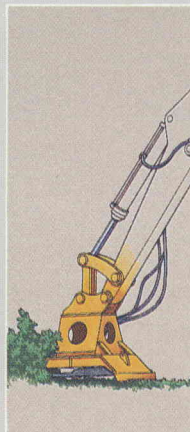
Extended Reach, Long, Medium and Short Sticks



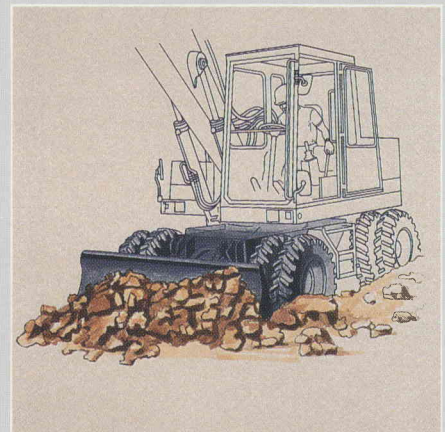
One and Two-Piece Booms



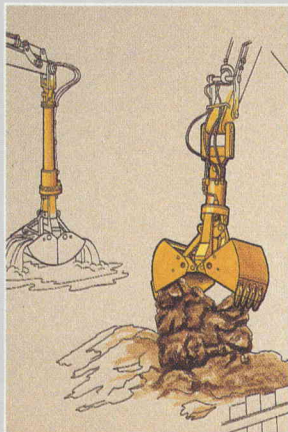
Tilting Ditch Cleaning Bucket



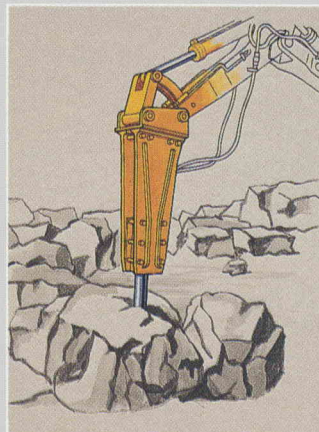
Mower



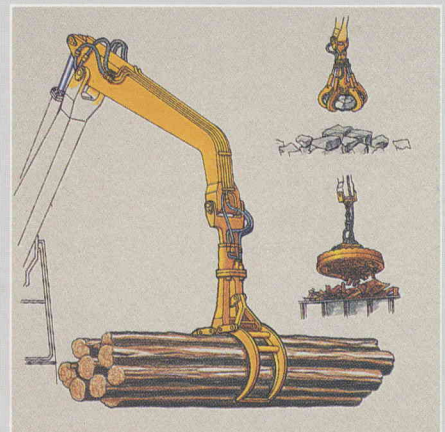
Stabilizer/Dozer Blade



Clamshell Bucket and Extension



Hydraulic Hammer



Material Handling Stick for Wood and Multi-Tine Grapples and Magnets

214B FT (Fast Travel)

Higher travel speeds offer added benefits.

Now there's a 214B version with higher travel speeds that's an advantage if your work involves long-distance travel between jobs. The 214B FT also travels faster on the grades and soft ground found on many job sites.

- Maximum forward travel speed: 32 km/h/20 MPH — 60% faster than the standard version.
- Approximately 30% higher speeds on adverse grades.
- Faster speeds in high rolling resistance underfoot.
- Two power selector modes: light and standard, plus higher horsepower travel mode.
- Additional brake capacity.
- Higher engine and hydraulic oil cooling capacity.
- Faster digging cycles, because with the engine horsepower increase there's more hydraulic horsepower to the digging and swing circuits.
- Greater acceleration to enter traffic.
- Less travel time — more work time.



Specifications Comparison		
	214B	214B FT
Maximum Travel Speed	20 km/h/12.4 MPH	32 km/h/20.0 MPH
Engine Power	82 kW/110 FWHP	101 kW/135 FWHP
Radiator Fan:		
Number of Blades	6	9
Blade Diameter	535 mm/21.1"	566 mm/22.3"
Pump Power:		
All Functions ("II" Mode) (except forward travel)	65 kW/87 HP	72 kW/96 HP
Forward Travel Only	65 kW/87 HP	85 kW/114 HP
Travel Circuit Flow	150 L/min/40 gpm	190 L/min/50 gpm
Hydraulic Oil Cooler Capacity	—	+16%
Axle Differential Ratio	2.11	1.72
Service Brake Discs Per Wheel	2	3
Standard Tires Ply Rating	12	14
Maximum Speed on 5% Grade	10.4 km/h/6.4 MPH	14.5 km/h/9.0 MPH
Maximum Drawbar Pull	11 000 kg/24,200 lb	*8900 kg/19,600 lb
Power Selector	Light	Light
	Standard	**Standard
		Travel

*214B FT gradeability/drawbar pull superior to 214B at all travel speeds over 2.5 km/h/1.6 MPH.

**11% more hydraulic kW/HP for digging and swing functions than 214B.



Services

Total support that's unmatched in the industry.

- Preventive maintenance programs such as Scheduled Oil Sampling to help eliminate unscheduled downtime and spot minor problems before they become costly major ones.
- Excellent service capability, with the latest in technology and tooling... whether in the field or in the shop.

- Unequalled parts availability. Most are on your Cat Dealer's shelves. And his inventory is backed by the Cat Dealer Terminal System, computerized search system linking him with Caterpillar's worldwide parts distribution system of depots and major warehouses. This system tracks the part within minutes... and within hours the part is on its way to you.

- Parts and components exchange for fast and economical repair. Exchange damaged part or component over the counter for one rebuilt by your Cat Dealer or remanufactured by Caterpillar.
- Finance options to meet individual needs... buy, rent, lease, lease-to-purchase plans.

SPECIFICATIONS



Caterpillar Engine

Flywheel power at
2000 RPM, 214B: 82 kW/110 HP
214B FT: 101 kW/135 HP
(Kilowatts (kW) is the International System of Units equivalent to horsepower.)

The net power at the flywheel of the vehicle engine is based on SAE J1349 standard conditions of 25°C/77°F and 100 kPa/29.61", using 35° API gravity fuel oil at 15.6°C/60°F, and after deductions for fan, air cleaner, lubricating oil pump, fuel pump, water pump, alternator and muffler. No deration is required up to 3000 m/10,000 ft. altitude.

Cat four-stroke-cycle 3116 turbocharged diesel engine with six cylinders, 105 mm/4.13" bore, 127 mm/5.0" stroke and 6.6 liters/402.6 in³ displacement.

Direct-injection. Engine oil cooler. Dry air filter with main filter and secondary element.

24-volt direct electric starting system. Two 12-volt, 110 amp-hour batteries.



Hydraulic System

Load-sensing hydraulics. Variable-displacement axial piston pump powers the boom, stick, bucket, swing and travel circuits. Provides required flow rate to the system or to a single circuit. Output of the pump at 2000 RPM and

13 500 kPa/1960 psi 270 liters/min/71.3 gpm
Relief valve setting 32 000 kPa/4640 psi

Cylinders	Bore and Stroke	Force (kN/lb)
Boom (2)	127.1×870 mm/ 5.0"×34"	2×405/91,200
Stick (1)	127.1×1265 mm/ 5.0"×50"	1×405/91,200
Bucket (1)	114.4×1040 mm/ 4.5"×41"	1×326/73,360

All cylinders have rod and head-end snubbers to cushion bottoming impact. To prevent load drift, check valve in head-end boom circuit can be remotely actuated by operator with an electrical switch on cab console.

Separate hydraulic oil cooling circuit with thermostatically controlled, hydraulically driven fan.



Brakes

Service — Multi-disc oil brakes on all four wheels. All-hydraulic actuation. Engine-mounted pump supplies system. Three accumulators pre-charged with nitrogen gas. Drop in system pressure below 10 000 kPa/1450 psi actuates warning light on console and audible alarm. Lockable during excavator operation.

Parking — Auxiliary shoe brake mounted between drive shaft sections. Spring-applied, hydraulically released. Functions as additional holding brake during excavator operation.

Secondary braking — Uses spring-applied, hydraulically released parking brake. Operator can manually modulate application. A separate accumulator makes application of the secondary brake independent of the service brake. Parking brake spring cylinder is released by hydraulic pressure of 7000 kPa/1015 psi.



Transmission

Fully hydrostatic; all-wheel drive by variable-displacement piston motor. Forward and reverse travel and speed controlled by foot pedals on righthand side of steering column. On-the-go shifting permitted. Transmission protected by downshift governor to prevent high-to-low shift until pre-set slower ground speed is reached. Overspeed valve limits downhill travel speed in forward and reverse gear. Left armrest must be in raised position to start engine. This also neutralizes all travel and hydraulic functions except steering.

	214B		214B FT	
Speeds	km/h	MPH	km/h	MPH
(forward and reverse):				
Work	0-5.0	0-3.1	0-9.0	0-5.9
Travel	0-20	0-12.4	0-32	0-20
Optional creeper speeds (forward and reverse, work range only) ...	0-2.3	0-1.4	0-3.8	0-2.36
Gradeability with 10.00-20 tires	67%		50%	



Controls

Two pilot-operated joysticks on seat armrests actuate boom, stick, bucket and swing. A push button in top of each handle activates solenoid valves to control attachment options such as ditch cleaning bucket tilt and clam or grapple rotator.

Right lever: Move forward and backward to lower and raise boom. Right and left to control bucket curl and dump, or to open or close attachment clamshell.

Left lever: Move forward and backward to move stick out and in. Left and right to swing left or right.

Oblique movement of either lever operates two functions simultaneously.

Service brake pedal is immediately to the right of the steering column.

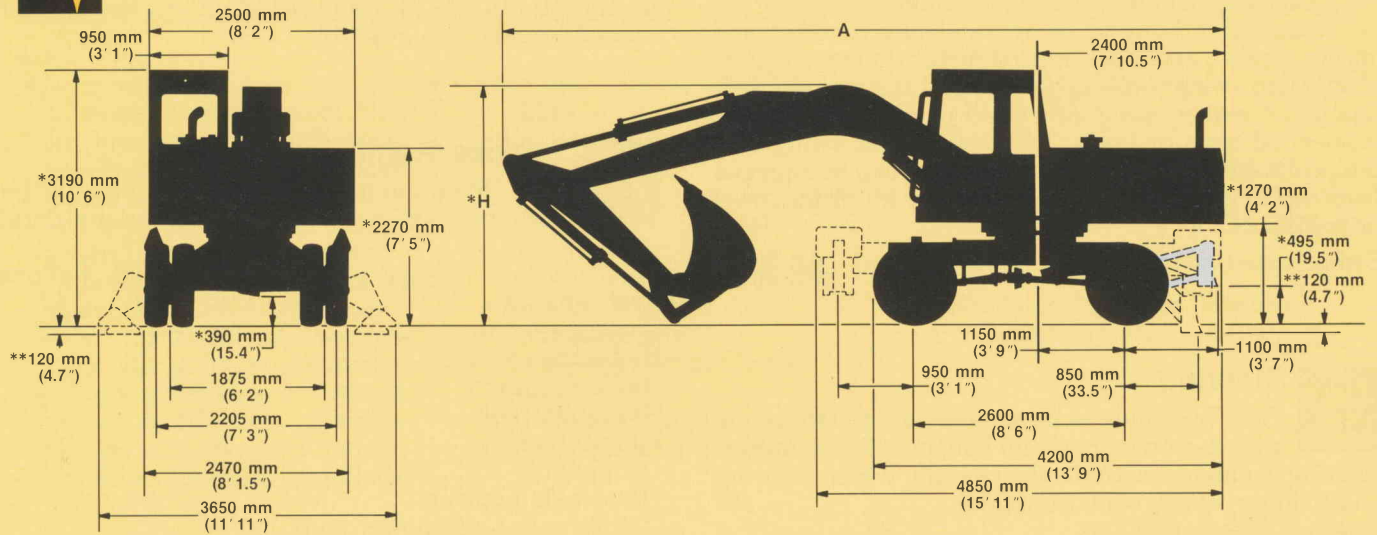
Forward and reverse travel and speed are controlled by two foot pedals to the right of service brake pedal.

Swing deceleration can be controlled by reversing the flow with the swing joystick lever. Swing braking can also be controlled by left pedal. To permanently lock swing, push pedal beyond normal braking point to engage latch. Push again with foot touching latch to release lock.

Left armrest lifts for operator entry and exit. Raising the armrest also prevents actuation of all hydraulic functions except steering. Left armrest must be raised to start engine.



Dimensions (approximate)



Dimensions shown are for machine equipped with 10.00–20 tires.

*With 11.00–20 or 18.00–19.5 tires, increase vertical dimensions marked with asterisk by 10 mm/0.4".

**With 11.00–20 or 18.00–19.5 tires, decrease vertical dimensions marked with asterisks by 10 mm/0.4".

Transport Dimensions

Stick		Two-Piece Boom								One-Piece Boom			
		Foreboom Extended and in Lower Position				Foreboom Extended and in Upper Position							
		One Set of Outriggers		Two Sets of Outriggers		One Set of Outriggers		Two Sets of Outriggers		One Set of Outriggers		Two Sets of Outriggers	
		A	H	A	H	A	H	A	H	A	H	A	H
mm	1800	8670	3150	8670	3150	8950	2960	8950	2960	8810	3090	8810	3090
in	5' 11"	28' 5"	10' 4"	28' 5"	10' 4"	29' 4"	9' 9"	29' 4"	9' 9"	28' 11"	10' 2"	28' 11"	10' 2"
mm	2300	8630	3130	8610	3230	8920	2990	8920	2990	8780	3060	8780	3060
in	7' 7"	28' 4"	10' 3"	28' 3"	10' 8"	29' 3"	9' 10"	29' 3"	9' 10"	28' 10"	10' 0"	28' 10"	10' 0"
mm	2800	8640	3100	8440	3670	8920	3030	8850	3310	8780	3090	8480	3420
in	9' 2"	28' 4"	10' 2"	27' 8"	12' 0"	29' 3"	9' 11"	29' 0"	10' 10"	28' 10"	10' 2"	27' 10"	11' 3"
mm	4000	7940	4600	7720	5010	8480	4200	8100	4860	8320	4250	7970	4900
in	13' 2"	26' 1"	15' 1"	25' 4"	16' 5"	27' 10"	13' 9"	26' 7"	15' 11"	27' 4"	13' 11"	26' 2"	16' 1"

Maximum height of base machine with 10.00–20 tires 3190 mm/10' 6"

Maximum height of base machine without cab (to top of exhaust pipe) with 10.00–20 tires 2790 mm/9' 2"

SPECIFICATIONS



Swing Mechanism

Hydraulic piston motor drives combined spur/planetary gearing to pinion. Swing gear has external teeth. Ball-type swing bearing. Wet disc brake on swing drive housing is hydraulically released and spring applied, and locks upperstructure in any position. Modulated swing brake application by the operator (left foot pedal) reduces pendulum effect of clamshell or other suspended tools or loads. Two mechanical swing lock pin positions (180° opposite each other) can be engaged from cab to lock undercarriage to upper frame for travel or transport.

Swing speed at rated engine speed 8.5 RPM



Steering

Fully hydraulic — powered by a separate pump mounted on main pump housing. Supplemental steering capability, actuated by steering wheel. Steering angle (inner wheel, each direction) 35°

Turning circle diameter

(center line of outside dual tire) 12.4 m/40' 8"

Vehicle clearance turning circle:

With 1-piece boom and

folded equipment 16.8 m/55' 2"

With 2-piece boom, foreboom fully

retracted and in upper position 14.4 m/47' 3"



Axles and Final Drives

All-wheel drive. Conventional differentials and planetary gear reduction final drives. Front steering axle oscillates $\pm 8.5^\circ$ for stability on rough terrain. Lockable from cab in any position of oscillation.

Ground clearance

(with 10.00–20 tires) 390 mm/15.4"

Axle load capacity 38 metric ton/42 ton



Tires

Dual pneumatic 10.00–20 (standard), 11.00–20 . . . or solid rubber 10.00–20. Single pneumatic 18.00–19.5 and 18.00–22.5. Recaps and special brands also available.



Service Refill Capacities

(See Operation and Maintenance Manual for recommended change intervals and related data.)

	Liters	U.S. Gallons
Fuel tank	287.0	75.8
Cooling system	30.0	7.8
Hydraulic system (includes tank)	330.0	87.2
Hydraulic tank	280.0	74.0
Lubrication:		
Engine oil	15.0	4.0
Rear axle housing, differential and power shift transmission	13.5	3.6
Front steering axle and differential housing	10.5	2.8
Final drives:		
Front (each of two)	1.5	0.4
Rear (each of two)	1.5	0.4



Weight (approximate)

Shipping (includes one-piece boom, 2800 mm/9' 2" stick, 910 mm/36" general purpose bucket, 10.00–20 dual tires and 10% fuel) 16 280 kg/35,890 lb

Operating (shipping weight plus 50% full fuel tank and operator) 16 455 kg/36,280 lb

For the following equipment, change the above weights:

	kg	lb
With two-piece boom	+110	+240
With 1800 mm/5' 11" stick	–155	–340
With 2300 mm/7' 7" stick	–75	–160
With 4000 mm/13' 2" stick	+130	+290
With rear dozer	+750	+1,655
With rear outriggers	+900	+1,980
With front and rear outriggers	+1900	+4,185
With dozer and front outriggers	+1750	+3,860
With FOPS	+95	+210



Standard Equipment

NOTE: Standard and optional equipment may vary by country. Consult your Caterpillar Dealer for specifics.

- Cab: resiliently mounted; sound suppressed; pressurized; filtered air; break-resistant polycarbonate skylight; 2-piece windshield with 5 open positions and integral overhead storage; tinted break-resistant polycarbonate windows except windshield (Western Hemisphere only); third exit (rear window); fully adjustable suspended seat; fuel gauge; floor mat; literature pocket; bottle rack; cigarette lighter; ashtray; coat hanger; provision for radio installation.
- Counterweight, 3000 kg/6,615 lb.
- Lights:
 - Interior cab;
 - Complete system for travel on public roads in most countries;
 - Work, one boom-mounted.
- Mirrors, rearview.
- Power selector.
- Signaling/warning horn, operator's.
- Storage box on upperstructure.
- Swing pinion protection.
- Tires, dual pneumatic 10.00-20.
- Tool kit.
- Travel alarm with operator-controlled delayed shut-off for long-distance travel (Western Hemisphere only).
- Wheel chocks.
- Windshield washer (Western Hemisphere only) and wipers.



Optional Equipment

- Backhoe sticks (see page 12).
- Booms, one- and two-piece (see page 12).
- Buckets (see page 13).
- Cab heater, engine hot water.
- Clamshell/grapple lines with diverter valve for all stick lengths.
- Creeper speed (low gear only).
- Dozer, rear-mounted (cannot be installed with rear outriggers).
- Electric refueling pump.
- Ether starting aid.
- FOPS (Falling Object Protective Structure; mounts on top of standard cab).
- Gauge, pilot circuit pressure.
- Headlight protection.
- Hydraulic circuits, auxiliary.
- Hydraulic hammer installation arrangement for short, medium and long sticks (controls and lines installed).
- Hydraulic hammers, with or without blow rate adjustment (outside sourced — consult your dealer).
- Lights:
 - Work, additional boom-mounted.
 - Work, rear.
- Mirror, for seeing from cab across lower front of cab.
- Outriggers, one set (rear-mounted) or two sets. (Single set is front-mounted when dozer installed.)
- Radiator door, lockable.
- Radio.
- Rain visor for top of cab windshield.
- Rotating beacon.
- Rubber spacer rings for use between dual tires.
- Storage box, undercarriage-mounted.
- Supplemental steering (battery powered).
- Swing gear tooth guard.
- Tilting device (for ditch cleaning buckets only).
- Tires (see page 10).
- Travel alarm (standard in Western Hemisphere).
- Vandalism guards for front windshield.
- Warning horn, additional, air-operated.
- Windshield washer (standard in Western Hemisphere).

SPECIFICATIONS



Specifications of Major Components

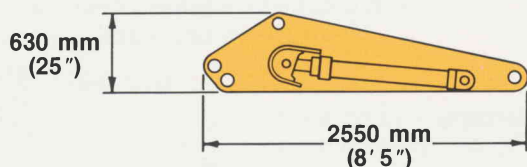
Upperstructure (with swing bearing, but without boom or other attachments) 8600 kg/18,940 lb

Undercarriage assembly (with 10.00—20 tires, without swing bearing, no attachments) . . . 4100 kg/9,040 lb

(Booms and sticks with cylinders but without hydraulic lines.)

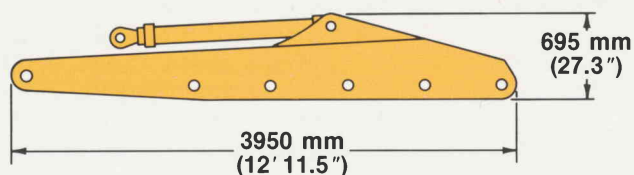
Stub Boom

Weight — 940 kg/2,070 lb Width — 725 mm/28.5"



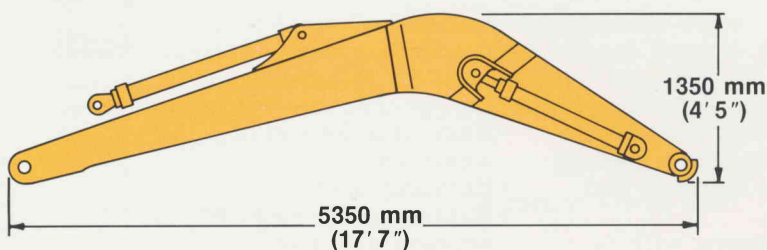
Foreboom

Weight — 920 kg/2,030 lb Width — 600 mm/24"

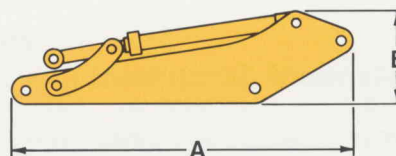


One-Piece Boom

Weight — 1750 kg/3,860 lb Width — 725 mm/28.5"



Sticks

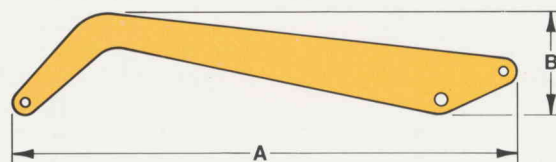


Stick	Weight	A	B	Width
1800 mm 5' 11"	650 kg 1,430 lb	2690 mm 8' 10"	720 mm 28"	455 mm 18"
2300 mm 7' 7"	730 kg 1,610 lb	3170 mm 10' 5"	660 mm 26"	455 mm 18"
2800 mm 9' 2"	805 kg 1,770 lb	3700 mm 12' 2"	630 mm 25"	455 mm 18"
4000 mm* 13' 2"*	935 kg 2,060 lb	4960 mm 16' 3"	610 mm 24"	455 mm 18"

*See pages 14 & 15 for usage.

Material Handling Stick

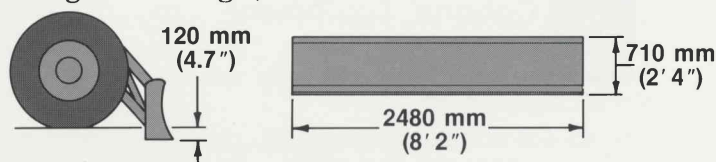
3000 mm 9' 10"	390 kg 860 lb	3950 mm 13' 0"	850 mm 2' 10"	300 mm 12"
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Dozer Blade

(with cylinders and linkage)

Weight — 750 kg/1,655 lb



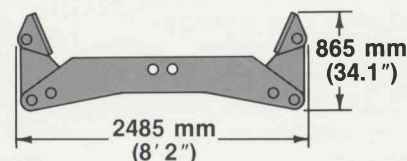
Outriggers, one or two sets

(each set — with cylinders and linkage but without hydraulic lines):

Weight (rear mounted) — 900 kg/1,980 lb

Weight (front mounted) — 1000 kg/2,205 lb

Width — 425 mm/16.7"



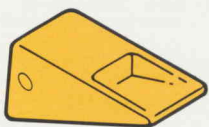
Buckets

General Purpose	Cutting Width		SAE Capacity, Heaped		Weight With Teeth		Teeth
	mm	in	liters	yd ³	kg	lb	
<ul style="list-style-type: none"> Includes weld-on tooth adapters. Tips required. Power and speed pinholes to adapt to working conditions. 	610	24	450	0.58	470	1,040	3
	710	28	520	0.67	530	1,165	3
	810	32	610	0.79	590	1,300	4
	910	36	700	0.91	615	1,355	4
	1010	40	790	1.03	645	1,425	4
	1110	44	880	1.16	705	1,550	5
	1210	48	980	1.28	745	1,640	5
Rock <ul style="list-style-type: none"> Includes weld-on tooth adapters. Tips required. 	760	30	650	0.85	680	1,500	3
	1010	40	920	1.21	820	1,805	4
	1010	44	1040	1.35	855	1,885	5
	1210	48	1150	1.50	935	2,060	5
Ditch Cleaning (without teeth)	1800	71	480	0.63	480	1,060	
	2000	79	720	0.94	710	1,565	
	2300	91	620	0.80	550	1,210	

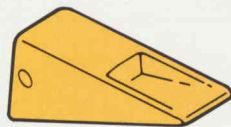
Maximum Breakout Force

Stick	1800 mm/5' 11"		2300 mm/7' 7"		2800 mm/9' 2"		4000 mm/13' 2"	
	kN	lb	kN	lb	kN	lb	kN	lb
Bucket Force, Bucket Speed Position	100	22,487	103	23,119	103	23,119	103	23,076
Stick Force, Bucket Speed Position	99	22,304	81	18,211	72	16,092	56	12,510
Bucket Force, Bucket Power Position	126	28,305	127	28,503	127	28,503	126	28,411
Stick Force, Bucket Power Position	108	24,203	88	19,701	77	17,325	59	13,374

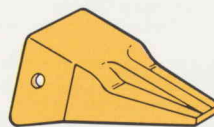
Teeth



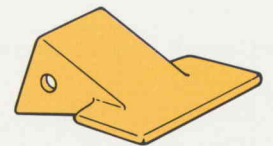
Short (severe)...
for tough digging.



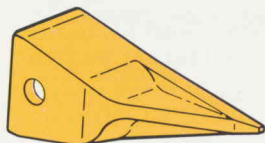
Long
(general purpose)...
for most digging
applications.



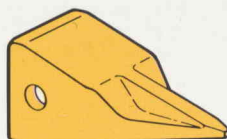
Penetration ...
self-sharpening for
digging in tough,
compacted material.



Wide (spade)...
for easy-to-dig materials,
load retention and
clean-up grading.



Sharp (corner)

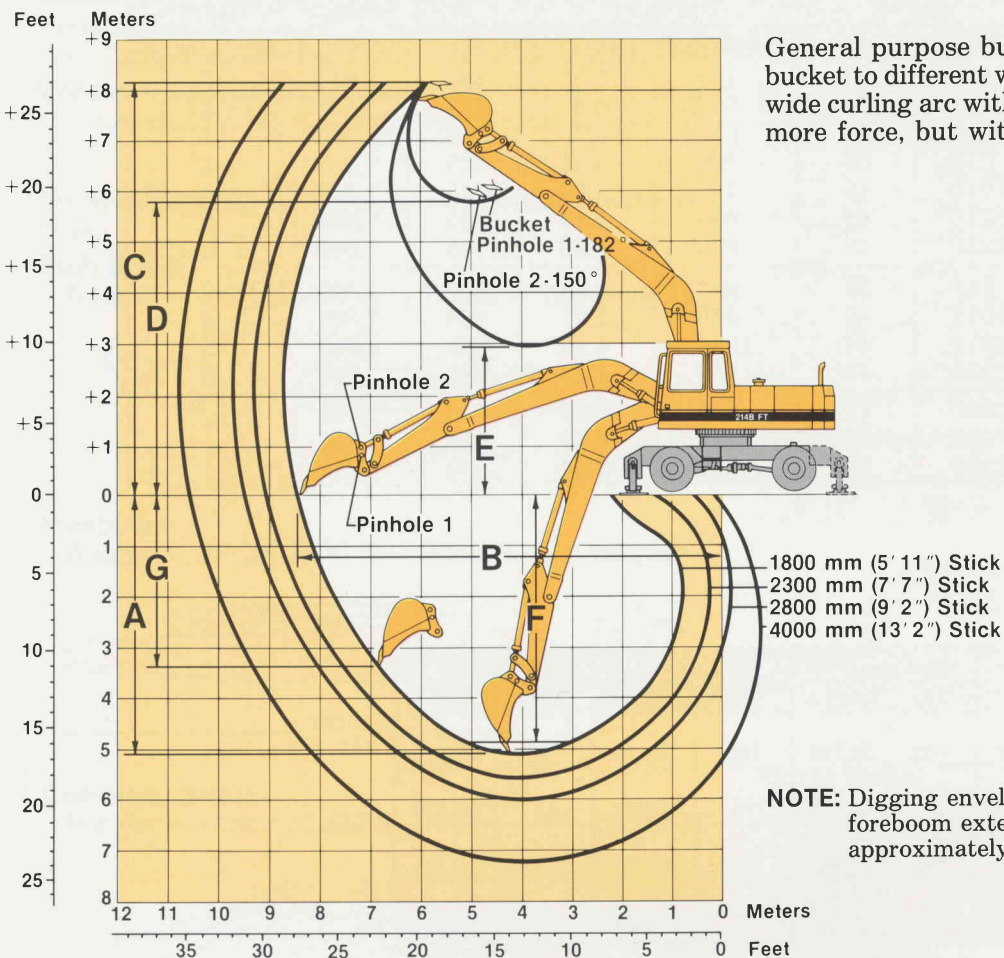


Sharp (center)

Sharp Tip...a special application ground engaging tool, designed to provide maximum penetration. It is recommended only when maximum penetration is the most important tip selection criterion — more important than wear life and strength.

SPECIFICATIONS

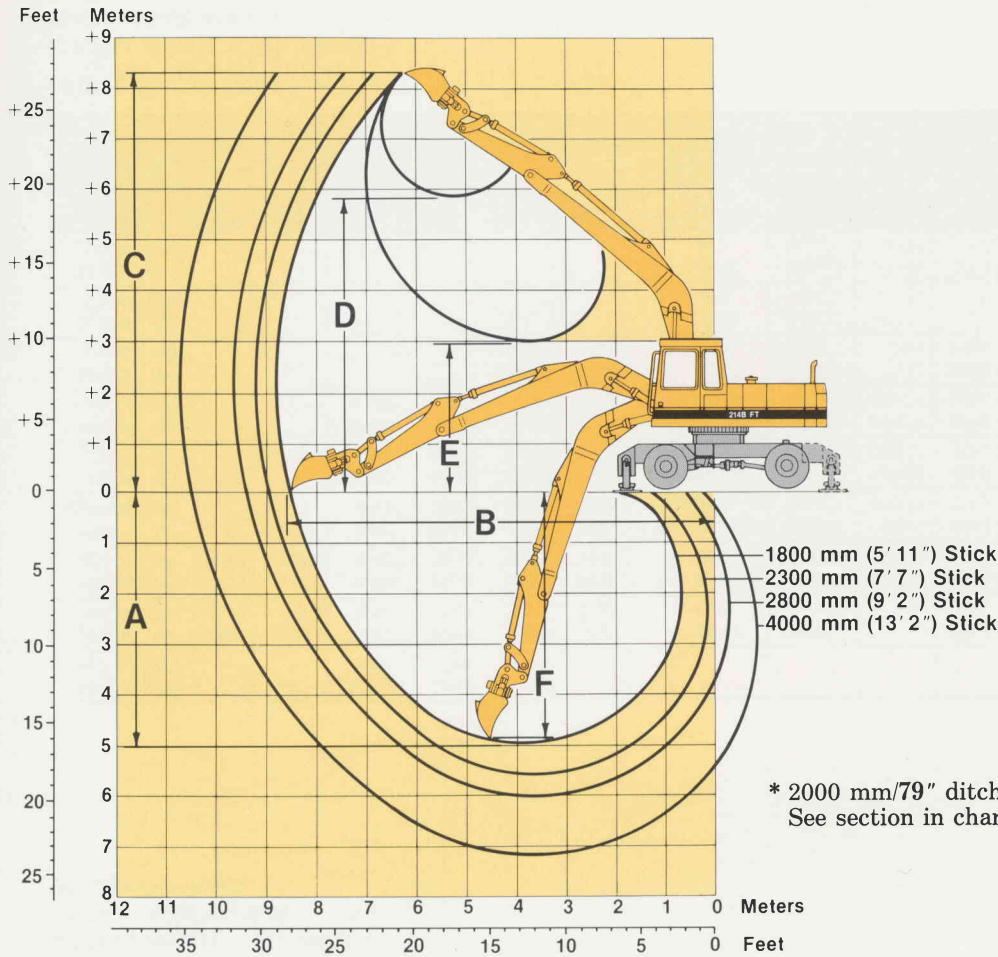
General Purpose Buckets Working Ranges With One-Piece Boom & 10.00–20 Tires



Stick	1800 mm/5' 11"	2300 mm/7' 7"	2800 mm/9' 2"	*4000 mm/13' 2"
A Maximum digging depth . . .	5020 mm/16' 5"	5515 mm/18' 1"	6000 mm/19' 8"	7200 mm/23' 8"
B Maximum reach at ground level	8540 mm/28' 0"	9025 mm/29' 7"	9400 mm/30' 10"	10 565 mm/34' 8"
C Overall height at end of dump	8385 mm/27' 6"	8635 mm/28' 4"	8525 mm/28' 0"	9065 mm/29' 9"
D Maximum loading height . . .	5705 mm/18' 9"	5970 mm/19' 7"	5950 mm/19' 6"	6485 mm/21' 3"
E Minimum loading height . . .	3095 mm/10' 2"	2520 mm/8' 3"	1975 mm/6' 6"	800 mm/2' 8"
F Digging depth at 2440 mm/8' flat floor	4780 mm/15' 8"	5310 mm/17' 5"	5820 mm/19' 1"	7065 mm/23' 2"
G Maximum vertical wall	3370 mm/11' 1"	3660 mm/12' 0"	3580 mm/11' 9"	4610 mm/15' 2"

* Extended Reach 4000 mm/13' 2" stick is not to be used with hammers, rock buckets over 760 mm/30" wide, general purpose buckets over 810 mm/32" wide or ditch cleaning buckets over 1800 mm/71" wide.

1800 mm/71" and 2300 mm/91" Hydraulically Tilting Ditch Cleaning Buckets* Working Ranges With One-Piece Boom & 10.00–20 Tires



	1800 mm/71" and 2300 mm/91" Buckets				2000 mm/79" Bucket		
Stick	1800 mm/5' 11"	2300 mm/7' 7"	2800 mm/9' 2"	*4000 mm/13' 2"	1800 mm/5' 11"	2300 mm/7' 7"	2800 mm/9' 2"
A Maximum digging depth . . .	4870 mm/ 15' 11"	5370 mm/ 17' 7"	5850 mm/ 19' 2"	7050 mm/ 23' 1"	5020 mm/ 16' 5"	5520 mm/ 18' 1"	6000 mm/ 19' 8"
B Maximum reach at ground level	8390 mm/ 27' 6"	8870 mm/ 29' 1"	9250 mm/ 30' 4"	10 410 mm/ 34' 2"	8540 mm/ 28' 0"	9030 mm/ 29' 7"	9400 mm/ 30' 10"
C Overall height at end of dump	8390 mm/ 27' 6"	8660 mm/ 28' 5"	8630 mm/ 28' 4"	9170 mm/ 30' 1"	8540 mm/ 28' 0"	8810 mm/ 28' 11"	8780 mm/ 28' 10"
D Maximum loading height . .	5850 mm/ 19' 2"	6120 mm/ 20' 1"	6100 mm/ 20' 0"	6640 mm/ 21' 9"	5700 mm/ 18' 8"	5970 mm/ 19' 7"	5950 mm/ 19' 6"
E Minimum loading height . . .	3250 mm/ 10' 8"	2670 mm/ 8' 9"	2120 mm/ 6' 11"	950 mm/ 3' 1"	3090 mm/ 10' 2"	2520 mm/ 8' 3"	1970 mm/ 6' 6"
F Digging depth at 2440 mm/ 8' flat floor	4610 mm/ 15' 1"	5150 mm/ 16' 10"	5210 mm/ 17' 1"	6620 mm/ 21' 8"	4780 mm/ 15' 8"	5310 mm/ 17' 5"	5820 mm/ 19' 1"

* Extended Reach 4000 mm/13' 2" stick is not to be used with hammers, rock buckets over 760 mm/30" wide, general purpose buckets over 810 mm/32" wide or ditch cleaning buckets over 1800 mm/71" wide.

SPECIFICATIONS

Lift Capacities

BOOM — One-piece

STICK — 4000 mm/13' 2"

BUCKET WIDTH — 810 mm/32"

Front & rear outriggers raised

LOAD POINT HEIGHT		LOAD RADIUS						LOAD AT MAXIMUM REACH	
		1.5 m	3.0 m	4.5 m	6.0 m	7.5 m	9.0 m	360°	m ft
		5.0 ft	10.0 ft	15.0 ft	20.0 ft	25.0 ft	30.0 ft		
		360°	360°	360°	360°	360°	360°		
7.5 m	kg							*540	8.84
25.0 ft	lb							*1200	28.97
6.0 m	kg							*490	9.74
20.0 ft	lb							*1070	31.92
4.5 m	kg					1650		*480	10.28
15.0 ft	lb					3630		*1050	33.70
3.0 m	kg					1560	990	*500	10.53
10.0 ft	lb					3450	2190	*1100	34.51
1.5 m	kg			3620	2230	1450	940	*550	10.51
5.0 ft	lb			7970	4920	3190	2070	*1220	34.45
Ground Line	kg		*4540	3190	2020	1330	880	*650	10.22
	lb		*10,020	7040	4440	2940	1950	*1440	33.50
-1.5 m	kg	*2960	*5550	2960	1870	1250	850	810	9.63
-5.0 ft	lb	*6520	*12,230	6520	4120	2750	1880	1780	31.56
-3.0 m	kg	*4970	5550	2880	1800	1220		1030	8.66
-10.0 ft	lb	*10,970	12,230	6360	3980	2680		2260	28.39
-4.5 m	kg	*7510	5690	2930	1830				
-15.0 ft	lb	*16,560	12,550	6450	4030				

BOOM — One-piece

STICK — 2800 mm/9' 2"

BUCKET WIDTH — 810 mm/32"

Dozer & front outriggers raised

LOAD POINT HEIGHT		LOAD RADIUS								LOAD AT MAXIMUM REACH		
		3.0 m/10.0 ft.		4.5 m/15.0 ft.		6.0 m/20.0 ft.		7.5 m/25.0 ft.				
		OVER REAR	360°	OVER REAR	360°	OVER REAR	360°	OVER REAR	360°	OVER REAR	360°	m ft
7.5 m	kg									*1060	*1060	7.36
25.0 ft	lb									*2330	*2330	24.12
6.0 m	kg									*960	*960	8.46
20.0 ft	lb									*2120	*2120	27.73
4.5 m	kg									*940	*940	9.10
15.0 ft	lb									*2080	*2080	29.82
3.0 m	kg					3240	2330	2180	1500	*980	*980	9.38
10.0 ft	lb					7150	5130	4800	3310	*2160	*2160	30.76
1.5 m	kg			4740	3350	3040	2130	2090	1420	*1070	950	9.36
5.0 ft	lb			10,450	7390	6710	4710	4600	3120	*2360	2090	30.69
Ground Line	kg			4450	3070	2880	1980	2010	1340	*1230	1000	9.03
	lb			9800	6770	6350	4360	4430	2950	*2710	2200	29.59
-1.5 m	kg	*6370	5690	4340	2980	2800	1900	1970	1300	*1510	1170	8.33
-5.0 ft	lb	*14,050	12,550	9580	6560	6160	4180	4340	2870	*3340	2570	27.30
-3.0 m	kg	8590	5810	4370	3000	2800	1900					
-10.0 ft	lb	18,930	12,800	9630	6610	6170	4190					
-4.5 m	kg	*7860	6040	4520	3140							
-15.0 ft	lb	*17,330	13,330	9960	6920							

* Indicates the load is limited by hydraulic capacity rather than tipping.

Lift Capacity Ratings are based on SAE Standard J1097. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity.

Lift Capacities

BOOM — One-piece

STICK — 2300 mm/7' 7"

BUCKET WIDTH — 810 mm/32"

Dozer & front outriggers raised

LOAD POINT HEIGHT		LOAD RADIUS								LOAD AT MAXIMUM REACH		
		3.0 m/10.0 ft.		4.5 m/15.0 ft.		6.0 m/20.0 ft.		7.5 m/25.0 ft.				
		OVER REAR	360°	OVER REAR	360°	OVER REAR	360°	OVER REAR	360°	OVER REAR	360°	m ft
7.5 m	kg									*1430	*1430	6.85
25.0 ft	lb									*3160	*3160	22.44
6.0 m	kg									*1290	*1290	8.04
20.0 ft	lb									*2830	*2830	26.35
4.5 m	kg					*3180	2460			*1240	1230	8.71
15.0 ft	lb					*7010	5430			*2740	2720	28.56
3.0 m	kg			*4780	3700	3230	2310	2180	1510	*1260	1100	9.01
10.0 ft	lb			*10,530	8160	7120	5100	4810	3330	*2780	2430	29.55
1.5 m	kg			4670	3290	3040	2130	2110	1440	*1340	1070	8.99
5.0 ft	lb			10,290	7240	6710	4710	4650	3170	*2950	2360	29.47
Ground Line	kg			4440	3070	2900	2000	2050	1380	*1500	1140	8.64
	lb			9790	6770	6400	4410	4510	3040	*3300	2510	28.31
-1.5 m	kg	*6040	5830	4390	3030	2840	1950			*1780	1350	7.90
-5.0 ft	lb	*13,310	12,850	9680	6670	6270	4290			*3920	2980	25.89
-3.0 m	kg	8740	5950	4460	3080	2880	1980					
-10.0 ft	lb	19,260	13,110	9820	6800	6360	4370					
-4.5 m	kg			*4540	3280							
-15.0 ft	lb			*10,010	7240							

BOOM—One-piece

STICK — 2800 mm/9' 2"

BUCKET WIDTH — 810 mm/32"

Dozer on ground (machine equipped with dozer only)

LOAD POINT HEIGHT		LOAD RADIUS								LOAD AT MAXIMUM REACH		
		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft				
		OVER REAR	360°	OVER REAR	360°	OVER REAR	360°	OVER REAR	360°	OVER REAR	360°	m ft
7.5 m	kg									*1060	*1060	7.36
25.0 ft	lb									*2330	*2330	24.12
6.0 m	kg									*960	*960	8.46
20.0 ft	lb									*2120	*2120	27.73
4.5 m	kg									*940	*940	9.10
15.0 ft	lb									*2080	*2080	29.82
3.0 m	kg					*3350	2560	*3010	1660	*980	*980	9.38
10.0 ft	lb					*7390	5630	*6630	3670	*2160	*2160	30.76
1.5 m	kg			*5790	3710	*4080	2360	*3340	1580	*1070	1070	9.36
5.0 ft	lb			*12,770	8190	*8990	5200	*7360	3470	*2360	2350	30.69
Ground Line	kg			*6860	3430	*4690	2200	*3630	1500	*1230	1120	9.03
	lb			*15,110	7550	*10,330	4850	*8010	3300	*2710	2470	29.59
-1.5 m	kg	*6370	*6370	*7130	3330	*4960	2110	*3720	1460	*1510	1310	8.33
-5.0 ft	lb	*14,050	*14,050	*15,720	7340	*10,940	4660	*8200	3210	*3340	2880	27.30
-3.0 m	kg	*10 130	6600	*6720	3350	*4740	2120					
-10.0 ft	lb	*22,340	14,550	*14,820	7390	*10,450	4670					
-4.5 m	kg	*7860	6850	*5360	3500							
-15.0 ft	lb	*17,330	15,110	*11,810	7710							

* Indicates the load is limited by hydraulic capacity rather than tipping.

Lift Capacity Ratings are based on SAE Standard J1097. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity.

SPECIFICATIONS

Lift Capacities

BOOM — One-piece

STICK — 2300 mm/7' 7"

BUCKET WIDTH — 810 mm/32"

Dozer on ground (machine equipped with dozer only)

LOAD POINT HEIGHT		LOAD RADIUS								LOAD AT MAXIMUM RADIUS		
		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft		OVER REAR	360°	m ft
		OVER REAR	360°	OVER REAR	360°	OVER REAR	360°	OVER REAR	360°			
7.5 m 25.0 ft	kg lb									*1430 *3160	*1430 *3160	6.85 22.44
6.0 m 20.0 ft	kg lb									*1290 *2830	*1290 *2830	8.04 26.35
4.5 m 15.0 ft	kg lb					*3180 *7010	2690 5930			*1240 *2740	*1240 *2740	8.71 28.56
3.0 m 10.0 ft	kg lb			*4780 *10,530	4070 8980	*3710 *8170	2540 5600	*3310 *7300	1670 3680	*1260 *2780	1230 2700	9.01 29.55
1.5 m 5.0 ft	kg lb			*6310 *13,910	3650 8040	*4380 *9650	2360 5200	*3570 *7870	1600 3520	*1340 *2950	1190 2630	8.99 29.47
Ground Line	kg lb			*7100 *15,660	3420 7550	*4880 *10,770	2220 4890	*3780 *8340	1530 3380	*1500 *3300	1270 2800	8.64 28.31
-1.5 m -5.0 ft	kg lb	*6040 *13,310	*6040 *13,310	*7120 *15,700	3380 7440	*5020 *11,080	2160 4770			*1780 *3920	1500 3310	7.90 25.89
-3.0 m -10.0 ft	kg lb	*9290 *20,490	6750 14,870	*6470 *14,260	3440 7580	*4560 *10,050	2200 4860					
-4.5 m -15.0 ft	kg lb			*4540 *10,010	3640 8030							

BOOM — One-piece

STICK — 4000 mm/13' 2"

BUCKET WIDTH — 810 mm/32"

Dozer & front outriggers on ground

LOAD POINT HEIGHT		LOAD RADIUS						LOAD AT MAXIMUM RADIUS	
		1.5 m 5.0 ft	3.0 m 10.0 ft	4.5 m 15.0 ft	6.0 m 20.0 ft	7.5 m 25.0 ft	9.0 m 30.0 ft	360°	m ft
		360°	360°	360°	360°	360°	360°		
7.5 m 25.0 ft	kg lb							*540 *1200	8.84 28.97
6.0 m 20.0 ft	kg lb							*490 *1070	9.74 31.92
4.5 m 15.0 ft	kg lb					*2060 *4540		*480 *1050	10.28 33.70
3.0 m 10.0 ft	kg lb					*2360 *5200	*1410 *3120	*500 *1100	10.53 34.51
1.5 m 5.0 ft	kg lb			*4400 *9690	*3300 *7280	2520 5550	1770 3900	*550 *1220	10.51 34.45
Ground Line	kg lb		*4540 *10,020	5530 12,180	3480 7680	2390 5280	1710 3770	*650 *1440	10.22 33.50
-1.5 m -5.0 ft	kg lb	*2960 *6520	*5550 *12,230	5260 11,590	3320 7320	2300 5070	*1010 *2230	*820 *1810	9.63 31.56
-3.0 m -10.0 ft	kg lb	*4970 *10,970	*7940 *17,510	5170 11,410	3250 7170	2270 5000		*1120 *2480	8.66 28.39
-4.5 m -15.0 ft	kg lb	*7510 *16,560	*10 100 *22,280	5220 11,510	3280 7230				

* Indicates the load is limited by hydraulic capacity rather than tipping.

Lift Capacity Ratings are based on SAE Standard J1097. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity.

Lift Capacities

BOOM — One-piece

STICK — 2800 mm/9' 2"

BUCKET WIDTH — 810 mm/32"

Dozer & front outriggers on ground

LOAD POINT HEIGHT		LOAD RADIUS								LOAD AT MAXIMUM REACH		
		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft				
		OVER REAR	360°	OVER REAR	360°	OVER REAR	360°	OVER REAR	360°	OVER REAR	360°	m ft
7.5 m	kg									*1060	*1060	7.36
25.0 ft	lb									*2330	*2330	24.12
6.0 m	kg									*960	*960	8.46
20.0 ft	lb									*2120	*2120	27.73
4.5 m	kg									*940	*940	9.10
15.0 ft	lb									*2080	*2080	29.82
3.0 m	kg					*3350	*3350	*3010	2570	*980	*980	9.38
10.0 ft	lb					*7390	*7390	*6630	5660	*2160	*2160	30.76
1.5 m	kg			*5790	5700	*4080	3600	*3340	2480	*1070	*1070	9.36
5.0 ft	lb			*12,770	12,560	*8990	7950	*7360	5460	*2360	*2360	30.69
Ground Line	kg			*6860	5380	*4690	3430	*3630	2390	*1230	*1230	9.03
	lb			*15,110	11,850	*10,330	7570	*8010	5270	*2710	*2710	29.59
-1.5 m	kg	*6370	*6370	*7130	5270	*4960	3340	*3720	2350	*1510	*1510	8.33
-5.0 ft	lb	*14,050	*14,050	*15,720	11,620	*10,940	7370	*8200	5180	*3340	*3340	27.30
-3.0 m	kg	*10 130	*10 130	*6720	5300	*4740	3350					
-10.0 ft	lb	*22,340	*22,340	*14,820	11,670	*10,450	7380					
-4.5 m	kg	*7860	*7860	*5360	*5360							
-15.0 ft	lb	*17,330	*17,330	*11,810	*11,810							

BOOM — One-piece

STICK — 2300 mm/7' 7"

BUCKET WIDTH — 810 mm/32"

Dozer & front outriggers on ground

LOAD POINT HEIGHT		LOAD RADIUS								LOAD AT MAXIMUM REACH		
		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft				
		OVER REAR	360°	OVER REAR	360°	OVER REAR	360°	OVER REAR	360°	OVER REAR	360°	m ft
7.5 m	kg									*1430	*1430	6.85
25.0 ft	lb									*3160	*3160	22.44
6.0 m	kg									*1290	*1290	8.04
20.0 ft	lb									*2830	*2830	26.35
4.5 m	kg					*3180	*3180			*1240	*1240	8.71
15.0 ft	lb					*7010	*7010			*2740	*2740	28.56
3.0 m	kg			*4780	*4780	*3710	*3710	*3310	2570	*1260	*1260	9.01
10.0 ft	lb			*10,530	*10,530	*8170	*8170	*7300	5670	*2780	*2780	29.55
1.5 m	kg			*6310	5610	*4380	3600	*3570	2500	*1340	*1340	8.99
5.0 ft	lb			*13,910	12,370	*9650	7930	*7870	5500	*2950	*2950	29.47
Ground Line	kg			*7100	5370	*4880	3450	*3780	2430	*1500	*1500	8.64
	lb			*15,660	11,830	*10,770	7610	*8340	5360	*3300	*3300	28.31
-1.5 m	kg	*6040	*6040	*7120	5320	*5020	3390			*1780	*1780	7.90
-5.0 ft	lb	*13,310	*13,310	*15,700	11,720	*11,080	7480			*3920	*3920	25.89
-3.0 m	kg	*9290	*9290	*6470	5380	*4560	3430					
-10.0 ft	lb	*20,490	*20,490	*14,260	11,870	*10,050	7570					
-4.5 m	kg			*4540	*4540							
-15.0 ft	lb			*10,010	*10,010							

* Indicates the load is limited by hydraulic capacity rather than tipping.

Lift Capacity Ratings are based on SAE Standard J1097. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity.

SPECIFICATIONS

Lift Capacities

BOOM — One-piece

STICK — 2800 mm/9' 2"

BUCKET WIDTH — 810 mm/32"

Rear outriggers on ground

LOAD POINT HEIGHT		LOAD RADIUS								LOAD AT MAXIMUM REACH		
		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft				
		OVER REAR	360°	OVER REAR	360°	OVER REAR	360°	OVER REAR	360°	OVER REAR	360°	m ft
7.5 m	kg									*1060	*1060	7.36
25.0 ft	lb									*2330	*2330	24.12
6.0 m	kg									*960	*960	8.46
20.0 ft	lb									*2120	*2120	27.73
4.5 m	kg									*940	*940	9.10
15.0 ft	lb									*2080	*2080	29.82
3.0 m	kg					*3350	2970	*3010	1960	*980	*980	9.38
10.0 ft	lb					*7390	6550	*6630	4330	*2160	*2160	30.76
1.5 m	kg			*5790	4360	*4080	2770	*3340	1870	*1070	*1070	9.36
5.0 ft	lb			*12,770	9610	*8990	6110	*7360	4130	*2360	*2360	30.69
Ground Line	kg			*6860	4060	*4690	2600	*3630	1790	*1230	*1230	9.03
	lb			*15,110	8950	*10,330	5740	*8010	3950	*2710	*2710	29.59
-1.5 m	kg	*6370	*6370	*7130	3960	*4960	2520	3700	1750	*1510	*1510	8.33
-5.0 ft	lb	*14,050	*14,050	*15,720	8730	*10,940	5550	8160	3860	*3340	*3340	27.30
-3.0 m	kg	*10,130	7970	*6720	3980	*4740	2520					
-10.0 ft	lb	*22,340	17,570	*14,820	8780	*10,450	5550					
-4.5 m	kg	*7860	*7860	*5360	4130							
-15.0 ft	lb	*17,330	*17,330	*11,810	9110							

BOOM — One-piece

STICK — 2300 mm/7' 7"

BUCKET WIDTH — 810 mm/32"

Rear outriggers on ground

LOAD POINT HEIGHT		LOAD RADIUS								LOAD AT MAXIMUM REACH		
		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft				
		OVER REAR	360°	OVER REAR	360°	OVER REAR	360°	OVER REAR	360°	OVER REAR	360°	m ft
7.5 m	kg									*1430	*1430	6.85
25.0 ft	lb									*3160	*3160	22.44
6.0 m	kg									*1290	*1290	8.04
20.0 ft	lb									*2830	*2830	26.35
4.5 m	kg					*3180	3110			*1240	*1240	8.71
15.0 ft	lb					*7010	6860			*2740	*2740	28.56
3.0 m	kg			*4780	4730	*3710	2950	*3310	1970	*1260	*1260	9.01
10.0 ft	lb			*10,530	10,430	*8170	6510	*7300	4340	*2780	*2780	29.55
1.5 m	kg			*6310	4290	*4380	2770	*3570	1890	*1340	*1340	8.99
5.0 ft	lb			*13,910	9450	*9650	6100	*7870	4180	*2950	*2950	29.47
Ground Line	kg			*7100	4060	*4880	2630	*3780	1830	*1500	*1500	8.64
	lb			*15,660	8940	*10,770	5790	*8340	4040	*3300	*3300	28.31
-1.5 m	kg	*6040	*6040	*7120	4010	*5020	2570			*1780	*1780	7.90
-5.0 ft	lb	*13,310	*13,310	*15,700	8840	*11,080	5660			*3920	*3920	25.89
-3.0 m	kg	*9290	8120	*6470	4070	*4560	2610					
-10.0 ft	lb	*20,490	17,910	*14,260	8970	*10,050	5750					
-4.5 m	kg			*4540	4280							
-15.0 ft	lb			*10,010	9450							

* Indicates the load is limited by hydraulic capacity rather than tipping.

Lift Capacity Ratings are based on SAE Standard J1097. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity.

Lift Capacities

BOOM — One-piece

STICK — 1800 mm/5'11"

BUCKET WIDTH — 810 mm/32"

Dozer & front outriggers on ground

LOAD POINT HEIGHT		LOAD RADIUS			LOAD AT MAXIMUM REACH	
		3.0 m	4.5 m	6.0 m	360°	m ft
		10.0 ft	15.0 ft	20.0 ft		
7.5 m	kg				*2550	6.15
25.0 ft	lb				*5620	20.15
6.0 m	kg				*2310	7.49
20.0 ft	lb				*5090	24.54
4.5 m	kg				*2240	8.22
15.0 ft	lb				*4930	26.94
3.0 m	kg		*5380	3780	2160	8.54
10.0 ft	lb		*11,860	8330	4770	28.00
1.5 m	kg			3600	2130	8.52
5.0 ft	lb			7940	4700	27.92
Ground Line	kg			3480	2280	8.14
	lb			7680	5020	26.67
-1.5 m	kg		5400	3450	2710	7.33
-5.0 ft	lb		11,900	7610	5970	24.03
-3.0 m	kg	*8270	5500		*2050	5.69
-10.0 ft	lb	*18,230	12,120		*4520	18.64

BOOM — One-piece

STICK — 4000 mm/13' 2"

BUCKET WIDTH — 810 mm/32"

Two sets of outriggers on ground

LOAD POINT HEIGHT		LOAD RADIUS						LOAD AT MAXIMUM REACH	
		1.5 m	3.0 m	4.5 m	6.0 m	7.5 m	9.0 m	360°	m ft
		5.0 ft	10.0 ft	15.0 ft	20.0 ft	25.0 ft	30.0 ft		
7.5 m	kg							*540	8.84
25.0 ft	lb							*1200	28.97
6.0 m	kg							*490	9.74
20.0 ft	lb							*1070	31.92
4.5 m	kg					*2060		*480	10.28
15.0 ft	lb					*4540		*1050	33.70
3.0 m	kg					*2360	*1410	*500	10.53
10.0 ft	lb					*5200	*3120	*1100	34.51
1.5 m	kg			*4400	*3300	*2790	*1860	*550	10.51
5.0 ft	lb			*9690	*7280	*6150	*4110	*1220	34.45
Ground Line	kg								
	lb								
-1.5 m	kg	*2960	*5550	6350	3980	2770	*1010	*820	9.63
-5.0 ft	lb	*6520	*12,230	14,000	8770	6100	*2230	*1810	31.56
-3.0 m	kg	*4970	*7940	6260	3900	2730		*1120	8.66
-10.0 ft	lb	*10,970	*17,510	13,800	8610	6020		*2480	28.39
-4.5 m	kg	*7510	*10,100	6310	3930				
-15.0 ft	lb	*16,560	*22,280	13,920	8670				

BOOM — One-piece

STICK — 2800 mm/9' 2"

BUCKET WIDTH — 810 mm/32"

Two sets of outriggers on ground

LOAD POINT HEIGHT		LOAD RADIUS								LOAD AT MAXIMUM REACH		
		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft		OVER F/R**	360°	m ft
		OVER F/R**	360°	OVER F/R**	360°	OVER F/R**	360°	OVER F/R**	360°			
7.5 m	kg									*1060	*1060	7.36
25.0 ft	lb									*2330	*2330	24.12
6.0 m	kg									*960	*960	8.46
20.0 ft	lb									*2120	*2120	27.73
4.5 m	kg									*940	*940	9.10
15.0 ft	lb									*2080	*2080	29.82
3.0 m	kg					*3350	*3350	*3010	*3010	*980	*980	9.38
10.0 ft	lb					*7390	*7390	*6630	*6630	*2160	*2160	30.76
1.5 m	kg			*5790	*5790	*4080	*4080	*3340	2940	*1070	*1070	9.36
5.0 ft	lb			*12,770	*12,770	*8990	*8990	*7360	6490	*2360	*2360	30.69
Ground Line	kg					6470	4090	*3630	2860	*1230	*1230	9.03
	lb					*15,110	14,270	*10,330	9020	*2710	*2710	29.59
-1.5 m	kg	*6370	*6370	*7130	6360	*4960	4000	*3720	2810	*1510	*1510	8.33
-5.0 ft	lb	*14,050	*14,050	*15,720	14,010	*10,940	8810	*8200	6200	*3340	*3340	27.30
-3.0 m	kg	*10,130	*10,130	*6720	6380	*4740	4000					
-10.0 ft	lb	*22,340	*22,340	*14,820	14,080	*10,450	8810					
-4.5 m	kg	*7860	*7860	*5360								
-15.0 ft	lb	*17,330	*17,330	*11,810								

** Over front or rear.

* Indicates the load is limited by hydraulic capacity rather than tipping.

Lift Capacity Ratings are based on SAE Standard J1097. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity.

SPECIFICATIONS

Lift Capacities

BOOM — One-piece

STICK — 2300 mm/7' 7"

BUCKET WIDTH — 810 mm/32"

Two sets of outriggers on ground

LOAD POINT HEIGHT		LOAD RADIUS								LOAD AT MAXIMUM REACH		
		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft				
		OVER F/R**	360°	OVER F/R**	360°	OVER F/R**	360°	OVER F/R**	360°	OVER F/R**	360°	m ft
7.5 m	kg									*1430	*1430	6.85
25.0 ft	lb									*3160	*3160	22.44
6.0 m	kg									*1290	*1290	8.04
20.0 ft	lb									*2830	*2830	26.35
4.5 m	kg					*3180	*3180			*1240	*1240	8.71
15.0 ft	lb					*7010	*7010			*2740	*2740	28.56
3.0 m	kg			*4780	*4780	*3710	*3710	*3310	3040	*1260	*1260	9.01
10.0 ft	lb			*10,530	*10,530	*8170	*8170	*7300	6700	*2780	*2780	29.55
1.5 m	kg			*6310	*6310	*4380	4260	*3570	2960	*1340	*1340	8.99
5.0 ft	lb			*13,910	*13,910	*9650	9390	*7870	6530	*2950	*2950	29.47
Ground Line	kg			*7100	6460	*4880	4110	*3780	2890	*1500	*1500	8.64
	lb			*15,660	14,240	*10,770	9060	*8340	6380	*3300	*3300	28.31
-1.5 m	kg	*6040	*6040	*7120	6400	*5020	4040			*1780	*1780	7.90
-5.0 ft	lb	*13,310	*13,310	*15,700	14,120	*11,080	8920			*3920	*3920	25.89
-3.0 m	kg	*9290	*9290	*6470	*6470	*4560	4090					
-10.0 ft	lb	*20,490	*20,490	*14,260	*14,260	*10,050	9010					
-4.5 m	kg			*4540	*4540							
-15.0 ft	lb			*10,010	*10,010							

** Over front or rear.

BOOM — One-piece

STICK — 1800 mm/5' 11"

BUCKET WIDTH — 810 mm/32"

Two sets of outriggers on ground

LOAD POINT HEIGHT		LOAD RADIUS			LOAD AT MAXIMUM REACH	
		3.0 m	4.5 m	6.0 m	360°	m ft
		10.0 ft	15.0 ft	20.0 ft		
7.5 m	kg				*2550	6.15
25.0 ft	lb				*5620	20.15
6.0 m	kg				*2310	7.49
20.0 ft	lb				*5090	24.54
4.5 m	kg				*2240	8.22
15.0 ft	lb				*4930	26.94
3.0 m	kg		*5380	*4050	*2270	8.54
10.0 ft	lb		*11,860	*8920	*5000	28.00
1.5 m	kg			4260	*2390	8.52
5.0 ft	lb			9390	*5270	27.92
Ground Line	kg			4140	*2630	8.14
	lb			9120	*5800	26.67
-1.5 m	kg		6490	4110	*3080	7.33
-5.0 ft	lb		14,300	9050	*6790	24.03
-3.0 m	kg	*8270	*6110		*2050	5.69
-10.0 ft	lb	*18,230	*13,460		*4520	18.64

* Indicates the load is limited by hydraulic capacity rather than tipping.

Lift Capacity Ratings are based on SAE Standard J1097. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity.



The Competitive Edge

Performance

- Turbocharged Cat 3116 diesel Engine at 82 kW/110 FWHP (214B) and 101 kW/ 135 FWHP (214B FT) . . . with excellent fuel efficiency.
- Load-sensing hydraulic system automatically adjusts flow rate to loads encountered: low resistance, high flow rate for fast cycles . . . high resistance, low flow rate, high pressure for maximum breakout force.
- Simultaneous proportioned operation of all functions, including travel.
- Pump flow is reduced to minimum when joysticks and travel controls are in neutral . . . cutting fuel consumption.
- Pump flow increases in direct proportion to lever movement to give precise control.
- High-pressure cutoff decreases pump flow to minimum when hydraulic system pressure reaches a point just below relief valve setting . . . conserving fuel and reducing heat buildup.
- Hydrostatic four-wheel drive with on-the-go shifting.
- Two forward and reverse speeds: work and travel.
- Overspeed valve to limit downhill speed.
- Downshift inhibitor to keep machine from downshifting at high speed.
- Four-wheel oil disc service brakes, pedal controlled.
- Oscillating front axle to help keep all four wheels on the ground while traveling; fully lockable while digging.
- 390 mm/15.4" ground clearance.
- Lifting stability superior to track machine when dozer and/or outriggers used.
- A wide range of work tools . . . buckets, grapples, hammers and more . . . to extend your job opportunities.

Operating Ease/Comfort

- Pilot-operated joysticks for short-throw, fingertip operation and precise control.
- Single lever to set oscillating axle lock, parking brake and four-wheel brakes simultaneously. Also can be individually controlled.
- Pedal-operated swing brake with brake lock detent . . . applies automatically after engine is stopped.
- Blue light in steering wheel center helps remind operator when upperstructure is turned within 60° of center when over fixed rear axle.
- Roomy 920 mm/36.22" wide cab with pressurized ventilation and filtered incoming air.
- Exceptionally low sound levels.

Reliability/Durability

- Conservative engine rating, high displacement-to-power ratio and low RPM for long life and reliable operation.

- O-ring face seals and SAE four-bolt flanges used on hydraulic line connections to help prevent leaks.
- Load-sensing hydraulics and high pressure cutoff for reduced hydraulic pump wear and easier cold weather starting.
- Cylinder snubbers to extend cylinder life.
- Transmission and drive motor located above the rear axle, rather than in the middle between the two axles, for more clearance and protection.
- Steering cylinder integrated in the front steering axle for protection.
- Monitoring system to check critical temperatures and pressures, alerting operator to potential problems.

Maintenance/Repair

- Transmission housing, oil disc wheel brakes, swing drive brake system and axle oscillation system with no specific maintenance requirements.
- Wide service doors for excellent access.
- Engine inspection points easily reached within engine hood opening on top of machine.
- Battery compartment large enough to accommodate Caterpillar batteries.
- Quick-connect pressure taps for time-saving adjustment and troubleshooting of hydraulic system.

Total Customer Support

- Most parts are on your Cat Dealer's shelf when you need them. If they're not, he can quickly locate them through the Cat Dealer Terminal System. Within hours the part is on the way to you.
- Exchange parts and components. Choose components rebuilt by the dealer or products remanufactured by the factory . . . for fast, low-cost repairs.
- Expert service capability. Fast field service or repairs in the dealer's shop by fully trained servicemen using the latest tooling and technology.
- Machine management services. Effective preventive maintenance and diagnostic programs, cost-effective repair options.
- Flexible financing. Your Cat Dealer can arrange attractive financing on the entire line of Caterpillar products . . . with terms structured to meet your cash flow requirements. See how affordable and easy it is to own Cat equipment.



Helping you get more done

1-5 JUL 1989