CAT®

219D
219D LC

EXCAVATOR

- **Exceptional Productivity** -- Superior breakout force, high bucket fill factors, fast cycle times.
- **Reliable/Durable** -- Built to withstand severe working conditions.
- **Low Operating Costs** -- Highly efficient, long-life componentry.
- **Operator Comfort and Convenience** -- Quiet, efficient, protected, productive work environment.
- **Service and Maintenance Ease** -- Fast fluid level checks, reduced maintenance.
- **Total Customer Support** -- Unmatched in the industry!

Cat direct-injection, turbocharged 3304 Engine	104.4 KW/140 HP
Operating Weight	
219D	21 740 kg/47,940 lb
219D LC	22 560 kg/49,750 lb

Machine shown may include optional equipment.

FEATURES

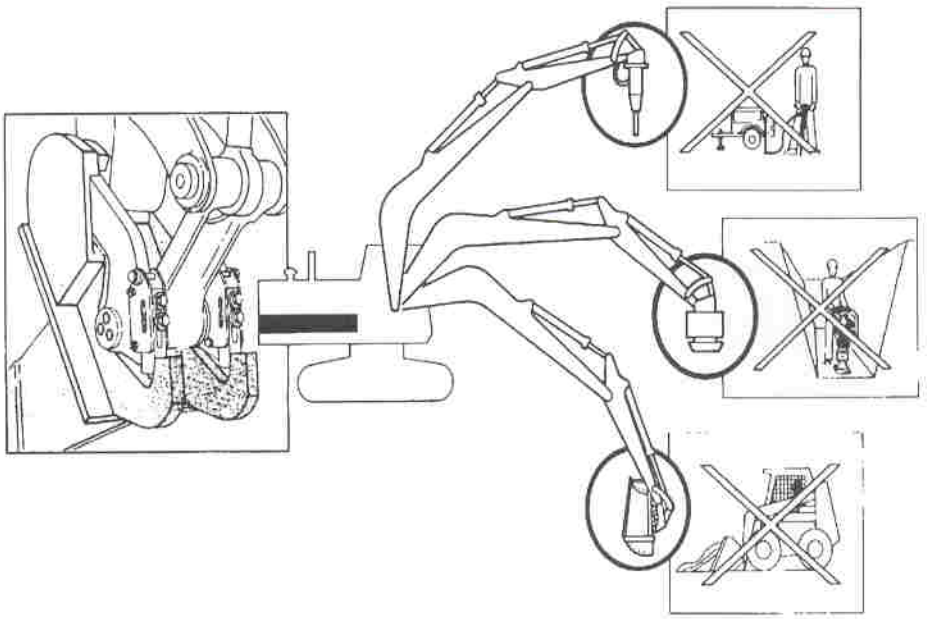
Rugged, Versatile Performer

Compare the features and you'll see why Cat's 219D and 219D LC offer greater overall value!

■ **Cat direct-injection, turbocharged 3304 Engine** ... proven around the world in earthmoving, industrial and over-the-road applications.
- High displacement-to-power ratio for reliable performance day-in, day-out.
- Caterpillar direct-injection fuel system for excellent fuel efficiency.

■ **High-performance hydraulics** make the 219 D and 219D LC exceptionally productive machines.
- Cushion swing control allows precision handling of heavy objects.
- Standard heavy lift circuit for increased lifting capacity.

■ **Undercarriage designed and built by Caterpillar** ... the world's leading manufacturer of track-type machines.
- Heavy, box-section track roller frames bolted to the carbody for service and maintenance ease.
- Standard-length, variable-gauge undercarriage for ease of transportation and good maneuverability in tight work areas, and the productivity of a wide, stable base.
- Long undercarriage for superior flotation and traction in poor underfoot conditions.
- Three shoe sizes available to match job requirements.



■ **Wide selection of attachments** ... for maximum versatility.
- One-piece boom -- features thick, one-piece, top and bottom plates for maximum durability.
- Three sticks -- short, medium and long.
- Seven buckets, including five of which can be configured for Cat's VERSA-LINK Quick Coupling System. Caterpillar-designed and built buckets have large torque tubes and transverse wear strips for excellent structural rigidity.
- Six different bucket tips and four sidecutters for a choice of ground engaging tools to match job conditions. Cat ground engaging tools ... designed, built and warranted by the same company that builds the bucket and the machine!

■ **Caterpillar's VERSA-LINK Quick Coupling System** ... increases productivity by using the right tools for the job.
- Save money -- a variety of attachments eliminates the need of special equipment and operators.
- Save time -- one person can easily change attachments in two to three minutes or less.
- No reduction in bucket capacity or breakout force.
- Reliable and durable -- built for severe service.

Variable-flow Hydraulics

Variable-flow system converts horsepower into high tool forces or faster speeds, according to job requirements, for maximum productivity

■ **Variable-flow piston pumps.**
- Fully utilize engine horsepower throughout work cycle.
- Respond to hydraulic system needs.

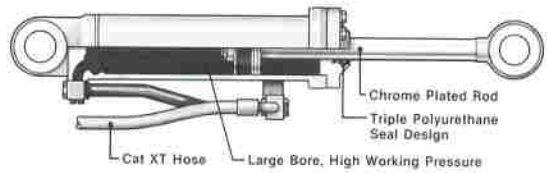
■ **Power proportioning.**
- Allows lifting, digging, dumping and traveling in any combination.
- Delivers power where it is most needed.

■ **Cushion swing control.**
- Provides smooth swing control for precise applications such as pipe setting, etc.
- Easily activated by switch in cab.

■ **Heavy lift circuit is standard.**
- Substantially increases lifting capacity by increasing work ing pressure at the flip of an easy-to-reach switch.
- Reduces pump flow for precise implement control, maneuvering in tight quarters or loading on lowboy.
- Includes additional check valve to prevent stick drift at high operating pressures.

Cat XT Hose

Large Bore, High Working Pressure



Triple Polyurethane Seal Design

Chrome-plated Rod

■ **Caterpillar's XT-5 and XT-6 hose and reusable coupling system.**
- Exceptional strength.
- Good hose flexibility.
- Superior service life.

■ **Oil-to-air cooler** -- offers efficient heat rejection for excellent hydraulic system protection.

■ **Hydraulic cylinders.**
- Seamless-steel tubes, honed to fine tolerances.
- Hardened, precision-ground, chrome-plated rods.
- Triple-polyurethane seals guard against contamination, leaks.
- Self-aligning spherical bearings on all cylinders minimize twisting forces for excellent durability.

Cat® 3304 Engine

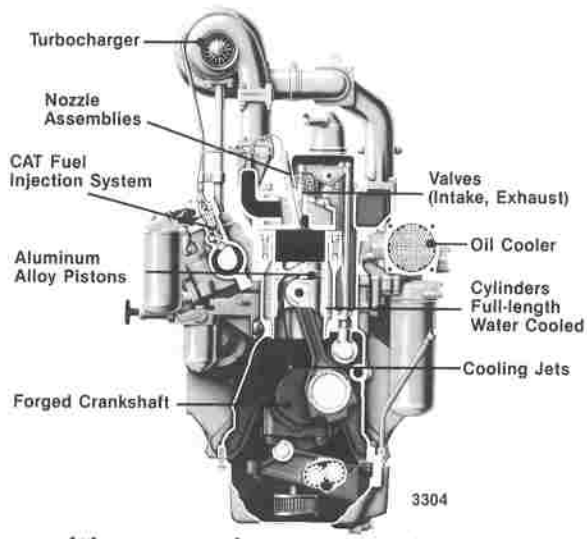
Reliable ... durable ... dependable!

■ **Turbocharged for increased performance and efficiency,** especially at high altitudes. No derating required up to 2300 meters/ **7,500 feet.**

■ **Direct-injection fuel system.**
- Adjustment-free pumps and valves.
- Efficient, accurate fuel metering.

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

■ **Automatic engine speed control is standard.**
- Electronic governor control system automatically reduces engine speed when joysticks and travel controls are in neutral.



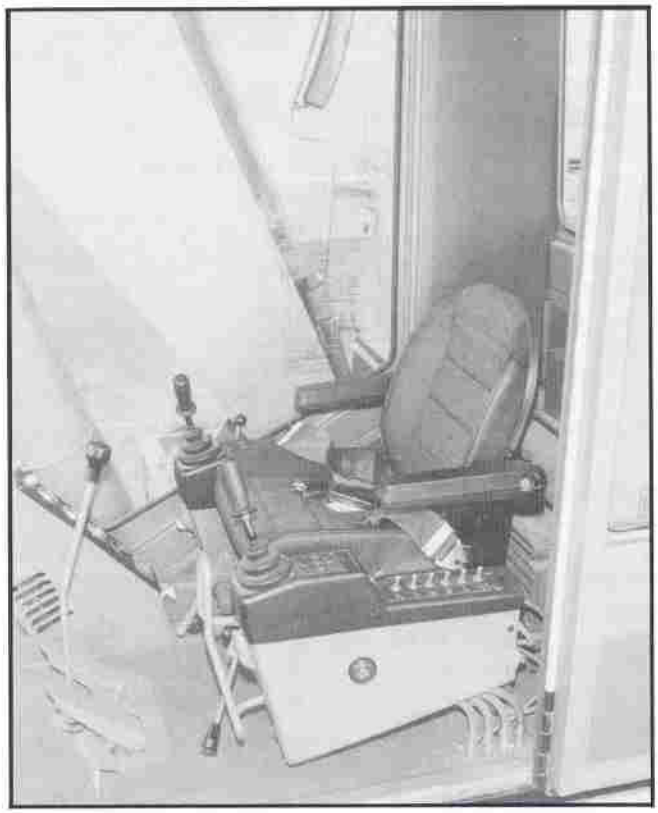
- **Three-position operation** - full power, off and economy ... decreases fuel consumption, noise during periods of inactivity -- lowers costs.
- **Automatically returns** engine to original operating RPM when joysticks or travel controls are actuated ... no resetting necessary.

FEATURES

Operator's Station

Excellent visibility, logical control placement, excellent operator comfort for fast, confident machine operation.

- **Fabricated cab is about 50% heavier** than competitive cabs for greater durability ... stays tight even after years of use.
  - Isolation-mounted unit uses large rubber mounts and a heavy, lead-lined rubber mat to suppress noise.
  - Spacious 926 mm/**36"** window-to-window inside width for excellent operator comfort.
- **Excellent, all-around visibility and ventilation** for confident machine operation.
  - Two-section windshield is adjustable five-ways.
  - Large side window, sliding rear window and skylight.
  - Heavy duty mirrors are standard.
- **Four-way, adjustable suspension seat** for superior comfort.
  - Joysticks and switches mounted on side consoles that move up and down with the seat, so they are always easy to reach.
- **Hydraulic-over-hydraulic pilot control system.**
  - Easy, well-modulated lever movement without surging.
  - Low lever efforts.



- **Separate travel pedals** for each direction, forward and reverse, and steering lever.
  - Steering lever allows gradual and spot turns as well as counter-rotation.
- **Full instrumentation is standard,** including fuel level, engine oil level, engine oil pressure, coolant temperature and hydraulic oil temperature gauges.

Servicing Ease

Simplified maintenance and service means more time on the job, lower owning and operating costs.

- **Self-lubricating swing gear** rides in enclosed trough.
  - Contaminants are sealed out.
  - No hand greasing.
- **Swing bearing greased every 50 service meter hours through fitting in cab.**
- **Remote, centralized lubrication fittings** for hard-to-reach lube points on the one-piece boom.
  - Remaining lube points are conveniently located for easy access.
- **Lip-type linkage pin seals** keep grit out, grease in.
- **Hydraulic track adjusters standard.**
  - Adjust track tension with a grease gun.
- **Radiator, engine oil level,** hydraulic fluid levels checked easily from convenient walkway.
- **Maintenance and repair kits available** to simplify service.
  - PM kits with oil and air filters.
  - Hydraulic cylinder seal kits.
  - Engine tune-up kits with fuel nozzles.
- **Exchange and Remanufactured components** reduce parts costs, downtime.
  - Alternators to complete Cat Remanufactured 3304 Engines and hydraulic components available.
  - Warranted the same as new products.
  - Assembled, tested and ready to install.

Caterpillar® Engine

Flywheel power @ 1800 RPM
.....104.4 kW/**140HP**
(Kilowatts (kW) is the International System of Units equivalent of horsepower.)

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"Hg****. Power is based on using 35° API (15.6°C /* ***60°F****) gravity fuel having an LHV of 42 780 kJ/kg /* ***18,390 Btu/lb*** *when used at 29.4°C /* ***85°F*** *and with a density of 838,9g/L /* ***7.001 lb/U.S. gal****. Power rating is adjusted for vehicle equipped with fan, air cleaner, water pump, fuel pump, muffler and lubricating oil pump. No derating is required up to 2300 m. /* ***7,500 ft.***

Caterpillar four-stroke-cycle, 3304 turbocharged diesel engine with four cylinders, 121 mm/**4.75"** bore, 152 mm/**6.0"** stroke and 7.0 liters/**425 cu. in.** displacement.

Caterpillar direct-injection fuel system with individual, adjustment-free, injection pumps and valves. Cam-ground and tapered, aluminum-alloy pistons have three rings each and are cooled by oil spray.

Easy-to-change, spin-on oil and fuel filters. Dry-type air cleaner with primary and secondary elements. Water pump, fuel pump and service meter standard.

Direct-current, 24-volt starting and charging system with two, 132-amp-hour, 12-volt batteries and 50-amp alternator.

Hydraulic system

Two variable-displacement piston pumps power the boom, stick, bucket, swing and travel circuits.
Output of each pump @ rated engine speed and 69 bar/**1,000 psi**..... 2 x 187 liters/min./**2 x 50 GPM**

A fixed-displacement gear pump powers the pilot-control circuit.
Output to pilot system @ rated engine speed and 19 bar/**235 psi**..... 83 liters/min./**22 GPM**

Oil-to-air hydraulic cooler is mounted in front of engine radiator.

Relief valve settings:
- Implement circuits .... 310 bar/**4,495 psi**
- Heavy lift circuit.....359 bar/**5,205 psi**
- Travel circuits ..... 359 bar/**5,205 psi**
- Swing circuit ..... 138 bar/**2,000 psi**
- Pilot circuit ..... 23 bar/**335 psi**

Cylinders, bore x stroke:
- Boom (2) ..... 120.7 x 975 mm/**4.75" x 38.4"**
- Stick (1) ..... 139.7 x 1207 mm/**5.5" x 47.5"**
- Bucket (1) ..... 120.7 x 967 mm/**4.75" x 38.1"**

Drive

Fully hydraulic; each track is driven by an independent hydraulic motor. Two travel pedals: right pedal gives forward movement...the left, reverse. Triple-reduction, spur-gear final drive, fully enclosed and splash lubricated. Duo-Cone Floating Ring Seals on output shafts.

Maximum drawbar pull
- 219D ..... 164 kN/**36,900 lb**
- 219D LC ..... 203 kN/**45,675 lb**

Maximum travel speed @ 2000 RPM: forward and reverse
- 219D ..... 4.0 km/h/**2.5 MPH**
- 219D LC ..... 3.2 km/hr/**2.0 MPH**

Track

Cat design and built track-type undercarriage. Reinforced box-section, track roller frame. Sealed Track. Lifetime Lubricated rollers and idlers, hydraulic track adjusters and triple grouser shoes are standard.

	219D	219D LC
Number of shoes (each side)	43	49
Width of shoes (standard)	550 mm/**22"**	550 mm/**22"**
Overall track length	3810 mm/**12'6"**	4420 mm/**14'6"**
Track gauge		
extended	2180 mm/**7'2"**	2438 mm/**8'0"**
retracted	1930 mm/**6'4"**	--
Ground contact area for indicated shoe sizes		
550 mm/**22"**	7.64 m^2/**5661 in^2**	4.33 m^2/**6,710 in^2**
660 mm/**26"**	4.37 m^2/**6796 in^2**	5.19 m^2/**8,040 in^2**
760 mm/**30"**	5.03 m^2/**7827 in^2**	5.98 m^2/**9,270 in^2**

Controls

Two joystick hand levers actuate boom, stick, bucket and swing.

Right lever: Move forward and backward to lower and raise boom. Right and left to control bucket curl and dump.

Left lever: Move forward and backward to move stick out and in. Left and right to control swing direction.

Oblique movement of either lever operates any two functions simultaneously. Manually applied lever on the left console completely neutralizes the control system.

SPECIFICATIONS

Swing Mechanism

Case-hardened drive gears are splash lubricated. Swing gear and pinion run in a trough of lubricant. No daily maintenance required. Hydraulic motor provides high swing torque for fast acceleration. No mechanical braking required. To stop rotation, release controls to cut off oil flow to swing motor. A manual shoe-type brake locks the upperstructure during lifting applications on side slopes.

Smooth, modulated deceleration occurs when swing control lever is released, assuring accurate positioning for next work cycle.
Swing speed ..... 7.5 RPM

Cushion swing control standard:
A operator-controlled switch on the instrument panel activates the circuit to provide smooth, soft swing control for precision applications like pipe setting, etc.

Steering

A lever mounted between the travel pedals provides gradual pivot and counter-rotation steering. (1) Depress the forward or reverse pedal and move the lever right or left. This drives one track while slowing the other to turn the machine in the direction the lever was moved. (2) Move the lever farther, into contact with a "resistance" bumper spring, for a pivot turn with one track locked and the other driving. (3) Push the lever beyond the bumper spring to reverse the locked track for counter-rotation and a spot turn.

Service Refill Capacities

	Liters	U.S. Gallons
Fuel Tank	270	71
Cooling System	27	7
Lubrication:		
Engine Oil	19	5
Swing Drive	29	7.7
Final Drives (each)	11.3	3.0
Hydraulic System	300	79.3
Hydraulic Tank	155	41

Brakes

Two oil-disc brakes on final drive input shafts. Spring-applied, hydraulically released. When machine is stationary, brakes are set automatically. Depressing either travel pedal simultaneously disengages brakes.

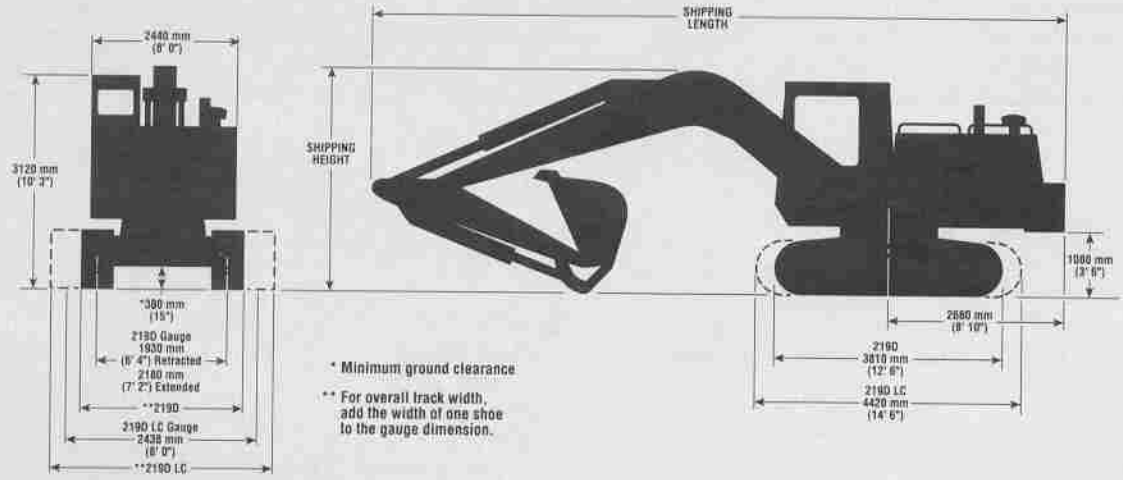
OperatingWeight

Includes lubricants, coolant, 50% full fuel tank, 550 mm/**22"** triple grouser track shoes, one-piece boom, 2760 kg/**6,090 lb** counterweight, 75 kg/**165 lb** operator and 1075 mm/**42"** bucket.

Stick	219D*		219D LC**	
	kg	lb	kg	lb
1800 mm/**5'11"**	21 560	**47,540**	22 390	**49,370**
2200 mm/**7'3"**	21 580	**47,590**	22 400	**49,390**
2800 mm/**9'2"**	21 740	**47,940**	22 560	**49,750**

*For 660 mm/**26"** shoes, add 270 kg/**595 lb.** Add 610 kg/**1345 lb** for 760 mm/**30"** shoes.
** For 660 mm/**26"** shoes add 310 kg/**683 lb.** Add 700 kg/**1543 lb** for 760 mm/**30"** shoes.

Dimensions



With One-piece Boom and:	1800 mm/5'11" Stick	2200 mm/7'3" Stick	2800 mm/9'2" Stick
Shipping height	3120 mm/**10'3"**	3120 mm/**10'3"**	3120 mm/**10'3"**
Shipping length	9410 mm/**30'10"**	9410 mm/**30'10"**	9360 mm/**30'9"**

SPECIFICATIONS

Standard Equipment

NOTE: Standard and optional equipment may vary. Consult your Caterpillar dealer for specifics.

Air cleaner, dry-type.
Alarm, travel (standard in North America).
Alternator, 50-amp.
Automatic Engine Speed Control.
Cab, all-weather, sound-suppressed, with:
- Cigar lighter.
- Fans:
  - circulating
  - defroster.
- Floor mat.
- Heater, cab.
- Horns, electric, front and rear.
- Hour meter, electric.
- Instrumentation:
  - Engine oil pressure gauge.
  - Coolant temperature gauge.
  - Hydraulic oil temperature gauge.
  - Voltmeter.
  - Air filter service light.
  - Hydraulic oil filter service light.
  - Flashing warning light.
  - Hydraulic tank low pressure light.
- Lights, dome and dash.
- Seat, four-way adjustable, suspended with arm rests and side consoles.)
- Seat belt.
- Windshield, two-section, retractable with tinted safety glass in top; clear, laminated safety glass in bottom.
- Windshield wipers, dual with washers.
- Windows, side and skylight, tinted LEXAN.
- Window, sliding rear with friction lock.

Counterweight, 2760 kg/**6070 lb.**
Cushion swing control.
Guards:
- Track motor.
- Idler, track guiding.

Heavy lift circuit.
Hydraulic track adjusters.
Lifetime Lubricated rollers and idlers.
Linkage pins, chromed and sealed.
Locking house, cab and tool compartment.
Lights, working, basic machine.
Lubrication points, centralized.
Mirrors, rear view.
Muffler.
Pump, modified pilot with through shaft for auxiliary system.
Starting aid, ether.
Track, Sealed with 550 mm/**22"** triple grouser shoes.
Tow eyes, front and rear.
Undercarriage (LC), 4420 mm/**14'6"**
Walkway and handrails

Optional Equipment

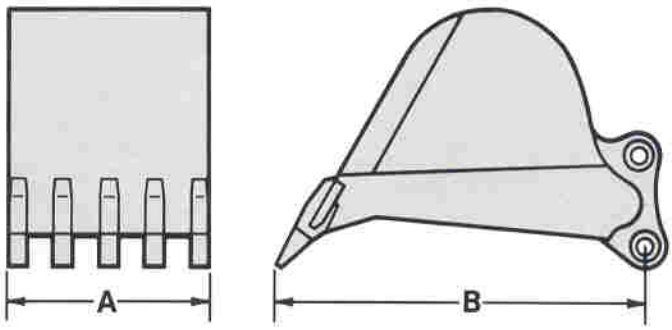
Air conditioner.
Alarm, travel (optional outside of North America).
Backhoe sticks:
- 1800 mm/**5'11".**
- 2200 mm/**7'3".**
- 2800 mm/**9'2".**
- 3400 mm/**11'2"**
- 4000 mm/**13'1".**

Boom, 5600 mm/**18'5".**
Buckets.
Bucket linkage.
Bucket sidecutters.
Bucket tips.
Cab riser.
Check valves, boom and stick.
Cooling system, high ambient temperature, 52° C/**125°F**
Fan, ventilating.
Guards:
- Pilot lines.
- Pump
- Sprocket end.
- Swivel.
- Track guiding, full-length.
- Windshield vandalism.

Hydraulics, auxiliary.
Hydraulic hammer arrangement.
Pump, refueling.
Precleaner with prescreener.
Seat, adjustable suspension and tilting.
Starting system, low temperature.
Step group.
Sticks.
Track shoes.
VERSA-LINK Quick Coupling System, including coupler, adapter, buckets and ripper.
Working lights, boom.

Bucket Specifications

Caterpillar buckets curl 174° for excellent load retention and easy digging under obstructions. High-strength, heat-treated steel is used in the primary wear areas.



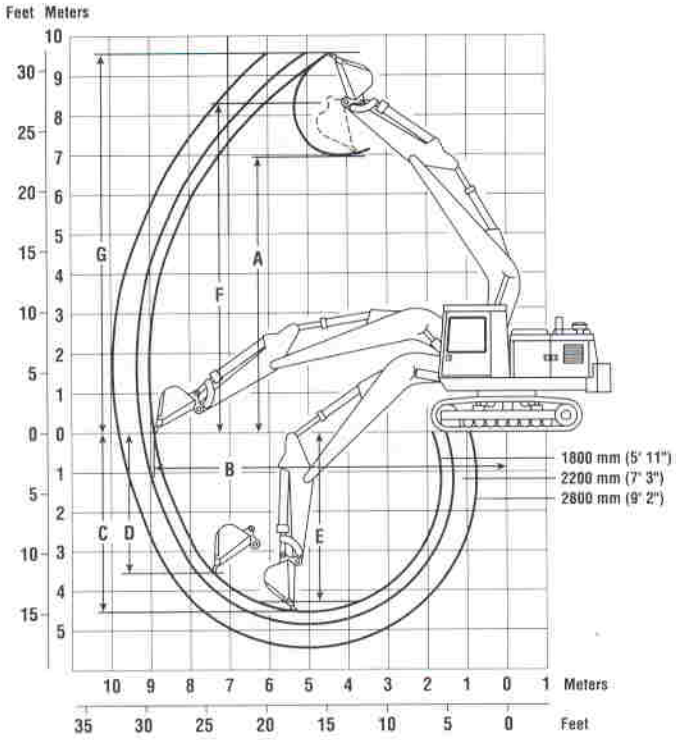
Bucket Selection
(equipped with long tips)

Type	A Bite Width mm/in.	B Tip Radius mm/in.	SAE Heaped liter/yd³	Bucket Force kN/lbs	Weight With Tips kg/lb	Number of Teeth
T	625/**24.6**	1450/**57**	447/**0.6**	106/**23,800**	460/**1,015**	3
T*	775/**30.5**	1450/**57**	601/**0.8**	106/**23,800**	540/**1,190**	4
T*	925/**36.5**	1450/**57**	761/**1.0**	106/**23,800**	606/**1,335**	5
X*	1075/**42.5**	1350/**53.2**	765/**1.0**	113.5/**25,500**	615/**1,350**	5
EX*	1096/**43**	1377/**54.2**	779/**1.0**	111.3/**25,000**	771/**1,700**	5
X*	1225/**48.3**	1350/**53.2**	902/**1.2**	113.5/**25,500**	684/**1,500**	6
X*	1375/**54.2**	1350/**53.2**	1038/**1.4**	113.5/**25,500**	737/**1,625**	6

T = Trenching, EX = Extreme Service Excavation and X = Excavation.
*Also available in VERSA-LINK Quick Coupling System version.

SPECIFICATIONS

219D and 219D LC Digging Envelope, One-Piece Boom



		Stick Length		
		1800 mm/ 5'11"	2200 mm/ 7'3"	2800 mm/ 9'2"
A Maximum loading height bucket with teeth	mm	6940	7090	7510
	ft. in.	22'9"	23'3"	24'8"
B Maximum reach at ground level	mm	8850	9170	9750
	ft. in.	29'0"	30'1"	32'0"
C Maximum digging depth	mm	4530	4930	5530
	ft. in.	14'10"	16'2"	18'2"
D Maximum vertical wall digging depth	mm	3550	4080	4600
	ft. in.	11'8"	13'5"	15'1"
E Maximum depth of cut for 2440 mm/8' level bottom	mm	4280	47100	5350
	ft. in.	14'1"	15'5"	17'7"
F Maximum bucket hinge pin height	mm	8300	8440	8860
	ft. in.	27'3"	27'8"	29'1"
G Maximum height to bucket teeth at highest arc	mm	9570	9690	10 100
	ft. in.	31'5"	31'9"	33'2"
Stick forces	kN	110.8	98.0	83.3
	lb	24,890	22,030	18,750

Lift Capacities

STICK -- 2200 mm/**7'3"**
BUCKET -- 1075 mm/**42"**
BOOM -- ONE-PIECE
SHOE -- 550 mm/**22"**
UNDERCARRIAGE -- 4420 mm/**14'6"**
HEAVY LIFT CIRCUIT-- Activated

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 FRONT	OVER SIDE	OVER FRONT	OVER SIDE	OVER FRONT	OVER SIDE	OVER FRONT	OVER SIDE	OVER FRONT	OVER SIDE
6.0 m **20.0 ft**	kg **lb**			*4850	*4850	*4330 ***9500**	*4330 ***9500**			*3690 ***8200**	2990 **6700**
4.5 m **15.0 ft**	kg **lb**	*8110	*8110	*5720 ***12,300**	*5720 ***12,300**	*4650 ***10,100**	*4650 ***10,100**	*4090 ***8900**	3240 **6900**	*3620 ***8000**	2530 **5600**
3.0 m **10.0 ft**	kg **lb**			*7010 ***15,100**	*7010 ***15,100**	*5190 ***11,200**	4570 **9800**	*4260 ***9300**	3170 **6800**	*3580 ***7900**	2320 **5100**
1.5 m **5.0 ft**	kg **lb**			*8020 ***17,300**	6610 **14,200**	*5680 ***12,300**	4340 **9300**	*4450 ***9600**	3070 **6600**	*3550 ***7800**	2270 **5000**
Ground Line	kg **lb**			*8210 ***17,800**	6330 **13,600**	*5880 ***12,700**	4170 **9000**	*4480 ***9700**	2980 **6400**	*3480 ***7700**	2380 **5200**
-1.5 m **-5.0 ft**	kg **lb**	*5690 ***13,100**	*5690 ***13,100**	*7700 ***16,700**	6270 **13,500**	*5640 ***12,200**	4090 **8800**	*4090 ***8700**	2950 **6400**	*3290 ***7200**	2700 **6000**
-3.0 m **-10.0 ft**	kg **lb**			*6510 ***14,000**	6330 **13,600**	*4730 ***10,100**	4120 **8900**				

STICK -- 2800 mm/**9'2"**
BUCKET -- 1075 mm/**42"**
BOOM -- ONE-PIECE
SHOE -- 550 mm/**22"**
UNDERCARRIAGE -- 4420 mm/**14'6"**
HEAVY LIFT CIRCUIT -- Activated

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 FRONT	OVER SIDE	OVER FRONT	OVER SIDE	OVER FRONT	OVER SIDE	OVER FRONT	OVER SIDE	OVER FRONT	OVER SIDE
6.0 m **20.0 ft**	kg **lb**					*3830 ***8400**	*3830 ***8400**	*3660 ***8100**	3260 **6900**	*2940 ***6500**	2580 **5800**
4.5 m **15.0 ft**	kg **lb**			*5010 ***10,800**	*5010 ***10,800**	*4190 ***9100**	*4190 ***9100**	*3720 ***8100**	3250 **7000**	*2890 ***6400**	2210 **4900**
3.0 m **10.0 ft**	kg **lb**			*6320 ***13,600**	*6320 ***13,600**	*4780 ***10,300**	4580 **9800**	*3970 ***8600**	3150 **6800**	*2950 ***6500**	2030 **4500**
1.5 m **5.0 ft**	kg **lb**			*7540 ***16,200**	6660 **14,300**	*5360 ***11,600**	4310 **9300**	*4230 ***9200**	3020 **6500**	*3100 ***6800**	1990 **4400**
Ground Line	kg **lb**			*8070 ***17,400**	6280 **13,500**	*5700 ***12,300**	4100 **8800**	*4370 ***9400**	2910 **6300**	*3160 ***7000**	2060 **4500**
-1.5 m **-5.0 ft**	kg **lb**	*5480 ***12,600**	*5480 ***12,600**	*7860 ***17,000**	6130 **13,200**	*5650 ***12,200**	3980 **8600**	*4230 ***9100**	2850 **6100**	*3050 ***6700**	2300 **5100**
-3.0 m **-10.0 ft**	kg **lb**	*9810 ***21,200**	*9810 **21,200**	*6970 ***15,000**	6150 **13,200**	*5070 ***10,900**	3970 **8500**	*3410	2870	*2720 ***5900**	*2720 ***5900**
-4.5 m **-15.0 ft**	kg **lb**			*5170	*5170						

*Indicates the load is limited by hydraulic capacity rather than tipping capacity. Lift capacity ratings are based on SAE Standard J1097. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity.

Benefits Summary

104.4 kW/140Hp Cat Turbocharged Diesel Engine ... provides fast cycles and high productivity. A tough, durable engine ... field-proven in many applications.

Automatic Engine Speed Control is standard ... Electronic governor control system automatically selects one of three engine RPM settings, according to load ... contributes up to 20% fuel savings.

High 310 bar/4,495 psi hydraulic working pressure ... for aggressive digging capability when working in tough ground conditions.

New-design track rollers specifically for excavators ... deliver maximum durability in high impact applications.

Constant-horsepower hydraulic system ... with variable-displacement piston pumps and hydraulic power proportioning, coupled to Cat's XT-5 hose, makes the 219D and 219D LC fuel efficient and very reliable.

Human-engineered cab ... the sound-suppressed cab features heavy duty construction with 11-gauge sheet steel and a box-section frame. The 926 mm/**36"** inside cab width provides extra room for shift-long operator comfort. The 219D and 219D LCs' two-section windshield adjusts to five different visibility/ventilation combinations to maximize operator comfort and productivity. It has tinted safety glass in the upper window and clear, tempered safety glass in the lower window. Tinted side and rear windows enhance visibility. The four-way adjustable seat has joysticks and switches mounted on side consoles, placing the controls within comfortable reach. An angled gauge panel allows the operator to monitor selected machine systems with a glance. A cab heater is standard.

Controls respond smoothly and easily for precise work ... boosted by a hydraulic-over-hydraulic pilot system for easy, well-modulated lever movement. Prevents surges common to air-over-hydraulic controls, and reduces high lever efforts common to mechanically controlled systems.

Track-type undercarriage designed and built by Caterpillar, the world's most experienced manufacturer of track-type vehicles ... delivers rugged performance and long life with a minimum of undercarriage service. Outstanding drawbar pull helps the 219D and 219D LC maneuver and travel in poor underfoot conditions and on steep slopes. Track pins and bushings are sealed with metal-to-metal discs ... the rollers and idlers, with Caterpillar's Duo-Cone Seals. Hydraulic track adjusters and heavy duty recoil springs are standard equipment. The track roller frames use box-beam construction. Bolt-on track shoes are available in several widths.

Powerful, dependable hydraulic components ... deliver high flows for rapid lift, swing and dump functions or high pressure for maximum digging forces. Major components are Cat turbocharged 3304 Engine; twin, variable-displacement piston pumps; single-section, fixed-displacement, gear pump; piston-type track motors; Cat's XT-5 hose and couplings; heavy steel tubing and pilot control valves; Cat hydraulic cylinders; and hydraulic tank.

Remote, centralized grease fittings ... allow easy lubrication of hard-to-reach lube points.

CATERPILLAR®

AEHQ8958 (9-89)
(Replaces AEHQ4492)

Printed in U.S.A