



# 245D 245D LC

## EXCAVATORS

- **Fuel-efficient, powerful 3406B Engine** for maximum productivity.
- **Optional PRELUB™** prelubrication system automatically fills oil filters and galleys (prior to cranking) to protect key engine and starter parts from wear caused by engine dry starts.
- **Available in standard excavator, mass excavator, front shovel and trencher configurations** to match specific job requirements.
- **Rugged Caterpillar® undercarriage** — designed and built by the world's leading producer of track-type machinery.
- **Reliable/durable** — built to withstand severe working conditions.
- **Total Customer Support** — superior support that continues after the sale...unmatched in the industry!

Cat® 3406B Engine .....	287 kW/385 HP
<b>Operating Weights:</b>	
Standard Excavator .....	67 940 kg/149,800 lb
<b>Trenchers:</b>	
Heavy Lift.....	73 950 kg/163,030 lb
Deep Trencher .....	75 000 kg/165,340 lb
Mass Excavator.....	65 440 kg/145,080 lb
<b>Front Shovel:</b>	
Front Dump Bucket.....	65 950 kg/146,820 lb
Bottom Dump Bucket .....	68 130 kg/151,610 lb
<b>Bucket Capacities:</b>	
Standard Excavator .....	1.9 to 5.1 m <sup>3</sup> / 2.50 to 6.75 yd <sup>3</sup>
Trenchers.....	1.9 to 3.3 m <sup>3</sup> / 2.50 to 4.25 yd <sup>3</sup>
Mass Excavator.....	3.8 to 5.1 m <sup>3</sup> / 5.00 to 6.75 yd <sup>3</sup>
Front Shovel.....	3.1 to 3.8 m <sup>3</sup> / 4.0 to 5.0 yd <sup>3</sup>

Featured machines may include additional equipment applicable only for special applications. See your authorized Caterpillar dealer for available options. Prelube is a trademark of RPM Industries.



# FEATURES

## Five Versatile Arrangements

Excavators with the versatility and performance to handle almost any job.

■ **Five application-specific arrangements** available to match job requirements and maximize productivity.

- Standard Excavator.
- Heavy Lift Trencher.
- Deep Trencher.
- Mass Excavator.
- Front Shovel.

■ **Optional wide-gauge carbody** provides the 245D with one of the widest working platforms in its size class.

■ **Optional long undercarriage** extends tracks to provide optimized lifting platform.

■ **Wide selection of attachments** for maximum versatility.

- Six standard excavator and trencher buckets.
- Three mass excavator buckets.
- Two front shovel buckets.
- Three booms, four sticks for the standard excavator and trenchers.

■ **The 245D/245D LC Deep Trencher** is designed for applications which require extended reach, deeper digging depths with stability and flotation. Large counterweight provides stability when handling large loads. Longer stroke stick cylinder for enhanced digging envelope and low shipping height. (Top photo)



■ **The 245D/245D LC Heavy Lift Trencher** with standard undercarriage provides up to 27% greater lifting capacity than the general purpose excavator. It is designed for those applications where maximum lifting performance is the primary concern.





- **Cat's 245D Front Shovel** features parallelogram-type front linkage which keeps the bucket parallel to the ground. This allows excellent penetration, fast loading and smooth floor clean-up. The master cylinder circuit automatically maintains a level bucket while raising the boom, eliminating constant adjustment during the work cycle.

- **Cat's 245D Mass Excavator** moves material faster and more efficiently than standard excavators. Its boom is shorter, straighter and heavier which allows it to handle large bucket loads without bending and twisting. It has excellent breakout force and superior stability for loading large trucks.



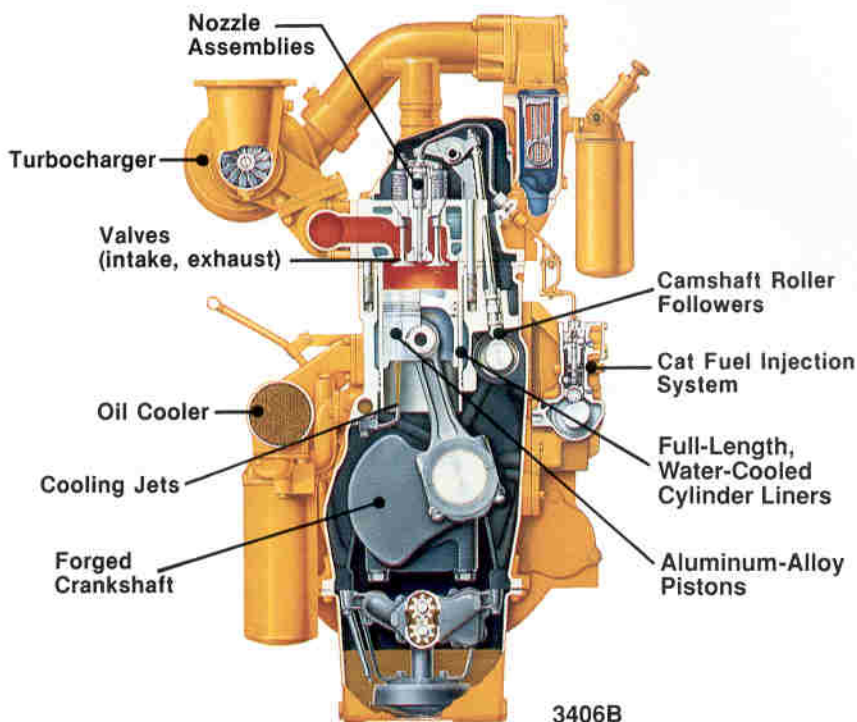
- **The 245D Standard Excavator** provides excellent performance, reliability, durability and resale value. It meets the widest cross section of excavator applications from truck loading to trenching with a wide range of work tools.

# FEATURES

## Cat 3406B Engine

Reliable...dependable...efficient.

- **Cat 3406B direct-injection, turbocharged and aftercooled engine** provides dependable, fuel-efficient power.
- **Optional PRELUB system** automatically fills oil filters and galleries prior to cranking the engine.
  - Minimizes wear on engine and starter components, particularly in extremely hot or cold conditions.
  - Fast, easy refill of filters and galleries following routine oil changes.
- **Crankshaft uses wide connecting rod bearings** designed to withstand increased loading.
- **New gallery-cooled pistons** for efficient dissipation of heat and increased lubrication.
- **Four-stroke-cycle design** provides long, effective power strokes for more complete fuel combustion.
- **High displacement, low 1800 RPM rating** for better fuel efficiency, long service life and low maintenance costs.
- **Turbocharged and jacket-water aftercooled** for power and optimum fuel 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.
  - Automatically returns engine to original operating RPM when joysticks or travel controls are actuated...no resetting necessary.
- **Steel-backed, copper-bonded bearing** for long main bearing service life.
- **High-pressure 103 425 kPa/ 15,000 psi direct-injection fuel system** — precision injection timing, excellent fuel atomization for more complete combustion and maximum fuel efficiency.
- **Exchange and remanufactured components** reduce parts costs, downtime.
  - Warranted the same as new products.
  - Assembled, tested and ready to install.



## Hydraulic System

Variable-flow, high-pressure system delivers the proper flow/pressure balance, according to work cycle requirements.

### ■ Four-pump system for superior multi-function operation.

- Twin, variable-displacement, axial-piston pumps power the implement and track circuits.
- Dedicated, variable-displacement pump drives swing mechanism.
- Single-section gear pump powers the pilot circuit.

### ■ Valve combines pump flows for single functions when raising the boom and extending the stick...for faster cycle times and greater productivity.

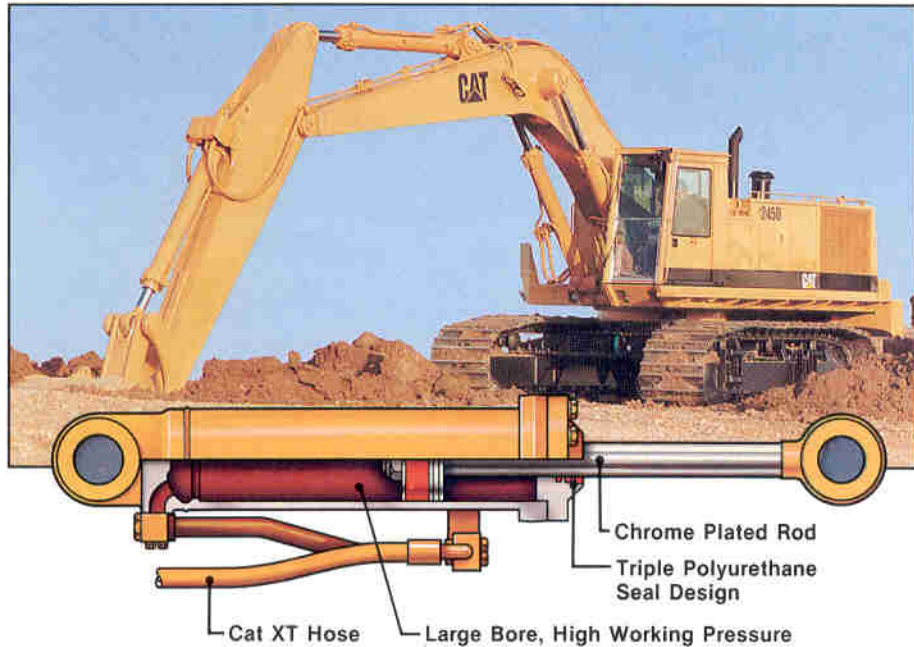
### ■ Heavy lift circuit increases lift capacity, allows precise implement control while handling heavy loads.

### ■ Implement hydraulic cylinders.

- Constructed of seamless steel tubing and honed to fine tolerances.
- Precision-ground, hardened, chrome-plated rods.
- Triple polyurethane sealing unit guards against contaminants and leaks.
- Spherical bearings on all cylinders for durability and long service life.

### ■ Oil-to-air cooler provides efficient heat rejection and excellent hydraulic system protection.

### ■ Caterpillar variable-flow piston pumps provide improved center bearing, drive block and sealing. The pump automatically converts engine horsepower into high tool forces when digging tough materials, or faster speeds during easier parts of the work cycle.



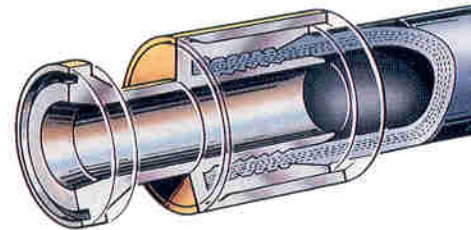
### ■ Caterpillar's XT Hose is designed and built to exacting tolerances to meet the critical strength and flexibility demands of today's hard-working hydraulic systems. Layers of high-tensile strength spiral wound steel wire — easily withstand thousands of pounds of pressure at maximum impulse cycles for increased hose life.

### ■ Reusable Couplings: These couplings are reusable so you save the cost of coupling replacement. You're always sure of having the right coupling when you replace hose.

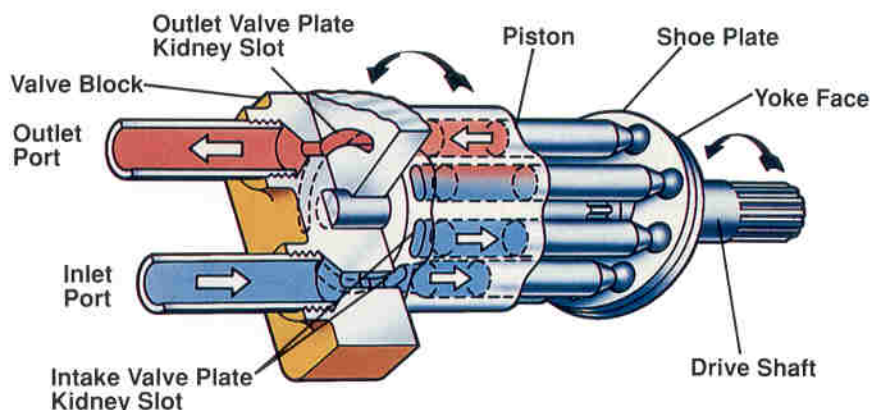
#### Caterpillar's XT Hose



#### Reusable Couplings



#### Variable-flow Piston Pump

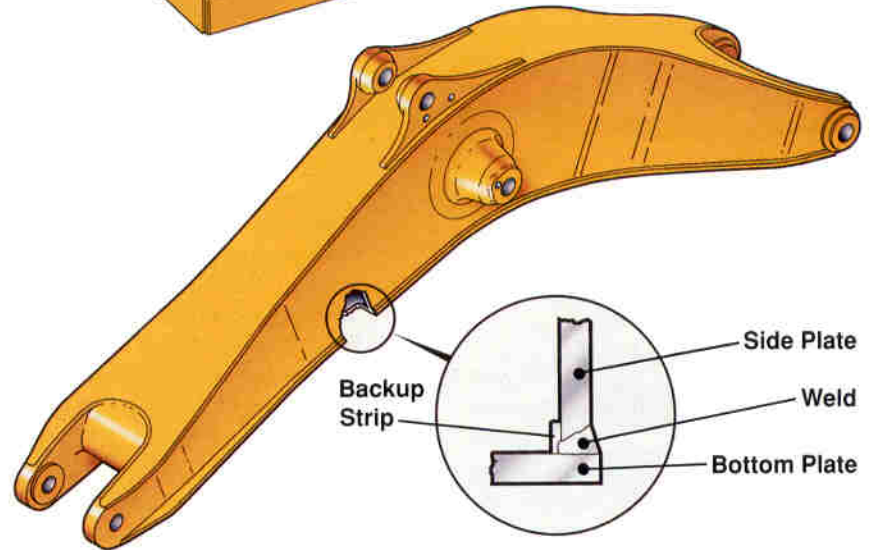
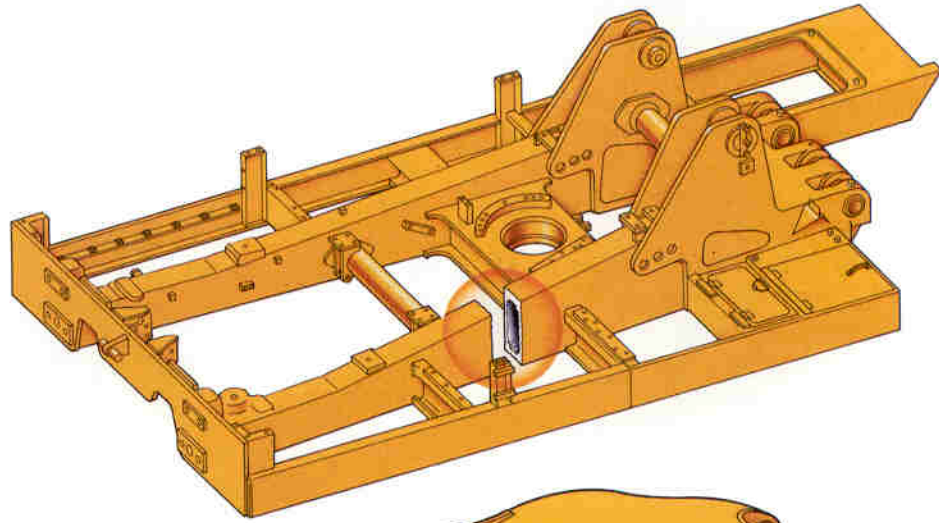


## Structure

Built to withstand the toughest working conditions.

■ **The 245D/245D LC Excavator main frame** has a heavier boom tower plate, stronger swing bearing mounts and is reinforced behind the swing bearing to better accommodate its 10 450 kg/**23,000 lb** counter-weight.

- Two outside channel beams and channel cross beams support the operator's platform and hydraulic componentry.
- Two long, box-section beams form the backbone of the main frame, bearing the weight of the boom and swing drive mounting.
- Boom cylinder pivots are castings, built onto the boom to spread out loading stresses.
- All pivot points have sealed linkage to reduce maintenance.
- 10 450 kg/**23,000 lb** counter-weight increases lifting capacity.



■ **Caterpillar® Excavator boom and stick** are built for performance and long life. Box-beam boom and stick construction provides excellent implement service life.

- Continuous top and bottom plates from the base to the stick pivot casting eliminate transverse welds.
- This welded structure provides long service in tough digging applications.

■ **Stress-relieving of booms and sticks** realigns the grain of the metal after welding.

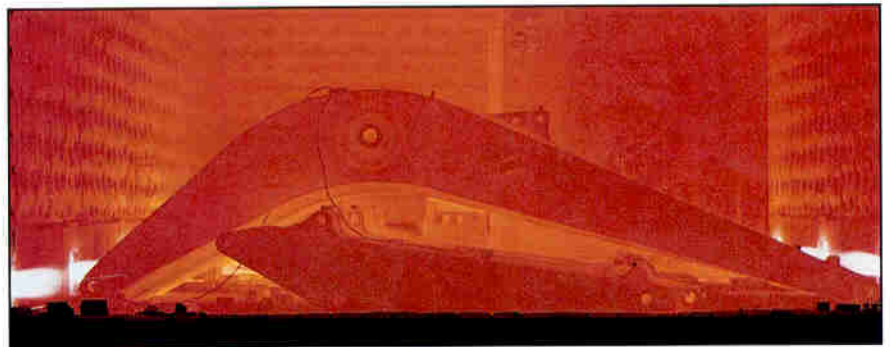
- This process creates a strong, efficient front structure without the need to design in excessive weight.
- Structural fatigue testing assures built-in reliability.

■ **Backup strips** are used on the inside corners of the welded box beam.

- Backup strip allows complete weld penetration, producing a joint with superior strength.

• Backup strip design greatly reduces stress concentration at the corner welds.

- Provides increased strength at this critical point and longer boom life.

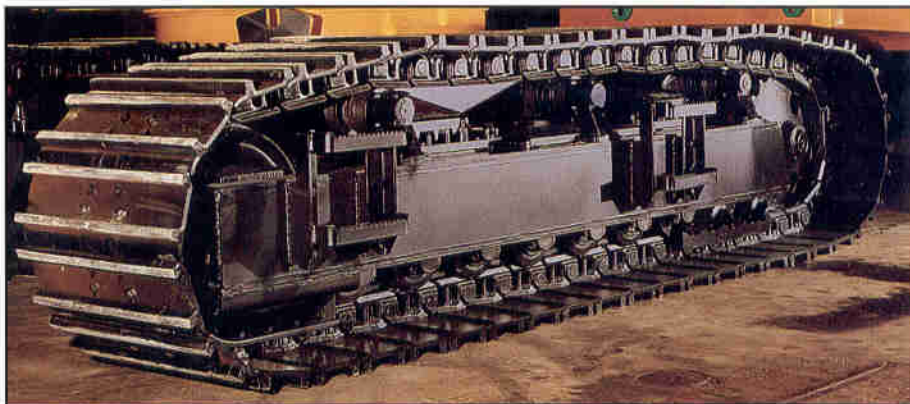




## Track-Type Undercarriage

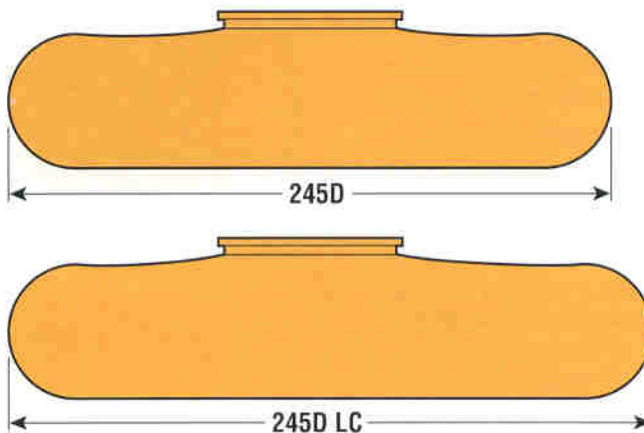
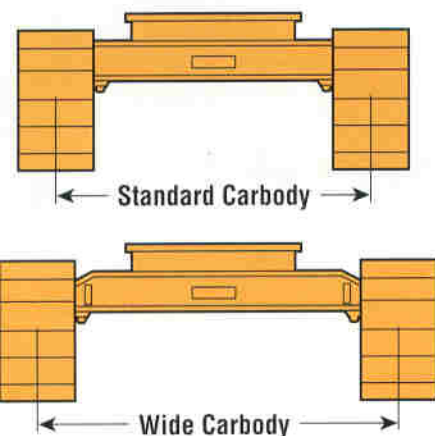
Rugged undercarriage designed and built by Caterpillar, the world's leading producer of track-type undercarriage!

- **Large D9H-size Sealed Track on box-section track roller frames** provide maximum rigidity and resistance to bending to handle load stresses encountered by the machine.
- **Lifetime Lubricated rollers and idlers.**
  - Track rollers are designed specifically for excavator applications to provide longer service life.
- **Independent track motors** deliver smooth, stepless power to tracks and allow counter-rotation for spot turns and maneuvering in tight quarters.



- **Oil-disc brakes on final drive** input shafts hold machine steady during work cycle.
  - Automatically apply after travel controls are in neutral.
  - Automatically released when travel controls are activated.

### Undercarriage Options



- **Variable track gauge:**
  - Reduces excavator transporting width when retracted.
  - Allows installation of extra wide track shoes for greater machine flotation in soft underfoot conditions.
  - Provides increased lifting capacity over the side when extended.
  - Variable track gauge is available with either standard or LC undercarriage.
- **Optional wide gauge carbody version** available for improved lift capacity over the side and easy turning.
- **LC (long) undercarriage option** provides exceptional machine stability when lifting heavy loads over front and rear.
  - LC undercarriage has one additional track roller on each side of the machine and increased overall track length.
- More track on the ground also means lower machine ground pressure, increased flotation — the key to performance in soft underfooting.
- Track extension is on the idler end of the undercarriage for optimum lifting capacity over the front of the machine.

# FEATURES

## Operator's Station

Excellent visibility and logical, convenient control placement for fast, confident machine operation.

- **Sound-suppressed cab** with 926 mm/36.5" wide inside dimension for greater operator comfort.
- **Cat cab is a welded unit** using 3 mm/0.120" thick sheet metal with box-section steel support frames, providing structural integrity.
- **The cab allows easy Falling Object Guard Structure (FOGS) installation** by bolting on an overhead guard.
- **A well-sealed door with full-height hinge** provides full-length support which can be realigned.
- **Wide catwalk and hand holds** aid entry and exit.
- **Pilot-operated controls** allow easy, well-modulated lever movement without surging or high lever efforts.
- **Optional cab heater or heater/air conditioner** circulates fresh, temperature-controlled air through the cab for shift-long operator comfort.
- **Two-section windshield** adjusts five ways for different visibility/ventilation combinations...enhances visibility and operator comfort.
- **Large side window, sliding rear window and skylight** provide excellent, all-around visibility for confident machine operation.
- **Joysticks and switches** are mounted on adjustable side consoles, attached to the four-way adjustable seat.
  - The joystick controls move with the seat during height adjustment.

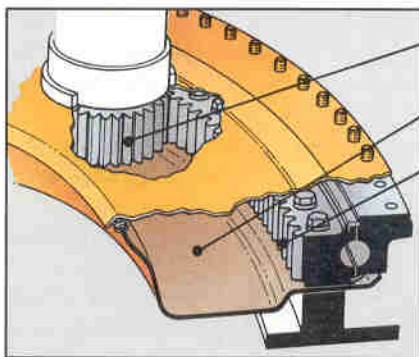




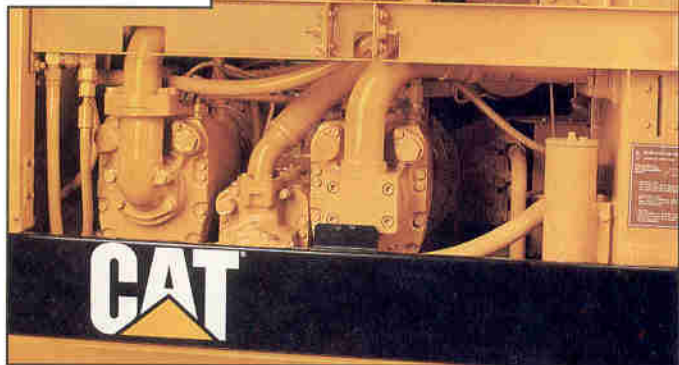
## Service

Simplified servicing requires less time on maintenance, allows more time in production.

- **Self-lubricating swing gear** rides in an enclosed lubrication trough.
  - Contaminants are sealed out; lubricant is held in.
  - No hand greasing.
- **Swing bearing** is greased every 50 service meter hours through fitting conveniently located in cab.
- **Easy accessible lube points** allow quick servicing.
- **Standard hydraulic track adjusters** require only a grease gun for track tension adjustments.
- **Radiator, engine oil and hydraulic fluid levels** are checked from convenient walkway.
- **Linkage pins have lip-type seals** to keep grit out and grease in.

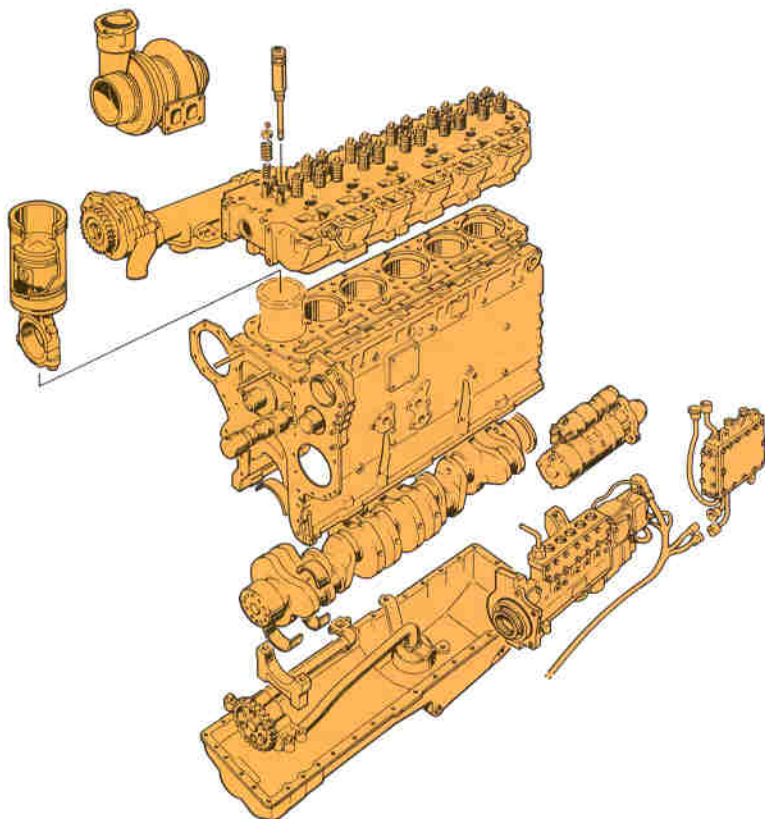


Swing Drive Pinion  
Lubrication Trough  
Ring Gear



## Cat Remanufactured Engines...lower repair costs...optimize life cycle repairs.

- **Cat Remanufactured Engine** delivers the quality and reliability you need for top performance.
  - All engines are dynamometer tested to new engine specifications and available off-the-shelf from your nearest Cat parts and service location.
  - Engines fully assembled, ready to install.
  - No downtime for rebuilding. Get back to work fast.
- **Caterpillar Remanufactured cylinder heads, unit injectors, oil pumps, connecting rods, crankshafts, turbochargers, water pumps and starters** available for fast, economical repairs.
  - Remanufactured cylinder packs are available preassembled with the connected rod, liner, piston, rings, wrist pin retainers and seals — ready to drop in the block as a unit.
- **All Cat Remanufactured components** carry same-as-new warranty.





# SPECIFICATIONS

## Caterpillar Engine

Flywheel power at 1800 RPM .....287 kW/**385 HP**  
(Kilowatts (kW) is the International System of Units equivalent of horsepower.)

*Net power at the flywheel of the vehicle engine based on SAE J1349 standard conditions 25°C/77°F and 100 kPa/29.61" Hg. Power is based on using 35° API (15.6°C/60°F) gravity fuel oil and after deductions for fan, air cleaner, water pump, fuel pump, muffler, and alternator. No derating required up to 2300 m / 7,500 ft. altitude.*

These additional ratings also apply at 2100 RPM:

	kW	HP
ISO 1585.....	287	<b>385</b>
ISO 3046-1.....	266.0	<b>356.6</b>
EEC 80/1269.....	268.5	<b>360</b>

Caterpillar four-stroke-cycle, 3406B turbocharged and aftercooled, diesel Engine with six cylinders, 137 mm/5.4" bore, 165 mm/6.5" stroke and 14.6 liters/893 in<sup>3</sup> displacement.

Direct-injection, Caterpillar fuel system with adjustment-free pumps and valves. Fuel system has variable timing. Parallel manifold porting with two intake and two exhaust valves per cylinder. Stellite-faced exhaust valves; hard, alloy-steel seats; valve rotators. Push-rod valve mechanism with two rocker arms per cylinder.

Cam-turned and tapered, aluminum-alloy pistons have three rings each and cooled by oil spray. Steel-backed, copper-bonded aluminum bearings. Hardened crankshaft journals.

Direct-electric, 24-volt starting system with ether starting aid. Ether canister not included.

Standard 50-amp alternator.

## Swing Mechanism

Variable-displacement piston pump powers swing circuit. Automatic servo system regulates pump flow according to swing requirements — provides low flow rate for maximum swing torque — high flow rate for maximum swing speed. Fixed-displacement, axial-piston motor powers swing drive. Triple-reduction, spur-gear swing drive has carburized drive gears. Manually applied, shoe-type brake on swing drive case holds upperstructure steady on slopes. Smooth, modulated deceleration when swing control levers released allows accurate positioning for next work cycle. Hydraulic motor provides maximum torque at stall of 19 580 kg/m/141,600 lb/ft. Swing speed is 6.3 RPM.

## Hydraulic System

Four-pump system. Two Caterpillar variable-displacement piston pumps power the boom, stick, bucket and travel circuits. One variable-displacement piston pump powers the swing circuit. A single-section gear pump powers the pilot-control circuit.

Power output to boom, stick, bucket and travel circuits at rated engine RPM and 6897 kPa/68.9 bar/**1,000 psi**:

Maximum flow .....2 x 450 liters/min/**2 x 119 GPM**  
Power output to swing circuit at rated engine RPM and 6897 kPa/68.9 bar/**1,000 psi**:

Maximum flow .....280 liters/min/**74 GPM**  
Power output to pilot-control circuit at rated engine RPM and 1724 kPa/17.2 bar/**250 psi**:

Maximum flow .....63 liters/min/**16.6 GPM**

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

### Relief valve settings:

Implement circuits .....31 720 kPa/317 bar/**4,600 psi**  
Travel circuits .....31 720 kPa/317 bar/**4,600 psi**  
Swing circuit

Accelerating .....31 030 kPa/310 bar/**4,500 psi**

Decelerating .....21 360 kPa/214 bar/**3,100 psi**

Pilot circuit .....2310 kPa/23.1 bar/**335 psi**

Heavy lift (optional on standard excavator)....34 500 kPa/345 bar/**5,000 psi**

### Cylinders, bore and stroke:

Standard Excavator:

Boom (2) .....184 x 1623 mm/**7.25" x 63.9"**

Stick (1) .....210 x 1740 mm/**8.25" x 68.5"**

Bucket (1) .....190 x 1640 mm/**7.5" x 64.5"**

Trenchers:

Boom (2) .....210 x 1600 mm/**8.25" x 63.0"**

Stick (1)

Cat Sticks .....210 x 1854 mm/**8.25" x 73.5"**

Weldco Sticks .....210 x 1994 mm/**8.25" x 78.5"**

Bucket (1) .....178 x 1640 mm/**7.0" x 64.5"**

Mass Excavator:

Boom (2) .....184 x 1623 mm/**7.25" x 63.9"**

Stick (1) .....210 x 1740 mm/**8.25" x 68.5"**

Bucket (1) .....197 x 1638 mm/**7.75" x 64.5"**

Front Shovel:

Boom (2) .....178 x 1080 mm/**7.0" x 42.5"**

Stick (1) .....210 x 1740 mm/**8.25" x 68.5"**

Bucket (2) .....178 x 1490 mm/**7.0" x 58.7"**

Master (1) .....152 x 1140 mm/**6.0" x 45"**

Three abrasion-resistant, polyurethane seals work as a system to seal the rod end of each cylinder.





## Drive

Fully hydrostatic. Each track is driven by an independent track motor. With idlers in front, the right travel pedal gives forward movement; the left, reverse. Triple-reduction, spur-gear final drives are fully enclosed and splash lubricated. Duo-Cone Seals are used on the output shafts.

Maximum drawbar pull ....436 kN/44 480 kg/**97,970 lb**  
 Maximum travel speed .....3.17 km/h/**1.97 MPH**



## Track

Caterpillar designed and built track-type (D9H) undercarriage. Reinforced, box-section track roller frame with hydraulic track adjuster and Lifetime Lubricated rollers and idlers. Idler-end, track guiding guards are standard. Sealed Track with double grouser shoes. Variable-gauge track has two positions. When retracted, it reduces shipping width. When extended 406 mm/16", it improves stability over the side.

Number of shoes, each side.....45

### Width of standard shoe:

Standard and Mass Excavator.....760 mm/30"  
 Trencher .....760 mm/30"  
 Trencher LC .....910 mm/36"  
 Front Shovel.....610 mm/24"

### Overall track length:

Standard, Mass, Front Shovel and  
 Trencher Excavators.....5613 mm/18'5"  
 Trencher LC .....5994 mm/19'8"

### Ground contact area with standard shoes:

Standard and Mass Excavator .....7.4 m<sup>2</sup>/**11,415 in<sup>2</sup>**  
 Trencher .....7.4 m<sup>2</sup>/**11,415 in<sup>2</sup>**  
 Trencher LC.....9.5 m<sup>2</sup>/**14,800 in<sup>2</sup>**  
 Front Shovel .....5.89 m<sup>2</sup>/**9,132 in<sup>2</sup>**

### Track gauge:

	<b>Extended</b>	<b>Retracted</b>
Standard carbody ....	3251 mm/10'8"	2844 mm/9'4"
Wide carbody.....	3759 mm/12'4"	3352 mm/11'0"

### Overall track width:

610 mm/24" shoe —  
 Standard gauge.....3861 mm/12'8" 3454 mm/11'4"  
 Wide gauge..... 4369 mm/14'4" 3962 mm/13'0"  
 Standard 760 mm/30" shoe —  
 Standard gauge.....4013 mm/13'2" 3606 mm/11'10"  
 Wide gauge ..... 5842 mm/14'10" 4115 mm/13'6"  
 910 mm/36" shoe —  
 Standard gauge.....4166 mm/13'8" 3759 mm/12'4"  
 Wide gauge..... 4674 mm/15'4" 4267 mm/14'0"



## Brakes

Two oil-disc brakes on final drive input shafts. Spring-applied, hydraulically released. Brakes automatically set when machine is stationary. Brakes disengaged by depressing either travel pedal.



## Steering

A lever between the travel pedals provides gradual turns, pivot and counter-rotation steering. (1) Depress the forward or reverse pedal and move 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 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

	<b>Liters</b>	<b>U.S. Gallons</b>
Fuel Tank .....	675	180
Cooling System.....	77.6	20.5
Lubrication:		
Engine oil.....	46.5	12.3
Pump drive .....	5	1.3
Swing drive.....	44.5	11.7
Final drive (each).....	60.5	16.0
Hydraulic System (includes tank).....	729	193
Hydraulic Tank .....	403	106



## Controls

Two joystick hand levers actuate boom, stick, bucket and swing. (SAE pattern)

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

**Left lever:** Move forward and backward to control stick movement. Move left and right to control swing direction.

Oblique movement of either lever operates two functions simultaneously. Flow from both piston pumps automatically combine to increase boom-raise speed. Manually applied lever on the left console completely neutralizes the implement and travel controls.

## Standard Equipment

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

Air conditioner with heater.  
All-weather cab.  
Alternator, 50-amp.  
Automatic Engine Speed Control.  
Basic machine working lights.  
Cigar lighter.  
Counterweight  
10 450 kg/**23,000 lb.**  
Defroster fan.  
Dome and dash lights.  
Dry-type air cleaner and pre-cleaner.  
Dual windshield wipers with washer.  
Electric clock hour meter.  
Electric horns, front and rear.  
Electronic Monitoring System (EMS).  
Ether starting aid.  
Floor mat.  
Hydraulic track adjusters.  
Idle end track guiding guard.

Instrumentation:  
Air filter service indicator.  
Coolant temperature warning light.  
Engine oil pressure warning light.  
Flashing warning light.  
Fuel gauge.  
Hydraulic oil filter service light.  
Hydraulic oil temperature gauge.  
Low hydraulic oil level light.  
Low voltage warning.  
Lifetime Lubricated roller and idlers.  
Lockable house and cab.  
Mirrors, rearview.  
Muffler.  
Sealed linkage pins.  
Sealed Track — see configuration charts on pages 16 and 17.  
Seat belts.  
Seat, four-way, adjustable, with armrests and side consoles.  
Skylight, non-opening.

Sliding rear window with friction lock.  
Tinted LEXAN sheet in all windows (except windshield).  
Tool compartment.  
Tow eyes, front and rear.  
Travel Alarm.  
Walkway and handrails.  
Windshield, two-section with tinted, laminated glass in top; clear, laminated glass in bottom.

### Mass Excavator

Backhoe stick.  
Boom, one piece.

### Front Shovel

Track guiding guards, full length.  
Lockable house and cab and non-opening skylight...Falling Object Guard.

## Optional Equipment

### Standard 245D, Mass Excavator,

#### Front Shovel and Trenchers

Counterweight removal device.  
Guards (hydraulic pump and lines, pilot line, swivel, track motor).  
PRELUB™ prelubrication system.  
Storage rack.  
Track shoes.  
Windshield vandalism guard.

### Standard 245D, Mass Excavator

Falling Object Guard.  
Full length track guiding guards.  
Heavy lift hydraulic circuit.  
Low temperature starting system.  
Tool kit.  
Suspension seat, tiltable.

### Standard 245D Excavator and Trenchers

Backhoe sticks — including bucket cylinders:  
2590 mm/**8'6"**.  
3200 mm/**10'6"**.  
4420 mm/**14'6"**.  
4877 mm/**16'0"**.

### Booms:

General  
Purpose.....7671 mm/**25'2"**  
Mass Excavator.....6477 mm/**21'3"**  
Front Shovel.....4343 mm/**14'3"**  
Heavy Lift  
Trencher .....7925 mm/**26'0"**  
Deep Trencher .....9525 mm/**31'3"**

### Bucket teeth:

short.  
long.  
penetration.  
wide.  
sharp.  
sharp corner.  
Cab heater.  
Cab ventilation fan.

### Check valves:

boom.  
stick.  
Cooling package, high ambient temperature.

### Mass Excavator

Auxiliary hydraulic system.  
Bucket tips.  
Mass excavation buckets.  
Mounted working lights.

### Front Shovel

Auxiliary AEM hydraulic outlets.  
Boom, one piece.  
Bucket side cutters.  
Buckets:  
Bottom dump.  
Front dump.  
Suspension seat.  
Stick.

### Mass Excavator and Front Shovel

610 mm/**24"** double grouser track shoes.  
910 mm/**36"** double grouser track shoes.



245D  
245D LC

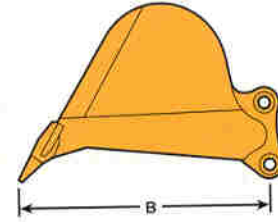
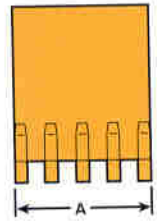


# SPECIFICATIONS

## Bucket Specifications\*

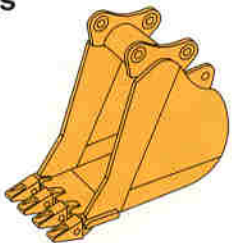
Caterpillar buckets curl 170° to 177° on the 245D Standard Excavator and Trenchers and 164° on the 245D Mass Excavator for excellent load retention and easy digging under obstructions.

Type	A		B		SAE Capacity		Weight With Tips		Number of Teeth
	Bite Width		Tip Radius		Capacity		Weight		
Standard Excavator and Trenchers	mm	in	mm	in	m <sup>3</sup>	yd <sup>3</sup>	kg	lb	
Trenching.....	1070	42	2306	90.8	1.9	2.50	1967	4,337	4
Extreme Service Trenching.....	1090	43	2310	90.9	1.9	2.50	2609	5,753	4
Excavation.....	1220	48	2225	87.6	2.0	2.62	1986	4,379	4
Excavation.....	1370	54	2225	87.6	2.4	3.12	2175	4,796	5
Excavation.....	1730	68	1916	76.6	2.6	3.50	2422	5,341	5
Excavation.....	2060	81	1916	75.1	3.3	4.25	2762	6,090	6
Rehandling**.....	2121	83.5	2010	79.0	3.8	5.00	2850	6,280	6
Rehandling***.....	2090	82	2320	91.5	5.1	6.75	2530	5,580	6
<b>Mass Excavator</b>									
Excavation.....	2121	83.5	2110	83	3.8	5.00	2965	6,540	6
Extreme Service ...	2137	84	2110	83	3.4	4.25	3300	7,270	6
Light Material .....	2090	82	2452	96.5	5.1	6.75	2386	5,850	6
<b>Front Shovel</b>									
Front Dump.....	2350	92.5	2475	97.45	3.8	5.0	4180	9,220	6
Bottom Dump.....	2350	92.5	2390	94.2	3.1	4.0	5620	12,400	6

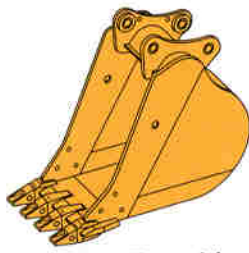


\* Buckets are equipped with long teeth and adapters.  
 \*\* Not recommended for material weighing more than 2,500 lb per yd<sup>3</sup>.  
 \*\*\* Not recommended for material weighing more than 2,000 lb per yd<sup>3</sup>.

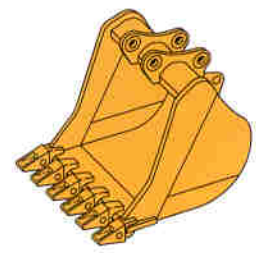
## Buckets



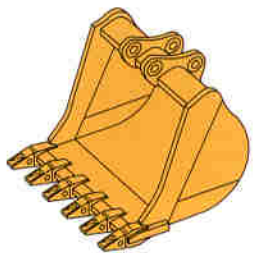
**Trenching Buckets**  
 Caterpillar's trenching buckets have profiles designed for optimum capacity and performance for given bite widths. Choose the proper bite width, according to pipe diameter.



**Extreme Service Trenching Bucket**  
 The extreme service trenching bucket is designed for tougher trenching applications where fragmented rock, frozen ground or caliche, etc., are encountered.



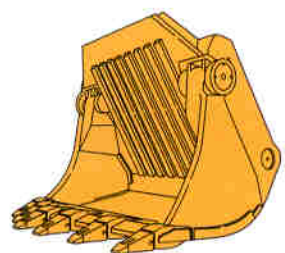
**Excavation Buckets**  
 Cat's excavation buckets are designed for volume truck loading. They feature shorter tip radii to maintain greater force and larger bite widths for easier loading and dumping.



**Light Material Excavation Bucket**  
 This bucket design provides larger bucket capacity for excavating and loading easy-to-dig, light materials. This bucket also can be used for finishing and clean-up work.



**Front Dump Bucket**  
 This bucket, with strong and simple design, is the best choice for production loading of off-highway trucks. It can also be used for finishing and clean-up work.



**Bottom Dump Bucket**  
 This bucket provides both quick, clean dumping action and increased loading height when loading off-highway trucks. Controlled dumping action places loads accurately with minimal damage to truck bodies.



## Bucket and Stick Forces

Standard Excavator and Trenchers														
Stick Bucket Type	Bucket Curling Forces		Stick Crowd Forces											
			Standard 245 with Cat Sticks						Trenchers					
			2590 mm/8'6"		3200 mm/10'6"		4420 mm/14'6"		Cat 4420 mm/14'6"		Weldco 4420 mm/14'6"		Weldco 4877 mm/16'0"	
kN	lb	kN	lb	kN	lb	kN	lb	kN	lb	kN	lb	kN	lb	
Trenching*														
1070 mm/42"	242.3	54,450	255.6	57,430	226.3	50,860	185.5	41,690	191.7	43,080	209.2	47,000	195.7	43,980
Extreme Service Trenching*														
1090 mm/43"	240.0	53,910	255.4	57,390	226.2	50,830	185.4	41,670	191.6	43,080	209.0	46,970	195.6	43,980
Excavation**														
1220 mm/48"	251.2	56,450	260.0	58,420	229.8	51,630	187.8	42,210	194.1	43,610	212.0	47,580	198.0	44,490
Excavation**														
1370 mm/54"	251.2	56,450	260.0	58,420	229.8	51,630	187.8	42,210	194.1	43,610	212.0	47,580	198.0	44,490
Excavation***														
1730 mm/68"	304.8	68,480	277.7	62,410	243.6	54,740	196.6	44,250	—	—	—	—	—	—
Excavation***														
2060 mm/81"	304.8	68,480	277.7	62,410	243.6	54,740	196.6	44,250	—	—	—	—	—	—
Rehandling														
2121 mm/83.5"	276	62,020	271	61,000	237	53,640	194	43,520	—	—	—	—	—	—
Rehandling														
2090 mm/82"	236	53,130	225	50,460	223	50,100	183	41,150	—	—	—	—	—	—

Bucket Tip Radius: \* 2310 mm/90.9"

\*\* 2225 mm/87.6"

\*\*\* 1916 mm/75.1"

Mass Excavator				
2920 mm/9'7" Stick Bucket Type	Bucket Curling Forces		Stick Crowd Forces	
	kN	lb	kN	lb
Excavation 2121 mm/83.5"	351.6	79,020	261.9	58,860
Extreme Service 2137 mm/84"	351.6	79,020	261.9	58,860
Light Material 2090 mm/82"	303.0	68,000	261.9	58,860

Front Shovel				
3353 mm/11'0" Stick Bucket Type	Bucket Curling Forces		Stick Crowd Forces	
	kN	lb	kN	lb
Front Dump 3.8 m <sup>3</sup> /5.0 yd <sup>3</sup>	411.2	92,403	366.5	82,362
Bottom Dump 3.1 m <sup>3</sup> /4.0 yd <sup>3</sup>	426.2	95,786	368.2	82,733

# SPECIFICATIONS

## Weights (approximate)

Standard Excavator, Heavy Lift Trencher and Deep Trencher

Configuration	Shoe Width		
	910 mm/36"	760 mm/30"	610 mm/24"
<b>Standard Excavator**</b>			
Shipping Weight:			
Stick .....2590 mm/8'6"	66 640 kg/146,940 lb	65 630 kg/144,722 lb	64 630 kg/142,500 lb
3200 mm/10'6"	66 850 kg/147,400 lb	65 840 kg/145,180 lb	64 840 kg/142,960 lb
4420 mm/14'6"	67 350 kg/148,500 lb	66 340 kg/146,280 lb	65 335 kg/144,060 lb
Operating Weight:			
Stick .....2590 mm/8'6"	67 230 kg/148,240 lb	66 220 kg/146,020 lb	65 220 kg/143,800 lb
3200 mm/10'6"	67 440 kg/148,700 lb	66 530 kg/146,480 lb	65 425 kg/144,260 lb
4420 mm/14'6"	67 940 kg/149,800 lb	66 930 kg/147,580 lb	65 920 kg/145,360 lb
Ground Pressure:			
Stick .....4420 mm/14'6"	75.4 kPa/10.9 psi	89.2 kPa/12.9 psi	109.8 kPa/15.9 psi
<b>Deep Trencher***</b>			
<b>LC roller frame and 9525 mm/31'3" boom</b>			
Shipping Weight:			
Standard gauge carbody		—	—
Cat stick .....4420 mm/14'6"	73 180 kg/161,361 lb	—	—
Weldco stick(s).....4420 mm/14'6"	73 810 kg/162,750 lb	—	—
4877 mm/16'0"	74 130 kg/163,450 lb	—	—
Wide gauge carbody		—	—
Cat stick .....4420 mm/14'6"	74 390 kg/164,040 lb	—	—
Weldco stick(s).....4420 mm/14'6"	75 020 kg/165,430 lb	—	—
4877 mm/16'0"	75 340 kg/166,130 lb	—	—
Operating Weight:			
Standard gauge carbody		—	—
Cat stick .....4420 mm/14'6"	73 780 kg/162,660 lb	—	—
Weldco stick(s).....4420 mm/14'6"	74 410 kg/164,050 lb	—	—
4877 mm/16'0"	74 730 kg/164,750 lb	—	—
Wide gauge carbody		—	—
Cat stick .....4420 mm/14'6"	75 000 kg/165,340 lb	—	—
Weldco stick(s).....4420 mm/14'6"	75 630 kg/166,730 lb	—	—
4877 mm/16'0"	75 950 kg/167,430 lb	—	—
<b>Heavy Lift Trencher** wide gauge carbody, LC roller frame and 7976 mm/26'2" boom</b>	<b>wide gauge carbody and LC roller frame</b>	<b>standard gauge carbody and standard undercarriage</b>	
Shipping Weight:			
Cat stick .....4420 mm/14'6"	73 350 kg/161,730 lb	69 900 kg/154,150 lb*	—
Weldco stick(s).....4420 mm/14'6"	73 980 kg/163,120 lb	70 540 kg/155,540 lb	—
4877 mm/16'0"	74 290 kg/163,820 lb	70 860 kg/156,240 lb	—
Operating Weight:			
Cat stick .....4420 mm/14'6"	73 950 kg/163,030 lb	70 510 kg/155,450 lb	—
Weldco stick(s).....4420 mm/14'6"	74 580 kg/164,420 lb	71 140 kg/156,840 lb	—
4877 mm/16'0"	74 900 kg/165,120 lb	71 460 kg/157,540 lb	—

Note: Weights include 1370 mm/54" bucket.

### \* Standard Excavator

Shipping weight includes lubricants, coolant, 10% fuel and no bucket.

Operating weight includes shipping weights plus full fuel tank, operator and nominal bucket.

Add 1342 kg/2,955 lb for fully guarded machine.

### \*\* Heavy Lift and Deep Trenchers

For 2590 mm/8'6" stick, deduct 710 kg/1,560 lb For 3200 mm/10'6" stick, deduct 500 kg/1,100 lb.

Add 1342 kg/2,955 lb for fully guarded machine.

Deduct 2220 kg/4,810 lb for standard undercarriage.

Deduct 1220 kg/2,680 lb for standard carbody.

Deduct 1820 kg/4,000 lb for standard counterweight.



## Weights (approximate)

### Mass Excavator and Front Shovel

Configuration	Shoe Width		
	910 mm/36"	760 mm/30"	610 mm/24"
<b>Mass Excavator*</b> (2921 mm/9'7" Stick)			
Shipping Weight.....	2921 mm/9'7" 65 830 kg/149,580 lb	64 830 kg/143,780 lb	63 820 kg/141,550 lb
Operating Weight.....	2921 mm/9'7" 66 420 kg/147,280 lb	65 440 kg/145,080 lb	64 410 kg/142,850 lb
Ground Pressure.....	2921 mm/9'7" 73 kPa/10.8 psi	87 kPa/12.7 psi	107 kPa/15.6 psi
<b>Front Shovel**</b>			
Shipping Weight:			
Front Dump Bucket .....	—	66 370 kg/147,740 lb	65 360 kg/145,520 lb
Bottom Dump Bucket .....	—	68 540 kg/152,530 lb	67 540 kg/150,310 lb
Operating Weight:			
Front Dump Bucket .....	—	66 960 kg/149,040 lb	65 950 kg/146,820 lb
Bottom Dump Bucket .....	—	69 130 kg/153,830 lb	68 130 kg/151,610 lb
Ground Pressure:			
Front Dump Bucket .....	—	89 kPa/12.9 psi	110 kPa/15.9 psi
Bottom Dump Bucket .....	—	92 kPa/13.3 psi	113 kPa/16.4 psi

#### \* Mass Excavator

Shipping weight includes lubricants, coolant, 10% fuel and no bucket.

Operating weight includes shipping weights plus full fuel tank, operator and nominal bucket.

Add 1342 kg/2,955 lb for fully guarded machine.

#### \*\* Front Shovel Excavator

Shipping weight includes lubricant, coolant, 10% fuel and bucket.

Operating weight includes shipping weight plus full fuel tank and operator.



# ARRANGEMENTS

## 245D Standard Excavator

The Caterpillar 245D is designed and built to be dependable, productive and efficient.

The Caterpillar 245D Standard Excavator has become well known for sophisticated, durable design, serviceability and productive performance.

- **The 245D Excavator** has an aftercooled 3406B direct-injection, turbocharged engine which runs at 1800 RPM for long life and optimized fuel efficiency. It provides increased power (287 kW/385 HP) to handle the heaviest job.

- **The main frame, carbody and roller frame** are of box-section construction to provide extremely rigid support for the boom assembly and components to give rugged performance and long service life.

- **Caterpillar Variable-Flow Piston Pumps** continually utilize full engine horsepower throughout the work cycle.

- **The cab** offers excellent visibility, advanced operator comfort features and roominess for a productive workday.

- **Choice of sticks, booms and undercarriage arrangements** for maximum versatility.

- **Swing speed on 245D** increased from 4.8 RPM to 6.3 RPM.

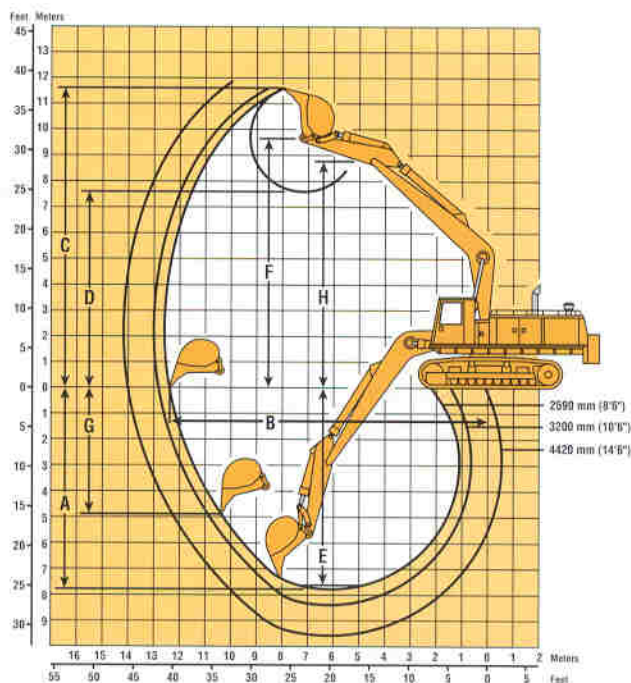




## Standard Excavator Working Ranges\*

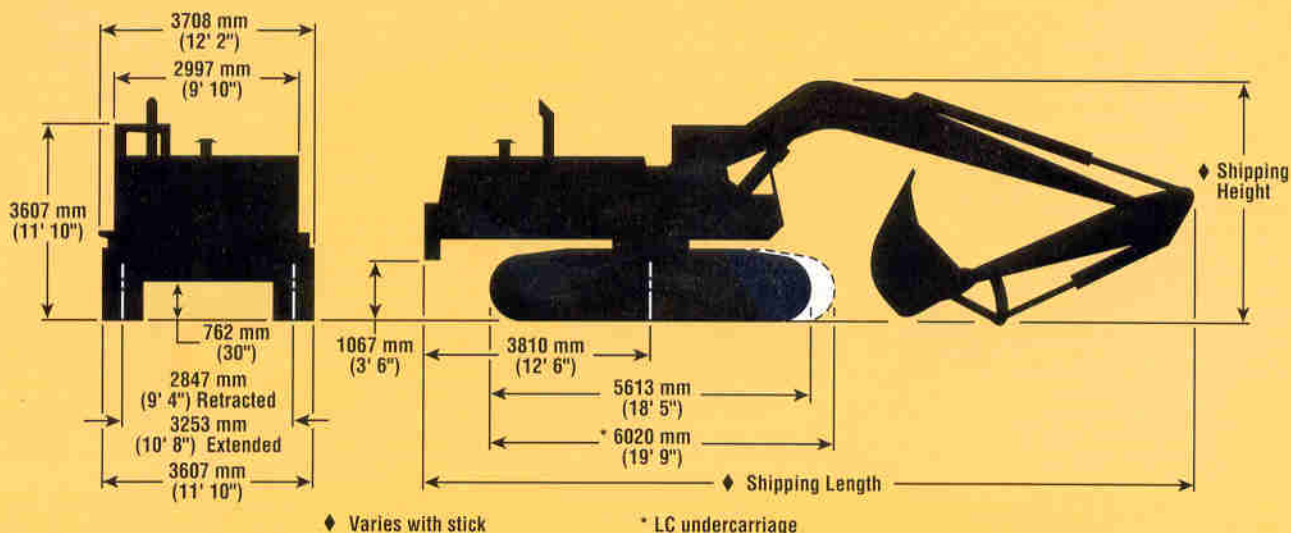
- Shown with standard undercarriage.
- Optional long undercarriage and optional wide carbody available as attachments. Either of these attachments require the 12 474 kg/27,500 lb counterweight. This is necessary to avoid interference between the counterweight and undercarriage.

\*Machine equipped with general purpose boom, 1220 mm/48" bucket and standard undercarriage.



Stick Length	2590 mm/8'6"	3200 mm/10'6"	4420 mm/14'6"
A Maximum digging depth .....	7772 mm/25'6"	8382 mm/27'6"	9677 mm/31'9"
B Maximum reach at ground level.....	12 395 mm/40'8"	12 827 mm/42'1"	14 021 mm/46'0"
C Maximum cutting height .....	11 659 mm/38'3"	11 506 mm/37'9"	11 862 mm/38'11"
D Maximum loading height.....	7595 mm/24'11"	7509 mm/24'8"	7874 mm/25'10"
E Maximum digging depth at 2440 mm/8' level bottom...	7620 mm/25'0"	8230 mm/27'0"	9474 mm/31'1"
F Maximum bucket hinge pin height.....	9830 mm/32'3"	9728 mm/31'11"	10 084 mm/33'1"
G Maximum vertical wall digging depth .....	4877 mm/16'0"	5156 mm/16'11"	6375 mm/20'11"
H Maximum height to boom/stick hinge pin.....	8766 mm/28'9"	8766 mm/28'9"	8766 mm/28'9"

Dimensions* (approximate)	2590 mm/8'6" Stick	3200 mm/10'6" Stick	4420 mm/14'6" Stick
	Shipping height .....	4623 mm/15'2"	4775 mm/15'8"
Shipping length .....	13 516 mm/44'4"	13 132 mm/43'1"	12 802 mm/42'0"



◆ Varies with stick

\* LC undercarriage

\*Machines are equipped with general purpose booms and 760 mm/30" shoes. Roller frames are retracted and cab catwalk is removed. Add 406 mm/16" to track width if gauge is extended.



# ARRANGEMENTS

## 245D Heavy Lift Trencher

Heavy Lift Trencher provides up to 48% greater lifting capacity (30 feet at ground level) than the general purpose excavator, with an enhanced working range. Designed to meet the sewer contractors lifting needs and is a good all around configuration of the 245D.



The Heavy Lift Trencher is designed for those applications where optimized lifting performance is the primary concern, such as handling large diameter pipe in sewer and water work.

- **With its 7976 mm/26'2" long boom** it has a digging envelope similar to the standard 245D backhoe with its 7671 mm/25'2" long boom.

- **Maximum digging depth of 9630 mm/31'7".**
- **Standard Cat 245D stick** available with 127 mm/5" longer stick cylinder.
- **Weldco sticks** available for optimized transport height, but requires 254 mm/10" longer stick cylinder.

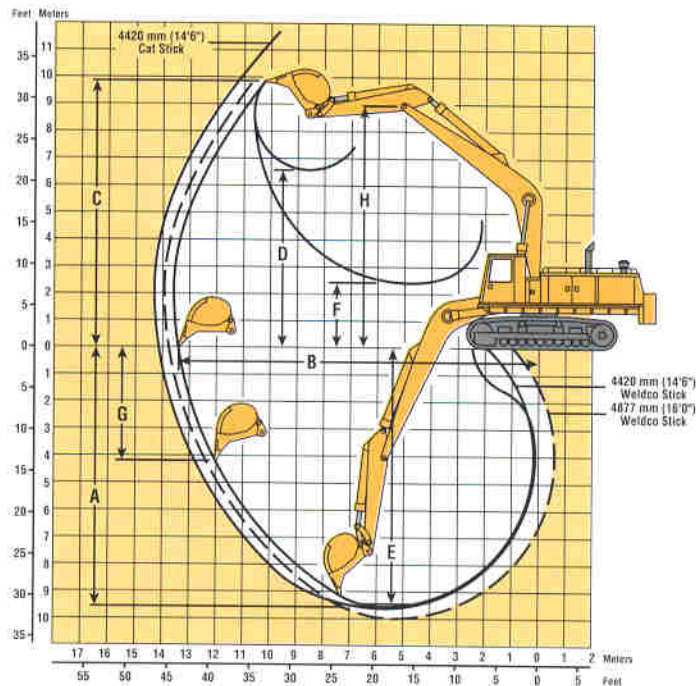
- **Higher relief pressure** improves performance of implement, travel, swing and heavy lift circuit.
- **Large 27,000 lb counterweight** provides stability for handling large loads.

*For more specific information refer to the Custom Product 245D Trencher Spec-A-Log or Salesgram.*



## Heavy Lift Trencher Working Ranges

- Shown with standard undercarriage.
- Optional long undercarriage available.
- Optional wide carbody is available.



Stick Length	Cat 4420 mm/14'6"	Weldco 4420 mm/14'6"	Weldco 4877 mm/16'0"
A Maximum digging depth*	9630 mm/31'7"	9560 mm/31'4"	10 000 mm/32'10"
B Maximum reach at ground level	14 140 mm/46'5"	13 420 mm/44'0"	13 800 mm/45'3"
C Maximum cutting height**	11 690 mm/38'4"	9850 mm/32'4"	9830 mm/32'3"
D Maximum loading height bucket with teeth**	7900 mm/25'11"	6572 mm/21'7"	6560 mm/21'6"
E Maximum digging depth at 2440 mm/8' flat floor*	9500 mm/31'2"	9510 mm/31'3"	9980 mm/32'9"
F Minimum loading height**	2310 mm/7'7"	2310 mm/7'7"	1850 mm/6'1"
G Maximum vertical wall digging depth*	6360 mm/20'11"	4200 mm/13'9"	4630 mm/15'2"
H Maximum height to boom/stick hinge pin**	8950 mm/29'4"	8950 mm/29'4"	8950 mm/29'4"

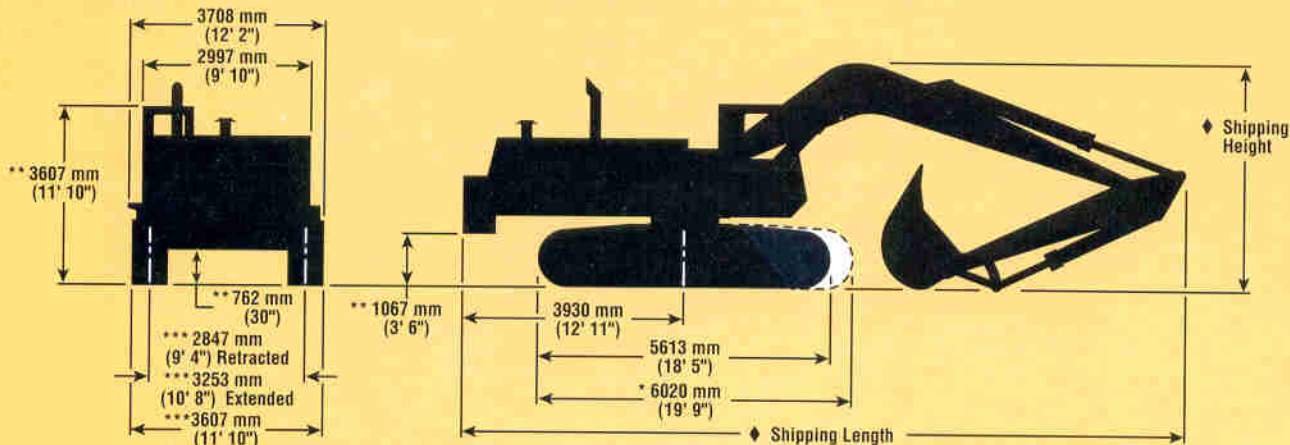
\*Deduct 102 mm/4.0" for machines equipped with wide gauge carbody.

\*\*Add 102 mm/4.0" for machines equipped with wide gauge carbody.



### Dimensions\* (approximate)

	4420 mm/14'6" Stick	4420 mm/14'6" Stick	4880 mm/16'0" Stick
Shipping height	4851 mm/15'11"	4216 mm/13'10"	4267 mm/14'0"
Shipping length	13 437 mm/44'1"	13 538 mm/44'5"	13 487 mm/44'3"



\* LC undercarriage.

\*\* Add 127 mm (5") for wide gauge carbody.

\*\*\* Add 508 mm (20") for wide gauge carbody.

◆ Varies with stick

# ARRANGEMENTS

## 245D Deep Trencher

The Deep Trencher has 14% greater reach, 11% more digging depth and approximately 27% more lift than the general purpose arrangement. The Deep Trencher is well-suited for deep sewer and water applications.



**The Deep Trencher** is designed for those applications which require extended reach and deeper digging depth.

■ **With its 9525 mm/31'3" long boom and a 4420 mm/14'6" stick** it provides 15 930 mm/52'3" ground level reach and 10 760 mm/35'4" maximum digging depth.

■ **Long stroke stick cylinder** enhance the digging envelope and lowers the shipping height.

- 127 mm/5" longer stick cylinder for Cat sticks.
- 254 mm/10" longer stick cylinder for Weldco sticks.

■ **Optional extended track roller frame**, recommended with the Deep Trencher Boom, provides excellent stability.

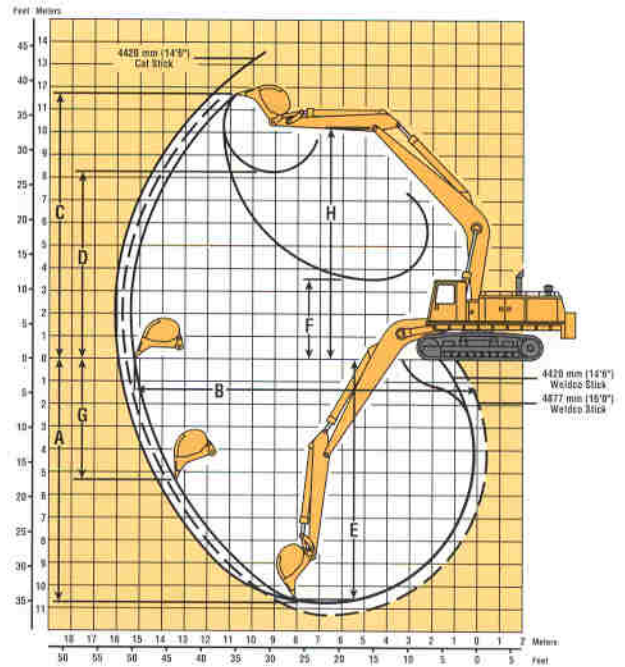
■ **Choice of either Cat or Weldco sticks** to match specific job requirements.

*For more specific information refer to the Custom Product 245D Trencher Spec-A-Log or Salesgram.*



## Deep Trencher Working Ranges

- Long undercarriage shown.
- Standard undercarriage not recommended with Deep Trencher.
- Optional wide carbody is available.



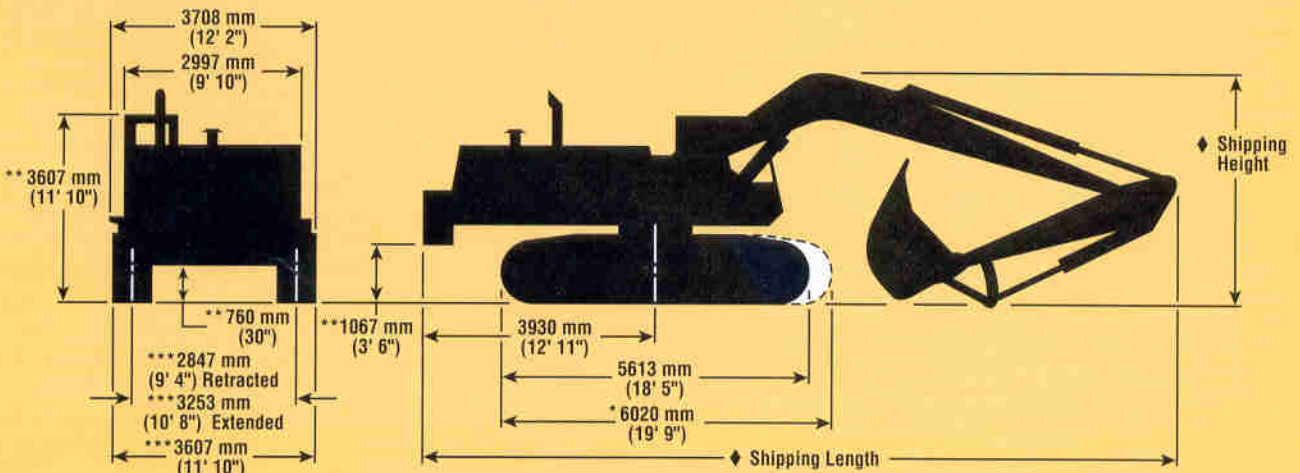
Stick Length	Cat 4420 mm/14'6"	Weldco 4420 mm/14'6"	Weldco 4877 mm/16'0"
A Maximum digging depth*	10 760 mm/35'4"	10 740 mm/35'3"	11 200 mm/36'9"
B Maximum reach at ground level	15 930 mm/52'3"	15 230 mm/49'11"	15 610 mm/51'3"
C Maximum cutting height**	13 590 mm/44'7"	11 710 mm/38'5"	11 730 mm/38'6"
D Maximum loading height bucket with teeth**	9630 mm/31'7"	8269 mm/27'1"	8290 mm/27'2"
E Maximum digging depth at 2440 mm/8' flat floor*	10 650 mm/34'11"	10 650 mm/34'11"	11 110 mm/36'5"
F Minimum loading height**	3590 mm/11'9"	3590 mm/11'9"	3130 mm/10'3"
G Maximum vertical wall digging depth*	7990 mm/26'3"	5350 mm/17'7"	5780 mm/19'0"
H Maximum height to boom/stick hinge pin**	10 240 mm/33'7"	10 240 mm/33'7"	10 240 mm/33'7"

\*Deduct 102 mm/4.0" for machines equipped with wide gauge carbody.

\*\*Add 102 mm/4.0" for machines equipped with wide gauge carbody.

## Dimensions\* (approximate)

	4420 mm/14'6" Stick	4420 mm/14'6" Stick	4880 mm/16'0" Stick
Shipping height	5003 mm/16'5"	4623 mm/15'2"	4496 mm/14'9"
Shipping length	14 961 mm/49'1"	15 164 mm/49'9"	15 189 mm/49'10"



\* LC undercarriage.

\*\* Add 127 mm (5") for wide gauge carbody.

\*\*\* Add 508 mm (20") for wide gauge carbody.

◆ Varies with stick



## 245D Mass Excavator

Designed and built for production loading in mining and construction applications.

■ **Cat's 245D Mass Excavator** is designed to move material faster and more efficiently when truck loading than standard excavators.

- Its boom is shorter and straighter and, the boom box-section is considerably larger and thus, the boom is heavier. Together, these differences help resist bending and twisting forces from large bucket loads.
- The increased weight of the boom and excellent breakout force make the 245D Mass Excavator an excellent choice for production loading trucks up to 50 ton capacity.

■ **Proper work site layout** is key to maximum productivity. Many factors affect your overall productivity. One key factor is work site layout. It consists of three important elements — hauler location, bench height and work zone/swing angle. Paying close attention to these three elements will help you get maximum productivity from your equipment and operators.



FIGURE 1



FIGURE 2

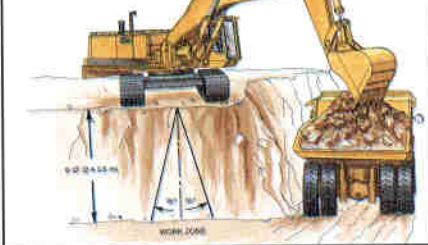
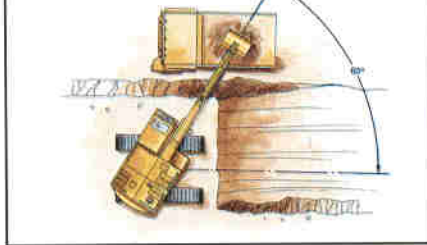


FIGURE 3



### Bench Height

This is the most critical element in work site layout, and it is wholly dependent on the type of material you're moving. In stable materials, keep the bench height equal to the stick length. In loose materials, the angle of repose will force the hauler away from the excavator, so the bench height will be less.

### Hauler Location

Correct spotting of the hauler is important. Try to position the hauler slightly forward of the excavator. This will allow visual eye contact between operators for communications (fig. 1). Also, the hauling unit should be as close as possible to the excavator centerline. A good rule of thumb is to keep the inside truck body rail below the boom/stick hinge pin.

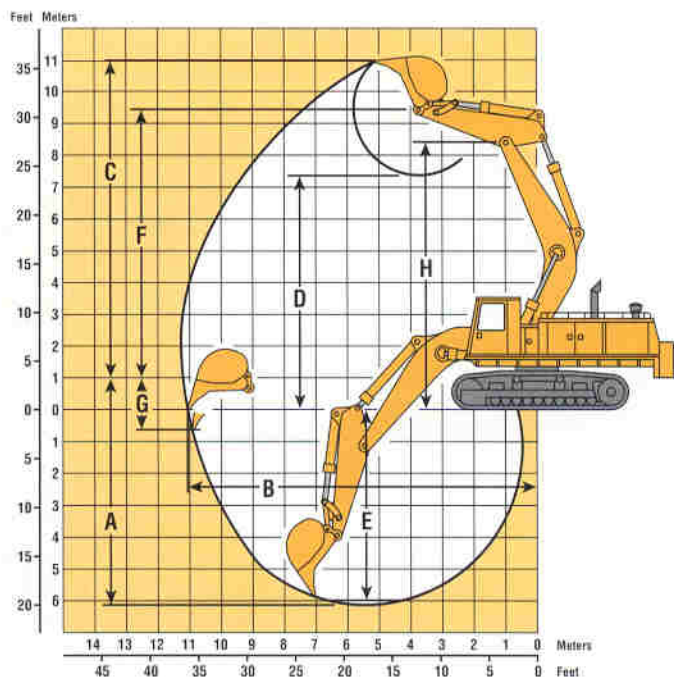
### Work Zone/Swing Angle

The work zone should be kept as tight as possible. Ideally, the machine should swing no more than  $15^\circ$  either side of its centerline (fig. 2), and no more than  $60^\circ$  to the hauler (fig. 3). The machine should be positioned so that the bucket is full when the stick nears its vertical position. If the machine is farther back, breakout force will be reduced. If it is too close to the edge, it will undercut and increase cycle times.



## Mass Excavator Working Ranges

- Shown with standard undercarriage.
- Optional wide carbody available as an attachment.
- Optional LC undercarriage not recommended, as it interferes with 245 Mass Excavator counterweight.

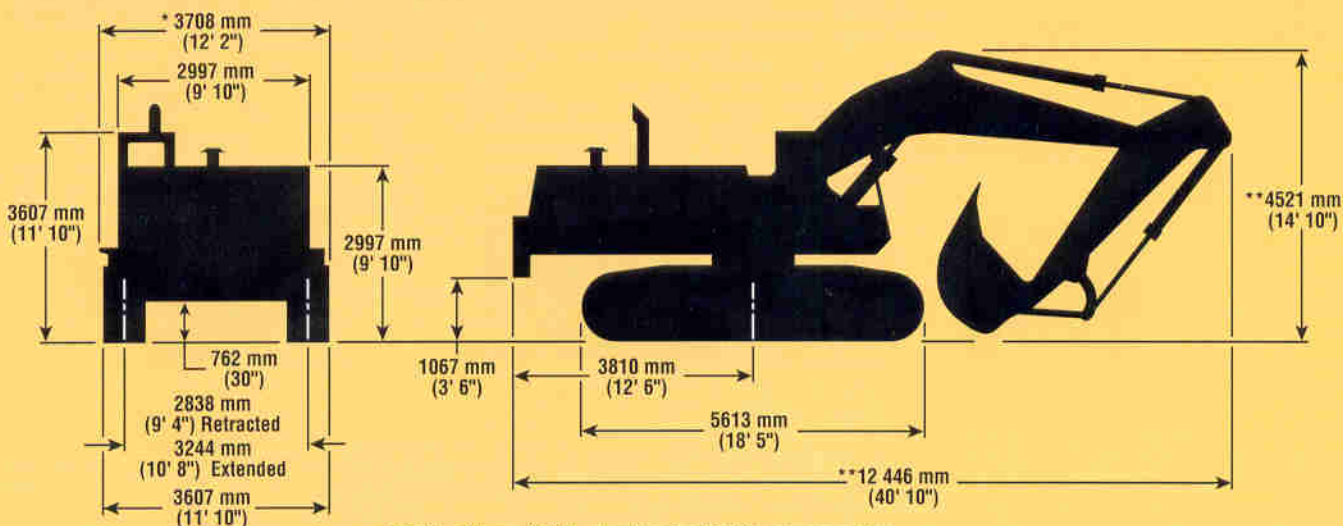


Bucket Working Ranges	General Purpose	Rock	Light Material
A Maximum digging depth .....	6148 mm/20'2"	6148 mm/20'2"	6501 mm/21'4"
B Maximum reach at ground level .....	11 073 mm/36'4"	11 049 mm/36'3"	11 430 mm/37'6"
C Maximum cutting height .....	11 025 mm/36'2"	10 948 mm/35'11"	11 406 mm/37'5"
D Maximum loading height .....	7367 mm/24'2"	7367 mm/24'2"	7254 mm/23'1"
E Maximum digging depth at 2440 mm/8' level bottom ..	5995 mm/19'8"	5995 mm/19'8"	6349 mm/20'10"
F Maximum bucket hinge pin height .....	9473 mm/31'1"	9473 mm/31'1"	9473 mm/31'1"
G Maximum vertical wall digging depth .....	610 mm/2'0"	1625 mm/5'4"	1853 mm/6'1"
H Maximum height to boom/stick hinge pin .....	8433 mm/27'8"	8433 mm/27'8"	8433 mm/27'8"

## Shipping Dimensions (approximate)



With 2121 mm/83.5" bucket.



\* With 762 mm (30") track shoes in shipping gauge position and cab catwalk removed.

\*\* With 2920 mm (9'7") Stick.

# ARRANGEMENTS

## 245D Front Shovel

Caterpillar Front Shovels are designed for fast cycle times and excellent productivity in rock loading and quarry type applications.



Master Cylinder

■ **The Cat 245D Front Shovel** features parallelogram-type front linkage with a master cylinder. The parallelogram linkage automatically keeps the bucket parallel to the ground. This allows excellent penetration, fast loading and a smooth

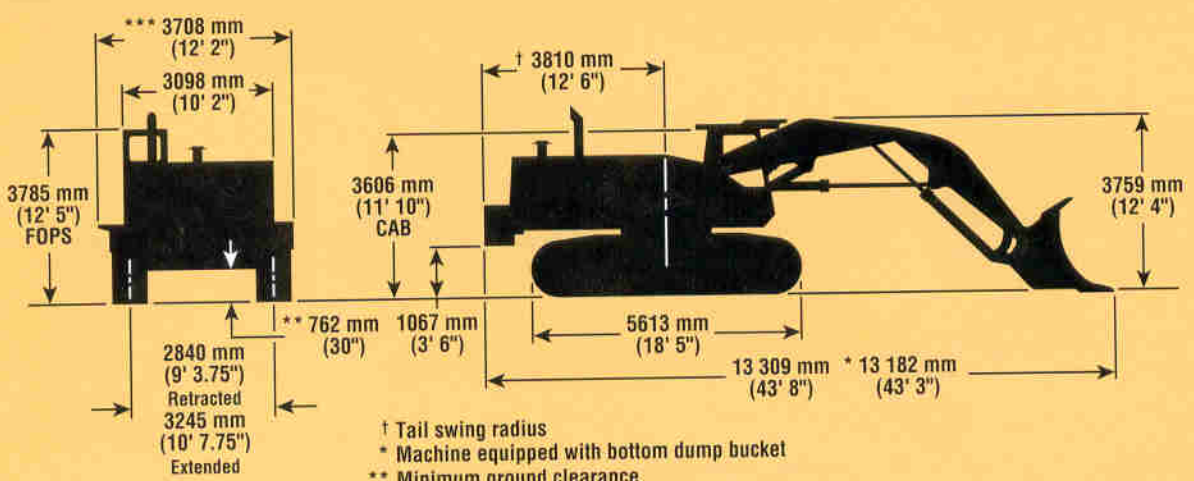
floor clean-up. The operator can concentrate on the boom and stick rather than bucket adjustments. The master cylinder circuit automatically maintains a level bucket while raising the boom. It aids in bucket positioning both above

and below grade, eliminating constant adjustment during the work cycle. The master cylinder arrangement also uses bucket cylinder circuit pressure to increase the boom lifting force.



### Shipping Dimensions\* (approximate)

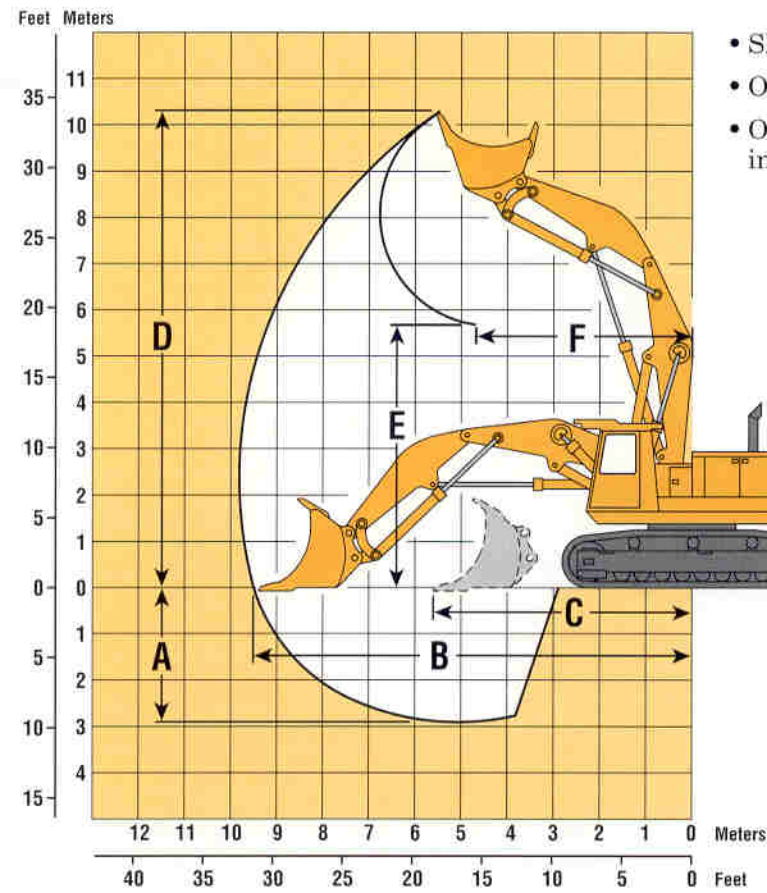
With 2121 mm/83.5" bucket.



† Tail swing radius  
 \* Machine equipped with bottom dump bucket  
 \*\* Minimum ground clearance  
 \*\*\* Reduces to 3455 mm (11' 4") with catwalks and counterweights removed

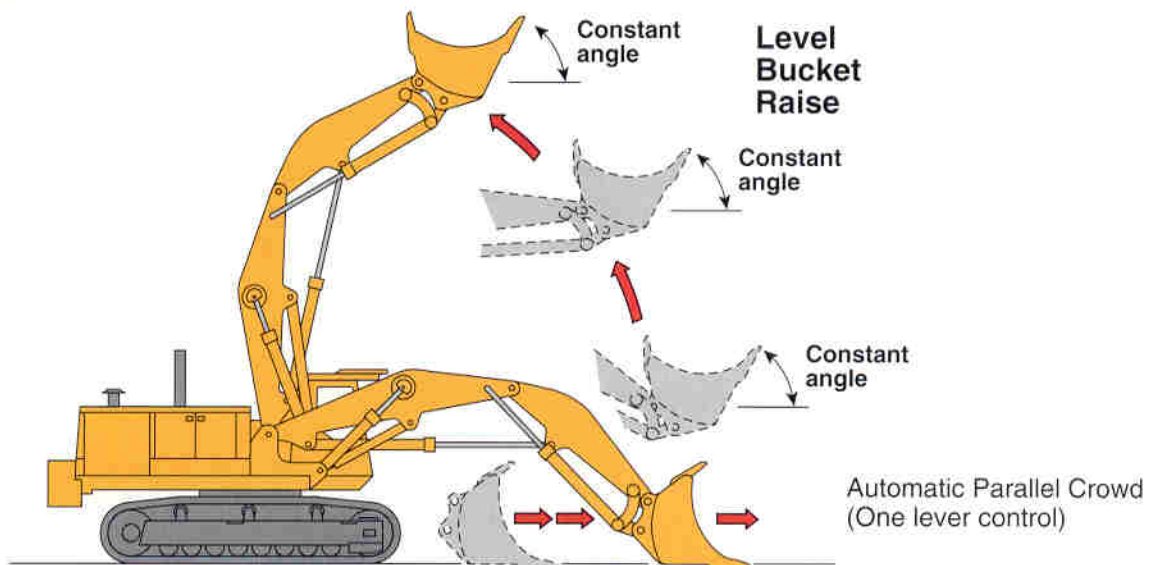


## Front Shovel Working Ranges



- Shown with standard undercarriage.
- Optional wide carbody available as an attachment.
- Optional LC undercarriage not recommended, as it interferes with 245 Front Shovel counterweight.

Bucket Type	Front Dump	Bottom Dump
A Maximum digging depth .....	2870 mm/9'5"	2769 mm/9'1"
B Maximum reach at ground level .....	9499 mm/31'2"	9373 mm/30'9"
C Minimum reach at ground level.....	5588 mm/18'4"	5461 mm/17'11"
D Maximum cutting height.....	10 287 mm/33'9"	10 414 mm/34'2"
E Maximum loading height .....	5638 mm/18'6"	6781 mm/22'3"
F Reach at maximum loading height.....	6299 mm/20'8"	5715 mm/18'9"
Maximum bucket throat opening.....	—	1435 mm/56.5"



# SPECIFICATIONS

## Content of Various 245D Configurations

245D/245D LC Arrangements	245D General Purpose	245D(LC) Heavy Lift Trencher	245D(LC) Deep Trencher	245D Mass Excavator	245D Front Shovel
<b>Boom</b>					
Cat GP.....7671 mm/25'2"	Required	—	—	—	—
Cat Mass Excavator .....6477 mm/21'3"	—	—	—	Required	—
Cat Front Shovel .....4343 mm/14'3"	—	—	—	—	Required
Weldco Deep Trencher .....9525 mm/31'3"	—	—	Required	—	—
Weldco Heavy Lift Trencher...7925 mm/26'0"	—	Required	—	—	—
<b>Boom Cylinders (diameter)</b>					
Standard .....180 mm/7.25"	Standard	—	—	Standard	Standard
Trencher .....210 mm/8.25"	—	Required	Required	—	—
<b>Counterweight</b>					
Standard .....10 450 kg/23,000 lb	Standard	—	—	Standard	Standard
Trencher .....12 474 kg/27,500 lb	—	Required	Required	—	—
<b>Sticks</b>					
Cat .....2590 mm/8'6"	Optional	Optional	Optional	—	—
.....3200 mm/10'6"	Optional	Optional	Optional	—	—
.....4420 mm/14'6"	Optional	Optional	Optional	—	—
Cat Mass Excavator .....2921 mm/9'7"	—	—	—	Standard	—
Cat Front Shovel .....3353 mm/11'0"	—	—	—	—	Standard
Weldco .....4420 mm/14'6"	—	Optional	Optional	—	—
.....4877 mm/16'0"	—	Optional	Optional	—	—
<b>Undercarriage Length</b>					
Standard .....5613 mm/18'5"	Standard	Standard	Standard	Standard	Standard
Long Undercarriage .....5994 mm/19'8"	N/A	Optional	Recommended	N/A	N/A
<b>Carbody (gauge, extended)</b>					
Standard .....3250 mm/10'8"	Standard	Standard	Standard	Standard	Standard
Wide .....3760 mm/12'4"	Optional	Optional	Optional	Optional	Optional
<b>Upper Frame Modifications*</b>					
.....	—	Required	Required	—	—
<b>Hydraulic Modifications**</b>					
.....	—	Required	Required	—	—

\* **Upper Frame Modifications** to accommodate larger boom cylinder pins which are 127 mm/5" in diameter versus the standard 114 mm/4.5" diameter pins. This also includes the addition of two (2) 25 mm/1.0" thick plates to rear crossmember which supports the larger counterweight.

### \*\* Hydraulic Modifications

**For Caterpillar sticks**, this modification provides 210 mm/8.25" diameter boom cylinders for greater lifting capacities, a modified stick cylinder with 1867 mm/73.5" stroke for extended stick articulation, 32 040 kPa/4,650 psi main implement relief valve, 31 000 kPa/4,500 psi swing relief valve, 32 040 kPa/4,650 psi travel relief valve and 35 170 kPa/5,100 psi heavy lift relief valve.

**For Weldco sticks**, this modification provides 210 mm/8.25" diameter boom cylinders for greater lifting capacities, a modified stick cylinder with 1994 mm/78.5" stroke for extended stick articulation, 32 040 kPa/4,650 psi main implement relief valve, 31 000 kPa/4,500 psi swing relief valve, 32 040 kPa/4,650 psi travel relief valve and 35 170 kPa/ 5,100 psi heavy lift relief valve.



**245D**  
**245D LC**



# SPECIFICATIONS





## Lift Capacities



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

**STANDARD EXCAVATOR** (Bare Stick)  
**BOOM** – Cat, 7671 mm/25'2", General Purpose  
**STICK** – Cat, 4420 mm/14'6"

**BUCKET** – None (Bare Stick)  
**SHOE** – 760 mm/30"  
**HEAVY LIFT** – Activated

**UNDERCARRIAGE** – Standard  
**COUNTERWEIGHT** – 10 433 kg/23,000 lb

Diagram	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		10.5 m/35.0 ft		Diagram		m ft		
	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb			
9.0 m 30.0 ft	kg															*9840	*9840	9.9	
	lb															*21,800	*21,800	32.3	
7.5 m 25.0 ft	kg												*10 110	*10 110		*9640	*9640	10.8	
	lb												*22,700	*22,700	*22,200	*22,200	*21,300	*21,300	35.3
6.0 m 20.0 ft	kg											*11 000	*11 000	*10 350	*10 350	*9660	9060	11.4	
	lb											*24,000	*24,000	*22,700	*22,400	*21,300	20,100	37.3	
4.5 m 15.0 ft	kg						*16 440	*16 440	*13 570	*13 570	*11 890	*11 890	*10 820	10 170	*9870	8460		11.8	
	lb						*35,510	*35,510	*29,400	*29,400	*25,800	*25,800	*23,600	21,900	*21,700	18,700		38.6	
3.0 m 10.0 ft	kg						*19 310	*19 310	*15 200	*15 200	*12 860	*12 860	*11 380	9880	*10 290	8130		11.9	
	lb						*41,600	*41,600	*32,900	*32,900	*27,900	26,700	*24,800	21,300	*22,600	17,900		39.2	
1.5 m 5.0 ft	kg						*21 500	20 790	*16 580	15 290	*13 720	11 910	*11 880	9610	*10 640	8020		11.9	
	lb						*46,400	44,900	*35,900	33,000	*29,800	25,700	*25,800	20,700	*23,400	17,700		39.1	
Ground Line	kg						*22 600	20 070	*17 480	14 770	*14 320	11 560	*12 200	9390	*10 890	8130		11.7	
	lb						*48,900	43,300	*37,900	31,900	*31,000	25,000	*26,500	20,300	*24,000	17,900		38.3	
-1.5 m -5.0 ft	kg					*19 740	*19 740	*22 700	19 750	*17 760	14 480	*14 510	11 350	*12 180	9260	*11 160	8490		11.2
	lb					*45,100	*45,100	*49,200	42,600	*38,500	31,200	*31,400	24,500	*26,300	20,000	*24,600	18,700		36.8
-3.0 m -10.0 ft	kg	*15 070	*15 070	*18 250	*18 250	*27 110	*27 110	*21 870	*19 710	*17 330	14 380	*14 120	11 280	*11 510	9270	*11 430	9220		10.5
	lb	*33,700	*33,700	*41,100	*41,100	*61,900	*61,900	*47,400	*42,500	*37,500	31,000	*30,500	24,400	*24,860	20,020	*25,200	20,400		34.5
-4.5 m -15.0 ft	kg			*26 030	*26 030	*25 790	*25 790	*20 050	*19 890	*16 010	14 490	*12 810	11 390			*11 610	10 560		9.6
	lb			*58,800	*58,800	*55,700	*55,700	*43,300	*42,900	*34,500	31,300	*27,400	24,600			*25,600	23,500		31.2
-6.0 m -20.0 ft	kg			*27 550	*27 550	*21 060	*21 060	*16 620	*16 620	*12 920	12 920					*11 710	*11 710		8.3
	lb			*59,500	*59,500	*45,500	*45,500	*35,900	*35,900	*27,900	*27,900					*25,300	*25,300		26.5

**HEAVY LIFT TRENCHER** (Bare Stick)  
**BOOM** – Weldco, 7925 mm/26'0", Trencher  
**STICK** – Cat, 4420 mm/14'6"

**BUCKET** – None (Bare Stick)  
**SHOE** – 760 mm/30"  
**HEAVY LIFT** – Activated

**UNDERCARRIAGE** – Standard  
**COUNTERWEIGHT** – 10 432 kg/23,000 lb

Diagram	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		10.5 m/35.0 ft		12.0 m/40.0 ft		Diagram		m ft		
	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb			
9.0 m 30.0 ft	kg															*9900	*9900	10.2	
	lb															*21,900	*21,900	33.3	
7.5 m 25.0 ft	kg															*9770	*9770	11.1	
	lb															*21,500	*21,500	36.2	
6.0 m 20.0 ft	kg															*9850	*9850	11.6	
	lb															*21,700	*21,700	38.1	
4.5 m 15.0 ft	kg			*31 980	*31 980	*23 620	*23 620	*19 230	*19 230	*16 760	15 280	13 610	12 090	*10 130	9760	*10 130	9770		12.0
	lb			*69,900	*69,900	*50,800	*50,800	*41,600	*41,600	*36,200	33,000	29,300	26,000	*21,880	21,080	*22,300	21,600		39.3
3.0 m 10.0 ft	kg					*27 440	26 540	*21 420	19 140	16 640	14 700	13 230	11 720	10 790	9560	*10 610	9400		12.1
	lb					*59,100	57,300	*46,300	41,300	35,900	31,700	28,500	25,300	23,310	20,650	*23,300	20,700		39.8
1.5 m 5.0 ft	kg					29 210	25 130	20 910	18 270	16 080	14 150	12 880	11 380	10 600	9370	*10 490	9280		12.1
	lb					62,900	54,200	45,100	39,400	34,700	30,500	27,800	24,500	22,900	20,240	23,100	20,500		39.7
Ground Line	kg			*13 360	*13 360	28 360	24 320	20 280	17 660	15 640	13 730	12 610	11 110			10 660	9410		11.8
	lb			*31,300	*31,300	61,000	52,400	43,700	38,100	33,700	29,600	27,200	24,000			23,500	20,700		38.8
-1.5 m -5.0 ft	kg	*11 880	*11 880	*19 210	*19 210	27 990	23 970	19 920	17 320	15 370	13 470	12 440	10 950			11 160	9840		11.4
	lb	*26,700	*26,700	*43,800	*43,800	60,200	51,600	42,900	37,300	33,100	29,100	26,800	23,600			24,600	21,700		37.3
-3.0 m -10.0 ft	kg	*18 430	*18 430	*26 500	*26 500	*27 960	23 940	19 810	17 210	15 280	13 380	12 420	10 940			12 130	10 680		10.7
	lb	*41,500	*41,500	*60,300	*60,300	*60,100	51,500	42,700	37,100	33,000	28,900	26,800	23,600			26,800	23,600		35.0
-4.5 m -15.0 ft	kg	*25 990	*25 990	*34 060	*34 060	*26 860	24 170	19 940	17 330	15 410	13 500					13 930	12 250		9.7
	lb	*58,700	*58,700	*73,700	*73,700	*58,000	52,000	43,000	37,400	33,300	29,200					31,000	27,200		31.7
-6.0 m -20.0 ft	kg			*27 820	*27 820	*22 270	*22 270	*17 590	*17 590							*15 700	*15 700		8.4
	lb			*60,100	*60,100	*48,100	*48,100	*38,000	*38,000							*33,900	*33,900		27.0















# SPECIFICATIONS

## Lift Capacities

**STANDARD EXCAVATOR**  
**BOOM** – Cat, 7671 mm/25'2", General Purpose  
**STICK** – Cat, 2590 mm/8'6"

**BUCKET** – 1220 mm/48"  
**SHOE** – 760 mm/30"  
**HEAVY LIFT** – Activated













**UNDERCARRIAGE** – Standard  
**COUNTERWEIGHT** – 10 432 kg/23,000 lb

		6.0 m/20.0 ft		7.5 m/25.0 ft		9.0 m/30.0 ft		10.5 m/35.0 ft				m ft
												
7.5 m 25.0 ft	kg lb					*9400 *20,700	*9400 *20,700			*7970 *17,600	7600 16,900	11.4 37.1
6.0 m 20.0 ft	kg lb			*10 980 *23,700	*10 980 *23,700	*9720 *21,200	*9720 *21,200			*7980 *17,600	6780 15,000	11.9 38.9
4.5 m 15.0 ft	kg lb			*12 580 *27,100	*12 580 *27,100	*10 490 *22,700	*10 490 *22,700	*9340 *20,400	8310 17,800	*8140 *17,900	6310 14,000	12.2 39.9
3.0 m 10.0 ft	kg lb			*14 210 *30,700	13 800 29,800	*11 380 *24,600	10 430 22,400	*9740 *21,100	8050 17,300	*8450 *18,600	6120 13,500	12.2 40.1
1.5 m 5.0 ft	kg lb					*12 120 *26,200	9990 21,500	*10 110 *21,900	7790 16,700	*8540 *18,800	6180 13,600	12.1 39.6
Ground Line	kg lb			*15 760 *34,100	12 800 27,500	*12 480 *27,000	9700 20,900	*10 250 *22,100	7610 16,400	*8560 *18,900	6530 14,400	11.6 38.2
-1.5 m -5.0 ft	kg lb			*15 350 *33,200	12 700 27,300	*12 330 *26,000	9580 20,600	*9930 *21,300	7560 16,300	*8410 *18,500	7270 16,100	11.0 35.9
-3.0 m -10.0 ft	kg lb	*17 040 *37,100	*17 040 *37,100	*14 240 *30,800	*12 790 *27,500	*11 470 *24,600	9620 20,700					
-4.5 m -15.0 ft	kg lb	*14 520 *31,400	*14 520 *31,400	*12 160 *26,100	*12 160 *26,100	*9300 *20,090	*9300 *20,090					
-6.0 m -20.0 ft	kg lb	*10 280 *21,600	*10 280 *21,600	*7920 *17,110	*7920 *17,110							

**HEAVY LIFT TRENCHER**  
**BOOM** – Weldco, 7925 mm/26'0"  
**STICK** – Cat, 2590 mm/8'6"

**BUCKET** – 1220 mm/48"  
**SHOE** – 760 mm/30"  
**HEAVY LIFT** – Activated

**UNDERCARRIAGE** – Standard/Wide Gauge  
**COUNTERWEIGHT** – 10 432 kg/23,000 lb

		6.0 m/20.0 ft		7.5 m/25.0 ft		9.0 m/30.0 ft		10.5 m/35.0 ft				m ft
												
7.5 m 25.0 ft	kg lb					*13 600 *29,800	*13 600 *29,800			*8100 *17,900	*8100 *17,900	11.7 38.1
6.0 m 20.0 ft	kg lb			*16 320 *35,200	*16 320 *35,200	*14 290 *31,100	13 940 29,900	11 990 25,900	10 460 22,590	*8150 *18,000	8000 17,700	12.2 39.8
4.5 m 15.0 ft	kg lb			*18 650 *40,100	17 890 38,600	15 290 32,900	13 330 28,700	11 720 25,100	10 200 21,900	*8350 *18,400	7500 16,600	12.4 40.7
3.0 m 10.0 ft	kg lb			19 410 41,800	16 750 36,100	14 640 31,500	12 700 27,300	11 370 24,400	9850 21,200	8460 18,700	7290 16,100	12.4 40.8
1.5 m 5.0 ft	kg lb			18 600 40,100	15 980 34,400	14 090 30,300	12 170 26,200	11 040 23,700	9540 20,500	8570 18,900	7370 16,200	12.3 40.2
Ground Line	kg lb			18 240 39,200	15 630 33,600	13 740 29,600	11 830 25,500	10 810 23,200	9310 20,000	9030 19,900	7770 17,100	11.8 38.8
-1.5 m -5.0 ft	kg lb			18 150 39,000	15 550 33,400	13 600 29,200	11 690 25,100	10 720 23,100	9230 19,900	*9930 *21,800	8630 19,100	11.1 36.5
-3.0 m -10.0 ft	kg lb	*17 870 *38,600	*17 870 *38,600	18 260 *38,600	15 650 33,600	13 650 29,400	11 740 25,300					
-4.5 m -15.0 ft	kg lb	*19 690 *42,700	*19 690 *42,700	*17 000 *36,500	15 960 34,300	*13 550 *28,500	12 040 26,000					
-6.0 m -20.0 ft	kg lb			*11 750 *24,000	*11 750 *24,000							

















## Lift Capacities

**STANDARD EXCAVATOR**  
**BOOM** – Cat, 7671 mm/25'2"  
**STICK** – Cat, 3200 mm/10'6"

**BUCKET** – 1220 mm/48"  
**SHOE** – 760 mm/30"  
**HEAVY LIFT** – Activated















**UNDERCARRIAGE** – Standard  
**COUNTERWEIGHT** – 10 432 kg/23,000 lb

		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft		9.0 m/30.0 ft		10.5 m/35.0 ft				
														m ft
7.5 m 25.0 ft	kg lb							*8490 *18,600	*8490 *18,600			*6510 *14,400	*6510 *14,400	11.8 38.6
6.0 m 20.0 ft	kg lb							*8970 *19,500	*8970 *19,500	*8380 *18,400	*8380 *18,300	*6590 *14,500	6330 14,000	12.3 40.4
4.5 m 15.0 ft	kg lb					*11 670 *25,100	*11 670 *25,100	*9820 *21,300	*9820 *21,300	*8740 *19,000	8360 17,900	*6810 *15,000	5890 13,000	12.6 41.3
3.0 m 10.0 ft	kg lb					*13 460 *29,000	*13 460 *29,000	*10 810 *23,400	10 510 22,600	*9250 *20,100	8060 17,300	*7180 *15,800	5700 12,600	12.6 41.5
1.5 m 5.0 ft	kg lb					*14 880 *32,000	13 270 28,600	*11 690 *25,300	10 030 21,600	*9750 *21,100	7770 16,700	*7720 *17,000	5720 12,600	12.5 41.0
<b>Ground Line</b>	kg lb					*15 560 *33,600	12 800 27,600	*12 240 *26,400	9680 20,800	*10 050 *21,700	7540 16,200	*8170 *18,000	6000 13,200	12.1 39.6
-1.5 m -5.0 ft	kg lb			*19 770 *42,700	17 920 38,700	*15 490 *33,500	12 610 27,100	*12 310 *26,600	9480 20,400	*9990 *21,500	7420 15,900	*8220 *18,100	6610 14,600	11.4 37.5
-3.0 m -10.0 ft	kg lb			*18 220 *39,500	18 170 39,000	*14 700 *31,700	12 610 27,100	*11 770 *25,300	9460 20,300	*9280 *20,040	7450 16,090	*7790 *17,000	*7780 *17,000	10.5 34.2
-4.5 m -15.0 ft	kg lb	*18 010 *40,100	*18 010 *40,100	*15 970 *34,500	*15 970 *34,500	*13 060 *28,100	12 800 27,500	*10 310 *21,900	9620 20,700					
-6.0 m -20.0 ft	kg lb	*14 010 *30,000	*14 010 *30,000	*12 380 *26,300	*12 380 *26,300	*9980 *20,900	*9980 *20,900							

**HEAVY LIFT TRENCHER**  
**BOOM** – Weldco, 7925 mm/26'0", Trencher  
**STICK** – Cat, 3200 mm/10'6"

**BUCKET** – 1220 mm/48"  
**SHOE** – 760 mm/30"  
**HEAVY LIFT** – Activated

**UNDERCARRIAGE** – Standard/Wide Gauge  
**COUNTERWEIGHT** – 10 432 kg/23,000 lb

		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft		9.0 m/30.0 ft		10.5 m/35.0 ft				
														m ft
7.5 m 25.0 ft	kg lb							*12 130 *26,200	*12 130 *26,200			*6650 *14,600	*6650 *14,600	12.1 39.5
6.0 m 20.0 ft	kg lb							*13 380 *29,100	*13 380 *29,100	*11 490 *23,600	10 600 22,700	*6770 *14,900	*6770 *14,900	12.6 41.1
4.5 m 15.0 ft	kg lb			*23 050 *49,100	*23 050 *49,100	*17 480 *37,600	*17 480 *37,600	*14 640 *31,700	13 500 29,000	11 810 25,300	10 280 22,000	*7030 *15,500	*7030 *15,500	12.8 42.0
3.0 m 10.0 ft	kg lb					19 760 42,600	17 080 36,800	14 780 31,800	12 830 27,600	11 410 24,500	9900 21,200	*7440 *16,400	6840 15,100	12.8 42.2
1.5 m 5.0 ft	kg lb					18 800 40,500	16 160 34,800	14 170 30,500	12 240 26,300	11 040 23,700	9530 20,500	*8030 *17,700	6890 15,200	12.7 41.6
<b>Ground Line</b>	kg lb					18 260 39,300	15 640 33,700	13 740 29,500	11 820 25,400	10 750 23,100	9250 19,900	8400 18,500	7210 15,900	12.3 40.2
-1.5 m -5.0 ft	kg lb			*17 310 *37,400	*17 310 *37,400	18 050 38,800	15 440 33,200	13 510 29,000	11 600 24,900	10 600 22,800	9100 19,600	9210 20,300	7920 17,500	11.6 38.0
-3.0 m -10.0 ft	kg lb			*21 990 *50,700	*21 990 *48,300	18 070 38,800	15 460 33,200	13 480 29,000	11 570 24,900	10 610 22,800	9110 19,600	*7630 *16,480	*7630 *16,480	10.6 33.9
-4.5 m -15.0 ft	kg lb	*17 820 *38,500	*17 820 *38,500	*21 760 *47,100	*21 760 *47,100	*18 270 *39,300	15 680 33,700	13 660 29,400	11 750 25,300					
-6.0 m -20.0 ft	kg lb			*17 080 *36,500	*17 080 *36,500	*14 240 *30,000	*14 240 *30,000							











# SPECIFICATIONS

## Lift Capacities

**DEEP TRENCHER (LC, Standard Carbody)**  
**BOOM** – Weldco, 9525 mm/31'3", Trencher  
**STICK** – Weldco, 4877 mm/16'0"

**BUCKET** – 1220 mm/48"  
**SHOE** – 910 mm/36"  
**HEAVY LIFT** – Activated

**UNDERCARRIAGE** – LC/Standard Gauge  
**COUNTERWEIGHT** – 12 474 kg/27,500 lb

		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft		9.0 m/30.0 ft		10.5 m/35.0 ft		12.0 m/40.0 ft		13.5 m/45.0 ft				m ft	
9.0 m 30.0 ft	kg lb											*6550 *13,100	*6550 *13,100					14.7 48.2	
7.5 m 25.0 ft	kg lb											*7500 *16,400	7160 15,200			*5060 *11,100	4300 9,600	15.1 49.6	
6.0 m 20.0 ft	kg lb									*8750 *18,900	*8750 *18,900	*7920 *17,200	6840 14,600	*6960 *13,700	5080 10,700	*5300 *11,600	4300 8,400	15.3 50.3	
4.5 m 15.0 ft	kg lb			*19 180 *40,800	*19 180 *40,800	*14 060 *30,100	*14 060 *30,100	*11 330 *24,400	*11 330 *24,400	*9620 *20,800	8510 18,200	*8460 *18,300	6440 13,700	*7650 *16,600	4840 10,300	*5630 *12,400	3440 7,600	15.4 50.5	
3.0 m 10.0 ft	kg lb					*16 430 *35,200	13 650 29,500	*12 760 *27,500	10 290 22,200	*10 530 *22,700	7840 16,800	*9050 *19,600	6000 12,800	*8000 *17,300	4560 9,700	*6090 *13,400	3230 7,100	15.3 50.1	
1.5 m 5.0 ft	kg lb					*18 200 *39,100	12 280 26,500	*13 980 *30,100	9370 20,200	*11 360 *24,500	7220 15,500	*9600 *20,700	5580 11,900	*8340 *18,000	4290 9,100	*6700 *14,700	3150 7,000	14.9 49.0	
Ground Line	kg lb					*19 040 *41,100	11 490 24,700	*14 790 *31,900	8710 18,700	*11 970 *25,800	6730 14,400	*10 020 *21,600	5230 11,200	*8580 *18,500	4050 8,600	7240 16,000	3200 7,100	14.4 47.4	
-1.5 m -5.0 ft	kg lb					*19 100 *41,300	11 130 23,900	*15 120 *32,600	8300 17,800	*12 290 *26,500	6390 13,700	*10 240 *22,100	4970 10,600	8510 18,200	3880 8,300	7630 16,800	3410 7,500	13.7 45.0	
-3.0 m -10.0 ft	kg lb						*18 570 *40,200	11 040 23,700	*14 980 *32,300	8110 17,400	*12 260 *26,400	6200 13,300	*10 180 *21,900	4830 10,300	8420 18,200	3800 8,210	*7940 *17,500	3820 8,500	
-4.5 m -15.0 ft	kg lb						*20 590 *46,200	16 580 35,500	*17 540 *37,900	11 130 23,900	*14 360 *31,000	8100 17,400	*11 820 *25,400	6160 13,200	*9750 *20,900	4800 10,300			
-6.0 m -20.0 ft	kg lb	*16 170 *37,800	*16 170 *37,800	*19 100 *41,300	16 980 36,400	*15 960 *34,400	11 380 24,400	*13 200 *28,400	8250 17,700	*10 860 *23,200	6270 13,500								
-7.5 m -25.0 ft	kg lb	*18 440 *39,600	*18 440 *39,600	*16 100 *34,500	*16 100 *34,500	*13 640 *29,200	11 800 25,400	*11 320 *24,000	8570 18,500	*9100 *19,700	6560 14,200								
-9.0 m -30.0 ft	kg lb			*11 900 *24,900	*11 900 *24,900	*10 200 *21,200	*10 200 *21,200												

**DEEP TRENCHER**  
**BOOM** – Weldco, 9525 mm/31'3", Trencher  
**STICK** – Weldco, 4877 mm/16'0"

**BUCKET** – 1230 mm/48"  
**SHOE** – 910 mm/36"  
**HIGH LIFT** – Activated

**UNDERCARRIAGE** – LC/Wide Gauge  
**COUNTERWEIGHT** – 12 474 kg/27,500 lb

		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft		9.0 m/30.0 ft		10.5 m/35.0 ft		12.0 m/40.0 ft		13.5 m/45.0 ft				m ft	
9.0 m 30.0 ft	kg lb											*6700 *13,500	*6700 *13,500					14.8 48.4	
7.5 m 25.0 ft	kg lb											*7530 *16,400	*7530 *16,400			*5070 *11,200	*5070 *11,200	15.2 49.7	
6.0 m 20.0 ft	kg lb									*8820 *19,100	*8820 *19,100	*7960 *17,300	*7960 *17,300	*7100 *14,000	6530 13,900	*5320 *11,700	5010 11,100	15.4 50.4	
4.5 m 15.0 ft	kg lb			*19 590 *41,600	*19 590 *41,600	*14 260 *30,600	*14 260 *30,600	*11 450 *24,600	*11 450 *24,600	*9690 *20,900	*9690 *20,900	*8510 *18,400	8120 17,400	*7670 *16,700	6280 13,400	*5670 *12,400	4650 10,300	15.4 50.5	
3.0 m 10.0 ft	kg lb					*16 600 *35,600	*16 600 *35,600	*12 870 *27,700	12 790 27,600	*10 600 *22,900	9850 21,100	*9090 *19,700	7670 16,400	*8030 *17,400	5990 12,800	*6130 *13,500	4440 9800	15.2 50.0	
1.5 m 5.0 ft	kg lb					*18 300 *39,400	15 580 33,600	*14 060 *30,300	11 860 25,500	*11 410 *24,600	9220 19,800	*9630 *20,800	7250 15,500	*8360 *18,100	5710 12,200	*6760 *14,900	4390 9700	14.9 48.9	
Ground Line	kg lb					*19 070 *41,100	14 790 31,800	*14 830 *32,000	11 200 24,100	*12 010 *25,900	8720 18,700	*10 040 *21,700	6890 14,700	*8600 *18,600	5480 11,700	7390 16,300	4480 9900	14.4 47.2	
-1.5 m -5.0 ft	kg lb					*19 070 *41,200	14 450 31,000	*15 130 *32,700	10 790 23,200	*12 300 *26,500	8380 18,000	*10 240 *22,100	6640 14,200	8460 18,500	5310 11,300	*7780 *17,100	4750 10,500	13.7 44.7	
-3.0 m -10.0 ft	kg lb					*16 330 *38,500	*16 330 *38,500	*18 510 *40,000	14 370 30,900	*14 950 *32,300	10 610 22,800	*12 240 *26,400	8200 17,600	*10 160 *21,900	6490 13,900	*8460 *18,300	5230 11,300	*7960 *17,400	5280 11,700
-4.5 m -15.0 ft	kg lb					*20 920 *45,900	*20 920 *45,900	*17 440 *37,700	14 480 31,100	*14 290 *30,800	10 610 22,800	*11 760 *25,300	8170 17,500	*9690 *20,800	6480 13,900				
-6.0 m -20.0 ft	kg lb	*16 780 *39,100	*16 780 *39,100	*18 890 *40,800	*18 890 *40,800	*15 800 *34,000	14 760 31,700	*13 080 *28,100	10 780 23,200	*10 750 *23,000	8300 17,800								
-7.5 m -25.0 ft	kg lb	*18 070 *38,800	*18 070 *38,800	*15 810 *33,900	*15 810 *33,900	*13 420 *28,700	*13 420 *28,700	*11 120 *23,600	*11 120 *23,600	*8900 *19,300	8620 18,620								
-9.0 m -30.0 ft	kg lb			*11 490 *24,000	*11 490 *24,000	*9850 *20,400	*9850 *20,400												











## Lift Capacities

### MASS EXCAVATOR

BOOM – Cat, 6477 mm/21'3"

STICK – 2921 mm/9'6"















BUCKET – None (Bare Stick)

SHOE – 760 mm/30"

HIGH LIFT – Activated

UNDERCARRIAGE – Standard

COUNTERWEIGHT – 7938 kg/17,500 lb

	3.0 m/10.0		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft		9.0 m/30.0 ft					
													m ft	
9.0 m 30.0 ft	kg lb				*17 130 *37,800	*17 130 *37,800						*16 860 *37,600	*16 860 *37,600	6.4 20.4
7.5 m 25.0 ft	kg lb				*17 220 *37,600	*17 220 *37,600	*15 720 *34,500	*15 720 *33,700				*15 600 *34,500	15 040 33,800	7.7 25.0
6.0 m 20.0 ft	kg lb				*18 570 *40,300	*18 570 *40,300	*16 130 *35,100	15 440 33,200				*15 080 *33,300	12 520 27,900	8.5 27.8
4.5 m 15.0 ft	kg lb				*20 650 *44,600	*20 650 *44,600	*17 040 *37,000	14 890 32,100	*14 890 *32,160	11 230 24,260		*14 870 *32,800	11 190 24,800	9.0 29.5
3.0 m 10.0 ft	kg lb				*22 640 *48,900	19 650 42,400	*17 990 *39,000	14 270 30,800	15 080 32,500	10 940 23,600		14 500 32,000	10 520 23,200	9.2 30.3
1.5 m 5.0 ft	kg lb				*23 660 *51,200	18 730 40,400	*18 530 *40,200	13 740 29,600	14 790 31,900	10 670 23,000		14 350 31,600	10 360 22,800	9.2 30.2
Ground Line	kg lb			*28 160 *65,500	*28 160 60,800	*23 290 *50,500	18 250 39,300	*18 290 *39,600	13 400 28,900			*14 830 *32,700	10 690 23,600	8.9 29.1
-1.5 m -5.0 ft	kg lb	*23 120 *52,300	*23 120 *52,300	*27 200 *59,200	*27 200 *59,200	*21 480 *46,500	18 140 39,100	*16 870 *36,400	13 310 28,700			*14 660 *32,300	11 690 25,800	8.3 27.1
-3.0 m -10.0 ft	kg lb			*22 120 *47,900	*22 120 *47,900	*17 850 *38,400	*17 850 *38,400					*13 920 *30,600	*13 920 *30,600	7.3 23.9

### MASS EXCAVATOR

BOOM – Mass Ex, 6477 mm/21'3"

STICK – Cat, 2921 mm/9'6"















BUCKET – None (Bare Stick)

SHOE – 760 mm/30"

HEAVY LIFT – Not Activated

UNDERCARRIAGE – Standard

COUNTERWEIGHT – 7938 kg/17,500 lb

	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					
													m ft	
9.0 m 30.0 ft	kg lb				*15 200 *33,500	*15 200 *33,500						*14 940 *33,300	*14 940 *33,300	6.4 20.4
7.5 m 25.0 ft	kg lb				*15 270 *33,300	*15 270 *33,300	*13 860 *30,400	*13 860 *30,400				*13 740 *30,400	*13 740 *30,400	7.7 25.0
6.0 m 20.0 ft	kg lb				*16 420 *35,600	*16 420 *35,600	*14 200 *30,900	*14 200 *30,900				*13 240 *29,200	12 520 27,900	8.5 27.8
4.5 m 15.0 ft	kg lb				*18 180 *39,300	*18 180 *39,300	*14 970 *32,500	14 890 32,100	*13 040 *28,200	11 230 24,260		*13 020 *28,700	11 190 24,800	9.0 29.5
3.0 m 10.0 ft	kg lb				*19 860 *42,900	19 650 42,400	*15 760 *34,200	14 270 30,800	*13 270 *28,800	10 940 23,600		*12 950 *28,500	10 520 23,200	9.2 30.3
1.5 m 5.0 ft	kg lb				*20 700 *44,800	18 730 40,400	*16 200 *35,100	13 740 29,600	*13 270 *28,700	10 670 23,000		*12 940 *28,500	10 360 22,800	9.2 30.2
Ground Line	kg lb			*25 330 *57,900	*25 330 *57,900	*20 330 *44,100	18 250 39,300	*15 950 *34,500	13 400 28,900			*12 910 *28,500	10 690 23,600	8.9 29.1
-1.5 m -5.0 ft	kg lb	*20 770 *47,000	*20 770 *47,000	*23 640 *51,400	*23 640 *51,400	*18 690 *40,500	18 140 39,100	*14 670 *31,600	13 310 28,700			*12 720 *28,000	11 690 25,800	8.3 27.1
-3.0 m -10.0 ft	kg lb			*19 100 *41,300	*19 100 *41,300	*15 450 *33,200	*15 450 *33,200					*12 020 *26,400	*12 020 *26,400	7.3 23.9



## The Competitive Edge

### Performance

- **Powerful, dependable hydraulic components** deliver high flow for rapid lift, swing and dump — or high pressure for maximum digging forces.
- **Proven Cat 3406B diesel Engine** operates at 1800 RPM for improved fuel efficiency and longer service life.
- **Three, variable-displacement piston pumps** provide superior, multi-function capability.
- **Constant horsepower hydraulic system** features variable-displacement piston pumps and hydraulic power proportioning — coupled with Cat high-pressure XT-5 hose and couplings for fuel efficient, reliable and productive operation.

### Reliability/Durability

- **Box-section carbody** uses plate construction to provide excellent strength and resistance to stresses generated by high-volume production over long periods of time.
- **Improvements like a heavier boom tower plate**, stronger swing bearing mounts and reinforcement behind the swing bearing help the heavy, box-section mainframe resist the forces of stress for maximum productivity and uptime.
- **Castings at cylinder pivot points**, boom nose and boom foot eliminate welds in high stress areas. Increases boom life.
- **Duo-Cone Seals on rollers, idlers and sprockets** to keep dirt and grit out/lubricants in for trouble-free operation.
- **XT-5 hydraulic hose and couplings** — used and proven the world over in the toughest applications — less hose changing, more work done.
- **Box-section boom and sticks** are stress relieved after welding — strengthens front structures to resist stress and twisting forces.
- **Booms have single-piece, top and bottom plates** — no cross welds — for rigidity, reduced maintenance and long life.
- **Booms and sticks use full-length**, metal back-up strips at weld joints — superior weld penetration of both joints and the strip for high strength, durability and performance.

### Maintenance/Repair

- **Pivot points have sealed linkage** to reduce maintenance.
- **Daily service areas** — strategically placed, fast access, more work time.
- **Modular components** — remove as single units for simpler, quicker repairs.
- **Modules can be pre-tested, field-installed**, less shop time, downtime.

- **Monitoring system** — guards against costly, time-consuming failure when gauges aren't monitored.
- **Full line of Exchange components** for the lowest repair cost in the industry.

### Operating Ease

- **Conveniently placed, precise, low-effort controls** and easy-to-read, non-glare instrument panel — less strain, fatigue for a more productive operation.
- **Fully adjustable suspension seat** available for enhanced operator comfort.
- **Two-section front window** adjustable for multiple visibility/ventilation combinations — no cross bar or lower windshield to obstruct visibility.
- **Rear window opens** for added ventilation.
- **Large skylight** provides excellent visibility to overhead obstructions.

### Total Customer Support System

- **Parts availability** — most Cat parts on dealer's shelf when you need them — computer-controlled, emergency search system backup.
- **Service capability** — dealer's shop or fast field service — trained service people — latest tools and technology.
- **Machine management services** — effective preventive maintenance programs, diagnostic programs (Scheduled Oil Sampling, Technical Analysis), cost-effective repair options, customer meetings, operator and mechanic training.
- **Exchange components for quick repairs** — choose remanufactured products or rebuilt components for maximum availability and lower costs.
- **Literature support** — easy-to-use operation, maintenance guides help you get the maximum value out of your equipment investment.
- **Flexible financing** — your dealer can help arrange attractive financing on the entire line of Cat equipment. Terms structured to meet your cash flow requirements. See how affordable and easy it is to own Cat equipment.

### Custom Products

- In addition to the standard range of optional equipment, special attachments and machine configurations to suit particular customer applications can be made. Contact your Caterpillar dealer for details on matching the Caterpillar product to your special applications.