345D L

Hydraulic Excavator



Engine		
Engine Model	Cat® C13 ACERT™	
Net Flywheel Power	283 kW	380 hp
Weights		
Operating Weight – Long Undercarriage	45 375 kg	100,040 lb
Operating Weight – Long Variable	49 265 kg	108,610 lb

- 6.9 m (22'8") HD Reach Boom, R3.9m (12'10") Stick, 1219 mm (48") GP-C Bucket, 750 mm (30") TG Track Shoes, Long Undercarriage

345D L Hydraulic Excavator

The 345D L hydraulic excavator's high performance and rugged durability combine to maximize your productivity.

C13 Engine with ACERT™ Technology

ACERT™ Technology works at the point of combustion to optimize engine performance and provide low exhaust emissions to meet U.S. EPA Tier 3 and EU Stage IIIA emission regulations, with exceptional performance capabilities and proven reliability. **pg. 4**

Hydraulics

The hydraulic system has been designed to provide reliability and outstanding controllability. An optional Tool Control System provides enhanced flexibility. **pg. 5**

Operator Station

Provides maximum space, excellent visibility and easy access to all switches. The monitor is a full-color graphical display that allows the operator to understand the machine information easily. Overall, the cab provides a comfortable environment for the operator. **pg. 6**

Work Tools

A variety of work tools, including buckets, couplers, hammers, and shears are available through Cat® Work Tools. **pg. 11**

Versatility

Caterpillar offers a wide variety of optional and factory-installed attachments to enhance performance and improve job site management. **pg. 12**

Complete Customer Support

Your Cat dealer offers a wide range of services – from assistance with configuring your machine to best match your application to customer support agreements to meet your maintenance needs. Repair Option Programs guarantee the cost of repairs up front and help you to avoid unscheduled repairs. **pg. 15**

Outstanding performance. *Excellent control, high stick and bucket forces, impressive lift capacity, simplified service and a comfortable operator station to increase your productivity and lower operating costs.*



Undercarriage

Cat designed excavator undercarriage is stable, durable and low maintenance. Available in Fixed, Variable and Wide Variable gauge configurations to meet lift capacity and bucket size needs. **pg. 8**

Structures

Caterpillar® design and manufacturing techniques assure outstanding durability and service life from these important components. **pg. 9**

Boom, Sticks and Attachments

Built for good performance and long service life, Cat booms and sticks are box-section structures with thick multi-plate fabrications to resist high stress. Three lengths of booms and five types of sticks are available, offering a range of configurations suitable for a wide variety of applications and conditions. **pg. 10**

AccuGrade™ Grade Control System for Hydraulic Excavators

The AccuGrade System helps to move material right the first time, reduces costs and increases material utilization. The system improves operator skills, helping with labor requirements and improves safety on the job site. **pg. 13**

Service and Maintenance

Fast, easy service has been designed in with extended service intervals, advanced filtration, convenient filter access and user-friendly electronic diagnostics for increased productivity and reduced maintenance costs. **pg. 14**



C13 Engine with ACERT™ Technology

Built for power, reliability, economy and low emissions.



Performance. The 345D L, equipped with the C13 with ACERT Technology, meets the U.S. EPA Tier 3 emissions while providing 10% more horsepower compared to the 345C L. The building blocks of ACERT Technology are fuel delivery, air management, and electronic control – providing better fuel economy and reduced wear.

Emissions. ACERT Technology is a differentiated technology that reduces emissions at the point of combustion. The technology capitalizes on Caterpillar's proven leadership in three core engine systems: fuel, air and electronics.

Fuel System. The Cat C13 features electronic controls that govern the mechanically actuated unit fuel injection (MEUI) system. MEUI provides the high-pressure required to help reduce particulate emissions and deliver better fuel economy through finer fuel atomization and more complete combustion.

Controllers. The mechanically actuated unit injection system features a high-pressure fuel injection system, proven to significantly reduce fuel consumption and particulate emission. Electronic Unit Injection (EUI) produces high-pressure and affords the integration of electronics with fewer components. The modular design of the electronic control system allows greater update, flexibility, improves serviceability and lowers repair costs.

ADEM™ A4 Engine Controller. The ADEM™ A4 electronic control module manages fuel delivery to get the best performance per liter or gallon of fuel used. The engine management system provides flexible fuel mapping, allowing the engine to respond quickly to varying application needs. It tracks engine and machine conditions while keeping the engine operating at peak efficiency.

Turbocharger. The Cat C13 uses a wastegate turbocharger for improved performance.

- The wastegate valve controls excessive engine boost pressure by allowing exhaust to bypass the exhaust-side turbine.
- The wastegate also reduces turbine wear in high RPM, low load conditions and optimizes air and fuel delivery for peak engine performance.
- The turbocharger increases the density of the air, enabling the engine to produce more power with few effects from altitude.

Low Sound and Vibration Levels. The engine mounts are rubber-isolating mounts matched with the engine package to provide optimum sound and vibration reduction. Further noise reduction has been achieved through design changes to the isolated top cover, oil pan, multiple injection strategy, insulated timing cover and sculpted crankcase.

Air Cleaner. The radial seal air filter features a double-layered filter core for more efficient filtration and is located in a compartment behind the cab. A warning is displayed on the monitor when dust accumulates above a preset level.

Cooling System. The 345D L layout completely separates the cooling system from the engine compartment. The cooling fan is hydraulically driven with variable speed control based on the ambient temperature, coolant temperature, and hydraulic oil temperature. This unique feature assists in the management of engine power and improves noise efficiency while providing optimized cooling.

Cold Weather Starting Kit. The optional kit includes two additional batteries, heavy-duty battery cables, and the ether starting aid. With this kit, the 345D L has the capability to start at –32° C (–25.6° F).

Hydraulics

Cat® hydraulics deliver power and precise control to keep material moving.

Pilot System. The pilot pump is independent from the main pumps and controls the front linkage, swing and travel operations. The pilot control valve operation is proportional to control lever movement, delivering outstanding controllability.

Component Layout. The component location and hydraulic system design provide the highest level of system efficiency. The main pumps, control valve and hydraulic tank are located as close to each other as possible. This design makes it possible to use shorter tubes and lines between components, reducing friction losses and pressure drops.

Heavy Lift Standard. The operator can select the heavy lift mode at the push of a button to boost lifting capability and provide improved controllability of heavy loads.

Hydraulic Cross-Sensing System. The hydraulic cross sensing system utilizes each of two hydraulic pumps to 100 percent of engine power under all operating conditions. This improves productivity with faster implement speeds and quicker, stronger pivot turns.

Boom and Stick Regeneration Circuits. A hydraulically operated stick regeneration circuit saves energy and improves multi-function performance during the stick-in operation. New on the 345D L, the boom regeneration circuit is operated electrically, and this system is managed by the machine ECM. The system improves cycle times and fuel efficiency, increasing your productivity and reducing operating costs.



Boom and Swing Priority. The hydraulic system on the 345D L provides automatic priority function for boom-up and swing operations eliminating the need for work mode buttons. When the boom or swing lever is activated, the system automatically assigns priority based on operator demand.

Hydraulic Cylinder Snubbers. Snubbers are located at the rod-end of the boom cylinders and both ends of the stick cylinders to cushion shocks while reducing sound levels and extending component life.

Operator Station

Designed for simple, easy operation, the 345D L allows the operator to focus on production.



Cab Design. The workstation is spacious, quiet and comfortable, assuring high productivity during a long work day. The air conditioner and attachment switches are conveniently located on the right-hand wall, and the key switch and throttle dial are on the right-hand console. The monitor is easy to see with excellent visibility.

Standard Cab Equipment. To enhance operator comfort and productivity, the cab includes a lighter, drink holder, coat hook, service meter, literature holder, magazine rack and storage compartment.



Monitor Display Screen. The compact, full color 400x234 pixels Liquid Crystal Display (LCD), displays machine maintenance, diagnostic and prognostic information, in twenty-seven different languages. The keypad allows the operator to select machine operation conditions and to set view preferences. The Master Caution Lamp blinks ON and OFF when one of these critical conditions occur:

- Engine oil pressure low
- Coolant temperature high
- Hydraulic oil temperature high

Under the normal condition or the default condition, the monitor display screen is divided into four areas: clock and throttle dial area, gauge area, event display area and multi-information display area.

Clock and Throttle Dial Area. The clock, throttle dial position and green gas-station icon are displayed on the monitor screen.

Gauge Area. Three analog gauges, fuel level, hydraulic oil temperature and coolant temperature, are displayed on the monitor screen.

Event Display Area. Machine information is displayed on the monitor screen with the icon and language.

Multi-information Display Area. This area is reserved for displaying information that is convenient for the operator. The "CAT" logo is displayed when no information is available to be displayed.



Console. The consoles feature a simple, functional design to reduce operator fatigue, ease of switch operation and excellent visibility. Both consoles have attached armrests with height adjustments.

Travel Controls. The 345D L uses pilot operated control levers, positioned so the operator can operate with arms on the armrests. The vertical stroke is longer than the horizontal stroke, reducing operator fatigue. The control lever grips are shaped to fit into the operator's hands. The horn switch and one-touch low idle switch are positioned on the left and right grip.

Hydraulic Activation Control Lever. For added safety, this lever must be in the operate position to activate the machine control functions.

Seat. A high-back, heated, air-suspension seat is now standard on the 345D L. The seat allows a variety of adjustments to suit the operator's size and weight and provides a comfortable working environment. Wide adjustable armrests and a retractable seatbelt are also included.

Climate Control. Positive filtered ventilation with a pressurized cab comes standard on the 345D L. Fresh air or re-circulated air can be selected with a switch on the left console.

Cab Exterior. The exterior design uses thick steel tubing along the bottom perimeter of the cab, improving the resistance of fatigue and vibration. This design allows the FOGS to be bolted directly to the cab, at the factory or as an attachment later, enabling the machine to meet specifications and job site requirements.

Cab Mounts. The cab shell is attached to the frame with viscous rubber cab mounts, which dampen vibrations and sound levels while enhancing operator comfort.

Windows. All glass is affixed directly to the cab, eliminating window frames and providing excellent visibility. The upper front windshield opens, closes and stores on the roof above the operator with a one-touch action release system.

Wipers. Pillar-mounted wipers increase the operator's viewing area and offer continuous and intermittent modes.

Skylight. An enlarged skylight with sunshade provides excellent visibility and good ventilation.

Undercarriage

Durable undercarriage absorbs stresses and provides excellent stability.

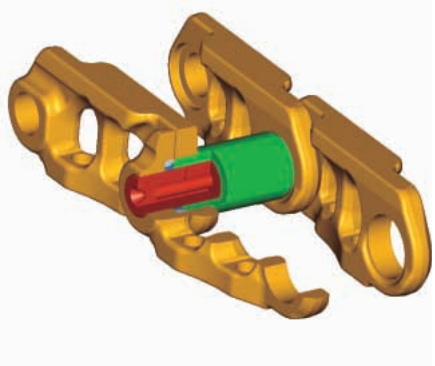


Undercarriage Options. Track with Positive Pin Retention 2 (PPR2) and cast idlers are available as attachments on the 345D L. The PPR2 prevents loosening of the track pin from the track link and the cast idler is designed for extended life. Both options are ideal for extreme applications or those that require a large amount of travel.

Travel Motors. Two-speed axial piston hydraulic motors provide the 345D L drive power and speed selection. When the high-speed position is selected, the machine automatically changes between computer-controlled high and low speeds depending on drawbar-pull requirements.

Straight-line Travel Circuit. The straight-line travel circuit is incorporated into the hydraulic system, which maintains low-speed, straight-line travel, even when operating the front linkage.

Final Drive. The final drives are a three-stage planetary reduction. This design results in a complete drive/brake unit that is compact and delivers excellent performance and reliability.

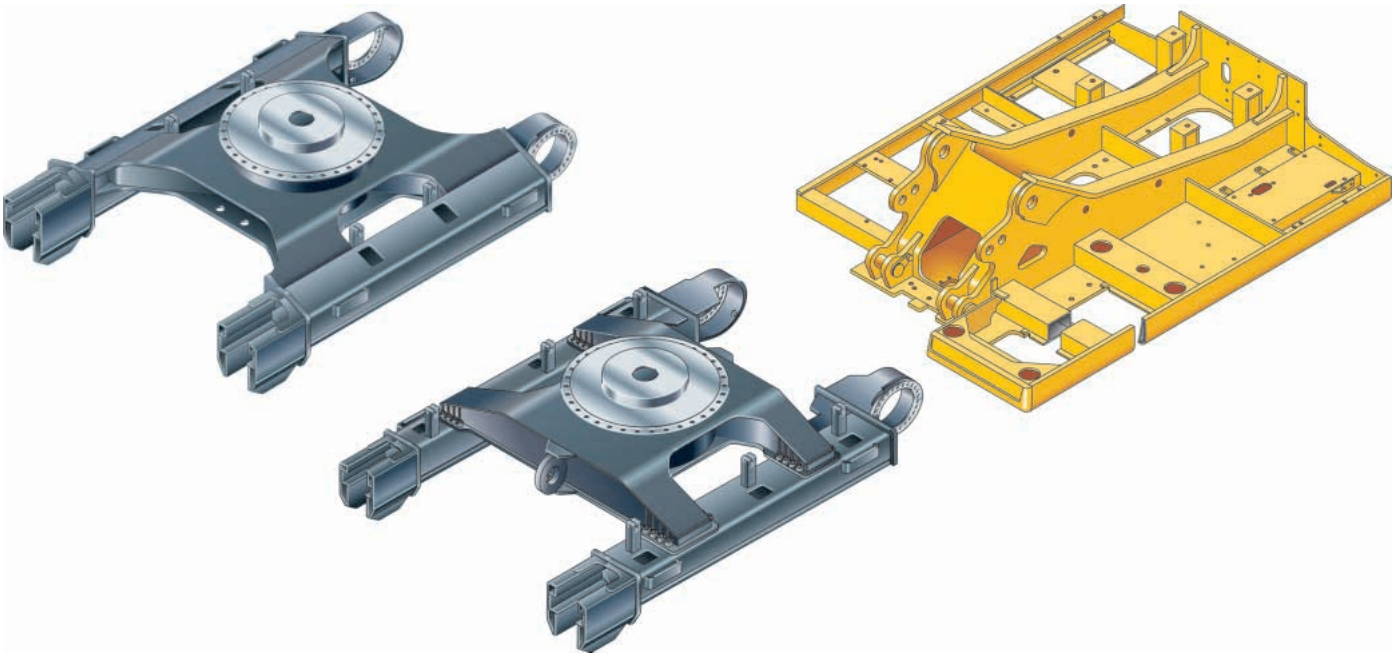


Track. The 345D L comes standard with a grease lubricated track called GLT4. The track links are assembled and sealed with grease to decrease internal bushing wear, reduce travel noise, and lower operating costs by extending service life. The track link for the 345D L has been re-designed to avoid the concentration of stresses and improve durability and reliability.

Track Guards. The idler guard and bolt-on center guard are standard equipment. They help maintain track alignment while traveling or working on slopes. For applications that require additional track protection or alignment, optional guards are available.

Structures

The 345D L structural components are the backbone of the machine's durability.



Carbody. The 345D L has three undercarriage options to meet regional transportation requirements and application needs.

- Fixed gauge for narrow transport and weight sensitive areas.
- Variable gauge for increased track and ground clearance and over-side lift.
- Wide variable gauge, provided as an attachment to the variable gauge machine, provides a significant increase in over-side lift with the capability for handling larger buckets.

The carbody utilizes a columnless design that allows the swing bearing to be directly mounted on the top plate for excellent rigidity and strength.

Upper Frame. The rugged main frame is designed for maximum durability. Robot welding is used for consistent, high-quality welds. The main channels are box sections connected by a large diameter tube in the boom foot area to improve rigidity and strength. The outer frame utilizes curved side rails for rigidity against bending and torsional loads.

Counterweights. The 345D L has several counterweight options to best match the machine to your application. Counterweight removal device is available for the 7.6 mt (16,760 lb) and 8.7 mt (19,180 lb) counterweights to facilitate transport when needed.

Track Roller Frame. Fixed Gauge Undercarriage

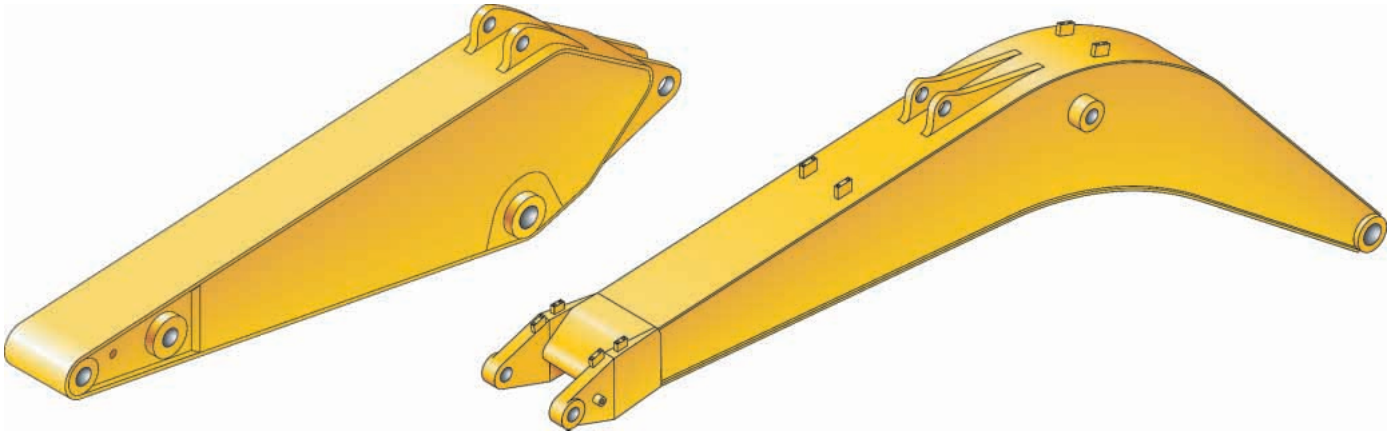
- Uses a press-formed, pentagonal section for the track frame that is robot-welded for weld consistency and quality. The track frame has been designed so that the top of the track frame has a steep angle to help prevent accumulation of mud and debris.

Variable Gauge Undercarriage

- The track roller frame is made of thick steel plate that is bent into a U shape and welded to the bottom plate to create a box structure. The box structure design increases rigidity and impact resistance.

Boom, Sticks and Attachments

Designed for maximum flexibility to keep productivity and efficiency high on all jobs.



Front Linkage Attachments. Three length of booms and five types of sticks are available, offering a range of configurations suitable for a wide variety of application conditions.

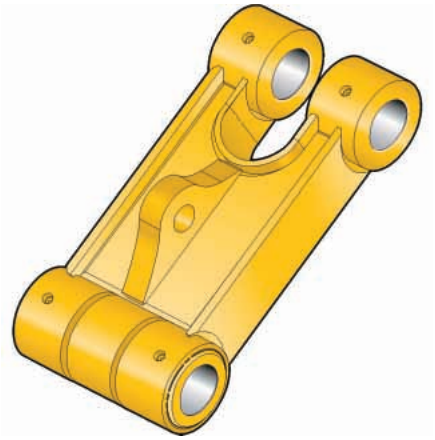
Boom Construction. The 345D L booms have large cross-sections and internal baffle plates to provide long life and durability. Forged steel is used in critical high-load areas such as the boom-foot and boom cylinder connection.

Long Reach Boom – 7.4 m (23'3") long. The Long Reach boom, when combined with the 4.3 m (14'1") stick, provides a similar digging envelope to the previous 345C. This boom/stick combination has a significantly reduced transport height, eliminating the need to remove the stick cylinder pin.

HD Reach Boom – 6.9 m (22'8") long. The Heavy Duty (HD) Reach boom is designed to balance reach, digging force and bucket capacity, making it ideal for a wide range of applications.

Mass Excavation Boom – 6.55 m (21'6") long. The mass boom is designed to provide maximum digging forces, bucket capacity and truck loading productivity. The mass boom comes with two stick options for further job site versatility.

Stick Construction. The 345D L sticks are made of high-tensile strength steel, using a large box section design, interior baffle plates and an additional bottom guard.



Power Link. The 345D L power link improves durability, increases machine-lifting capability in key lifting positions, and is easier to use compared to the previous lift bar designs.

Work Tools

The 345D L has an extensive selection of work tools to optimize machine performance.



Work Tools. Choose from a variety of work tools such as hammers, shears, pulverizers, compactors, multi-processors, sorting grapples and couplers. Ask your Cat dealer for information on attachments or special configurations.

General Purpose Buckets. General purpose (GP) buckets are best suited for digging in low-impact, moderately abrasive materials such as dirt, loam, gravel and clay.

Heavy Duty Buckets. Heavy duty (HD) buckets are designed for a wide range of moderately abrasive applications such as mixed dirt, clay and rock. HD buckets have optimized loading and dumping characteristics and more robust construction than the GP buckets.

Heavy-Duty Power Buckets. Heavy duty power (HDP) buckets are for use in moderately abrasive applications where breakout force and cycle times are critical. Decreased tip radius maximizes tip force and improves cycle times in most materials. Not ideal for use in sticky material conditions. Cutting edge and GET are up-sized.

Heavy Duty Rock Buckets. Heavy duty rock (HDR) buckets are designed for aggressive bucket loading in highly abrasive applications such as shot rock and granite. Features include:

- Thick wear plates to extend the life of the bucket in severe applications.
- Side wear plates that extend further up the side of the bucket for maximum protection in rocky soils.
- Sidebar protectors are available for sidebar protection, or side-cutters can be used to provide increased fill characteristics and bucket wear protection.

Rock Ripping Buckets. Rock ripping (RR) buckets are ruggedly constructed, narrow buckets for ripping in applications where material penetration and an inability to blast is an issue. The aggressive lip-type ripping design uses five sharp or twin sharp teeth in a staggered position. The staggered design allows one or two tips to penetrate first, providing higher breakout forces.



Caterpillar Ground Engaging Tools (GET). Caterpillar K Series™ GET is featured on the 345D L buckets. The K Series™ system uses a vertical retainer, which is easier to remove and install than the old Cat J Series pin. There are a variety of teeth, side cutters, and sidebar protectors to match operating conditions.

- The teeth are designed to be extremely aggressive and offer excellent penetration.
- The side-cutter design is aggressive in trenching applications, improving efficiency and bucket payload.

Service Life. Caterpillar® buckets increase service life and reduce repair costs.

- Dual radius design for increased life and reduced wear.
- Robot welding of hinge assembly for increased weld penetration and longer life.
- Incorporates the aggressive and easier to install K Series™ GET system.
- High strength and heat-treated steel that exceeds T-1 in high wear areas.

Versatility

A wide variety of optional and factory-installed attachments are available to enhance performance and improve job site management.



Control Levers. Three types of tool controls are available to meet the operator's individual preference.

- Foot Pedal – The hydraulic modulated foot pedal is used in conjunction with the hydraulic controller.
- Foot Switch – The electric on/off switch pedal is used in conjunction with either the hydraulic controller or attachment controller. The foot switch is located on cab floor.
- Tool Controller Joystick – Two types of the tool controller joysticks are available. The joystick with the modulation switch has two on/off switches, one trigger switch and one modulation switch. The joystick without the modulation switch has three on/off switches and one trigger switch.



Tool Control System. The optional tool control system maximizes work tool productivity by configuring hydraulic flow, pressure, and operator controls to match a specific work tool. System versatility enables a wide range of tools to be used.

Auxiliary Hydraulic Valve. A hydraulically controlled auxiliary valve is standard on the 345D L. Control circuits are available as attachments, allowing operation of high and medium pressure tools such as shears, grapples, hammers, pulverizers, multi-processors and vibratory plate compactors.

Product Link. Product Link 321 is now standard on the 345D L. The optional levels of service, including Asset Watch, Maintenance Watch, and Health Watch allow you to monitor and maintain your equipment for the lowest operating cost.

Machine Security. An optional Machine Security System is available from the factory on the 345D L. This system controls when the machine can be operated and utilizes specific keys to prevent unauthorized machine use, a significant theft deterrent.

AccuGrade™ Grade Control System for Hydraulic Excavators

The AccuGrade Excavator System design integrates the scalable machine control and guidance system to optimize performance, reliability and productivity.

Overview. The AccuGrade System for Hydraulic Excavators reduces guesswork and costly rework by moving material right the first time, reduces survey costs up to 90%, and increases material utilization. The system improves operator skills, which reduces labor requirements, aids operators in maintaining a consistent grade and slope across the worksite, and reduces material cost.



The AccuGrade Attachment Ready Option (ARO) Machine. The ARO supports all kits and integrates the critical sensors with the machine right out of the factory. The design uses advanced Position Sensing Cylinder (PSC) technology as well as heavy duty rotary sensors. With the PSC, the AccuGrade system determines the current cylinder length and the current position of the bucket tip in real time.

The PSC also removes the front linkage sensors from the traditional high wear areas such as the bucket linkage, and places them safely inside the bucket cylinder for increased integration, responsiveness, and reliability.

The ARO uses a Controller Area Network (CAN) designed for plug-and-play capability. Simply mount the components, connect, calibrate and the system is ready to operate. All wiring and necessary welded brackets are factory installed as part of the ARO.



AccuGrade Site Reference Kit. The AccuGrade Site Reference system provides the operator with precise, real-time bucket positioning relative to the desired grade. Using a combination of sensors, the system calculates bucket tip position relative to a grade/survey stake or benchmark.

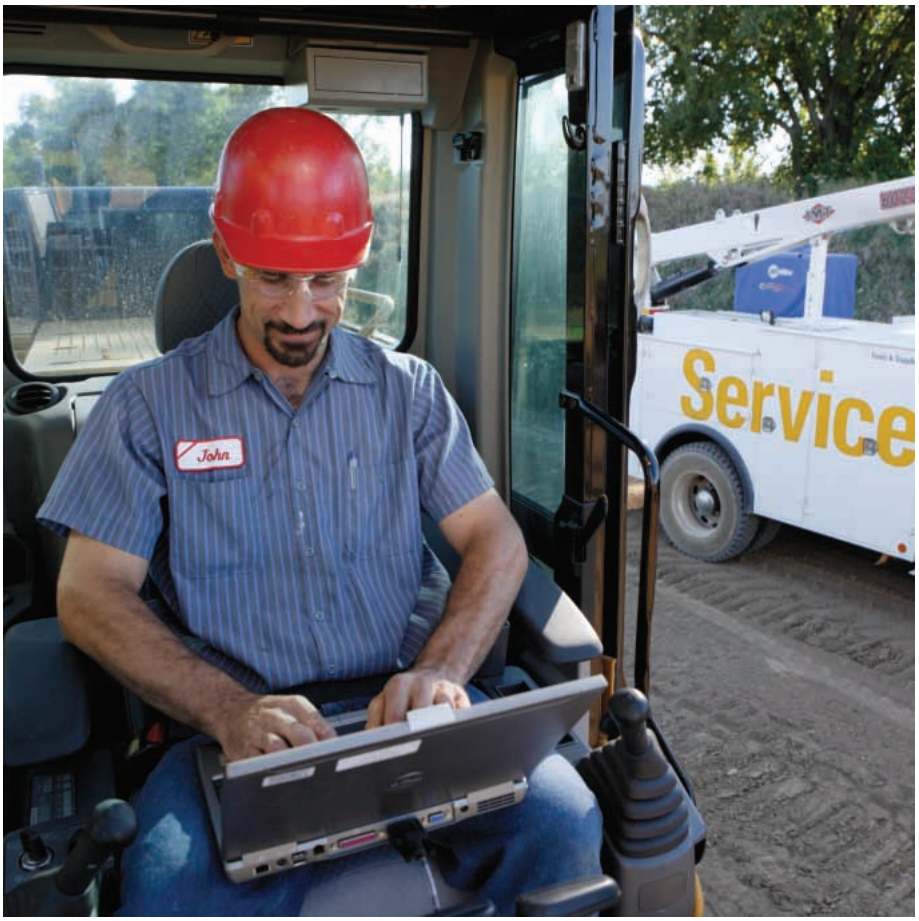
AccuGrade Laser Reference Kit. The optional system allows the machine to move after obtaining a reference benchmark. The laser receiver attachment references a rotating laser to calculate the desired grade for elevation changes over large work sites, significantly increasing productivity.

AccuGrade GPS Kit. AccuGrade GPS uses 3D design files that are stored on the in-cab display and is able to use satellites in both the US and the GLONASS satellite constellation to augment the GPS solution and define the location of the machine on the job site. With the addition of the machine position to the location of the bucket determined by the machine-mounted components, AccuGrade GPS then compares the position of the bucket relative to the site design plan and delivers real-time information to the operator.

Applications. The Site and Laser Reference systems are ideal for building pads, trenches, and general utility applications. The 3D system is ideal for all applications, including finishing slopes, excavating and truck loading, complex trenches, and sites with 3D designs, such as retention ponds and golf courses.

Service and Maintenance

Simplified service and maintenance save you time and money.



Extended Service Intervals. Extended service and maintenance intervals increase machine availability. The maintenance intervals for engine oil and engine oil filter have been extended to 500 hours.

Capsule Filter. The hydraulic return filters are located in the hydraulic tank. The filter elements are removable without spilling hydraulic oil.

Pilot Hydraulic System Filter. The pilot hydraulic system filter keeps contaminants from the pilot system and is located in the pump compartment.

Radial Seal Main Air Cleaner. The radial seal main air cleaner with pre-cleaner has a double-layered filter element for more efficient filtration. No tools are required to change the element.

Fuel-Water Separator. The water separator has a primary fuel filter element and is located in the battery compartment for easy access from the ground.

Service Points. Service points are centrally located with easy access to facilitate routine maintenance.



Oil Sample and Pressure Ports. Oil sample and pressure ports provide easy checking of machine condition and are standard on every machine.

Greasing Points. A concentrated remote greasing block on the boom delivers grease to hard-to-reach locations.

Complete Customer Support

Cat dealer services help you operate longer with lower costs.



Product Support. You will find nearly all parts at our dealer parts counter. Cat dealers utilize a worldwide computer network to find in-stock parts to minimize machine downtime. You can save money with Cat remanufactured components.

Machine Selection. Make detailed comparisons of the machines you are considering before you buy. What are the job requirements, machine attachments and operating hours? What production is needed? Your Cat dealer can provide recommendations.

Purchase. Look past initial price. Consider the financing options available as well as day-to-day operating costs. This is also the time to look at dealer services that can be included in the cost of the machine to yield lower equipment owning and operating costs over the long run.

Customer Support Agreements. Cat dealers offer a variety of product support agreements, and work with customers to develop a plan that best meets specific needs. These plans can cover the entire machine, including attachments, to help protect your investment.

Operation. Improving operating techniques can boost your profits. Your Cat dealer has videotapes, literature and other ideas to help you increase productivity, and Caterpillar offers certified operator training classes to help maximize the return on your investment.

Maintenance Services. Repair option programs guarantee the cost of repairs up front. Diagnostic programs such as Scheduled Oil Sampling, Coolant Sampling and Technical Analysis help you avoid unscheduled repairs.

Replacement. Repair, rebuild or replace? Your Cat Dealer can help you evaluate the cost involved so you can make the right choice.

SAFETY.CAT.COM™.

Engine

Engine Model	Cat C13 ACERT	
Net Flywheel Power	283 kW	380 hp
Net Power – ISO 9249	283 kW	380 hp
Net Power – SAE J1349	283 kW	380 hp
Net Power – EEC 80/1269	283 kW	380 hp
Bore	130 mm	5.1 in
Stroke	157 mm	6.2 in
Displacement	12.5 L	763 in^3
Cylinders	6	

- The 345D L meets U.S. EPA Tier 3 and EU Stage IIIA exhaust emission requirements.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.
- No engine derating needed up to 2300 m (7,500 ft).

Weights

Operating Weight – Long Undercarriage	45 375 kg	100,040 lb
Operating Weight – Long Variable	49 265 kg	108,610 lb

- 6.9 m (22'8") HD Reach Boom, R3.9m (12'10") Stick, 1219 mm (48") GP-C Bucket, 750 mm (30") TG Track Shoes, Long Undercarriage

Swing Mechanism

Swing Speed	8.7 rpm	
Swing Torque	148.5 kN·m	109,560 lb ft

Drive

Maximum Travel Speed	4.5 km/h	2.8 mph
Maximum Drawbar Pull – Long Undercarriage	337.7 kN	75,920 lb

Service Refill Capacities

Fuel Tank Capacity	705 L	186 gal
Cooling System	35.5 L	9.4 gal
Engine Oil	42 L	11 gal
Swing Drive (each)	10 L	2.6 gal
Final Drive (each)	15 L	4 gal
Hydraulic System (including tank)	570 L	150 gal
Hydraulic Tank	243 L	64 gal

Hydraulic System

Main System – Maximum Flow (Total)	734 L/min	194 gal/min
Maximum Pressure – Equipment – Normal	35 000 kPa	5,080 psi
Maximum Pressure – Equipment – Heavy Lift	38 000 kPa	5,511 psi
Maximum Pressure – Travel	35 000 kPa	5,080 psi
Maximum Pressure – Swing	31 400 kPa	4,550 psi
Pilot System – Maximum flow	43 L/min	11 gal/min
Pilot System – Maximum pressure	4110 kPa	596 psi
Boom Cylinder – Bore	160 mm	6.3 in
Boom Cylinder – Stroke	1575 mm	62 in
Stick Cylinder – Bore	190 mm	7.5 in
Stick Cylinder – Stroke (for Long Reach and Reach fronts)	1778 mm	70 in
Stick Cylinder – Stroke (for mass excavation fronts)	1758 mm	69.2 in
TB Family Bucket Cylinder – Bore	160 mm	6.3 in
TB Family Bucket Cylinder – Stroke	1356 mm	53.4 in
UB Family Bucket Cylinder – Bore	170 mm	6.7 in
UB Family Bucket Cylinder – Stroke	1396 mm	55 in
Main normal relief pressure	35 000 kPa	5,080 psi

Sound Performance

Performance	ANSI/SAE J1166 MAY90 Meets OSHA and MSHA Requirements

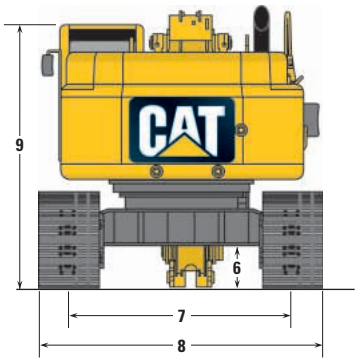
- When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166 OCT 98, meets OSHA and MSHA requirements for operator sound exposure limits in effects at time of manufacture.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in noisy environment.

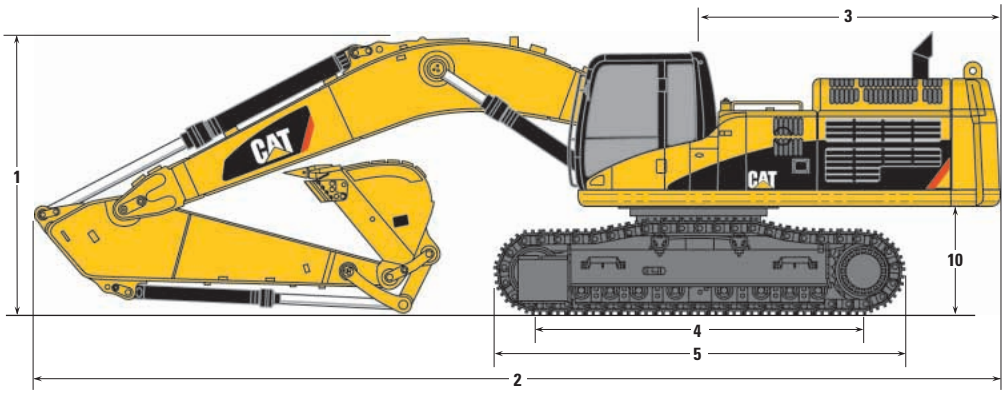
Standards

Brakes	SAE J1026 APR90
Cab/FOGS	SAE J1356 FEB 88 and ISO 10262-1998

Dimensions

All dimensions are approximate.





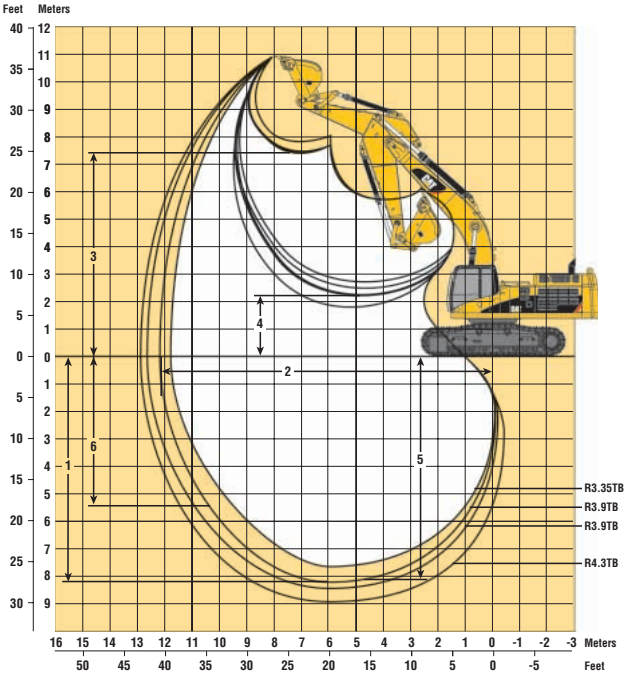
Boom	Long Reach Boom 7.4 m (24'3")		HD Reach Boom 6.9 m (22'8")		Mass Boom 6.55 m (21'6")	
Stick	**R4.3TB (14'1")**	**R3.9TB (12'10")**	**R3.9TB (12'10")**	**R3.35TB (11'0")**	**M3.0UB (9'10")**	**M2.5UB (8'2")**
1 Shipping Height						
Fixed Gauge Undercarriage	3680 mm (12'1")	3570 mm (11'8")	3660 mm (12'0")	3690 mm (12'1")	4020 mm (13'2")	3960 mm (13'0")
Variable Gauge Undercarriage	3630 mm (11'11")	3550 mm (11'7")	3640 mm (11'11")	3720 mm (12'2")	4050 mm (13'3")	4000 mm (13'2")
2 Shipping Length						
Fixed Gauge Undercarriage	12 450 mm (40'10")	12 430 mm (40'9")	11 950 mm (39'2")	11 940 mm (39'2")	11 640 mm (38'2")	11 710 mm (38'5")
Variable Gauge Undercarriage	12 400 mm (40'8")	12 370 mm (40'7")	11 910 mm (39'1")	11 910 mm (39'1")	11 620 mm (38'1")	11 680 mm (38'4")
3 Tail Swing Radius	3770 mm (12'4")	3770 mm (12'4")	3770 mm (12'4")	3770 mm (12'4")	3770 mm (12'4")	3770 mm (12'4")

Undercarriage	Fixed Gauge	Variable Gauge	Wide Variable Gauge
4 Length to Center of Rollers	4360 mm (14'4")	4340 mm (14'3")	4340 mm (14'3")
5 Track Length	5360 mm (17'7")	5340 mm (17'6")	5340 mm (17'6")
6 Ground Clearance	510 mm (1'8")	740 mm (2'5")	740 mm (2'5")
7 Track Gauge			
Retracted (Transport) Position	2740 mm (9'0")	2640 mm (8'8")	2760 mm (9'1")
Extended (Working) Position	2740 mm (9'0")	2890 mm (9'6")	3240 mm (10'8")
8 Track Width*			
Retracted (Transport) Position	3640 mm (11'11")	3540 mm (11'7")	3660 mm (12'0")
Extended (Working) Position	3640 mm (11'11")	3790 mm (12'5")	4140 mm (13'7")
9 Cab Height	3210 mm (10'6")	3360 mm (11'0")	3360 mm (11'0")
10 Counterweight Height (to bottom)	1320 mm (4'4")	1470 mm (4'10")	1470 mm (4'10")

* Track width shown is for 900 mm (36") track shoes. Subtract 150 mm (6") for 750 mm (30") track shoes.

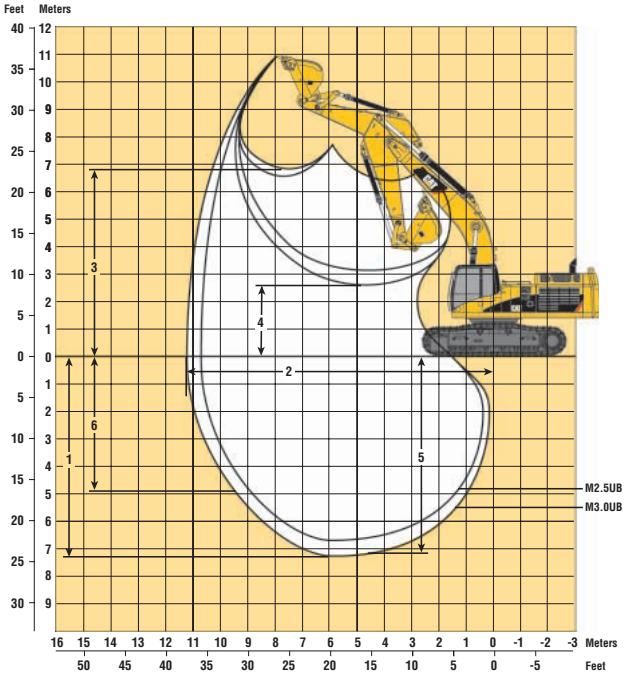
HD Reach Working Ranges

Heavy Duty (HD) Reach boom configuration



Mass Working Ranges

Mass (M) boom configuration



345D L Working Ranges – Long Fixed Gauge Undercarriage

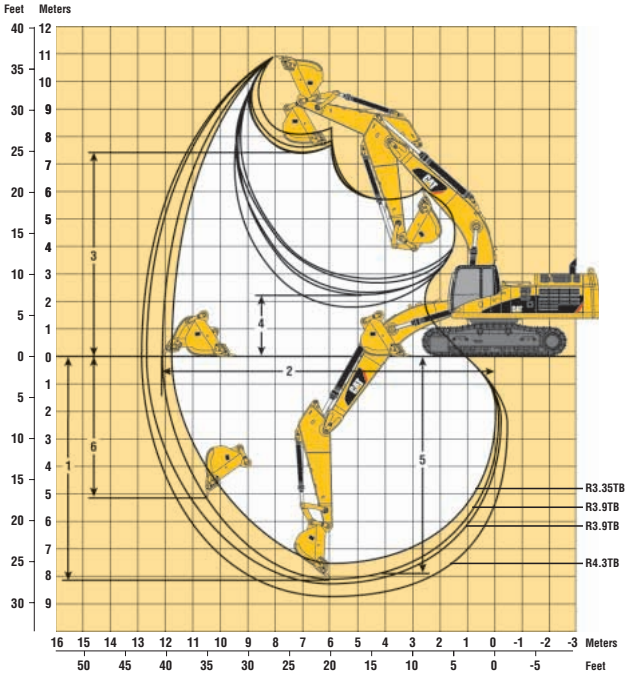
		Long Reach Boom		HD Reach Boom		Mass Excavation Boom	
Stick		**R4.3TB (14'1")**	**R3.9TB (12'10")**	**R3.9TB (12'10")**	**R3.35TB (11'0")**	**M3.0UB (9'10")**	**M2.5UB (8'2")**
Bucket		**GP-C 1.8 m³ GP-C 2.36 yd³**	**GP-C 1.8 m³ GP-C 2.36 yd³**	**GP-C 1.8 m³ GP-C 2.36 yd³**	**GP-C 1.8 m³ GP-C 2.36 yd³**	**HD 3.11 m³ HD 4.07 yd³**	**HD 3.11 m³ HD 4.07 yd³**
1	Maximum Digging Depth	8920 mm (29'3")	8520 mm (27'11")	8200 mm (26'11")	7650 mm (25'1")	7200 mm (23'7")	6700 mm (22'0")
2	Maximum Reach at Ground Level	12 940 mm (42'5")	12 580 mm (41'3")	12 120 mm (39'9")	11 710 mm (38'5")	11 160 mm (36'7")	10 700 mm (35'1")
3	Maximum Loading Height	7870 mm (25'10")	7750 mm (25'5")	7410 mm (24'4")	7420 mm (24'4")	6830 mm (22'5")	6640 mm (21'9")
4	Minimum Loading Height	2240 mm (7'4")	2640 mm (8'8")	2200 mm (7'3")	2750 mm (9'0")	2670 mm (8'10")	3170 mm (10'5")
5	Maximum Depth Cut for 2440 mm (8') Level Bottom	8790 mm (28'10")	8380 mm (27'6")	8070 mm (26'6")	7500 mm (24'7")	7050 mm (23'1")	6530 mm (21'5")
6	Maximum Vertical Wall Digging Depth	5860 mm (19'3")	5330 mm (17'6")	5300 mm (17'4")	5210 mm (17'1")	4660 mm (15'3")	4220 mm (13'10")

345D L Working Ranges with Pin Grabber Coupler – Long Fixed Gauge Undercarriage

		HD Reach Boom
Stick		**R3.35TB (11'0")**
Bucket with UB-Family Coupler		**GP-C 1.8 m³ GP-C 2.36 yd³**
1	Maximum Digging Depth	8010 mm (26'4")
2	Maximum Reach at Ground Level	12 070 mm (39'7")
3	Maximum Loading Height	7060 mm (23'1")
4	Minimum Loading Height	2400 mm (7'11")
5	Maximum Depth Cut for 2440 mm (8') Level Bottom	7870 mm (25'10")
6	Maximum Vertical Wall Digging Depth	4010 mm (13'2")

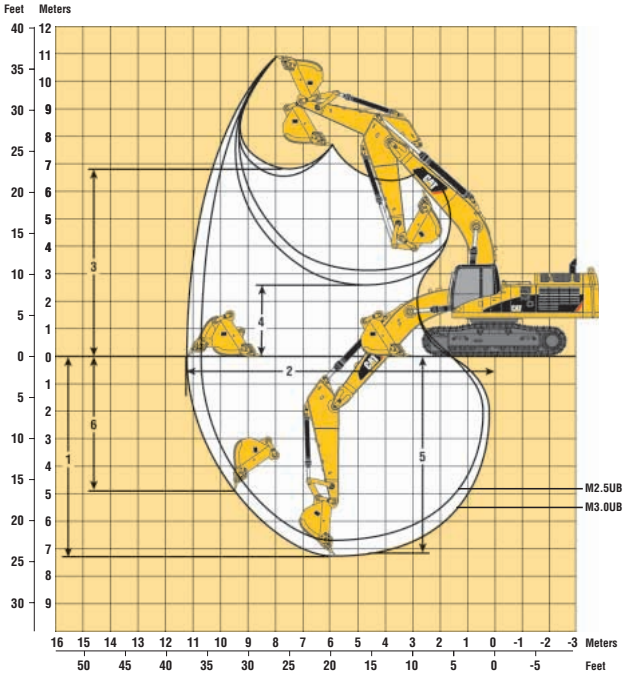
HD Reach Working Ranges

Heavy Duty (HD) Reach boom configuration



Mass Working Ranges

Mass (M) boom configuration



345D L Working Ranges – Long Variable Gauge Undercarriage

		Long Reach Boom		HD Reach Boom		Mass Excavation Boom	
Stick		**R4.3TB (14'1")**	**R3.9TB (12'10")**	**R3.9TB (12'10")**	**R3.35TB (11'0")**	**M3.0UB (9'10")**	**M2.5UB (8'2")**
Bucket		**GP-C 1.8 m³ GP-C 2.36 yd³**	**GP-C 1.8 m³ GP-C 2.36 yd³**	**GP-C 1.8 m³ GP-C 2.36 yd³**	**GP-C 1.8 m³ GP-C 2.36 yd³**	**HD 3.11 m³ HD 4.07 yd³**	**HD 3.11 m³ HD 4.07 yd³**
1	Maximum Digging Depth	8770 mm (28'9")	8370 mm (27'6")	8050 mm (26'5")	7500 mm (24'7")	7200 mm (23'8")	6700 mm (22'0")
2	Maximum Reach at Ground Level	12 910 mm (42'4")	12 550 mm (41'2")	12 100 mm (39'8")	11 680 mm (38'4")	11 160 mm (36'7")	10 700 mm (35'2")
3	Maximum Loading Height	8010 mm (26'4")	7890 mm (25'11")	7550 mm (24'9")	7570 mm (24'10")	6830 mm (22'5")	6640 mm (21'9")
4	Minimum Loading Height	2380 mm (7'10")	2780 mm (9'1")	2350 mm (7'9")	2900 mm (9'6")	2670 mm (8'9")	3170 mm (10'5")
5	Maximum Depth Cut for 2440 mm (8') Level Bottom	8650 mm (28'4")	8230 mm (27'0")	7920 mm (26'0")	7360 mm (24'2")	7050 mm (23'1")	6530 mm (21'5")
6	Maximum Vertical Wall Digging Depth	5720 mm (18'9")	5190 mm (17'0")	5160 mm (16'11")	5070 mm (16'7")	4660 mm (15'3")	4220 mm (13'10")

345D L Working Ranges with Pin Grabber Coupler – Long Variable Gauge Undercarriage

		HD Reach Boom
Stick		**R3.35TB (11'0")**
Bucket with UB-Family Coupler		**GP-C 1.8 m³ GP-C 2.36 yd³**
1	Maximum Digging Depth	7860 mm (25'9")
2	Maximum Reach at Ground Level	12 040 mm (39'5")
3	Maximum Loading Height	7210 mm (23'8")
4	Minimum Loading Height	2540 mm (8'4")
5	Maximum Depth Cut for 2440 mm (8') Level Bottom	7730 mm (25'4")
6	Maximum Vertical Wall Digging Depth	3860 mm (12'8")

Operating Weight*

	kg	lb
Complete Machine Equipped with:		
6.9 m (22'8") HD Reach Boom, R3.9m (12'10") Stick, 1219 mm (48") GP-C Bucket, Long Fixed Gauge Undercarriage with 750 mm (30") TG Track Shoes, 7610 kg (16,780 lb) Counterweight without Removal Device	45 375	100,040
Differences for Other Booms:		
7.4 m (24'3") Long Reach Boom	–385	–850
6.55 m (21'6") Mass Excavation Boom	+10	+20
Differences for Other Sticks:		
R4.3m (14'1") Stick with TB Bucket Linkage and Bucket Cylinder	+270	+590
R3.35m (11'0") Stick with TB Bucket Linkage and Bucket Cylinder	–65	–145
M3.0m (9'10") Stick with UB Bucket Linkage and Bucket Cylinder	+430	+945
M2.5m (8'2") Stick with UB Bucket Linkage and Bucket Cylinder	+250	+550

	kg	lb
Differences for Other Buckets:		
See Bucket Specification Chart		
Differences for Other Undercarriages:		
Long Variable Gauge Undercarriage	+2490	+5,490
Long Wide Variable Gauge Undercarriage	+3270	+7,215
Differences for Other Track Shoes:		
600 mm (24") Double Grouser (DG)	–645	–1,420
900 mm (36") Triple Grouser (TG)	+660	+1,455
Differences for Other Counterweights:		
7.6 MT Counterweight with Removal Device	+315	+690
8.7 MT Counterweight with Removal Device	+1415	+3,115
9.0 MT Counterweight without Removal Device	+1395	+3,080

* All weights are approximate. Operating weight includes 15% full fuel tank.
Add 520 kg (1,140 lb) for full fuel tank and 75 kg (165 lb) for an average operator.

Work Tool Matching Guide

Boom Options		**HD Reach Boom R6.9**	
Stick Options	**R3.9TB**	**R3.35TB**	**Boom Mounted**
Tools:			
Contractor's Grapple	G145B	G145B	—
Dedicated Quick Coupler	Yes	Yes	—
Hydraulic Hammer	H160D S/H180D S	H160D S/H180D S	—
Hydraulic Shear	S340	S340	S365B
Hydraulic Thumb	Yes	Yes	—
Multi-Processor	MP30	MP30	—
Pin-Grabber Quick Coupler	Yes	Yes	—
Pulverizer – Mechanical Operation	P130	P130	—
Ripper Tooth	Yes	Yes	—
Shear – Mechanical Operation	S128	S128	—
Sorting and Demolition Grapple	G330	G330	—
Trash Grapple	TG-TB	TG-TB	—

345D L Bucket and Stick Forces

Stick Forces						
	Sticks					
TB-Family Buckets	R4.3		R3.9		R3.35	
	kN	lb	kN	lb	kN	lb
GP-C, HD, HDR						
Stick Digging Force (ISO)	171	38,400	183	41,100	199	44,700
Stick Digging Force (SAE)	167	37,500	179	40,200	194	40,200
HD-P						
Stick Digging Force (ISO)	176	39,500	189	42,400	206	42,400
Stick Digging Force (SAE)	170	38,200	183	41,100	199	41,100
GP-C, HD, HDR with coupler						
Stick Digging Force (ISO)	161	36,100	171	38,400	186	38,400
Stick Digging Force (SAE)	157	35,200	169	37,900	181	37,900
HD-P with coupler						
Stick Digging Force (ISO)	165	37,000	176	39,500	191	39,500
Stick Digging Force (SAE)	161	36,100	172	38,600	187	38,600

	Sticks			
UB-Family Buckets	M3.0		M2.5	
	kN	lb	kN	lb
GP				
Stick Digging Force (ISO)	206	46,200	233	52,300
Stick Digging Force (SAE)	198	44,400	223	50,100
HD, HDR with coupler				
Stick Digging Force (ISO)	213	47,800	242	54,300
Stick Digging Force (SAE)	205	46,000	231	51,900

Bucket Forces				
	TB-Family Buckets		UB-Family Buckets	
	kN	lb	kN	lb
GP-C, HD, HDR				
Bucket Digging Force (ISO)	268	60,200	240	53,900
Bucket Digging Force (SAE)	238	53,500	212	47,600
HD-P				
Bucket Digging Force (ISO)	300	67,300	263	59,000
Bucket Digging Force (SAE)	258	58,000	230	51,600
GP-C, HD, HDR with coupler				
Bucket Digging Force (ISO)	219	49,200		
Bucket Digging Force (SAE)	200	44,900		
HD-P with coupler				
Bucket Digging Force (ISO)	239	53,700		
Bucket Digging Force (SAE)	217	48,700		

345D L Bucket Specifications and Compatibility

Fixed Gauge Undercarriage

	Capacity*		Width		Tip Radius		Weight w/o tips		Teeth	HD Reach Boom Stick		Long Reach Boom Stick	
	m^3	yd^3	mm	in	mm	in	kg	lb	Qty	R3.9TB (12'10")	R3.35TB (11'0")	R4.3TB (14'1")	R3.9TB (12'10")
TB Buckets													
General Purpose – Capacity (GP-C)	1.0	1.32	762	30	1871	73.7	1265	2,790	3	●	●	●	●
	1.2	1.60	914	36	1871	73.7	1490	3,280	4	●	●	●	●
	1.5	1.98	1067	42	1871	73.7	1583	3,490	4	●	●	●	●
	1.8	2.35	1219	48	1871	73.7	1728	3,810	5	●	●	●	●
	2.1	2.75	1372	54	1871	73.7	1850	4,070	5	●	●	◒	●
	2.4	3.13	1524	60	1871	73.7	1930	4,250	6	◒	●	○	◒
	2.8	3.64	1727	68	1871	73.7	2182	4,810	7	○	◒	◑	◑
	3.1	4.03	1880	74	1871	73.7	2308	5,080	7	◑	○	◒	◑
Heavy Duty (HD)	1.1	1.39	914	36	1871	73.7	1549	3,410	4	●	●	●	●
	1.3	1.70	1067	42	1871	73.7	1664	3,670	4	●	●	●	●
	1.6	2.04	1219	48	1871	73.7	1806	3,980	5	●	●	●	●
	1.8	2.37	1372	54	1871	73.7	1931	4,250	5	●	●	●	●
	2.1	2.71	1524	60	1871	73.7	2080	4,580	6	●	●	○	◒
	2.4	3.14	1727	68	1871	73.7	2291	5,050	7	◒	◒	◑	○
	2.7	3.51	1880	74	1871	73.7	2397	5,280	7	○	◒	◑	◑
Heavy Duty Rock (HDR)	0.9	1.14	762	30	1871	73.7	1410	3,110	3	●	●	●	●
	1.1	1.39	914	36	1871	73.7	1644	3,620	4	●	●	●	●
	1.3	1.71	1067	42	1871	73.7	1769	3,900	4	●	●	●	●
	1.6	2.04	1219	48	1871	73.7	1923	4,240	5	●	●	●	●
	1.8	2.37	1372	54	1871	73.7	2061	4,540	5	●	●	◒	●
	2.1	2.71	1524	60	1871	73.7	2221	4,890	6	●	●	○	◒
	2.4	3.14	1676	66	1871	73.7	2451	5,400	7	◒	◒	◑	○
	2.7	3.51	1880	74	1871	73.7	2567	5,650	7	○	○	◒	◑
Heavy Duty-Power (HD-P)	1.73	2.26	1372	54	1725	67.9	1894	4,170	4	●	●	●	●

	Capacity*		Width		Tip Radius		Weight w/o tips		Teeth	Mass Boom Stick	
	m^3	yd^3	mm	in	mm	in	kg	lb	Qty	M3.0UB (9'10")	M2.5UB (8'2")
UB Buckets											
General Purpose (GP)	3.5	4.54	1981	78	2047	80.6	2762	6,080	6	◑	○
Heavy Duty (HD)	3.1	4.07	1981	78	1880	74.0	2675	5,890	6	○	◒
Heavy Duty Rock (HDR)	2.4	3.17	1524	60	2093	82.4	2544	5,600	4	●	●
	3.1	4.07	1930.4	76	2147	84.5	3013	6,640	6	○	○

Assumptions for maximum material density rating
1. Front linkage fully extended at ground line
2. Bucket curled
3. 100% bucket fill factor

* Capacities based on SAE J296. Some calculations of capacity fall on borderlines. Rounding may allow two buckets to have the same English rating but different metric ratings.

- ● 2100 kg/m^3 (3,500 lb/yd^3) max material density
- ◒ 1800 kg/m^3 (3,000 lb/yd^3) max material density
- ○ 1500 kg/m^3 (2,500 lb/yd^3) max material density
- ◑ 1200 kg/m^3 (2,000 lb/yd^3) max material density
- ◒ 900 kg/m^3 (1,500 lb/yd^3) max material density

345D L Bucket Specifications and Compatibility

Variable Gauge Undercarriage

	Capacity*		Width		Tip Radius		Weight w/o tips		Teeth	HD Reach Boom Stick		Long Reach Boom Stick	
	m^3	yd^3	mm	in	mm	in	kg	lb	Qty	R3.9TB (12'10")	R3.35TB (11'0")	R4.3TB (14'1")	R3.9TB (12'10")
TB Buckets													
General Purpose – Capacity (GP-C)	1.0	1.32	762	30	1871	73.6	1265	2,790	3	●	●	●	●
	1.2	1.60	914	36	1871	73.6	1490	3,280	4	●	●	●	●
	1.5	1.98	1067	42	1871	73.6	1583	3,490	4	●	●	●	●
	1.8	2.35	1219	48	1871	73.6	1728	3,810	5	●	●	●	●
	2.1	2.75	1372	54	1871	73.6	1850	4,070	5	●	●	●	●
	2.4	3.13	1524	60	1871	73.6	1930	4,250	6	●	●	◒	●
	2.8	3.64	1676	66	1871	73.6	2182	4,810	7	◒	●	○	○
	3.1	4.03	1880	74	1871	73.6	2308	5,080	7	○	◒	◑	○
Heavy Duty (HD)	1.1	1.39	914	36	1871	73.6	1549	3,410	4	●	●	●	●
	1.3	1.70	1067	42	1871	73.6	1664	3,670	4	●	●	●	●
	1.6	2.04	1219	48	1871	73.6	1806	3,980	5	●	●	●	●
	1.8	2.37	1372	54	1871	73.6	1931	4,250	5	●	●	●	●
	2.1	2.71	1524	60	1871	73.6	2080	4,580	6	●	●	●	●
	2.4	3.14	1676	66	1871	73.6	2291	5,050	7	●	●	○	◒
	2.7	3.51	1880	74	1871	73.6	2397	5,280	7	◒	●	○	○
Heavy Duty Rock (HDR)	0.9	1.14	762	30	1871	73.6	1410	3,110	3	●	●	●	●
	1.1	1.39	914	36	1871	73.6	1644	3,620	4	●	●	●	●
	1.3	1.71	1067	42	1871	73.6	1769	3,900	4	●	●	●	●
	1.6	2.04	1219	48	1871	73.6	1923	4,240	5	●	●	●	●
	1.8	2.37	1372	54	1871	73.6	2061	4,540	5	●	●	●	●
	2.1	2.71	1524	60	1871	73.6	2221	4,890	6	●	●	◒	●
	2.4	3.14	1676	66	1871	73.6	2451	5,400	7	●	●	○	◒
	2.7	3.51	1880	74	1871	73.6	2567	5,650	7	◒	◒	◑	○
Heavy Duty-Power (HD-P)	1.73	2.26	1372	54	1725	67.9	1894	4,170	4	●	●	●	●

	Capacity*		Width		Tip Radius		Weight w/o tips		Teeth	Mass Boom Stick	
	m^3	yd^3	mm	in	mm	in	kg	lb	Qty	M3.0UB (9'10")	M2.5UB (8'2")
UB Buckets											
General Purpose (GP)	3.5	4.54	1981.2	78	2047	80.6	2762	6,080	6	○	◒
Heavy Duty (HD)	3.1	4.07	1981.2	78	1880	74.0	2675	5,890	6	◒	●
Heavy Duty Rock (HDR)	2.4	3.17	1524	60	2093	82.4	2544	5,600	4	●	●
	3.1	4.07	1930.4	76	2147	84.5	3013	6,640	6	◒	◒

Assumptions for maximum material density rating
1. Front linkage fully extended at ground line
2. Bucket curled
3. 100% bucket fill factor

* Capacities based on SAE J296. Some calculations of capacity fall on borderlines. Rounding may allow two buckets to have the same English rating but different metric ratings.

- ● 2100 kg/m^3 (3,500 lb/yd^3) max material density
- ◒ 1800 kg/m^3 (3,000 lb/yd^3) max material density
- ○ 1500 kg/m^3 (2,500 lb/yd^3) max material density
- ◑ 1200 kg/m^3 (2,000 lb/yd^3) max material density
- ◒ 900 kg/m^3 (1,500 lb/yd^3) max material density

345D L Bucket Specifications and Compatibility

Wide Variable Gauge Undercarriage

	Capacity*		Width		Tip Radius		Weight w/o tips		Teeth	HD Reach Boom Stick		Long Reach Boom Stick	
	m^3	yd^3	mm	in	mm	in	kg	lb	Qty	R3.9TB (12'10")	R3.35TB (11'0")	R4.3TB (14'1")	R3.9TB (12'10")
TB Buckets													
General Purpose – Capacity (GP-C)	1.0	1.32	762	30	1871	73.6	1265	2,790	3	●	●	●	●
	1.2	1.60	914	36	1871	73.6	1490	3,280	4	●	●	●	●
	1.5	1.98	1067	42	1871	73.6	1583	3,490	4	●	●	●	●
	1.8	2.35	1219	48	1871	73.6	1728	3,810	5	●	●	●	●
	2.1	2.75	1372	54	1871	73.6	1850	4,070	5	●	●	●	●
	2.4	3.13	1524	60	1871	73.6	1930	4,250	6	●	●	●	●
	2.8	3.64	1676	66	1871	73.6	2182	4,810	7	●	●	◒	●
	3.1	4.03	1880	74	1871	73.6	2308	5,080	7	●	●	○	◒
Heavy Duty (HD)	1.1	1.39	914	36	1871	73.6	1549	3,410	4	●	●	●	●
	1.3	1.70	1067	42	1871	73.6	1664	3,670	4	●	●	●	●
	1.6	2.04	1219	48	1871	73.6	1806	3,980	5	●	●	●	●
	1.8	2.37	1372	54	1871	73.6	1931	4,250	5	●	●	●	●
	2.1	2.71	1524	60	1871	73.6	2080	4,580	6	●	●	●	●
	2.4	3.14	1676	66	1871	73.6	2291	5,050	7	●	●	●	●
	2.7	3.51	1880	74	1871	73.6	2397	5,280	7	●	●	◒	●
Heavy Duty Rock (HDR)	0.9	1.14	762	30	1871	73.6	1410	3,110	3	●	●	●	●
	1.1	1.39	914	36	1871	73.6	1644	3,620	4	●	●	●	●
	1.3	1.71	1067	42	1871	73.6	1769	3,900	4	●	●	●	●
	1.6	2.04	1219	48	1871	73.6	1923	4,240	5	●	●	●	●
	1.8	2.37	1372	54	1871	73.6	2061	4,540	5	●	●	●	●
	2.1	2.71	1524	60	1871	73.6	2221	4,890	6	●	●	●	●
	2.4	3.14	1676	66	1871	73.6	2451	5,400	7	●	●	●	●
	2.7	3.51	1880	74	1871	73.6	2567	5,650	7	●	●	◒	●
Heavy Duty-Power (HD-P)	1.73	2.26	1372	54	1725	67.9	1894	4,170	4	●	●	●	●

	Capacity*		Width		Tip Radius		Weight w/o tips		Teeth	Mass Boom Stick	
	m^3	yd^3	mm	in	mm	in	kg	lb	Qty	M3.0UB (9'10")	M2.5UB (8'2")
UB Buckets											
General Purpose (GP)	3.5	4.54	1981.2	78	2047	80.6	2762	6,080	6	◒	●
Heavy Duty (HD)	3.1	4.07	1981.2	78	1880	74.0	2675	5,890	6	●	●
Heavy Duty Rock (HDR)	2.4	3.17	1524	60	2093	82.4	2544	5,600	4	●	●
	3.1	4.07	1930.4	76	2147	84.5	3013	6,640	6	◒	●

Assumptions for maximum material density rating
1. Front linkage fully extended at ground line
2. Bucket curled
3. 100% bucket fill factor

* Capacities based on SAE J296. Some calculations of capacity fall on borderlines. Rounding may allow two buckets to have the same English rating but different metric ratings.

- ● 2100 kg/m^3 (3,500 lb/yd^3) max material density
- ◒ 1800 kg/m^3 (3,000 lb/yd^3) max material density
- ○ 1500 kg/m^3 (2,500 lb/yd^3) max material density
- ◑ 1200 kg/m^3 (2,000 lb/yd^3) max material density
- ◒ 900 kg/m^3 (1,500 lb/yd^3) max material density

HD Reach Boom Lift Capacities

 Load Point Height

 Load Radius Over Front

 Load Radius Over Side

 Load at Maximum Reach – Bucket Curled

 Load at Maximum Reach

BOOM – 6.9 m (22'8")
STICK – 3.9 m (12'10")

BUCKET – GP-C 2.36 yd³ – 1820 kg (4,013 lb)
SHOES – 900 mm (36") triple grouser

UNDERCARRIAGE – Long – fixed gauge
COUNTERWEIGHT – 9000 kg (19,842 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			m ft
9.0 m **30.0 ft**	kg **lb**											*6460 ***14,360**	*6460 ***14,360**	6.83 **21.99**	*4410 ***9,800**	*4410 ***9,800**	9.99 **32.42**
7.5 m **25.0 ft**	kg **lb**							*7540 ***14,950**	7260 ***14,950**			*6110 ***13,500**	*6110 ***13,500**	7.92 **25.75**	*4280 ***9,450**	*4280 ***9,450**	10.92 **35.63**
6.0 m **20.0 ft**	kg **lb**							*8370 ***18,300**	7180 **15,350**			*6050 ***13,330**	5730 **12,750**	8.65 **28.27**	*4290 ***9,450**	*4290 ***9,450**	11.53 **37.73**
4.5 m **15.0 ft**	kg **lb**					*10 000 ***21,700**	9690 **20,850**	*8940 ***19,450**	6970 **14,950**	*6640	5090	*6190 ***13,630**	5080 **11,260**	9.11 **29.85**	*4420 ***9,750**	4000 **8,850**	11.88 **38.93**
3.0 m **10.0 ft**	kg **lb**	*19 080 ***41,000**	*19 080 ***41,000**	*13 930 ***30,050**	13 170 **28,400**	*11 260 ***24,400**	9170 **19,700**	*9650 ***20,950**	6680 **14,350**	*8510 ***16,400**	4960 **10,600**	*6550 ***14,400**	4730 **10,440**	9.33 **30.61**	*4670 ***10,250**	3800 **8,400**	11.99 **39.34**
1.5 m **5.0 ft**	kg **lb**	*22 710 ***48,950**	18 880 **40,700**	*15 960 ***34,500**	12 220 **26,350**	*12 450 ***26,950**	8640 **18,600**	*10 350 ***22,450**	6380 **13,700**	8390 **18,000**	4810 **10,300**	*7140 ***15,720**	4600 **10,140**	9.33 **30.63**	*5050 ***11,100**	3770 **8,300**	11.88 **38.99**
Ground Line	kg **lb**	*24 410 ***52,800**	17 810 **38,300**	*17 290 ***37,400**	11 530 **24,850**	*13 320 ***28,850**	8220 **17,700**	10 630 **22,850**	6130 **13,150**	8250 ***16,650**	4680 **10,000**	8070 ***17,800**	4680 **10,320**	9.11 **29.9**	*5620 ***12,400**	3920 **8,650**	11.54 **37.86**
–1.5 m **–5.0 ft**	kg **lb**	*24 450 ***53,000**	17 400 **37,400**	*17 740 ***38,400**	11 150 **24,000**	*13 670 ***29,600**	7950 **17,100**	10 450 **22,450**	5970 **12,800**			8970 ***19,810**	5020 **11,080**	8.66 **28.37**	*6470 ***14,300**	4290 **9,500**	10.95 **35.88**
–3.0 m **–10.0 ft**	kg **lb**	*23 220 ***50,250**	17 390 **37,350**	*17 230 ***37,250**	11 040 **23,750**	*13 320 ***28,750**	7850 **16,900**	10 410 **22,400**	5930 **12,750**			*9600 ***21,170**	5730 **12,710**	7.93 **25.92**	*7830 ***17,400**	5020 **11,150**	10.05 **32.87**
–4.5 m **–15.0 ft**	kg **lb**	*20 670 ***44,600**	17 670 **38,000**	*15 610 ***33,600**	11 160 **24,000**	*11 960 ***25,550**	7940 **17,100**					*9590 ***21,120**	7150 **15,990**	6.86 **22.32**			
–6.0 m **–20.0 ft**	kg **lb**	*16 280 ***34,600**	*16 280 ***34,600**	*12 250 ***25,800**	11 550 **24,950**							*8900 ***19,410**	*8900 ***19,410**	5.3 **16.96**			

* Limited to hydraulic capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity rating standard ISO 10567. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. All lifts with heavy lift on.

 Load Point Height

 Load Radius Over Front

 Load Radius Over Side

 Load at Maximum Reach

BOOM – 6.9 m (22'8")
STICK – 3.9 m (12'10")

BUCKET – Bare coupler – 934 kg (2,059 lb)
SHOES – 900 mm (36") triple grouser

UNDERCARRIAGE – Long – fixed gauge
COUNTERWEIGHT – 9000 kg (19,842 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		10.5 m/35.0 ft				
																m ft
9.0 m **30.0 ft**	kg **lb**													***15,830**	***15,830**	**25.47**
7.5 m **25.0 ft**	kg **lb**									*8070 ***16,150**	7800 ***16,150**			*6800 ***15,030**	*6800 ***15,030**	8.93 **29.06**
6.0 m **20.0 ft**	kg **lb**									*8990 ***19,700**	7700 **16,500**			*6730 ***14,840**	6480 **14,410**	9.66 **31.56**
4.5 m **15.0 ft**	kg **lb**							*10 570 ***22,950**	10 150 **21,850**	*9550 ***20,800**	7470 **16,050**			*6860 ***15,100**	5820 **12,880**	10.13 **33.19**
3.0 m **10.0 ft**	kg **lb**			*19 630 ***42,200**	*19 630 ***42,200**	*14 480 ***31,300**	13 600 **29,300**	*11 840 ***25,650**	9630 **20,750**	*10 260 ***22,300**	7180 **15,450**	*8930 ***17,400**	5500 **11,750**	*7170 ***15,770**	5430 **12,000**	10.39 **34.08**
1.5 m **5.0 ft**	kg **lb**			*23 360 ***50,400**	19 400 **41,800**	*16 560 ***35,800**	12 700 **27,400**	*13 050 ***28,300**	9120 **19,650**	*10 950 ***23,800**	6880 **14,800**	8900 **19,150**	5340 **11,450**	*7690 ***16,930**	5270 **11,610**	10.44 **34.26**
Ground Line	kg **lb**	*9780 ***22,200**	*9780 ***22,200**	*25 120 ***54,350**	18 400 **39,600**	*17 930 ***38,800**	12 040 **25,950**	*13 930 ***30,200**	8720 **18,750**	11 120 **23,900**	6640 **14,300**	8760 ***17,450**	5210 **11,200**	*8510 ***18,750**	5290 **11,670**	10.29 **33.76**
–1.5 m **–5.0 ft**	kg **lb**	*14 540 ***32,800**	*14 540 ***32,800**	*25 180 ***54,550**	18 010 **38,700**	*18 380 ***39,800**	11 680 **25,150**	*14 290 ***30,950**	8460 **18,200**	10 940 **23,550**	6480 **13,950**			9390 **20,730**	5540 **12,240**	9.92 **32.52**
–3.0 m **–10.0 ft**	kg **lb**	*20 360 ***45,950**	*20 360 ***45,950**	*23 930 ***51,850**	17 980 **38,650**	*17 880 ***38,700**	11 560 **24,900**	*13 940 ***30,100**	8360 **18,000**	10 900 **23,500**	6430 **13,850**			*10 330 ***22,780**	6100 **13,510**	9.31 **30.45**
–4.5 m **–15.0 ft**	kg **lb**	*23 890 ***53,300**	*23 890 ***53,300**	*21 350 ***46,050**	18 220 **39,200**	*16 240 ***34,950**	11 670 **25,150**	*12 570 ***26,900**	8440 **18,200**					*10 430 ***22,990**	7210 **16,060**	8.38 **27.33**
–6.0 m **–20.0 ft**	kg **lb**	*22 500 ***47,900**	*22 500 ***47,900**	*16 910 ***36,000**	*16 910 ***36,000**	*12 850 ***27,100**	12 020 **25,950**							*10 120 ***22,190**	9590 **21,690**	7.03 **22.69**

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HD Reach Boom Lift Capacities

 Load Point Height

 Load Radius Over Front

 Load Radius Over Side

 Load at Maximum Reach – Bucket Curled

 Load at Maximum Reach

BOOM – 6.9 m (22'8")
STICK – 3.35 m (11'0")

BUCKET – GP-C 2.36 yd³ – 1820 kg (4,013 lb)
SHOES – 900 mm (36") triple grouser

UNDERCARRIAGE – Long – fixed gauge
COUNTERWEIGHT – 9000 kg (19,842 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			m ft
9.0 m **30.0 ft**	kg **lb**											*7490 ***16,700**	*7490 ***16,700**	6.28 **20.14**	*4630 ***10,250**	*4630 ***10,250**	9.44 **30.60**
7.5 m **25.0 ft**	kg **lb**											*6980 ***15,450**	*6980 ***15,450**	7.44 **24.16**	*4460 ***9,850**	*4460 ***9,850**	10.44 **34.03**
6.0 m **20.0 ft**	kg **lb**							*9600 ***20,900**	*9600 ***20,900**	*8900 ***19,500**	6970 **14,900**	*6840 ***15,090**	6120 **13,620**	8.21 **26.82**	*4450 ***9,800**	*4450 ***9,800**	11.08 **36.24**
4.5 m **15.0 ft**	kg **lb**					*12 600 ***27,200**	*12 600 ***27,200**	*10 610 ***23,000**	9460 **20,350**	*9390 ***20,450**	6790 **14,550**	*6960 ***15,330**	5390 **11,950**	8.69 **28.47**	*4560 ***10,050**	4270 **9,450**	11.44 **37.50**
3.0 m **10.0 ft**	kg **lb**			*20 620 ***44,300**	19 980 **43,150**	*14 740 ***31,800**	12 800 **27,600**	*11 780 ***25,500**	8950 **19,250**	*10 020 ***21,750**	6540 **14,000**	*7320 ***16,110**	5010 **11,060**	8.92 **29.27**	*4790 ***10,550**	4060 **8,950**	11.56 **37.92**
1.5 m **5.0 ft**	kg **lb**			*23 140 ***51,000**	18 280 **39,400**	*16 540 ***35,750**	11 930 **25,700**	*12 840 ***27,800**	8470 **18,200**	*10 610 ***23,000**	6270 **13,450**	*7960 ***17,510**	4880 **10,770**	8.92 **29.28**	*5170 ***11,400**	4050 **8,900**	11.44 **37.56**
Ground Line	kg **lb**			*21 560 ***50,150**	17 490 **37,650**	*17 550 ***38,000**	11 340 **24,400**	*13 520 ***29,250**	8100 **17,400**	10 550 **22,650**	6050 **13,000**	8940 **19,700**	5000 **11,030**	8.69 **28.52**	*5740 ***12,650**	4240 **9,350**	11.09 **36.38**
–1.5 m **–5.0 ft**	kg **lb**	*13 540 ***30,600**	*13 540 ***30,600**	*23 970 ***52,000**	17 290 **37,150**	*17 640 ***38,200**	11 060 **23,800**	*13 630 ***29,500**	7890 **16,950**	10 420 **22,400**	5940 **12,750**	9660 **21,330**	5420 **11,970**	8.22 **26.92**	*6600 ***14,600**	4690 **10,350**	10.47 **34.29**
–3.0 m **–10.0 ft**	kg **lb**	*20 690 ***46,750**	*20 690 ***46,750**	*22 230 ***48,150**	17 430 **37,450**	*16 750 ***36,200**	11 040 **23,750**	*12 960 ***27,950**	7860 **16,900**	*9910	5970	*9780 ***21,560**	6300 **13,970**	7.45 **24.35**	*7950 ***17,500**	5600 **12,400**	9.52 **31.10**
–4.5 m **–15.0 ft**	kg **lb**	*22 980 ***51,200**	*22 980 ***51,200**	*19 130 ***41,200**	17 830 **38,350**	*14 620 ***31,350**	11 250 **24,250**	*11 010 ***23,300**	8040 **17,350**			*9440 ***20,720**	8110 **18,160**	6.32 **20.51**			
–6.0 m **–20.0 ft**	kg **lb**			*13 850 ***29,150**	*13 850 ***29,150**	*10 210 ***20,950**	*10 210 ***20,950**										

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 Load Point Height

 Load Radius Over Front

 Load Radius Over Side

 Load at Maximum Reach

BOOM – 6.9 m (22'8")
STICK – 3.35 m (11'0")

BUCKET – Bare coupler – 934 kg (2,059 lb)
SHOES – 900 mm (36") triple grouser

UNDERCARRIAGE – Long – fixed gauge
COUNTERWEIGHT – 9000 kg (19,842 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**											***18,260**	***18,260**	**23.67**
7.5 m **25.0 ft**	kg **lb**											*7680 ***17,110**	*7680 ***17,110**	8.46 **27.48**
6.0 m **20.0 ft**	kg **lb**							*10 170 ***22,200**	*10 170 ***22,200**	*9530 ***20,900**	7490 **16,050**	*7550 ***16,760**	6870 **15,310**	9.22 **30.09**
4.5 m **15.0 ft**	kg **lb**					*13 140 ***28,400**	*13 140 ***28,400**	*11 180 ***24,300**	9910 **21,350**	*10 000 ***21,800**	7300 **15,650**	*7640 ***16,960**	6130 **13,600**	9.71 **31.79**
3.0 m **10.0 ft**	kg **lb**			*21 210 ***45,600**	20 430 **44,100**	*15 310 ***33,050**	13 240 **28,550**	*12 360 ***26,800**	9420 **20,300**	*10 630 ***23,100**	7030 **15,100**	*7960 ***17,660**	5720 **12,640**	9.98 **32.71**
1.5 m **5.0 ft**	kg **lb**			*24 040 ***52,500**	18 870 **40,650**	*17 160 ***37,100**	12 420 **26,800**	*13 440 ***29,100**	8950 **19,300**	*11 210 ***24,250**	6770 **14,550**	*8520 ***18,920**	5550 **12,240**	10.03 **32.90**
Ground Line	kg **lb**			*22 350 ***51,900**	18 140 **39,050**	*18 200 ***39,400**	11 870 **25,550**	*14 130 ***30,600**	8600 **18,500**	11 030 **23,750**	6560 **14,100**	*9410 ***20,920**	5600 **12,360**	9.87 **32.37**
–1.5 m **–5.0 ft**	kg **lb**	*14 120 ***31,900**	*14 120 ***31,900**	*24 730 ***53,650**	17 940 **38,550**	*18 300 ***39,650**	11 600 **25,000**	*14 250 ***30,850**	8400 **18,100**	10 910 **23,500**	6440 **13,900**	10 030 **22,160**	5910 **13,070**	9.49 **31.08**
–3.0 m **–10.0 ft**	kg **lb**	*21 130 ***46,900**	*21 130 ***46,900**	*22 960 ***49,750**	18 040 **38,800**	*17 400 ***37,650**	11 570 **24,900**	*13 580 ***29,300**	8360 **18,000**	*10 520	6470	*10 590 ***23,370**	6600 **14,630**	8.84 **28.90**
–4.5 m **–15.0 ft**	kg **lb**	*23 430 ***52,350**	*23 430 ***52,350**	*19 810 ***42,700**	18 390 **39,550**	*15 250 ***32,750**	11 760 **25,350**	*11 610 ***24,600**	8530 **18,450**			*10 440 ***23,020**	7980 **17,820**	7.86 **25.60**
–6.0 m **–20.0 ft**	kg **lb**			*14 460 ***30,450**	*14 460 ***30,450**	*10 790 ***22,250**	*10 790 ***22,250**					*9510 ***20,750**	*9510 ***20,750**	6.39 **20.56**

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HD Reach Boom Lift Capacities

 Load Point Height

 Load Radius Over Front

 Load Radius Over Side

 Load at Maximum Reach – Bucket Curled

 Load at Maximum Reach

BOOM – 6.9 m (22'8")
STICK – 3.9 m (12'10")

BUCKET – GP-C 2.36 yd³ – 1820 kg (4,013 lb)
SHOES – 900 mm (36") triple grouser

UNDERCARRIAGE – Long – fixed gauge
COUNTERWEIGHT – 7641 kg (16,846 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			m ft
9.0 m **30.0 ft**	kg **lb**											*6460 ***14,360**	*6460 ***14,360**	6.83 **21.99**	*4230 ***9,350**	*4230 ***9,350**	9.97 **32.33**
7.5 m **25.0 ft**	kg **lb**							*7540 ***14,950**	6580 **14,000**			*6110 ***13,500**	*6110 ***13,500**	7.92 **25.75**	*4110 ***9,050**	*4110 ***9,050**	10.90 **35.56**
6.0 m **20.0 ft**	kg **lb**							*8370 ***18,300**	6510 **13,900**			*6050 ***13,330**	5110 **11,390**	8.65 **28.27**	*4130 ***9,100**	3950 **8,750**	11.51 **37.66**
4.5 m **15.0 ft**	kg **lb**					*10 000 ***21,700**	8850 **19,000**	*8940 ***19,450**	6290 **13,450**	*6640	4530	*6190 ***13,630**	4500 **9,970**	9.11 **29.85**	*4260 ***9,350**	3570 **7,900**	11.86 **38.86**
3.0 m **10.0 ft**	kg **lb**	*19 080 ***41,000**	*19 080 ***41,000**	*13 930 ***30,050**	12 050 **25,950**	*11 260 ***24,400**	8320 **17,900**	*9650 ***20,950**	6010 **12,850**	7850 ***16,400**	4400 **9,350**	*6550 ***14,400**	4160 **9,190**	9.33 **30.61**	*4500 ***9,900**	3370 **7,450**	11.97 **39.27**
1.5 m **5.0 ft**	kg **lb**	*22 710 ***48,950**	17 200 **37,050**	*15 960 ***34,500**	11 100 **23,900**	*12 450 ***26,950**	7800 **16,750**	10 050 **21,550**	5710 **12,250**	7680 **16,450**	4250 **9,050**	*7140 ***15,720**	4030 **8,880**	9.33 **30.63**	*4880 ***10,750**	3340 **7,350**	11.86 **38.91**
Ground Line	kg **lb**	*24 410 ***52,800**	16 130 **34,700**	*17 290 ***37,400**	10 410 **22,400**	13 160 **28,250**	7370 **15,850**	9770 **21,000**	5450 **11,700**	7540 **16,200**	4120 **8,800**	7650 **16,860**	4100 **9,040**	9.11 **29.9**	*5450 ***12,000**	3470 **7,650**	11.52 **37.78**
–1.5 m **–5.0 ft**	kg **lb**	*24 450 ***53,000**	15 720 **33,750**	*17 740 ***38,400**	10 030 **21,550**	12 850 **27,600**	7100 **15,250**	9590 **20,600**	5290 **11,350**			8200 **18,100**	4400 **9,730**	8.66 **28.37**	*6300 ***13,900**	3810 **8,400**	10.92 **35.80**
–3.0 m **–10.0 ft**	kg **lb**	*23 220 ***50,250**	15 710 **33,750**	*17 230 ***37,250**	9910 **21,300**	12 740 **27,400**	7000 **15,050**	9540 **20,550**	5250 **11,300**			9320 **20,660**	5060 **11,200**	7.93 **25.92**	*7650 ***17,000**	4490 **9,950**	10.03 **32.78**
–4.5 m **–15.0 ft**	kg **lb**	*20 670 ***44,600**	15 990 **34,350**	*15 610 ***33,600**	10 030 **21,600**	*11 960 ***25,550**	7100 **15,300**					*9590 ***21,120**	6370 **14,240**	6.86 **22.32**			
–6.0 m **–20.0 ft**	kg **lb**	*16 280 ***34,600**	*16 280 ***34,600**	*12 250 ***25,800**	10 420 **22,500**							*8900 ***19,410**	*8900 ***19,410**	5.30 **16.96**			

* Limited to hydraulic capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity rating standard ISO 10567. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. All lifts with heavy lift on.

 Load Point Height

 Load Radius Over Front

 Load Radius Over Side

 Load at Maximum Reach

BOOM – 6.9 m (22'8")
STICK – 3.9 m (12'10")

BUCKET – Bare coupler – 934 kg (2,059 lb)
SHOES – 900 mm (36") triple grouser

UNDERCARRIAGE – Long – fixed gauge
COUNTERWEIGHT – 7641 kg (16,846 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		10.5 m/35.0 ft				
																m ft
9.0 m **30.0 ft**	kg **lb**													***15,830**	***15,830**	**25.47**
7.5 m **25.0 ft**	kg **lb**									*8070 ***16,150**	7120 **15,200**			*6800 ***15,030**	*6800 ***15,030**	8.93 **29.06**
6.0 m **20.0 ft**	kg **lb**									*8990 ***19,700**	7020 **15,050**			*6730 **14,840**	5860 **13,030**	9.66 **31.56**
4.5 m **15.0 ft**	kg **lb**							*10 570 ***22,950**	9310 **20,000**	*9550 ***20,800**	6800 **14,600**			*6860 ***15,100**	5230 **11,580**	10.13 **33.19**
3.0 m **10.0 ft**	kg **lb**			*19 630 ***42,200**	19 500 **42,100**	*14 480 ***31,300**	12 470 **26,900**	*11 840 ***25,650**	8790 **18,900**	*10 260 ***22,300**	6500 **13,950**	8370 ***17,400**	4930 **10,550**	*7170 ***15,770**	4860 **10,740**	10.39 **34.08**
1.5 m **5.0 ft**	kg **lb**			*23 360 ***50,400**	17 720 **38,200**	*16 560 ***35,800**	11 570 **24,950**	*13 050 ***28,300**	8280 **17,850**	10 530 **22,650**	6210 **13,350**	8200 **17,600**	4770 **10,250**	*7690 ***16,930**	4700 **10,360**	10.44 **34.26**
Ground Line	kg **lb**	*9780 ***22,200**	*9780 ***22,200**	*25 120 ***54,350**	16 720 **35,950**	*17 930 ***38,800**	10 920 **23,500**	13 640 **29,300**	7870 **16,950**	10 260 **22,050**	5960 **12,800**	8060 **17,300**	4640 **9,950**	8220 **18,130**	4720 **10,400**	10.29 **33.76**
–1.5 m **–5.0 ft**	kg **lb**	*14 540 ***32,800**	*14 540 ***32,800**	*25 180 ***54,550**	16 330 **35,100**	*18 380 ***39,800**	10 560 **22,750**	13 340 **28,700**	7610 **16,400**	10 080 **21,700**	5800 **12,500**			8640 **19,060**	4940 **10,910**	9.92 **32.52**
–3.0 m **–10.0 ft**	kg **lb**	*20 360 ***45,950**	*20 360 ***45,950**	*23 930 ***51,850**	16 300 **35,050**	*17 880 ***38,700**	10 440 **22,500**	13 230 **28,450**	7510 **16,200**	10 040 **21,600**	5760 **12,400**			9520 **21,070**	5450 **12,080**	9.31 **30.45**
–4.5 m **–15.0 ft**	kg **lb**	*23 890 ***53,300**	*23 890 ***53,300**	*21 350 ***46,050**	16 540 **35,550**	*16 240 ***34,950**	10 540 **22,700**	*12 570 ***26,900**	7590 **16,400**					*10,430 ***22,990**	6470 **14,420**	8.38 **27.33**
–6.0 m **–20.0 ft**	kg **lb**	*22 500 ***47,900**	*22 500 ***47,900**	*16 910 ***36,000**	*16 910 ***36,000**	*12 850 ***27,100**	10 900 **23,550**							*10,120 ***22,190**	8680 **19,630**	7.03 **22.69**

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Always refer to the appropriate Operation and Maintenance Manual for specific product information.

HD Reach Boom Lift Capacities

 Load Point Height

 Load Radius Over Front

 Load Radius Over Side

 Load at Maximum Reach – Bucket Curled

 Load at Maximum Reach

BOOM – 6.9 m (22'8")
STICK – 3.9 m (12'10")

BUCKET – GP-C 2.36 yd³ – 1820 kg (4,013 lb)
SHOES – 900 mm (36") triple grouser

UNDERCARRIAGE – Long – variable gauge
COUNTERWEIGHT – 9000 kg (19,842 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			m ft
9.0 m **30.0 ft**	kg **lb**											*6410 ***14,240**	*6410 ***14,240**	6.96 **22.41**	*4210 ***9,350**	*4210 ***9,350**	10.07 **32.70**
7.5 m **25.0 ft**	kg **lb**							*7800 ***15,650**	*7800 ***15,650**			*6090 ***13,460**	*6090 ***13,460**	8.00 **26.03**	*4110 ***9,050**	*4110 ***9,050**	10.97 **35.80**
6.0 m **20.0 ft**	kg **lb**							*8410 ***18,400**	7940 **17,000**			*6050 ***13,330**	*6050 ***13,330**	8.71 **28.46**	*4140 ***9,100**	*4140 ***9,100**	11.55 **37.81**
4.5 m **15.0 ft**	kg **lb**					*10 120 ***21,950**	*10 120 ***21,950**	*9010 ***19,600**	7710 **16,550**	*6860 ***12,450**	5710 **12,150**	*6220 ***13,680**	5680 **12,580**	9.14 **29.95**	*4280 ***9,400**	*4280 ***9,400**	11.88 **38.93**
3.0 m **10.0 ft**	kg **lb**	*19 500 ***41,900**	*19 500 ***41,900**	*14 140 ***30,500**	*14 140 ***30,500**	*11 380 ***24,650**	10 100 **21,750**	*9720 ***21,100**	7420 **15,900**	*8630 ***16,700**	5570 **11,900**	*6590 ***14,500**	5330 **11,770**	9.34 **30.65**	*4530 ***9,950**	4370 **9,650**	11.97 **39.27**
1.5 m **5.0 ft**	kg **lb**	*22 970 ***49,550**	20 980 **45,150**	*16 130 ***34,850**	13 520 **29,100**	*12 560 ***27,200**	9580 **20,600**	*10 410 ***22,550**	7120 **15,300**	8750 ***18,450**	5420 **11,600**	*7210 ***15,880**	5220 **11,510**	9.32 **30.59**	*4930 ***10,850**	4370 **9,600**	11.83 **38.84**
Ground Line	kg **lb**	*24 480 ***52,950**	19 960 **42,900**	*17 380 ***37,600**	12 850 **27,650**	*13 380 ***28,950**	9160 **19,700**	*10 880 ***23,550**	6870 **14,750**	8610 ***16,150**	5290 **11,350**	*8190 ***18,050**	5350 **11,790**	9.08 **29.79**	*5520 ***12,150**	4550 **10,050**	11.47 **37.63**
–1.5 m **–5.0 ft**	kg **lb**	*24 390 ***52,850**	19 580 **42,050**	*17 730 ***38,400**	12 480 **26,850**	*13 670 ***29,600**	8910 **19,150**	10 890 **23,400**	6710 **14,450**			*9430 ***20,800**	5760 **12,710**	8.60 **28.18**	*6400 ***14,150**	5000 **11,050**	10.85 **35.56**
–3.0 m **–10.0 ft**	kg **lb**	*23 030 ***49,850**	19 610 **42,100**	*17 130 ***37,050**	12 390 **26,650**	*13 240 ***28,550**	8820 **19,000**	*10 360 ***22,200**	6690 **14,400**			*9610 ***21,200**	6590 **14,620**	7.84 **25.64**	*7830 ***17,400**	5860 **13,000**	9.92 **32.43**
–4.5 m **–15.0 ft**	kg **lb**	*20 340 ***43,850**	19 930 **42,800**	*15 380 ***33,050**	12 540 **27,000**	*11 740 ***25,050**	8940 **19,250**					*9570 ***21,070**	8270 **18,500**	6.74 **21.90**			
–6.0 m **–20.0 ft**	kg **lb**	*15 710 ***33,350**	*15 710 ***33,350**	*11 780 ***24,700**	*11 780 ***24,700**							*8750 ***19,030**	*8750 ***19,030**	5.10 **16.31**			

* Limited to hydraulic capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity rating standard ISO 10567. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. All lifts with heavy lift on.

 Load Point Height

 Load Radius Over Front

 Load Radius Over Side

 Load at Maximum Reach – Bucket Curled

 Load at Maximum Reach

BOOM – 6.9 m (22'8")
STICK – 3.35 m (11'0")

BUCKET – GP-C 2.36 yd³ – 1820 kg (4,013 lb)
SHOES – 900 mm (36") triple grouser

UNDERCARRIAGE – Long – variable gauge
COUNTERWEIGHT – 9000 kg (19,842 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			m ft
9.0 m **30.0 ft**	kg **lb**														*4600 ***10,200**	*4600 ***10,200**	9.56 **30.99**
7.5 m **25.0 ft**	kg **lb**									*6860	*6860	*6960 ***15,380**	*6960 ***15,380**	7.53 **24.46**	*4450 ***9,850**	*4450 ***9,850**	10.51 **34.29**
6.0 m **20.0 ft**	kg **lb**							*9680 ***21,050**	*9680 ***21,050**	*8940 ***19,550**	7730 **16,550**	*6850 ***15,090**	6750 **15,020**	8.27 **27.01**	*4450 ***9,800**	*4450 ***9,800**	11.12 **36.40**
4.5 m **15.0 ft**	kg **lb**					*12 810 ***27,650**	*12 810 ***27,650**	*10 720 ***23,250**	10 400 **22,350**	*9450 ***20,550**	7540 **16,150**	*6990 ***15,380**	6020 **13,340**	8.73 **28.58**	*4580 ***10,050**	*4580 ***10,050**	11.46 **37.57**
3.0 m **10.0 ft**	kg **lb**			*21 000 ***45,100**	*21 000 ***45,100**	*14 940 ***32,250**	14 090 **30,400**	*11 890 ***25,750**	9890 **21,300**	*10 080 ***21,900**	7270 **15,600**	*7370 ***16,210**	5650 **12,460**	8.93 **29.30**	*4820 ***10,600**	4600 **10,150**	11.56 **37.92**
1.5 m **5.0 ft**	kg **lb**			*22 450 ***51,350**	20 390 **43,900**	*16 680 ***36,050**	13 230 **28,500**	*12 920 ***27,950**	9410 **20,250**	*10 650 ***23,100**	7010 **15,050**	*8030 ***17,680**	5540 **12,220**	8.91 **29.24**	*5220 ***11,500**	4620 **10,150**	11.42 **37.48**
Ground Line	kg **lb**	*7750 ***17,700**	*7750 ***17,700**	*21 830 ***50,650**	19 660 **42,250**	*17 600 ***38,100**	12 660 **27,250**	*13 560 ***29,350**	9050 **19,450**	*10 970 **23,600**	6800 **14,600**	*9110 ***20,080**	5710 **12,590**	8.66 **28.40**	*5810 ***12,800**	4850 **10,700**	11.04 **36.22**
–1.5 m **–5.0 ft**	kg **lb**	*14 180 ***32,000**	*14 180 ***32,000**	*23 860 ***51,750**	19 490 **41,850**	*17 600 ***38,100**	12 400 **26,700**	*13 610 ***29,400**	8850 **19,050**	*10 820 ***23,300**	6690 **14,400**	*9760 ***21,530**	6210 **13,720**	8.15 **26.72**	*6710 ***14,850**	5390 **11,900**	10.39 **34.04**
–3.0 m **–10.0 ft**	kg **lb**	*21 350 ***47,300**	*21 350 ***47,300**	*22 000 ***47,650**	19 660 **42,250**	*16 610 ***35,900**	12 400 **26,700**	*12 840 ***27,650**	8840 **19,050**	*9730	6740	*9770 ***21,530**	7240 **16,070**	7.36 **24.05**	*7900 ***17,400**	6440 **14,300**	9.40 **30.73**
–4.5 m **–15.0 ft**	kg **lb**	*23 240 ***51,850**	*23 240 ***51,850**	*18 730 ***40,350**	*18 730 ***40,350**	*14 330 ***30,700**	12 650 **27,250**	*10 700 ***22,550**	9050 **19,550**			*9360 ***20,550**	*9360 ***20,550**	6.18 **20.06**			
–6.0 m **–20.0 ft**	kg **lb**			*13 150	*13 150	*9530	*9530										

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Always refer to the appropriate Operation and Maintenance Manual for specific product information.

HD Reach Boom Lift Capacities

 Load Point Height

 Load Radius Over Front

 Load Radius Over Side

 Load at Maximum Reach – Bucket Curled

 Load at Maximum Reach

BOOM – 6.9 m (22'8")
STICK – 3.9 m (12'10")

BUCKET – GP-C 2.36 yd³ – 1820 kg (4,013 lb)
SHOES – 900 mm (36") triple grouser

UNDERCARRIAGE – Long – wide variable gauge
COUNTERWEIGHT – 9000 kg (19,842 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			m ft
9.0 m **30.0 ft**	kg **lb**											*6410 ***14,240**	*6410 ***14,240**	6.96 **22.41**	*4210 ***9,350**	*4210 ***9,350**	10.07 **32.7**
7.5 m **25.0 ft**	kg **lb**							*7800 ***15,650**	*7800 ***15,650**			*6100 ***13,460**	*6100 ***13,460**	8.00 **26.03**	*4110 ***9,050**	*4110 ***9,050**	10.97 **35.80**
6.0 m **20.0 ft**	kg **lb**							*8410 ***18,400**	*8410 ***18,400**			*6050 ***13,330**	*6050 ***13,330**	8.71 **28.46**	*4140 ***9,100**	*4140 ***9,100**	11.55 **37.81**
4.5 m **15.0 ft**	kg **lb**					*10 120 ***21,950**	*10 120 ***21,950**	*9010 ***19,600**	8940 **19,200**	*6860 ***12,450**	6680 ***12,450**	*6220 ***13,680**	*6220 ***13,680**	9.14 **29.95**	*4280 ***9,400**	*4280 ***9,400**	11.88 **38.93**
3.0 m **10.0 ft**	kg **lb**	*19 500 ***41,900**	*19 500 ***41,900**	*14 140 ***30,500**	*14 140 ***30,500**	*11 380 ***24,650**	*11 380 ***24,650**	*9720 ***21,100**	8640 **18,550**	*8630 ***16,700**	6550 **14,000**	*6590 ***14,500**	6310 **13,920**	9.34 **30.65**	*4530 ***9,950**	*4530 ***9,950**	11.97 **39.27**
1.5 m **5.0 ft**	kg **lb**	*22 970 ***49,550**	*22 970 ***49,550**	*16 130 ***34,850**	15 840 **34,100**	*12 560 ***27,200**	11 180 **24,050**	*10 410 ***22,550**	8330 **17,900**	8900 ***18,450**	6390 **13,700**	*7210 ***15,880**	6200 **13,670**	9.32 **30.59**	*4930 ***10,850**	*4930 ***10,850**	11.83 **38.84**
Ground Line	kg **lb**	*24 480 ***52,950**	23 950 **51,400**	*17 380 ***37,600**	15 140 **32,600**	*13 380 ***28,950**	10 750 **23,150**	*10 880 ***23,550**	8080 **17,350**	8760 ***16,150**	6260 **13,450**	*8190 ***18,050**	6350 **14,010**	9.08 **29.79**	*5520 ***12,150**	5410 **11,950**	11.47 **37.63**
–1.5 m **–5.0 ft**	kg **lb**	*24 390 ***52,850**	23 550 **50,500**	*17 730 ***38,400**	14 770 **31,750**	*13 670 ***29,600**	10 490 **22,550**	*10 950 ***23,650**	7920 **17,000**			*9430 ***20,800**	6830 **15,090**	8.60 **28.18**	*6400 ***14,150**	5920 **13,100**	10.85 **35.56**
–3.0 m **–10.0 ft**	kg **lb**	*23 030 ***49,850**	*23 030 ***49,850**	*17 130 ***37,050**	14 670 **31,550**	*13 240 ***28,550**	10 400 **22,400**	*10 360 ***22,200**	7890 **17,000**			*9610 ***21,200**	7800 **17,300**	7.84 **25.64**	*7830 ***17,400**	6910 **15,300**	9.92 **32.43**
–4.5 m **–15.0 ft**	kg **lb**	*20 340 ***43,850**	*20 340 ***43,850**	*15 380 ***33,050**	14 820 **31,900**	*11 740 ***25,050**	10 520 **22,650**					*9570 ***21,070**	*9570 ***21,070**	6.74 **21.9**			
–6.0 m **–20.0 ft**	kg **lb**	*15 710 ***33,350**	*15 710 ***33,350**	*11 780 ***24,700**	*11 780 ***24,700**							*8750 ***19,030**	*8750 ***19,030**	5.10 **16.31**			

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Always refer to the appropriate Operation and Maintenance Manual for specific product information.

Mass Boom Lift Capacities

 Load Point Height

 Load Radius Over Front

 Load Radius Over Side

 Load at Maximum Reach – Bucket Curled

 Load at Maximum Reach

BOOM – 6.55 m (21'6")
STICK – 2.5 m (8'2")

BUCKET – UB 75 HDR V-edge – 3062 kg (6,752 lb)
SHOES – 900 mm (36") triple grouser

UNDERCARRIAGE – Long – fixed gauge
COUNTERWEIGHT – 9000 kg (19,842 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			m ft
9.0 m **30.0 ft**	kg **lb**														*5940 ***13,200**	*5940 ***13,200**	7.95 **25.56**
7.5 m **25.0 ft**	kg **lb**											*10 140 ***22,480**	9020 **20,460**	5.92 **19.11**	*5600 ***12,350**	*5600 ***12,350**	9.20 **29.92**
6.0 m **20.0 ft**	kg **lb**							*9850 ***21,450**	8520 **18,150**			*9740 ***21,500**	6790 **15,190**	6.85 **22.32**	*5540 ***12,200**	4770 **10,650**	9.97 **32.59**
4.5 m **15.0 ft**	kg **lb**			*17 600 ***37,700**	*17 600 ***37,700**	*13 030 ***28,100**	12 510 **26,900**	*10 650 ***23,100**	8240 **17,650**			*9630 ***21,230**	5660 **12,550**	7.41 **24.26**	*5680 ***12,500**	4140 **9,200**	10.40 **34.07**
3.0 m **10.0 ft**	kg **lb**			*21 460 ***46,050**	18 270 **39,450**	*14 880 ***32,100**	11 590 **24,950**	*11 610 ***25,100**	7830 **16,800**	*9650 ***20,950**	5370 **11,400**	*9670 ***21,310**	5090 **11,240**	7.68 **25.19**	*6010 ***13,200**	3860 **8,500**	10.54 **34.57**
1.5 m **5.0 ft**	kg **lb**			*19 450 ***47,400**	16 790 **36,200**	*16 240 ***35,050**	10 810 **23,250**	*12 380 ***26,750**	7430 **15,950**	9730 **20,800**	5200 **11,050**	9500 **20,940**	4920 **10,850**	7.68 **25.21**	*6550 ***14,400**	3860 **8,500**	10.40 **34.14**
Ground Line	kg **lb**			*23 080 ***50,100**	16 370 **35,150**	*16 710 ***36,150**	10 350 **22,250**	*12 680 ***27,400**	7150 **15,350**			*9920 ***21,870**	5130 **11,320**	7.41 **24.32**	*7390 ***16,300**	4160 **9,200**	9.98 **32.75**
–1.5 m **–5.0 ft**	kg **lb**	*16 420 ***37,300**	*16 420 ***37,300**	*21 650 ***47,000**	16 450 **35,300**	*16 160 ***34,950**	10 220 **21,950**	*12 220 ***26,300**	7050 **15,150**			*9950 ***21,940**	5840 **12,910**	6.85 **22.45**	*7840 ***17,250**	4920 **10,900**	9.24 **30.25**
–3.0 m **–10.0 ft**	kg **lb**	*23 670 ***52,100**	*23 670 ***52,100**	*18 960 ***41,050**	16 850 **36,150**	*14 360 ***30,900**	10 380 **22,300**	*10 360	7200			*9640 ***21,200**	7440 **16,570**	5.94 **19.35**			
–4.5 m **–15.0 ft**	kg **lb**			*14 260 ***30,400**	*14 260 ***30,400**	*10 290 ***21,300**	*10 290 ***21,300**					*8100 ***19,220**	*8100 ***19,220**	4.49 **13.75**			

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 Load Point Height

 Load Radius Over Front

 Load Radius Over Side

 Load at Maximum Reach – Bucket Curled

 Load at Maximum Reach

BOOM – 6.55 m (21'6")
STICK – 3.0 m (9'10")

BUCKET – UB 75 HDR V-edge – 3062 kg (6,752 lb)
SHOES – 900 mm (36") triple grouser

UNDERCARRIAGE – Long – fixed gauge
COUNTERWEIGHT – 9000 kg (19,842 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			m ft
9.0 m **30.0 ft**	kg **lb**														*4420 ***9,850**	*4420 ***9,850**	8.58 **27.70**
7.5 m **25.0 ft**	kg **lb**							*8700 ***19,150**	*8700 **18,450**			*7330 ***16,250**	*7330 ***16,250**	6.48 **20.98**	*4150 ***9,200**	*4150 ***9,200**	9.73 **31.68**
6.0 m **20.0 ft**	kg **lb**							*9100 ***19,800**	8650 **18,450**			*7070 ***15,590**	5960 **13,330**	7.35 **23.97**	*4100 ***9,050**	*4100 ***9,050**	10.45 **34.18**
4.5 m **15.0 ft**	kg **lb**					*12 100 ***26,100**	*12 100 ***26,100**	*9990 ***21,650**	8320 **17,800**	*8730 ***19,000**	5570 **11,800**	*7180 ***15,790**	5000 **11,100**	7.88 **25.80**	*4220 ***9,250**	3700 **8,200**	10.86 **35.58**
3.0 m **10.0 ft**	kg **lb**			*20 100 ***43,150**	18 890 **40,750**	*14 090 ***30,400**	11 750 **25,300**	*11 050 ***23,900**	7870 **16,850**	*9230 ***20,000**	5380 **11,450**	*7610 ***16,730**	4510 **9,960**	8.14 **26.68**	*4480 ***9,850**	3440 **7,600**	10.99 **36.06**
1.5 m **5.0 ft**	kg **lb**			*22 730 ***49,050**	17 170 **36,950**	*15 700 ***33,900**	10 890 **23,400**	*11 970 ***25,850**	7410 **15,900**	*9660 **20,750**	5170 **11,000**	*8420 ***18,520**	4340 **9,580**	8.14 **26.70**	*4920 ***10,850**	3420 **7,550**	10.86 **35.65**
Ground Line	kg **lb**			*23 280 ***50,400**	16 430 **35,300**	*16 500 ***35,650**	10 330 **22,200**	*12 470 ***26,950**	7080 **15,150**	9510 **20,400**	5000 **10,650**	8920 **19,650**	4500 **9,920**	7.88 **25.86**	*5610 ***12,350**	3660 **8,050**	10.47 **34.34**
–1.5 m **–5.0 ft**	kg **lb**	*15 550 ***35,250**	*15 550 ***35,250**	*22 350 ***48,450**	16 310 **35,000**	*16 310 ***35,250**	10 090 **21,650**	*12 310 ***26,550**	6910 **14,800**			*9270 ***20,430**	5060 **11,180**	7.35 **24.09**	*6690 ***14,800**	4270 **9,450**	9.77 **32.00**
–3.0 m **–10.0 ft**	kg **lb**	*23 630 ***52,150**	*23 630 ***52,150**	*20 130 ***43,550**	16 560 **35,550**	*14 970 ***32,250**	10 150 **21,800**	*11 100 ***23,700**	6960 **14,950**			*9180 ***20,200**	6290 **14,000**	6.50 **21.21**			
–4.5 m **–15.0 ft**	kg **lb**	*21 330 ***45,800**	*21 330 ***45,800**	*16 150 ***34,550**	*16 150 ***34,550**	*11 900 ***25,150**	10 510 **22,650**					*8360 ***18,260**	*8360 ***18,260**	5.18 **16.74**			

* Limited to hydraulic capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity rating standard ISO 10567. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. All lifts with heavy lift on.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

Long Reach Boom Lift Capacities

 Load Point Height

 Load Radius Over Front

 Load Radius Over Side

 Load at Maximum Reach – Bucket Curled

 Load at Maximum Reach

BOOM – 7.4 m (24'3")
STICK – 4.3 m (14'1")

BUCKET – GP-C 2.36 yd³ – 1820 kg (4,013 lb)
SHOES – 900 mm (36") triple grouser

UNDERCARRIAGE – Long – fixed gauge
COUNTERWEIGHT – 9000 kg (19,842 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			m ft
9.0 m **30.0 ft**	kg **lb**							*6510 ***12,850**	*6510 ***12,850**			*5660 ***12,550**	*5660 ***12,550**	7.87 **25.44**	*3850 ***8,500**	*3850 ***8,500**	10.95 **35.60**
7.5 m **25.0 ft**	kg **lb**							*7170 ***15,700**	*7170 **15,500**			*5460 ***12,050**	*5460 ***12,050**	8.84 **28.79**	*3790 ***8,350**	*3790 ***8,350**	11.79 **38.49**
6.0 m **20.0 ft**	kg **lb**							*7600 ***16,550**	7090 **15,200**	*7140 ***14,250**	5120 **10,900**	*5460 ***12,030**	4670 **10,400**	9.51 **31.08**	*3830 ***8,450**	3680 **8,200**	12.34 **40.41**
4.5 m **15.0 ft**	kg **lb**					*9380 ***20,300**	*9380 ***20,300**	*8260 ***17,950**	6810 **14,600**	*7520 ***16,400**	4990 **10,650**	*5630 ***12,390**	4160 **9,220**	9.93 **32.54**	*3980 ***8,750**	3350 **7,400**	12.66 **41.52**
3.0 m **10.0 ft**	kg **lb**	*18 670 ***40,050**	*18 670 ***40,050**	*13 400 ***28,900**	12 810 **27,600**	*10 680 ***23,100**	8900 **19,150**	*9040 ***19,600**	6470 **13,900**	*7950 ***17,300**	4800 **10,250**	*5970 ***13,140**	3870 **8,550**	10.14 **33.25**	*4220 ***9,300**	3180 **7,000**	12.77 **41.89**
1.5 m **5.0 ft**	kg **lb**	*22 210 ***47,850**	18 180 **39,200**	*15 420 ***33,300**	11 790 **25,400**	*11 890 ***25,750**	8320 **17,900**	*9780 ***21,200**	6130 **13,150**	8160 **17,500**	4600 **9,850**	*6520 ***14,340**	3750 **8,270**	10.14 **33.26**	*4580 ***10,100**	3140 **6,950**	12.67 **41.57**
Ground Line	kg **lb**	*18 730 ***43,400**	17 090 **36,750**	*16 750 ***36,200**	11 050 **23,800**	*12 800 ***27,700**	7860 **16,900**	10 300 **22,150**	5840 **12,500**	7970 **17,100**	4430 **9,500**	7080 **15,620**	3800 **8,380**	9.93 **32.58**	*5110 ***11,250**	3250 **7,150**	12.35 **40.52**
–1.5 m **–5.0 ft**	kg **lb**	*20 680 ***47,400**	16 670 **35,800**	*17 250 ***37,350**	10 640 **22,900**	*13 230 ***28,650**	7550 **16,250**	10 080 **21,650**	5640 **12,100**	7850 **16,850**	4320 **9,250**	7510 **16,570**	4040 **8,920**	9.51 **31.17**	*5870 ***13,000**	3520 **7,750**	11.81 **38.70**
–3.0 m **–10.0 ft**	kg **lb**	*22 870 ***49,550**	16 650 **35,750**	*16 920 ***36,600**	10 500 **22,600**	*13 090 ***28,300**	7420 **15,950**	9990 **21,450**	5550 **11,900**	7840	4300	8350 **18,490**	4540 **10,060**	8.85 **28.94**	*7050 ***15,650**	4050 **9,000**	10.99 **35.97**
–4.5 m **–15.0 ft**	kg **lb**	*20 820 ***44,950**	16 890 **36,300**	*15 720 ***33,900**	10 580 **22,750**	*12 200 ***26,250**	7450 **16,050**	*9480 ***20,200**	5600 **12,050**			*8530 ***18,800**	5490 **12,240**	7.89 **25.71**			
–6.0 m **–20.0 ft**	kg **lb**	*17 440 ***37,350**	17 380 ***37,350**	*13 350 ***28,500**	10 870 **23,400**	*10 160 ***21,450**	7680 **16,600**					*8310 ***18,230**	7430 **16,790**	6.53 **21.09**			

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 Load Point Height

 Load Radius Over Front

 Load Radius Over Side

 Load at Maximum Reach – Bucket Curled

 Load at Maximum Reach

BOOM – 7.4 m (24'3")
STICK – 3.9 m (12'10")

BUCKET – GP-C 2.36 yd³ – 1820 kg (4,013 lb)
SHOES – 900 mm (36") triple grouser

UNDERCARRIAGE – Long – fixed gauge
COUNTERWEIGHT – 9000 kg (19,842 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			m ft
9.0 m **30.0 ft**	kg **lb**											*6680 ***14,820**	*6680 ***14,820**	7.40 **23.91**	*4610 ***10,200**	*4610 ***10,200**	10.54 **34.25**
7.5 m **25.0 ft**	kg **lb**							*7760 ***17,050**	7260 **15,500**			*6440 ***14,220**	6090 **13,640**	8.43 **27.43**	*4530 ***10,000**	*4530 ***10,000**	11.42 **37.27**
6.0 m **20.0 ft**	kg **lb**							*8150 ***17,800**	7120 **15,250**			*6450 ***14,200**	5160 **11,470**	9.13 **29.82**	*4580 ***10,100**	3980 **8,850**	12.00 **39.26**
4.5 m **15.0 ft**	kg **lb**					*10 020 ***21,700**	9490 **20,400**	*8790 ***19,100**	6870 **14,750**	*7980 ***17,400**	5070 **10,800**	*6650 ***14,630**	4600 **10,180**	9.56 **31.33**	*4740 ***10,400**	3630 **8,050**	12.33 **40.40**
3.0 m **10.0 ft**	kg **lb**	*20 080 ***43,100**	19 830 **42,800**	*14 240 ***30,700**	12 740 **27,450**	*11 290 ***24,400**	8930 **19,250**	*9530 ***20,650**	6550 **14,050**	*8370 ***18,150**	4900 **10,500**	*7060 ***15,530**	4280 **9,460**	9.78 **32.06**	*5010 ***11,000**	3450 **7,600**	12.43 **40.79**
1.5 m **5.0 ft**	kg **lb**	*19 350 ***46,100**	18 030 **38,900**	*16 130 ***34,800**	11 800 **25,450**	*12 430 ***26,900**	8400 **18,100**	*10 210 ***22,150**	6240 **13,400**	8280 **17,750**	4730 **10,100**	7520 **16,570**	4160 **9,180**	9.78 **32.08**	*5420 ***11,900**	3420 **7,550**	12.33 **40.45**
Ground Line	kg **lb**	*17 660 ***40,900**	17 180 **36,950**	*17 260 ***37,300**	11 160 **24,050**	*13 230 ***28,600**	7990 **17,200**	10 440 **22,450**	5980 **12,850**	8120 **17,450**	4580 **9,800**	7670 **16,910**	4230 **9,320**	9.56 **31.37**	*6010 ***13,250**	3540 **7,800**	12.00 **39.37**
–1.5 m **–5.0 ft**	kg **lb**	*20 910 ***47,900**	16 930 **36,350**	*17 530 ***37,950**	10 840 **23,300**	*13 520 ***29,250**	7730 **16,650**	10 250 **22,050**	5810 **12,500**	8030 **17,250**	4500 **9,650**	8160 **18,020**	4510 **9,960**	9.13 **29.92**	*6880 ***15,200**	3860 **8,550**	11.44 **37.49**
–3.0 m **–10.0 ft**	kg **lb**	*22 620 ***49,000**	17 000 **36,500**	*16 970 ***36,700**	10 760 **23,150**	*13 200 ***28,500**	7640 **16,450**	10 200 **21,950**	5760 **12,400**			*8970 ***19,780**	5100 **11,300**	8.44 **27.60**	*7450 ***16,400**	4470 **9,900**	10.59 **34.65**
–4.5 m **–15.0 ft**	kg **lb**	*20 240 ***43,700**	17 300 **37,200**	*15 490 ***33,400**	10 880 **23,450**	*12 070 ***25,900**	7720 **16,650**					*8990 ***19,800**	6230 **13,900**	7.44 **24.21**			
–6.0 m **–20.0 ft**	kg **lb**	*16 430 ***35,100**	*16 430 ***35,100**	*12 710 ***27,000**	11 230 **24,200**	*9510 ***19,850**	8010 **17,300**					*8530 ***18,650**	*8530 ***18,650**	5.99 **19.30**			

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Long Reach Boom Lift Capacities

 Load Point Height

 Load Radius Over Front

 Load Radius Over Side

 Load at Maximum Reach – Bucket Curled

 Load at Maximum Reach

BOOM – 7.4 m (24'3")
STICK – 4.3 m (14'1")

BUCKET – GP-C 2.36 yd³ – 1820 kg (4,013 lb)
SHOES – 900 mm (36") triple grouser

UNDERCARRIAGE – Long – variable gauge
COUNTERWEIGHT – 9000 kg (19,842 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			m ft
9.0 m **30.0 ft**	kg **lb**							*6760 ***13,550**	*6760 ***13,550**			*5630 ***12,480**	*5630 ***12,480**	7.98 **30.81**	*3840 ***8,500**	*3840 ***8,500**	11.04 **35.92**
7.5 m **25.0 ft**	kg **lb**							*7200 ***15,750**	*7200 ***15,750**			*5450 ***12,030**	*5450 ***12,030**	8.92 **33.96**	*3790 ***8,350**	*3790 ***8,350**	11.85 **38.71**
6.0 m **20.0 ft**	kg **lb**							*7650 ***16,700**	*7650 ***16,700**	*7200 ***14,700**	5740 **12,200**	*5470 ***12,040**	5220 **11,610**	9.56 **36.13**	*3840 ***8,450**	*3840 ***8,450**	12.39 **40.55**
4.5 m **15.0 ft**	kg **lb**					*9500 ***20,550**	*9500 ***20,550**	*8330 ***18,100**	7550 **16,200**	*7560 ***16,450**	5600 **11,950**	*5660 ***12,440**	4710 **10,420**	9.96 **37.51**	*4000 ***8,800**	3820 **8,450**	12.68 **41.58**
3.0 m **10.0 ft**	kg **lb**	*19 080 ***40,950**	*19 080 ***40,950**	*13 610 ***29,350**	*13 610 ***29,350**	*10 800 ***23,350**	9830 **21,150**	*9110 ***19,750**	7200 **15,450**	*7990 ***17,350**	5400 **11,550**	*6010 ***13,230**	4420 **9,760**	10.15 **38.18**	*4250 ***9,350**	3660 **8,050**	12.77 **41.89**
1.5 m **5.0 ft**	kg **lb**	*22 400 ***48,400**	20 250 **43,600**	*15 580 ***33,650**	13 070 **28,150**	*12 000 ***25,950**	9250 **19,900**	*9840 ***21,300**	6860 **14,700**	*8410 ***18,250**	5200 **11,150**	*6580 ***14,490**	4320 **9,520**	10.13 **38.17**	*4630 ***10,200**	3640 **8,000**	12.64 **41.50**
Ground Line	kg **lb**	*18 750 ***43,350**	*18 750 **41,300**	*16 830 ***36,400**	12 350 **26,600**	*12 860 ***27,850**	8790 **18,900**	*10 390 ***22,500**	6570 **14,100**	8330 **17,900**	5040 **10,800**	*7440 ***16,400**	4400 **9,690**	9.90 **37.50**	*5170 ***11,400**	3770 **8,300**	12.31 **40.38**
–1.5 m **–5.0 ft**	kg **lb**	*21 030 ***48,150**	18 840 **40,450**	*17 250 ***37,350**	11 970 **25,750**	*13 250 ***28,650**	8500 **18,300**	10 520 **22,600**	6380 **13,700**	8220 **17,650**	4930 **10,600**	*7940 ***17,530**	4690 **10,350**	9.45 **36.11**	*5970 ***13,200**	4100 **9,050**	11.74 **38.48**
–3.0 m **–10.0 ft**	kg **lb**	*22 720 ***49,200**	18 840 **40,450**	*16 850 ***36,450**	11 840 **25,450**	*13 040 ***28,150**	8380 **18,050**	*10 360 ***22,300**	6300 **13,550**			*8440 ***18,620**	5280 **11,690**	8.77 **33.93**	*7170 ***15,800**	4710 **10,450**	10.90 **35.65**
–4.5 m **–15.0 ft**	kg **lb**	*20 550 ***44,400**	19 110 **41,050**	*15 550 ***33,500**	11 940 **25,700**	*12 070 ***25,950**	8430 **18,150**	*9330 ***19,850**	6370 **13,750**			*8530 ***18,790**	6390 **14,250**	7.78 **30.77**			
–6.0 m **–20.0 ft**	kg **lb**	*17 020 ***36,400**	*17 020 ***36,400**	*13 030 ***27,750**	12 260 **26,400**	*9860 ***20,750**	8690 **18,750**					*8250 ***18,080**	*8250 ***18,080**	6.37 **26.29**			

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Always refer to the appropriate Operation and Maintenance Manual for specific product information.

Standard Equipment

Standard equipment may vary. Consult your Caterpillar dealer for details.

- Auto-lube ready
- Auxiliary hydraulic valve and auxiliary pump drive location
- Cab
  - Air conditioner, heater, defroster with automatic climate control
  - Ashtray with lighter
  - Bolt-on FOGS capability
  - Coat hook
  - Floor mat
  - Light, interior
  - Literature compartment
  - Monitor
    - Full graphic color display
    - Start-up level check (engine oil, coolant, and hydraulic oil)
  - Polycarbonate side windows
  - Positive filtered ventilation
  - Radio, AM/FM with two speakers
  - Seat belt, retractable
  - Seat, suspension, heated, with high back and head rest
  - Skylight, openable, with sunshade
  - Storage compartment suitable for a lunch box cooler
  - Windshield wiper and washers (upper and lower)
- Counterweight 9000 kg (19,840 lb)
- Engine
  - Cat C13 with ACERT Technology
  - Electric priming pump
  - Precleaner
  - Speed control, automatic
  - Water separator, fuel
- Fine swing control
- Fuel-Water separator
- Heavy lift mode
- High ambient cooling
- Hydraulic neutralizer lever for all controls
- Lights, working
  - Boom, both sides
  - Cab mounted, two
  - Frame mounted
- Mirrors, frame and cab
- Product Link PL321SR
- S•O•S℠ analysis, engine and hydraulic sampling ports
- Swing parking brake, automatic
- Swivel guard
- Track
  - Guiding guards, idler and center sections
  - Motor guards, track, heavy duty
- Travel alarm

Optional Equipment

Optional equipment may vary. Consult your Caterpillar dealer for details.

- Auxiliary controls
  - Circuit, hammer
  - System, tool control with medium pressure
  - System, tool control without medium pressure
- Auxiliary hydraulic lines for Booms and Sticks
- Booms
  - Long Reach 7.4 m (24'3")
  - Mass excavation 6.55 m (21'6")
  - Reach, Heavy-Duty 6.9 m (22'8")
- Buckets (see pages 11, 21, 22 and 23)
  - Bucket linkage:
    - TB family (with lift eye)
    - UB family
  - Bucket pin adapter kit, for using 345B series buckets
  - Bucket sidecutters and tips
- Cab
  - Camera, rear view
  - Mounting, radio, 12V and 24V
  - Power supply, 7A – 12V (2)
  - Rear window emergency exit
  - Straight travel pedal
  - Sunscreen
  - WAVS ready
- Check valves
  - Boom lowering
  - Stick lowering
- Counterweight
  - Counterweight 7654 kg (16,760 lb)
  - Counterweight 7654 kg (16,760 lb) with counterweight removal for a total weight of 7915 kg (17,450 lb)
  - Counterweight 8700 kg (19,180 lb) with counterweight removal for a total weight of 9000 kg (19,840 lb)
- Coupler
  - Pin grabber type, controls, lines
- Engine
  - Starting, cold weather (two additional batteries, heavy duty battery cables, ether aid)
  - Terminal, jump start
- Fan, hydraulic, reversing
- Guards
  - Falling Object, for cab
  - Front windshield
  - Guiding, track, full length
  - Guiding, track, sprocket end
  - Heavy-duty, bottom
  - Vandalism protection
- Hand Control Pattern Changer
- High intensity discharge lights
  - HID Long reach boom
  - HID HD boom
- Machine Security System (MSS)
- Sticks
  - 2.5 m (8'2") Mass
  - 3.0 m (9'10") Mass
  - 3.35 m (11'0") HD Reach
  - 3.9 m (12'10") Long Reach/HD Reach
  - 4.3 m (14'1") Long Reach
- Undercarriage
  - Fixed
  - Idler, Cast
  - Track, GLT4
    - 600 mm (24") double-grouser shoes
    - 750 mm (30") triple-grouser shoes
    - 900 mm (36") triple-grouser shoes
  - Track, PPR2
    - 750 mm (30") triple-grouser shoes
    - 900 mm (36") triple-grouser shoes
  - Variable
  - Wide variable

Notes

345D L Hydraulic Excavator

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at **www.cat.com**

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Featured machines in photos may include additional equipment.
See your Caterpillar dealer for available options.

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