

6015B

Hydraulic Shovel



Engine

Engine Model	Cat® C27 ACERT™	
Emissions	U.S. EPA Tier 4 Final, Tier 2 Equivalent or Tier 1 Equivalent	
Gross Power – SAE J1995	606 kW	813 hp
Net Power – SAE J1349	556 kW	746 hp

Bucket

Standard Bucket Capacity – Backhoe (Heaped 1:1)	8.1 m ³	10.6 yd ³
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Operating Specifications

Bucket Payload	14.6 tonnes	16 tons
Operating Weight	140 tonnes	154 tons

6015B Features

More Productive

- *Most powerful engine in its class for faster cycle times.*
- *Increased standard bucket size over 5110B for improved production capability.*
- *Optimized pass match with Cat 773, 775, and 777 trucks.*

More Reliable

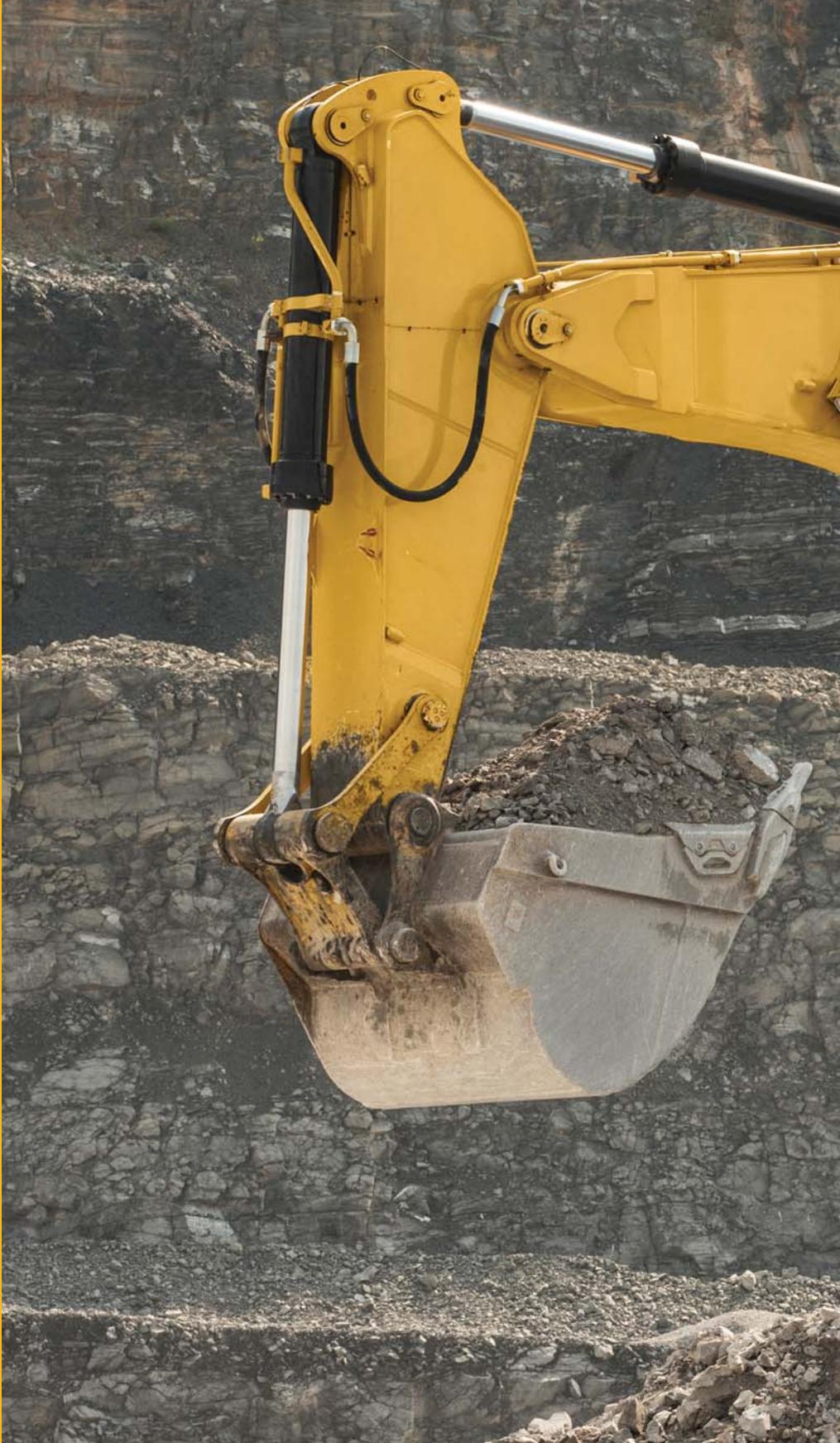
- *Extensive use of proven Cat components.*
- *Improved durability of robust 5110B structures.*
- *Improved filtration system to ensure consistent oil cleanliness and hydraulic system performance.*

More Efficient

- *Boom float regenerates boom oil for reduced engine demand.*
- *Proprietary Cat integrated engine control technologies drive efficient fuel burn.*
- *Oil cooling system, independent from engine cooling, for greater fuel economy.*
- *Regeneration of swing energy via closed-loop swing circuit.*

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6015B – Load more, make more



The new Cat 6015B Hydraulic Shovel meets your need to move more material at a lower cost, so you can achieve production targets, deliver on your commitments, meet deadlines – and maximize your profitability. Load more, make more.

Powerful Engine

A powerful engine for faster loading cycles



The Most Powerful Engine in Its Class, Translating to Faster Cycle Times, and Greater Productivity

Offering 606 kW (813 hp) of rated power via its single C27 ACERT engine, the 6015B is capable of providing class-leading cycle times and unmatched productivity.

Reliable Cat C27 ACERT Engine

The Cat C27 engine with ACERT Technology delivers power and reliability, ensuring top performance, high productivity, and exceptional service life. Its durability has been proven in heavy construction, quarry/aggregate, and mining applications alike; the versatility required of a 100 tonne (110 ton) hydraulic shovel.

ACERT Technology

The development of ACERT Technology began with the search for a better way to reduce diesel engine emissions, and culminated in a revolutionary engine design breakthrough that burns fuel more precisely than ever before. Lower combustion temperatures reduce emissions and prolong the life of lighter, more power-dense engine platforms. It also varies the injection timing based on factors like engine load and speed for optimum performance under a wide range of operating conditions, including mining.

Worldwide Cat Engine Support

Our engines are only as good as the service and support that stand behind them. Highly trained and experienced service technicians at your local Cat dealership are ready with whatever you need, wherever and whenever you need it. They know the Cat C27 ACERT engine inside and out, so they can promptly diagnose issues and keep your 6015B running at peak performance.



Optimized Truck Match

Designed to load trucks commonly used in heavy construction, quarry, and mining applications

Greater Profit Potential Via Optimized Match with Cat Off-Highway Trucks

Standard equipped with a large, 8.1 m³ (10.6 yd³) bucket, the 6015B is designed to optimally pass popular Cat 773, 775, and 777 trucks, at 4, 5, and 7 passes, respectively. This is a one pass advantage over leading standard equipped shovels in its class. When consistently achieved, the result is more material moved, and greater profit.

Versatility to Load Trucks Most Commonly Found in Heavy Construction, Quarry/Aggregate, and Mining Applications

With its ability to pair with trucks most commonly found in heavy construction, quarry/aggregate, and small to mid-size mining applications across the globe, 6015B demonstrates the versatility required of a 100 tonne (110 ton) shovel to be an appropriate and productive fit for any of these environments.

6015B Pass Match with Cat Off-Highway/Mining Trucks

	773 Series	775 Series	777 Series
	55.5-56.5 tonnes (61-62.3 tons)	65 tonnes (71.7 tons)	90.4-96.9 tonnes (100-106.9 tons)
6015B	4 passes	5 passes	7 passes

Productivity Enhancing Cat Buckets and G.E.T.

Improved productivity, operational efficiency, and serviceability



Ground Engaging Tool (G.E.T.) Quality and Performance Made Easy

Increase your operational efficiency and productivity with C70 hammerless Cat G.E.T. designed specifically for the 6015B hydraulic mining shovel. By designing our own G.E.T. in-house, we are able to take a production focus, rather than a component focus, to optimize performance across the entire machine. And like all Cat G.E.T., it is fully supported by your local Cat dealer.

- **Increased uptime:** Simple 180 degree turn to lock and unlock.
- **Safe installation and removal:** No pins to drive out; retainer is built into the tip.
- **Fast and easy change-outs:** No special tools are required to service the hammerless system.
- **Simple installation:** No assembly required.



Cat Buckets Increase Productivity

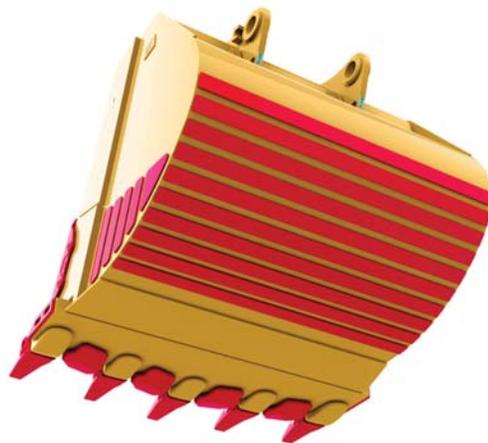
Cat buckets are designed to match your Cat 6015B mining shovel, providing optimum payload and machine efficiency while protecting your investment. Bucket wear surfaces are armored with replaceable wear materials to extend the life of your bucket. Cat buckets are easy to rebuild, with all parts available through your Cat dealer. Trust Cat to give you long service life without adding excessive weight.

Key Features

- Sized to match the 6015B hydraulic shovel and your application.
- Protected with high abrasion materials matched to the wear characteristics of your application.
- Rebuildable, with all wear components (shown below in red) available as service parts.

General Duty Buckets

General Duty buckets are sized for low density materials, providing maximum payload in general duty applications such as top soil.



Heavy Duty Buckets

Heavy Duty buckets are suited for less dense rock and soils. The Heavy Duty wear package includes lip shrouds to fully guard the bucket lip and has hardened wear bars in the highest wear areas.

Extreme Duty Buckets

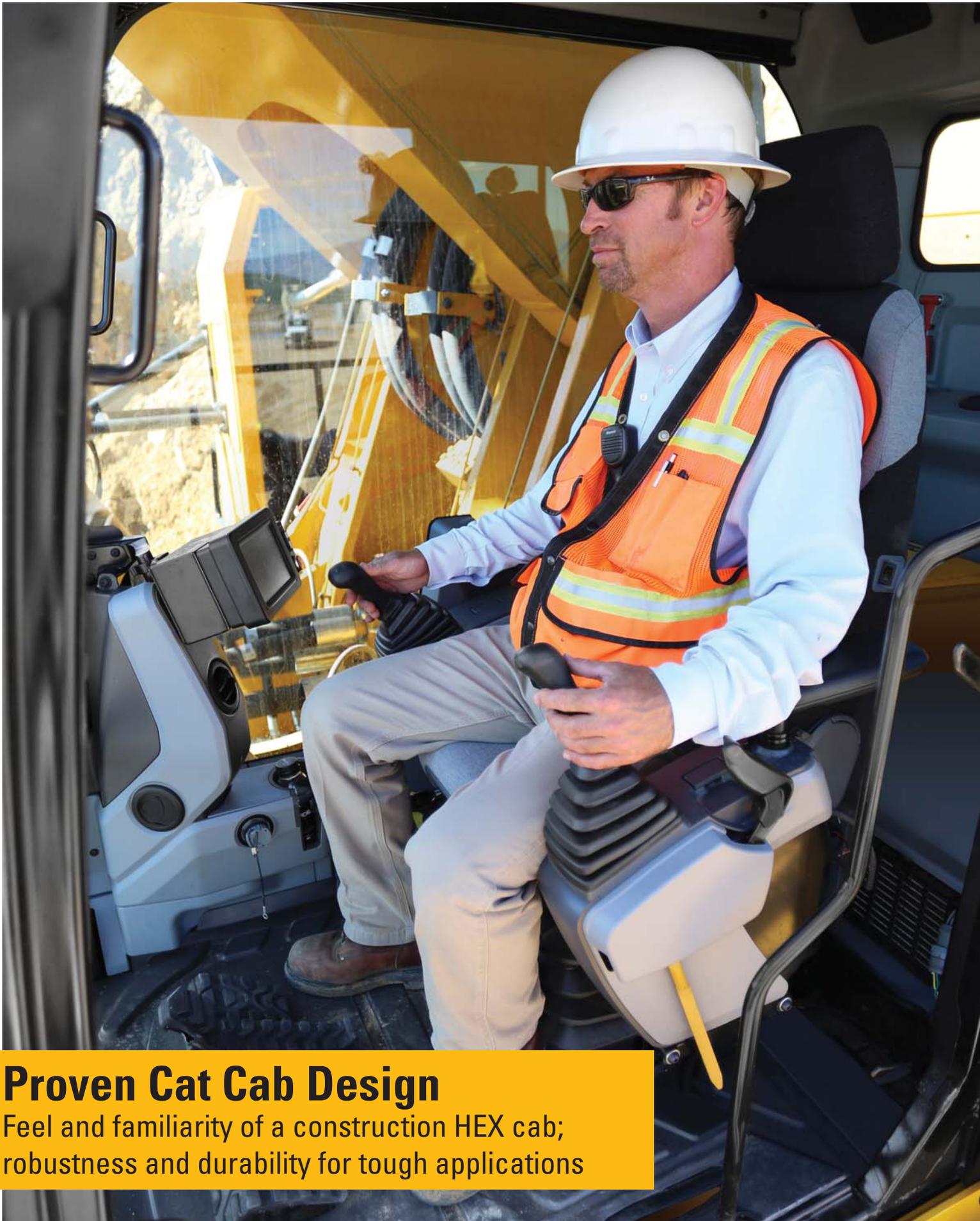
Extreme Duty buckets are the most heavily guarded for use in dense rock and aggressive digging conditions. It features lip shrouds as well as hardened wear material across the entire bucket surface.

Coal Bucket

The Coal bucket for the 6015B uses the General Duty wear package with guarding in the most critical areas and it's sized to match the density of coal to provide optimum productivity.

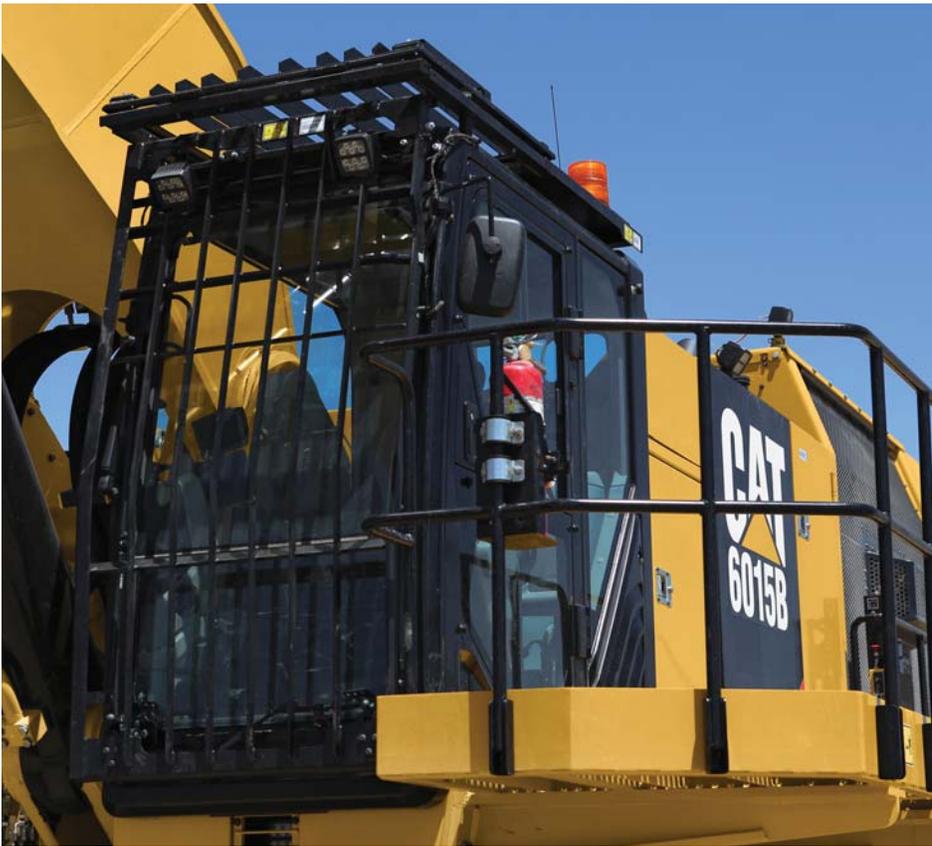
6015B Bucket Specifications

Machine	Bucket Type	Part #	Material Density		Capacity		Width		Weight		Wear Package	# Tips	GET
			t/m ³	lb/yd ³	m ³	yd ³	mm	in	kg	lb			
6015B	General Duty	472-6080	1.75	2,950	7.4	10.0	2306	91.0	6387	14,081	General Duty	4	C70
		472-5966	1.65	2,781	8.6	11.0	2632	104.0	7111	15,677	General Duty	5	C70
	Heavy Duty	472-6034	1.80	3,034	6.6	8.6	2356	93.0	6752	14,886	Heavy Duty	4	C70
		472-5947	1.80	3,034	8.1	10.6	2682	106.0	7528	16,596	Heavy Duty	5	C70
	Extreme Duty	458-3475	1.80	3,034	5.8	7.6	2154	85.0	7754	17,095	Extreme Duty	4	C70
		458-3407	1.80	3,034	7.4	9.7	2682	106.0	8636	19,039	Extreme Duty	5	C70
Coal	472-6127	1.00	1,685	10.4	13.6	3040	120.0	7464	16,455	General Duty	8	K150	



Proven Cat Cab Design

Feel and familiarity of a construction HEX cab;
robustness and durability for tough applications



Proven and Reliable Design, Even in the Toughest of Applications

A modified version of the Cat HEX cab, the 6015B cab has literally logged hundreds of thousands of hours digging in tough applications across the globe. You can rest assured that it will meet the demands of your application, as well as the comfort and safety requirements of your operators.

Optimizing Operator Situational Awareness with Excellent Cab Visibility

- Large, wide windows provide excellent all-around visibility.
 - Retractable front windshield made of standard laminated glass provides large viewing area.
 - Lower front window provides view of the tracks.
 - Large, right side polycarbonate window provides good visibility across the machine.
 - Tempered glass upper door window slides open for excellent ventilation.
 - Polycarbonate skylight provides unobstructed upward view.
- Multiple strategically positioned and high-powered lights for maximum illumination of the digging area in dark conditions (Optionally available in LED).
- Heavy-duty wipers ensure good visibility in inclement weather conditions.

Maximizing Operator Alertness and Effectiveness with Leading Comfort Features

- Extremely quiet and fully pressurized cab environment.
- Fully adjustable suspension seat provides height and weight adjustments, lumbar support, wide arm/wrist rests and wide retractable seat belt for full operator comfort and support.
- Ergonomic controls with adjustable joystick console height, independent of the seat, to operator preference.
- A new seven inch multipurpose color touch screen display dramatically simplifies the operator interface.
 - Intuitive navigation with in-language text enables operators to modify certain machine operating parameters and monitor machine conditions literally at the touch of their fingers.
- Fully automatic climate control system with air conditioner, heater, and defroster, maintains constant cab temperature for comfortable operation in any weather condition.
- Double wall pressed cab shell and platform are mounted to the cab riser with resilient mounts to reduce noise, vibration and operator fatigue.
- Responsive electro-hydraulic controls provide sure, precise maneuvering for high production capability and minimized operator fatigue.
- No hydraulic lines are present in the cab for a cool, clean, quiet, and odorless environment.

Cat Undercarriage Design

Excellent stability, maneuverability, lift capacity, and component life



Tracks Designed for High-Impact and High-Travel Applications, Like Mining and Heavy Construction

Cat exclusive Positive Pin Retention (PPR) Sealed and Greased Track design resists pin walking and link cracking for reliable sealing and maximum track life.

- Resists end-play generation and link movement on the pin.
- Tightly controls seal motion for long internal pin/bushing wear life.
- Resists fatigue and crack formation with redesigned, stronger track links.

These are the same track links used on our popular D11 dozers, further substantiating their reliability and durability in extreme applications and high travel conditions.

Better Wear of Undercarriage Components

- Even idler slide wear and extended component life result from the floating push tube.
- Low wear drive system via induction hardened and high quantity of sprocket teeth.
- Full track guards are optionally available for even greater protection of bottom rollers.

Superior Serviceability

- Automatic track tensioning system is a simplified design that requires no manual adjustment.
- PPR tracks are easily serviced with a master joint. Allows for easy removal and installation of undercarriage.

Reliable Crawler Performance

- Eliminates unnecessary wear and assists in easier track tensioning via three carrier rollers.
- Exceptional track guidance via standard track guides the entire length of the crawler.
- Travel motors and gearboxes are well protected by robust steel covers, with integrated service doors for easy service access.



Robust Structures

Proven durability you can rely on

Large and Robust Structures Designed and Fabricated to Withstand Your Toughest Digging Conditions

To extend service life and ensure that your 6015B keeps producing, our structures are designed for durability and dependability. Extended performance in the harsh digging conditions you face daily is accomplished through selection of high-strength steels and rugged castings, joined and thermally stress-relieved to create a reliable external shell.

- Manufactured from high-strength steel for durability.
- Full penetration, profiled and ground welds at critical junctures.
- MT, UT, and X-ray inspections on select welds ensure quality.

Durable Front Linkage Is Sturdy and Strong, Yet Light Enough for Fast Cycle Times

The 6015B boom and stick utilize high-strength steel and rugged castings, that are joined and thermally stress relieved, for optimum structural life and resistance to impact and wear in difficult digging conditions.

- Box-section design provides unsurpassed rigidity and strength.
- Thermally stress relieved structures reduce residual stresses for longer structural life.
- Heat treated castings are used in boom foot area to handle high force boom loads.
- Heavy duty castings in high load areas add exceptional strength and durability.

More Reliable Swing Stability and Component Life

Providing superior stability, extending component life, and ultimately improving machine uptime, our swing system includes a unique cross roller bearing, with sealed internal gearing, connected to an automatic lubrication system.

Exceptional structural strength and durability is afforded by mounting the swing bearing directly to the 6015B carbody, eliminating collar welds.

Protecting against surface wear, while preserving structural toughness in the main bearing body, 6015B swing bearing rings are made of specially heat-treated steel, and raceways are induction hardened.

Fully Tested and Validated Structures

All 6015B structures have been fully tested and validated at our state-of-the-art proving ground in Tucson, AZ (USA).



Fuel Efficiency Technologies

Lower fuel cost; Lower total cost of ownership

Leading Fuel Efficiency Via Cat Exclusive Power Management Technologies

Proprietary Cat integrated engine control technologies keep the engine running at or near the rated speed to maintain an optimized balance of power and fuel efficiency. This technology prevents large drops in engine speed, followed by over speeds, often observed in older equipment. It provides the following benefits:

- Estimates fuel requirements, based on engine speed and torque, and needed machine torque, based on hydraulic load (pumps and fan). This technology ensures faster and more consistent engine regulation by preventing lug, which, in turn, reduces fuel consumption.
- Reduces hydraulic pump output to prevent engine lug, based on available engine torque, desired engine speed, actual engine speed, and estimated hydraulic load. This technology provides power to the machine functions that need it to move material quickly and efficiently.



Closed-Loop Swing System

Load more material, at lower cost, with energy recovery capability

Greater Efficiency Via Energy Recovery

Kinetic energy captured during the swing motion is fed back into the system during deceleration, providing more power to drive the main and auxiliary pumps. Energy is saved during deceleration, because braking occurs hydrostatically with pump displacement controls, as opposed to throttling flow through breaking valves as in open circuit swing systems.

Energy Savings During Acceleration

Energy is saved during swing via speed control, ensuring that only the minimum necessary oil flow is utilized at any given time, and providing smooth acceleration and deceleration for fast cycles.

Efficient Hydraulic System

Efficient performance from a reliable, clean, and responsive system



Fuel Savings as a Result of Best-In-Class Energy Efficiency

More efficient hydraulic pump utilization, reduced energy losses, and increased fuel savings are realized with our innovative, automatic flow proportioning technology.

- Additional fuel savings resulting from boom float feature, which regenerates boom oil for reduced engine demand and improved energy efficiency.

Smooth, efficient operation, and controllability is afforded by our Cat Proportional Priority Pressure Compensating (PPPC) technology. PPPC ensures that flow is proportional, according to demands, so individual functions – boom, stick, and bucket – are automatically prioritized during simultaneous operations.

Maximized hydraulic efficiency is delivered via our flow-on-demand system, designed with four pumps; three for implement and travel, and one for swing. Pressure and flow compensation deliver only as much flow as needed to reduce heat build-up and component wear.

Consistent Oil Cleanliness for Dependable Hydraulic System Performance

The hydraulic system design has been optimized for peak performance and reliability, featuring a newly designed filtration system.

- Machine comes equipped with standard high-pressure and return oil filtration.
- A separate kidney loop provides continuous filtration and optimum oil cleanliness at all times, supporting the hydraulic system.



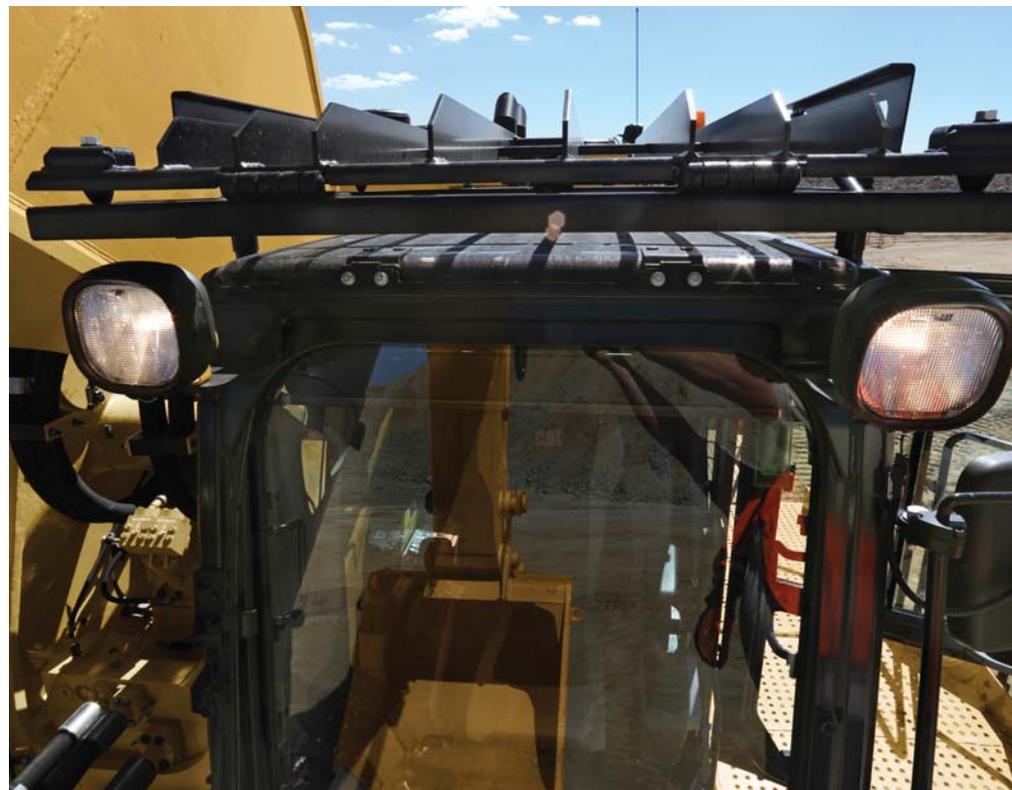
Efficient Oil Cooling

To maximize hydraulic efficiency, our oil cooling system is independent of engine cooling, providing cooling on demand.

Resulting in greater fuel economy, the temperature controlled variable speed fan provides cooling on demand to maintain optimum hydraulic fluid temperature.

Safety Enhancements

Designed with your safety as our top priority



Sharing your commitment to safety, and driven by our commitment to Zero Harm, we work tirelessly to design the safest machines possible to protect your most important asset; your employees.

Some examples of the safety-enhancing features of the Cat 6015B hydraulic mining shovel include the following:

Operator Environment

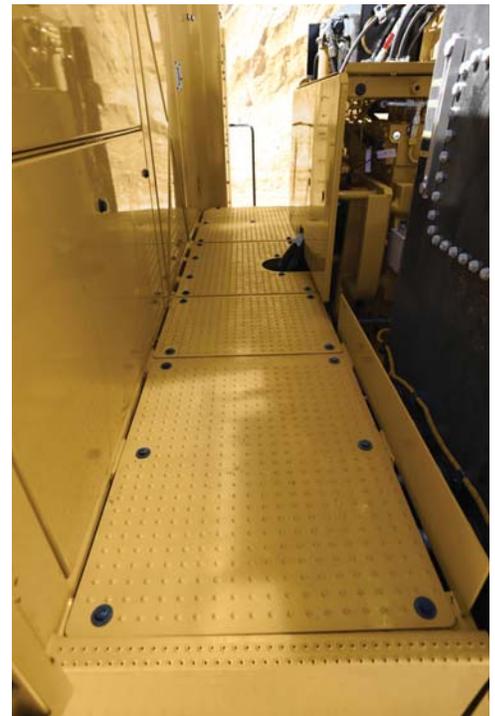
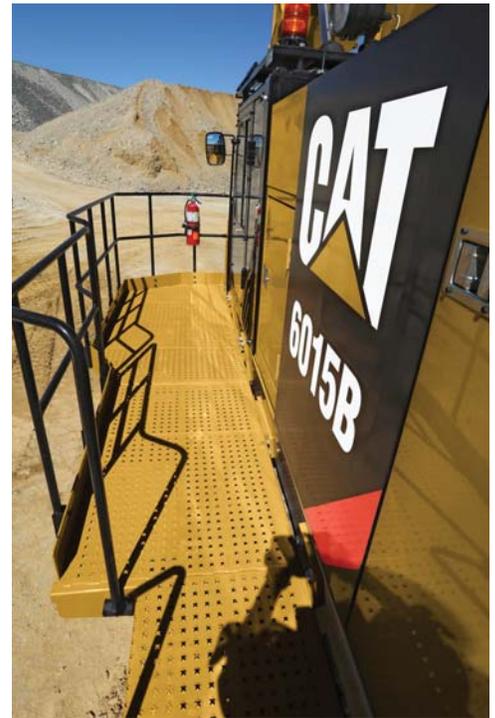
- Optimized operator situational awareness and safe machine positioning and truck loading via excellent cab visibility and large, ideally positioned mirrors.
- Multiple egress points for safe exit to the side or front of machine.
- Cab equipped with emergency hammer for quick escape and ready access to emergency ladder.
- Numerous, optimally positioned lights for ample visibility during operation in dark conditions.
- FOPS certified cab with safety glass windshield.
- Ergonomic placement of cab door handle to prevent bending down, and risk of injury, to enter cab.

Machine Access

- Wide crosswalk made of extruded tread plates provides safer service access to full width of machine, including hydraulics, engine service doors and engine/pump room.
- Safe movement about the machine via wide and slip-resistant walkways, limited walkway elevation changes (steps up/down), and minimized trip hazards.
- Grab irons and steps provide operator and maintenance personnel with three points of contact at all times.
- Quick exit from machine during emergency facilitated by three means of egress.
- Optional 45 degree boarding ladder.
- Ability to lower boarding ladder from ground level in case of an emergency.

Fire Suppression and Burn Prevention

- A bulkhead separates the pump room from the engine compartment for safer containment of hydraulic oils.
- Improved wire and hose guarding for added safety.



Electrical System

- Safe electrical maintenance facilitated by battery disconnect switch.

Emergency Shut-Offs

- Ground level, engine and pump room, and cab access to engine kill switches allows quick shutoff in emergency situations.

Cat Technology Solutions

Evolving your work site for greater safety and productivity



Asset ID	Status	Lab Number	Source	Sample Date	Meter Reading	Severity	Status
LMA 25	Failure	Y123-456789-1234	RADIATOR	08/28/12	1003 hrs	Critical	Action Taken
LMA 12	Warning	Y234-567891-2345	RADIATOR	08/19/12	3000 hrs	Minor	Action Taken
LMA 48	OK	Y345-678912-3456	ENGINE	08/17/12	950 hrs	OK	Action Taken
LMA 36	OK						
LMA 11	OK						
LMA 23	OK						

Helping You Enhance Safety and Productivity Through Technology

Aimed at enhancing the productivity and profitability of your 6015B hydraulic shovel, we currently offer optional Cat MineStar™, Product Link™, and VIMS™ solutions, to meet your site specific needs.

Cat Product Link

Take the guesswork out of asset management with Product Link remote monitoring.

- Remote access to information through the easy-to-use VisionLink® interface.
- Maximize uptime by staying informed on machine systems and diagnostic codes.
- Track machine with utilization, fuel usage, and payload summaries (when used with equipped truck).
- Stay up to date on machine location, service meter hours, and reporting status.

Vital Information Management System (VIMS)

Connect directly to the machine for access to a wide range of sensor information and enhanced machine data.

- Detailed data logging of machine parameters and diagnostic codes.
- Track machine sensor information with trend analysis and histograms to monitor machine health.





Cat MineStar System

Helping you achieve your goals for enhanced mine site safety, improved efficiency, reduced operating costs, and greater profitability, the Cat MineStar System provides the most comprehensive suite of mining technology products in the industry. It consists of a number of configurable capability sets – Fleet, Terrain, Detect, Health, and Command – that allow you to scale the system to your mine site needs. Cat MineStar System helps you manage everything from material tracking to sophisticated real-time fleet management, machine health systems, autonomous equipment, and more.

The Cat 6015B is “MineStar ready,” capable of utilizing four of the Cat MineStar System capability sets; Health is a fully integrated option, while Fleet, Terrain for Loading, and Detect are retrofit options.

- **Health**

Health delivers critical event-based machine condition and operating data for your entire fleet. It includes comprehensive equipment health and asset monitoring capabilities with a wide range of diagnostic, analytic and reporting tools.

- **Fleet**

Fleet provides real-time machine tracking, assignment and productivity management, providing a comprehensive overview of all your asset operations from anywhere in the world.

- **Terrain**

Terrain enables high-precision management of drilling, dragline, grading and loading operations through the use of guidance technology. It increases machine productivity and provides you real-time feedback for improved efficiency.

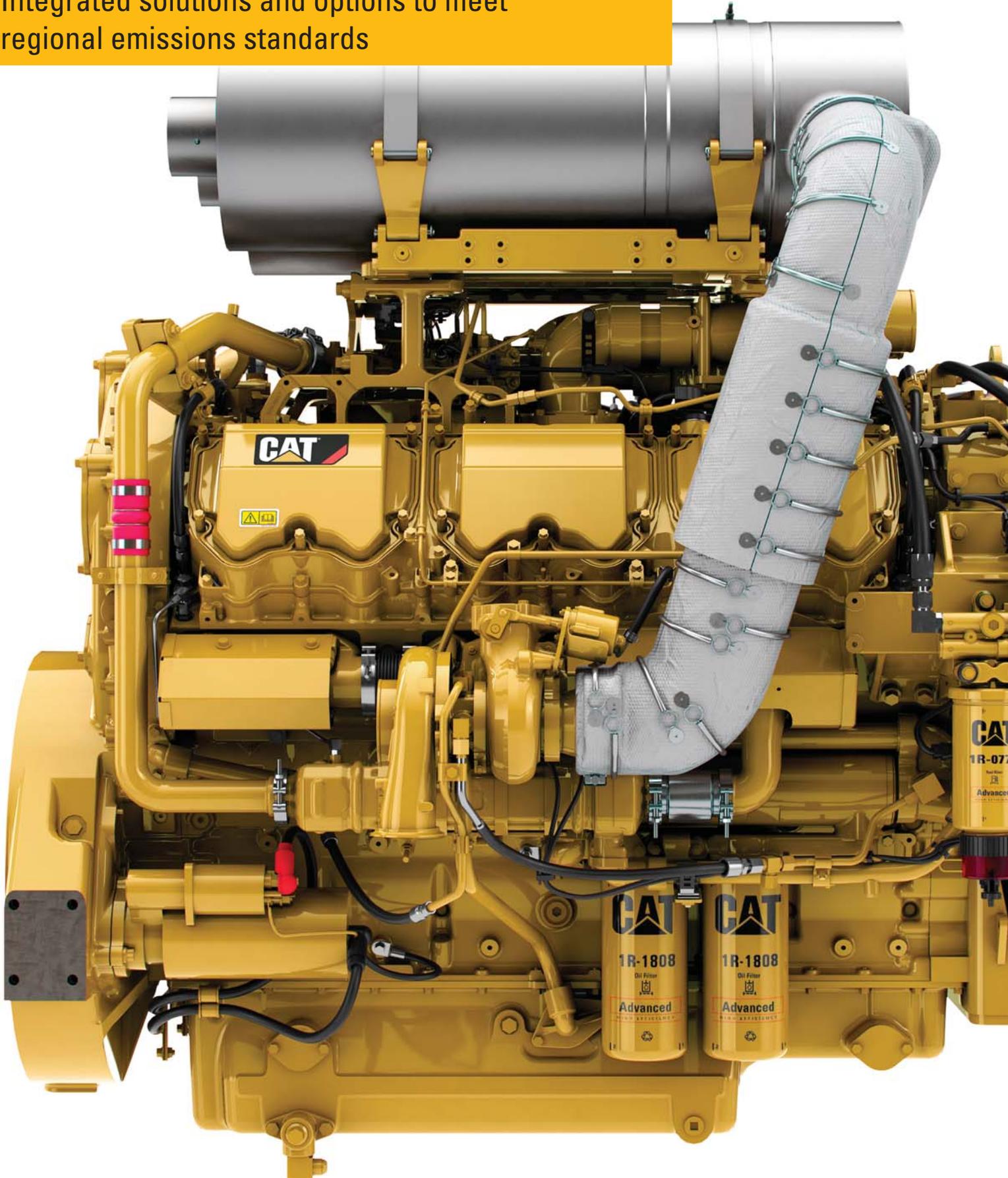
- **Detect**

Detect provides equipment operators with enhanced awareness for increased site safety, using a combination of radars, an in-cab display, and multiple cameras.

Please speak to your local dealer for more information on MineStar for the 6015B.

Emissions Technology

Integrated solutions and options to meet regional emissions standards





Tier 4 Final Engine Option for Operation in North America

The C27 ACERT engine on the 6015B hydraulic shovel meets Tier 4 Final emission standards and can be counted on to work productively and economically in heavy construction, quarry/aggregate, and mining applications. It delivers the power and torque needed for optimal performance and fast cycles.

The 6015B meets Tier 4 Final emission standards in the United States and Canada using:

- Cat NO_x Reduction System captures and cools a small quantity of exhaust gas, then routes it into the combustion chamber where it drives down combustion temperatures and reduces NO_x emissions.
- Diesel Oxidation Catalyst (DOC) – uses a chemical process called oxidation to condition exhaust gases to meet emission standards.
- MEUI™-C Fuel System delivers increased fuel efficiency, while further reducing NO_x emissions.

Ultra Low Sulfur Diesel (ULSD) Fuel and Low Ash Oil are required. Diesel exhaust fluid is not required.

Tier 1 or Tier 2 Equivalent Engine Options Available for Operation in Countries with Lesser Regulated Emission Standards

There are two engine arrangements available for the market outside of the U.S. and Canada; a China NR III certified offering that is Tier 2 equivalent, as well as an optimized fuel consumption offering that is Tier 1 equivalent.





Sustainability

Higher standards for a better tomorrow

Meeting the needs of today without compromising the needs of tomorrow is the goal for all Cat machinery. The commitment to helping you operate safely and sustainably is affirmed in the design of the 6015B hydraulic mining shovel.

The 6015B offers a number of sustainable benefits:

Emissions

The 6015B is available with a C27 ACERT engine that meets Tier 4 Final emission standards for reduced emissions for the North American market.

Isochronous governing used on the 6015B engine keeps the engine running at the ideal speed in all load applications. This means less fuel burned. Great for the environment, and the bottom line.

Automatic Engine Speed Control lowers engine RPM when the machine has not been working for a period of time, reducing engine noise and emissions, as well as preserving fuel.

Sounds Suppression

Reduced operator and spectator sound levels result in less impact on the communities where the 6015B operates.

The 6015B cab provides the operator with a quiet work environment.

Rebuilds

Decrease your energy use and material consumption with a machine design that facilitates rebuilding.

Service

Ground-level accessible service fluid fill points ensure fast, easy, and secure replenishment of machine fluids.



Seamless Dealer Support

The same responsiveness and expertise you receive and expect on all Cat equipment

Parts Available When You Want Them

Receiving 6015B parts from your local Cat Dealer is streamlined through the optimized use of Cat components, integrated part numbers, and stocking of parts in local Caterpillar warehouses. Your 6015B will be supported 24 hours a day, 7 days a week, by a worldwide network of parts distribution facilities, dealer service centers, and technical training facilities to keep it up and running at peak performance levels.

A Single Source for All Service and Maintenance Needs

With the use of Cat components throughout, you can rest assured that your local Cat Dealer is your most knowledgeable and trusted single source for your 6015B service and maintenance needs. Cat Dealer expert technicians have the unique knowledge, experience, training, and tooling necessary to fully support your 6015B hydraulic shovel, no matter the need or where your site is located.

Continued Support Throughout the Life of Your 6015B

Consistent with any piece of Cat equipment, the 6015B is designed and built to provide maximum productivity capability and operating economy throughout its working life. To help you meet these performance levels with your 6015B, Cat dealers offer a wide range of service plans that maximize uptime and return on your investment, including:

- Preventative maintenance programs.
- Diagnostic programs, such as scheduled oil sampling and technical analysis.
- Rebuild and reman options.
- Customer support agreements.

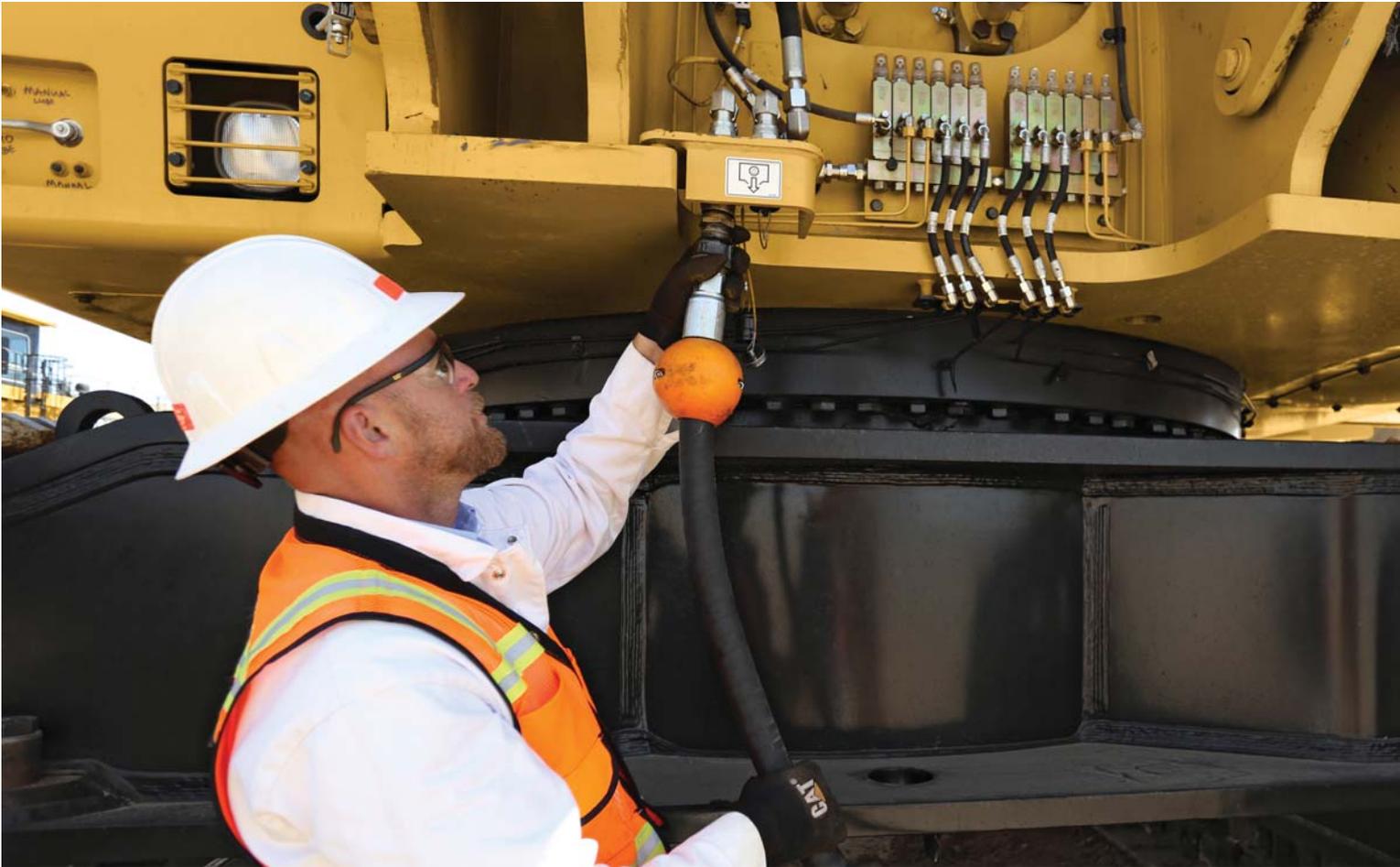
And although the 6015B is designed for easy operation, your Cat dealer can arrange training programs to help your operators improve productivity, increase uptime, reduce operating costs, and enhance safety.

No One Knows Your 6015B Hydraulic Shovel Better

The vast majority of Cat dealers across the globe have supported our line of hydraulic shovels for over a decade, so they are uniquely equipped to optimize the performance of your 6015B with their unmatched Cat hydraulic shovel expertise. This expertise includes a deep understanding of how the 6015B is best applied and utilized in all types of applications, so they can take your site-specific factors into account to help lower your operating and maintenance costs.

Serviceability

Service friendly for greater uptime





Designed for safe, easy serviceability and component accessibility, for greater uptime and increased productivity.

Easily Accessible Service Locations

- Service locations are easily accessible from walkways or ground level, allowing critical, routine maintenance to get done quickly, safely and efficiently.
- Centralized lubrication points simplify servicing in to hard-to-reach locations.
- Stand-up engine compartment and pump room provide easy service access to engine and pumps.
- Right and left-hand service platforms with open grating provide access to cab, cross walkway, engine service doors and engine/pump room for safe, easy servicing.
- Access doors open outward for easy inspection.
- Large service doors provide ample room for inspection and servicing.
- Handrails enclose all walkways and service platforms for dependable service access.
- Fast fill fuel system at ground level and regular fill cap on top of tank.
- Spin-on filters for fuel and oil systems reduce changing time and help assure clean, tight seals.



Robust Illumination for Maintenance in Dark Conditions

- Lighted engine compartment and pump room.
- Optional ladder light, with ground level access switch, provides lighted entry and exit for maintenance personnel safety.
- Additional optional work lights provide excellent lighting to boarding, service and work areas in dark conditions.

Preventative Maintenance Made Easy

- Fluid sight gauges for radiator, hydraulics, fuel and swing drives are visible from center of machine for daily fluid inspections.
- Scheduled Oil Sampling (S-O-SSM) ports for hydraulic system and engine oil provide a fast, convenient means of obtaining uncontaminated fluid samples for improved analysis and reliability.
- Key-On Fluid Level Check allows monitoring for fluid levels in the main cab display, prior to operation.
- Preventive maintenance program tracks time to next service interval and can optionally alert to upcoming interval due soon, or past due service.
- Hydraulic pressure test ports, at virtually every required location, provide quick, easy access for testing or adjusting hydraulic pressure.
- Standard autolube feature provides automatic lubrication at predetermined cycles for maintenance-free duty.
- Standard grease reel gun allows remote lubrication of front bucket linkage from ground level once per shift. No sensitive automatic lubrication lines on rear of bucket or linkage that are prone to damage.

Fast Assembly and Efficient Transportability

- Modular design makes assembly, and disassembly for transport, quick and easy.
- Modular shipping enables quick, cost-effective hauling from site to site.
 - The superstructure can be transported as a single unit, with the engine ready to run.
 - Only requires assembly of the track roller frames, attachment (boom, stick and bucket), counterweight, and connection of the hydraulic hoses.

6015B Hydraulic Shovel Specifications

Engine

Engine Model	Cat C27 ACERT with Tier 4 Final emission standards	
Gross Power – SAE J1995	606 kW	813 hp 1,800 min ⁻¹
Net Power – SAE J1349	556 kW	746 hp 1,800 min ⁻¹
Number of Cylinders	12	
Bore	137.2 mm	5.4 in
Stroke	152.4 mm	6 in
Displacement	27 L	1,648 in ³
Maximum Altitude without Deration above Sea Level (a.s.l.)	3048 m	10,000 ft

Engine Model	Cat C27 ACERT with Tier 1 or Tier 2 equivalent emission standards	
Gross Power – SAE J1995	606 kW	813 hp 1,800 min ⁻¹
Net Power – SAE J1349	556 kW	746 hp 1,800 min ⁻¹
Number of Cylinders	12	
Bore	137.2 mm	5.4 in
Stroke	152.4 mm	6 in
Displacement	27 L	1,648 in ³
Aspiration	Turbocharged and aftercooled	
Maximum Altitude without Deration above Sea Level (a.s.l.)	4420 m	14,500 ft

Weights

Operating Weight	140 tonnes	154 tons
Ground Pressure	16.3 N/cm ²	23.6 psi

- 700 mm (28 in) track shoes, 7.6 m (24 ft 11 in) boom, 3.4 m (11 ft 2 in) stick

Track

Standard	700 mm	28 in
Wide	900 mm	36 in
Extra Wide	1000 mm	39 in
Number of Shoes (each side)	46	
Number of Track Rollers (each side)	9	
Number of Carrier Rollers (each side)	3	
Track Pads	Double grouser	

Drive

Travel Speed (two stages):		
1st Stage (maximum)	2.3 km/h	1.4 mph
2nd Stage (maximum)	3.3 km/h	2.1 mph
Maximum Drawbar Pull (Forward)	858 kN	192,886 lbf
Maximum Drawbar Pull (Reverse)	983 kN	220,987 lbf
Gradeability of Travel Drives	Approximately 42%	
Hydraulic Track Tensioning	With accumulator	

Service Refill Capacities

Fuel Tank	1700 L	449 gal
Cooling System	165 L	44 gal
Engine Oil	87 L	23 gal
Swing Drive	9 L	2.4 gal
Hydraulic System (including tank)	1752 L	463 gal
Hydraulic Tank	956 L	253 gal
Grease Tank	68 L	18 gal

Electrical System

System Voltage	24V
Batteries	4 × 200Ah (12V each)
Alternator Rating	150A (24V)

- Emergency stop in cabin, engine module, pump room and on service station accessible from ground level
- All around lighting
- Four (4) lights on attachment
- Five (5) lights for front
- Two (2) lights for left side
- One (1) light for right side
- Two (2) lights for rear end
- One (1) light for machine deck/service
- One (1) beacon light on cabin roof

6015B Hydraulic Shovel Specifications

Hydraulic System

Main Pumps	3 × variable swash plate pumps	
Maximum Total Oil Flow	1544 L/min	407 gal/min
Maximum Pressure, Attachment	320 bar	4,641 psi
Maximum Pressure, Travel	320 bar	4,641 psi
Swing Pump	1 × variable swash plate pump	
Maximum Flow, Swing	479 L/min	127 gal/min
Maximum Pressure, Swing	365 bar	5,294 psi
Pilot Pump	1 × gear pump	
Maximum Flow, Pilot	153 L/min	40.4 gal/min
Maximum Pressure, Pilot	95 bar	1,378 psi
Engine Fan Pump	1 × variable swash plate pump	
Maximum Flow, Engine Fan	201 L/min	53.1 gal/min
Maximum Pressure, Engine Fan	220 bar	3,191 psi
Hydraulic Fan Pump	1 × variable swash plate pump	
Maximum Flow, Hydraulic Fan	86 L/min	22.7 gal/min
Maximum Pressure, Hydraulic Fan	135 bar	1,958 psi
Hydraulic Oil Cooling		
Maximum Flow	1075 L/min	284 gal/min
Diameter of Fan	1016 mm	40 in

- Filters:
 - Full-flow high-pressure filters (200 µm) for main pumps
 - Full-flow filters (20 µm) for complete return circuit
 - Pressure filters (16 µm) for servo circuit
 - Full-flow filters (6 µm) for engine cooling return circuit
 - Swing charge filter (15 µm)
 - Pump case return screens (125 µm)

Swing System

Swing Drives	Two (2) compact planetary transmissions with axial piston motors
Parking Brake	Wet multiple disc brake, spring-loaded/hydraulically released
Maximum Swing Speed	4.9 rpm
Swing Ring	Cross roller bearing with sealed internal gearing

- Closed-loop swing circuit with speed control
- Hydraulic braking of the swing motion when control is returned to neutral position or by counteracting control for stronger braking
- All raceways and the internal gearing of swing ring supplied by automatic central lubrication system

Centralized Service Area

- Accessible from ground level
- Emergency stop
- Quick couplings for:
 - Diesel fuel
 - Grease

Undercarriage

Travel Speed (two stages):		
1st Stage (maximum)	2.3 km/h	1.3 mph
2nd Stage (maximum)	3.3 km/h	2.1 mph
Maximum Drawbar Pull (Forward)	858 kN	192,886 lbf
Maximum Drawbar Pull (Reverse)	983 kN	220,987 lbf
Gradeability of Travel Drives	Approximately 42%	
Hydraulic Track Tensioning	With accumulator	
Number of Shoes (each side)	46	
Number of Track Rollers (per side)	9	
Number of Carrier Rollers (per side)	3	

- Forged double-grouser track pads
- Chain links connected by hardened pins and bushings
- Cat D11 Track-Type Tractor links
- All running surfaces of sprockets, idlers, rollers and track chain links hardened
- Fully hydraulic self-adjusting track tensioning system with accumulator
- Automatic hydraulic retarder valve to prevent overspeed on downhill travel
- Audible travel alarm

6015B Hydraulic Shovel Specifications

Operator's Cab

- Pressurized operator station with positive filtration
- Mirror package
- Sliding upper door window (left-hand cab door)
- Glass-breaking safety hammer
- Removable lower windshield with in cab storage bracket
- Coat hook
- Beverage holder
- Literature holder
- AM/FM radio
- Radio with MP3 auxiliary audio port
- Two stereo speakers
- Storage shelf suitable for lunch or toolbox
- Color LCD display with warning, filter/fluid change, and working hour information
- Adjustable armrest
- Height-adjustable joystick consoles
- Neutral lever (lock out) for all controls
- Travel control pedals with removable hand levers
- Two power outlets, 10 amp (total)
- Laminated glass front upper window and tempered other windows

Automatic Lubrication System

Capacity of Grease Barrel	68 L	18 gal
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- Central bank lubrication system
- Grease is automatically applied to all attachment pivot points (except bucket linkage) and slew bearing
- Standard grease reel on machine for bucket linkage
- Grease refill service point accessible from ground

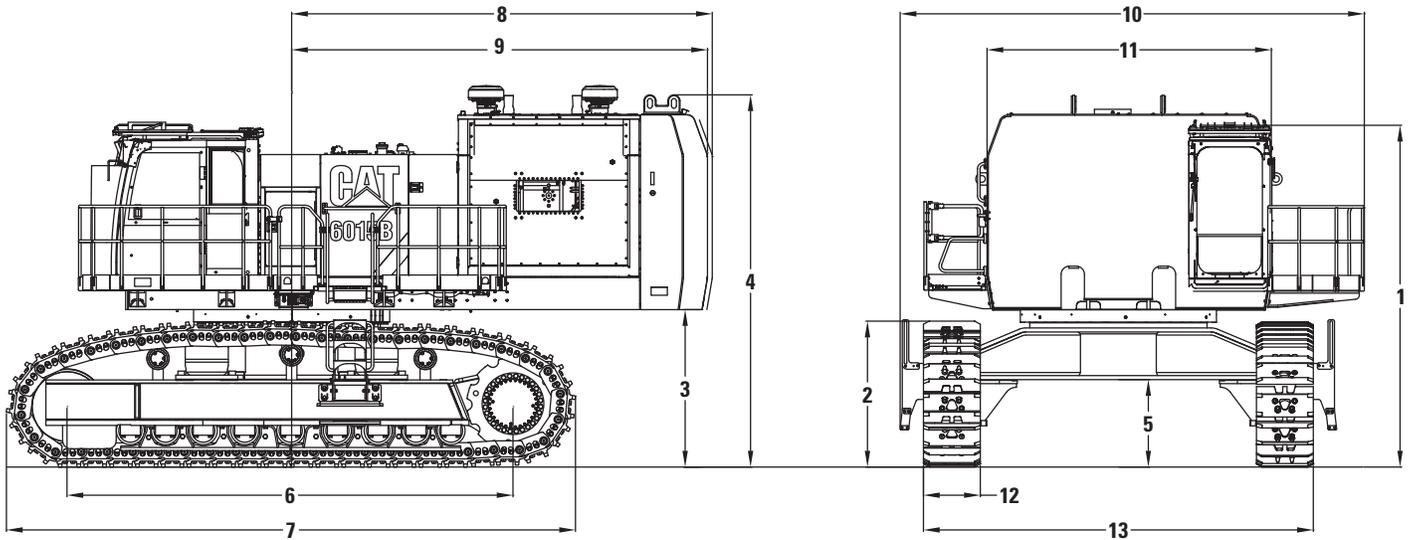
Attachments

- Boom and stick torsion-resistant with welded box design
- High-tensile steel with solid steel castings at pivot areas
- Boom and stick stress-relieved after welding
- Float valve for boom down function
- Buckets equipped with:
 - Special liner material covering main wear areas inside and outside
 - Lip shrouds
 - Wing shrouds
 - Heel shrouds

6015B Hydraulic Shovel Specifications

Dimensions

All dimensions are approximate.



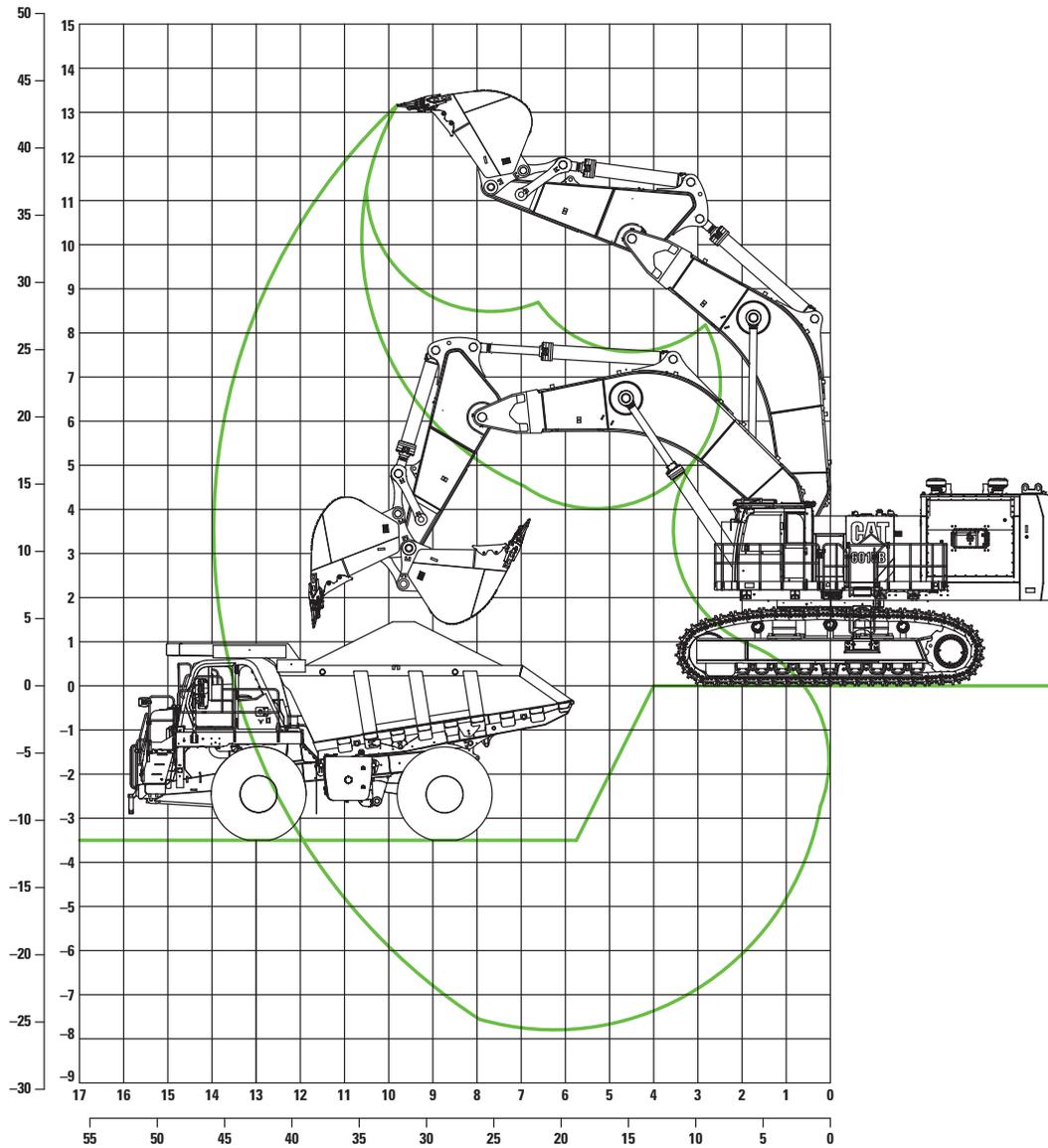
1	4210 mm	13 ft 10 in
2	1800 mm	5 ft 11 in
3	1940 mm	6 ft 4 in
4	4590 mm	15 ft 1 in
5	1080 mm	3 ft 7 in
6	5530 mm	18 ft 2 in
7	7000 mm	23 ft 0 in

8	5180 mm	17 ft 0 in
9	5120 mm	16 ft 10 in
10	7520 mm	24 ft 8 in
11	3650 mm	12 ft 0 in
12	700 mm	2 ft 4 in
13	4800 mm	15 ft 9 in

6015B Hydraulic Shovel Specifications

Backhoe Attachment (BH)

Working Diagram – Boom 7.6 m (24 ft 11 in) – Stick 3.4 m (11 ft 2 in)



Working Range

Maximum Digging Depth	7.9 m	25 ft 7 in
Maximum Digging Reach	13.9 m	45 ft 11 in
Maximum Digging Height	13.2 m	43 ft 4 in
Maximum Dump Height	8.7 m	28 ft 7 in

Digging Forces

Bucket Digging Force (SAE)	501 kN	112,600 lbf
Stick Digging Force (SAE)	439 kN	98,800 lbf
Bucket Digging Force (ISO)	586 kN	131,700 lbf
Stick Digging Force (ISO)	458 kN	103,000 lbf

Backhoe

Tooth System	Cat C70 penetration tip with CapSure lock	
Capacity 1:1	8.1 m ³	10.6 yd ³
Total Width	2682 mm	8 ft 10 in
Number of Teeth	5	
Weight Including Standard Wear Package	7528 kg	16,596 lb
Maximum Material Density (loose)	1.8 t/m ³	3,034 lb/yd ³

Optional Equipment

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

UNDERCARRIAGE

- Track guards – full
- Track guards – center
- Track width
 - Standard – 700 mm (28 in)
 - Wide – 900 mm (36 in)
 - Extra Wide – 1000 mm (39 in)

COLD WEATHER OPTIONS

- Starting aid – cold weather
- 120V or 240V engine heater
- Fuel heater
- Heated cab mirror
- Low temperature lubricants

SUPERSTRUCTURE

- Copper Mesabi or aluminum bar plate engine cooling packages
- LED working lights
- Powered access stairway
- Camera system

CAB

- Windshield guard (FOGS)
- Product Link

ATTACHMENT

- 3.4 m (11 ft 2 in) or 4.1 (13 ft 5 in) stick

BUCKETS

- Additional buckets available, based on application, through your local Cat dealer

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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