IT38G Series II

Integrated Toolcarrier

Engine		
Engine Model	Cat® 3126B ATAAC	
Flywheel Power	119 kW	160 hp
Max. Flywheel Power	134 kW	180 hp
Buckets		
Bucket Capacities	2.21-2.8 m^3	2.75-3.5 yd^3

Weights		
Operating Weight	14 583 kg	32,156 lb
• For 2.8 m^3 (3.5 yd^3) material handling bucket with BOCE		
Operating Specifications		
Static Tipping Load, Full Turn	8665 kg	19,106 lb
• For 2.8 m^3 (3.5 yd^3) material handling bucket with BOCE		

IT38G Series II Integrated Toolcarrier

Setting the standard for Integrated Tool Carrier productivity, durability and comfort.

Engine

Cat® 3126B ATAAC diesel engine delivers stronger performance, faster response and excellent fuel economy. The IT38G II meets all world-wide emissions regulations through 2006. **pg. 4**

Power Train

Countershaft transmission with automatic shift capability provides on-the-go speed and direction changes. Electronic Clutch Pressure Control (ECPC) delivers smoother shifts. Variable Shift Control matches shift patterns to the application. **pg. 5**

Cooling System

The G Series II cooling package reduces radiator plugging and contributes to increased fuel efficiency. Reverse air flow, an on-demand fan and a more accessible system keep the machine running cool in tough airborne debris applications. **pg. 6**

Work Tools

✔ A variety of couplers, work tools and buckets are available from the factory or from your Caterpillar® dealer. New 3.5 yd^3 bucket now available. **pg. 11**

Serviceability

Easily perform daily maintenance up to 250-hour service intervals with ground-level access to all major service points including sight gauges for level checks of engine coolant, hydraulic and transmission oil. **pg. 12**

Improved visibility and increased static tipping loads provide unmatched performance and versatility.

Environmental Features

The electronically controlled 3126B ATAAC engine in the IT38G Series II has low exhaust emissions and meets current regulations. Sampling valves and ecology drains help prevent fluid spills. **pg. 7**

Operator Station

The IT38G Series II cab provides floor mounted pedals and an easy-to-use instrument panel. **pg. 8**

Linkage

✔ The IT38G II 8-bar front linkage offers parallel lift and unmatched versatility. **pg. 10**

Complete Customer Support

In addition to machine selection, Cat® dealers offer a wide range of services, from purchase options to operator training, maintenance programs and parts support. **pg. 13**

✔ *New Feature*

Engine

The IT38G II provides more power, excellent fuel economy, and reduced maintenance.

Powerful Performance. The 3126B ATAAC engine delivers net power of 119 kW (160 hp), and meets EPA Tier 2 emissions standards. Its advanced fuel system keeps fuel at low pressure in the lines until it is injected into the cylinder. Fuel pressure is created hydraulically in response to a signal from the ADEM™ III Electronic Control Module.

Electronic Control Module. The ADEM III fuel system is a proprietary electronic control module that provides improved engine response and fuel efficiency, plus advanced diagnostics and reduced emissions. Altitude capability up to 3050 meters (10,000 feet) is available without derating. ADEM III allows full electronic integration of the engine and transmission for maximum power train efficiency.

Turbocharged, ATAAC. Turbocharging packs dense air into the cylinders for more complete combustion and lower emissions. Air-to-air aftercooling (ATAAC) provides a separate cooling system for intake manifold air. The ATAAC system reduces smoke and emissions by providing cooler inlet air for more efficient combustion.

Constant Net Horsepower. The IT38G II electronic engine is integrated with an on-demand cooling fan. The engine compensates for varying fan loads and provides constant net horsepower, regardless of operating conditions. A consistent level of "working" horsepower is provided and fuel consumption is reduced.

Oil Change Intervals. The engine oil change interval of 500 hours (with CH-4 oil), reduces costs and downtime.

Power Train

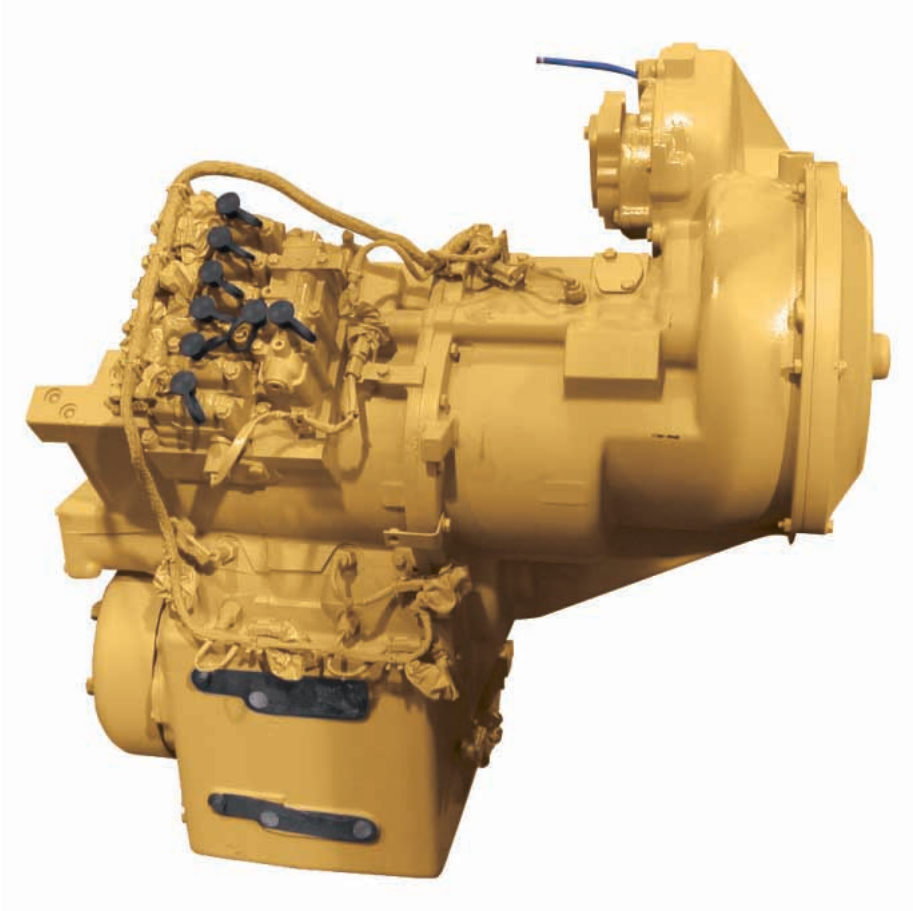
Advanced Caterpillar® power train is reliable and fuel efficient.

Electronic Power Shift Transmission. The electronic power shift transmission with automatic shift capability is a countershaft design built by Caterpillar. It is electronically controlled and allows full power shifts and directional changes. Fully modulated gear shifts contribute to operator comfort and increase component life.

Electronic Clutch Pressure Control (ECPC). Senses input from both the transmission and the operator controls in the cab to modulate each individual clutch through a proportional electro-hydraulic valve. This results in smoother gear changes and improved shift quality. Energy is modulated into the clutches, resulting in longer clutch life.

Integrated Braking System (IBS). The Caterpillar® exclusive Integrated Braking System integrates downshifting and transmission neutralization into the left brake pedal. IBS provides smooth, optimized transmission neutralizer performance with a greater range of adjustability. IBS also lowers owning and operating costs by reducing axle oil temperatures, which can extend service brake life.

Easy Service. Daily transmission oil level check is done from the ground through a well-protected sight gauge. An oil sampling valve allows quick, clean access to the transmission for S•O•S℠ oil analysis.



Variable Shift Control (VSC). Variable Shift Control allows the operator to select one of three different shift patterns based on the application and operating preferences. VSC reduces fuel consumption in many applications. In all modes, full machine power remains available for loading.

Limited Slip Differentials. Front and Rear Limited Slip Differentials are available as attachments. The differential clutch slows the slipping wheel and transfers torque to the slower turning wheel.

Cooling System

The G Series II cooling package reduces radiator plugging and improves fuel efficiency.

On-Demand Fan. Electronically controlled, variable speed on-demand fan adjusts to meet the varying cooling requirements of the machine. Fan speed is determined by oil, coolant and inlet manifold temperatures. In cooler operating conditions, average fan speed is reduced, resulting in less fuel consumption, lower noise levels and less radiator plugging.

Unit Core Radiator. The unit core radiator with square wave-shaped fins and lower fin density (6 fins per inch) allows debris to pass through easily.

Excellent System Access. The IT38G II provides a swing-out grill, hydraulic oil cooler and air conditioner condenser for easy cleaning. Side panels open to allow access to both sides of all cores for cleaning. A heavy duty airborne debris grill, with 4 mm perforations is available as an attachment.

Reverse Flow. Air enters through the rear grill and exits out the top opening and side hood doors. Rear air flow picks up less debris from the ground, reducing plugging.

Environmental Features

Caterpillar cares about the environment and continues to develop innovative solutions.

Low Exhaust Emissions. The Cat® 3126B ATAAC engine used in the IT38G Series II is a low emission engine designed to meet current emissions regulations. It is electronically controlled, with air-to-air aftercooling for more efficient combustion and cleaner emissions.

Reduced Sound. The electronic on-demand fan automatically regulates fan speed depending on cooling requirements. The fan draws less horsepower in cooler ambient temperatures, which reduces fuel consumption. Sound levels are also reduced when the fan slows down. There is additional insulation around the engine to reduce sound levels.

Environmental Fluids. Extended Life Coolant/Antifreeze with anti-foaming and anti-corrosion properties provide extended service intervals (up to 6,000 hours) and requires less frequent fluid changes and disposals. Air conditioning refrigerant is CFC-free.

Fewer Leaks And Spills. Oil sampling valves and pressure test ports are included for easy service diagnostics, with less chance of spills. Filters are positioned vertically and located for easy access, allowing for removal without fluid spillage.

Ecology Drains. Standard for the engine, transmission, hydraulics, radiator and fuel. Activating the valve allows fluid to be drained into a container without spillage. Axle oil ecology drains are an attachment and allow quicker oil changes with reduced spillage.

Rebuildable Components. Many major components are designed to be rebuilt. Worn components can be remanufactured instead of thrown out.

Operator Station

Improved visibility.

Excellent Visibility. Best in class visibility allows safe and confident operation – maximizing performance, productivity and versatility.

Low-Effort Steering. Low effort hand metering unit steering. Tilt steering column helps fit the wheel to the operator. Load sensing steering directs power through the steering system only when needed. When not steering, more engine power is available to generate rimpull, breakout and lift forces.

Finger Tip Controls. Pilot-assisted hydraulic implement controls deliver comfortable, low-effort operation. Third valve hydraulics are standard and controlled by an in-cab lever. Single lever joystick and lift lever F-N-R switch are available as attachments.

Centrally-Located Indicators. Gauges, status indicators and alert indicators are centrally located. 3-level warning system monitors key functions. The system alerts the operator of immediate or impending problems with engine oil pressure, parking brake, fuel pressure, electrical system, brake oil pressure, hydraulic oil temperature, transmission filter bypass, engine inlet manifold temperature, primary steering oil pressure and the air inlet heater. LED warning indicators with no bulbs to replace.

Convenient Cab Access. Left and right side doors swing open 180 degrees and latch for optimal ventilation, visibility and communication to ground level. Left and right side sliding windows are available as an attachment. Full service platforms are provided on both sides of the machine for safety and easy maintenance access.

Floor Mounted Pedals. All pedals, including the electronic governor, are floor mounted for greater operator comfort. Left pedal incorporates the Integrated Braking System that combines service brake, transmission neutralizer and downshift functions.

Generous Storage Space. Compartments for lunchbox, coolers and cups.

Seat Options. The standard cloth and vinyl seat adjusts 6 ways. The optional Caterpillar Contour air suspension seat provides increased operator comfort with 6-way adjustment and automotive-style lumbar support.

Electronic Autoshift Control. Provides manual or one of two fully automatic shifting modes.

Ride Control System. Option that reduces fore and aft pitch for a smoother, more comfortable ride. Allows the selection of three different modes: Off – always off service. On – always in service. Auto – the system is automatically actuated when the machine travels at a speed greater than 9 km (6 mph).

Variable Shift Control. Allows the operator to select three different shift patterns based on application and working preferences. Normal, Economy and Aggressive modes. Lowers sound levels and fuel consumption and provides smoother shifts.

Quick Coupler. Electronically controlled by a switch in the cab.

Radios. 12-volt converter (5-amp), speakers, antenna, wiring and brackets for entertainment radio installation. Factory installed AM/FM/CD radio available as an attachment.

Linkage

Increased full turn static tipping load allows stable and versatile operation.

8-Bar Linkage. Provides parallel lift, which keeps the load level throughout the lift cycle, particularly when using forks. Parallel lift lets the operator concentrate on placing the load, instead of retaining it. Visibility to the work tool is excellent.

Frame. Consists of a durable four plate loader tower and a full box-section frame. The IT38G II features a spread hitch design that distributes forces between the upper and lower hitch plates. Double-tapered roller bearings are used on the upper and lower hitch pins for better load distribution.

Quick Coupler. Allows most attachments to be changed in under 30 seconds. The quick coupler is electrically actuated from inside the cab.

Work Tools

A variety of couplers, work tools and buckets are available from the factory or from your Caterpillar® dealer. New 3.5 yd³ bucket now available.

Quick Couplers. Quick Couplers provide unmatched versatility for wheel loaders. The hydraulic model allows an operator to change attachments in seconds without leaving the cab.

Coal Buckets. Coal Buckets maximize productivity in loading and stockpiling coal and other materials of similar density.

Fertilizer Buckets. Fertilizer Buckets are specially designed with increased capacity for greater efficiency when handling light materials.

Material Handling Buckets. The Material Handling Bucket is a flat-floor bucket used for handling stockpiled materials such as aggregates or other easy-to-load materials requiring moderate breakout force.

Multi-Purpose Buckets. Multi-Purpose Buckets have a unique four-way action that can load, strip topsoil, bulldoze, clamp pipe or large chunks of concrete, clean up debris, and many other tasks.

Side Dump Buckets. Side Dump Buckets dump both to the front and to the side of the machine, an advantage when working in tight quarters, such as street work, tunnel construction and building levees.

Waste Buckets. Waste Buckets are designed for long life in the harsh world of refuse applications. This high capacity bucket is well-suited for loading, sorting and other transfer station work.

Woodchip and Clean-Up Buckets. Woodchip and high-capacity Clean-Up Buckets are available for forestry and millyard applications.

Lumber and Log Forks. Lumber and log forks are ideal for a wide range of jobs – loading, decking and sorting lumber, logs or palletized material.

Millyard Forks. Used for unloading, sorting, decking and feeding logs to the mill, millyard forks maximize loader efficiency in millyard applications.

Pallet Forks. When used with a quick coupler, pallet forks increase the versatility of the machine; ideal for handling a variety of materials.

Material Handling Arms. Material Handling Arms move pipe, concrete blocks, highway dividers and other construction materials quickly and precisely.

Loader Rakes. Loader Rakes are durable, high-capacity tools for land clearing and site clean up. Rakes are available with or without top clamps and in quick coupler and pin-on models.

Angle Blades. Angle Blades, available in both manual and hydraulic versions, equip Cat machines to sidecast soil, plow snow, pioneer roads and move debris and rocks.

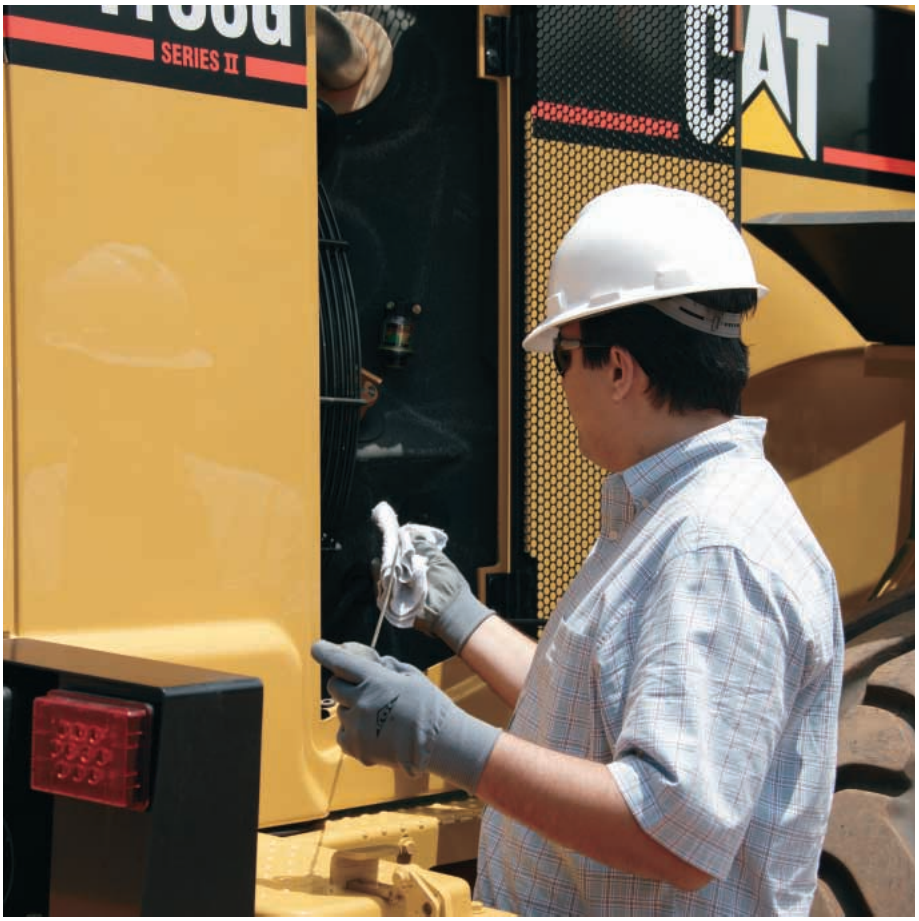
Angle Brooms. Hydraulic and manual Angle Brooms are ideal for clearing parking lots, industrial plants, millyards, airport runways, streets, driveways and lanes.

Special Application Brooms. Special application brooms are built to handle tough sweeping situations found in sewer and pipeline, governmental and coal seam applications.

Snow Removal. Hydraulic and manual reversing plows and trip-edge reversing plows are available for the IT38G Series II. Quick reversing action plows are ideal for clearing snow on mountain roads, airports, large parking lots, plant facilities and rural or urban roads. V-plows penetrate drifts and throw snow both directions to quickly clear a path through heavy accumulations.

Serviceability

The IT38G Series II continues Caterpillar leadership in wheel loader serviceability.



Ground Level Maintenance Points. All service points, including color-coded S•O•S sampling ports are accessible from ground level. Remote grease lines culminate in two convenient central lube banks in the right hitch area.

Sight Gauges. For the transmission oil, hydraulic oil and radiator coolant are easy to see and eliminate the risk of contaminants entering the system during daily checks.

Engine Compartment. Access is convenient through service doors and side panels that can be quickly opened.

Non-Metallic Hood. Tilts for full access to engine, cooling system and major components. An electric screw-jack, with manual backup, tilts the hood up to 70 degrees.

Ecology Drains. For engine, transmission and hydraulic oil, reduces spills when draining fluids. Axle oil ecology drains are available as an attachment.

Electric Fuel Priming Pump. An electrically-actuated fuel priming pump simplifies fuel filter changes.

Engine Oil Change Intervals. Are every 500 hours with the use of CH-4 oil.

Coolant. System is factory filled with Caterpillar Extended Life Coolant, which can provide up to 6,000 hours between change intervals.

Remote Pressure Taps. Are available as an attachment to make transmission diagnostics even easier.

Brake Wear Indicators. Inboard indicator allows a service technician to measure and track brake wear.

Batteries. Two maintenance-free batteries are located in a built-in battery box in the left rear frame with a sealed lid to keep moisture out.

Caterpillar Monitoring System (CMS). Provides machine performance feedback along with diagnostic codes, which a service technician can use to quickly troubleshoot problems.

Product Link. Is a wireless communication system that provides two-way information flow between a machine and Caterpillar dealers and customers. Machines are fitted with a data module, wiring, and an antenna. The system up-links via satellite to the Caterpillar network and PC software. Product Link eliminates trips to obtain data, allows more effective maintenance scheduling and can identify unauthorized machine usage.

Machine Security System. An optional programmable system that manages machine access and restricts unauthorized usage. Keys can be programmed (using Caterpillar Electronic Technician) to deny access during specific times or days of the week.

Complete Customer Support

Cat® dealer services help you operate longer with lower costs.

Machine Selection. Make detailed comparisons of the machines under consideration before purchase. Cat dealers can estimate component life, preventive maintenance costs and the true cost of lost production.

Purchase. Look past initial price and consider the many financing options available as well as day-to-day operating costs. Consider the 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 can develop a plan that meets your specific needs. These plans can cover the entire machine, including attachments, to help protect your investment.

Parts Support. You will find nearly all parts at our dealer parts counter. Cat dealers use a worldwide computer network to find in-stock parts to minimize machine downtime.

Operation. Improving operating techniques can boost your profits. Your Cat dealer has training videotapes, literature and other ideas to help you increase productivity.

Maintenance Services. Choose from a variety of maintenance services when purchasing your machine. Repair option programs guarantee the cost of repairs up front. Diagnostic programs such as S•O•S and Coolant Sampling help avoid unscheduled repairs.

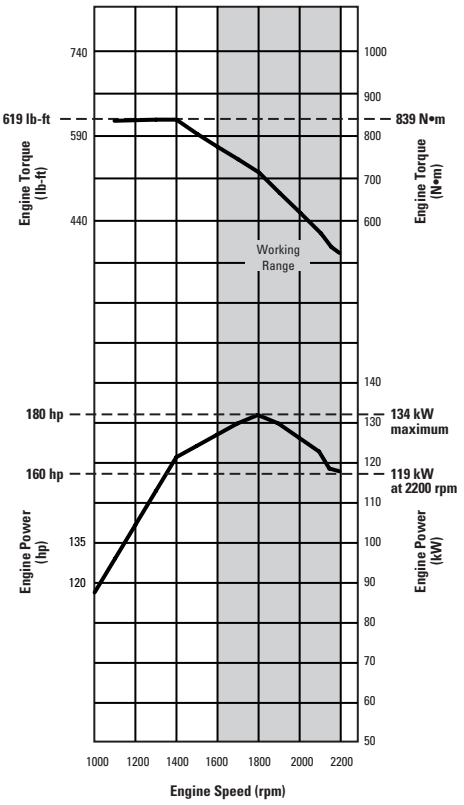
Component Replacement. Repair, rebuild or replace? Caterpillar offers a line of genuine remanufactured components, which can help lower repair costs. Your Cat dealer will help you evaluate the cost involved so you can make the right choice.

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

Engine

Engine Model	Cat® 3126B ATAAC	
Flywheel Power	119 kW	160 hp
Max. Flywheel Power	134 kW	180 hp
Peak Torque (Net) @ 1,400 RPM	839 N·m	619 ft-lb
Total Torque Rise	62 %	
Bore	110 mm	4.3 in
Stroke	127 mm	5 in
Displacement	7.2 L	439 in^3

- Flywheel power rating at 2,200 rpm. Maximum flywheel power rating at 1,800 rpm.
- Caterpillar 3126B engine meets EPA Tier 2 off-highway emissions regulations.
- No derating required up to 3050 m (10,000 ft) altitude.



Weights

Operating Weight	14 583 kg	32,156 lb

- For 2.8 m^3 (3.5 yd^3) material handling bucket with BOCE

Buckets

Bucket Capacities	2.21-2.8 m^3	2.75-3.5 yd^3
Max Bucket Capacity	2.8 m^3	3.5 yd^3

Operating Specifications

Static Tipping Load, Full Turn	8665 kg	19,106 lb
Breakout Force	110 kN	24,750 lb

- For 2.8 m^3 (3.5 yd^3) material handling bucket with BOCE

Transmission

Forward 1	7.6 km/h	4.7 mph
Forward 2	13.4 km/h	8.3 mph
Forward 3	23.3 km/h	14.5 mph
Forward 4	38.8 km/h	24.1 mph
Reverse 1	7.6 km/h	4.7 mph
Reverse 2	13.4 km/h	8.3 mph
Reverse 3	23.3 km/h	14.5 mph

- Maximum travel speeds with empty bucket and 20.5-R25 tires.

Hydraulic System

Bucket/Work Tool System – Pump Output	163 L/min	43 gal/min
Bucket/Work Tool System – Relief Valve Setting	24 800 kPa	3,597 psi
Hydraulic Cycle Time – Raise	5.8 Seconds	
Hydraulic Cycle Time – Dump	2 Seconds	
Hydraulic Cycle Time – Lower, Empty, Float Down	2.9 Seconds	
Hydraulic Cycle Time – Total	10.7 Seconds	
Pilot System – Pump Output	102 L/min	26.9 gal/min

- Bucket/Work Tool System, Vane-Type Pump-Output at 2,200 rpm and 7000 kPa (1,000 psi).
- Pilot System, Piston-Type Pump-Output at 2,200 rpm and 7000 kPa (1,000 psi).

Brakes

Brakes	Meets required standards.

- Meet OSHA, SAE J1473 Oct90 and ISO 3450-1985 standards.

Axles

Front	Fixed front	
Rear	Oscillating +/- 12°	
Maximum Single-Wheel Rise and Fall	420 mm	16.5 in

Tires

Tires	Choose from a variety of tires to match your application.

- Choice of:

20.5-25 L2 Goodyear, Firestone

20.5-25 L3 Firestone, Goodyear

20.5-R25 GP2B L2 Goodyear

20.5-R25 RT3 L3 Goodyear

20.5-R25 XHA L3 Michelin

20.5-R25 XTLA L2 Michelin

550/65 R25 L3 Michelin

- NOTE: In certain applications (such as load and carry) the loader's productive capabilities might exceed the tires' tonnes-km/h (ton-mph) capabilities. Caterpillar recommends you consult a tire supplier to evaluate all conditions before selecting a tire model. Other special tires are available on request.

Cab

ROPS/FOPS	Meets SAE and ISO standards.

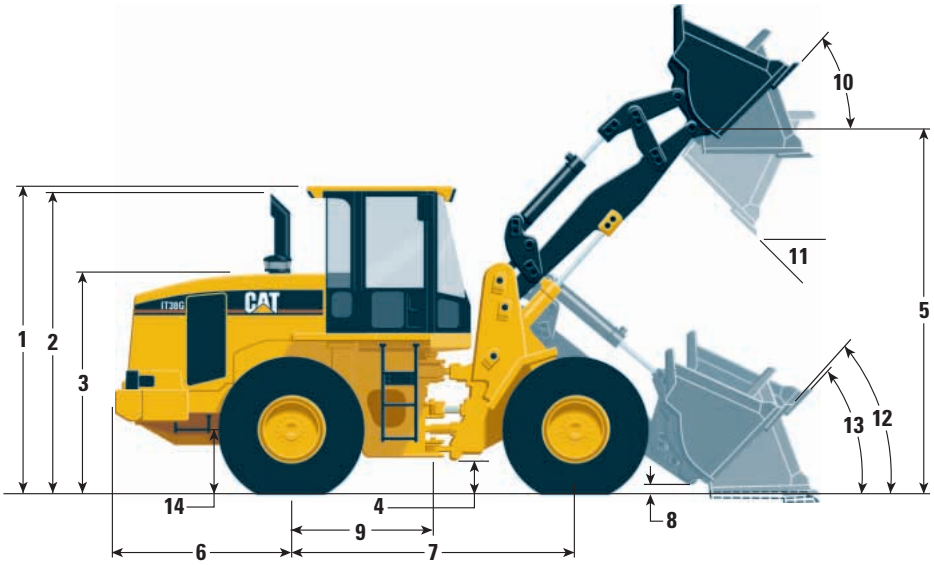
- Caterpillar cab with Integrated Rollover Protection Structure (ROPS) is standard in North America.
- ROPS meets SAE J1040 APR88 and ISO 3471:1994 criteria.
- Falling Objects Protective Structure (FOPS) meets SAE J231 Jan81 and ISO 3449:1992 level II criteria.
- The operator sound pressure level measured according to the procedure specified in ISO 6394:1998 is 75 dB(A) for the cab offered by Caterpillar when properly installed and maintained and tested with the doors and windows closed.
- 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.
- The sound pressure level is 110 dB(A) measured according to the static test procedure and conditions specified in ISO 6393:1998 for a standard machine configuration.

Service Refill Capacities

Fuel Tank – Standard	257 L	67.9 gal
Cooling System	43 L	11.4 gal
Crankcase	30 L	7.9 gal
Transmission	30 L	7.9 gal
Differentials and Final Drives – Front	24 L	6.3 gal
Differentials and Final Drives – Rear	27 L	7.1 gal
Hydraulic System (Including Tank)	90 L	23.8 gal
Hydraulic Tank	76 L	20.1 gal

Dimensions – Material Handling Buckets

All dimensions are approximate.



1	Height to top of ROPS	3330 mm	10'10"
2	Height to top of exhaust pipe	3227 mm	10'7"
3	Height to top of hood	2359 mm	7'9"
4	Ground clearance with 20.5R25 (see Tire Options chart for other tires)	399 mm	1'4"
5	B-Pin height – standard	4061 mm	13'4"
6	Center line of rear axle to edge of counterweight	1857 mm	6'1"
7	Wheelbase	3020 mm	9'11"
8	B-Pin height @ carry – standard	235 mm	9'3"
9	Center line of rear axle to hitch	1510 mm	4'11"
10	Rack back @ maximum lift	45°	
11	Dump angle @ maximum lift	42°	
12	Rack back @ carry	46°	
13	Rack back @ ground	48°	
14	Height to center line of axle	690 mm	2'3"

Tires

Tread width for all tires is 2020 mm (80")

		Width over tires		Change in vertical dimensions		Change in operating weight without ballast		Change in static tipping load – straight	
		mm	inches	mm	inches	kg	lb	kg	lb
20.5-25, (L-3)	Bridgestone	2596	102	–9	–0.4	+209	+461	N/A	N/A
550/65R25, (L-3)	Michelin	2569	101	–80	–3.1	+43	+95	0	0
20.5-25, (L-2)	Goodyear	2607	103	+24	+0.9	–60	–132	–44	–97
20.5-25 (L-3)	Goodyear	2602	102	–22	–0.9	–86	–190	+64	+141
20.5-R25 (L-2)	Michelin XTLA	2601	102	0	0	0	0	0	0
20.5-R25 (L-3)	Michelin XHA	2594	102	+6	+0.2	–170	–375	+129	+284
20.5-R25 (L-3)	Goodyear GP2B	2595	102	+10	+0.4	+127	+280	+98	+216

NOTE:
Tire options include tires and rims.

In certain applications (such as load-and-carry work) the loader's productive capabilities might exceed the tires' tonnes-km/h (ton-mph) capabilities. Caterpillar recommends consulting a tire supplier to evaluate all conditions before selecting a tire model.

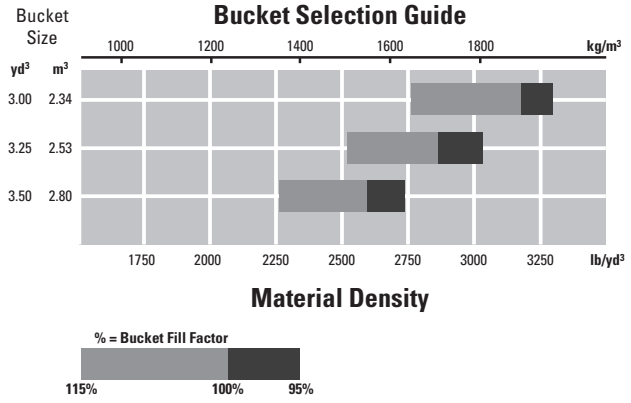
Operating Specifications

		Material Handling Buckets								
		Teeth	Teeth and Segments	Bolt-On Edges	Teeth	Teeth and Segments	Bolt-On Edges	Teeth	Teeth and Segments	Bolt-On Edges
Rated Bucket Capacity (§)	m^3	2.21	2.34	2.34	2.41	2.53	2.53	2.65	2.80	2.80
	yd^3	2.75	3.00	3.00	3.00	3.25	3.25	3.25	3.50	3.50
Struck Capacity (§)	m^3	1.79	1.89	1.89	1.96	2.06	2.06	2.16	2.30	2.30
	yd^3	2.34	2.47	2.47	2.56	2.69	2.69	2.82	3.00	3.00
Width (§)	mm	2708	2708	2708	2708	2708	2708	2777	2777	2709
	ft/in	8'11"	8'11"	8'11"	8'11"	8'11"	8'11"	9'1"	9'1"	8'11"
Dump Clearance at Full Lift	mm	2698	2698	2805	2698	2698	2805	2622	2622	2733
and 45° Discharge (§)	ft/in	8'10"	8'10"	9'2"	8'10"	8'10"	9'2"	8'7"	8'7"	9'0"
Reach at Full Lift	mm	1259	1259	1152	1259	1259	1152	1315	1315	1224
and 45° Discharge (§)	ft/in	4'2"	4'2"	3'9"	4'2"	4'2"	3'9"	4'4"	4'4"	4'0"
Reach with Lift Arm	mm	2626	2626	2475	2626	1515	2475	2720	2720	2577
Horizontal and Bucket Level (§)	ft/in	8'7"	8'7"	8'1"	8'7"	8'7"	8'1"	8'11"	8'11"	8'5"
Digging Depth (§)	mm	41	66	66	41	66	66	41	66	66
	in	1.6"	2.6"	2.6"	1.6"	2.6"	2.6"	1.6"	2.6"	2.6"
Overall Length	mm	7631	7631	7481	7631	7631	7481	7738	7738	7582
	ft/in	25'0"	25'0"	24'7"	25'0"	25'0"	24'7"	25'5"	25'5"	24'11"
Overall Height with Bucket	mm	5128	5128	5128	5241	5241	5241	5299	5299	5299
at Full Raise	ft/in	16'10"	16'10"	16'10"	17'2"	17'2"	17'2"	17'5"	17'5"	17'5"
Turning Radius – Outside Corner of	mm	6114	6114	6069	6114	6114	6069	6184	6184	6099
Racked Bucket, Carry Position (§)	ft/in	20'1"	20'1"	19'11"	20'1"	20'1"	19'11"	20'3"	20'3"	20'0"
Static Tipping Load Straight *	kg	10 211	10 024	10 174	9917	9901	10 049	10 125	9940	10 030
	lb	22,515	22,103	22,434	21,867	21,832	22,158	22,326	21,918	22,116
Static Tipping Load	kg	8822	8646	8796	8550	8521	8669	8749	8574	8665
Full 40° Turn	lb	19,453	19,064	19,395	18,853	18,789	19,115	19,292	19,806	19,106
Breakout Force ** (§)	kN	127	119	120	126	117	119	117	109	110
	lb	28,575	26,775	27,000	28,350	26,325	26,775	26,325	24,525	24,750
Operating Weight * (§)	kg	14 546	14 639	14 529	14 682	14 775	14 665	14 565	14 659	14 583
	lb	32,074	32,279	32,036	32,374	32,579	32,336	32,116	32,323	32,156

* Static tipping loads and operating weight shown are based on standard machine configuration with 20.5R25 tires, full fuel tank, coolant, lubricants and operator.

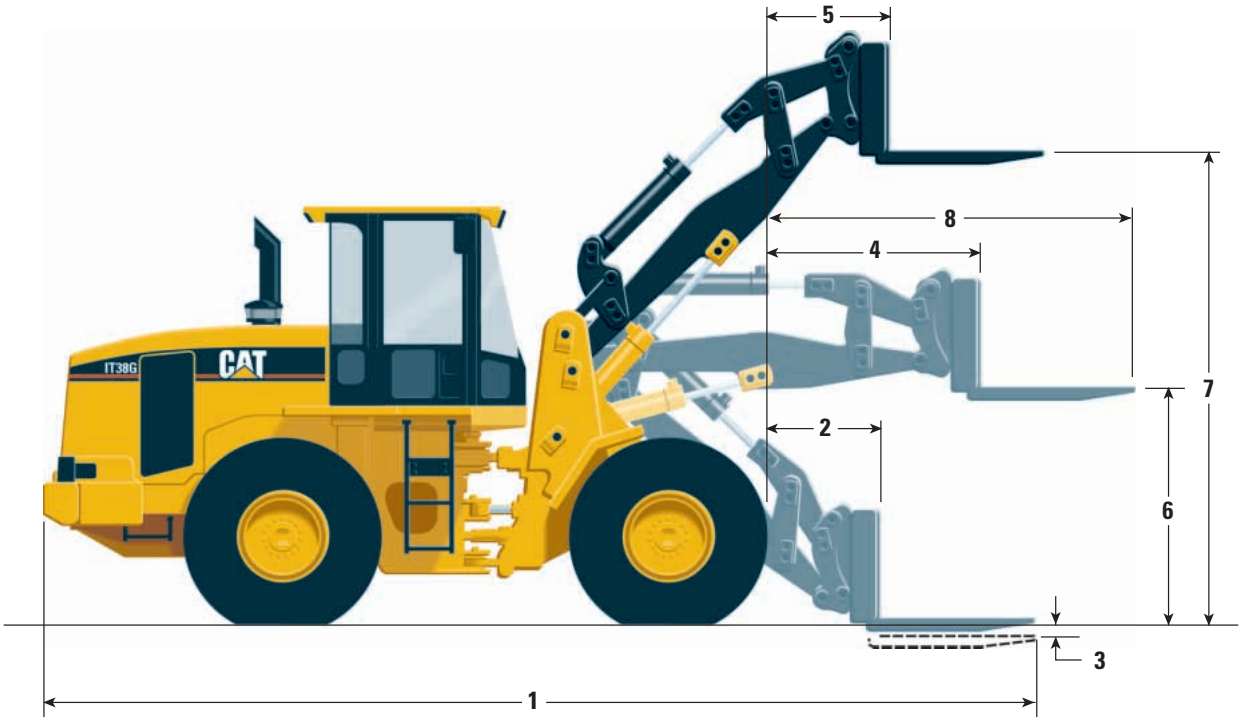
** Measured 102 mm (4.0") behind tip of cutting edge with bucket hinge pin as pivot point in accordance with SAE J732C.

(§) Specifications and ratings conform to all applicable standards recommended by the Society of Automotive Engineers, including SAE Standard J732C governing loader ratings.



Dimensions – Forks

All dimensions are approximate.



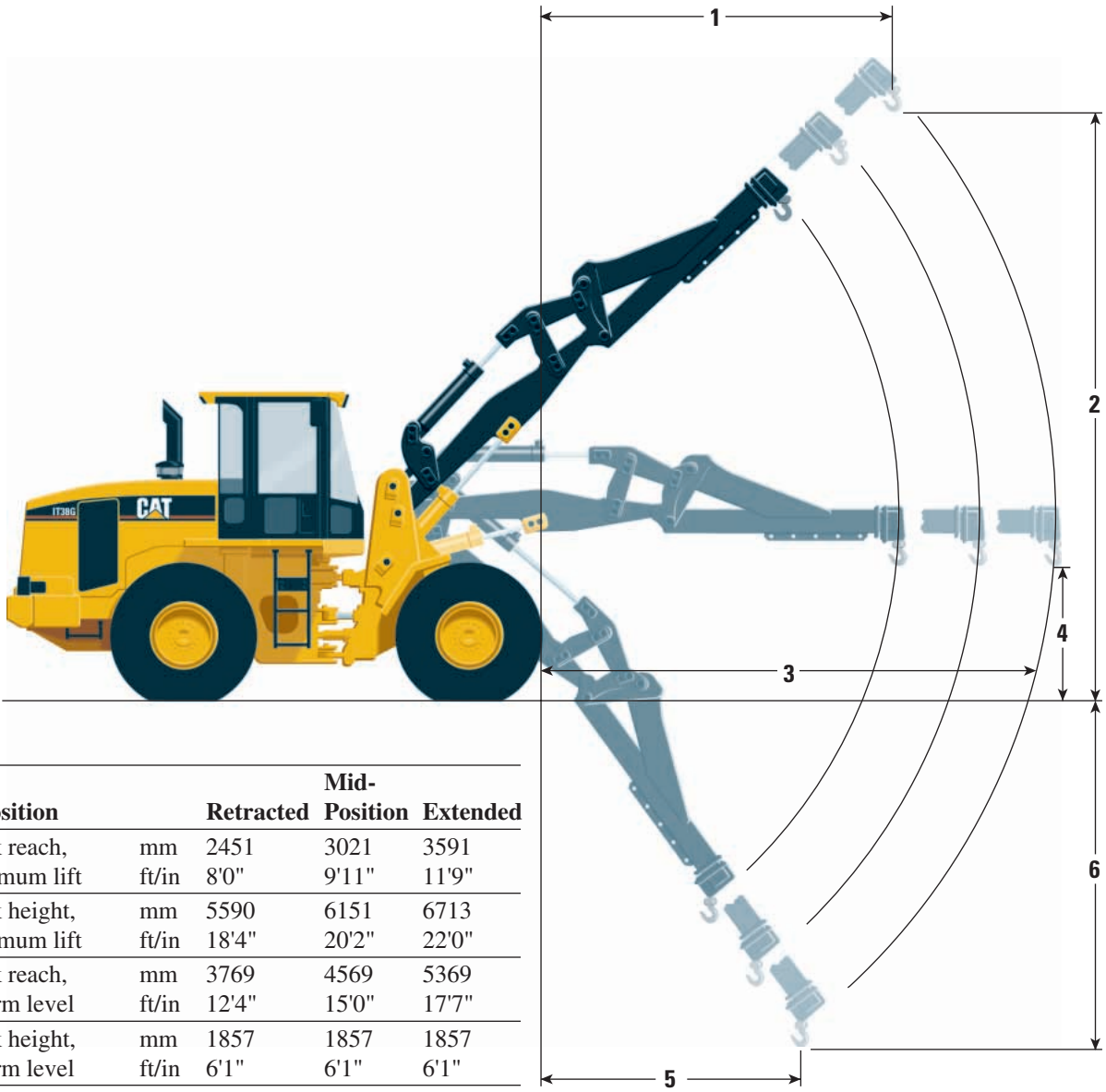
Fork tine length	mm in	1219 48"	1524 60"	1829 72"
1 Overall length, fork level on ground	mm ft/in	7935 26'0"	8282 27'2"	8540 28'0"
2 Carriage reach, fork level on ground	mm ft/in	1053 3'5"	1096 3'7"	1049 3'5"
3 Tine height, minimum lift, fork level	mm in	104 4"	147 6"	93 4"
4 Carriage reach, lift arm and fork level	mm ft/in	1622 5'4"	1632 5'4"	1626 5'4"
5 Carriage reach, maximum lift, fork level	mm ft/in	892 2'11"	903 3'0"	896 2'11"
6 Tine height, lift arm and fork level	mm ft/in	1735 5'8"	1692 5'7"	1746 5'9"
7 Tine height, maximum lift, fork level	mm ft/in	3591 11'9"	3547 11'8"	3601 11'10"
8 Overall reach, lift arm and fork level	mm ft/in	2841 9'4"	3156 10'4"	3455 11'4"
Static tipping load, straight with lift arm and forks level	kg lb	8302 18,306	7841 17,289	7419 16,359
Static tipping load, full 40º turn with lift arm and forks level	kg lb	7206 15,889	6800 14,994	6425 14,167
Operating weight * (§)	kg lb	14 216 31,346	14 261 31,446	14 377 31,701

* Static tipping loads and operating weights shown are based on standard machine configuration with 20.5R25 tires, full fuel tank, coolants, lubricants and operator.

(§) Specifications and ratings conform to all applicable standards recommended by the Society of Automotive Engineers, including SAE Standard J732C governing loader ratings.

Dimensions – Material Handling Arm

All dimensions are approximate.



Hook Position			Retracted	Mid-Position	Extended
1 Hook reach, maximum lift		mm	2451	3021	3591
		ft/in	8'0"	9'11"	11'9"
2 Hook height, maximum lift		mm	5590	6151	6713
		ft/in	18'4"	20'2"	22'0"
3 Hook reach, lift arm level		mm	3769	4569	5369
		ft/in	12'4"	15'0"	17'7"
4 Hook height, lift arm level		mm	1857	1857	1857
		ft/in	6'1"	6'1"	6'1"
5 Hook reach, minimum lift		mm	1801	2268	2736
		ft/in	5'11"	7'5"	9'0"
6 Hook height, minimum lift		mm	1988	2637	3287
		ft/in	6'6"	8'8"	10'9"
Static tipping load, straight		kg	5504	4658	4033
		lb	12,136	10,271	8,893
Static tipping load, full turn		kg	4780	4043	3499
		lb	10,540	8,915	7,715
Operating weight * (§)		kg	14 034	14 034	14 034
		lb	30,945	30,945	30,945

* Static tipping loads and operating weights shown are based on standard machine configuration with 20.5R25 tires, full fuel tank, coolants, lubricants and operator.

(§) Specifications and ratings conform to all applicable standards recommended by the Society of Automotive Engineers, including SAE Standard J732C governing loader ratings.

Standard Equipment

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

Electrical
- Alarm, back-up
- Alternator, 50-amp brushless
- Batteries, maintenance-free (2) 950 CCA
- Ignition key, start/stop switch
- Lighting system, halogen (6 total)
- Main disconnect switch
- Starter, electric, heavy-duty
- Starting and charging system (24-volt)

Operator Environment
- Bucket/Work Tool function lockout
- Cab, pressurized and sound suppressed
  - ROPS/FOPS, radio ready (entertainment) includes antenna, speakers and converter (12-volt, 15-amp)
- Cigar lighter and ashtray
- Coat hook
- Computerized Monitoring System
  - Instrumentation, Gauges:
    - Engine coolant temperature
    - Fuel level
    - Hydraulic oil temperature
    - Speedometer/Gear Range/Tachometer
    - Transmission oil temperature
  - Instrumentation, Warning Indicators:
    - Air inlet heater
    - Electrical, alternator output
    - Engine inlet manifold heater
    - Engine oil pressure
    - Fuel pressure
    - Parking brake
    - Hydraulic oil temperature
    - Primary steering oil pressure
    - Service brake oil pressure
    - Transmission filter bypass
- Controls, lift and tilt function
- Heater and defroster
- Horn, electric (steering wheel mounted)
- Lunchbox, beverage holders, storage box
- Mirrors, rearview (internally mounted)
- Seat, KAB (cloth) mechanical suspension
- Seat belt, retractable, 51 mm (2") wide
- Steering column, adjustable, angle
- Wet-Arm wipers and washers, front and rear
  - Intermittent front wiper

Power Train
- Brakes, full hydraulic enclosed wet-disc with Integrated Braking System (IBS)
- Driveline, extreme service
- Engine, Cat 3126B diesel with ATAAC, electronically controlled
- Fan, radiator, hydraulically driven, variable speed, temperature sensing, on demand
- Filters, fuel, primary/secondary
- Fuel priming pump (electric)
- Fuel/water separator
- Muffler, sound suppressed
- Precleaner, engine air intake
- Radiator, unit core (6 fins per inch) with ATAAC
- Starting aid (air inlet heater)
- Switch, transmission neutralizer lockout
- Torque converter
- Transmission, automatic countershaft power shift (4F/3R)
- Variable Shift Control (VSC)

Other Standard Equipment
- Automatic work tool positioner
- Counterweight
- Couplings, Caterpillar O-ring face seals
- Diagnostic pressure taps
- Fenders, steel front and rear
- Hitch, drawbar with pin
- Hood, non-metallic power tilting
- Hoses, Caterpillar XT™
- Hydraulic arrangement, two-valve quick coupler actuation
- Hydraulic oil cooler, swing-out
- Kickout, lift and return-to-work, adjustable
- Linkage, 8-bar, parallel lift
- Product Link Ready
- Sampling valves (engine, transmission)
- Sight Gauges:
  - Engine coolant
  - Hydraulic oil level
  - Transmission oil level
- Steering, load sensing
- Vandalism protection caplocks

Antifreeze
- Premixed 50% concentration of Extended Life Coolant with freeze protection to –34° C (–29° F).

Optional Equipment

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

Actuator, electrical (power train and bottom guard)
Air conditioner
Alternator, heavy-duty (65 amp)
Axle ecology drain
Axle oil cooler
Axle oil temperature monitor
Buckets and Work Tools
Bucket Ground Engaging Tools (GET) – see Cat dealer for details
Differentials
  Limited slip, front or rear
  NO-SPIN, rear
Fan, auto-reversing
Fender and platform extensions, rear
Fenders and platforms, narrow
Fenders, roading, rear
Grill, airborne debris
Guard, axle seal
Guard, power train
Heater, engine coolant (120V)
Hydraulic arrangement, third-valve
Hydraulic arrangement, fourth-valve
Joystick control, two- or three-valve
Lights, cab-mounted (4)
Lights, directional
Lights, roading
Machine Security System
Mirrors, rearview, external
Open canopy
Precleaner, turbine
Precleaner, turbine/trash
Product Link
Radio, AM/FM Weatherband (CD)
Remote pressure taps
Ride Control System, two- or three-valve
Seat, air suspension
Seat belt 70 mm (3")
Sliding windows, cab
Starting aid, ether
Steering, secondary
Sunscreen, rear
Sun visor, front
Switch, lift lever F-N-R
Quick coupler, hydraulic, horizontal pin
Wiper, intermittent rear
Special machine arrangements
  Scrap handler
  Waste handler

Notes

Notes

IT38G Series II Integrated Toolcarrier

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AEHQ5540-02 (4-06)

Replaces AEHQ5540-01

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