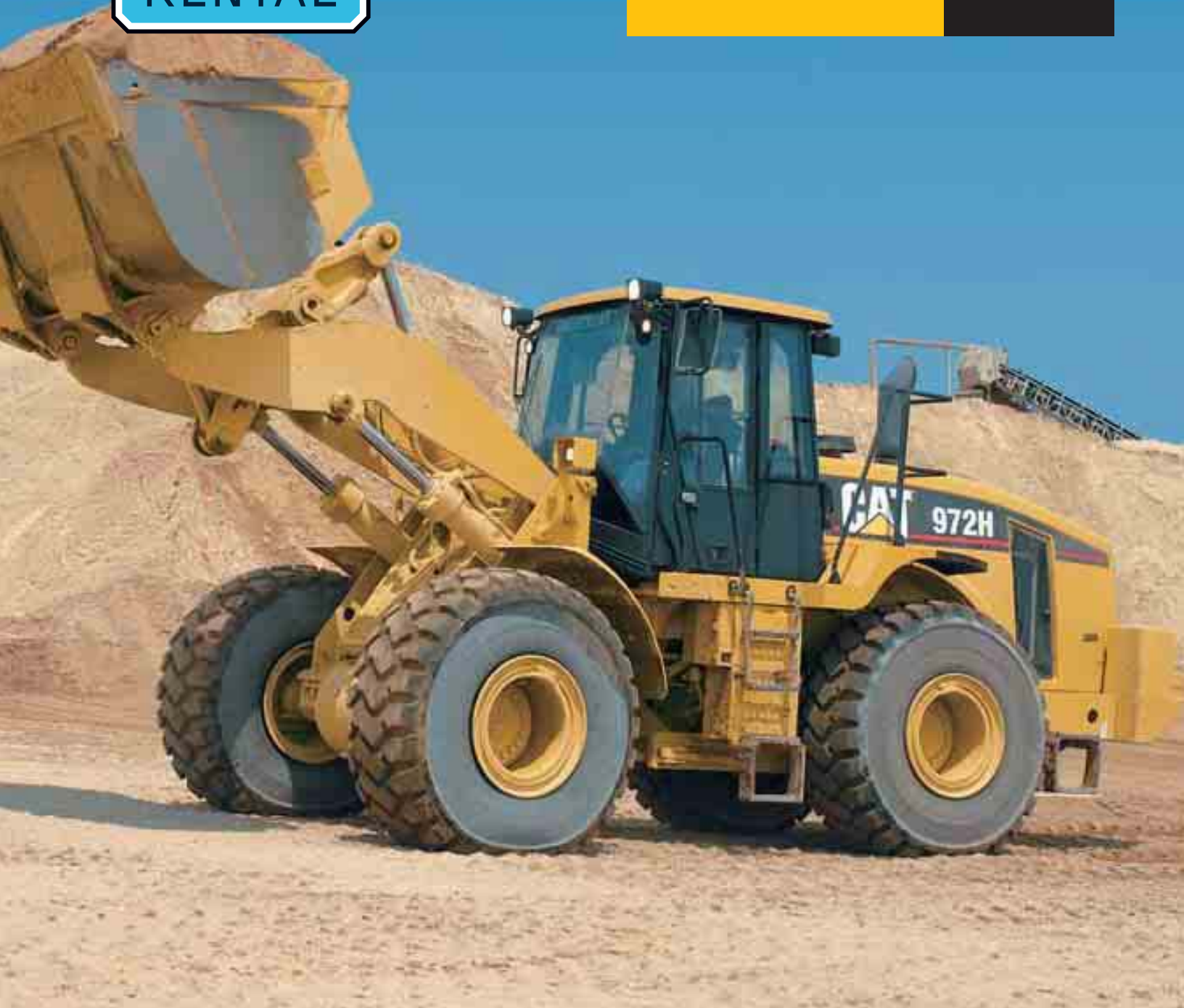




972H

Wheel Loader



Cat® C13 Diesel Engine with ACERT™ Technology

Gross Power (SAE J1995)	229 kW/311 hp
-------------------------	---------------

Net Power (ISO 9249) at 1800 rpm	214 kW/291 hp
----------------------------------	---------------

Bucket Capacity	3.8 to 5.5 m³
-----------------	---------------

Operating Weight	25 800 to 27 500 kg
------------------	---------------------

Engine

Cat C13 with ACERT Technology	
Gross Power	229 kW/311 hp
Net Power at 1800 rpm	
ISO 9249	214 kW/291 hp
80/1269/EEC	214 kW/291 hp
Peak Torque (net) at 1400 rpm	1332 Nm
Total Torque Rise	40%
Bore	130 mm
Stroke	157 mm
Displacement	12.5 liter

- All engine horsepower (hp) are metric including front page.
- EU Stage IIIA compliant.
- Rating for net power advertised based on power available when the engine is equipped with alternator, air cleaner, muffler and on-demand hydraulic fan drive at maximum fan speed.

Operating Specifications

Operating Weight	25 800 kg
Static Tipping Load, Full Turn	17 610 kg
Breakout Force	235 kN
Bucket Capacities	3.8 to 5.5 m ³

- Operating weight with 4.5 m³ universal plus bucket and bolt-on cutting edge.

Axles

Front	Fixed
Rear	Oscillating ± 13°
Maximum Single-Wheel Rise and Fall	502 mm

Sound

- The operator sound pressure level measured according to the procedures specified in ISO 6394:1998 is 71 dB(A) for the cab offered by Caterpillar, when properly installed, 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 environments.
- The European Union 2000/14/EC labeled spectator sound power level is 108 dB(A).

Hydraulic System

Implement System	
Pump Output	320 l/min
Relief lift and tilt valve setting	310 bar
Hydraulic Cycle Times	seconds
Raise	5.9
Dump	2.1
Lower, Empty, Float Down	2.4
Total	10.4

- Implement system, variable axial piston pump (rated at 2100 rpm and 69 bar)
- Cycle times with rated payload

Service Refill Capacities

	Liters
Fuel Tank	380
Cooling System	39
Crankcase	35
Transmission	50
Differentials and Final Drives	
Front	64
Rear	64
Hydraulic Tank	110

ROPS/FOPS

- Caterpillar cab with integrated Rollover Protective Structure (ROPS) is standard in Europe.
- Rollover Protective Structure ROPS meets ISO 3471:1994 criteria.
- Falling Objects Protective Structure (FOPS) meets ISO 3449:1992 Level II criteria.

Brakes

Meet ISO 3450:1996 standard.

Transmission

Forward	km/h
1	7
2	13
3	21
4	37
Reverse	
1	8
2	14
3	24
4	39

- Maximum travel speeds (26.5–25 tires)

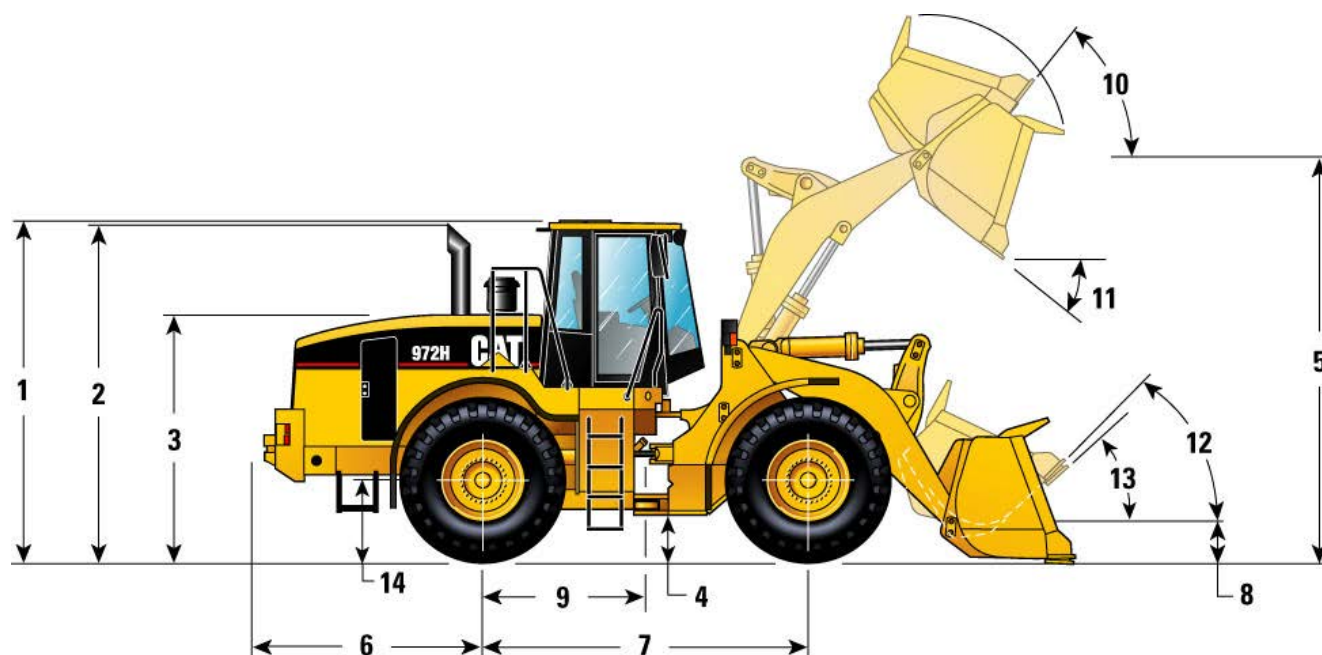
Tires

26.5 R 25, L-3 (XHA MX)
26.5 R 25, L-3 (VMT BS)
26.5 R 25, L-2 (GP2B GY)
750/65 R 25, L-3 (MX)
26.5 R 25, L-3 (RT3B GY)

In certain applications (such as load and carry) the loader's productive capabilities might exceed the tires' tonnes-km/h capabilities. Caterpillar recommends that you consult a tire supplier to evaluate all conditions before selecting a tire model. The 26.5-25 size range and other special tires are available on request.

Dimensions

All dimensions are approximate



		mm		
1	Height to top of ROPS	3580	10	Rack back at maximum lift 55°
2	Height to top of exhaust pipe	3532	11	Dump angle at maximum lift 52°
3	Height to top of hood	2658	12	Rack back at carry 47°
4	Ground clearance with 26.5 R 25, L-3	476	13	Rack back at ground 41°
5	Bucket hinge pin height (B-pin)	4445	14	Height to center line of axle 795 mm
6	Center line of rear axle to edge of counterweight	2461		
7	Wheelbase	3450		
8	Bucket hinge pin height at carry (B-pin)	485		
9	Center line of rear axle to hitch	1725		

Tire Specifications

	Width over tires	Change in vertical dimensions	Change in operating weight	Change in static tipping load
	mm	mm	kg	kg
26.5 R 25, L-3 (XHA MX)	2970	0	0	0
26.5 R 25, L-3 (VMT BS)	2968	-10	+80	-17
26.5 R 25, L-2 (GP2B GY)	2965	0	-48	-33
26.5-25 20 PR, L-3 (SHRL GY)	2927	0	-220	-107
26.5-25 20 PR, L-3 (SRG FS)	2945	-24	-324	-454
750/65 R 25, L-3 (MX)	3029	0	-228	-40
26.5 R 25, L-3 (RT3B GY)	2970	0	+10	+8
26.5 R 25, L-5 (VSDL BS)	2909	+20	+1248	+871
26.5-25, L-4 (SRG FS)	2955	+20	+34	+24

Operation Specifications

		Universal Plus Buckets							
		Bolt-on Cutting Edge	Tips and Segments	Bolt-on Cutting Edge	Tips and Segments	Bolt-on Cutting Edge	Tips and Segments	Bolt-on Cutting Edge	Tips and Segments
Rated bucket capacity	m ³	5.5*	5.5*	5*	5*	4.8	4.8	4.5	4.5
Struck capacity	m ³	4.75	4.75	4.25	4.25	4.1	4.1	3.8	3.8
Width	mm	3220	3303	3220	3303	3220	3303	3220	3303
Dump clearance at full lift and 45° discharge ⁴	mm	3075	2912	3117	2955	3145	2983	3202	3040
Reach at full lift and 45° discharge ⁴	mm	1331	1458	1288	1415	1260	1387	1203	1331
Reach with lift arms horizontal and bucket level ⁴	mm	3083	3288	3023	3228	2983	3188	2903	3108
Digging depth	mm	100	95	100	95	100	95	100	95
Overall length ⁴	mm	9290	9514	9230	9454	9190	9414	9110	9334
Overall height with bucket at full raise	mm	6264	6264	6207	6207	6167	6167	6090	6090
Loader turning radius with bucket in carry position	mm	7500	7604	7483	7587	7472	7576	7450	7554
Static tipping load straight ¹	kg	19625	19438	19704	19518	19779	19595	19855	19672
Static tipping load at full articulation (37°) ¹	kg	17384	17197	17461	17276	17535	17351	17610	17426
Breakout force ²	kN	206	204	215	213	221	220	235	234
Bucket weight	kg	2411	2548	2349	2486	2290	2427	2232	2369
Operating weight ¹	kg	25983	26120	25921	26058	25862	25999	25804	25941

* Light material only

¹ Static tipping load and operating weight shown are based on average machine configuration with sound suppression cab and ROPS, secondary steering, air conditioning, ride control, limited slip rear, loading fenders, autolube, front access platform, back-up alarm, 26.5 R 25, L-3, tires for Universal Plus buckets, L-4 tires for General Excavation buckets, L-5 tires for Rock buckets, full fuel tank, coolant, lubricants, lights, directional signals, CE plates and operator.

² For buckets with adapters, tips and segments, value is measured 102 mm behind the tip of the segment, with bucket hinge pin as pivot point, in accordance with SAE J732C.

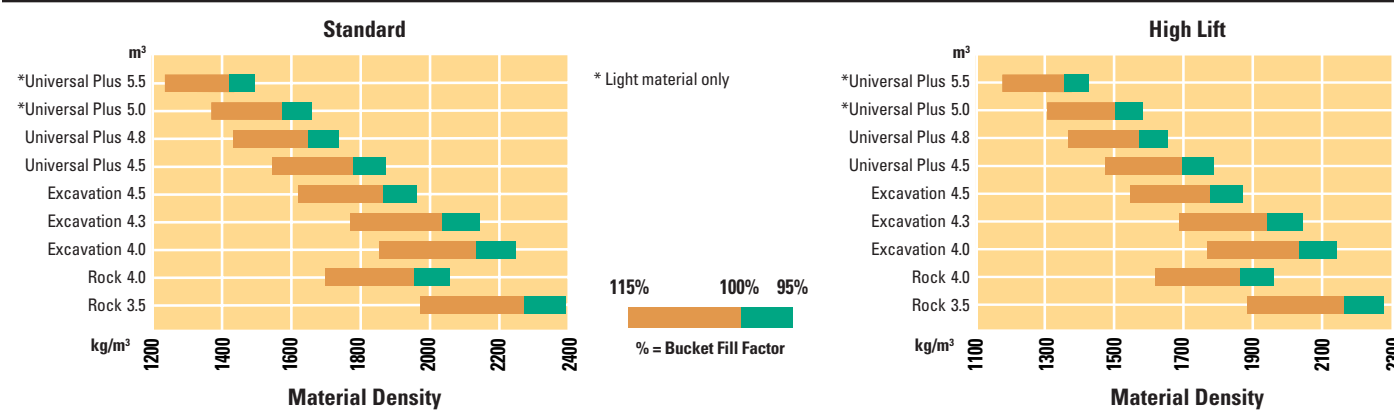
³ All buckets shown can be used on the high lift arrangement. High lift column shows changes in specifications from standard lift to high lift. Add or subtract as indicated to or from specifications given for appropriate bucket to calculate high lift specifications.

Dimensions for dump clearance, reach and overall length:

⁴ Actual dimensions taken at the tip of the Ground Engaging Tools, either the tip of the bolt-on cutting edge or the tip of the teeth, type long.

	General Excavation Buckets						Rock Buckets			High Lift ³
	Bolt-on Cutting Edge	Tips and Segments	Bolt-on Cutting Edge	Tips and Segments	Bolt-on Cutting Edge	Tips and Segments	Bolt-on Cutting Edge	Tips and Segments	Tips and Segments	
	4.5	4.5	4.3	4.3	4	4	4	4	3.5	same
	3.8	3.8	3.6	3.6	3.4	3.4	3.4	3.4	2.9	same
	3220	3303	3220	3303	3059	3142	3289	3258	3258	same
	3275	3122	3314	3162	3314	3185	3252	3093	3205	+335
	1299	1438	1270	1410	1270	1429	1426	1608	1570	+23
	2909	3114	2859	3064	2859	3064	3011	3252	3142	+274
	83	78	83	78	83	78	71	76	76	-4
	9112	9336	9062	9286	9062	9263	9225	9476	9366	+336
	6127	6127	6081	6081	6081	6081	6413	6413	6303	+336
	7453	7557	7439	7543	7366	7459	7516	7576	7544	167
	19472	19289	19610	19428	19735	19554	19725	19885	20154	-1883
	17247	17065	17377	17196	17502	17321	17453	17582	17838	-1720
	232	231	241	240	242	241	212	213	232	-6
	2426	2563	2365	2502	2252	2389	2689	2636	2769	same
	26217	26354	26156	26293	26043	26180	27341	27421	27288	+95

Bucket Selection Guide



In accordance with SAE J818, these data consider the bucket load to be equal to half of the static tipping load at full turn.

Standard Equipment

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

Electrical

Alternator, 80-amp brushless
Batteries, maintenance-free (2)
Battery disconnect switch
Ignition key; start/stop switch
Starter, electric, heavy-duty
Starting and charging system
(24-volt)
Working lights, halogen (6 total)

Operator Environment

Bucket/work tool function lockout
Cab, pressurized and sound-suppressed
ROPS/FOPS
Radio-ready (entertainment) includes
antenna, speakers and converter
(12-volt, 10-amp)
Caterpillar Monitoring System
Instrumentation, gauges:
Digital gear range indicator
Engine coolant temperature
Fuel level
Hydraulic oil temperature
Speedometer/tachometer
Transmission oil temperature
Instrumentation, warning indicators:
Axle oil temperature
Electrical, alternator output
Engine air filter restriction
Engine inlet air temperature
Engine oil pressure
Fuel level
Fuel pressure, high/low
Hydraulic filter bypass
Hydraulic oil level
Parking brake
Primary steering oil pressure
Service brake oil pressure
Transmission oil filter bypass

Cigar lighter (12-volt), ashtray
Coat hook (2) with straps
Controls, electrohydraulic,
lift and tilt function
Fender extensions, front and rear
Horn, electric (steering wheel/console)
Light, dome (cab)
Lunchbox, beverage holders and
personal tray
Mirrors, external
Seat, Cat Comfort (cloth) with
air suspension
Seat belt, retractable, 51 mm
Steering column, adjustable angle
(steering wheel and Command
Control) length (Command Control)
Sun visor, front
Wet-Arm wipers and washers,
front and rear
Intermittent front wipers
Window, sliding left

Power Train

Brakes, full hydraulic enclosed wet-disc
with Integrated Braking System (IBS)
and brake wear indicator
Engine, Cat C13 with ACERT
technology and air to air aftercooler
Fan, radiator, electronically controlled,
hydraulically driven, temperature
sensing, on demand
Filters, fuel, primary/secondary
Filters, engine air, primary/secondary
Fuel priming pump (electric)
Muffler, sound suppressed
Radiator, unit core
Starting aid, ether (ready)
Switch, transmission neutralizer lockout
Torque converter, free wheel stator
Transmission, automatic/manual,
planetary powershift (4F/4R)
Variable Shift Control (VSC)

Other

Automatic bucket positioner
Counterweight
Doors, service access (locking)
Ecology drains, engine, transmission
and hydraulics
Fenders, steel (front and rear)
Grill, airborne debris
Hitch, drawbar with pin
Hood, non-metallic, power tilting
Hose couplings, Caterpillar O-ring
face seal
Hoses, Caterpillar XT™
Hydraulic oil cooler
Kickout, lift and tilt, automatic (in-cab
adjustable)
Linkage, Z-bar, cast crosstube/tilt lever
Oil sampling valves (engine, transmission
and hydraulic oils)
Product Link ready
Remote diagnostic pressure taps
(steering, hydraulic, transmission
and brakes)
Service center, electrical and hydraulic
Sight gauges:
Engine coolant
Hydraulic oil
Transmission oil level
Steering, load sensing

Tires, Rims, Wheels

A tire must be selected from the
mandatory attachments section
(price list). Base machine price
includes an allowance based on
a premium radial tire.

Antifreeze

Premixed 50% concentration of
Extended Life Coolant with freeze
protection to -34°C

Optional Equipment

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

Alarm, back-up
Air conditioner, heater and defroster
Aggregate Autodig System
Autolube
Axle oil cooler, front and rear axles
Buckets, quick coupler, work tools
and Ground Engaging Tools (GET) –
see Cat dealer for details
Cat Machine Security System (MSS)
Camera package, rear vision,
includes a monitor
Cooling, high-ambient, 50°C
Differentials
Limited slip, front or rear
NO-SPIN, rear
Drain, axle ecology
Fenders, narrow
Fenders, roading
Guard, axle seal
Guard, front window,
wide or small mesh
Guard, power train
Guard, vandalism
Heater, engine coolant, 240-volt
Hydraulic arrangement, three-valve
Joystick control, two- or three-valve
Lights
directional
high intensity discharge (HID)
roading
warning beacon
work, cab-mounted

Mirror, rearview (internally mounted)
Mirrors, heated external
Mirrors, heated external, folding
Open canopy
Payload Control System
Payload Control System Printer
Platform, window cleaning
Precleaner, turbine
Precleaner, turbine/trash
Product Link
Radio, AM/FM (cassette)
Receptacle, jump-start, 24-volt
Remote pressure taps (transmission,
steering, torque converter and
implement systems)
Ride Control System,
two- or three-valve
Seat, Deluxe (heated cushion, high back
extension, ride zone indicator,
operator weight shock adjustment)
Sound suppression, exterior
Steering, Command Control System
Steering, secondary
Switch FNR (steering wheel machines)
Special Machine Arrangements
High Lift Arrangement,
two- and three-valve
Toolbox
Vandalism protection caplocks
Window, sliding right

Merchandising Arrangement 0
(not for EU regulated countries)
Wheel Loader, SW
Air conditioner
Precleaner, turbine

Merchandising Arrangement 1
Wheel Loader, SW
Conversion, CE mark
Air conditioner
Tool box

Merchandising Arrangement 2
Wheel Loader, SW
Conversion, CE mark
Air conditioner
Differential, limited slip, rear
Ride control, 2 valve

Merchandising Arrangement 3
Wheel Loader, SW
Conversion, CE mark
Air conditioner
Aggregate Autodig
Limited Slip Differential, rear
Ride control, 2 valve
Seat, Deluxe

Merchandising Arrangement 4
Wheel Loader, SW
Conversion, CE mark
Air conditioner
Hydraulics, 3 valve
Ride control, 3 valve

Other Special Arrangements
High Lift Arm, provides +335 mm
dump clearance
High Capacity Lift Arm (972H Plus),
provides +7% payload capacity
Access package (15° inclined ladder
and front access platform)

972H Plus

Extended capacity lift arm.

- Higher payload
- Increased full turn static tipping load
- Greater truck match possibilities
- Increased stability

Main specification changes compared to the standard lift arm operating specifications:

Straight static tipping load	+1215 kg
Full turn static tipping load	+1070 kg
Dump clearance at full lift and 45° discharge	-223 mm