

ZAXIS-3 series

HITACHI

ZAXIS

500LC

520LCH



HYDRAULIC EXCAVATOR

- **Model Code :** ZX500LC-3 / ZX520LCH-3
- **Engine Rated Power :** 260 kW (349 HP)
- **Operating Weight :** ZX500LC-3 : 49 500 kg
ZX520LCH-3 : 51 700 kg
- **Backhoe Bucket :**
 - SAE, PCSA Heaped : ZX500LC-3 : 1.15 - 2.65 m³
ZX520LCH-3 : 1.9 - 2.65 m³
 - CECE Heaped : ZX500LC-3 : 1.00 - 2.30 m³
ZX520LCH-3 : 1.70 - 2.30 m³

The New Generation Hydraulic Excavators

The HITACHI ZAXIS-3 series new-generation hydraulic excavators are packed with a host of technological features - clean engine, HITACHI advanced hydraulic technologies, with strong undercarriage and front attachment, plus well matching of power and speed.

ZAXIS 500LC / 520LCH's large 60-ton class undercarriage components provide greater travel performance and durability on tough ground conditions.

- Clean engine complies with the emission regulations EU Stage III A
- Low noise design complies with the EU noise regulation 2000 / 14 / EC, STAGE II



Durability and reliability

Increased loading capacity of swing circle
Enlarged upper and lower rollers, idlers and sprockets
Increased traction force
Pressed master pins
Full track guard provided standard (ZAXIS 520LCH)
5% increase in strength with stronger pin material
Strengthened general-purpose bucket
Strengthened H-bucket for heavy-duty excavation

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Productivity

Increased digging force
Enhanced boom recirculation system
Boom mode selector helps to reduce shaking and jerking of body during scraping operations.
Larger-diameter front piping
Combined operation of boom and arm
New bucket regenerative system
High power yet low fuel consumption
Common rail type fuel injection system
Cooled EGR system

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Operator comfort

High visibility inside cab
Short stroke levers
Wide foot space
Comfort designed seat
Improved controllability and operator comfort

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Multi function monitor

Maintenance support
Attachment support system
Multi-language selection
Rear view camera
Theft deterrent system
Fuel consumption monitoring

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Maintenance

Parallel arrangement of the cooling pack
Conveniently located inspection points
Extended hydraulic oil Filter change intervals

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Safety measures

CRES II cab
(ZAXIS 500LC is standard equipped)
H/R cab
(ZAXIS 520LCH is standard equipped)
Cab right guard
Evacuation hammer
Pilot control shut-off lever

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A quieter machine
A recyclable machine

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Notes: Some of the pictures in this brochure show an unmanned machine with attachments in an operating position. These were taken for demonstration purposes only and the actions shown are not recommended under normal operating conditions.

A Solid Base for a Long Life

Strengthened undercarriage for higher durability even in heavy-duty applications.



Strengthened Undercarriage



Increased Loading Capacity of Swing Circle

The swing circle ball bearing utilizes more balls to boost the loading capacity of the swing circle by approximately 6%, allowing stable swing even in tough operation*.

* vs. Conventional model

Enlarged Upper and Lower Rollers, Idlers and Sprockets

Upper and lower rollers, idlers and sprockets, used on the ZAXIS 500LC/520LCH, are larger in diameter than those on the new ZAXIS 470LCH. Undercarriage components capable of bearing a 60-ton class excavator are utilized to give sufficient strength and durability. This feature is suitable for worksites when the machine travels frequently.

Increased Traction Force

On the ZAXIS 500LC/520LCH, distance between tumblers is shortened, compared to that of the new ZAXIS 470LCH, to increase traction force by 30%.

The feature is suitable for frequent hill climbing and traveling on hard ground surfaces.

Pressed Master Pins

The master pin of each track link is pressed, instead of the master pin using a pin retention to avoid disengagement.



Full Track Guard Provided Standard (ZAXIS 520LCH)

Full track guards are provided standard. Full track guards protect track links and lower rollers from damage and deformation. Moreover, they also keep out stones, preventing the overload to the undercarriage to reduce wear and damage.

Strengthened Front Components

5% Increase in Strength with Stronger Pin Material

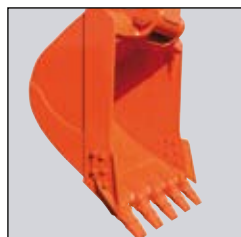
The strength of pins, used in the arm and boom, is increased by 5%, using harder steel material*.

* vs. Conventional model



Strengthened General-Purpose Bucket

Bucket teeth are reshaped as Super-V teeth for smooth penetration and higher production. Bushings are utilized at both ends of a bucket pin to eliminate clearances, preventing jerky operation.



Strengthened H-Bucket for Heavy-Duty

The heavy-duty bucket is reshaped, and bucket parts are strengthened to increase durability.



World-Class Productivity

To yield high production yet maintain low fuel consumption, such was the objective of the development of a new engine and hydraulic system for the ZAXIS 500LC / 520LCH.

Production: Approx 14% Increase

(vs. Conventional Model)



Advanced Hydraulic Technologies

Increased Digging Force

7% more bucket digging force and 8% more arm digging force*.

* At power boost mode / vs Conventional model

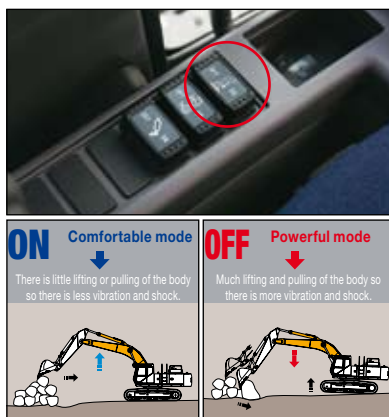
Enhanced Boom Recirculation System

In combined operation of boom lower and arm, arm speed can be increased by approximately 15% over the conventional. Pressurized oil from boom cylinder bottom side is delivered to boom cylinder rod side to lower the boom, assisted by boom weight. Conventionally, pressurized oil from pump is delivered to boom cylinder rod side to lower the boom. The new system also allows for an efficient combined operation of swing and lowering the boom.



Boom Mode Selector

The amount the body can be lifted or pulled by the front of machine can be ON or OFF selected. This helps to provide for more comfortable operation and contributes to longer component service life.

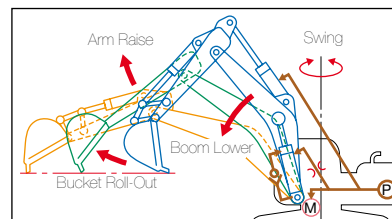


Larger-Diameter Front Piping

Arm piping is increased in diameter to reduce hydraulic loss (theoretically 7%) for speedy front operation.

Combined Operation of Boom and Arm

In combined operation of swing + boom lower + arm roll-out, or in leveling (boom lower + arm roll-out), arm roll-out speed can be increased greatly. Here's why. A variable throttle in the arm circuit, adjusts the flow when needed to reduce hydraulic loss in combined operation with arm roll-out.



New Bucket Regenerative System

Swift bucket actions can be done in combined operation for excavation through the new bucket regenerative circuit. When the load to the bucket is light, pressurized oil from bucket cylinder rod side is delivered through a regenerative valve to bucket cylinder bottom side for the effective use of hydraulic energy.

New-Generation Clean Engine

High Power Yet Low Fuel Consumption

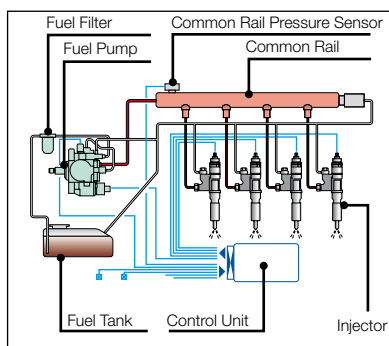
4% Increase in output (vs. Conventional model)

- 260 kW (349 HP) / 1 800 min⁻¹

The new clean engine, complying with the emission regulations Tier 3 in US (EPA) and EU Stage III, can reduce fuel costs by electronic control.

Common Rail Type Fuel Injection System

Electronic control common rail type fuel injection system drives an integrated fuel pump at an ultrahigh pressure to distribute fuel to each injector per cylinder through a common rail. This enables optimum combustion to generate big horsepower, and reduce PM* and fuel consumption.



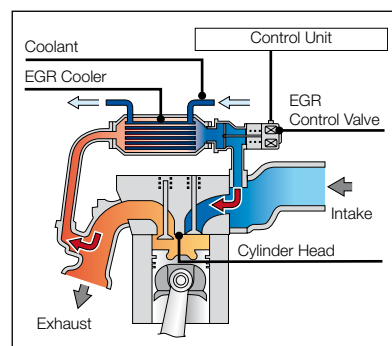
Cooled EGR** System

Exhaust gas is partially mixed with intake air to lower combustion temperature for reducing NOx and fuel consumption.

What's more, the EGR cooler cools down exhaust gas to increase air concentration for complete combustion, reducing PM*.

*Particulate Matter

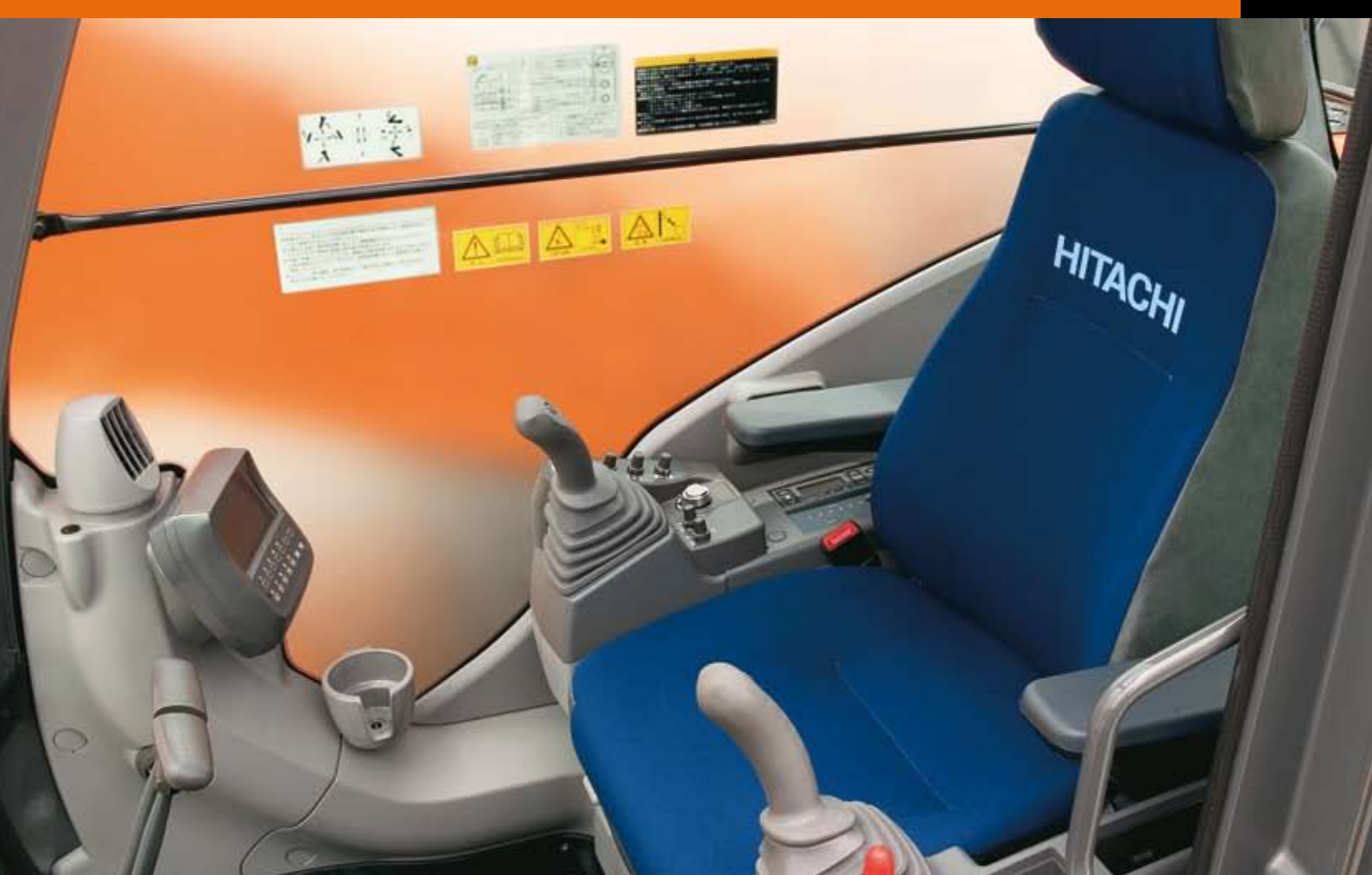
**Exhaust Gas Recirculation



A New Standard in Operator Comfort

The operator's seat of the ZAXIS-3 series gives the operator an excellent view of the jobsite. On the wide-screen colour LCD monitor the operator can see what is behind the machine. Ample legroom, short stroke levers and a large seat ensure optimum working conditions for the operator during long hours.





The ZAXIS-3 series cab has been redesigned to meet demands of customers. From the operator's seat the operator has an excellent view of the jobsite. On the widescreen colour LCD monitor the operator can see machine conditions and with the rear view camera, what is behind the machine. Ample legroom, short stroke levers and a suspension seat ensure optimum working conditions. The seat features horizontal, vertical adjustments and has a backrest contoured for comfort, with a HITACHI logo.



Wide adjustable armrests and a retractable seat belt are included. Short stroke levers allow for continuous operation with less fatigue. The cab is pressurized to keep out dust. Noise and vibrations are kept to a minimum due to the elastic mounts, filled with silicone oil, the cab rests on.

Visibility is improved especially for the right downward view. Sliding windows on the front (ZAXIS 500LC) and side enable direct communication between operator and other workers. Foot space has increased and travel pedals have been redesigned for easier operation.

A flat floor allows for easy cleaning. Ergonomic controls and switches, fully automatic air conditioner and a radio complete the package.

Embedded Information Technology

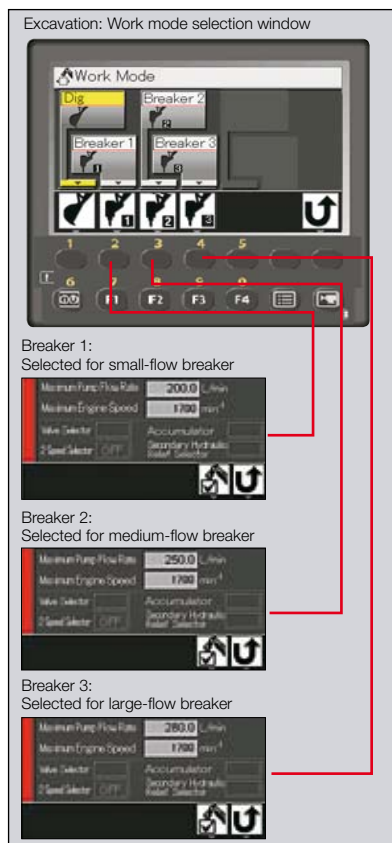
The ZAXIS-3 series is equipped with a widescreen colour LCD monitor with adjustable contrast for day and night shifts. With the monitor the operator can check maintenance intervals, select work modes, monitor fuel consumption, and connect to the rear view camera. A theft deterrent system and multi-language selection is also available.

Multi function monitor



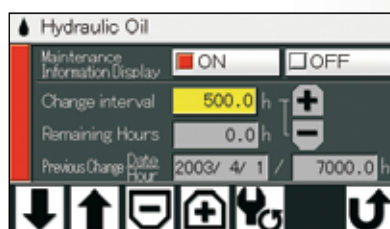
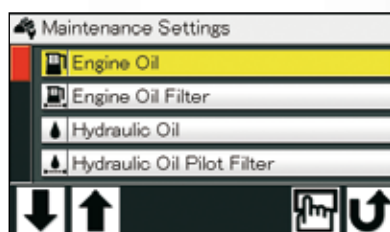
The colour LCD monitor, located in the cab, indicates coolant temperature, fuel level, and maintenance data. It also allows one-touch adjustment of the attachment. The display can also be adjusted to day or night shift.

Attachment support system (work mode selector)



The work mode can be selected from the multi-function monitor inside the cab. Pump flow in the selected work mode can be monitored.

Maintenance support



Replacement timing of hydraulic oil and fuel filters is alerted to the operator through the LCD monitor according to the schedule preset by the user each time when turning the key switch. The scheduled maintenance can prevent the failure of the machine.

Multi-language selection



The menu allows selection from 12 languages.





Rear view camera



The widescreen colour LCD, teamed up with the rear view camera on the counterweight, provides rearward viewing.

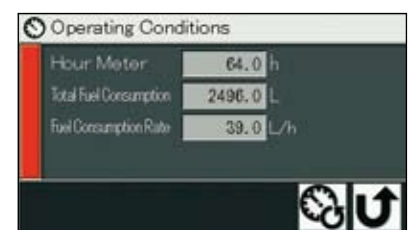
The rear view camera automatically works when traveling, and can also be manually turned on with a select switch on the monitor.

Theft deterrent system



The electronic immobiliser requires the entry of an encryption code to the multifunctional monitor each time when starting the engine to prevent theft and vandalism.

Fuel consumption monitoring



Fuel consumption per operating hour is computed, and the result is displayed on the LCD monitor. This information suggests refuelling timing, and guides energy-saving operation and efficient job management.

Simplified Maintenance

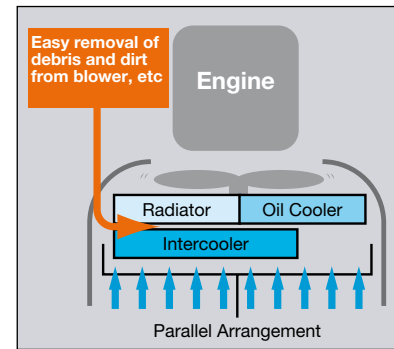
Focusing on simplified maintenance, including easy inspection, service and cleaning.



Parallel Arrangement of the Cooling Pack



The radiator and oil cooler are laid out in a parallel arrangement, instead of the conventional in-line arrangement. This parallel arrangement is significantly easier to clean around the engine. The air conditioner condenser can be opened for easy cleaning of the condenser and the radiator located behind.



Conveniently Located Inspection Point



In addition to a pre-filter, dual main fuel filters are provided standard to reduce clogging of the fuel line to the engine. The engine oil pan is fitted with a drain coupler. When draining, an associated drain hose is connected to the drain coupler. The drain coupler is reliable, avoiding oil leakage and vandalism. The sidewalk is widened from 340 mm (Conventional model) to 510 mm for smooth walking from cab to rear. The sidewalk is the field-proven split type that permits the detaching of its rear when traveling or operating on rough terrain.



The fresh air filter for the air conditioner is relocated to cab door side from conventional location behind the operator seat. This allows easy cleaning and replacement of the fresh air filter, like the air circulation filter inside the cab.

Extended Maintenance Intervals

Automatic Lubrication / Repositioned Bucket Lubricating Points

The front attachment is automatically lubricated, except for bucket lubricating points at the top of arm that are repositioned for side lubrication.

Enlarged Fuel Tank

The fuel tank is enlarged, increasing the capacity from 650 liters (Conventional model) to 725 liters. Refueling intervals (when filled fully) extend from 17 to 18 hours.

Extended Hydraulic Oil Filter Change Intervals

Hydraulic oil filter change intervals are extended from 500 hours (Conventional model) to 1000 hours to help reduce running costs.

Safety Features

An array of safety devices for enhanced safety.

Protecting the Operator from Tipping Accident

CRES II Cab (ZAXIS 500LC Standard Equipped)

The CRES II cab is designed to help with “just in case” protection for the operator. Safety in case of tipping is improved. The cab top can withstand nine-fold loading.



H/R Cab (ZAXIS 520LCH Standard Equipped)

The H/R cab utilizes the reinforced front window and FOPS* at the roof for protection against falling objects.

The front glass window, made of straight-laminated, is fixed to shut out dirt and debris. The cab provided with a full guard satisfies the OPG**(Level II) cab requirements stipulated by ISO.

**Falling Object Protective Structure*

***Operator Protective Guards*



Additional Features

Cab Right Guard



Evacuation Hammer



Pilot Control Shut-Off Lever



Other features include a retractable seat belt, evacuation hammer and emergency engine shut-off switch. A shut-off lever for pilot control helps to prevent unintentional movements.

Environmental Features

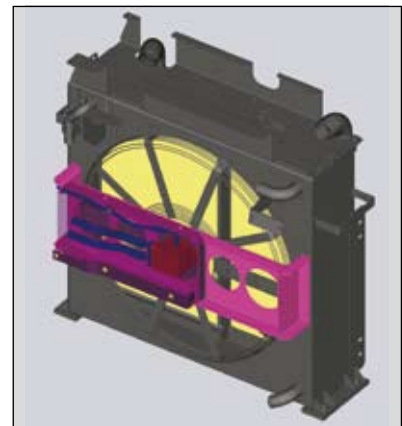
Hitachi acts responsibly when it comes to the environment.

A Cleaner Machine

The ZAXIS-3 series is equipped with a clean but powerful engine to comply with Tier 3, and Stage III A. An engine emission regulations effective in the U.S. EPA and European Union from 2006. Exhaust gas is partly recombusted to reduce particulate matter (PM) output and lower nitrogen oxide (NOx) levels.

A Quieter Machine

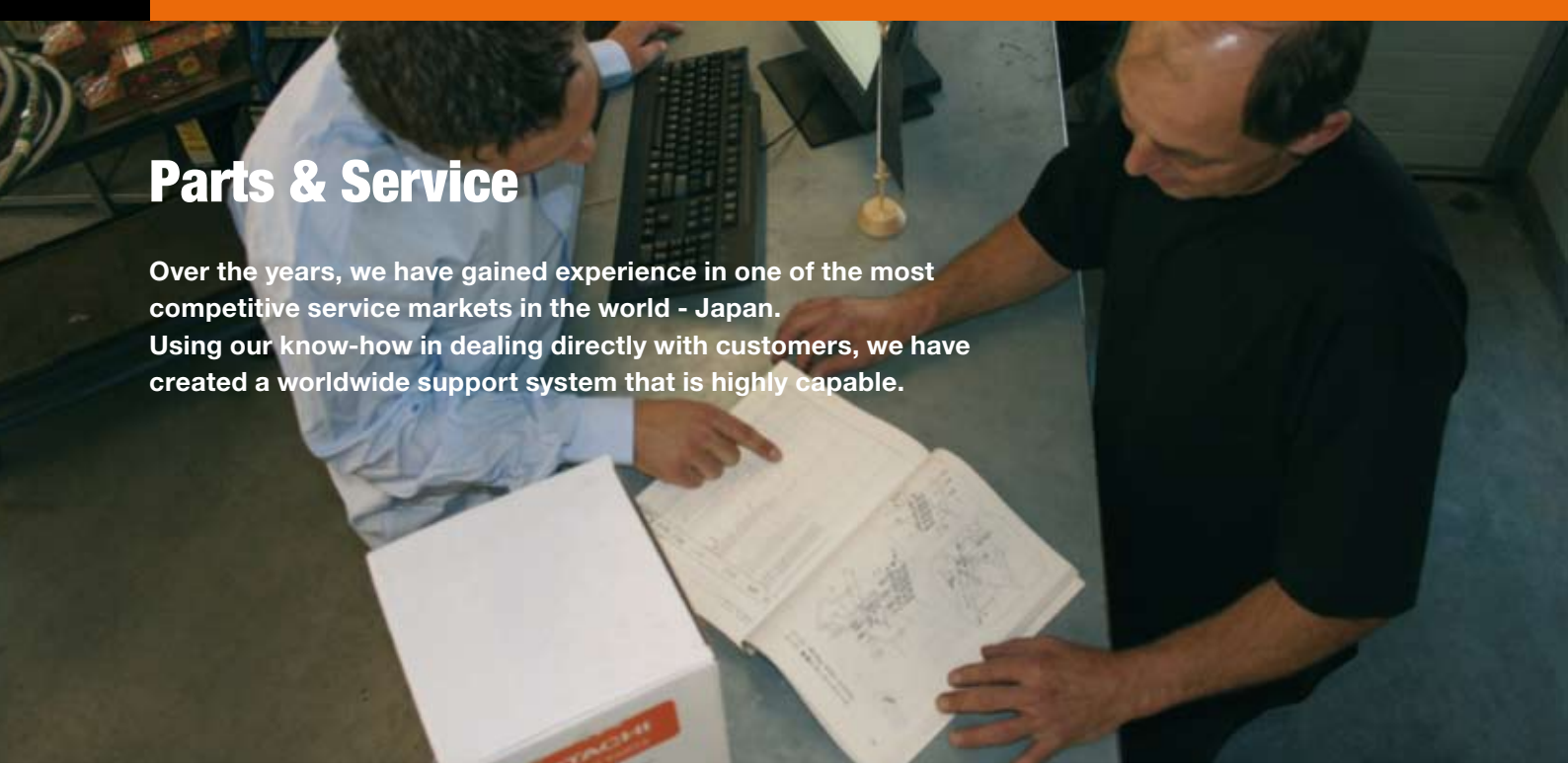
Engine noise is reduced by approximately 2 dB with the robust engine. It goes without saying that the engine meets the EU noise regulations. The engine cooling fan is a large 120 mm diameter variable-speed electrohydraulic fan. This fan automatically starts when temperature comes into the high temperature range, ensuring low noise operation. A proven large muffler is provided to reduce sound and exhaust emissions greatly.



A Recyclable Machine

Over 97% of the ZAXIS-3 series can be recycled. All resin parts are marked to facilitate recycling. The machine is completely lead-free. The radiator and oil cooler are made from aluminium and all wires are lead-less. In addition, biodegradable hydraulic oil is available for jobsites where special environmental care is required.



A photograph showing two men in a workshop or office setting. One man, wearing a light blue shirt, is pointing at a large open manual or catalog on a desk. The other man, wearing a dark blue t-shirt, is looking at the manual. A white box with the Hitachi logo is visible on the desk. In the background, there is a computer keyboard and some other equipment.

Parts & Service

Over the years, we have gained experience in one of the most competitive service markets in the world - Japan. Using our know-how in dealing directly with customers, we have created a worldwide support system that is highly capable.

Parts

HITACHI only offers genuine high quality parts. We guarantee that these parts have high performance and long life. We manage around 1 000 000 types of parts all around the world. They are designed and built to be the best match for your HITACHI equipment. HITACHI has a global parts distribution network that makes sure you get what you need as quickly as possible. We have more than 150 dealers worldwide who provide the closest support for your needs.

In most cases, your dealer will have the replacement part that you require. If a dealer does not have a certain part, he can order it from four fully stocked parts depots located across the world. These distribution centres are all connected by an on-line system that gives them access to shared information on stocks, such as the number and type of available parts.

The depots, which in turn are stocked by a parts center in Japan, minimize delivery time and enable you to get your parts as efficiently and quickly as possible.

Service

Our goal is to "keep customer equipment at a maximum performance level". To fulfil this goal, we have set more than 150 dealers all over the world. They have highly trained technicians, and provide a number of support programs. HITACHI provides a unique extended warranty program called HITACHI Extended Life Program, or HELP.

To minimize downtime during troubleshooting, we developed a PDA based diagnostic system called "Dr.ZX". To keep our customers' equipment in top running shape, good service is indispensable. We believe personnel training is the key to providing the best service.

If you would like more information regarding parts and/or service, please ask your nearest HITACHI dealer. Not all programs and/or services are available in every market or region.

Remote fleet management with e-Service Owner's Site

Reduce maintenance effort and costs for your machine fleet with e-Service Owner's Site; latest machine information of each of your machines available on-line, in your office.

OWNER'S

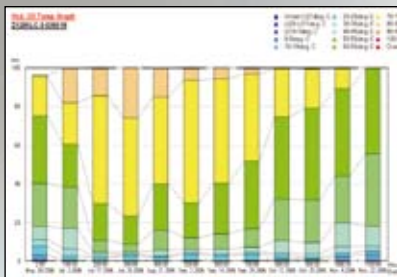
e-Service Owner's Site



e-Service Owner's Site features

Operation

Remote access to all relevant machine operation information such as daily operating hours and machine fuel level as well as historically accumulated temperatures and pressures.



Maintenance

For each machine, maintenance history as well as recommended maintenance due is displayed in one view, allowing for accurate and efficient fleet maintenance management.

Location

In addition to any general GPS function, GIS (Geographical Information System) will not only show the geographical position of each machine with immediate serial number identification, it will also allow for dedicated multiple machine searches using specific operational information as search criteria.



Check and monitor each of your machines from your office

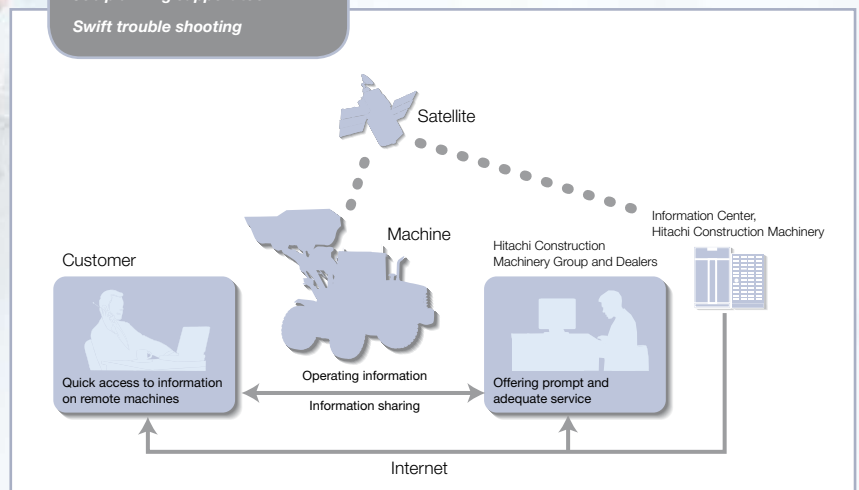
Enhanced service support from your local dealer

Actual geographical location of each of your machines

e-Service Owner's Site is an on-line fleet management tool offered by HCME to each of its customers. It will present all operational information and location of your machines on a PC in your office, giving you an up to date overview of your machines, allowing for full fleet control. Each machine will regularly send its operational data to a satellite and from there, via a ground station to a Hitachi server. The data collected in the server will then be processed and directed to each customer around the world. Your machine information will be available through a secure internet connection for you and your dealer. This communication chain is operational 24h a day, each day of the year. It will support your job planning, help you maintain your machine and allow for enhanced service and trouble shooting support by your local dealer, all directly contributing to reduce downtime and increase the cost performance of your fleet.

All new ZAXIS-3 and ZW machines supplied by HCME will have a satellite communication unit installed as standard*, meaning each owner can directly enjoy the benefits of e-Service Owner's Site. Your local dealer will be able to give you access to e-Service Owner's Site.

Optimizing fleet management
Accurate maintenance planning
Job planning support tool
Swift trouble shooting



* (1) Satellite communication may be forbidden by the local regulatory standards (including safety standards) and legal requirements of the particular country where you wish to use it. Please contact HITACHI dealer for details.
(2) Satellite communication basically allows for worldwide coverage. Contact your local dealer for the latest situation on actual satellite communication availability for your country or specific jobsite.
(3) If transmission of the satellite signal is hindered in any way, satellite communication may not be possible.

EQUIPMENT

ZX520LCH-3

ENGINE

Model	Isuzu AH-6WG1XYSA-01
Type	4-cycle water-cooled, direct injection
Aspiration	Turbocharged
No. of cylinders	6
Rated power	
ISO 9249,	H/P mode:
Without Fan net	260 kW (349 HP) at 1 800 min ⁻¹ (rpm)
EEC 80/1269,	H/P mode:
Without Fan net	260 kW (349 HP) at 1 800 min ⁻¹ (rpm)
Maximum torque	1 580 Nm (161 kgfm) at 1 500 min ⁻¹ (rpm)
Piston displacement ...	15.681 L
Bore and stroke	147 mm x 154 mm
Batteries	2 x 12 V / 170 Ah

HYDRAULIC SYSTEM

- Work mode selector
General purpose mode / Attachment mode
 - Engine speed sensing system
- | | |
|------------------------|--|
| Main pumps | 2 variable displacement axial piston pumps |
| Maximum oil flow | 2 x 360 L/min |
| Pilot pump | 1 gear pump |
| Max. oil flow | 30 L/min |

Hydraulic Motors

Travel	2 axial piston motors with parking brake
Swing	2 axial piston motors

Relief Valve Settings

Implement circuit	31.9 MPa (325 kgf/cm ²)
Swing circuit	27.9 MPa (285 kgf/cm ²)
Travel circuit	34.3 MPa (350 kgf/cm ²)
Pilot circuit	3.9 MPa (40 kgf/cm ²)
Power boost	34.3 MPa (350 kgf/cm ²)

Hydraulic Cylinders

High-strength piston rods and tubes. Cylinder cushion mechanisms provided in boom and arm cylinders to absorb shock at stroke ends.

Dimensions

	Quantity	Bore	Rod diameter
Boom	2	170 mm	115 mm
Arm	1	190 mm	130 mm
Bucket	1	170 mm	120 mm

Hydraulic Filters

Hydraulic circuits use high-quality hydraulic filters. A suction filter is incorporated in the suction line, and full-flow filters in the return line and swing/travel motor drain lines.

CONTROLS

Pilot controls. Hitachi's original shockless valve.

Implement levers	2
Travel levers with pedals	2

UPPERSTRUCTURE

Revolving Frame

Welded sturdy box construction, using heavy-gauge steel plates for ruggedness. D-section frame for resistance to deformation.

Swing Device

Axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row, shear-type ball bearing with inductionhardened internal gear. Internal gear and pinion gear are immersed in lubricant. Swing parking brake is spring-set/hydraulic-released disc type.

Swing speed	9.0 min ⁻¹ (rpm)
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Operator's Cab

Independent spacious cab, 1 005 mm wide by 1 795 mm high, conforming to ISO* Standards. (OPG top guard fitted Level II (ISO 10262) compliant cab)

Reinforced glass windows on 4 sides for visibility. Reclining seat with armrests; adjustable with or without control levers.

* International Standardization Organization

UNDERCARRIAGE

Tracks

Tractor-type undercarriage. Welded track frame using selected materials. Side frame bolted to track frame. Lubricated track rollers, idlers, and sprockets with floating seals.

Track shoes with double grousers made of induction-hardened rolled alloy. Heat-treated connecting pins with dirt seals. Hydraulic (grease) track adjusters with shock-absorbing recoil springs.

Numbers of Rollers and Shoes on Each Side

Upper rollers	3
Lower rollers	8
Track shoes	49
Full track guard	1

Travel Device

Each track driven by axial piston motor through reduction gear for counter rotation of the tracks. Sprockets are replaceable. Parking brake is spring-set/hydraulic-released disc type.

Automatic transmission system: High-Low.

Travel speeds	High : 0 to 4.0 km/h Low : 0 to 2.9 km/h
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Maximum traction force ...	415 kN (42 300 kgf)
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Gradeability	35° (70%) continuous
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WEIGHTS AND GROUND PRESSURE

Equipped with 7.0 m H-boom, 3.4 m H-arm, and 1.9 m³ rock bucket.

Shoe type	Shoe width	Operating weight	Ground pressure
Double grouser	600 mm	51 800 kg	92 kPa (0.93 kgf/cm ²)
Triple grouser	750 mm	52 000 kg	74 kPa (0.75 kgf/cm ²)
	900 mm	52 800 kg	62 kPa (0.63 kgf/cm ²)

Shoe for use 600 mm; Quarry ground, Dry riverbed, Solid ground
750 mm; Mid-Solid ground, Soft ground
900 mm; Soft ground

BACKHOE ATTACHMENTS

Boom and arms are of all-welded, box-section design. A number of booms and arms are available. Bucket is of all-welded, high-strength steel structure. The ZX520LCH-3 is a heavy duty type and equipped with a reinforced H-boom or BE-boom and H-arm or BE-arm.

Backhoe Buckets

Capacity		Width		No. of teeth	Weight	Recommendation			
						ZX520LCH-3			
SAE, PCSA heaped	CECE heaped	Without side cutters	With side cutters			6.3 m BE-boom		7.0 m H-boom	
						2.5 m BE-arm	2.9 m BE-arm	2.9 m BE-arm	3.4 m H-arm
*1 1.90 m ³	1.70 m ³	1 480 mm	1 500 mm	5	2 070 kg	●	●	●	●
*1 2.10 m ³	1.80 m ³	1 560 mm	1 580 mm	5	2 170 kg	●	●	●	●
*1 2.30 m ³	2.00 m ³	1 680 mm	1 700 mm	5	2 260 kg	●	●	●	—
*1 2.50 m ³	2.20 m ³	1 800 mm	1 820 mm	5	2 360 kg	●	●	—	—
*2 1.30 m ³	1.20 m ³	1 170 mm	—	3	2 330 kg	●	●	●	●
One-point ripper				1	1 260 kg	●	●	●	●

*1 Rock bucket

*2 Ripper bucket

● Heavy-duty

— Not applicable

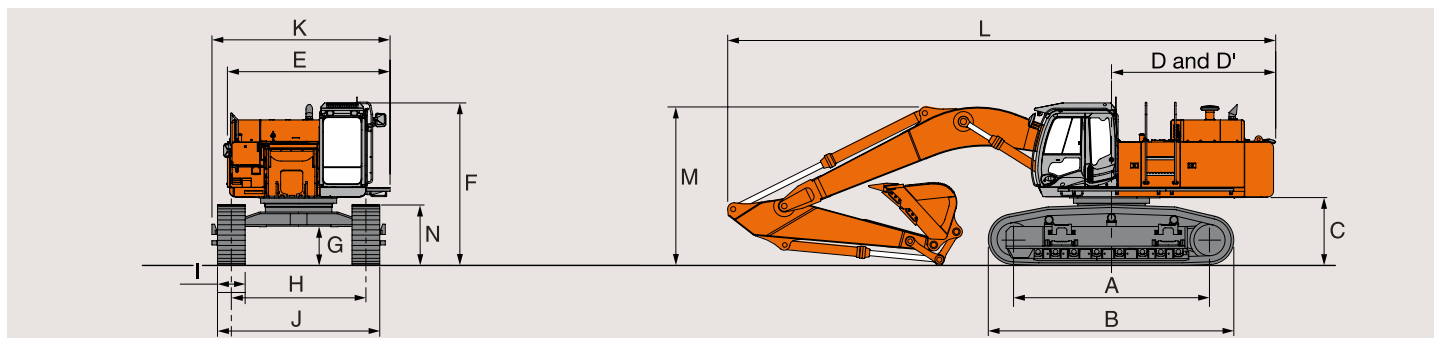
SERVICE REFILL CAPACITIES

	liters
Fuel tank	725.0
Engine coolant	55.0
Engine oil	57.0
Swing device (each side)	6.5
Travel device (each side)	11.0
Hydraulic system	560.0
Hydraulic oil tank	330.0

SPECIFICATIONS / LIFTING CAPACITIES

ZX520LCH-3

DIMENSIONS



Unit: mm

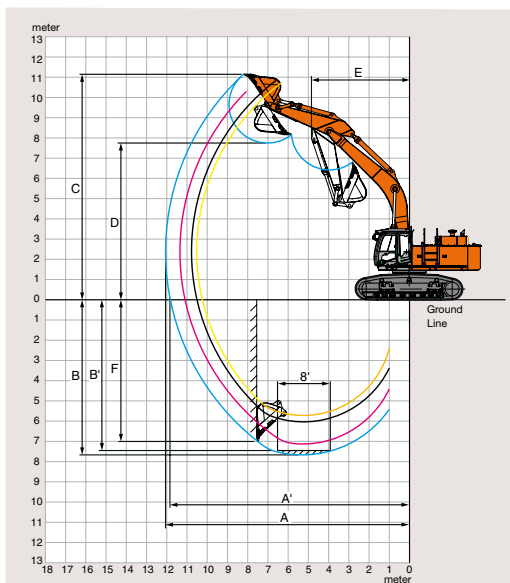
	ZX520LCH-3 ^{*2}		
A Distance between tumblers	4 250		
B Undercarriage length	5 330		
^{*1} C Counterweight clearance	1 435		
D Rear-end swing radius	3 645		
D' Rear-end length	3 560		
E Overall width of upperstructure	3 530		
F Overall height of cab	3 520		
^{*1} G Min. ground clearance	720		
H Track gauge: Extended/Retracted	2 920 / 2 420		
I Track shoe width	G 600	G 750	G 900
J Undercarriage width: Extended/Retracted	3 520 / 3 020	3 670 / 3 170	3 820 / 3 590
K Overall width	3 860		
L Overall length	11 890		
^{*2} M Overall height of boom	3 500		
N Track height	1 290		

^{*1} Excluding track shoe lug. G: 600mm Double grouser shoe

^{*2} Equipped with 7.0 m H-boom and 3.4 m H-arm

WORKING RANGES

Unit: mm



Arm length	ZX520LCH-3			
	6.3 m BE-boom		7.0 m H-boom	
	2.5 m BE-arm	2.9 m BE-arm	2.9 m BE-arm	3.4 m H-arm
A Max. digging reach	10 460	10 750	11 330	12 060
A' Max. digging reach (on ground)	10 190	10 490	11 080	11 820
B Max. digging depth	5 720	6 050	7 130	7 690
B' Max. digging depth (8' level)	5 540	5 890	6 920	7 550
C Max. cutting height	10 730	10 870	10 240	11 130
D Max. dumping height	7 390	7 520	7 170	7 730
E Min. swing radius	4 090	3 930	5 020	4 840
F Max. vertical wall	4 180	4 570	4 200	7 030
Bucket digging force* ISO	287 kN	287 kN	287 kN	288 kN
Arm crowd force* ISO	293 kN	256 kN	256 kN	218 kN
Bucket digging force* SAE : PCSA	258 kN	258 kN	258 kN	250 kN
Arm crowd force * SAE : PCSA	286 kN	249 kN	249 kN	209 kN
Equipped bucket SAE : PCSA	2.5 m ³	2.5 m ³	2.1 m ³	2.1 m ³

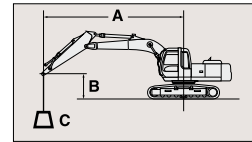
Excluding track shoe lug * At power boost

Metric measure

The lifting capacity is defined by the overload alarm device set pressure.

When the hydraulic pressure reaches the set pressure, the alarm buzzer sounds.

Values in the table are with the overload alarm device switched off and with retracted bucket cylinder.



A: Load radius

B: Load point height

C: Lifting capacity

ZX520LCH-3 (WITHOUT BUCKET)



Rating over-front



Rating over-side or 360 degrees

Unit: 1 000 kg

Conditions	B: Load point height m	A: Load radius												At max. reach		
		3.0 m		4.0 m		5.0 m		6.0 m		7.0 m		8.0 m				
																meter
BE-boom 6.3 m BE-arm 2.5 m Shoe 600 mm	8.0							*14.2	*14.2					*12.5	*12.5	6.4
	6.0					*16.6	*16.6	*14.9	*14.9	*13.9	13.2			*11.8	11.1	7.8
	4.0					*20.4	*20.4	*17.2	15.9	*15.1	12.7	*13.8	10.4	*12.1	9.5	8.4
	2.0					*23.5	19.4	*19.2	15.0	*16.4	12.1	*14.4	10.0	13.1	9.0	8.6
	0(GROUND)					*23.6	18.9	*19.6	14.5	*16.7	11.7	*14.3	9.8	*13.6	9.3	8.2
	-2.0	*28.2	*28.2	*24.8	*24.8	*21.1	19.0	*17.8	14.5	*14.9	11.7			*13.5	10.9	7.4
	-3.0			*21.7	*21.7	*18.6	*18.6	*15.5	14.7					*13.1	12.6	6.7
BE-boom 6.3 m BE-arm 2.9 m Shoe 600 mm	8.0							*13.5	*13.5					*8.1	*8.1	6.8
	6.0					*15.9	*15.9	*14.4	*14.4	*13.5	13.4	*9.4	*9.4	*7.7	*7.7	8.1
	4.0			*25.3	*25.3	*19.8	*19.8	*16.8	16.2	*14.8	12.9	*13.5	10.5	*7.9	*7.9	8.7
	2.0					*23.3	19.8	*19.1	15.2	*16.3	12.2	*14.4	10.1	*8.7	*8.7	8.9
	0(GROUND)			*26.0	*26.0	*24.0	19.1	*19.8	14.6	*16.8	11.8	14.4	9.9	*10.2	9.0	8.5
	-2.0	*28.8	*28.8	*26.2	*26.2	*21.9	19.1	*18.4	14.6	*15.5	11.8			*13.3	10.3	7.7
	-4.0					*16.3	*16.3	*13.1	*13.1					*12.4	*12.4	6.1
-6.0																
H-boom 7.0 m BE-arm 2.9 m Shoe 600 mm	8.0									*12.1	*12.1			*11.0	*11.0	7.5
	6.0							*14.1	*14.1	*12.9	*12.9	*12.0	10.8	*11.0	9.3	8.7
	4.0					*20.4	20.4	*16.8	15.7	*14.5	12.5	*13.0	10.3	*11.6	8.1	9.3
	2.0					*23.4	18.9	*18.9	14.7	*16.0	11.9	*14.0	9.9	11.2	7.7	9.4
	0(GROUND)					*23.3	18.5	*19.4	14.2	*16.5	11.5	14.1	9.6	11.6	8.0	9.1
	-2.0	*20.5	*20.5	*24.8	*24.8	*21.3	18.6	*18.2	14.2	*15.6	11.4	*13.4	9.6	*12.5	8.9	8.4
	-4.0	*21.8	*21.8	*19.6	*19.6	*17.2	*17.2	*14.7	14.5	*12.2	11.8			*12.2	11.7	7.0
-5.0					*13.5	*13.5							*11.4	*11.4	5.9	
H-boom 7.0 m H-arm 3.4 m Shoe 600 mm	8.0											*10.4	*10.4	*7.7	*7.7	8.4
	6.0									*12.3	*12.3	*11.5	10.9	*7.5	*7.5	9.4
	4.0			*24.6	*24.6	*19.4	*19.4	*16.1	16.0	*14.0	12.8	*12.6	10.5	*7.7	7.4	10.0
	2.0					*23.0	19.4	*18.6	15.0	*15.8	12.1	*13.8	10.0	*8.3	7.1	10.1
	0(GROUND)			*13.1	*13.1	*23.8	18.8	*19.6	14.4	*16.6	11.6	14.2	9.7	*9.5	7.3	9.8
	-2.0	*16.6	*16.6	*23.4	*23.4	*22.3	18.7	*18.8	14.3	*16.1	11.5	*13.9	9.6	*11.5	8.0	9.1
	-4.0	*25.6	*25.6	*21.9	*21.9	*18.8	*18.8	*16.0	14.5	*13.6	11.7			*11.3	10.0	7.8
-5.0			*18.3	*18.3	*15.7	*15.7	*13.3	*13.3					*10.7	*10.7	6.9	
H-boom 7.0 m H-arm 3.4 m Shoe 900 mm	8.0											*10.4	*10.4	*7.7	*7.7	8.4
	6.0									*12.3	*12.3	*11.5	11.2	*7.5	*7.5	9.4
	4.0			*24.6	*24.6	*19.4	*19.4	*16.1	*16.1	*14.0	13.1	*12.6	10.8	*7.7	7.6	10.0
	2.0					*23.0	19.9	*18.6	15.4	*15.8	12.4	*13.8	10.3	*8.3	7.3	10.1
	0(GROUND)			*13.1	*13.1	*23.8	19.3	*19.6	14.8	*16.6	11.9	*14.4	9.9	*9.5	7.5	9.8
	-2.0	*16.6	*16.6	*23.4	*23.4	*22.3	19.2	*18.8	14.7	*16.1	11.8	*13.9	9.8	*11.5	8.3	9.1
	-4.0	*25.6	*25.6	*21.9	*21.9	*18.8	*18.8	*16.0	14.9	*13.6	12.0			*11.3	10.3	7.8
-5.0			*18.3	*18.3	*15.7	*15.7	*13.3	*13.3					*10.7	*10.7	6.9	

Notes: 1. Ratings are based on ISO 10567.

2. Lifting capacity of the ZAXIS Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.

3. The load point is the center-line of the bucket pivot mounting pin on the arm.

4. *Indicates load limited by hydraulic capacity.

5. 0 m = Ground.

EQUIPMENT

ZX520LCH-3

STANDARD EQUIPMENT

Standard equipment may vary by country, so please consult your Hitachi dealer for details.

ENGINE

- H/P mode control
- P mode control
- E mode control
- 50 A alternator
- Dry-type air double filter with evacuator valve (with air filter restriction switch for monitor)
- Cartridge-type engine oil filter
- Cartridge-type fuel filter
- Fuel pre-filter
- Radiator, oil cooler and intercooler with dust protective net
- Radiator reserve tank
- Fan guard
- Isolation-mounted engine
- Auto-idle system

HYDRAULIC SYSTEM

- Work mode selector
- Engine speed sensing system
- E-P control system
- Power boost
- Auto power lift
- Boom mode selector system
- Shockless valve in pilot circuit
- Control valve with main relief valve
- Extra port for control valve
- Suction filter
- Full-flow filter
- Pilot filter
- Drain filter
- Quick warm-up system for pilot circuit

CAB

- H/R cab
- OPG top guard fitted Level II (ISO10262) compliant cab
- All-weather sound suppressed steel cab
- Laminated straight glass front window
- Left side window can be opened
- 6 fluid-filled elastic mounts
- Intermittent windshield wipers
- Front window washer
- Adjustable reclining suspension seat with adjustable armrests
- Footrest
- Electric double horn
- AM-FM radio with digital clock
- Auto-idle selector
- Retractable Seat belt
- Drink holder
- Cigarette lighter
- Ashtray
- Storage box
- Glove compartment
- Floor mat
- Short wrist control levers
- Pilot control shut-off lever
- Auto control air conditioner
- Pilot control shut-off lever
- Engine shut-off switch
- Transparent roof with slide curtain
- Sun visor

MONITOR SYSTEM

- Display of meters: water temperature, hour, fuel rate, clock
- Other displays: work mode, auto-idle, glow, rearview monitor, operating conditions, etc
- Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, air filter restriction, work mode, overload, etc
- Alarm buzzers: overheat, engine oil pressure, overload

LIGHTS

- 2 working lights
- 2 cab lights

UPPERSTRUCTURE

- 4.5 mm thickness undercover
- 9 820 kg counterweight
- Fuel level float
- Rear view camera
- 170 Ah batteries
- Hydraulic oil level gauge
- Tool box
- Utility space
- Rearview mirror (right & left side)
- Swing parking brake
- Ladder
- Electrical fuel refilling pump with auto-stop
- Auto-grease lubricator (Without bucket and link pins)

UNDERCARRIAGE

- Travel parking brake
- Travel motor covers
- Hydraulic track adjuster
- Idler track guard
- Bolt-on sprocket
- Upper and lower rollers
- Reinforced track links with pin seals
- Full track guard
- 600 mm double grouser shoes

FRONT ATTACHMENTS

- Flanged pin
- Monolithically cast bucket link A
- Centralized lubrication system
- Dirt seal on all bucket pins
- 7.0 m H-boom and 3.4 m H-arm
- Damage prevention plate and square bars
- 2.1 m³ (SAE, PCSA heaped) rock bucket (with dual type side shrouds)

MISCELLANEOUS

- Standard tool kit
- Lockable machine covers
- Lockable fuel refilling cap
- Skid-resistant tapes, plates, handrails and sidewalk
- Travel direction mark on track frame
- Onboard information controller
- Theft deterrent system

OPTIONAL EQUIPMENT

Optional equipment may vary by country, so please consult your Hitachi dealer for details.

- Hose rupture valves
- Swing motion alarm device with lamps
- Travel motion alarm device
- Biodegradable oil
- Extinguisher
- Pre cleaner
- Additional 2 cab lights
- Attachment basic piping
- Accessories for breaker
- Accessories for breaker & crusher
- Accessories for 2 speed selector
- 12 V power source
- Additional fuse box
- Overload alarm
- Front glass lower guard
- Front glass upper guard
- 600 mm triple grouser shoe
- Suspension seat with heater
- Air suspension seat with heater
- Additional working light (boom right side)
- Track undercover
- Reinforced link B
- Fan reverse device
- 6.3 m BE-boom
- 2.5 m BE-arm
- 2.9 m BE-arm
- 750 mm shoe with standard track guard
- 900 mm shoe with standard track guard

EQUIPMENT

ZX500LC-3

ENGINE

Model	Isuzu AH-6WG1XYSA-01
Type	4-cycle water-cooled, direct injection
Aspiration	Turbocharged
No. of cylinders	6
Rated power	
ISO 9249,	H/P mode:
Without Fan net	260 kW (349 HP) at 1 800 min ⁻¹ (rpm)
EEC 80/1269,	H/P mode:
Without Fan net	260 kW (349 HP) at 1 800 min ⁻¹ (rpm)
Maximum torque	1 580 Nm (161 kgfm) at 1 500 min ⁻¹ (rpm)
Piston displacement ...	15.681 L
Bore and stroke	147 mm x 154 mm
Batteries	2 x 12 V / 170 Ah

HYDRAULIC SYSTEM

- Work mode selector
General purpose mode / Attachment mode
 - Engine speed sensing system
- | | |
|------------------------|--|
| Main pumps | 2 variable displacement axial piston pumps |
| Maximum oil flow | 2 x 360 L/min |
| Pilot pump | 1 gear pump |
| Max. oil flow | 30 L/min |

Hydraulic Motors

Travel	2 axial piston motors with parking brake
Swing	2 axial piston motors

Relief Valve Settings

Implement circuit	31.9 MPa (325 kgf/cm ²)
Swing circuit	27.9 MPa (285 kgf/cm ²)
Travel circuit	34.3 MPa (350 kgf/cm ²)
Pilot circuit	3.9 MPa (40 kgf/cm ²)
Power boost	34.3 MPa (350 kgf/cm ²)

Hydraulic Cylinders

High-strength piston rods and tubes. Cylinder cushion mechanisms provided in boom and arm cylinders to absorb shock at stroke ends.

Dimensions

	Quantity	Bore	Rod diameter
Boom	2	170 mm	115 mm
Arm	1	190 mm	130 mm
Bucket	1	170 mm	120 mm

Hydraulic Filters

Hydraulic circuits use high-quality hydraulic filters. A suction filter is incorporated in the suction line, and full-flow filters in the return line and swing/travel motor drain lines.

CONTROLS

Pilot controls. Hitachi's original shockless valve.

Implement levers	2
Travel levers with pedals	2

UPPERSTRUCTURE

Revolving Frame

Welded sturdy box construction, using heavy-gauge steel plates for ruggedness. D-section frame for resistance to deformation.

Swing Device

Axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row, shear-type ball bearing with inductionhardened internal gear. Internal gear and pinion gear are immersed in lubricant. Swing parking brake is spring-set/hydraulic-released disc type.

Swing speed	9.0 min ⁻¹ (rpm)
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Operator's Cab

Independent spacious cab, 1 005 mm wide by 1 675 mm high, conforming to ISO* Level II Standards. Reinforced glass windows on 4 sides for visibility. Openable front windows (upper and lower). Reclining seat with armrests; adjustable with or without control levers.

* International Standardization Organization

UNDERCARRIAGE

Tracks

Tractor-type undercarriage. Welded track frame using selected materials. Side frame bolted to track frame. Lubricated track rollers, idlers, and sprockets with floating seals.

Track shoes with triple grousers made of induction-hardened rolled alloy. Heat-treated connecting pins with dirt seals. Hydraulic (grease) track adjusters with shock-absorbing recoil springs.

Numbers of Rollers and Shoes on Each Side

Upper rollers	3
Lower rollers	8
Track shoes	49
Track guard	2

Travel Device

Each track driven by axial piston motor through reduction gear for counterrotation of the tracks. Sprockets are replaceable. Parking brake is spring-set/hydraulic-released disc type.

Automatic transmission system: High-Low.

Travel speeds	High : 0 to 4.0 km/h
	Low : 0 to 2.9 km/h

Maximum traction force ...	415 kN (42 300 kgf)
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Gradeability	35° (70%) continuous
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WEIGHTS AND GROUND PRESSURE

Equipped with 7.0 m boom, 3.4 m arm, and 2.10 m³ bucket (SAE, PCSA heaped).

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm	49 500 kg	88 kPa (0.89 kgf/cm ²)
	750 mm	50 300 kg	71 kPa (0.72 kgf/cm ²)
	900 mm	51 100 kg	60 kPa (0.61 kgf/cm ²)

Note: Depending on the jobsites conditions, 750 mm grouser shoe and 900 mm grouser shoe may not be recommended for rock, hard surface or forestry application.

BACKHOE ATTACHMENTS

Boom and arms are of all-welded, box-section design. A number of booms and arms are available. Bucket is of all-welded, high-strength steel structure.

SERVICE REFILL CAPACITIES

	liters
Fuel tank	725.0
Engine coolant	55.0
Engine oil	57.0
Swing device (each side)	6.5
Travel device (each side)	11.0
Hydraulic system	560.0
Hydraulic oil tank	330.0

Backhoe Buckets

Capacity		Width		No. of teeth	Weight	Recommendation						
						ZX520LC-3						
SAE, PCSA heaped	CECE heaped	Without side cutters	With side cutters			6.3 m BE-boom		7.0 m boom				8.2 m boom
						2.5 m BE-arm	2.9 m BE-arm	2.9 m arm	3.4 m arm	3.9 m arm	4.9 m arm	4.9 m arm
1.15 m³	1.00 m³	1 100 mm	1 210 mm	5	1 070 kg	X	X	X	X	X	⊙	⊙
1.40 m³	1.20 m³	1 280 mm	1 410 mm	5	1 170 kg	X	X	X	X	X	⊙	—
1.60 m³	1.40 m³	1 220 mm	1 360 mm	5	1 480 kg	—	—	⊙	⊙	⊙	X	X
1.90 m³	1.70 m³	1 400 mm	1 540 mm	5	1 590 kg	—	—	⊙	⊙	⊙	X	X
2.10 m³	1.80 m³	1 490 mm	1 630 mm	5	1 650 kg	—	—	⊙	⊙	○	X	X
2.30 m³	2.00 m³	1 520 mm	1 660 mm	5	1 800 kg	⊙	⊙	⊙	○	—	X	X
2.50 m³	2.20 m³	1 630 mm	1 770 mm	5	1 870 kg	⊙	⊙	—	—	—	X	X
2.65 m³	2.30 m³	1 720 mm	1 860 mm	5	1 930 kg	⊙	○	—	—	—	X	X
Applicable shoe type						600 mm Triple grouser						
						750 mm Triple grouser						
						900 mm Triple grouser						

⊙ Suitable for materials with density of 1 800 kg/m³ or less.

○ Suitable for materials with density of 1 600 kg/m³ or less.

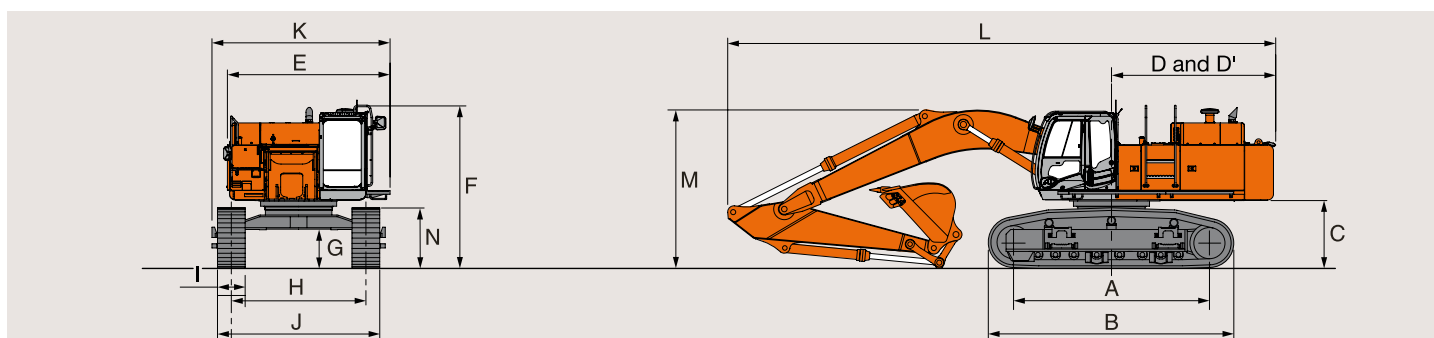
— Not applicable

X Cannot be installed

SPECIFICATIONS / LIFTING CAPACITIES

ZX500LC-3

DIMENSIONS



Unit: mm

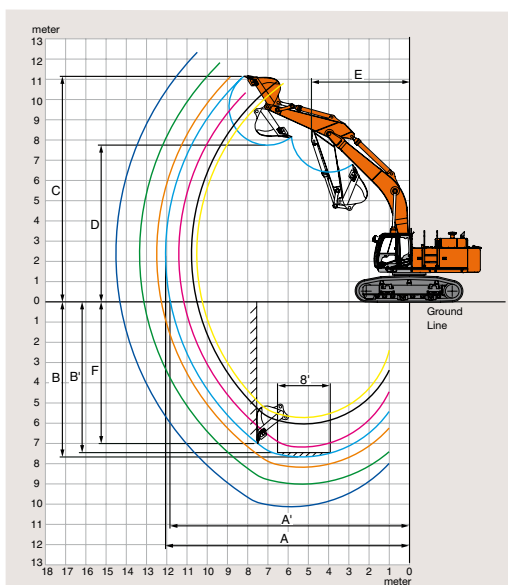
	ZX500LC-3 ^{*2}		
A Distance between tumblers	4 250		
B Undercarriage length	5 330		
^{*1} C Counterweight clearance	1 435		
D Rear-end swing radius	3 645		
D' Rear-end length	3 560		
E Overall width of upperstructure	3 530		
F Overall height of cab	3 410		
^{*1} G Min. ground clearance	720		
H Track gauge: Extended/Retracted	2 920 / 2 420		
I Track shoe width	G 600	G 750	G 900
J Undercarriage width: Extended/Retracted	3 520 / 3 020	3 670 / 3 170	3 820 / 3 590
K Overall width	3 860		
L Overall length	11 890		
M Overall height of boom	3 500		
N Track height	1 290		

^{*1} Excluding track shoe lug.

^{*2} Equipped with 7.0 m boom and 3.4 m arm

WORKING RANGES

Unit: mm



Arm length	ZX500LC-3						
	6.3 m BE-boom		7.0 m boom				8.2 m boom
	2.5 m BE-arm	2.9 m BE-arm	2.9 m arm	3.4 m arm	3.9 m arm	4.9 m arm	4.9 m arm
A Max. digging reach	10 570	10 860	11 400	12 060	12 490	13 340	14 510
A' Max. digging reach (on ground)	10 300	10 600	11 150	11 820	12 270	13 130	14 320
B Max. digging depth	5 820	6 160	7 200	7 690	8 200	9 030	10 150
B' Max. digging depth (8° level)	5 650	6 000	7 000	7 550	8 070	8 920	10 040
C Max. cutting height	10 820	10 960	10 330	11 130	11 240	11 810	12 310
D Max. dumping height	7 290	7 410	7 100	7 730	7 840	8 750	9 290
E Min. swing radius	4 070	3 930	5 020	4 840	4 810	4 850	5 870
F Max. vertical wall	4 550	4 950	5 190	6 510	6 900	8 340	9 330
Bucket digging force ISO*	277 kN (28 300 kgf)	277 kN (28 300 kgf)	277 kN (28 300 kgf)	278 kN (28 400 kgf)	278 kN (28 400 kgf)	231 kN (23 600 kgf)	231 kN (23 600 kgf)
Arm crowd force ISO*	286 kN (29 200 kgf)	249 kN (25 400 kgf)	252 kN (25 700 kgf)	216 kN (22 000 kgf)	195 kN (19 900 kgf)	172 kN (17 600 kgf)	172 kN (17 600 kgf)
Bucket digging force* SAE : PCSA	250 kN (25 500 kgf)	250 kN (25 500 kgf)	247 kN (25 200 kgf)	249 kN (25 400 kgf)	249 kN (25 400 kgf)	207 kN (21 100 kgf)	207 kN (21 100 kgf)
Arm crowd force* SAE : PCSA	277 kN (28 300 kgf)	242 kN (24 700 kgf)	245 kN (25 000 kgf)	209 kN (21 300 kgf)	190 kN (19 400 kgf)	170 kN (17 300 kgf)	170 kN (17 300 kgf)

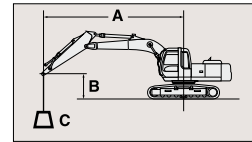
Excluding track shoe lug * At power boost

Metric measure

The lifting capacity is defined by the overload alarm device set pressure.

When the hydraulic pressure reaches the set pressure, the alarm buzzer sounds.

Values in the table are with the overload alarm device switched off and with retracted bucket cylinder.



A: Load radius

B: Load point height

C: Lifting capacity

ZX500LC-3 (WITHOUT BUCKET)



Rating over-front



Rating over-side or 360 degrees

Unit: 1 000 kg

Conditions		Load point height	Load radius																		At max. reach			
			2 m		3 m		4 m		5 m		6 m		7 m		8 m		9 m		10 m					
																								
Boom Arm Shoes 7.0 m 3.4 m 600mm	8														*10.4	*10.4						*7.8	*7.8	8.4
	6											*12.4	*12.4	*11.7	10.9	*11.1	9.0					*7.6	*7.6	9.4
	4					*24.7	*24.7	*19.6	*19.6	*16.3	16.0	*14.2	12.7	*12.8	10.5	*11.8	8.8	*8.0	7.4			*7.8	7.4	10.0
	2							*23.3	19.3	*18.8	14.9	*15.9	12.1	*14.0	10.0	12.2	8.5	*10.4	7.3			*8.4	7.1	10.1
	0(GROUND)					*13.1	*13.1	*24.0	18.7	*19.8	14.4	*16.8	11.6	14.2	9.7	12.0	8.2					*9.6	7.3	9.8
	-2	*13.5	*13.5	*16.7	*16.7	*23.5	*23.5	*22.6	18.7	*19.1	14.2	*16.3	11.5	*14.0	9.6	11.9	8.2					*11.6	8.0	9.1
	-4			*26.0	*26.0	*22.2	*22.2	*19.0	19.0	*16.2	14.5	*13.8	11.7									*11.4	10.0	7.8
	-5					*18.5	*18.5	*16.0	*16.0	*13.5	*13.5											*10.9	*10.9	6.9
Boom Arm Shoes 7.0 m 3.9 m 600mm	8														*10.0	*10.0						*6.4	*6.4	8.9
	6														*10.9	*10.9	*10.4	9.0				*6.3	*6.3	9.9
	4					*23.2	*23.2	*18.1	*18.1	*15.2	*15.2	*13.4	12.7	*12.1	10.4	*11.2	8.7	*9.8	7.4			*6.5	*6.5	10.4
	2					*12.4	*12.4	*22.3	19.4	*18.0	14.9	*15.3	12.0	*13.4	9.9	*12.1	8.4	10.3	7.1			*6.9	6.6	10.5
	0(GROUND)					*14.6	*14.6	*23.8	18.6	*19.4	14.2	*16.4	11.5	14.0	9.5	11.8	8.1	10.1	7.0			*7.9	6.7	10.3
	-2	*12.7	*12.7	*15.8	*15.8	*22.3	*22.3	*22.9	18.4	*19.2	14.0	*16.3	11.3	13.8	9.4	11.7	8.0					*9.6	7.3	9.6
	-4	*21.4	*21.4	*25.9	*25.9	*23.8	*23.8	*20.0	18.6	*16.9	14.1	*14.4	11.4	*12.1	9.5							*11.0	8.9	8.4
	-6					*16.0	*16.0	*13.6	*13.6	*11.2	*11.2											*10.0	*10.0	6.4
-8																								
Boom Arm Shoes 7.0 m 4.9 m 600mm	9																*7.5	*7.5				*5.6	*5.6	9.5
	8																*8.4	*8.4	*6.4	*6.4		*5.5	*5.5	10.2
	6																*9.6	9.6	*8.7	8.1		*5.3	*5.3	11.0
	4											*12.3	*12.3	*11.3	11.0	*10.6	9.2	*10.0	7.8		*5.4	*5.4	11.5	
	2					*23.2	*23.2	*20.5	*20.5	*16.9	15.7	*14.5	12.6	*12.9	10.4	*11.7	8.8	10.8	7.6		*5.7	*5.7	11.6	
	0(GROUND)			*8.6	*8.6	*15.9	*15.9	*23.5	19.2	*19.2	14.8	*16.2	11.9	*14.1	9.9	12.2	8.5	10.5	7.3		*6.3	6.1	11.4	
	-2	*10.5	*10.5	*13.6	*13.6	*19.8	*19.8	*24.0	18.7	*19.8	14.3	*16.8	11.6	14.1	9.7	12.0	8.2	10.3	7.2		*7.2	6.5	10.8	
	-4	*16.8	*16.8	*20.7	*20.7	*27.3	26.8	*22.4	18.7	*18.7	14.3	*16.0	11.5	*13.8	9.6	*11.9	8.2				*9.1	7.4	9.7	
	-6	*25.5	*25.5	*26.6	*26.6	*21.7	*21.7	*18.1	*18.1	*15.3	14.6	*12.8	11.8	*10.3	9.9						*10.0	9.7	8.1	
	-8					*17.1	*17.1	*14.4	*14.4	*11.9	*11.9										*9.4	*9.4	6.9	

Notes: 1. Ratings are based on ISO 10567.

2. Lifting capacity of the ZAXIS Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.

3. The load point is the center-line of the bucket pivot mounting pin on the arm.

4. *Indicates load limited by hydraulic capacity.

5. 0 m = Ground.

EQUIPMENT

ZX500LC-3

STANDARD EQUIPMENT

Standard equipment may vary by country, so please consult your Hitachi dealer for details.

ENGINE

- H/P mode control
- P mode control
- E mode control
- 50 A alternator
- Dry-type air double filter with evacuator valve (with air filter restriction switch for monitor)
- Cartridge-type engine oil filter
- Cartridge-type fuel filter
- Fuel pre-filter
- Radiator, oil cooler and intercooler with dust protective net
- Radiator reserve tank
- Fan guard
- Isolation-mounted engine
- Auto-idle system

HYDRAULIC SYSTEM

- Work mode selector
- Engine speed sensing system
- E-P control system
- Power boost
- Auto power lift
- Boom mode selector system
- Shockless valve in pilot circuit
- Control valve with main relief valve
- Extra port for control valve
- Suction filter
- Full-flow filter
- Pilot filter
- Drain filter
- Quick warm-up system for pilot circuit

CAB

- CRES II cab
- OPG top guard fitted Level I (ISO10262) compliant cab
- All-weather sound suppressed steel cab
- Laminated round glass (green colour) front window
- 6 fluid-filled elastic mounts
- Openable windows ; upper and lower front, and left side
- Intermittent windshield wipers
- Front window washer
- Adjustable reclining suspension seat with adjustable armrests
- Footrest
- Electric double horn
- AM-FM radio with digital clock
- Auto-idle selector
- Retractable Seat belt
- Drink holder
- Cigarette lighter
- Ashtray
- Storage box
- Glove compartment
- Floor mat
- Short wrist control levers
- Pilot control shut-off lever
- Auto control air conditioner
- Pilot control shut-off lever
- Engine shut-off switch
- Transparent roof with slide curtain
- Sun visor

MONITOR SYSTEM

- Display of meters: water temperature, hour, fuel rate, clock
- Other displays: work mode, auto-idle, glow, rearview monitor, operating conditions, etc
- Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, air filter restriction, work mode, overload, etc
- Alarm buzzers: overheat, engine oil pressure, overload

LIGHTS

- 2 working lights

UPPERSTRUCTURE

- Undercover
- 9 820 kg counterweight
- Fuel level float
- Rearview camera
- 170 Ah batteries
- Hydraulic oil level gauge
- Tool box
- Utility space
- Rearview mirror (right & left side)
- Swing parking brake
- Ladder
- Electrical fuel refilling pump with auto-stop
- Auto-grease lubricator (Without bucket and link pins)

UNDERCARRIAGE

- Travel parking brake
- Travel motor covers
- 2 track guards (each side) and hydraulic track adjuster
- Idler track guard
- Bolt-on sprocket
- Upper and lower rollers
- Reinforced track links with pin seals
- 600 mm triple grouser shoes

FRONT ATTACHMENTS

- Flanged pin
- Monolithically cast bucket link A
- Centralized lubrication system
- Dust seal on all bucket pins
- 7.0 m boom and 3.4 m arm
- 2.1 m³ (SAE, PCSA heaped) bucket

MISCELLANEOUS

- Standard tool kit
- Lockable machine covers
- Lockable fuel refilling cap
- Skid-resistant tapes, plates and handrails
- Travel direction mark on track frame
- Onboard information controller
- Theft deterrent system

OPTIONAL EQUIPMENT

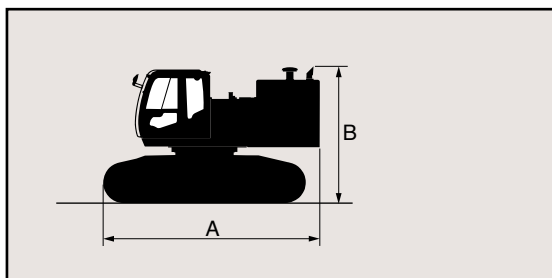
Optional equipment may vary by country, so please consult your Hitachi dealer for details.

- H/R cab : OPG top guard fitted
Level II (ISO10262) compliant cab
(with 2 cab lights)
- Hose rupture valves
- Swing motion alarm device with
lamps
- Travel motion alarm device
- Biodegradable oil
- Extinguisher
- Pre cleaner
- Additional 2 cab lights
- Rain guard for cab
- Attachment basic piping
- 12 V power source
- Additional fuse box
- Overload alarm
- Front glass lower guard
- Front glass upper guard
- Full track guard
- 750 mm Triple grouser shoe
- 900 mm triple grouser shoe
- Air suspension seat with heater
- Suspension seat with heater
- Additional working light
(boom right side)
- Track under cover
- Reinforced link B
- Fan reverse device
- 7.0 m H-boom
- 6.3 m BE-boom
- 2.5 m BE-arm
- 2.9 m BE-arm
- 3.4 m H-arm
- 2.9 m arm
- 3.9 m arm
- 4.9 m arm

TRANSPORTATION

TRANSPORTATION

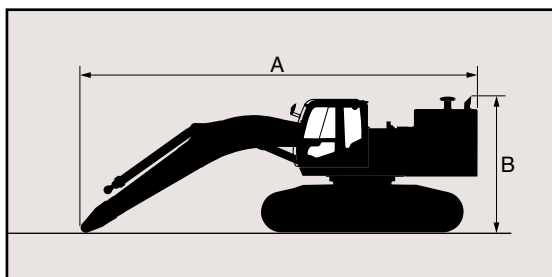
BASIC MACHINE (WITHOUT COUNTERWEIGHT)



	Shoe width	Overall width*	Weight	A	B
ZX500LC-3	600 mm	3 060 mm	30 800 kg	5 400 mm	3 500 mm
	750 mm	3 170 mm	31 500 kg		
	900 mm	3 320 mm	32 300 kg		
ZX520LCH-3	600 mm	3 060 mm	31 900 kg	5 620 mm	3 520 mm
	750 mm	3 170 mm	32 200 kg		
	900 mm	3 320 mm	32 900 kg		

Note: Undercarriage retracted

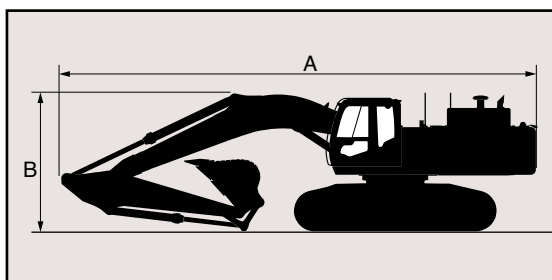
BASIC MACHINE FITTED WITH BOOM AND NO SIDEWALK



	Boom length	Shoe width	Overall width*	Weight	A	B
ZX500LC-3	6.3 m BE	600 mm	3 060 mm	36 000 kg	9 060 mm	3 500 mm
		750 mm	3 170 mm	36 800 kg		
		900 mm	3 320 mm	37 600 kg		
	7.0 m	600 mm	3 060 mm	35 600 kg	9 850 mm	
		750 mm	3 170 mm	36 400 kg		
		900 mm	3 320 mm	37 100 kg		
ZX520LCH-3	6.3 m BE	600 mm	3 060 mm	39 800 kg	9 060 mm	3 520 mm
		750 mm	3 170 mm	40 000 kg		
		900 mm	3 320 mm	40 700 kg		
	7.0 m H	600 mm	3 060 mm	39 700 kg	9 850 mm	
		750 mm	3 170 mm	39 900 kg		
		900 mm	3 320 mm	40 600 kg		

Note: Undercarriage retracted

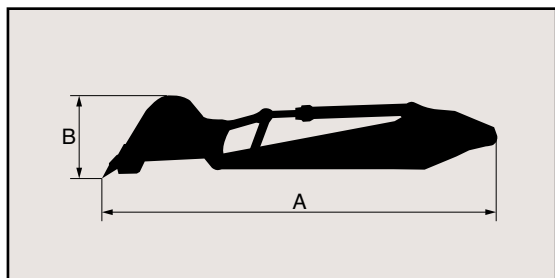
BASIC MACHINE WITH FRONT AND SIDEWALK



Boom length		6.3 m BE		7.0 m				7.0 m H		8.2 m
Arm length		2.5 m BE	2.9 m BE	2.9 m	3.4 m	3.9 m	4.9 m	2.9 m BE	3.4 m H	4.9 m
ZX500LC-3	A	11 400 mm	11 220 mm	11 980 mm	11 890 mm	11 890 mm	11 800 mm	—	—	13 110 mm
	B	4 100 mm	3 980 mm	3 620 mm	3 500 mm	3 500 mm	4 680 mm	—	—	4 450 mm
ZX520LCH-3	A	11 400 mm	11 270 mm	—	—	—	—	11 980 mm	11 890 mm	—
	B	4 100 mm	3 980 mm	—	—	—	—	3 500 mm	3 500 mm	—

TRANSPORTATION

BUCKET



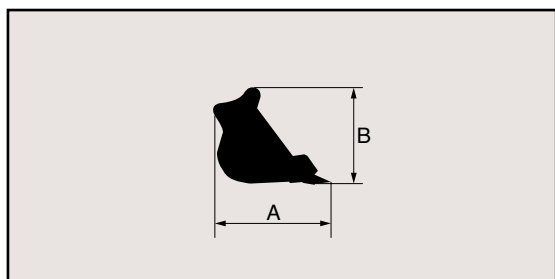
ZX500LC-3

Arm	Bucket SAE, PCSA heaped	A	B	Overall width	Weight
2.5 m BE	2.50 m³	5 650 mm	1 470 mm	1 770 mm	5 000 kg
2.9 m	2.30 m³	6 030 mm	1 340 mm	1 660 mm	4 200 kg
2.9 m BE	2.30 m³	6 030 mm	1 340 mm	1 700 mm	4 660 kg
3.4 m	1.90 m³	6 430 mm	1 270 mm	1 540 mm	3 920 kg
	2.10 m³	6 430 mm	1 270 mm	1 630 mm	3 980 kg
3.9 m	1.90 m³	6 930 mm	1 270 mm	1 540 mm	4 230 kg
4.9 m	1.40 m³	7 760 mm	1 170 mm	1 410 mm	3 720 kg

ZX520LCH-3

Arm	Bucket SAE, PCSA heaped	A	B	Overall width	Weight
2.5 m BE	2.50 m³	5 650 mm	1 470 mm	1 820 mm	5 490 kg
2.9 m BE	2.30 m³	6 030 mm	1 340 mm	1 700 mm	4 660 kg
3.4 m H	1.90 m³	6 370 mm	1 470 mm	1 500 mm	4 630 kg

BUCKET



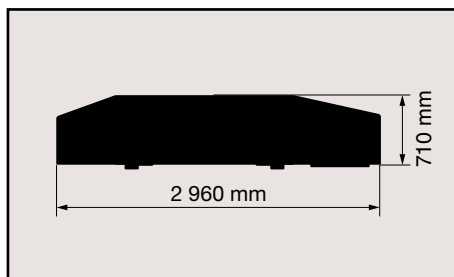
ZX500LC-3 (Hoe bucket)

Bucket		A	B	Overall width	Weight
PCSA heaped	CECE heaped				
1.15 m³	1.00 m³	1 800 mm	1 350 mm	1 210 mm	1 070 kg
1.40 m³	1.20 m³	1 800 mm	1 350 mm	1 410 mm	1 170 kg
1.60 m³	1.40 m³	1 960 mm	1 570 mm	1 360 mm	1 480 kg
1.90 m³	1.70 m³	1 960 mm	1 570 mm	1 540 mm	1 590 kg
2.10 m³	1.80 m³	1 960 mm	1 570 mm	1 630 mm	1 650 kg
2.30 m³	2.00 m³	1 950 mm	1 660 mm	1 660 mm	1 800 kg
2.50 m³	2.20 m³	1 950 mm	1 660 mm	1 770 mm	1 870 kg
2.65 m³	2.30 m³	1 950 mm	1 660 mm	1 860 mm	1 930 kg

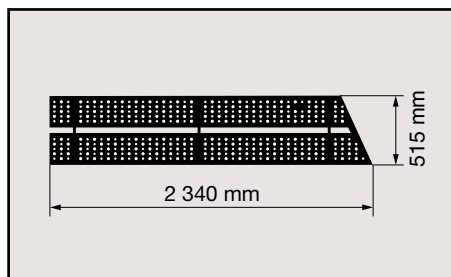
ZX520LCH-3 (Rock bucket)

Bucket		A	B	Overall width	Weight
PCSA heaped	CECE heaped				
1.90 m³	1.70 m³	2 030 mm	1 480 mm	1 500 mm	2 070 kg
2.10 m³	1.80 m³	1 950 mm	1 650 mm	1 580 mm	2 170 kg
2.30 m³	2.00 m³	1 950 mm	1 650 mm	1 700 mm	2 260 kg
2.50 m³	2.20 m³	1 950 mm	1 650 mm	1 820 mm	2 360 kg

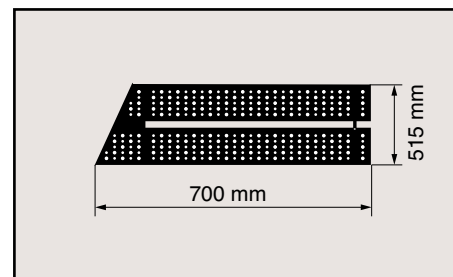
COUNTERWEIGHT 9 820 kg
Overall height: 410 mm



LEFT SIDEWALK 44 kg
Overall height: 150 mm



LEFT SIDEWALK 30 kg
Overall height: 150 mm



Prior to operating this machine, including satellite communication system, in a country other than a country of its intended use, it may be necessary to make modifications to it so that it complies with the local regulatory standards (including safety standards) and legal requirements of that particular country. Please do not export or operate this machine outside the country of its intended use until such compliance has been confirmed. Please contact your Hitachi dealer in case of questions about compliance.

These specifications are subject to change without notice.

Illustrations and photos show the standard models, and may or may not include optional equipment, accessories, and all standard equipment with some differences in colour and features. Before use, read and understand the Operator's Manual for proper operation.