HITACHI

Reliable solutions

ZAXIS 690





HYDRAULIC EXCAVATOR

Model Code: ZX670LC-5A / ZX690LCH-5A Engine Rated Power: 345 kW (463 HP) Operating Weight: ZX670LC-5A : 66 900 kg ZX690LCH-5A: 68 200 kg Backhoe Bucket ISO Heaped: 2.5 - 4.0 m³

WALK AROUND

CONTENTS

4-5 More Production with Excellent Performance

- Swift Front Movements with HIOS* IIIB Hydraulics
- In Pursuit of Yielding More Production
- Reduction in Fuel Consumption
- · More Fuel Reduction in the ECO mode
- · Easy-to-Use Attachments

6-7 High Quality and Durability

- Prestige R&D and Quality Control
 All-New Engine with Enhanced
- Durability and Reliability
- Rock-Solid, Durable Front Attachment
 Tough Undercarriage on Rough
- Quarry Sites
- · Robust Upperstructure

8-9 No Compromise on Operator Comfort

- · Comfortable operating environment
- · Comfort-designed operator seat
- · Robust cab
- New, easy-to-use multifunction monitor

10-11 Simplified Maintenance

- · Grouped Remote Inspection Points
- · Fast Lubrication
- · Easy-Access to the Upperstructure
- · Large Capacity Fuel Tank
- · Service intervals

12-13 Hitachi Support Chain

A wide range of after-sales services and support options is available to all our customers.

14-24 Specifications

Higher productivity

The HIOS IIIB hydraulic system achieves higher productivity with better fuel consumption than the conventional ZAXIS model, which helps to reduce costs.

Larger swing power

The increased swing torque makes it easier to dig next to side walls and operate on slopes.

Added durability

With a strengthened boom, arm and H/R cab, the ZAXIS 690 can work for lengthy periods in rugged environments.

Faster movement

The new hydraulic system increases the front attachment speed during combined and single operation.

ZA/IS Empower your Vision.

New ZAXIS provides reliable solutions: impressive fuel economy, swift front movements, and easy operation. You'll also find Hitachi technological prowess and expertise, such as the optimized hydraulic system and engine.

New ZAXIS features the key benefits of high quality, low fuel consumption, and high durability, all of which serve to ensure low running costs.

New ZAXIS, which is empowered by comprehensive evolution, will realize customers' visions and dreams, and pioneer your colorful future.

Expanded leg room

The seat and console can slide further back on the new ZAXIS, providing a more comfortable working environment for the operator. The rightside console has been ergonomically re-designed.

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Ultimate comfort

The heated air suspension seat is ideal in cold climates and absorbs vibration during operation minimising operator fatigue.

Easily accessible information

The large multi-function LCD monitor screen is easy to view in bright sunlight or darkness and provides technical data.

ZANS

Quick and easy service access

The air conditioner condenser can be opened for easy cleaning. Inspection parts are conveniently located.



MORE PRODUCTION WITH EXCELLENT PERFORMANCE

Our customers expect a consistently high level of performance from their large Hitachi excavators, whether they are working on largescale construction projects or busy quarries. In order to meet those expectations, Hitachi engineers designed the new ZAXIS 690 with a variety of measures intended to increase speed and efficiency, and therefore maximise production levels on any job site.



Delivering consistently high levels of performance



Swift Front Movements with HIOS* IIIB Hydraulics

The HIOS IIIB hydraulic system is designed for efficient use of hydraulic oil pressure in the circuit, by eliminating loss of power and fuel. Swift movements of the front attachment can be achieved by a total control of the boom, arm and bucket regeneration system. This Hitachi technological prowess brings about high performance and fuel economy.

In Pursuit of Yielding More Production

New ZAXIS 690 delivers extra power in excavation and swinging. More specifically, a great swing torque. This boosts productivity in mining operation. The machine powerfully moves the bucket, full of crushed stones, around on mines, and swiftly loads them onto a dump truck. What's more, the power boost mechanism is added to ensure powerful mining.

Reduction in Fuel Consumption**

New ZAXIS is a fuel-thrifty excavator that can reduce fuel consumption compared to the conventional model, thanks to the HIOS IIIB hydraulic system and engine control system, thereby reducing CO₂ emissions.

More Fuel Reduction in the ECO mode

The ECO mode, a new economical mode, can further cut fuel consumption by 11% compared to the PWR mode, without sacrificing digging force by optimal matching of operations.

Easy-to-Use Attachments

The operator can change over valves, adjust extra circuit flow, and check settings from the multifunction monitor next to the operator seat. What's more, 11 jobs, including flow rate setting, can easily be selected by their identified names.

*Human & Intelligent Operating System **8% decreased compared to the ZX650-3 at P mode

Key features

Swift Front Movements with HIOS* IIIB Hydraulics

In Pursuit of Yielding More Production

Reduction in Fuel Consumption

More Fuel Reduction in the ECO mode

Easy-to-Use Attachments

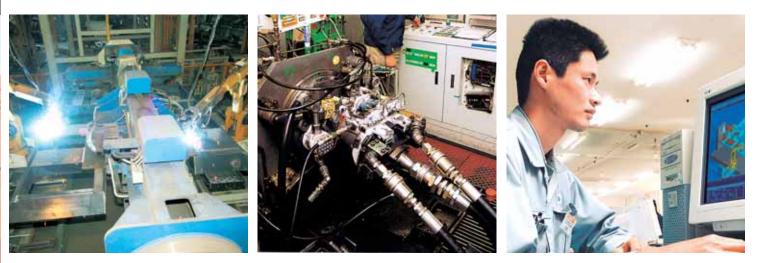


HIGH QUALITY AND DURABILITY

One of the reasons why customers choose Hitachi is our reputation for producing reliable, durable and high-quality construction equipment. Like all other Hitachi large excavators, the ZAXIS 690 benefits from our advanced technology and manufacturing expertise gained over more than four decades. So it can be relied upon to perform in the toughest quarries and other job sites.



Hitachi large excavators are built to last



Prestige R&D and Quality Control

Hitachi has earned praise for technological prowess and product performance around the world.

R&D Division has a track record – including excellent design, stress analysis expertise using CAE system, and abundant production data base. What's more, a large-scale durability test field (427 hm²) allows for a series of stringent testing of new machines.

Production Division strives to automatize production processes, including robotic welding, machining, painting, assembling and transferring.

All-New Engine with Enhanced Durability and Reliability

To boost durability and reliability in harsh mining operations, the engine is newly devised, while redesigning its associated systems, such as fuel and coolant lines. This gives an edge in durability. The auto idle stop mechanism is combined to effectively cut fuel consumption and CO₂ emissions.

Rock-Solid, Durable Front Attachment

A very robust and durable boom and arm are adopted for the Front Attachment, allowing it to function optimally at tough job sites such as mines / quarries, where an endless stream of operations is required. The new ZAXIS adopts H-boom and H-arm, using thick plates for high durability. The arm also includes a damage prevention plate and square bars; improving its durability. The arm cylinder, boom cylinders and bucket cylinder for the retract side cushion shocks at the stroke ends to reduce noise and extend the service life.

Tough Undercarriage on Rough Quarry Sites

Tracks are rugged enough to move around on uneven quarry site, with power and stability.

Idler brackets are of box-section structure, and strengthened with reinforcing plates to withstand high stresses and resist deformation. The two-step ladders on the side allow easy access to the cab and riding on the machine.

Robust Upperstructure

The upperstructure is reinforced with proven D-section skirt for protection against obstacles, reducing deformation. A large door catch is provided to reduce shocks and jolts from the cab and upperstructure.

Key features

Prestige R&D and Quality Control

All-New Engine with Enhanced Durability and Reliability

Rock-Solid, Durable Front Attachment

Tough Undercarriage on Rough Quarry Sites

Robust Upperstructure

ZAXIS 690



NO COMPROMISE ON OPERATOR COMFORT

The comfort and safety of those who operate Hitachi large excavators were among the top design priorities of our engineers. That's why the cab for the new ZAXIS 690 has been carefully created to incorporate a variety of user-friendly features and offers all-round visibility. This has resulted in a pleasant and secure working environment for any job site, and an operator experience that is second to none.



Comfort and safety come first with Hitachi



From the comfort of the cab

It's essential for you to feel comfortable while you work, especially if you are operating an excavator for lengthy periods of time in a quarry or large-scale construction site. Hitachi has reviewed the ergonomic design of its ZAXIS excavator cab to ensure that you can complete your shift with ease and enjoy the rest of your day.

The fully adjustable air-suspension seat absorbs vibrations and helps to minimise operator fatigue. Its new sliding mechanism means that it can be moved back further than ever before. More leg room is also available as the space underneath the monitor has been expanded. The pressurized cab keeps dust and particles from entering.

Enhanced visibility

Healthy and safety are of paramount importance in busy quarries and construction sites. With the latest innovations from Hitachi, the new ZAXIS offers enhanced visibility, particularly on the right-hand side of the machine, to help you avoid any unnecessary damage, and ultimately save you time and money.

The monitor and door have been repositioned, which improves your view and provides easier access to the cab. The excavator is also equipped with the latest rear-view camera, giving you a broader visual range.

User-friendly functionality

The advanced technology that is incorporated within the new ZAXIS is one of its many advantages. The ergonomic controls and the easy to view colour monitor place the power firmly in your hands.

The new multi-function LCD monitor with a seven-inch screen displays a comprehensive range of useful technical information. It allows you to check the machine's status and settings at a glance and has multi-lingual support in up to 32 languages.

For easy operation, the monitor and ergonomically designed switches have been repositioned and are both conveniently located on the right-hand side of the cab.

Enjoy your work

By creating a relaxed and pleasant workspace, our aim was to make your day in the cab of the new ZAXIS more enjoyable and therefore more satisfying.

If you enjoy listening to the radio as you work, you will find that the controls for the AM/FM stereo radio are now fully adjustable from the colour monitor. Alternatively, if you wish to plug in an MP3 player, an auxiliary terminal and MP3 player storage has also been added to the sound system, so that you can work smoothly and efficiently to your favourite music.

Key features

Fully adjustable excellent cab

- Enhanced visibility
- New colour LCD monitor
- Auxiliary terminal and MP3 player storage

- Easily accessible real-time information
- Expansive leg room
- Ergonomically designed control panel

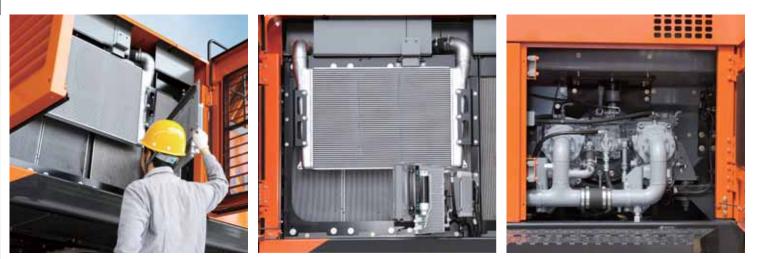


SIMPLIFIED MAINTENANCE

Time is precious on any large-scale construction site or quarry. So the quicker and easier it is to maintain Hitachi large excavators, the sooner our customers can focus on the task at hand. The new ZAXIS 690 has a range of easily accessible features to allow for quick and easy routine maintenance and cleaning, helping to ensure maximum uptime and providing peace of mind that your machine is performing at optimum capacity.



Quicker and easier to maintain than ever before



Grouped Remote Inspection Points

Inspection points are concentrated inside left and right covers that are readily accessible from ground level for convenient servicing and inspection, including water draining from the fuel tank, replenishment of filters. A lid behind the cab door is available for easy replacement of the air conditioner filters for fresh air.

Fast Lubrication

The arm and boom have their own centralized greasing points for fast lubrication. An electric grease gun with hose-reel or an optional auto-grease lubricator is also available for faster greasing / lubrication.

Easy-Access to the Upperstructure

A large sidewalk is provided on the left side of the cab, making it easy to access the engine from the ladder while handrails are provided and sufficient slip-resistant plates for safety.

Large Capacity Fuel Tank

Equipped with a large capacity fuel tank for longer operations.

Key features

Grouped Remote Inspection Points

- Fast Lubrication
 - Easy-Access to the Upperstructure
- Large Capacity Fuel Tank



SUPPORT CHAIN

As soon as you become a Hitachi customer, you can rely on first-class after-sales service from your authorised dealer. Hitachi provides extensive support to each of the dealers within the global network, so that they can ensure your ZAXIS 690 continues to meet your requirements and exceed expectations. To further protect your investment in Hitachi construction machinery, we have introduced the Hitachi Support Chain after-sales programme. This gives you the flexibility to create a tailor-made service plan from the following key-areas, "links" in the chain of service available from Hitachi via your local dealer.







Flexible after-sales programme to protect your investment

Global e-Service

The new ZAXIS excavator is equipped with a GPRS communication system^{*}. This sends a wide range of machine data to the Hitachi main server. Via the Global e-Service database, you will have remote access to all of this data. All you need is an internet connection and your Global e-Service log-in details.

Global e-Service enables you and your dealer to download and share this data, helping you to remotely manage your fleet. The online facility also helps your dealer to proactively advise you on preventive maintenance and related special offers.

The latest information on the ZAXIS excavator is available 24/7 and includes operational data, such as the number of working hours, fuel consumption figures, working modes and location. This helps you to reduce running costs, plan jobs efficiently and keep up to date with machine maintenance – to ensure optimum performance and minimal downtime.

Technical support

The professional and highly trained Hitachi service team combine the global expertise and knowledge of Hitachi Construction Machinery with your local language and culture. We take a proactive approach towards customer service by continuously training our dealer personnel, so that the available global knowledge is passed on to each individual technician in our dealer network.

Extended warranty and service contracts

Every new Hitachi model is covered by a full manufacturer's warranty. However, your ZAXIS excavator may require extra protection due to severe working conditions or to minimise equipment repair costs. To meet these demands, our dealers offer the option of a unique extended warranty programme (HELP – Hitachi Extended Life Program) and comprehensive service contracts – the most effective way to optimise the performance of your new ZAXIS excavator.

Parts and Remanufactured Components

Hitachi offers different lines of parts and components to suit your specific needs. In addition to our range of genuine parts, there are other options available:

- If your machines have been working for several years, Hitachi can offer a second line of genuine parts as an attractively priced solution.
- For that highly demanding application or climate, Hitachi provides a line of parts with extra performance.
- When you are looking for an economical solution for preventive replacements, remanufactured components are the best option.

Whatever choice you make, you can be assured of the renowned Hitachi quality and warranty to give you added peace of mind.

Your Hitachi dealer can supply you with more details on each of the above parts lines.



* The GPRS communication system is standard equipment for new ZAXIS excavators, however, the availability of the communication system depends on licensing regulations in your country. Please contact your Hitachi dealer for more information or to apply for a Global e-Service account.

Key features

Check each of your machines from your office – 24/7

Have a remote insight into fuel consumption

- Check the current and previous locations and movements of your machine(s)
- See maintenance status and items due for renewal on each of your machines
- Receive e-mail notifications for any machine alerts, unexpected movements and so on

SPECIFICATIONS

ENGINE

Model	Isuzu GH-6WG1XKSA-02
Туре	4-cycle water-cooled, direct injection
Aspiration	Turbocharged, intercooled
No. of cylinders	6
Rated power	
ISO 14396	H/P mode:
	345 kW (463 HP) at 1 800 min ⁻¹ (rpm)
SAE J1349, net	H/P mode:
(Without Fan)	345 kW (463 HP) at 1 800 min ⁻¹ (rpm)
Maximum torque	1 980 Nm (202 kgf m) 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

Hydraulic Pumps

Main pumps	2 variable displacement axial piston pumps
Maximum oil flow	2 x 489 L/min
Pilot pump	1 gear pump
Maximum oil flow	50 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	29.4 MPa (300 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

	Quantity	Bore	Rod diameter
Boom	2	190 mm	130 mm
Arm	1	200 mm	140 mm
Bucket	1	180 mm	130 mm
Bucket BE	1	190 mm	130 mm

UPPERSTRUCTURE

Revolving Frame

D-section frame for resistance to deformation.

Swing Device

Axial piston motor with planetary reduction gear is bathed in oil. Swing parking brake is spring-set/hydraulic-released disc type.

Swing speed	 9.0 min ⁻¹ (rpm)
Swing torque	 194 kNm

Operator's Cab ZAXIS 670LC:

Independent spacious cab, 1 025 mm wide by 1 675 mm high, The OPG top guard fitted Level I conforms to the related requirements of the International Organization Standardization(ISO)10262.

ZAXIS 690LCH (H/R cab):

Independent spacious cab, 1 025 mm wide by 1 817 mm high, The OPG top guard fitted Level II conforms to the related requirements of the International Organization Standardization(ISO)10262.

UNDERCARRIAGE

Tracks

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

3
8
47
1
2 : ZAXIS 670LC
Full track guard : ZAXIS 690LCH

Travel Device

Maximum traction force ... 460 kN (46 900 kgf)

Gradeability 70% (35 degree) continuous

SERVICE REFILL CAPACITIES

Fuel tank	
Engine coolant	
Engine oil	57.0 L
Pump device	6.2 L
Swing device (each side)	10.5 L
Travel device (each side)	16.0 L
Hydraulic system	750.0 L
Hydraulic oil tank	

WEIGHTS AND GROUND PRESSURE

Operating Weight and Ground Pressure

				ZAXIS	670LC	ZAXIS	590LCH
Shoe type	Shoe width	Boom type	Arm type	kg	kPa (kgf/cm²)	kg	kPa (kgf/cm²)
		BE 6.8 m	BE 2.9 m	67 700	102 (1.04)	69 100	104 (1.06)
		Bucket capacity		3.5 m ³		Rock bucket 4.0 m ³	
	650 mm	7.8 m	3.6 m	66 900	100 (1.02)	68 200	102 (1.04)
	050 11111	Bucket	capacity	2.9	m ³	Rock buc	ket 2.9 m³
		7.8 m	4.2 m	67 000	101 (1.03)	-	-
		Bucket	capacity	2.5	m ³		-
		BE 6.8 m	BE 2.9 m	68 100	89 (0.90)	-	-
		Bucket capacity		3.5 m ³			-
Double	750 mm	7.8 m	3.6 m	67 200	87 (0.89)	-	-
Double	750 1111	Bucket capacity		2.9 m ³			-
		7.8 m	4.2 m	67 400	88 (0.89)	-	-
		Bucket	capacity	2.5	m ³		-
		BE 6.8 m	BE 2.9 m	69 100	75 (0.76)	-	-
		Bucket	capacity	3.5	m ³		-
	900 mm	7.8 m	3.6 m	68 300	74 (0.75)	-	-
	900 11111	Bucket capacity		2.9	2.9 m ³		-
		7.8 m	4.2 m	68 400	74 (0.76)	-	-
		Bucket	capacity	2.5	m ³		-

BUCKET LIST

ZAXIS 670LC

Capacity	Wie	Width Recommendation					
ISO	Without side	With side		No. of Weight	BE-boom 6.8 m	Boom	7.8 m
heaped	cutters	cutters			BE-arm 2.9 m	Arm 3.6 m	Arm 4.2 m
2.50 m ³	1 480 mm	1 620 mm	5	2 150 kg	x	Ø	O
2.90 m ³	1 680 mm	1 820 mm	5	2 310 kg	x	Ø	х
3.50 m ³	1 800 mm	1 990 mm	5	2 980 kg	Ø	x	х
					Double grouser 650 mm		
Applicable shoe type			Double grouser 750 mm				
				Double grouser 900 mm			

 $\ensuremath{\textcircled{O}}$ Suitable for material with density of 1 800 kg / $m^{\scriptscriptstyle 3}$ or less

Not applicable
 x Can't be installed

ZAXIS 690LCH

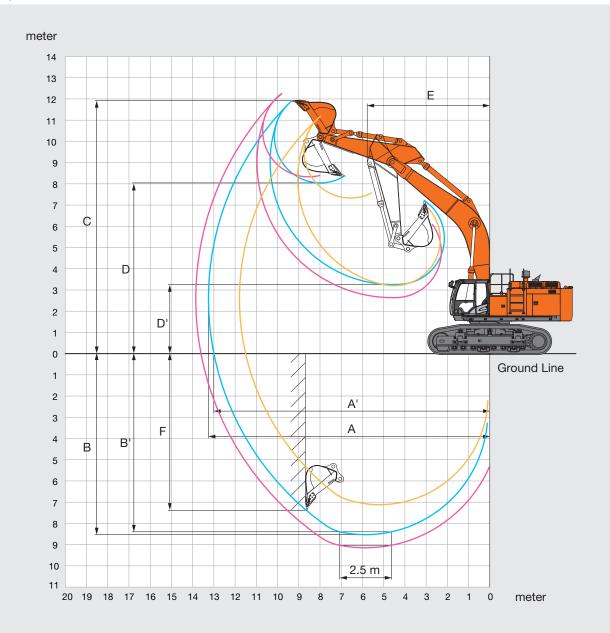
Capacity	Wie	dth		Recommendation		
ISO	Without side	With side	No. of teeth	Weight	BE-boom 6.8 m	H-boom 7.8 m
heaped	cutters	cutters			BE-arm 2.9 m	H-arm 3.6 m
2.90 m ³	1 680 mm	1 680 mm	5	2 850 kg	x	•
3.30 m ³	1 790 mm	1 790 mm	5	3 120 kg	•	x
4.00 m ³	1 950 mm	1 970 mm	5	3 700 kg	•	x
Applicable shoe type				Double grou	Iser 650 mm	

Heavy-duty service
Not applicable
x Can't be installed

SPECIFICATIONS

WORKING RANGES

ZAXIS 670LC

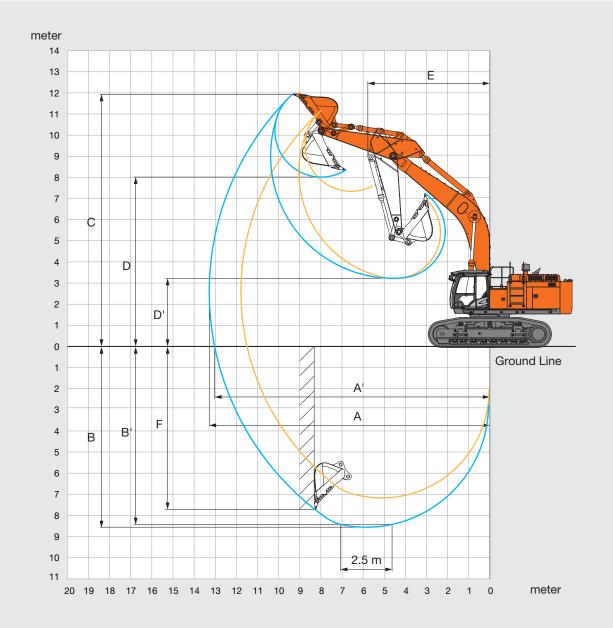


Unit: mm ZAXIS 670LC BE-boom 6.8 m Boom 7.8 m Arm 3.6 m BE-arm 2.9 m Arm 4.2 m 11 800 A Max. digging reach 13 250 13 850 A' Max. digging reach (on ground) 11 500 13 000 13 610 B Max. Digging depth 7 120 8 530 9 150 B' Max. Digging depth for 2.5 m level 6 960 8 390 9 020 C Max. cutting height 11 190 11 920 12 240 D Max. dumping height 7 330 8 050 8 330 D' Min. dumping height 3 200 3 260 2 640 E Min. swing radius 5 2 4 0 5 780 5 760 F Max. vertical wall 5 280 7 380 8 180

Excluding track shoe lug

WORKING RANGES

ZAXIS 690LCH

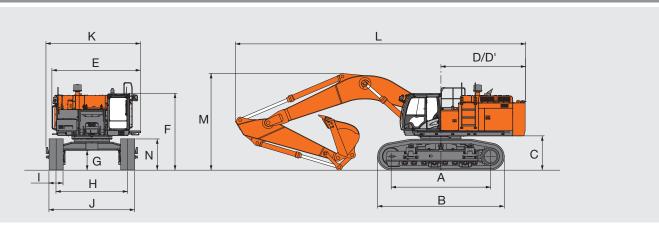


Unit: mm ZAXIS 690LCH BE-boom 6.8 m H-boom 7.8 m BE-arm 2.9 m H-arm 3.6 m A Max. digging reach 11 780 13 280 A' Max. digging reach (on ground) 11 490 13 030 B Max. Digging depth 7 170 8 560 B' Max. Digging depth for 2.5 m level 7 010 8 420 C Max. cutting height 11 150 11 940 D Max. dumping height 7 340 8 0 2 0 D' Min. dumping height 3 210 3 2 3 0 E Min. swing radius 5 240 5 780 F Max. vertical wall 5 050 7 720

Excluding track shoe lug

SPECIFICATIONS

DIMENSIONS



Unit: mm

Retractable ga	auge	ZAXIS 670LC	ZAXIS 690LCH		
A Distance between tumblers		4 590	4 590		
B Undercarriage length		5 840	5 840		
^{*1} C Counterweight clearance		1 530	1 530		
D Rear-end swing radius		4 020	4 020		
D' Rear-end length		3 910	3 910		
E Overall width upperstructure	Э	4 090	4 090		
F Overall height of cab		3550	3 660		
^{*1} G Min. ground clearance		860	860		
H Track gauge : Extended / Re	etracted	3 300 / 2 830	3 300 / 2 830		
I Track shoe width		650 / 750 / 900	650		
J Undercarriage width	with 650 mm shoe	3 950 / 3 480	3 950 / 3 480		
:Extended / Retracted	with 750 mm shoe	4 050 / 3 580	-		
	with 900 mm shoe	4 200 / 3 730	-		
K Overall width		4 360	4 360		
L Overall length		13 400	13 400		
M Overall height of boom		4 460	4 460		
N Track height		1 440	1 440		

^{*1} Excluding track shoe lug

BUCKET AND ARM DIGGING FORCES

ZAXIS 670LC

	BE-boom 6.8 m	Boom 7.8 m			
	BE-arm 2.9 m	Arm 3.6 m	Arm 4.2 m		
Bucket digging force* ISO	369 kN (37 700 kgf)	324 kN (33 100 kgf)	324 kN (33 100 kgf)		
Bucket digging force*SAE : PCSA	332 kN (33 900 kgf)	290 kN (29 600 kgf)	290 kN (29 600 kgf)		
Arm crowd force* ISO	306 kN (31 200 kgf)	255 kN (26 000 kgf)	231 kN (23 600 kgf)		
Arm crowd force* SAE : PCSA	297 kN (30 300 kgf)	247 kN (25 200 kgf)	224 kN (22 900 kgf)		

* At power boost

ZAXIS 690LCH

	BE-boom 6.8 m	H-boom 7.8 m
	BE-arm 2.9 m	H-arm 3.6 m
Bucket digging force* ISO	369 kN (37 700 kgf)	324 kN (33 100 kgf)
Bucket digging force*SAE : PCSA	332 kN (33 900 kgf)	286 kN (29 200 kgf)
Arm crowd force* ISO	306 kN (31 200 kgf)	255 kN (26 000 kgf)
Arm crowd force* SAE : PCSA	297 kN (30 300 kgf)	246 kN (25 100 kgf)

* At power boost

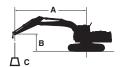
LIFTING CAPACITIES (Without bucket)

Notes: 1. Ratings are based on ISO 10567.

- Lifting care based on ISO 10607.
 Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
 The load point is the center-line of the bucket pivot mounting pin on the arm.
 *Indicates load limited by hydraulic capacity.

- 5. 0 m = Ground.

For lifting capacities, subtract bucket and quick hitch weight from lifting capacities without bucket.



A: Load radius B: Load point height C: Lifting capacity

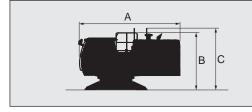
– Й г	Rating over-front	ث⊒≕	Rating over-side or 360 degrees	Unit : ka

ZAXIS 670LC									Ü Rati	ing over-fro	nt 🛱	Rating o	over-side	e or 360 de	egrees	Unit : kg
	Load						Load	radius								
Conditions	point	3.	0 m	4.5	5 m	6.0) m	7.5	5 m	9.0) m	10.	5 m	At	max. reac	n
	height m	ů	œ≕	ů	œ⊸	ů	∷ ≕	Ů	a	ů	₽	ů	¢≕	ů	⇔	meter
Boom 7.8m	7.5									*13 620	13 490			*10 210	*10 210	9.92
Arm 3.6m	6.0							*15 780	*15 780	*14 280	13 160	*10 730	10 160	*10 250	10 090	10.5
Without Bucket	4.5					*21 680	*21 680	*17 580	16 760	*15 270	12 710	13 780	9 960	*10 540	9 320	10.9
Shoes 650mm	3.0					*24 830	21 970	*19 390	15 960	*16 330	12 240	13 510	9 700	*11 080	8 910	11.1
	1.5					*26 880	20 950	*20 810	15 300	16 650	11 830	13 260	9 460	*11 940	8 790	11.0
	0 (Ground)			*16 490	*16 490	*27 610	20 430	21 390	14 870	16 330	11 530	13 080	9 300	12 600	8 960	10.8
	-1.5			*25 200	*25 200	*27 220	20 260	21 160	14 660	16 170	11 390			13 390	9 500	10.3
	-3.0	*24 420	*24 420	*32 800	32 540	*25 760	20 330	*20 630	14 660	16 210	11 420			14 930	10 570	9.56
	-4.5	*35 650	*35 650	*28 790	*28 790	*22 970	20 650	*18 320	14 910					*15 400	12 650	8.48
	-6.0			*22 390	*22 390	*17 820	*17 820							*14 830	*14 830	6.92
Boom 7.8m	7.5									*12 620	*12 620	*9 290	*9 290	*8 650	*8 650	10.6
Arm 4.2m	6.0									*13 390	13 310	*12 660	10 290	*8 660	*8 660	11.2
Without Bucket	4.5					*20 000	*20 000	*16 490	*16 490	*14 460	12 820	*13 210	10 030	*8 860	8 560	11.5
Shoes 650mm	3.0					*23 350	22 270	*18 430	16 090	*15 620	12 300	13 540	9 730	*9 250	8 190	11.7
	1.5					*25 850	21 040	*20 060	15 330	*16 650	11 830	13 230	9 440	*9 880	8 070	11.6
	0 (Ground)					*27 120	20 320	*21 110	14 790	16 260	11 460	13 000	9 220	*10 820	8 200	11.4
	-1.5					*27 230	20 000	20 980	14 490	16 030	11 250	12 870	9 100	12 170	8 6 1 0	10.9
	-3.0			*32 770	31 840	*26 280	19 970	20 890	14 410	15 970	11 200			13 360	9 4 4 0	10.2
	-4.5			*30 800	*30 800	*24 110	20 190	*19 260	14 550	*15 250	11 370			*14 540	10 990	9.25
	-6.0			*25 430	*25 430	*20 130	*20 130	*15 560	15 020					*14 410	14 150	7.85
BE-Boom 6.8m	7.5							*16 810	*16 810					*13 560	*13 560	8.22
BE-Arm 2.9m	6.0					*19 710	*19 710	*17 550	17 480					*13 250	13 000	8.97
Without Bucket	4.5					*22 640	*22 640	*18 960	16 850	*17 010	12 690			*13 380	11 790	9.41
Shoes 650mm	3.0					*25 600	22 390	*20 520	16 170	17 200	12 350			*13 910	11 200	9.60
	1.5					*27 590	21 450	*21 730	15 600	16 870	12 050			*14 910	11 090	9.55
	0 (Ground)					*28 180	20 960	21 780	15 250	16 690	11 880			16 070	11 460	9.25
	-1.5			*35 530	33 060	*27 310	20 850	*21 550	15 150					17 600	12 500	8.68
	-3.0	*40 280	*40 280	*31 570	*31 570	*24 670	21 060	*18 920	15 380					*17 710	14 690	7.78
	-4.5			*24 650	*24 650	*18 660	*18 660							*16 670	*16 670	6.40
	-6.0															

ZAXIS 690LCH									🖞 Rat	ing over-fi	ront 🛱	Rating	over-side	or 360 d	egrees	Unit : kg
	Load						Load	radius								. 1.
Conditions	point	3.0) m	4.5	5 m	6.0	6.0 m 7.5 m		5 m	9.0 m		10.	5 m		t max. read	sn
	height m	Ů	Ģ ≕	ů	Ģ ≕	ů	ü =0	ů	Ģ ≕	ů	; =0	ů		ů	ü =	meter
H-Boom 7.8m	7.5									*13 510	*13 510			*10 120	*10 120	9.92
H-Arm 3.6m	6.0							*15 670	*15 670	*14 180	13 200	*10 640	10 180	*10 160	10 100	10.5
Without Bucket	4.5					*21 570	*21 570	*17 470	16 830	*15 160	12 750	*13 800	9 980	*10 450	9 330	10.9
Shoes 650mm	3.0					*24 710	22 090	*19 270	16 030	*16 220	12 280	13 550	9 720	*10 990	8 920	11.1
	1.5					*26 760	21 070	*20 690	15 370	16 730	11 870	13 300	9 480	*11 860	8 800	11.0
	0 (Ground)			*16 400	*16 400	*27 490	20 550	*21 460	14 930	16 410	11 570	13 130	9 320	12 640	8 980	10.8
	-1.5			*25 110	*25 110	*27 090	20 370	21 270	14 730	16 250	11 420			13 430	9 520	10.3
	-3.0	*24 330	*24 330	*32 660	*32 660	*25 640	20 450	*20 510	14 730	16 280	11 450			14 990	10 600	9.56
	-4.5	*35 560	*35 560	*28 660	*28 660	*22 850	20 770	*18 200	14 980					*15 290	12 690	8.48
	-6.0			*22 270	*22 270	*17 700	*17 700							*14 720	*14 720	6.92
BE-Boom 6.8m	7.5							*16 810	*16 810					*13 560	*13 560	8.22
BE-Arm 2.9m	6.0					*19 710	*19 710	*17 550	*17 550					*13 250	13 140	8.97
Without Bucket	4.5					*22 640	*22 640	*18 960	17 010	*17 010	12 820			*13 380	11 920	9.41
Shoes 650mm	3.0					*25 600	22 620	*20 520	16 330	17 370	12 490			*13 910	11 320	9.60
	1.5					*27 590	21 680	*21 730	15 770	17 050	12 180			*14 910	11 210	9.55
	0 (Ground)					*28 180	21 190	22 010	15 420	16 860	12 010			16 240	11 590	9.25
	-1.5			*35 530	33 410	*27 310	21 070	*21 550	15 320					*17 760	12 630	8.68
	-3.0	*40 280	*40 280	*31 570	*31 570	*24 670	21 290	*18 920	15 550					*17 710	14 850	7.78
	-4.5			*24 650	*24 650	*18 660	*18 660							*16 670	*16 670	6.40
	-6.0															

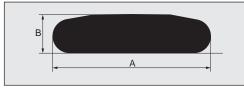
TRANSPORTATION

UPPERSTRUCTURE



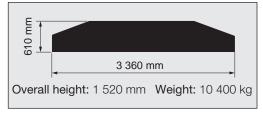
ZAXIS 670LC 3 510 mm 19 900 kg 5 220 mm 2 910 mm 3 140 mr		Overall width	Weight	А	В	С	
	ZAXIS 670LC	C 2.510 mm	19 900 kg	E 000 mm	0.010 mm	3 140 mm	
ZAXIS 690LCH 20 100 kg	ZAXIS 690LCH	CH	20 100 kg	5 220 mm	291011111		

SIDE FRAME

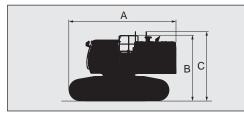


	Shoe width	Overall width	Weight	А	В		
	650 mm	1 250 mm	10 400 kg				
ZAXIS 670LC	750 mm	1 250 mm	10 700 kg	5 850 mm	1.450 mm		
	900 mm	1 320 mm	11 200 kg		1 450 mm		
ZAXIS 690LCH	650 mm	1 250 mm	10 600 kg				

COUNTERWEIGHT



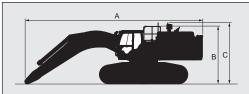
BASIC MACHINE (WITHOUT COUNTERWEIGHT)



	Shoe width	Overall width	Weight	А	В	С	
	650 mm	3 480 mm	42 700 kg			4 050 mm	
ZAXIS 670LC	750 mm	3 580 mm	43 100 kg	0.040	3 820 mm		
	900 mm	3 730 mm	44 100 kg	6 240 mm			
ZAXIS 690LCH	650 mm	3 480 mm	43 400 kg				

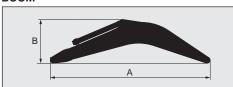
Notes: Undercarriage retracted.

BASIC MACHINE FITTED WITH BOOM AND NO SIDEWALK (WITH COUNTER WEIGHT)



	Boom length	Shoe width	Overall width	Weight	А	В	С
ZAXIS	6.8 m BE	650 mm	3 480 mm	61 200 kg	10 610 mm	3 820 mm	4 050 mm
690LCH	7.8 m H	650 mm	3 480 mm	61 700 kg	11 670 mm	3 820 11111	4 030 11111

BOOM



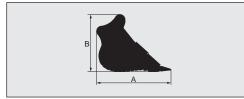
Boom	А	В	Overall width	Weight
6.8 m BE	7 140 mm	2 550 mm	1 390 mm	6 130 kg
7.8 m H	8 130 mm	2 330 mm	1 390 mm	6 580 kg
7.8 m	8 130 mm	2 330 mm	1 390 mm	6 560 kg

ARM



Arm	A	В	Overall width	Weight
2.9 m BE	4 370 mm	1 690 mm	800 mm	3 820 kg
3.6 m	5 110 mm	1 440 mm	800 mm	3 620 kg
3.6 m H	5 110 mm	1 440 mm	800 mm	3 750 kg
4.2 m	5 710 mm	1 390 mm	800 mm	3 930 kg

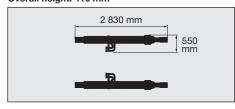
BUCKET



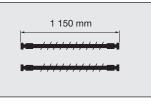
Bucket Capasity ISO heaped	A	В	Overall width	Weight
2.50 m ³	2 220 mm	1 810 mm	1 620 mm	2 150 kg
2.90 m ³	2 220 mm	1 810 mm	1 820 mm	2 310 kg
3.50 m ³	2 250 mm	1 890 mm	1 990 mm	2 980 kg
*1 2.90 m ³	2 290 mm	1 770 mm	1 680 mm	2 850 kg
*1 3.30 m ³	2 250 mm	1 890 mm	1 790 mm	3 120 kg
*1 4.00 m ³	2 360 mm	1 930 mm	1 900 mm	3 700 kg

*1 Rock Bucket

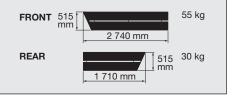
BOOM CYLINDERS 550 kg X 2 Overall height: 410 mm



HOSE OF BOOM CYLINDERS 7 kg X 2 / 10 kg X 2



LEFT SIDEWALK Overall height: 150 mm



EQUIPMENT

ENGINE	ZAXIS 670LC	ZAXIS 690LCH
Alternator 50 A		
Auto idle system	•	•
Cartridge-type engine oil filter	•	•
Cartridge-type fuel filter	•	•
Dry-type air double filter with	•	•
evacuator valve with air filter	•	•
restriction switch for monitor		
Expansion tank	•	•
Fan guard	•	•
Fuel pre-filter	•	•
Isolation-mounted engine	•	•
Power mode control		
[H/P(High Power) PWR(Power) ECO(Economy)]	•	•
Pre-cleaner	•	
Radiator, oil cooler and intercooler	•	•
with dust protective net	•	•
Solenoid fuel pump	•	•
Water separater	•	•
HYDRAULIC SYSTEM		
Accessories for breaker	—	0
Accessories for breaker & crusher	—	0
Accessories for 2 speed selector	—	0
Auto power lift	٠	٠
Boom mode selector system	•	•
Control valve with main relief valve	•	•
Drain filter	•	•
Engine speed sensing system	•	•
E-P control system	•	•
Extra port for control valve	•	•
Full-flow filter	•	•
Hose rupture valve	0	0
Pilot filter	•	•
Power boost	•	•
Quick warm-up system for pilot circuit	•	•
Shockless valve in pilot circuit	•	•
Suction filter	•	•
Work mode selector	•	•
	-	

• : Standard equipment O	: Optional equipment	- : Not applicable
САВ	ZAXIS 670LC	ZAXIS 690LCH
Additional fuse box	•	•
Adjustable armrests	•	•
All-weather sound suppressed		•
steel cab	•	
AM-FM radio	•	•
Ashtray	•	•
Auto control air conditioner	•	•
Auto-idle selector	•	•
AUX. terminal and storage	0	•
Cab : (Center pillar reinforced	•	—
structure) Front window on upper, lower and		
left side can be opened	•	—
OPG top guard fitted Level I	•	
(ISO10262) compliant cab	•	
Round Tempered glass (green color) front window	•	—
Cab : H/R cab		•
OPG lower front guard fitted Level		
ll (ISO10262)		•
OPG top guard fitted Level II	_	•
(ISO10262)		
Laminated straight glass front window	_	•
Left side window can be opened		•
	•	•
Cigarette lighter 24 V Drink holder	•	•
-	•	•
Engine shut-off switch	•	•
Electric double horn	•	•
Evacuation hammer	•	•
Fire extinguisher bracket	0	0
Floor mat	•	•
Footrest	•	•
Front window washer	•	0
Glove compartment	•	•
Hot & cool box	•	•
Intermittent windshield wiper	•	•
Key cylinder light	•	•
LED room light with door courtesy	•	•
Pilot control shut-off lever	•	•
Power outlet 12 V	0	•
Rain guard for cab	0	_
Rear tray	•	•
Retractable seat belt	•	•
Rubber radio antenna	•	•
Seat : Adjustable reclining air suspension with heater	0	•
Seat : Adjustable reclining		
mechanical suspension	•	0
Seat : Adjustable reclining	0	0
mechanical suspension with heater		
Short wrist control levers	•	•
Storage box	•	•
Sun visor (front)	0	0
Sun visor (side)	0	0
Transparent roof with slide curtain	_	•
2 speakers	•	•
6 fluid-filled elastic mounts	•	•

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

MONITOR SYSTEM	ZAXIS 670LC	ZAXIS 690LCH
Alarm buzzers: overheat, engine oil pressure	•	•
Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, air filter restriction, work mode, etc	•	•
Display of meters: water temperature, hour, fuel rate, clock	•	•
Other displays: work mode, auto- idle, glow, operating conditions, etc	•	•
LIGHTS		
Additional working lights (boom right side)	0	0
2 cab lights	0	•
3 working lights	•	•
4 cab lights	0	0
UPPER STRUCTURE		
Auto-grease lubricator	0	•
Battery disconnect switch	•	•
Batteries 170 Ah	•	•
Counterweight 10 400 kg	•	•
Electric fuel refilling pump with auto stop	0	0
Electrical grease pump with hose- reel	•	•
Fuel level float	•	•
Hydraulic oil level gauge	•	•
Ladder	•	•
Rear view camera	•	•
Rear view mirror (right & left side)	•	•
Side walk (cab side)	•	•
Swing parking brake	•	•
Tool box	•	•
Utility space	•	•
2.3 mm thickness undercover	•	_
4.5 mm thickness undercover	_	•
UNDERCARRIAGE		
ONDENCANNIAGE		-

UNDERGARRIAGE		
Bolt-on sprocket	•	•
Double grouser shoes 650 mm	•	•
Double grouser shoe with standard track guard 750 mm	0	_
Double grouser shoe with standard track guard 900 mm	0	_
Full track guard	—	•
Hydraulic track adjuster	•	•
Idler track guard	•	•
Reinforced track links with pin seals	•	•
Travel motor covers	•	•
Travel parking brake	•	•
Track undercover	0	0
Upper and lower rollers	•	•
2 track guard (each side)	•	_

• : Standard equipment O	: Optional equipment	— : Not applicable
FRONT ATTACHMENTS	ZAXIS 670LC	ZAXIS 690LCH
Arm 4.2 m	0	_
Arm 2.9 m BE	0	•
Boom 7.8 m and Arm 3.6 m	•	-
Boom 7.8 m H and Arm 3.6 m H	—	0
Boom 6.8 m BE	0	•
Centralized lubrication system	•	•
Damage prevention plate and square bars	_	•
Dirt seal on all bucket pins	•	•
Flanged pin	•	•
Monolithically cast bucket link A	•	•
MISCELLANEOUS		
Anti-slip steps and handrails	•	•

Anti-slip steps and handrails	•	•
Lockable fuel refilling cap	•	•
Lockable machine covers	•	•
Onboard information controller	•	•
Standard tool kit	•	•
Theft deterrent system	•	•
Travel direction mark on track frame	•	•
		·

OTHERS		
Global e-service	•	•

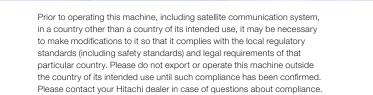


- Hitachi Environmental Vision 2025 -

The Hitachi Group released the Environmental Vision 2025 to curb annual carbon dioxide emissions. The Group is committed to global production while reducing environmental impact in life cycles of all products, and realizing a sustainable society by tackling three goals — prevention of global warming, conservation of resources, and preservation of ecosystem.

Reducing Environmental Impact by New ZAXIS

Hitachi makes a green way to cut carbon emissions for global warming prevention according to LCA*. New ZAXIS utilizes lots of technological advances, including the new ECO mode, and Isochronous Control. Hitachi has long been committed to recycling of components, such as aluminum parts in radiators and oil cooler. Resin parts are marked for recycling. *Life Cycle Assessment – ISO 14040



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 color and features. Before use, read and understand the Operator's Manual for proper operation.

Hitachi Construction Machinery www.hitachicm.com.au

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