

ZAXIS-5G series

HITACHI

Reliable solutions

**ZAXIS670**



## HYDRAULIC EXCAVATOR

Model Code : ZX670LC-5G / ZX670LCH-5G

Engine Rated Power : 312 kW (418 HP)

Operating Weight : ZX670LC-5G : 66 800 kg

ZX670LCH-5G : 68 200 kg

Backhoe Bucket : ISO Heaped : 2.5 - 3.5 m<sup>3</sup>



# ZAXIS Empower your Vision.

A ZAXIS hallmark – industry-leading hydraulic technologies, and performance no other can beat. 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.

## Key Benefits for Low Running Costs



### Large Production with Less Fuel

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- 6% reduction in fuel consumption
- More fuel reduction in the ECO mode
- Swift front movements with HIOS IIB hydraulics
- 9% enhancement in swing torque
- Easy-to-use attachments

### Pursuits of Performance and Durability

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- Prestige R&D and quality control
- Durable, reliable engine
- Rock-solid, durable front attachment
- Strengthened undercarriage
- Strengthened upperstructure D-section skirt

### No Compromise on Operator Comfort

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

### Simplified Maintenance

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- Remote inspection points
- Fast lubrication
- Easy access to the upperstructure
- Low life cycle costs
- 920 L large capacity fuel tank

### Hitachi Support Chain

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- Remote fleet management with Global e-Service
- Parts and service





## Large Production with Less Fuel

### 6%\* Reduction in Fuel Consumption

New ZAXIS is a fuel-thrifty excavator that can reduce fuel consumption by 6%\*, compared to the conventional ZX650LC-3 family, thanks to the HIOS IIIB hydraulic system and engine control system, thereby reducing CO<sub>2</sub> emissions.

\*H/P mode vs. conventional model's H/P mode

### More Fuel Reduction in the ECO mode

The ECO mode, a new economical mode, can further cut fuel consumption by 10% compared to the PWR mode, without sacrificing digging force by optimal matching of operations.



### Swift Front Movements with HIOS\* IIIB Hydraulics

Operating speed increases with less fuel consumption thanks to the HIOS IIIB hydraulic system, developed by industry-leading hydraulic technologies and a wealth of experience.

\*Human & Intelligent Operation System

#### Improved Arm Controllability

Improved arm controllability for level lifting and level crowding for front movements, including swing operations. The boom regenerative circuit using the boom weight and the newly adopted variable orifice of the swing circuit help ensure hydraulic oil can be effectively allocated and pressure loss can be reduced.

### 9%\* Enhancement in Swing Torque

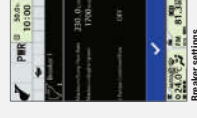
One of the key performance requirements for mining machinery is swing power. It must be capable of holding and swinging buckets full of crushed stones powerfully, and then loading them onto a dump truck. The new ZAXIS adopts a newly developed swing device to improve swing power by 9%\* over conventional models. It also has sufficient capacity to load crushed stones onto a dump truck.

\*Compared to the conventional ZX650LC-3 family



### Easy-to-Use Attachments

The operator can 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.

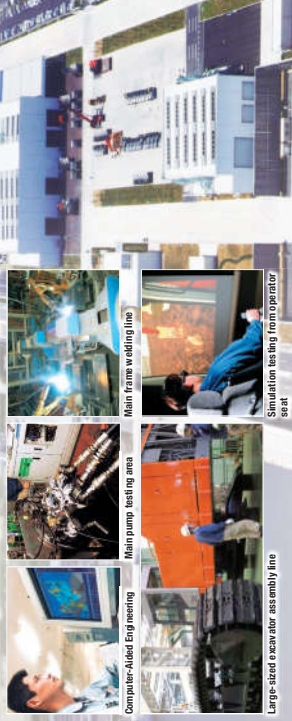




# Pursuits of Performance and Durability

## 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.



Computer-aided Eng painting  
Main pump testing area  
Simulation test rig from operator seat

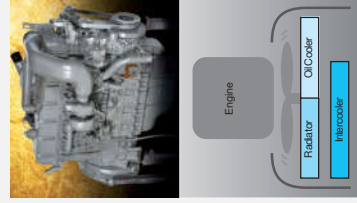
Main frame welding line

Large-sized excavator assembly line

## Durable, Reliable Engine

This engine has a track record showing impressive durability at countless tough job sites around the world. The engine — associated with a rugged design, a direct fuel injection system and an elaborate governor — goes green, and complies with EU Stage II and US EPA Tier 2 emissions regulations.

The cooling system has excellent cooling capability with a radiator and oil cooler arranged in parallel. The system optimizes the rotational speed of cooling fan, depending on the temperatures of coolant and hydraulic oil, contributing to excellent cooling capability and noise reduction. The combination of a 312 kW (418 HP) engine and the new HIOS IIIB hydraulic system meets requirements, in terms of both output and fuel consumption.



## 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 ZX670LCH-5G adopts an H-boom and H-arm, using plates thicker than those of standard models. The arm also includes a damage prevention plate and square bars, improving its durability compared to the standard model.

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.

## Strengthened Undercarriage

The reliable undercarriage structure of the conventional ZAXIS models is retained for the new ZAXIS. For idler brackets, where stress is concentrated in transit, the box-structure and reinforcing plates limit deformation and enhance travel stability. An enhanced two-step side step ladder is also provided to facilitate entering/exiting from the cab.

## Strengthened Upperstructure D-Section Skirt

For the new ZAXIS, the plate thickness of the D-section skirt is increased by 30% to improve durability performance. A large door catch is added to reduce shocks and jolts of the cab and upperstructure.



Boom tie protector

Idle brackets

Side step

Enhancements of boom & arm with rock bucket (ZX670LCH-5G)

Undercarriage Structure



# No Compromise on Operator Comfort

## Comfortable Operating Environment

You'll feel comfortable and confident, with plenty of leg space and excellent visibility when operating the cab. The new compact console gives more leg space. The new door pillar is shifted rearward by 70 mm to widen an entry space for easy access. A new LED room light, interlocked with the door, turns on when the door opens. The front window is easily removed and stored overhead using slide rails (ZX670LC-5G only). The overhead window is openable and located strategically for uniform air circulation inside the cab. The control panel and control levers are arranged within easy reach of the operator. AM/FM radio and AUX port (optional) for a mobile music player are available for a long work day with less fatigue. All these designs focus on operator comfort.

## Comfort-Designed Operator Seat

The luxury cloth seat is fitted with a headrest and arm rests for operator comfort. The seat can be adjusted in multiple ways, sliding and reclining, to suit operator's size and preferences. The seat can slide rearward by 40 mm more for added leg space. An air suspension with a heat pad is optional.

## Robust Cab

The robust cab, meeting the OPG (Top Guard Level 1\*), protects the operator from falling objects. The pilot control shut-off lever is provided with a neutral engine start system that permits engine starting only when the pilot control shut-off lever is in Lock position. The engine is lockable by entering a password through the 10-key panel.

\*The ZX670LC-5G complies with Top Guard Level II.

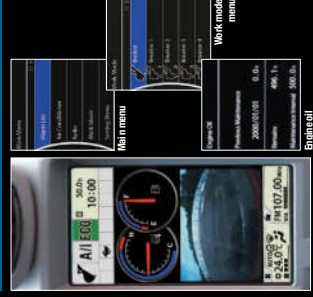


The photo shows an optional air suspension seat.



## New, Easy-to-Use Multifunction Monitor

The new multi-language, multifunction monitoring system comprises of a 7-inch high-resolution color monitor and a multifunction controller. The monitor allows the operator to check varying operating variables: hydraulic oil temperature, fuel level, work mode, full-auto air conditioner, AM/FM radio, rear view monitor camera (optional), maintenance support, and attachment flow adjustment. Menu items can be selected and adjusted by a multifunction controller on the control panel. A new rear view monitor camera always displays the view behind the machine.





## Simplified Maintenance



Air damper

An air conditioner filter for fresh air

### Remote Inspection Points

Inspection points are concentrated inside left cover and undercover that are readily accessible 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 optional electric grease gun with hose-reel or an 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.



Inspection points inside the left cover



Inspection points inside the undercover



Centralized boom and arm greasing points



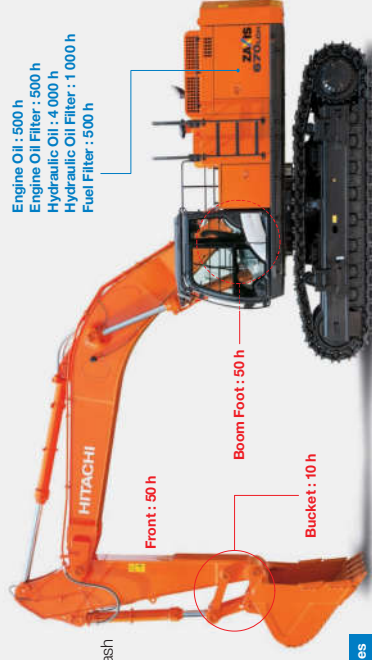
Electric grease gun with hose-reel (Optional)

### Low Life Cycle Costs

Service intervals are long enough to slash maintenance costs.

### 920 L Large Capacity Fuel Tank

Equipped with a large capacity fuel tank for longer operations.



Engine Oil : 500 h  
Engine Oil Filter : 500 h  
Hydraulic Oil : 4,000 h  
Hydraulic Oil Filter : 1,000 h  
Fuel Filter : 500 h

Front : 50 h

Boom Foot : 50 h

Bucket : 10 h

Note: Periodic inspection is required to check oil contamination and levels.



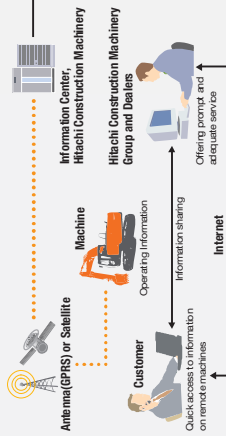
## Hitachi Support Chain

Hitachi Support Chain is a full customer support system offered after buying a Hitachi machine.

### Remote Fleet Management with

#### Easy Access to On-Site Machines through the Internet

This on-line fleet management system allows you to access each on-site machine from a PC in your office. You can get its operating information and location to increase productivity of the fleet and reduce downtime. Operating data and log are sent to a Hitachi server for processing, and then to customer and dealers around the world. This system is available 24 hours a day, all the year around.



Note: In Some Regions, Global e-Service is Not Available by Local Regulations.

#### Main Features of Global e-Service

##### Functions

Global e-Service provides easy access to a machine on site, conveying operating information and log, including daily operating hours, fuel level, temperatures, pressures, and likes.

##### Maintenance

Maintenance data and log are displayed on a easy-to-read monitor screen, suggesting recommended maintenance for efficient fleet management.



### Parts and Service

Hitachi full customer support is available every area on the globe for full customer satisfaction through Hitachi local dealers.

#### Parts

Hitachi Global Online Network, a parts supply system, is linked with Japan Parts Center, overseas depots and over 150 dealers abroad to deliver on-line parts information, including in-stock parts, order receptions, shipments and delivery period of over one million parts and components.

##### Genuine Hitachi Parts

Genuine Hitachi parts, meeting Hitachi stringent quality standards, are guaranteed according to Hitachi warranty standards. The use of genuine Hitachi parts, including engine, fuel, hydraulic oil and filters, may slash running costs, and extend machine life.

##### Ground Engaging Tools (GETs)

Hitachi provides an array of Hitachi Ground Engaging Tools developed and built for a variety of applications.

Using high-quality, well-maintained GETs will help you get customers' trust.

Note: Some dealers do not handle Hitachi GETs.

##### Remanufactured Components

Hitachi components are remanufactured according to the stringent remanufacturing standards at four factories around the world. They have high quality equivalent to new ones, and backed up by Hitachi warranty system.

Note: Some dealers do not handle Hitachi Remanufactured Components.

#### Service

##### Extended Warranty — HELP

Hitachi Standard Warranty System is available on all new Hitachi machines. In addition, Hitachi offers Hitachi Extended Life Programs (HELPS) to suit customer expectations —

# SPECIFICATIONS

| ENGINE                 |   |
|------------------------|---|
| Model .....            | Isuzu BB-6WG1XQA-05                                   |
| Type .....             | 4-cycle water-cooled, direct injection                |
| Aspiration .....       | Turbocharged, intercooled                             |
| No. of cylinders ..... | 6   |
| Rated power .....      | H/P mode:   |
| ISO 14396 .....        | 312 kW (418 HP) at 1 800 min <sup>-1</sup> (rpm)      |
| Maximum torque .....   | 1 621 Nm (165 kgf.m) at 1 500 min <sup>-1</sup> (rpm) |
| Piston displacement .. | 15 681 L  |
| Bore and stroke .....  | 147 mm x 154 mm                                       |
| Batteries .....        | 2 x 12 V / 170 Ah                                     |

| HYDRAULIC SYSTEM        |  |
|-------------------------|--|
| <b>Hydraulic Pumps</b>  |  |
| Main pumps .....        | 2 variable displacement axial piston pumps |
| Maximum oil flow ..     | 2 x 443 L/min                              |
| Pilot pump .....        | 1 gear pump                                |
| Maximum oil flow ..     | 50 L/min                                   |
| <b>Hydraulic Motors</b> |  |
| Travel .....            | 2 axial piston motors with parking brake   |
| Swing .....             | 2 axial piston motors                      |

|                              |                                     |
|------------------------------|-------------------------------------|
| <b>Relief Valve Settings</b> |                                     |
| Implement circuit .....      | 31.9 MPa (325 kgf/cm <sup>2</sup> ) |
| Swing circuit .....          | 29.4 MPa (300 kgf/cm <sup>2</sup> ) |
| Travel circuit .....         | 34.3 MPa (350 kgf/cm <sup>2</sup> ) |
| Pilot circuit .....          | 3.9 MPa (40 kgf/cm <sup>2</sup> )   |
| Power boost .....            | 34.3 MPa (350 kgf/cm <sup>2</sup> ) |

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

| UPPER STRUCTURE  |                             |
|--|-----------------------------|
| <b>Revolving Frame</b>   |                             |
| D-section frame for resistance to deformation.                     |                             |
| <b>Swing Device</b>  |                             |
| 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 <sup>-1</sup> (rpm) |

|   |  |
|---|--|
| <b>Operator's Cab</b>   |  |
| <b>ZX670LC-5g:</b>  |  |
| Independent spacious cab, 1 025 mm wide by 1 675 mm high.   |  |
| The OPG top guard fitted Level II conforms to the related requirements of the International Organization Standardization(ISO)10262. |  |

|   |  |
|---|--|
| <b>ZX670LCH-5g (H/R cab):</b>   |  |
| 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   |  |
|---|--|
| <b>Tracks</b>   |  |
| 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. |  |
| <b>Numbers of Rollers and Shoes on Each Side</b>  |  |
| Upper rollers .....   | 3  |
| Lower rollers .....   | 8: ZX670LC-5g<br>8: ZX670LCH-5g                |
| Track shoes .....   | 47: ZX670LC-5g<br>47: ZX670LCH-5g              |
| Idler track guard .....   | 1  |
| Track guard .....   | 2: ZX670LC-5g<br>Full track guard: ZX670LCH-5g |

|   |   |
|---|---|
| <b>Travel Device</b>  |   |
| Each track driven by axial piston motor through reduction gear for counterrotation of the tracks. Parking brake is spring-set/hydraulic-released disc type. |   |
| Automatic transmission system: High-Low.  |   |
| Travel speeds .....   | High : 0 to 4.8 km/h<br>Low : 0 to 3.3 km/h |
| Maximum traction force ..   | 460 kN (46 900 kgf)                         |
| Gradeability .....  | 70% (35 degree) continuous                  |

| SERVICE REFILL CAPACITIES       |         |
|---------------------------------|---------|
| Fuel tank .....                 | 920.0 L |
| Engine coolant .....            | 68.0 L  |
| Engine oil .....                | 52.0 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 .....        | 380.0 L |

| WEIGHTS AND GROUND PRESSURE                 |            |                 |          |                    |             |
|---|------------|-----------------|----------|--------------------|-------------|
| <b>Operating Weight and Ground Pressure</b> |            |                 |          |                    |             |
| Shoe type                                   | Shoe width | Boom type       | Arm type | ZX670LC-5g         | ZX670LCH-5g |
|   |            | 6.8 m BE        | 2.9 m BE | kg                 | kg          |
|   |            | Bucket capacity |          | 67 300             | 68 100      |
|   | 650 mm     | 7.8 m           | 3.6 m    |                    |             |
|   |            | Bucket capacity |          | 66 800             | 68 200      |
|   |            | 7.8 m           | 4.2 m    |                    |             |
|   |            | Bucket capacity |          | 67 000             | —           |
|   |            | 6.8 m BE        | 2.9 m BE |                    |             |
|   |            | Bucket capacity |          | 67 600             | —           |
|   |            | 7.8 m           | 3.6 m    |                    |             |
|   |            | Bucket capacity |          | 67 200             | —           |
| Double                                      | 750 mm     | Bucket capacity |          | 67 400             | —           |
|   |            | 6.8 m BE        | 2.9 m BE |                    |             |
|   |            | Bucket capacity |          | 68 700             | —           |
|   |            | 7.8 m           | 3.6 m    |                    |             |
|   |            | Bucket capacity |          | 68 200             | —           |
|   | 900 mm     | 7.8 m           | 4.2 m    |                    |             |
|   |            | Bucket capacity |          | 68 400             | —           |
|   |            | Bucket capacity |          | 2.5 m <sup>3</sup> | —           |

| BUCKET LIST          |                      |                   |              |                       |            |
|----------------------|----------------------|-------------------|--------------|-----------------------|------------|
| ZX670LC-5g           |                      |                   |              |                       |            |
| Capacity             | Width                |                   | No. of teeth | Recommendation        |            |
| ISO heaped           | Without side cutters | With side cutters |              | 6.8 m BE-boom         | 7.8 m boom |
| 2,50 m <sup>3</sup>  | 1 480 mm             | 1 620 mm          | 5            | 2.9 m BE-arm          | 3.6 m arm  |
| 2,90 m <sup>3</sup>  | 1 680 mm             | 1 820 mm          | 5            | x                     | Ⓞ          |
| 3,50 m <sup>3</sup>  | 1 800 mm             | 1 990 mm          | 5            | Ⓞ                     | Ⓞ          |
| Applicable shoe type |                      |                   |              | 650 mm Double grouser |            |
|                      |                      |                   |              | 750 mm Double grouser |            |
|                      |                      |                   |              | 900 mm Double grouser |            |

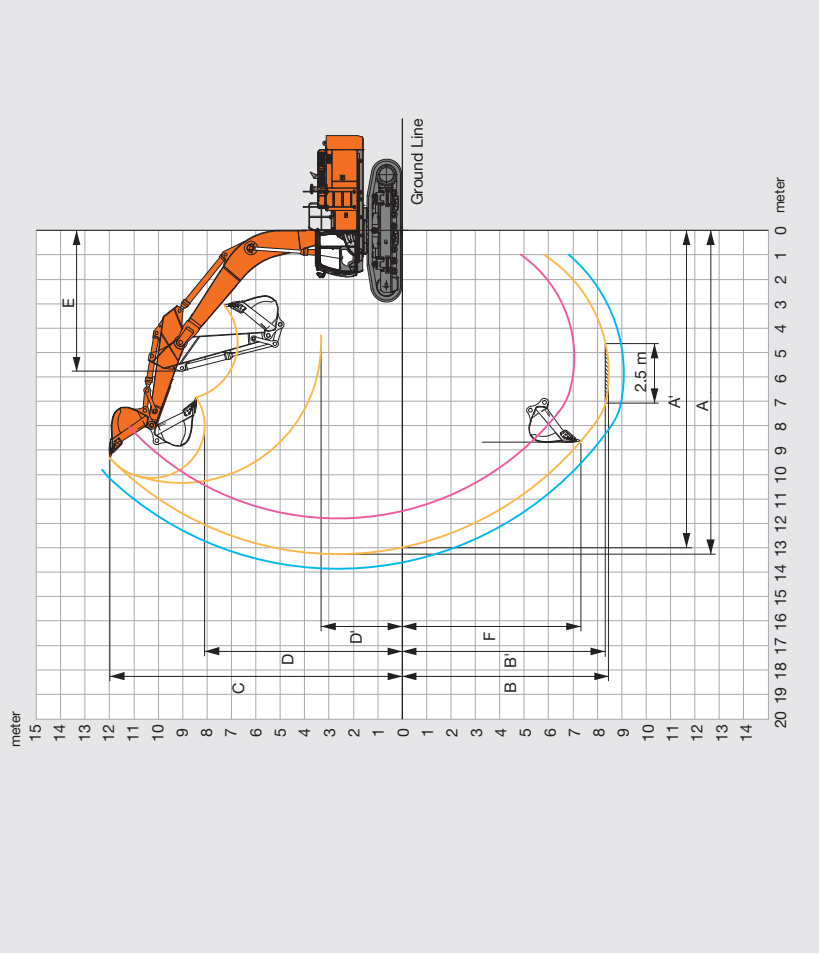
| ZX670LCH-5g            |                      |                   |              |                       |              |
|------------------------|----------------------|-------------------|--------------|-----------------------|--------------|
| Capacity               | Width                |                   | No. of teeth | Recommendation        |              |
| ISO heaped             | Without side cutters | With side cutters |              | 6.8 m BE-boom         | 7.8 m H-boom |
| *1 2,90 m <sup>3</sup> | 1 680 mm             | 1 680 mm          | 5            | 2.9 m BE-arm          | 3.6 m H-arm  |
| *1 3,30 m <sup>3</sup> | 1 790 mm             | 1 790 mm          | 5            | x                     | ●            |
| *2 1,50 m <sup>3</sup> | —                    | 1 310 mm          | 3            | ●                     | x            |
| *2 1,80 m <sup>3</sup> | —                    | 1 570 mm          | 3            | ●                     | x            |
| One-point ripper       |                      |                   | 1            | ●                     | ●            |
| Applicable shoe type   |                      |                   |              | 650 mm Double grouser |              |
| *1 Rock bucket         |                      |                   |              | ● Heavy-duty service  |              |
| *2 Ripper bucket       |                      |                   |              | — Not applicable      |              |
|                        |                      |                   |              | x Can't be installed  |              |



# SPECIFICATIONS

## WORKING RANGES

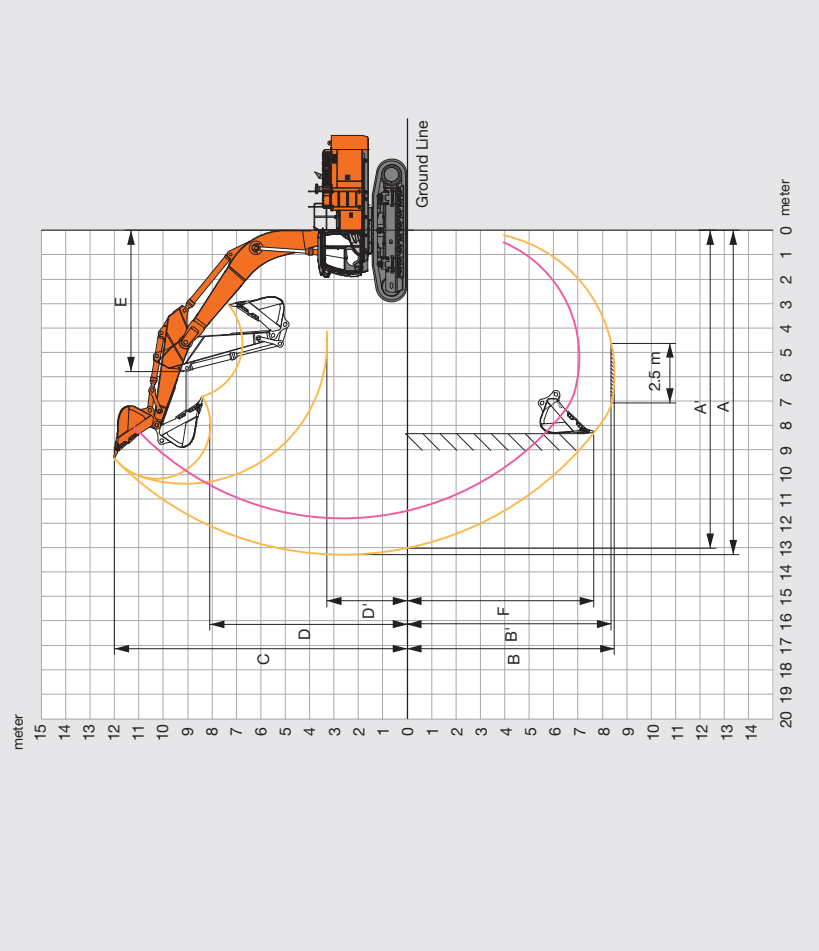
### ZX670LC-5g



|                                   | ZX670LC-5g                    |                         | Unit: mm  |
|-----------------------------------|-------------------------------|-------------------------|-----------|
|                                   | 6.8 m BE-boom<br>2.9 m BE-arm | 7.8 m boom<br>3.6 m arm | 4.2 m arm |
| A Max. digging reach              | 11 800                        | 13 250                  | 13 850    |
| A' Max. digging reach (on ground) | 11 500                        | 13 000                  | 13 610    |
| B Max. Digging depth              | 7 120                         | 8 500                   | 9 150     |
| B' Max. Digging depth (8° level)  | 6 970                         | 8 400                   | 9 030     |
| 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               | 5 240                         | 5 780                   | 5 760     |
| F Max. vertical wall              | 5 280                         | 7 380                   | 8 180     |
| Excluding track shoe lug          |                               |                         |           |

## WORKING RANGES

### ZX670LCH-5g

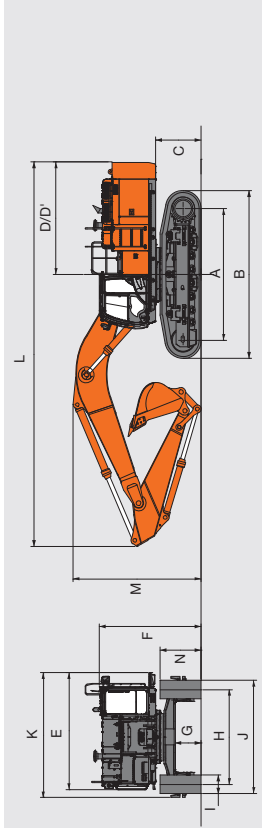


|                                   | ZX670LCH-5g                   |                             | Unit: mm |
|-----------------------------------|-------------------------------|-----------------------------|----------|
|                                   | 6.8 m BE-boom<br>2.9 m BE-arm | 7.8 m H-boom<br>3.6 m H-arm |          |
| A Max. digging reach              | 11 800                        | 13 280                      |          |
| A' Max. digging reach (on ground) | 11 500                        | 13 030                      |          |
| B Max. Digging depth              | 7 120                         | 8 560                       |          |
| B' Max. Digging depth (8° level)  | 6 970                         | 8 420                       |          |
| C Max. cutting height             | 11 190                        | 11 940                      |          |
| D Max. dumping height             | 7 330                         | 8 020                       |          |
| D' Min. dumping height            | 3 200                         | 3 230                       |          |
| E Min. swing radius               | 5 240                         | 5 760                       |          |
| F Max. vertical wall              | 5 280                         | 7 720                       |          |
| Excluding track shoe lug          |                               |                             |          |



## SPECIFICATIONS

### DIMENSIONS



|                             |                                    | Unit: mm        |               |
|-----------------------------|------------------------------------|-----------------|---------------|
| Retractable gauge           |                                    | ZX670LC-56      | ZX670LCH-56   |
| A                           | Distance between ladders           | 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       | 4 090           | 4 090         |
| F                           | Overall height of cab              | 3 660           | 3 660         |
| *1 G                        | Mn. ground clearance               | 860             | 860           |
| H                           | Track gauge - Extended / Retracted | 3 300 / 2 830   | 3 300 / 2 830 |
| I                           | Track shoe width                   | 660 / 750 / 900 | 660           |
| J                           | Undercarriage width                | 3 950 / 3 480   | 3 950 / 3 480 |
| : Extended / Retracted      |                                    | 4 050 / 3 580   | —             |
| with 750 mm shoe            |                                    | 4 200 / 3 730   | —             |
| with 900 mm shoe            |                                    | —               | —             |
| 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

#### ZX670LC-56

|                                 | 6.8 m BE-boom       |  | 7.8 m boom          |                     |
|---------------------------------|---------------------|--|---------------------|---------------------|
|                                 | 2.9 m BE-arm        |  | 3.6 m arm           | 4.2 m arm           |
| 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) |

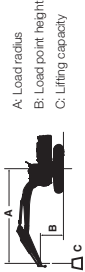
#### ZX670LCH-56

|                                 | 6.8 m BE-boom       |                     | 7.8 m H-boom |
|---------------------------------|---------------------|---------------------|--------------|
|                                 | 2.9 m BE-arm        | 3.6 m H-arm         |              |
| 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) |              |

## LIFTING CAPACITIES (Without bucket)

- Notes: 1. Ratings are based on ISO 10567.  
2. Lifting capacity does not exceed 75% of lifting 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.

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

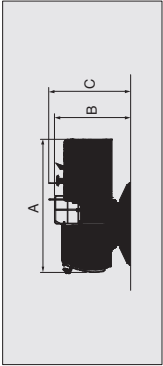


| ZX670LC-56   |                        | Rating over-side or 360 degrees |     |     |     |     |      |      |      |      |      | Unit : kg    |       |
|--|------------------------|---------------------------------|-----|-----|-----|-----|------|------|------|------|------|--------------|-------|
| Conditions   | Load point height<br>m | Load radius m                   |     |     |     |     |      |      |      |      |      | At max reach | meter |
|  |                        | 3.0                             | 4.5 | 6.0 | 7.5 | 9.0 | 10.5 | 10.5 | 10.5 | 10.5 | 10.5 |              |       |
| Boom 7.8m<br>Arm 3.6m<br>Without Bucket<br>Shoes 650mm       | 7.5                    |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | 6.0                    |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | 4.5                    |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | 3.0                    |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | 1.5                    |                                 |     |     |     |     |      |      |      |      |      |              |       |
| 0(Ground)  | -1.5                   |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | -3.0                   |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | -4.5                   |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | -6.0                   |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | -7.5                   |                                 |     |     |     |     |      |      |      |      |      |              |       |
| Boom 7.8m<br>Arm 4.2m<br>Without Bucket<br>Shoes 650mm       | 7.5                    |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | 6.0                    |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | 4.5                    |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | 3.0                    |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | 1.5                    |                                 |     |     |     |     |      |      |      |      |      |              |       |
| 0(Ground)  | -1.5                   |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | -3.0                   |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | -4.5                   |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | -6.0                   |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | -7.5                   |                                 |     |     |     |     |      |      |      |      |      |              |       |
| BE-Boom 6.8m<br>BE-Arm 2.9m<br>Without Bucket<br>Shoes 650mm | 7.5                    |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | 6.0                    |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | 4.5                    |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | 3.0                    |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | 1.5                    |                                 |     |     |     |     |      |      |      |      |      |              |       |
| 0(Ground)  | -1.5                   |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | -3.0                   |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | -4.5                   |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | -6.0                   |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | -7.5                   |                                 |     |     |     |     |      |      |      |      |      |              |       |

| ZX670LCH-56  |                        | Rating over-side or 360 degrees |     |     |     |     |      |      |      |      |      | Unit : kg    |       |
|--|------------------------|---------------------------------|-----|-----|-----|-----|------|------|------|------|------|--------------|-------|
| Conditions   | Load point height<br>m | Load radius m                   |     |     |     |     |      |      |      |      |      | At max reach | meter |
|  |                        | 3.0                             | 4.5 | 6.0 | 7.5 | 9.0 | 10.5 | 10.5 | 10.5 | 10.5 | 10.5 |              |       |
| H-Boom 7.8m<br>H-Arm 3.6m<br>Without Bucket<br>Shoes 650mm   | 7.5                    |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | 6.0                    |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | 4.5                    |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | 3.0                    |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | 1.5                    |                                 |     |     |     |     |      |      |      |      |      |              |       |
| 0(Ground)  | -1.5                   |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | -3.0                   |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | -4.5                   |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | -6.0                   |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | -7.5                   |                                 |     |     |     |     |      |      |      |      |      |              |       |
| BE-Boom 6.8m<br>BE-Arm 2.9m<br>Without Bucket<br>Shoes 650mm | 7.5                    |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | 6.0                    |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | 4.5                    |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | 3.0                    |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | 1.5                    |                                 |     |     |     |     |      |      |      |      |      |              |       |
| 0(Ground)  | -1.5                   |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | -3.0                   |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | -4.5                   |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | -6.0                   |                                 |     |     |     |     |      |      |      |      |      |              |       |
|  | -7.5                   |                                 |     |     |     |     |      |      |      |      |      |              |       |

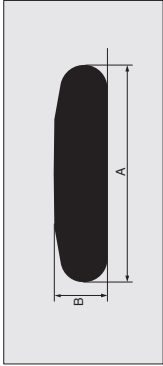


UPPERSTRUCTURE



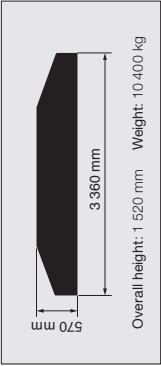
|             | Overall width | Weight    | A        | B        | C        |
|-------------|---------------|-----------|----------|----------|----------|
| ZX670LC-6G  | 3 510 mm      | 19 900 kg | 5 220 mm | 2 910 mm | 3 140 mm |
| ZX670LCH-6G |               | 20 100 kg |          |          |          |

SIDE FRAME

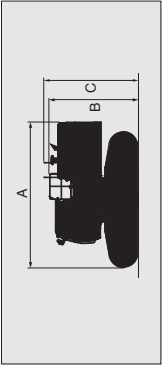


|             | Shoe width | Overall width | Weight    | A        | B        |
|-------------|------------|---------------|-----------|----------|----------|
| ZX670LC-6G  | 650 mm     | 1 250 mm      | 10 400 kg | 5 840 mm | 1 450 mm |
|             | 750 mm     | 1 250 mm      | 10 700 kg |          |          |
|             | 900 mm     | 1 320 mm      | 11 200 kg |          |          |
| ZX670LCH-6G | 650 mm     | 1 250 mm      | 10 600 kg |          |          |

COUNTERWEIGHT



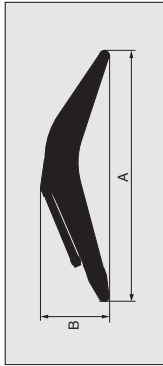
BASIC MACHINE (WITHOUT COUNTERWEIGHT)



|             | Shoe width | Overall width | Weight    | A        | B        | C        |
|-------------|------------|---------------|-----------|----------|----------|----------|
| ZX670LC-6G  | 650 mm     | 3 480 mm      | 42 700 kg | 6 240 mm | 3 820 mm | 4 050 mm |
|             | 750 mm     | 3 580 mm      | 43 100 kg |          |          |          |
|             | 900 mm     | 3 730 mm      | 44 100 kg |          |          |          |
| ZX670LCH-6G | 650 mm     | 3 480 mm      | 43 400 kg |          |          |          |

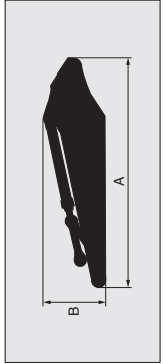
Notes: Undercarriage retracted.

BOOM



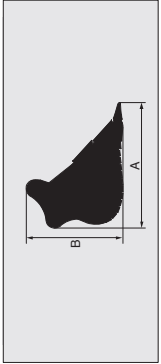
| Boom     | A        | B        | Overall width | Weight   |
|----------|----------|----------|---------------|----------|
| 6.8 m BE | 7 140 mm | 2 510 mm | 1 330 mm      | 6 110 kg |
| 7.8 m H  | 8 130 mm | 2 330 mm | 1 330 mm      | 6 560 kg |
| 7.8 m    | 8 130 mm | 2 330 mm | 1 330 mm      | 6 550 kg |

ARM



| Arm      | A        | B        | Overall width | Weight   |
|----------|----------|----------|---------------|----------|
| 2.9 m BE | 4 370 mm | 1 680 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        | 3 850 kg |

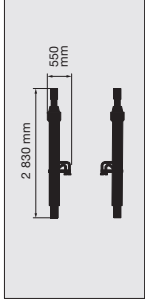
BUCKET



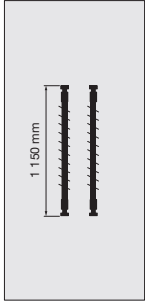
| Bucket Capacity ISO heaped | A        | B        | Overall width | Weight   |
|----------------------------|----------|----------|---------------|----------|
| 2.50 m³                    | 2 220 mm | 1 810 mm | 1 620 mm      | 2 150 kg |
| 2.90 m³                    | 2 220 mm | 1 810 mm | 1 620 mm      | 2 310 kg |
| 3.50 m³                    | 2 250 mm | 1 890 mm | 1 990 mm      | 2 980 kg |
| *1 2.90 m³                 | 2 280 mm | 1 770 mm | 1 680 mm      | 2 850 kg |
| *1 3.30 m³                 | 2 250 mm | 1 890 mm | 1 790 mm      | 3 120 kg |

\*1) Rock Bucket

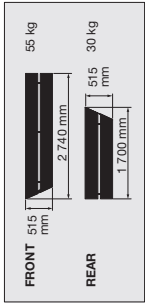
BOOM CYLINDERS 550 kg X 2  
Overall height: 410 mm



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



LEFT SIDEWALK Overall height: 150 mm





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

● : Standard equipment    ○ : Optional equipment    — : Not applicable

| ENGINE   | ZX60LC-6J | ZX60CH-6J |
|--|-----------|-----------|
| 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 | ●         | ●         |
| Fan guard  | ●         | ●         |
| Fuel pre-filter  | ●         | ●         |
| Power mood control [H/P(High Power) PWR(Power) ECO(Economy)] Isolation-mounted engine          | ●         | ●         |
| Pre-cleaner  | ○         | ○         |
| Radiator, oil cooler and intercooler with dust protective net                                  | ●         | ●         |
| Radiator reserve tank  | ●         | ●         |
| 50 A alternator  | ●         | ●         |

| HYDRAULIC SYSTEM                       |   |   |
|--|---|---|
| Accessories for breaker                | — | ○ |
| Accessories for breaker & crusher      | — | ○ |
| Accessories for 2 speed selector       | — | ○ |
| Auto power lift                        | ● | ● |
| 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                     | ○ | ○ |
| Pilot filter                           | ● | ● |
| Power boost                            | ● | ● |
| Quick warm-up system for pilot circuit | ● | ● |
| Shockless valve in pilot circuit       | ● | ● |
| Suction filter                         | ● | ● |
| Work mode selector                     | ● | ● |

| CAB   | ZX60LC-6J | ZX60CH-6J |
|---|-----------|-----------|
| Additional fuse box   | ●         | ●         |
| Adjustable armrests   | ●         | ●         |
| All-weather sound suppress and steel cab                      | ●         | ●         |
| AM-FM radio   | ●         | ●         |
| Ashtray   | ●         | ●         |
| Auto control air conditioner                                  | ●         | ●         |
| Auto-idle selector  | ●         | ●         |
| AUX terminal and storage                                      | ○         | ○         |
| Cab : (Center pillar reinforced structure)                    | —         | —         |
| OPG top guard fitted Level I (ISO10262) compliant cab         | ●         | —         |
| Round Tempered glass (green color) front window               | ●         | —         |
| Front window on upper, lower and left side can be opened      | —         | —         |
| Cab : H/R cab   | —         | ●         |
| OPG top guard fitted Level II (ISO10262)                      | —         | ●         |
| OPG front guard fitted Level II (ISO10262)                    | —         | ○         |
| Laminated straight glass front window                         | —         | ●         |
| Left side window can be opened                                | —         | ●         |
| Drink holder  | ●         | ●         |
| Engine shut-off cable   | ●         | ●         |
| Electric double horn  | ●         | ●         |
| Evacuation hammer   | ●         | ●         |
| Fire extinguisher bracket                                     | ○         | ○         |
| Floor mat   | ●         | ●         |
| Footrest  | ●         | ●         |
| Front window washer   | ●         | ●         |
| Glove compartment   | ●         | ●         |
| Hot & cool box  | ●         | ●         |
| Intermittent windshield wiper                                 | ●         | ●         |
| Key cylinder light  | ●         | ●         |
| LED room light with door courtesy                             | ●         | ●         |
| Pilot control shut-off lever                                  | ●         | ●         |
| Rain guard for cab  | ○         | —         |
| Rear tray   | ●         | ●         |
| Retractable seat belt   | ●         | ●         |
| Rubber radio antenna  | ●         | ●         |
| Seat : Adjustable reclining mechanical suspension             | ●         | ●         |
| Seat : Adjustable reclining mechanical suspension with heater | ○         | ○         |
| Seat : Adjustable reclining air suspension with heater        | ○         | ○         |
| Short wrist control levers                                    | ●         | ●         |
| Storage box   | ●         | ●         |
| Sun visor (front)   | ○         | ○         |
| Sun visor (side)  | ○         | ○         |
| Transparent roof with slide curtain                           | —         | ●         |
| 2 speaker   | ●         | ●         |
| 6 fluid-filled elastic mounts                                 | ●         | ●         |
| 12 V power outlet   | ○         | ○         |
| 24 V cigarette lighter  | ●         | ●         |

| MONITOR SYSTEM  | ZX60LC-6J | ZX60CH-6J |
|---|-----------|-----------|
| 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, dock   | ●         | ●         |
| Other displays: work mode, auto-idle, glow, operating conditions etc  | ●         | ●         |
| LIGHTS  |           |           |
| 2 cab lights  | ○         | ●         |
| 3 working lights  | ●         | ●         |
| 4 cab lights  | ○         | ○         |
| Additional working lights(boom right side)  | ○         | ○         |
| UPPER STRUCTURE   |           |           |
| Electric fuel refilling pump with auto stop   | ○         | ○         |
| Auto-grease lubricator  | ○         | ○         |
| 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   | ●         | ●         |
| 170 Ah batteries  | ●         | ●         |
| 2.3 mm thickness undercover   | ●         | —         |
| 4.5 mm thickness undercover   | —         | ●         |
| 10,400 kg counterweight   | ●         | ●         |

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

| MONITOR ATTACHMENTS   | ZX60LC-6J | ZX60CH-6J |
|---|-----------|-----------|
| Centralized lubrication system  | ●         | ●         |
| Damage prevention plate and square bars                                 | —         | ●         |
| Dirt seal on all bucket pins  | ●         | ●         |
| Ranged pin  | ●         | ●         |
| Monolithically cast bucket link A                                       | ●         | ●         |
| 2.5 m <sup>3</sup> (ISO heaped) bucket                                  | ○         | —         |
| 2.9 m <sup>3</sup> (ISO heaped) bucket                                  | ●         | —         |
| 3.5 m <sup>3</sup> (ISO heaped) bucket                                  | ○         | —         |
| 2.9 m <sup>3</sup> (ISO heaped) rock bucket with dual type side shrouds | —         | ●         |
| 3.3 m <sup>3</sup> (ISO heaped) rock bucket with dual type side shrouds | —         | ○         |
| 7.8 m boom and 3.6 m arm  | —         | —         |
| 7.8 m H-boom and 3.6 m H-arm  | —         | ●         |
| 6.8 m BE-boom   | ○         | ○         |
| 4.2 m arm   | ○         | —         |
| 2.9 m BE-arm  | ○         | ○         |
| MISCELLANEOUS   |           |           |
| 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  | ●         | ●         |

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

● : Standard equipment    ○ : Optional equipment    — : Not applicable



Built on the foundation of superb technological capabilities, Hitachi Construction Machinery is committed to providing leading-edge solutions and services to contribute as a reliable partner to the business of customers worldwide.

## 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

Before using a machine with a satellite communication system, please make sure that the satellite communication system complies with local regulations, safety standards and legal requirements. If not so, please make modifications accordingly.

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.