# **HITACHI**



# **HYDRAULIC EXCAVATOR**

- Model Code: ZX85USB-3
   Engine Rated Power: 39.4 kW (52.8 HP) ISO 9249, net
   Operating Weight: 8 080 8 440 kg
   Backhoe Bucket: SAE, PCSA Heaped: 0.13 0.33 m³

  CECE, Heaped: 0.12 0.29 m³

## **The Power to Perform**

The ZAXIS-3 series is a new generation of excavators designed to provide more efficient power, productivity and improved operator comfort. By listening carefully to the wishes of the end-user, HITACHI not only understands your business, but also provides the reliable solutions you've been looking for.

#### **NEW AND IMPROVED**

- Performance: 5 % higher production
- Comfort: **Excellent visibility Enhanced controllability** Lower noise level
- New equipment: Standard satellite communication system Standard theft deterrent system Rear view camera (Optional)



#### **Productivity**

E-mode

Speed sensing control

Improved swing ability

Improved mobility

Improved blade crowding performance

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#### Operator comfort

High visibility inside cab Short stroke levers

Comfort designed seat

Improved controllability and operator

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#### **Multi function monitor**

Maintenance support

Theft deterrent system Rear view camera (Optional)

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#### **Durability and reliability**

Strengthed upperstructure Strengthened undercarriage Strengthened front attachment

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#### Maintenance

Conveniently located inspection points Wide opened engine cover

Parallel arrangement of the cooling

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#### Pilot control shut-off lever

Cab right protection bars

Safety measures

CRES II cab

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Array of low noise mechanisms Ecological design

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Notes: The pictures in this catalog show excavations with a 2.12 m arm, 600 mm grouser shoe and an optional attachment installed. Some of the pictures in this catalog show an unmanned machine with attachments in an operating position. These were taken for demonstration purposes only and the actions shown are not recommended under normal operating conditions.



#### More production, less fuel consumption

#### **Increased Production**

A combination of the hydraulic system (HIOS\*II) and new intercooled turbocharger engine allows the efficient use of hydraulic pressure to increase speeds of actuators and boost production with higher fuel efficiency. The productivity is increased 5 % in comparison to previous model ZAXIS-1.

\*Human & Intelligent Operation System

#### E-mode

The E mode and P mode can be selected to suit job needs. The E mode can save fuel consumption by up to 12 % compared to the previous model's P mode, while yielding similar production.

# Increase in Swing Torque and Traction Force

Swing torque and traction force are increased significantly.

- -Swing torque 9 % UP
- -Traction force 8 % UP

#### **Efficient hydraulic control**

#### **Hydraulic System**

The Hydraulic System elicits more user satisfaction than other models due to its greater operator comfort and ease of operability.

During arm roll-in operations, the hydraulics of 3 pumps are merged, allowing for quick leveling operations. Depending on the operations, usage of the 3 pumps are automatically switched, offering excellent operability. It supports stability and combined operability, such as speed balance and land clearing.

#### **Speed Sensing Control**

A speed sensing system is used for hydraulic horsepower control. The hydraulic pump delivery flow, which varies with changes in engine RPM according to the load, is controlled. This means efficient use of engine horsepower, and also contributes to a reduction in fuel consumption.

#### Development concept of new engine

#### **Intercooled Turbocharger Engine**

The new intercooled turbocharger engine is developed and built to comply with the rigorous Emission Regulations enforced in 2008 in U.S and EU. This new engine contributes to environmental preservation. At the same time it realizes high durability and low fuel consumption by adapting the latest advanced engine technology.

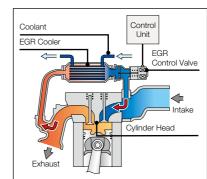
#### Cooled EGR\* System

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

What's more, the EGR cooler cools down exhaust gas to increase air

down exhaust gas to increase air concentration for complete combustion, reducing PM\*\* (diesel plume).

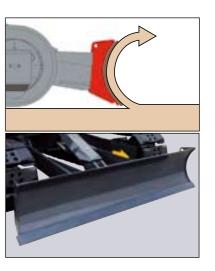
\*Exhaust Gas Recirculation
\*\*Particulate Matter



# Improved crowding performance

#### **Reshaped Blade**

The blade is reshaped for crowding without loss.







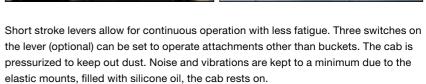
The ZAXIS-3 series cab has been redesigned to meet demands of customers. Using the glass door increases visibility, which is effective when the front is in offset position. From the operator's seat the operator has an excellent view of the jobsite. On the widescreen color LCD monitor the operator can see machine conditions and with the rear view camera (optional), what is behind the machine. Ample legroom, short stroke levers and a comforable seat ensure optimum working conditions. The seat features horizontal, vertical adjustments and has a backrest contoured for comfort, with a HITACHI logo.











Visibility is improved especially for the left downward view. Sliding front window on the enable direct communication between operator and other workers. Travel pedals can be folded when not in use for wider legspace.

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

# **Embedded Information Technology**

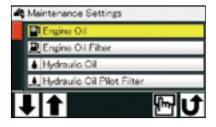
The ZAXIS-3 series is equipped with a widescreen color LCD monitor with adjustable contrast for day and night shifts. With the monitor the operator can check maintenance intervals and connect to the rear view camera (optional). A theft deterrent system and multi-language selection is also available.

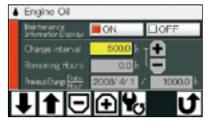
#### **Multi function monitor**



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

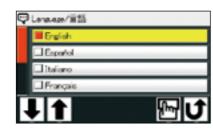
#### Maintenance support





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

#### Multi-language selection



The menu allows selection from 12 languages.



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



Rear view camera (Optional)

The widescreen color LCD, in tandem with the rear view camera on the counterweight, provides a convenient view of the area behind the unit. The rear view camera automatically works when travelling backward, and can also be manually turned on with a select switch on the monitor.

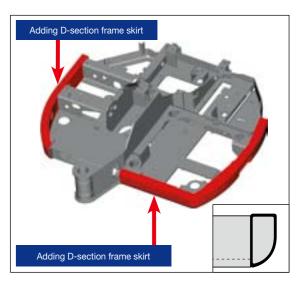


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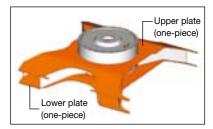
#### **Strengthened Upperstructure**

The new ZAXIS excavator now has a D-section frame skirt, which was highly acclaimed in previous models. As a result of this D-section frame skirt, rigidity and durability in the upper machinery are greatly improved.



#### Strengthened X beam

One-piece upper and lower plates are utilized instead of conventional 4-piece plates, eliminating welds. This increases strength of the track frame.



#### Strengthened front attachment

At arm-bucket joint, the arm top is hardened with WC thermal spraying (Tungsten-Carbide) for greater wear resistance at its contact surface with bucket, reducing jerking.



WC Thermal spraying

# **Simplified Maintenance**

The ZAXIS-3 series meet customer demands for simplified maintenance. Regular maintenance is the key for keeping equipment in top condition, which can help to prevent costly downtime. In addition, a regularly serviced machine has higher residual value. There are many service features to be found on the ZAXIS-3 series.



#### Conveniently located inspection points

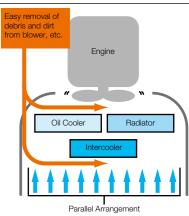
Wide doors give access, from ground level, to the fuel filter, water separator and engine oil



#### Parallel arrangement of the cooling pack

The oil cooler and radiator are laid out in a parallel arrangement, instead of the conventional inline arrangement. This parallel arrangement is significantly easier to clean around the engine.





#### Extended oil and filter change intervals

Front Pin Lubricating Intervals and Consumables Replacement				
		New ZAXIS 85USB		
Consumable	es Engine Oil	500 h		
	Engine Oil Filter	500 h		
	Hydraulic Oil	5 000 h		
	Hydraulic Oil Filter	1 000 h		
	Fuel Filter	500 h		
Lubricant	Bucket	500 h		
	Boom Foot	500 h		
	Front	500 h		

The oil and filter change intervals have been extended considerably, reducing maintenance time and expenses. Engine oil consumption is lower. Hydraulic oil can be used up to 5 000

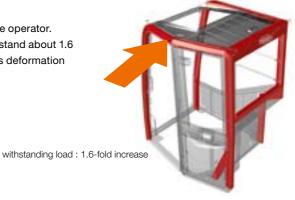
Hydraulic oil can be used up to 5 0 hours.

The fuel tank is a 135 L short-tail-swing version, the same capacity as that used in standard model ZAXIS 70. With 135 L, refueling doesn't have to be done as often.



#### **CRES II cab**

The CRES II cab is designed to help with "just in case" protection for the operator. Safety in case of tipping is improved. The cab top, for instance, can withstand about 1.6 times conventional load when side load is applied to the cab top until its deformation reaches 200 mm.



**Engine stop knob** 

Retractable seat belt

#### **Additional features**

#### Cab right protection bars



Pilot control shut-off lever



**Evacuation hammer** 



OPG top guard, Level II



(Optional)

Other features include a retractable seat belt, evacuation hammer and emergency engine stop knob. A shut-off lever for pilot control helps to prevent unintentional movements. In addition, a Falling Object Protective Structure (OPG top guard, Level II) guard is optionally available. For the cab windows there is a choice of laminated or tempered glass.

#### A cleaner machine

The ZAXIS-3 series is equipped with a clean but powerful engine to comply with Stage III A, and Tier 3. An engine emission regulations effective in the European Union and U.S. EPA from 2008. Reduced particulate matter (PM) output and lower nitrogen oxide (NOx) levels.



#### A quieter machine

Many features contribute to noise reduction in the new ZAXIS. Firstly, the fan with linear clutch responds to the engine temperature: the rotational speed of the fan increases smoothly as the temperature of the engine increases. This control reduces noise in light-load operations, as the fan rotational speed does not increase beyond what is necessary. This also means that no load is placed on the engine, reducing fuel consumption.

The cylinder block and ladder frame in the new engine are strengthened, reducing engine noise. Due to intercooled turbo charging and the optimization of fuel injection timing, exhaust noise is reduced by 10 dB (compared to previous models).



#### A recyclable machine

All resin parts are marked to facilitate recycling. The machine is completely leadfree. The radiator and oil cooler are made from aluminium and all wires are leadless. In addition, biodegradable hydraulic oil is available for jobsites where special environmental care is required.



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# **Parts & Service**

Over the years, we have gained experience in one of the most competitive service markets in the world - Japan.

Using our know-how in dealing directly with customers, we have created a worldwide support system that is highly capable.



#### **Parts**

HITACHI only offers genuine high quality parts. We guarantee that these parts have high performance and long life. We manage around 1 000 000 types of parts all around the world. They are designed and built to be the best match for your HITACHI equipment. HITACHI has a global parts distribution network that makes sure you get what you need as quickly as possible. We have more than 150 dealers worldwide who provide the closest support for your needs. In most cases, your dealer will have the replacement part that you require. If a dealer does not have a certain part, he can order it from four fully stocked parts depots located across the world. These distribution centres are all connected by an on-line system that gives them access to shared information on stocks, such as the number and type of available parts. The depots, which in turn are stocked by a parts center in Japan, minimize delivery time and enable you to get your parts as efficiently and quickly as possible.



#### Service

Our goal is to "keep customer equipment at a maximum performance level". To fulfil this goal, we have set more than 150 dealers all over the world. They have highly trained technicians, and provide a number of support programs.

HITACHI provides a unique extended warranty program called HITACHI Extended Life Program, or HELP. To minimize downtime during troubleshooting, we developed a PDA based diagnostic system called "Dr.ZX". To keep our customers' equipment in top running shape, good service is indispensable. We believe personnel training is the key to providing the best service.

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

### **SPECIFICATIONS**

ENGINE	
Model	Isuzu 4U-4LE2X
Type	4-cycle water-cooled, direct injection
Aspiration	Turbocharged, intercooled
No. of cylinders	4
Rated power	
EEC 80/1269 (without FAN)	40.5 kW (54.3 HP) at 2 000 min <sup>-1</sup> (rpm)
SAE J1349 (without FAN)	40.5 kW (54.3 HP) at 2 000 min <sup>-1</sup> (rpm)
ISO 9249, net	39.4 kW (52.8 HP) at 2 000 min <sup>-1</sup> (rpm)
EEC 80/1269, net	39.4 kW (52.8 HP) at 2 000 min <sup>-1</sup> (rpm)
SAE J1349, net	39.4 kW (52.8 HP) at 2 000 min <sup>-1</sup> (rpm)
Maximum torque	215 N·m (21.9 kgf·m) at 1 500 min <sup>-1</sup> (rpm)
Piston displacement	2.179 L
Bore and stroke	85 mm x 96 mm
Batteries	2 x 12 V / 52 Ah

#### HYDRAULIC SYSTEM

- Swing-independent 3-pump hydraulic system
- OHS (Optimum Hydraulic System) assures fully independent and combined operations
- Automatic 2-speed motor increases traction force and travel speed
- Engin speed sensing system

0 1 0 7	
Main pumps	3 variable displacement axial piston pumps
Maximum oil flow	2 x 79.2 L/min
	1 X 61.6 L/min
Pilot pump	1 gear pump
Maximum oil flow	22.0 L/min

#### **Hydraulic Motors**

Travel	2 variable displacement axial piston motors
Swing	1 axial piston motor

#### **Relief Valve Settings**

Implement circuit	26.0 MPa (265 kgf/cm²)
Swing circuit	25.0 MPa (255 kgf/cm <sup>2</sup> )
Travel circuit	31.4 MPa (320 kgf/cm <sup>2</sup> )
Pilot circuit	3.9 MPa (40 kgf/cm <sup>2</sup> )

#### **Hydraulic Cylinders**

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

#### **Dimensions**

	Quantity	Bore	Rod diameter
Boom	1	115 mm	65 mm
Arm	1	95 mm	60 mm
Bucket	1	85 mm	55 mm
Boom swing	1	110 mm	60 mm

#### **Hydraulic Filters**

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

#### **CONTROLS**

Pilot controls. Hitachi's original shockless valve and quick warm-up system built in the pilot circuit.

Implement levers	2
Travel levers with pedals	2
Boom swing pedals	1

#### **UPPERSTRUCTURE**

#### **Revolving Frame**

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

#### **Swing Device**

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

Swing speed	10.5 min <sup>-1</sup> (rpm)
Swing torque	16.0 kN·m (1 630 kgf·m)

#### Operator's Cab

Independent spacious cab, 1 065 mm wide by 1 655 mm high, conforming to ISO\* Standards. Reinforced glass windows on 4 sides for visibility. Front windows (upper and lower) can be opened. Reclining seat with armrests; adjustable with or without control levers.

#### UNDERCARRIAGE

#### **Tracks**

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

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

#### Numbers of Rollers and Shoes on Each Side

Upper rollers	1
Lower rollers	5
Track shoes	40

#### **Travel Device**

Each track driven by 2-speed axial piston motor through planetary reduction gear for counterrotation of the tracks. Sprockets are replaceable.

Parking brake is spring-set/hydraulic-released disc type. Travel shockless relief valve built in travel motor absorbs shocks when stopping travel. Automatic transmission system: High-Low.

Travel speeds	High: 0 to 5.0 km/h
	Low: 0 to 3.1 km/h

Maximum traction force.... 71.0 kN (7 240 kgf)

#### **WEIGHTS AND GROUND PRESSURE**

Equipped with 3.67 m monoblock boom, 1.62 m arm, 0.28 m<sup>3</sup> (SAE, PCSA heaped) bucket and blade.

Shoe type	Shoe width	Operating weight	Ground pressure		
Triple grouser	450 mm	8 080 kg	35 kPa (0.36 kgf/cm²)		
	600 mm	8 260 kg	27 kPa (0.28 kgf/cm²)		
Pad	450 mm	8 070 kg	35 kPa (0.37 kgf/cm²)		
Rubber	450 mm	8 100 kg	35 kPa (0.36 kgf/cm²)		

Weights of the basic machines [including 1 480 kg counterweight and triple grouser shoes and blade, excluding front-end attachment, fuel, hydraulic oil, engine oil and coolant etc.] are:

#### with Blade

ZX85USB<sub>-3</sub>...... 5 330 kg with 450 mm shoes

# Fuel tank 135.0 L Engine coolant 10.0 L Engine oil 12.0 L Travel device 1.2 L (each side) Hydraulic system 100.0 L Hydraulic oil tank 56.0 L

#### **BACKHOE ATTACHMENTS**

Boom and arms are of welded, box-section design. 3.72 m boom, and 1.62 m and 2.12 m arms are available.

#### **BUCKETS**

Capacity		Width		No. of	Mainh	Recommendation ZX85USB-3	
SAE, POSA neaped	GEGE neaped	side cutters	side cutters		1.62 m arm	2.12 m arm	
0.13 m <sup>3</sup>	0.12 m <sup>3</sup>	360 mm	450 mm	3	141 kg	0	0
0.17 m <sup>3</sup>	0.15 m <sup>3</sup>	450 mm	550 mm	3	168 kg	0	0
0.19 m <sup>3</sup>	0.17 m <sup>3</sup>	490 mm	590 mm	3	175 kg	0	0
0.23 m <sup>3</sup>	0.20 m <sup>3</sup>	560 mm	650 mm	3	186 kg	0	0
0.28 m <sup>3</sup>	0.24 m <sup>3</sup>	660 mm	750 mm	4	211 kg	0	©* <sup>2</sup>
0.33 m <sup>3</sup>	0.29 m <sup>3</sup>	770 mm	860 mm	5	230 kg	0	_
*1 0.23 m <sup>3</sup>	0.20 m <sup>3</sup>	560 mm	650 mm	3	225 kg	0	0
*1 0.28 m <sup>3</sup>	0.24 m <sup>3</sup>	660 mm	750 mm	4	254 kg	0	⊚* <sup>2</sup>
*1 0.33 m <sup>3</sup>	0.29 m <sup>3</sup>	770 mm	850 mm	5	277 kg	0	_

<sup>\*1</sup> Reinforced bucket

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<sup>\*</sup> International Standardization Organization

<sup>&</sup>lt;sup>\*2</sup> With 600 mm shoes only

Suitable for materials with density of 2 000 kg/m³ or less

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

Slope-finishing service

Not applicable

# **SPECIFICATIONS**

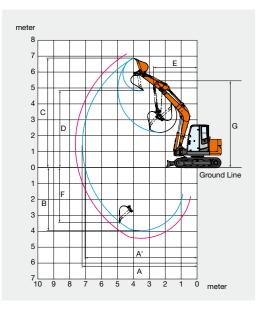
# **DIMENSIONS**

		Unit: mm
	ZX85USB-3	
A Distance between tumblers	2 290	
B Undercarriage length	2 920	
* C Counterweight clearance	760	
D Rear-end swing radius	1 490	
E Overall width of upperstructure	2 320	
F Overall height of cab	2 690	
* G Min. ground clearance	360	
H Track gauge	1 870	
I Track shoe width	G 450	
J Undercarriage width	2 320	
K Overall width	2 320	
L Overall length		
With 1.62 m arm	6 640	
With 2.12 m arm	6 810	
* M Tack height with triple grouser shoes	650	

<sup>\*</sup> Excluding track shoe lug G: Triple grouser shoe

#### **WORKING RANGES**





	ZX85USB-3						
Arm length	1.62 m	2.12 m					
A Max. digging reach	7 210	7 700					
A' Max. digging reach (on ground)	7 050 7 550						
B Max. digging depth	3 970	4 470					
C Max. cutting height	6 810	7 180					
D Max. dumping height	4 790	5 140					
E Min. swing radius	2 740	2 890					
F Max. vertical wall	3 450	4 030					
G Max. boom-swing angle	Left 60° / Right 60°						
H Max. offsetdistance	Left 910 / Right 720						
Bucket digging force* ISO	55 kN (5 600 kgf)						
Bucket digging force* SAE : PCSA	47 kN (4 800 kgf)						
Arm crowd force* ISO	38 kN 32 kN (3 900 kgf) (3 300 kgf)						
Arm crowd force* SAE : PCSA	36 kN 31 kN (3 700 kgf) (3 200 kgf)						

Excluding track shoe lug \* At power boost

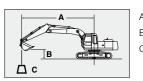
# LIFTING CAPACITIES

- Notes: 1. Ratings are based on SAE J1097.

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

  3. The load point is a hook (not standard equipment) located on the back of the bucket.

  - 4. \*Indicates load limited by hydraulic capacity.
    5. 0 m = Ground.



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

(	Rating over-side or 360 degrees

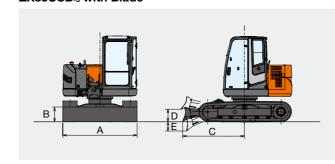
Rating over-front	Unit:
hatting over-indit	OHIL.

1 000 kg

		Load radius												A4			
Conditions	Load point height	2.0	2.0 m		3.0 m		4.0 m		5.0 m		6.0 m		7.0 m		At max. reach		
		<b>©</b>	ů	<b>@</b>	ů	<b>@</b>	ů	<b>©</b>	ů	<b>@</b>	ů	<b>©</b>	ů	<b>@</b>	ů	meter	
Bucket	5.0 m													1.06	*1.18	5.72	
SAE, PCSA: 0,28 m <sup>3</sup> Arm 1.62 m	4.0 m							1.33	*1.64					0.85	*1.14	6.37	
Counterweight 1 480 kg	3.0 m					1.87	*2.11	1.29	*1.80	0.93	*1.66			0.75	*1.15	6.74	
Grouser Shoe 450 mm	2.0 m					1.73	*2.80	1.23	*2.09	0.90	*1.76			0.70	*1.20	6.89	
	1.0 m					1.61	*3.34	1.16	*2.36	0.87	*1.88			0.69	*1.30	6.84	
	0 (Ground)					1.56	*3.43	1.12	*2.49	0.84	*1.93			0.73	*1.47	6.59	
	-1.0 m			2.95	*3.28	1.56	*3.23	1.10	*2.42	0.84	*1.83			0.83	*1.62	6.09	
	-2.0 m			2.53	*3.46	1.57	*2.77	1.12	*2.09					1.07	*1.48	5.25	
	-3.0 m					1.63	*1.85										

		Load radius											At many weeds			
Conditions	Load point	2.0 m		3.0 m		4.0 m		5.0 m		6.0 m		7.0 m		- At max. reach		
	height		ů	<b>©</b>	ů	<b>@</b>	Ů	<b>@</b>	Ů		ů	<b>@</b>	ů	<b>©</b>	Ů	meter
Bucket	5.0 m							1.37	*1.41					0.90	*1.00	6.34
SAE, PCSA: 0,28 m <sup>3</sup> Arm 2.12 m	4.0 m							1.37	*1.41	0.98	*1.46			0.75	*0.97	6.91
Counterweight 1 480 kg	3.0 m							1.33	*1.60	0.97	*1.51			0.68	*0.98	7.24
	2.0 m					1.82	*2.45	1.27	*1.92	0.94	*1.65			0.64	*1.01	7.38
	1.0 m					1.70	*3.14	1.21	*2.25	0.90	*1.82	0.69	*1.37	0.63	*1.09	7.34
	0 (Ground)					1.62	*3.47	1.16	*2.47	0.87	*1.93			0.66	*1.21	7.11
	-1.0 m			2.53	*2.94	1.60	*3.43	1.14	*2.52	0.86	*1.94			0.73	*1.42	6.66
	-2.0 m	*3.31	*3.31	2.56	*4.26	1.60	*3.12	1.13	*2.33	0.86	*1.71			0.89	*1.48	5.94
	-3.0 m			2.60	*3.23	1.63	*2.46	1.16	*1.77							

#### ZX85USB-₃ with Blade



A Overall width of blade	2 320 mm
B Overall heigth of blade	460 mm
C Blade distance	1 880 mm
*D Max. raising height above ground	360 mm
*E Max. lowering depth from ground	300 mm
* Excluding track shoe lug	

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Unit: mm

#### STANDARD EQUIPMENT

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

#### **ENGINE**

- E mode control
- 50 A alternator
- Dry-type air filter with evacuator valve (with air filter restriction indicator)
- Cartridge-type engine oil filter
- Cartridge-type fuel filter
- Air cleaner double filters
- Radiator, oil cooler and intercooler with dust protective net
- Radiator reserve tank
- Fan guard
- Isolation-mounted engine
- Auto-idle system

#### **HYDRAULIC SYSTEM**

- Control valve with main relief valve

- Full-flow filter
- Pilot filter

- Extra port for control valve
- Suction filter
- Swing drain filter
- Cigarette lighter

CAB

structure) cab

- CRES II (Center pillar reinforced

- OPG top guard fitted Level I

(ISO10262) compliant cab

- Equipped with reinforced, tinted

- Front windows on upper, lower and

(green color) glass windows

- Intermittent windshield wipers

- 4 fluid-filled elastic mounts

left side can be opened

- Front window washer

- Adjustable reclining seat

with adjustable armrests

- AM-FM radio with digital clock

- Ashtray

- Footrest

- Seat belt

- Drink holder

- Electric horn

- Storage box
- Glove compartment
- Fire extinguishier bracket
- Floor mat
- Short wrist control levers
- Pilot control shut-off lever
- Engine stop knob - Auto control air conditioner
- Transparent roof with slide curtain

#### MONITOR SYSTEM

- Meters:\_Hourmeter and trip-meter, engine coolant temperature gauge and fuel gauge.
- Warning lamps:\_Alternator charge, - All-weather sound suppressed steel engine oil pressure, engine overheat, - Upper and lower rollers air filter restriction and minimum fuel  $\,\,$  - Reinforced track links with pin seals level.
  - Pilot lamps:\_Engine preheat, work light, auto-idle - Alarm buzzers:\_Engine oil pressure and engine overheat

#### LIGHTS

- 2 working lights

#### **UPPERSTRUCTURE**

- Undercover
- 1 480 kg counterweight
- Fuel level float
- Hydraulic oil level gauge
- Rear view mirror
- (right, left side & cab rear) - Swing parking brake

#### UNDERCARRIAGE

- Travel parking brake
- Travel motor covers - Hydraulic track adjuster
- Bolt-on sprocket

- 4 tie down hooks
- 450 mm triple grouser shoes
- Blade

#### FRONT ATTACHMENTS

- HN bushing
- WC (tungsten-carbide) thermal spraying
- Flanged pin
- Dirt seal on all bucket pins
- 1.62 m arm
- 0.28 m³(SAE, PCSA heaped) bucket

#### **MISCELLANEOUS**

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

#### **OPTIONAL EQUIPMENT**

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

- Suspension seat
- OPG top guard, Level II
- Air suspension seat with heater
- Rain guard
- Sun visor

CAB

- 12 V power source
- Three switches lever

#### LIGHTS

- Additional work light (boom right
- Additional light (on the top of the
- Additional light (Rear light)
- Rotating lamp

#### **ATTACHMENTS**

UNDERCARRIAGE

**UPPER STRUCTURE** 

- Travel motion alarm device

- Track undercover

- Rear view camera

- Attachment basic piping
  - Accessories for breaker
  - Accessories for breaker & crusher
  - Accessories for 2 speed selector
  - Assist piping
- Pilot accumulator - Electric fuel refilling pump with auto
  - Hose rupture valve

#### **OTHERS**

- Biodegradable oil - Front screen of air condenser

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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.

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