



SK500LC



Power Meets Efficiency

KOBEICO



Higher fuel efficiency means "Efficiency"

Increase in productivity means "Power"

To urban centers, and to mines around the world. Kobelco's all-out innovation brings you durable earth-friendly construction machinery that's equal to any task, at sites all over the planet. Increased power and even greater fuel economy bring higher efficiency to any project. Kobelco SK500LC machines are also more durable than ever, able to withstand the rigors of the toughest job sites. It all adds up to new levels of value that are a step ahead of the times. While focusing on the global environment of the future, Kobelco offers next-generation productivity to meet the need for lower life cycle costs and exceed the expectations of customers the world over.



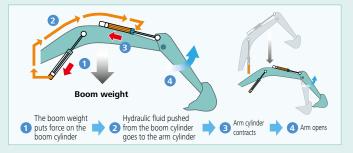


Evolution Continues, with Improved Fuel Efficiency.

Hydraulic System: Revolutionary Technology Saves Fuel

Arm Interflow System 🖤

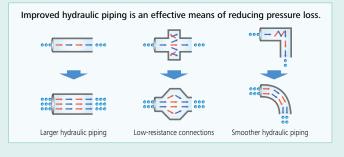
When lowering the boom, this system uses the downward force generated by the boom's weight to push fluid to the shovel arm. This greatly reduces the need to apply power from outside the system.



In Pursuit of Improved Fuel Efficiency

Hydraulic Circuit Reduces Energy Loss We have made every effort to enhance fuel efficiency by minimizing hydraulic

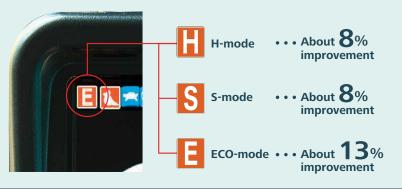
pressure resistance, improving the hydraulic line layout to control friction resistance loss and minimizing valve resistance.

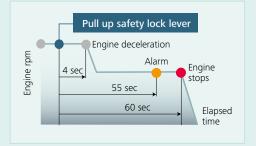


Operation Mode

Fuel consumption is lower in H-mode/S-mode/ECO-mode in comparison with the previous model (Generation 9).

Compared to previous models





AIS (Auto Idle Stop)

If the boarding/disembarking lever is left up, the engine will stop automatically.

This eliminates wasteful idling during standby, saving fuel and reducing CO_2 emissions as well.

Higher fuel efficiency means "Efficiency"

The new arm interflow system more efficiently controls hydraulic fluid flow, and significant reduction of in-line resistance and pressure loss boosts fuel efficiency. The electronic-control common-rail engine features high-pressure fuel injection and multiple injection with improved precision. It is fitted with an EGR cooler which greatly reduce PM and NOx emissions and meets TIERIII Standards.

Built to operate in tough working environment

Hydraulic Drive for Engine Cooling Fan; 🦇 Independent Oil Cooler Fan

Hydraulic drive optimizes the cooling fan rotation speed to improve fuel economy and reduce noise. Also, the independent oil cooler fan better matches cooling to the hydraulic oil temperature, for optimal oil temperature control.



Pursuing maximum fuel efficiency

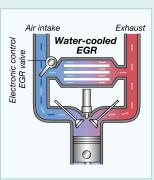
Common rail system

High-pressure injection atomizes the fuel, and more precise injection improves combustion efficiency. This also contributes to better fuel economy.



EGR cooler

While ensuring sufficient oxygen for combustion, cooled emission gases are mixed with the intake air and recirculated into the engine. This reduces oxygen content and lowers combustion temperature.





More Power and Higher Efficiency

The highly efficient hydraulic system minimizes fuel consumption while maximizing power. With nimble movement and ample digging power, this excavator promises to improve your job productivity.

Superior Digging Force

Max. Bucket Digging Force		
Normal:	267	kN
With power boost:	292	kN

Max. Arm Crowding Force		
Normal:	223	kN
With power boost		
	*Values are for HE) arm (3.00m)



Get More Done Faster with Superior Operability



*Values are for HD arm (3.00m)

A Light Touch on the Lever Means Smoother, **Less Tiring Work**

It takes 38%* less effort to work the operation lever, which reduces fatigue over long working hours or continued operations.

*Compared to SK500LC-9



Top Class Traveling Force

Powerful traveling force and pulling force deliver plenty of speed when climbing slopes or negotiating bad roads, and the agility to change direction swiftly and smoothly.



■rawbar Pulling Force: 415kN

Operator-friendly Features Include Controls that Are Easy to See, Easy to Use



Multi-Display in Color

Brilliant colors and graphic displays are easy to recognize on the LCD multi-display in the console. The display shows fuel consumption, maintenance intervals, and more.

- 1 Analog gauge provides an intuitive reading of fuel level and engine water temperature
- 2 Green indicator light shows low fuel consumption during operation
- 3 PM accumulation display (left)/Urea level gauge (right)
- 4 Fuel consumption/Switch indicator for rear camera images
- **(5)** Digging mode switch
- 6 Monitor display switch

One-Touch Attachment **Mode Switch**

A simple flick of a switch converts the hydraulic circuit and flow amount to match attachment changes. Icons help the operator to confirm the proper configuration at a glance.



PM accumulation display

Breaker mode







Fuel consumption

CONSUMPTION

13.

50 50

Nibbler mode

Increased Power, with Enhanced Durability to Maintain the **Machine's Value**

Improved Filtration System Reliability

Clean, contaminant-free fuel and hydraulic fluid are essential to stable performance. The improved filtration systems reduce the risk of mechanical trouble and enhance longevity and durability.

Hydraulic Fluid Filter 🤷

Recognized as the best in the industry, our premium fine filter separates out even the smallest particles. New cover prevents contamination when changing filters.



Double-Element

Air Cleaner

The large-capacity element features a double-filter structure that keeps the engine running clean even in industrial environments.

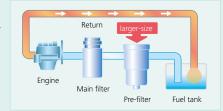
Hydraulic Fluid Filter Clog Detector

Pressure sensors at the inlet and outlet of the hydraulic fluid filter monitor differences in pressure to determine the degree of clogging If the difference in pressure exceeds a predetermined level, a warning appears on the multi-display, so any contamination can be removed from the filter before it reaches the hydraulic fluid reservoir.





The pre-filter, with built-in water separator maximizes filtering performance





Increase in productivity means "Power"

Structural design increases strength, while eliminating hydraulic problems. Enhanced durability takes productivity to a new level.

*Hydraulic piping for attachments may vary in your area. Two cab lights and additional track guides are optional.

Increased Filtering Capacity for Www Hydraulic Oil

Two filters are installed for returning hydraulic oil, to curb clogging and increase the durability and reliability of the hydraulic equipment.



KOBELCO

Pump Drain Filter 🥢

Newly installed pump drain filter boosts pump reliability.



Pilot Filter

A new cartridge-type pilot filter simplifies maintenance.



8

Comfortable Cab Is Now Safer than Ever

A work environment that is quieter and more comfortable. A cab that puts the operator first is key to improved safety.



Comfort

Super-Airtight Cab



The high level of air-tightness keeps dust out of the cab.

Quiet Inside

The high level of air-tightness ensures a quiet, comfortable cabin interior.

Low Vibration

Coil springs absorb small vibrations, and high suspension mounts filled with silicone oil reduce heavy vibration. The long stroke achieved by this system provides excellent protection from vibration.

Twice the stroke of a conventional mount

Broad View Liberates the Operator

The front window features one large piece of glass without a center pillar on the right side for a wide, unobstructed view.

Air Conditioner 🦇 Register behind the Seat



The large air-conditioner has registers on the back pillars that blow from behind and to the right and left of the operator's seat. They can be adjusted to put a direct flow of cool/warm air on the operator, which means a more comfortable operating environment.



More Comfortable Seat Means Higher Productivity



Interior Equipment Adds to Comfort and Convenience



Large Cab Is Easy to Get In and Out of The expanded cab provides plenty of room for

a large door, more headroom and smoother entry and exit.

Safety

ROPS Cab*

ROPS (Roll-Over-Protective Structure)-compliant cab clears ISO standards (ISO-12117-2: 2008) and ensures greater safety for the operator should the machine tip over.



*This picture contains optional cab two lights.





*TOP Guard is fitted as standard.

Expanded Field of View for Greater Safety





Right Side Camera Fitted

In addition to the existing rear-view camera, a camera for the right side is fitted for easy safety checks all around the machine.



Rear view shows the area directly behind the cab.



*If the operating mass exceeds MAX. MASS (maximum operating mass) described on ROPS CERTIFICATION with the special attachment or others installed, it will cause insufficient protective function, resulting in serious accidents or death should the machine tip/ roll over.

Ecavator Remote Monitoring System



Direct Access to Operational Status

Location Data

•Accurate location data can be obtained even from sites where communications are difficult.





	11 Apr, 2015	💼 to 10 May, 2015 🛛 💼	Search	
Тур	e of Operation	Working Hrs		Ratio
Total W	orking Hrs		169 Hrs	100 %
Digging	Hrs		72.2 Hrs	43 %
Travelin	ng Hrs		18.3 Hrs	11 %
Idle Hrs	5		15.9 Hrs	9 %
Opt Att	Hrs		62.5 Hrs	37 %
• • • • • • • • • • • • • • • • • • •	node Hrs		02.3 HIS 0 Hrs	0 9

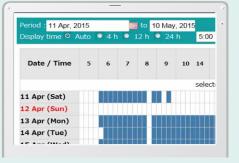
Latest location

11

Operating Hours

• A comparison of operating times of machines at multiple locations shows which locations are busier and more profitable.

• Operating hours on site can be accurately recorded, for running time calculations needed for rental machines, etc.



Daily report

Maintenance Data and Warning Alerts

Machine Maintenance Data

Provides maintenance status of separate machines operating at multiple sites.
Maintenance data is also relayed to KOBELCO service personnel, for more efficient planning of periodic servicing.

Model Serial 1	Serial No.	Hour	
	Me	Meter	Engine Oil
SK135SRLC-	YH07-09721	72411	124
3/SK140SRL	0.38/0.35	734 Hr	434
SK135SRLC-	YH07-09789	73 Hr	429
3/SK140SRL	0.38/0.35	73 11	429
SK210LC-9	YQ13-10454	960 Hr	58
SK2TULC-9	0.8/0.7	900 HI	56
SK210LC-9	YQ13-10481	549 Hr	498
SK210LC-9	0.8/0.7	549 11	490
SK75SR-	YT08-30374		

Work mode

H mode

S mode

E mode

TOTAL

Fuel consumption

Maintenance

Alarm Information Can Be Received through E-mail

• Alarm information or maintenance notice can be received through E-mail, using a computer or cell phone.



Fuel Consumption Data

•Data on fuel consumption and idling times can be used to indicate improvements in fuel consumption.

Working Hrs

2:06

0:00

169:19

171:25

Total Fuel

Consumption

24.5 L

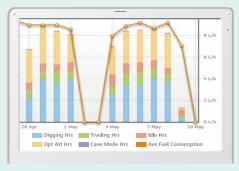
0.0 L

1489.7 L

1514.2 L

Graph of Work Content

• The graph shows how working hours are divided among different operating categories, including digging, idling, traveling and optional operations.





Warning Alerts

• This system warns an alert if an anomaly is sensed, preventing damage that could result in machine downtime.

Daily/Monthly Reports

• Operational data downloaded onto a computer helps in formulating daily and monthly reports.

Alarm messages can be received on mobile device.

Security System

Engine Start Alarm

•The system can be set an alarm if the machine is operated outside designated time.

	_	
etting Condition		
Setting Condition Change		
Start time 20 💌 : 00 💌		
Release time 07 💌 : 00	•	
No Working Whole Day		
Mon Tue Wed Thu Fri Sat S	in	
	Clear	1

Area Alarm

• It can be set an alarm if the machine is moved out of its designated area to another location.

Around the current	(latest) location	1 Km
阿 Input Latitude and I	Longitude	
Latitude1		
Longitude1		
Latitude2		
Longitude2		
Мар	Clear	1
© Release		£.,

Engine start alarm outside prescribed work time

Alarm for outside of reset area



Easy, On-the-Spot Maintenance

There is ample space in the engine compartment for a mechanic to do maintenance work inside. The distance between steps are lower so entry and exit is easier. And the mechanic can work in comfort, without contortions or unnatural body positions. Finally, the hood is lighter and easier to raise and lower.



Ground Level Access

Laid out for easy access to radiator and cooling system elements.



Maintenance Work, Daily Checks, Etc., Can Be Done from Ground Level

The layout allows for easy access from the ground for many daily checks and regular maintenance tasks.













Pre-filter with water separate

Engine oil filter
 Pilot filter
 Pump drain filter
 Pre-filter with water separator

Efficient Maintenance Keeps the Machine in Peak Operating Condition



More Efficient Maintenance Inside the Cab



More finely differentiated fuses make it easier Internal and external air conditioner filters can to locate malfunctions.



be easily removed without tools for cleaning.

Easy Cleaning

hours



Special sloped crawler side frame design is easily cleaned of mud.



Detachable two-piece floor mat with handles Engine oil pan equipped with drain valve. for easy removal. A floor drain is located under the floor mat.





Long-Interval Maintenance

Long-life hydraulic oil reduces cost and labor.



Highly Durable Premium-fine Filter

The high-capacity hydraulic oil filter incorporates glass fiber with superior cleaning power and durability.



Specifications

🔲 Engine

Model	HINO P11C-UP
Туре	Water-cooled, 4cycle 6cylinder direct injection type diesel engine with intercooler turbo-charger
No. of cylinders	6
Bore and stroke	122 mm × 150 mm
Displacement	10.52 L
Rated power output	Net 257 kW/1,850 min ⁻¹ (ISO 14396 : without fan)
Max. torque	Net 1,400 N · m/1,400 min ⁻¹ (ISO 14396 : without fan)

Hydraulic System

Pump	
Туре	Two variable displacement pumps + One gear pump
Max. discharge flow	2 × 370 L/min
Relief valve setting	
Excavating circuits (main)	31.4 Mpa
Power boost	34.3 Mpa
Travel circuit	34.3 Mpa
Swing circuit	26.0 Mpa
Pilot control circuit	5.0 Mpa
Pilot control pump	Gear type
Main control valve	8-spool
Oil cooler	Air cooled type

Swing System

Swing motor	Axial piston motor
Brake	Hydraulic; locking automatically when the swing control lever is in neutral position
Swing speed	7.6 min ⁻¹ {rpm}
Swing torque	185 kN·m



Travel motors	Variable displacement piston pump
Travel brakes	Hydraulic
Parking brakes	Wet multiple plate
Travel shoes	50 each side
Travel speed (high/low)	5.4/3.4 km/h
Drawbar pulling force	415 kN
Gradeability	70 % (35 deg)

🖪 Cab & Control

Cab

All-weather, sound-suppressed steel cab mounted on the high suspension mounts filled with silicone oil and equipped with a heavy, insulated floor mat.

······································
Control
Two hand levers and two foot pedals for travel
Two hand levers for excavating and swing
Electric rotary-type engine throttle

Boom, Arm & Bucket

Boom cylinders	170 mm × 1,590 mm
Arm cylinder	190 mm × 1,970 mm
Bucket cylinder	160 mm × 1,410 mm

Refilling Capacities & Lubrications

Fuel tank	638 L
Cooling system	47.4 L
Engine oil	42.5 L
Travel reduction gear	2×15 L
Swing reduction gear	2x5 L
Undraulic ail tank	371 L tank oil level
Hydraulic oil tank	631 L hydraulic system



Backhoe bucket and combination

	Use	Backhoe bucket				
	Ose	Heavy digging				
Bucket capacity	ISO heaped m ³	2.1				
Struck m ³		1.5				
On an in a suidth	With side cutters mm	1,660				
Opening width	Without side cutters mm	1,580				
No. of teeth		5				
Bucket weight kg		2,270				
Combination	3.0m short arm	\bigcirc				
	3.45m standard arm	\bigtriangleup				

 \bigcirc Standard \triangle Loading only

DLC SK500LC-10

Working Ranges

		Unit: m					
Boom	7.0 m						
Arm Range	3.00 Arm	3.45 Arm					
a- Max. digging reach	11.77	12.07					
b- Max. digging reach at ground level	11.54	11.84					
C- Max. digging depth	7.36	7.81					
d-Max. digging height	11.14	10.91					
e- Max. dumping clearance	7.72	7.58					
f- Min. dumping clearance	3.23	2.78					
g- Max. vertical wall digging depth	6.58	6.99					
h-Min. swing radius	5.28	5.14					
i- Horizontal digging stroke at ground level	5.21	6.09					
j- Digging depth for 2.4 m (8')flat bottom	7.20	7.67					
Bucket capacity ISO heaped m ³	2.10	2.10					

Digging Force (ISO 6015)

Digging Force (ISO 6015)		Unit: kN
Arm length	3.00 Arm	3.45 Arm
Bucket digging force	267/292*	268/293*
Arm crowding force	223/244*	203/222*



b h 13 m 12 11 10 9 8 d e f g С j 5 6 7 8] _{9 m} 13m 12 11 10 9 8 7 6 5 4 3 2 1 - 3.00 m Short Arm ------ 3.45 m Standard Arm

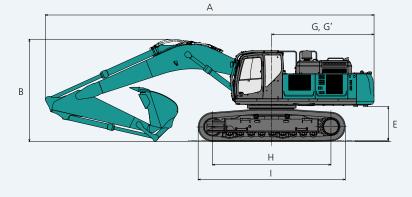
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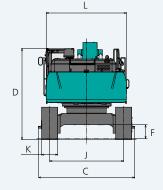
Dimensions 2

A	rm length	3.00 Arm	3.45 Arm			
А	Overall length	12,210	12,160			
В	Overall height (to top of boom)	3,800 3,610				
С	Overall width	3,580				
D	Overall height (to top of cab)	3,380				
Е	Ground clearance of rear end*	1,260*				
F	Ground clearance*	51	0*			

		Unit: mm
G	Tail swing radius	3,800
G'	Distance from center of swing to rear end	3,800
н	Tumbler distance	4,400
T	Overall length of crawler	5,460
J	Track gauge	2,750
К	Shoe width	600
L	Overall width of upperstructure	2.980

*Without including height of shoe lug.

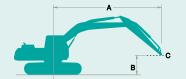


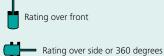


Operating Weight & Ground Pressure In standard trim, with standard boom, 3.00 m arm, and 2.10 m³ ISO heaped bucket

Shaped		Triple grouser shoes (even height)					
Shoe width	mm	600	800				
Overall width of crawler(Without including width of step)	mm	3,350	3,550				
Ground pressure	kPa	87	66				
Operating weight	kg	50,500	51,600				

Lift Capacities





A: Reach from swing centerline to arm top B: Arm top height above/below ground C: Lift point Bucket: Without bucket Relief valve setting: 34.3 MPa

SK500LC	-10	Boom: 7.0 m Arm: 3.00 m Bucket: without Counterweight: 9,800 kg Shoe: 600 mm HD												
	A		m	4.5	m	6.0	m	7.5	m	9.0	m	At Max.	Reach	
В		L	₫	L	—	L	—	L		L	₫-	L	₫-	Radius
9.0m	kg											*10,010	*10,010	7.36m
7.5m	kg							*9,550	*9,550			*9,660	9,250	8.51m
6.0m	kg							*10,020	*10,020	*9,540	8,370	*9,580	7,930	9.27m
4.5m	kg			*17,490	*17,490	*13,000	*13,000	*10,920	10,800	*9,840	8,190	*9,630	7,190	9.74m
3.0m	kg					*14,950	14,070	*11,960	10,320	*10,350	7,940	*9,760	6,810	9.96m
1.5m	kg					*16,430	13,400	*12,870	9,910	*10,830	7,720	*9,960	6,700	9.95m
G.L.	kg			*12,360	*12,360	*17,120	13,050	*13,410	9,650	*11,090	7,570	*10,190	6,870	9.70m
-1.5m	kg	*9,260	*9,260	*21,690	19,950	*17,000	12,970	*13,410	9,570	*10,800	7,580	*10,410	7,380	9.20m
-3.0m	kg	*20,200	*20,200	*20,650	20,230	*15,990	13,110	*12,560	9,680			*10,540	8,430	8.41m
-4.5m	kg	*22,390	*22,390	*17,480	*17,480	*13,570	13,510					*10,320	*10,320	7.21m

SK500LC	-10	Boom: 7.0	Boom: 7.0 m Arm: 3.45 m Bucket: without Counterweight: 9,800 kg Shoe: 600 mm HD											
		3.0 m		4.5 m 6.0		m 7.5 m		9.0 m		At Max. Reach				
В		ł	4 -	L	—	L	4 -	ł	₫	L	-	L	₫-	Radius
9.0m	kg											*9,210	*9,210	7.76m
7.5m	kg											*9,020	8,810	8.86m
6.0m	kg							*9,510	*9,510	*9,020	8,510	*8,950	7,610	9.59m
4.5m	kg			*16,160	*16,160	*12,340	*12,340	*10,470	*10,470	*9,450	8,290	*9,030	6,920	10.04m
3.0m	kg			*20,370	*20,370	*14,380	14,330	*11,590	10,450	*10,050	8,020	*9,310	6,560	10.26m
1.5m	kg			*13,460	*13,460	*16,060	13,580	*12,610	10,010	*10,630	7,770	*9,560	6,440	10.25m
G.L.	kg			*16,470	*16,470	*17,000	13,140	*13,290	9,700	*11,010	7,590	*9,850	6,580	10.01m
-1.5m	kg	*11,850	*11,850	*22,990	19,900	*17,140	12,990	*13,470	9,570	*10,980	7,530	*10,180	7,010	9.53m
-3.0m	kg	*20,260	*20,260	*21,530	20,120	*16,430	13,060	*12,930	9,610			*10,480	7,900	8.76m
-4.5m	kg	*25,020	*25,020	*18,810	*18,810	*14,520	13,360	*10,960	9,920			*10,620	9,730	7.62m

Notes:

1. Do not attempt to lift or hold any load that is greater than these lift capacities at their specified lift point radius and heights. Weight of all accessories must be deducted from the above lift capacities.

4. The above lift capacities are in compliance with ISO 10567. They do not exceed 87% of

2. Lift capacities are based on machine standing on level, firm, and uniform ground. User must make allowance for job conditions such as soft or uneven ground, out of level conditions, side loads, sudden stopping of loads, hazardous conditions, experience of personnel, etc.

3. Arm top defined as lift point.

hydraulic lift capacity or 75% of tipping load. Lift capacities marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.
5. Operator should be fully acquainted with the Operator's and Maintenance Instructions before

operating this machine. Rules for safe operation of equipment should be adhered to at all times.

Lift capacities apply to only machine as originally manufactured and normally equipped by KOBELCO CONSTRUCTION MACHINERY CO., LTD.



STANDARD EQUIPMENT

ENGINE

- Engine, HINO P11C-UP, diesel engine with turbocharger and intercooler
- Automatic engine deceleration
- Auto Idle Stop (AIS)
- Batteries (2 x 12V 112Ah)
- Starting motor (24V 6 kW), 60 amp alternator
- Automatic engine shut-down for low engine oil pressure
- Engine oil pan drain cock
- Double element air cleaner
- Battery shut down
- Pre air cleaner
- Emergency engine shut-off switch

CONTROL

- Working mode selector (H-mode, S-mode and ECO-mode)
- Power Boost

SWING SYSTEM & TRAVEL SYSTEM

- SSwing rebound prevention system
- Two-speed travel with automatic shift down
- Sealed & lubricated track links
- Grease-type track adjusters
- 600 mm HD triple grouser shoe
- Lower Under Cover
- Travel alarm
- Automatic swing brake
- Tow eyes
- Straight propel system

OPTIONAL EQUIPMENT

- Refueling pump
- 600 mm HD double grouser shoe
- 800 mm HD triple grouser shoe
- Cab guard
- Air suspension seat

Note: Standard and optional equipment may vary. Consult your KOBELCO dealer for specifics.

HYDRAULIC

- Arm interflow system
- Auto warm up system
- Aluminum hydraulic oil cooler
- Hydraulic fluid filter clog detector
- N&B piping

MIRRORS, LIGHTS & CAMERAS

- Two Rearview mirrors, Right bottom clearance mirror
- Three front working lights(Two for boom, one for right storage box)
- Rear & right side camera

CAB & CONTROL

- Two control levers, pilot-operated
- Horn, electric
- \blacksquare Cab light (interior)
- Luggage tray
- Large cup holder
- Detachable two-piece floor mat
- Headrest
- Handrails
- Intermittent windshield wiper with double-spray washer
- Skylight
- Tinted safety glass
- Pull-up type front window and removable lower front window
- Easy-to-read multi-display color monitor
- Automatic air conditioner
- Emergency escape hammer
- GEOSCAN
- Suspension seat
- 12v outlet
- Cab two lights
- Rain visor (may interfere with bucket action)
- Cat walk
- Additional truck guide



Note: This catalog may contain attachments and optional equipment that are not available in your area. And it may contain photographs of machines with specifications that differ from those of machines sold in your areas. Please consult your nearest KOBELCO distributor for those items you require. Specialist equipment is needed to use this machine in demolition work. Before using it please contact your KOBELCO dealer. Due to our policy of continuous product improvements all designs and specifications are subject to change without advance notice. Copyright by **KOBELCO CONSTRUCTION MACHINERY CO., LTD.** No part of this catalog may be reproduced in any manner without notice.

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