

**KOBELCO** SK130E We Save You Fuel

SK130-10E

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.

# **KOBELCO CONSTRUCTION MACHINERY CO., LTD.**

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Inquiries To:



# More operable. Durable. Better performance.



# **Upper Structure**

# **Cooling System**



The oil cooler has been changed from a two-layer to a one-layer type. This prevents dust from collecting in the gaps, helping to maintain the cooling function.

# **Get More Done Faster with Superior Operability**

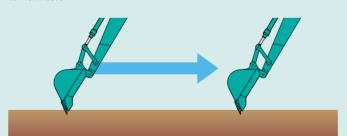


\*2 Without including height of shoe

# Improved Workability

# **Speedy combined operations**

Combined attachment operations, such as horizontal pulling to operate the boom and arm at the same time, are also nimble and smooth, making it possible to work faster.

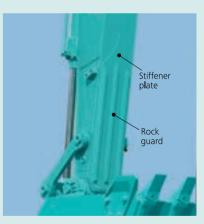


# Attachment/Equipment

# Reinforced Attachments

There is a new long arm. Additionally, rock guard reinforcement can now be attached to the tip.

The shape of the lower plate has been optimized for logging work, and the arm strength is enhanced.



# **Travel System**

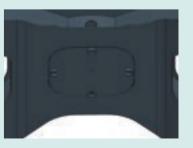
# Reinforced Guide Frame

Reinforced guide frame prevents deformation caused by impact or encroaching of loose stones.



# Reinforced Undercover

Reinforced undercover protects the piping and other components from damage caused by accidental contact with branches, debris and other obstacles.



# We're always pursuing fuel efficiency.

# **Efficient maintenance to** sustain high performance.

## Reduced fuel consumption in ECO-mode

# **ECO-mode: Engineered for Economy**

Kobelco's ECO-mode maximizes the operating efficiency of the engine and other components to achieve much greater fuel efficiency. Just press a button to choose the operation mode best suited to the task at hand and the working conditions.

- Optimal operation with three modes
- H-mode • Maximum power for maximum productivity on your toughest jobs
- S-mode • Ideal balance of productivity and fuel efficiency for a range of urban engineering projects
- ECO-mode • Minimum fuel consumption for utility projects and other work that demands precision

# Pull up safety lock lever Engine deceleration

60 sec

# AIS (Auto Idle Stop)

If the safety lock lever is lifted up, the engine will stop automatically. This eliminates wasteful idling during standby, saving fuel and reducing CO2 emissions as well.

# Hydraulic system engineered to reduce energy loss

Kobelco's proprietary hydraulic systems offer hydraulic line positioning that reduces friction resistance and valves designed for higher efficiency, minimizing energy loss throughout the

# 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

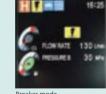




- 1 Analog gauge provides an intuitive reading of fuel level and engine water temperature
- 2 Green indicator light shows low fuel consumption during operation
- 3 Fuel consumption/Switch indicator for rear camera images
- 4 Digging mode switch
- 6 Monitor display switch

# **One-Touch Attachment Mode Switch**

A simple touch of a button, switches the hydraulic circuit and flow amount to match attachment changes. Icons help the operator to confirm the proper configuration at a glance.



# **Compatible with Biofuel**

Biofuel may be used with Kobelco machinery, reducing environmental impact and supporting business.

\*For more information about using biofuels, please contact the nearest dealer.

# 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.

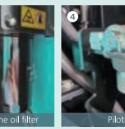




Simple layout for easy access to radiator and







An enlarged cartridge-type pilot filter simplifies maintenance.



# **Machine Information Display Function**

- Displays only the maintenance information that's needed, when it's needed
- Self-diagnostic function provides early-warning detection and display of electrical system malfunctions
- Service-diagnostic function makes it easier to
- check the status of the machine

  Record function of previous breakdowns including irregular and transient malfunction



# **More Efficient Maintenance Inside** the Cab



Internal and external air conditioner filters can be easily removed without tools for cleaning.

# **Easy Cleaning**







# **Long-Interval** Maintenance

Long-life hydraulic oil reduces cost



# **Highly Durable Premium-fine Filter**

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





handles for easy removal. A floor drain is the cab floor free of mud, simplify located under floor mat.





Floor mat's raised edges help keep Engine oil pan equipped with drain valve.

# Comfortable Cab Is Now Safer than Ever.



# Comfort

# **Super-Airtight Cab**



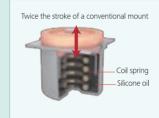
The high level of air-tightness keeps dust out of the cab.

## **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.



## **Anti-theft measures**

Theft-prevention brackets have been installed on the ECU, mechatronics, and cluster panels. Their structure makes removal very difficult.



# **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 Louvers behind the Seat



The large air-conditioner has louvers 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





\*Armrests are equipped with suspension seats only.

# 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.

# Interior Equipment Adds to Comfort and Convenience





\*Prevention bar shall be equipped on the right side window.

# 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



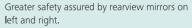
# **Standard 3 LED Lights**

Bright LED lights ensure visibility even during night work. (one for boom, one for right storage box, and one for Cab)



# **Expanded Field of View for Greater Safety**









7



**Direct Access to Operational Status** 

## **Location Data**

Customer

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





| 11 Apr. 2015 - 10 | 10 May, 2015 | Bearth   |         |
|-------------------|--------------|----------|---------|
| Type of Operation | Working Hre  | 100000   | Autio   |
| Total Working Hry |              | 110 res  | \$100 1 |
| (Ngging Hrs       |              | 72.2 14% | 431     |
| Traveling Hrs     |              | 18.3 Hrs | 1119    |
| Zelle Hrs         |              | 13.0 103 | 9.5     |
| Opt Att Hire      |              | 62.5 19% | 27 9    |
| Crane Hode Hrs    |              | 0.00     | 0.1     |

Work data

machine's operation, such as operating hours, location, fuel consumption, and maintenance status can be obtained remotely.

# **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

# **Fuel Consumption Data**

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



Digging Hrs Travelling Hrs Idle Hrs

**Graph of Work Content** 

•The graph shows how working hours are divided

among different operating categories, including

digging, idling, travelling and optional operations.

Work st

# | Work mode | Working Hrs | Total Fuel | Consumption | H mode | 2:06 | 24.5 L | S mode | 0:00 | 0:0 L | E mode | 160:19 | 1409.7 L | TOTAL | 171:25 | 1514.2 L |

# 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.



Maintenance

# **Warning Alerts**

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

# Alarm Information Can Be Received via E-mail

• Alarm information or maintenance notice can be received via e-mail, using a computer or a mobile



# **Daily/Monthly Reports**

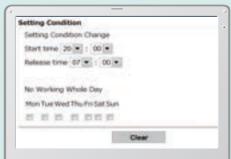
•Operational data downloaded onto a computer helps in formulating daily and monthly reports.

# Alarm messages can be received on a mobile device.

# **Security System**

# **Engine Start Alarm**

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



Engine start alarm outside prescribed work time

•It can be set up with an alarm if the machine is moved out of its designated area to

**Area Alarm** 

another location.



Alarm for outside of reset area



# **Engine**

| Model              | ISUZU 4JJ1                                                                                             |  |  |
|--------------------|--------------------------------------------------------------------------------------------------------|--|--|
| Туре               | Four cycle, water cooled, overhed camshaft, vertical in-line, direct injection type, with turbocharger |  |  |
| No. of cylinders   | 4                                                                                                      |  |  |
| Bore and stroke    | 95 mm × 105 mm                                                                                         |  |  |
| Displacement       | 2.999L                                                                                                 |  |  |
| Pated newer output | 65.4kW / 2,000min <sup>-1</sup> (ISO 9249 : with fan)                                                  |  |  |
| Rated power output | 73.0kW / 2,000 min <sup>-1</sup> (ISO 14396: without fan)                                              |  |  |
| May torque         | 341 N•m / 1,600 min <sup>-1</sup> (ISO 9249 : with fan)                                                |  |  |
| Max. torque        | 365 N•m / 1,600 min <sup>-1</sup> (ISO 14396: without fan)                                             |  |  |



# Hydraulic System

| Pump                 |                                                 |  |  |  |
|----------------------|-------------------------------------------------|--|--|--|
| Туре                 | Two variable displacement pumps + one gear pump |  |  |  |
| Max. discharge flow  | 2 x 130.4 L/min, 1 x 20 L/min                   |  |  |  |
| Relief valve setting |                                                 |  |  |  |
| Boom, arm and bucket | 34.3 MPa {350 kgf/cm²}                          |  |  |  |
| Travel circuit       | 34.3 MPa {350 kgf/cm²}                          |  |  |  |
| Swing circuit        | 28.0 MPa {286 kgf/cm²}                          |  |  |  |
| Control circuit      | 5.0 MPa {51 kgf/cm²}                            |  |  |  |
| Pilot control pump   | Gear type                                       |  |  |  |
| Main control valve   | 12 -Spool valve                                 |  |  |  |
| Oil cooler           | Air cooled type                                 |  |  |  |



# **Swing System**

| Swing motor             | Axial piston pump                                                                 |  |  |
|-------------------------|-----------------------------------------------------------------------------------|--|--|
| Brake                   | Hydraulic; locking automatically when the swing control lever is in neutral posit |  |  |
| Parking brake           | Oil disc brake, hydraulic operated automatically                                  |  |  |
| Swing speed             | 10.9 min <sup>-1</sup> {rpm}                                                      |  |  |
| Tail swing radius       | 2,330 mm                                                                          |  |  |
| Min. front swing radius | 2,640 mm                                                                          |  |  |



# Travel System

| 2 x axial-piston, two-step motors |  |  |
|-----------------------------------|--|--|
| Hydraulic brake per motor         |  |  |
| Oil disc brake per motor          |  |  |
| 44 each side                      |  |  |
| 3.3 / 5.7 km/h                    |  |  |
| 142 kN (14,500 kgf) SAE           |  |  |
| 70% {35 °}                        |  |  |
|                                   |  |  |



# Cab & Control

All-weather, sound-suppressed steel cab mounted on the high suspension

| mounts filled with silicone of and equipped with a neavy, 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  | 100 mm × 1,092 mm |
|-----------------|-------------------|
| Arm cylinder    | 115 mm × 1,116 mm |
| Bucket cylinder | 95 mm × 873 mm    |



# Refilling Capacities & Lubrications

| Fuel tank             | 271 L                  |  |
|-----------------------|------------------------|--|
| Cooling system        | 12 L                   |  |
| Engine oil            | 17 L                   |  |
| Travel reduction gear | 2 x 2.1 L              |  |
| Swing reduction gear  | 1 x 1.65 L             |  |
| Hydraulic oil tank    | 94.5 L tank oil level  |  |
|                       | 197 L hydraulic system |  |



# **Attachments**

Backhoe bucket and combination

| Туре            |                             | Backhoe bucket |       |         |
|-----------------|-----------------------------|----------------|-------|---------|
| Ducket capacity | ISO heaped m <sup>3</sup>   | 0.50           | 0.57  | 0.57 HD |
| Bucket capacity | ISO Struck m <sup>3</sup>   | 0.38           | 0.43  | 0.43    |
| Onaning width   | With side cutter mm         | 1,000          | 1,110 | 1,110   |
| Opening width   | Without side cutter mm      | 905            | 1,020 | 1,020   |
| No. of teeth    |                             | 5              | 5     | 5       |
| Bucket weight   | kg                          | 380            | 390   | 440     |
| Camphination    | 2.38m arm (with rock guard) | 0              | Δ     | Δ       |
| Combination     | 2.84m arm (with rock guard) | Δ              | -     | -       |

 $<sup>\</sup>bigcirc$  Standard combination  $\bigcirc$  Recommended  $\triangle$  Loading only - Not applicable

# **Working Ranges**

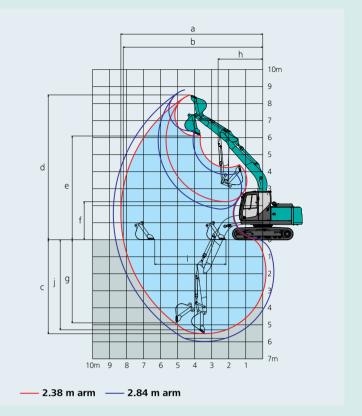
Unit: mm

| Boom                                            | 4.68 m             |                |  |
|-------------------------------------------------|--------------------|----------------|--|
| Range                                           | Standard<br>2,38 m | Long<br>2,84 m |  |
| a- Max. digging reach                           | 8,340              | 8,780          |  |
| b- Max. digging reach<br>at ground level        | 8,190              | 8,640          |  |
| c- Max. digging depth                           | 5,520              | 5,980          |  |
| d- Max. digging height                          | 8,450              | 8,760          |  |
| e- Max. dumping clearance                       | 6,090              | 6,390          |  |
| f- Min. dumping clearance                       | 2,230              | 1,800          |  |
| g- Max. vertical wall<br>digging depth          | 4,340              | 4,790          |  |
| h- Min. swing radius                            | 2,640              | 2,800          |  |
| i- Horizontal digging stroke<br>at ground level | 4,180              | 4,670          |  |
| j- Digging depth for 2.4 m (8') flat bottom     | 5,300              | 5,800          |  |
| Bucket capacity ISO heaped m <sup>3</sup>       | 0.50               | 0.50           |  |

# Digging Force (ISO 6015)

Unit: kN

| Arm length           | Standard<br>2.38 m | Long<br>2,84 m |
|----------------------|--------------------|----------------|
| Bucket digging force | 90.5               | 90.5           |
| Arm crowding force   | 64.2               | 58.2           |

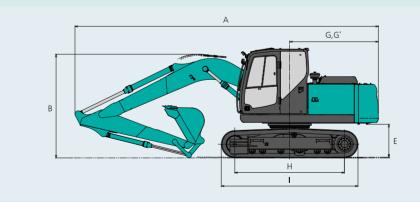


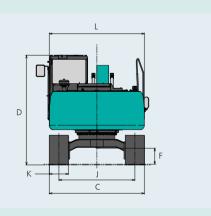
# **Dimensions**

| Ar | m length                        | Standard<br>2.38 m | Long<br>2,84 m |  |  |  |  |
|----|---------------------------------|--------------------|----------------|--|--|--|--|
| Α  | Overall length                  | 7,950 7,940        |                |  |  |  |  |
| В  | Overall height (to top of boom) | 2,710              | 3,120          |  |  |  |  |
| C  | Overall width of crawler        | 2,490              |                |  |  |  |  |
| D  | Overall height (to top of cab)  | 2,870              |                |  |  |  |  |
| Ε  | Ground clearance of rear end*   | 860                |                |  |  |  |  |
| F  | Ground clearance*               | 415                |                |  |  |  |  |
| G  | Tail swing radius               | 2,3                | 30             |  |  |  |  |

G' Distance from centre of swing to rear end 2,330 H Tumbler distance 2,870 I Overall length of crawler 3,580 J Track gauge 1,990 500 L Overall width of upperstructure 2,490

\*Without including height of shoe



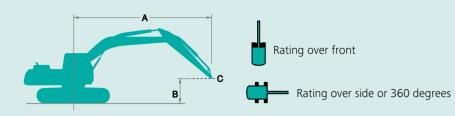


# **Operating Weight & Ground Pressure**

In standard trim, with standard boom, 2.38 m arm, and 0.50 m<sup>3</sup> ISO heaped bucket

| Shaped                   |     | Triple grouser shoes (even height) |        |  |  |  |  |
|--------------------------|-----|------------------------------------|--------|--|--|--|--|
| Shoe width               | mm  | 500                                | 700    |  |  |  |  |
| Overall width of crawler | mm  | 2,490                              | 2,690  |  |  |  |  |
| Ground pressure          | kPa | 40                                 | 30     |  |  |  |  |
| Operating weight         | kg  | 12,600                             | 13,100 |  |  |  |  |





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 (350 kgf/cm²)

| SK130-10E |    | Arm: HD arm 2.38 m Bucket: Without Shoe: 500 mm Counterweight: 2,000 kg |          |        |          |        |          |       |          |               |          |        |  |
|-----------|----|-------------------------------------------------------------------------|----------|--------|----------|--------|----------|-------|----------|---------------|----------|--------|--|
|           | Α  | 1.5m                                                                    |          | 3.0m   |          | 4.5m   |          | 6.0m  |          | At max. reach |          |        |  |
| В         |    | 1                                                                       | <b>—</b> | -      | <b>—</b> | 1      | <b>—</b> | 1     | <b>—</b> | 1             | <b>—</b> | Radius |  |
| 6.0m      | kg |                                                                         |          |        |          | *3,250 | *3,250   |       |          | *1,820        | *1,820   | 5.47m  |  |
| -3.0m     | kg |                                                                         |          |        |          | *3,530 | 3,390    | 3,080 | 2,110    | *1,680        | *1,680   | 6.44m  |  |
| -1.5m     | kg |                                                                         |          | *6,300 | 5,930    | *4,380 | 3,170    | 2,800 | 1,850    | *1,980        | 1,490    | 6.96m  |  |
| 4.5m      | kg |                                                                         |          | *5,630 | 5,180    | 4,460  | 2,920    | 2,880 | 1,930    | *1,760        | 1,590    | 7.11m  |  |
| 1.5m      | kg |                                                                         |          | *6,080 | 4,970    | 4,280  | 2,750    | 3,000 | 2,040    | *1,670        | 1,510    | 6.93m  |  |
| G.L.      | kg | *5,200                                                                  | *5,200   | 8,480  | 4,970    | 4,210  | 2,700    | 2,770 | 1,830    | *2,420        | 1,690    | 6.40m  |  |
| 3.0m      | kg | *8,950                                                                  | *8,950   | *7,870 | 5,100    | 4,270  | 2,760    |       |          | 3,300         | 2,180    | 5.39m  |  |

| SK130-10E |    | Arm: HD long arm 2.84 m Bucket: Without Shoe: 500 mm Counterweight: 2,000 kg |          |        |          |          |                |        |            |        |             |               |          |        |
|-----------|----|------------------------------------------------------------------------------|----------|--------|----------|----------|----------------|--------|------------|--------|-------------|---------------|----------|--------|
|           | А  | 1.5m                                                                         |          | 3.0m   |          | 4.5m     |                | 6.0m   |            | 7.5m   |             | At max. reach |          |        |
| В         |    | 1                                                                            | <b>—</b> | 1      | <b>—</b> | <b>1</b> | <del>#</del> - | 1      | <b>#</b> — | 1      | <del></del> | 1             | <b>—</b> | Radius |
| 7.5m      | kg |                                                                              |          |        |          |          |                |        |            |        |             | *2,070        | *2,070   | 4.49m  |
| -1.5m     | kg |                                                                              |          |        |          |          |                | *1,870 | *1,870     |        |             | *1,710        | *1,710   | 6.04m  |
| -3.0m     | kg |                                                                              |          |        |          |          |                | *3,060 | 2,120      |        |             | *1,590        | *1,590   | 6.93m  |
| G.L.      | kg |                                                                              |          | *5,280 | *5,280   | *3,930   | 3,200          | 2,990  | 2,030      |        |             | *1,580        | 1,410    | 7.41m  |
| 6.0m      | kg |                                                                              |          | 8,130  | 5,290    | 4,470    | 2,920          | 2,860  | 1,910      | *1,960 | 1,340       | *1,660        | 1,320    | 7.55m  |
| 3.0m      | kg | *4,450                                                                       | *4,450   | *6,310 | 4,900    | 4,230    | 2,710          | 2,750  | 1,800      |        |             | *1,830        | 1,330    | 7.39m  |
| 1.5m      | kg | *7,530                                                                       | *7,530   | 8,340  | 4,840    | 4,140    | 2,630          | 2,700  | 1,760      |        |             | *2,190        | 1,460    | 6.89m  |
| 4.5m      | kg |                                                                              |          | *8,370 | 4,940    | 4,170    | 2,650          |        |            |        |             | 2,770         | 1,820    | 5.96m  |
| -4.5m     | kg |                                                                              |          | *5,960 | 5,200    |          |                |        |            |        |             | *3,800        | 2,980    | 4.34m  |

## Notos

- 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
- 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.

- 4. The above lift capacities are in compliance with ISO 10567. They do not exceed 87% of hydraulic lift capacity or 75% of tipping load. Lift capacities marked with an asterisk (\*) are limited by hydraulic capacity rather than tipping load.
- 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.
- 6. Lift capacities apply to only machine originally manufactured and normally equipped by KOBELCO CONSTRUCTION MACHINERY CO., LTD.

# STANDARD EQUIPMENT

## **ENGINE**

- Engine, ISUZU 4JJ1, diesel engine with turbocharger and intercooler
- Automatic engine deceleration
- Auto Idle Stop (AIS)
- Batteries (2 x 12 V 100 Ah)
- Starting motor (24 V 4 kW), 50 amp alternator
- Engine oil pan drain cock
- Double element air cleaner

## CONTROL

- Working mode selector (H-mode, S-mode and ECO-mode)
- SWING SYSTEM & TRAVEL SYSTEM
- Swing rebound prevention system
- Straight propel system
- Two-speed travel with automatic shift down
- Sealed & lubricated track links
- Grease-type track adjusters
- Automatic swing brake

### HYDRAULIC

- Arm regeneration system
- Aluminum hydraulic oil cooler

# MIRRORS & LIGHTS

- Two rear view mirrors
- Three front working LED lights

  (one for boom, one for right storage box, and one for Cab)

## **CAB & CONTROL**

- Two control levers, pilot-operated
- Horn, electric
- Cab light (interior)
- Luggage tray
- Large cup holder
- Detachable two-piece floor mat
- 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
- KOMEXS

# OPTIONAL EQUIPMENT

- Two cab LED lights
- Rearview camera
- N & B piping
   Wide range of buckets

- Various optional arms
- Wide range of shoes
- Multi control valve
- Suspension seat with armrest

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