SK140SRLC-3
Hydraulic Excavators

**STANDARD EQUIPMENT**

**ENGINE**
- Engine, MITSUBISHI D04FR-74kW-01, Diesel engine with turbocharger and intercooler, Tier 4 interim certified
- Automatic engine deceleration
- Batteries (2 x 12V - 80 Ah)
- Starting motor (24 V - 5kW), 50 amp alternator
- Automatic engine low idle for low engine oil pressure
- Engine oil 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 down shift
- Sealed & lubricated track links
- 23.6” (600mm) track shoes
- Grease-type track adjusters
- Automatic swing brake

**MIRRORS & LIGHTS**
- Three rear view mirrors and rearview camera
- Two front working lights
- Swing flashers

**OPTIONAL EQUIPMENT**
- Boom & arm load (lock) holding valve
- Front-guard protective structures (May interfere with bucket rotation)
- Additional hydraulic circuit
- Control pattern changer (2-way)
- Cab additional light
- Rain visor (may interfere with bucket action)
- Add-on type counterweight (+580kg)

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

**CAB & CONTROL**
- Two control levers, pilot-operated
- Horn, electric
- Integrated left-light slide-type control box
- Ashtray
- Cab light (interior)
- Coat hook
- Large cup holder
- Detachable two-piece floor mat
- F5-way adjustable suspension seat
- Retractable seatbelt
- Headrest
- Handrails
- Heater and defroster
- Intermittent windshield wiper with double-spray washer
- Sky light
- Top guard
- Tinted safety glass
- Pull-type front window and removable lower front window
- Easy-to-read multi-display monitor
- Automatic air conditioner
- Emergency escape hammer
- Radio, AM/FM Stereo with speakers
- Travel alarm
- Drain pressure switch
- DPF regeneration switch
- 12V converter

**Note:** This catalog may contain attachments and optional equipment that are not available in your area. It may also contain photographs of machines with specifications that differ from those of machines sold in your area. Please consult your nearest KOBELCO distributor for those items you require.

Due to our policy of continuous product improvements all designs and specifications are subject to change without notice.

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Fuel Consumption Gives You the Competitive Edge

KOBELECO’s SR hydraulic excavator has undergone a new evolution. KOBELECO installed its full range of fuel-saving technologies in this SR model, resulting in unmatched low fuel consumption that provides a class leading standard of efficiency for engine-driven hydraulic excavators.

Outstanding performance in tight spaces, on-site safety, less stress for the operator KOBELECO was first to understand these demands and in response developed SR, short rear swing, excavators. The acclaimed SR concept went on to be adopted throughout the industry. But KOBELECO didn’t stop there. Aware of changing needs among machine users in a changing social environment, KOBELECO has taken the SR concept through a further evolution with value-added features. KOBELECO’s unique design for engine cooling, the iNDr system, cuts noise to extremely low levels.

The newest KOBELECO approach to low fuel consumption, NEXT-3E, now also applies to short rear swing models which maximize work volumes while saving on fuel. And the new ECO-mode in the SK140SRLC creates even greater savings on fuel to turn SR models into exceptional high-earning machines. KOBELECO continues to lead the field in short rear swing excavators.

Fuel Consumption Gives You the Competitive Edge

KOBELECO’s exclusive iNDr Cooling System delivers amazingly quiet operation.

The Revolutionary Integrated Noise and Dust Reduction Cooling System

KOBELECO has developed the revolutionary integrated Noise and Dust Reduction Cooling System, with the engine compartment placed inside a single duct that connects the air intake to the exhaust outlet.

Concept

- The intake and exhaust are offset, with the holes and joints in the sections corresponding to the duct wall completely covered to reduce noise at the intake and exhaust apertures. This design, coupled with the generous use of insulation material inside the duct, minimizes engine noise.

Reduces Noise

- The high-performance iNDr filter removes dust from the intake air, ensuring a quieter, cleaner engine and keeps the cooling units free of clogging so that no regular cleaning is necessary.

Enhancement

Greater Performance Capacity

Economy

Improved Cost Efficiency

Environment

Features That Go Easy on the Earth

Pursuing the “Three E’s”

The Perfection of Next-Generation, Network Performance

Five Ways the SK140SRLC Scores:

- Low Noise: iNDr
- More Work with Less Fuel!
- Efficient Performance!
- Fast, Accurate and Low-Cost Maintenance
- A Working Environment that Helps Operator Concentrate on the Job
More Work with Less Fuel!

Fuel Consumption and Work Volume
The new hydraulic system and an additional ECO-mode have cut fuel consumption by up to 21%.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Fuel Consumption (L/h)</th>
<th>Work Volume per Liter of Fuel (m³/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>H-mode</td>
<td>8% decrease</td>
<td>10% increase</td>
</tr>
<tr>
<td>S-mode</td>
<td>16% decrease</td>
<td>19% increase</td>
</tr>
<tr>
<td>ECO-mode</td>
<td>22% decrease</td>
<td>19% increase</td>
</tr>
</tbody>
</table>

* Figures for fuel consumption: fuel consumed per hour (L/h) compared with previous model, in KOBELCO tests.
* Figures for work volume: digging volume per liter of fuel (m³/L) compared with previous model, in KOBELCO tests.

ECO-mode
Work modes for a closer match to the job at hand. An addition to the existing H-mode and S-mode, the new ECO-mode saves even more energy.

- **H-mode**: For heavy duty operation, when a higher performance level is required.
- **S-mode**: For normal operations with lower fuel consumption.
- **ECO-mode**: Puts priority on low fuel consumption and economic performance.

Significant Extension of Continuous Working Hours
The combination of a large-capacity fuel tank and excellent fuel efficiency delivers an impressive increase in the length of continuous usage.

- **Fuel tank capacity**: 52.8 U.S. gal (200 L)

Next-Generation Electronic Engine Control
The high-pressure, common-rail fuel-injection engine with the multiple injection system features adjust table control to maximize fuel efficiency and provide powerful low-speed torque. The result is a highly fuel-efficient engine.

- **Tier4 compliant engine (No Exhaust fluid required)**
  - PM emissions cut: Limits creation of particulate matter (which results from incomplete combustion of fuel)
  - Diesel Particulate Filter (DPF): Carbon is built up as soot on the diesel particulate filter and is burned off at high temperature. No Exhaust fluid required. The system allows manual or automatic filter regeneration.
  - NOx emissions cut: Reduces nitrogen oxides (created by reaction with oxygen at high temperature)

- **EGR cooler**: While ensuring sufficient oxygen for combustion, cooled exhaust gases are mixed with the air intake and re-circulated into the engine. Then the oxygen concentration is lowered and the combustion temperature is lowered.

Automatic Acceleration / Deceleration Function Reduces Engine Speed
Engine speed is automatically reduced when the control lever is placed in neutral, effectively saving fuel and reducing noise and exhaust emissions. The engine quickly returns to the previous speed when the lever is moved out of neutral.
Efficient Performance!

Top-Class Powerful Digging
For more efficient work performance.
(SAE J1179:1990)
Max. arm crowding force: 14,006lbs {62.3kN}
Max. bucket digging force: 20,502lbs {91.2kN}

Powerful Travel
Drawbar pulling force: 31,100lbs {139kN}

Great Swing Power, Short Cycle Times
Powerful swing power and top-class swing speed.
Swing speed: 11.0rpm

Optional N&B (crusher and breaker)
The operator selects the desired mode from inside the cab, and the selector valve automatically configures the machine accordingly.

Attachment Mode Selector Switch
There is a choice of three different attachment modes, to accommodate bucket, crusher, or breaker. The desired attachment mode can be selected with a switch, which automatically configures the selector valve. All attachment modes can be used in either S-mode or H-mode.

Seamless, Smooth Combined Operations
The machines have inherited the various systems that make inching and combined operations easy and accurate, with further refinements that make a good thing even better. Leveling and other combined operations can be carried out with graceful ease.
- Electronic active control system
- Arm regeneration system
- Boom lowering regeneration system
- Variable swing priority system
- Swing rebound prevention system

Excellent Working Ranges
Greater working ranges with class-topping vertical digging depth.

Max. digging height: 31’4” {9,560mm}
Max. dumping height: 23’4” {7,100mm}
Max. digging reach: 28’10” {8,780mm}
Max. vertical digging depth: 17’10” {5,440mm}

Requires 12 ft. 9 in. of Working Space
The compact design allows the machine to perform continuous dig, 180° swing and dump operations within a working space of 12ft.9in”.

Mild Operating Sound
The iNDi cooling system also helps to keep the machine quiet, even at close quarters.

Meet EMC (Electromagnetic Compatibility) Standards in Europe
Electrical shielding ensured that the machines clear all European standards and neither cause or are affected by electromagnetic interference.
A Working Environment that Helps the Operator Concentrate on the Job at Hand!

**Big Cab**
The “Big cab” provides a roomy operating space with plenty of legroom, and the door opens wide for entry and exit. As well as giving a wide, open view to the front, the cab has increased window areas on both sides and to the rear, for improved visibility in all directions.

**Excellent Visibility**
Taking out the right-side cab support to make a single window has improved visibility to the right.

**Wide-Access Cab Aids Smooth Entry and Exit**
Easy entry and exit assured with wider cab entry and safety lock lever integrated with mounting for control levers.

**Comfortable Operating Environment**
- Double slide seat
- Powerful automatic air conditioner
- Spacious luggage tray
- Large cup holder
- One-touch lock release simplifies opening and closing front window
- Two-speaker FM/AM radio with station select

**Multi-Display Color Monitor**
The LCD multi-display color monitor is fitted as standard. Operations data as well as the full range of machine-status data can readily be checked.

**Safety Features**
The newly developed, ROPS (Roll-Over-Protective Structure)-compliant cab clears ISO standards (ISO-12117-2: 2008) and ensures greater safety for the operator.

- Level 2 FOPS Guard (ISO 10262) is equipped as standard.
- To fit vandalism guards, please contact your KOBELCO dealer. (Mounting brackets for vandalism guards provided standard)
- FOPS guard (Meets or exceeds current OHSA standards)

**Maintenance**
- Rearview monitoring
- Protective panel separates the pump compartment from the engine
- Retractable seatbelt requires no manual adjustment
- Hammer for emergency exit
- Handrails meet European standards
- Thermal guard prevents contact with hot components during engine inspections
- Travel alarm
- Swing flasher
Fast, Accurate and Low-Cost Maintenance

Comfortable “On the Ground” Maintenance

All components that require regular maintenance are laid out for easy access with the control valves located on a single right-hand panel that opens and closes at a touch. In the pump compartment, there is remote access to such components as the engine oil filter and fuel filter (with built-in water separator). On the left side are the iNDr filter, air cleaner, radiator coolant, etc. Daily maintenance can be carried out easily without the need to climb up to the machine.

Fast Maintenance

- Engine quick drain cock can be turned without tools.
- Fuel tank equipped with bottom flange and large drain valve.
- Hour meter can be checked while standing on the ground.
- Easy access fuel hose box. More finely differentiated hoses make it easier to locate malfunctions.
- Washer fluid tank located under the cab floor mat.
- Detachable two-piece floor mat with handles for easy removal. A floor drain located under floor mat.
- Internal and external air conditioner filters can be easily removed without tools for cleaning.
- Special crawler frame designed is easily cleaned of mud.
- Location Data
- Operating Hours
- Fuel Consumption Data
- Graph of Work Content
- Graph of Machine Duty Cycles
- Maintenance Data
- and Warning Alerts
- Engine Start Alarm
- Area Alarm

Easy Cleaning

- Easy access to cooling units
- Easy access to pump
- Tool box

Long-life hydraulic oil reduces cost and labor.

Double-Element Air Cleaner

The high-performance air cleaner has twice the capacity and service life of previous air cleaners and is installed behind the iNDr filter for even more effective cleaning performance.

Monitor Display with Essential Information for Accurate Maintenance Checks

- Displays only the maintenance information that’s needed, when it’s needed.
- Self-diagnostic function that provides early-warning detection and display of electrical system malfunctions.
- Record function of previous technical issues including irregular and transient malfunction.

Choice of 16 Languages for Monitoring Display

With messages including those requiring urgent action displayed in the local language, users in all parts of the world can work with greater peace of mind.

iNDr Means Easy Maintenance

iNDr Filter Blocks Out Dust

Outside air goes directly from the intake duct through the iNDr filter for dust removal. The filter features a 60-mesh screen, which means it has sixty holes per inch both vertically and horizontally, with a wide front surface area and accordion structure that resists clogging.

Visual Checking and Easy Cleaning

When checking and cleaning the cooling system, one must deal with several cooling components like the radiator, oil cooler and intercooler, which all must be handled in different ways. But with the iNDr filter, there’s just one filter in one place. If it looks dirty during start-up inspection, it can be cleaned easily and quickly.

Total Support for Machines with Network Speed and Accuracy

Our “KOMEX” allows you to use the Internet to manage information from your office for machines operating in all areas. Be prepared for any problems with strategic information and cost management. This provides a wide range of support for your business operations.

Long-Interval Maintenance

Super-fine Filter(Hydraulic oil filter)

High-performance, super-fine filter has a 1,000 hour replacement cycle.

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Direct Access to Operational Status

- Location Data
- Operating Hours
- Fuel Consumption Data
- Graph of Work Content
- Graph of Machine Duty Cycles

Maintenance Data

and Warning Alerts

- Engine Start Alarm
- Area Alarm

Security System

- Engine Start Alarm
- Area Alarm

Long-Interval Maintenance

Super-fine Filter(Hydraulic oil filter)

High-performance, super-fine filter has a 1,000 hour replacement cycle.
### Specifications

#### Engine
- Model: MITSUBISHI D04EG-74W-01
- Type: Direct injection, water-cooled, 4-cylinder diesel engine with Turbocharger, intercooler
- No. of cylinders: 4
- Bore and stroke: 3.70” (94 mm) x 4.72” (120 mm)
- Total displacement: 203.3 c.c. (3.31 L)
- Rated power output: 92.8 hp (69.2kW) / 2,000 rpm (SAE NET)
- Torque: 265 lb-ft (359N.m) / 1,600 rpm (SAE NET)

#### Travel System
- Travel motors: 2 x axial piston, two-speed motors
- Parking brakes: Oil disc brake per motor
- Travel shoes: 46 each side
- Travel speed: 3.5 / 2.1 mph (5.6 / 3.4 km/h)
- Drawbar pulling force: 31,100 lbs (139 kN) (SAE J1309)
- Gradeability: 70 % (30°)

#### Cab & Control
- Cab: All-weather, sound-suppressed steel cab mounted on the silicon-sealed viscous mounts and equipped with a heavy, insulated floor mat.
- Brakes: Two hand levers and two foot pedals for travel
- Electric-type rotary engine throttle
- Control: Two hand levers for excavating and swing
- Swing reduction gear: Electric rotary-type engine throttle
- Engine oil: 20.3 U.S.gal {77.6 L} tank oil level
- Brake: Oil disc brake, hydraulic operated
- Oil cooler: Air cooled type

#### Refilling Capacities & Lubrications
- Backhoe bucket: 6.95 cu.yd. (0.50 m³)
- Arm cylinder: 4.5" (115 mm) x 3.9" (100 mm)
- Bucket cylinder: 3.7" (95 mm) x 2.0" (63 mm)

#### Dimensions
- Overall length: 24’11’’ (7.72 m)
- Overall width: 9’4’’ (2.84 m)
- Overall height: 17.3’’ (440 mm)

#### Operating Weight & Ground Pressure
- In standard trim, with standard boom, 9’4’’ (2.84 m) arm, and 0.50 cu.yd. (0.38 m³) heaped bucket

#### Swing System
- Motor: Axial piston motor
- Parking brake: Oil disc brake, hydraulic operated automatically
- Swing speed: 11.0 rpm
- Swing torque: 29,400 lb-ft (39.9 kN.m) (SAE)
- Tail swing radius: 4’11’’ (1,490 mm)
- Min. front swing radius: 7’10’’ (2,460 mm)

#### Hydraulic System
- Pump Type: Two variable displacement pumps
- Max. discharge flow: 2 x 34.5 U.S.gph (2 x 130L/min)
- Main control valves: Gear type
- Oil cooler: Air cooled type
- Swing motor: Axial piston motor
- Control: 2 x axial piston, two-speed motors
- Travel motor: 2 x 10.5 U.S.gph (2 x 40L/min)
- Control: Direct injection, water-cooled, 4-cycle diesel engine

#### Working Ranges

#### Dozer Blade (Optional)
- Dozer cylinder: 4.3” (110 mm) x 8.7” (220 mm)
- Working range: 8’9” (2.67 m) (width) x 1’11” (575 mm) (down)
- Max. discharge flow: 3.0 U.S.gph (11.5 L/min)

#### Cab
- Rotation: 360°
- Comfort: Accessible seat

#### Attachments
- Backhoe bucket and arm combination
- Bucket capacity: 0.65 cu.yd. (0.49 m³)
- Normal digging: 0.49 cu.yd. (0.36 m³)
- Ground clearance of rear end: 4.5” (115 mm)
- Ground clearance: 3.9” (100 mm) x 3’7” (1,092 mm)
- Drawbar pulling force: 31,100 lbs (139 kN) (SAE J1309)
- Operating weight: 31,000 lbs (139 kN) (SAE J1309)
- Ground pressure: 5.4 (32.8)
- Motor: Electric rotary-type engine throttle
- Gear type: 12-spool
- Hydro Oil: Air cooled type
- Engine: 1211
Specifications

Offset Boom Specifications

<table>
<thead>
<tr>
<th>Boom</th>
<th>Offset Boom Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7'3&quot; (2.20 m)</td>
</tr>
<tr>
<td>a- Max. digging reach</td>
<td>23'5&quot; (7.150)</td>
</tr>
<tr>
<td>b- Max. digging reach at ground level</td>
<td>22'11&quot; (6.830)</td>
</tr>
<tr>
<td>c- Max. digging depth</td>
<td>14'10&quot; (4.520)</td>
</tr>
<tr>
<td>d- Max. digging height</td>
<td>25'7&quot; (7.810)</td>
</tr>
<tr>
<td>e- Max. dumping clearance</td>
<td>17'9&quot; (5.420)</td>
</tr>
<tr>
<td>f- Min. swing radius</td>
<td>8'6&quot; (2.593)</td>
</tr>
<tr>
<td>g- Min. digging radius</td>
<td>6'9&quot; (2.070)</td>
</tr>
<tr>
<td>h- Max. vertical wall digging depth</td>
<td>10'8&quot; (3.250)</td>
</tr>
<tr>
<td>i- Horizontal digging stroke at ground level</td>
<td>12'4&quot; (3.770)</td>
</tr>
<tr>
<td>j- Digging depth for 6 feet flat bottom</td>
<td>13'8&quot; (4.160)</td>
</tr>
</tbody>
</table>

Dimensions

Operating Weight & Ground Pressure

In standard trim, with standard boom, 7'3" (2.20m) arm, and 0.59 cu. yd. (0.45m³) SAE heaped bucket

<table>
<thead>
<tr>
<th>Shape</th>
<th>Triple grouser shoes (even heel t)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>19'7&quot; (5.980)</td>
</tr>
</tbody>
</table>

| Overall width of crawler | 8'2" (2.490) |
| Ground pressure | 6.24 (43) |
| Operating weight | 31,700 (14,400) |

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 height. Weight of all accessories must be deducted from the above lift capacities.
2. Lift capacities are based on machine standing on level, firm, and uniform ground. User must make allowance for jobs such as soft or uneven ground, out of level conditions, side loads, sudden stopping of loads, hazardous conditions, experience of personnel, etc.
3. Bucket lift hook is defined as lift point.
4. The above lifting capacities are in compliance with SAE J930.1987. They do not exceed 87 % of hydraulic lifting capacity or 75 % of tipping load. Lifting 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.
5. Lift capacity applies to only machines as originally manufactured and normally equipped by KOBELCO CONSTRUCTION MACHINERY CO., LTD.