

KOBELCO®

215SR ACERA®
235SR ACERA®
SHORT RADIUS EXCAVATORS



| | Operating Weight | Net Horsepower (SAE) | Max Digging Depth | Bucket Capacity | Bucket Breakout Force (SAE) |
|--------------|-------------------------|-----------------------------|--------------------------|--|------------------------------------|
| 215SR | 54,700 lbs (24,800 kg) | 153 @ 2,000 rpm | 21'7" (6.59 m) | 0.63-1.60 cu yd (0.48-1.22m ³) | 27,450 lbf (122 kN) |
| 235SR | 58,870 lbs (26,700 kg) | (114 kW @ 2,000 rpm) | 21'8" (6.65 m) | 0.63-1.80 cu yd (0.48-1.38m ³) | 31,700 lbf (141 kN) |

215SR ACERA / 235SR ACERA

KOBELCO BREAKS THE COMFORT BARRIER!

The new Kobelco **215SR ACERA & 235SR ACERA** excavators use superior design technology to deliver the highest level of operator comfort, major increases in performance and incredibly low overall system noise. The new **INDR® (Integrated Noise and Dust Reduction)** system makes the 215SR ACERA and 235SR ACERA models the ultimate choice for urban construction sites where tight areas require high performance, low noise and low engine emissions.

Proven HINO Engine Performance

The 215SR ACERA and 235SR ACERA models deliver big performance with proven HINO engine technology. HINO technology comes from the world's largest automotive manufacturer, making this engine **proven**, efficient, powerful and highly reliable. Here are the facts:

- HINO delivers global quality, reliability and performance
- Tier III certified 313 cu. in., 4-cylinder direct injected, turbo-charged diesel engine
- 153 (SAE) Net engine horsepower @ 2,000 rpm
- 422 lb-ft of engine torque @ 1,600 rpm (97/68/EC)
- 15% higher fuel efficiency in S Mode than prior 235SR

Heavy-Duty Components

- Standard X-frame delivers enhanced stability and balance
- Heavy Duty undercarriage (235SR ACERA) for severe applications
- Heavy-duty Boom and Arm is standard on 235SR
- Rollers, sprockets and travel motors are sealed for long life
- Robust lift cylinders ensure maximum rated capacity
- Pumps, valves and piping are optimized for maximum efficiency
- Flanged Steel bucket bushings deliver long life

Flanged brass bucket bushings provide long life and extended maintenance intervals.



Integrated Design

- Short Radius platform is ideal for working in tight spaces
- Comfortable cab system uses features common to our SK Series
- Integrated counter weight design blends into the overall upper-body structure, providing balance and beauty
- INDR works with incoming and outgoing air to attain low noise levels, superior system cooling efficiency and maximum particulate filtration



313 cu. in. turbo-charged HINO diesel engine cranks out 153hp Net (SAE). With superior engine power and efficient hydraulics, the 235SR delivers a 15% increase in fuel economy and 6% faster cycles times.



Long Life pre-filter screens are easily removed for cleaning and reinstallation. These filters keep your radiators cleaner, longer, greatly extending your maintenance intervals.



FUTURE NOISE REDUCTION TECHNOLOGY IS HERE!

Kobelco's **INDR®** (*Integrated Noise and Dust Reduction*) system is a unique design that provides three very distinct functions:

- Superior air filtration
- Excellent engine and hydraulic system cooling
- Maximum noise suppression

The X-Ray view of INDR below demonstrates this activity.

The integrated counter weight design incorporates special air flow dynamics to bring-in cool outside air (Blue arrows) through unique air vents that are designed into the counter weight structure.

The incoming air passes through twin pre-filter screens that trap particulates larger than (1mm). The air continues through to the 2-Stage Donaldson engine air filter and, to cool the radiator, hydraulic oil cooler and turbo-inter cooler.

Triple-filtered air heads toward the combustion chamber, while the engine and hydraulic compartment receives clean, large area cooling. Air that passes through the cooling systems is exhausted through the upper rear corner vents of the excavator (Green arrows).

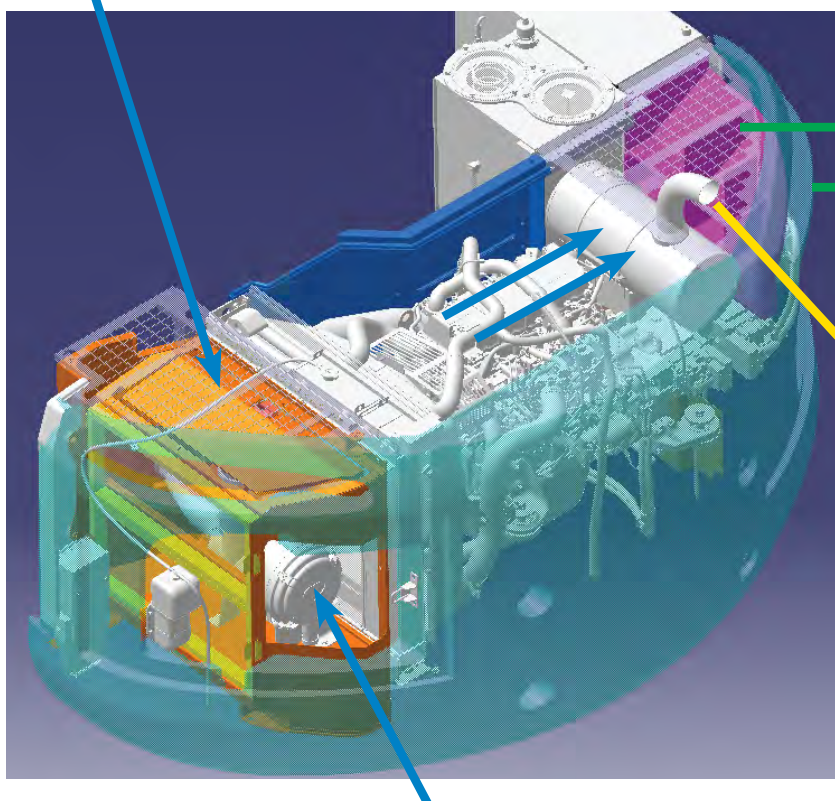
Engine exhaust emissions exit through the muffler tail pipe at the rear of the unit. This INDR system is designed to provide premium air filtration and excellent engine cooling while reducing engine noise by 5 dBA. INDR makes both the 215SR ACERA and 235SR ACERA the perfect excavator choice for working in tight urban environments.

INDR X-Ray View

INDR Cleans and quiets incoming air while reducing exhaust noise.



Outside air enters special intake ducts that quiet incoming air. Air then encounters 2 pre-filters.



Cooling exhaust air exits up and away from the excavator, reducing noise and delivering optimum engine cooling.

Engine exhaust exits through muffler tailpipe towards the rear.

Pre-filtered air proceeds through Donaldson-type filtration. Rest of air is directed through radiator systems.



Ground Level access to INDR system filters. Note special INDR air intake vents.

Side door provides access to valve assembly and hydraulic lines. A clean hydraulic layout simplifies maintenance and reduces shop time.



215SR ACERA / 235SR ACERA

WE PUT THE OPERATOR FIRST

At Kobelco, we put you, the operator, first by providing excellent visibility and system control. We know you can't perform at your best if you're not comfortable. That's why Kobelco has gone to the extremes to ensure that our cabs deliver maximum personal comfort, progressive hydraulic acceleration and a clear view of the job site.

A Cab Designed Around You

- Oversized cab provides ample room and numerous comfort features
- Super-wide entry/exit area (32% wider egress than 200SR) provides easy access to the roomy cab
- 7-way adjustable seat lets you establish the level of comfort
- Right-side located controls provide easy access to critical functions
- Climate-controlled A/C & heating system for extreme environments
- AM/FM stereo with dual speakers is standard
- 24 volt and 12 volt converter for charging cell phones and other accessories
- Storage area behind operator's seat

Clear Job-Site Visibility

- Our cab provides clear visibility with minimal obstructions
- Large glass panels provide an excellent view of the work station
- Operator is positioned for maximum visibility of all functions and operations
- Moveable front, top and side glass panels provide cross-flow ventilation

Easy-to-Read Instruments

- New Monitor includes work mode selector switch, fuel and temperature gauges, and an Orange backlit multi-display with large sun shade
- Self-diagnostics with fault code memory makes it easy to monitor and adjust system pressures, engine speed, travel speed and other operating functions
- Warning screens and audible alarms alert you to temperature and pressure status
- Establish and review service interval reminders for engine oil, hydraulic oil, fuel and filters

Personal Climate Control

- High efficiency/high output air conditioning & heating system
- Program a temperature between 61 and 91 degrees F (18 to 32 C) for optimum and consistent comfort
- Four fan speeds and LCD display let you monitor your environment
- Redesigned vents efficiently circulate air around the operator's compartment for exceptional air flow



The Power mode system provides four power modes to match your work operations. The monitor features a large sunshade and orange back-lit screen for easy viewing.





Spacious dimensions and an unrivaled view make the Kobelco cab a comfortable and productive place to work.

A personal climate control console includes an LCD display and controls for the high-output air conditioning and heating system and the four-speed fan. Just program a temperature between 61 and 91 degrees F (18 to 32 C) for optimum comfort any time of the year.



215SR ACERA / 235SR ACERA

HINO POWERED FOR PERFORMANCE

The new 215SR ACERA and 235SR ACERA excavators are easy on fuel with a highly efficient HINO engine and quiet, tandem in-line hydraulic pumps. **ITCS**[®] brings this great combination together to provide excellent breakout forces and the sensitivity for fine grading and leveling. All of these functions are controlled from inside the cab using our new orange backlit monitor and power mode selection switches.

ITCS[®] (*Intelligent Total Control System*)

ITCS integrates engine, hydraulics and electronics for superior operational control

- Recognizes your moves and assists by providing progressive power, where and when it's needed, so you stay in control.
- Provides the smooth, even movement required for fine grading and leveling
- Auto-Accel smoothly increases engine rpms and hydraulic flow in direct proportion to the operator's movement of the control levers. This results in even, deliberate acceleration for precise applications
- Auto-Decel reduces engine rpms after 4 seconds of operator inactivity, extending engine life and reducing fuel cost

Power Mode Selection

The 215SR ACERA and 235SR ACERA models provide four work modes:

- H Mode: Heavy-duty excavation work, gives priority to the workload at high speed (default mode)
- S Mode: Standard digging and loading work, provides fuel savings
- B Mode: Breaker work (1-way hydraulic flow)
- A Mode: Demolition work with crusher/nibbler-breaker (2-way/2 pump flow)

Changing modes is fast and easily viewable on the Orange, back-lit readout display.

Auto Warm-up System

Kobelco's 215SR and 235SR excavators feature a fully automatic engine and hydraulic warm-up system. This system warms-up the hydraulic circuit to an optimum 126°F (52°C) and kicks-in whenever ambient temperatures drop below 50°F (10°C). This feature improves system efficiency to make you more productive.



215SR ACERA / 235SR ACERA

Smooth, Powerful Hydraulics

Kobelco performance features are unmatched by the competition.

- Power Boost™ provides approximately 10% more bucket breakout force - on command, “without time limit”
- Heavy Lift provides approximately 10% more lifting and swing capability – on command, “without time limit”
- Independent Travel circuit is exclusive to North American Kobelco products, providing dedicated flow for excavator travel
- Swing priority dedicates power for trenching operations
- Boom and arm holding valves minimize drift for accurate positioning
- Standard high-flow valve can be switched between one-pump flow to two-pump flow from inside the cab
- Hydraulic flow has been increased to improve overall performance

Easy Maintenance & Servicing

The 215SR ACERA and 235SR ACERA provide excellent access to:

- INDR pre-filters for cleaning with air or water
- Side-by-side radiator, oil cooler and intercooler
- Hydraulic pump, tank, valves, hoses and filters
- Batteries, air filter, back-up alarm and other connections

Designed with Attachments in Mind

Kobelco doesn't just design excavators, we design excavators for use with attachments for the job site.

- High-capacity hydraulic system is adjustable from inside the cab
- Standard one or two-way auxiliary valve makes it easy to install piping and controls for auxiliary hydraulics
- Two auxiliary hydraulic modes permit switching between one-way and two-way flow without leaving the cab to manually switch a valve (with auxiliary hydraulics installed)
- An optional independent flow 'extra' circuit, with dedicated rotary gear pump, provides flow for multi-function attachments that include thumbs or twist buckets

Feel the passion we've built into the new Kobelco 215SR ACERA and 235SR ACERA excavators. If you demand productivity, performance and fine control, see your nearest Kobelco dealer today, or use our dealer locator at www.kobelcoamerica.com to find the dealer nearest you.



Easy access to hydraulic components.

2-Stage engine air filter and radiator systems are accessible after removal of pre-filter screens.

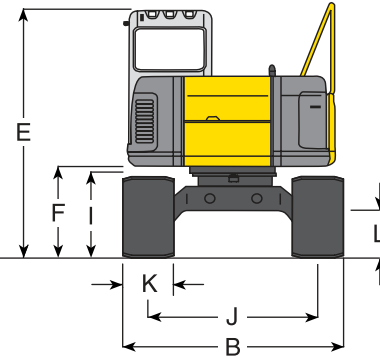
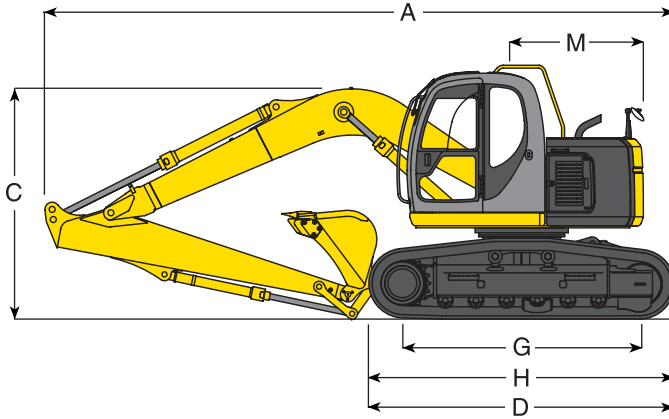


Anti-slip step pads and support rail make access to upper structure easy.

Shark tooth operator's step ensures solid traction for soiled job sites and operating during inclement weather.



215SR DIMENSIONS, WEIGHTS & BUCKET SELECTION CHART



DIMENSIONS: 215SR Unit ft-in (m)

| ARM LENGTH | ft (m) | 9' 5" | (2.87 m) |
|--------------------|------------------------------------|--------|----------|
| BOOM LENGTH | | | |
| A | Overall length | 29' 0" | (8.83) |
| B | Overall width (with 800 mm shoe) | 10' 6" | (3.19) |
| C | Overall height (to top of boom) | 9' 11" | (3.03) |
| D | Basic machine length | 14' 7" | (4.45) |
| E | Overall height (to top of cab)* | 10' 3" | (3.13) |
| F | Ground clearance of rear end* | 3' 4" | (1.02) |
| G | Center distance of tumbler | 12' 0" | (3.66) |
| H | Overall length of crawler | 14' 7" | (4.45) |
| I | Crawler height at tumbler center* | 3' 2" | (0.96) |
| J | Track gauge | 8' 6" | (2.59) |
| K | Width of crawler shoe | 31.5" | (0.80) |
| L | Ground clearance of undercarriage* | 1' 6" | (0.455) |
| M | Tail swing radius | 5' 6" | (1.68) |

* Excludes height of grouser bar

WEIGHTS

215SR with 9' 5" (2.87 m) std. HD arm

| | | |
|-----------------------------|-----------|-----------------|
| Operating Weight w/ Bucket | lb (kg) | 54,700 (24,800) |
| Bucket Weight | lb (kg) | 1,390 (630) |
| Operating Weight w/o Bucket | lb (kg) | 53,310 (24,170) |
| Ground Pressure | psi (kPa) | 5.6 (38.6) |
| Counterweight | lb (kg) | 13,760 (6.24) |

SHIPPING DIMENSIONS

| | | | |
|-------------------|-----------|--------|--------|
| Height | ft-in (m) | 10' 3" | (3.13) |
| Width w/Std. Shoe | ft-in (m) | 10' 6" | (3.19) |
| Length | ft-in (m) | 29' 0" | (8.83) |

BUCKET SELECTION CHART

| Bucket Duty | Capacity (SAE) | | Width | | Bucket | | Arm ft-in (m) 9' 5" (2.87) |
|-------------|-----------------|---------|------------|---------|----------------|-------|-------------------------------|
| | Cubic Yard (m³) | | Inches (m) | | Weight lb (kg) | | |
| General | .880 | (.672) | 24 | (.609) | 1,165 | (528) | H |
| | .910 | (.695) | 30 | (.762) | 1,325 | (601) | H |
| | 1.140 | (.871) | 36 | (.914) | 1,450 | (685) | H |
| | 1.370 | (1.047) | 42 | (1.066) | 1,651 | (749) | M |
| | 1.600 | (1.223) | 48 | (1.219) | 1,780 | (807) | L |
| Heavy Duty | .680 | (.519) | 24 | (.609) | 1,250 | (567) | H |
| | .910 | (.695) | 30 | (.762) | 1,420 | (644) | H |
| | 1.140 | (.871) | 36 | (.914) | 1,560 | (708) | M |
| | 1.370 | (1.047) | 42 | (1.066) | 1,651 | (749) | L |
| | 1.600 | (1.223) | 48 | (1.219) | 1,780 | (807) | X |
| Severe Duty | .630 | (.481) | 26 | (.660) | 1,455 | (660) | H |
| | .750 | (.573) | 31 | (.787) | 1,590 | (721) | H |
| | .880 | (.672) | 37 | (.939) | 1,790 | (812) | M |
| | 1.130 | (.871) | 43 | (1.092) | 2,000 | (907) | L |

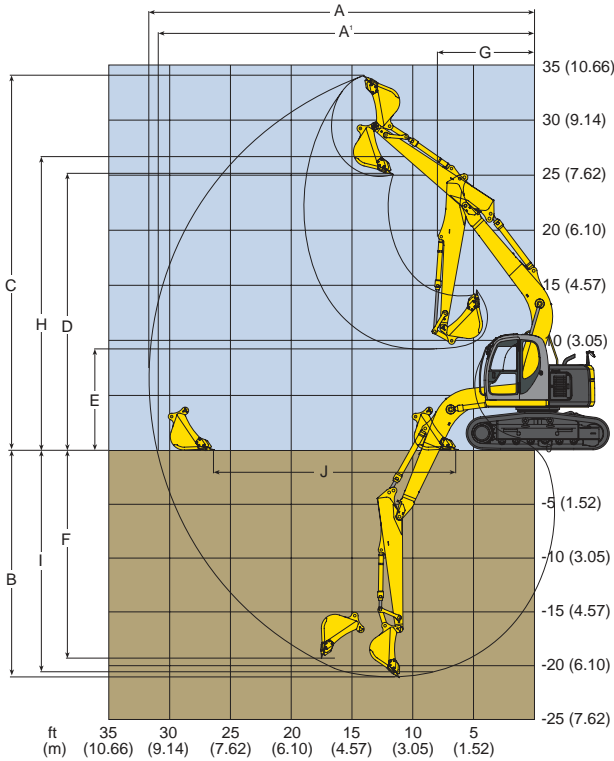
H - Used with material weight up to 3,000 lbs/cu yd (1,780 kg/m³)

M - Used with material weight up to 2,500 lbs/cu yd (1,483 kg/m³)

L - Used with material weight up to 2,000 lbs/cu yd (1,186 kg/m³)

X - Not recommended





This chart is a graphic representation of the working ranges for the 215SR equipped with a 9' 5" (2.87 m) arm.

PERFORMANCE

| | | | |
|------------------------------------|-------------------------|-----------|-------------|
| Travel Speed (Turtle) | mph (km/h) | 2.24 | (3.6) |
| Travel Speed (Rabbit) | mph (km/h) | 3.73 | (6.0) |
| Swing Speed | rpm | 13.3 | |
| Gradeability | degrees | 35 (70%) | |
| Drawbar Pulling Force | lb (kN) | 51,009 | (226.9) |
| Bucket Capacity Range (SAE heaped) | cu yd (m ³) | 0.63-1.60 | (0.48-1.22) |

SPECIFICATION SUMMARY

ENGINE

| | | | |
|----------------------|---|-------------|---------------|
| Make and Model | JO5E-TA HINO Motor, Ltd. | | |
| Type | Water-cooled, 4-Cylinder direct injection diesel engine with intercooler turbo-charger and EGR system | | |
| Displacement | cu in (l) | 313 | (5.123) |
| Bore | in (mm) | 4.41 | (112) |
| Stroke | in (mm) | 5.12 | (130) |
| Electrical System | 24 volts (70 amp) | | |
| Horsepower SAE NET | hp (kW) @ RPM | 153 @ 2,000 | (114 @ 2,000) |
| Horsepower ISO 14396 | hp (kW) @ RPM | 158 @ 2,000 | (118 @ 2,000) |
| Max torque - SAE | lbf-ft (kN • m) | 422 @ 1,600 | (572 @ 1,600) |

WORKING RANGES

| | ft-in | (m) |
|--|--------------|---------------|
| STANDARD ARM | 9' 5" | (2.87) |
| A Max digging reach | 31' 10" | (9.71) |
| A' Max digging reach at ground level | 31' 3" | (9.53) |
| B Max digging depth | 21' 7" | (6.59) |
| C Max digging height | 34' 8" | (10.57) |
| D Max dumping clearance | 25' 3" | (7.7) |
| E Min dumping clearance | 9' 9" | (2.97) |
| F Max vertical wall digging depth | 19' 7" | (5.96) |
| G Min front swing radius | 7' 6" | (2.29) |
| H Height at min front swing radius | 26' 9" | (8.15) |
| I Digging depth at 8' (2.4 m) level bottom | 20' 11" | (6.38) |
| J Horiz digging stroke at ground level | 20' 5" | (6.36) |

Measurements shown are for machines equipped with the 1.57 cu. yd. (1.2 m³) bucket.

BREAKOUT FORCES

| ARM | ft-in (m) | 9' 5" | (2.87) |
|----------------------|--------------|--------|---------|
| Arm Crowding Force | SAE lbf (kN) | 20,952 | (93.2) |
| Arm Crowding Force | ISO lbf (kN) | 21,762 | (96.8) |
| Bucket Digging Force | SAE lbf (kN) | 27,449 | (122.1) |
| Bucket Digging Force | ISO lbf (kN) | 30,574 | (136.0) |

Power Boost engaged

REFILL CAPACITIES

| | | | |
|--|---------|-------|--------|
| Fuel Tank Capacity | gal (l) | 79.25 | (300) |
| Hydraulic Oil Reservoir | gal (l) | 30 | (114) |
| Hydraulic System including Oil Reservoir | gal (l) | 61 | (230) |
| Cooling System | gal (l) | 5.8 | (22) |
| Lubrication: Engine Oil | gal (l) | 5.4 | (20.5) |

HYDRAULIC SYSTEM

| | | | |
|------------------------------|--------------------|-------------------------------------|-----------|
| Hydraulic Pump | Type | Tandem inline variable displacement | |
| Pump | Number | 2 VP + 1 FG | |
| Max Discharge Flow | US gal/min (l/min) | 2 x 55 | (2 x 210) |
| Auxiliary Pump Output | US gal/min (l/min) | 1 x 5.3 | (1 x 20) |
| Operating Pressure: | | | |
| Implement | psi (MPa) | 4,970 | (34.3) |
| Travel | psi (MPa) | 4,970 | (34.3) |
| Swing | psi (MPa) | 4,130 | (28.5) |
| Power Boost/Heavy Lift | psi (MPa) | 5,480 | (37.8) |
| Pilot Control Circuit | psi (MPa) | 725 | (5.0) |
| Control Valves (directional) | 8-spool valves | | |

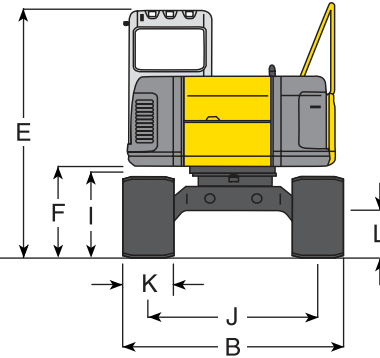
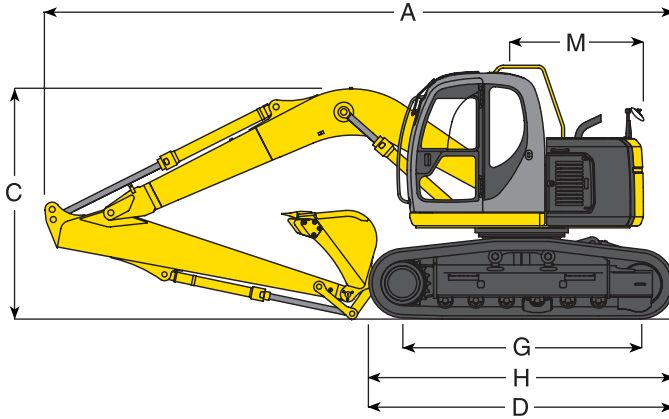
UNDERCARRIAGE

| | | | |
|---------------------------------|-----------|--------|--------|
| Track Overall Length | ft-in (m) | 14' 7" | (4.45) |
| Track Overall Width w/Std. Shoe | ft-in (m) | 10' 6" | (3.19) |
| Standard Track Shoe | in (mm) | 31.5 | (800) |
| Ground Clearance | in (mm) | 1' 6" | (445) |

SWING SYSTEM

| | | | |
|------------------------|-----------------|--------|--------|
| Max Swing Speed | rpm | 13.3 | |
| Swing Torque | lbf-ft (kN • m) | 52,370 | (71) |
| Tail Swing Radius | ft-in (m) | 5' 6" | (1.68) |
| Min Front Swing Radius | ft-in (m) | 7' 2" | (2.29) |

235SR DIMENSIONS, WEIGHTS & BUCKET SELECTION CHART



DIMENSIONS: 235SR Unit ft-in (m)

| ARM LENGTH | ft (m) | 9' 8" | (2.94 m) |
|--------------------|------------------------------------|--------|----------|
| BOOM LENGTH | | | |
| A | Overall length | 29' 6" | (8.98) |
| B | Overall width (with 800 mm shoe) | 11' 1" | (3.39) |
| C | Overall height (to top of boom) | 9' 11" | (3.03) |
| D | Basic machine length | 15' 3" | (4.64) |
| E | Overall height (to top of cab)* | 10' 4" | (3.16) |
| F | Ground clearance of rear end* | 3' 5" | (1.05) |
| G | Center distance of tumbler | 12' 6" | (3.85) |
| H | Overall length of crawler | 15' 3" | (4.64) |
| I | Crawler height at tumbler center* | 3' 2" | (0.96) |
| J | Track gauge | 8' 6" | (2.59) |
| K | Width of crawler shoe | 31' 5" | (0.80) |
| L | Ground clearance of undercarriage* | 1' 6" | (0.455) |
| M | Tail swing radius | 5' 5" | (1.73) |

* Excludes height of grouser bar

WEIGHTS

235SR with 9' 8" (2.94 m) std. HD arm

| | | |
|-----------------------------|-----------|-----------------|
| Operating Weight w/ Bucket | lb (kg) | 58,870 (26,700) |
| Bucket Weight | lb (kg) | 1,390 (630) |
| Operating Weight w/o Bucket | lb (kg) | 57,480 (26,070) |
| Ground Pressure | psi (kPa) | 5.75 (39.7) |
| Counterweight | lb (kg) | 13,760 (6.24) |

SHIPPING DIMENSIONS

| | | | |
|-------------------|-----------|--------|--------|
| Height | ft-in (m) | 10' 4" | (3.16) |
| Width w/Std. Shoe | ft-in (m) | 11' 1" | (3.39) |
| Length | ft-in (m) | 29' 6" | (8.98) |



BUCKET SELECTION CHART

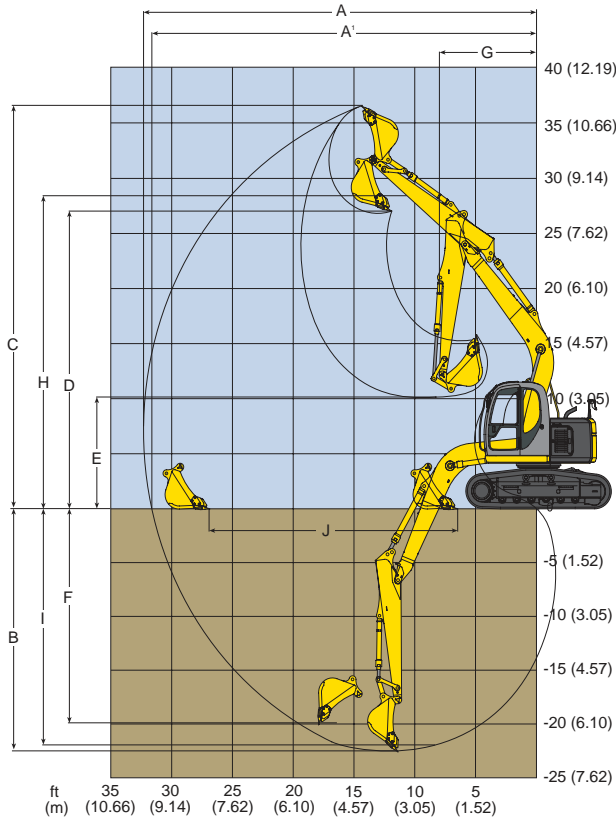
| Bucket Duty | Capacity (SAE) | | Width | | Bucket | | Arm ft-in (m) |
|-------------|-----------------|---------|------------|---------|----------------|-------|---------------|
| | Cubic Yard (m³) | | Inches (m) | | Weight lb (kg) | | 9' 8" (2.94) |
| General | .91 | (.695) | 30 | (.762) | 1,325 | (601) | H |
| | 1.14 | (.871) | 36 | (.914) | 1,450 | (658) | H |
| | 1.37 | (1.047) | 42 | (1.066) | 1,651 | (749) | M |
| | 1.6 | (1.223) | 48 | (1.219) | 1,780 | (807) | L |
| | 1.8 | (1.38) | 54 | (1.371) | 2,019 | (916) | L |
| Heavy Duty | .68 | (.519) | 24 | (.609) | 1,250 | (567) | H |
| | .91 | (.695) | 30 | (.762) | 1,420 | (644) | H |
| | 1.14 | (.871) | 36 | (.914) | 1,560 | (708) | M |
| | 1.37 | (1.04) | 42 | (1.066) | 1,730 | (785) | L |
| Severe Duty | .63 | (.481) | 26 | (.66) | 1,455 | (660) | H |
| | .75 | (.573) | 31 | (.787) | 1,590 | (721) | H |
| | .88 | (.672) | 37 | (.939) | 1,790 | (812) | M |
| | 1.13 | (.871) | 43 | (1.092) | 2,000 | (907) | L |

H - Used with material weight up to 3,000 lbs/cu yd (1,780 kg/m³)

M - Used with material weight up to 2,500 lbs/cu yd (1,483 kg/m³)

L - Used with material weight up to 2,000 lbs/cu yd (1,186 kg/m³)

X - Not recommended



This chart is a graphic representation of the working ranges for the 235SR equipped with a 9' 8" (2.94 m) arm.

PERFORMANCE

| | | |
|------------------------------------|-------------------------|-----------------------|
| Travel Speed (Turtle) | mph (km/h) | 2.1 (3.4) |
| Travel Speed (Rabbit) | mph (km/h) | 3.42 (5.5) |
| Swing Speed | rpm | 11.8 |
| Gradeability | degrees | 35 (70%) |
| Drawbar Pulling Force | lb (kN) | 54,561 (242.7) |
| Bucket Capacity Range (SAE heaped) | cu yd (m ³) | 0.63-1.80 (0.48-1.38) |

SPECIFICATION SUMMARY

ENGINE

| | | |
|----------------------|---|---------------------------|
| Make and Model | JO5E-TA HINO Motor, Ltd. | |
| Type | Water-cooled, 4-Cylinder direct injection diesel engine with intercooler turbo-charger and EGR system | |
| Displacement | cu in (l) | 313 (5.123) |
| Bore | in (mm) | 4.41 (112) |
| Stroke | in (mm) | 5.12 (130) |
| Electrical System | 24 volts (70 amp) | |
| Horsepower SAE NET | hp (kW) @ RPM | 153 @ 2,000 (114 @ 2,000) |
| Horsepower ISO 14396 | hp (kW) @ RPM | 158 @ 2,000 (118 @ 2,000) |
| Max torque - SAE | lbf-ft (kN • m) | 422 @ 1,600 (572 @ 1,600) |

WORKING RANGES

| | ft-in | (m) |
|--|--------------|---------------|
| STANDARD ARM | 9' 8" | (2.94) |
| A Max digging reach | 32' 4" | (9.85) |
| A' Max digging reach at ground level | 31' 10" | (9.68) |
| B Max digging depth | 21' 8" | (6.65) |
| C Max digging height | 36' 9" | (11.21) |
| D Max dumping clearance | 27' 4" | (8.33) |
| E Min dumping clearance | 10' 7" | (3.14) |
| F Max vertical wall digging depth | 19' 10" | (6.05) |
| G Min front swing radius | 6' 4" | (1.93) |
| H Height at min front swing radius | 27' 7" | (8.4) |
| I Digging depth at 8' (2.4 m) level bottom | 21' 3" | (6.46) |
| J Horiz digging stroke at ground level | 21' 5" | (6.52) |

Measurements shown are for machines equipped with the 1.57 cu. yd. (1.2 m³) bucket.

BREAKOUT FORCES

| ARM | ft-in (m) | 9' 8" | (2.94) |
|----------------------|--------------|--------|---------|
| Arm Crowding Force | SAE lbf (kN) | 24,234 | (107.8) |
| Arm Crowding Force | ISO lbf (kN) | 25,179 | (112) |
| Bucket Digging Force | SAE lbf (kN) | 31,699 | (141) |
| Bucket Digging Force | ISO lbf (kN) | 35,295 | (157) |

Power Boost engaged

REFILL CAPACITIES

| | gal (l) | 87.2 | (330) |
|--|---------|------|--------|
| Fuel Tank Capacity | gal (l) | 30 | (114) |
| Hydraulic Oil Reservoir | gal (l) | 61 | (230) |
| Hydraulic System including Oil Reservoir | gal (l) | 5.8 | (22) |
| Cooling System | gal (l) | 5.4 | (20.5) |
| Lubrication: Engine Oil | gal (l) | | |

HYDRAULIC SYSTEM

| Hydraulic Pump | Type | Tandem inline variable displacement | |
|------------------------------|--------------------|-------------------------------------|-----------|
| Pump | Number | 2 VP + 1 FG | |
| Max Discharge Flow | US gal/min (l/min) | 2 x 58.1 | (2 x 220) |
| Auxiliary Pump Output | US gal/min (l/min) | 1 x 5.3 | (1 x 20) |
| Operating Pressure: | | | |
| Implement | psi (MPa) | 4,970 | (34.3) |
| Travel | psi (MPa) | 4,970 | (34.3) |
| Swing | psi (MPa) | 4,130 | (28.5) |
| Power Boost/Heavy Lift | psi (MPa) | 5,480 | (37.8) |
| Pilot Control Circuit | psi (MPa) | 725 | (5.0) |
| Control Valves (directional) | | 8-spool valves | |

UNDERCARRIAGE

| | | | |
|---------------------------------|-----------|--------|--------|
| Track Overall Length | ft-in (m) | 15' 3" | (4.64) |
| Track Overall Width w/Std. Shoe | ft-in (m) | 11' 1" | (3.39) |
| Standard Track Shoe | in (mm) | 31.5 | (800) |
| Ground Clearance | in (mm) | 1' 6" | (445) |

SWING SYSTEM

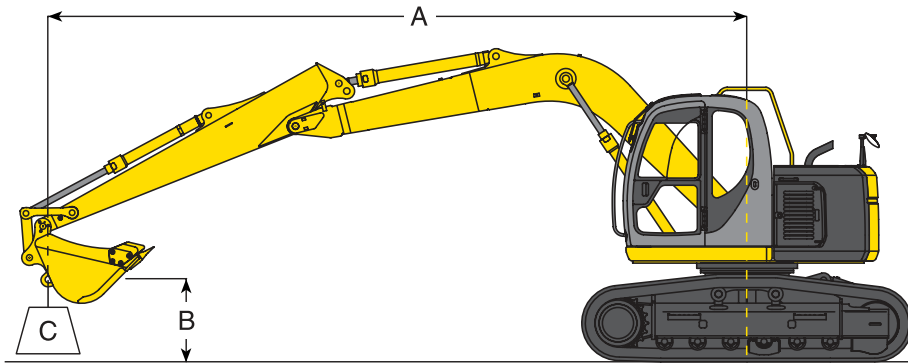
| | | |
|------------------------|-----------------|--------------|
| Max Swing Speed | rpm | 11.8 |
| Swing Torque | lbf-ft (kN • m) | 58,270 (79) |
| Tail Swing Radius | ft-in (m) | 5' 8" (1.73) |
| Min Front Swing Radius | ft-in (m) | 6' 4" (1.93) |

215SR ACERA / 235SR ACERA





215SR LIFT CAPACITIES — 9' 5" (2.87 m) Arm



- A Reach of swing centerline to bucket hook
- B Bucket hook height above/below ground
- C Lifting capacities in pounds and kilograms
 - Max discharge pressure: 5,480 psi (385 kg/cm²)
 - Track shoe: 31.5" (800 mm) Triple grouser
 - Boom: 18' 5" (5.62 m)
 - Bucket weight: 1,390 lbs. (630 kg)

LIFTING CAPACITY 31.5" (800mm) triple grouser shoe

Based on Heavy Lift machine equipped with— Arm: 9' 5" (2.87 m) Bucket: SAE heaped 1.05 cu. yd. (0.8 m³) bucket

| A | LIFT POINT RADIUS | | | | | | | | | | AT MAX. REACH | | RADIUS | |
|------------------|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|----------------|---------------|----------------|---------------|-----------------|
| | 5' (1.5 m) | | 10' (3.0 m) | | 15' (4.6 m) | | 20' (6.1 m) | | 25' (7.6 m) | | | | | |
| B | C | | | | | | | | | | | | | |
| 25' (7.6 m) | lb | | | | | | | | | | | *4,830 | *4,830 | 19' 9" |
| | kg | | | | | | | | | | | *2,190 | *2,190 | (6.04 m) |
| 20' (6.1 m) | lb | | | | | | *8,680 | *8,680 | | | | *4,450 | *4,450 | 23' 8" |
| | kg | | | | | | *3,940 | *3,940 | | | | *1,800 | *1,800 | (7.21 m) |
| 15' (4.6 m) | lb | | | | *13,400 | *13,400 | *11,480 | 10,010 | *6,630 | *6,630 | *4,590 | *4,590 | *4,590 | 26' 0" |
| | kg | | | | *6,080 | *6,080 | *5,200 | 4,540 | *3,000 | *3,000 | *2,080 | *2,080 | *2,080 | (7.93 m) |
| 10' (3.0 m) | lb | | | *27,880 | *27,880 | *18,100 | 14,870 | *14,110 | 9,460 | *9,650 | 6,520 | *4,880 | *4,880 | 27' 3" |
| | kg | | | *12,640 | *12,640 | *8,200 | 6,740 | *6,400 | 4,290 | *3,370 | 2,960 | *2,210 | *2,210 | (8.31 m) |
| 5' (1.5 m) | lb | | | *18,020 | *18,020 | *21,400 | 13,650 | *15,690 | 8,880 | *11,740 | 6,240 | *5,460 | *5,300 | 27' 6" |
| | kg | | | *8,170 | *8,170 | *9,700 | 6,190 | *7,110 | 4,020 | *5,320 | 2,830 | *2,470 | *2,400 | (8.39 m) |
| Ground Level | lb | | | *18,390 | *18,390 | *22,940 | 12,800 | 16,240 | 8,440 | 11,490 | 6,020 | *6,490 | 5,360 | 26' 10" |
| | kg | | | *8,340 | *8,340 | *10,400 | 5,850 | 7,360 | 3,830 | 5,210 | 2,730 | *2,490 | 2,430 | (8.19 m) |
| -5' (-1.5 m) | lb | *15,450 | *15,450 | *24,600 | *24,270 | *22,400 | 12,610 | *16,000 | 8,230 | *9,600 | 5,920 | *8,380 | 5,850 | 25' 2" |
| | kg | *7,000 | *7,000 | *11,150 | *11,000 | *10,160 | 5,720 | *7,250 | 3,370 | *4,350 | 2,680 | *3,800 | 2,650 | (7.69 m) |
| -10' (-3.0 m) | lb | *22,610 | *22,610 | *27,750 | *24,630 | *19,810 | 12,680 | *14,440 | 8,270 | | | *12,250 | 7,060 | 22' 4" |
| | kg | *9,250 | *10,250 | *12,580 | *11,170 | *8,980 | 5,750 | *5,550 | 3,750 | | | *5,550 | 3,200 | (6.80 m) |
| -15' (-4.6 m) | lb | | | *19,590 | *19,590 | *14,310 | 13,110 | | | | | *11,660 | 10,340 | 17' 7" |
| | kg | | | *8,880 | *8,880 | *6,490 | 5,940 | | | | | *5,280 | 4,690 | (5.37 m) |



Rating over front

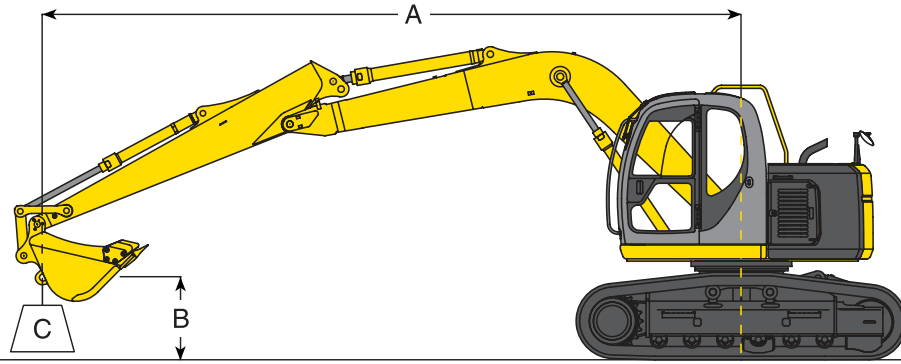


Rating over side / 360 degrees

Notes:

1. Do not attempt to lift or hold any load that exceeds these rated values at their specified load radii and heights. Weight of all accessories must be deducted from the above lifting capacities.
2. Lifting capacities assume a machine standing on a level, firm, and uniform supporting surface. Operator must make allowance for job conditions such as soft or uneven ground, out of level conditions, side loads, sudden stopping of loads, hazardous conditions, inexperienced personnel, weight of various other buckets, lifting slings, attachments, etc.
3. Ratings at bucket lift hook.
4. The above rated loads are in compliance with SAE Hydraulic Excavator Lift Capacity Standard J 1097. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Rated loads 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 Manuals before operating this machine. Rules for safe operation of equipment should be followed at all times.
6. Capacities apply only to the machine as originally manufactured and normally equipped by KOBELCO Construction Machinery America LLC.

235SR LIFT CAPACITIES — 9' 8" (2.94 m) Arm



- A** Reach of swing centerline to bucket hook
- B** Bucket hook height above/below ground
- C** Lifting capacities in pounds and kilograms
 - Max discharge pressure: 5,480 psi (385 kg/cm²)
 - Track shoe: 31.5" (800 mm) Triple grouser
 - Boom: 18' 6" (5.65 m)
 - Bucket weight: 1,390 lbs. (630 kg)

LIFTING CAPACITY 31.5" (800mm) triple grouser shoe

Based on Heavy Lift machine equipped with— Arm: 9' 8" (2.94 m) Bucket: SAE heaped 1.05 cu. yd. (0.8 m³) bucket

| A | LIFT POINT RADIUS | | | | | | | | | | AT MAX. REACH | | | | |
|------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|-------------------|------------------|-------------------|----------------|------------------|-------------------|---------------------|---------------------|
| | 5' (1.5 m) | | 10' (3.0 m) | | 15' (4.6 m) | | 20' (6.1 m) | | 25' (7.6 m) | | RADIUS | | | | |
| B | C | | | | | | | | | | | | | | |
| 30' (9.1 m) | lb kg | | | | | | | | | | | *8,855 *8,870 | *8,550 *3,870 | 13' 10" (4.22 m) | |
| 25' (7.6 m) | lb kg | | | | | *11,950 *5,420 | *11,950 *5,420 | *7,590 *3,440 | *7,590 *3,440 | | | | *7,090 *3,210 | *7,090 *3,210 | 20' 2" (6.16 m) |
| 20' (6.1 m) | lb kg | | | | | *13,190 *5,980 | *13,190 *5,980 | *12,020 5,450 | 12,020 5,450 | | | | *6,660 *3,020 | *6,660 *3,020 | 23' 11" (7.31 m) |
| 15' (4.6 m) | lb kg | | | *17,640 *8,000 | *17,640 *8,000 | *15,670 *7,100 | *15,670 *7,100 | *13,240 *6,000 | 12,640 5,730 | *9,830 4,460 | 8,590 3,890 | | *6,660 *3,020 | *6,660 *3,020 | 26' 3" (8.01 m) |
| 10' (3.0 m) | lb kg | | | *29,410 *13,340 | *29,410 *13,340 | *19,020 *8,620 | *18,990 *8,610 | *14,700 *6,660 | 11,980 5,430 | *12,310 *5,580 | 8,300 3,760 | | *6,990 *3,170 | *6,990 *3,170 | 27' 5" (8.37 m) |
| 5' (1.5 m) | lb kg | | | *18,790 *8,520 | *18,790 *8,520 | *21,910 *9,930 | 17,550 7,960 | *16,040 *7,270 | 11,300 5,120 | *12,800 *5,800 | 7,960 3,610 | | *7,670 *3,470 | 6,710 3,040 | 27' 9" (8.45 m) |
| Ground Level | lb kg | | | *20,150 *9,140 | *20,150 *9,140 | *22,880 *10,380 | 16,670 7,560 | *16,610 *7,530 | 10,800 4,900 | *12,820 *5,810 | 7,700 3,490 | | *8,880 *4,020 | 6,810 3,080 | 27' 1" (8.25 m) |
| -5' (-1.5 m) | lb kg | *17,110 *7,760 | *17,110 *7,760 | *27,940 *12,670 | *27,940 *12,670 | *21,750 *9,860 | 16,350 7,410 | *15,940 *7,230 | 10,560 4,790 | *11,800 *5,350 | 7,610 3,450 | | *11,100 *5,030 | 7,420 3,360 | 25' 5" (7.75 m) |
| -10' (-3.0 m) | lb kg | *26,080 *11,820 | *26,080 *11,820 | *25,350 *11,490 | *25,350 *11,490 | *18,530 *8,400 | *16,450 *7,460 | *13,510 *6,120 | 10,610 4,810 | | | | *11,080 *5,020 | 8,940 4,050 | 22' 6" (6.87 m) |
| -15' (-4.6 m) | lb kg | | | *16,550 *7,500 | *16,550 *7,500 | *12,410 *5,620 | *12,410 *5,620 | | | | | | *9,670 *4,380 | *9,670 *4,380 | 17' 10" (5.45 m) |



Rating over front



Rating over side / 360 degrees

Notes:

1. Do not attempt to lift or hold any load that exceeds these Rated values at their specified load radii and heights. Weight of all accessories must be deducted from the above lifting capacities.
2. Lifting capacities assume a machine standing on a level, firm, and uniform supporting surface. Operator must make allowance for job conditions such as soft or uneven ground, out of level conditions, side loads, sudden stopping of loads, hazardous conditions, inexperienced personnel, weight of various other buckets, lifting slings, attachments, etc.
3. Ratings at bucket lift hook.
4. The above rated loads are in compliance with SAE Hydraulic Excavator Lift Capacity Standard J 1097. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Rated loads 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 Manuals before operating this machine. Rules for safe operation of equipment should be followed at all times.
6. Capacities apply only to the machine as originally manufactured and normally equipped by KOBELCO Construction Machinery America LLC.

215SR ACERA / 235SR ACERA

ACERA



215SR ACERA / 235SR ACERA STANDARD AND OPTIONAL EQUIPMENT

STANDARD EQUIPMENT

- AM/FM radio
- Arm: 9' 5" (2.87 m) – **215SR**;
9' 8" (2.94 m) – **235SR** with vertical ribbed rock guard, tapped blocks, breaker ready
- Audible warning system for high coolant temperature, low engine oil pressure, clogged air filter and oil replacement interval
- Auxiliary valve
- Automatic swing and travel parking brakes
- Automatic engine accel/decel feature
- Automatic engine & hydraulic warm up function
- Boom: 18' 5" (5.62 m) – **215SR**;
18' 6" (5.65 m) – **235SR**
- Boom and arm holding (anti-drift) valves
- Cab is die formed, modular steel full-vision, sound insulated, with viscous silicon-filled mounts, windshield wiper, heater and defroster, cigarette lighter, ashtray, floor mat, cab light, control lever lock, tinted skylight with damper cylinder
- Climate control air conditioning/heating system
- Counter weight: 13,760 (6,240)
- Display monitor mounted on multi-function console provides status of following: aging of engine oil, fuel and hydraulic filters, system status, engine preheat, low engine oil pressure, engine coolant temperature, air cleaner restriction, battery charging
- Dual element air cleaner
- Exhaust Gas Recirculation (EGR) system
- Electric horn
- Emergency electronic bypass
- Engine shuts down automatically if low oil pressure occurs
- Flanged brass bucket bushing
- Floor mat: removable, washable, replaceable
- Heavy duty batteries (2 x 12 volt 136 AH)
- Heavy Lift "without time limit"
- Hydraulic track adjusters
- Independent travel
- **INDR® (Integrated Noise and Dust Reduction)** system
- Lifetime lubricated track rollers, idlers and sprockets, grease cylinder track adjuster, track link disassembly mechanism, long pitch sealed and strutted track links
- Long-life attachment bushings. Flanged bushing assembly at bucket pivot.
- Engine: JO5E-TA HINO Motor, Ltd.
- Mode selection:
 - H Mode: Heavy-duty excavation work
 - S Mode: Standard digging and loading work
 - B Mode: Breaker work
 - A Mode: Demolition work with crusher/nibbler-breaker

- Heavy-Duty X-Frame undercarriage - **235SR**
- Power Boost "without time limit"
- Power outlet: 24 volt to 12 volt converter
- Proportional auto accel system
- Removable cleanout screens for radiator & condensers
- Removable travel levers with toe tabs
- Eight (8) track rollers per side - **215SR**
Nine (9) track rollers per side - **235SR**
- Self-lubricating bushings in boom foot and boom hoist cylinders
- Service diagnostics: Computer system displays 68 service items and 60 event fault code memory – accessible from cab
- Starting motor (24 v/5.0 kW) 70 amp alternator
- Straight travel system
- Storage compartment for manuals
- Suspension seat: 7-way adjustable with safety belt
- Swing and travel automatic parking brakes
- Swing priority (trenching system) functions automatically
- Swing shockless valve
- Track shoes: 31.5" (800 mm) semi-triple bar grouser
- Travel Alarm
- Travel: two speed with automatic shift
- Two lever control for boom, arm, bucket and swing; pilot operated wrist controls and foot pedals
- Warm up function of engine and hydraulic system, functions automatically
- Work lights: three front and two rear

OPTIONAL EQUIPMENT

- Boom and arm load (lock) valves
- Breaker piping and controls
- Flow controlled, combined one-way or two way auxiliary hydraulic piping (one or two pump) with hand or foot controls
- Control pattern changer (ISO/BHL)
- High & Wide Undercarriage - **235SR only**
- Independent low-flow rotation valve with piping
- Large selection of ESCO & HENSLEY buckets
- Vandalism guards (see price pages)
- Rotational valve w/piping and controls

NOTE: Due to our policy of continual product improvement, all designs and specifications are subject to change without advance notice.

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The purchase of a Kobelco excavator isn't the end, it's the beginning of our relationship together. Consider your local Kobelco dealer as your partner in productivity who will work with you to supply your business needs. Whether you need assistance in selecting the right model for your operation or developing an affordable leasing or financing plan through CNH Capital, your Kobelco dealer can offer you sound advice because he has decades of heavy equipment experience.

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Safety begins with a thorough understanding of the equipment. Always make sure you and your operators read the Operator's Manual before using the equipment. Pay close attention to all safety and operating decals and never operate machinery without all shields, protective devices and structures in place.

