190G W/230G W
19 960–24 140-kg (44,000–53,220 lb.) Operating Weight
The wheel deal.

Looking to get on a roll? 190G W and 230G W Wheeled Excavators travel on tires, so they’re more mobile and maneuverable than tracked excavators. Their more spacious and comfortable cabs come equipped with easy-to-navigate enhanced LCD monitors that let operators easily dial-in a wealth of machine info and functionality. Rugged EPA Interim Tier 4 (IT4)/EU Stage IIIB diesels meet rigid emission regulations, enabling you to work, wherever there’s work. Delivering the smoothness, control, and operating ease you’ve come to expect from John Deere, these wheeled excavators are the real deal.

Key Specifications 190G W 230G W

<table>
<thead>
<tr>
<th>Net Peak Power (ISO 9249)</th>
<th>119 kW (159 hp) 119 kW (159 hp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Weight</td>
<td>20 550 kg (45,300 lb.)* 24 140 kg (53,220 lb.)*</td>
</tr>
<tr>
<td>Digging Depth</td>
<td>5.93 m (19 ft. 5 in.) 6.14 m (20 ft. 2 in.)</td>
</tr>
<tr>
<td>Arm Force (ISO)</td>
<td>91 kN (20,458 lb.) 114 kN (25,628 lb.)</td>
</tr>
<tr>
<td>Maximum Travel Speed</td>
<td>35 km/h (21.8 mph) 27.5 km/h (17.1 mph)</td>
</tr>
</tbody>
</table>

*With two-piece boom and front and rear outriggers.

John Deere WorkSight™ is an exclusive suite of telematic solutions that increases uptime while lowering operating costs. At its heart, JDLink™ Ultimate machine monitoring provides real-time utilization data and alerts to help you maximize productivity and efficiency while minimizing downtime. Remote diagnostics enable your dealer to read codes, record performance data, and even update software without a trip to the jobsite.

Choose from a variety of boom, blade, outrigger, and bucket options to equip your machine exactly as needed to optimize your setup.

Spacious cab delivers excellent visibility and less noise, along with a bevy of creature comforts.

The IT4/Stage IIIB technology utilized in our diesel engine is simple, fuel efficient, fully integrated, and fully supported. Seamless solutions that require no operator input or loss of productivity include field-proven cooled exhaust gas recirculation (EGR) for reducing NOX, and a diesel particulate filter (DPF) and diesel oxidation catalyst (DOC) to reduce particulate matter.

Rubber tires allow you to drive quickly from job to job instead of loading up a trailer — plus they’re much friendlier to paved surfaces.

The G-Series’ short wheelbase makes them very adept in close quarters — unlike unwieldy truck-mounted excavators. For work close up, opt for the two-piece boom.

Multi-language LCD monitor and rotary dial provide intuitive access to a wealth of information and functions.
Streetwise.

Work has never been easier than with John Deere wheeled excavators. They’re the perfect “Swiss Army knife” for a variety of work, whether it’s clearing ditches, repairing sewers or potholes, loading trucks, or moving Jersey barriers. Rubber tires and transport speeds as fast as 35 km/h (21.7 mph) mean you don’t need to load them on a trailer to travel to a nearby job or across pavement. Plenty of street smarts, too, with the Powerwise III™ engine/hydraulic-management system, three productivity modes, and Power Dig and Auto Power Lift functions. Add any of the many available options to tackle a wide variety of on- and off-road work.

1. Refined parallelogram blade better handles backfill and cleanup duties, while serving as a third stabilizer during digging.
2. Monoblock boom delivers the reach and lift capacity you need for long-distance work. Or opt for a two-piece boom for added versatility.
3. Standard solid rubber spacer between the heavy-duty dual tires puts pressure on the sidewalls to help keep the machine more stable. It also keeps mud and debris out, for longer tire life.

When the digging gets tough, press the Power Dig button for the extra hydraulic power you need to muscle through. Need a little extra lift when cranking? Auto Power Lift automatically engages when the boom is raised.

Powerwise III perfectly balances engine performance and hydraulic flow for predictable operation. Three productivity modes allow you to choose the digging style that fits the job. High productivity delivers more power and faster hydraulic response to move more material. Power delivers smooth and balanced metering for normal operation. Economy reduces top speed and helps save fuel.

Low-flow assist hydraulics come standard, perfect for lower-pressure, lower-flow applications like bucket-lift or -swinger attachments. Need additional hydraulic capability? Dealer-installed high-pressure, high-flow auxiliary hydraulic packages are available.

Standard deluxe lighting package provides 360-deg. illumination of the work area so you can extend the workday beyond daylight hours.

If you don’t need a blade, choose the four-outrigger option for maximum stability. You can activate the outriggers together or independently to quickly and easily level the machine.

Impressive horsepower, weight, and dig forces make these machines highly productive for a wide variety of work. Activate the axle-lock switch on the steering column to hold the machine more steady while digging or handling material when the stabilizers are not in use. Engage the brake at the same time to add even more stability.

Fast travel speed and boom and arm movement combined with superior arm force help speed cycle times. Wide axles, rock-solid stability, and substantial lift capabilities allow these machines to quickly move Jersey barriers.

Low-flow assist hydraulics come standard, perfect for lower-pressure, lower-flow applications like bucket-lift or -swinger attachments. Need additional hydraulic capability? Dealer-installed high-pressure, high-flow auxiliary hydraulic packages are available.

Standard deluxe lighting package provides 360-deg. illumination of the work area so you can extend the workday beyond daylight hours.

If you don’t need a blade, choose the four-outrigger option for maximum stability. You can activate the outriggers together or independently to quickly and easily level the machine.
Generous hydraulic flow and smooth, predictable metering ensure powerful digging force, precise low-effort control, and superb multifunction operation. Quick, responsive pump activation eliminates any delay in functions.

Wide expanse of front and side glass, narrow front cab posts, large overhead glass, and numerous mirrors provide virtually unobstructed all-around visibility. If you need to see more, the standard rearview camera displays the action behind on the monitor.

We’ve got your back with a sculpted mechanical-suspension high-back seat. Seat has 318 mm (12.5 in.) of travel, sliding together or independent of the joystick console. So it won’t cramp an operator’s style.

Two-speed PowerShift™ transmission shifts smoothly on-the-go from low to high in each speed, enabling multiple operating speeds for better responsiveness. Downshifting isn’t a problem either, since the transmission will only shift within certain travel-speed parameters — protecting both operator and drivetrain.

Multi-language LCD monitor provides intuitive access to a wealth of information and functions. Simply turn and tap the rotary dial to select work mode, access operating info, check maintenance intervals, source diagnostic codes, adjust cab temperature, and tune the radio. Plus much more.

1. The F-N-R directional switch is now conveniently located on the left-hand pilot lever, making it easier to control the blade and stabilizer functions.

2. Ergonomically correct short-throw pilot levers provide smooth, predictable fingertip control with less movement or effort. Push buttons in the right lever allow fingertip control of auxiliary hydraulic flow for operating attachments.

3. Each outrigger is independently controlled, enabling optimum placement to help complete the job safely and surely.

4. Automatic, high-velocity bi-level climate-control system with automotive-style adjustable louvers helps keep the glass clear and the cab comfortable.

Operators will have no trouble “dialing it up a notch” in this spacious, well-appointed cab. The refined monitor employs a rotary control that operators can simply turn and tap to access an abundance of performance and convenience functions and features. Operators will also appreciate the comfortable fabric-covered high-back seat, unsurpassed all-round visibility, low-effort joysticks, a highly efficient HVAC system, and numerous other amenities. The 190G W and 230G W provide everything your operators need to do their best work.
Nothing runs like a Deere, because nothing is built like one.

Don’t let downtime get you down. From their ultra-dependable, fuel-sipping diesels to their rugged D-channel side frames, these wheeled excavators keep things upbeat — and up and running. Their highly efficient cooling system ensures things are running cool in any environment. You’ll also continue to profit from traditional durability-enhancing features, including tungsten-carbide thermal-coated arm surfaces, oil-impregnated bushings, and welded boom bulkheads. For maximum uptime and long-term durability. When you know how they’re built, you’ll run a Deere.

A John Deere exclusive, three welded bulkheads within the boom resist torsional stress for unsurpassed durability. Booms, arms, and mainframes are so tough, they’re warranted for three years or 10,000 hours.

Highly efficient, heavy-duty cooling system keeps things cool, even in the toughest environments.

PowerShift transmission has been integrated with the axle and repositioned higher above ground level to better protect it from damage.

Wet-type disc brakes are virtually maintenance free and deliver reliable, long-term stopping power.

Oil-impregnated bushings enhance durability and extend grease intervals to 500 hours for the arm-and-boom joint and 100 hours for the bucket joint.
Let’s roll.

G-Series Wheeled Excavators are loaded with features that make them hassle-free to service and maintain, so you can keep things rolling. Large, easy-to-open doors and easy-access service points make quick work of the daily routine. Remote-mounted vertical oil and fuel filters minimize maintenance. And extended engine and hydraulic fluid-service intervals increase uptime and reduce daily operating costs. Plus the Machine Information Center (MIC), state-of-the-art LCD color monitor, and fluid-sample ports help you make timely decisions about machine upkeep — and manage uptime and costs.

Auto-idle automatically reduces engine speed when hydraulics aren’t in use. Auto-shutdown further preserves precious fuel.

MIC captures and stores vital machine performance and utilization data to help improve uptime.

Large fuel tanks and 500- and 5,000-hour engine and hydraulic oil-service intervals decrease downtime for routine maintenance.

Ground-level fresh-air cab filter is quickly serviced from outside the cab where it’s more likely to get done.

Reinforced resin thrust plates, grooved bushings, and thermal-coated bucket joints increase arm, boom, and bucket lube intervals to 500 hours.

Ultimate Uptime, featuring John Deere WorkSight, is a customizable support solution available exclusively from your Deere dealer. This flexible offering maximizes equipment availability with standard John Deere WorkSight capabilities that can help prevent future downtime and speed repairs when needed. In addition to the base John Deere WorkSight features, our dealers work with you to build an uptime package that meets the specific needs of your machine, fleet, project, and business, including customized maintenance and repair agreements, onsite parts availability, extended warranties, fluid sampling, response-time guarantees, and more.

1. Easy-to-read LCD monitor tracks scheduled maintenance intervals and issues reminders. Should a problem arise, it provides diagnostic information to help decrease downtime.

2. Swing open the side panels on either side of the machine to provide even more wide-open access to components.


4. Vertical spin-on engine oil filters and fuel/water separators are conveniently grouped in the right rear compartment, for easy ground-level servicing.
**Engine**

- Manufacturer and Model: Isuzu 4HK1
- Non-Road Emission Standard: EPA Interim Tier 4/EU Stage IIIB
- Cylinders: 4
- Displacement: 5.2 L (317 cu. in.)
- Net Peak Power (ISO 9249): 119 kW (159 hp) at 2,000 rpm
- Off-Level Capacity: 67% (34 deg.)
- Aspiration: Turbocharged, air-to-air charge air cooler

**Cooling**

- High-efficiency, direct-drive suction-type fan

**Powertrain**

- 2-speed propel with creeper mode and automatic shift
- Maximum Travel Speed:
  - Creeper: 2.6 km/h (1.6 mph)
  - Low: 8.6 km/h (5.3 mph)
  - High: 35.0 km/h (21.8 mph)
- Front Axle: All-wheeled drive; can be locked hydraulically in any position
- Oscillation: ± 7 deg.
- Brakes: Maintenance-free wet-disc brakes on front and rear axles, fully hydraulic service brakes
- Tires: Standard size, dual-traction-type 10.00-20 14PR tires

**Drawbar Pull**: 9534 kgf (20,570 lbf)

**Hydraulics**

- Main Pumps: 2 variable-displacement axial-piston pumps
- System Operating Pressure:
  - Implement Circuits: 34 300 kPa (4,975 psi)
  - Travel Circuits: 34 800 kPa (5,047 psi)
  - Swing Circuits: 33 400 kPa (4,844 psi)
  - Power Boost: 36 100 kPa (5,265 psi)
- Controls: Pilot levers, short stroke, low-effort hydraulic pilot controls with shutoff lever

**Cylinders**

- Monoblock Boom (2):
  - Bore: 120 mm (4.7 in.)
  - Rod Diameter: 85 mm (3.4 in.)
  - Stroke: 850 mm (33.9 in.)
- 2-Piece Boom (2):
  - Bore: 120 mm (4.7 in.)
  - Rod Diameter: 85 mm (3.4 in.)
  - Stroke: 980 mm (38.6 in.)
- Positioning, 2-Piece Boom (1):
  - Bore: 170 mm (6.7 in.)
  - Rod Diameter: 105 mm (4.1 in.)
  - Stroke: 670 mm (26.6 in.)
- Arm (1):
  - Bore: 125 mm (4.9 in.)
  - Rod Diameter: 90 mm (3.5 in.)
  - Stroke: 1371 mm (54.0 in.)
- Bucket (1):
  - Bore: 105 mm (4.1 in.)
  - Rod Diameter: 75 mm (3.0 in.)
  - Stroke: 1060 mm (41.7 in.)

**Electrical**

- Voltage: 24 volt
- Number of Batteries (12 volt): 2
- Alternator Rating: 50 amp
- Lights (6):
  - Headlights (2), top of cab (2), rear of cab (1), and boom (1)
- Driving Lights: Headlights (2), turn signals and hazard lights, brake lights, and side marker lights
- Swing Mechanism:
  - Speed: 12.2 rpm
  - Torque: 53 000 Nm (39,091 lb.-ft.)

**Serviceability**

- Refill Capacities:
  - Engine Coolant: 25 L (6.6 gal.)
  - Engine Oil with Filter: 23 L (6.1 gal.)
  - Hydraulic Tank: 100 L (26.4 gal.)
  - Hydraulic System: 180 L (47.6 gal.)
  - Swing Drive: 6.2 L (1.6 gal.)
  - Transmission: 2.5 L (0.6 gal.)

**Operating Weights**

- With full fuel tank, 79 kg (175 lb.) operator, 0.7 m³ (35 in.), 610 kg (1,345 lb.) bucket; 2.71 m (8 ft. 11 in.) arm; standard gauge; and 4,000 kg (8,819 lb.) counterweight
- Front Outrigger and Rear Outrigger: 20 200 kg (44,530 lb.)
- Front Blade and Rear Outrigger: 19 960 kg (44,000 lb.)

**Operating Dimensions**

- Maximum Reach: 9.58 m (31 ft. 5 in.)
- Maximum Digging Depth: 5.83 m (19 ft. 2 in.)
- Maximum Cutting Height: 9.25 m (30 ft. 4 in.)
- Maximum Dumping Height: 6.45 m (21 ft. 2 in.)
- Minimum Swing Radius: 3.48 m (11 ft. 5 in.)

**Serviceability (continued)**

- Differential Gear:
  - Front: 9.5 L (2.5 gal.)
  - Rear: 14 L (3.7 gal.)
- Front and Rear Hubs: 2.5 L (0.6 gal. x 2)

**190G W EXCAVATOR WITH MONOBLOCK BOOM**

**190G W EXCAVATOR WITH 2-PIECE BOOM**
Machine Dimensions 190G W

With standard gauge and 2.77-m (8 ft. 11 in.) arm, dimensions are provided for both the front and rear outrigger configuration, and for the front blade and rear outrigger configuration.

A Overall Length – 8.98 m (29 ft. 6 in.)
B Overall Height 3.13 m (10 ft. 3 in.)
C Engine Cover Height 2.47 m (8 ft. 1 in.)
D Counterweight Clearance 1.24 m (4 ft. 1 in.)
E Overall Height of Cab 3.13 m (10 ft. 3 in.)
F Overall Width of Tires 2.55 m (8 ft. 4 in.)
G Overall Height 3.13 m (10 ft. 3 in.)
H Overall Width of Tires 2.55 m (8 ft. 4 in.)
J Minimum Ground Clearance 0.35 m (11.8 in.)
K Wheelbase 2.65 m (8 ft. 8 in.)
L Swing Center to Rear Axle 1.15 m (3 ft. 1 in.)
M Rear Overhang 1.09 m (3 ft. 7 in.)
N Rear Overhang 1.09 m (3 ft. 7 in.)
O Overall Width of Blade 2.53 m (8 ft. 4 in.)
P Overall Height of Blade 0.59 m (23.2 in.)
Q Maximum Blade Raise 0.37 m (14.6 in.)
R Overall Width of Blade 2.53 m (8 ft. 4 in.)
S Overall Width with Outrigger Retracted 2.47 m (8 ft. 1 in.)
T Overall Width with Outrigger Extended 2.64 m (8 ft. 8 in.)
U Overall Height of Boom (traveling) 4.00 m (13.1 ft.)
V Overall Height of Boom (traveling) 4.00 m (13.1 ft.)
W Front Overhang (traveling) 3.33 m (10 ft. 11 in.)
X Front Overhang (traveling) 3.33 m (10 ft. 11 in.)
Y Front Overhang and Rear Overhang 1.38 m (4 ft. 6 in.)
Z Rear Blade and Rear Outrigger 1.32 m (4 ft. 4 in.)

Machine Dimensions 190G W

With standard gauge and 2.77-m (8 ft. 11 in.) arm, dimensions are provided for both the front and rear outrigger configuration, and for the front blade and rear outrigger configuration.

A Overall Length – 8.98 m (29 ft. 6 in.)
B Overall Height 3.13 m (10 ft. 3 in.)
C Engine Cover Height 2.47 m (8 ft. 1 in.)
D Counterweight Clearance 1.24 m (4 ft. 1 in.)
E Overall Height of Cab 3.13 m (10 ft. 3 in.)
F Overall Width of Tires 2.55 m (8 ft. 4 in.)
G Overall Height 3.13 m (10 ft. 3 in.)
H Overall Width of Tires 2.55 m (8 ft. 4 in.)
J Minimum Ground Clearance 0.35 m (11.8 in.)
K Wheelbase 2.65 m (8 ft. 8 in.)
L Swing Center to Rear Axle 1.15 m (3 ft. 1 in.)
M Rear Overhang 1.09 m (3 ft. 7 in.)
N Rear Overhang 1.09 m (3 ft. 7 in.)
O Overall Width of Blade 2.53 m (8 ft. 4 in.)
P Overall Height of Blade 0.59 m (23.2 in.)
Q Maximum Blade Raise 0.37 m (14.6 in.)
R Overall Width of Blade 2.53 m (8 ft. 4 in.)
S Overall Width with Outrigger Retracted 2.47 m (8 ft. 1 in.)
T Overall Width with Outrigger Extended 2.64 m (8 ft. 8 in.)
U Overall Height of Boom (traveling) 4.00 m (13.1 ft.)
V Overall Height of Boom (traveling) 4.00 m (13.1 ft.)
W Front Overhang (traveling) 3.33 m (10 ft. 11 in.)
X Front Overhang (traveling) 3.33 m (10 ft. 11 in.)
Y Front Overhang and Rear Overhang 1.38 m (4 ft. 6 in.)
Z Rear Blade and Rear Outrigger 1.32 m (4 ft. 4 in.)

Horizontal Distance from Centerline of Rotation

Lift Capacities 190G W
Boldface type indicates hydraulically limited capacities; lightface type indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook, main boom with equipped with 600 kg (1,323 lb.) bucket, 2.77-m (8 ft. 11 in.) arm, and standard counterweight; and situated on firm, level, uniform supporting surface. Figures do not exceed 87% of hydraulic capacity or 75% of weight needed to tip machine.

<table>
<thead>
<tr>
<th>LOAD POINT HEIGHT</th>
<th>1.5 m (5 ft.)</th>
<th>3.0 m (10 ft.)</th>
<th>4.5 m (15 ft.)</th>
<th>6.0 m (20 ft.)</th>
<th>7.5 m (25 ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over Front</td>
<td>4640</td>
<td>6620</td>
<td>9590</td>
<td>4640</td>
<td>4640</td>
</tr>
<tr>
<td>Over Side</td>
<td>3980</td>
<td>6140</td>
<td>8730</td>
<td>3980</td>
<td>3980</td>
</tr>
<tr>
<td>Over Front</td>
<td>4640</td>
<td>6620</td>
<td>9590</td>
<td>4640</td>
<td>4640</td>
</tr>
<tr>
<td>Over Side</td>
<td>3980</td>
<td>6140</td>
<td>8730</td>
<td>3980</td>
<td>3980</td>
</tr>
<tr>
<td>Over Front</td>
<td>4640</td>
<td>6620</td>
<td>9590</td>
<td>4640</td>
<td>4640</td>
</tr>
<tr>
<td>Over Side</td>
<td>3980</td>
<td>6140</td>
<td>8730</td>
<td>3980</td>
<td>3980</td>
</tr>
</tbody>
</table>

With monoblock boom, rear outriggers, and front blade down

<table>
<thead>
<tr>
<th>LOAD POINT HEIGHT</th>
<th>4.5 m (15 ft.)</th>
<th>6.0 m (20 ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over Front</td>
<td>4640</td>
<td>4640</td>
</tr>
<tr>
<td>Over Side</td>
<td>3980</td>
<td>3980</td>
</tr>
<tr>
<td>Over Front</td>
<td>4640</td>
<td>4640</td>
</tr>
<tr>
<td>Over Side</td>
<td>3980</td>
<td>3980</td>
</tr>
<tr>
<td>Over Front</td>
<td>4640</td>
<td>4640</td>
</tr>
<tr>
<td>Over Side</td>
<td>3980</td>
<td>3980</td>
</tr>
</tbody>
</table>

With 2-piece boom, rear outriggers, and front blade down

<table>
<thead>
<tr>
<th>LOAD POINT HEIGHT</th>
<th>4.5 m (15 ft.)</th>
<th>6.0 m (20 ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over Front</td>
<td>4640</td>
<td>4640</td>
</tr>
<tr>
<td>Over Side</td>
<td>3980</td>
<td>3980</td>
</tr>
<tr>
<td>Over Front</td>
<td>4640</td>
<td>4640</td>
</tr>
<tr>
<td>Over Side</td>
<td>3980</td>
<td>3980</td>
</tr>
<tr>
<td>Over Front</td>
<td>4640</td>
<td>4640</td>
</tr>
<tr>
<td>Over Side</td>
<td>3980</td>
<td>3980</td>
</tr>
</tbody>
</table>

With monoblock beam and 4 outriggers down

<table>
<thead>
<tr>
<th>LOAD POINT HEIGHT</th>
<th>4.5 m (15 ft.)</th>
<th>6.0 m (20 ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over Front</td>
<td>4640</td>
<td>4640</td>
</tr>
<tr>
<td>Over Side</td>
<td>3980</td>
<td>3980</td>
</tr>
<tr>
<td>Over Front</td>
<td>4640</td>
<td>4640</td>
</tr>
<tr>
<td>Over Side</td>
<td>3980</td>
<td>3980</td>
</tr>
<tr>
<td>Over Front</td>
<td>4640</td>
<td>4640</td>
</tr>
<tr>
<td>Over Side</td>
<td>3980</td>
<td>3980</td>
</tr>
</tbody>
</table>

With 2-piece beam, rear outriggers, and front blade down

<table>
<thead>
<tr>
<th>LOAD POINT HEIGHT</th>
<th>4.5 m (15 ft.)</th>
<th>6.0 m (20 ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over Front</td>
<td>4640</td>
<td>4640</td>
</tr>
<tr>
<td>Over Side</td>
<td>3980</td>
<td>3980</td>
</tr>
<tr>
<td>Over Front</td>
<td>4640</td>
<td>4640</td>
</tr>
<tr>
<td>Over Side</td>
<td>3980</td>
<td>3980</td>
</tr>
<tr>
<td>Over Front</td>
<td>4640</td>
<td>4640</td>
</tr>
<tr>
<td>Over Side</td>
<td>3980</td>
<td>3980</td>
</tr>
</tbody>
</table>
A full line of buckets is offered to meet a wide variety of applications. Digging forces are with power boost. Buckets are equipped with John Deere TK-Series Bucket Teeth standard. Replaceable cutting edges and a variety of teeth are available through John Deere Parts. Optional side cutters add 150 mm (6 in.) to bucket widths. Capacities are SAE heaped ratings.

### Bucket Specifications

<table>
<thead>
<tr>
<th>Type Bucket</th>
<th>Bucket Width</th>
<th>Bucket Capacity</th>
<th>Bucket Weight</th>
<th>Bucket Dig Force</th>
<th>Arm Dig Force, 2.71 m (8 ft. 11 in.)</th>
<th>Bucket Tip Radius, 2.71 m (8 ft. 11 in.)</th>
<th>Number of Teeth</th>
</tr>
</thead>
<tbody>
<tr>
<td>General-Purpose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High-Capacity</td>
<td>762</td>
<td>0.60</td>
<td>0.79</td>
<td>650</td>
<td>1,422</td>
<td>122.7</td>
<td>1473</td>
</tr>
<tr>
<td></td>
<td>914</td>
<td>0.76</td>
<td>1.00</td>
<td>735</td>
<td>1,621</td>
<td>122.7</td>
<td>1473</td>
</tr>
<tr>
<td></td>
<td>1067</td>
<td>0.93</td>
<td>1.22</td>
<td>812</td>
<td>1,790</td>
<td>122.7</td>
<td>1473</td>
</tr>
<tr>
<td></td>
<td>1219</td>
<td>1.09</td>
<td>1.43</td>
<td>892</td>
<td>1,970</td>
<td>122.7</td>
<td>1473</td>
</tr>
<tr>
<td>Heavy-Duty</td>
<td>610</td>
<td>0.43</td>
<td>0.56</td>
<td>646</td>
<td>1,404</td>
<td>122.7</td>
<td>1473</td>
</tr>
<tr>
<td></td>
<td>762</td>
<td>0.58</td>
<td>0.76</td>
<td>723</td>
<td>1,593</td>
<td>122.7</td>
<td>1473</td>
</tr>
<tr>
<td></td>
<td>914</td>
<td>0.74</td>
<td>0.97</td>
<td>808</td>
<td>1,782</td>
<td>122.7</td>
<td>1473</td>
</tr>
<tr>
<td></td>
<td>1067</td>
<td>0.91</td>
<td>1.19</td>
<td>892</td>
<td>1,970</td>
<td>122.7</td>
<td>1473</td>
</tr>
<tr>
<td></td>
<td>1219</td>
<td>1.06</td>
<td>1.39</td>
<td>977</td>
<td>1,790</td>
<td>122.7</td>
<td>1473</td>
</tr>
<tr>
<td>Ditching</td>
<td>1524</td>
<td>0.87</td>
<td>1.14</td>
<td>577</td>
<td>1,271</td>
<td>170.3</td>
<td>1473</td>
</tr>
<tr>
<td>General-Purpose</td>
<td>1219</td>
<td>1.09</td>
<td>1.43</td>
<td>577</td>
<td>1,271</td>
<td>122.7</td>
<td>1473</td>
</tr>
</tbody>
</table>

### Lift Capacities

<table>
<thead>
<tr>
<th>LOAD POINT HEIGHT</th>
<th>1.5 m (5 ft.)</th>
<th>3.0 m (10 ft.)</th>
<th>4.5 m (15 ft.)</th>
<th>6.0 m (20 ft.)</th>
<th>7.5 m (25 ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Over Front</td>
<td>Over Side</td>
<td>Over Front</td>
<td>Over Side</td>
<td>Over Front</td>
</tr>
<tr>
<td>6.0 m (20 ft.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3980</td>
</tr>
<tr>
<td>4.5 m (15 ft.)</td>
<td>4860</td>
<td>4860</td>
<td>4330</td>
<td>4330</td>
<td>2820</td>
</tr>
<tr>
<td></td>
<td>(10,510)</td>
<td>(10,510)</td>
<td>(9,450)</td>
<td>(9,450)</td>
<td>(6,440)</td>
</tr>
<tr>
<td>3.0 m (10 ft.)</td>
<td>8700</td>
<td>8700</td>
<td>6500</td>
<td>6500</td>
<td>5050</td>
</tr>
<tr>
<td></td>
<td>(19,130)</td>
<td>(19,130)</td>
<td>(13,970)</td>
<td>(13,970)</td>
<td>(10,960)</td>
</tr>
<tr>
<td>1.5 m (5 ft.)</td>
<td>10,630</td>
<td>10,630</td>
<td>8100</td>
<td>8100</td>
<td>5830</td>
</tr>
<tr>
<td></td>
<td>(23,330)</td>
<td>(23,330)</td>
<td>(17,470)</td>
<td>(17,470)</td>
<td>(12,630)</td>
</tr>
</tbody>
</table>

### Horizontal Distance from Centerline of Rotation

<table>
<thead>
<tr>
<th>HORIZONTAL DISTANCE FROM CENTERLINE OF ROTATION</th>
<th>Over Front</th>
<th>Over Side</th>
<th>Over Front</th>
<th>Over Side</th>
<th>Over Front</th>
<th>Over Side</th>
<th>Over Front</th>
<th>Over Side</th>
<th>Over Front</th>
<th>Over Side</th>
<th>Over Front</th>
<th>Over Side</th>
<th>Over Front</th>
<th>Over Side</th>
<th>Over Front</th>
<th>Over Side</th>
<th>Over Front</th>
<th>Over Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5 m (5 ft.)</td>
<td>3980</td>
<td>3980</td>
<td>3980</td>
<td>3980</td>
<td>3980</td>
<td>3980</td>
<td>3980</td>
<td>3980</td>
<td>3980</td>
<td>3980</td>
<td>3980</td>
<td>3980</td>
<td>3980</td>
<td>3980</td>
<td>3980</td>
<td>3980</td>
<td>3980</td>
<td>3980</td>
</tr>
</tbody>
</table>
Engine
Manufacturer and Model Isuzu 4HK1
Non-Road Emission Standard EPA Interim Tier 4/EU Stage IIIB
Cylinders 4
Displacement 5.2 L (317 cu. in.)
Net Peak Power (5G 92Wt) 119 kW (159 hp) at 2,000 rpm
Off-Level Capacity 60% (31 deg.)
Aspiration Turbocharged, air-to-air charge air cooler

Cooling
High-efficiency, direct-drive suction-type fan

Powertrain
2-speed propel with creeper mode and automatic shift
Maximum Travel Speed
Creep 2.9 km/h (1.8 mph)
Low 7.4 km/h (4.6 mph)
High 27.5 km/h (17.1 mph)

Brakes
Maintenance-free wet-disc brakes on front and rear axles; fully hydraulic service brakes

Tires
Standard size, dual-traction-type 11.00-20 16PR tires

Drawbar Pull 11 115 kgf (24,504 lbf)

Hydraulics
Main Pumps 2 variable-displacement axial-piston pumps
Pump Flow, Maximum x 2 189 L/min (49.9 gpm)
System Operating Pressure
Implement Circuits 34 300 kPa (4,975 psi)
Travel Circuits 35 300 kPa (5,120 psi)
Swing Circuits 35 300 kPa (5,120 psi)
Power Boost 38 000 kPa (5,511 psi)

Controls
Pilot levers, short stroke, low-effort hydraulic pilot controls with shutoff lever

Cylinders
Bore
Rod Diameter
Stroke
Monoblock Boom (2) 125 mm (4.9 in.) 85 mm (3.4 in.) 1241 mm (48.9 in.)
2-Piece Boom (2) 130 mm (5.1 in.) 85 mm (3.4 in.) 1024 mm (40.3 in.)
Positioning, 2-Piece Boom (2) 180 mm (7.1 in.) 110 mm (4.3 in.) 680 mm (26.8 in.)
Arm (1) 115 mm (4.5 in.) 95 mm (3.7 in.) 1475 mm (58.1 in.)
Bucket (1) 115 mm (4.5 in.) 80 mm (3.2 in.) 1060 mm (41.7 in.)

Electrical
Voltage 24 volt
Number of Batteries (12 volt) 2
Alternator Rating 50 amp
Lights (6) Headlights (2), top of cab (2), rear of cab (1), and boom (1)

Driving Lights
Headlights (2), turn signals and hazard lights, brake lights, and side marker lights

Swing Mechanism
Speed 11.2 rpm
Torque 6150 Nm(45,360 lb.-ft.)

Serviceability
Refill Capacities
Fuel Tank 400 L (105.7 gal.)
Engine Coolant 25 L (6.6 gal.)
Engine Oil with Filter 23 L (6.1 gal.)
Hydraulic Tank 130 L (34.3 gal.)
Hydraulic System 270 L (71.3 gal.)
Swing Drive 6.2 L (1.6 gal.)
Transmission 2.5 L (0.6 gal.)

Serviceability (continued)
Differential Gear
Front 11 L (2.9 gal.)
Rear 14.5 L (3.8 gal.)
Front and Rear Hubs 2.5 L x 2 (2.5 qt. x 2)

Operating Weights
With full fuel tank; 79 kg (175 lb.) operator; 0.8 m³ (1.04 cu. yd.), 660 kg (1,455 lb.) general-purpose bucket; 2.91 m (9 ft. 7 in.) arm; standard gauge; and 2,500 kg (5,511 lb.) counterweight

Monoblock Boom 23 600 kg (52,030 lb.) 24 140 kg (52,540 lb.)
2-Piece Boom 23 290 kg (64,350 lb.) 23 830 kg (18,540 lb.)

Operating Dimensions
Arm Digging Force
SAE 110 kN (24,729 lb.)
ISO 114 kN (25,628 lb.)

Bucket Digging Force
SAE 141 kN (31,698 lb.)
ISO 158 kN (35,520 lb.)

Maximum Reach
Arm 10.28 m (33 ft. 9 in.)
Bucket 10.36 m (34 ft. 0 in.)

Maximum Cutting Height
Arm 10.25 m (33 ft. 7 in.)
Bucket 10.28 m (33 ft. 9 in.)

Maximum Dumping Height
Arm 7.38 m (24 ft. 3 in.)
Bucket 7.63 m (24 ft. 11 in.)

Overall Height
Arm 3.19 m (10 ft. 6 in.)
Bucket 3.32 m (10 ft. 11 in.)

Overall Length
Arm 9.96 m (32 ft. 8 in.)
Bucket 9.64 m (31 ft. 7 in.)

Minimum Swing Radius
Arm 3.55 m (11 ft. 8 in.)
Bucket 3.42 m (11 ft. 3 in.)

Every effort has been made to ensure accuracy in the information provided. However, as with any engineering device, conditions, equipment, and other factors affecting performance can vary. Consult the manufacturer for the most recent, accurate information.
Machine Dimensions 230G W

With standard gauge and 2.91-m (9 ft. 7 in.) arm, dimensions are provided for both the front and rear outrigger configuration, and for the front blade and rear outrigger configuration.

- **Front: Overall Height of Boom (traveling)** 3.98 m (13 ft. 1 in.)
- **Overall Height of Blade** 0.60 m (23.6 in.)
- **Maximum Blade Raise** 0.38 m (14.8 in.)
- **Overall Height of Blade** 0.60 m (23.6 in.)
- **Maximum Blade Lower** 0.21 m (8.3 in.)
- **Front Overhang** 1.34 m (4 ft. 5 in.)
- **Rear Overhang** 1.34 m (4 ft. 5 in.)
- **Swing Center to Rear Axle** 1.35 m (4 ft. 5 in.)
- **Wheelbase** 2.75 m (9 ft. 0 in.)
- **Overall Width of Tires** 2.75 m (9 ft. 0 in.)
- **Counterweight Clearance** 1.25 m (4 ft. 1 in.)
- **Rear-End Swing Radius** 2.89 m (9 ft. 6 in.)
- **Overall Length** 9.96 m (32 ft. 8 in.)
- **Ground Line** 6.0 m (20 ft.)
- **Height Off Ground**
  - 3.0 m (10 ft.)
  - 4.5 m (15 ft.)

**Lift Capacities 230G W**

Lift capacities indicate hydraulically limited capacities; lightface type indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook; machine equipped with 666-kg (1,468 lb.) bucket, 2.91-m (9 ft. 7 in.) arm, and standard counterweight, and situated on firm, level, uniform supporting surface. Figures do not exceed 87% of hydraulic capacity or 75% of weight needed to tip machine.

**Ground Line**

- **2-Piece Boom**
  - 6.0 m (20 ft.)
  - 3.0 m (10 ft.)
  - 4.5 m (15 ft.)
  - 1.5 m (5 ft.)
- **With monoblock boom, rear outriggers, and front blade down**
  - 7790 (17,710)
  - 6690 (14,810)
  - 5250 (11,570)

**With 2-piece boom, rear outriggers, and front blade down**

- **7340 (16,180)**
- **6660 (14,660)**
- **6060 (13,350)**
- **5460 (11,940)**

**With 3 piece boom, rear outriggers, and front blade down**

- **7340 (16,180)**
- **6660 (14,660)**
- **6060 (13,350)**
- **5460 (11,940)**

**With 4 piece boom, rear outriggers, and front blade down**

- **7340 (16,180)**
- **6660 (14,660)**
- **6060 (13,350)**
- **5460 (11,940)**

**In horizontal distance from centerline of rotation**

- **1.5 m (5 ft.)**
- **3.0 m (10 ft.)**
- **4.5 m (15 ft.)**
- **6.0 m (20 ft.)**

**Rear Overhang** 1.09 m (3 ft. 7 in.)

**Front Overhang** 3.49 m (11 ft. 5 in.)

**Swing Center to Rear Axle** 1.35 m (4 ft. 5 in.)

**Ground Line**

- **2-Piece Boom**
  - 6.0 m (20 ft.)
  - 3.0 m (10 ft.)
  - 4.5 m (15 ft.)
  - 1.5 m (5 ft.)
- **With monoblock boom, rear outriggers, and front blade down**
  - 7790 (17,710)
  - 6690 (14,810)
  - 5250 (11,570)

**With 2-piece boom, rear outriggers, and front blade down**

- **7340 (16,180)**
- **6660 (14,660)**
- **6060 (13,350)**
- **5460 (11,940)**

**With 3 piece boom, rear outriggers, and front blade down**

- **7340 (16,180)**
- **6660 (14,660)**
- **6060 (13,350)**
- **5460 (11,940)**

**With 4 piece boom, rear outriggers, and front blade down**

- **7340 (16,180)**
- **6660 (14,660)**
- **6060 (13,350)**
- **5460 (11,940)**
Buckets

A full line of buckets is offered to meet a wide variety of applications. Digging forces are with power boost. Buckets are equipped with John Deere TK-Series Bucket Teeth standard. Replaceable cutting edges and a variety of teeth are available through John Deere Parts. Optional side cutters add 150 mm (6 in.) to bucket widths. Capacities are SAE heaped ratings.

<table>
<thead>
<tr>
<th>Type Bucket</th>
<th>Bucket Width</th>
<th>Bucket Capacity</th>
<th>Bucket Weight</th>
<th>Bucket Dig Force</th>
<th>Arm Dig Force, 2.91 m (9 ft. 7 in.)</th>
<th>Bucket Tip Radius, 2.91 m (9 ft. 7 in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General-Purpose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High-Capacity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>762</td>
<td>30</td>
<td>0.60</td>
<td>0.79</td>
<td>650</td>
<td>5,432</td>
<td>153.5</td>
</tr>
<tr>
<td>914</td>
<td>36</td>
<td>0.76</td>
<td>1.00</td>
<td>735</td>
<td>6,821</td>
<td>153.2</td>
</tr>
<tr>
<td>1067</td>
<td>42</td>
<td>0.93</td>
<td>1.22</td>
<td>812</td>
<td>7,970</td>
<td>153.2</td>
</tr>
<tr>
<td>1219</td>
<td>48</td>
<td>1.09</td>
<td>1.43</td>
<td>892</td>
<td>9,470</td>
<td>153.5</td>
</tr>
<tr>
<td>Heavy-Duty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>610</td>
<td>24</td>
<td>0.40</td>
<td>0.52</td>
<td>543</td>
<td>1,197</td>
<td>154.6</td>
</tr>
<tr>
<td>762</td>
<td>30</td>
<td>0.54</td>
<td>0.71</td>
<td>735</td>
<td>1,369</td>
<td>154.6</td>
</tr>
<tr>
<td>914</td>
<td>36</td>
<td>0.69</td>
<td>0.90</td>
<td>707</td>
<td>1,559</td>
<td>154.6</td>
</tr>
<tr>
<td>1067</td>
<td>42</td>
<td>0.83</td>
<td>1.09</td>
<td>785</td>
<td>1,731</td>
<td>154.6</td>
</tr>
<tr>
<td>1219</td>
<td>48</td>
<td>0.99</td>
<td>1.29</td>
<td>871</td>
<td>1,921</td>
<td>154.6</td>
</tr>
<tr>
<td>Ditching</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1524</td>
<td>60</td>
<td>0.87</td>
<td>1.14</td>
<td>577</td>
<td>2,271</td>
<td>153.5</td>
</tr>
</tbody>
</table>

Boldface type indicates hydraulically limited capacities; lightface type indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook; machine equipped with 666 kg (1,468 lb.) bucket, 2.91 m (9 ft. 7 in.) arm, and standard counterweight; and situated on firm, level, uniform supporting surface. Figures do not exceed 87% of hydraulic capacity or 75% of weight needed to tip machine.

Lift Capacities (continued)

<table>
<thead>
<tr>
<th>HORIZONTAL DISTANCE FROM CENTERLINE OF ROTATION</th>
<th>1.5 m (5 ft.)</th>
<th>3.0 m (10 ft.)</th>
<th>4.5 m (15 ft.)</th>
<th>6.0 m (20 ft.)</th>
<th>7.5 m (25 ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>With 2-piece boom and 4 outriggers down</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.5 m (25 ft.)</td>
<td>4340</td>
<td>6330</td>
<td>9610</td>
<td>12,100</td>
<td>15,320</td>
</tr>
<tr>
<td>6.0 m (20 ft.)</td>
<td></td>
<td>4340</td>
<td>7310</td>
<td>12,100</td>
<td>15,320</td>
</tr>
<tr>
<td>4.5 m (15 ft.)</td>
<td></td>
<td></td>
<td>7310</td>
<td>12,100</td>
<td>15,320</td>
</tr>
<tr>
<td>3.0 m (10 ft.)</td>
<td></td>
<td></td>
<td></td>
<td>6120</td>
<td>15,460</td>
</tr>
<tr>
<td>1.5 m (5 ft.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15,460</td>
</tr>
<tr>
<td>Ground Line</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8310</td>
<td>11,090</td>
<td>11,090</td>
<td>7610</td>
<td>7,850</td>
<td>6970</td>
</tr>
<tr>
<td>18,590 (24,530) (26,730)</td>
<td></td>
<td>(14,390)</td>
<td>(13,770)</td>
<td>(10,650)</td>
<td></td>
</tr>
<tr>
<td>–1.5 m (5 ft.)</td>
<td>13,890</td>
<td>20,290</td>
<td>12,130</td>
<td>7,850</td>
<td>6810</td>
</tr>
<tr>
<td>50,990 (50,320) (51,210)</td>
<td></td>
<td>(39,220)</td>
<td>(35,220)</td>
<td>(31,810)</td>
<td></td>
</tr>
<tr>
<td>–3.0 m (10 ft.)</td>
<td>22,540</td>
<td>21,550</td>
<td>12,370</td>
<td>7,370</td>
<td>6210</td>
</tr>
<tr>
<td>11,090</td>
<td></td>
<td>(10,220)</td>
<td>(9,220)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>–4.5 m (15 ft.)</td>
<td>31,020</td>
<td>19,560</td>
<td>19,560</td>
<td></td>
<td></td>
</tr>
<tr>
<td>69,820 (69,820) (69,820)</td>
<td></td>
<td>(61,120)</td>
<td>(41,120)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Lift Capacities

Lift Capacities (continued)

<table>
<thead>
<tr>
<th>LOAD POINT HEIGHT</th>
<th>Over Front</th>
<th>Over Side</th>
<th>Over Front</th>
<th>Over Side</th>
<th>Over Front</th>
<th>Over Side</th>
<th>Over Front</th>
<th>Over Side</th>
<th>Over Front</th>
<th>Over Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.5 m (25 ft.)</td>
<td>4340</td>
<td>6330</td>
<td>9610</td>
<td>12,100</td>
<td>15,320</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.0 m (20 ft.)</td>
<td></td>
<td>4340</td>
<td>7310</td>
<td>12,100</td>
<td>15,320</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.5 m (15 ft.)</td>
<td></td>
<td></td>
<td>7310</td>
<td>12,100</td>
<td>15,320</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.0 m (10 ft.)</td>
<td></td>
<td></td>
<td></td>
<td>6120</td>
<td>15,460</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5 m (5 ft.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15,460</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ground Line</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8310</td>
<td>11,090</td>
<td>11,090</td>
<td>7610</td>
<td>7,850</td>
<td>6970</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18,590 (24,530)</td>
<td>11,090</td>
<td>11,090</td>
<td>7610</td>
<td>7,850</td>
<td>6970</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>–1.5 m (5 ft.)</td>
<td>13,890</td>
<td>20,290</td>
<td>12,130</td>
<td>7,850</td>
<td>6810</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50,990 (50,320)</td>
<td>11,090</td>
<td>11,090</td>
<td>7610</td>
<td>7,850</td>
<td>6970</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>–3.0 m (10 ft.)</td>
<td>22,540</td>
<td>21,550</td>
<td>12,370</td>
<td>7,370</td>
<td>6210</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11,090</td>
<td>11,090</td>
<td>7610</td>
<td>7,850</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>–4.5 m (15 ft.)</td>
<td>31,020</td>
<td>19,560</td>
<td>19,560</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>69,820 (69,820)</td>
<td>69,820</td>
<td>69,820</td>
<td>69,820</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Additional equipment

#### Key:
- ● Standard
- ▲ Optional or special

See your John Deere dealer for further information.

<table>
<thead>
<tr>
<th>190G 230G Engine</th>
<th>190G 230G Upperstructure</th>
<th>190G 230G Operator’s Station (continued)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto-idle system</td>
<td>Right- and left-hand mirrors</td>
<td>Multifunction, color LCD monitor with:</td>
</tr>
<tr>
<td>Automatic belt-tension device</td>
<td>Vandal locks with ignition key: Cab door /</td>
<td></td>
</tr>
<tr>
<td>Batteries (2 – 12 volt)</td>
<td>Fuel cap / Service doors</td>
<td>Diagnostic capability / Multiple-language</td>
</tr>
<tr>
<td>Coolant recovery tank</td>
<td></td>
<td>capabilities / Maintenance tracking /</td>
</tr>
<tr>
<td>Dual-element dry-type air filter</td>
<td></td>
<td>Clock / System monitoring with alarm</td>
</tr>
<tr>
<td>Electronic engine control</td>
<td></td>
<td>features: Auto-idle indicator, Auto-shut-</td>
</tr>
<tr>
<td>Enclosed fan guard (conforms to SAE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engine coolant to –37 deg. C (–34 deg. F)</td>
<td></td>
<td>down indicator, brake pressure audible</td>
</tr>
<tr>
<td>Fuel filter with water separator</td>
<td></td>
<td>alarm, engine air cleaner restriction</td>
</tr>
<tr>
<td>Full-flow oil filter</td>
<td></td>
<td>indicator light, engine check, engine</td>
</tr>
<tr>
<td>Turbocharger with charge-air cooler</td>
<td></td>
<td>coolant temperature indicator light</td>
</tr>
<tr>
<td>500-hour engine-oil-change interval</td>
<td></td>
<td>with audible alarm, engine oil pressure</td>
</tr>
<tr>
<td>Programmable auto-shutdown</td>
<td></td>
<td>indicator light with audible alarm,</td>
</tr>
<tr>
<td>▲</td>
<td></td>
<td>low-alternator-charge indicator light,</td>
</tr>
<tr>
<td>▲</td>
<td></td>
<td>low-fuel indicator light, fault-code alert</td>
</tr>
<tr>
<td>▲</td>
<td></td>
<td>indicator, fuel-rate display, water-in-</td>
</tr>
<tr>
<td>▲</td>
<td></td>
<td>fuel light, wiper-mode indicator, work-</td>
</tr>
<tr>
<td>▲</td>
<td></td>
<td>mode indicator, and work-mode indicator</td>
</tr>
<tr>
<td>▲</td>
<td></td>
<td>Motion alarm with cancel switch (con-</td>
</tr>
<tr>
<td>▲</td>
<td></td>
<td>forms to SAE J994)</td>
</tr>
<tr>
<td>▲</td>
<td></td>
<td>Power-boost switch on right control lever</td>
</tr>
<tr>
<td>▲</td>
<td></td>
<td>▲ 50-amp alternator</td>
</tr>
<tr>
<td>▲</td>
<td></td>
<td>Blade-type multi-fused circuits</td>
</tr>
<tr>
<td>▲</td>
<td></td>
<td>Positive-terminal battery covers</td>
</tr>
<tr>
<td>▲</td>
<td></td>
<td>JDLink™ Ultimate wireless communication</td>
</tr>
<tr>
<td>▲</td>
<td></td>
<td>system (available in specific countries;</td>
</tr>
<tr>
<td>▲</td>
<td></td>
<td>see your dealer for details)</td>
</tr>
<tr>
<td>▲</td>
<td></td>
<td>Headlights (2)</td>
</tr>
<tr>
<td>▲</td>
<td></td>
<td>Work lights, top of cab (2), rear of cab</td>
</tr>
<tr>
<td>▲</td>
<td></td>
<td>(1), and boom (1)</td>
</tr>
<tr>
<td>▲</td>
<td></td>
<td>Turn signals / Hazard lights</td>
</tr>
<tr>
<td>▲</td>
<td></td>
<td>Brake lights</td>
</tr>
<tr>
<td>▲</td>
<td></td>
<td>Side marker lights</td>
</tr>
</tbody>
</table>

---

Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan at test conditions specified per ISO 9249. No derating is required up to 3050-m (10,000 ft.) altitude. Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with SAE standards. Except where otherwise noted, these specifications are based on units with full fuel tanks and 79-kg (175 lb.) operators; a 190G W unit with 0.7-m² (0.92 cu. yd.), 900-mm (35 in.) bucket and 2.71-m (8 ft. 11 in.) arm; and a 230G W unit with 0.8-m³ (1.04 cu. yd.), 900-mm (35 in.) bucket and 2.91-m (9 ft. 7 in.) arm.