**EQUIPMENT**

**STANDARD EQUIPMENT**

**ENGINE**
- Meets EPA Tier II non-road emissions regulations
- H/P mode control
- E mode control
- 50 A alternator
- Dry-type air filter with evacuator valve (with safety element)
- Radiator and oil cooler with dust protective net
- Radiator reserve tank
- Fan guard
- Isolation-mounted engine
- Auto-idle system
- Auto acceleration system

**HYDRAULIC SYSTEM**
- Work mode selector
- Engine speed sensing system
- E-P control system
- Quick warm-up system for pilot circuit
- Shockless valve in pilot circuit
- Boom-arm reduced drift valve
- Control valve with main relief valve
- Auxiliary valve section
- Suction filter
- Full-flow filter
- Pilot filter

**CAB**
- CRES (Center pillar Reinforced Structure) cab
- All-weather sound-suppressed steel cab
- Reinforced, tinted (bronze color) glass windows
- 4 fluid-filled elastic mounts
- Upper and lower front windows and left side windows that open
- Intermittent windshield retractable wipers
- Front window wiper
- Adjustable reclining seat with adjustable armrests
- Footrest
- Electric double horn
- 12 V-60 W, 5 amp, cellular phone outlet
- AM-FM radio with digital clock
- Seat belt
- Drink holder
- Cigar lighter
- Ashtray
- Storage box
- Glove compartment
- Floor mat
- Heater
- Pilot control shut-off lever
- Engine stop knob
- Auto control air conditioner

**MONITOR SYSTEM**
- Meters:
  - Hourmeter, trip meter, engine coolant temperature gauge, and fuel gauge
  - Warning lamps:
    - Alternator charge, engine oil pressure, engine overheating, air filter restriction, and minimum fuel level
  - Pilot lamps:
    - Engine preheat, work light, auto-idle, auto-acceleration, digging mode, attachment mode
  - Alarm buzzers:
    - Engine oil pressure and engine overheating

**LIGHTS**
- 2 working lights

**UPPERSTRUCTURE**
- Undercover
- 7,270 lb (3,300 kg) counterweight
- Fuel level float
- Hydraulic oil level gauge
- Tool box
- Utility space
- Rearview mirror (right and left side)

**UNDERCARRIAGE**
- Travel parking brake
- Travel motor covers
- Track guards and hydraulic track adjuster
- Bolt-on sprocket
- Upper rollers and lower rollers
- Reinforced track links with pin seals
- 28” (700 mm) triple grouser shoes
- Travel motion alarm device

**FRONT ATTACHMENTS**
- HN bushing
- WC thermal spraying
- Reinforced resin thrust plate
- Flanged pin
- Bucket clearance adjust mechanism
- Centralized lubrication system
- Grease seal on all bucket pins
- 8” 6.58 mi arm

**MISCELLANEOUS**
- Lockable fuel filling cap
- Skid-resistant tapes, plates and handrails
- Travel direction mark on track frame
- Onboard Machine Information Center (MIC)

**OPTIONAL EQUIPMENT**
- 10’ 2” (3.1 m) arm
- Tropical doors
- 24” (600 mm) triple grouser shoes
- Window vandalism protection covers
- Auxiliary hydraulic and electric pilot controls
- Hydraulic filter restriction indicator kit
- Single pedal propel control
- Auxiliary line with shut-off valve
- Bucket digging general purpose, general purpose high capacity, heavy-duty, heavy-duty high capacity, side cutters and teeth
- Heavy-duty grapple
- Hydraulic bucket material clamps
- Hydraulic control
- Seat belt, 3” (76 mm) non-retractable
- Alternate pilot control pattern
- Cab extension harness
- Safety and ease of access
- Protection screens for cab front, rear and side
- 24- to 12-volt, DC radio converters, 10 amp
- Cab extension harness
- Secondary exit top hatch
- Ripper
- Auto lubrication systems
- Boom and arm anti-drift kits

**SPECIFICATIONS**

- **Rated Engine**: 110 hp (82.2 kW)
- **Operating Weight**: 35,500 lbs (16,100 kg)
- **Bucket Capacity**: 0.50 - 1.30 yd³ (0.38 - 0.99 m³)

These specifications are subject to change without notice. Illustrations and photos show the standard models, and may or may not include optional equipment, accessories, and all standard equipment with some differences in color and features.
Rigid Undercarriage
The overall rigidity of the entire undercarriage has been increased to support a heavier front attachment and counterweight.

High-Power Engine
The Isuzu AA-4BG1TC generates:
- 105 hp @ 1,950 rpm in P mode (78.0 kW/min)
- 110 hp @ 2,150 rpm in H/P mode (82.2 kW/min)
- 295 lbf•ft max. torque @ 1,800 rpm (40.8 kgf•m/min)
and meets EPA Tier II non-road emission regulations.

Durable
Extensive steps have been taken to improve basic performance and overall durability.

Multi-function Operations
The Zaxis 160LC continues the Hitachi tradition of smooth, multi-functioning excavators. Executing combined operations such as simultaneous swinging and traveling are easy with Zaxis.

Smarter, faster, more productive yet more efficient—the versatile Hitachi Zaxis 160LC can be found at construction sites all over the world. Boasting a cleaner yet more powerful engine and a host of new items as well as significant refinements, Zaxis is the next generation in excavator development.

Machine Information Center
The Machine Information Center captures and stores vital machine performance data such as engine speeds, hydraulic temperatures, pump pressures, alarms and faults, hours of operation, and more. The data is downloadable through a Palm™ Pilot and is transferred to your PC. Special PC software interprets the data and generates valuable machine performance reports and graphs highlighting machine utilization, performance history, and more to help users improve productivity and profit.

Safety, Comfort, and Convenience
The operator's compartment is designed for both comfort and operating efficiency.
The Zaxis Advantage

Higher Productivity
Zaxis uses the latest technologies to achieve lower total operational costs while boosting productivity. In comparison to the EX160, in H/P mode, production has increased by 4% with a 2% decrease in fuel consumption. The P mode, production has been increased by 3% with 3% less fuel consumption.

Cab Comfort
The easy-to-read monitor panel and switches are located near the operator to minimize fatigue and enhance operator control. Noise levels inside the cabin have been reduced. The Auto-control air conditioner allows you to set a specific temperature, then forget it. Bi-level air ducts are positioned throughout the cab to promote even air flow.

Increased Travel and Swing Power
Armed with plenty of dependable power for travel and swing operations, the Zaxis 160 is ready for the toughest of terrains and job sites thanks to improved travel motors and swing reduction gear. It has 8% more swing torque and 17% more travel power than the EX160.

Auto Acceleration and Auto Idle
Engine speed is automatically controlled in response to the amount of lever operation. This helps reduce fuel consumption, especially during light load work, up to 9%. The Auto Idle control reduces the engine speed automatically to save energy when the lever is in neutral.

Lower Operating Costs
Reduced fuel consumption, a strengthened main frame, front attachment, and undercarriage, longer lubrication intervals, 4,000-hour hydraulic oil and 1,000-hour filter change intervals help extend the durability of Zaxis while reducing running and repair costs.

Work Modes
Two modes simplify excavating operations. The “Digging” mode for smooth and speedy front operations or “Attachment” mode for track and variety of tools such as breakers, compactors, and crushers.

Cabin Safety
The CRES (Center pillar Reinforced Structure) rigid cab is designed with safety in mind. The closed-section pillar and reinforcing members at central areas withstand vertical and horizontal external forces. This can help reduce the potential of operator injury in the event of an accident.

Operator Command
The newly refined hydraulic system gives the operator unprecedented control. The bucket regenerative mechanism makes light-duty operation quicker.

ENGINE

<table>
<thead>
<tr>
<th>Model</th>
<th>Isuzu AA-4BG1TC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>4-cycle water-cooled, direct injection</td>
</tr>
<tr>
<td>NO. of cylinders</td>
<td>10</td>
</tr>
<tr>
<td>Rated output power</td>
<td>168 hp (125 kW)</td>
</tr>
<tr>
<td>Horsepower</td>
<td>170 mph (273 km/h)</td>
</tr>
<tr>
<td>Tachometer speed</td>
<td>3,000 rpm</td>
</tr>
<tr>
<td>Fuel consumption</td>
<td>7.8 gal (29.5 l)</td>
</tr>
<tr>
<td>Fuel efficiency</td>
<td>20.1 km/gal</td>
</tr>
<tr>
<td>Emissions</td>
<td>Tier II (US EPA)</td>
</tr>
<tr>
<td>Air filter capacity</td>
<td>800 MCF (23280 l)</td>
</tr>
<tr>
<td>Oil filter capacity</td>
<td>500 MCF (14,280 l)</td>
</tr>
<tr>
<td>Coolant filter capacity</td>
<td>600 MCF (17040 l)</td>
</tr>
</tbody>
</table>

HYDRAULIC SYSTEM

<table>
<thead>
<tr>
<th>Work mode selector</th>
<th>2 variable displacement axial piston pumps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. oil flow</td>
<td>2 x 365 US gpm (1,389 L/min)</td>
</tr>
<tr>
<td>Pilot pump</td>
<td>1 variable displacement axial piston pump</td>
</tr>
<tr>
<td>Max. oil flow</td>
<td>6.4 US gpm (24.2 L/min)</td>
</tr>
<tr>
<td>Swing</td>
<td>2 axial piston motors</td>
</tr>
</tbody>
</table>

Swing Mechanism

Revolving Frame
Swing circle is single-row, shear-type ball bearing with induction-hardened inner race. Internal gear and pinion gear are immersed in lubricant. Swing parking brake is spring-set, hydraulic-released disc type. Swing speed | 13.6 rpm (min⁻¹) |
Swing diameter | 28.850 in (732 mm) |

Operator’s Cab
Independent roof cab, 40” (0.95 mm) wide by 66” (1.675 mm) high, conforming to ISO Standards. Reinforced glass windows on 4 sides for visibility. Front windows (upper and lower) are openable. Adjustable, reclining seat with armrests; removeable with or without control levers.
LIFTING CAPACITIES

Notes:
1. Ratings are based on SAE J1097.
2. Lifting capacity of the ZAXIS Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
3. The load point is a hook (not standard equipment) located on the back of the bucket.
4. Indicated load limited by hydraulic capacity.

**ZAXIS160C**

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Load point height</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 ft. (1.52 m)</td>
<td>10 ft. (3.05 m)</td>
</tr>
<tr>
<td>8'6&quot; (2.59 m)</td>
<td>10 ft. (3.05 m)</td>
</tr>
<tr>
<td>15 ft. (4.57 m)</td>
<td>15 ft. (4.57 m)</td>
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**Unit:** ft in (mm)

**SAE : PCSA**

<table>
<thead>
<tr>
<th>Bucket Type</th>
<th>Bucket Weight</th>
<th>Arm Force</th>
<th>Tip Radius</th>
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</tr>
</thead>
<tbody>
<tr>
<td>General-Purpose</td>
<td>General-Purpose</td>
<td>16,600</td>
<td>16,715</td>
<td>100.3</td>
</tr>
<tr>
<td>Plate Lip</td>
<td>Plate Lip</td>
<td>23,200</td>
<td>137.2</td>
<td>80.2</td>
</tr>
<tr>
<td>High Capacity</td>
<td>High Capacity</td>
<td>18,135</td>
<td>80.7</td>
<td>37.0</td>
</tr>
<tr>
<td>Heavy-Duty</td>
<td>Heavy-Duty</td>
<td>18,290</td>
<td>80.8</td>
<td>37.0</td>
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<tr>
<td>Ditching</td>
<td>Ditching</td>
<td>31,665</td>
<td>149.9</td>
<td>80.8</td>
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**Backhoe Buckets**

A full line of buckets is offered to meet a wide variety of applications. The buckets have an adjustable bushing for side clearance, with the exception of the ditching bucket.

**Tooth selection includes either the John Deere Fanggs® or the ESCO (Helilok) Standard tooth. Replaceable cutting edges are available through Hitachi parts. Optional side cutters add 6 inch (150 mm) to bucket widths.**

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**DIMENSIONS / WORKING RANGES**

**ZAXIS160**

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