**EQUIPMENT**

**STANDARD EQUIPMENT**

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

**HYDRAULIC 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
- Extra auxiliary port for control valve
- 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 overheat, air filter restriction, and minimum fuel level
- Pilot lamps: Engine preheat, work light, auto-idle
- Alarm buzzers: Engine oil pressure and engine overheat
- Lights: 2 working lights

**CAB**
- CRES (Center pillar Reinforced Structure) cab
- All-weather sound-suppressed steel cab
- Reinforced, tinted glass windows
- 4 fluid-filled electric mounts
- Upper and lower front windows and left side windows that open
- Intermittent windshield wipers
- Front window washer
- Deluxe reclining suspension seat with armrests and lumbar support
- Footrest
- Transparent tinted overhead hatch with sunshade
- Electric double horn
- 12 V-60 W, 5 amp, cellular phone outlet
- Coat hook
- AM-FM stereo with digital clock
- Rv mode selector
- Large cup holder
- Cigar lighter
- Ashtray
- Storage box
- Glove compartment
- Floor mat
- Heater
- Pilot control shut-off lever
- Engine stop knob
- Auto-control air conditioner

**FRONT ATTACHMENTS**
- Backfill blade
- Bucket maximum width 7'7” (2 320 mm)
- Bucket maximum height above ground 1'4” (400 mm)
- Blade distance 15’ (435 mm)
- Blade distance 6’3” (1 910 mm)

**OPTIONAL EQUIPMENT**
- Off-set boom with 5’ 4” (1.62 m) arm
- 5’ 4” (1.62 m) arm
- 6’ 11” (2.12 m) arm
- 18” (450 mm) rubber crawler pads
- Windows waveland protection covers
- Auxiliary hydraulic and electric pilot controls
- Hydraulic filter restriction indicator kit
- Auxiliary lines with shut-off valve
- Bucket heavy-duty with teeth
- Dozer blade
- Seat belt, 3” (76 mm) non-retractable
- Alternate pilot control pattern
- Cab circulation fan
- 24- to 12-volt, DC radio converters, 10 amp
- Secondary seat kit-top hatch
- Upper and lower front window guards
- Lockable machine covers

**HITACHI Zaxis 80**

**Rated Engine**
- 52 hp (39 kW)

**Operating Weight**
- 15,905 lbs (7 215 kg)

**Bucket Capacity**
- 0.19 - 0.75 yd³ (0.15 - 0.57 m³)

**DIMENSIONS**
- Overall width of blade: 7’7” (2 320 mm)
- Overall height of blade: 1’4” (400 mm)
- Blade distance: 15’ (435 mm)
- Blade distance: 6’3” (1 910 mm)

**HITACHI CONSTRUCTION PRODUCTS**
P.O. Box 8806 • 1515 5th Avenue • Moline, IL 61265
www.hitachiconstruction.com

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.
Smarter, faster, more productive yet more efficient—the versatile Hitachi Zaxis 80 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.

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

**Rigid Undercarriage**
The overall rigidity of the entire undercarriage has been strengthened for increased durability.

**Safety, Comfort, and Convenience**
The operator’s compartment is designed for both comfort and operating efficiency.

**Multi-function Operations**
The Zaxis 80 continues the Hitachi tradition of smooth, multi-functioning excavators. Executing combined operations such as simultaneous swinging and traveling are easy with Zaxis.

**High-Power Engine**
The Isuzu CC-4J G1 generates
- 52 hp @ 2,100 rpm (39 kW/min⁻¹)
- 142 lbf•ft max. torque @ 1,800 rpm (19.6 kgf•m/min⁻¹)
and meets EPA Tier II non-road emission regulations.

**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.
### SPEC SUMMARY

#### ENGINE
- **Model**: Zaxis CC-4 G1
- **Type**: 4-cycle water-cooled, direct injection
- **No. of cylinders**: 4
- **Rated power SAE J1349, net**: 52 hp (39 kW) at 2,100 rpm (min−1)
- **Maximum torque**: 142 ft-lbf (19.6 kgf.m) at 1,800 rpm (min−1)
- **Piston displacement**: 187 in3 (3.059 L)
- **Bore and stroke**: 3.76” x 4.21” (95.4 mm x 107 mm)
- **Bypass type**: Mechanical speed control with stopping motor

#### HYDRAULIC SYSTEM
- **Swing-independent 3-pump hydraulic system**: OHV (optimum hydraulic system) assures fully independent and combined operations
- **New-type automatic 2-speed motor increases traction force and travel speed**: Main pumps = 3 variable displacement axial piston pumps
  - Max. oil flow: 2 x 16.6 US gpm (2 x 63 L/min, 2 x 13.9 lpm gpm)
  - 1 x 13.9 US gpm (5 x 52 L/min, 1 x 11.6 lpm gpm)
- **Travel oil pump**: 1 gear pump
  - Max. oil flow: 5.9 US gpm (22.5 L/min, 5.0 lpm gpm)
- **Hydraulic Motors**: 2 variable displacement axial piston motors
- **Swing Oil Valve Settings**: Implement circuit = 3,770 psi (265 kgf/cm2)
- **Swing circuit**: 3,270 psi (230 kgf/cm2)
- **Travel circuit**: 4,550 psi (320 kgf/cm2)
- **Pilot circuit**: 570 psi (40 kgf/cm2)

#### Hydraulic Cylinders
- **High-strength piston rods and tubes**: Cylinder cushion mechanisms provided in boom and arm cylinders to absorb shock at stroke ends.

#### Hydraulic Filters
- **Hydraulic circuits use high-quality hydraulic filters**: A suction filter is incorporated in the suction line, and full-flow filters in the return line and swing/travel motor drain lines.

#### Revolving Frame
- **Welded stub box construction**: Using heavy-gauge steel plates for ruggedness, D-section frame for resistance to deformation.

#### Swing Mechanism
- **Axial piston motor with planetary reduction gear**: is bathed in oil.
- **Swing circle**: Single-row, shear-type ball bearing with induction-hardened internal gear. Internal gear and pinion gear are immersed in lubricant. Swing parking brake is spring-set/hydraulic-released disc type.

#### Swing speed
- **Swing torque**: 10,200 ft-lbf (1,410 kgf•m)

#### Operator’s Cab
- **Independent roo security**: 140° (0.905 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; movable with or without control levers.

### CONTROLS
- **Pilot Controls**: Hitachi’s original shockless valve and quick warm-up system built in the pilot circuit.
- **Implement levers**: Travel levers with pedals
- **Travel levers with pedals**: Travel levers with pedals

### UNDERCARRIAGE
- **Tractor-type undercarriage**: Lubricated track rollers, idlers, and sprockets with floating seals.
- **Tracks**: Track shoes with triple grouser made of induction-hardened rolled alloy. Heat-treated connecting pins with dirt seals. Hydraulic (geared) track adjusters with check-arranging recoil springs.

### SERVICE REFILL CAPACITIES

<table>
<thead>
<tr>
<th>US gal</th>
<th>Liters</th>
<th>Imp gal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel tank</td>
<td>35.7</td>
<td>135.0</td>
</tr>
<tr>
<td>Engine coolant</td>
<td>2.3</td>
<td>9.5</td>
</tr>
<tr>
<td>Engine oil</td>
<td>3.2</td>
<td>12.0</td>
</tr>
<tr>
<td>Travel final device</td>
<td>0.66</td>
<td>2.5</td>
</tr>
<tr>
<td>Hydraulic system</td>
<td>26.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Hydraulic tank</td>
<td>15.9</td>
<td>60.0</td>
</tr>
</tbody>
</table>

### WEIGHTS/GROUND PRESSURE
- **Zaxis 80 with full fuel tank, 175 lb (79 kg) operator; blade, 24” (600 mm) triple-semi-grouser shoes; 5’ 4” (1.62 m) arm; and 0.36 yd3 (028 m3) 30” (760 mm), 522 lb (237 kg) bucket weight**: 17,601 lb (8,125 kg)
- **Ground pressure**: 4.06 psi (28.13 kPa)

### SPECIFICATIONS

#### Cab Comfort
- **Easy-to-read monitor panel**: A low-noise muffler and the Isuzu Tier II emissions control engine ensures a quieter, more environmentally friendly excavator. Plastic parts are labeled for easy recycling. Wiring is lead-free.

#### 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 hydraulic oil filters all work together to extend the durability of Zaxis while reducing running and repair costs.

#### Work Mode
- **Single mode simplifies excavating operations**: The “Digging” mode for smooth and speedy front operations.

#### The Zaxis Advantage
- **Higher Productivity**: Zaxis uses the latest technologies to achieve lower total operational costs while boosting productivity. The Isuzu engine provides an excellent balance of power and fuel efficiency.

#### Cab Safety
- **The CRE5 (Center pillar Reinforced Structure) rigid cab**: is designed with safety in mind. The closed-section pillar and reinforcing members at all corners 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 system makes light-duty operation quicker.

#### Increased Travel and Swing Power
- **Armed with plenty of dependable power for travel and swing operations**: The Zaxis is ready for the toughest of jobs and terrain thanks to improved travel motors and swing reduction gear. It has more swing torque and more travel power than the ZX380.

#### 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. The Auto-idle control reduces the engine speed automatically to save energy when the lever is in neutral.

#### Fuel and Engine Oil
<table>
<thead>
<tr>
<th>Qty</th>
<th>Bore Rod Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boom 2</td>
<td>4.53” (115 mm) 2.56” (65 mm)</td>
</tr>
<tr>
<td>Arm 1</td>
<td>3.74” (95 mm) 2.17” (55 mm)</td>
</tr>
<tr>
<td>Bucket 1</td>
<td>3.35” (85 mm) 2.17” (55 mm)</td>
</tr>
</tbody>
</table>

#### Hydraulic Cylinders
- **Hydraulic circuits use high-quality hydraulic filters**: A suction filter is incorporated in the suction line, and full-flow filters in the return line and swing/travel motor drain lines.

#### Revolving Frame
- **Welded stub box construction**: Using heavy-gauge steel plates for ruggedness, D-section frame for resistance to deformation.

#### Swing Mechanism
- **Axial piston motor with planetary reduction gear**: is bathed in oil.
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- **Swing torque**: 10,200 ft-lbf (1,410 kgf•m)

#### Operator’s Cab
- **Independent roof security**: 140° (0.905 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; movable with or without control levers.
A full line of buckets is offered to meet a wide variety of applications. Tooth selection includes either the John Deere Fangg® tooth or Tiger, Twin Tiger, Flare, or Star tooth. Replaceable cutting edges are available through Hancor parts.

### BACKHOE BUCKETS

#### DIMENSIONS / WORKING RANGES

A full line of buckets is offered to meet a wide variety of applications. Tooth selection includes either the John Deere Fangg® tooth or Tiger, Twin Tiger, Flare, or Star tooth. Replaceable cutting edges are available through Hancor parts.

### SPECIFICATIONS

#### LIFTING CAPACITIES

**ZAXIS80**

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<th>Conditions with blade on ground</th>
<th>6 ft (1.8 m)</th>
<th>10 ft (3.05 m)</th>
<th>15 ft (4.57 m)</th>
<th>20 ft (6.10 m)</th>
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<tr>
<td><strong>A. Load radius</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>B. Load point height</strong></td>
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<td></td>
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<tr>
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**Note:** 1. Ratings are based on SAE J1097.
2. The maximum of the ZAXIS Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
3. *Indicates load limited by hydraulic capacity.

**ZAXIS80**

<table>
<thead>
<tr>
<th>Specifications</th>
<th>ZAXIS80</th>
<th>ZAXIS80 with Offset front</th>
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<tbody>
<tr>
<td><strong>A. Distance between tumbler</strong></td>
<td>7'0&quot; (2.13 m)</td>
<td>7'0&quot; (2.13 m)</td>
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<td><strong>B. Undercarriage length</strong></td>
<td>9'1&quot; (2.76 m)</td>
<td>2'6&quot; (0.76 m)</td>
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<tr>
<td><strong>C. Counterweight clearance</strong></td>
<td>5'9&quot; (1.75 m)</td>
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<td><strong>D. Rear-end swing radius</strong></td>
<td>8'4&quot; (2.54 m)</td>
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<td><strong>E. Overall width</strong></td>
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