HYDRAULIC EXCAVATOR
Model Code : ZX17U-5A
Engine Rated Power : 10.6 kW (14.2 HP)
Operating Weight : Canopy  1 880 kg
Backhoe Bucket : ISO Heaped : 0.044 m³

Notes: Standard and optional equipment may vary by country, please consult your Hitachi dealer for details. The machines shown on this brochure are so positioned for the sake of demonstrations. When leaving the machine, be sure to rest the bucket on the ground.
The new series of Hitachi compact excavators has evolved even further.
We listen to customers’ needs, provide solutions, and adopt fresh ideas into our new products.
The outcome is reflected in our new excavators that are compact, productive and nimble.
The round body is smart and its wide-opening covers provide direct access to service points for quick maintenance.
The operator station is full of easy-to-use controls, an informative monitor, and a comfortable operator seat.

Trustworthy and User-Friendly
New Compact Excavators

Prominent Advantages
High Performance
Easy Maintenance
Operator Comfort
High Performance

Notes: The machines shown on this brochure are so positioned for the sake of demonstrations. When leaving the machine, be sure to rest the bucket on the ground.
The machine pictured here (facing pages) is equipped with optional piping and bucket with reinforced sides and bottom plates.
Switches, engine control levers and similar are functionally laid out, with unskilled operators in mind. The bright LCD monitor is easy to read at a glance.

**Neutral Engine Start System**

The engine cannot start unless the shut-off lever is in the lock position for safe operation.

**Thief Deterrent System (Optional)**

The electronic immobilizer requires the entry of a password via the each time the engine is started to prevent theft and vandalism.

**Powerful Clean Engine**

This powerful engine yields more production than the conventional (ZX17U-2).

**Functional Work Space**

Switches, engine control levers and similar are functionally laid out, with unskilled operators in mind. The bright LCD monitor is easy to read at a glance.

**Hydraulic Pilot Control**

Hydraulic pilot control levers provide light, smooth control of the front, blade, swing and travel. The levers are ergonomically arranged for easier and less tiring operation.

**Large Roof with Rainwater Groove**

A large-sized overhead roof protects the operator from sunlight and rain. Its rainwater groove drains rainwater to the rear.

**Adjustable Crawlers and Blade**

Crawlers can be extended and retracted by control lever: retracted for truck transport and easy access to narrow job sites; and extended for surefooted excavation.

**Wide Working Ranges**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall height</td>
<td>2,380 mm</td>
</tr>
<tr>
<td>Cutting height</td>
<td>3,540 mm</td>
</tr>
<tr>
<td>Dumping height</td>
<td>2,510 mm</td>
</tr>
<tr>
<td>Dipping depth</td>
<td>2,190 mm</td>
</tr>
<tr>
<td>Dipping reach</td>
<td>3,810 mm</td>
</tr>
</tbody>
</table>

Notes: These specifications are for 3-piller canopy, 0.93 m arm, 0.044 m³ bucket and 200 mm rubber shoes.
Easy Maintenance
Simplified Maintenance for Everyday Use

Wide-open covers give direct, quick access to main components for easy daily inspection and servicing, such as filter replacement.

Vertically Sliding Engine Cover

The upright engine cover, upgraded from the conventional model, slides vertically with less rearward projection for ease of maintenance in confined spaces.

Enlarged Refuel Port

The enlarged refuel port is adopted, like on the upper-classes, for quick refueling.

Easy Access for Engine Maintenance

With the seat tilted up, the top of engine is exposed for easy maintenance.

Spare power supply (12 V)

With the 2-way selector valve, the operator can effortlessly select the piping for the breaker or grapple.

Notes: The perspective view on this page shows the imaginary layout of components.
High-Durability Backed by Stringent Quality Control

Hitachi has been globally acclaimed for its technological prowess and high-performance products ever since the launch of its first hydraulic excavator in 1949. Its Design Division has adopted the 3D-CAD system for ease of analysis and data crunching to churn out quality products and slash development lead times. Newly developed products have been vigorously tested in multiple ways, such as extended-hours of durability and evaluation tests, at a vast Hitachi 4,270,000 m² test field under critical operating conditions — for instance, tropical or freezing weather conditions — before unveiling new products.

High-Quality Hitachi Products

This widely acclaimed flat bottom bucket, comes as a standard item to protect welds on the bucket bottom from wearing. Wide wear plates are also welded to the bucket bottom, protection increases durability.

Durable Flat Bottom Bucket

Durable Front Attachment

At the pin joints of the front, clearance fit gets tighter to reduce jolt and noise, and increase durability. Grease-retained HN bushings at pins allow for long 500-hour lubricating intervals. Main hoses at the swing post are covered with a hose protector. The boom cylinder is protected with a cylinder cover to increase durability.
**ENGINE**

- **Model:** 3TNV70
- **Type:** Water-cooled, 4-cycle, swirl combustion chamber, injection type diesel engine
- **No. of cylinders:** 3
- **Rated power: ISO 9249, net:** 10.6 kW (14.2 HP) at 2,400 min⁻¹ (rpm)
- **EEC 80/1269, net:** 10.6 kW (14.2 HP) at 2,400 min⁻¹ (rpm)
- **SAE J1349, net:** 10.6 kW (14.2 HP) at 2,400 min⁻¹ (rpm)
- **Maximum torque:** 48.8 Nm (49.8 kgfm) at 1,800 min⁻¹ (rpm)
- **Piston displacement:** 0.854 L
- **Bore and stroke:** 70 mm x 74 mm
- **Batteries:** 1 x 12 V / 36 Ah

**HYDRAULIC SYSTEM**

**Hydraulic Pumps**
- **Main pumps:** 2 variable displacement axial piston pumps
- **Maximum oil flow:** 2 x 19.2 L/min
- **Pilot pump:** 1 gear pump
- **Maximum oil flow:** 6.5 L/min

**Hydraulic Motors**
- **Travel:** 2 variable displacement axial piston motors
- **Swing:** 1 gear motor

**Relief Valve Settings**
- **Implement circuit:** 20.6 MPa (210 kgf/cm²)
- **Swing circuit:** 13.7 MPa (140 kgf/cm²)
- **Travel circuit:** 20.6 MPa (210 kgf/cm²)
- **Pilot circuit:** 3.9 MPa (40 kgf/cm²)

**Hydraulic Cylinders**

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Boom (3-Pillar canopy)</th>
<th>Arm</th>
<th>Bucket</th>
<th>Boom swing</th>
<th>Span</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>60 mm</td>
<td>55 mm</td>
<td>65 mm</td>
<td>60 mm</td>
<td>50 mm</td>
</tr>
<tr>
<td></td>
<td>35 mm</td>
<td>30 mm</td>
<td>30 mm</td>
<td>30 mm</td>
<td>30 mm</td>
</tr>
<tr>
<td></td>
<td>435 mm</td>
<td>406 mm</td>
<td>311 mm</td>
<td>298 mm</td>
<td>312 mm</td>
</tr>
</tbody>
</table>

**HYDRAULIC SYSTEM**

**Undercarriage**

- **Tracks:** Tractor type undercarriage. Welded track frame using selected materials. Side frame extended by cylinder span.
- **Numbers of Rollers on Each Side:** Lower rollers: 3

**Travel Device**
- Each track driven by a 2-speed axial piston motor.
- Parking brake is of the spring-set/hydraulic-released disc type.
- **Travel speeds:** High: 0 to 4.2 km/h
- Low: 0 to 2.4 km/h

**Maximum traction force:** 11.4 kN (1160 kgf)

**Gradeability:** 47% (25 degrees) continuous

**SERVICE REFILL CAPACITIES**

- **Fuel tank:** 20.0 L
- **Engine coolant:** 2.7 L
- **Engine oil:** 2.1 L
- **Hydraulic system:** 26.0 L
- **Hydraulic oil tank:** 14.0 L

**WEIGHTS AND GROUND PRESSURE**

**Operating Weight and Ground Pressure**

**3-PILLAR CANOPY**
- **Including 1.82 m boom and 0.044 m³ bucket (ISO heaped) heavier counterweight 240 kg and extra piping.**
- **Shoe type Shoe width Arm length kg kPa (kgf/cm²)**
  - Rubber shoes 230 mm 0.93 m 1,180 * 26.7 (0.25)

**BACKHOE ATTACHMENTS**

**Arm and Bucket Digging Force**

- **Arm length:** 0.93 m
- **Bucket digging force ISO:** 16.0 kN (1600 kgf)
- **Bucket digging force SAE / PCSA:** 12.5 kN (1270 kgf)
- **Arm crown force ISO:** 8.6 kN (880 kgf)
- **Arm crown force SAE / PCSA:** 7.9 kN (810 kgf)

**Weights**

<table>
<thead>
<tr>
<th>Bucket Capacity</th>
<th>Without side cutters</th>
<th>With side cutters</th>
<th>No. of teeth</th>
<th>Weight</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.020 m³</td>
<td>250 mm</td>
<td>300 mm</td>
<td>3</td>
<td>37.0 kg</td>
<td>○</td>
</tr>
<tr>
<td>0.035 m³</td>
<td>350 mm</td>
<td>400 mm</td>
<td>3</td>
<td>42.0 kg</td>
<td>○</td>
</tr>
<tr>
<td>0.044 m³</td>
<td>400 mm</td>
<td>500 mm</td>
<td>3</td>
<td>44.0 kg</td>
<td>○</td>
</tr>
<tr>
<td>0.050 m³</td>
<td>450 mm</td>
<td>500 mm</td>
<td>3</td>
<td>47.0 kg</td>
<td>○</td>
</tr>
</tbody>
</table>

○ Suitable for materials with density of 2 000 kg/m³ or less

□ Suitable for materials with density of 1 600 kg/m³ or less

**SPECIFICATIONS**

**BACKHOE ATTACHMENTS**

- **Boom and arm are of welded, box-section design. A 1.82 m boom and 0.93 m arm are available.**

**Buckets**

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Weight</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO heaped</td>
<td>Weight</td>
<td></td>
</tr>
<tr>
<td>0.020 m³</td>
<td>37.0 kg</td>
<td></td>
</tr>
<tr>
<td>0.035 m³</td>
<td>42.0 kg</td>
<td></td>
</tr>
<tr>
<td>0.044 m³</td>
<td>44.0 kg</td>
<td></td>
</tr>
<tr>
<td>0.050 m³</td>
<td>47.0 kg</td>
<td></td>
</tr>
</tbody>
</table>

* Operating weight fully serviced, +80 kg operator ISO 6016.

**SUCTION**

- **3-PILLAR CANOPY**
- **Including 1.82 m boom and 0.044 m³ bucket (ISO heaped) heavier counterweight 120 kg and extra piping.**
- **Shoe type Shoe width Arm length kg kPa (kgf/cm²)**
  - Rubber shoes 230 mm 0.93 m 1,780 * 36.5 (0.27)

* Operating weight fully serviced, +80 kg operator ISO 6016.
**SPECIFICATIONS**

### WORKING RANGES

**DIMENSIONS**

This illustration shows with 0.93 m arm, 0.044 m³ bucket and 230 mm rubber shoes and heavier counterweight 240 kg.

**Data in (   ) are dimensions of counterweight 120 kg.**

<table>
<thead>
<tr>
<th>ZX17U-5A</th>
<th>Unit: mm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Arm 0.93 m</td>
</tr>
<tr>
<td>A</td>
<td>Max. digging reach</td>
</tr>
<tr>
<td>A'</td>
<td>Max. digging reach (on ground)</td>
</tr>
<tr>
<td>B</td>
<td>Max. digging depth</td>
</tr>
<tr>
<td>C</td>
<td>Max. cutting height</td>
</tr>
<tr>
<td>D</td>
<td>Max. dumping height</td>
</tr>
<tr>
<td>D'</td>
<td>Min. dumping height</td>
</tr>
<tr>
<td>E</td>
<td>Min. swing radius</td>
</tr>
<tr>
<td>F</td>
<td>Max. vertical wall digging depth</td>
</tr>
<tr>
<td>G</td>
<td>Front height at Min. swing radius</td>
</tr>
<tr>
<td>H</td>
<td>Min. level crowding distance</td>
</tr>
<tr>
<td>I</td>
<td>Working radius at Min. swing radius (Max. boom-swing angle)</td>
</tr>
<tr>
<td>J</td>
<td>Blade bottom highest position above ground</td>
</tr>
<tr>
<td>K</td>
<td>Blade bottom lowest position above ground</td>
</tr>
<tr>
<td>L/L'</td>
<td>Offset distance</td>
</tr>
<tr>
<td>Max. boom-swing angle (deg.)</td>
<td>70 / 50</td>
</tr>
</tbody>
</table>
LIFTING CAPACITIES (Without bucket)

Notes:
1. Ratings are based on ISO 10567.
2. Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
3. The load point is the center-line of the bucket pivot mounting pin on the arm.
4. Indicates load limited by hydraulic capacity.
5. 0 m = Ground.

For lifting capacities, subtract bucket and quick hitch weight from lifting capacities without bucket.

ZX17U-5A 3-Pillar Canopy Version, Blade above Ground

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Load point height m</th>
<th>Load radius 1.0 m</th>
<th>Load radius 2.0 m</th>
<th>Load radius 3.0 m</th>
<th>All max. reach meter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boom 1.82 m</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2.98</td>
</tr>
<tr>
<td>Arm 0.93 m</td>
<td>1</td>
<td>0.52</td>
<td>0.49</td>
<td>0.29</td>
<td>0.26</td>
</tr>
<tr>
<td>Heavier counterweight 240 kg</td>
<td>0 (Ground)</td>
<td>0.50</td>
<td>0.46</td>
<td>0.26</td>
<td>0.26</td>
</tr>
<tr>
<td>Rubber shoe 230 mm</td>
<td>-1</td>
<td>*1.12</td>
<td>*1.12</td>
<td>0.50</td>
<td>0.35</td>
</tr>
</tbody>
</table>

ZX17U-5A 3-Pillar Canopy Version, Blade on Ground

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Load point height m</th>
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<td>2</td>
<td>2</td>
<td>2</td>
<td>2.98</td>
</tr>
<tr>
<td>Arm 0.93 m</td>
<td>1</td>
<td>1.70</td>
<td>0.49</td>
<td>0.44</td>
<td>0.41</td>
</tr>
<tr>
<td>Heavier counterweight 240 kg</td>
<td>0 (Ground)</td>
<td>1.61</td>
<td>0.46</td>
<td>0.46</td>
<td>0.42</td>
</tr>
<tr>
<td>Rubber shoe 230 mm</td>
<td>-1</td>
<td>*1.12</td>
<td>*1.12</td>
<td>1.63</td>
<td>0.42</td>
</tr>
</tbody>
</table>

ZX17U-5A 3-Pillar Canopy Version, Blade above Ground

<table>
<thead>
<tr>
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<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2.98</td>
</tr>
<tr>
<td>Arm 0.93 m</td>
<td>1</td>
<td>0.45</td>
<td>0.42</td>
<td>0.25</td>
<td>0.22</td>
</tr>
<tr>
<td>Counterweight 120 kg</td>
<td>0 (Ground)</td>
<td>0.42</td>
<td>0.39</td>
<td>0.24</td>
<td>0.22</td>
</tr>
<tr>
<td>Rubber shoe 230 mm</td>
<td>-1</td>
<td>*1.12</td>
<td>*1.12</td>
<td>0.42</td>
<td>0.30</td>
</tr>
</tbody>
</table>

ZX17U-5A 3-Pillar Canopy Version, Blade on Ground

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Load point height m</th>
<th>Load radius 1.0 m</th>
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<th>Load radius 3.0 m</th>
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<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2.98</td>
</tr>
<tr>
<td>Arm 0.93 m</td>
<td>1</td>
<td>1.70</td>
<td>0.42</td>
<td>0.44</td>
<td>0.41</td>
</tr>
<tr>
<td>Counterweight 120 kg</td>
<td>0 (Ground)</td>
<td>1.61</td>
<td>0.39</td>
<td>0.46</td>
<td>0.42</td>
</tr>
<tr>
<td>Rubber shoe 230 mm</td>
<td>-1</td>
<td>*1.12</td>
<td>*1.12</td>
<td>1.63</td>
<td>0.42</td>
</tr>
</tbody>
</table>

ZX17U-5A 3-Pillar Canopy Version, Blade above Ground

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</tr>
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<td>*1.12</td>
<td>1.63</td>
<td>0.42</td>
</tr>
</tbody>
</table>

ZX17U-5A 3-Pillar Canopy Version, Blade on Ground

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Load point height m</th>
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<td>-1</td>
<td>*1.12</td>
<td>*1.12</td>
<td>1.63</td>
<td>0.42</td>
</tr>
</tbody>
</table>

ENGINE
- Air cleaner double filters
- Cartridge-type engine oil filter
- Dust-proof indoor net
- Fuel main filter
- Water-separator for engine fuel
- Full-flow filter
- Hydraulic pilot type control levers
- Overload relief valve
- Pilot control shut-off lever with neutral engine start system
- Pilot filter
- Suction filter

HYDRAULIC SYSTEM
- Full-flow filter
- Hydraulic pilot type control levers
- Overload relief valve
- Pilot control shut-off lever with neutral engine start system
- Pilot filter
- Suction filter
- Swing parking brake
- Travel parking brake
- Suction filter
- Valve for extra piping

UPPER STRUCTURE
- Counterweight 120 kg
- Heavier counterweight 240 kg
- Travel motion alarm

REAR ATTACHMENTS
- Arm 0.93 m
- Boom 1.82 m
- Swing parking brake
- Travel parking brake
- Suspension seat

3-PILLAR CANOPY
- Anti-slip plate
- Arm rests
- Electric horn
- Floor mat
- Pilot control shut-off lever with neutral engine start system
- Pilot filter
- Suction filter
- Swing parking brake
- Travel parking brake
- Suspension seat

UNDERCARRIAGE
- Retractable undercarriage
- Rubber shoe 230 mm
- Valve for extra piping

MISCELLANEOUS
- Standard equipment
- Optional equipment
- Theft deterrent system*
Built on the foundation of superb technological capabilities, Hitachi Construction Machinery is committed to providing leading-edge solutions and services to contribute as a reliable partner to the business of customers worldwide.

The Hitachi Group released the Environmental Vision 2025 to curb annual carbon dioxide emissions. The Group is committed to global production while reducing environmental impact in life cycles of all products, and realizing a sustainable society by tackling three goals — prevention of global warming, conservation of resources, and preservation of ecosystem.

Reducing Environmental Impact by New ZAXIS

Hitachi makes a green way to cut carbon emissions for global warming prevention according to LCA*. New ZAXIS utilizes lots of technological advances, including the new ECO mode, and Isochronous Control. Hitachi has long been committed to recycling of components, such as aluminum parts in radiators and oil cooler. Resin parts are marked for recycling.

*Life Cycle Assessment – ISO 14040

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. Before use, read and understand the Operator’s Manual for proper operation.