

# HITACHI



ZX35U-5N

# SPEC SUMMARY

Operating Weight Net Power (ISO 9249) **ZX30U-5N** 6,680 lb. (3,030 kg) 23.7 hp (17.4 kW) @ 2,400 rpm

**ZX35U-5N** 7,584 lb. (3,440 kg) 23.7 hp (17.4 kW) @ 2,400 rpm

ZAXIS 30 ZAXIS 35

**Compact Excavators** 

# A PERFECT FIT: INTUITIVE COMPACT EXCAVATORS





The ZAXIS-5N series of compact excavators puts you firmly in control, so you can feel confident in your machine's performance, and be supported by the technological expertise and services that Hitachi Construction Machinery Americas provides.

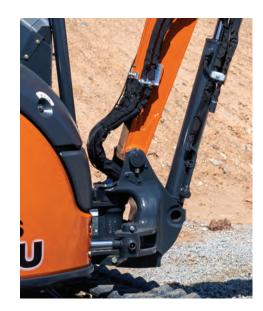
# HIGH PERFORMANCE 8. QUALITY

# Versatility

- Short tail swing to work safely in narrow job sites.
- 1-way/2-way selector valve for attachment mode (breaker and grapple).
- **Auxiliary hydraulic line diverter** to thumb or breaker and other attachment operation.
- Wider working range for small equipment.
- **Auxiliary function lever** for various attachments.

# **Quality Details**

- **Boom Cylinder Guard:** The boom cylinder is protected with a cylinder cover to increase durability.
- **Hose Protectors** protect hydraulic hoses on the boom arm.
- Standard **auxiliary hydraulic lines** are plumbed to simplify attachment use.
- **Durable rubber tracks** minimize ground damage and allow machines to cross virtually any terrain, including paved surfaces.
- Standard backfill blade adds versatility enabling these compact to grade and backfill as well as provide extra stability.



ZAVIS





• **4 tie downs** on both left and right hand side of dozer blade and rear track for transportation.

# **High-Performance**

- Full hydraulic pilot valve
- · Higher productivity
- 2 work modes (Eco and Power) for desired productivity.
- Eco friendly auto idling system for lowering unnecessary fuel consumption and emission.

# EASY MAINTENANCE

**Easy, ground-level access** maintenance points for lubrication.

Longer maintenance interval

**Parallel-aligned cooling package** for easy cleanup.

**Larger engine cover and wider space** for maintenance.

Easy to clean radiators

**Wet-disc swing brake** provides long term maintenance-free performance.

**Hinged service door** provides wide-open access to the side-by-side oil cooler and radiator for easier core maintenance.

**Side-by-side cooling cores** resist debris buildup. Dedicated door provides easy access for cleaning.

**Spin-on filters** provide quick, easy access for filter maintenance.

**Ground level at-a-glance gauges** for ease of daily inspection and servicing.

Tilting floor for easy access maintenance.

#### Vertical Sliding Engine Cover

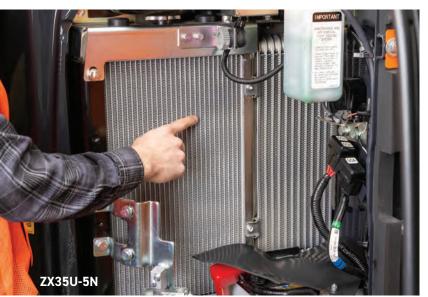
The upright engine cover, updated from the conventional model, slides vertically with less rear projection for ease of maintenance in confined spaces.

#### Easy Access Fueling

Large fueling port adapted from the larger excavator models allows for quick fueling.

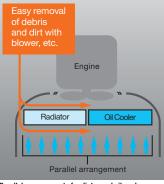
#### Easy Access Engine Compartment

The operator seat tilts up to reveal the engine compartment for ease of maintenance.









Parallel arrangement of radiator and oil cooler



Split-type floor mat



Dust-proof indoor net (optional)

**Sloped Track Frame Tops for Easy Mud Removal** Track frame tops are sloped to let mud slide away, curbing mud packing.



• Joystick controls for effortless operation.

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- **Ergonomic design** gives you convenient access to controls.
- LCD Operator control panel makes operation easier.
- **Improved sound isolation** provides quiet environment for the operator (cab spec).
- Optimal pedal layout helps to reduce fatigue.
- **Hydraulic Pilot Control levers** provide smooth control of the front, blade, swing and travel. The levers are ergonomically arranged for easier access and to prevent fatigue.
- Simple, easy to read LCD display provides operational data at a glance.
- **Drink holder** is easy to reach from the operator station.

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# CONTROL AND COMFORT ZONE

Enhanced comfort and safety features are at your fingertips in the refined cab of ZAXIS-5N excavators, giving you the power to perform productively, with ease and reduced fatigue.

## Spacious operator station

Fitted with a wide and adjustable sliding suspension seat and adjustable arm rest, the ZX30U-5N and ZX35U-5N provide a high level of comfort for operators.

### Easy operation

Intuitive controls are in easy reach of the operator and the hydraulic pilot control levers ensure a smooth operation. Low noise levels allow operators to work more comfortably.

### Enhanced design

The ZX30U-5N and ZX35U-5N are equipped with lights on the cab and boom.

#### Perfectly Positioned Pedals

The swing boom and foldable travel pedals are positioned for easy operation, yet allow plenty of foot room.





Above: Joystick controls for effortless operation and multi-function LCD eco-display makes operation easier.

Left: 4 pillars open-canopy for safer and better visibility.

#### Comfort

- Ergonomically designed operator station.
- Low noise level.
- Comfortable seat with suspension and slide features.
- Wider and spacious cabin with large door.

#### Easy Access

Spacious operator stations have wide entryways, making entering and exiting the cab safe and easy.

# **DURABILITY AND SAFETY**



# **Durability and Safety**

#### **HN Bushings**

Grease impregnated HN bushings and pins provide long 500-hour lubricating intervals.

### Highly durable front attachment.

#### Safety canopy to protect operator.

Boom hoses are positioned to protect from damages.

• The rugged 4-pillar canopy effectively protects the operator against tipping and falling objects. ROPS (Roll-Over Protective Structure),

#### Neutral Engine Start System

The engine cannot start unless the shut-off lever is in the locked position, providing safe operation.

# SERVICE AND SUPPORT

# **Reducing the Total Cost of Ownership**

Through our long-term commitment to maintaining a leadership position in technology and service, Hitachi Construction Machinery Americas supports an extensive network of independent, authorized local dealers focused on providing you with knowledgable and experienced sales, service and parts personnel.

HITACH

Your Hitachi Construction Machinery Americas authorized local dealer has the resources, knowledge and personnel to work with you to ensure that you receive the most benefit from your construction equipment investment utilizing carefully designed programs and services in conjunction with extensive hands' on training and digital resources. Hitachi Construction Machinery Americas provides a totally focused approach to supporting you, your business, and your machines.

- Full manufacturer's warranty
- HELP, Hitachi Extended Life Program
- Local parts depot backed by the Hitachi Global Parts Network
- Hitachi Genuine parts

# **ZX30U-5N SPECIFICATIONS**

| ENGINE              |  |  |
|---------------------|--|--|
| Model               | Yanmar 3TNV88F   |  |
| Туре                | 4-cycle water-cooled, vertical in-line, direct injection |  |
| Aspiration          | Natural  |  |
| Aftertreatment      | _  |  |
| No. of cylinders 3  |  |  |
| Rated power         |  |  |
| ISO 14396: Gross    | 24.7 hp (18.2 kW) at 2,400 rpm                           |  |
| ISO 9249: Net       | 23.7 hp (17.4 kW) at 2,400 rpm                           |  |
| Maximum torque      | 66.5 lbf-ft (90.2 Nm) at 1,300 min-1                     |  |
| Piston displacement | 100.2 cu. in. (1.642 L)                                  |  |
| Bore and stroke     | 3.5" x 3.5" (88 mm x 90 mm)                              |  |
| Batteries           | 1 x 12 V/55 Ah   |  |

| HYDRAULIC SYSTEM      |          |   |                     |  |
|-----------------------|----------|---|---------------------|--|
| Hydraulic Pumps       |          |   |                     |  |
| Main pumps            |          | Open center, pilot operated, with 2 variable-<br>displacement pumps, 1 single gear pump |                     |  |
| Maximum oil flow      |          | 2 x 10.1 gpm (2 x 38.4 L/m)   |                     |  |
| Gear pump             |          | 6.0 gpm (22.8 L/min)  |                     |  |
| Auxiliary flow        |          | 16.2 gpm (61.2 L/min)   |                     |  |
| Auxiliary Pressure    |          | 2,495 psi (17.2 Mpa)  |                     |  |
| Hydraulic Moto        | ors      |   |                     |  |
| Travel                |          | 2 variable displacement a   | axial piston motors |  |
| Swing                 |          | 1 axial piston motor  |                     |  |
| Relief Valve Settings |          |   |                     |  |
| Implement circuit     |          | 3,553.4 psi (24.5 MPa)  |                     |  |
| Swing circuit         |          | 2,697.7 psi (18.6 MPa)  |                     |  |
| Travel circuit        |          | 3,553.4 psi (24.5 MPa)  |                     |  |
| Pilot circuit         |          | 594.7 psi (4.1 MPa)   |                     |  |
| Hydraulic Cylin       | ders     |   | Unit: in (mm)       |  |
|                       | Quantity | y Bore  | Rod diameter        |  |
| Boom (Canopy)         | 1        | 3.3" (85)   | 2.0" (50)           |  |
| Boom (Cab)            | 1        | 3.3" (85)   | 2.0" (50)           |  |
| Arm                   | 1        | 3.0" (75)   | 1.8" (45)           |  |
| Bucket                | 1        | 2.6" (65)   | 1.6" (40)           |  |
| Blade                 | 1        | 3.5" (90)   | 2.0" (50)           |  |
| Boom swing            | 1        | 3.3" (85)   | 1.8" (45)           |  |

# UPPERSTRUCTURE

**Revolving Frame** 

D-section frame for resistance to deformation

### Swing Device

| Axial piston motor with planetary reduction gear is bathed in oil.<br>Swing circle is single row.<br>Swing parking brake is spring-set/hydraulic released disc type |                          |  |
|---|--------------------------|--|
| Swing speed   | 9.1 rpm                  |  |
| Swing torque  | 3,761.6 lbf-ft (5.1 kNm) |  |
| Max boom swing angle (Canopy),<br>left/right  | 72 degrees/62 degrees    |  |
| Max boom swing angle (Cab), left/right  | 62 degrees/62 degrees    |  |

## UNDERCARRIAGE

#### Tracks

Tractor-type undercarriage. Welded track frame using selected materials. Side frame welded to track frame

| Numbers of Rollers on Each Side  |                                    |  |  |
|--|------------------------------------|--|--|
| Jpper rollers 1  |                                    |  |  |
| Lower rollers 4  |                                    |  |  |
| Travel Device  |                                    |  |  |
| Each track driven by a 2-speed axial piston motor.<br>Parking brake is spring-set/hydraulic-released disc type.<br>Automatic transmission system: High-Low |                                    |  |  |
| Travel appende   | High: 0 to 2.7 mph (0 to 4.8 km/h) |  |  |
| Travel speeds  | Low: 0 to 1.7 mph (0 to 2.8 km/h)  |  |  |
| Maximum traction force   | 6,069.9 lbf (27.0kN)               |  |  |
| Gradeability   | 58% (30 degree) continuous         |  |  |

| ENVIRONMENT  |                                     |  |
|--|-------------------------------------|--|
| Engine Emissions                                   | EPA Final Tier 4                    |  |
| Sound Level*                                       |                                     |  |
| Sound level in canopy according to ISO 6396: 2008  | *LpA 78.0 (right)/75.4 (left) dB(A) |  |
| Sound level in cab according<br> to ISO 6396: 2008 | *LpA 70.4 (right)/70.2 (left) dB(A) |  |
| External sound level according to ISO 6395: 2008   | *LwA 95.5 (cab) dB(A)               |  |

\*Sinec sound level test on ZX30U-5N is not measured, ZX35U-5N sound level is indicated for the reference purpose.

## SERVICE REFILL CAPACITIES

|                           | Unit; gal (L) |
|---------------------------|---------------|
| Fuel tank                 | 11.1 (42.0)   |
| Engine coolant            | 1.0 (3.9)     |
| Engine oil                | 1.9 (7.2)     |
| Travel device (each side) | 0.2 (0.6)     |
| Hydraulic system          | 11.4 (43.0)   |
| Hydraulic oil tank        | 8.5 (32.0)    |

# WEIGHTS AND GROUND PRESSURE

### Operating Weight and Ground Pressure

|                                       | Shoe width,<br>in (mm) | Operating Weight<br>Ib (kg) | Ground Pressure<br>psi (kPa) |
|---------------------------------------|------------------------|-----------------------------|------------------------------|
| *Rubber track and Canopy 12" (300 mm) |                        | 6,680 lb (3,030 kg)         | 4.1 psi (28.0 kPa)           |
| *Rubber track and Cab 12" (300 mm)    |                        | 7,055 lb (3,200 kg)         | 4.4 psi (30.0 kPa)           |

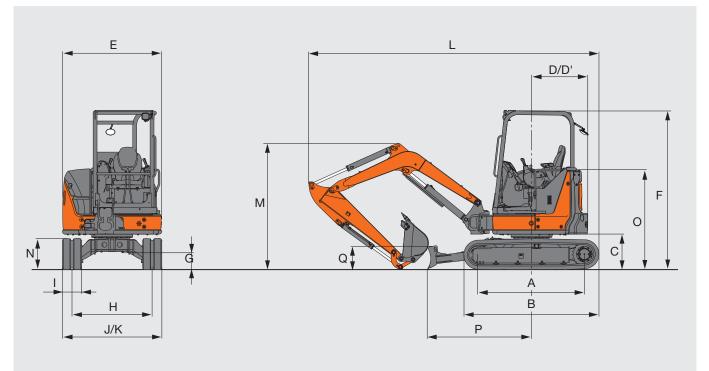
\*With 723 lb (328 kg) counterweight, Standard front attachment, Rubber track, Full fuel tank and 165 lb (75 kg) Operator

| Components Weight |                         | Unit: Ib (kg)   |  |
|-------------------|-------------------------|-----------------|--|
|                   | Counterweight; Standard | 723 lb (328 kg) |  |

| BUCKET AND ARM DIGGING FORCE         |                 |  |  |
|--------------------------------------|-----------------|--|--|
|                                      | Unit: lbf (kN)  |  |  |
| Arm length                           | 3' 10" (1.17 m) |  |  |
| Arm crowd force* ISO 6015: 2006      | 3,790 (17.0)    |  |  |
| Bucket digging force* ISO 6015: 2006 | 6,110 (27.0)    |  |  |

# **ZX30U-5N SPECIFICATIONS**

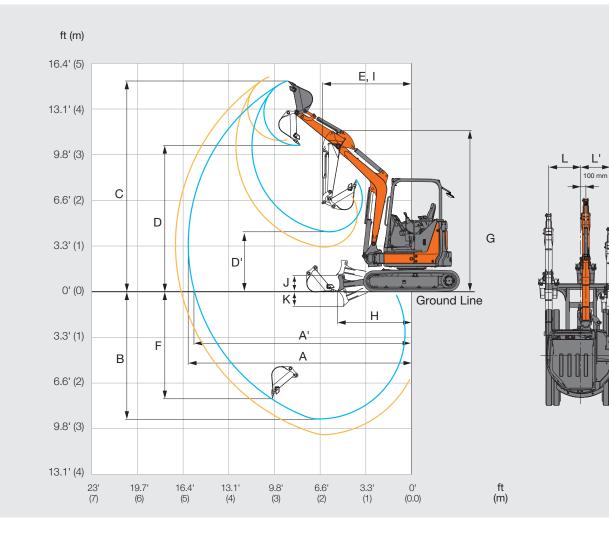
# DIMENSIONS



### Unit: ft-in (mm)

|    |                                 | ZX30U-5N (Canopy) | ZX30U-5N (Cab) |
|----|---------------------------------|-------------------|----------------|
| Α  | Distance between tumblers       | 5' 5" (1,660)     | 5' 5" (1,660)  |
| В  | Undercarriage length            | 6' 11" (2,110)    | 6' 11" (2,110) |
| С  | Counterweight clearance         | 1' 10" (550)      | 1' 10" (550)   |
| D  | Rear-end swing radius           | 2' 7" (775)       | 2' 7" (775)    |
| D' | Rear-end length                 | 2' 7" (775)       | 2' 7" (775)    |
| E  | Overall width of upperstructure | 5' 1" (1,550)     | 5' 1" (1,550)  |
| F  | Overall height of canopy/cab    | 8' 2" (2,480)     | 8' 2" (2,480)  |
| G  | Min. ground clearance           | 11" (280)         | 11" (280)      |
| Н  | Track gauge                     | 4' 1" (1,250)     | 4' 1" (1,250)  |
| I  | Track shoe width                | 12" (300)         | 12" (300)      |
| J  | Undercarriage width             | 5' 1" (1,550)     | 5' 1" (1,550)  |
| K  | Overall width                   | 5' 1" (1,550)     | 5' 1" (1,550)  |
| L  | Overall length blade in front   | 14' 7" (4,450)    | 14' 7" (4,450) |
| М  | Overall height of boom          | 4' 11" (1,510)    | 4' 11" (1,510) |
| Ν  | Track height                    | 1' 7" (480)       | 1' 7" (480)    |
| 0  | Engine cover height             | 5' 0" (1,530)     | 5' 0" (1,530)  |
| Р  | Horizontal distance to blade    | 5' 4" (1,620)     | 5' 4" (1,620)  |
| Q  | Blade height                    | 1' 2" (360)       | 1' 2" (360)    |

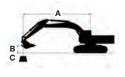
# WORKING RANGES



# Unit: ft-in (mm)

| Unit. 1    |   |                      | Onit. 11-11 (1111)   |
|------------|---|----------------------|----------------------|
|            |   | ZX30U-5N (Canopy)    | ZX30U-5N (Cab)       |
| Arm length |   | 3' 10" (1,170)       | 3' 10" (1,170)       |
| А          | Max. digging reach  | 16' 1" (4,890)       | 16' 1" (4,890)       |
| A'         | Max. digging reach (on ground)                              | 15' 7" (4,750)       | 15' 7" (4,750)       |
| В          | Max. digging depth  | 9' 2" (2,790)        | 9' 2" (2,790)        |
| С          | Max. cutting height   | 15' 2" (4,620)       | 14' 6" (4,420)       |
| D          | Max. dumping height   | 10' 6" (3,200)       | 9' 11" (3,030)       |
| D'         | Min. dumping height   | 4' 4" (1,310)        | 4' 0" (1,220)        |
| E          | Min. swing radius   | 6' 6"(1,970)         | 7' 1" (2,150)        |
| F          | Max. vertical wall digging depth                            | 7' 8" (2,330)        | 7' 8" (2,330)        |
| G          | Front height at Min. swing radius                           | 11' 7" (3,530)       | 11' 3" (3,440)       |
| Н          | Min. level crowding distance                                | 5' 3" (1,610)        | 5' 3" (1,610)        |
| I          | Working radius at Min. swing radius (Max. boom-swing angle) | 5' 2" (1,580)        | 6' (1,820)           |
| J          | Blade bottom highest position                               | 1' 2" (360)          | 1' 2" (360)          |
| K          | Blade bottom lowest position                                | 1' 1" (320)          | 1' 1" (320)          |
| L/L'       | Offset distance, left/right                                 | 2' (610)/2' 5" (735) | 2' (610)/2' 4" (700) |

# ZX30U-5N LIFTING CAPACITIES



A: Load radiusB: Load point heightC: Machine capacity

Rating over-front, Rating over-side or 360 degrees Unit: Ib (kg)

| ZX30U-5N                           | 3' 10" (1.17 m) Standard Arm, Standard Counterweight, and Rubber Track |                   |                     |                   |
|------------------------------------|--|-------------------|---------------------|-------------------|
|                                    | Canopy   |                   | Cab                 |                   |
|                                    | Over Front* Over Front*  |                   | Over Front*         | Over Front*       |
| Ground Level at 10' (3.0 m) Radius | 3,170 lb (1,440 kg)  | 1,050 lb (480 kg) | 3,170 lb (1,440 kg) | 1,124 lb (510 kg) |

\*Blade down (limited by hydraulics).

# EQUIPMENT

| ENGINE                                    | ZX30U-5N |
|---|----------|
| Yanmar 3TNV88F 100.2 cu. in.<br>(1.642 l) | •        |
| ISO 9249: 23.7 hp (17.4 kW) at 2,400 rpm  | •        |
| ISO 14396: 24.7 hp (18.2 kW) at 2,400 rpm | •        |
| 40 amp alternator, 12 volt                | •        |
| Antifreeze                                | •        |
| Certified to EPA Tier 4 Final             | •        |
| Direct injection                          | •        |
| Electric fuel shutoff                     | •        |
| Fan guard                                 | •        |
| Fuel filter & water separator             | •        |
| Isolation mounted                         | •        |
| Low maintenance battery                   | •        |
| Single dry-type air filter                | •        |
| Under hood muffler                        | •        |

| HYDRAULIC SYSTEM   | ZX30U-5N |
|--|----------|
| NEW 2nd auxiliary hydraulic coupler piping                                     | 0        |
| NEW Auxiliary flow rate changer, high and low                                  | •        |
| Auxiliary function control and right hand pilot lever                          | •        |
| <b>NEW</b> Auxiliary hydraulic diverter for breaker or thumb on arm to arm     | •        |
| Auxiliary valve section  | •        |
| Axial plunger swing motor  | •        |
| Boom swing foot control  | •        |
| Excavator to backhoe control pattern change                                    | •        |
| Full flow oil filter   | ٠        |
| Hydraulic pilot controls for boom, arm, bucket, swing, blade and propel        | •        |
| Open center with two variable<br>displacement pumps and one<br>fixed gear pump | •        |
| NEW Quick coupler piping   | 0        |
| Wet disk swing brake   | •        |

| UNDERCARRIAGE                            | ZX30U-5N |
|--|----------|
| 12" (300 mm) rubber track                | •        |
| Backfill blade 5' 2" (1.55 m)            | •        |
| NEW Blade float                          | •        |
| Axial plunger propel motor               | •        |
| Planetary final drive                    | •        |
| Propel motor shield                      | •        |
| Two speed travel with automatic shifting | •        |

| UPPER STRUCTURE   | ZX30U-5N |
|---|----------|
| 360 degree upper structure rotation   | ٠        |
| NEW Battery disconnect switch   | •        |
| Counterweight; 723 lb (328 kg)  | •        |
| Independent boom swing<br>(72 degrees left and 62 degrees right<br>rotation for canopy)<br>(62 degrees left and 62 degrees right<br>rotation for cab) | •        |
| ROPS/OPG/FOPS Canopy  | •        |
| ROPS/OPG/FOPS cab with air con-<br>ditioning and heater   | 0        |
| Vandal locks for service doors  | ٠        |
| NEW LED work light  |          |
| One mounted on boom   | ٠        |
| One mounted on canopy (cab)   | •        |
| Zero swing configuration  | •        |

| FRONT ATTACHMENTS                             | ZX30U-5N |
|---|----------|
| Boom 7' 6" (2.28 m)                           | •        |
| Arm 3' 10" (1.17 m)                           | •        |
| Mechanical quick coupler                      | •        |
| <b>NEW</b> Seatscrew for quick coupler piping | •        |
|   |          |

•: Standard equipment O: Optional equipment

| OPERATOR'S STATION  | ZX30U-5N |
|---|----------|
| 12 Volt outlet  | •        |
| NEW 3 in. retractable seat belt                                     | •        |
| Air conditioner for cab   | 0        |
| <b>NEW</b> CAB front window power assist dampener (CAB only)        | •        |
| Cupholder   | •        |
| Electronic throttle control with auto idle                          | •        |
| Foldable propel pedals and levers                                   | •        |
| Horn  | •        |
| Instrumentation lights  | •        |
| Monitor system with:  |          |
| Alternator voltage warning indicator                                | •        |
| Auto idle indicator   | •        |
| Auto shut-down indicator  | •        |
| Clock   | •        |
| Diagnostic capability   | •        |
| Engine coolant temperature gauge and indicator                      | •        |
| Engine oil pressure indicator                                       | •        |
| Engine preheat indicator and alarm                                  | •        |
| Fuel gauge with low fuel indicator                                  | •        |
| Hour meter  | •        |
| Power/Economy mode  | •        |
| System monitoring capability  | •        |
| Travel mode indicator   | •        |
| Work lights indicator   | •        |
| Motion alarm with cancel switch                                     | •        |
| Operator manual storage in back of seat                             | •        |
| Seat with fore/aft adjustment                                       | •        |
| NEW Telematics  | •        |
| Two travel modes with automatic shifting and speed selection switch | •        |
| NEW USB power outlet (CAB only)                                     | •        |
| Work lights switch  | •        |

# **ZX35U-5N SPECIFICATIONS**

| ENGINE              |   |
|---------------------|---|
| Model               | Yanmar 3TNV88F  |
| Туре                | 4-cycle water-cooled, vertical in-line direct injection |
| Aspiration          | Natural   |
| Aftertreatment      | —   |
| No. of cylinders    | 3   |
| Rated power         |   |
| ISO 14396: Gross    | 24.7 hp (18.2 kW) at 2,400 rpm                          |
| ISO 9249: Net       | 23.7 hp (17.4 kW) at 2,400 rpm                          |
| Maximum torque      | 66.5 lbf-ft (90.2 Nm) at 1,300 min-1                    |
| Piston displacement | 100.2 cu. in. (1.642 L)                                 |
| Bore and stroke     | 3.5" x 3.5" (88 mm x 90 mm)                             |
| Batteries           | 1 x 12 V/55 Ah  |

| HYDRAULIC SYSTEM                 |  |  |                     |
|----------------------------------|--|--|---------------------|
| Hydraulic Pump                   | os   |  |                     |
| Main pumps                       |  | Open center, pilot operated, with 2 variable-<br>displacement pumps, 1 fixed-gear pump |                     |
| Maximum oil flow                 |  | 2 x 10.1 gpm (2 x 38.4 L/m)  |                     |
| Gear pump                        |  | 6.0 gpm (22.8 L/min)   |                     |
| Auxiliary flow                   |  | 16.2 gpm (61.2 L/min)  |                     |
| Auxiliary Pressure               | sure 2,495 psi (17.2 Mpa)                          |  |                     |
| Hydraulic Moto                   | rs   |  |                     |
| Travel                           | Travel 2 variable displacement axial piston motors |  | axial piston motors |
| Swing                            | 1 axial piston motor                               |  |                     |
| Relief Valve Settings            |  |  |                     |
| Implement circuit                |  | 3,553.4 psi (24.5 MPa)   |                     |
| Swing circuit                    |  | 2,697.7 psi (18.6 MPa)   |                     |
| Travel circuit                   |  | 3,553.4 psi (24.5 MPa)   |                     |
| Pilot circuit                    |  | 594.7 psi (4.1 MPa)  |                     |
| Hydraulic Cylinders Unit: in (mr |  |  | Unit: in (mm)       |
|                                  | Quantity   | / Bore   | Rod diameter        |
| Boom (Canopy)                    | 1  | 3.3" (85)  | 2.0" (50)           |
| Boom (Cab)                       | 1  | 3.3" (85)  | 2.0" (50)           |
| Arm                              | 1  | 3.0" (75)  | 1.8" (45)           |
| Bucket                           | 1  | 2.6" (65)  | 1.6" (40)           |
| Blade                            | 1  | 3.5" (90)  | 2.0" (50)           |
| Angle blade                      | 1  | 2.4" (60)  | 1.4" (35)           |
| Boom swing                       | 1  | 3.3" (85)  | 1.8" (45)           |

## UPPERSTRUCTURE

**Revolving Frame** 

D-section frame for resistance to deformation

#### Swing Device

Axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single row. Swing p set/hydraulic released disc ty

| Swing parking prake is spring-set/hydra | aulic released disc type |
|---|--------------------------|
|   |                          |

| Swing speed                                  | 9.0 rpm                  |
|--|--------------------------|
| Swing torque                                 | 4,425.4 lbf-ft (6.0 kNm) |
| Max boom swing angle (Canopy),<br>left/right | 72 degrees/62 degrees    |
| Max boom swing angle (Cab), left/right       | 62 degrees/62 degrees    |

## UNDERCARRIAGE

#### Tracks

Tractor-type undercarriage. Welded track frame using selected materials. Side frame welded to track frame

| Numbers of Rollers on Each Side |    |
|---------------------------------|----|
| Upper rollers                   | 1  |
| Lower rollers                   | 4  |
| Steel track (optional)          | 44 |
| Travel Device                   |    |

#### Travel Device

Each track driven by a 2-speed axial piston motor. Parking brake is spring-set/hydraulic-released disc type. Automatic transmission system: High-Low

| Travel speeds          | High: 0 to 2.7 mph (0 to 4.8 km/h) |
|------------------------|------------------------------------|
|                        | Low: 0 to 1.7 mph (0 to 2.8 km/h)  |
| Maximum traction force | 6,069.9 lbf (27.0 kN)              |
| Gradeability           | 58% (30 degree) continuous         |

| ENVIRONMENT                                       |                                   |
|---|-----------------------------------|
| Engine Emissions                                  | EPA Final Tier 4                  |
| Sound Level*                                      |                                   |
| Sound level in canopy according to ISO 6396: 2008 | *LpA 78.0(right)/75.4(left) dB(A) |
| Sound level in cab according to ISO 6396: 2008    | *LpA 70.4(right)/70.2(left) dB(A) |
| External sound level according to ISO 6395: 2008  | *LwA 95.5(cab) dB(A)              |

## SERVICE REFILL CAPACITIES

|                           | Unit; gal (L) |
|---------------------------|---------------|
| Fuel tank                 | 11.1 (42.0)   |
| Engine coolant            | 1.3 (5.0)     |
| Engine oil                | 1.9 (7.2)     |
| Travel device (each side) | 0.2 (0.6)     |
| Hydraulic system          | 11.4 (43.0)   |
| Hydraulic oil tank        | 8.5 (32.0)    |

# WEIGHTS AND GROUND PRESSURE

| Shoe type and arm length                       | Shoe width,<br>in (mm) | Operating Weight<br>Ib (kg) | Ground Pressure<br>psi (kPa) |
|--|------------------------|-----------------------------|------------------------------|
| *Rubber track, Canopy<br>4' 4" (1,315 mm) arm  | 12" (300 mm)           | 7,584 lb (3,440 kg)         | 4.6 psi (32.0 kPa)           |
| *Rubber track, Cab<br>4' 4" (1,315 mm) arm     | 12" (300 mm)           | 7,959 lb (3,610 kg)         | 4.8 psi (33.0 kPa)           |
| **Rubber track, Canopy<br>5' 8" (1,715 mm) arm | 12" (300 mm)           | 8,157 lb (3,700 kg)         | 4.9 psi (33.7 kPa)           |
| **Rubber track, Cab<br>5' 8" (1,715 mm) arm    | 12" (300 mm)           | 8,532 lb (3,870 kg)         | 5.1 psi (35.2 kPa)           |
| *Steel track, Canopy<br>4' 4" (1,315 mm) arm   | 12" (300 mm)           | 8,069 lb (3,660 kg)         | 4.8 psi (33.0 kPa)           |
| *Steel track, Cab<br>4' 4" (1,315 mm) arm      | 12" (300 mm)           | 8,444 lb (3,830 kg)         | 4.9 psi (34.0 kPa)           |
| **Steel track, Canopy<br>5' 8" (1,715 mm) arm  | 12" (300 mm)           | 8,642 lb (3,920 kg)         | 5.1 psi (35.0 kPa)           |
| **Steel track, Cab<br>5' 8" (1,715 mm) arm     | 12" (300 mm)           | 9,017 lb (4,090 kg)         | 5.4 psi (37.0 kPa)           |

#### Operating Weight and Ground Pressure

\*With full fuel tank, standard counterweight, 175 lb (79 kg) operator \*\*With full fuel tank, extra counterweight, 175 lb (79 kg) operator

#### **Components Weight**

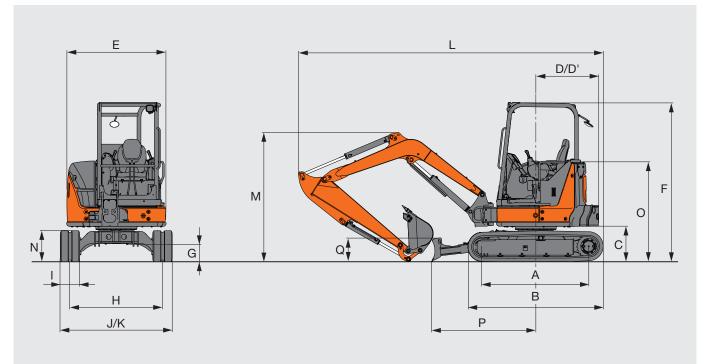
#### Unit: lb (kg)

| Counterweight                        |             |
|--------------------------------------|-------------|
| Standard                             | 1,190 (540) |
| Additional                           | 529 (240)   |
| Optional Angle Blade                 | 653 (296)   |
| Optional Angle Blade weight increase | 573 (260)   |

| BUCKET AND ARM DIGGING FORCE         |                 |                 |
|--------------------------------------|-----------------|-----------------|
|                                      |                 | Unit: lbf (kN)  |
| Arm length                           | 4' 4" (1.315 m) | 5' 8" (1.715 m) |
| Arm crowd force* ISO 6015: 2006      | 4,277 (19.0)    | 3,792 (16.9)    |
| Bucket digging force* ISO 6015: 2006 | 6,085 (27.1)    | 6,085 (27.1)    |

# **ZX35U-5N SPECIFICATIONS**

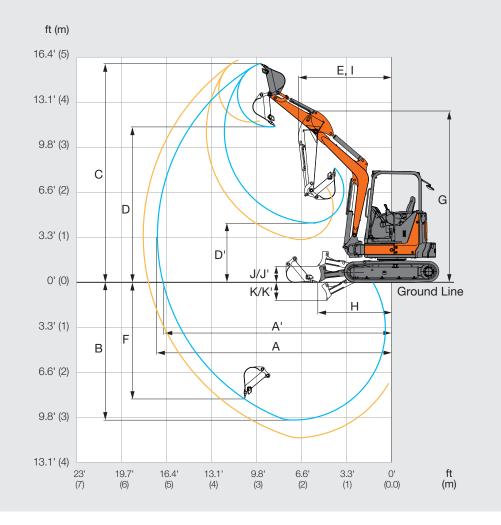
# DIMENSIONS

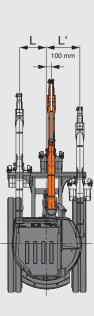


## Unit: ft-in (mm)

|    |                                    | ZX35U-5N (Canopy) | ZX35U-5N (Canopy) | ZX35U-5N (Cab) | ZX35U-5N (Cab) |
|----|------------------------------------|-------------------|-------------------|----------------|----------------|
|    | Arm length                         | 4' 4" (1,315)     | 5' 8" (1,715)     | 4' 4" (1,315)  | 5' 8" (1,715)  |
| А  | Distance between tumblers          | 5' 5" (1,660)     | 5' 5" (1,660)     | 5' 5" (1,660)  | 5' 5" (1,660)  |
| В  | Undercarriage length               | 6' 11" (2,110)    | 6' 11" (2,110)    | 6' 11" (2,110) | 6' 11" (2,110) |
| С  | Counterweight clearance            | 1' 10" (550)      | 1' 10" (550)      | 1' 10" (550)   | 1' 10" (550)   |
| D  | Rear-end swing radius              | 2' 10" (870)      | 2' 10" (870)      | 2' 10" (870)   | 2' 10" (870)   |
| D' | Rear-end length                    | 2' 10" (870)      | 2' 10" (870)      | 2' 10" (870)   | 2' 10" (870)   |
| E  | Overall width of upperstructure    | 5' 1" (1,550)     | 5' 1" (1,550)     | 5' 1" (1,550)  | 5' 1" (1,550)  |
| F  | Overall height of canopy/cab       | 8' 2" (2,480)     | 8' 2" (2,480)     | 8' 2" (2,480)  | 8' 2" (2,480)  |
| G  | Min. ground clearance              | 0" 11" (280)      | 0" 11" (280)      | 0" 11" (280)   | 0" 11" (280)   |
| Н  | Track gauge                        | 4' 9" (1,440)     | 4' 9" (1,440)     | 4' 9" (1,440)  | 4' 9" (1,440)  |
| I  | Track shoe width                   | 12" (300)         | 12" (300)         | 12" (300)      | 12" (300)      |
| J  | Undercarriage width                | 5' 9" (1,740)     | 5' 9" (1,740)     | 5' 9" (1,740)  | 5' 9" (1,740)  |
| К  | Overall width                      | 5' 9" (1,740)     | 5' 9" (1,740)     | 5' 9" (1,740)  | 5' 9" (1,740)  |
| L  | Overall length blade in front      | 15' 3" (4,640)    | 15' 6" (4,760)    | 15' 3" (4,640) | 15' 6" (4,760) |
| М  | Overall height of boom             | 5' 0" (1,530)     | 6' 6" (1,990)     | 5' 0" (1,530)  | 6' 6" (1,990)  |
| Ν  | Track height                       | 1' 7" (480)       | 1' 7" (480)       | 1' 7" (480)    | 1' 7" (480)    |
| 0  | Engine cover height                | 5' 0" (1,530)     | 5' 0" (1,530)     | 5' 0" (1,530)  | 5' 0" (1,530)  |
| Р  | Horizontal distance to blade       | 5' 4" (1,620)     | 5' 4" (1,620)     | 5' 4" (1,620)  | 5' 4" (1,620)  |
| P' | Horizontal distance to angle blade | 5' 9" (1,750)     | 5' 9" (1,750)     | 5' 9" (1,750)  | 5' 9" (1,750)  |
| Q  | Blade height                       | 1' 2" (360)       | 1' 2" (360)       | 1' 2" (360)    | 1' 2" (360)    |
| Q' | Angle blade height                 | 1' 2" (362)       | 1' 2" (362)       | 1' 2" (362)    | 1' 2" (362)    |
|    |                                    |                   |                   |                |                |

# WORKING RANGES

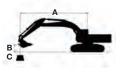




| Unit: ft-in | (mm) |
|-------------|------|
|-------------|------|

|      |  | ZX35U-5N (Canopy)    | ZX35U-5N (Canopy)     | ZX35U-5N (Cab)        | ZX35U-5N (Cab)       |
|------|--|----------------------|-----------------------|-----------------------|----------------------|
|      | Arm length   | 4' 4" (1,315)        | 5' 8" (1,715)         | 4' 4" (1,315)         | 5' 8" (1,715)        |
| А    | Max. digging reach   | 17' 1" (5,210)       | 18' 1" (5,520)        | 17' 1" (5,210)        | 18' 1" (5,520)       |
| A'   | Max. digging reach (on ground)                                 | 16' 8" (5,080)       | 17' 9" (5,410)        | 16' 8" (5,080)        | 17' 9" (5,410)       |
| В    | Max. digging depth   | 10' 0" (3,060)       | 11' 4" (3,460)        | 10' 0" (3,060)        | 11' 4" (3,460)       |
| С    | Max. cutting height  | 15' 11" (4,870)      | 16' 3" (4,950)        | 15' 5" (4,700)        | 15' 7" (4,740)       |
| D    | Max. dumping height  | 11' 4" (3,460)       | 11' 9" (3,570)        | 10' 10" (3,310)       | 11' 1' (3,390)       |
| D'   | Min. dumping height  | 4' 4" (1,320)        | 3' 1" (950)           | 4' 1" (1,250)         | 2' 10" (860)         |
| Е    | Min. swing radius  | 6' 10" (2,080)       | 7' 2" (2,190)         | 7' 4" (2,240)         | 7' 7" (2,300)        |
| F    | Max. vertical wall digging depth                               | 8' 6" (2,580)        | 9' 1" (2,780)         | 8' 6" (2,580)         | 9' 1" (2,780)        |
| G    | Front height at Min. swing radius                              | 12' 2" (3,720)       | 12' 4" (3,760)        | 11' 11" (3,640)       | 12' 1" (3,680)       |
| Н    | Min. level crowding distance                                   | 5' 3" (1,610)        | 5' 2" (1,570)         | 5' 3" (1,610)         | 5' 2" (1,570)        |
| Ι    | Working radius at Min. swing radius<br>(Max. boom-swing angle) | 5' 6" (1,670)        | 5' 10" (1,770)        | 6' 3" (1,910)         | 6' 6" (1,970)        |
| J    | Blade bottom highest position                                  | 1' 2" (360)          | 1' 2" (360)           | 1' 2" (360)           | 1' 2" (360)          |
| K    | Blade bottom lowest position                                   | 1' 4" (400)          | 1' 4" (400)           | 1' 4" (400)           | 1' 4" (400)          |
| J'   | Angle blade bottom highest position                            | 1' 3" (390)          | 1' 3" (390)           | 1' 3" (390)           | 1' 3" (390)          |
| K'   | Angle blade bottom lowest position                             | 1' 6" (460)          | 1' 6" (460)           | 1' 6" (460)           | 1' 6" (460)          |
| L/L' | Offset distance, left/right                                    | 2' (610)/2' 5" (735) | 2' (610))/2' 5" (735) | 2' (610))/2' 4" (700) | 2' (610)/2' 4" (700) |

# **ZX35U-5N LIFTING CAPACITIES**



A: Load radiusB: Load point heightC: Machine capacity

3' 10" (1.17 m) Standard Arm, Standard Counterweight, and Rubber Track

**Boldface type** indicates hydraulically limited capacity; lightface type indicates stability-limited capacities, in lb (kg). Machine equipped with 5' 9" (1,740 mm) blade and 12" (300 mm) track; lifting measurement from center of arm to bucket pin; situated on firm, level, uniform supporting surface. Total load includes weight of cables, hook, etc. Figures do not exceed 87 percent of hydraulic capacities or 75 percent of weight needed to tip machine. All lift capacities are based on ISO 10567.

Rating over-front, Rating over-side or 360 degrees Unit: Ib (kg)

| ZX35U-5N                                 |                         |                |                         |                |                        |                |                        |                |
|--|-------------------------|----------------|-------------------------|----------------|------------------------|----------------|------------------------|----------------|
|  | Rubber T<br>Standard Co |                | Steel Tr<br>Standard Co |                | Rubber T<br>Extra Cour |                | Steel Tr<br>Extra Cour |                |
| Ground level at 5' (1.52) radius         | Over Front              | Over Side      | Over Front              | Over Side      | Over Front             | Over Side      | Over Front             | Over Side      |
| 4' 4" (1,315 mm) Standard Arm and Ca     | b                       |                |                         |                |                        |                |                        |                |
| 5' 8" (1,715 mm) Long Arm and Cab        | 1,812<br>(822)          | 1,812<br>(822) | 1,812<br>(822)          | 1,812<br>(822) | 1,812<br>(822)         | 1,812<br>(822) | 1,812<br>(822)         | 1,812<br>(822) |
| 4' 4" (1,315 mm) Standard Arm and Canopy |                         |                |                         |                |                        |                |                        |                |
| 5' 8" (1,715 mm) Long Arm and Canopy     | 1,812<br>(822)          | 1,812<br>(822) | 1,812<br>(822)          | 1,812<br>(822) | 1,812<br>(822)         | 1,812<br>(822) | 1,812<br>(822)         | 1,812<br>(822) |
| Ground level at 10' (3.05 m) radius      | Over Front              | Over Side      | Over Front              | Over Side      | Over Front             | Over Side      | Over Front             | Over Side      |
| 4' 4" (1,315 mm) Standard Arm and Cab    | 3,453<br>(1,566)        | 1,506<br>(683) | 3,453<br>(1,566)        | 1,577<br>(715) | 3,453<br>(1,566)       | 1,780<br>(807) | 3,453<br>(1,566)       | 1,852<br>(840) |
| 5' 8" (1,715 mm) Long Arm and Cab        | 3,307<br>(1,500)        | 1,481<br>(672) | 3,307<br>(1,500)        | 1,553<br>(704) | 3,307<br>(1,500)       | 1,756<br>(797) | 3,307<br>(1,500)       | 1,827<br>(829) |
| 4' 4" (1,315 mm) Standard Arm and Canopy | 3,453<br>(1,566)        | 1,412<br>(640) | 3,453<br>(1,566)        | 1,484<br>(673) | 3,453<br>(1,566)       | 1,686<br>(765) | 3,453<br>(1,566)       | 1,758<br>(797) |
| 5' 8" (1,715 mm) Long Arm and Canopy     | 3,307<br>(1,500)        | 1,388<br>(630) | 3,307<br>(1,500)        | 1,460<br>(662) | 3,307<br>(1,500)       | 1,662<br>(754) | 3,307<br>(1,500)       | 1,734<br>(787) |
| Ground level at 15' (4.57 m) radius      | Over Front              | Over Side      | Over Front              | Over Side      | Over Front             | Over Side      | Over Front             | Over Side      |
| 4' 4" (1,315 mm) Standard Arm and Cab    |                         |                |                         |                |                        |                |                        |                |
| 5' 8" (1,715 mm) Long Arm and Cab        | 1,976<br>(896)          | 835<br>(379)   | 1,976<br>(896)          | 878<br>(398)   | 1,976<br>(896)         | 1,000<br>(454) | 1,976<br>(896)         | 1,043<br>(473) |
| 4' 4" (1,315 mm) Standard Arm and Canopy |                         |                |                         |                |                        |                |                        |                |
| 5' 8" (1,715 mm) Long Arm and Canopy     | 1,976<br>(896)          | 779<br>(353)   | 1,976<br>(896)          | 822<br>(373)   | 1,976<br>(896)         | 944<br>(428)   | 1,976<br>(896)         | 987<br>(448)   |

# EQUIPMENT

| ENGINE                                    | ZX35U-5N |
|---|----------|
| Yanmar 3TNV88F 100.2 cu. in.<br>(1.642 L) | •        |
| ISO 9249: 23.7 hp (17.4 kW) at 2,400 rpm  | •        |
| ISO 14396: 24.7 hp (18.2 kW) at 2,400 rpm | •        |
| 40 amp alternator, 12 volt                | •        |
| Antifreeze                                | •        |
| Certified to EPA Tier 4 Final             | •        |
| Direct injection                          | •        |
| Electric fuel shutoff                     | •        |
| Fan guard                                 | •        |
| Fuel filter & water separator             | •        |
| Isolation mounted                         | •        |
| Low maintenance battery                   | •        |
| Single dry-type air filter                | •        |
| Under hood muffler                        | •        |

| HYDRAULIC SYSTEM   | ZX35U-5N |
|--|----------|
| NEW 2nd auxiliary hydraulic coupler piping                                     | •        |
| <b>NEW</b> Auxiliary flow rate changer, high and low                           | 0        |
| Auxiliary function control and right<br>hand pilot lever                       | •        |
| NEW Auxiliary hydraulic diverter for breaker or thumb on arm to arm            | •        |
| Auxiliary valve section  | •        |
| Axial plunger swing motor  | •        |
| Boom swing foot control  | •        |
| Excavator to backhoe control pattern change                                    | •        |
| Full flow oil filter   | •        |
| Hydraulic pilot controls for boom, arm, bucket, swing, blade and propel        | •        |
| Open center with two variable<br>displacement pumps and one<br>fixed gear pump | •        |
| NEW Quick coupler piping   | 0        |
| Wet disk swing brake   | •        |

| UNDERCARRIAGE                            | ZX35U-5N |
|--|----------|
| 12" (300 mm) rubber track                | •        |
| 12" (300 mm) steel track                 | 0        |
| 12" (300 mm) rubber pad track            | 0        |
| Angle blade                              | 0        |
| Axial plunger propel motor               | •        |
| Backfill blade 5' 8" (1.74 m)            | •        |
| NEW Blade float                          | •        |
| Planetary final drive                    | •        |
| Propel motor shield                      | •        |
| Two speed travel with automatic shifting | •        |

| UPPER STRUCTURE   | ZX35U-5N |
|---|----------|
| 360 degree upper structure rotation   | •        |
| NEW Battery disconnect switch   | ٠        |
| Counterweight; 1,190 lb (540 kg)  | ٠        |
| Additional Counterweight; 529 lb<br>(240 kg)  | 0        |
| Independent boom swing<br>(72 degree left and 62 degree<br>right rotation for canopy)<br>(62 degree left and 62 degree<br>right rotation for cab) | ٠        |
| ROPS/OPG/FOPS canopy  | •        |
| ROPS/OPG/FOPS cab with air<br>conditioning and heater   | 0        |
| Vandal locks for service doors  | •        |
| NEW LED work light  |          |
| One mounted on boom   | •        |
| One mounted on canopy (cab)   | •        |
| Zero swing configuration  | •        |

| FRONT ATTACHMENTS                             | ZX35U-5N |
|---|----------|
| Boom 8' 1" (2.47 m)                           | ٠        |
| Arm 4' 4" (1.32 m)                            | •        |
| Arm 5' 8" (1.72 m)                            | 0        |
| Mechanical quick coupler                      | •        |
| <b>NEW</b> Seatscrew for quick coupler piping | •        |

•: Standard equipment O: Optional equipment

| OPERATOR'S STATION  | ZX35U-5N |
|---|----------|
| 12 Volt outlet  | •        |
| NEW 3 in. retractable seat belt                                     | •        |
| Air conditioner for cab   | 0        |
| <b>NEW</b> CAB front window power assist dampener (CAB only)        | •        |
| Cupholder   | •        |
| Electronic throttle control with auto idle                          | •        |
| Foldable propel pedals and levers                                   | •        |
| Horn  | •        |
| Instrumentation lights  | •        |
| Monitor system with:  |          |
| Alternator voltage warning indicator                                | •        |
| Auto idle indicator   | •        |
| Auto shut-down indicator  | •        |
| Clock   | •        |
| Diagnostic capability   | •        |
| Engine coolant temperature gauge and indicator                      | •        |
| Engine oil pressure indicator                                       | •        |
| Engine preheat indicator and alarm                                  | •        |
| Fuel gauge with low fuel indicator                                  | •        |
| Hour meter  | •        |
| Power/Economy mode  | •        |
| System monitoring capability  | •        |
| Travel mode indicator   | •        |
| Work lights indicator   | •        |
| Motion alarm with cancel switch                                     | •        |
| Operator manual storage in back of seat                             | •        |
| Seat with fore/aft adjustment                                       | •        |
| NEW Telematics  | •        |
| Two travel modes with automatic shifting and speed selection switch | •        |
| <b>NEW</b> USB power outlet (CAB only)                              | •        |
| Work lights switch  | •        |







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