

ZW50-5B SPECIFICATIONS

HITACHI

Reliable Solutions

LANCROS

ENGINE

Gross power (ISO 14396)	44 HP/2,400 RPM (32.8 kW/2,400 RPM)
Net power (ISO 9249)	42 HP/2,400 RPM (31.8 kW/2,400 RPM)
Make/Model	Kubota D1803-CR-TIE4 diesel engine
Type	4-cycle, water-cooled, direct injection with turbocharger and air cooled intercooler
Fuel type	#2 Diesel (Requires ultra-low sulfur fuel.)
Fuel injection pump	Electronically controlled, common rail type
Governor	All speed electrical type
Cooling module type	Forced circulation type
Number of cylinders	3
Bore and stroke	3.4" x 4.0" (87mm x 102.4mm)
Total displacement	112 in ³ (1.83 liters)
Alternator	DC 12V-70A (8.4 kW)
Air cleaner	Dry type (double element) with restriction indicator
Starter motor	DC 12V-2.7 HP (2.0 kW)
Battery	12V-800 CCA (70Ah), 2 units

TRANSMISSION

Transmission	Hydrostatic transmission (HST) automatically controls power and 2-speed	
	Normal Mode	
Speeds: Forward	Low:	5.0 MPH (8.0 km/hr)
	Auto:	10.6 MPH (17.0 km/hr)
Speeds: Reverse	Low:	5.0 MPH (8.0 km/hr)
	Auto:	10.6 MPH (17.0 km/hr)

SYSTEMS REFILL CAPACITY

LOCATION	GALLONS	LITERS
Fuel tank (diesel fuel)	11.1	42
Engine lubricant (including oil pan)	2.0	8
Engine coolant	1.7	7
T/M	0.5	2
Axle (front/rear)	1.2/1.2	5/5
Hydraulic oil tank	7.1	27

HYDRAULIC AND STEERING SYSTEM

Steering type	Articulated frame steering. Full hydraulic power steering unit, pilot operation	
Steering mechanism	Double-acting piston type	
Lift (boom) cylinder	Two (2) double-acting piston type: 2.8" x 20.9" (70mm x 531mm)	
Tilt (bucket) cylinder	Two (2) double-acting piston type: 2.8" x 17.7" (70mm x 450mm)	
Steering cylinder	Two (2) double-acting piston type: 2.4" x 9" (60mm x 228mm)	
Main oil pump	13.9 GPM/1,000 PSI @ 2,400 RPM (52.7 LPM/20.6 MPa @ 2,400 RPM)	
HST charging pump	4.0 GPM/3,260 PSI @ 2,400 RPM (15.3 LPM/2.5 MPa @ 2,400 RPM)	
Relief valve set pressure	Loading	2,987 psi, 20.6 MPa (210 kgf/cm ²)
HYDRAULIC CYCLE TIME* front end loading, Z bar linkage system		
Normal Mode		
Lifting time (at full load)	5.0 sec.	
Lowering time (empty)	3.0 sec.	
Bucket dumping time	1.0 sec.	
TOTAL	9.0 sec.	

* Measured in accordance with SAE J732C

AXLE SYSTEM

Drive system	4-wheel drive
Front and rear axle	Semi-floating type, fixed to the front frame, trunnion support
Tires	15.5/60-18 8PR (L-2)
Reduction and differential gear	Limited slip differential (LSD)
Final reduction gear	Inboard mounted, heavy duty planetary gear
Oscillation angle	Total 16 (+8, -8)°

BRAKE SYSTEM

Service brakes	Wet disc in reduction gear box
Parking/Emergency brake	Spring-applied, hydraulically-released wet disc

Model Name: ZW50-5B, EPA Tier 4 Final/EU Stage IV Certified

Remarks

- Materials and specifications are subject to change without notice and without any obligation on the part of the manufacturer.
- This information, while believed to be completely reliable, is not to be taken as warranty for which we assume legal responsibility.
- Dumping clearance and reach are measured from bucket edge in accordance with SAE J732C.
- Counterweight should not be used with tire ballast.
- This specification sheet may contain attachments and optional equipment not available in your area.

Please contact your local HCMA dealer for additional information.

SPECIFICATIONS

ZW50-5B

BUCKET DATA

Standard Arm with Quick Coupler
General Purpose w/ Bolt-on Cutting Edge



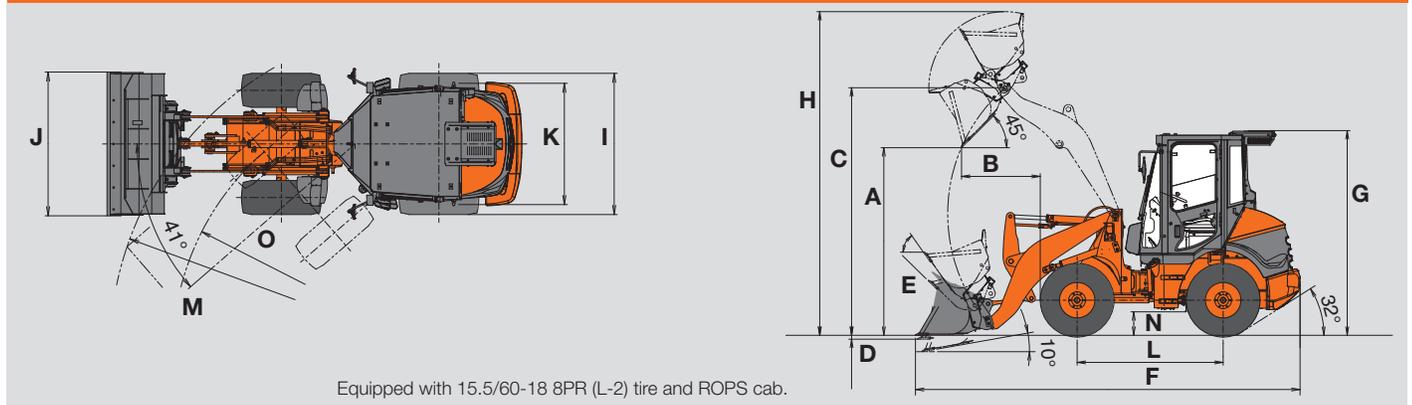
				Canopy*	Cab
Capacity	Heaped	yd ³ (m ³)	0.8 (0.6)	0.8 (0.6)	0.8 (0.6)
	Struck	yd ³ (m ³)	0.7 (0.52)	0.7 (0.52)	0.7 (0.52)
A	Maximum dumping clearance	ft-in (mm)	7'10" (2,380)	7'10" (2,380)	7'10" (2,380)
B	Dumping reach (to front of bucket edge or tooth)	ft-in (mm)	3'3" (995)	3'3" (995)	3'3" (995)
C	Max. hinge pin height	ft-in (mm)	10'4" (3,140)	10'4" (3,140)	10'4" (3,140)
D	Digging depth (with bucket level)	in (mm)	2" (50)	2" (50)	2" (50)
Breakout force		lb (kN)	5,530 (24.6)	5,530 (24.6)	5,530 (24.6)
Bucket tilt-back angle	at ground level	degree	44°	44°	44°
	E at carry position	degree	55°	55°	55°
Overall	F Length	ft-in (mm)	16' (4,875)	16' (4,875)	16' (4,875)
	G Height (up to cab top)	ft-in (mm)	8'5" (2,565)	8'6" (2,595)	8'6" (2,595)
	H Height (bucket fully raised)	ft-in (mm)	13'6" (4,105)	13'6" (4,105)	13'6" (4,105)
	I Width (outside tire)	ft-in (mm)	5'5" (1,660)	5'5" (1,660)	5'5" (1,660)
	J Width (outside bucket)	ft-in (mm)	5'7" (1,690)	5'7" (1,690)	5'7" (1,690)
K	Tread	ft-in (mm)	4'2" (1,260)	4'2" (1,260)	4'2" (1,260)
L	Wheel base	ft-in (mm)	6'1" (1,850)	6'1" (1,850)	6'1" (1,850)
Clearance Circle (bucket carry position)	M at outside of bucket	ft-in (mm)	10'3" (3,125)	10'3" (3,125)	10'3" (3,125)
	at outside of tire	ft-in (mm)	12'8" (3,870)	12'8" (3,870)	12'8" (3,870)
N	Minimum ground clearance	in (mm)	12" (295)	12" (295)	12" (295)
O	Full articulation angle	degree	40°	40°	40°
Operating weight (with ROPS cab)**		lb (kg)	8,810 (3,995)	9,350 (4,240)	9,350 (4,240)
Static tipping load***	Straight	lb (kg)	5,510 (2,500)	5,840 (2,650)	5,840 (2,650)
	Full turn	lb (kg)	4,480 (2,030)	4,760 (2,160)	4,760 (2,160)

Notes: * Canopy option available in US market only

** Includes ROPS/FOPS weight

*** Static tipping load and operating weight marked with** include 15.5/60-18 8PR (L-2) tires (no ballast) with lubricants, coolant, full fuel tank and operator.
All dimensions, weight and performance data based on ISO 6746-1:1987, ISO 7131:1997 and ISO 7546:1983

DIMENSIONS



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SPECIFICATIONS

ZW50-5B

ZW50-5B FORK SPECIFICATIONS

Fork type		Canopy*	Cab
A Fork tine length	ft (mm)	3'11" (1,195)	3'11" (1,195)
B Reach @ ground level	ft (mm)	3' (915)	3' (915)
C Maximum reach	ft (mm)	4'10" (1,475)	4'10" (1,475)
D Reach @ max hinge pin height	ft (mm)	2'6" (750)	2'6" (750)
E Fork height @ max reach	ft (mm)	4'10" (1,480)	4'10" (1,480)
F Fork height @ max hinge pin height	ft (mm)	10'2" (3,080)	10'2" (3,080)
Straight tip load with level arms and fork (load centered @ 24")	lb (kg)	4,040 (1,830)	4,260 (1,930)
Full turn tip load with level arms and fork (load centered @ 24")	lb (kg)	3,200 (1,450)	3,420 (1,550)
Max operating load (load centered @ 24")	lb (kg)	1,600 (725)	1,600 (725)
Fork attachment weight (load centered @ 24")	lb (kg)	360 (165)	360 (165)
Operating weight*** (load centered @ 24")	lb (kg)	8,860 (4,020)	9,370 (4,250)
G Overall length (load centered @ 24")	ft (mm)	17'11" (5,470)	17'11" (5,470)
H Overall height (load centered @ 24")	ft (mm)	8'5" (2,565)	8'5" (2,560)
I Fork width	ft (mm)	4' (1,225)	4' (1,225)
J Turning radius	ft (mm)	10'3" (3,125)	10'3" (3,125)
K Loader clearing radius, Fork in carry position	ft (mm)	13'2" (4,015)	13'2" (4,015)

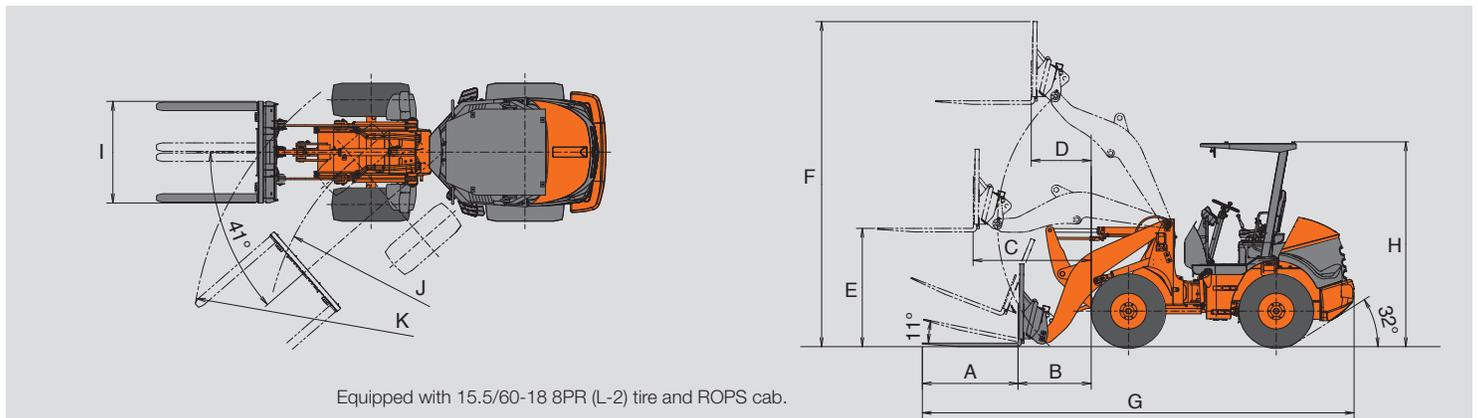
Notes: * Canopy option available in US market only

** Static tipping load and operating weight marked with** include 15.5/60-18 8PR tires (no ballast) with lubricants, coolant, full fuel tank and operator.

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DIMENSIONS



BUCKET SELECTION CHART

General purpose bucket with bolt-on cutting edges	Bucket capacity yd ³ (m ³)	Material density lb/yd ³ (kg/m ³)						
		1,350 (800)	1,690 (1,000)	2,020 (1,200)	2,360 (1,400)	2,700 (1,600)	3,030 (1,800)	
Standard lift with quick-coupler	0.8 (0.6)					110%	100%	95%

EQUIPMENT DATA

ZW50-5B

STANDARD EQUIPMENT

ENGINE

Air filter double elements
Air intake
Cold start aid, glow plugs
Engine oil filter, cartridge type
Engine coolant reservoir
Kubota D1803-CR-TIE4 diesel

POWERTRAIN

Brake, parking
Enclosed wet disc type
Spring applied
Oil pressure released
Brakes, service
Enclosed wet disc type
Full hydraulic system
Electrically controlled HST system
Forward/reverse lever
Limited slip differential (LSD) for both axles
Travel mode selector switch (L & Auto)

HYDRAULIC SYSTEM

Bucket auto leveler (automatic return to dig control)
Coupler, hydraulic, universal type
Hydraulic system, 3-function
Control valve, 3-spool, parallel and tandem control
Shift lever lock

ELECTRICAL

Alternator, DC 12V-70A (8.4 kW)
Battery, 12V-800 CCA (70Ah)
Battery disconnect cable
Horn, electric
Lights:
2 Headlights (halogen)
2 Stop/tail/turn lights (halogen)
2 Turn signals (front) (halogen)
1 Backup (halogen)
Working lights (LED for Cab only) 2 front, 2 rear

CAB

AM/FM/WB Stereo Radio with AUX input
Coat hook
Cup holder
Floor mat, sweep-out
ROPS/FOPS Cab, ISO 3449 Level II compliant (Canada)*
ROPS/FOPS Canopy (US)
Seat, adjustable suspension, fabric (cab only)
Seat, adjustable suspension, vinyl (canopy only)
Seat belt, adjustable (3 inch)
* Canopy option available in US market only.

OTHERS

Articulation locking bar
Counterweight
Drawbar
Fenders
Linkage (Z-type, sealed w/HN bushings)
Neutral safety start
Rear grill, hinged
Radiator, dust screen
Radiator, side-by-side w/oil cooler

ALARMS, GAUGES, INDICATORS

Alarms (audible)	Brake oil level
	Engine coolant temp
	Engine oil pressure
Alarms (visual)	Air filter
	Battery discharge
	Brake oil level
	Engine oil pressure
	Engine coolant temperature
	Machine service
Gauges	Engine coolant temperature
	Engine tachometer
	Fuel gauge
Indicators	Clearance light
	Cold start
	Forward/reverse
	Hour meter
	High beam
	Parking brake
	Turn signal w/4-way flashers
	Travel mode (L)
	Working light, indicator (cab only)

QUICK LINKS

Website's
Product Page

