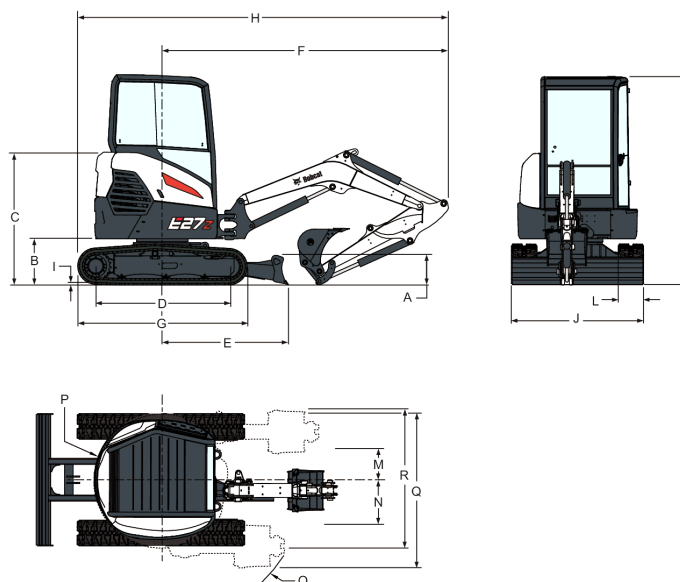


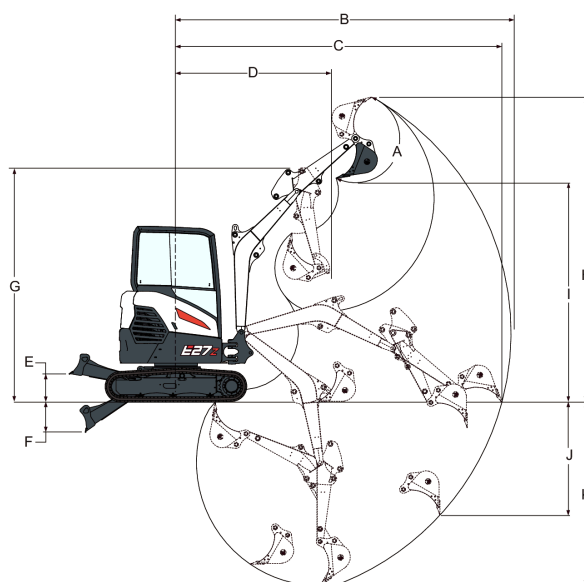
## Dimensions



(A) Blade height	319.0 mm
(B) Clearance, upper structure to ground line	539.0 mm
(C) Ground line to top of engine cover	1540.0 mm
(D) Length of track on ground	1543.0 mm
(E) Machine centre line to blade	1462.0 mm
(F) Minimum radius in travel position	3343.0 mm
(G) Overall length of track assembly	1965.0 mm
(H) Overall length in travel position	4325.0 mm
(I) Track lug height	21.0 mm
(J) Blade width	1550.0 mm
(K) Height	2438.0 mm
(L) Track width	300.0 mm
(M) Machine centre line to working equipment centre line, left-hand rotation	565.0 mm
(N) Machine centre line to working equipment centre line, right-hand rotation	773.0 mm
(O) Minimum turning radius	1726.0 mm
(P) Swing clearance, rear	785.0 mm
(Q) Working width at maximum right-hand rotation	1808.0 mm
(R) Working width at maximum left-hand rotation	1599.0 mm
(•) Boom length (boom pivot to arm pivot)	2100.0 mm
(•) Standard arm length (arm pivot to bucket pivot)	1100.0 mm
(•) Optional arm length (arm pivot to bucket pivot)	1400.0 mm

*(Values with a "\*" are for the long dipperstick)*

## Working Range



(A) Bucket pivot angle	185.0°
(B) Maximum reach of working equipment	4644.0 mm
(B*) Maximum reach of working equipment, long dipperstick	4931.0 mm
(C) Maximum reach at ground level	4518.0 mm
(C*) Maximum reach at ground level, long dipperstick	4814.0 mm
(D) Maximum working equipment radius with boom at maximum height and dipperstick fully retracted	2131.0 mm
(D*) Maximum working equipment radius with boom at maximum height and dipperstick fully retracted, long dipperstick	2135.0 mm
(E) Maximum blade height	385.0 mm
(F) Maximum blade depth	420.0 mm
(G) Maximum height of working equipment with dipperstick retracted	3247.0 mm
(G*) Maximum height of working equipment with dipperstick retracted, long dipperstick	3239.0 mm
(H) Maximum bucket tooth height	4230.0 mm
(H*) Maximum bucket tooth height, long dipperstick	4430.0 mm
(I) Maximum dump height	3043.0 mm
(I*) Maximum dump height, long dipperstick	3243.0 mm
(J) Maximum depth of vertical wall which can be excavated	1567.0 mm
(J*) Maximum depth of vertical wall which can be excavated, long dipperstick	1818.0 mm
(K) Maximum digging depth	2547.0 mm
(K*) Maximum digging depth, long dipperstick	2847.0 mm

*(Values with a "\*" are for the long dipperstick)*

## Lift Capacity - Cab, standard arm and standard Counterweight

### RATED LIFT CAPACITY OVER BLADE, BLADE DOWN

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius	Lift at 4000 mm radius
3000	3210	585*	-	538*	-
2000	3810	601*	-	605*	-
1000	4030	636*	-	833*	642*
Ground	3880	684*	1722*	957*	-
-1000	3330	746*	1551*	916*	-

\* Rated hydraulic lift capacity

### RATED LIFT CAPACITY OVER BLADE, BLADE UP

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius	Lift at 4000 mm radius
3000	3210	466	-	538*	-
2000	3810	366	-	605*	-
1000	4030	333	-	507	336
Ground	3880	354	912	515	-
-1000	3330	456	1045	538	-

\* Rated hydraulic lift capacity

### RATED LIFT CAPACITY OVER SIDE, BLADE UP

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius	Lift at 4000 mm radius
3000	3210	403	-	442	-
2000	3810	308	-	453	-
1000	4030	283	-	425	286
Ground	3880	298	723	411	-
-1000	3330	377	782	440	-

\* Rated hydraulic lift capacity

## Lift Capacity - Cab, long arm and standard Counterweight

### RATED LIFT CAPACITY OVER BLADE, BLADE DOWN

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius	Lift at 4000 mm radius
3000	3630	497*	-	-	-
2000	4070	526*	-	492*	510*
1000	4270	565*	-	722*	576*
Ground	4150	614*	1614*	918*	648*
-1000	3600	665*	1559*	937*	-
-2000	2550	697*	1070*	-	-

\* Rated hydraulic lift capacity

**RATED LIFT CAPACITY OVER BLADE, BLADE UP**

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius	Lift at 4000 mm radius
3000	3630	396	-	-	-
2000	4070	323	-	492*	335
1000	4270	301	-	511	334
Ground	4150	313	881	494	331
-1000	3600	384	1002	513	-
-2000	2550	697*	1070*	-	-

\* Rated hydraulic lift capacity

**RATED LIFT CAPACITY OVER SIDE, BLADE UP**

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius	Lift at 4000 mm radius
3000	3630	341	-	-	-
2000	4070	275	-	492*	289
1000	4270	252	-	427	277
Ground	4150	261	700	406	275
-1000	3600	315	753	404	-
-2000	2550	583	903	-	-

\* Rated hydraulic lift capacity

**Lift Capacity - Cab, long arm and heavy Counterweight**
**RATED LIFT CAPACITY OVER BLADE, BLADE DOWN**

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius	Lift at 4000 mm radius
3000	3630	497*	-	-	-
2000	4070	526*	-	492*	510*
1000	4270	565*	-	722*	576*
Ground	4150	614*	1614*	918*	648*
-1000	3600	665*	1559*	937*	-
-2000	2550	697*	1070*	-	-

\* Rated hydraulic lift capacity

**RATED LIFT CAPACITY OVER BLADE, BLADE UP**

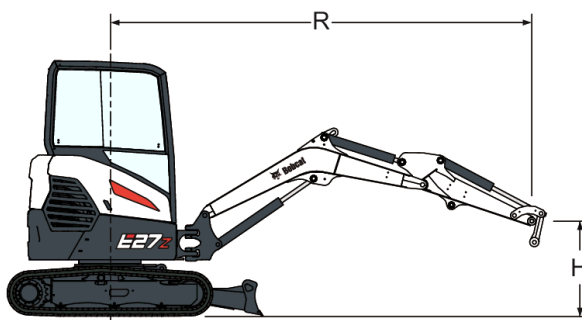
Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius	Lift at 4000 mm radius
3000	3630	497*	-	-	-
2000	4070	361	-	492*	373
1000	4270	336	-	566	372
Ground	4150	350	982	549	370
-1000	3600	428	1102	568	-
-2000	2550	697*	1070*	-	-

\* Rated hydraulic lift capacity

**RATED LIFT CAPACITY OVER SIDE, BLADE UP**

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius	Lift at 4000 mm radius
3000	3630	378	-	-	-
2000	4070	307	-	492*	322
1000	4270	282	-	474	310
Ground	4150	292	780	453	308
-1000	3600	352	833	451	-
-2000	2550	697*	1070*	-	-

\* Rated hydraulic lift capacity

**Lift Capacity - Canopy, standard arm and standard Counterweight**

**RATED LIFT CAPACITY OVER BLADE, BLADE DOWN**

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius	Lift at 4000 mm radius
3000	3210	585*	-	538*	-
2000	3810	601*	-	605*	-
1000	4030	636*	-	833*	642*
Ground	3880	684*	1722*	957*	-
-1000	3330	746*	1551*	916*	-

\* Rated hydraulic lift capacity

**RATED LIFT CAPACITY OVER BLADE, BLADE UP**

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius	Lift at 4000 mm radius
3000	3210	445	-	538*	-
2000	3810	349	-	510	-
1000	4030	317	-	484	320
Ground	3880	337	869	491	-
-1000	3330	436	1002	514	-

\* Rated hydraulic lift capacity

**RATED LIFT CAPACITY OVER SIDE, BLADE UP**

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius	Lift at 4000 mm radius
3000	3210	388	-	425	-
2000	3810	296	-	436	-
1000	4030	271	-	408	274
Ground	3880	285	693	393	-
-1000	3330	362	752	423	-

\* Rated hydraulic lift capacity

**Lift Capacity - Canopy, long arm and standard Counterweight**
**RATED LIFT CAPACITY OVER BLADE, BLADE DOWN**

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius	Lift at 4000 mm radius
3000	3630	497*	-	-	-
2000	4070	526*	-	492*	510*
1000	4270	565*	-	722*	576*
Ground	4150	614*	1614*	918*	648*
-1000	3600	665*	1559*	937*	-
-2000	2550	697*	1070*	-	-

\* Rated hydraulic lift capacity

**RATED LIFT CAPACITY OVER BLADE, BLADE UP**

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius	Lift at 4000 mm radius
3000	3630	387	-	-	-
2000	4070	307	-	492*	319
1000	4270	286	-	487	318
Ground	4150	298	838	470	315
-1000	3600	366	959	489	-
-2000	2550	697*	1070*	-	-

\* Rated hydraulic lift capacity

**RATED LIFT CAPACITY OVER SIDE, BLADE UP**

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius	Lift at 4000 mm radius
3000	3630	328	-	-	-
2000	4070	263	-	492*	277
1000	4270	240	-	410	265
Ground	4150	249	670	389	263
-1000	3600	301	723	387	-
-2000	2550	562	873	-	-

\* Rated hydraulic lift capacity

**Lift Capacity - Canopy, long arm and heavy Counterweight**
**RATED LIFT CAPACITY OVER BLADE, BLADE DOWN**

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius	Lift at 4000 mm radius
3000	3630	497*	-	-	-
2000	4070	526*	-	492*	510*
1000	4270	565*	-	722*	576*
Ground	4150	614*	1614*	918*	648*
-1000	3600	665*	1559*	937*	-
-2000	2550	697*	1070*	-	-

\* Rated hydraulic lift capacity

**RATED LIFT CAPACITY OVER BLADE, BLADE UP**

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius	Lift at 4000 mm radius
3000	3630	421	-	-	-
2000	4070	344	-	492*	357
1000	4270	321	-	543	356
Ground	4150	334	939	526	353*
-1000	3600	409	1059	545	-
-2000	2550	697*	1070*	-	-

\* Rated hydraulic lift capacity

**RATED LIFT CAPACITY OVER SIDE, BLADE UP**

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius	Lift at 4000 mm radius
3000	3630	346	-	-	-
2000	4070	295	-	492*	310
1000	4270	271	-	457	298
Ground	4150	280	750	435	296
-1000	3600	338	804	433	-
-2000	2550	697*	1070*	-	-

\* Rated hydraulic lift capacity

## Performance

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Digging force, dipperstick (ISO 6015)	16200 N
Digging force, long dipperstick (ISO 6015)	13470 N
Digging force, bucket (ISO 6015)	23720 N
Drawbar pull	29023 N
Ground pressure with rubber tracks	25.00 kPa
Ground pressure with steel tracks	26.20 kPa

## Cycle Times

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Boom raise time	3.8 s
Boom lower time	4.4 s
Bucket curl time	2.6 s
Bucket dump time	2.0 s
Dipperstick retract time	3.1 s
Dipperstick extend time	2.3 s
Boom swing left time	4.1 s
Boom swing right time	5.6 s
Blade raise time	2.4 s
Blade lower time	3.1 s
Slew rate	9.3 RPM

## Weights

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Operating weight with cab and bucket (ISO 6016)	2705 kg
Transport mass (no attachment)	2571 kg
Weight reduction with canopy	-118 kg
Additional weight for steel tracks	130 kg
Additional weight for long dipperstick	10 kg
Additional weight for heavy counterweight:	123 kg

## Engine

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Make / model	Kubota / D1105-E4B (Stage V)
Fuel	Diesel
Cooling	Liquid, forced circulation
Maximum power @ 2400 rpm (ISO 14396)	15.4 kW
Maximum governed speed	2400.0 RPM
High idle speed	2550.0 RPM
Low idle speed	1150.0 RPM
Maximum torque (SAE)	71.2 Nm
Number of cylinders	3
Displacement	1123 cm <sup>3</sup>
Bore	78.0 mm
Stroke	78.4 mm
Air filter	Dry, dual element, replaceable paper cartridge with safety element and restriction indicator
Ignition	Diesel-compression



## Electrical

Alternator	12 VOLTS 65 AMP - WITH INTERNAL REGULATOR
Battery	12 VOLT NEGATIVE GROUND - COLD CRANKING CURRENT 500 AMPS AT -18°C (0°F) - 90 MINUTES RESERVE CAPACITY [SAE]
Starter	12 VOLT 2 kW POSITIVE SHIFT DRIVE

## Hydraulic System

Pump type	Dual outlet variable displacement piston pump with gear pumps
Auxiliary (AUX1) flow	50.00 L/min
Total hydraulic capacity	87.00 L/min
Piston pump capacity	30.00 L/min
Piston pump capacity	30.00 L/min
Gear pump capacity	20.00 L/min
Gear pump capacity	6.75 L/min
Swing lock release pressure	191.00 bar
Auxiliary (AUX2) relief	179.00 bar
Auxiliary (AUX1) relief	180.00 bar
Port relief pressure for boom, bucket and dipperstick circuits	240.00 bar
Control valve	10-spool (OPTIONALLY 11), parallel series type, open center
Hydraulic filter	Full-flow replaceable — 3 µm synthetic media element
Fluid lines	SAE standard tubelines, hoses, and fittings
Auxiliary (AUX2) flow	20.00 L/min

## Hydraulic Cylinders

Boom cylinder	Cushion up
Boom cylinder bore	69.9 mm
Boom cylinder rod	41.4 mm
Boom cylinder stroke	546.0 mm
Dipperstick cylinder	Cushion up & cushion retract
Dipperstick cylinder bore	69.9 mm
Dipperstick cylinder rod	41.4 mm
Dipperstick cylinder stroke	492.0 mm
Bucket cylinder	No cushion
Bucket cylinder bore	57.2 mm
Bucket cylinder rod	31.8 mm
Bucket cylinder stroke	445.0 mm
Boom swing cylinder	Cushion left and right
Boom swing cylinder bore	69.8 mm
Boom swing cylinder rod	38.1 mm
Boom swing cylinder stroke	429.0 mm
Blade cylinder	No cushion
Blade cylinder bore	82.6 mm
Blade cylinder rod	44.5 mm
Blade cylinder stroke	170.0 mm

## Buckets

Width	Weight (kg)	Rated capacity (L)
STD 23 cm	44.9	24
STD 30 cm	51.4	35
STD 40 cm	60.9	52
STD 45 cm	64.7	60
STD 50 cm	68.6	69
STD 60 cm	78.1	86
STD 70 cm	87.5	103
HD 30 cm	53.2	35
HD 60 cm	70.4	69
HD 70 cm	79.9	86

## Slew System

Boom swing, left	70.0°
Boom swing, right	55.0°
Slew circle	Single row shear-type ball bearings with internal gear
Slew drive	GEAR PUMP CONNECTED TO A PLANETARY DRIVE

## Drive System

Travel motor	Each track is driven by a hydraulic axial piston motor
Drive reduction	41.9:1 TWO STAGE PLANETARY

## Traction

Track width	300.0 mm
Track adjusters	Grease type with shock absorbing recoil springs
Track type, standard	Half-pitch, rubber (directional type)
Track type, optional	Steel, triple grouser shoe
Travel speed, low range	2.5 km/h
Travel speed, high range	4.3 km/h
Undercarriage	CRAWLER-TRACTOR DESIGN SEALED TRACK ROLLERS WITH BOX-SECTION TRACK ROLLER FRAME GREASE TYPE TRACK ADJUSTERS WITH SHOCK ABSORBING RECOIL SPRINGS
Number of track rollers per side	1 top, 3 bottom
Gradeability	30.0°

## Brakes

Parking brake	Spring applied, hydraulically released, multi-disk brake
Slew brake	Spring applied, hydraulically released
Travel brake	HYDRALIC LOCK ON MOTOR

## Fluid Capacities

Fuel reservoir	34.40 L
Hydraulic reservoir	10.20 L
Final drive case (each)	0.60 L

## Fluid Specifications

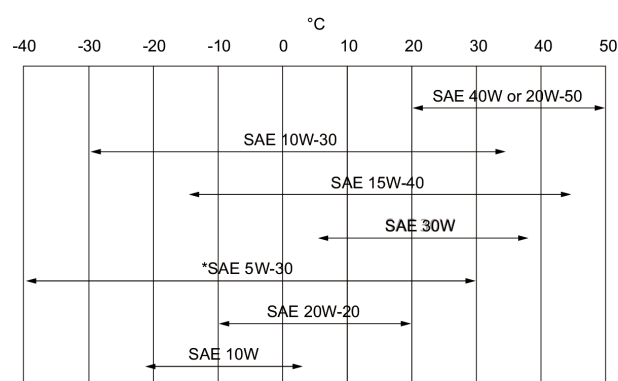
Engine coolant

Propylene glycol/water mix (53% - 47%) with freeze protection to -37°C

5 L can - 6904844A, 25 L container - 6904844B, 209 L drum - 6904844C, 1000 L tank - 6904844D

Engine oil

Oil must meet API Service Classification of CD, CE, CF4, CG4, or better. Recommended SAE viscosity number for anticipated temperature range.



Hydraulic fluid

\* Can be used only when available with appropriate diesel rating. For synthetic oil use the recommendation from the oil manufacturer.

Bobcat Superior SH, 5 L can - 6904842A, 25 L container - 6904842B, 209 L drum - 6904842C, 1000 L tank - 6904842D

Bobcat Bio Hydraulic, 5 L can - 6904843A, 25 L container - 6904843B, 209 L drum - 6904843C, 1000 L tank - 6904843D

Motor oil is not an acceptable alternative fluid.

## Controls

Engine

Hand lever on right hand side

Starting

Key type starter and shutdown switch

Blade

Right hand lever

Boom swing

Electric switch in left joystick

Hydraulics

Two joysticks control boom, bucket, dipperstick and upper structure slew

Auxiliary hydraulics

Electric switch in right joystick (left joystick for second auxiliary)

Upper structure slew lock for holding and service

Hydraulic lock on motor

Steering

Direction and speed controlled by two pilot-operated hand levers or two foot pedals

## Instrumentation

- Charging system indicator
- Engine oil pressure indicator
- Engine temperature gauge
- Fuel gauge

- Hour meter
- Hour meter, resettable
- Hydraulic system indicator
- Tachometer
- Engine throttle
- Auto idle switch
- Windshield wiper/washer switch
- High travel speed indicator
- Work light switch
- Work light indicator
- Battery kill switch

### Serviceability

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Fuel filler is external and has key lock for vandal proofing

Access is available to the following through the rear tailgate or side access hood:

- Air cleaner with indicator
- Battery
- Cooling system (engine oil and hydraulic oil coolers) for cleaning
- Control valve
- Engine oil and fuel filters
- Engine oil level
- Fuel filler
- Hydraulic valve bank
- Starter
- Sight gauges for hydraulic level

Central grease point for swing bearing, swing pinion, and offset cylinder

Tailgate and access cover have locks for vandal-proofing.

Easy access to all grease points.

### Standard Features

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- 1550 mm dozer blade
- 300 mm rubber tracks
- Adjustable double acting auxiliary hydraulic (AUX1) with Quick Couplers
- Battery disconnect switch
- Blade float feature
- Clamp ready
- Control console locks
- Cupholder
- Dual Direction Detent
- Engine/hydraulic monitor with shutdown
- Foldable and ergonomic travel pedals
- Full fuel warning alarm
- Grease gun holder
- Horn
- Machine IQ (telematic)
- Proportional fingertip auxiliary and boom swing offset hydraulic control
- Retractable seat belt
- Suspension seat with high back
- Storage compartment
- TOPS/ROPS/FOPS canopy \* 1
- Two-speed travel with Auto shift
- Upper structure four-point tie down

- Work light (boom)
- Water separator
- Warranty: 24 months, 2000 hours (whichever occurs first)

## Options

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- Comfort package cab (Cloth susp. seat & Dlx displ.)
- A-SAC package (Tilt coupler lines, Dlx displ.)
- Object handling package (Valves, OWD, Lifteye)
- TOPS/ROPS/FOPS cab
- Long dipperstick
- Heavy counterweight
- Steel tracks
- AUX1 direct return to tank
- AUX2 hydraulics
- AUX1/AUX2/Drain on arm
- Bucket valves (AUX3) kit
- Hydr. coupler lines (AUX5)
- Case drain line
- Auto idle
- Keyless ignition
- Travel motion alarm
- AM/FM MP3 radio
- Additional halogen lights
- LED lights set
- Beacon
- Special Application kit
- L/R mirrors
- Clamp w/ AUX1 valve
- Klac D and MS03 coupler
- Bobcat hydr. pin grabber

## Attachments

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- |                                   |                           |
|-----------------------------------|---------------------------|
| • Auger Accessories               | • Grading Buckets, Klac   |
| • Augers                          | • Grading Buckets, Pin-on |
| • Breaker Accessories             | • Hydraulic Clamps        |
| • Breakers                        | • Klac                    |
| • Clayspade Buckets, Klac         | • Laser Equipment         |
| • Clayspade Buckets, Pin-on       | • Skeleton Bucket, Klac   |
| • Clayspade Buckets, SW           | • Skeleton Bucket, Pin-On |
| • Digging Buckets, German Profile | • Skeleton Bucket, SW     |
| • Digging Buckets, Klac           | • Tilt Buckets, Klac      |
| • Digging Buckets, Pin-on         | • Tilt Buckets, Pin-on    |
| • Grading Buckets, German Type    | • Tilt Buckets, SW        |

## Environmental

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Noise level LpA(EU Directive 2006/42/EC)	77 dB(A)
Noise level LWA(EU Directive 2000/14/EC)	93 dB(A)
Whole body vibration (ISO 2631–1)	0.18 ms <sup>-2</sup>
Hand-arm vibration (ISO 5349–1)	0.51 ms <sup>-2</sup>

1. Roll Over Protective Structure (ROPS) – Meets requirements of ISO 3471. Tip Over Protective Structure (TOPS) – Meets requirements of ISO 12117. Falling Object Protective Structure (FOPS) - Meets requirements of ISO 3449.

## Safety

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Retractable seat belt, standard  
Operator cab, standard

Grab handles, standard  
Safety tread, standard

Front working lights, standard  
Control lockout, standard

Upper carriage slew lock, standard

Pedal lock, standard  
Travel motion alarm, optional  
Special applications kit, optional  
Operator's handbook, standard

Should always be worn when operating the excavator  
A four-post canopy or optional closed cab. Roll Over Protective Structure (ROPS) – Meets requirements of ISO 3471. Tip Over Protective Structure (TOPS) – Meets requirements of ISO 12117. Falling Object Protective Structure (FOPS) - Meets requirements of ISO 3449.  
Should always be used when entering/exiting excavator.  
Slip resistant tread on canopy threshold to be used when entering/exiting excavator.  
Use for indoor and low light operation.  
Operator console locks out work group and travel functions when in the upright position.  
An automatic disk brake locks the upper structure to the undercarriage for transport.  
Prevents activation of the boom swing function.  
For use when required  
Restricts objects and material from entering cab openings.  
Weather-resistant operator handbook attached to the inside of the cab, providing operational instructions and warnings decals with pictorials and international symbols.