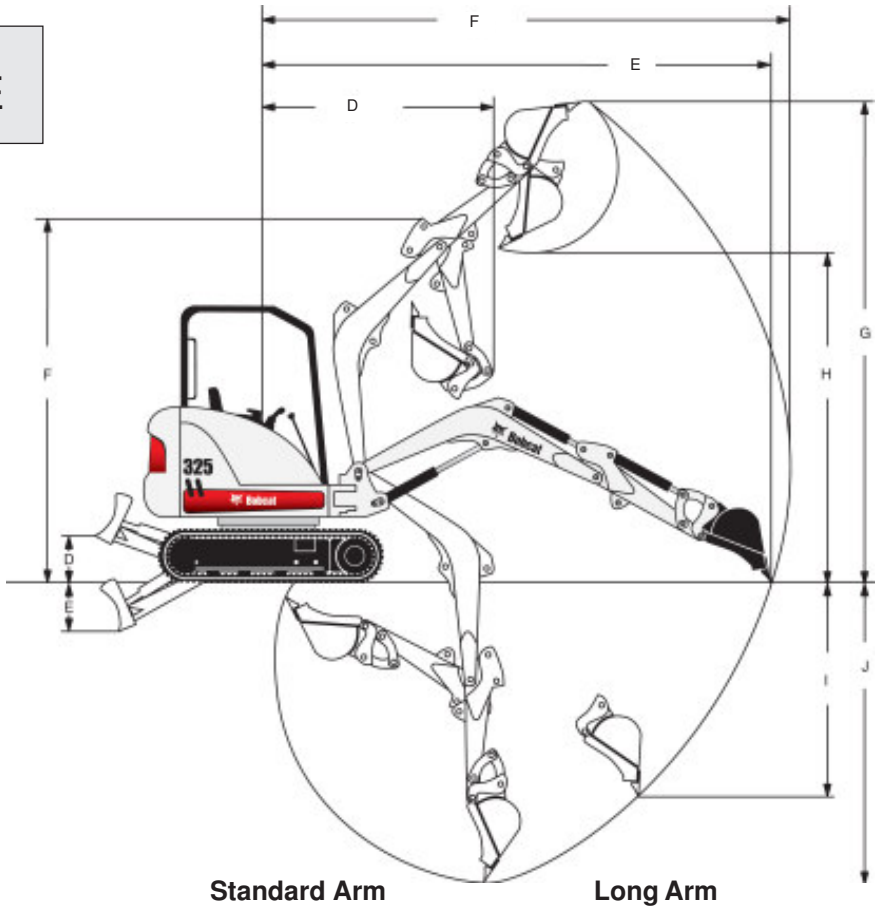
# 325 Compact Excavator Specifications

## Working Range

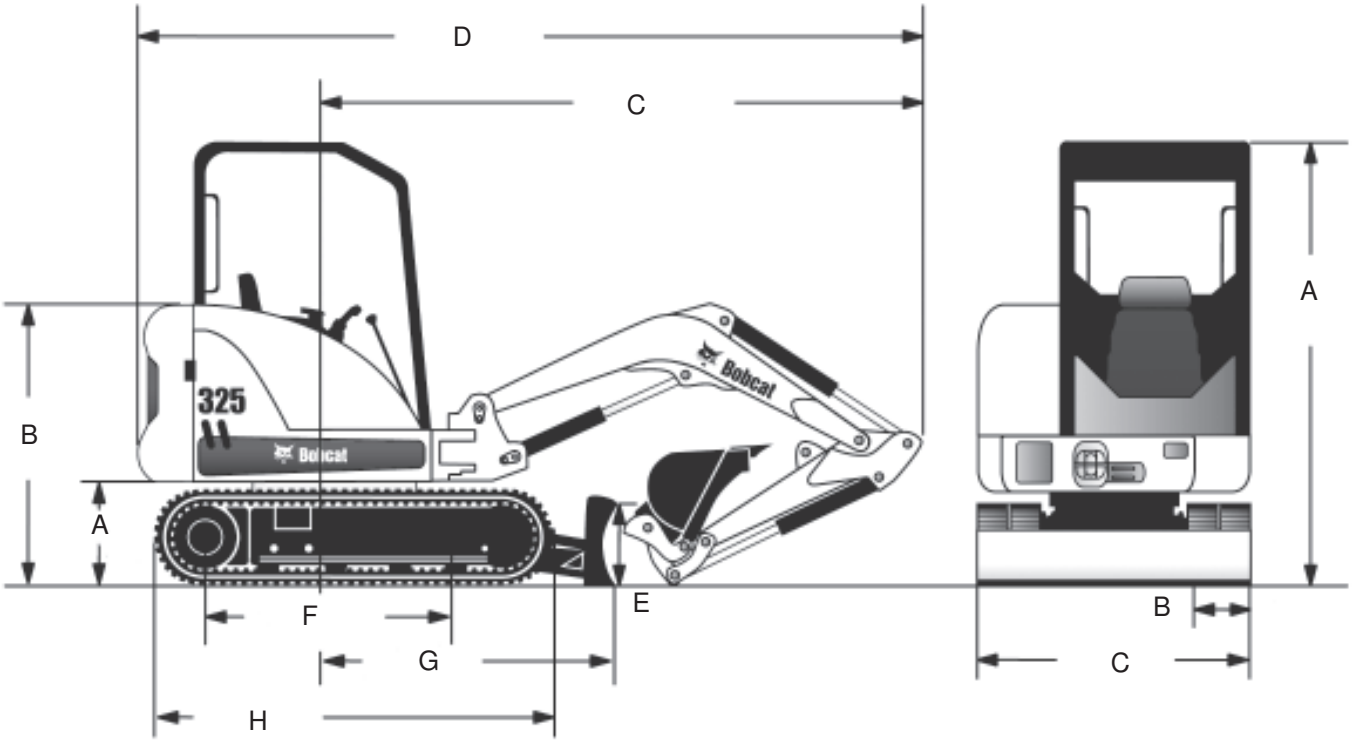



| | | Standard Arm | Long Arm |
|---|---|---|---|
| A. | Maximum Blade Depth | 16.9" (429 mm) | 16.9" (429 mm) |
| B. | Maximum Blade Height | 15.5" (393 mm) | 15.5" (393 mm) |
| C. | Maximum Height of Working Equipment with Arm Retracted | 121.5" (3087 mm) | 121.5" (3087 mm) |
| D. | Maximum Working Equipment Radius with Boom @ Maximum Height | 75.5" (1919 mm) | 78.5" (1993 mm) |
| E. | Maximum Reach at Ground level | 166.7" (4233 mm) | 178.3" (4529 mm) |
| F. | Maximum Radius of Working Equipment | 171.4" (4353 mm) | 182.7" (4639 mm) |
| G. | Maximum Bucket Tooth Height | 159.6" (4055 mm) | 167.4" (4251 mm) |
| H. | Maximum Dump Height | 109.4" (2779 mm) | 116.9" (2968 mm) |
| I. | Maximum Depth of Vertical Wall which can be Excavated | 70.9" (1801 mm) | 82.5" (2096 mm) |
| J. | Maximum Dig Depth | 100.6" (2555 mm) | 112.6" (2859 mm) |
| | Bucket Pivot Angle | 175° | 176° |

## Machine Performance

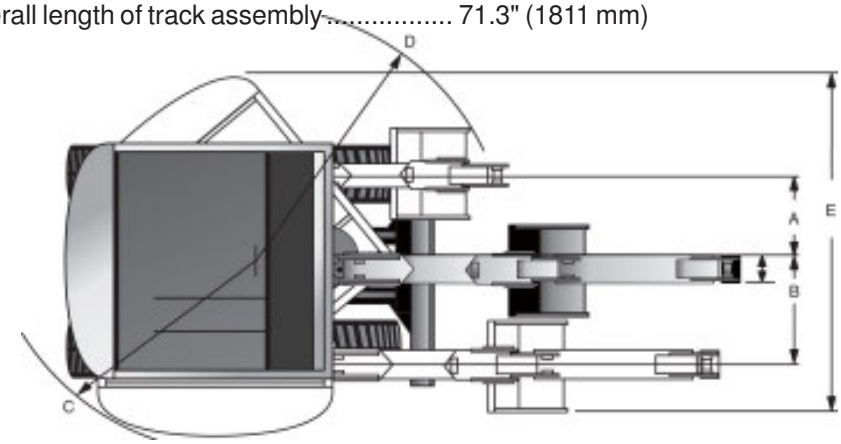
| | Standard Arm | Long Arm |
|---|---|---|
| Operating Weight (includes standard equipment and 20" bucket) | | |
| with ROPS Canopy | 6506 lbs. (2951 kg.) | 6896lbs. (3128 kg.) |
| with ROPS Cab | 6769 lbs. (3070 kg.) | 7159 lbs. (3058 kg.) |
| Travel Speed | | |
| Low Range | 1.2 mph (1,9 km/hr) | 1.2 mph (1,9 km/hr) |
| High Range | 1.9 mph (3,1 km/hr) | 1.9 mph (3,1 km/hr) |
| Digging Force | | |
| High Range | 1.9 mph (3,1 km/hr) | 1.9 mph (3,1 km/hr) |
| Arm | 3140 lbf. (13967 N) | 2649lbf. (11783 N) |
| Bucket | 4766 lbf. (21200 N) | 4766 lbf. (21200 N) |

# DIMENSIONS




A. Clearance, upperstructure to groundline ..... 20.9" (532 mm)
B. Groundline to top of engine cover ..... 58.1" (1476 mm)
C. Minimum radius in travel position ..... 119.4" (3034 mm)
C. Minimum radius in travel position (long) .... 118.4" (3007 mm)
D. Overall length in travel position ..... 165.2" (4196 mm)
D. Overall length in travel position (long arm) . 164.2" (4170 mm)
E. Blade height ..... 14.9" (378 mm)
F. Length of track on ground ..... 54.3" (1380 mm)
G. Machine centerline to blade ..... 56.7" (1440 mm)
H. Overall length of track assembly ..... 71.3" (1811 mm)

A. Height ..... 92.8" (2357 mm)
B. Track width ..... 12.6" (320 mm)
C. Blade width ..... 55.0" (1398 mm)
Track Lug Height ..... 0.98" (25 mm)




A. Machine centerline to working equipment centerline, left hand rotation ..... 15.7" (398 mm)
B. Machine centerline to working equipment centerline, right hand rotation ..... 24.1" (611 mm)
C. Minimum turning radius ..... 54.7" (1388 mm)
D. Swing clearance, rear of upperstructure ..... 47.3" (1200 mm)
E. Working width maximum right hand rotation ..... 73.5" (1867 mm)
F. Tailswing overhang ..... 19.8" (503 mm)

# STANDARD FEATURES

4' 7" Dozer Blade
12.6" Half Pitch Rubber Track
Auxiliary Hydraulics with Quick Couplers
Control Console Locks
Control Pattern Selector Valve (ISO/STD)
Engine Shutdown System
Fingertip Auxiliary Hydraulic Control
Horn
Hydraulic Joystick Controls
Retractable Seat Belt
Spark Arrestor Muffler
Suspension Seat
*TOPS/ROPS Canopy
Two-Speed Travel
Vandalism Protection
Working Lights
X-Change™ (Attachment Mounting System)
Warranty: 12 Months, Unlimited Hours

***Roll Over Protective Structure (ROPS) - Meets Requirements of SAE-J1040C**
***Tip Over Protective Structure (TOPS) - Meets Requirements of ISO/DIS 12117**

# OPTIONS/ ACCESSORIES

AM/FM Stereo Radio
Cab/Canopy Light Kit
Cab Enclosure, Vinyl
Catalytic Exhaust Purifier
Counterweight
FOPS Kit
Keyless Start
Lifting Chain Kit
Special Applications Kit
TOPS/ROPS Cab with Heater
Tracks: 11.8" Steel
Travel Motion Alarm

# INSTRUMENTATION

***Right of Operator Seat***
Auxiliary Mode Indicator
Console Indicator
Hourmeter/Job Clock/Tachometer
Engine/Hydraulic System Indicators
Engine Temperature Gauge
Fuel Gauge
Low Fuel Indicator
Pre-Heat Indicator
Two-Speed Indicator

# UNDERCARRIAGE

| | |
|---|---|
| Undercarriage | Crawler Tractor Design |
| Track Rollers | Sealed with Reinforced Box-Section Track Roller Frame |
| Track Adjusters | Grease Type with Shock Absorbing Recoil Springs |
| Track Type (Standard) | Half-Pitch Rubber |
| Track Width | 12.6" (320 mm) |
| Track Type (Optional) | Steel Shoe |
| Track Width | 11.8" (300 mm) |
| Number of Track Rollers | 3 each side |
| Ground Pressure-rubber | 4.12 PSI (28,4 kPa) |
| Ground Pressure-steel | 4.22 PSI (29,1 kPa) |

# ENGINE/ELECTRICAL

| | |
|---|---|
| Make/Model | Kubota/D1703 |
| Fuel/Cooling | Diesel/Liquid |
| Horsepower (SAE Gross) | 27.4 HP (20,4 kW) |
| Horsepower (SAE Net) | 26.3 HP (19,6 kW) |
| Maximum Governed RPM | 2200 RPM |
| Torque @ 1600 RPM (SAE Net) | 76.3 ft. –lbs. (103,4 Nm) |
| Number of Cylinders | 3 |
| Displacement | 100.5 cu. in. (1,65 L) |
| Bore x Stroke | 3.43 x 3.64 in. (87 x 92,4 mm) |
| Lubrication | Forced |
| Filter | Cartridge Type - Full Flow |
| Air Cleaner | Dry replaceable cartridge with safety element |
| Alternator | 12 volt; 40 amps |
| Battery | 12 volt; 500 cold cranking amps @ 0°F (-18°C); 75 minute reserve capacity |
| Starter | 12 volt, 2.7 HP (1,4 kW); Gear Reduction Type |

# HYDRAULIC SYSTEM

| | |
|---|---|
| Pump Type | Dual Outlet Piston, with Gear Pump |
| Pump Capacity | 1 x 7.0 GPM (26,6 L/min)<br>2 x 5.2 GPM (19,8 L/min) |
| System Relief Pressure | 2500 PSI (17237 kPa) |
| Auxiliary Circuits | 2500 PSI (17237 kPa) |
| Auxiliary Flow | 12.3 GPM (46,4 L/min) |
| Control Valves | (1) 10-Spool Parallel Series |
| Drive Motors | (2) Axial Piston Motors |
| Swing Motor | Orbit Motor |
| Slew Speed | 9.18 RPM |
| Boom Swing (Left) | 90° |
| Boom Swing (Right) | 50° |

*Hydraulic Function Times*

| | | | | |
|---|---|---|---|---|
| Bucket | Curl | 2.0 Seconds | Dump | 1.5 Seconds |
| Arm | Retract | 3.0 Seconds | Extend | 2.2 Seconds |
| Boom | Raise | 3.4 Seconds | Lower | 4.5 Seconds |
| Boom Swing | Left | 5.8 Seconds | Right | 5.1 Seconds |
| Blade | Raise | 2.4 Seconds | Lower | 2.4 Seconds |

# DRIVE SYSTEM

| | |
|---|---|
| Final Drive | Each track is driven by a hydrostatic axial piston motor |
| Type of Reduction | Two stage planetary gear reduction 44.3:1 |
| Maximum Drawbar Pull | 5480 lbf. (24376 N) |
| Maximum Gradability | 30° |

# CAPACITIES

| | |
|---|---|
| Fuel Tank | 14.1 gal. (53,3 L) |
| Cooling System | 5.5 qts (5,2 L) |
| Engine Oil and Filter | 5.75 qts. (5,4 L) |
| Hydraulic Reservoir | 4.8 gal. (18,2 L) |

# CONTROLS

| | |
|---|---|
| Vehicle Steering | Direction and speed controlled by two hand levers or foot levers |
| Excavator Functions | Two hydraulic joysticks control boom, arm, bucket and cab swing. Foot pedal controls boom swing. The blade is controlled by a seperate lever. Switches on right hand joystick control auxiliary hydraulic functions. |
| Service Brake (Travel) | Hydraulic lock on motor |
| Parking Brake (Travel) | Hydraulic lock on motor |
| Service Brake (Swing) | Hydraulic lock on motor |
| Holding Brake (Swing) | Pin lock |

# HYDRAULIC CYLINDERS

| | *Bore Diameter* | *Rod Diameter* | *Stroke Diameter* |
|---|---|---|---|
| Boom (cushion up) | 3.00 in. (76,2 mm) | 1.62 in. (41,3 mm) | 18.68 in. (423,7 mm) |
| Arm (cushion extend) | 3.00 in. (76,2 mm) | 1.50 in. (38,1 mm) | 19.11 in. (485,4 mm) |
| Bucket | 2.50 in. (63,5 mm) | 1.50 in. (38,1 mm) | 18.34 in. (465,8 mm) |
| Boom Swing (cushion left and right) | 2.38 in. (60,3 mm) | 1.38 in. (34,9 mm) | 15.75 in. (400 mm) |
| Blade | 2.75 in. (69,9 mm) | 1.50 in. (38,1 mm) | 7.68 in. (195 mm) |

# SERVICEABILITY

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 Fill
- Hydraulic valve bank
- Starter
- Sight gauges for hydraulic level

Tailgate and access cover have locks for vandal proofing.
Easy access to all grease points.
Central grease point for swing bearing, swing pinion, and offset cylinder

# WARRANTY

| | |
|---|---|
| One Year Unlimited Hours | Standard |
| 24 Month, 2000 Hour Limit | Optional |
| 36 Month, 3000 Hour Limit | Optional |
| 60 Month, 5000 Hour Limit (Municipalities Only) | Optional |

# ATTACHMENTS

| | |
|---|---|
| Auger | Hydraulic Clamp |
| Grading Blade | Packer Wheel |
| Grading Bucket | Plate Compactor |
| Grapple, 3-Tine | Power Tilt |
| Hydra-Tilt | Ripper |
| Hydraulic Breaker | Trenching Buckets |

# LIFT CHARTS

## WARNING

OVERLOAD CAN TIP THE EXCAVATOR AND CAUSE INJURY OR DEATH

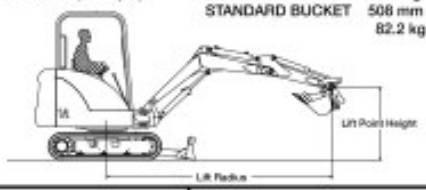
- Do not lift or hold any load that exceeds these ratings at their specified load radii and height.
- Total rated load is shown. The weight of all lifting devices must be deducted to determine the net load that can be lifted.

Where applicable, specifications conform to ISO Standards.
Specifications are subject to change without notice.
Lift Point is bucket hinge point with standard bucket attached and bucket cylinder fully extended.

### EXCAVATOR MODEL 325

CIRCUIT PRESSURES
WORKING 172 bar (2500 psi)
HOLDING 203 bar (2950 psi)

| | | |
|---|---|---|
| BOOM LENGTH | 2000 mm | (78.7 in) |
| ARM LENGTH | 1050 mm | (41.3 in) |
| COUNTERWEIGHT | 24.9 kg | (55.0 lb) |
| STANDARD BUCKET | 508 mm | (20.0 in) |
| | 82.2 kg | (181.3 lb) |




| LIFT POINT HEIGHT | RATED LIFT CAPACITY OVER BLADE, BLADE DOWN - kg (lb) | | | RATED LIFT CAPACITY OVER BLADE, BLADE UP - kg (lb) | | | RATED LIFT CAPACITY OVER SIDE, BLADE UP - kg (lb) | | |
|---|---|---|---|---|---|---|---|---|---|
| | LIFT RADIUS - mm (in) | | LIFT @ MAXIMUM RADIUS, kg (lb) @ mm (in) | LIFT RADIUS - mm (in) | | LIFT @ MAXIMUM RADIUS, kg (lb) @ mm (in) | LIFT RADIUS - mm (in) | | LIFT @ MAXIMUM RADIUS, kg (lb) @ mm (in) |
| mm (in) | 2000 (78.7) | 3000 (118.1) | | 2000 (78.7) | 3000 (118.1) | | 2000 (78.7) | 3000 (118.1) | |
| 3000 (118.1) | | | *326 (719) @ 2870 (113) | | | *311 (686) @ 2870 (113) | | | *326 (719) @ 2870 (113) |
| 2000 (78.7) | | *365 (806) | *350 (772) @ 3510 (138) | | *355 (782) | *335 (738) @ 3510 (138) | | *361 (796) | *343 (756) @ 3510 (138) |
| 1000 (39.4) | *909 (2004) | *494 (1088) | *374 (826) @ 3710 (146) | *886 (1955) | *474 (1044) | 280 (618) @ 3710 (146) | 705 (1553) | *470 (1036) | 267 (589) @ 3710 (146) |
| Ground | *1111 (2449) | *567 (1249) | *414 (913) @ 3560 (140) | 777 (1714) | 405 (893) | 305 (672) @ 3560 (140) | 660 (1455) | 367 (808) | 274 (603) @ 3560 (140) |
| -1000 (-39.4) | *936 (2063) | *446 (983) | *437 (964) @ 3010 (118) | *936 (2063) | *446 (983) | *433 (954) @ 3010 (118) | 748 (1648) | | *431 (951) @ 3010 (118) |

41644

* Rated Hydraulic Lift Capacity

SW 6809677

## WARNING

OVERLOAD CAN TIP THE EXCAVATOR AND CAUSE INJURY OR DEATH

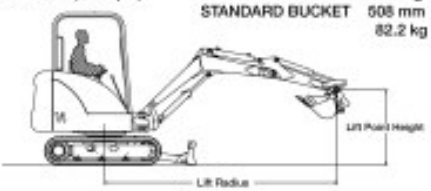
- Do not lift or hold any load that exceeds these ratings at their specified load radii and height.
- Total rated load is shown. The weight of all lifting devices must be deducted to determine the net load that can be lifted.

Where applicable, specifications conform to ISO Standards.
Specifications are subject to change without notice.
Lift Point is bucket hinge point with standard bucket attached and bucket cylinder fully extended.

### EXCAVATOR MODELS
### 325 EQUIPPED WITH LONG ARM
### 328

CIRCUIT PRESSURES
WORKING 172 bar (2500 psi)
HOLDING 203 bar (2950 psi)

| | | |
|---|---|---|
| BOOM LENGTH | 2000 mm | (78.7 in) |
| ARM LENGTH | 1350 mm | (53.1 in) |
| COUNTERWEIGHT | 166 kg | (366 lb) |
| STANDARD BUCKET | 508 mm | (20.0 in) |
| | 82.2 kg | (181.3 lb) |




| LIFT POINT HEIGHT | RATED LIFT CAPACITY OVER BLADE, BLADE DOWN - kg (lb) | | | RATED LIFT CAPACITY OVER BLADE, BLADE UP - kg (lb) | | | RATED LIFT CAPACITY OVER SIDE, BLADE UP - kg (lb) | | |
|---|---|---|---|---|---|---|---|---|---|
| | LIFT RADIUS - mm (in) | | LIFT @ MAXIMUM RADIUS, kg (lb) @ mm (in) | LIFT RADIUS - mm (in) | | LIFT @ MAXIMUM RADIUS, kg (lb) @ mm (in) | LIFT RADIUS - mm (in) | | LIFT @ MAXIMUM RADIUS, kg (lb) @ mm (in) |
| mm (in) | 2000 (78.7) | 3000 (118.1) | | 2000 (78.7) | 3000 (118.1) | | 2000 (78.7) | 3000 (118.1) | |
| 3000 (118.1) | | | *270 (594) @ 3240 (128) | | | *266 (586) @ 3240 (128) | | | *270 (594) @ 3240 (128) |
| 2000 (78.7) | | *295 (651) | *296 (652) @ 3800 (150) | | *287 (632) | *285 (629) @ 3800 (150) | | *290 (639) | *294 (649) @ 3800 (150) |
| 1000 (39.4) | *785 (1731) | *425 (938) | *322 (709) @ 3990 (157) | *756 (1666) | *412 (908) | *313 (689) @ 3990 (157) | *768 (1693) | *422 (931) | *320 (706) @ 3990 (157) |
| Ground | *1049 (2313) | *532 (1174) | *346 (763) @ 3850 (152) | 827 (1822) | *516 (1137) | *345 (761) @ 3850 (152) | 781 (1721) | 399 (880) | 279 (615) @ 3850 (152) |
| -1000 (-39.4) | *975 (2149) | *479 (1057) | *379 (835) @ 3360 (132) | *964 (2125) | *481 (1061) | *378 (833) @ 3360 (132) | 783 (1727) | *484 (1067) | *374 (825) @ 3360 (132) |

* Rated Hydraulic Lift Capacity

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# SAFETY

Retractable Seat Belt (Std.) ..... Should always be worn when operating the excavator
Operator Cab (Std.) ..... A four post canopy or optional enclosed cab provided.Four post canopy and cab shall meet Roll Over Protective Structure (ROPS) in accordance with SAE J1040 and Tip Over Protective Structure (TOPS) in accordance with ISO 12117. An optional Falling Object Guard Structure (FOGS) shall be in accordance with ISO 10262 Level 1 for top guard.

***Level I – Acceptance is intended for protection from falling bricks, small concrete blocks and hand tools encountered in operations such as highway maintenance, landscaping and other construction site services.***

Grab Handles (Std.) ..... Should always be used when entering/exiting excavator.
Safety Tread (Std.) ..... Slip resistant tread on canopy threshold to be used when entering/exiting excavator.
Front Working Lights (Std.) ..... Use for indoor and low light operation.
Control Lockout (Std.) ..... Operator console shall lock out work group and travel functions when in the upright position.
House Swing Lock (Std.) ..... A lock pin shall be provided to lock the upper carriage to the undercarriage for transporting.
Pedal Lock (Std.) ..... Pedal lock shall prevent activation of boom swing function.
Travel Motion Alarm (Opt.) ..... For use when required.
Special Applications Kit (Opt.) ..... Restricts objects and material from entering cab openings.
Operator's Handbook ..... Weather resistant operator handbook written in English will be attached to inside of cab, providing operational instructions and warnings by decals with pictorials and international symbols plus some messages in four basic languages: English, French, German and Spanish.

# TRAINING RESOURCES

*Bobcat Excavator Operator Training Course*
4-hour course provides video, classroom and hands-on training
*Bobcat Excavator Service Safety Training Course*
2-hour course provides video, classroom and hands-on training