

## Engine

Isuzu AU-4LE2X Tier 3 turbocharged diesel engine with electronic fuel control, 54 Net HP (40 kW), 2.2 Liter displacement, 4-cylinder, water-cooled, EGR with cooler, air-to-air intercooler, 24-volt system, 50 amp alternator, Emergency Engine Stop, Green Plug oil drain, double element air filter.

SAE net horsepower .....	54 hp (40 kW) @ 2000 rpm
Displacement .....	133 cu in (2,179 cc)
Maximum torque .....	155 lbf-ft (210 Nm)
Starter .....	24V-3.2kW
Alternator .....	50 amp
Battery .....	64 amp-hours

## Cab and Controls

Cab with a/c and heat with defrost, analog gauge package, illuminated softtouch switches, low-effort controls, control pattern changer, blade control, one-touch idle, safety glass windows, intermittent windshield wiper with washer, polycarbonate roof hatch, sun visor, shockless cab suspension with four fluid mountings, KAB® reclining suspension seat, AM/FM radio, dome light, seat belt, cup holder, storage compartments, floor mat, footrests, cigarette lighter, ashtray, 12-volt outlet, travel alarm, handrail, mirrors. Common key locks, tool box, 70W work light, non-skid surface pads, handrail.

A/C output .....	13,490 BTU/hr
Heater output .....	12,900 BTU/hr
Sound level (inside cab) .....	75.0 dB(A)
Sound level (exterior) .....	96.0 dB(A)

## Hydraulic System

Open-center system, two variable displacement axial piston pumps and one gear pump for pilot controls, main control valve with one 4-spool valve and one 5-spool valve with auxiliary spool, 1-spool valve for blade and auxiliary, oil cooler, boom and arm holding valves, attachment cushion, o-ring face seals, 6 micron return filter.

### Hydraulic Pumps

Maximum flow .....	2 x 18.0 gpm (2 x 68 l/min)
Pilot pump maximum flow .....	5.7 gpm (21 l/min)
Blade pump maximum flow .....	6.4 gpm (24 l/min)

### Relief Valve Settings

Boom/arm/bucket .....	4,260 psi (294 bar)
Swing circuit .....	3,280 psi (226 bar)
Pilot pump working circuit pressure .....	610 psi (42 bar)
Blade pump working circuit pressure .....	3,280 psi (226 bar)

### Hydraulic Cylinders

	number of cylinders – bore x rod x stroke
Boom .....	1 - 4.3" x 2.8" x 35.9" (110 mm x 70 mm x 911 mm)
Arm .....	1 - 3.7" x 2.4" x 31.4" (95 mm x 60 mm x 797 mm)
Offset Arm Cylinder .....	1 - 3.7" x 2.4" x 27" (95 mm x 60 mm x 685 mm)
Offset Cylinder .....	1 - 3.7" x 2.2" x 12.4" (95 mm x 55 mm x 315 mm)
Bucket .....	1 - 3.3" x 2.2" x 26.2" (85 mm x 55 mm x 665 mm)
Blade .....	1 - 3.9" x 2.4" x 7.1" (100 mm x 60 mm x 180 mm)

### Hydraulic Oil Filtration

Return filter .....	6 micron
Pilot filter .....	8 micron
Suction screen .....	150 micron



## Swing

Fixed-displacement, axial piston swing motor, planetary gear reduction. Mechanical disc brake and ball bearing with internal gear for turntable.

Swing speed .....	0 – 9.5 rpm
Tail swing .....	4' 1" (1.24 m)
Swing torque .....	12,520 lbf-ft. (17.0 kN•m)

## Undercarriage

X Pattern carbody with 9' 4" (2.85m) LC long undercarriage by 6' 6" (1.99m) track gauge, sealed and strutted track chain, sealed rollers and idlers, two-speed independent hydrostatic travel with compact planetary final drive, disc type brakes, adjustable track tension, swivel guard, 7' 7" (2.32m) hydraulically controlled dozer blade.

Carrier rollers .....	1 per side
Track rollers .....	5 per side
Track link pitch .....	6.06" (154 mm)
Shoes .....	39 per side
Shoe width .....	17.7" (450 mm)
Ground pressure .....	5.07 psi (0.35 Bar)

## Lubricant and Coolant Capacity

Fuel tank .....	26.42 gallons (100.0 Liters)
Hydraulic tank .....	13.21 gallons (50.0 Liters)
Hydraulic system .....	25.70 gallons (97.3 Liters)
Final drive (per side) .....	0.29 gallons (1.1 Liters)
Engine oil .....	2.38 gallons (9.0 Liters)
Cooling system .....	2.69 gallons (10.2 Liters)

## Travel System

Variable-displacement axial piston travel motor, planetary gear reduction final drive, spring-applied hydraulic release disc brake. Max. travel speed .....

## Attachment

Boom .....	12' 8" (3.87 m)
Offset Boom .....	12' 10" (3.92 m)
<b>Available Arms (Excavator)</b>	<b>Digging Force*</b>
• 5' 7" (1.71m) .....	8,610 lbf (38.3 kN)
• 6' 11" (2.12m) .....	7,640 lbf (3 465 kN)
<b>Available Arms (Offset)</b>	<b>Digging Force*</b>
• 5' 9" (1.75m) .....	8,860 lbf (39.4 kN)
Bucket Digging Force .....	12,790 lbf (56.9 kN)

\*Digging force ratings are based on ISO 6015, "Earthmoving Machinery – Hydraulic Excavators – Tool Forces."

## Fuel Usage\*

Heavy .....	1.67 gal / hr (6.32 liter / hr)
Average .....	1.46 gal / hr (5.53 liter / hr)
Light .....	1.15 gal / hr (4.35 liter / hr)

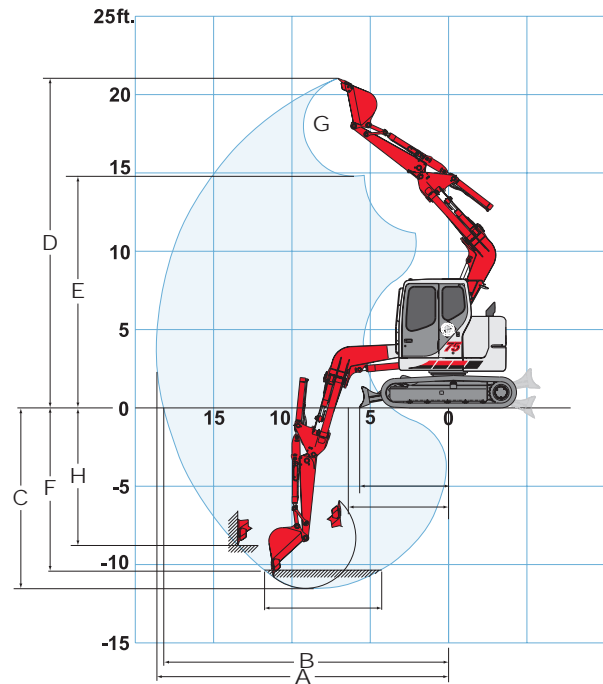
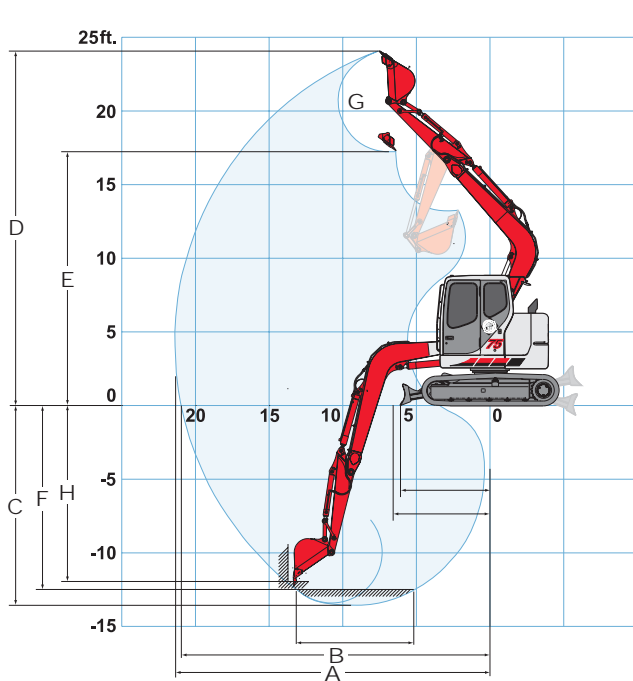
\*Fuel economy varies widely depending on application. "Heavy" represents nearly continuous operation in tough digging applications in SP Mode. "Light" represents easy digging applications utilizing the machine about 50% of the time in SP Mode.

## Operating Weight

<b>Mono Boom Excavator</b> - Working weight with 17.7" steel (450mm) shoes, 12'8"(3.87m) boom, 5'7" (1.71m) arm, 460 lb (210kg) bucket, 2,987 lb (1,355kg) counterweight .....	17,461 lbs. (7 920 kg)
<b>Offset Boom Excavator</b> - working weight with 17.7"(450mm) shoes, 12'10" (3.92m) boom, 5'9" (1.75m) arm, 460 lb (210kg) bucket, 2,987 lb (1,355kg) counterweight .....	18,188 lbs (8,250 kg)

# 75 Spin Ace® Tier III Specifications

## Working Ranges



### 75 MSR Mono Boom

	Machine equipped with 12' 8" (3.87 m) boom	5' 7" Arm (1.71 m)	6' 11" Arm (2.12 m)
A.	Max. digging radius	21' 5" (6.52 m)	22' 8" (6.90 m)
B.	Max. digging radius @ ground level	21' 0" (6.39 m)	22' 3" (6.77 m)
C.	Max. digging depth	13' 7" (4.14 m)	14' 11" (4.54 m)
D.	Max. digging height	24' 1" (7.33 m)	25' 0" (7.62 m)
E.	Max. dumping height	17' 3" (5.25 m)	18' 2" (5.54 m)
F.	Digging depth – 8' (2.44 m) level bottom	12' 6" (3.81 m)	14' 0" (4.26 m)
G.	Bucket wrist angle	177°	177°
H.	Max. vertical wall depth	11' 11" (3.64 m)	13' 5" (4.10 m)

### 75 MSR Offset Boom

	Machine equipped with 12' 10" (3.92 m) boom	5' 9" Arm (1.75 m)
A.	Max. digging radius	21' 4" (6.49 m)
B.	Max. digging radius @ ground level	20' 10" (6.36 m)
C.	Max. digging depth	13' 9" (4.19 m)
D.	Max. digging height	23' 7" (7.20 m)
E.	Max. dumping height	16' 11" (5.15 m)
F.	Digging depth – 8' (2.44 m) level bottom	12' 6" (3.81 m)
G.	Bucket wrist angle	177°
H.	Max. vertical wall depth	10' 8" (3.26 m)

## Bucket Sizes

### 75 Spin® Ace

Bucket Type	Capacity	Width Outside Lip	Weight	# Teeth	Arm Length		
					Mono	Mono	Offset
					5' 7" (1.71 m)	6' 11" (2.12 m)	5' 9" (1.75 m)
ESCO STDP	.24 yd <sup>3</sup> (.18 m <sup>3</sup> )	18" (457 mm)	403 lb. (183 kg)	3	H	H	H
	.35 yd <sup>3</sup> (.27 m <sup>3</sup> )	24" (610 mm)	473 lb. (215 kg)	4	H	H	H
	.45 yd <sup>3</sup> (.34 m <sup>3</sup> )	30" (762 mm)	542 lb. (246 kg)	5	H	M	M
ESCO DITCH	.61 yd <sup>3</sup> (.47 m <sup>3</sup> )	42" (1 067 mm)	596 lb. (270 kg)	0	L	L	N/A
	.71 yd <sup>3</sup> (.54 m <sup>3</sup> )	48" (1 219 mm)	645 lb. (293 kg)	0	L	N/A	N/A
POWER	.24 yd <sup>3</sup> (.18 m <sup>3</sup> )	18" (457 mm)	644 lb. (292 kg)	3	H	H	H
	.34 yd <sup>3</sup> (.26 m <sup>3</sup> )	24" (610 mm)	728 lb. (330 kg)	4	H	H	M
	.45 yd <sup>3</sup> (.34 m <sup>3</sup> )	30" (762 mm)	812 lb. (368 kg)	4	M	L	L
	.55 yd <sup>3</sup> (.42 m <sup>3</sup> )	36" (914 mm)	897 lb. (407 kg)	5	L	N/A	N/A
	.65 yd <sup>3</sup> (.50 m <sup>3</sup> )	42" (1 067 mm)	981 lb. (445 kg)	6	N/A	N/A	N/A

### Approval Code For Arm/Bucket Combinations:

- H - Heavy material (up to 3,370 lbs./ yd<sup>3</sup>)
- M - Medium material (up to 2,700 lbs./ yd<sup>3</sup>)
- L - Light material (up to 2,020 lbs./ yd<sup>3</sup>)
- N/A - Not applicable

# 75 Spin Ace® Tier III Specifications

## Lifting Capacities 75 Spin® Ace

### Mono Boom (Blade off Ground)

#### 5' 7" (1.71 m) Arm

12' 8" (3.87 m) Boom and 462 lb. (210 kg) Bucket

Bucket Hook Height		Radius of Load							
		5' 0" (1.52 m)		10' 0" (3.05 m)		15' 0" (4.57 m)		Cap. at Max. Reach	
		End	Side	End	Side	End	Side	End	Side
+20' 0" (6.10 m)	lbs. kg							3,250* 1 474*	3,250* 1 474*
+15' 0" (4.57 m)	lbs. kg			3,500* 1 588*	3,500* 1 588*			2,700 1 225	2,450 1 111
+10' 0" (3.05 m)	lbs. kg	7,550* 3 425*	7,550* 3 425*	4,700* 2 132*	4,700* 2 132*	3,550 1 610	3,200 1 451	2,100 953	1,900 862
+5' 0" (1.52 m)	lbs. kg			6,450 2 926	5,650 2 563	3,350 1 520	3,000 1 361	1,950 885	1,750 794
Ground Line	lbs. kg			5,950 2 698	5,200 2 359	3,150 1 429	2,800 1 270	2,000 907	1,800 816
-5' 0" (1.52 m)	lbs. kg	7,800* 3 538*	7,800* 3 538*	5,850 2 654	5,100 2 313	3,050 1 383	2,700 1 225	2,500 1 134	2,200 998
-10' 0" (3.05 m)	lbs. kg	10,250* 4 649*	10,250* 4 649*	5,900 2 676	5,250 2 381				

### Mono Boom (Blade on Ground)

#### 5' 7" (1.71 m) Arm

12' 8" (3.87 m) Boom and 462 lb. (210 kg) Bucket

Bucket Hook Height		Radius of Load							
		10' 0" (3.05 m)		15' 0" (4.57 m)		Cap. at Max. Reach			
		End	Side	End	Side	End	Side		
+20' 0" (6.10 m)	lbs. kg							3,250* 1 474*	3,250* 1 474*
+15' 0" (4.57 m)	lbs. kg	3,500* 1 588*	3,500* 1 588*					2,900* 1 315*	2,450 1 111
+10' 0" (3.05 m)	lbs. kg	4,700* 2 132*	4,700* 2 132*	3,850* 1 746*	3,200 1 451	2,850* 1 293*	1,900 862		
+5' 0" (1.52 m)	lbs. kg	6,800* 3 084*	5,650 2 563	4,500* 2 041*	3,000 1 361	3,050* 1 383*	1,750 794		
Ground Line	lbs. kg	7,950* 3 606*	5,200 2 359	5,000* 2 268*	2,800 1 270	3,500* 1 588*	1,800 816		
-5' 0" (1.52 m)	lbs. kg	7,650* 3 470*	5,100 2 313	4,900* 2 223*	2,700 1 225	3,650* 1 656*	2,200 998		
-10' 0" (3.05 m)	lbs. kg	5,950* 2 699*	5,250 2 381						

### Mono Boom (Blade off Ground)

#### 6' 11" (2.12 m) Arm

12' 8" (3.87 m) Boom and 422 lb. (192 kg) Bucket

Bucket Hook Height		Radius of Load									
		5' 0" (1.52 m)		10' 0" (3.05 m)		15' 0" (4.57 m)		20' 0" (6.10 m)		Cap. at Max. Reach	
		End	Side	End	Side	End	Side	End	Side	End	Side
+20' 0" (6.10 m)	lbs. kg									2,900* 1 315*	2,900* 1 315*
+15' 0" (4.57 m)	lbs. kg					3,150* 1 429*	3,150* 1 429*			2,400 1 089	2,150 975
+10' 0" (3.05 m)	lbs. kg			4,000* 1 814*	4,000* 1 814*	3,500* 1 588*	3,250 1 474			1,900 862	1,700 771
+5' 0" (1.52 m)	lbs. kg			6,300* 2 858*	5,800 2 631	3,350 1 520	3,000 1 361	2,050 930	1,850 839	1,750 794	1,550 703
Ground Line	lbs. kg			6,000 2 722	5,250 2 381	3,150 1 429	2,800 1 270	1,950 885	1,750 794	1,800 816	1,600 726
-5' 0" (1.52 m)	lbs. kg	6,850* 3 107	6,850* 3 107	5,800 2 631	5,050 2 291	3,000 1 361	2,650 1 202			2,150 975	1,900 862
-10' 0" (3.05 m)	lbs. kg	11,900* 5 398	11,900* 5 398	5,900 2 676	5,100 2 313	3,050 1 383	2,700 1 225				

### Mono Boom Arm (Blade on Ground)

#### 6' 11" (2.12 m)

12' 8" (3.87 m) Boom and 422 lb. (192 kg) Bucket

Bucket Hook Height		Radius of Load									
		10' 0" (3.05 m)		15' 0" (4.57 m)		20' 0" (6.10 m)		Cap. at Max. Reach			
		End	Side	End	Side	End	Side	End	Side		
+20' 0" (6.10 m)	lbs. kg									2,900* 1 315*	2,900* 1 315*
+15' 0" (4.57 m)	lbs. kg					3,150* 1 429*	3,150* 1 429*			2,600* 1 179*	2,150 975
+10' 0" (3.05 m)	lbs. kg	4,000* 1 814*	4,000* 1 814*	3,500* 1 588*	3,250 1 474					2,600* 1 179*	1,700 771
+5' 0" (1.52 m)	lbs. kg	6,300* 2 858*	5,800 2 631	4,200* 1 905*	3,000 1 361	3,450* 1 565*	1,850 839	2,750* 1 247*	1,550 703		
Ground Line	lbs. kg	7,850* 3 561*	5,250 2 381	4,850* 2 200*	2,800 1 270	3,600* 1 633*	1,750 794	3,100* 1 406*	1,600 726		
-5' 0" (1.52 m)	lbs. kg	7,800* 3 538*	5,050 2 291	4,950* 2 245*	2,650 1 202			3,450* 1 565*	1,900 862		
-10' 0" (3.05 m)	lbs. kg	6,600* 2 994*	5,100 2 313	3,900* 1 769*	2,700 1 225						

### Offset Boom (Blade off Ground)

#### 5' 9" (1.75 m) Arm

12' 10" (3.92 m) Boom and 462 lb. (210 kg) Bucket

Bucket Hook Height		Radius of Load							
		5' 0" (1.52 m)		10' 0" (3.05 m)		15' 0" (4.57 m)		Cap. at Max. Reach	
		End	Side	End	Side	End	Side	End	Side
+20' 0" (6.10 m)	lbs. kg							3,050* 1 383*	3,050* 1 383*
+15' 0" (4.57 m)	lbs. kg			3,400* 1 542*	3,400* 1 542*			2,650 1 202	2,350 1 066
+10' 0" (3.05 m)	lbs. kg			4,500* 2 041*	4,500* 2 041*	3,450 1 565	3,050 1 383	1,950 885	1,750 794
+5' 0" (1.52 m)	lbs. kg			6,100 2 767	5,300 2 404	3,100 1 406	2,750 1 247	1,750 794	1,500 680
Ground Line	lbs. kg			5,350 2 427	4,600 2 087	2,800 1 270	2,450 1 111	1,750 794	1,550 703
-5' 0" (1.52 m)	lbs. kg	7,900* 3 583*	7,900* 3 583*	5,200 2 359	4,450 2 018	2,700 1 225	2,350 1 066	2,200 998	1,950 885
-10' 0" (3.05 m)	lbs. kg	9,050* 4 105*	9,050* 4 105*	5,350 2 427	4,700 2 132				

### Offset Boom (Blade on Ground)

#### 5' 9" (1.75 m) Arm

12' 10" (3.92 m) Boom and 462 lb. (210 kg) Bucket

Bucket Hook Height		Radius of Load							
		10' 0" (3.05 m)		15' 0" (4.57 m)		Cap. at Max. Reach			
		End	Side	End	Side	End	Side		
+20' 0" (6.10 m)	lbs. kg							3,050* 1 383*	3,050* 1 383*
+15' 0" (4.57 m)	lbs. kg	3,400* 1 542*	3,400* 1 542*					3,000* 1 361*	2,350 1 066
+10' 0" (3.05 m)	lbs. kg	4,500* 2 041*	4,500* 2 041*	3,550* 1 610*	3,050 1 383	3,050* 1 383*	1,750 794		
+5' 0" (1.52 m)	lbs. kg	6,250* 2 835*	5,300 2 404	4,150* 1 882*	2,750 1 247	3,150* 1 429*	1,500 680		
Ground Line	lbs. kg	7,150* 3 243*	4,600 2 087	4,550* 2 064*	2,450 1 111	3,300* 1 497*	1,550 703		
-5' 0" (1.52 m)	lbs. kg	6,950* 3 152*	4,450 2 018	4,450* 2 018*	2,350 1 066	3,350* 1 520*	1,950 885		
-10' 0" (3.05 m)	lbs. kg	5,350* 2 427*	4,700 2 132						

### Notes: Excavator lifting capacities

- Lifting capacities shown should not be exceeded. Weight of all lifting accessories must be deducted from the above lifting capacities.
- Lifting capacities are based on machine standing on firm, uniform supporting surface. User must make allowances for job conditions such as soft or uneven ground.
- Lifting capacities shown do not exceed 75% of minimum tipping loads or 87% of hydraulic capacities. Capacities marked with an asterisk (\*) are limited by hydraulic capacities.
- Least stable position is over the side.
- Operator should be fully acquainted with the Operator's Manual & Operating Safety Booklet, furnished by LBX before operating the machine.
- Capacities apply only to the machine as originally manufactured and normally equipped by LBX Company LLC.
- Lift capacity ratings are based on SAE J/ISO 10567, "Earthmoving Machinery - Hydraulic Excavators - Lift Capacity".

# 75 Spin Ace® Tier III Specifications

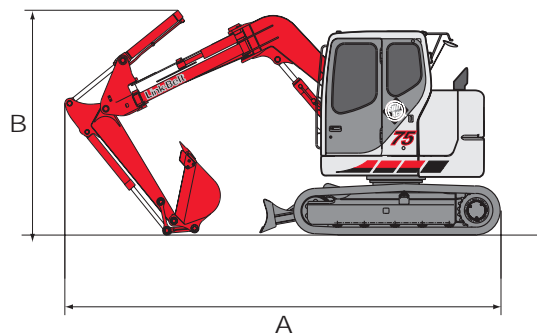
## Travel Dimensions

### Dimensions - Mono Boom - 5' 7" (1.71 m) arm

A.	Overall length	19' 5" (5.92 m)
B.	Overall width	7' 7" (2.32 m)
C.	Overall height	8' 10" (2.70 m)
D.	Distance between sprocket and idler	7' 3" (2.21 m)
E.	Overall length of crawler and blade	10' 9" (3.28 m)
F.	Track gauge	6' 2" (1.87 m)
G.	Minimum ground clearance	1' 2" (360 mm)
H.	Shoe width	17.7" (450 mm)
I.	Overall track width (w/450 mm shoes)	7' 7" (2.32 m)
J.	Tail swing radius	4' 0" (1.24 m)
K.	Cab height	8' 10" (2.70 m)
L.	Blade height	17.7" (450 mm)
M.	Blade dig depth	8.0" (205 mm)
N.	Blade raise height	16.3" (415 mm)
O.	Overall width of upperstructure	7' 4" (2.23 m)

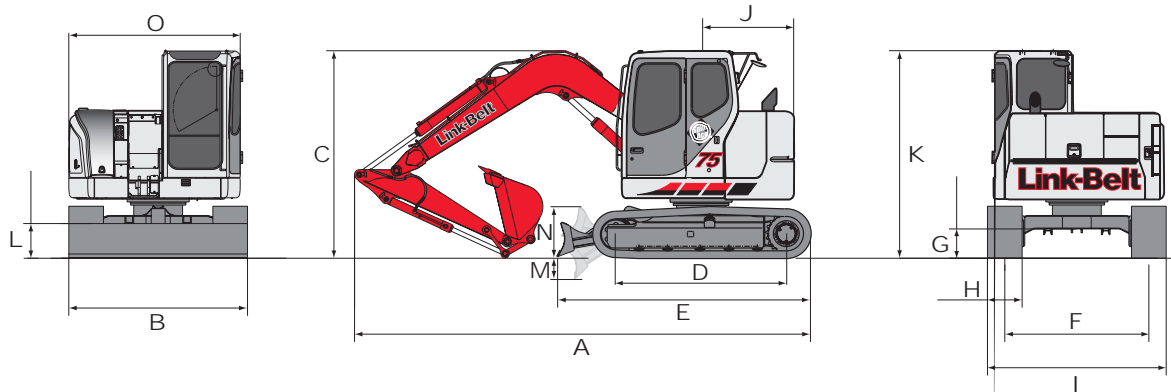
### Dimensions - Offset Boom - 5' 9" (1.75 m) arm

A.	Overall length	19' 7" (5.97 m)
B.	Overall height	9' 9" (2.97 m)



### Dimensions - Mono Boom - 6' 11" (2.12 m) arm

A.	Overall length	19' 5" (5.91 m)
C.	Overall height	9' 8" (2.95 m)



## Standard Equipment

- Control Pattern Selector Valve
- One-touch decelerator
- Integral cylinder cushioning
- Cushioned attachment
- Swing cushion valve
- Auxiliary valve spool
- Travel alarm
- Low noise/low vibration cab floating on 4 fluid filled mounts
- Sliding/reclining, suspension cloth upholstered seat with adjustable arm rests and lumbar support, seat belt
- Analog gauge package
- Heater and air conditioner
- Rear view mirrors
- Two work lights, cab and boom
- Horn, interior lighting, AM/FM Stereo radio, clock, floor mat, cigarette lighter
- 12 volt accessory outlet for cell phones/ audio extras
- Safety glass windows with windshield wiper and washer
- Gate lock lever (hydraulic lockout device)
- Vandalism locks
- Common key for cab & house doors and engine hood
- Upper and lower undercovers
- Chrome plated boom foot pin with brass bushing
- Chrome plated boom to arm connection pin with brass bushing
- 17.7" (450 mm) 3-bar grouser shoes
- Dozer blade
- 2,987 lb. (1 355 kg) Counterweight

## Options

- Arms - Mono Boom
  - 5' 7" (1.71 m)
  - 6' 11" (2.12 m)
- Offset Boom and Arm
- 23.6" (600 mm) 3-bar grouser shoes
- 17.7" (450 mm) rubber track (individual shoes bolting to standard rail)
- Bolt-on rubber pads (bolt to steel shoes)
- Auxiliary Hydraulics
  - Single Acting
  - Multi-Function (standard boom only)
  - Thumb (standard boom only)
- Hose Burst Check Valves
- Couplers (field install)
  - Esco Multi-Pin Grabber
- Thumbs (field install)
  - Universal rigid
  - Hydraulic non-link
  - Hydraulic non-link (for coupler)
  - Hydraulic link