

135G



Engine	135G		
	Base engine for use in the U.S., U.S. Territories, and Canada		
Manufacturer and Model	Isuzu 4JJ1		
Non-Road Emissions Standard	EPA Interim Tier 4/EU Stage IIIB		
Net Rated Power (ISO 9249)	72 kW (97 hp) at 2,000 rpm		
Cylinders	4		
Displacement	3.0 L (182 cu. in.)		
Off-Level Capacity	70% (35 deg.)		
Aspiration	Turbocharged, air-to-air charge-air cooler		
Cooling			
Direct-drive suction-type fan			
Powertrain			
2-speed propel with automatic shift			
Maximum Travel Speed			
Low	3.4 km/h (2.1 mph)		
High	5.5 km/h (3.4 mph)		
Drawbar Pull	11 000 kg (24,251 lb.)		
Hydraulics			
Open center, load sensing			
Main Pumps	2 variable-displacement axial-piston pumps		
Maximum Rated Flow	105 L/m (28 gpm) x 2		
Pilot Pump	1 gear		
Maximum Rated Flow	32.9 L/m (8.7 gpm)		
Pressure Setting	3930 kPa (570 psi)		
System Operating Pressure			
Circuits			
Implement	34 336 kPa (4,980 psi)		
Travel	34 336 kPa (4,980 psi)		
Swing	32 300 kPa (4,685 psi)		
Power Boost	36 300 kPa (5,265 psi)		
Controls	Pilot levers, short stroke, low-effort hydraulic pilot controls with shutoff lever		
Cylinders			
	Bore	Rod Diameter	Stroke
Boom (2)	105 mm (4.13 in.)	70 mm (2.76 in.)	995 mm (39.17 in.)
Arm (1)	115 mm (4.53 in.)	80 mm (3.15 in.)	1127 mm (44.37 in.)
Bucket (1)	100 mm (3.94 in.)	70 mm (2.76 in.)	875 mm (34.45 in.)
Electrical			
Number of Batteries (12 volt)	2		
Battery Capacity	300 CCA		
Alternator Rating	50 amp		
Work Lights	2 halogen (1 mounted on boom, 1 on frame)		
Undercarriage			
Rollers (each side)			
Carrier	1		
Track	7		
Shoes, Triple Semi-Grousers (each side)	44		
Track			
Adjustment	Hydraulic		
Guides	Front idler		
Chain	Sealed and lubricated		
Ground Pressure			
	Without Blade	With Blade	
Rubber Crawler Pads, 500 mm (20 in.)	43 kPa (6.24 psi)	46 kPa (6.67 psi)	
Triple Semi-Grouser Shoes			
600 mm (24 in.)	36 kPa (5.22 psi)	38 kPa (5.51 psi)	
700 mm (28 in.)	31 kPa (4.50 psi)	33 kPa (4.79 psi)	



Swing Mechanism	135G
Speed	13.3 rpm
Torque	34 000 Nm (25,000 lb.-ft.)

Serviceability

Refill Capacities	
Fuel Tank	220 L (58 gal.)
Cooling System	20 L (21.1 qt.)
Engine Oil with Filter	17 L (18 qt.)
Hydraulic Tank	60 L (15.9 gal.)
Hydraulic System	125 L (33 gal.)
Gearbox	
Swing	3.2 L (3.4 qt.)
Propel (each)	4 L (4.2 qt.)

Operating Weights

With full fuel tank; 79-kg (175 lb.) operator; 914-mm (36 in.), 0.50-m³ (0.65 cu. yd.), 414-kg (913 lb.) general-purpose bucket; 3.01-m (9 ft. 11 in.) arm; and 3650-kg (8,047 lb.) counterweight

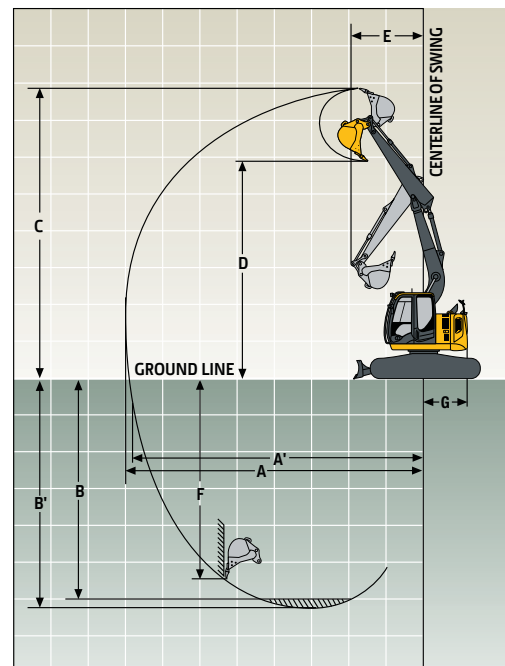
	<i>Without Blade</i>	<i>With Blade</i>
Rubber Crawler Pad, 500 mm (20 in.)	13 900 kg (30,617 lb.)	14 900 kg (32,819 lb.)
Triple Semi-Grouser Shoes		
600 mm (24 in.)	13 700 kg (30,176 lb.)	14 700 kg (32,379 lb.)
700 mm (28 in.)	13 900 kg (30,617 lb.)	14 900 kg (32,819 lb.)

Component Weights

Undercarriage		
Rubber Crawler Pad, 500 mm (20 in.)	4639 kg (10,218 lb.)	5577 kg (12,284 lb.)
Triple Semi-Grouser Shoes		
600 mm (24 in.)	4439 kg (9,778 lb.)	5516 kg (12,150 lb.)
700 mm (28 in.)	4639 kg (10,218 lb.)	5732 kg (12,626 lb.)
1-Piece Boom (with arm cylinder)	951 kg (2,095 lb.)	
Arm with Bucket Cylinder and Linkage		
2.52 m (8 ft. 3 in.)	431 kg (949 lb.)	
3.01 m (9 ft. 11 in.)	501 kg (1,104 lb.)	
Boom-Lift Cylinders (2), Total Weight	232 kg (511 lb.)	
914-mm (36 in.), 0.50-m ³ (0.65 cu. yd.)	414 kg (913 lb.)	
Bucket		
Counterweight, Standard	3650 kg (8,047 lb.)	

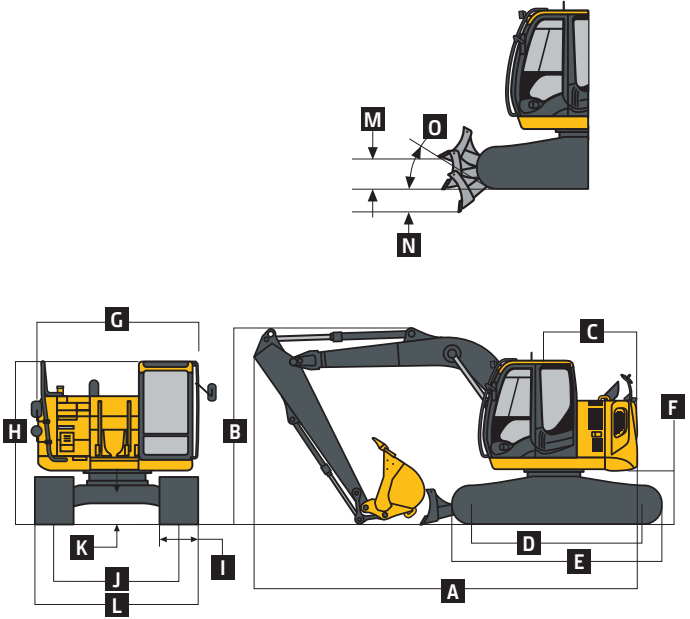
Operating Dimensions

Arm Length		<i>2.52 m (8 ft. 3 in.)</i>	<i>3.01 m (9 ft. 11 in.)</i>
Arm Digging Force			
SAE	65 kN (14,611 lb.)	59 kN (13,167 lb.)	
ISO	67 kN (15,066 lb.)	60 kN (13,521 lb.)	
Bucket Digging Force			
SAE	85 kN (19,015 lb.)	85 kN (19,015 lb.)	
ISO	96 kN (21,480 lb.)	96 kN (21,480 lb.)	
Lifting Capacity Over Front at Ground Level 6.1-m (20 ft. 0 in.) Reach (with power boost)			
A	Maximum Reach	8.38 m (27 ft. 6 in.)	8.86 m (29 ft. 1 in.)
A'	Maximum Reach at Ground Level	8.24 m (27 ft. 0 in.)	8.72 m (28 ft. 7 in.)
B	Maximum Digging Depth	5.49 m (18 ft. 0 in.)	5.98 m (19 ft. 7 in.)
B'	Maximum Digging Depth at 2.44-m (8 ft. 0 in.) Flat Bottom	5.27 m (17 ft. 3 in.)	5.79 m (19 ft. 0 in.)
C	Maximum Cutting Height	9.29 m (30 ft. 6 in.)	9.69 m (31 ft. 9 in.)
D	Maximum Dumping Height	6.83 m (22 ft. 5 in.)	7.22 m (23 ft. 8 in.)
E	Minimum Swing Radius	1.49 m (4 ft. 11 in.)	1.49 m (4 ft. 11 in.)
F	Maximum Vertical Wall	4.73 m (15 ft. 6 in.)	5.19 m (17 ft. 0 in.)
G	Tail-Swing Radius	1.49 m (4 ft. 11 in.)	1.49 m (4 ft. 11 in.)



Machine Dimensions 135G

A Overall Length with Arm	
2.52 m (8 ft. 3 in.)	7.37 m (24 ft. 2 in.)
3.01 m (9 ft. 11 in.)	7.39 m (24 ft. 3 in.)
B Overall Height with Arm	
2.52 m (8 ft. 3 in.)	2.79 m (9 ft. 2 in.)
3.01 m (9 ft. 11 in.)	2.78 m (9 ft. 1 in.)
C Rear-End Length/Swing Radius	1.49 m (4 ft. 11 in.)
D Distance Between Idler/Sprocket Centerline	2.88 m (9 ft. 5 in.)
E Undercarriage Length	3.58 m (11 ft. 9 in.)
F Counterweight Clearance	840 mm (33 in.)
G Upperstructure Width	2.48 m (8 ft. 2 in.)
H Cab Height	2.79 m (9 ft. 2 in.)
I Track Width with Triple Semi-Grouser Shoes	600 mm (24 in.) / 700 mm (28 in.)
J Gauge Width	1.99 m (6 ft. 6 in.)
K Ground Clearance	410 mm (16 in.)
L Overall Width	
Rubber Crawler Pad, 500 mm (20 in.)	2.49 m (8 ft. 2 in.)
Triple Semi-Grouser Shoes	
600 mm (24 in.)	2.59 m (8 ft. 6 in.)
700 mm (28 in.)	2.69 m (8 ft. 10 in.)
M Blade Lift Height	460 mm (18 in.)
N Blade Cut Below Grade	540 mm (21 in.)
O Blade Lift Angle	29 deg.
Blade	
Length	2.51 m (8 ft. 3 in.)
Height	460 mm (18 in.)
Width	
Rubber Crawler Pad, 500 mm (20 in.)	2490 mm (8 ft. 2 in.)
Triple Semi-Grouser Shoes	
600 mm (24 in.)	2490 mm (8 ft. 2 in.)
700 mm (28 in.)	2690 mm (8 ft. 10 in.)



Lift Capacities

Boldface type indicates hydraulically limited capacity; lightface type indicates stability-limited capacities, in kg (lb.). All lift capacities are based on ISO 10567 (with power boost). Machine equipped with 414-kg (913 lb.) bucket and standard counterweight; and 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.

HORIZONTAL DISTANCE FROM CENTERLINE OF ROTATION

LOAD POINT HEIGHT	1.5 m (5 ft.)		3.0 m (10 ft.)		4.5 m (15 ft.)		6.0 m (20 ft.)		7.5 m (25 ft.)	
	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
<i>With 2.52-m (8 ft. 3 in.) arm and 600-mm (24 in.) triple semi-grouser shoes, blade on ground</i>										
4.5 m (15 ft.)			3550 (7,850)	3550 (7,850)	3550 (7,750)	3500 (7,500)	3200 (6,500)	2100 (4,500)		
3.0 m (10 ft.)			6250 (13,400)	6250 (13,400)	4350 (9,450)	3300 (7,100)	3600 (7,900)	2050 (4,350)		
1.5 m (5 ft.)			6450 (15,850)	5750 (12,350)	5350 (11,500)	3050 (6,600)	4000 (8,650)	1950 (4,150)		
Ground Line			5750 (13,400)	5,450 (11,750)	5850 (12,700)	2900 (6,250)	4200 (9,150)	1850 (4,000)		
-1.5 m (-5 ft.)	4350 (9,800)	4350 (9,800)	8750 (18,950)	5450 (11,700)	5750 (12,450)	2850 (6,100)	4000 (8,600)	1850 (3,950)		
-3.0 m (-10 ft.)	8250 (18,650)	8250 (18,650)	7100 (15,250)	5550 (11,900)	4750 (10,150)	2900 (6,200)				
<i>With 3.01-m (9 ft. 11 in.) arm and 500-mm (20 in.) rubber crawler pad, blade on ground</i>										
4.5 m (15 ft.)					3100 (6,700)	3100 (6,700)	3000 (6,400)	2150 (4,650)		
3.0 m (10 ft.)			4900 (10,250)	4900 (10,250)	3900 (8,500)	3400 (7,300)	3350 (7,250)	2100 (4,450)		
1.5 m (5 ft.)			8050 (17,300)	5950 (12,850)	4950 (10,750)	3150 (6,750)	3800 (8,200)	1950 (4,200)	2150 (3,700)	1300 (2,800)
Ground Line			6250 (14,550)	5550 (11,900)	5700 (12,350)	2950 (6,300)	4100 (8,900)	1850 (4,000)		
-1.5 m (-5 ft.)	3800 (8,500)	3800 (8,500)	8250 (18,950)	5450 (11,650)	5800 (12,550)	2850 (6,100)	4100 (8,850)	1800 (3,900)		
-3.0 m (-10 ft.)	6850 (15,450)	6850 (15,450)	7800 (16,750)	5550 (11,800)	5150 (11,050)	2850 (6,150)	3350	1850		
-4.5 m (-15 ft.)			5050 (10,500)	5050 (10,500)	2900	2900				

Lift Capacities (continued)

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Boldface type indicates hydraulically limited capacity; lightface type indicates stability-limited capacities, in kg (lb.). All lift capacities are based on ISO 10567 (with power boost). Machine equipped with 414-kg (913 lb.) bucket and standard counterweight; and 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.

HORIZONTAL DISTANCE FROM CENTERLINE OF ROTATION

LOAD POINT HEIGHT	1.5 m (5 ft.)		3.0 m (10 ft.)		4.5 m (15 ft.)		6.0 m (20 ft.)		7.5 m (25 ft.)	
	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
<i>With 3.01-m (9 ft. 11 in.) arm and 600-mm (24 in.) triple semi-grouser shoes, blade on ground</i>										
4.5 m (15 ft.)					3100 (6,700)	3100 (6,700)	3000 (6,400)	2100 (4,550)		
3.0 m (10 ft.)			4900 (10,250)	4900 (10,250)	3900 (8,500)	3350 (7,200)	3350 (7,250)	2050 (4,400)		
1.5 m (5 ft.)			8050 (17,300)	5900 (12,650)	4950 (10,750)	3100 (6,650)	3800 (8,200)	1950 (4,150)	2150 (3,700)	1300 (2,750)
Ground Line			6250 (14,550)	5450 (11,700)	5700 (12,350)	2900 (6,200)	4100 (8,900)	1850 (3,950)		
-1.5 m (-5 ft.)	3800 (8,500)	3800 (8,500)	8250 (18,950)	5350 (11,500)	5800 (12,550)	2800 (6,000)	4100 (8,850)	1800 (3,800)		
-3.0 m (-10 ft.)	6850 (15,450)	6850 (15,450)	7800 (16,750)	5400 (11,650)	5150 (11,050)	2800 (6,000)	3350 (6,000)	1800 (6,000)		
-4.5 m (-15 ft.)			5050 (10,500)	5050 (10,500)	2900 (6,000)	2900 (6,000)				

With 3.01-m (9 ft. 11 in.) arm and 700-mm (28 in.) triple semi-grouser shoes, blade on ground

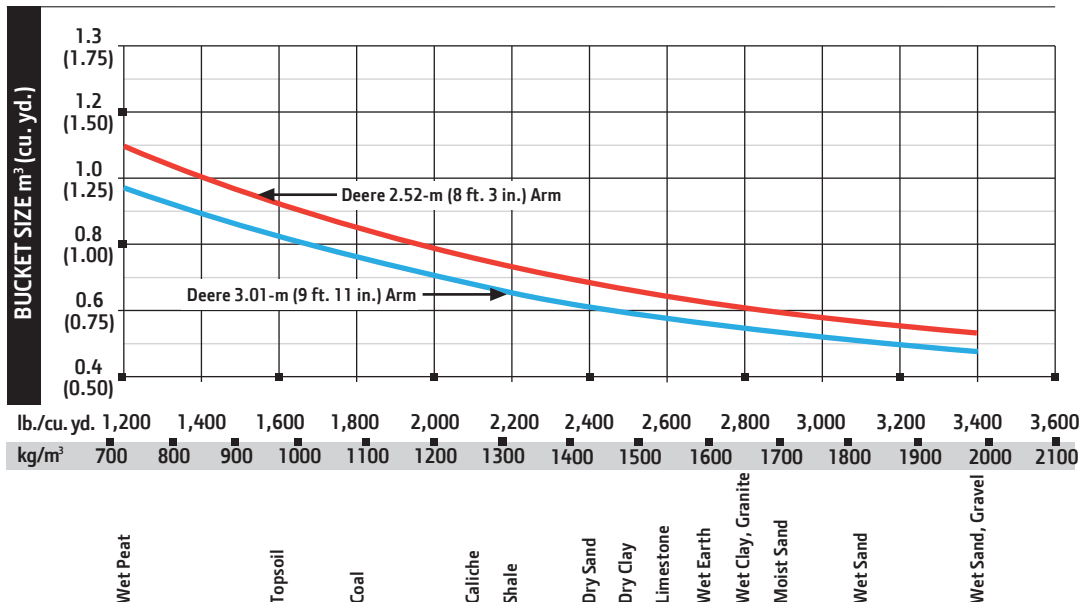
4.5 m (15 ft.)					3100 (6,700)	3100 (6,700)	3000 (6,400)	2150 (4,600)		
3.0 m (10 ft.)			4900 (10,250)	4900 (10,250)	3900 (8,500)	3400 (7,300)	3350 (7,250)	2050 (4,450)		
1.5 m (5 ft.)			8050 (17,300)	5950 (12,800)	4950 (10,750)	3150 (6,750)	3800 (8,200)	1950 (4,200)	2150 (3,700)	1300 (2,800)
Ground Line			6250 (14,550)	5550 (11,900)	5700 (12,350)	2950 (6,300)	4100 (8,900)	1850 (4,000)		
-1.5 m (-5 ft.)	3800 (8,500)	3800 (8,500)	8250 (18,950)	5450 (11,650)	5800 (12,550)	2850 (6,100)	4100 (8,850)	1800 (3,900)		
-3.0 m (-10 ft.)	6850 (15,450)	6850 (15,450)	7800 (16,750)	5500 (11,800)	5150 (11,050)	2850 (6,100)	3350 (6,100)	1850 (6,100)		
-4.5 m (-15 ft.)			5050 (10,500)	5050 (10,500)	2900 (6,000)	2900 (6,000)				

Buckets

A full line of buckets is offered to meet a wide variety of applications. Digging forces are with power boost. Buckets are equipped with John Deere Fanggs™ or ESCO teeth standard. Replaceable cutting edges and a variety of teeth are available through John Deere Parts. Optional side cutters add 150 mm (6 in.) to bucket widths. Capacities are SAE heaped ratings.

Type Bucket	Bucket Width		Bucket Capacity		Bucket Weight		Bucket Dig Force		Arm Dig Force 2.52 m (8 ft. 3 in.)		Arm Dig Force 3.01 m (9 ft. 11 in.)		Bucket Tip Radius		Number of Teeth
	mm	in.	m³	cu. yd.	kg	lb.	kN	lb.	kN	lb.	kN	lb.	mm	in.	
Heavy Duty Plate Lip	610	24	0.37	0.48	460	1,014	84.6	19,015	65.0	14,611	58.6	13,167	1328	52.27	4
	760	30	0.50	0.65	522	1,150	84.6	19,015	65.0	14,611	58.6	13,167	1328	52.27	4
	915	36	0.62	0.81	589	1,297	84.6	19,015	65.0	14,611	58.6	13,167	1328	52.27	5
	1067	42	0.76	0.99	631	1,390	84.6	19,015	65.0	14,611	58.6	13,167	1328	52.27	5
Ditching	1500	60	0.63	0.83	457	1,007	121.9	27,411	72.7	16,337	64.6	14,529	921	36.25	0

Bucket Selection Guide*



* Contact your John Deere dealer for optimum bucket and attachment selections. These recommendations are for general conditions and average use. Does not include optional equipment such as thumbs or couplers. Larger buckets may be possible when using light materials, for flat and level operations, less compacted materials, and volume loading applications such as mass-excavation applications in ideal conditions. Smaller buckets are recommended for adverse conditions such as off-level applications, rocks, and uneven surfaces. Bucket capacity indicated is SAE heaped.