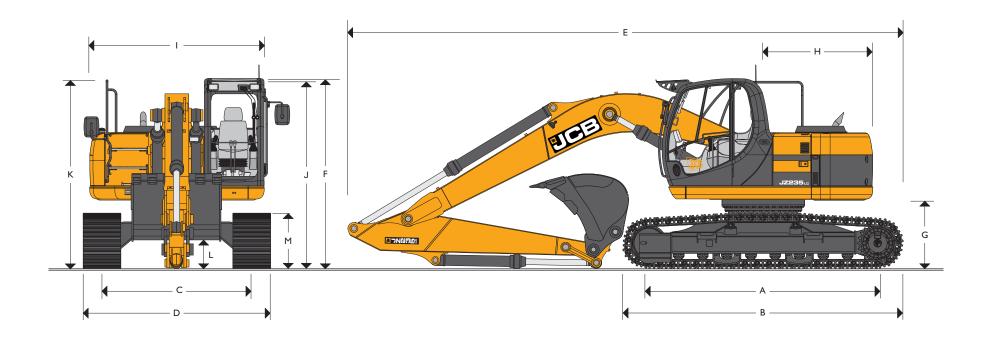


MAX OPERATING WEIGHT: 51,194 lb (23,270 kg) NET ENGINE POWER: 172 hp (128 kW)



STATIC D	IMENICIONS _	17235 I C	MONOROOM

Dimensions in ft-in (mm)	LC
A Track Length On Ground	12-0 (3660)
B Undercarriage Overall Length	14-8 (4460)
C Track Gauge	7-10 (2390)
D Width Over Tracks (20 in (500 mm) trackshoes)	_
D Width Over Tracks (24 in (600 mm) trackshoes)	9-10 (2990)
D Width Over Tracks (28 in (700 mm) trackshoes)	10-2 (3090)
D Width Over Tracks (32 in (800 mm) trackshoes)	10-6 (3190)
D Width Over Tracks (36 in (900 mm) trackshoes)	10-10 (3290)

D	ipper Lengths	6 ft 3 in (1.91 m)	7 ft 10 in (2.40 m)	3.0 m (9 ft 10 in)
Е	Transport Length with Monoboom	29-6 (8980)	29-5 (8970)	29-0 (8850)
F	Transport Height with Monoboom	10-0 (3055)	10-0 (3060)	9-11 (3025)

Dimensions in ft-in (mm)	
G Counterweight Clearance	3-7 (1080)
H Tailswing Radius	5-6 (1680)
I Width of Superstructure	9-2 (2787)
J Height Over Cab	9-10 (3000)
K Height Over Grab Rail	9-9 (2970)
L Ground Clearance	I-7 (486)
M Track Height	2-11 (885)



ENGINE

Model: Isuzu 4HKIX – Tier III emissions compliant.

Type: Water cooled, 4-stroke, 4-cylinder in-line, common rail turbocharged diesel.

Net Power (ISO 3046-INF): 172 hp (128 kW) at 2,000 rpm.

Piston Displacement:317 cu in (5.193 l).Injection:Electronic governor.

Air Filtration: Dry element with secondary safety element and in cab warning indicator.

Cooling: Water cooler via large capacity radiator.

 $\begin{array}{lll} \textbf{Starting System:} & 24 \, \text{V} - 4.5 \, \text{kW.} \\ \textbf{Batteries:} & 2 \, \text{x} \, \text{I} \, \text{2} \, \text{V} \, \text{Heavy-duty.} \\ \textbf{Alternator:} & 24 \, \text{V} \, 40 \, \text{amp.} \\ \textbf{Refueling Pump:} & \text{Electric type.} \\ \end{array}$

SWING SYSTEM

Swing Motor: Axial piston.

Swing Brake: Hydraulic braking plus automatic spring applied disc type parking brake.

Final Drive: Planetary reduction.

Swing Speed: 9.8 rpm.

Swing Gear: Large diameter, internally toothed fully sealed grease bath lubricated.

Swing Lock: Switchable brake in cab.

UNDERCARRIAGE

Carriage Options: LC-Long Carriage.

Construction: Fully welded, "X" frame type with central bellyguarding and track motor guards.

Sloping sidemembers with dirt relief holes under top rollers.

Recovery Point: Front and rear.

Track Type: Sealed and greased.

Track Shoe Options: LC – 24 in (600 mm), 28 in (700 mm), 31.5 in (800 mm), 36 in (900 mm).

Upper and Lower Rollers: Heat treated, sealed and lubricated.

Track Adjustment: Grease cylinder type.

Track Idler: Sealed and lubricated, with spring cushioned recoil.

LC

No of Track Guides:2 per sideNo of Lower Rollers:8 per sideNo of Upper Rollers:2 per sideNo of Track Shoes:49 per side

HYDRAULICS

A variable flow load sensing system with flow on demand, variable power output and servo operated, multi-function open center control. Machine auto warm up standard – maximizes performance in cold conditions.

Pumps:

Main Pumps 2 variable displacement axial piston type.

Maximum Flow 2×55 gpm $(2 \times 208 \text{ l/min})$.

Servo Pump Gear type.

Maximum Flow 5.3 gpm (20 l/min).

Fan Drive Gear type.

Control Valve:

A combined four and five spool control valve with auxiliary service spool as standard. When required twin pump flow is combined to boom and dipper services for greater speed and efficiency.

Relief Valve Settings:

 Boom / Arm / Bucket:
 4,975 lbf/sq in (343 bar)

 Automatic Power Boost:
 5,410 lbf/sq in (373 bar)

 Swing Circuit:
 3,263 lbf/sq in (225 bar)

 Travel Circuit:
 4,975 lbf/sq in (343 bar)

 Pilot Control:
 580 lbf/sq in (40 bar)

A separate Cushion Control valve in the servo system provides cushioning of the boom and dipper spools selection and quick warm-up of the servo system.

Hydraulic Cylinders:

Double acting type, with bolt-up end caps and hardened steel bearing bushes. End cushioning is fitted as standard on boom, dipper and bucket rams.

Optional hose burst check valves available for boom and dipper rams.

Filtration

The hydraulic components are protected by the highest standard of filtration to ensure long hydraulic fluid and component life.

 In Tank:
 150 micron, suction strainer.

 Main Return Line:
 10 micron, fibreform element.

 Plexus Bypass Line:
 1.5 micron, paper element.

 Pilot Line:
 10 micron, paper element.

Hydraulic Hammer Return: 10 micron, reinforced microform element.

Cooling:

Cooling is provided via a full return line air blast cooler as part of a single face cooling pack in conjunction with the engine water cooler and intercooler.

TRACK DRIVE

Type: Fully hydrostatic, three speed with autoshift between high and medium speed.

Travel Motors: Variable swash axial piston type, fully guarded within undercarriage frame.

Final Drive: Planetary reduction, bolt-on sprockets.

Service Brake: Hydraulic counter balance valve to prevent overspeeding on gradients.

Park Brake: Disc type, spring applied, automatic hydraulic release.

 Gradability:
 70% (35 deg) continuous.

 Travel Speed:
 High – 3.4 mph (5.6 km/h).

 Mid – 2.1 mph (3.3 km/h).

Mid – 2.1 mph (3.3 km/h). Low – 1.4 mph (2.3 km/h).

Tractive Effort: 43,144 lbf (191.9 kN, 19,570 kgf).



EXCAVATOR END – MONOBOOM

Monoboom available along with a choice of dipper lengths to suit the requirements of reach, dig-depth, loadover height, tearouts and site versatility. Reserve strength is built into the fully welded structures for hydraulic hammer and other arduous operations. Fabricated bucket tipping links are provided with a choice of lift points.

Strong, durable construction, large cross sections and multi plate fabrications to withstand high stress applications. The $5.7 \, \mathrm{m}$ (18 ft 8 in) boom is designed to ensure the optimum digging envelope when matched with the three dipper lengths.

Low maintenance bronze alloy bushes with graphite plugs are fitted to boom base and boom to dipper pivots resulting in 1,000 hour greasing intervals at these points.

CAB

Excellent digging, loading and positioning visibility results from the careful design of front, side and roof lights. All screens are tinted to improve in cab conditions.

Fully opening front screen is very smooth to operate and as the lower screen is stored within the top screen frame it makes complete front screen opening easy, fast and convenient.

Fresh air ventilation available from opening door window, opening slot in front screen and fully opening front screen. Parallelogram wash wiper for upper screen ensuring good wiped area for maximum visibility. Wiper motor is fitted in the left hand side of the roof screen so as not to affect bucket visibility when loading. Optional lower screen wiper available. Fresh air ventilation and heater with windscreen demister. Infinitely variable blower speed, temperature and recirculation control. Optional climate control. Fully adjustable deluxe suspension seat with arm rest adjustment and backrest recline. Radio with digital tuner fitted into the roof lining for maximum protection. Conveniently placed radio mute button incorporated into lower console. 12 v power point and mobile phone holder built into the right hand console. Courtesy light can be operated from ground level and is illuminated for five minutes or until switched off improving operator access at night. Cab mounted roller blind protects operator from suns' glare through front or top screens.

AMS - ADVANCED MANAGEMENT SYSTEM

Four selectable working modes link the operators control movements with the engine and hydraulic systems to maximize productivity and efficiency.

A (Auto): Up to 100% engine power and 100% flow. Gives variable power and speed depending

on the operator's input, matching the demand for output and efficiency to the job. Power boost is automatically activated in this mode should hard conditions be encountered. Auto idle cuts in after a period of inactivity (between 5 and 30 seconds as set by the operator)

80% engine power. 95% of hydraulic flow maximises economy while maintaining

excellent output.

E (Economy):

P (Precision): 55% engine power. 90% of hydraulic flow for fine control of grading operations.

L (Lifting): 55% engine power. 63% of hydraulic flow with permanent power boost for maximum

lifting power and control.

The Auto mode allows the AMS processor to select the optimum operational performance to match the demands of the job while the three alternative modes give precise matching of application when specific tasks are undertaken.

The adjustable position monitor mounted on the front right hand pillar of the cab gives the operator a constant read out of mode, tracking range, operating temperature and a host of other information, while retaining excellent visibility of the monitor and the job being carried out.

The required flow for hammer applications can be set and stored in the AMS memory and is automatically activated whenever the hammer pedal is depressed.

A maintenance indicator warns of imminent service needs, and all servicing and basic checks can be carried out using only the in cab display.

CONTROLS

Excavator: All servo lever operated to ISO control pattern, independently adjustable to the seat.

Tracks: Individually servo operated by foot pedal or hand lever.

Speed selection via joystick button.

Auxiliary: Via servo operated foot pedal.

Control Isolation: Via gate lock lever at cab entrance or panel switch.

Engine Speed: Dial type throttle control plus servo lever mounted one-touch idle control or

separate selectable

auto-idle with adjustable time delay using AMS.

Engine Stop: Ignition key operated and seperate shut-down button.

Horn: Operated via servo lever mounted button.



SERVICE CAPACITIES											
Fuel Tank	gal (I)	76.6 (290)									
Engine Coolant	gal (I)	8.4 (31.8)									
Engine Oil	gal (I)	6.6 (25.0)									
Swing Reduction Gear	gal (I)	3.1 (12.0)									
Track Reduction Gear (each side)	gal (I)	1.2 (4.7)									
Hydraulic System	gal (I)	52.8 (200)									
Hydraulic Tank	gal (I)	144.1 (120)									

WEIGHTS AND GROUND BEARING PRESSURES

JZ235 LC – equipped with 1.14 m³ bucket 1675 lb (760 kg), operator, full fuel tank, 24 in (600 mm) track shoes and 7 ft10 in (2.4 m) dipper.

Shoe Width	Operating Weight	Bearing Pressure
24 in (600 mm)	48,405 lb (21,956 kg)	6.54 lb/sq in (0.46 kg/sq cm)
28 in (700 mm)	48,998 lb (22,225 kg)	5.69 lb/sq in (0.40 kg/sq cm)
32 in (800 mm)	49,591 lb (22,444 kg)	4.98 lb/sq in (0.35 kg/sq cm)
35 in (900 mm)	50,184 lb (22,763 kg)	4.41 lb/sq in (0.31 kg/sq cm)

STANDARD / OPTIONAL EQUIPMENT

Standard Equipment: Engine fan guard; Cold start pre-heat; Auto engine warm up; Double element air cleaner; Electric refueling pump; Heavy duty alternator; Electrics isolator; Heavy duty batteries; Cab & engine soundproofing; Cab heater & screen demister; Tinted glass; Interior light; Coat hook; Cigarette lighter; Ashtray; Operator's storage shelf; Removable floormat; Windscreen wash/wipe; Plug-in power socket; Automatic power boost; Auto-idle; One-touch engine speed control; Hydraulic cushion control; Boom/swing priority switch; Plexus hydraulic oil filtration; HSP pressure test points; Auxiliary pipework mounting brackets; Work lights – boom & mainframe mounted; Undercarriage belly guarding; Upper structure under covers; Swing system cover; Twin track guides; External mirrors; Handrail & non slip walk ways; Quick connect engine oil drain pipe; Front screen blind; Quick connect fuel tank drain pipe; Hinged engine under cover. Climate control; ISO/SAE control pattern changeover.

Optional Equipment: Hose burst check valves & overload warning system; Tipping link mounted lift points; General purpose buckets; Ditch/grading buckets; Quickhitch buckets; Hydraulic hammers; Auxiliary pipework (full and low flow); Climate control; Cab mounted & rear work lights; Rotating beacon; Rain guard; Biodegradeable oil; Air suspension seat with heated pad and lumbar support adjustment; lower screen wiper; Radio.



WORKING RANGE – JZ235 LC MONOBOOM

Во	om Length 18 ft 8 in (5.70 m)		1		
Di	pper Length		6 ft 3 in (1.91 m)	7 ft 10 in (2.40 m)	9 ft 10 in (3.00 m)
Α	Maximum Digging Reach	ft-in (m)	29-7 (9.02)	31-1 (9.47)	32-5 (9.88)
В	Maximum Digging Reach (on ground)	ft-in (m)	28-10 (8.79)	30-4 (9.24)	31-9 (9.67)
С	Maximum Digging Depth	ft-in (m)	18-4 (5.59)	19-11 (6.08)	21-7 (6.57)
D	Maximum Digging Height	ft-in (m)	34-0 (10.36)	35-1 (10.70)	35-11 (10.96)
Е	Maximum Dumping Height	ft-in (m)	24-7 (7.50)	25-9 (7.85)	26-8 (8.13)
F	Maximum Vertical Wall Cut Depth	ft-in (m)	13-6 (4.12)	15-0 (4.57)	19-3 (5.87)
G	Minimum Swing Radius	ft-in (m)	7-6 (2.33)	7-9 (2.37)	6-11 (2.10)
	Bucket Rotation	deg.	183°	183°	183°
	Dipper Tearout (ISO 6015)	lbf (kgf)	29,650 (13,450)	25,485 (11,560)	21,142 (9590)
	Dipper Tearout with Boost (ISO 6015)	lbf (kgf)	32,210 (14,610)	27,670 (12,550)	22,950 (10,410)
	Bucket Tearout (ISO 6015)	lbf (kgf)	32,080 (14,550)	32,080 (14,550)	32,080 (14,550)
	Bucket Tearout with Boost (ISO 6015)	lbf (kgf)	34,835 (15,800)	34,835 (15,800)	34,835 (15,800)

STANDARD EXCAVATING BUCKETS

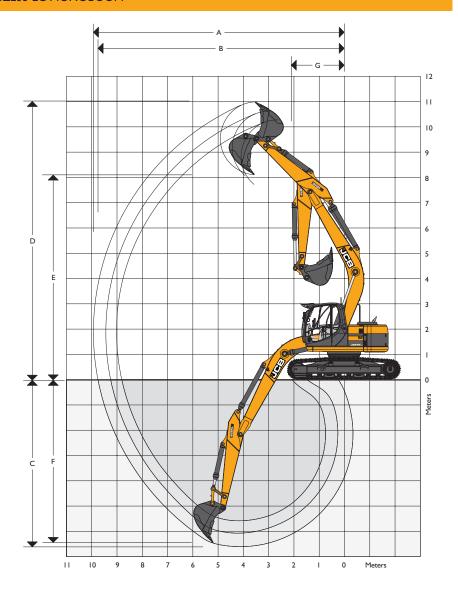
Standard excavating buckets are fully welded, heavy duty steel with hardened and sealed pivot pins.

Mono Boom Length: 18	ft 8 in (5.70 r	n)					
Bucket Width in (mm)	24 (600)	35 (900)	39 (1000)	47 (1200)	53 (1350)	57 (1450)	59 (1500)
Bucket Capacityyd³ (m³)	0.5 (0.4)	0.9 (0.7)	1.0 (0.8)	1.3 (1.025)	1.4 (1.045)	1.5 (1.14)	2.35 (1.18)
Bucket Weight Ib (kg)	1038 (471)	1285 (583)	1358 (616)	1532 (695)	1576 (715)	1676 (760)	1711 (776)
Dipper Length							
6 ft 3 in (1.91 m)	0	0	0	0	0	0	0
7 ft 10 in (2.40 m)	0	0	0	0	0	•	•
9 ft 10 in (3.00 m)	0	0	0	0	•	•	•

- O Material weight up to 1.35 t/yd³ (1800 kg/m³)
- Material weight up to 1.1 t/yd³ (1500 kg/m³)
- Material weight up to 0.90 t/yd³ (1200 kg/m³)

These recommendations are given as a guide based on typical operating conditions.

Please contact your distributor for the correct selection of buckets and attachments to suit the application.





LIFT CAPACITIES – Dipper Length: 6 ft 3 in (1.9 m), Monoboom: 18 ft 8 in (5.7 m), Trackshoes: 24 in (600 mm), No Bucket.

JZ235 LC MONO

Reach	10 ft (3 m)		15 ft (4.5 m)		20 ft (6 m)		25 ft (7.5 m)		Max	Max Reach	
	=	Į.		<u>.</u>							
Load Point Height	lb (kg)	lb (kg)	lb (kg)	lb (kg)	lb (kg)	lb (kg)	lb (kg)	lb (kg)	lb (kg)	lb (kg)	ft (mm)
25 ft (7.5 m)			17,526 (7950)*	16,336 (7410)					15,146 (6870)*	15,036 (6820)	15.47 (4716)
20 ft (6.0 m)	24,758 (11,230)*	24,578 (11,230)*	20,327 (9220)*	16,150 (7330)	15,609 (7080)*	10,053 (4560)			13,999 (6350)*	9788 (4440)	19.98 (6092)
15 ft (4.5 m)	33,554 (15,220)*	28,902 (13,110)	22,200 (10,070)*	15,211 (6900)	15,873 (7200)	9811 (4450)			12,654 (5740)	7848 (3560)	22.59 (6886)
10 ft (3.0 m)			24,074 (10,920)*	13,955 (6330)	15,322 (6950)	9326 (4230)			11,332 (5140)	6967 (3160)	23.92 (7291)
5 ft (1.5 m)			23,197 (10,520)	13,029 (5910)	14,815 (6720)	8863 (4020)			10,913 (4950)	6658 (3020)	24.18 (7373)
0 m			21,230 (9630)*	12,699 (5760)	14,506 (6580)	8576 (3890)			11,288 (5120)	6812 (3090)	23.43 (7142)
– 5 ft (– 1.5 m)	15,388 (6980)*	15,388 (6980)*	16,976 (7700)*	12,721 (5770)	13,272 (6020)*	8532 (3870)			11,288 (5120)*	7628 (3460)	21.54 (6566)
– 10 ft (– 3.0 m)			10,384 (4710)*	10,384 (4710)*					7959 (3610)*	7959 (3610)*	18.16 (5537)

LIFT CAPACITIES – Dipper Length: 7 ft 10 in (2.4 m), Monoboom: 18 ft 8 in (5.7 m), Trackshoes: 24 in (600 mm), No Bucket.

JZ235 LC MONO

Reach	10 ft (3 m)		15 ft (4.5 m)		20 ft (6 m)		25 ft (7.5 m)		Ma	Max Reach	
				-	==	-					
Load Point Height	lb (kg)	lb (kg)	lb (kg)	lb (kg)	lb (kg)	lb (kg)	lb (kg)	lb (kg)	lb (kg)	lb (kg)	ft (mm)
25 ft (7.5 m)			15,388 (6980)*	15,388 (6980)					11,883 (5390)*	11,464 (5200)	18.20 (5548)
20 ft (6.0 m)	26,014 (11,800)*	26,014 (11,800)*	15,983 (7250)*	15,983 (7330)	14,396 (6530)*	10,119 (4590)			10,935 (4960)*	8289 (3760)	22.16 (6755)
15 ft (4.5 m)			18,474 (8380)*	15,256 (6920)	15,256 (6920)	9811 (4450)			10,714 (4860)	6922 (3140)	24.53 (7478)
10 ft (3.0 m)			21,781 (9880)*	14,154 (6420)	15,278 (6930)	9370 (4250)	10,825 (4910)	6724 (3050)	10,075 (4570)	6261 (2840)	25.76 (7852)
5 ft (1.5 m)			23,302 (10,570)	13,272 (6020)	14,793 (6710)	8929 (4050)	10,626 (4820)	6548 (2970)	9788 (4440)	6041 (2740)	26.01 (7928)
0 m			22,818 (10,350)*	18,853 (5830)	14,462 (6560)	8642 (3920)	10,472 (4750)	6418 (2910)	10,075 (4570)	6173 (2800)	25.30 (7714)
- 5 ft (- 1.5 m)	25,463 (11,550)*	24,868 (11,280)	22,096 (10,000)*	12,809 (5810)	14,374 (6520)	8576 (3890)			11,133 (5050)	6790 (3080)	23.57 (7185)
- 10 ft (- 3.0 m)	22,884 (10,380)*	22,884 (10,380)*	18,122 (8220)*	13,029 (5910)*	13,206 (5990)*	8752 (3970)			12,103 (5490)*	8311 (3770)	20.53 (6260)
			10,031 (4550)*	10,031 (4550)*					9171 (4160)*	9171 (4160)*	15.44 (4707)

Lift Capacity Front and Rear

Lift Capacity Full Circle

- Notes: I. The above loads are in compliance with SAE and ISO Hydraulic Excavator Lift Capacity Standards.
 - 2. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.
 - 3. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.



LIFT CAPACITIES – Dipper Length: 9 ft 10 in (3.0 m), Monoboom: 18 ft 8 in (5.7 m), Trackshoes: 24 in (600 mm), No Bucket.

JZ235 LC MONO

Reach	5 ft (1.5 m) 10 ft (3 m)		15 ft (4.5 m) 20 ft (6		(6 m) 25 ft (7.5 m)		Max Reach		Max Reach				
			=	<u> </u>	==		===	<u> </u>		1	===		
Load Point Height	lb (kg)	lb (kg)	lb (kg)	lb (kg)	lb (kg)	lb (kg)	lb (kg)	lb (kg)	lb (kg)	lb (kg)	lb (kg)	lb (kg)	ft (mm)
25 ft (7.5 m)					12,808 (5810)*	12,808 (5810)*	9722 (4410)*	9722 (4410)*			7650 (3470)*	7650 (3470)*	20.62 (6285)
20 ft (6.0 m)					13,558 (6150)*	13,558 (6150)*	12,985 (5890)*	10,141 (4600)			7120 (3230)*	7120 (3230)	24.18 (7372)
15 ft (4.5 m)			20,370 (9240)*	20,370 (9240)*	16,600 (7530)*	15,476 (7020)	14,043 (6370)*	9810 (4450)	10,956 (4970)	6834 (3100)	7010 (3180)*	6040 (2740)	26.37 (8039)
10 ft (3.0 m)			26,786 (12150)*	26,786 (12150)*	20,128 (9130)*	14,330 (6500)	15,255 (6920)	9303 (4220)	10,714 (4860)	6613 (3000)	7187 (3260)*	5511 (2500)	27.51 (8388)
5 ft (1.5 m)					22,994 (10,430)*	13,271 (6020)	19,682 (6660)	8796 (3990)	10,449 (4740)	6371 (2890)	7650 (3470)*	5291 (2400)	27.75 (8459)
0 ft (0 m)			14,903 (6760)*	14,903 (6760)*	22,663 (10,280)	12,676 (5750)	14,285 (6480)	8993 (3830)	10,251 (4650)	6172 (2800)	8509 (3860)*	5401 (2450)	27.09 (8259)
– 5 ft (– 1.5 m)	14,881 (6750)*	14,881 (6750)*	24,294 (11020)*	24,250 (11000)*	22,443 (10,180)	12,500 (5670)	14,087 (6390)	8289 (3760)	10,185 (4620)	6106 (2770)	9700 (4400)	5842 (2650)	25.48 (7767)
- I0 ft (- 3.0 m)	24,956 (11,320)*	24,956 (11320)*	26,411 (11980)*	24,603 (11160)	19,753 (8960)*	12,588 (5710)	14,153 (6420)	8333 (3780)			11,530 (5230)	6922 (3140)	22.70 (6921)
– 15 ft (– 4.5 m)			18,121 (8220)*	18,121 (8220)*	13,845 (6280)*	13,007 (5900)					10,185 (4620)*	9768 (4390)	18.23 (5558)

Lift Capacity Front and Rear



Lift Capacity Full Circle

- Notes: I. The above loads are in compliance with SAE and ISO Hydraulic Excavator Lift Capacity Standards.
 - 2. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.
 - 3. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.



A GLOBAL COMMITMENT TO QUALITY

JCB's total commitment to its products and customers has helped it grow from a one-man business into one of the world's largest manufacturers of backhoe loaders, crawler excavators, wheeled excavators, telescopic handlers, wheeled loaders, dump trucks, rough terrain fork lifts, industrial fork lifts, mini/midi excavators, skid steer loaders and tractors.

By making constant and massive investments in the latest production technology, the JCB factories have become some of the most advanced in the world.

By leading the field in innovative research and design, extensive testing and stringent quality control, JCB machines have become renowned all over the world for performance, value and reliability.

And with an extensive dealer sales and service network in over 150 countries, we aim to deliver the best customer support in the industry.

Through setting the standards by which others are judged, JCB has become one of the world's most impressive success stories.

