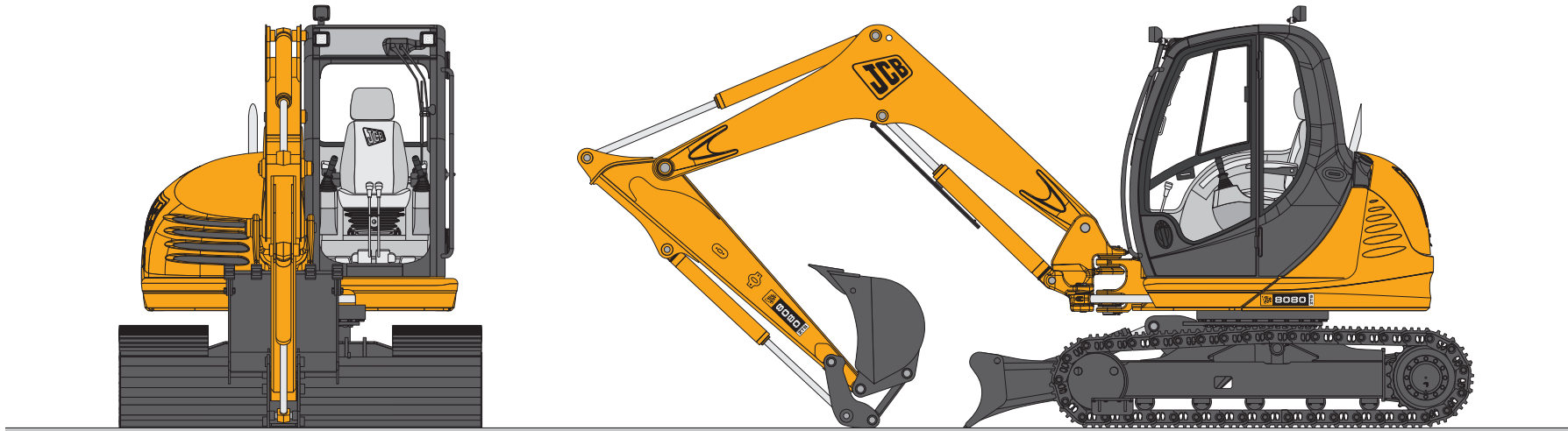




JCB MIDI EXCAVATOR | 8080 ZTS



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FAST FACTS

- **AMS – ADVANCED MANAGEMENT SYSTEM**

Maximizes machine performance and minimizes fuel consumption by matching the engine to the hydraulic output. Full diagnostics minimize downtime and allow machine usage to be analyzed.

- **EXTREME COMFORT**

The operator's environment is stylish and spacious with a fully adjustable deluxe suspension seat and independent armrests. Integral air conditioning keeps that operator comfortable and productive. Plus many extras, a cool box, toolbox, radio cassette, sunblind, coat-hook, cup holder, 12 volt electrical receptacle and a front window that easily opens and stows overhead.

- **DUAL PATTERN CONTROL SWITCH**

Operator can change control pattern from ISO to SAE from inside the cab.

- **DURABLE BUILD**

X-frame undercarriage with good ground clearance, large diameter swing ring and belly guards standard.

- **SUPERB OPERATOR ENVIRONMENT**

Features deluxe suspension seat, short control levers, clear all-round visibility, cushion control, Auto plus One-Touch idle controls and air conditioning.

- **TIER II LOW EMISSION 3.1 LITER DIESEL ENGINE**

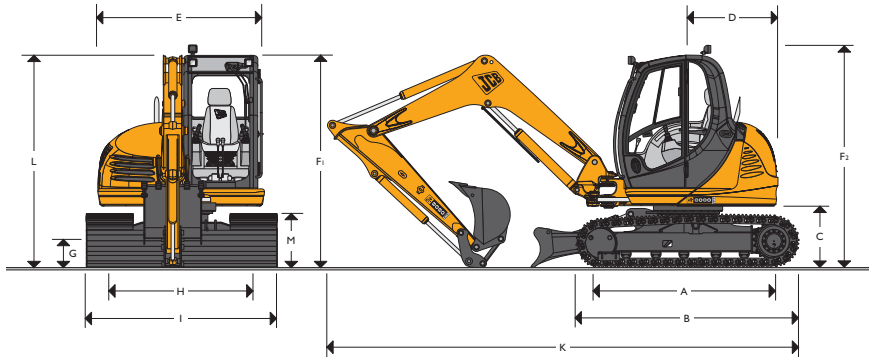
58 net HP and long-life reliability

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STATIC DIMENSIONS



STATIC DIMENSIONS

Dimensions in ft-in (millimetres)		
A	Track length on ground	7-3 (2200)
B	Undercarriage overall length	9-3 (2830)
C	Counterweight clearance	2-6 (767)
D	Tailswing radius	3-10 (11160)
E	Overall width of superstructure	7-0 (2135)
F1	Height over cab	8-11 (2709)
F2	Height over cab worklights	9-3 (2830)
G	Ground clearance	1-2 (363)
H	Track gauge	6-1 (1850)
I	Width over tracks (18in / 450mm shoes)	7-7 (2300)
I	Width over tracks (24in / 600mm shoes)	8-0 (2450)
K	Transport length (79in / 2000mm dipper)	19-11 (6060)
L	Transport height (79in / 2000mm dipper)	9-3 (2830)
M	Track height	2-2 (665)

ENGINE

Model	Tier II A-4JG1 compliant.
Type	Water cooled, 4-stroke, 4-cylinder in-line, direct injection, diesel.
Net power (SAE J1349 and 80/1269/EEC)	57.6hp (44kW) at 2300 rev/min.
Piston Displacement	186 cu.in. (3.06 litres).
Air Filtration	Dry element with secondary safety element.
Cooling	Water cooled.
Starting system	12 volt.
Batteries	1 x 12 volt Heavy Duty.
Alternator	12 volt, 80 amp.

SWING SYSTEM

Swing motor	Axial piston type.
Swing brake	Hydraulic braking plus automatic spring applied disc type parking brake.
Final drive	Planetary reduction.
Swing speed	9.5 rev/min.
Swing gear	Large diameter, internally toothed.
Swing lock	Multi position hydraulic.

UNDERCARRIAGE

Construction	Fully welded, 'X' frame type with central bellyguarding and sloping sidemembers with dirt relief holes under top rollers.
Upper & lower rollers	Heat treated, sealed and lubricated.
Track type	Sealed and greased steel or continuous rubber.
Track adjustment	Grease cylinder type.
Track idler	Sealed and lubricated, with spring cushioned recoil.
Track shoes	18in (450mm) triple grouser 24in (600mm) triple grouser 18in (450mm) rubber tracks 18in (450mm) triple grouser offset drive
Rollers and Shoes (each side)	Upper rollers 1 Lower rollers 5 Track shoes 39



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HYDRAULIC SYSTEM

A variable flow load sensing system with flow on demand and servo operated, multi-function open center control.

Pumps

Main pumps | variable displacement axial piston type.
Maximum flow | 45 gal/min (170 l/min).

Control valve

A nine spool control valve with auxiliary service spool as standard (2nd auxiliary optional).

Relief valve settings

Boom/Arm/Bucket | 4350lb/sq.in (300 bar)
Swing circuit | 3278lb/sq.in (226 bar)
Travel circuit | 4350lb/sq.in (300 bar)
Pilot control | 580lb/sq.in (40 bar)

Hydraulic cylinders

Double acting type, with screwed end caps and hardened steel bearing bushes.

Filtration

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

In tank

125 micron.

Main return line

first fit 3 micron, thereafter 10 micron.

Cooling

Air blast cooler.

TRACK DRIVE

Type

Fully hydrostatic, 2 speed with auto shift-down system.

Travel motors

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.

Gradeability

49° continuous.

Travel Speed

High – 3.4mph.

Low – 2.3mph.

Tractive Effort

12,950ft.lb

EXCAVATOR END

Mono boom.

Cast tipping link.

Boom up end damped, dipper out end damped.

Swing end damped both directions.

CAB

Unlike some other zero tailswing machines, the full size high-comfort cab of the 8080 gives the operator the room to operate in comfort, helping him to be more productive.

Dimensions in ft-in (millimetres)	External	Internal
Cab height	5-7 (1707)	5-3 (1600)
Cab length	4-11 (1510)	4-7 (1405)
Cab width	3-2 (960)	3-1 (945)
Distance from seat base to roof	3-8 (1130)	
Door aperture width	2-5 (735)	

- Steel cab with high strength rolled section frame conforms to ISO dimensional standards. Noise and vibration isolated by four hydraulically damped mountings.
- All tinted safety glass windows with fully opening two piece windshield and in screen stowage. Gas strut assisted. Parallelogram wash/wiper. Opening door window.
- Air conditioning and heater with windscreen demister.
- Fully adjustable deluxe suspension seat with armrests and backrest recline.
- Cigarette lighter and ashtray are standard fitment.
- Radio is available as an option.



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AMS – ADVANCED MANAGEMENT SYSTEM

Advanced Management System

The heart of the system is the in-cab monitor unit. This gives a graphical display of fuel level, engine water and hydraulic oil temperatures, in addition to audio visual warnings and function selection.

The unit also controls the work mode and one touch idle facility.

The monitor and service tool can be used to check the function of pressure switches, solenoids and actual values on monitor gauges.

It is easy to amend the preset languages shown on the monitor. Using a service tool additional languages can be made available.

A maintenance indicator illuminates at the required service interval to make the operator aware of an imminent service.

All servicing and basic checks can be carried out using the cab monitor display. A service tool connected to the monitor can be used for more detailed diagnostics and machine history analysis.

CONTROLS

Excavator	All servo lever operated, with DPC-Dual pattern controls (ISO or SAE).
Tracks	Individually servo operated by foot pedal or hand lever. Speed selection via button on joystick.
Auxiliary	RH joystick switch or floor switch.
Low flow	RH pedal on floor.
Controls isolation	Gate lock lever at cab entrance, via LH console, and a console mounted switch.
Engine speed	Dial type throttle control plus servo lever mounted one-touch idle control and fascia panel mounted auto-idle control.
Engine stop	Ignition key operated.
Horn	Operated via servo lever mounted button.
Dozer	Via dedicated lever.

SERVICE CAPACITIES

	US Gal	Liters
Fuel tank	27.25	103
Engine coolant	3.7	14.0
Engine oil	2.5	9.6
Track reduction gear (each side)	0.34	1.3
Hydraulic system	27.8	105
Hydraulic tank	14.9	56.5

WEIGHTS AND GROUND BEARING PRESSURES

Machine equipped with Boom; 6ft 6in (2.00m) Dipper Arm and 36" excavating bucket. Operator and full fuel tank.

Track shoes	Standard Boom	
	Operating Weight	Bearing Pressure
18in. (450mm) Rubber	18188lb (8250kg)	5.97lb/sq. in. (0.42kg/sq. cm.)
18in. (450mm) Steel	18519lb (8400kg)	5.97lb/sq. in. (0.42kg/sq. cm.)
24in. (600mm) Steel	18960lb (8600kg)	4.69lb/sq. in. (0.33kg/sq. cm.)

DOZER BLADE

Dimensions in ft-in (millimetres)	
Max. height (above ground)	1-6 (463)
Dig depth (below ground)	1-4 (403)
Approach angle	degrees 23°
Width	7-6 (2320), 8-1 (2470), 7-3 (2220)
Height	1-8 (514)
Reach in front of tracks	2-1 (632)



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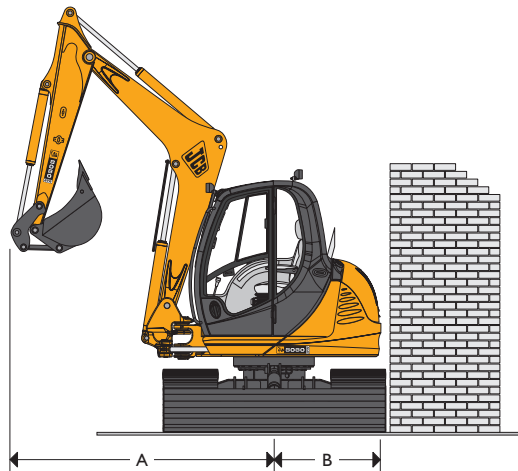
STANDARD EQUIPMENT

Speakers and aerial; Air conditioning; Intermittent wiper; Courtesy light; Automatic idle; Single acting hi flow auxiliary; Cab and boom worklights; Coolbox; Cup holder; Front opening window with integral lower window storage; Auto shiftdown track motors; Floor mounted hammer switch; Suspension seat; Undercarriage belly guards; Cab handrail; Quickhitch electrics; Cold start pre-heat; Double element air cleaner; Heavy duty alternator; Heavy duty battery; Cab and engine soundproofing; Cab heater and screen defroster; Tinted glass; Coat hook; Cigarette lighter; Removable floor mat; Windshield washer and wiper; Plug in power socket; One touch engine speed control; Dozer blade.

ZERO TAIL SWING PERFORMANCE

The JCB 8080 midi excavator offers users all the advantages of a zero tailswing machine but none of the drawbacks. When fitted with optional non-offset tracks, the tail rotates within the width of the undercarriage, reducing the space required in which to operate the machine, ensuring the rear cannot come into contact with objects while turning. Also excellent lift capacity has been retained.

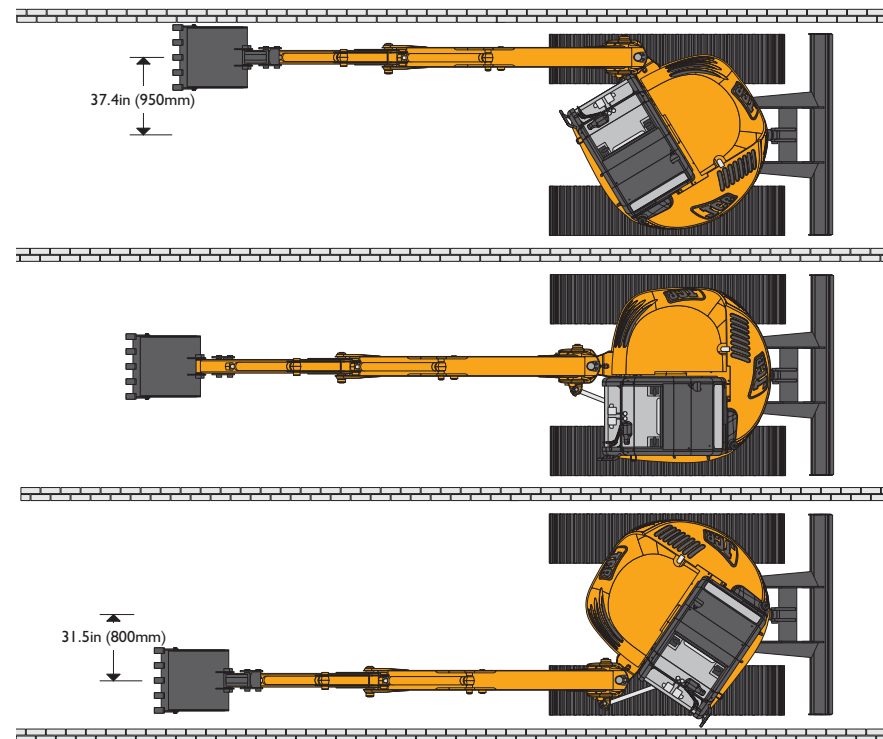
- A Front slew radius
Kingpost straight – 9ft 5in (2862mm)
Kingpost full swing – 7ft 9in (2358mm)
- B Tailswing radius – 3ft 10in (1160mm)



OPTIONAL EQUIPMENT

Fan guard; Electrics isolator; Radio cassette; Low flow auxiliary; Double acting hi flow auxiliary; Mechanical quickhitch; bucket changeover auxiliary; FOGS guard level 1 and 2; Hydraulic quickhitch; Tipping link mounted lifting point; General purpose buckets; Ditch/grading buckets; Hydraulic hammers; Rotating beacon; Electric refuelling pump; Hose burst check valves (either 1 x boom or 1 x boom and 1 x dipper); Headrest.

SWING PERFORMANCE



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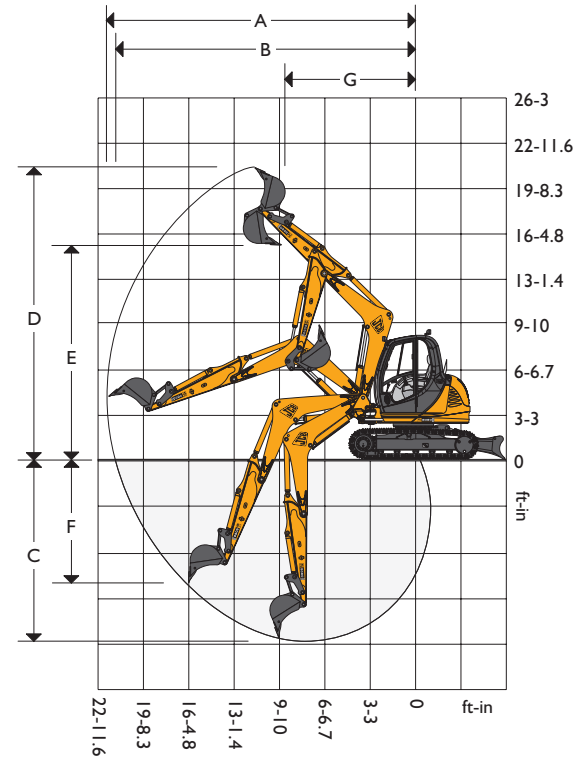


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WORKING RANGE

Standard Boom		6ft-6.7in (2.00m) Dipper
Dimensions		
A	Max. digging reach	ft-in (mm) 22-5 (6836)
B	Max. digging reach on ground	ft-in (mm) 21-11 (6677)
C	Max. digging depth	ft-in (mm) 13-10 (4214)
D	Max. digging height	ft-in (mm) 21-1 (6436)
E	Max. dumping height	ft-in (mm) 15-5 (4703)
F	Max. vertical wallcut depth	ft-in (mm) 9-0 (2752)
G	Min. swing radius	ft-in (mm) 9-5 (2862)
	Dipper tearout	lbf (kN) 8093 (36)
	Bucket tearout	lbf (kN) 11240 (50)
	Bucket rotation	degrees 204°



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LIFT CAPACITIES – Dipper length: 6ft-6in (2.0m), Trackshoes: 18in (450mm) rubber, No bucket.

Monoboomb

Load Point	Reach from swing center												
	9ft 10in (3m)			13ft 1in (4m)			16ft 5in (5m)			Capacity at max. reach			
Height	Dozer up	Dozer down		Dozer up	Dozer down		Dozer up	Dozer down		Dozer up	Dozer down		ft-in (m)
ft-in (m)	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	
11-6 (3.5)	–	–	–	–	–	–	2426*	2536*	2426*	2580*	2668*	2117*	17-3 (5.26)
9-10 (3.0)	–	–	–	2293*	2381*	2271*	2448*	2668*	2536*	2734*	–	1985	18-0.5 (5.5)
8-2 (2.5)	–	–	–	2690*	2778*	2822*	2646*	2756*	2558*	2139	2867	1985	18-4 (5.6)
6-7 (2.0)	3903*	4079*	3925*	3131*	3241*	3219*	2844*	2955*	2227*	1985	2867*	1808	18-8 (5.7)
4-11 (1.5)	5204*	5424*	5094*	3660*	3771*	2977*	3087*	3175*	2205	2073	3021*	1742	18-10 (5.75)
3-3 (1.0)	6218*	6417*	4234	4035*	4212*	2800	2646	3440*	2073	1985	3131*	1477	18-10 (5.75)
1-8 (0.5)	5446	7012*	4145	3594	4653*	2933	2646	3638*	2337	2117	3175*	1477	18-8 (5.7)
Ground level	3969	7872*	4388	2470	5182*	2800	2095	3881*	2161	2073	3241*	1676	18-8 (5.7)
– 1-8 (0.5)	3969	7916*	3969	2470	5248*	2933	2139	3837*	2073	1808	3396*	–	18-0.5 (5.5)
– 3-3 (1.0)	4454	7872*	4300	3131	5424*	2867	2227	4035*	2073	2139	3616*	1896	17-8 (5.38)

Lift capacity front and rear.

Lift capacity full circle.

- Notes:**
1. Lifting capacities are based on ISO 10567, that is: 75% of minimum tipping load or 87% of hydraulic lift capacity, whichever is the less. Lifting capacities marked* are based on hydraulic capacity.
 2. Lift capacities assume that the machine is on firm, level ground and equipped with an approved lifting point and bucket.
 3. Lift capacities may be limited by local regulations. Please refer to your dealer.

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A GLOBAL COMMITMENT TO QUALITY

JCB's total commitment to its products and customers has helped it grow from a one-man business into the World's 5th largest manufacturer 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 a global sales and service network of over 400 distributors and agents, the company exports over 70% of its production to all five continents.

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



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of Hard Work