



JCB 3CX SITEMASTER

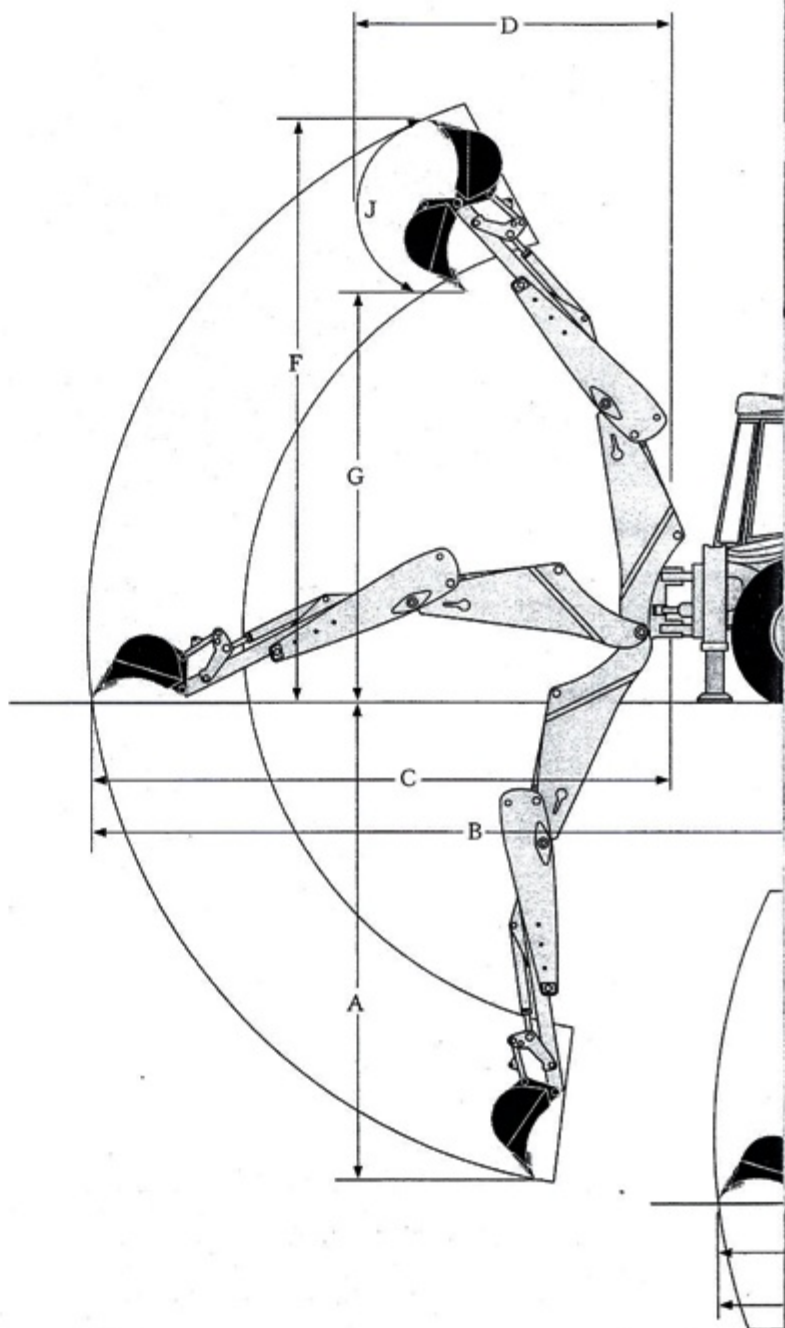
BACKHOE LOADER



MAX. ENGINE POWER: 68.5kW (92hp)
MAX. BACKHOE DIG DEPTH: 5.46 metres (17ft 11in)
MAX. LOADER CAPACITY: 1.0 m³ (1.32 yd³)

BACKHOE DIMENSIONS

		m	ft-in
A SAE max dig Depth	Ext	5.46	17-11
	Ret	4.24	13-11
SAE 2ft flat bottom	Ext	5.43	17-10
	Ret	4.21	13-10
Maximum dig depth with deep profile bucket	Ext	5.97	19-7
	Ret	4.75	15-7
B Reach - ground level to rear wheel centre	Ext	7.87	25-10
	Ret	6.72	22-1
C Reach - ground level to slew centre	Ext	6.52	21-5
	Ret	5.37	17-7
D Reach - at full height to slew centre	Ext	3.66	12-0
	Ret	2.74	9-0
E Side reach - to centre line of machine	Ext	7.09	23-3
	Ret	5.94	19-6
F SAE operating height	Ext	6.35	20-10
	Ret	5.53	18-2
G Maximum loaderover Height	Ext	4.72	15-6
	Ret	3.84	12-7
SAE loaderover height	Ext	4.32	14-2
	Ret	3.44	11-3
H Total kingpost travel		1.16	3-10
	Narrow rear frame option	1.05	3-5
J Bucket rotation	Speed	201°	201°



BACKHOE PERFORMANCE

Bucket tearout	Speed	4940kgf	10870lbf
	Power	5700kgf	12540lbf
Dipper tearout	Ext	2085kgf	4590lbf
	Ret	3010kgf	6620lbf
Lift capacity of bucket pivot at full reach	Ext	990kg	2180lbs
	Ret	1250kg	2750lbs

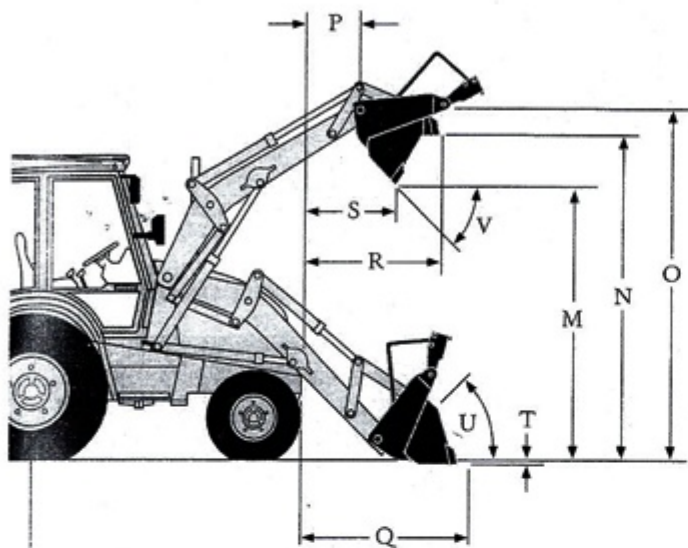
BACKHOE ATTACHMENTS

STANDARD PROFILE BUCKET					DEEP PROFILE BUCKET				
WIDTH* mm (in)	CAPACITY SAE		WEIGHT (+ TEETH) kg (lb)	TEETH	WIDTH* mm (in)	CAPACITY SAE		WEIGHT (+ TEETH) kg (lb)	TEETH
	RATED m ³ (ft ³)	STRUCK m ³ (ft ³)				RATED m ³ (ft ³)	STRUCK m ³ (ft ³)		
305 (12)	0.06 (2½)	0.05 (1¾)	102 (225)	3	305 (12)	0.09 (3)	0.07 (2½)	102 (225)	3
400 (16)	0.09 (3)	0.07 (2½)	109 (240)	3	457 (18)	0.16 (5½)	0.13 (4½)	122 (269)	3
457 (18)	0.12 (4¼)	0.09 (3)	116 (256)	3	610 (24)	0.23 (8)	0.18 (6¼)	142 (314)	4
610 (24)	0.17 (6)	0.13 (4½)	140 (310)	4	800 (32)	0.30 (10½)	0.24 (8½)	163 (359)	5
800 (32)	0.24 (8½)	0.17 (6)	162 (355)	5	950 (37)	0.38 (1½)†	0.30 (10½)	183 (403)	5
950 (37)	0.30 (10½)	0.21 (7¼)	198 (435)	5	1100 (43)	0.48 (1½)†	0.34 (12)	203 (448)	6

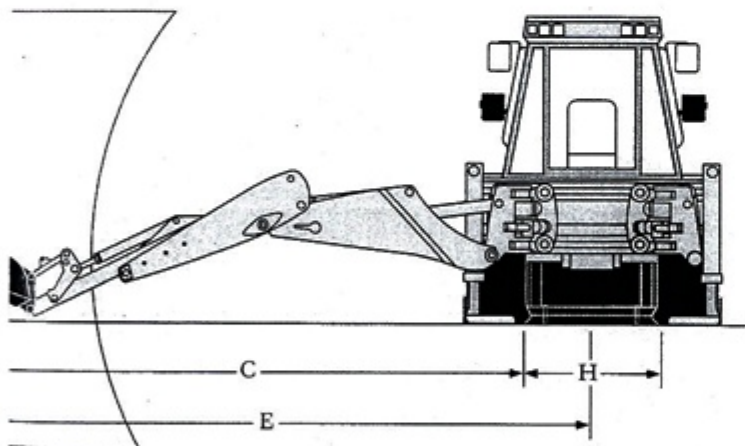
*Including sidecutters. Width less sidecutters deduct 25mm (1in)

*Including sidecutters. Width less sidecutters deduct 25mm (1in). †Capacity in cu yd

LOADER DIMENSIONS – 6-in-1 Shovel



	m	ft-in
M Dump height	2.74	9-0
N Loadover height	3.20	10-6
O Pin height	3.45	11-4
P Pin forward reach	0.36	1-2
Q Reach at ground (Toe plate horizontal)	1.37	4-6
R Max. reach at full height	1.15	3-9
S Reach at full height fully dumped	0.78	2-7
T Dig depth	0.10	0-4
U Rollback at ground	45°	45°
V Dump angle	43°	43°
Jaw opening width	0.95	3-1



LOADER PERFORMANCE

Loader breakout of shovel	6500kgf	14340lbf
Loader breakout-arms	4850kgf	10690lbf
Lift capacity to full height - A*	2850kg	6270lb
Lift capacity to full height - B*	2800kg	6160lb
Clamping force (A* and B*)	2940kgf	6480lb

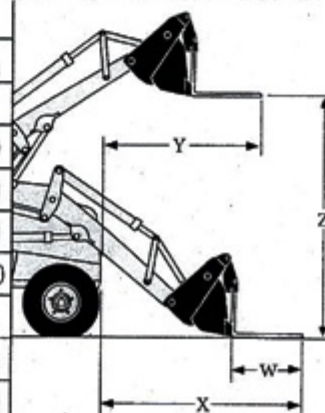
*Type A shovel = 2235mm (7' 4")/Type B shovel = 2350mm (7' 8")

LOADER ATTACHMENTS

6-IN-1 SHOVEL

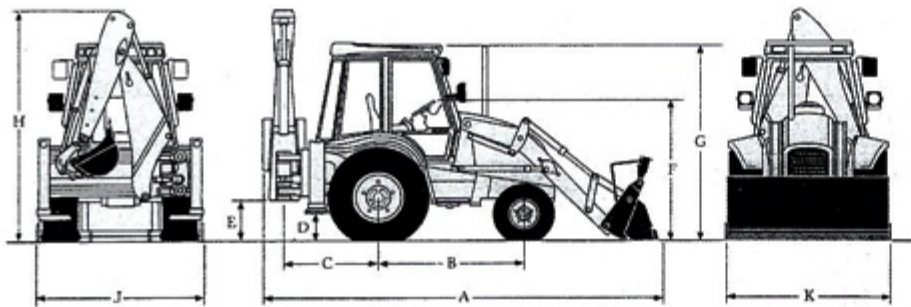
FORKLIFT PERFORMANCE & DATA

WIDTH mm (ft in)	CAPACITY SAE		SHOVEL MOUNTED FORKS		QUICKHITCH MOUNTED FORKS	
	RATED m ³ (yd ³)	STRUCK m ³ (yd ³)	Section Width	W Fork length	Section Width	W Fork length
2235 (7-4)	1.0 (1.32)	0.83 (1.09)	80mm (3 1/4in)	1.1m (3ft 7in)	80mm (3 1/4in)	1.1m (3ft 7in)
			X Reach at ground	2.66m (8ft 9in)	Y Reach at full height	2.03m (6ft 8in)
			Y Reach at full height	2.25m (7ft 5in)	Z Full lift height	1.72m (5ft 8in)
			Z Full lift height	2.92m (9ft 7in)	3.27m (10ft 9in)	
2350 (7-8)	1.0 (1.32)	0.83 (1.09)	Minimum fork spacing	0.2m (8in)	0.2m (8in)	
			Maximum fork spacing	2.17m (7ft 3in)	1.03m (3ft 4in)	
			SWL at 500mm load centres	1000kg (2205lb)	2000kg (4410lb)	



GENERAL SPECIFICATION – JCB 3CX SITEMASTER

STATIC DIMENSIONS



*Narrow Option

	m	ft. ins.
A Total Travel Length	5.62	(18-5)
B Axle Centreline Distance	2.17	(7-1)
C Slew Centre to Rear Axle Centre Distance	1.36	(4-6)
D Stabiliser Feet Clearance	0.37	(1-2)
E Kingpost Clearance	0.52	(1-8)
F Steering Wheel Centre Height	1.94	(6-4)
G Cab Roof Height	2.87	(9-5)
H Total Travel Clearance	3.61	(11-10)
J Rear Frame Width	2.36	(7-9)
K Shovel Width	2.35	(7-8)
J Rear Frame Width*	2.24	(7-4)
K Shovel Width*	2.23	(7-4)

ENGINE

	Naturally Aspirated	Turbo Charged
Make	JCB	JCB
Model	1004-42	1004-40T
Displacement/Lt	4.23	3.99
No. cylinders	4	4
Bore size/mm	103	100
Stroke/mm	127	127
Air Filter	Dual element, 2 stage	Dual element, 2 stage
Cold Start	Thermostat	Thermostat

Conforming to EC mobile off-highway low emission regulations (stage 1), the advanced engine design means low fuel consumption, higher torque and power outputs, excellent reliability and minimal (500 hr) maintenance intervals.

Two stage dry type air filter has both primary and safety elements.

To: ISO/TR 14396 and SAE J1995

Gross Power	56 KW (75 hp) @ 2200 rpm	68.5 KW (92 hp) @ 2200 rpm
Gross Torque	290 Nm (214 lbf.ft) @ 1400 rpm	370 Nm (273 lbf.ft) @ 1400 rpm

To: ISO 9249 (EEC 80/1269) and SAE J1349

Net Power	53.3 KW (71.5 hp) @ 2200 rpm	63.1 KW (84.5 hp) @ 2200 rpm
Net Torque	284 Nm (210 lbf.ft) @ 1400 rpm	361 Nm (266 lbf.ft) @ 1400 rpm

To: EEC 86/662 (dBA)

Noise level in cab	75	76
External sound power	104	105

ELECTRICS

Starting circuit	12 Volts
Standard alternator	72 Amp
Heavy duty alternator	85 Amp
Low maintenance battery	115 A/hr
No. front work lights	4
No. rear work lights (adjustable)	4

TRANSMISSION

The JCB Syncro Shuttle combines a 4-speed, fully synchromesh gearbox with integral torque converter. Plus it has a power shuttle for smooth, easy direction changes and fast cycle times.

- Easy-to-use column mounted lever for machine direction change while allowing the operator to keep hands on the steering wheel.
- Direction changes are modulated from forward to reverse with detented lever gate for safety
- The pedal layout and conventional H-pattern gear lever add to overall ease of operation.
- Torque converter stall ratio: 2.54:1
- A solenoid-operated clutch allows easy on the move selection of 2 or 4WD
- An optional 4-speed full powershift gearbox is available enabling effortless and fast gear changes. It is operated through the twist grip on the column mounted forward/reverse lever.

TRAVEL SPEEDS

Speed will vary dependent on tyre selection.

Gear	km/h	mph
1	5.5	3.4
2	8.9	5.5
3	19.1	11.9
4	36.1	22.4

AXLES

High tractive effort is produced via the heavy-duty JCB rear drive axle and front steer-drive axle. Both axles incorporate the unique JCB Max-Trac torque-proportioning differential for reduced wheel slippage. A limited slip differential is available as an option for the rear axle to increase traction further on very soft/slippy ground. The front steer-drive axle has an oscillation angle of 16° to maintain wheel to ground contact in arduous site conditions. Powered track rod steering gives large steer angle for small turning circles.

SMOOTH RIDE SYSTEM

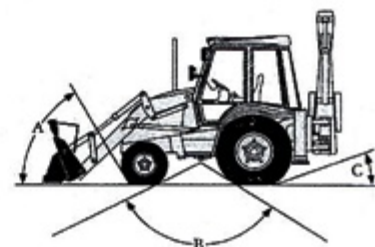
The optional Smooth Ride System provides a suspension system for the loader allowing the arms to "float" minimizing machine "bounce" when travelling on the road, or across site, for maximum operator comfort and reduced machine loadings.

BRAKES

The JCB braking system ensures effective, fade-free braking. The self-adjusting, multi disc-arrangement is inboard mounted and is oil immersed for minimum maintenance and a long operating life

- A 3 position switch allows the selection of 2 wheel drive with two wheel braking; 2 wheel drive with four wheel braking or 4 wheel drive with four wheel braking.
- All turbo-charged machines are fitted with servo assisted brakes as standard (optional on naturally aspirated machines).
- Twin brakes pedals provide tighter turning circle and enhanced steering control on slippery ground.
- Automatic compensation ensures 'straight' machine braking.
- Disc diameter: 220 mm (8.7 in). Friction area: 129,000 sq. mm (200 sq. in) per brake.
- The independent parking brake is mounted on the transmission output shaft and will hold the machine on 1:3 gradients. It is an over-center type, adjustable within the cab, with transmission disconnect to prevent premature brake pad wear. Park brake disc diameter: 280 mm (11 in). Friction area: 5416 sq. mm (8.4 sq. in)

GROUND LINE ANGLES



- A - Approach angle 66°
- B - Interference angle/ramp to ground plane 120°
- C - Departure angle 20°

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TURNING CIRCLES

Full power hydrostatic steering is incorporated. In the event of engine failure emergency steering is still available.



	Unbraked	Braked
A Kerb-kerb	8.1m (26' 7")	6.9m (22' 8")
B Wall-wall	10.4m (34' 1")	9.5m (31' 2")

(Depending on tyre size, ground conditions, etc.)

CAB

Excellent visibility (and safety) is provided by the extra large tinted glass areas of 6.4 sq m (70sq ft). Cab frame is ROPS and FOPS approved for maximum operator protection. ISO standard 3471 and 3449 (SAE J1040 and J231).

- A fully adjustable, seat with lumbar support combines with ergonomically positioned controls to minimise operator fatigue.
- The in-cab noise levels are the lowest in the business for maximum operator comfort (see engine section for data).
- A radio location is provided as standard plus twin speakers for stereo sound.
- Cab provides easy 'walk through' two door access and rear side windows open either partially or fully for extra ventilation. Standard features include: lap seat belt, 3 speed fresh air/recycle heater, front & rear screen wash/wipers, front & rear horn, exterior mirrors, and flat easy-clean floor mat.
- The instrument panel is positioned to the right-hand side for ease of viewing from either the loading or excavating position and has an optional lockable cover for vandal proofing. Engine speed, fuel and coolant temperature gauges, (and clock on cab builds) are mounted in the panel.
- Audio/visual warning is provided for alternator charge, coolant temperature, engine oil pressure, air filter blockage, transmission oil temperature/pressure and handbrake on.

JCB POWERSLIDE

Exclusive to JCB, this option enables the excavator's sideshift carriage to be hydraulically powered across the rearframe by the operation of a pedal in the cab.

With this feature there is no need to "push" the carriage across with the bucket avoiding ground damage and the need to relocate the whole machine.

TYRES

Front:	12.0 x 18, 12PR - Industrial
	12.5 x 18, 10PR - Industrial
	335/80 x 18, Radial - Traction
	400/70 x 18, Radial - Industrial
Rear:	16.9 x 28, 12PR - Traction or Industrial
	18.4 x 26, 12PR - Traction or Industrial
	16.9 x 28, Radial - Traction
	480/80 x 26, Radial - Industrial
Front:	12.5 x 20, 10PR - Industrial
Rear:	18.4 x 30, 14PR - Industrial

HYDRAULICS

The Open Centre system uses twin gear pumps and Hydraulic Speed Control (HSC) with a power modulation valve that automatically varies hydraulic power to match digging conditions for extra performance and power.

- Open centre hydraulic system using simple and reliable high efficiency gear pumps.
- A Power Modulation Valve automatically varies the hydraulic power to match digging conditions to improve performance and efficiency - automatically dumps one pump when 4th gear selected on powershift models.
- The HSC switch enables controlled use of hydraulic response depending upon application.
- Easily used, ergonomically positioned levers give excellent control of the loader and backhoe, thus reducing operator fatigue.
- Optional seat mounted hydraulic servo controls allow dual operation of loader and excavator function.
- An independent pump powers the Extradig dipper so that it can extend or retract without breaking the digging cycle. This allows faster cycle times and simultaneous use of the telescopic and normal excavator actions in operations such as grading and bank dressing.
- A full flow 10 micron filter ensures that oil stays free of contaminants.

PUMP FLOWS at 2200rpm

Nat Asp engine	Turbo engine
Main pump:	Main pump:
73L/min	79L/min
(16gal/min)	(17.5gal/min)

Second pump:	57L/min
51L/min	(12.5gal/min)
(11.5gal/min)	

SYSTEM WORKING PRESSURE

Backhoe & Loader: 227 bar (3300lbf/sq in).

CAPACITIES

Hydraulic system (inc. tank)	132ltrs	(29gal)
Fuel tank	130ltrs	(28.6gal)
Engine coolant	23ltrs	(5gal)
Engine oil (inc. filter)	10ltrs	(2.2gal)
Rear axle	16ltrs	(3.5gal)
Front axle	16ltrs	(3.5gal)
Gearbox (inc. filter)	16ltrs	(3.5gal)

WEIGHT

Operational weight with 610mm (24in) excavator bucket, Extradig, 6-in-1 shovel & forks and full fuel tank: 8070kg (17,800lb)

GENERAL SPECIFICATION

STANDARD/OPTIONAL EQUIPMENT

Tinted glass	Std
ROPS & FOPS Canopy	Opt
Sunvisor	Opt
Windscreen sun band	Opt
Front windscreen wiper & washer	Std
Rear windscreen wiper & washer	Std
Rear side opening windows	Std
Door opening windows	Opt
Cab heater & demister (front & rear)	Std
Face fan	Opt
Face level air vents	Opt
Air conditioning	Opt
Suspension seat	Std
Seat armrests	Opt
Seat belt	Std
Head rest	Opt
Tilt steer column	Opt
Servo controls	Opt
Interior reading light	Std
Radio location & speakers (cab builds)	Std
Cigarette lighter and ashtray	Std
Instruments vandal guard	Opt
Front & rear horns	Std
Reverse alarm	Opt
In-cab tool tray	Std
In-cab storage box	Std
Interior mirror	Std
External mirrors (on cab builds)	Std
Door ajar stays	Std
Fire extinguisher	Opt
Road lights, direction indicators	Std
Number plate mounting & light	Std
Rear fog light	Opt
Front & rear work lights	Std
Rotating beacon	Opt
Battery isolator	Opt
Loader arm safety strut	Std
Shovel return-to-dig mechanism	Opt
Smooth Ride System	Opt
6-in-1 shovel	Std
Bolt-on-toeplate	Opt
Shovel mounted forks (not quickhitch)	Std
Loader quickhitch & integrated forks	Opt
Loader quickhitch (mech. or hyd.)	Opt
Ram mounted lock valves	Opt
JCB Powerslide (powered sideshift)	Opt
Extradig dipper	Std
Two position tipping lever	Opt
High flow (eg hammer) pipework	Opt
Low flow (eg jaw bucket) pipework	Opt
Lifting shackle/hook	Opt
Excavator quickhitch	Opt
GP excavator buckets	Opt
Ditch cleaning/grading buckets	Opt
Excavator mounted hyd. hammer	Opt
Air filter pre-cleaner	Opt
Powershift gearbox (with turbo engine)	Opt
Limited slip differentials	Opt
Hand held hyd. tool circuit	Opt
Biodegradable hydraulic oil	Opt
Heavy duty alternator	Opt
Extreme cold climate heating equip.	Opt
Electric refuelling pump	Opt
Exterior mounted toolbox	Opt
Front mudguards	Opt
Stabiliser street pads	Opt

Standard equipment may vary dependant on territory - please consult your dealer.