

NEW



BACKHOE LOADER | 3CX

Gross power: 74hp (55kW) Maximum dig depth: 18'6" (5.63m) Maximum loader bucket capacity: 1.3yd³ (1.0m³)



INTRODUCING THE JCB 3CX.

COMBINING LOW COST OF OWNERSHIP, SUPERIOR STRENGTH AND INNOVATIVE FEATURES GALORE, THE JCB 3CX IS ANOTHER GREAT VALUE MACHINE FROM THE WORLD'S NUMBER ONE BACKHOE MANUFACTURER. PRODUCTIVITY, PERFORMANCE AND EFFICIENCY ARE ALL CLASS-LEADING, MAKING THIS A PERFECT SOLUTION FOR LARGE FLEETS, RENTAL YARDS AND SMALLER BUSINESSES ALIKE.

The world's number one.

Market leader in 74 countries, around half of all the backhoe loaders sold in the world today are JCBs.

Value for money.

Our entry-level 3CX is a great value machine, boasting low cost of ownership and superior strength as standard. Coupled with warranty packages make the 3CX the ultimate value proposition.

Innovation built in.

This machine packs the sort of innovative features that make JCB backhoes synonymous with class-leading productivity, performance and efficiency.

Strength in depth.

There's durability aplenty throughout to cope with the rigours of the rental industry, as well as a superior aftercare package and extended warranty.

Low maintenance engine.

JCB EcoMAX is a highly efficient 74hp Tier 4 final engine that doesn't require costly DPF technology; this keeps servicing and refuelling costs low.

Excellence in any field.

The 3CX is the number one go-to solution for large fleets, rental yards and owner operators alike.



COMPETITORS'
COMBINED
MARKET SHARE

JCB

As global market leader, JCB sells around half of all the world's backhoe loaders.

COST OF OWNERSHIP AND EFFICIENCY.

WE UNDERSTAND THAT A LOW COST OF OWNERSHIP IS ESSENTIAL IN TODAY'S COMPETITIVE WORLD. WHETHER YOU RENT OR OPERATE YOUR FLEET, THE JCB 3CX IS DESIGNED TO GIVE YOU ULTIMATE VALUE FOR MONEY.

Maximum return on investment.

1 The JCB 3CX is a great value entry level machine offering superb return on investment as well as affordable insurance, finance and service parts.

2 Unlike most entry level backhoes, this is an extremely efficient machine. JCB's EcoMAX engine is very powerful and offers excellent fuel economy by producing high torque at low revs.

EcoMAX is a highly durable engine design, with tens of thousands of units in service all over the world working on a huge range of different applications.

3 The 3CX has a top speed of 23mph so you can reduce travel times on site and between locations.

4 With high breakout forces you'll be able to shift more material in less time. Put simply, these are the most efficient loaders in their class.



2



1



3



4

Rear stabilizers are equipped with twin hose burst check valves (HBCVs), which means the legs can't move during machine operation.

Built to last.

- 6 JCB precision machining provides high tolerances and accurate location of pins and bushings.
- 7 The hydraulic cylinders have friction welded ends to give extra strength.
- 8 We use a powder coat paint process which provides a high quality finish. Paint coverage is optimized and your machine stays looking good for longer.
- 9 By heating the boom and dipper to 1200°F, we remove any internal stresses caused by manufacturing and welding. This process doubles the life of our booms and reduces the overall machine weight at the same time.

Protected from damage.

- 10 JCB stabilizer cylinder guards are fitted as standard to reduce downtime by protecting your backhoe from potential costly damage.
- 11 To protect boom and dipper hoses from the perils of trenchwork, we've enclosed them inside the rear structures of the machine.

The stabilizer legs hoses are protected to prevent damage from material spillage when using the excavator.

- 12 Kingpost hoses, meanwhile, are enclosed in a flexible, robust guide to keep them from snagging or sustaining damage.

The steering cylinders are positioned high up behind the front axle which provides additional protection when moving over arduous ground.



PRODUCTIVITY AND PERFORMANCE.

THE JCB 3CX IS DESIGNED TO OFFER YOU ULTIMATE PRODUCTIVITY – WHICH OF COURSE EQUATES TO ULTIMATE VALUE-FOR-MONEY. PERFORMANCE IS BEST-IN-CLASS AND SO IS THE MACHINE'S STANDARD SPECIFICATION.

A more productive backhoe.

1 The JCB EcoMAX engine produces its peak power and torque at low engine speeds, which makes for exceptional responsiveness, great economy and outstanding performance.

2 Select our optional Extradig package and an innovative inner box design to give you an extra 3'9" of reach and dig depth. That means less repositioning and, of course, more efficiency.

The boom and dipper are of equal length, this allows digging close to the machine, meaning less repositioning, thus saving fuel.

3 A large 38 gallon fuel tank extends refuelling intervals and maximises productivity.

4 This backhoe excels in both uneven terrain and confined spaces thanks to a winning combination of high ground clearance and an excellent turning circle.

5 There's a powerful slew to ensure fast and controllable backfilling.



To guarantee ultimate performance in all conditions, the 3CX is equipped with 4WD as standard, and has a top speed of 23mph.



Lifting standards.

7 Load retention is exceptional with the 3CX's 45° loader bucket rotation.

Best in class loader bucket break out forces gives exceptional breakout ability improving loading times.

8 Reduce downtime during attachment changes by choosing our mechanical rear quickhitch option.

Limited Slip Differential provides automatic traction control to enable the machine to drive in the toughest of conditions and enables the machine to still steer unlike differential locks designs.

9 JCB's highly versatile 6-in-1 bucket is compatible with the 3CX backhoe, meaning that operators can dig, doze, load, grab, grade and backfill with just one tool.

10 Excellent forward reach enables the machine to reach much further and effective loading into high sided trucks.

11 You can easily operate high powered attachments like breakers and patch planers courtesy of a high performance 32.5g/min hydraulic pump.

12 Large 24" wheels give excellent stability when working on uneven ground.



We've fitted additional fuel filtration to reduce dirt in fluids and prevent blockages.



Minimizing downtime.

5 A lockable front grille safeguards the battery and isolator, eliminating potentially costly theft-related downtime.

Exceptional ground clearance (best-in-class) enables the machine to drive over difficult terrain and reduces costly damage to the underside of the machine.

6 There's no time-consuming dust bowl or precleaner to maintain on this machine, saving precious operator time and improving forward visibility. What's more, our scavenge design discharges dirt from the exhaust to extend air filter life.

7 The large 22 gallon hydraulic tank is mounted outboard for easy access and improved cooling, therefore improving life span of oil.

8 Hydraulic hoses all meet at the bulkhead manifold, meaning that replacement is straightforward.



COMFORT AND EASE OF USE.

ANOTHER IMPORTANT CONTRIBUTOR TO PRODUCTIVITY IS COMFORT – AFTER ALL, A COMFORTABLE OPERATOR IS A PRODUCTIVE ONE. ACCORDINGLY, THE JCB 3CX IS DESIGNED FOR DAY-LONG OPERATOR COMFORT.

A great place to work.

- 1 To create the perfect working environment for operators – and, in turn, improve productivity – select our optional air conditioning package.
- 2 To enable longer working stints, the 3CX boasts a low effort braking setup.

This backhoe comes with a choice of a canopy or a cab; our cabs are pressurized to ensure a clean and controlled working environment.

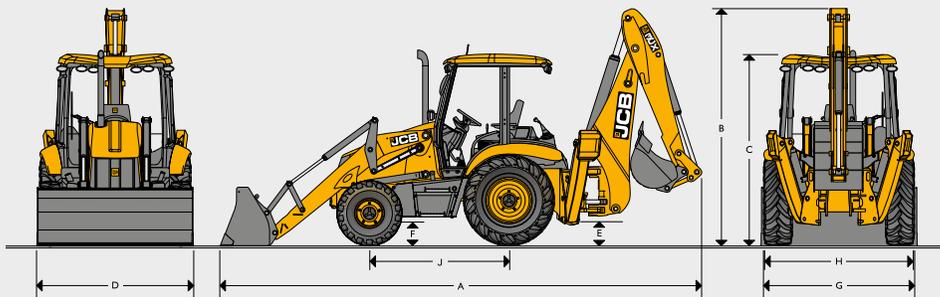
- 3 There's a 12V auxiliary circuit in the cab so that operators can charge phones and use various accessories.
- 4 Our fully adjustable suspension seat comes as standard, providing operators with improved comfort and reduced fatigue for longer working stints.
- 5 Lockable storage aplenty, with work tools easy to accommodate even if you choose the canopy option.

Operating the 3CX is straight forward; the traditional manual control system is easy and comfortable to operate.



STATIC DIMENSIONS

Loader end max. payload: 4078lb (1850kg) Max. lift height: 10.59ft (3.23meters)

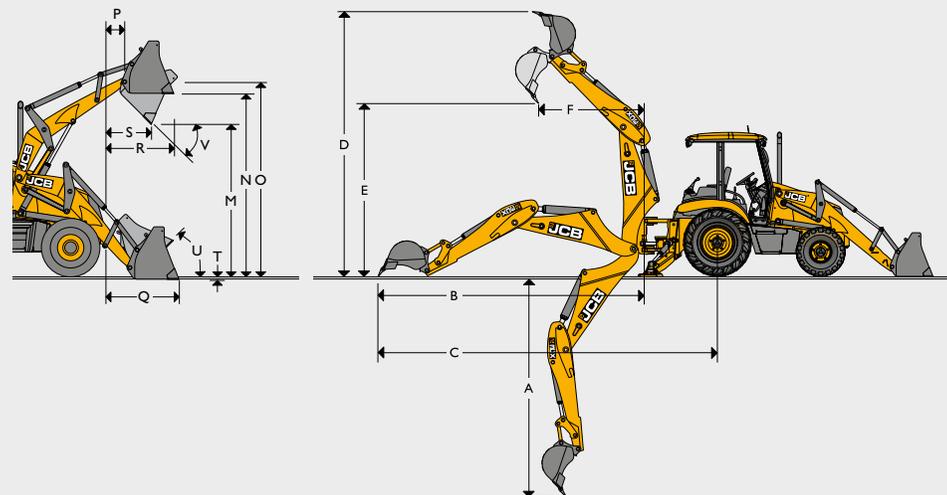


Drive		4WD	
A	Transport length	ft-in (m)	23-7 (7.19)
B	Transport height – standard Backhoe	ft-in (m)	11-3 (3.43)
B	Transport height – Extradig	ft-in (m)	11-7 (3.53)
C	Height to top of cab/canopy	ft-in (m)	9-3 (2.81)
D	Overall width with loader bucket	ft-in (m)	7-8 (2.45)
E	Ground clearance – mainframe	ft-in (m)	1-1 (0.33)
F	Ground clearance – front axle	ft-in (m)	1-1.4 (0.34)
G	Front wheel track	ft-in (m)	7-1 (2.16)
H	Rear wheel track	ft-in (m)	7-3 (2.21)
J	Wheelbase	ft-in (m)	7-1 (2.17)

ENGINE

Manufacturer	JCB		
Aspiration	Turbocharged		
Displacement	liter	4.4	
No. of cylinders	4		
Bore	inch	4.05	
Stroke	inch	5.0	
Rated engine	rpm	2200	
Power ratings			
Gross HP - SAE J1995 (ISO 14396)	hp (kW)	74 (55)	
Net HP - SAE J1349	hp (kW)	71 (53)	
Maximum torque			
Rated ISO 14396 (SAE J1995)	lb ft (Nm)	295 (400)	
Max. Torque	rpm	1200	

EXCAVATOR/LOADER PERFORMANCE



Excavator performance		Fixed dipper	Extending dipper
A	Max dig depth	ft-in (m)	14 (4.24) / 18 (5.46)
B	Reach-ground level to rear wheel center	ft-in (m)	22 (6.72) / 25-10 (7.87)
C	Reach-ground level to slew center	ft-in (m)	17-6 (5.37) / 21-4 (6.52)
D	Reach at full height to slew center	ft-in (m)	9 (2.74) / 12 (3.66)
E	Max. working height	ft-in (m)	18 (5.53) / 20-10 (6.35)
F	Max. load over height	ft-in (m)	12-7 (3.84) / 15-6 (4.72)
G	Bucket rotation – power	degrees	185° / 185°
	Bucket breakout force	lbf (kgf)	13940 (6324) / 13730 (6228)
	Dipper breakout force	lbf (kgf)	7092 (3217) / 7110 (3225)
Loader performance		GP	6-in-1
M	Dump height	ft-in (m)	9 (2.74) / 7 (2.72)
N	Load over height	ft-in (m)	10-6 (3.23) / 10-6 (3.20)
O	Pin height	ft-in (m)	11-4 (3.45) / 11-4 (3.45)
P	Pin forward reach	ft-in (m)	1 (0.36) / 1 (0.36)
Q	Reach at ground	ft-in (m)	4-7 (1.42) / 4-6 (1.37)
R	Max. reach at full height	ft-in (m)	4 (1.20) / 3-8 (1.15)
S	Reach at full height – bucket dumped	ft-in (m)	2-8 (0.83) / 2-6 (0.78)
T	Below ground level dig depth	ft-in (m)	0-3 (0.07) / 0-3 (0.10)
U	Rollback at ground	degrees	45° / 45°
V	Dump angle	degrees	43° / 43°
	Shovel breakout force	lbf (kgf)	13600 (6170) / 14400 (6531)
	Loader arm breakout force	lbf (kgf)	10900 (4942) / 10430 (4732)
	Shovel capacity	yd ³ (m ³)	1.1/1.3 (0.88/1.0) (GP shovel) / 1.3 (1.0) (6-in-1 shovel)

SERVICE CAPACITIES

Cooling system	gal (ltr)	4.2 (18.5)
Fuel tank	gal (ltr)	38 (173)
Engine oil with filter	gal (ltr)	3.4 (15)
Gearbox with filter	gal (ltr)	3.6 (16)
Rear axle	gal (ltr)	3.6 (16)
Front axle	gal (ltr)	3.6 (16)
Hydraulic system incl. tank	gal (ltr)	29.5 (130)
Hydraulic tank	gal (ltr)	22 (85)

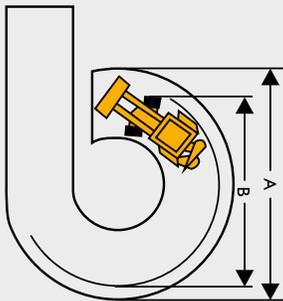
TRANSMISSION

JCB Synchro-shuttle transmission: It provides superb drive power in all conditions. It consists of a 4-speed, full synchromesh gearbox with integral torque convertor and electrically operated reversing power shuttle.

- Easy-to-use, column mounted electric reversing shuttle which can change machine direction while allowing operator to keep hands on the steering wheel leading to fast cycle times.
- The pedal layout and conventional 4-pattern gear lever with transmission disconnect switch adds to the overall ease of operation. On-the-move gear changes are possible.
- Torque convertor stall ratio is 2.52:1

Manufacturer	JCB
Type	Synchroshuttle
Gears forward/reverse	4 forward/4 reverse
Shuttle control – F/R	Power shuttle
Travel speeds*	mph (kph)
Gear 1	3 (4.9)
Gear 2	5.3 (8.6)
Gear 3	12.3 (19.8)
Gear 4	22.8 (36.7)

*Speeds may vary dependant on tire selection.

TURNING CIRCLE

* Standard bucket in travel position

Inner wheels braked

A Outside loader bucket	9.50m
B Outside wheels	6.90m

Inner wheels not braked

A Outside loader bucket	10.40m
B Outside wheels	8.10m

STEERING

Front wheel full power hydrostatic system utilizing the main hydraulic pump via a steering priority valve. In the event of engine failure, emergency steering is maintained (all models).

BRAKES

Service: Hydraulically actuated dual line, self adjusting, oil immersed, multi-disc type on the rear axle, well protected from dirt, water etc. requiring no maintenance.

Parking: Hand operated, disc brake on rear axle input disc.

Brake pedal: Two independently operable foot pedals enable machine to maneuver in tight spaces. Pedals are linked together for normal use.

HYDRAULIC SYSTEM

• Main relief valve: 3,655 psi • Unloader valve: 3,002 psi • Pump type: 2 section displacement gear
 • Pump capacity: 32.5g/min • Filtration through suction strainer and return line JCB Filtermatic filter
 • During excavation the circuit automatically varies hydraulic power to match digging conditions for extra performance, control and power • Careful routing of hydraulic hoses and pipework guards against site damage and allows easy servicing

CAB

• Floor mats • Fully adjustable seat and soft touch steering wheel • 'Walk through' two door access
 • Seat belt • Large convex rear view mirror • Interior light • Front screen wiper • Horn • Hazard warning system • Tool box • Instrumentation panel includes engine speed, engine hours, fuel level, water temperature gauge and 12v connection • Audible and visual fault warning system for alternator charge, coolant temperature, engine oil pressure, blocked air filter, transmission oil pressure and temperature, and hand brake on.

AXLES

Rear: Drive axle rigidly mounted, incorporates JCB Max-Trac torque proportioning differential, driven by short propshaft from gear box.

Front: 4WD, Steer axle, centrally pivoted with oscillation angle of 16°.

ELECTRICAL AND INSTRUMENTATION

12 volt negative ground, utilising wiring and connectors meeting IP69 water ingress test standard. Central fuse panel.

Battery: 110 A/hr **Alternator:** 95 amp standard.

Rear working lights: 2 fixed and 4 adjustable.

Tires

Front: Galaxy 14x17.5-10 (4WD)

Rear: Galaxy 19.5x24-12 (4WD)

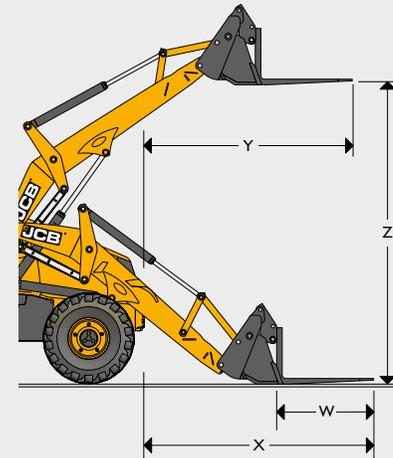
WEIGHT

Operating: 17,196lb (7,800kg)

BACKHOE LIFT CAPACITIES

Excavator type		Standard	Extradig – Retracted	Extradig – Extended
Boom lift capacity - SAE J31				
+16	lb	-	-	1938
+14	lb	3386	3227	2117
+12	lb	3438	3266	2144
+10	lb	2550	2414	1631
+8	lb	2459	2320	1615
+6	lb	2363	2222	1589
+4	lb	2270	2127	1561
+2	lb	2184	2018	1534
Ground level	lb	2105	1957	1502
-2	lb	2034	1884	1476
-4	lb	1972	1819	1454
-6	lb	1923	1766	1440
-8	lb	1897	1735	1436
-10	lb	1948	1770	1453
-12	lb	-	-	1517
-14	lb	-	-	1801
Dipper lift capacity - SAE J31				
+16	lb	-	-	2065
+14	lb	3941	3856	2283
+12	lb	4334	4245	2382
+10	lb	3829	3763	2123
+8	lb	3884	3812	2161
+6	lb	4667	4582	2541
+4	lb	-	-	2653
+2	lb	-	-	2924
Ground level	lb	-	-	-

LOADER ATTACHMENTS – 6 in I Bucket Fork Dimensions



			6-in-I bucket mounted forks
W	Forks – tine length	ft-in (m)	3-7 (1.1)
	Forks – tine length	ft-in (m)	0-3.1 (0.08)
X	Forks reach at ground level	ft-in (m)	8-9 (2.66)
Y	Forks reach at full height	ft-in (m)	7-5 (2.25)
Z	Forks lift height – max	ft-in (m)	9-7 (2.92)
	Fork spacing – min/max 10"		10" (260 mm) to 68" (1725 mm)

LOADER ATTACHMENTS – Direct Mount

HD bucket – 92", 1.3 yd ³	lb (kg)	1697 (770)
6-in-I, 92" – with forks 1.3 yd ³	lb (kg)	1940 (880)

BACKHOE ATTACHMENTS – Buckets

Bucket width	in (mm)	12 (305)	18 (455)	24 (610)	24 (610)	30 (760)	36 (910)
Number of teeth		3	4	4	5	5	6
Heavy-duty trenching buckets			18	24	24	30	36
Capacity	cu ft (cu m)	2.8 (0.08)	4.9 (0.14)	7.1 (0.20)	7.1 (0.20)	9.2 (0.26)	11.3 (0.32)
Weight	lb (kg)	293 (100)	359 (128)	408 (145)	419 (190)	478 (166)	544 (189)
Heavy-duty high capacity trenching buckets			4	4	5	5 (14.1)	6 (-)
Capacity	cu ft (cu m)	5.3 (0.15)	8.5 (0.24)	8.5 (0.24)	11.3 (0.32)	14.1	-
Weight	lb (kg)	430 (195)	509 (231)	514 (233)	588 (267)	668 (303)	-

See your JCB Dealer for availability of other backhoe buckets and attachments.

All JCB buckets include heavy-duty features consisting of a 1"x18" cutting edge, back straps, box section cross member, and full length, chamfered side cutters.

BACKHOE ATTACHMENTS – Hydraulic Breakers

Breaker model	mm	HM380	HM386Q
Operating weight	lb (kg)	727 (330)	794 (360)
Impact energy	ft/lb (joules)	723 (981)	443 (600)
Impact frequency	bpm	380-900	720-1380
Oil flow range	gpm (lpm)	9-17 (40-80)	16-26 (60-100)
Operating pressure	bar (psi)	1740-2393 (120-165)	100-150 (1450-2175)
Tool diameter	in (mm)	3 (75)	3.1 (80)

A wide variety of tools are available for JCB breakers. See your JCB Dealer for details.

BACKHOE ATTACHMENTS – Patch Planer

Cutting width	in (mm)	15.7 (400)
Cutting length	in (mm)	1.04-4.5 (1-115)
Weight	lb (kg)	1190 (540)
Hydraulic flow range	gpm (lpm)	24-53 (90-200)
Hydraulic pressure range	bar (psi)	140-210 (2030-3046)

BACKHOE ATTACHMENTS – Compactor

Weight	lb (kg)	395 (179)
Width	in (mm)	12 (305)
Length	in (mm)	29 (739)
Optimum machine down force	lb (kg)	1543 (700)
Centrifugal force	kN	16.3
Frequency	Hz	33
Oil flow	gpm (lpm)	6 (24)

BACKHOE ATTACHMENTS – Auger*

		ED3500	ED6000
Width	in (mm)	10.0 (254)	9.9 (253)
Length	in (mm)	23.2 (591)	24.1 (614)
Power head and hanger weight	lb (kg)	231 (105)	242 (110)
Oil flow @ 60rpm	gpm (lpm)	15.8 (60)	27.4 (104)
Oil flow min.	gpm (lpm)	30.4 (115)	30.4 (115)
Oil flow max.	gpm (lpm)	79.2 (300)	79.2 (300)

BACKHOE ATTACHMENTS – Auger Flights*

Weight	in (mm)	6 (150) - 18 (460)
Width	lb (kg)	42 (19) - 201 (91.2)
No. of teeth		2-16
Length	in (mm)	39.3(1000) - 47.2 (1200)

*Available from September 2014