JCB BACKHOE LOADER | 2CX

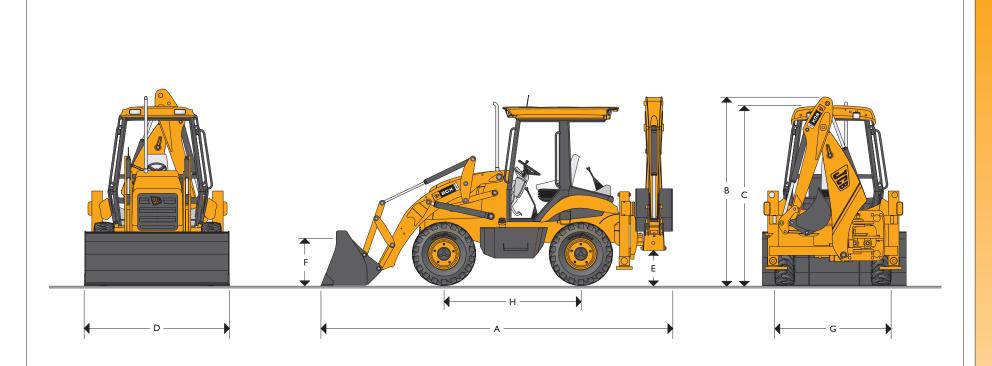






# JCB BACKHOE LOADER | 2CX | 12FT





### STATIC DIMENSIONS

JCB 2CX 12FT features four wheel drive, four wheel steering, four equal sized tires, a heavy duty one piece mainframe, componentized driveline and fully enclosed engine compartment.

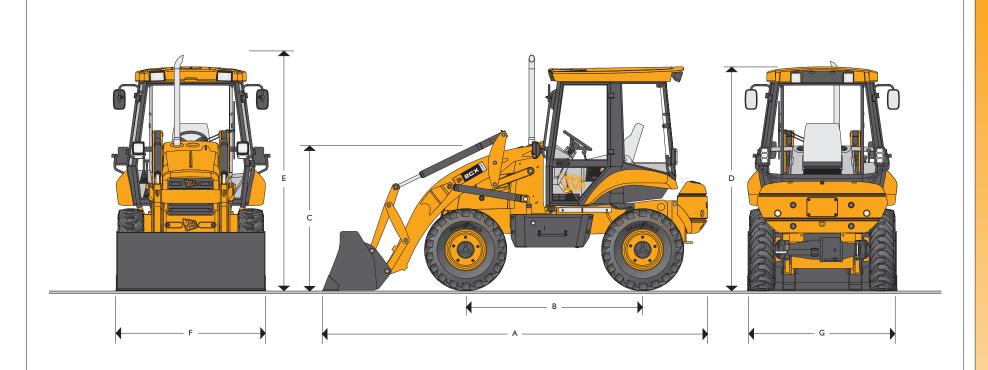
Machine model	2CX I2FT
	ft-in (meter)
A Transport length	17-9 (5.40)
B Transport height	10-0 (3.05)
C Height to top of cab/canopy	8-8 (2.65)
D Overall width with loader bucket	6-6 (2.00)

Machine model	2CX I2FT
	ft-in (meter)
E Ground clearance – transmission	1-2 (0.36)
F Ground clearance – front axle	I-I (0.33)
G Width over tires	6-0 (1.84)
H Wheelbase	6-6 (1.99)



# JCB BACKHOE LOADER | 2CX LOADER





### STATIC DIMENSIONS

JCB Loaders feature heavy duty one piece mainframe, componentized driveline and fully enclosed engine compartment.

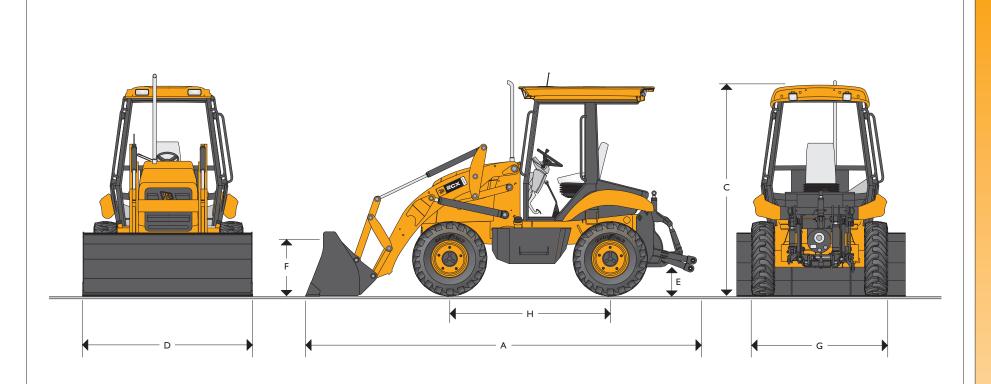
Machine model	2CX LOADER
	ft-in (m)
A Transport length	15-11 (4.86)
B Wheelbase	6-6 (1.99)
C Steering wheel center height	5-9 (1.76)
D Cab roof height	8-8 (2.65)

Ma	achine model	2CX LOADER
		ft-in (m)
Е	Transport height	8-11 (2.72)
F	Shovel width	6-7 (2.00)
G	Overall width with loader bucket	6-0 (1.84)



# JCB BACKHOE LOADER | 2CX UTILITY





### STATIC DIMENSIONS

JCB 2CX UTILITY features four wheel drive, four wheel steering, four equal sized tires, a heavy duty one piece mainframe, componentized driveline and fully enclosed engine compartment.

Machine model	2CX UTILITY
	ft-in (meter)
A Transport length	16-6 (5.04)
C Height to top of cab/canopy	8-9 (2.67)
D Overall width with loader bucket	6-6 (1.98)
E Ground clearance – transmission	1-2 (0.36)

Ma	achine model	2CX UTILITY	
		ft-in (meter)	
F	Ground clearance – front axle	I-I (0.33)	
G	Width over tires	6-0 (1.84)	
Н	Wheelbase	6-7 (2.00)	





#### **OPERATING WEIGHTS**

Operating weight includes machine equipped with standard loader bucket and standard rear attachments, full fluid levels and SAE operator.

2CX	12FT	LOADER	UTILITY
	lb (kg)	lb (kg)	lb (kg)
	12144 (5509)	12787 (5800)	12663 (5744)
Add for:			
Cab	400 (181)	400 (181)	400 (181)

#### **ENGINE**

Four cylinder, direct injection diesel. JCB Dieselmax water pump, spin-on oil and fuel filters, water sediment separator prefilter, dual element air cleaner with internal precleaners. EPA Tier II emissions compliant.

Machine model	2CX
Displacement	268 cu. inches (4.4 liters)
Aspiration	Natural
Rated engine RPM	2200
Horsepower ratings	HP (kW)
SAE gross	75 (56)
SAE net	69.1 (51.5)
Maximum torque	lb-ft (Nm)
SAE net	223 (302)
Max. torque RPM	1200

#### STEERING

Power hydrostatic system utilizing the main hydraulic pump via a steering priority valve. In the event of engine failure, emergency steering is maintained. Two steering modes. Front wheel steer or four wheel steer chosen by selector lever.

Machine model	2CX
Steering axles	Front/Rear
Туре	Hydrostatic
Steering turns – lock to lock	4.0
	ft-in (meter)
Turning circle – unbraked 4WS	23-9 (7.25)
Loader clearance – circle 4WS	30-8 (9.35)

#### **ENGINE SUPPORT SYSTEM**

Engine support system is designed for ease of daily checks, routine maintenance and longer service intervals.

Fuel type Diesel.

Fuel filter Replaceable cartridge plus water and sediment separator prefilter.

Air cleaner Dual, dry element cyclonic type.

Oil filter and lubrication Full flow, spin-on type filter.

Cooling system Hot climate specification, pressurized 14.5 psi (1.0 bar) suction fan.

Pressurized recovery tank with integral filler neck.

#### **ELECTRICAL AND INSTRUMENTATION**

12 volt negative ground, utilizing wiring and connectors meeting IP67/IP69 water ingress test standard.

Central fuse panel located in operator area, 12 volt negative ground system.

Gauges Tachometer, engine coolant temp, fuel level, hourmeter.

Warning system Audible and visual system. Engine oil, transmission, park brake, battery, air cleaner,

alternator.

Battery 12V, 900 CCA.
Pre-wire Radio speakers (cab).

**Horn** Controlled from front (all) and rear. (Backhoe only)

Reverse alarmStandard fit.Alternator95 amps.

#### **TRANSMISSION**

The JCB Transmissions are designed and built specifically for JCB Backhoe Loaders. They feature synchronized shifting in all gears, power shift between forward and reverse, and ground speeds to maximize production.

2CX	12FT	LOADER	UTILITY
Manufacturer	JCB	JCB	JCB
Туре	Synchro shuttle	Synchro shuttle	Synchro shuttle
Torque converter	Single stage, dual phase,	Single stage, dual phase,	Single stage, dual phase,
	II " diameter	II " diameter	I I " diameter
Torque converter ratio	2.78:1	2.78:1	2.83:1
Gears forward/reverse	4F/4R	4F/4R	4F/4R
Gear selection	Synchro shift	Synchro shift	Synchro shift
Shuttle control – F/R	Power shuttle	Power shuttle	Power shuttle
Engine RPM	2200	2200	2430
Travel speeds	mph (kph) @ Rated engine speed	mph (kph) @ Rated engine speed	mph (kph) @ Rated engine speed
Tires equipped	12.5/80×18	12.5/80×18	12.5/80×18
Gear I	3.8 (6.1)	5.1 (8.2)	3.4 (5.5)
Gear 2	6.5 (10.4)	5.4 (8.7)	5.7 (9.2)
Gear 3	19.6 (21.3)	11.6 (18.5)	11.7 (18.9)
Gear 4	21.3 (34.2)	18.8 (30.1)	18.6 (30.0)
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#### FRONT AXLE

JCB front axles are designed and built specifically for backhoe loaders and incorporate double reduction, outboard planetary drives and steel drive mechanism front and rear.

Machine model	2CX
Туре	JCB Max-Trac steer drive torque proportioning
Limited slip	Optional
Axle ratings	lb (kg)
Static load rating	16500 (7484)
Dynamic load rating	8300 (3765)
SAE J43 rating	10487 (4757)

#### REAR AXLE

JCB rear axles are designed and built specifically for backhoe loaders and incorporate double reduction, outboard planetary drives and steel drive mechanism front and rear.

outboard planetary drive
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### LOADER

JCB loaders provide parallel lift self leveling on the up and down cycle enhancing load retention and use of optional pallet forks. High capacity buckets and high lift and breakout forces maximize production.

Machine model	2CX
Loader attachment type	Q-Fit tool carrier
GP bucket	lb (kg)
Bucket breakout force	7935 (3600)
Lift capacity to full height	4850 (2200)
6-in-I bucket	
Bucket breakout force	7935 (3600)
Lift capacity to full height	4624 (2100)
Pallet forks – Q-Fit	
Operating load	2873 (1300)

LOADER ATTACHMENTS – Tool Carrier – Q-Fit			
Standard Q-Fit coupler			
GP bucket 73", 0.8 cu.yd			
GP bucket 78", I.0 cu.yd			
Pallet forks			
2 foot truss boom with hydraulic winch			
6-in-1 bucket, 73", 0.8 cu.yd			
Q-Fit blank			
Sweeper/collector			

Consult your JCB Dealer for the complete list of Q-Fit attachments and applications.





#### **OPERATOR'S AREA**

Meets SAE ROPS/FOPS requirements. Standard features include the following:

2CX	2CX	
	Cab	Canopy
Suspension seat	•	•
2" seat belt (HD seat w/3" belt option)	•	•
4 front and 2 rear work lamps	•	•
Brake lights, hazard lamps, turn signals	•	•
Windshield wiper and washer	•	•
Rear window wiper and washer	•	
Rear view mirrors	•	•
Deluxe floor mat and dome lamp	•	•
Heater/defogger	•	
Openable right side and rear windows	•	
Side instrument panel and switches	•	•

### **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. Automatic compensation ensures 'straight' machine braking.

- Twin brake pedals provide tighter turning circle and enhanced steering control on slippery ground.
- Park brake disc diameter: 11.2 in (285 mm).
- The independent parking brake is mounted on the input shaft rear axle. It is an over-center type, adjustable within
  the cab, with transmission disconnect to prevent premature brake pad wear.

#### TIRES

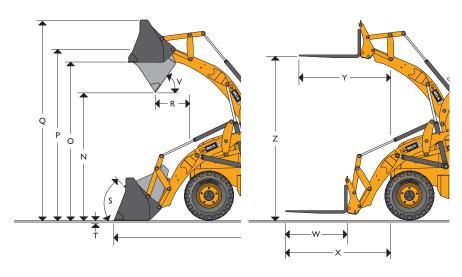
Tires listed are most popular sizes. See your JCB Dealer for a full listing. Tires are offered in sets of four.

Machine model	2CX
12.5-18, 10 ply Industrial	Standard
335/80-R18 XM27 Radial	Optional





### LOADER DIMENSIONS



Ma	chine model	2CX
BU	CKETS	ft-in (meter)
	Overall width with bucket	6-6 (2.00)
N	Dump height	8-2 (2.48)
0	Load over height	9-10 (2.99)
Р	Loader hinge pin height	10-8 (3.24)
Q	Maximum operating height	12-6 (3.80)
R	Dump reach at full height	2-4 (0.71)
S	Rollback @ ground	45°
Т	Digging depth	0-4 (0.10)
U	Dump angle	45°
FO	RKS	ft-in (meter)
W	Forks – tine length	3-11 (1.20)
	Forks – tine width	0-4 (0.1)
X	Forks reach at ground level	3-4 (1.02)
Υ	Forks reach at full height	2-4 (0.71)
Z	Forks lift height – max.	9-11 (3.02)
	Forks spacing – min./max.	0-6 (0.15) to 4-2 (1.28)
	Operating load lb (kg)	3526 (1600)

SERVICE CAPACITIES	

Machine model	2CX
	gal (liter)
Cooling system	3.7 (14)
Fuel tank	18 (83)
Engine with filter	11 (2.42)
Synchro shuttle trans with filter	3.74 (17)
Rear axle	2.4 (9)
Front drive axle	2.4 (9)
Drive axle hubs – each	0.5 (2)
Hydraulic system incl. tank	18 (83)

#### **HYDRAULIC SYSTEM**

Open center system with single gear pump which supplies oil for loader, backhoe and steering. Side mounted hydraulic tank with sight glass, JCB cylinders, high strength steel tubing, hose protection, return line filter.

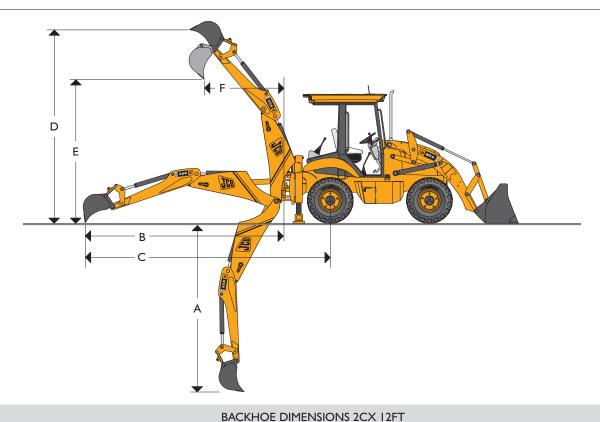
- Open center hydraulic system using simple and reliable high efficiency gear pump.
- Single pump system with priority valve to ensure metered supply to steering and main hydraulic system.
- Easily used, ergonomically positioned levers give excellent control of the loader and backhoe, thus reducing
  operator fatigue.
- A full flow 10 micron filter ensures that oil stays free of contaminants.

Machine model	2CX I2FT	2CX LOADER	2CX UTILITY
Pump output gpm (lpm)	17 (63.8)	17 (63.8)	17 (63.8)
System relief pressure psi (bar)	3335 (230)	3335 (230)	3300 (227)
Filter rating	10 micron	10 micron	10 micron



# JCB BACKHOE LOADER | 2CX | 12FT





### BACKHOE DIMENSIONS 2CX 12F1

	2CX I2FT
	ft-in (meter)
A SAE dig depth – Max.	12-0 (3.66)
A SAE dig depth – 2' flat bottom	11-8 (3.59)
B Reach from swing pivot	15-2 (4.61)
C Reach from rear axle center	18-10 (5.74)
D Maximum operating height	15-0 (4.59)
E Loading height	10-11 (3.32)
F Loading reach	8-9 (2.67)
Swing arc	180°
Rear frame width	6-5 (1.95)
King post travel	3-4 (1.02)
Bucket rotation	187°



# JCB BACKHOE LOADER | 2CX | 12FT



#### **BACKHOE PERFORMANCE**

	2CX 12 FT Standard backhoe
	lb (kg)
Bucket force	9259 (4200)
Dipper force	5483 (2487)
Dipper lift capacity – SAE J3 I	
+ 4 feet	3260 (1480)
+ 6 feet	2425 (1100)
+ 8 feet	2215 (1005)
+ 10 feet	2260 (1025)
+  2 feet	2568 (1165)
Boom lift capacity – SAE J3 I	
+ 12 feet	1355 (615)
+ 10 feet	1500 (680)
+ 8 feet	1520 (690)
+ 4 feet	1500 (680)
Ground level	1510 (685)
- 4 feet	1465 (665)
- 6 feet	1510 (685)
- 8 feet	1650 (750)

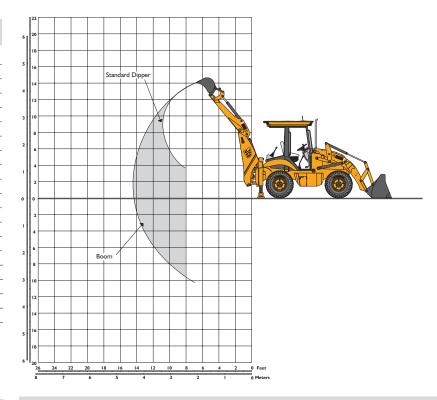
Lift capacity figures comply with SAE J31. All figures are stated in pounds (kilograms). The large arc indicates boom lift. The small arc indicates dipper lift with the boom at 68 degrees. Units are equipped with standard equipment as listed in this data sheet and a 24" general purpose backhoe bucket.

#### JCB HYDRAULIC BREAKERS

JCB hydraulic breakers are designed for use on JCB Backhoe Loaders. They feature constant blow energy, pressure damping, heavy-duty side plates and high impact frequency for maximum production. Coupled with factory installed hydraulic breaker circuit, the JCB breakers and Backhoe Loader make a perfect demolition combination.

Breaker model	HM265Q
Energy class – ft./lb	381
Impact frequency – bpm	480-1200
Oil flow range – gpm (lpm)	8-17 (30-65)
Operating weight – lb (kg)	441 (200)
Operating pressure – psi (bar)	1450-2175 (100-150)
Tool diameter – in. (mm)	2.6 (65)

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



#### **BACKHOE BUCKETS**

JCB Backhoe Loader buckets are designed specifically for use on JCB machines with pin positions to maximize tearout, load retention and straight wall digging characteristics.

Bucket width – in.	9	12	16	18	24	48
Bucket width – mm	230	305	405	435	630	1220
Number of teeth	2	3	4	4	5	6
General purpose trenching buckets						
Capacity – cu.ft.	1.5	2.0	2.8	3.2	4.3	2.1
Capacity – cu.m	0.04	0.06	0.08	0.09	0.12	0.06
Weight – Ibs	115	125	145	150	185	143
Weight – kg	52.2	56.7	65.8	68.1	83.9	64.9

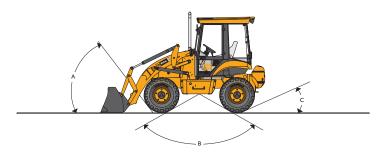
See your JCB Dealer for availability of other backhoe buckets and attachments.



# JCB BACKHOE LOADER | 2CX LOADER/UTILITY



#### **GROUND LINE ANGLES**



- A Approach angle > 45°
- B Interference angle/ramp to ground plane  $130^{\circ}$
- C Departure angle 27°

#### THREE POINT HITCH

Category 2 hitch, featuring power up, power down and hydraulic tilt option.

Hitch category	2 (Cat   ball option)
Hitch lift ram	Single double acting cylinder
	in (mm)
Bore diameter	3.15 (80)
Rod diameter	1.97 (50)
Stroke	8.8 (226)
	lb (kg)
Lift capacity at hitch pins	7000 (3176)
Lift capacity at 600mm	3800 (1724)
Down pressure	1300 (590)
	in (mm)
Lower link travel	9 to 35.5 (228 to 902)
Departure angle	15°
Options	Hydraulic tilt ram
Swinging drawbar height	13 (337)

### **POWER TAKE OFF**

Independant power take off.

PTO option	540 rpm 13/8" 6 tooth straight spline
Direction of rotation	Clockwise
Engine rpm at 1695 rpm	540 rpm
PTO horspower	55hp





### 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.



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