

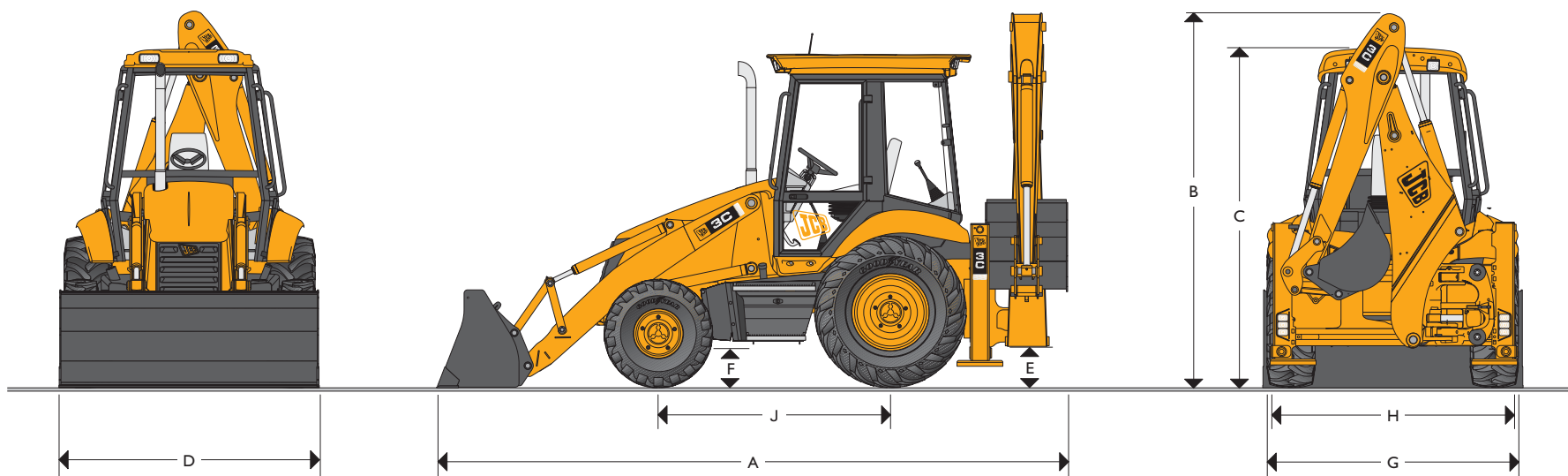


JCB BACKHOE LOADER | 3C



MAX. ENGINE POWER

85hp (63kW)



STATIC DIMENSIONS

JCB Series 4 Backhoe Loaders feature heavy duty one piece mainframe, componentized driveline and fully enclosed engine compartment. All fluid and component compartments are lockable using the ignition key.

Machine model	3C-2WD metre (ft-in)	3C-4WD metre (ft-in)
A Transport length	5.52 (18-1)	5.52 (18-1)
B Transport height – standard backhoe	3.40 (11-2)	3.40 (11-2)
C Height to top of cab/canopy	2.82 (9-3)	2.82 (9-3)
D Overall width with bucket	4.24 (7-4)	4.24 (7-4)
E Ground clearance – mainframe	0.35 (1-1)	0.35 (1-1)

Machine model	3C-2WD metre (ft-in)	3C-4WD metre (ft-in)
F Ground clearance – front axle	0.36 (1-2)	0.25 (0-10)
G Front wheel track	1.86 (6-1)	1.89 (6-2)
H Rear wheel track	1.77 (5-9)	1.77 (5-9)
J Wheelbase	2.11 (6-11)	2.16 (7-1)

JCB BACKHOE LOADER | 3C



JCB BACKHOE LOADER | 3C



JCB BACKHOE LOADER | 3C

OPERATING WEIGHTS

Operating weight includes machine equipped with standard loader bucket, 24" HD backhoe bucket and full fluid levels.

Machine model	3C-2WD	3C-4WD
	kg (lb)	kg (lb)
Base unit – standard backhoe	6490 (14278)	6630 (14586)
Cab, Extradig	6930 (15246)	7070 (15554)
Cab, Extradig, 4-in-1	7270 (15994)	7410 (16302)

ENGINE

Four cylinder, direct injection diesel. Spin-on oil and fuel filter, water separator, dual element air cleaner, 20" fan with internal pre-cleaner. Cold start aid.

Displacement	4.4 liters (268 cu. inches)
Aspiration	Natural
Rated engine RPM	2200
Horsepower ratings	HP (kW)
Gross ISO/TR 14396 and SAE J1995	85 (63)
SAE Net ISO 9249 SAE J1349	61.6 (82.6)
Maximum torque	Nm (lb-ft)
Gross ISO/TR 14396 and SAE J1995	320 (236)
SAE Net ISO/TR 9249 and SAE J1349	315.6 (232.7)
Max. torque RPM	1200

STEERING

Power hydrostatic system utilizing the main hydraulic pump via a steering priority valve. Emergency power off steering.

Machine model	3C-2WD	3C-4WD
Steering axles	Front	Front
Type	Hydrostatic	Hydrostatic
Steering turns – lock to lock	3.00	3.00
	metre (ft-in)	metre (ft-in)
Turning circle – unbraked	8.05 (26-5)	8.05 (26-5)
Loader clearance circle	10.6 (34-9)	10.6 (34-9)

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/sediment separator prefilter.
Air cleaner	Dual, dry element cyclonic type with self cleaning internal air intake precleaner.
Oil filter and lubrication	Full flow, spin-on type filter.
Cooling system	Hot climate specification, pressurized to 14.5 psi (1.0 bar) 20" suction fan. Pressurized recovery tank with integral filler neck.



JCB BACKHOE LOADER | 3C



ELECTRICAL AND INSTRUMENTATION

12 volt negative ground, utilizing wiring and connectors meeting IP69 water and dust ingress test standard. Central fuse panel supplemented with main circuit breakers under bonnet.

Gauges	Tachometer, engine coolant temp, fuel level, hourmeter.
Warning system	Audible and visual system for engine, transmission, park brake, battery charge condition, air cleaner restriction, water in fuel.
Battery	12V, 950 CCA.
Pre-wire	Pre-wire for beacon.
Horn	Front horn button mounted on forward-to-reverse lever.
Accessory	12V power outlet on instrument panel.
Reverse alarm	Standard fit. Meets SAE requirements.
Alternator	95 amp standard.

TRANSMISSION

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

Machine model	3C-2WD	3C-4WD
Manufacturer	JCB	JCB
Type	JCB Synchroshuttle	JCB Synchroshuttle
Torque converter	Single stage, dual phase	
Torque converter ratio	3.01:1	3.01:1
Gears forward/reverse	4F/4R	4F/4R
Gear selection	Manual	Manual
Shuttle control – F/R	Power shuttle	Power shuttle
Travel speeds	kph (mph)	kph (mph)
Tyres equipped	16.9x24	16.9x24
Gear 1	5.06 (3.1)	5.06 (3.1)
Gear 2	8.2 (5.1)	8.2 (5.1)
Gear 3	17.5 (10.5)	17.5 (10.5)
Gear 4	33.16 (20.6)	33.16 (20.6)

FRONT AXLE

JCB front axles are designed and built specifically for backhoe loaders and accept a wide variety of tyre combinations.

Machine model	3C-2WD	3C-4WD
Type	Flame cut bar with fixed tread	JCB Max-Trac torque proportioning
Axle ratings	kg (lb)	kg (lb)
Static load rating		16500 (36375)
Dynamic load rating		5500 (12125)
Oscillation angle	16°	16°
Steering ram	Power track rod	Power track rod

REAR AXLE

JCB rear axles are designed and built specifically for backhoe loaders and accept a wide variety of tyre combinations.

Machine model	3C-2WD	3C-4WD
Type	JCB limited slip differential outboard planetary drive	
Axle ratings	kg (lb)	kg (lb)
Static load rating	21000 (46296)	21000 (46296)
Dynamic load rating	7000 (15435)	7000 (15435)

OPERATOR'S AREA

Meets SAE ROPS to ISO3471 EN13510 FOPS to ISO3449 EN13627 (Level 2) requirements. Standard features include the following:

	Cab	Canopy
Heavy duty suspension seat (option)	●	●
Heater/pressurizer	●	
Front and rear wipers	●	
Front and rear window washers	●	
2" seat belt (3" option)	●	●
4 front and 2 rear work lamps	●	●
12V power outlet	●	●
Instrument vandal cover		●
Brake lights, hazard lamps, turn signals	●	●
Interior rear view mirror	●	●
Side-mounted instrument panel	●	●
Deluxe floor mat	●	●
Cup holder	●	●

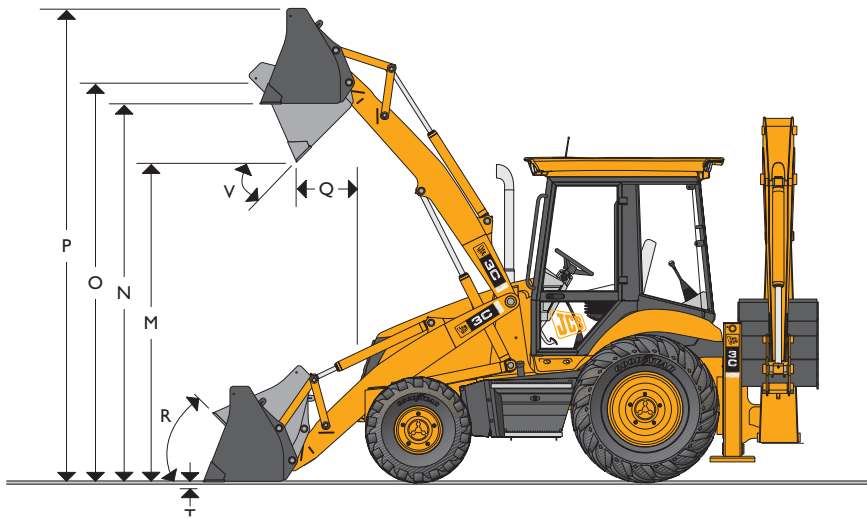


JCB BACKHOE LOADER | 3C



JCB BACKHOE LOADER | 3C

LOADER DIMENSIONS



LOADER DIMENSIONS

Machine model	3C-2WD	3C-4WD
	metre (ft-in)	metre (ft-in)
Overall width with bucket	2.24 (7-4)	2.24 (7-4)
M Dump height	2.69 (8-10)	2.69 (8-10)
N Load over height	3.20 (10-6)	3.20 (10-6)
O Loader hinge pin height	3.38 (11-1)	3.38 (11-1)
P Maximum operating height	4.06 (13-4)	4.06 (13-4)
Q Dump reach at full height	0.81 (2-8)	0.81 (2-8)
R Rollback @ ground – degrees	41°	41°
T Digging depth	0.13 (0-5)	0.13 (0-5)
V Dump angle – degrees	42°	42°

STANDARD LOADER – General Purpose Bucket

JCB loaders provide high-capacity buckets with high lift and breakout forces for maximum productivity. Load retention system provides bucket roll-out on the lift cycle for maximum load retention. Two spool valve is standard.

Machine model	3C-2WD	3C-4WD
	kg (lb)	kg (lb)
Bucket breakout force	5322 (11730)	5322 (11730)
Lift capacity to full height	3062 (6750)	3062 (6750)

LOADER ATTACHMENTS – Direct Mount

JCB Backhoe Loaders utilize heavy-duty, high-capacity loader buckets. All buckets feature a drilled cutting edge to accept a bolt-on cutting edge or teeth. Flat top section provides rigidity and bucket sight level indicator.

Machine model	3C-2WD	3C-4WD
	kg (lb)	kg (lb)
GP bucket – 88°, 1.25 cu.yd.	360 (794)	360 (794)
HD bucket – 88°, 1.25 cu.yd.	440 (970)	440 (970)
6-in-1 bucket – 88°, 1.25 cu.yd.	699 (1540)	699 (1540)

MULTI-PURPOSE LOADER – 6-in-1 Bucket

JCB multi-purpose loaders feature a 6-in-1 bucket, three-spool loader valve, dual lever loader control and loader pipework.

Machine model	3C-2WD	3C-4WD
	kg (lb)	kg (lb)
Bucket breakout force	5502 (12127)	5502 (12127)
Lift capacity to full height	2818 (6211)	2818 (6211)



JCB BACKHOE LOADER | 3C



BRAKES

Hydraulically actuated, self-adjusting, oil immersed, inboard, multi-plate type. Separate master cylinder and brake oil reservoir. Independent disk and caliper type parking brake mounted on rear of transmission.

3C – 2WD and 4WD Two pedal service brakes with interlock for individual or simultaneous operation.

SERVICE CAPACITIES

Machine model	3C-2WD	3C-4WD
	litre (gal)	litre (gal)
Cooling system	18.5 (4.1)	18.5 (4.1)
Fuel tank	130 (29)	130 (29)
Engine oil with filter	15 (3.3)	15 (3.3)
Synchro shuttle trans with filter	16 (3.5)	16 (3.5)
Rear axle	16 (3.5)	16 (3.5)
Front drive axle	N/A	4.2 (16)
Drive axle hubs – each	2 (0.4)	2 (0.4)
Hydraulic tank	75 (16.5)	75 (16.5)
Hydraulic system incl. tank	115 (25.3)	115 (25.3)

TYRES

Tyres listed are most popular sizes. See your JCB Dealer for a full listing of available tyre sizes and tread patterns.

Machine model	3C-2WD	3C-4WD
11L-16, F3, 12 ply – front	Standard	
16.9-24, R4, 12 ply – rear	Standard	
14-17.5, FWD, 10 ply – front		Standard
16.9-24, R4, 12 ply – rear		Standard



JCB BACKHOE LOADER | 3C



HYDRAULIC SYSTEM

Open center system incorporating a single gear pump which supplies oil for loader, backhoe and steering systems. Side mounted hydraulic tank with sight glass and lockable cap. JCB cylinders, million cycle hydraulic hoses with abrasion protection. Structural steel tubing to resist impact.

Machine model	3C-2WD	3C-4WD
	lpm (gpm)	lpm (gpm)
Pump output	90 (20)	90 (20)
	bar (psi)	bar (psi)
System relief pressure	228 (3300)	228 (3300)
Filter rating	10 micron	10 micron

BACKHOE BUCKETS

JCB Backhoe Loader buckets are designed specifically for use on JCB machines. Dual position tipping link provides positions to maximize tearout force or to maximize rotation for straight wall digging and improved load retention. 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.

Heavy duty trenching buckets						
Bucket width – mm	305	455	610	610	760	910
Bucket width – in.	12	18	24	24	30	36
Number of teeth	3	4	4	5	5	6
Capacity – cu.m	0.08	0.14	0.20	0.20	0.26	0.32
Capacity – cu.ft.	2.8	4.9	7.1	7.1	9.2	11.3
Weight – kg	133	163	185	190	217	247
Weight – lbs	293	359	408	419	478	544

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



JCB BACKHOE LOADER | 3C



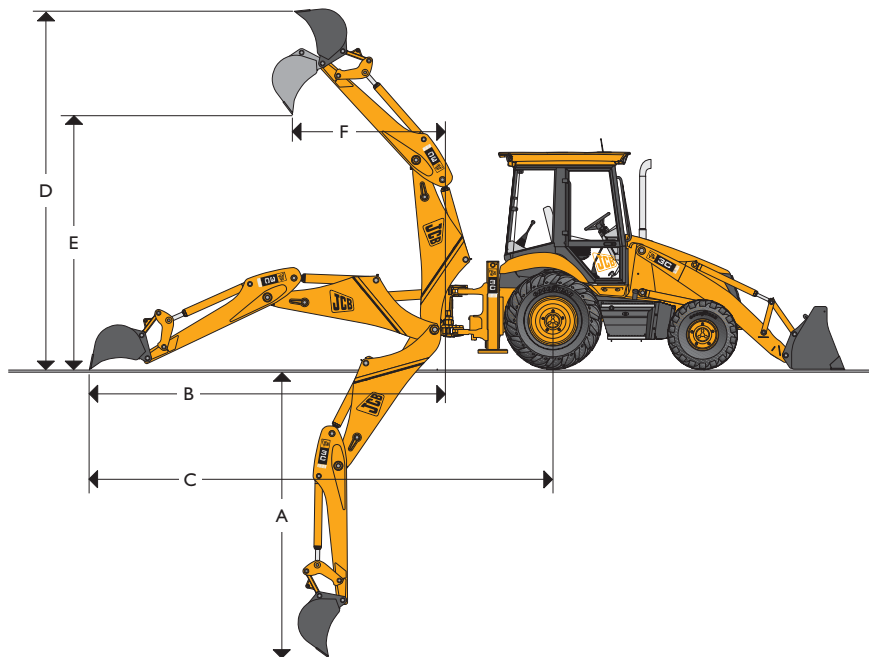
BACKHOE DIMENSIONS – 3C 2WD & 4WD

	standard backhoe	Extradig – retracted	Extradig – extended
	metre (ft-in)	metre (ft-in)	metre (ft-in)
A SAE dig depth – max.	4.37 (14-4)	4.45 (14-7)	5.49 (18-0)
A SAE dig depth – 2' flat bottom	4.34 (14-3)	4.42 (14-6)	5.44 (17-10)
B Reach from swing pivot	5.36 (17-7)	5.44 (17-10)	6.40 (21-0)
C Reach from rear axle center	6.55 (21-6)	6.65 (21-10)	7.62 (25-0)
D Maximum operating height	5.36 (17-7)	5.38 (17-8)	6.10 (20-0)
E Loading height	3.15 (10-4)	3.20 (10-6)	3.61 (11-10)
F Loading reach	1.73 (5-8)	1.73 (5-8)	2.77 (9-1)
Swing arc – degrees	180°	180°	180°
Stabilizers – transport	2.18 (7-2)	2.18 (7-2)	2.18 (7-2)
Stabilizers – operating	3.20 (10-6)	3.20 (10-6)	3.20 (10-6)
Leveling angle – degrees	15°	15°	15°
Bucket rotation – degrees	185° max. power/201° max. rotation		

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. Model 385Q is equipped with sound insulation for quiet operation.

Breaker model		385Q
Impact Energy	J	859/611
Impact frequency	bpm	480/960
Oil flow range	gpm (lpm)	50/80
Operating weight	kg	312
Operating pressure	psi (bar)	100/150
Tool diameter	mm	80





JCB BACKHOE LOADER | 3C



JCB BACKHOE LOADER | 3C

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, wheel 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.



JCB Sales Limited, Rocester, Staffordshire ST14 5JP. Tel: 01889 590312. Fax: 01889 590588. Web: <http://www.jcb.com>

JCB reserves the right to change design, materials and/or specifications without notice. Specifications are applicable to units sold in the United States and Canada. The JCB logo is a registered trademark of J C Bamford Excavators Ltd.

USA 5/06 Issue 1

Helping You Get
the Job Done!