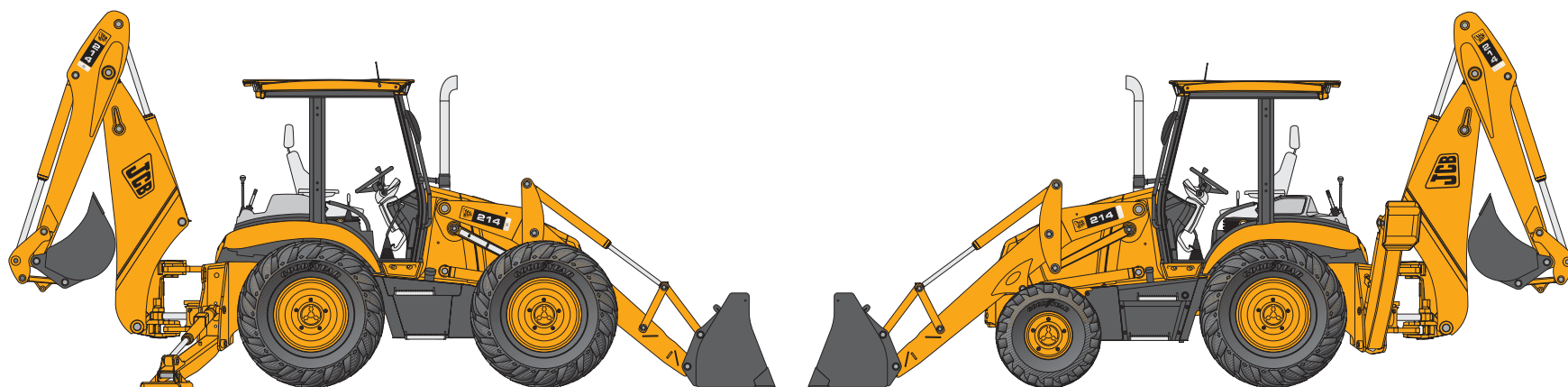




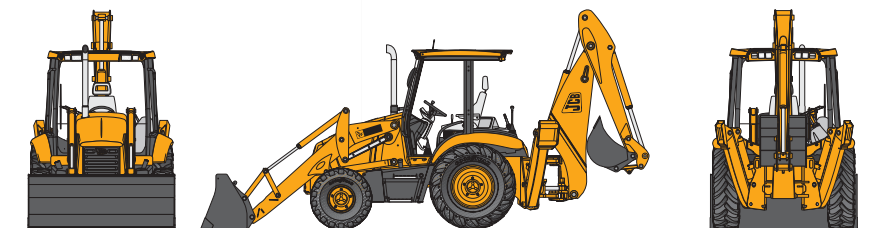
JCB BACKHOE LOADERS | 214 & 214S



FAST FACTS

- **HEAVY DUTY MAINFRAME CONSTRUCTION**
Unitized, one piece mainframe massive rear frame supports.
- **DELUXE OPERATOR ENVIRONMENT**
Industry's quietest cab at 71 dB(A). Full featured suspension seat, openable windows and face level fan all standard.
- **POWERTRAIN – TWO WHEEL STEER MODELS**
Heavy duty turbo (92 HP net) diesel engine, JCB Powershift transmission and limited slip rear axle for excellent traction. Standard JCB four wheel drive front axle.
- **POWERTRAIN – FOUR WHEEL STEER MODELS**
Four wheel drive, four wheel steer provide high maneuverability. JCB Powershift transmission provides optimum convenience. Optional 6x4 autoshift high speed transmission. Limited slip steer drive axles front and rear provide exceptional traction by utilizing four equal sized tires. Three steering modes provide maximum flexibility for varying job conditions.
- **OPERATOR PLATFORM**
Choice of deluxe ROPS/FOPS quiet cab or open canopy with ergonomically placed controls and instruments. Cab includes adjustable tilt steering column and outstanding ventilation.
- **LOADER**
Large capacity buckets with parallel lift system. Optional tool carrier quick attach system for front mounted attachments. Standard three spool valve.
- **HYDRAULIC SYSTEM**
Open center, dual gear pumps. Hydraulic speed control allows operator to divert power and speed as needed.
- **BACKHOE**
Heavy duty center mount design. Extradig dipper standard. Variety of optional hydraulic circuits and attachments.
- **SERVICEABILITY AND SECURITY**
Ground level service access for daily and regular maintenance via a tilt engine hood. Single key operates all locks.
- **JCB PRECISION CONTROLS (OPTIONAL)**
Seat mounted servo controls provide low effort, precise control of the excavator.

STATIC DIMENSIONS



OPERATING WEIGHTS

STATIC DIMENSIONS



JCB BACKHOE LOADERS | 214 & 214S



ENGINE SUPPORT SYSTEM

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

Fuel type	Diesel.
Fuel filter	Replacement spin-on cartridge plus water/sediment separator.
Air cleaner	Dual, dry element cyclonic type. Pre-cleaner option.
Oil filter and lubrication	Full flow, spin-on type filter.
Cooling system	Hot climate specification, pressurized 7 psi (0.5 bar) 20" suction fan. Pressurized recovery tank with integral filler neck.

ELECTRICAL AND INSTRUMENTATION

12 volt negative ground, utilizing wiring and connectors meeting IP69 water ingress test standard. Central fuse panel supplemented with main circuit breakers at battery positive terminal.

Gauges	Tachometer, engine coolant temp, fuel level, hourmeter, clock.
Warning system	Audible and visual system. Engine oil, transmission, park brake, battery, air cleaner.
Battery	12V, 950 CCA.
Pre-wire	Radio speakers (cab), beacon (all).
Horn	Controlled from both front and rear.
Reverse alarm	Standard fit.
Alternator	85 amp.

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. JCB semi automatic powershift transmission provides 10% faster travel speed than the standard powershift transmission. It features automatic upshift and downshift controlled by machine travel speed and incorporates a kickdown pedal to provide extra torque to the drive axles when required. The operator may use the autoshift in manual mode when operator control of shift points is desired.

Machine model	214 2WD/4WD	214S Std	214S Opt
Manufacturer	JCB	JCB	JCB
Type	JCB Synchroshuttle	JCB Powershift	JCB Autoshift
Torque converter	Single stage dual phase	Single stage dual phase	Single stage dual phase
Torque converter ratio	3.01:1	2.52:1	2.52:1
Gears forward/reverse	4F/4R	4F/4R	6F/4R
Gear selection	Manual	Powershift*	Man or auto powershift
Shuttle control – F/R	Power shuttle	Power shuttle	Power shuttle
Travel speeds	mph (kph)	mph (kph)	mph (kph)
Tires equipped	16.9-24 tires	16.9-24 tires	16.9-28 tires
Gear 1	3.4 (5.5)	3.1 (5.0)	3.1 (4.9)
Gear 2	5.6 (8.9)	5.8 (9.3)	5.1 (8.2)
Gear 3	11.9 (19.1)	13.4 (21.5)	6.9 (11.0)
Gear 4	22.5 (36.0)	22.5 (36.0)	11.1 (17.8)
Gear 5			18.5 (29.6)
Gear 6			25.0 (40.0)

*Powershift transmission is also available as a factory installed option on 214-4WD.

FRONT AXLE

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

Machine model	214-2WD	214-4WD	214S-4WS
Type	Flame cut bar w/fixed tread	JCB Max-Trac torque proportioning	JCB LSD with outboard planetary drive
Limited slip	N/A	N/A	Standard
Axle ratings	lb (kg)	lb (kg)	lb (kg)
Static load rating	36383 (16508)	36383 (16508)	55125 (25011)
Dynamic load rating	18300 (8303)	18300 (8303)	27562 (12505)
SAE J43 rating	24200 (11000)	26083 (11856)	26083 (11856)

REAR AXLE

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

Machine model	214-2WD	214-4WD	214S-4WS
Type	JCB limited slip differential with outboard planetary drive		
Axle ratings	lb (kg)	lb (kg)	lb (kg)
Static load rating	55125 (25011)	55125 (25011)	55125 (25011)
Dynamic load rating	27562 (12505)	27562 (12505)	27562 (12505)
SAE J43 rating	18650 (8477)	24150 (10977)	26083 (11856)

OPERATOR'S AREA

Meets SAE ROPS/FOPS requirements 22,550lb (10250kg) GVW capacity. Deluxe trim with standard features including the following:

	Cab	Canopy
Heavy duty suspension seat with armrests	●	●
2" seat belt (3" option)	●	●
4 front and 4 rear work lamps	●	●
Brake lights, hazard lamps, turn signals	●	●
3 speed windshield wiper and washer	●	●
Rear window wiper and washer	●	
Tilt steering column	●	●
Interior rear view mirror	●	●
Deluxe floor, head liner and dome lamp	●	
Deluxe floor		●
Heater/defogger with upper and lower vents	●	
Face level fan	●	
Openable side and rear windows	●	
Side and front instrument panels	●	●

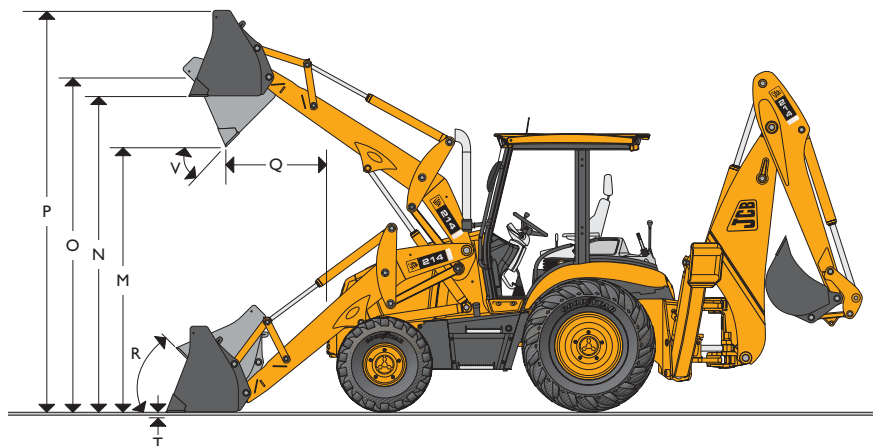
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LOADER DIMENSIONS



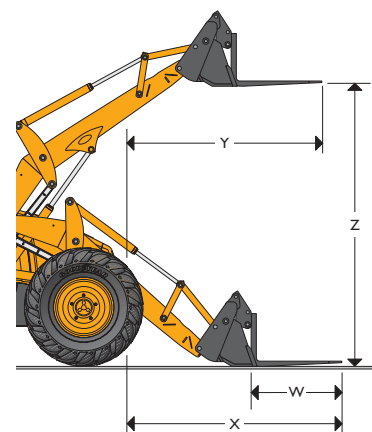
LOADER DIMENSIONS

Machine model	214-2WD	214-4WD	214S-4WS
	ft-in (meter)	ft-in (meter)	ft-in (meter)
Overall width with bucket	7-8 (2.35)	7-8 (2.35)	7-8 (2.35)
M Dump height	9-0 (2.74)	9-0 (2.74)	8-8 (2.64)
N Load over height	10-8 (3.25)	10-8 (3.25)	10-5 (3.18)
O Loader hinge pin height	11-4 (3.45)	11-4 (3.45)	11-0 (3.35)
P Maximum operating height	13-7 (4.14)	13-7 (4.14)	13-2 (4.01)
Q Dump reach at full height	2-8 (0.81)	2-8 (0.81)	2-10 (0.86)
R Rollback @ ground - degrees	46°	46°	45°
T Digging depth	0-2 (0.05)	0-2 (0.05)	0-8 (0.20)
V Dump angle - degrees	45°	45°	53°
6-in-1 Bucket fork dimensions			
W Forks - tine length	3-6 (1.07)	3-6 (1.07)	3-6 (1.07)
Forks - tine width	0-3.3 (0.08)	0-3.3 (0.08)	0-3.3 (0.08)
X Forks reach at ground level	8-8 (2.69)	8-8 (2.69)	8-10 (2.94)
Y Forks reach at full height	7-0 (2.13)	7-0 (2.13)	7-6 (2.29)
Z Forks lift height - max.	9-6 (2.90)	9-6 (2.90)	9-3 (2.82)
Fork spacing - min/max.	10" (260mm) to 68" (1725mm)		

LOADER ATTACHMENTS – Direct Mount

Loader buckets are listed according to size and application. Numbers listed below models are bucket shipping weights. All buckets are drilled to accept optional auxiliary cutting edge or teeth. Flat top box section provides rigidity and assists in bucket leveling.

Machine model	214-2WD	214-4WD	214S-4WS
	lb (kg)	lb (kg)	lb (kg)
HD bucket – 92.5", 1.4 cu.yd.	948 (430)	948 (430)	948 (430)
HD bucket – 96", 1.6 cu.yd.	N/A	N/A	1433 (650)
6-in-1, 92" – with forks 1.5 cu.yd.	N/A	N/A	1984 (900)
6-in-1, 92" – with forks 1.3 cu.yd.	1940 (880)	1940 (880)	1940 (880)



SMOOTH RIDE SYSTEM (Optional)

The JCB Smooth Ride System (SRS) consists of a dry nitrogen and oil filled cylinder installed in line with the loader lift cylinders. When activated, the Smooth Ride System allows the loader arms to float slightly. This action counteracts variations in road or site surfaces and provides the operator with a smooth ride.

Activation

Electric switch on instrument panel. Manually controlled by the operator for maximum benefit and user flexibility.



JCB BACKHOE LOADERS | 214 & 214S



STANDARD 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 combined with high lift and breakout forces maximize productivity.

Machine model	214-2WD	214-4WD	214S-4WS
	lb (kg)	lb (kg)	lb (kg)
Bucket breakout force	12638 (5734)	12638 (5734)	12638 (5734)
Loader arm breakout force	13313 (6040)	13313 (6040)	13313 (6040)
Lift capacity to full height	9231 (4188)	9231 (4188)	9231 (4188)

LOADER – 6-in-1 Bucket

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 combined with high lift and breakout forces maximize productivity.

Machine model	214-2WD	214-4WD	214S-4WS
	lb (kg)	lb (kg)	lb (kg)
Bucket breakout force	13443 (6009)	13443 (6009)	13696 (6214)
Loader arm breakout force	13383 (6072)	13383 (6072)	12860 (5835)
Lift capacity to full height	8647 (3923)	8647 (3923)	8043 (3649)
6-in-1 bucket clamp force	6486 (2943)	6486 (2943)	6486 (2943)
Fork lift capacity – 24" center	4000 (1815)	4000 (1815)	4000 (1815)

LOADER ATTACHMENTS – Tool Carrier – Q-Fit

Machine model	214-2WD	214-4WD	214S-4WS
Optional Q fit coupler	●	●	●
48" Pallet forks with load guard	●	●	●
2.0 cu.yd. light material bucket			●
1.5 cu.yd. BHL profile bucket	●	●	●
1.75 cu.yd. loader profile bucket			●
12 foot truss boom	●	●	●
Side shift carriage	●	●	●
Side tilt carriage	●	●	●
Framer's carriages	●	●	●
Q-fit blank	●	●	●
Sweeper/collector	●	●	●

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

BRAKES

Self adjusting oil immersed, inboard, multi-disc type. Hydraulic power assisted actuation on all models. Oil immersed multi-plate brakes provide fade free stops. Independent disk and caliper type parking brake mounted on rear of transmission.

214 – 2WD and 4WD

Two pedal service brakes for individual or simultaneous operation.

Selectable 4WD braking for improved road deceleration.

214S – 4WS

Single pedal service brakes. Automatic four wheel drive engagement when braking to enhance stopping ability.

TIRES

Tires listed are most popular sizes. See your JCB Dealer for a full listing of available tire sizes and tread designs. Tires are listed in as front and rear combinations that are compatible with axle availability.

Machine model	214-2WD	214-4WD	214S-4WS
11L-16, F3, 12 ply – front	Standard		
19.5L-24, R4, 10 ply – rear	Standard		
19.5L-24, R4, 12 ply – rear	Optional		
14-17.5, FWD, 10 ply – front		Standard	
19.5L-24, R4, 10 ply – rear		Standard	
19.5L-24, R4, 12 ply – rear		Optional	
335/18 Radial front		Optional	
16.9-28 XTLA* Radial rear		Optional	
16.9-24, R4, 12 ply – set of 4			Standard
16.9-28, R4, 10 ply – set of 4			Optional
16.9-28, XTLA*† – set of 4			Optional

*XTLA is a designation of Michelin radial tires.

† Required for autoshift transmission.

HYDRAULIC SYSTEM

Open center system incorporating dual gear pumps which supply oil for loader, backhoe and steering systems. Side mounted hydraulic tank with sight glass. JCB cylinders with hose protection, structural steel tubing. Return line filter with magnet and replaceable cartridge.

Machine model	214-2WD	214-4WD	214S-4WS
	gpm (lpm)	gpm (lpm)	gpm (lpm)
Pump output – #1	24 (91)	24 (91)	24 (91)
Pump output – #2	15 (57)	15 (57)	15 (57)
Combined pump output	39 (148)	39 (148)	39 (148)
	psi (bar)	psi (bar)	psi (bar)
System relief pressure	3300 (228)	3300 (228)	3300 (228)
Offloader valve relief	3000 (207)	3000 (207)	3000 (207)
Filter rating	10 micron	10 micron	10 micron



JCB BACKHOE LOADERS | 214 & 214S



SERVICE CAPACITIES

Machine model	214-2WD	214-4WD	214S-4WS
	gal (liter)	gal (liter)	gal (liter)
Cooling system	6.1 (23)	6.1 (23)	6.1 (23)
Fuel tank	42.5 (160)	42.5 (160)	42.5 (160)
Engine with filter	2.6 (10)	2.6 (10)	2.6 (10)
Synchro shuttle trans w/filter	4.8 (18)	4.8 (18)	N/A
Powershift trans w/filter	N/A	3.9 (15)	3.9 (15)
Autoshift trans w/filter	N/A	N/A	3.9 (15)
Rear axle	4.2 (16)	4.2 (16)	4.2 (16)
Front drive axle	N/A	4.2 (16)	4.2 (16)
Drive axle hubs – each	0.4 (2)	0.4 (2)	0.4 (2)
Hydraulic tank	22 (83)	22 (83)	22 (83)
Hydraulic system incl. tank	33.4 (127)	33.4 (127)	33.4 (127)

BACKHOE BUCKETS

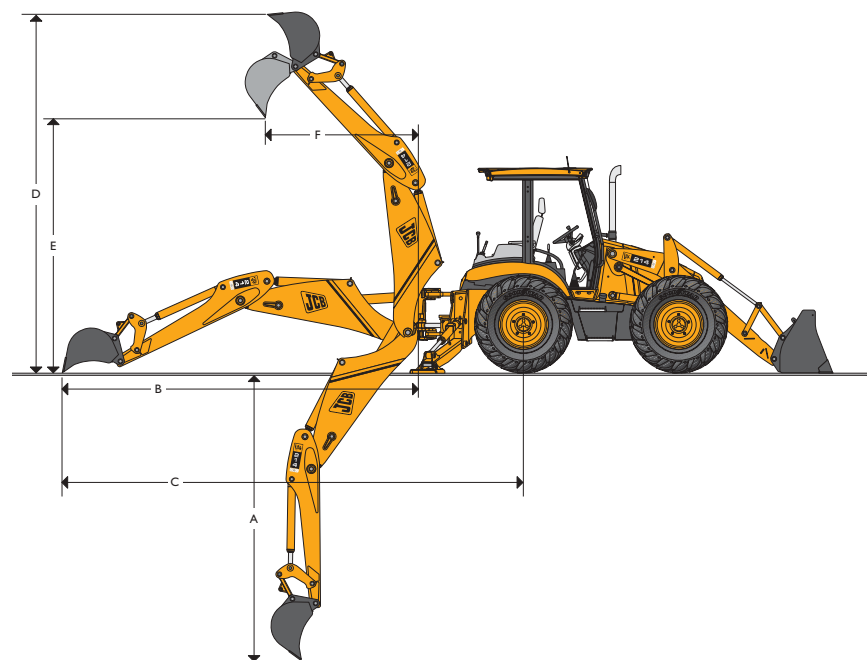
JCB Backhoe Loader buckets are designed specifically for use on JCB machines. Dual position tipping link provides positions to maximize tearout force or to maximize rotation for straight wall digging and improved load retention. All JCB buckets include heavy-duty features consisting of a 1"x18" cutting edge, back straps, box section cross member, and full length, chamfered side cutters.

Bucket width – in.	12	18	24	24	30	36
Bucket width – mm	305	455	610	610	760	910
Number of teeth	3	4	4	5	5	6
Heavy duty trenching buckets						
Capacity – cu.ft.	2.8	4.9	7.1	7.1	9.2	11.3
Capacity – cu.m	0.08	0.14	0.20	0.20	0.26	0.32
Weight – lbs	293	359	408	419	478	544
Weight – kg	100	128	145	190	217	247

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

BACKHOE DIMENSIONS

	standard backhoe	Extradig – retracted	Extradig – extended
	ft-in (meter)	ft-in (meter)	ft-in (meter)
A SAE dig depth – max.	14-7 (4.45)	14-7 (4.45)	18-6 (5.63)
A SAE dig depth – 2" flat bottom	14-5 (4.39)	14-5 (4.39)	18-4 (5.59)
B Reach from swing pivot	17-10 (5.44)	17-10 (5.44)	21-6 (6.55)
C Reach from rear axle center	21-9 (6.63)	21-9 (6.63)	25-6 (7.77)
D Maximum operating height	17-8 (5.38)	17-8 (5.38)	20-6 (6.25)
E Loading height	10-6 (3.20)	10-6 (3.20)	12-3 (3.73)
F Loading reach	5-3 (1.68)	5-5 (1.73)	9-1 (2.77)
Swing arc – degrees	180°	180°	180°
Stabilizers – transport	7-6 (2.29)	7-6 (2.29)	7-6 (2.29)
Stabilizers – operating	10-10 (3.30)	10-10 (3.30)	10-10 (3.30)
Leveling angle – degrees	15°	15°	15°
Bucket rotation – degrees	185° max. power/201° max. rotation		



These models are also available with sideshift backhoe configurations. Contact your local JCB Dealer for details.

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BACKHOE PERFORMANCE

	standard backhoe	Extradig – retracted*	Extradig – extended*
	lb (kg)	lb (kg)	lb (kg)
Bucket force	12023 (5455)	11600 (5263)	11600 (5263)
Dipper force	7919 (3593)	7919 (3593)	5518 (2504)
Dipper lift capacity – SAE J131			
+ 4 feet	8200 (3721)	8150 (3698)	3860 (1751)
+ 6 feet	6100 (2768)	6000 (2722)	3170 (1438)
+ 8 feet	5400 (2450)	5340 (2423)	2900 (1316)
+ 10 feet	4800 (2178)	4680 (2123)	2630 (1193)
+ 12 feet	3680 (1670)	3580 (1624)	1910 (867)
Boom lift capacity – SAE J131			
+ 18 feet			1500 (681)
+ 16 feet			1820 (826)
+ 12 feet	3840 (1742)	3370 (1529)	2150 (975)
+ 8 feet	3380 (1534)	3160 (1434)	2150 (975)
+ 4 feet	3230 (1466)	2950 (1338)	2160 (980)
Ground level	3130 (1420)	2710 (1230)	2080 (944)
– 4 feet	2960 (1343)	2489 (1129)	2050 (930)
– 8 feet	2830 (1284)	2330 (1057)	1930 (876)
– 10 feet	2850 (1293)	2150 (975)	1910 (867)
– 12 feet			1910 (867)

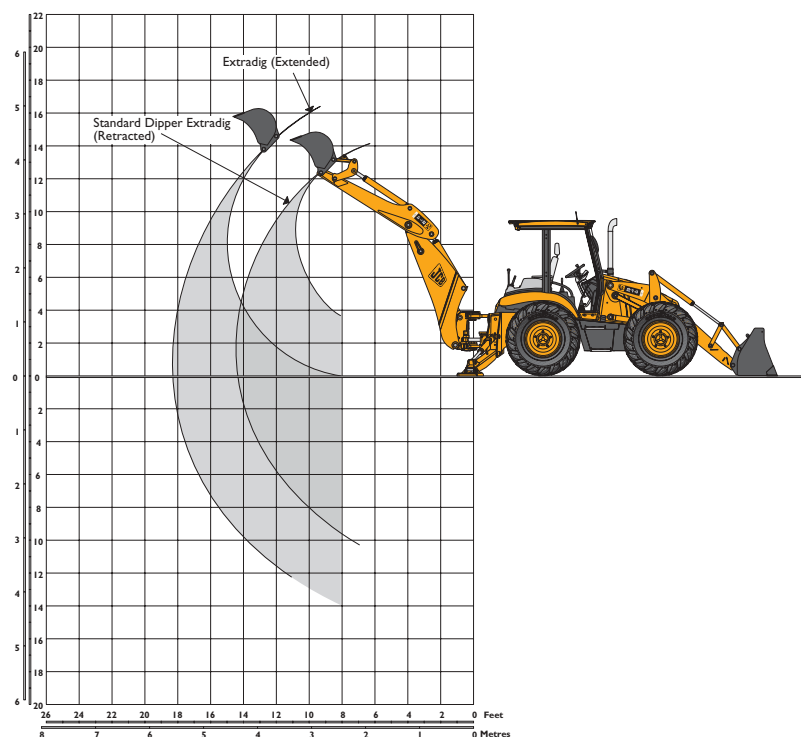
Lift capacity figures comply with SAE J131. All figures are stated in pounds (kilograms). The large arc indicates boom lift. The small arc indicates dipper lift with the boom at 63 degrees. Units are equipped with standard equipment as listed in this data sheet and a 24" backhoe bucket.

JCB PRECISION CONTROLS (OPTIONAL)

JCB Precision Controls offer smooth, low effort and precise backhoe operation while reducing operator fatigue. The joysticks are integrated into the seat armrests, which provides increased legroom, improved job visibility and hydraulic excavator ergonomics.

Best in class hydraulic modulation combined with the greatest digging performance, means that the JCB Precision Controls are unmatched in any backhoe loader.

BACKHOE PERFORMANCE



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 360Q is equipped with sound insulation for quiet operation.

Breaker model	360	360Q	550
Energy class – ft./lb	750	750	1100
Impact frequency – bpm	600-1800	600-1800	450-1000
Oil flow range – gpm (lpm)	13-40 (50-150)	13-40 (50-150)	16-36 (62-132)
Operating weight – lb (kg)	891 (405)	921 (418)	1183 (583)
Operating pressure – psi (bar)	1450-2100 (100-145)	1450-2100 (100-145)	1305-1815 (90-125)
Tool diameter – in. (mm)	2.75 (70)	2.75 (70)	3.31 (82)

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



JCB BACKHOE LOADERS | 214 & 214S



THE BEST BACK-UP IN THE BUSINESS

Buy any of the JCB Backhoe Loader models and you'll get a complete deal that extends beyond that of any rival.

FINANCE

Your JCB Dealer can meet your financial needs through a variety of plans for leasing, lease purchases with or without options, installment sales contracts and rental programs.

PARTS

JCB Dealers' convenient locations offer excellent 'over the counter' parts availability.

WARRANTY

JCB Backhoe Loaders are covered by JCB's one year standard warranty, which is outlined in the JCB 'Certificate of Warranty'. Extended warranty coverage is also available. Contact your JCB Dealer for details.

REGIONAL PARTS DEPOTS

For the breakdown part your dealer may not have in stock, JCB has SDD 'Same Day Dispatch,' from one of two parts distribution centers in the United States and one in Canada.

SERVICE

JCB Dealer service people are committed to keeping your JCB up and running. JCB Dealer mechanics are enrolled in on-going training programs and supported by experienced JCB Service Representatives based throughout North America.



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