

NEW



## MINI EXCAVATOR | 15C-I/16C-I/18Z-I/19C-I/19C-I PC

Transport weight: 1479-1868kg Net engine power: 10.8kW



Courtesy of Machine.Market

# CHOOSING A COMPACT EXCAVATOR JUST GOT TOUGHER



## **THE NEW GENERATION 1-2 TONNE COMPACT EXCAVATOR RANGE FROM JCB ENCOMPASSES FIVE MODELS INCLUDING FOUR CONVENTIONAL TAILSWING AND ONE ZERO TAILSWING MODEL.**

There are two lightweight Conventional Tailswing models, the 15C and 16C. These are ideally suited to being towed behind a van or pickup. The 15C is a standard specification, fixed undercarriage model driven by a gear pump offering single speed tracking. The transport weight of the 16C at 1674kg with a cab is enhanced with a retracting undercarriage, two speed tracking and a variable displacement pump.

The 18Z is a zero tailswing model, offers the same performance features as the 16C, but in a zero tailswing package, facilitating work in tight environments such as footways and in between buildings. This helps to reduce risk of damage both to the machine and the workspace.

The 19C shares the same compact footprint as the rest of the range, however has greater tearout and lift capacity for customers carrying with greater requirements. There is also the option of a 1344mm dipper offering greater reach and dig depth.

The 19C PC has additional operating features offering customers an enhanced operating experience. Features such as Electro Proportional Control, Auto Kickdown, travel motors as well as the option of a hydraulic quick hitch, additional auxiliary lines and adjustable auxiliary flows are available.



# CHOOSE TOUGH.

THE NEW GENERATION JCB MINI EXCAVATORS HAVE BEEN DESIGNED AND BUILT TO WITHSTAND THE TOUGHEST OF JOB SITES. WITH LONG-LASTING COMPONENTS AND EASY, COST EFFECTIVE REPAIRS, THEY PROVIDE MINIMUM DOWNTIME AND MAXIMUM PROFITS.

## Designed to last.

**1** Full width rear cast counterweight gives full protection against site damage.

All hydraulic components are assembled within a hydraulic clean room and go through multi-stage hot tests and oil detection processes to ensure reliability.

Improved dig end pins with ARCO coating protects pins against corrosion, helping towards reduced cost of ownership.

**2** State of the art manufacturing processes to achieve ultimate build quality, reliability, durability, service life and machine uptime. Our in-house paint process is a case in point, guaranteeing quality and lasting protection.

**3** The standard\* heavy-duty kingpost optimises service life and lowers the cost of ownership due to the durable re-bushable pivots. \*Excluding the 15C-1.

**4** The top mounted boom ram reduces the risk of damage on site, for instance when loading dumpers.

**5** Hoses are routed through the boom, dipper and kingpost for ultimate durability. All five models use O-ring faced seal hydraulics which provides excellent sealing capabilities.



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**Strong and durable.**

**6** The 18Z is JCB's first zero tailswing model within its class, it protects the machine and surrounding environment from accidental damage.

**7** Solid cast rear door for maximum impact resistance compared to glass reinforced plastic.

**8** Three single flanged bottom rollers allied with short pitch tracks ensures a smooth ride. Long pitch rubber or steel tracks are optional for more arduous applications.

**9** The strong, durable H frame undercarriage provides rigid support with an open design allowing spoil to fall readily preventing excessive componentry wear.

For ultimate rigidity, the extending undercarriage beams are constructed from 25mm solid steel plate\*.

\*15c-1 has a fixed undercarriage.



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# CHOOSE EASY.

**MOST JOBS ARE HARD ENOUGH WITHOUT THE ADDED STRESS OF DIFFICULT AND FREQUENT SERVICING, HARD TO REACH CLEANING AND OF COURSE UNCOMFORTABLE OPERATING CONDITIONS. THAT'S WHY WE'VE JUST MADE THEM EASY.**

## Making life easy.

**1** Easy pre-start checks allows you to check fluid oil levels whilst an analogue hour meter gives you quick and easy viewing without having to turn the machine on.

Standard two speed tracking is operated by a button on the dozer. Auto kick-down is standard on the 19C-1 PC and optional on the 16C-1, 18Z-1 and 19C-1.

**2** New right hand positioned panel with easy button functions, easy to read indicators and warnings allow the operator to always be aware of the machines status as well as potential risks.

**3** Electro proportional control as standard on the 19C-1 PC enables new finer control through an auxiliary thumb switch to allow for precision control of attachments.

All new valve block, spools and floor controls allow for fine control and smooth operation for even the less experienced operator, increasing productivity.



### Supporting productivity.

4 180° opening service door to access all cleaning and maintenance points with a separate, daily checks door.

5 Our hydraulic system allows you to travel in a straight line at the same time as selecting excavator functions, increasing productivity.

6 Spacious cab with large door entry, excellent visibility and intuitive controls. 24% bigger than the previous model. Easily accessible external lockable fuel tank provides extra security.



## CHOOSE SIMPLE.

DESIGNED TO SIMPLY GET ON WITH WORKING, THE NEW GENERATION MINIS ARE ALL DESIGNED WITH YOUR PROFITS IN MIND. WITH A SIMPLE, CLASSIC DESIGN, LOW COST MAINTENANCE AND EASY REPAIRS EQUALS MACHINES TAILORED TO YOUR NEEDS, WHY CHOOSE ANYTHING ELSE?

Bucket rotation is a huge 201°, offering great spoil retention during truck loading, providing total versatility. Dipper lengths are 950mm, 1100mm and 1344mm.



### User-friendly environment.

1 Large glass area gives increased visibility. 70/30 split line and clear joining split gives perfect visibility down to the dozer blade.

2 Flat glass which is easier to replace and more cost effective than curved options, with the added benefit of sun reflecting tinted glass for operator comfort.

3 The new range boasts new instrumentation, the 19C-1 PC has the added benefit of an integrated membrane switch immobiliser pad.

4 Improved 2 speed heater with three multi-positioned vents for ultimate operator comfort.





### Ultimate convenience.

5 Graphite impregnated bushes with industries lowest greasing intervals of 500 hours, means no need for daily greasing.

6 Hydraulic connections reduced along with hose length reductions and combined control valves; all deliver improved hydraulic efficiency and reduced component complexity.

Premium or rental specifications to help choose the right machine. Zero tailswing or Conventional tailswing plus cab or canopy options across the range.

7 Reduced minimum front swing radius for a compact machine that can tuck up to work in the tightest of conditions without compromise to load over height.



## CHOOSE QUICK.

WHEN TIME IS MONEY AND GETTING FROM THE LAST JOB TO THE NEXT JOB QUICKER IS A HUGE ADVANTAGE, THE NEW GENERATION MINIS DON'T HANG ABOUT. QUICK CLEANING, TRANSPORTING AND ATTACHMENT CHANGES ALL ADD UP TO BIGGER PROFITS FOR YOU.

### Ultimate versatility.

- 1 Industry standard bucket centres and pin sizes (30mm) for maximum attachment versatility.
- 2 Factory ready manual or hydraulic quick hitch (model specific) allows the operator to switch between attachments quickly and safely.
- 3 Choose from JCB's range of specially designed attachments. They provide ultimate performance, full JCB warranty compliance, and optimum fit and operation. Dual hydraulic flow is available as an option.

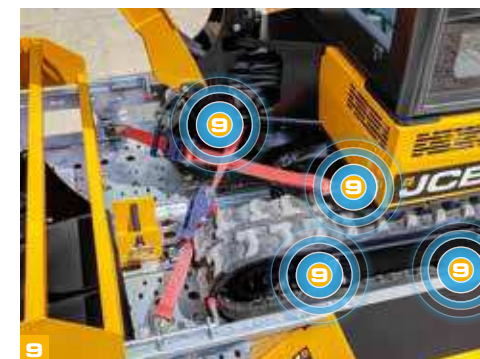


## Low cost of ownership.

- 4 New dig end geometry allows the machines to load dumpers without the need to re-position speeding up arduous jobs on site.
- 5 Sloping undercarriage track legs gives minimal soil retention and enables fast cleaning.
- 6 The new dozer geometry allows the blade to become free of material build up. With easy to use swing out dozer wing extensions, there's no need for any tools for operation\*.
- 7 No daily greasing with easy to access maintenance and cleaning means quicker turnaround times.

\* Not applicable for the 15c-1

- 8 With low operating weights, each machine can be easily towed to wherever they're needed.
- 9 10 tie down and lifting points ensure compliant, speedy machine transportation.



## SAFE & SECURE.

WORKING QUICKER IS ALSO ABOUT WORKING SMARTER. AS WORKING CONDITIONS BECOME MORE AND MORE RESTRICTED, SAFETY BECOMES MORE AND MORE IMPORTANT. JCB HAS ALWAYS BEEN AT THE FOREFRONT OF SITE SAFETY AND PROVIDES INNOVATIVE WAYS TO IMPROVE IT.

### Work smart.

**1** The new cabs are fully ROPS and FOPS compliant, for increased protection laminated glass is available as an option.

**2** All services, including tracking and dozer, are isolated when the control pod is raised as an additional safety precautionary measure.

**3** Lift overload audible warning system on the 19c-1 PC ensures maximum stability and safety when working efficiently.

**4** A lockable internal toolbox provides safe tool storage on all models.

Optional operator presence and seat belt isolation switches for increased on site safety.



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## Safely does it.

**4** Optimum seat position with large glass area and bodywork design combine to give excellent all round visibility for increased on site safety. As a result, all models do not require mirrors to meet EU regulations.

**5** JCB's unique 2GO system gives an additional layer of safety meaning all controls are fully isolated unless the 2GO button is activated.

For increased safety, there is a Thatcham approved immobiliser\*, eliminating the possibility of an unauthorised start. Having the software system Livelink and Datatag\* on the minis, will allow you to set a geofence and machine working restrictions.

A key benefit of the Livelink and immobiliser combination is the remote pin code management system, which allows you to remotely authorise or deny the usage of the machine. Up to 14 individual pin codes can be programmed into the system, offering the option to customise operator preferences by embedding a separate auxiliary mode in each code.

\* Region specific.



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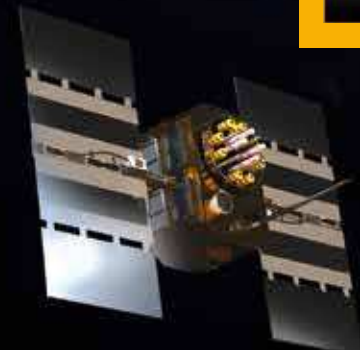
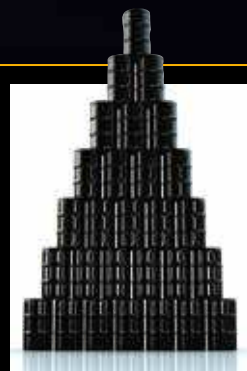
Optional green beacon warning light and high visibility seatbelts available to those wishing to increase on-site safety measures.

# LIVELINK, WORK SMARTER.

**LIVELINK IS AN INNOVATIVE SOFTWARE SYSTEM THAT LETS YOU MANAGE JCB MACHINES REMOTELY – ONLINE, BY EMAIL OR BY MOBILE PHONE. ACCESS EVERYTHING FROM MACHINE ALERTS TO HISTORY INFORMATION, WITH ALL DATA STORED AT A SECURE CENTRE.**

## Productivity and cost benefits

By providing information like machine location, Livelink can help improve efficiency and perhaps even reduce insurance costs.



## Maintenance benefits

Manage machine maintenance easily – accurate hours monitoring and service alerts improve maintenance planning, while real-time location data helps you manage your fleet. Critical machine alerts and maintenance history records are also available.



## Security benefits

Livelink's real-time geofencing alerts tell you when machines move out of predetermined zones, and real-time curfew alerts inform you of unauthorised usage. Further benefits include real-time location information, advanced ECU matching (pairs Livelink with the immobiliser or ECU), and PIN code management (to remotely authorise usage – perfect for plant hire).



## VALUE ADDED.

JCB'S WORLDWIDE CUSTOMER SUPPORT IS FIRST CLASS. WHATEVER YOU NEED AND WHEREVER YOU ARE, WE'LL BE AVAILABLE QUICKLY AND EFFICIENTLY TO HELP MAKE SURE YOUR MACHINERY IS PERFORMING TO ITS FULL POTENTIAL.



1

1 Our Technical Support Service provides instant access to factory expertise, day or night, while our Finance and Insurance teams are always on hand to provide fast, flexible, competitive quotes.

2 The global network of JCB Parts Centres is another model of efficiency; with 16 regional bases, we can deliver around 95% of all parts anywhere in the world within 24 hours. Our genuine JCB parts are designed to work in perfect harmony with your machine for optimum performance and productivity.



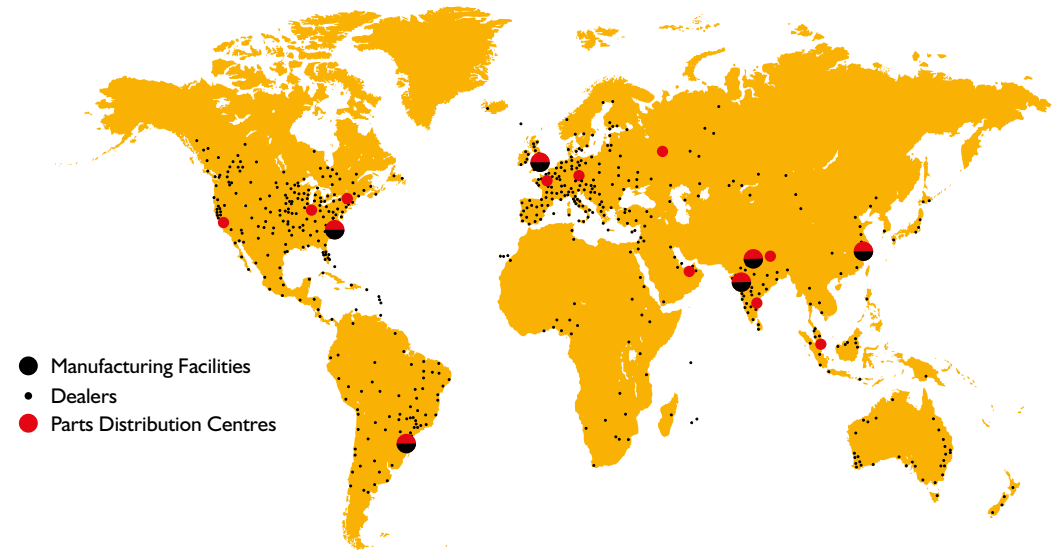
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3 JCB Assetcare offers comprehensive extended warranties and service agreements, as well as service-only or repair and maintenance contracts. Irrespective of what you opt for, our maintenance teams around the world charge competitive labour rates, and offer non-obligation quotations as well as fast, efficient insurance repair work.

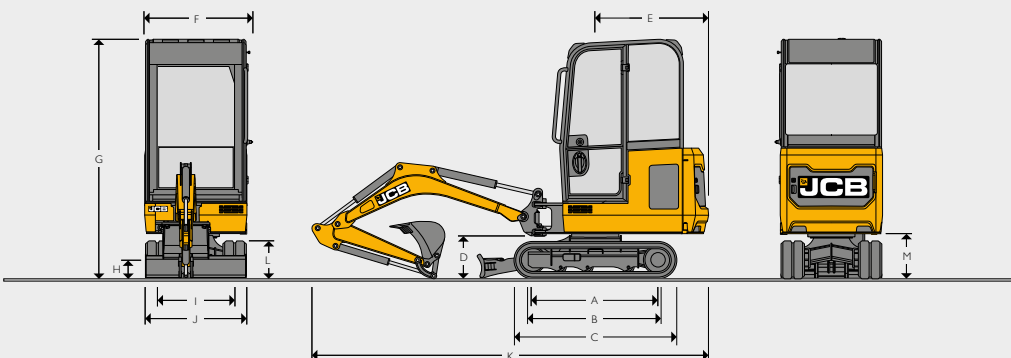


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Note: JCB LIVELINK and JCB ASSETCARE may not be available in your region, so please check with your local dealer.



STATIC DIMENSIONS



Machine model		15C-1	16C-1	18Z-1	19C-1	19C-1 PC
A	Sprocket idler centres	mm	1022	1218	1218	1218
B	Track length on ground	mm	1030	1220	1220	1220
C	Undercarriage overall length - rubber	mm	1378	1578	1578	1578
	Undercarriage overall length - steel	mm	1378	1578	1578	1578
D	Kingpost clearance	mm	409	409	409	409
E	Tailswing radius	mm	1103	1103	685	1103
F	Overall width of superstructure	mm	996	996	996	996
G	Height over cab	mm	2324	2324	N/A	2328
	Height over canopy	mm	2342	2342	2340	2345
H	Ground clearance	mm	162	162	162	162
I	Track gauge - retracted/extended	mm	750	750-1110	750-1110	750-1110
J	Width over tracks / rubber / steel - retracted	mm	980	980	980	980
	Width over tracks / rubber / steel - extended	mm	N/A	1330	1330	1330
K	Transport length	mm	3860	3860	3547	3860
L	Track height	mm	367	367	367	367
M	Counterweight clearance	mm	434	434	434	434

ENGINE

Machine model	15C-1, 16C-1, 18Z-1, 19C-1, 19C-1 PC	
Model	403D-07	
Fuel	Diesel	
Cooling	Water cooled	
Gross power ISO 14396	kW	11.7 @ 2550 rpm
Net power	kW	10.8 @ 2550 rpm
Max. torque ISO 14396	Nm	45.6 @ 2000 rpm
Displacement	cc	762
Gradeability	degrees	35°
Starter motor	kW	1.2
Battery	volt / amps	12V / 65AH
Alternator	amps (aircon)	60

UNDERCARRIAGE

Machine model		15C-1	16C-1	18Z-1	19C-1	19C-1 PC
		Fixed	Retractable	Retractable	Retractable	Retractable
No. of bottom rollers		3	3	3	3	3
Track width rubber	mm	230	230	230	230	230
Track width steel	mm	230	230	230	230	230
Travel speed - low	kph	2.0	2.4	2.4	2.4	2.4
Travel speed - high	kph	N/A	4.1	4.1	4.1	4.1
Tractive effort	kN	11.5	11.5	13.2	13.2	13.2

HYDRAULIC SYSTEM

Machine model		15C-1	16C-1	18Z-1	19C-1	19C-1 PC
Pump	cc	10	18	18	18	18
Nominal output @ 2000rpm	lpm	25	36	36	36	36
Excavator/track main relief pressure	bar	205	205	235	235	235
Slew main relief pressure	bar	205	205	167	167	167
Auxiliary hydraulic pressure (Aux 1)	bar	200	200	200	200	200
Auxiliary hydraulic pressure (Aux 2)	bar	N/A	N/A	N/A	N/A	200
Auxiliary hydraulic flow (Aux 1)	lpm	25	32	32	32	32
Auxiliary hydraulic flow (Aux 2)	lpm	N/A	N/A	N/A	N/A	32
Hydraulic pump		Gear	Piston	Piston	Piston	Piston



**WEIGHTS**

Machine model	15C-1		16C-1		18Z-1	19C-1		19C-1 PC	
	Canopy	Cab	Canopy	Cab	Canopy	Canopy	Cab	Canopy	Cab
Operating weight*	1554	1664	1639	1749	1749	1830	1910	1863	1943
FOPS (Falling Object Protective Structure) guard	N/A	15	N/A	15	N/A	N/A	15	N/A	15
Steel tracks	81	81	81	81	81	81	81	81	81
Long dozer	9	9	9	9	9	9	9	9	9
Mechanical quickhitch	14	14	14	14	14	14	14	14	14
Hydraulic quickhitch (without hoses)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	24	24
Gravemaster dipper	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5	5
Shipping weight**	1460	1570	1545	1655	1655	1736	1816	1769	1849
Ground bearing pressure (rubber tracks)	0.33	0.33	0.35	0.36	0.33	0.35	0.36	0.36	0.37
Ground bearing pressure (steel tracks)	0.35	0.35	0.36	0.38	0.35	0.36	0.38	0.38	0.39
Transport weight (operator weight - 75kg)	1479	1589	1564	1674	1674	1755	1835	1788	1868

\*Operator weight to ISO 6016 including cab/canopy, rubber tracks, 950 dipper (15C-1, 16C-1, 19C-1 & 18Z-1), 1100 dipper (19C-1 PC), 300mm bucket, full tanks and a 75kg operator. \*\*Shipping weight to ISO 6016 is mass of the base machine without operator, with fuel level at 10% of tank capacity.

**SERVICE CAPACITIES**

Machine model	15C-1	16C-1	18Z-1	19C-1	19C-1 PC
Fuel tank	18.5	18.5	20.5	18.5	18.5
Engine coolant	Canopy model: 4.2 Cab model: 4.7	Canopy model: 4.2 Cab model: 4.7	Canopy model: 4.2	Canopy model: 4.2 Cab model: 4.7	Canopy model: 4.2 Cab model: 4.7
Engine oil	2.5	2.5	2.5	2.5	2.5
Hydraulic system	28	28	28	28	28
Hydraulic tank	15	15	15	15	15

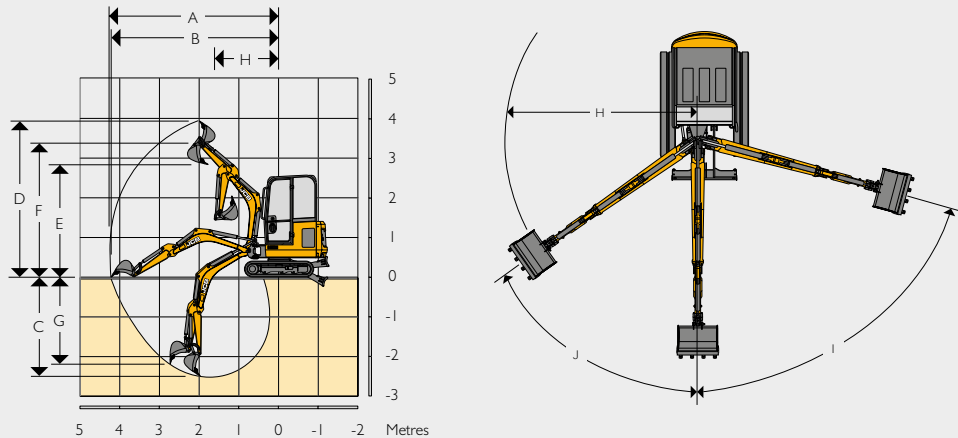
**OPERATOR ENVIRONMENT**

Machine model	15C-1	16C-1	18Z-1	19C-1	19C-1 PC
Cab/canopy height	1347 / 1364	1347 / 1364	na / 2347	1347 / 1364	1347 / 1364
Cab/canopy height with FOGS guard LEVEL I	1366 / 1364	1366 / 1364	na / 2347	1366 / 1364	1366 / 1364
Cab/canopy length with FOGS guard LEVEL I	1236 / 1427	1236 / 1427	1107	1236 / 1427	1236 / 1427
Cab/canopy length	1202 / 1427	1202 / 1427	1107	1202 / 1427	1202 / 1427
Cab/canopy width	976 / 978	976 / 978	978	976 / 978	976 / 978

**DOZER**

Machine model	15C-1	16C-1	18Z-1	19C-1	19C-1 PC
Dozer length (STD) centre of boss	787	787	787	787	787
Max. height above ground	239	239	239	239	239
Dig depth below ground	225	225	225	225	225
Approach angle	25.3	25.3	25.3	25.3	25.3
Width (without wings)	980	980	980	980	980
Width (with wings)	N/A	1340	1340	1340	1340
Height	234	234	234	234	234

**WORKING RANGE**



	15C-1/ 16C-1 (950mm Dipper)	15C-1/ 16C-1 (1100mm Dipper)	18Z-1 / 19C-1/ 19C-1 PC (950mm Dipper)	18Z-1 / 19C-1/ 19C-1 PC (1100mm Dipper)	16C-1, 18Z-1, 19C-1, 19C-1 PC (1344mm Gravemaster Dipper)
Boom length	1800	1800	1800	1800	1800
A Max. digging reach	3899	4043	3899	4043	4247
B Max. digging reach on ground	3834	3981	3834	3981	4220
C Max. digging depth – dozer up	2271	2421	2271	2421	2665
Max. digging depth – dozer down	2426	2576	2426	2576	2819
D Max. digging height	3556	3667	3556	3667	3847
E Max. dump/load-over height	2598	2637	2598	2637	2818
F Max. height to dipper nose pivot pin	3116	3154	3116	3154	3335
G Max. vertical wallcut depth	1933	2139	1933	2139	2375
H Min. front swing radius (no offset)	1488	1517	1488	1517	1565
Min. front swing radius (fully offset)	1171	1196	1171	1196	1236
I Boom swing left	75°	75°	75°	75°	75°
J Boom swing right	55°	55°	55°	55°	55°
Bucket rotation	201°	201°	201°	201°	201°
Dipper rotation	126°	126°	126°	126°	126°
Bucket tearout (power position)	15.6	15.6	18	18	18
Dipper tearout	8.8	7.9	10.1	9.1	7.9
Slew speed	7.9	7.9	7.9	7.9	7.9

EQUIPMENT											
Machine model	15C-1	16C-1	18Z-1	19C-1	19C-1 PC	Machine model	15C-1	16C-1	18Z-1	19C-1	19C-1 PC
<b>SERVICE AND MAINTENANCE</b>						<b>PROTECTION AND SAFETY</b>					
Beacon ready kit	•	•	•	•	•	ROPS, TOPS & FOGS certified canopy	•	•	•	•	•
Single element air cleaner	•	•	•	•	•	ROPS & TOPS certified cab	+	+		+	+
500 hours dig end greasing intervals	•	•	•	•	•	Internal lockable toolbox	•	•	•	•	•
Grease gun & cartridge	+	+	+	+	+	Protected boom work light	+	•	•	•	•
Toolkit	+	+	+	+	+	2GO hydraulic isolation	•	•	•	•	•
Automatic glow plug					+	Cesar Data Tag (UK ONLY)	•	•	•	•	•
<b>TRACKS AND UNDERCARRIAGE</b>						<b>EXTERNAL EQUIPMENT</b>					
230mm short pitch rubber tracks	•	•	•	•	•	Standard dipper (mm)	950	950	950	950	1100
Two speed tracking		•	•	•	•	Dipper options (mm)	1100	1100	1100	1100	950/1344
Retractable undercarriage		•	•	•	•	Tie down points	•	•	•	•	•
Extendable dozer blade		•	•	•	•	LED beacon	+	+	+	+	+
Heavy duty recoiled tracked tensioners		•	•	•	•	Halogen work lights	+	+	+	+	+
230mm long pitch rubber tracks		+	+	+	+	Heavy duty kingpost	+	•	•	•	•
230mm steel tracks		+	+	+	+	Exterior mirrors	+	+	+	+	+
Long dozer blade	+	+	+	+	+	Full bucket range	+	+	+	+	+
Auto kick down track motors		+	+	+	•	Mechanical quick hitch	+	+	+	+	+
<b>OPERATOR STATION</b>						Hydraulic quick hitch					
LED worklights		+	+	+	+	Thumb ready dipper	+	+	+	+	+
Full audio visual warning systems	•	•	•	•	•	<b>STANDARD</b> •					
Full control isolation	•	•	•	•	•	<b>OPTIONAL</b> +					
12 volt power socket	•	•	•	•	•						
ISO servo controls	•	•	•	•	•						
Static seat	•	•	•	•	•						
Electro-proportional thumb controlled dual flow auxiliary					+						
Dual patterned controls (ISO/SAE changeover)	+	+	+	+	+						
Fabric suspension seat	+	+		+	+						
Vinyl suspension seats	+	+	+	+	+						
LED interior lights		+		+	+						
Sunblind	+	+	+	+	+						
Fire extinguisher	+	+	+	+	+						
Track lever pedals	+	+	+	+	+						
Full radio kit	+	+		+	+						
<b>HYDRAULICS</b>											
Hydraulic slew travel lock	•	•	•	•	•						
Single acting auxiliary circuit	•	•	•	•	•						
Variable displacement pump		•	•	•	•						
Straight line travel circuit	•	•	•	•	•						
ORFS hydraulics	•	•	•	•	•						
Quick release auxiliary couplers	•	•	•	•	•						
Double acting auxiliaries	+	+	+	+	+						
Auxiliary vent					•						











JCB

JCB 16lc-1

JCB  
HMD-1ET



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Your nearest JCB dealer

**Mini Excavator 15c-1/16c-1/18z-1/19c-1/19c-1 PC**

Transport weight: 1479-1868kg Net engine power: 10.8kW

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