



## HYDRAULIC EXCAVATOR | JS140

Engine Power: 68.6 kW (92hp) | Bucket Capacity: 0.55 – 0.72m<sup>3</sup> | Operating Weight: 14,611 kg





# HIGH ON OUTPUT & FUEL EFFICIENCY.

IT'S NOW MORE IMPORTANT THAN EVER TO SAVE TIME AND MONEY; THE JSI40 HAS BEEN DESIGNED TO MAKE THE MOST OF BOTH.

## Upping output.

**1** A bucket tearout of 9785Kgf and a dipper tearout of 17404Kgf means the JSI40 can really get the job done quickly, even in very hard ground conditions.

**2** Excellent digging forces provide ease of operations in tough working conditions and firm ground.

## Efficiency.

**3** The JSI40 comes with 3 power modes using a dial type throttle:

**Economy mode:** lower fuel consumption at optimum output level.

**Power mode:** increases engine speed for faster operations when higher output is required.

**Power+ mode:** 6% more output over P mode.

**4** The proven and efficient Cummins engine is designed and developed to work in all climates around the world. The mechanical engine ensures maximum uptime by being better suited to lower quality fuel and air, making the JSI40 reliable and durable.



POWER MODE		USAGE
P+	Power Plus	Provides maximum output. Suitable for high output in tough ground conditions.
P	Power	For high output requirements
E	Economy	For general duty and digging operations



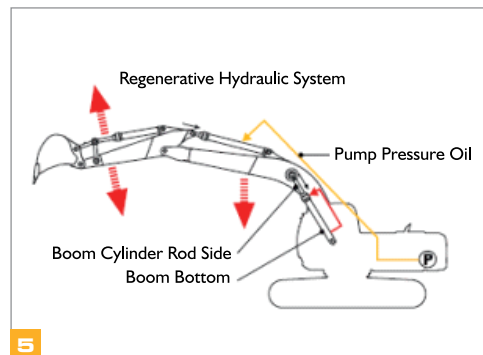


### Stability, hydraulics and attachments.

- 5 JCB's innovative hydraulic regeneration system means oil is recycled across the cylinders for faster cycle times and reduced fuel consumption.
- 6 For versatility, JCB offers auxiliary pipework for hammers.
- 7 High swing speed of 13.6 rpm shortens the digging cycle time, thus increasing overall productivity.
- 8 An operating weight of 14.6t offers increased machine stability while working in rough underfoot conditions.
- 9 **Auto Idler and One Touch idler function:** is a standard feature with the JS140. Improving fuel efficiency by reducing the engine speed when the machine is not at work for a set period of time, which can be customised.



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## STRENGTH INSIDE AND OUT.

BEFORE YOU BUY AN EXCAVATOR, YOU NEED TO KNOW IT'S GOING TO BE TOUGH ENOUGH TO PERFORM ANY JOB YOU ASK OF IT. WITH THE JSI40, STRENGTH AND DURABILITY COME AS STANDARD.



### Boom and dipper.

1 Boom and arm are made of high tensile steel that offers increased strength and longer life, even in the most arduous applications.

Critical stress points have been reinforced, especially on either sides of the boom foot to ensure long life.

2 Additional reinforcement plate and wear ribs on the arm bottom plates provides strength and protection from damage from tough applications.



### Componentry.

3 The JSI40 boasts the best components in the industry, including Kawasaki pumps, Cummins engine and Kayaba main control valves.

4 IP67/69 compliant dust & water proof electrical connectors further enhance the reliability of JSI40, even in extreme wet and dusty conditions.





## Structural strength.

- 5** Heavy duty X Type track frame offers increased reliability for longer hours. The track frame has been strengthened at the idler mounting area for increased strength while quarry working.
- 6** Heavy duty track chain with enhanced strength to improve the life of the track links in arduous conditions.
- 7** The JS140's high-strength rigid upper frame provides maximum durability and support.
- 8** A new 0.63Cum wider bucket (1040mm width) has been specifically designed for quarry, crusher applications and enhanced bucket life.
- 9** Belly guard on the lower frame and under-covers on the upper frame protects the overall machine system.



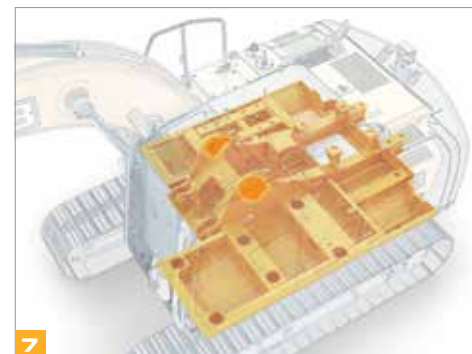
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## LESS SERVICING, MORE SERVICE.

WE'VE DESIGNED THE JSI40 TO BE LOW MAINTENANCE AND EASILY SERVICEABLE. WHICH MAKES THEM AFFORDABLE, EFFICIENT AND HIGHLY PRODUCTIVE. HELPING YOU GET THE BEST SERVICE FROM YOUR MACHINE.

### Easy does it.

1 Audio & instrument visual alerts for the following:

- Air-filter blockage
- Low coolant level
- High hydraulic temperature
- Low engine oil pressure

2 Radial seal on air filters provides error-free sealing on installation. Meanwhile, wire mesh elements make for easy storage, handling and cleaning.

3 The JSI40's engine has an in-line direct injection mechanical fuel pump, making maintenance and reliability second to none.





**Here to help.**

**4** The JS140's special hydraulic filtrations system provides 5,000hrs of hydraulic oil life. Reducing maintenance costs and increases machine uptime.

**5** New high efficiency glass fibre return line filter ensures longer life of hydraulic components. The JS140 has the following hydraulic filters:

- Full flow return filter
- Drain filter
- Servo filter

**6** The bushes fitted at both ends of the boom are infused with graphite which acts as a natural lubricant. This feature increases greasing interval to 1,000hrs, thus reducing maintenance costs and time.

**7** 'JCB Eject' turbine type air pre-cleaner filters dust particles to reduce clogging of the air filter, increasing its life and reduces maintenance costs.

**9** Engine Bonnet is assisted by a gas strut for ease of opening and closing.



SERVICE INTERVALS	
Engine oil, oil filter and fuel filters	Every <b>500</b> hours
Hydraulic main filter	Every <b>1,000</b> hours
Hydraulic oil	Every <b>5,000</b> hours

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**THE JSI40'S 7 INCH DIGITAL COLOUR DISPLAY HOSTS ALL THE RELEVANT, REAL TIME, INFORMATION THAT WILL HELP THE OPERATOR TO MAXIMISE MACHINE OUTPUT AND UPTIME.**



### Operational information



Quantity of fuel left in tank



Engine speed & operating mode status



Trip meter



Auto idle status & time setting



Machine operating parameters



Rear view camera operation

### Maintenance information



Maintenance due information



Colour coded health alerts based on severity



Hour meter, counting of attachment operation



Easy diagnostic system



Service warning alerts







## COMFORT AND EASE OF USE.

WE'VE DESIGNED THE JSI40 TO BE COMFORTABLE, ERGONOMIC, SIMPLE AND INTUITIVE TO OPERATE. WHICH IS GOOD FOR YOUR OPERATORS BUT EVEN BETTER FOR YOU.



**1** The cab with pressed steel construction has a large internal space and increases overall visibility. The operator will have enough leg and head room to work all day in comfort. Ergonomically positioned controls along with reclining arm rests give the operator the utmost comfort.

**2** The bigger cabin is mounted on six viscous mounts to reduce vibration levels in uneven ground conditions.

**3** Top corner glass in the cabin provides excellent visibility when working at heights.

**4** The JSI40 comes with a fully ducted air-conditioning unit to keep the operator comfortable in hot climate conditions.







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### Comfortably in control.

Hydraulic isolator lock lever with additional servo lock lever over-ride switch prevents unintended machine operation at site.

Swing lock system prevents any unintended operations or mishaps on site.

**2Go System:** The servo isolator lock can be released only with two separate inputs. The engine will not start if the hydraulic isolator is not in the 'hydraulics off' position.



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### Even more comfort.

A large floor area with large high grip pedals give easy and precise tracking.

For better ventilation this cabin is equipped with a roof hatch, sliding rear window and removable lower front end glass.

Anti-slip arrangement on machine covers offers safety to the operator.



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We've fitted the new JS140 with an all-day comfy fully adjustable deluxe seat that boasts hand recline rests.



## 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 AND HISTORY INFORMATION, WITH ALL DATA STORED AT A SECURE CENTRE.



### Manage machine maintenance easily.

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.





## 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.



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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 18 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.

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

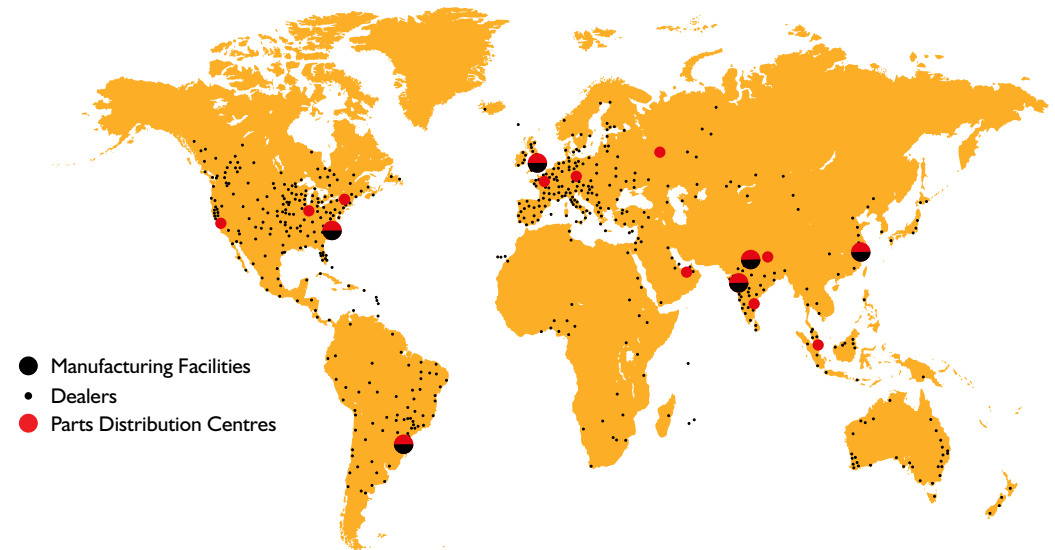


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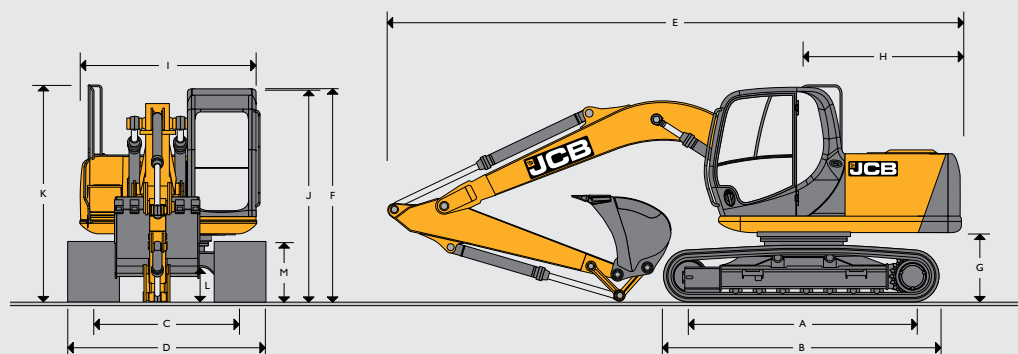
3 JCB Assetcare offers comprehensive extended warranties and service agreements, as well as service-only or repair and maintenance contracts. Irrespective of what you opt for, our maintenance teams around the world charge competitive labour rates, and offer non-obligation quotations as well as fast,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



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## STATIC DIMENSIONS



## STATIC DIMENSIONS

A	Track length on ground	mm	2780	
B	Undercarriage overall length	mm	3550	
C	Track gauge	mm	1990	
D	Width over tracks (500mm trackshoes)	mm	2490	
D	Width over tracks (600mm trackshoes)	mm	2590	
G	Counterweight clearance	mm	910	
H	Tailswing radius	mm	2150	
I	Overall width of superstructure	mm	2410	
J	Height over cab	mm	2997	
K	Height over grab rails	mm	2625	
L	Ground clearance	mm	460	
M	Track height	mm	815	
<b>Dipper lengths</b>		<b>4.7m Monoboom</b>		
E	Transport length	mm	7630	7724
F	Transport height	mm	2997	2907

## ENGINE

Model	Cummins 4BT Tier 0 compliant
Type	4-stroke, 4-cylinder in-line, direct injection, turbocharged diesel
Rated power (net)	75 kW (100hp) at 2200 rpm
Piston displacement	3.9 litres
Air filtration	Dry element with secondary safety element plus air pre-cleaner
Starting system	2 x 12 volt
Batteries	Water cooled via large capacity radiator
Alternator	24 volt, 75 ampere

## UNDERCARRIAGE

Carriage options	Standard carriage
Construction	Fully welded, 'X' frame type with central bellyguarding and sloping sidemembers with dirt relief holes under top rollers
Recovery point	Front and rear
Track shoe options	500mm, 600mm
Upper & lower rollers	Heat treated, sealed and lubricated
Track adjustment	Grease cylinder type
Track idler	Sealed and lubricated, with spring enhanced recoil
Track type	Sealed and lubricated
No. of track guides	1 per side
No. of lower rollers	7 per side
No. of upper rollers	1 per side
No. of track shoes	44 per side

## SERVICE CAPACITIES

	Litres
Fuel tank	253
Engine coolant	21.2
Engine oil	13.5
Hydraulic system	124
Hydraulic tank	73
Swing device	3.2
Travel device	2 x 3

## WEIGHTS AND GROUND BEARING PRESSURES

Figures include (size) bucket, operator full fuel tank and a 2.1m dipper.			
	500mm trackshoes	600mm trackshoes	
Machine weight	kg	14365	14549
Ground bearing pressure	kg/cm <sup>2</sup>	0.47	0.40
Figures include (size) bucket, operator full fuel tank and a 2.5m dipper.			
	500mm trackshoes	600mm trackshoes	
Machine weight	kg	14427	14611
Ground bearing pressure	kg/cm <sup>2</sup>	0.47	0.40



TRACK DRIVE	
Type	Fully hydrostatic with two speed autoshift
Travel motors	Variable swash axial piston type, fully guarded within undercarriage frame
Final drive	Planetary reduction, bolt-on sprockets
Service brake	Hydraulic counter balance valve
Park brake	Disc type, spring applied, automatic hydraulic release
Gradeability	70% (35 deg.) continuous
Travel speed	3.7 kph
Tractive effort	104.1 kN

HYDRAULIC SYSTEM	
A variable flow load sensing system with flow on demand, variable power output and servo operated, multi-function open centre control.	
<b>Pumps</b>	
Main pumps	2 variable displacement axial piston type
Maximum flow	2 x 124 L/min
Servo pump	Gear type
Maximum flow	19.5 L/min
<b>Control valve</b>	
A combined four and five spool control valve with auxiliary service spool as standard.	
<b>Relief valve settings</b>	
Boom/Arm/Bucket	330 bar
Swing circuit	279 bar
Travel circuit	330 bar
Pilot control	40 bar
<b>Filtration</b>	
In tank	105 micron, suction strainer
Main return line	10 micron, glass fibre element
Pilot line	10 micron, paper element
Hydraulic hammer return	10 micron, reinforced microform element

SWING SYSTEM	
Swing motor	Axial piston type
Swing brake	Hydraulic braking plus automatic spring applied disc type parking brake
Swing torque	34 kN
Swing speed	14.3 rpm
Swing gear	Large diameter, internally toothed fully sealed grease bath lubricated

STANDARD/OPTIONAL EQUIPMENT	
Equipment	Standard/Optional
Auto-Idler	Standard
Work lights: 1 each on boom and main frame	Standard
Additional lights; 2 nos. on cab & 1 no. on Counterweight	Standard
Windscreen wiper	Standard
Engine fan guard	Standard
Undercarriage belly guarding	Standard
Upper structure under covers	Standard
Engine pre-cleaner	Standard
Double element radial type air cleaner with wire mesh protection	Standard
Heavy-duty alternator (75 amp)	Standard
Cabin fan	Standard
Suspension seat	Standard
Cab floor mat	Standard
Rubber covered track pedals	Standard
Removable front lower cab glass	Standard
Hammer pipe mounting brackets	Standard
Tool kit	Standard
Handrail and nonslip walk ways	Standard
Radiator fly screen	Standard
FM radio and music player with speakers	Standard
Fully ducted air conditioner unit with heater	Standard
Cabin guard (front)	Optional
Rock breaker pipe work	Standard
General purpose buckets (0.55 cum, 0.63 cum, 0.72 cum)	Optional
First aid kit	Standard
Fire extinguisher	Standard
3m arm	Optional
Refueling pump	Optional
700mm track plates	Standard

CONTROLS	
Excavator	All servo lever operated to ISO control pattern, independently adjustable to the seat.
Tracks	Individually servo operated by foot pedal or hand lever, and speed selection via machine control interface switch.
Auxiliary	Via servo operated foot pedal.
Control isolation	Via gate lock lever at cab entrance or rocker switch.
Engine speed	Dial type throttle control plus servo lever mounted one-touch idle control or separate selectable auto-idle with adjustable time delay using SMART control.
Engine stop	Ignition key operated and emergency shut down switch.
Horn	Operated via servo lever mounted button.

**EXCAVATOR END – MONOBOOM**

4.7m Monoboom available along with a choice of dipper lengths to suit the requirements of reach, dig-depth, loadover height and tearouts. Reserve strength is built into the fully welded structures for hydraulic hammer and other arduous operations.

**EXCAVATOR BUCKET**

Bucket	Toe plate width (mm)
0.9 m <sup>3</sup> (GP)	1198
1.02 m <sup>3</sup> (GP)	1350

**BUCKET AND ARM COMBINATION**

Bucket width	mm	900	1000	1200	1350	1500	1600	1800
Bucket capacity	m <sup>3</sup>	0.85	0.98	1.245	1.45	1.49	1.61	1.845
Bucket weight	kg	827	-	-	-	-	-	1217
<b>Dipper length</b>								
2.1	m	☐	☐	☐	☐	☐	●	●
2.5	m	☐	☐	☐	●	●	■	✘

☐ = Suitable for general excavating (materials up to 2000kg/cu.m).

■ = Suitable for light excavating (materials up to 1600kg/cu.m).

● = Suitable for grading & loading materials up to 1200kg/cu.m).

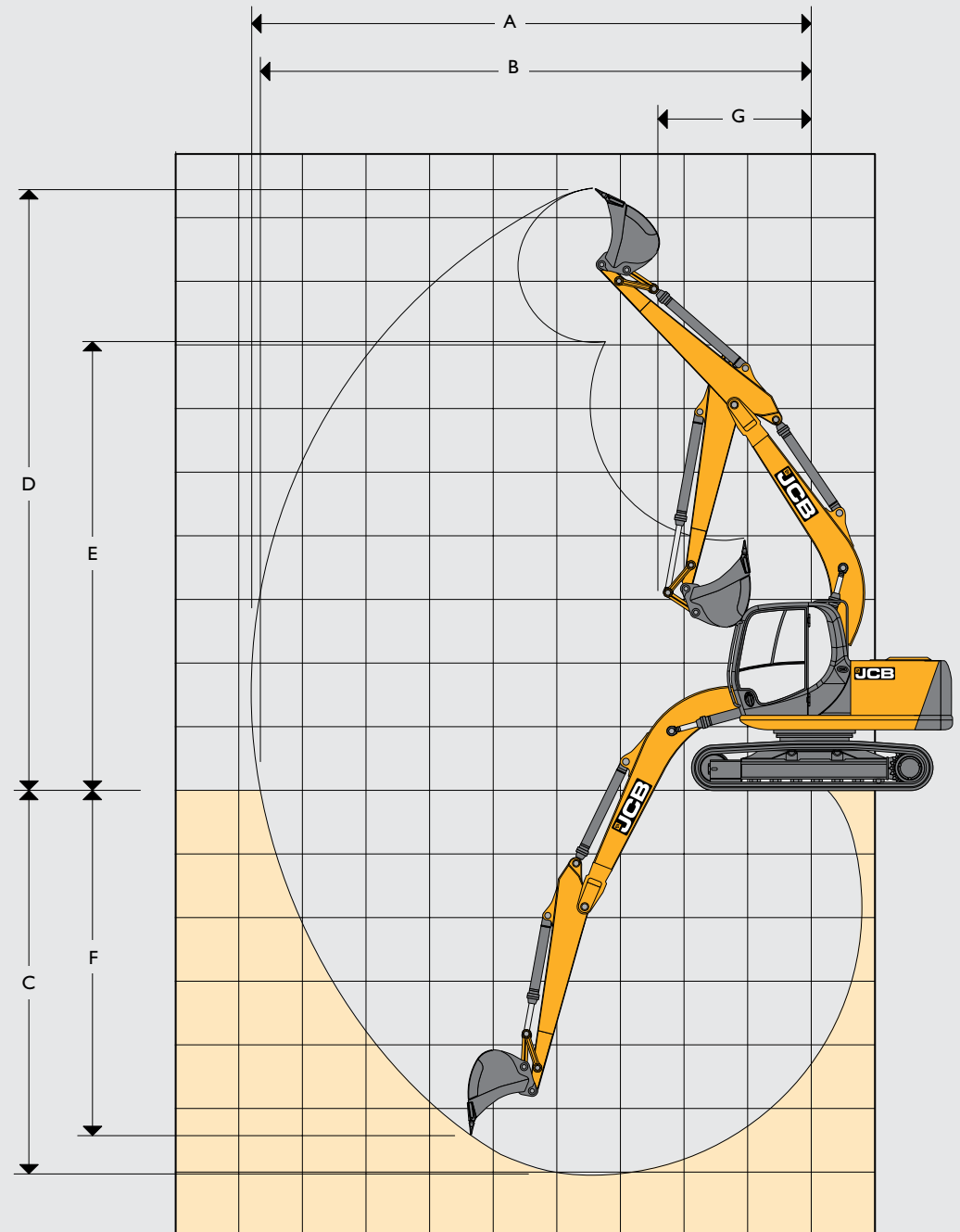
✘ = Not recommended

\* Bucket capacity using JCB quickhitch only (quickhitch = 186kg).

**WORKING RANGE 4.7M MONOBOOM**











Dipper length:		2.1m	2.5m
A	Maximum digging reach	mm 7970	8381
B	Maximum digging reach (on ground)	mm 7820	8018
C	Maximum digging depth	mm 5150	5443
D	Maximum digging height	mm 8820	9238
E	Maximum loadover height	mm 6430	6728
F	Maximum vertical wall cut depth	mm 4580	4956
G	Minimum swing radius	mm 2050	2248
	Bucket rotation	182°	181°
	Maximum dipper tearout (ISO 6015)	kgf 7404	6710
	Maximum bucket tearout (ISO 6015)	kgf 9785	9351

**WORKING RANGE 4.7M MONOBOOM**















**LIFT CAPACITIES – ARM: 2.1M, TRACKS: 44 LINKS, TRACK SHOES: 500MM, NO BUCKET** **JSI40 LC**

Reach	1.5m		3m		4.5m		6m		Capacity at Max Reach		
											
Load Point Ht.	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm
7.5m			3710	3710					3740	3740	3056
6.0m					3110	3110			2860	2860	5046
4.5m			3170	3170	3270	3270	3100	2210	2610	2170	6070
3.0m			5780	5780	3960	3340	3300	2160	2580	1850	6604
1.5m					4750	3100	3200	2070	2670	1730	6767
0m			6120	5280	4760	2960	3120	2000	2740	1760	6588
- 1.5m	5460	5460	7700	5300	4720	2920	3120	1990	3100	1980	6034
- 3.0m			6490	5430	4390	2990			3730	2630	4979

**LIFT CAPACITIES – ARM: 2.1M, TRACKS: 44 LINKS, TRACK SHOES: 600MM, NO BUCKET** **JSI40 LC**

Reach	1.5m		3m		4.5m		6m		Capacity at Max Reach		
											
Load Point Ht.	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm
7.5m			3710	3710					3740	3740	3056
6.0m					3110	3110			2860	2860	5046
4.5m			3170	3710	3270	3270	3100	2240	2610	2190	6070
3.0m			5780	5780	3960	3380	3340	2190	2580	1870	6604
1.5m					4750	3140	3240	2100	2710	1750	6767
0m			6120	5350	4830	3000	3170	2030	2780	1780	6588
- 1.5m	5460	5460	7700	5370	4780	2960	3160	2020	3140	2010	6034
- 3.0m			6490	5500	4390	3030			3730	2670	4979



Lift capacity front and rear.













Lift capacity full circle.











**Notes:**

1. For lifting capacity including bucket, subtract total weight of bucket or bucket and quickhitch from above values.
2. Lifting capacities are based on ISO 10567, that is: 75% of minimum tipping load or 87% of hydraulic lift capacity, whichever is the less. Lifting capacities marked\* are based on hydraulic capacity.
3. Lift capacities assume that the machine is on firm, level ground.
4. Lift capacities may be limited by local regulations. Please refer to your dealer.


**LIFT CAPACITIES – ARM: 2.5M, TRACKS: 44 LINKS, TRACK SHOES: 500MM, NO BUCKET** **JSI40 LC**

Reach	1.5m		3m		4.5m		6m		Capacity at Max Reach			
												
Load Point Ht.	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm	
7.5m										2970	2970	3817
6.0m					2760	2760				2380	2380	5534
4.5m					2990	2990	2940	2290		2200	1990	6480
3.0m			5120	5120	3700	3420	3180	2210		2190	1730	6982
1.5m			7360	5610	4560	3170	3240	2110		2290	1620	7137
0m			6840	5320	4800	2990	3150	2020		2530	1640	6967
- 1.5m	5100	5100	7970	5290	4730	2930	3110	1990		2830	1820	6446
- 3.0m	9270	9270	7000	5380	4740	2970				3600	2300	5474

**LIFT CAPACITIES – ARM: 2.5M, TRACKS: 44 LINKS, TRACK SHOES: 600MM, NO BUCKET** **JSI40 LC**

Reach	1.5m		3m		4.5m		6m		Capacity at Max Reach			
												
Load Point Ht.	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm	
7.5m										2970	2970	3817
6.0m					2760	2760				2380	2380	5534
4.5m					2990	2990	2940	2320		2200	2020	6480
3.0m			5120	5120	3700	3460	3180	2240		2190	1750	6982
1.5m			7360	5680	4560	3210	3290	2140		2290	1650	7137
0m			6840	5390	4870	3030	3190	2050		2530	1670	6967
- 1.5m	5100	5100	7970	5360	4790	2970	3160	2020		2870	1840	6446
- 3.0m	9270	9270	7000	5450	4740	3010				3600	2330	5474

 Lift capacity front and rear.

 Lift capacity full circle.

- Notes:**
1. For lifting capacity including bucket, subtract total weight of bucket or bucket and quickhitch from above values.
  2. Lifting capacities are based on ISO 10567, that is: 75% of minimum tipping load or 87% of hydraulic lift capacity, whichever is the less. Lifting capacities marked\* are based on hydraulic capacity.
  3. Lift capacities assume that the machine is on firm, level ground.
  4. Lift capacities may be limited by local regulations. Please refer to your dealer.









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