

# TRACKED EXCAVATOR | JZI40LC Dozer

Gross engine power: 81 kW (109 hp) Bucket capacity: 0.35 - 0.89m<sup>3</sup> Operating weight: 15856 - 17880kg



# STRENGTH IN DEPTH.

BUILT TO WITHSTAND THE RIGOURS OF LIFE ON ANY CONSTRUCTION SITE, THE NEW JCB JZI40 EXCAVATOR IS STRONGER THAN EVER. PUT SIMPLY, IT'S MADE FROM THE FINEST MATERIALS AND COMPONENTS, USING THE VERY LATEST MANUFACTURING ADVANCES.







### Boom and dipper.

A JCB JZ140's reinforced boom and dipper is made of high strength steel, with internal baffle plates for long life durability.

Our advanced manufacturing and assembly processes produce high precision premium quality assembled components.

# The sum of its parts.

Our engine is tried and proven; we've built 200,000 DIESELMAX engines since 2004. To ensure similar longevity; the JZ140's EcoMAX T4i/Stage IIIB engine has been tested for 110,000 hours in 70 different machines across the toughest applications and environments around the world.





# Built to last.

The high-strength undercarriage of a JCB JZ140 uses a fully welded X-frame construction for long-term durability even in the most demanding applications.

strength and reduces stress. It's also highly resistant to impact damage.

strength and rigidity.

design with a deeper section increasing stiffness and durability.

E A closed box section revolving frame increases

The JZ140's high-strength rigid upper frame provides maximum durability and support, while its stiff durable door design offers you added

Difference The JZI 40 has a redesigned dozer blade











# PERFORMANCE AND PRODUCTIVITY.

WE'VE DESIGNED THE NEW JCB JZI40 TO OFFER YOU UNPARALLELED LEVELS OF PERFORMANCE AND PRODUCTIVITY. THE LATEST ECOMAX ENGINE OFFERS YOU BOTH POWER AND EFFICIENCY, WHILE STATE-OF-THE-ART HYDRAULICS PROVIDE COLOSSAL FORCE AND PRECISION CONTROL AT THE DIG END.

> There's a full list of auxiliary pipework options including hammer, auxiliary, and low flow. For ultra versatility, these auxiliary options are available with proportional controls.

### Loads more productive.

JCB's all-new easy-to-use quickhitch system makes attachment changing quicker and easier for you, and is purpose-designed for the JS range.

An optional dozer blade increases versatility when you're grading. Choose the optional rubber street pads and you can use your JCB JZ140 on sensitive ground like tarmac without causing damage.

### EcoMAX efficiency.

Our proven EcoMAX T4i/Stage IIIB engines are highly fuel efficient, saving you money. This is partly due to the fact that EcoMAX produces high torque at just 1500 - 1600 rpm, making for improved fuel-efficient matching of the hydraulics.

To reduce noise pollution from unnecessary air flow, the JZ140's engine-driven cooling fan has a proportional control system, maintaining optimum fan speed.

Variable power bands allow you to tailor performance, and therefore economy, to specific tasks.



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With a massive 92kN bucket tearout

and fast cycle times, this excavator is extremely productive in all applications.

### Always in total control.

Simultaneous tracking and excavating is smooth and fast with an intuitive multi-function operation. Proportional controls offer you precise command over attachments and in tasks where you need to perform fine adjustments.

**JCB**'s innovative hydraulic regeneration system means oil is recycled across the cylinders for faster cycle times and reduced fuel consumption.





A JCB JZI 40 has a solid, stable work platform for fast cycle times.

# **REDUCED SWING, INCREASED SAFETY.**

SAFETY IS OF COURSE THE NUMBER ONE PRIORITY ON ANY WORK SITE. THE NEW JCB JZI40 OFFERS YOU GREATER LEVELS OF SAFETY THAN A CONVENTIONAL TAILSWING EXCAVATOR DESIGN BECAUSE IT'S EASIER TO MANOEUVRE, ESPECIALLY IN RESTRICTED SPACES.



### Safety without compromise.

A reduced tailswing configuration is perfect for working in urban environments or where space is at a premium. In short, JCB JZ140's reduced tailswing improves safety and increases operator confidence.

This excavator is tailor-made for applications like urban building sites, motorway work, house building, forestry, utilities, railways and commercial buildings.





#### REDUCED SWING, INCREASED SAFETY

Select the optional boxing ring to maximise safety when completing daily checks on the upper structure.



# The safe choice.

Optional LED lighting improves visibility in low light conditions, boosting both safety and productivity.

The JCB JZ140 is fitted with a rear-view camera as standard to further increase on site safety.

Choose the optional seatbelt warning beacon available to meet your job site commitments.





# **COMFORTABLY SUPERIOR.**

IN ORDER TO ENJOY ULTIMATE PRODUCTIVITY, YOU NEED YOUR OPERATORS TO STAY FRESH AND ALERT FOR LONG SHIFTS. THE CAB AND CONTROLS ON THE NEW JCB JZI40 ARE DESIGNED TO ACHIEVE JUST THAT, OFFERING AN INCREDIBLY INTUITIVE, ERGONOMIC AND COMFORTABLE WORKING ENVIRONMENT.



A 70/30 front screen split gives JCB JZI 40s excellent front visibility. A clear view of the front right track provides easy, safe trench digging and manoeuvring.

The 7" colour multi-function display is easy to read in all light conditions, provides instant operational information, and has a customisable home screen.

JCB's new basic tool select system (fitted as standard) allows the operator to set up the single direction auxiliary and hammer circuit to match the flow requirements. The selected flow is achieved by automatically adjusting the engine revs when the hydraulic service is operated.

A full sized cab delivers a spacious and comfortable operating environment.







#### COMFORTABLY SUPERIOR

### A great place to work.

The JZ140 creates a quieter working environment inside and out. Because we've reduced noise levels to 72dB(A) inside and 99dB(A) outside, you can use the machine at any location, any time. JCB cabs use 6 viscous rubber mounts to minimise noise and vibration. The positive pressure cab keeps out dirt and dust.

JCB's climate control option offers a precisely controlled cab temperature with fresh or recirculated air. Demisting/defrosting functions keep a JZ140's front window clear.

There's a spacious luggage tray behind the operator's seat.

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

The JCB JZI 40 is now available with the Supreme seat. Featuring air suspension, lumbar support and a fully adjustable headrest. The supreme seat also features ventilation to keep you cool on hot days, and a heater for colder conditions.







The JZ140's cab and controls are independently adjustable so that it's easy to find the perfect operating position.

We offer tailored seating options to suit many different applications.

# LESS SERVICING, MORE SERVICE.

TO PROVIDE YOU WITH THE MAXIMUM POSSIBLE UPTIME, WE'VE MADE THE NEW JCB JZI40 AN EXTREMELY EASY EXCAVATOR TO SERVICE. WHEN MAINTENANCE IS REQUIRED, YOU'LL FIND IT'S QUICK AND COST-EFFECTIVE TO CARRY OUT THANKS TO THE COMPLETELY REDESIGNED UPPER STRUCTURE.

## Access all areas.

All filters on a JZ140 are easily accessible thanks to the large bay doors that open wide and provide unobstructed access. Engine oil, hydraulic oil and fuel filters are centrally located for fast, straightforward servicing. The air filter is also easy to find, and has a double-element construction to simplify cleaning. The cooling pack has increased in size, and the air condition condenser unit can be swung out for great access when cleaning all cooling packs.

A repositioned valve block is now far easier to access, despite more compact dimensions. All new hose routing from the valve block has been designed with reliability in mind.



# SERVICE INTERVALS

Engine oil and oil filter	Every 500 hours
Hydraulic oil	Every 5000 hours
Hydraulic oil filter	Every 1000 hours







#### LESS SERVICING, MORE SERVICE

### Saving you time and money.

Because the EcoMAX engine doesn't need exhaust after treatment, it doesn't require costly heatresistant lube oil, a DPF, or any DEF/AdBlue.

Unlike most Tier 4i engines, JCB EcoMAX doesn't use a Diesel Particulate Filter (DPF) or SCR, saving you additional running costs.

We've eliminated the need for a visibowl style pre-cleaner on the JZ140 with our new optional scavenger filtration system. This uses suction from the cooling fan to remove heavier particles from the induction system.

The innovative recalibration option allows EcoMAX to run on lower grade fuels. This means your JZ140 can be resold across different territories, which improves residuals.

JCB's In-Cab Monitor checks engine oil levels, coolant, and system errors on start- up.

### New and improved.

To make life even easier for you, we've revised the filter layout on the latest JCB JZ140, and reduced the number of fuel filters to two. Service access is now better than ever and a fuel shutoff tap as standard ensures downtime is reduced still further.

An all-new step layout has improved access to the upper structure.

The main valve block is located under the steps so you can inspect it very easily.

The JCB EcoMAX engine can also be reached through the counterweight, via a detachable panel, providing greater engine access.







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

### 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.



# Productivity and cost benefits

By providing information like idle time monitoring and machine fuel consumption, JCB LiveLink helps reduce your fuel usage, saving money and improving productivity. Machine location information can help improve efficiency and perhaps even reduce insurance costs.

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### 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). Remote pin code management is also available.

# 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.





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.



CB 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.

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





### STATIC DIMENSIONS



STATIC DIMENSIONS								
Din	nensions in mm	Monoboom						
			L	С				
А	Track length on ground		28	65				
В	Undercarriage overall length		35	90				
С	Track gauge		19	90				
D	Width over tracks (500mm trackshoes)		24	90				
D	Width over tracks (600mm trackshoes)		25	90				
D	Width over tracks (700mm trackshoes)		26	90				
D	Width over tracks (800mm trackshoes)	-						
D	Width over tracks (850mm trackshoes)	2840						
D	Width over tracks (900mm trackshoes)		-					
Boo	m options	Monoboom 4.7m						
Dip	per lengths	2.1m	2.5m	2.7m	3.0m			
Е	Transport length	7306	7331	7275	7284			
F	Transport height	3227	3227	3300	3318			
G	Counterweight clearance		91	6				
Н	Tailswing radius	1485						
T	Width of superstructure	2500						
J	Height over cab	2842						
Κ	Height over grab rail	3227						
L	Ground clearance		43	4				
Μ	Track height		82	20				

ENGINE	
Model	JCB EcoMAX 444 TCA 81 EU Stage IIIB, EPA Tier 4 interim compliant.
Туре	Water cooled, 4-stroke, 4-cylinder in-line, common rail direct injection, turbocharged variable geometry intercooled diesel.
Rated power (net)	81kW (109hp) at 2050rpm.
Piston displacement	4.4 litres.
Air filtration	Dry element with secondary safety element and in-cab warning indicator.
Starting system	24 volt.
Batteries	2 x I 2 volt.
Alternator	24 volt 55 ampere

SLEW SYSTEM	
Slew motor	Axial piston type.
Slew brake	Hydraulic braking plus automatic spring applied disc type parking brake.
Slew torque	36.1 kNm
Slew speed	13.1 rpm.
Slew gear	Large diameter, internally toothed fully sealed grease bath lubricated.

TRACK DRIVE					
Туре	ully hydrostatic, three speed with autoshift.				
Travel motors	Variable swash axial piston type, fully guarded within undercarriage frame.				
Final drive	Planertary reduction, bolt-on sprockets.				
Service brake	Hydraulic counter balance valve.				
Park brake	Disc type, spring applied, automatic hydraulic release.				
Gradability	70% (35 deg) continuous.				
Travel speed	LC				
	High - 5.12 km/h				
	Mid - 3.00 km/h				
	Low - 1.83 km/h				
Tractive effort	120.5 kNm				

SERVICE CAPACITIES							
	Litres						
Fuel tank	203						
Engine coolant	23.6						
Engine oil	14						
Swing reduction gear	2.2						
Track reduction gear (each side)	3.5						
Hydraulic system	160						
Hydraulic tank	67						

UNDERCARRIAGE											
Carriage options	LC - Long Carr	LC - Long Carriage, HD - Heavy Duty Carriage.									
Construction	Fully welded 'X	Fully welded 'X' Frame type and sloping sidemembers with dirt releif holes under top rollers.									
Recovery point	Front and rear.	Front and rear.									
Track shoes	500mm	500mm 600mm 700mm 800mm 850mm 900mm									
LC	• x	•	•		•						
HD		• • • •									
Upper & lower rollers	Heat treated, se	Heat treated, sealed and lubricated.									
Track adjustment	Grease cylinder	type.									
Track idler	Sealed and lubr	icated, with sprin	g cushioned reco	oil.							
Track type	Sealed and lubr	icated.									
Rollers and shoes (each side)			L	С							
No. of track guides (optional)			2	-							
No. of lower rollers		7									
No. of upper rollers			2	<u>)</u>							
No. of track shoes			4	4							

ullet = Triple grouser,  $oldsymbol{X}$  = Geogrip.

#### HYDRAULIC SYSTEM

Open centered, negative control hydraulic system with twin variable flow piston pumps providing flow-on-demand.					
Pumps					
Main pumps	2 variable displacement axial piston type.				
Maximum flow	2 x I 24 I/min.				
Servo pump	Gear type.				
Maximum flow	20.5 l/min.				
Control valve					
A combined four and five spool control va	alve with auxilary service spool as standard.				
Relief valve settings					
Boom/Arm/Bucket	314 bar.				
With power boost	343 bar.				
Slew circuit	279 bar.				
Travel circuit	343 bar.				
Pilot control	40 bar.				
Filtration					
In tank	150 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.				

#### OPTIONAL BLADE



А	Blade height	mm	447
В	Blade lift above ground	mm	494
С	Blade cut below ground	mm	508
D	Blade forward of track	mm	412
	Dozer width – 500mm tracks	mm	2510
	Dozer width – 600mm tracks	mm	2610
	Dozer width – 700mm tracks	mm	2710
Add	litional machine weight with blade		
	500mm tracks	kg	636
	600mm tracks	kg	644
	700mm tracks	kg	653

Dozer not available with 800, 850 and 900mm track plates.

#### WEIGHTS AND GROUND BEARING PRESSURES

Figures include 383kg bucket, operator, full fuel tank and 2.5m dipper.

		500mm shoes	600mm shoes	700mm shoes	800mm shoes	850mm shoes	900mm shoes
LC Monoboom							
Machine weight	kg	15084	15300	15515	-	15839	-
Ground bearing pressure	kg/cm <sup>2</sup>	0.48	0.41	0.35	-	0.30	-

BUCKET AND ARM COMBINATION - MONOBOOM																
Bucket options	cket options GP Bucket				HD Bucket					Grade Bucket						
Bucket width	mm	600	700	800	1000	1200	1300	600	700	800	1000	1200	1300	1524	1836	1836
Bucket capacity	m <sup>3</sup>	0.35	0.42	0.50	0.66	0.81	0.89	0.35	0.42	0.50	0.66	0.81	0.89	0.65	0.79	0.79
Bucket weight	kg	286	312	335	383	428	454	336	364	402	455	520	546	453	523	582
LC																
2.10m Quickhitch (No Quickhitch)																
2.50m Quickhitch (No Quickhitch)																
2.70m Quickhitch (No Quickhitch)							<b>()</b>					■ (■)	• ( <b>=</b> )			■ (■)
3.00m Quickhitch (No Quickhitch)						<b>()</b>	• ( <b>=</b> )					• ( <b>=</b> )	• (•)		• ( <b>=</b> )	• ( <b>=</b> )
LC + Dozer																
2.10m Quickhitch (No Quickhitch)																
2.50m Quickhitch (No Quickhitch)																
2.70m Quickhitch (No Quickhitch)							<b>()</b>					<b>■</b> ( <b>□</b> )	<b>()</b>		<b>(</b> )	<b>■</b> ( <b>□</b> )
3.00m Quickhitch (No Quickhitch)							<b>()</b>					<b>()</b>	• ( <b>=</b> )		<b>()</b>	<b>()</b>

● = Material weight up to 1200kg/m<sup>3</sup>.
■ = Material weight up to 1600kg/m<sup>3</sup>.

 $\Box$  = Material weight up to 2000kg/m<sup>3</sup>.

These recommendations are given as a guide based on typical operating conditions. Please contact your distributor for the correct selection of buckets and attachments to suit the application.

W0	WORKING RANGE - LC MONOBOOM 4.7M										
	Dipper length:		2.1m	2.5m	2.7m	3.0m					
А	Maximum digging reach	mm	7961	8331	8465	8787					
В	Maximum digging reach (on ground)	mm	7810	8187	8324	8651					
С	Maximum digging depth	mm	5 54	5557	5762	6055					
D	Maximum digging height	mm	8886	9160	9275	9469					
Е	Maximum dumping height	mm	6418	6692	6807	7015					
F	Maximum vertical wall cut depth	mm	4590	4986	5073	5488					
G	Minimum swing radius	mm	2117	2175	2468	2535					
	Bucket rotation	deg	182	182	182	182					
	Maximum dipper tearout	kNm	74.7	66.3	64.8	60. I					
	Maximum bucket tearout	kNm	92	92	92	92					



LIFT CAPACITIES – DIPPER LENGTH: 2.5M, 4.7M MONOBOOM, TRACKSHOES: 500MM, NO BUCKET, DOZER JZI40 LC MONO															
Reach	2m		<mark>3m</mark>		<mark>4m</mark>		<mark>5m</mark>		<mark>6m</mark>		<mark>7m</mark>		Capacity at Max Reach		
	Ē	<u></u>	Ē	<u>_</u>	Ē	<u>H</u>		<u>1</u> 0		<u></u>					
Load Point Ht.	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm
6.0m					3450*	3450*	3660*	3330					2360*	2360*	5490
5.0m					3670*	3670*	3720*	3320	2970*	2440			2220*	2220*	6179
<mark>4.0m</mark>			<mark>4720*</mark>	4720*	4280*	4280*	4030*	3250	<mark>3690</mark>	2420			2160*	2030	6648
3.0m			6560*	6560*	5190*	4400	4520*	3140	2630	2370			2160*	1860	6941
2.0m			8610*	6390	6210*	4160	4690	3010	3550	2300	2750*	1810	2220*	1770	7080
I.0m			6750*	6030	6440	<mark>3960</mark>	4560	2890	3480	2230	2770	1770	2330*	1750	7076
<mark>0m</mark>			7090*	5870	<mark>6290</mark>	3830	4460	2800	3420	2180			2530*	1780	6926
<mark>– I.0m</mark>	4840*	4840*	9110*	5820	6210	3770	4410	2750	3390	2150			2820*	1880	6623
<mark>– 2.0m</mark>	7500*	7500*	10020*	5840	6200	3760	4400	2740	3390	2150			3290	2090	6141
<mark>– 3.0m</mark>	10940*	10940*	9090*	5920	6250	3800	4440	2780					3950	2500	5435

LIFT CAPACITIES – DIPPER LENGTH: 3.0M, 4.7M MONOBOOM, TRACKSHOES: 500MM, NO BUCKET, DOZER JZI40 LC MONO															
Reach	2m		3m		4m		5m		6m		7m		Capacity at Max Reach		
	Ē		Ē	<u>1</u>		<u>1</u> 0	Ē	<u>1</u> 0		<u>_</u>			r	<u></u>	
Load Point Ht.	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm
6.0m							3150*	3150*	2380*	2380*			2160*	2160*	6070
5.0m							3230*	3230*	3360*	2490			2050*	2040	6699
4.0m					3650*	3650*	3570*	3300	3520*	2450	2490*	1880	2010*	1810	7133
3.0m			5440*	5440*	4560*	4490	4090*	3180	3650	2390	2850	1850	2020*	1670	7407
2.0m			7540*	6590	5630*	4230	4700*	3040	3570	2310	2810	1810	2070*	1600	7538
I.0m			9270*	6120	6490	4000	4580	2900	3480	2220	2760	1760	2170*	1570	7533
0m			7810*	5860	6290	3830	4460	2790	3400	2160	2720	1720	2330*	1590	7393
– I.0m	4620*	4620*	8850*	5760	6180	3730	4380	2720	3350	2110	2700	1700	2570*	1670	7110
– 2.0m	6660*	6660*	10240	5740	6140	3690	4340	2690	3340	2090			2890	1820	6664
– 3.0m	9310*	9310*	9610*	5790	6160	3710	4360	2700	3370	2130			3360	2120	6020

÷ Lift capacity front and rear.

For lifting capacity including bucket, subtract total weight of bucket or bucket and quickhitch from above values.
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.
Lift capacities assume that the machine is on firm, level ground.
Lift capacities may be limited by local regulations. Please refer to your dealer.

₿ Lift capacity full circle.



# ONE COMPANY, OVER 300 MACHINES.

Your nearest JCB dealer

### Tracked Excavator JZ140LC

Gross engine power: 81 kW (109 hp) Bucket capacity: 0.35 – 0.89m<sup>3</sup> Operating weight: 15856 – 17880kg



FSC Mixed Sources

#### Download the very latest information on this product range at: www.jcb.com

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