



Mini Excavator





Everything you want in a mini excavator

There are five key things every customer looks for in a mini: comfort, controllability, reliability, serviceability and performance. JCB mini excavators excel in all these areas. With the conventional tailswing (CTS) 8014, 8016, 8018 and 8020 CTS we have established a new benchmark for machines in this sector. These machines have been designed to provide the precision control, unrivalled service access and exceptional operator environment our

RAISING THE STANDARD IN COMPACT EXCAVATORS



customers require. All in a compact package that's easy to transport and ideal for restricted sites. The 8025, 8030, 8035, 8040, 8045 and 8050 ZTS mini excavators offer true zero tailswing and recognise the need for ever-more-compact machines that still deliver speed, power and productivity. Yet they never compromise on ease of operation and control. Benchmarked against conventional as well as zero tailswing models, we know from your feedback that these

minis can more than compete, particularly when it comes to stability and power. If tailswing is of lesser importance customers can now opt for the new 8026 CTS and 8050 RTS offering extra lift capacity due to the additional counterweight and lower centre of gravity. It all adds up to a complete and comprehensive range of twelve mini excavators that customers around the world are finding indispensable across a whole host of applications and sites.

Operator comfort

The 801 CTS range and 8020 CTS high-back seat and optional suspension seat give real support

Ample foot space and reduced noise levels improve comfort further

ZTS models feature one of the largest cabs/canopies for their machine sizes

Efficient heating systems and air conditioning options give complete comfort

Lifting the control pod on all models isolates the joystick servo controls for safer access



In a machine class renowned for cramped conditions, you'll find the JCB mini excavator operator environment a welcome change, with all cabs designed to provide the maximum space and comfort allowed by the machine size.

The stylish cab design of the 801 CTS range and the 8020 CTS combine practicality with comfort. A high-back seat gives real support and for added luxury, you can also opt for a suspension seat on the 8016–20 CTS models. The one-piece seat base and cab isolation mountings reduce noise levels and transmit very little vibration from the chassis to the controls. And there's plenty of space in the cab as the lockable toolbox allows equipment to be safely stowed for a clutter free work environment.

Moving on to the zero tailswing models, normally cab size is one thing you'd expect to be compromised to accommodate ZTS. Not with JCB minis. Getting into these machines, you will find a good size door width for easy access and the door itself latches back within the tailswing so you can work with it open. To make access even clearer, the left control pod hinges up and we have removed the left foot pedal (a changeover switch on the joystick allows you to control right and left pedal operations with just the right pedal).

Inside, the first thing you'll notice is how big the cab is compared to other ZTS models. The seating position is fully adjustable for maximum comfort. When you do adjust the seat, the control pod on the 8040 ZTS, 8045 ZTS and 8050 RTS/ZTS automatically adjusts to give you the most ergonomic working position (you can also change the seat and pod positions independently of each other).

Once you are up and running, the efficient heating system or optional air conditioning* allow you to obtain the most comfortable temperature. You can effortlessly store the gas-strut-assisted upper front screen overhead, and the lower front screen can also be removed. Plus, the whole cab structure is isolated from the slew frame for minimum vibration.

**8030–45 ZTS and 8050 RTS/ZTS only*





All-round visibility

Large glass area on all machines improves all-round visibility

Slimline boom on the 801 CTS range and the 8020 CTS offers excellent visibility to the bucket at all angles

ZTS machines offer excellent all-round visibility

An improved view of the right track increases safety

8025–45 ZTS hose routing on top of the boom also enhances visibility



To improve all-round visibility and safety on the 8014–20 CTS, we have maximised the glass area, particularly in the roof screen. You'll also find that there is minimal obstruction from the structural columns, and thanks to the narrower boom, better visibility down to the bucket and at maximum loader height. In addition, the curved rear profile of these reduced tailswing machines also helps to provide a clearer view.

Zero tailswing models always have an advantage over conventional models when it comes to visibility. In fact, the safety benefits of the ZTS design means it is now preferred by safety officers. And in some applications, such as on highways where working within one lane width is vital, only ZTS models are now specified.

If you opt for the 8025–45 ZTS or the 8050 RTS/ZTS, whether you choose the cab or canopy option you'll find visibility from the working position is excellent. To the left, you can see the whole track. To the right and the rear, the curving style of bonnets on all machines gives an improved view. The hose routing on top of the boom rather than to the side also means there's less to impede visibility, and the large front screen gives a superb view of the load all the way up to dump height.

Whatever the task, such superb all-round visibility means the operator has a clear view of the site, including other personnel, at all times, avoiding accidents and any damage to the machine and site structures. Add this to the enhanced comfort of JCB mini excavator cabs, and you have the perfect solution for safe and productive working, all day long.





Complete, precise control

The 801 CTS range, 8020 CTS and 8025–35 ZTS valve-block technology makes for smoother, more accurate operation

Proportional auxiliary controls allow for precise attachment operation on the foot pedal

8025–45 ZTS and 8050 RTS/ZTS slew and boom offset can be controlled simultaneously for faster machine positioning

8040 and 8045 ZTS load-sensed hydraulics improve performance and fuel efficiency

Straight-line tracking lets you easily operate the excavator end whilst travelling for safe operation



If the view outside the mini cabs is superb, the view inside is even better, with all the controls ergonomically placed to make controlling these machines quite simply effortless.

Within the whole mini range we have short travel joysticks, the most advanced micro technology in the valve block and a variable flow hydraulic pump (not available on the 8014 CTS, optional on the 8016 and 8018 CTS, standard on the 8020 CTS and larger models). These provide the smooth, precise control required by the novice operator, without compromising on the power and speed demanded by professional users.

The 8040–45 ZTS and 8050 RTS/ZTS also offer optional proportional auxiliary controls via the joystick (in addition to the standard foot pedal auxiliary). This allows you to finely control the oil flow from zero to full, so you can operate precise attachments like earth drills from your finger tips.

When it comes to the bigger models (above 2.5 tonnes) the increase in power also comes with an increase in control. Instead of a left foot pedal, a changeover button on the joystick lets you switch the right pedal between auxiliary service and boom offset function. Now, with the foot pedal in boom offset mode, you can operate the slew of the upper structure and the boom at the same time, allowing you to get into the correct position straight away. Plus, this foot pedal is servo-operated for low-effort, precise control.

Both the 8040 ZTS, 8045 ZTS and 8050 RTS/ZTS feature an auto-idle as standard. Auto-idle (which can be turned off if not required) helps you to conserve fuel by automatically switching to idle when the machine is stationary and then immediately returning to the setting you require as soon as you touch one of the services.

Finally on the 8040 ZTS, 8045 ZTS and 8050 RTS/ZTS we have also introduced a load-sensed, flow-on-demand hydraulic system. Basically, this system automatically controls flow and pressure, providing the hydraulic oil to a service only when you need to use it. So the engine is never overworked (saving you fuel), won't stall and is always running at peak efficiency.





Build quality

801 CTS and 8020 CTS excavators 3mm pressed steel rear engine bonnet protects against inevitable impacts

8025-45 ZTS and 8050 RTS/ZTS hoses routed on top of the boom for damage protection

Quick release couplers on auxiliary pipework prevent oil leaks and contamination

Simple design and durable components ensures reliability is built-in

JCB is world-renowned for engineering expertise. So it comes as no surprise that, while these machines are small, they're also extremely tough.

With the 8014-20 CTS these machines boast a cast slew frame which provides the main structure with great integral strength. Then there are the hydraulics that boast O Ring Face Seal (ORFS) fittings - the latest technology for the most robust connectivity between all hydraulic components, and of course, the rear engine bonnet; manufactured from 3mm pressed steel, it provides effective protection against the occasional, inevitable impacts

Similarly, our larger minis also boast superb build quality, with a robust undercarriage and super-structure designed to give you maximum reliability and minimum downtime.

And you will also find that we have paid close attention to the details that make a real difference. For example, excavator hoses are routed on top of the boom to give maximum protection against damage; the auxiliary pipework features quick release couplers to prevent oil leaks when connecting attachments and to reduce contamination that can cause failures; high levels of engine filtration prevent blockages and stoppages; and the left control pod boasts durable aluminium castings and a very simple design. Plus, the cab features flat glass that is free from holes which is easier and quicker to replace.





Superb service access

Easy access to all service points and 500-hour service intervals

8014–20 CTS tilting cab gives effortless access for in-depth maintenance

Plastic moulded fuel tank results in longer working hours

8025/30/35 ZTS removable floorplate gives access to slew motor and hydraulic valves

8040–45 ZTS and 8050 RTS/ZTS feature removable floor plates to access hose connection point under cab floor makes replacing hoses simpler



In direct response to customer requests, all JCB mini excavators now boast unrivalled access for easier servicing, along with increased service intervals to 500 hours.

On the 8014–20 CTS the position of the engine has allowed the grouping of routine service checks within a remote service panel. For less routine maintenance, we were the first manufacturer to introduce a tiltable cab on this size of mini excavator. The whole cab effortlessly tilts from the rear on gas struts in under five minutes. In fact, it's so easy it's a shame you don't have to do it until the 2,000-hour service. When the cab reaches full height there is a safety lock out which means it won't come down again until you tell it to. So, you have all the time and space you need for maintenance to the slew motor, valve block, hydraulic hoses, engine and hydraulic pump.

Just like the 801 CTS range, access to all 8025–45 ZTS and 8050 RTS/ZTS engine points is easy. You can check the oil from ground level, the fuel filter system features a combined sedimenter, filter and primer which allows you to prime the system if it runs out of fuel, and you can change the filter without any extra tools.

Under the rear cover, a moulded fuel tank results in a larger capacity for longer working hours, it's easy to get to all of the service points, and, on the 8040, 8045 ZTS and 8050 RTS/ZTS, cooling packs for the hydraulic oil and engine are both side by side for easy cleaning of the radiators.

The hoses on the whole mini range are colour coded to help you identify the correct one, and, on the 8040 ZTS, 8045 ZTS and 8050 RTS/ZTS, they meet at a connection point under the cab floor, so if you need to replace one, there's no need to feed it all the way through the length of the machine. On the 8025, 8030 and 8035 ZTS, the valve block is to the side which makes replacing hoses easier, plus inside the cab a removable plastic floorplate gives clear access to the slew motor, rotary joint and hydraulic valves.





8014, 8016, 8018 and 8020 CTS

**Compact size and reduced tailswing are perfect
for confined areas**

**CTS design offers improved stability and dump heights
give added productivity**

Unique cast slew frame is stronger and more robust

**Repositioned engine eradicates counterweighting
for a lighter machine**

**Reduced transport weights allow you to easily
tow* the machines on a trailer**

** Depending on local regulations/machine specification,
trailer and attachment configurations.*



Packed with sophisticated performance features, these minis come in a compact package, perfect for confined areas.

The 8014 CTS is an entry-level workhorse with a fixed undercarriage and uses the same 14.7 kW engine as the other 801 CTS machines including the 8020 CTS. On the 8016 CTS there is a longer undercarriage for added stability.

This can be hydraulically extended on the 8018 and 8020 CTS for better dig performance, higher load handling and access to narrower spaces. And both machines feature two-speed tracking (optional on the 8016 CTS) for speedy manoeuvring on site. Short pitch rubber tracks enhance the ride quality as less noise and vibration is generated during tracking.

All models feature a top mounted boom ram which maximises cylinder protection especially during lorry/skip loading activities. The robust slimline box boom offers a clear, unobstructed view down the trench; linked to a durable 'U' shape pressing dipper. All dig-end hoses are routed through the centre of the boom for excellent protection against accidental damage. For added durability replaceable steel bushes are now fitted as standard in the king post, dipper nose and bucket tipping link maximising service life.

Unique to JCB in this class is a cast slew frame. Not only does this provide great integral strength, but it has also allowed us to reposition the engine and tanks, shifting weight to the rear so there is no need for excessive counterweighting. The result is excellent stability and a lighter machine that is easier to transport.

And finally, all machines are compatible with our huge range of mini attachments and buckets.





8025, 8030, 8035 ZTS and 8026 CTS

8025 ZTS and 8026 CTS can be transported on a trailer*

Undercarriages are matched to the dig envelope
for stability and performance

Undercarriage and dozer blade design keep debris
from building up and impeding performance

Excellent tracking speeds, traction and tractive effort

Optional hose burst check valves allow lifting over 1 tonne

** Depending on local regulations/machine specification,
trailer and attachment configurations.*



In the 2.5 to 3.5 tonne sector JCB offers the customer a choice of either true zero tail swing - for added safety in confined spaces; or conventional tail swing - for outstanding lift performance. Whatever the preference, both systems offer exceptional stability with impressive digging performance.

The 8025 ZTS and 8026 CTS has a transport weight which allows you to transport from site to site using the low-cost transport methods readily available to most machine owners. Both the The 8025 ZTS, 8026 CTS and 8030 ZTS feature a powerful 1.5 litre, 3-cylinder engine, while the 8035 boasts a bigger 1.7 litre engine to match the increased size of the machine.

Stability is key on ZTS machines, so we've paid close attention to the undercarriages of these models, ensuring they give you the safest platform for hard working.

The 8025 ZTS and 8026 CTS footprint is superbly matched to give you excellent tracking and turning, whilst still offering a light machine that is easy to transport. The 8030 and 8035 ZTS feature respectively larger undercarriages to suit the machine sizes. In fact on all machines, the undercarriage is perfectly matched to the dig envelope for the best performance and added safety. The undercarriage and dozer blade design is such that debris doesn't build up underneath or in front of the machine to slow you down, and keeps the material rolling in front of the machine.

A two-speed tracking motor, excellent tractive effort and traction, single-acting auxiliary pipework as standard, double-acting optional, rubber tracks as standard with optional steel tracks... as if all this wasn't enough, the JCB 8025-35 ZTS and 8026 CTS also boast optional hose burst check valves, allowing these excavators to comply with legislation for lifting over 1 tonne.





8040 ZTS, 8045 ZTS, 8050 RTS/ZTS

34kW (46hp) engine – excellent power for this class of machine

Optimum track footprint for good all-round stability
and least-effort spin turning

400mm rubber tracks make good contact with the ground for
best traction and a smooth ride

Curved dozer profile stops material building up and
impeding performance

Single-acting (optional double-acting) auxiliary pipework to
the dipper for powering attachments



The JCB 8040 ZTS, 8045 ZTS and 8050 RTS/ZTS feature a 34kW (46hp) engine, making these machines very powerful for this class of excavator.

All this power is transferred into superb digging and tracking performance via the load-sensed hydraulic system, giving you impressive tearout forces, and high levels of tractive effort and tracking speeds.

The key to harnessing such superb performance is excellent stability. This is provided from optimum weight distribution within the upper structure and the substantial undercarriage. The undercarriage dimensions are also optimised to ensure good stability both in line and over the sides of the tracks, and to allow for ease of manoeuvring and low-effort turns.

The high-specification undercarriage components provide both a smooth ride and excellent tractive effort. For operating on a variety of surfaces, rubber tracks are provided as standard (with steel tracks for more arduous applications if required). Plus, the two-speed track motors provide power and high tracking speeds.

For dozing, you can't get a much more powerful mini. Not only that, but the unique JCB dozer design also features an improved curved profile at the front which forms material into a roll that then keeps moving away from the machine rather than building up and acting as an obstacle. The X-frame undercarriage design (as well as being more rigid) also features lots of slopes and exit points to help ensure material doesn't build up underneath the machine and impede performance.

And finally, for ready-to-go versatility, all models feature single-acting auxiliary pipework to the dipper as standard for powering breaker attachments. Double-acting pipework (e.g. for powering earth drills) is also available as an option, allowing you to switch between single and double modes.





Cab and controls

- Excellent 360 degree all-round visibility.
- Up-and-over convenient front window opening.
- Class-leading automotive cab styling and space.
- Reduced sound and vibration for the operator.
- Certified to ROPS and TOPS safety standard.

Service access

- Grouped access to routine checks and fills.
- Fewer hydraulic joints for fewer potential leaks.
- 'Gull-wing' style rear and side bonnets provide excellent service access to engine and hydraulic valve block on 8025-50.
- Easy access to major service tasks and daily checks.
- Unique tilting cab on 8014-20 CTS.

Engine and hydraulics

- Powerful engines for mini excavators.
- Large diesel tank for uninterrupted day's work.
- Service intervals increased to 500 hours.
- Impressive hydraulic pressures for optimum power and performance.





Boom, dipper and bucket

New large excavator style boom fitted to give mini excavators a family feel on 8025–8050 RTS/ZTS.

Excellent dig envelope across mini range.

Hoses routed neatly for improved visibility.

Boom reaches further back increasing load-over height.

Impressive break-out forces for mini excavator.

Undercarriage

Superb tractive effort.

Sealed for life track rollers.

Strong, rigid dozer blades fitted as standard.

All model ranges offer 2-speed tracking, (other than 8014 CTS).

Tracks

Continuous rubber tracks fitted as standard.

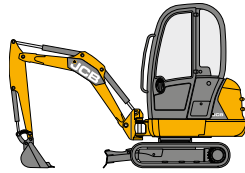
Steel tracks available.

Easy change from rubber tracks to steel.

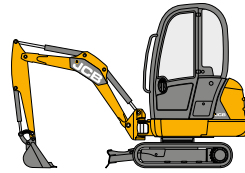
Top and bottom roller guides 8025–45 ZTS, and 8050 RTS/ZTS.

Fully protected hydrostatic track motors.

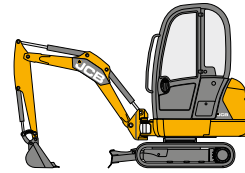
8014 CTS



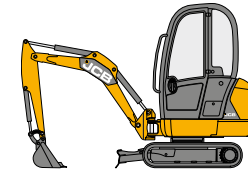
8016 CTS



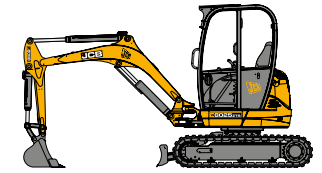
8018 CTS



8020 CTS



8025 ZTS/ZTSLC



Operating weight standard dipper	kg	1634	1657	1822	2067	2806 / 2833
Gross engine power	hp/kW	19.7 / 14.7	19.7 / 14.7	19.7 / 14.7	19.7 / 14.7	28 / 20.9
Dipper length	mm	1161	1161 (1261)	1161 (1261) (1500)	1261	1100
Dig depth	mm	2271	2271 (2366)	2343 (2442) (2682)	2504	2580 / 2452
Ground level reach	mm	3974	3974 (4060)	4073 (4170) (4401)	4252	4691 / 4425
Dump height	mm	2531	2531 (2626)	2628 (2692) (2846)	2779	3158 / 2707
Fuel tank capacity	Ltr	23.5	23.5	23.5	23.5	40
Bucket tearout	kN	13.5	16.2	16.2	19	24
Dipper tearout	kN	7.1	7.1	9.2	9.6	15
Pump flow	Ltr/min	43.6	43.6	43.6	55.4	102
Machine width	mm	1000	1000	1000 – 1340	1002 – 1362	1550

8026 CTS

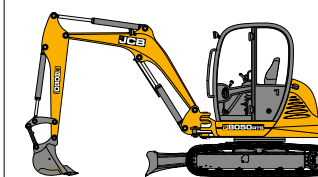
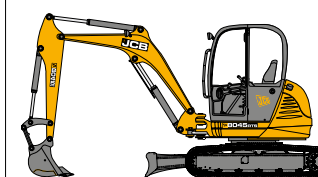
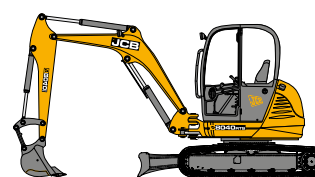
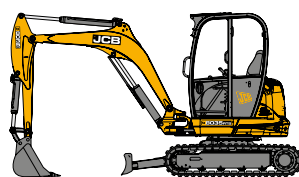
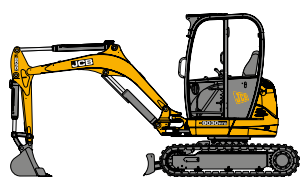
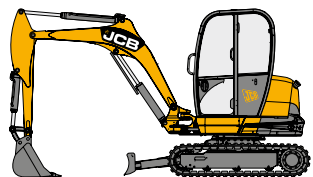
8030 ZTS

8035 ZTS

8040 ZTS

8045 ZTS

8050 ZTS / RTS



2867	3217	3651	4300	4750	5235 / 4930
24.7 / 18.4	28 / 20.9	31.6 / 23.6	46.4 / 34.1	46.4 / 34.1	46.4 / 34.1
1300	1300	1525	1525	1725	1725 or 1900
2740	2794	3179	3341	3542	3542 or 3764
4660	4901	5315	5613	5844	5844 or 6025
3220	3205	3482	3843	3977	3977 or 4102
56	40	40	68	68	68
23	28	32	37.1	42.2	42.2
17	17	20	23	26.1	26.1 or 23.75
96	102	110	169	169	169
1550	1650	1750	1980	1980	1980



AUGER

- Accurate ground removal, minimal reinstatement
- Compact design with 50mm hex output shaft
- All hydraulic components are well protected
- High torque rating for better performance
- Full range of flights, standard, heavy and rock duty
- Replaceable wear part system



QUICKHITCH

- Quicker changeover maintains high productivity
- Safer changeover of attachments for the operator
- Complete with safety pin for failsafe operation
- Compatible with a wide range of attachments
- Pin kits available



GRADING BUCKET

- Ditch maintenance/grading buckets have a central reinforcing plate that gives added strength and rigidity
- Drainage holes to reduce weight/density during operation



KERBMASTER

- Designed for the accurate and safe placement of kerb edges
- Incorporates Hose Burst check Valve for operator safety
- Heavy-duty nylon face plate and nylon rollers to eliminate damage to the kerb stone faces
- Available with manual or full hydraulic rotation
- Reduces health risks associated with manual handling



BUCKETS

- A complete range including off pin and dedicated buckets, GP, Ditching/Grading
- A range of widths and duty to suit most applications
- Designed to maximise machine productivity
- Replaceable wear part system



HAMMMASTER

- Sealed for life accumulator for minimum maintenance
- Matched tool and piston assures optimum energy transfer
- Silenced options for use in urban areas



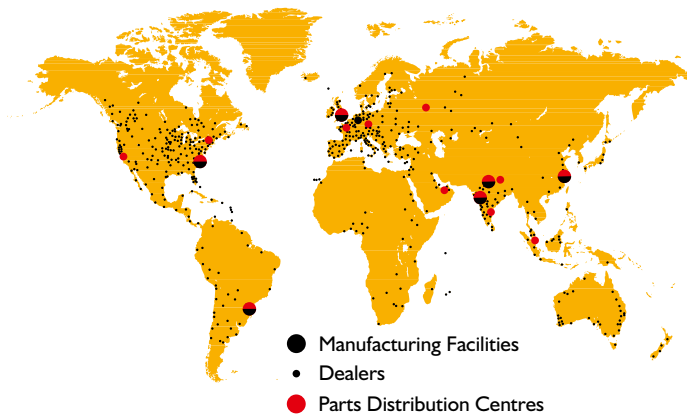
COMPACTOR

- Dipper mounted, protecting the operator from vibration
- Effective for trench reinstatement and general compaction duties
- Can be direct or quick-hitch mounted



A few words about JCB

A groundbreaking, class-leading family business with a commitment to supporting our customers and protecting the environment



A family company on a global scale. JCB is no ordinary company. From the dreams of one man, Joseph Cyril Bamford, we have grown into the world's largest privately owned construction company by volume. Since 1945, the same attention to detail, passion for progress and family spirit has taken us from strength to strength.

Nowadays JCB operates across all five continents, manufacturing at 20 factories in the UK, Brazil, Germany, China, North America and India. With 2,000 dealerships and depots selling and supporting our products in over 150 countries, we are one of the top three manufacturers of construction equipment with some of the finest engineering facilities in the world.

A history of world-class innovation. Our business has always been driven by innovation, using only the most advanced technology, components and processes, meticulous design and rigorous testing. Evidence of this doesn't come much more powerful than our revolutionary JCB DIESELMAX engine. Having grabbed the headlines when it smashed the world diesel land-speed record at 350.092mph, it is now providing our customers with tomorrow's performance today.



Sustainability in all we do. As a manufacturer of working machinery, operating in both established and emerging markets, we accept the challenge of helping to deliver economic and environmental sustainability.

Product innovations that provide the right solutions to our customers have been a vital part of our history and will be key to our sustainable future. But in addition to developing cleaner and more efficient machines, we have a commitment to ensuring our manufacturing facilities meet the highest environmental standards.

A commitment to our customers that goes on and on. That's a fact we remind ourselves of constantly, and it's the reason our customers are at the heart of everything we do. Whatever a customer needs, we make it our mission to provide world-class support and 100% satisfaction.

At the heart of this is a dedication to minimising machine downtime. So our state-of-the-art World Parts Centre dispatches more than a million genuine parts and attachments every week, with an 'Anywhere in 24 hours' strategy. Our JCB-trained technicians provide excellent, expert customer care, whether it's routine servicing or something more urgent. And we are constantly looking at new, innovative ways to help you get the most out of your machine.





Mini Excavator Range

Your nearest JCB dealer