

130hp/145hp
Payload: 4999kg
Maximum lift height: 8.1m

LOADALL | 550-80 AGRI PLUS



A Product of Hard Work



JCB's most productive Loadall... Ever

The 550-80. More payload more lift height

JCB has continually pioneered and championed the versatile telescopic handler concept, continually improving our Loadall machines to remain at the forefront of performance and innovation. The new 550-80 is the latest product of this drive to be the best.

The 550-80 has been designed and developed in response to customer demand. You told us you wanted a machine that could lift a heavier load - we give you our highest capacity Loadall yet, capable of lifting a massive 4.99 tonnes and with a total lift height of 8.1 metres. This machine is perfect for bringing even greater levels of productivity and business profitability to rehandling applications.

Up to now our Agri Loadall range offered a maximum 4.1-tonne payload. The 550-80 sees a significant increase on this, adding huge efficiency and productivity to a machine already renowned for its world-leading versatility. This versatility is supported by a range of JCB attachments designed specifically to work in harmony with the Agri Loadall range.

But the 550-80 is not solely about doing more. It's also about doing more for less. So we have invested in new technology and features - including efficient new hydraulic circuits, transmission design and machine structure - that drive down the cost of operation by reducing fuel consumption.

Above all, the 550-80 is an integrated solution. It boasts JCB componentry and, at its heart, the JCB 97kW (130hp) or optional 108kW (145hp) DIESELMAX engine; both result in more power, more torque and more productivity. The machine is also backed up by JCB's dedicated world parts and service team, providing you with world-class support for maximum uptime.





Maximum productivity and economy through constant innovation

The 550-80 boasts a number of productivity enhancing features which also have economy at their heart. Among these are the robust Z-bar linkage, which results in incredible power - 6.5 tonnes of tearout force to maximise bucket fill for superb performance in rehandling applications.

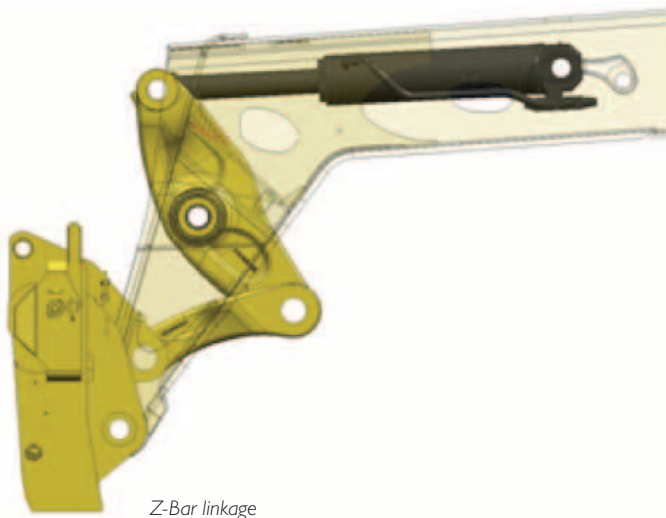
Hydraulics are the key to getting more done, more efficiently on the Loadall. The 550-80's new re-generation system harnesses gravity to aid the boom lower and retract functions, saving energy and therefore reducing fuel consumption. The system also provides fast cycle times for efficient operation. The hydraulic variable speed cooling fan, fitted as standard, automatically reacts to ambient temperature and adjusts fan speed to optimise energy consumption. The fan can also be reversed from within the cab to clear dust and debris from the cooling systems to maintain performance.

A huge amount of torque is generated by the JCB 97kW (130hp) or optional 108kW (145hp) DIESELMAX engine: 532Nm and 550Nm respectively. The 108kW (145hp) engine is the largest, most powerful power unit ever fitted to a Loadall, signalling our commitment to make this our most productive Loadall yet. These engines are supported by a JCB Powershift transmission that offers travel speeds of up to 40kph* to maximise cycle times whatever the application.


When engaged, the transmission dump feature on the brake pedal is another innovation on the 550-80. This disconnects the transmission when the brake pedal is depressed, maximising power to the hydraulic functions and improving productivity whilst minimising operator fatigue. We have also introduced a high back off braking system which achieves full brake pedal release, reducing drag and maintaining road speed for longer to improve fuel economy.

We are confident that this Loadall achieves new levels of productivity and efficiency. Our highest capacity Loadall ever - 4.99 tonnes and a total lift height of 8.1 metres - it answers customer demand for increased payload capability, lower fuel consumption to keep down running costs and maximised versatility for an all-round business asset.

* Dependent on tyre selection



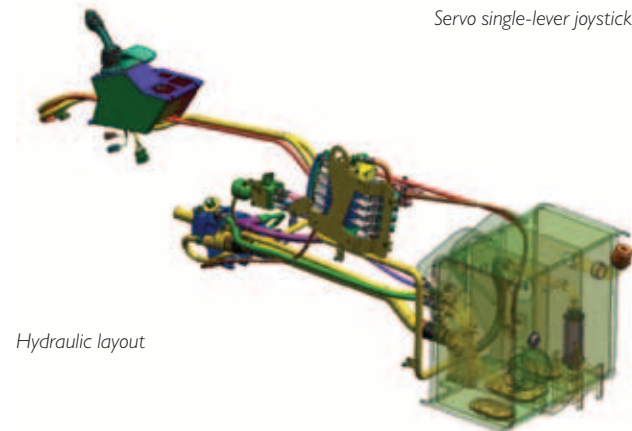
Z-Bar linkage



Hydraulic cycle times (unladen)	
Lift	7.4 seconds
Lower	5.9 seconds
Extend	8.3 seconds
Retract	5.9 seconds
Bucket dump	2.8 seconds
Bucket crowd	3.0 seconds



Servo single-lever joystick



Hydraulic layout



A productive driver is comfortable and in complete control



Productivity and comfort go hand in hand; if the driver is thrown around, too hot or cold, constantly twisting and reaching, and can't see clearly, they won't be as productive.

In fact, the 550-80 Loadall offers best-in-class comfort with: one of the largest cabs in the industry, class-leading noise levels, excellent air flow, ventilation and demisting, with optional air conditioning; and a fully adjustable suspension seat and steering column for the optimum driving posture. Class-leading in-cab noise levels are lowered even further by a variable speed cooling fan which reduces fan noise into the cab.

The whole point of any cab is to put the operator in control, and the 550-80 does this with simplicity and style. Ergonomic, intelligent arrangement of all dials and switches makes for intuitive, relaxed operation, while the servo controls are either cab-mounted or seat-mounted single lever. Both options are designed to be quick and easy to get to grips with and offer precision control. Operating the machine is made even easier thanks to the four-speed JCB Powershift transmission which provides effortless gear change operation for a significant reduction in operator fatigue.

Control is increased even further with automotive-inspired braking. This new system sees already class-leading braking performance enhanced with the introduction of power brakes, providing proportional braking throughout the pedal travel and resulting in improved braking effort and safe, stable stopping.

We have also made it easier for operators to see what they're doing. A low boom, large cab and roof windows, and angled roof protection bars all combine to give all-round clarity for driver safety and machine protection.





Incredible strength and quality for unrivalled durability and reliability

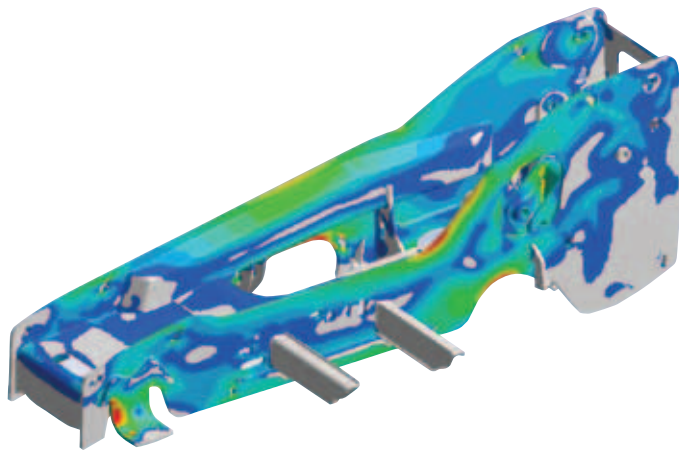
At JCB we take pride in what we do. And pride means investing in quality at every stage, from design and manufacture, to purchasing, assembly and even beyond the sale with our legendary support.

This focus on quality is a major driver behind our vertical integration strategy: the engine, transmission, hydraulic rams and cab are all designed by JCB to work perfectly together so there's no compromise in performance at any stage. In 2006, the JCB DIESELMAX engine powered the world's fastest diesel car to a record-breaking 563kph (350mph). Today this quality engineering provides high torque at low revs in JCB machines.

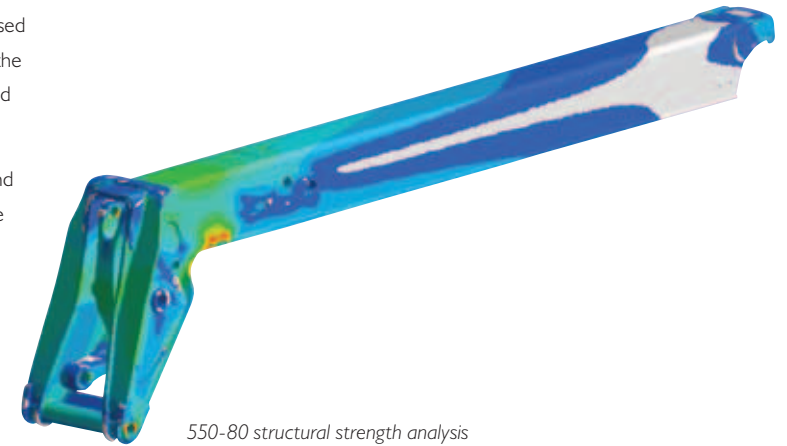
Quality continues in our meticulous eye for detail which leaves no part of the machine free from constant innovation and improvement. The chassis, for example, is a one-piece fully welded design for maximum strength and minimum weight, with 25mm thick chassis side plates providing both rigidity and structural strength.

The boom is mounted low into the chassis providing an extremely rigid structure and maximum over-the-shoulder visibility. The increased boom depth and width also enhances strength and durability, while the boom nose has been increased in size for heavy-duty, long lasting and powerful performance.

The robust Z-bar linkage, heavy-duty axles, integral hydraulic tank and one-piece chassis... We have left no stone unturned in our objective to fulfil our reputation for legendary build quality.



550-80 structural strength analysis



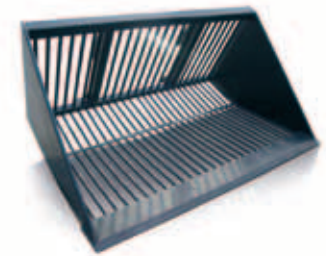
550-80 structural strength analysis



Unbeatable versatility to help you get more from your machine

When every part of your machine works in harmony, the result is superlative performance. JCB attachments are all designed and manufactured to be perfectly matched to your machine. We use only top quality components combined with engineering expertise and exhaustive testing to ensure quality, reliability and durability.

The range of attachments is designed to answer specific tasks around the farm, from a bale spike, beet basket and shovels, to speciality hydraulic attachments which can be speedily interchanged using the hydraulic quick couplers. We offer real solutions to specific customer needs, maximising the versatility and profitability of your JCB 550-80 Loadall.



BEET BASKET

Specialist attachment for handling all types of root crops
Spaced bar design allows mud and small material to fall through
Substantial toeplate gives long-lasting protection
Round-bar leading edge to prevent damage to the crop
Available with a choice of bracket options



GRAIN PUSHER

Specialist attachment to aid the stockpiling of grain
Heavy-duty box section design provides strength and durability
Available with a choice of bracket options



SHOVEL

Grain/potato and rehandling versions available
 Rolled-back shell for easy material ejection
 Weld in toeplate to prolong shovel life
 Grain/potato version has round bar on leading edge to prevent damage to root crops
 Available with a choice of bracket options



MUCK FORK & GRAB

Available with power grab or round-top grab
 Available with standard, Kverneland or Hardox tines
 Supplied with tail hoses as standard
 Side tines for improved material retention
 Available with a choice of bracket options



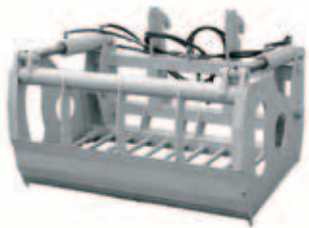
MULTISHOVEL

Combines a shovel and top grab to provide a multi-purpose attachment
 Substantial toeplate gives long-lasting protection to shovel
 Rolled-back shell for easy material ejection
 Removable side plates for handling awkward loads
 Available with a choice of bracket options



DIRECT MOUNT SHOVEL

A specialist 1.8m³ shovel that mounts directly onto the end of the boom that removes the requirement for the quickhitch carriage
 Increased shovel roll back gives maximum material retention, ideally suited for high capacity applications



SHEAR GRAB

Specialist attachment for cutting grass and maize silage from the clamp
 Kverneland tines fitted as standard for extra strength
 Heavy-duty design for increased durability
 Available with a choice of bracket options



BALE SPIKE

Available in single- or twin-bale format for handling round bales up to 1.8m diameter
 Kverneland tines fitted as standard for extra strength
 Twin-spike version can also be used for handling large square bales
 Anti-rotation tine fitted as standard for improved stability
 Available with a choice of bracket options



BIG BALE TRIPLE GRAB

Easy handling of 3 x 800 bales or 2 x 1200 bales
 Curved tines penetrate and grip the bales without damage
 Hydraulically operated from the cab

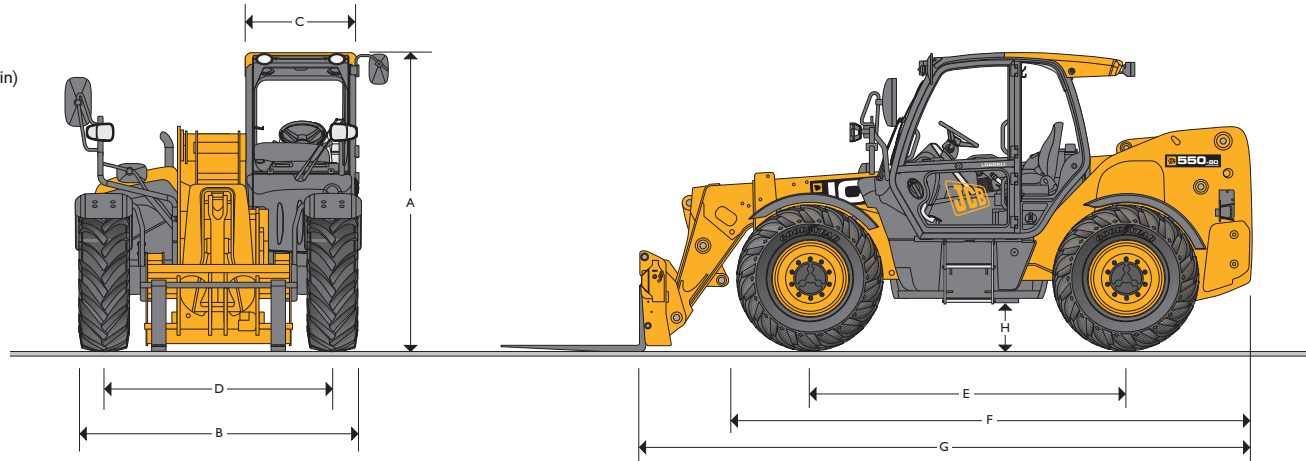


WRAPPED BALE CLAMP

Twin-roller design eliminates damage to the bale wrapping
 Removable rollers mounted on Kverneland tines allowing the attachment to be used as a twin-bale spike
 Free rotating rollers allow stacking of bales without the risk of damage
 Available with a choice of bracket options



MAX. PAYLOAD: 4999kg (11001 lb)
 MAX. LIFT HEIGHT: 8.1 metres (26ft 7in)



STATIC DIMENSIONS

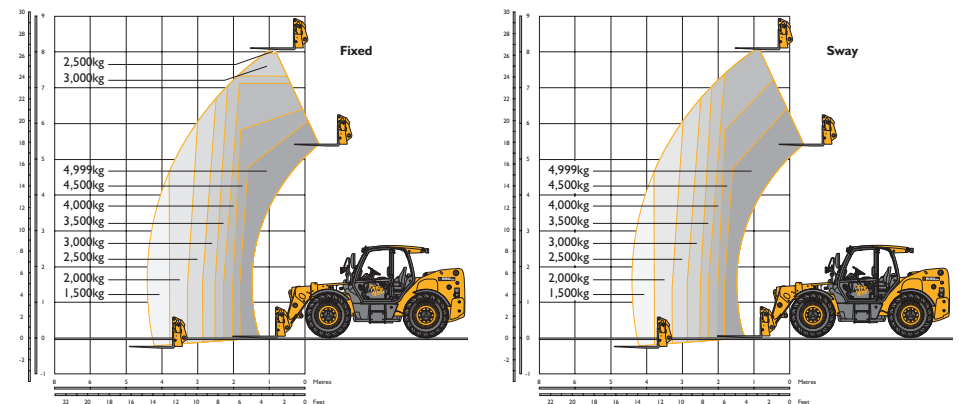
A	Overall height	m (ft-in)	2.59 (8-6)
B	Overall width (over tyres)*	m (ft-in)	2.42 (7-11)
C	Inside width of cab	m (ft-in)	0.94 (3-1)
D	Front track	m (ft-in)	1.98 (6-6)
E	Wheelbase	m (ft-in)	2.75 (9-0)
F	Overall length to front of tyres	m (ft-in)	4.42 (14-6)
G	Overall length to front of carriage	m (ft-in)	5.27 (17-3)
H	Ground clearance	m (ft-in)	0.40 (1-4)
	Carriage rollback angle	degrees	47.0
	Carriage dump angle	degrees	33.0
	Weight	kg (lb)	10150 (22377)
	Tyres		440/80R24

*Dependant upon tyre specified.

ENGINE

Manufacturer		JCB
Displacement	litres (in ³)	4.4 (269)
No. of cylinders		4
Bore size	mm (in)	103 (4.05)
Stroke	mm (in)	132 (5)
Aspiration		TCA
Power rating		
Power @ 2200rpm	kW (hp)	97 (130) / 108 (145)
Torque rating		
Torque @ 1500rpm	Nm (lb/ft)	550 (405)

LIFT PERFORMANCE



LIFT PERFORMANCE

Maximum lift capacity	kg (lb)	4999 (11001)
Lift capacity to full height	kg (lb)	2500 (5512) Fixed 4000 (8818) Sway
Lift capacity at full reach	kg (lb)	1500 (3307)
Lift height	mm (ft-in)	8.1 (26.7)
Reach at maximum lift height	mm (ft-in)	0.92 (3-0)
Maximum forward reach	mm (ft-in)	4.47 (14-8)
Reach with 1 tonne load	mm (ft-in)	4.47 (14-8)
Placing height	mm (ft-in)	7.45 (24-5)

Complies with stability test EN 1459 Annex B.

**TRANSMISSION**

JCB powershift transmission incorporating torque converter, bevel box and a 4 speed powershift gearbox in one resiliently mounted unit. A combined steering column mounted switch incorporating directional control and 4 forward and 4 reverse powershift gears. Travel speed 38kph (23mph). Permanent 4 wheel drive.

Front and rear drive axles: Epicyclic hub reduction drive/steer axles with torque proportioning differentials.

BRAKES

Service brakes: Hydraulically activated power brakes, self-adjusting, oil-immersed in-board multi-disc type on front and rear axles.

Parking brake: Hand operated oil immersed disc type.

BOOM AND CARRIAGE

Boom is manufactured from high tensile steel.

Low maintenance, hard wearing pads.

JCB Q-fit self-levelling carriage with lever operated pin locking accepts pallet forks and a wide range of attachments.

One boom end auxiliary hydraulic service fitted as standard.

SAFETY CHECK VALVES

Fitted to carriage tilt, telescopic and boom lift rams.

SERVICE CAPACITIES

Fuel tank	litres (UK gal)	146 (32.1)
Hydraulic tank	litres (UK gal)	112 (24.6)
Coolant	litres (UK gal)	23 (5.1)

ELECTRICS

12 v negative earth. 95 AH battery. 95 amp alternator. Full road lighting. Reversing light. Direction indicators. Hazard warning. Reverse alarm.

STEERING

Hydrostatic power steering with power track rods on both axles.

Three steer mode options: front wheel steer; all wheel steer; crab steer: operated from in the cab by a selection switch, with automatic alignment.

HYDRAULICS

Operating system pressure		260 (3770)
Main hydraulics	ltrs/min	140
Pump		Variable
Loader controls		Cab mounted single lever joystick (Seat mounted optional) – Electric servo control of all lift end functions
Hydraulic cycle times		seconds
Lift		7.4
Lower		5.9
Extend		8.3
Retract		5.9
Bucket dump		2.8
Bucket crowd		3.0

DELUXE CAB

Quiet, safe and comfortable cab conforms to ROPS ISO 3471 and FOPS ISO 3449. Tinted glass all round with laminated front and roof screen. Roof bars, front, rear and roof screen wash/wipe and heater/screen demister. Opening rear window. Audio-visual warning system for coolant temperature, water in fuel, engine oil pressure, air cleaner, battery charge, transmission oil temperature and pressure. Brake charge, hourmeter and road speed indicator. Engine temperature, fuel gauge and clock.

Adjustable steer column with stalk bar powershift change and forward reverse shuttle. Floor mounted throttle pedal.

Adjustable deluxe suspension seat with adjacent park brake.

Automatic eye level audio-visual load moment indicator warning system receiving a signal from a load sensor on the rear axle.

This system continuously monitors the machine's forward stability and leaves the operator in control at all times.

Hydraulic controls:

Cab mounted single lever servo joystick, incorporating forward/neutral/reverse, transmission disconnect, with progressive extend/retract and auxiliary incorporating constant flow facility.

Seat mounted single lever servo joystick incorporating forward/neutral/reverse, transmission disconnect, with progressive extend/retract and auxiliary incorporating constant flow facility (optional).

OPTIONS AND ACCESSORIES

Options: Front and rear working lights, rotating flashing beacon, fire extinguisher, radial industrial tyres, electrical 2/4WD select, limited slip differential in front axle, windscreen and roof guard, air suspension seat, roof and front screen blind, radio kit, air conditioning, 2 speed and intermittent front wash/wipe, high flow auxiliary, smoothride system, towing facility with trailer lighting package, direct mount bucket, variable speed fan and reversing fan as standard, 2nd boom auxiliary, carriage options available – contact your local dealer.

Attachments: Contact your local dealer for details of the comprehensive range.

Adaptive load control for EU territories conforms to EN15000

Your machine – working efficiently, secure and in good health

JCB LiveLink and Guardian
are the key to all three



As part of our dedication to looking at new, innovative ways to help you get the most out of your machine, our latest development is JCB LiveLink: an advanced machine monitoring system that enables you to better protect your investment and accurately monitor and improve machine performance.

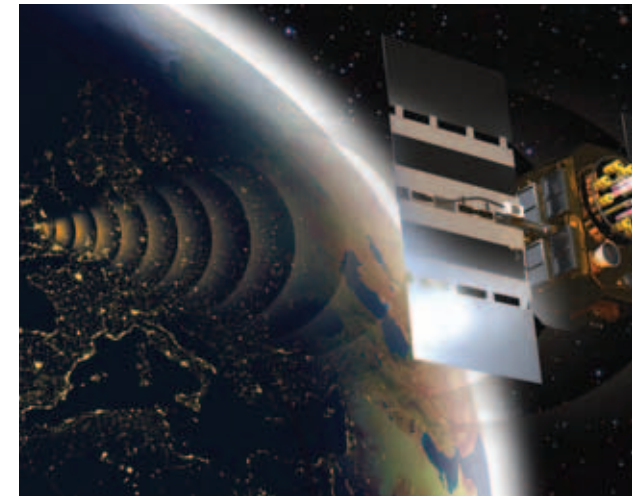
JCB LiveLink is a software system that enables JCB owners to monitor and manage their machines remotely. All you need is a PC connected to the internet. The LiveLink computer is built into the machine where it collects information from a number of sensors. This information is sent, using mobile communications technology, to JCB's secure data centre. Machine management information is then displayed to users via the LiveLink website, by email or via mobile phone.

By providing you with information on the usage and productivity of your fleet, JCB LiveLink enables you to keep track of each machine's efficiency, ensuring that you get the best value for money possible.

By providing information on the location, movement and activity of machines, the system can also assist in ensuring machines are operated at the correct times and helps to protect them from theft. And, JCB LiveLink helps machine owners to confirm that their machines are well maintained and in good health without having to travel around work sites inspecting machines.

In response to increasing concerns regarding machine security, we now also offer JCB Guardian as an option on every new JCB machine. JCB Guardian is a package of theft protection and monitoring systems that includes LiveLink telemetry along with *CESAR identification, immobiliser technology and a host of optional locks and guards. It's your peace of mind solution that can also result in considerable insurance premium savings.

**Territory specific*



Flexible aftercare solutions from JCB Assetcare

JCB Assetcare is a range of flexible service options designed to ensure you get the very highest standards of machine servicing, no matter what your budget. It guarantees you the optimum level of aftersales support, with highly skilled, factory-trained engineers using genuine JCB parts and lubricants to maintain maximum machine performance.

This allows your machine to be covered to maximise uptime and profitability throughout its operating life.

*“For complete peace of mind
and cost predictability
choose JCB Assetcare.”*

JCB Assetcare offers you the following options, which can be tailor-made to meet your specific requirements including excellence as standard:

For complete peace of mind and total budget predictability, your JCB dealer can offer a **Full Repair and Maintenance package**, with a fixed monthly sum covering all regular maintenance and necessary repairs including **Flexicare** for excavators and wheeled loading shovels, to give a pay by the hour alternative.

A **JCB Service Agreement** allows you to plan and manage your maintenance budget over a period of hours, or years of machine use, as determined by you. The price is maintained for the duration of the agreement and includes all parts, lubricants, labour and travel to maximise your machine performance.

JCB Sure Price Service (pay as you go) includes all genuine JCB lubricants, filters, greases and other parts and is carried out as you require it. The all-inclusive price also covers labour, 100 point check and any travel. Service intervals are hours based (usually every 500 hours) and no prior agreement is required; simply advise your dealer when the machine reaches the recommended service interval for great value for money.

JCB Machinery Protection Plan protects you against any unexpected failure for up to 2, 3, 4 or 5 years or up to 10,000 hours depending on machine type. You can take up a Machinery Protection Plan at any time during the first three months of ownership, and the package is transferable on the initial machine sale. Coverage options are 500, 1000, 1500 or 2000 hours per year (model dependent).

JCB Driveline Protection Plan – sign up to a Service Agreement on backhoe or Loadall mechanical transmission machines and get **FREE** Driveline Protection for every 1,000 hours you commit to (covers engine, transmission and axle).

For the full terms and conditions of the above programmes please speak to your local dealer.





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

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