

## WHEEL LOADER | 406





# PRODUCTIVE PERFORMANCE.

THE NEW JCB 406 MEETS STAGE V EMISSIONS LEGISLATION. THE 406 IS A HIGHLY VERSATILE MACHINE WITH OPTIMAL POWER-TO-WEIGHT RATIO, MAKING IT THE PERFECT TOOL CARRIER. IT'S A PERFECT CHOICE FOR RENTAL FLEETS LOOKING FOR A LOW COST, SIMPLE,

## JCB Diesel by Kohler.

PRODUCTIVE MACHINE.

- 1 JCB has worked in close collaboration with Kohler to produce the ultimate compact wheel loader engine with high power and torque produced at low revs. The 406 has an easy-maintenance electronic JCB Diesel by Kohler engine offering potent performance.
- 2 JCB's hydraulic quickhitch makes attachment changing quick and efficient.
- Hydrostatic drive makes the 406 very easy to operate even for the inexperienced.
- 4 These machines benefit from a strong chassis and the best possible weight distribution to allow for better absorption of external forces into the machine.

The Auto Idle Shutdown feature turns the engine off after a set period of no use, reducing fuel usage.











## All the versatility you need.

- JCB's articulated steering boasts an easy-to-use built-in sideshift which is ideal for pallet handling and changing attachments.
- So that you can tailor your wheel loader to any application, we offer limited slip diffs that excel on soft muddy terrain.

Power from the driveline is transferred to the ground very efficiently through an innovative chassis, with perfect harmony between all components. This makes our machines the best possible wheel loader solutions.

- Our inching pedal economically splits engine power from tyres to work frame in order to maximise power of the machine for precise, efficient material handling.
- Raised driving position provides increased forward and rearward visibility with superb all-round machine visibility.
- The rear-mounted hydraulic handheld tool circuit allows you to operate a wealth of attachments, including breakers, pumps and disc cutters. There's no need for additional powerpacks or equipment either, which improves fuel consumption.







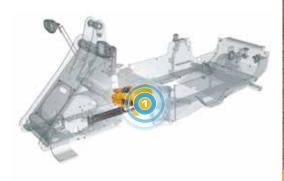


# **QUALITY AND RELIABILITY BUILT IN.**

JCB KNOWS THAT A WHEEL LOADER IS A KEY PART OF THE ON-SITE PROCESS. THAT'S WHY THE NEW 406 IS BUILT ON A FOUNDATION OF QUALITY AND RELIABILITY. THE STANDARDS WE'VE USED FROM DESIGN TO MANUFACTURE WILL SAFEGUARD YOUR WORKING PROCESS, HOUR AFTER HOUR, DAY AFTER DAY.

## Proven build quality.

- With our knowledge of materials handling JCB does not accept compromises when developing machines. Proof of this is our strong heavy-duty centre joint which oscillates through  $\pm 10$  degrees.
- Recessed rear lights are protected within the solid counterweight casting for good impact protection.
- Hydraulic hoses are well protected, being neatly routed, clamped and positioned well away from all pinching areas.
- We use state-of-the-art manufacturing processes like robot machining, precision paint technology and innovative assembly techniques to achieve the very highest levels of quality.
- Precision machining provides high tolerances and accurate location of pins and bushes.





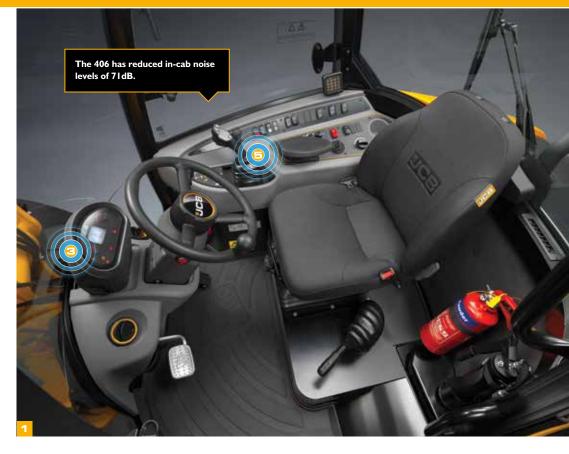






# **COMFORTABLE AND EASY TO USE.**

THE NEW 406 COMPACT WHEEL LOADER IS DESIGNED TO MAKE WORK EASIER. ITS NEXT GENERATION CAB IS EASY TO ACCESS, INTUITIVE TO OPERATE AND ITS OPERATED FROM THE CENTRE OF THE MACHINE FOR SUPERB VISIBILITY. ULTIMATELY, A CONFIDENT AND COMFORTABLE OPERATOR IS A MORE PRODUCTIVE ONE.



## Designed around you.

- All-new next generation styling in the cab includes new right hand arm rest designed for improved operator working and an easy to clean floor mat.
- A new next generation tilting and telescopic steering column provides easy adjustment for maximum comfort. A new steering wheel features soft grip for improved comfort and style.
- A stylish modern central dash display combines analogue dials and a colour LCD screen which can

- display machine health details, service requirements, operating information and more. Depressurising button in cab for easy and quick change of attachments.
- 4 All the instruments needed to operate JCB wheel loader are within easy reach of the seat, so there's no need to hunt around for information whilst working.
- **5** Ergonomically designed joystick for more comfortable and intuitive operation.





# **SERVICEABILITY MADE EASY.**

THE NEW JCB 406 BENEFITS FROM INNOVATIVE **DESIGN AND QUALITY COMPONENTS, ALLOWING** THEM TO SPEND AS MUCH TIME AS POSSIBLE HARD AT WORK WITH LONG SERVICE INTERVALS.

## Service with a smile.

- Gain access to the engine bay and cooling pack areas easily with the large single piece bonnet. All daily check points can be easily accessed under the bonnet.
- The DPF is well positioned making it easy to replace without removing other components.
- The 406 shares common parts with other JCB machines making for even greater availability.
- 4 Cab air filter and electrical fuses sit under the HVAC for easy ground level access.
- 5 The battery is easily located in a secure locking box.
- Electronic engine has more information available which is displayed on the cab EMS and also through JCB LiveLink, including running hours, error information and DPF status.











# SAFE AND SECURE.

Total safety.

1 The new 406 can be fitted with an immobiliser as an option to help prevent thefts from your fleet.

2 Access steps are inclined and equally spaced, complemented by well positioned grab handles for

Engine mounted DPF is secured under lockable

4 Our in-cab, electronic 2-stage quickhitch isolation system protects against uncontrolled

three points of contact at all times.

bonnet for increased security.

release of attachments.

**BECAUSE SAFETY AND SECURITY ARE PARAMOUNT ON** ANY SITE, THE JCB 406 IS DESIGNED TO PROTECT ITS **OPERATORS, THEMSELVES AND ANY BYSTANDERS AT ALL TIMES. GREAT VISIBILITY, ANTI-THEFT FEATURES** AND NON-SLIP SURFACES ARE JUST THE START.





















## LIVELINK TELEMATICS.

LiveLink telematics helps you monitor and manage your machine fleet remotely anywhere in the world by radically improving the efficiency, productivity, safety and security of all your JCB and non JCB machine fleet.

MACHINE EFFICIENCY: Keep track of your machine's daily activity with regular performance reports which provide information about idle time, location, machine health, error codes for diagnostics, engine utilisation by power band, safety alerts, and fuel consumption. JCB LiveLink ensures machines are kept running for maximum uptime and return on investment.

MACHINE RELIABILITY: Accurate hours and service alerts improve maintenance planning to optimise machine productivity.

MACHINE SECURITY: LiveLink's real time geo-fencing alerts tell you when machines move out of predetermined zones.

Curfew alerts inform you of unauthorised usage.



Track the location of any asset via Bluetooth connection.



An after market telematics solution which can be retrofitted to any machine.



## COMPLETE CONTROL FOR YOUR FLEET.

LiveLink Fleet enables you to track every aspect of your equipment to maximise efficiency and machine uptime.

GUESS LESS, KNOW MORE: Equipment issues and service reminders are logged as soon as they occur, helping you to react quickly.

YOUR EYES ON THE GROUND: Integrate LiveLink Fleet with the JCB Operator mobile app and data from your operators' daily equipment checks feed instantly into your dashboard.

**TOTAL PEACE OF MIND:** Operator safety alerts help to ensure machines are being used efficiently and safely.

SMARTER TOOLS. SMARTER DECISIONS: From hours worked to fuel wastage, access custom analytics on your fleet to make smarter decisions, quicker.

**EFFORTLESS MEETS PAPERLESS:** Access certificates, warranty information, quick start machine guides and manuals.

# The JCB Operator app

## THEY SPOT IT, YOU KNOW IT.

The JCB Operator app gives you faster, clearer and more accurate information about your fleet, direct from the people using your equipment each day.

STAY IN TOUCH: Get regular checks on your machine with visibility in the LiveLink Fleet portal.

**TAILOR YOUR CHECKS:** Customise your checklists to suit any application, customer or site.

**UPLOAD TO KEEP UPDATED:** Upload useful information with photos and comments.

**FULLY COMPATIBLE:** The JCB Operator app works with non telemetry related machines and assets.

**ACCESS ALL INFORMATION:** Get access to documentation such as quick start guides.

\*The individual features of LiveLink Telematics, LiveLink Fleet and Operator App vary per region, engine and machine type.

# **VALUE ADDED.**

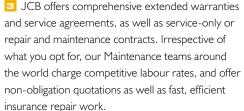
JCB'S WORLDWIDE CUSTOMER SUPPORT IS FIRST CLASS. WHATEVER YOU NEED AND WHEREVER YOU ARE, WE'LL BE **AVAILABLE QUICKLY AND EFFICIENTLY TO HELP MAKE SURE** YOUR MACHINERY IS PERFORMING TO ITS FULL POTENTIAL.

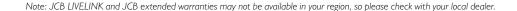


- 1 Our Technical Support Service provides instant access to factory expertise, day or night, while our Finance and Insurance teams are always on hand to provide fast, flexible, competitive quotes.
- The global network of JCB Parts Centres is another model of efficiency; with 18 regional bases, we can 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.

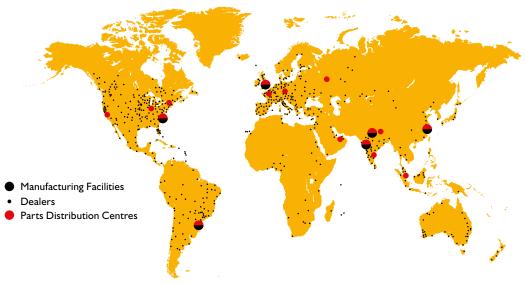


JCB offers comprehensive extended warranties and service agreements, as well as service-only or repair and maintenance contracts. Irrespective of what you opt for, our Maintenance teams around non-obligation quotations as well as fast, efficient insurance repair work.

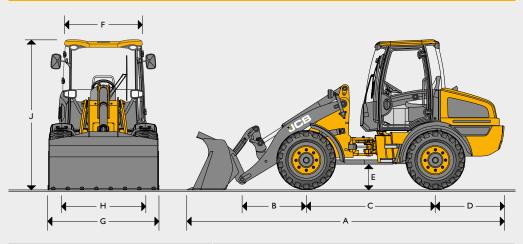








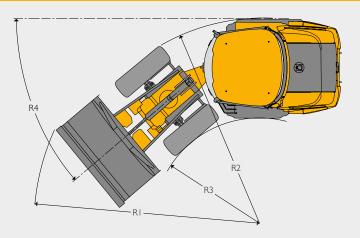
## STATIC DIMENSIONS



			406
Α	Overall Length	mm	5133
В	Axle to pivot pin	mm	906
С	Wheelbase	mm	2100
D	Axle to counterweight face	mm	1268
Е	Ground clearance	mm	313
F	Width over cab	mm	1468
G	Width over tyres	mm	1727
Н	Wheel track	mm	1390
J	Height over cab	mm	2500
	Front axle weight	kg	1698
	Rear axle weight	kg	3092
	Total weight	kg	4790
	Max. radius over tyre	kg	3800
	Max. width across tyres	mm	1761

Data based on machine equipped with quickhitch mounted 0.8m³ bucket with toe plates and Camso SLR4 12.5-18 tyres.

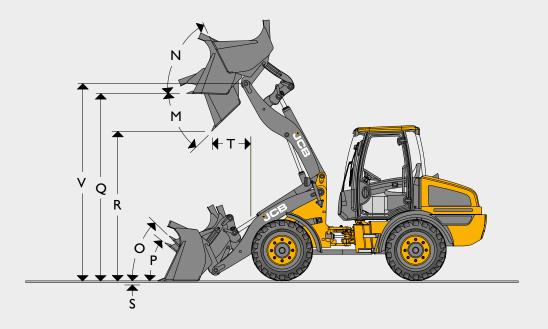
## TURNING CIRCLE



			406
RI	Maximum turn radius over shovel	mm	4160
R2	Maximum turn radius over tyre	mm	3800
R3	Inside turn radius	mm	2010
R4	Articulation angle	degrees	40

ENGINE		
		406
Туре		4 stroke, Electronic Common Rail
Model		JCB Diesel by Kohler - KDI 1903 TCR
Capacity	litres	1.903
Aspiration		Turbocharged
Cylinders		3
Max gross power to SAE J1995/ISO 14396	kW (hp)	36.4 (49) @ 2600 rpm
Max torque	Nm @ 1500rpm	170
Emissions		EU Stage V
After-treatment		DPF

DADER DIMENSIONS						
Model (assumes machine is fitted with Camso SLR4 12.5-18 tyres)				406		
Bucket Type		General purpose	General purpose	Light duty	Light duty	4 in 1 shovel 0.8m³
Bucket Equipment		Teeth or	toeplate	Тоер	plate	Teeth or toeplate
Bucket Capacity (SAE heaped)	m3	0.8	I	1.2	1.4	0.75
Bucket width	mm	1900	1900	1900	1900	1900
Bucket weight	kg	287	322	353	384	485
Max. material density	kg/m3	2050	1620	1320	1120	2100
Tipping load straight	kg	3760	3722	3687	3651	3529
Tipping load full turn	kg	3287	3245	3207	3168	3036
Payload	kg	1644	1623	1603	1584	1518
Max. breakout force	kN	41.9	36.5	32.2	29.7	41.9
Dump angle maximum	degrees	45	45	45	45	45
Roll Back angle full height	degrees	56	56	56	56	56
Roll Back at carry	degrees	54	54	54	54	54
Roll Back at ground level	degrees	42	42	42	42	42
Load over height	mm	2991	2991	2991	2991	2991
Dump height (45deg Dump)	mm	2489	2418	2348	2295	2489
Dig depth	mm	105	105	105	105	106
Reach at dump height	mm	764	835	905	958.5	764
Reach maximum (45deg dump)-horizontal arm	mm	1494	1465	1635	1689	1494
Operating weight (Based on 80Kg operator and full fuel and urea tanks)	kg	4790	4831	4862	4893	4995
Pin height	mm	3120	3120	3120	3120	3120



## SPECIFICATION WHEEL LOADER 406

TYRE SIZE					
				Dime	nsions
Tyre Size	Manufacturer	Туре	Operating Weight kg	Vertical mm	Width mm
335/80 R18	Dunlop	SPT9 EM	41.2	-4	0
365/70 R18	Dunlop	SPT9 EM	64	-14	69
405/70 R18	Dunlop	SPT9 EM	94	9	113
335/80 R20	Dunlop	SPT9 MPT	77.6	22	-22
340/80 R18	Michelin	XMCL	71.6	28	25
340/80 R18	Nokian	TRI 2	55.6	6	12
12.5-18	Camso	SLR4	0	I	15
12.5/80-18	Camso	SLR4	0	-15	-15

Loader dimensions quoted on 12.5-18 wheels and tyres.

TRANSMISSION		
		406
Туре		Hydrosatic
Model		Rexroth A6VM – 2 speed
Low range	kph	6
High range	kph	20.0

AXLES		
		406
Туре		Straight beam
Make and model		Dana III
Chassis angle oscillation	degrees	±10

## LOADER DIMENSIONS – FORK FRAME WITH FORKS



arriage width	mm	406
arriage width	mm	
	111111	1345
n of tines	mm	1200
at ground level	mm	710
at arms horizontal	mm	1232
ground level	mm	84
horizontal height	mm	1426
maximum height	mm	3012
at maximum height	mm	506
ad*	kg	2025
ig load straight	kg	2884
ig load full turn (40 deg)	kg	2531
ment weight	kg	191
	at ground level at arms horizontal ground level horizontal height maximum height at maximum height d* g load straight g load full turn (40 deg) ment weight	at ground level mm at arms horizontal mm ground level mm horizontal height mm maximum height mm at maximum height mm d* kg g load straight kg g load full turn (40 deg) kg

\*At the centre of gravity distance 500mm. Based on 80% of FTTL as defined in ISO 8313.

Manual fork spacings at 50mm increments. Fork section  $100 \text{mm} \times 50 \text{mm}$ .

ELECTRICAL SYSTEM		
		406
System voltage	Volt	12
Alternator output	Amp hour	100
Battery capacity	Amp hour	120

HYDRAULICS		
		406
Pump type		Single gear pump
Pump max. pressure	bar	230
Auxiliary flow	l/min	60
Hydraulic cycle times at full engine	rpm	
Arms raise (full bucket)	seconds	4.9
Bucket dump (full bucket)	seconds	3.5
Arms lower (empty bucket)	seconds	3.1
Total cycle	seconds	11.5
Pump max. flow	I/min	64

STEERING	Hydraulic power steering system and emergency steering.

SERVICE FILL CAPACITIES				
		406		
Hydraulic system	litres	70		
Fuel tank	litres	80		
Engine oil sump	litres	8.9		
Axle oil (front)	litres	4.4		
Axle oil (rear)	litres	6.05		

NOISE AND VIBRATION				
		406	Uncertaincy	Measurement conditions.
Noise at the operator station	LpA	71 dB	+/- I dB	Determined in accordance with the test method defined in ISO 6396 and the dynamic test condition defined on $2000/14/EC$ .
Noise emission from the machine	LWA	101 dB	+/- I dB	Guaranteed equivalent sound power (external noise) determined in accordance with the dynamic test conditions defined in 2000/14/EC.
Whole body vibration	m/s <sup>2</sup>	1.03	+/- 0.11 dB	ISO 2631-1:1997 normalised to an 8h reference period and based upon a test cycle comprising of loader work (soil).
Hand-arm vibration	m/s <sup>2</sup>	< 2.5	N/A	ISO 5349-2:2001 dynamic test conditions.

EQUIPMENT				
GENERAL MACHINE FEATURES				
Parallel lift geometry	•			
JCB Hydraulic Quickhitch				
Articulated steering	•			
Front and rear fenders	•			
One piece opening bonnet	•			
Recovery hitch	•			
Lifting lugs	•			
HBVC	+			
4th Spool aux circuit	+			
LSD axles	+			
Immobiliser	+			
LiveLink	•			
Under the bonnet battery isolator	+			
Worklights	+			
Bio oil	+			
Shovel level indicator	+			
Stowage box	+			
Fully opening RH window with locks	+			
Auto Idle Shutdown	•			

#### SEE DEALER FOR FULL LIST

	TRANSMISSION	
	Two speed	•
-	Neutral start	•
	Inching function	•
	Forward/reverse switch on joystick control lever	•
	BRAKES	
	In board oil immersed brakes with combined handbrake;	
-	cable operated park brake.	Ĭ
-		
-	ELECTRIC	
-	Full road lighting	•
	Direction indicators	•
-	Battery isolator	•
-		
-	HYDRAULICS	
-	Single lever manual control	•
-	Gear pump with priority steer	•
-	Emergency steer back up	•

CAB				
ROPS/FOPS safety structure				
Fully adjustable seat				
Interior light	•			
Adjustable tilt steering column				
Safety glass				
LCD display				
Front and rear screen wash/wipe				
3 speed heater fan with replaceable filters				
Sun visor	•			

STANDARD •

OPTIONAL +







ONE COMPANY, OVER 300 MACHINES.

Your nearest JCB dealer

## **Wheel Loader 406**

Gross power: 36.5kW (49.6 Hp) Max operating weight: 4,995kg Full turn tipping load: 3,284kg Standard shovel capacity: 0.8m<sup>3</sup>

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9999/6142 en-GB 07/20 Issue I