

## TELESCOPIC WHEELED LOADER | TM180/TM220





## PRODUCTIVE PERFORMANCE.

THE JCB TMI80 AND TM220 ARE HIGHLY PRODUCTIVE AND MULTIFUNCTIONAL TELESCOPIC WHEELED LOADERS WITH OPTIMAL POWER-TO-WEIGHT RATIO, MAKING THEM PERFECT MATERIAL HANDLERS. BOTH MACHINES ARE TIER 4 FINAL/STAGE 3B-COMPLIANT USING JUST A DIESEL OXIDATION CATALYST (DOC). THEY'RE ALSO MORE FRUGAL THAN OUTGOING TIER 3 MODELS.

## JCB Diesel by Kohler.

- 1 JCB has worked in close collaboration with Kohler to produce the ultimate compact engine. No engine power is wasted on a DPF and, with peak power and torque produced at low revs, you get good fuel economy too.
- Our TM180 and TM220 machines are equipped with a variable speed engine crank-driven cooling fan that maintains optimum fan speed for all requirements without using any excess engine power.
- The JCB TM220 has a high speed option this provides a 40km/h top speed.



### Moving with the times.

- 4 JCB's articulated steering boasts an easy-to-use built-in sideshift ideal for placing bales and changing attachments.
- So that you can tailor your telescopic wheeled loader to any application, we offer several axle options. Open diffs are ideal for hard ground, and limited slip diffs excel on soft muddy terrain. Our 100% switchable front axle diff lock on the TM220, meanwhile, provides ultimate traction on muddy terrain and creates no shear forces, so won't damage the ground when it's not in use. It can also be engaged on the move and under load.
- 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 solution.

### Versatility by the bucketload.

- Z Equip your telescopic wheeled loader with our new towing option (territory specific rockinger hitch) and you'll get a hitch with rear electrics and hydraulics, allowing you to trailer loads of up to 3.5 tonnes.
- By splitting power between the transmission and the hydraulics, our inching pedal allows precise, efficient, stepless load handling.





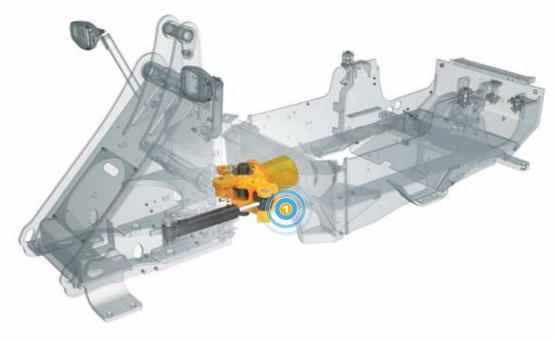






# **QUALITY, RELIABILITY AND DURABILITY.**

AT JCB, WE UNDERSTAND THAT A TELESCOPIC WHEELED LOADER IS A KEY PART OF ANY ON-SITE PROCESS. THAT'S WHY THE TMI80 AND TM220 ARE BUILT ON A FOUNDATION OF QUALITY AND RELIABILITY, ENSURING THAT THEY'LL ALWAYS BE A KEY PART OF YOUR WORKING PROCESS.





#### Built to last.

1 We understand how tough materials handling can be, so our machines are developed to be highly durable. A case in point is our heavy-duty centre joint, which oscillates through  $\pm 40^{\circ}$ , with  $10^{\circ}$  lateral oscillation to keep all 4 wheels on the ground

These machines benefit from a strong chassis and the best possible weight distribution.



## Quality design.

- All JCB telescopic wheeled loaders have rear lights that are recessed within the solid counterweight casting for good impact protection.
- 4 Hydraulic hoses are always well protected; they're neatly routed, properly clamped, and positioned well away from potential pinching spots.
- 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.
- inite element analysis and rig testing ensure superior structural strength and durability. Cold cell testing guarantees starting performance at temperatures as low as -20°C.











## **COMFORT AND EASE OF USE.**

JCB TMI80 AND TM220 ARE DESIGNED TO MAKE WORK MORE STRAIGHTFORWARD. THEY'RE EASY TO ACCESS, INTUITIVE TO OPERATE, AND THEY'RE CONTROLLED FROM THE CENTRE OF THE MACHINE FOR SUPERB VISIBILITY. AFTER ALL, A COMFORTABLE, CONFIDENT OPERATOR IS A MORE PRODUCTIVE ONE.

## A comfortable operator.

- 1 Both machines benefit from a comfortable and spacious cab. The operating position is designed for optimum all-round visibility, unhindered by components like silencers.
- ② Our tilting telescopic steering column is easy to adjust for an ergonomic driving position.
- All the instruments needed to operate a JCB machine are within easy reach of the seat, so there's no need to hunt around for information whilst working.
- With a fully opening right-hand window operators can enjoy increased ventilation whilst still being protected from dust.







## In complete control.

- A stylish, modern central dash display combines analogue dials and a colour LCD screen this can display machine health details, service requirements, operating information and more.
- These compact machines are equipped with a new ergonomically designed joystick control system for comfortable and intuitive operation and consistent with all agri telescopic wheeled loaders and Loadalls.







## SERVICEABILITY.

A TELESCOPIC WHEELED LOADER NEEDS TO SPEND AS MUCH TIME AS POSSIBLE HARD AT WORK. THAT'S WHY THEY BENEFIT FROM INNOVATIVE DESIGN AND QUALITY COMPONENTS, ALLOWING THEM TO OFFER MAXIMUM UPTIME WITH LONG SERVICE INTERVALS.

#### Access all areas.

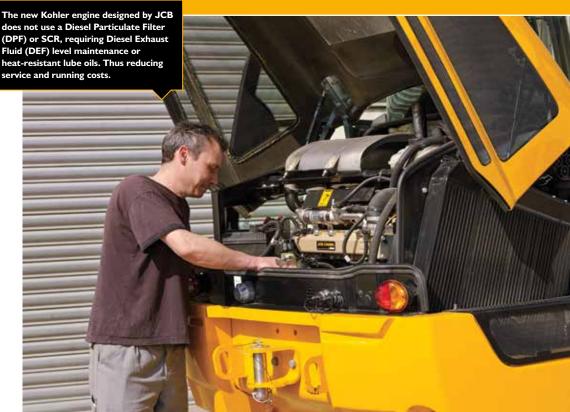
- Our large single piece bonnet ensures quick and convenient access to the engine bay and cooling pack areas. All daily check points are easily accessed under the bonnet.
- Operators, managers and dealers alike can access vital information like machine running times and error alerts it's all available at the touch of a button on the in-cab display or if needed via JCB's LiveLink telematics system.
- Both machines have a cyclonic pre-filter which maximises air filtration and extends filter element service intervals significantly.

2 Your local JCB dealer will be able to supply all parts for your TM180 and TM220, even JCB Diesel by Kohler engine components. Both machines also share parts with other JCB machinery, which makes everything even more readily available.









## **SAFETY AND SECURITY.**

BECAUSE SAFETY AND SECURITY ARE PARAMOUNT ON ANY FARM, TMI80 AND TM220 ARE DESIGNED TO PROTECT THEIR OPERATORS AND THEMSELVES AT ALL TIMES. GREAT VISIBILITY, ANTI-THEFT FEATURES AND NON-SLIP SURFACES ARE JUST THE START.

### Safety first.

Machines can be equipped with a new immobiliser option, which can help prevent thefts.

- With no exhaust after treatment, our JCB Diesel by Kohler engines are extremely compact, so there's no compromise to visibility. The sloping rear bonnet provides an unimpeded view, with the exhaust silencer and air intake filter both packaged out of sight.
- We've fitted an in-cab electronic 2-stage quickhitch isolation system to prevent uncontrolled release of attachments.
- Access steps are complemented by well positioned handles so that operators have three points of contact whenever they're entering or exiting the cab.







## **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.

## **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.





#### **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.





## **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.



## **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.



- 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 15 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.

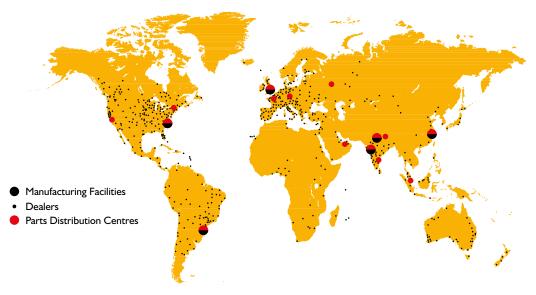


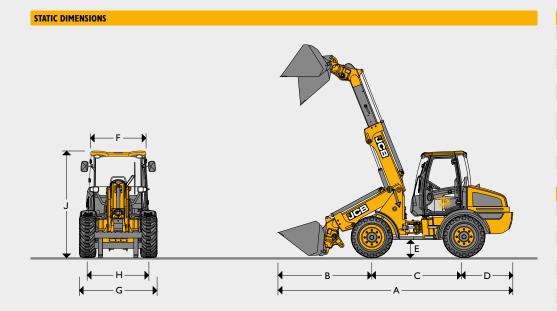
warranties and service agreements, as well as service-only or repair and maintenance contracts. Irrespective of what you opt for, our Maintenance teams around the world charge competitive labour fast, efficient insurance repair work.



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







			TMI80	TM220
Α	Overall length	mm	6003	5998
В	Axle to pivot pin	mm	1306	1269
С	Wheel Base	mm	2200	2205
D	Axle to counterweight face	mm	1268	1295
Е	Minimum ground clearance	mm	330	330
F	Width over cab	mm	1468	1468
G	Width over tyres	mm	1752	1902
Н	Wheel track	mm	1396	1490
J	Height over cab	mm	2500	2643
	Front axle weight	kg	2725	2632
	Rear axle weight	kg	3258	3863
	Total weight	kg	5983	6495
	Inside turn radius	mm	2105	2090
	Maximum turn radius over shovel	mm	4480	4755
	Maximum turn radius over tyre	mm	3955	4030
	Articulation angle	deg	±40°	±40°

TM180 data based on machine equipped with pin mounted 0.8m³ bucket with toe plates and Michelin XMCL 340/80R18 wheels and tyres. TM220 data based on machine equipped with pin mounted 0.9 m³ bucket with toe plates and Michelin XMCL 400/70R20 wheels and tyres.

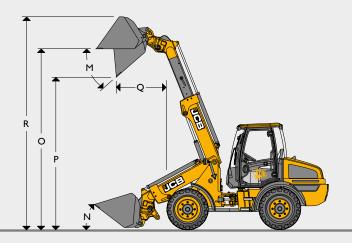
ENGINE			
		TMI80	TM220
Туре		4 stroke, Electronic Common Rail	4 stroke, Electronic Common Rail
Model		JCB Diesel by Kohler - KDI 2504 TCR	JCB Diesel by Kohler KDI 2504 TCR
Capacity	litres	2.482	2.482
Aspiration		Turbocharged	Turbocharged
Cylinders		4	4
Max gross power to SAE J1995/ISO 14396	kW (hp)	48 (64) @ 2200rpm	55.4 (74) @ 2200rpm
Max torque	Nm @ 1500rpm	300	300
Emissions		Stage 3B & T4F	Stage 3B & T4F

TRANSMISSION					
		TMI80	TM220		
Туре		Hydrostatic	Hydrostatic		
Model		Rexroth A6VM - 2 speed	Rexroth A6VM - 2 speed		
Model (40kph options)		N/A	Rexroth A6VM - 3 speed		
Low range	kph	6	6		
High range	kph	20	20		
High speed (optional)	kph	N/A	40		

AXLES					
	TM180	TM220			
Туре	Straight beam	Straight beam			
Make and model	Dana III	Dana III			

STEERING	Hydraulic power steering system emergency steering.
BRAKES	In board oil immersed brakes with combined handbrake; spring actuated hydraulic released park brake

#### LOADER DIMENSIONS



	Model		TM180	TM220
	Bucket equipment		General purpose	General purpose
	Bucket capacity (SAE heaped)		Teeth or toeplate	Teeth or toeplate
	Bucket width	m³	0.8	I
	Bucket weight	mm	1900	1950
	Maximum material density *	kg	287	332
	Payload *	kg/m³	2050	1957
	Maximum breakout force	kg	4323	4583
Μ	Dump angle maximum	kg	3326	3648
Ν	Roll back at carry	kg	1663	1824
	Roll back at ground level	kN	41.9	53.8
0	Load over height	degrees	45	45
Р	Dump height (45 deg dump)	degrees	56	63.6
Q	Reach at dump height	degrees	54	53.1
	Operating weight (includes 80Kg operator and full fuel tank)	degrees	42	41
R	Hinge pin height max.	mm	2991	3189

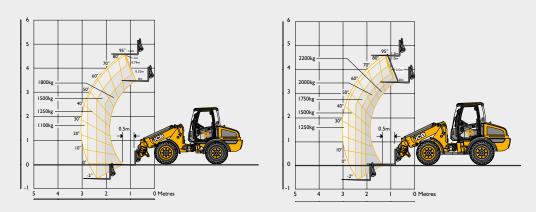
TYRE SIZE – TMI80						
		Dimensions				
Tyre size	Manufacturer	Туре	Op weight (kg)	Vertical (mm)	Width (mm)	
335/80 R18	Dunlop	SPT9 EM	-30.4	2	-25	
365/70 R18	Dunlop	SPT9 EM	-7.4	-8	44	
405/70 R18	Dunlop	SPT9 EM	22.4	15	88	
335/80 R20	Dunlop	SPT9 MPT	5.8	28	-47	
12.5/80-18	Goodyear	SGL	-83.2	-9	-46	
12.5-20	Goodyear	MPT	-55.7	34	-40	
335/80 R18	Michelin	XZSL	10.0	15	-11	
340/80 R18	Michelin	XMCL	0.0	0	0	
340/80 R18	Nokian	TRI 2	-16.0	7	-13	
12.5-18	Solideal	SLR4	-71.6	6	-25	
12.5/80-18	Solideal	SLR4	-71.6	-9	-40	

Loader dimensions quoted on 340/80R18 Wheels and Tyres.

TYRE SIZE – TM220						
		Dimensions				
Tyre size	Manufacturer	Туре	Op weight (kg)	Vertical (mm)	Width (mm)	
405/70 R18	Dunlop	SPT9 EM	-68.4	-12	-12	
335/80 R20	Dunlop	SPT9 MPT	-85.0	-89	-89	
365/80 R20	Dunlop	SPT9 MPT	-55.2	-55	-55	
405/70 R20	Dunlop	SPT9 MPT	-13.7	-11	-11	
12.5-20	Goodyear	MPT ISG	-144.8	-82	-82	
16.0/70-20	Goodyear	SGL	-12.0	-4	-4	
375/75 R20	Michelin	XZSL	-0.8	-17	-17	
380/75 R20	Michelin	XMCL	-12.8	-19	-19	
400/70 R20	Michelin	XMCL	0.0	0	0	
405/70 R20	Michelin	XZSL	24.8	6	6	
420/75 R20	Michelin	XMCL	38.0	6	6	
340/80 R18	Nokian	TRI 2	-82.4	-69	-69	
360/80 R20	Nokian	TRI 2	-56.8	-55	-55	

Loader dimensions quoted on 400/70R20 Wheels and Tyres.

### LOADER DIMENSIONS – FORK FRAME WITH FORKS



		TMI80	TM220
Fork carriage width	mm	1345	1345
Length of tines	mm	1069	1069
Reach at ground level	mm	1168	1043
Maximum forward reach	mm	3107	3041
Boom, horizontal height	mm	1428	1497
Max. lift height with forks	mm	4534	4562
Hinge pin height	mm		
Reach at maximum height	mm	1200	1200
Payload	kg	1800	2200
Full turn tipping load - forks with 500mm load centre *	kg	2250	2750
Full turn tipping load - forks calculated @ 80% load factor $^{st}$	kg	1800	2200
Full turn tipping load - forks calculated @ 60% load factor *	kg	1350	1650
Attachment weight	kg	191	191
Straight tipping load - forks with 500mm load centre *	kg	2950	3250

CAB
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ELECTRICAL SYSTEM					
		TM180 / TM220			
System voltage	Volt	12			
Alternator output	Amp hour	80			
Battery capacity	Amp hour	100			

HYDRAULICS					
		TM180	TM220		
Pump type		Single Gear Pump	Single Gear Pump		
Pump max. flow	I/min	64	89		
Pump max. pressure	bar	230	250		
Hydraulic cycle times at full engine					
Boom raise	Seconds	6.2	4.3		
Boom lower		5.1	4.5		
Extend	Seconds	5.3	3.6		
Retract	Seconds	4.4	2.9		
Bucket dump	Seconds	3.9	3.4		
Bucket crowd	Seconds	4.1	2.8		
Total cycle	Seconds	29.0	21.5		

SERVICE FILL CAPACITIES				
		TMI80	TM220	
Hydraulic system	litres	70	70	
Fuel tank	litres	80	80	
Engine oil sump	litres	11.2	11.2	
Axle oil (front)	litres	4.4	4.4	
Axle oil (rear)	litres	6.05	6.05	

STANDARD EQUIPMENT			
	TM180	TM220	
GENERAL MACHINE FEATURES	Parallel lift geometry, JCB hydraulic Quickhitch, articulated steering, front and rear fenders, one piece opening bonnet, recovery hitch, lifting lugs, temperature controlled engine cooling fan, HBCV, End damping on extend/retract, LLMC system.		
TRANSMISSION	Two speed, neutral start, inching function, forward/reverse switch on joystick control lever		
BRAKES	In board oil immersed brakes with combined handbrake; spring actuated hydraulic released parkbrake		
ELECTRIC	Full road lighting, direction indicators and battery isolator.		
HYDRAULICS	Single lever servo control, gear pump with priority steer, emergency steer back up, flow sharing		
САВ	ROPS/FOPS safety structure, roof widow, fully opening RH window, fully adjustable seat, interior light, adjustable tilt steering column, safety glass, LCD display, front and rear screen wash/wipe, 3 speed heater fan with replacable filters, radio aperture, sun visors		

OPTIONAL EQUIPMENT	
	TM180 / TM220
GENERAL MACHINE FEATURES	"LSD axles, locking differential front axle with on the fly operation, immobiliser, full-LiveLink, under bonnet battery isolator, worklights, bio oil, aircon, adjustable constant flow, 3-stage SRS, Rockinger Tow hitch 3.5t, rear aux. hydraulics, rear electrical connection, creep speed, stowage box, roof wash wiper".  See dealer for full list.





ONE COMPANY, OVER 300 MACHINES.

Your nearest JCB dealer

### **Telescopic Wheeled Loader TM180/TM220**

Gross power: TM180 (48kW/64hp) TM220 (55.4kW/74hp) Pay load: TM180 1800kg TM220 2200kg Lift height: TM180 4,534mm TM220 4,562mm

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

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