



TELESCOPIC WHEEL LOADER | TM180/TM220

Gross power: TM180 (48kW/64hp), TM220 (54.5kW/74hp) Payload: TM180 1800kg, TM220 2200kg Lift height: TM180 4534mm, TM220 4603mm



PRODUCTIVE PERFORMANCE.

THE JCB TM180 AND TM220 ARE HIGHLY PRODUCTIVE AND MULTIFUNCTIONAL TELESCOPIC WHEEL 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.

Hydrostatic drive makes these models very easy to operate even for the inexperienced. That means there's less risk of overpowering the machine at a cost to fuel economy.



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.

2 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.

3 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.

5 So that you can tailor your telescopic wheel 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.

6 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.

7 Equip your telescopic wheel 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.

8 By splitting power between the transmission and the hydraulics, our inching pedal allows precise, efficient, stepless load handling.



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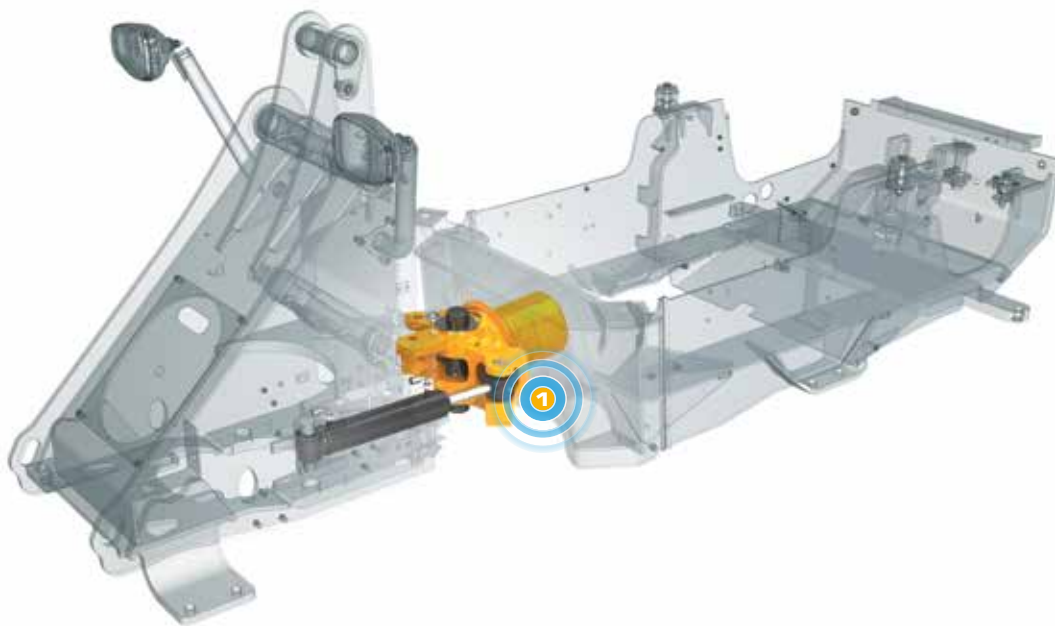
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QUALITY, RELIABILITY AND DURABILITY.

AT JCB, WE UNDERSTAND THAT A TELESCOPIC WHEEL LOADER IS A KEY PART OF ANY ON-SITE PROCESS. THAT'S WHY THE TM180 AND TM220 ARE BUILT ON A FOUNDATION OF QUALITY AND RELIABILITY, ENSURING THAT THEY'LL ALWAYS BE A KEY PART OF YOUR WORKING PROCESS.



We've used only the very finest engine, driveline and axle components on the TM180 and TM220, from suppliers like DANA and Bosch.



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° lateral oscillation to keep all 4 wheels on the ground

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



Quality design.

3 All JCB telescopic wheel 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.

5 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.

6 Precision machining provides high tolerances and accurate location of pins and bushes.

7 Finite 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 TM180 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.

In-cab noise levels on these machines are lower than outgoing models.

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.
- 3 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.
- 4 With a fully opening right-hand window operators can enjoy increased ventilation whilst still being protected from dust.



In complete control.

5 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.

6 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 WHEEL 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.

1 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.

2 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.

3 Both machines have a cyclonic pre-filter which maximises air filtration and extends filter element service intervals significantly.

4 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.

The new Kohler engine designed by JCB does not use a Diesel Particulate Filter (DPF) or SCR, requiring Diesel Exhaust Fluid (DEF) level maintenance or heat-resistant lube oils. Thus reducing service and running costs.



SAFETY AND SECURITY.

BECAUSE SAFETY AND SECURITY ARE PARAMOUNT ON ANY FARM, TM180 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.

1 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.

2 We've fitted an in-cab electronic 2-stage quickhitch isolation system to prevent uncontrolled release of attachments.

3 Access steps are complemented by well positioned handles so that operators have three points of contact whenever they're entering or exiting the cab.

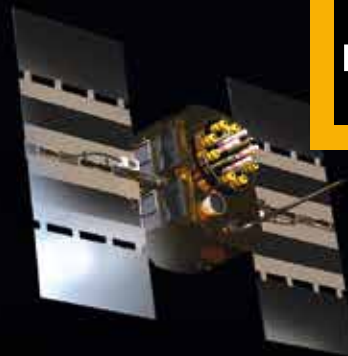


LIVELINK, WORK SMARTER.

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.

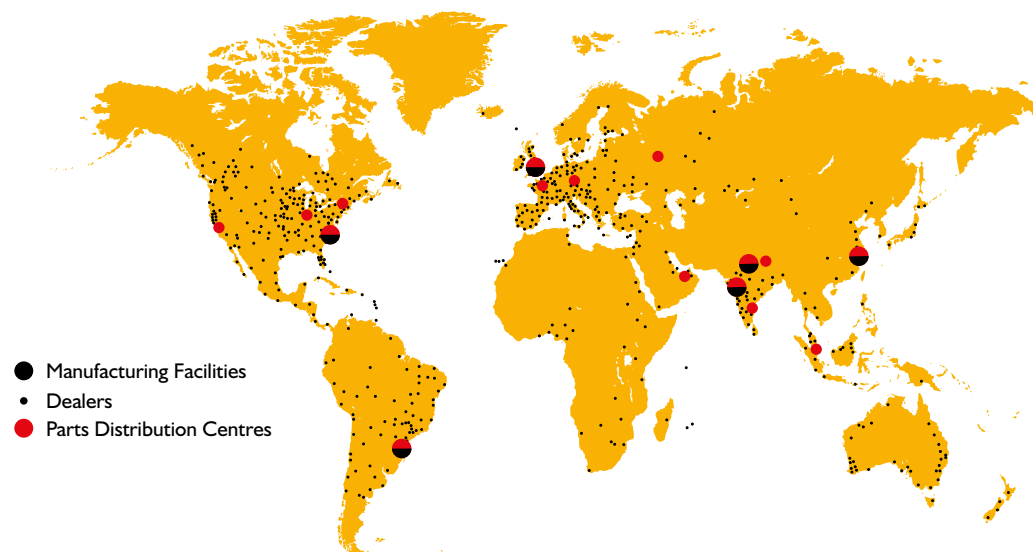


1 Our Technical Support Service provides instant access to factory expertise, day or night, while our Finance and Insurance teams are always on hand to provide fast, flexible, competitive quotes.

2 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.

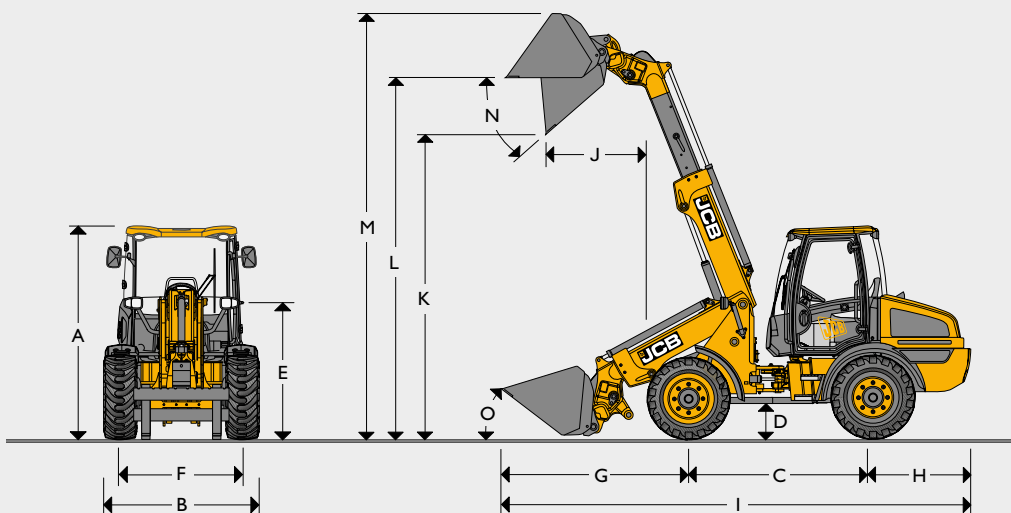


3 JCB Assetcare offers comprehensive extended warranties and service agreements, as well as service-only or repair and maintenance contracts. Irrespective of what you opt for, our Maintenance teams around the world charge competitive labour rates, and offer non-obligation quotations as well as fast, 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



| Machine Model | | | TM180 | TM220 |
|---------------|--------------------------------|---------|--------------|--------------|
| A | Overall height | mm | 2460 | 2642 |
| B | Overall width (over tyres) | mm | 1736 | 1904 |
| C | Wheelbase | mm | 2200 | 2205 |
| D | Ground clearance | mm | 330 | 330 |
| E | Height to top of boom pivot | mm | 1602 | 1667 |
| F | Wheel track | mm | 1396 | 1490 |
| G | Axle to shovel toe plate | mm | 2633 | 2558 |
| H | Axle to counterweight face | mm | 1268 | 1295 |
| I | Total length | mm | 6003 | 5998 |
| J | Dump reach | mm | 1202 | 1136 |
| K | Dump height | mm | 3573 | 3636 |
| L | Load over height | mm | 4299 | 4362 |
| M | Pin height | mm | 4707 | 4772 |
| N | Maximum dump angle | degrees | 43 | 43 |
| O | Roll back at carry | degrees | 41 | 41 |
| | Total length to front of hitch | mm | 4885 | 4885 |
| | Inside radius | mm | 2105 | 2090 |
| | Outside radius (edge of tyre) | mm | 3955 | 4030 |
| | Outside radius (over shovel) | mm | 4480 | 4755 |
| | Articulation angle | degrees | ±40 | ±40 |
| | Operating weight | kg | 5983 | 6495 |
| | Front axle weight | kg | 2725 | 2632 |
| | Rear axle weight | kg | 3258 | 3863 |
| | Tyres used for specification | | 340/80 R18 | 400/70 R20 |
| | Bucket used for specification | | 0.8m³ GP | 0.9m³ GP |
| | Hitch used for specification | | Pin and Cone | Pin and Cone |

ENGINE

| Machine Model | | TM180 | TM220 |
|---------------------|---------|----------------------|----------------------|
| Manufacturer | | JCB Diesel by Kohler | JCB Diesel by Kohler |
| Model | | KDI 2504 TCR | KDI 2504 TCR |
| Capacity | litres | 2.482 | 2.482 |
| Bore | mm | 88 | 88 |
| Stroke | mm | 102 | 102 |
| Aspiration | | Turbocharged | Turbocharged |
| Number of Cylinders | | 4 | 4 |
| Power Rating | | | |
| Gross Power | kW (hp) | 48 (64) @ 2200rpm | 54.5 (74) @ 2200rpm |
| Net Power | kW (hp) | 43.5 | 53 |
| Torque Rating | | | |
| Max Torque | Nm | 300 | 300 |

TRANSMISSION

| Machine Model | | TM180 | TM220 |
|-----------------------------|-----|----------------|----------------|
| Type | | Hydrostatic | Hydrostatic |
| Make | | Rexroth | Rexroth |
| Model | | A6VM – 2 speed | A6VM – 2 speed |
| Model (40 kph option) | | N/A | A6VM – 3 speed |
| Low range | kph | 6 | 6 |
| High range | kph | 20 | 20 |
| Max travel speed (optional) | kph | N/A | 40 |

AXLES

| Machine Model | | TM180 | TM220 |
|---------------------------|---------|---------------|-------|
| Type | | Straight beam | |
| Make | | Dana Spicer | |
| Model | | 111 | |
| Chassis angle oscillation | degrees | ± 10 | |

BRAKES

| Machine Model | | TM180 | TM220 |
|---------------|--|------------------------------------|-------|
| Service brake | | In board oil immersed | |
| Parking brake | | Spring actuated hydraulic released | |

NOISE AND VIBRATION

| | | TM180 | TM220 | Uncertainty | Measurement conditions |
|---------------------------------|------|-------|-------|-------------|---|
| Noise at the operator station | LpA | 76 | 77 | ± 1 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 | 104 | 104 | ± 1 dB | Guaranteed equivalent sound power (external noise) determined in accordance with the dynamic test conditions defined in 2000/14/EC. |
| Whole body vibration | m/s² | 0.66 | 0.65 | ± 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/s² | <2.5 | <2.5 | n/a | ISO 5349-2:2001 dynamic test conditions. |

SERVICE FILL CAPACITIES

| Machine model | | TM180 | TM220 |
|---------------------------------|--------|-------|-------|
| Hydraulic tank & transmission | litres | 70 | |
| Fuel tank | litres | 80 | |
| Engine oil sump | litres | 11.2 | |
| Axle oil (front) including hubs | litres | 4.4 | |
| Axle oil (rear) including hubs | litres | 6.05 | |

HYDRAULICS

| Machine model | | TM180 | TM220 |
|-----------------------|---------|-------------|-------|
| Pump type | | Single Gear | |
| Pump maximum flow | l/min | 64 | 89 |
| Pump maximum pressure | bar | 230 | 250 |
| Hydraulic cycle times | | | |
| Boom raise | seconds | 6.2 | 4.3 |
| Boom lower | seconds | 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 time | seconds | 29.0 | 21.5 |

ELECTRICAL SYSTEM

| Machine model | | TM180 | TM220 |
|-------------------|----------|-------|-------|
| System voltage | Volt | 12 | |
| Alternator output | Amp Hour | 80 | |
| Battery capacity | Amp Hour | 100 | |

TYRE OPTIONS – TM180

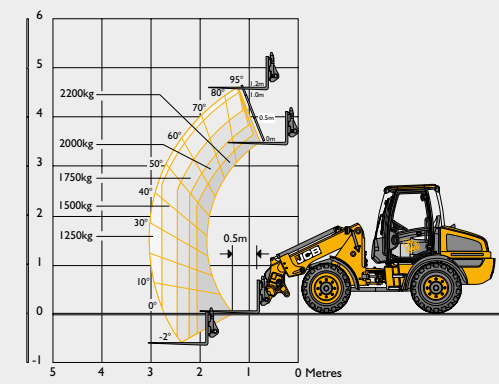
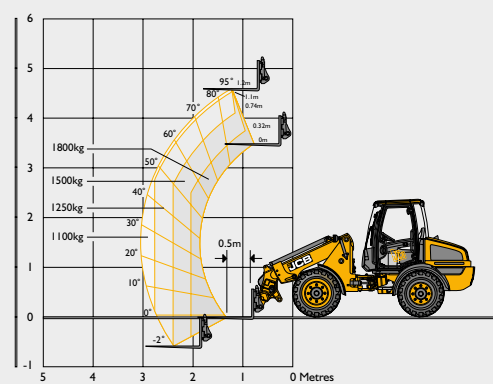
| Manufacturer | Size | Type | Application | Dimensional changes | |
|--------------|-------------|----------|-------------|---------------------|-----------------------|
| | | | | Overall height (mm) | Width over tyres (mm) |
| Dunlop | 335/80 R18 | SPT9 EM | EM | 2 | -25 |
| Dunlop | 365/70 R18 | SPT9 EM | EM | -8 | 44 |
| Dunlop | 405/70 R18 | SPT9 EM | EM | 15 | 88 |
| Dunlop | 335/80 R20 | SPT9 MPT | EM | 28 | -47 |
| Michelin | 340/80 R18 | XMCL | Ag | 0 | 0 |
| Michelin | 340/80 R18 | Bibload | Ag/EM | 2 | -3 |
| Michelin | 400/70 R18 | Bibload | Ag/EM | 2 | 96 |
| Nokian | 340/80 R18 | TRI 2 | EM | 7 | -13 |
| Camso | 12.5- 18 | SLR4 | EM | 6 | -25 |
| Camso | 12.5/80- 18 | SLR4 | EM | -9 | -40 |

TYRE OPTIONS - TM220

| Manufacturer | Size | Type | Application | Dimensional changes | |
|--------------|------------|----------|-------------|---------------------|-----------------------|
| | | | | Overall height (mm) | Width over tyres (mm) |
| Dunlop | 405/70 R18 | SPT9 EM | EM | -20 | -12 |
| Dunlop | 335/80 R18 | SPT9 MPT | EM | 1 | -89 |
| Dunlop | 365/70 R18 | SPT9 MPT | EM | 21 | -55 |
| Dunlop | 405/70 R20 | SPT9 MPT | EM | 14 | -11 |
| Michelin | 380/75 R20 | XMCL | Ag | 0 | -19 |
| Michelin | 400/70 R20 | XMCL | Ag | 0 | 0 |
| Michelin | 420/75 R20 | XMCL | Ag | 27 | 6 |
| Michelin | 340/80 R20 | Bibload | Ag/EM | -7 | -59 |
| Michelin | 400/70 R20 | Bibload | Ag/EM | -1 | -9 |
| Nokian | 340/80 R18 | TRI 2 | EM | -28 | -69 |
| Nokian | 360/80 R20 | TRI 2 | EM | 14 | -55 |

LOADER PERFORMANCE

| Machine model | | TM180 | TM220 |
|---|----|-------|-------|
| Maximum lift capacity to full height with forks | kg | 1800 | 2200 |
| Lift capacity at full reach | kg | 1100 | 1250 |
| Lift height | mm | 4534 | 4562 |
| Maximum forward reach | mm | 3107 | 3041 |
| Straight tipping load – forks with 500mm load centre | kg | 2950 | 3250 |
| Full turn tipping load – forks with 500mm load centre | kg | 2250 | 2750 |
| Full turn tipping load – forks calculated @ 80% load factor | kg | 1800 | 2200 |
| Full turn tipping load – forks calculated @ 60% load factor | kg | 1350 | 1650 |
| Breakout force – tearout | kN | 41.4 | 49.9 |



STANDARD/OPTIONAL EQUIPMENT

| | TM180 | TM220 | | TM180 | TM220 | | TM180 | TM220 |
|--|-------|-------|-------------------------------------|-------|-------|--|-------|-------|
| ENGINE AND COOLING | | | CAB | | | CHASSIS AND BODYWORK | | |
| 64hp JCB engine | • | × | ROPS/FOPS safety structure | • | • | Articulated steering | • | • |
| 74hp JCB engine | × | • | Laminated screen | • | • | Centre pivot oscillation | • | • |
| Cyclonic air filter | • | • | Fully adjustable mechanical seat | • | • | Plastic front and rear fenders | • | • |
| Widecore cooling pack | • | • | Air suspension seat | + | + | Fixed bottom step | • | • |
| | | | Interior light | • | • | Recovery hitch | • | • |
| TRANSMISSION / AXLES | | | Tilt and telescopic steering column | • | • | Grease gun and cartridge | + | + |
| Hydrostatic transmission | • | • | Front and rear wash / wipe | • | • | Rockinger tow hitch | + | + |
| 20kph travel speed | • | • | 3 speed heater fan | • | • | Rear electrics | + | + |
| 40kph travel speed | × | + | Air conditioning | + | + | Rear auxiliary | + | + |
| Transmission inching on footbrake | • | • | RH opening window with lock back | • | • | | | |
| Forward / reverse controls on joystick | • | • | LH opening door with door lock back | • | • | LOADER | | |
| In board oil immersed disc brakes | • | • | LH Sliding window | + | + | Centre mounted single stage telescopic boom | • | • |
| Standard open differential axles | + | + | Single lever joystick controls | • | • | Parallel lift | • | • |
| Diff lock axles | + | + | Loader control isolator | • | • | Pin and Cone carriage | + | + |
| Limited slip differentials axles | + | + | External rear view mirrors | • | • | Eurohitch | + | + |
| Creep speed including hand throttle | + | + | Front sun blind | • | • | JCB compact tool carrier | + | + |
| | | | Fire extinguisher | + | + | Electrical in cab quickhitch pin isolation | • | • |
| HYDRAULICS | | | Additional storage box | + | + | | | |
| Servo controls | • | • | Roof wiper | + | + | | | |
| Proportional boom and auxiliary controls | • | • | | | | | | |
| Adjustable constant flow hydraulics | • | • | ELECTRICAL | | | | | |
| Single gear pump | • | • | Road lights front and rear | • | • | | | |
| Priority steer valve | • | • | Reverse lights | • | • | | | |
| Hose burst check valves | • | • | Battery isolator | • | • | | | |
| JCB Adaptive Load Control | • | • | Direction indicators | • | • | | | |
| JCB Smoothride system | + | + | Rotating beacon | + | + | | | |
| Biodegradable hydraulic oil | + | + | Front and rear worklights (Halogen) | + | + | | | |
| | | | Boom worklights (Halogen) | + | + | | | |
| | | | Twin reverse light kit | + | + | | | |
| | | | Reverse fog light kit | + | + | | | |
| | | | LiveLink telematics | • | • | | | |
| | | | LED worklights | + | + | | | |
| | | | LED Boom worklights | + | + | | | |
| | | | 12v in-cab power socket | • | • | | | |
| | | | Block heater (230V) | + | + | STANDARD | • | |
| | | | Key immobiliser | + | + | OPTIONAL | + | |
| | | | Keypad immobiliser | + | + | NOT AVAILABLE | × | |
| | | | Radio speaker installation | + | + | NB. Regional variations may apply to standard and optional equipment | | |





ONE COMPANY, OVER 300 MACHINES.

Your nearest JCB dealer

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