



ARTICULATED TELESCOPIC HANDLER | TM320

Gross power: 125hp (93kW) | Lift capacity: 6,390lb | Lift height: 17ft 1in



JCB ARTICULATED TELESCOPIC HANDLER – ULTIMATE PRODUCTIVITY.

JCB'S RANGE OF AGRICULTURAL ARTICULATED TELESCOPIC HANDLERS IS DESIGNED TO PROVIDE SUPREME PRODUCTIVITY AND VERSATILITY ON THE FARM. PUT SIMPLY, OUR DESIGN CENTERS AROUND A HIGHLY MANEUVERABLE ARTICULATED MACHINE WITH PLENTY OF POWER AND CAPACITY.

The TM320 Agri is built with one thing in mind: productivity, and lots of it. As ever with JCB, innovation is at the very heart of the machine, with features like Torquelock, servo controls, Smooth Ride and clever hydraulics.

The new TM320 is now Tier 4 Final compliant and with a reaching capability of 17ft 1in and lifting capacity of 6,390lb it's more than a match for a tractor loader or wheeled loader. It has the versatility of a wheeled loader with the reach and lift characteristics of a telehandler all in one package, so if you're looking for all the familiarity of a central seating position combined with superb reliability, durability, maneuverability, climbing power and great versatility, this is a perfect machine for your materials handling application.

New Features include:

- Next generation In-Cab display incorporating In-Cab daily checks including coolant level, engine oil level and time until transmission oil check is required.
- Hydraulic reversing fan option.
- Wide-core radiator, AC condenser and re-designed cooling pack for optimal cooling.
- Updated styling including hood decal and grille.
- Right-hand side fully folding back window.
- Tier 4 Final compliant engine delivering 125hp (93kW).
- Superior after-treatment solution, utilising JCB EcoMAX, SCR only (no DPF).
- Variable auxiliary flows in cab.





STRENGTH YOU CAN RELY ON.

THE TM320 HAS BEEN DESIGNED AND BUILT FROM SCRATCH TO DELIVER THE STRENGTH AND POWER YOU'RE LOOKING FOR IN AN ARTICULATED MACHINE. NO COMPROMISE.

Proven reliability

1 We stress test across a lifetime of cycles to emulate the most arduous digging and dump situations. It's your guarantee of performance over thousands of hours.

2 To prove how good our EcoMax engines are, we've tested them for 110,000 hours in 70 different machines across the toughest applications and environments.

3 At JCB, we make our own hydraulic cylinders, cabs, axles, transmissions and engines – all designed to work in perfect harmony for optimum reliability.

Structural strength

4 The TM320's tough, inverted-U-shaped boom pressing features fully welded closing plates for ultimate strength, and is mounted into a heavy-duty loader tower.

5 A heavy-duty center joint takes both vertical and horizontal loadings for maximum durability and rigidity.

6 Our high-strength axle mounts provide maximum support and rigidity for the purpose-designed JCB axles.





Well protected

- 7 The JCB TM320's robust cast rear counterweight helps prevent impact damage.
- 8 Recessed rear lights mounted above the counterweight are well protected.
- 9 The TM320's under-machine protection plates shield the engine and driveline from impact damage.



The hydraulic hoses are routed within the main boom structure to guard against damage.

THE POWER TO PERFORM.

THE CLASS LEADER WHEN IT COMES TO LIFT CAPACITY AND TEAROUT FORCE, COMBINED WITH 17FT 11IN LIFT HEIGHT, 9FT 10IN FORWARD REACH AND THE SUPERB JCB ECOMAX ENGINE. THERE'S NOTHING THE TM320 CAN'T HANDLE.

Our unique oscillating center pivot point makes the most of traction by maintaining even weight distribution over each of the four wheels. It also gives extra stability and ride comfort.

JCB EcoMAX Engine

1 TM320 features our EcoMAX Tier 4 Final engine with variable geometry turbo, giving increased performance at low engine speed for improved cycle times and tractive effort. This 4.4 liter engine delivers a massive 550Nm torque at low engine speeds for optimum response.



Traction and travel

2 The JCB TM320 gives you ultimate traction and performance in soft, muddy ground, thanks to optional limited slip differentials and 4WD as standard.



3 JCB's Smooth Ride System (SRS) allows the boom and load to move independently of the chassis for better load retention, increased operator comfort and reduced stress on structures. When roading, the TM320 also reduces fuel consumption thanks to automatic TorqueLock in fourth, fifth and sixth gears.



Hydraulics and versatility

4 The TM320's variable flow auxiliary hydraulics are easy to use, designed to maximize productivity and efficiency.

This flow sharing system with a variable flow piston pump also allows for multiple functions to be performed at the same time, reducing cycle times.

5 The ability to change flow rate on-the-go is perfect for straw spreader or sweeper use, while the second boom auxiliary option caters for a wide range of attachments.

Loading and operation

6 Lock-up in the torque converter in gears 4, 5 and 6 improves productivity, fuel economy and efficiency.

7 An additional benefit of the TM's articulated steering is the built-in sideshift which makes it easier to position attachments and place loads accurately.

8 The TM320's foot brake features a selectable transmission dump for superb control when loading or rehandling.



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Quickhitch options include JCB Q-fit and industrial type.



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IN CONTROL, IN COMFORT.

THE TM320 MAKES LIFE EASIER. FIRST OF ALL, IT'S EASY TO OPERATE THANKS TO ERGONOMIC, INTUITIVE CONTROLS AND INTELLIGENT FEATURES. SECONDLY, IT GIVES A COMFORTABLE ENVIRONMENT TO WORK IN, MAKING OPERATORS MORE PRODUCTIVE.

At your command

1 From the high, centrally mounted driving position you're in complete control, with a low boom pivot and large glass areas giving an unhampered 360° view.

Eliminating the need for exhaust after treatment means the TM320's EcoMAX engine is extremely compact, so there's no compromise on either visibility or maneuverability.

2 Constant flow hydraulics are intuitive to use, with an in-cab display of the flow rate which can be adjusted on the go. Next generation screen shows fuel use screen, information screen and daily check screen.

3 The TM320's Smooth Ride System (SRS) is easy to operate via a rocker switch. It can be auto-engaged by travel speed or constantly activated.

4 Manual and Automatic transmission modes put the operator in control of increased transmission performance.

5 The operator can also limit proportional auxiliary flow to adapt the TM320 for using specialist attachments.



A seat-mounted single-lever joystick features gear change for ease of use and improved multi-functioning.



Sitting comfortably

- 6 The TM320 cab is large and roomy with plenty of storage for home comforts and work essentials.
- 7 The TM320 armrest console folds back so you can easily access the right hand window.
- 8 Boom end damping on lower and retract reduces shock to the operator and the machine itself.



A fully adjustable telescopic steering column allows you to fine tune the driving position.



Also fully adjustable, the supportive mechanical or air suspension seats give real comfort.

SERVICING MADE EASY.

THE TM320 IS LOW MAINTENANCE AND EASY TO SERVICE, WHICH MEANS LESS DOWNTIME, AND MORE WORKING AND EARNING TIME. IT'S ALSO DESIGNED FOR CONSUMMATE SAFETY, PROTECTING BOTH YOU AND YOUR INVESTMENT.

Maintenance made easy

1 Many competitor machines require a diesel particulate filter (DPF) to meet Tier 4 Final legislation. Instead, a TM320 uses a sealed-for-life SCR system. The diesel & DEF (Diesel Exhaust Fluid) tanks are easily accessible as well as all daily check points which all can be carried out from ground level.

2 The wide-core single-faced cooling pack delivers maximum performance and lets small materials pass through. An optional reversing fan is available to allow simple and easy cleaning of the cooling pack.

A cyclonic air cleaner reduces debris build up in the air filter while an air intake scavenge system removes debris, extending service intervals.



3 TM320's wide-opening rear hood gives clear access to service points, grease points are easily accessible and no tools are required to access the battery.

4 TM320's self-lubricating boom wear pads and dry boom lubrication provides virtually maintenance-free operation.



Daily checks can be carried out at ground level with the boom on the floor for safety. The fuel tank can also be filled from ground level.



Keeping you safe

- 5** TM320 offers superb all-round visibility: high, central driving position; expansive glass panels and roof glass; narrow cab pillars; and sloping rear hood.
- 6** Our in-cab, electronic 2-stage quickhitch isolation protects against uncontrolled release of attachments.
- 7** The operator presence switch disables drive on leaving the seat, preventing accidental operation.
- 8** TM320 features a reverse alarm as standard.



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A SMART INVESTMENT.

WHEN YOU OWN A JCB, YOU OWN A MACHINE THAT'S RENOWNED FOR HAVING HIGH RESIDUAL VALUES AROUND THE WORLD. COMBINED WITH EFFICIENT DESIGN THAT SAVES YOU MONEY, IT'S A REAL BUSINESS ASSET.

Torque converter locking on the transmission gives 100% efficiency for improved fuel economy.



EcoMAX saves you money

- 1 The TM320 EcoMAX engine uses less fuel than our Tier 3 engines, saving you money.
- 2 EcoMAX also produces high levels of power and torque at engine speeds as low as 1500-1600 rpm for fuel-efficient matching of transmission and hydraulics.

Even more savings

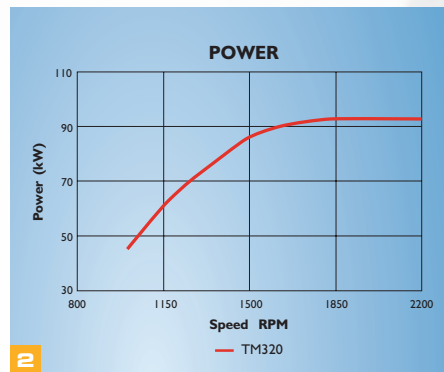
- 3 TM320's load-sensing hydraulics only consume power on demand, conserving fuel.

A business asset

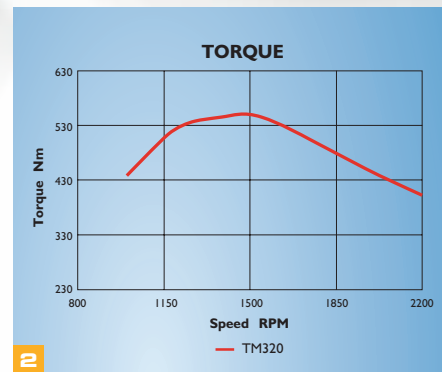
The proven demand for JCB brand machines, supported by our legendary productivity and build quality, equals high residual value.

The TM320's EcoMAX engine can be adapted to run on lower-grade fuels, allowing it to be resold across different territories for further improved residuals.

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THE NEW JCB ECOMAX ENGINE – TIER 4 FINAL COMPLIANT.

THE NEW TIER 4 FINAL ENGINE MEETS THE LATEST EPA STAGE OF ENGINE EMISSIONS LEGISLATION DESIGNED TO REDUCE POLLUTION FROM VEHICLES.



Total protection

The JCB EcoMAX Tier 4 Final Engine features an advanced combustion system that gives very low emissions and fuel consumption.

The Tier 4 Final engine does not require a diesel particulate filter, providing for less serviceable parts etc.

It has a sealed-for-life SCR system which has numerous benefits including the fact that there is no loss of productivity due to DPF regeneration.

The SCR system integrates a dosing system that sprays a fluid called Diesel Exhaust Fluid (DEF) into the exhaust gases as they leave the engine.

DEF is stored in a dedicated tank on the machine.

It provides better resale for Tier 4 Final engines to non Tier 4 Final regions with a recalibration kit being made available.

LIVELINK, WORK SMARTER.

JCB LIVELINK IS AN INNOVATIVE SOFTWARE SYSTEM THAT LETS YOU MONITOR AND MANAGE YOUR MACHINES REMOTELY – ONLINE, BY EMAIL OR BY MOBILE PHONE. LIVELINK GIVES YOU ACCESS TO A WHOLE HOST OF USEFUL DATA, INCLUDING MACHINE ALERTS, SERVICE DATA AND EVENT HISTORY INFORMATION. ALL YOUR MACHINE INFORMATION IS HANDLED AT A SECURE DATA CENTER FOR YOUR PEACE OF MIND.

Productivity and cost benefits

Machine location information can improve fleet efficiency and you may even enjoy reduced insurance costs courtesy of the added security that LiveLink brings.

Note : Please consult your local dealer for LiveLink availability



Maintenance benefits

JCB LiveLink makes it easy to manage machine maintenance. Accurate hours monitoring and service alerts improve maintenance planning, and real-time location data helps you manage your fleet. You'll also have access to critical machine alerts and maintenance history records.



Security benefits

Keep your machine operating safely with JCB LiveLink. Real-time geofencing alerts tell you when machines move out of predetermined operating zones, and real-time curfew alerts inform you if machines are being used when they're not supposed to be. Real time location information helps you store your machines in the safest places.



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.

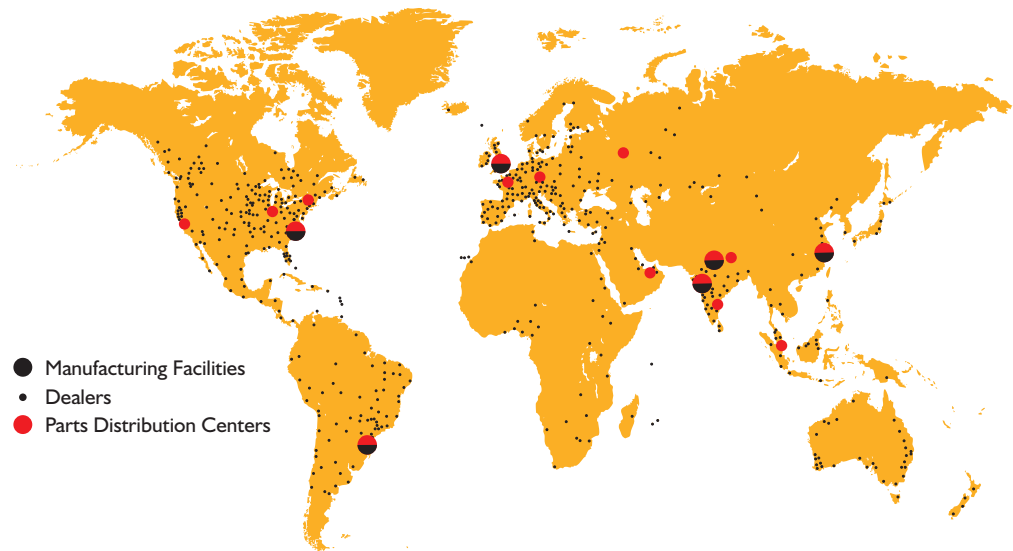


1 Our Technical Support Service provides instant access to factory expertise, day or night, while our Finance and Insurance teams are always on hand to provide fast, flexible, competitive quotes.

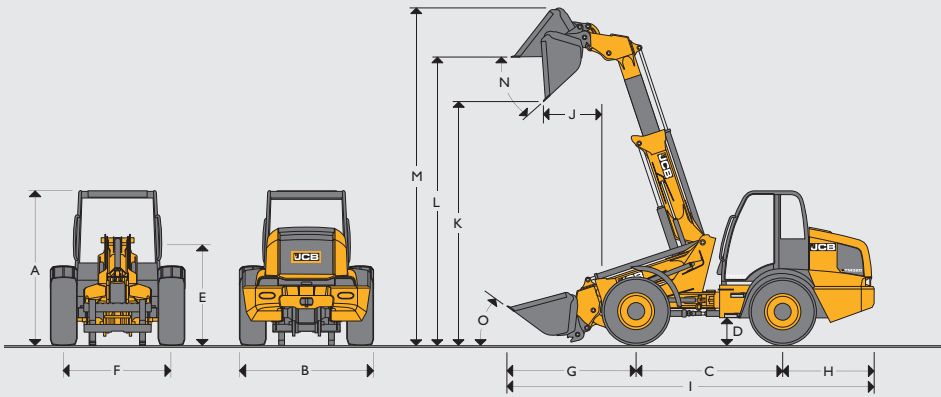
2 The global network of JCB Parts Centers is another model of efficiency; with 16 regional bases, we can deliver around 95% of all parts anywhere in the world within 24 hours. Our genuine JCB parts are designed to work in perfect harmony with your machine for optimum performance and productivity.



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.



STATIC DIMENSIONS



Machine model			TM320
A	Overall height	ft-in (mm)	8-10 (2703)
B	Overall width (over tires)	ft-in (mm)	7-8 (2350)
C	Wheelbase	ft-in (mm)	8-2 (2550)
D	Ground clearance	ft-in (mm)	1.5 (444)
E	Height to top of boom pivot	ft-in (mm)	6-0 (1835)
F	Wheel track	ft-in (mm)	6-1 (1870)
G	Axle to shovel toe plate	ft-in (mm)	7-7 (2316)
H	Axle to counterweight	ft-in (mm)	7-0 (2143)
I	Total length	ft-in (mm)	23-0 (7011)
J	Dump reach	ft-in (mm)	2-3 (686)
K	Dump height	ft-in (mm)	13-10 (4238)
L	Load over height	ft-in (mm)	16-5 (5026)
M	Pin height	ft-in (mm)	19-4 (5892)
N	Max dump angle	degrees	49
O	Roll back at carry	degrees	29
	Inside radius	ft-in (mm)	6-6 (2001)
	Outside radius (edge of tire)	ft-in (mm)	14-3 (4350)
	Outside radius (over shovel)	ft-in (mm)	15-2 (4633)
	Articulation angle	degrees	±43°
	Operating weight	lb (kg)	17151 (7780)
	Front axle weight	lb (kg)	6327 (2870)
	Rear axle weight	lb (kg)	10824 (4910)
	Tires used for specifications		Michelin XMCL 460/70 R24
	Bucket used for specification		1.3 yd ³
	Hitch used for specification		JCB Q-fit

*Please note total length: machine fitted with standard bucket – boom fully down, shovel crowded fully back

ENGINE

Machine model		TM320
Manufacturer		JCB
Model		ECOMAX
Capacity	ltr (in ³)	4.4 (269)
Bore	in (mm)	4 (103)
Stroke	in (mm)	5 (132)
Aspiration		Turbocharged/charge cooled
No. of cylinders		4
Power rating		
Max. power to SAE J1995/ISO 14396	hp (kW)	125 (93) @ 2200 rpm
Torque rating		
Max. torque	Nm (lbf ft)	550 (406) @ 1500 rpm

TRANSMISSION

Machine model		TM320
Type		Powershift
Make		JCB
Model		PS760 - 6 Speed
Max travel speed	mph (kph)	25 (40)

AXLES

Machine model		TM320
Type		Epicyclic hub reduction
Make		JCB
Model		Torque proportioning/LSD option
Overall axle ratio/ drop box ratio		13.71
Chassis angle oscillation	degrees	±10°
Max travel speed	mph (kph)	25 (40)

BRAKES

Machine model		TM320
Service brakes		In board oil immersed brakes
Parking brake		Cable operated disc brake on transmissions output shaft

SERVICE FILL CAPACITIES

Machine model		TM320
Hydraulic tank	gal (liters)	25 (97)
Fuel tank	gal (liters)	42 (160)
Engine oil sump	gal (liters)	3.7 (14)
Axle oil (front) including hubs	gal (liters)	5.25 (20)
Axle oil (rear) including hubs	gal (liters)	5.25 (20)
Diesel exhaust fluid	gal (liters)	9.5 (36)
Transmission	gal (liters)	5.25 (20)

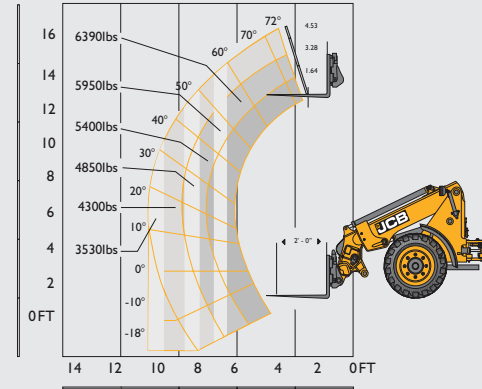
HYDRAULICS

Machine model		TM320
Pump type		Variable displacement piston pump
Pump max. Flow	gpm (l/min)	37 (140)
Pump max. Pressure	psi (bar)	3336 (230)
Hydraulic cycle times		
Boom raise	seconds	5.5
Boom lower	seconds	6.0
Extend	seconds	3.5
Retract	seconds	2.7
Bucket dump	seconds	2.8
Bucket crowd	seconds	2.8
Total cycle time	seconds	23.3

ELECTRICAL SYSTEM

Machine model		TM320
System voltage	Volt	12
Alternator output	Amp Hour	150
Battery capacity	Amp Hour	120

LOADER PERFORMANCE



Machine model		TM320
Max lift capacity to full height with forks @ 24in load centers	lb (kg)	6390 (2904)
Lift capacity at full reach	lb (kg)	3530 (1601)
Lift height	ft-in (mm)	17-1 (5200)
Maximum forward reach	ft-in (mm)	9-10 (2950)
Full turn tipping load - forks with 24in load center*	lb (kg)	8644 (3921)
Full turn tipping load - forks calculated @ 80% load factor*	lb (kg)	6915 (3137)
Full turn tipping load - forks calculated @ 60% load factor*	lb (kg)	5186 (2352)
Breakout force - tearout	lb (kg)	13800 (6260)

**Full Turn Tipping Load with forks and direct mount to Q-Fit carriage to EN474 (ISO 14397)

TIRE OPTIONS

TM320				
Manufacturer	Size	Type	Dimensional changes	
			Overall height in (mm)	Width over tires in (mm)
Michelin	460/70 R24	XMCL	0	0
Michelin	500/70 R24	XMCL	+1 (+24)	+1.5 (+38)
Michelin	15.5 R25	XHA	-0.2 (-5)	-3.4 (-86)
Michelin	15.5 R25	XTLA	-0.35 (-9)	-3.4 (-86)

STANDARD/OPTIONAL EQUIPMENT

STANDARD/OPTIONAL EQUIPMENT		STANDARD/OPTIONAL EQUIPMENT		STANDARD/OPTIONAL EQUIPMENT	
Engine and cooling		Cab		Electrical	
125hp JCB Engine	●	ROPS/FOPS safety structure	●	Road lights front and rear	●
Cyclonic air filter	●	Laminated screen	●	Reverse lights	●
Air intake scavenge system (engine fan driven)	●	Fully adjustable mechanical seat	●	Battery isolator	●
Widecore cooling pack	●	Air suspension seat	○	Direction indicators	●
Auto reversing hydraulic fan	○	Interior light	●	Rotating beacon	○
		Tilt and telescope steering column	●	Front and rear worklights (LED)	○
		Adjustable joystick control console and armrest	●	Boom worklights (LED)	○
Transmission / Axles		Front and rear wash/wipe	●	Twin reverse light kit	○
6 speed powershift transmission	●	3 speed heater fan	●	LiveLink telematics	●
Lock-up torque converter in gears 4 - 6	●	Air conditioning	○		
25mph (40kph) travel speed	●	LH opening door with door lock back	●	Chassis and Bodywork	
Transmissions disconnect on footbrake	●	RH opening window	●	Articulated steering	●
Forward / reverse controls on joystick	●	Single lever joystick controls (seat mounted)	●	Center pivot oscillation	●
Column mounted transmission selector	○	Loader control isolator	●	Plastic front and rear fenders	●
In board oil immersed disc brakes	●	External rear view mirrors	●	Fixed bottom step	●
Limited slip differentials front and rear	○	Additional storage box	○	Full width rear counterweight	●
		Variable auxiliary control	○	Recovery hitch	●
Hydraulics		Color LCD information display	●	Prop shaft guard	●
Servo controls	●	Daily checks screen	●	Front screen guard	○
Flow sharing hydraulics	●	Fuel usage and range menu	●	Roof screen guard	○
Proportional boom and auxiliary controls	●	Front sunblind	●	Exterior deluxe mirror	○
Adjustable constant flow hydraulics	●	Roof sunblind	●		
Variable displacement piston pump	●	Instantaneous fuel consumption menu	●	Loader	
Priority steer valve	●	Average fuel consumption menu	●	Center mounted single stage telescopic boom	●
Hose burst check valves	●	110V grid heater	●	Parallel lift	●
JCB Smoothride system	○	110V block heater	○	End damping on boom lower and retract	●
		In cab stowage box	○	JCB Q-fit carriage	●
		Steering column mounted forward/reverse lever	○	Industrial carriage	○
		Auxiliary pressure release switch	○		

● – Standard, ○ – Option, X – Not available





ONE COMPANY, OVER 300 MACHINES.

Your nearest JCB Dealer

TM320 Articulated Telescopic Handler

Gross power: 125hp (93kW) Lift capacity: 6,390lb Lift height: 17ft 1in

JCB North American - Headquarters

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Download the very latest information on this product range at agriculture.jcbna.com

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