



NEW 540-180 Hi-Viz Launch



540-180 HiViz Launch –EU Regions

The 540-180 Loadall is the latest addition to JCB's extensive range of Hi-Viz telescopic handlers for the construction and rental market sectors. It has been designed in direct response to customer demand for increased visibility with the following features and benefits. Production of the 540-170 will continue for the foreseeable future for demanding applications such as bucket work.

New Features + Benefits

- Best in class capacity at reach with 1t
- Improved visibility - 20% reduced area over the boom
- Improved off side and rear $\frac{3}{4}$ visibility
- Multi lever command control hydraulic system common with the 540V140 provides extremely precise load placement and best in class controllability
- Optional single lever servo command control system with light and easy functionality
- New 4 stage synchronised boom extend/retract provides fast and efficient load placement
- Light yet strong telescopic boom design with innovative chain adjustment designed to reduce maintenance time
- Smart Power 55Kw (75hp) Stage 3b T4F turbocharged JCB EcoMAX engine produces high torque at low rpms
- 5% Increased lift height over the 540-170 with 2500Kgs to full height
- 7% Increased forward reach over the 540-170
- 12% greater efficiency when placing and 20% improved efficiency when roading compared to the 540-170
- 17% improved productivity when placing and 7% Improved productivity when roading compared to the 540-170
- Best in class SAE rating. Best in class 1000hr Service cost and time.
- Reduced weight/ width to reduce transportation costs with best in class tie down points.
- Reduced turning circle

NEW- 4 stage chain driven boom with synchronised extend/retract.

The 540-180 has a 4 stage boom with a synchronised extend/retract to provide fast and efficient placement (See Fig 1) This process of boom operation means boom extension markers are only required on the first inter therefore increasing the ease of operation.



Fig 1

The synchronised and simultaneous extend/retract is achieved through using one internal extension ram and chain driven outer boom sections (See Fig 2). This chain driven boom system provides extremely smooth and precise boom movements combined with low maintenance to maximise productivity and minimise downtime. To aid ease of use and routine maintenance there are various chain tension indicators and when tensioning is required, the lock nuts are easily accessible on top of the boom.

Note: the service schedule has been revised to reflect changes in procedures for the 540-180. Customers must be made aware of this revised schedule at point of installation.



NEW- SMARTPOWER technology is integrated into the new construction 540-180 and delivers the most benefits to the customers including reduced running costs, simplest maintenance and high torque performance.

1. 'Future-proofed' 55kW (74hp) EcoMAX Engine is fully compliant for Stage 3b Tier4F right through to 2019 (T5) – Simplest engine solution.
2. No DEF (Diesel Exhaust Fluid) & No DPF (Diesel Particulate Filter) means reduced complexity, fewer maintenance costs and no regeneration needed.

3. JCB Driveline Vertical Integration

- With a drivetrain built entirely by JCB, all components are perfectly matched to ensure peak engine and hydraulic performance.
- Award winning EcoMAX engine provides high torque at low revs needed for 85% of a duty cycle (dynamic lift and material re-handling).
- Outperforms 75kW competitors - 20% more tonnes moved per hour with 10.5% less fuel.
- Only OEM to design & manufacture Driveline
- 'One Stop Shop' for parts and service



4. Unmatched Residual Values

- De-emissionising of the engine allows for resale into regions with lower grade fuel.
- World Number 1 status ensures worldwide recognition and demand.
- Industry leading quality, strength and durability ensures long running life of a Loadall.



NEW- Single lever Servo Command Controls

The 540-180 will be fitted with an electric servo single lever joystick as standard as shown in Fig 3, which provides fully proportional control of all lifting functions. The electric servo joystick provides light and precise control of all the hydraulic services with minimal arm movement, therefore enhancing operator comfort and minimising daily fatigue.

For further increased ease of use, the stabiliser legs levers are paddle style levers, to provide light and fatigue free operation (See Fig 4).



Fig 3



Fig 4



NEW- Regenerative hydraulics (lower/retract)

The 540-180 is fitted with an innovative re-generation system that comes as standard with the single lever command control system which aids the lower and retract functions through the use of 'gravitational force'. This feature uses gravity to reduce the energy input required in the lower and retract operations. This reduces the energy consumption of the machine whilst also reducing cycle times to maximise productivity.

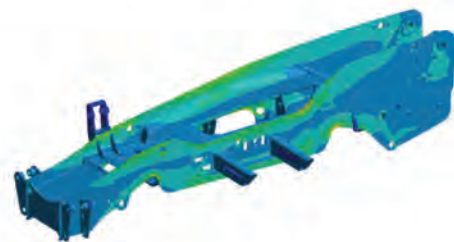


NEW - Auxiliary Hydraulic venting

The cab boasts a pressure release button for venting the hydraulic services ensuring quick and safe change of attachments

One piece chassis-

The JCB one piece chassis consists of 20mm side plates that provide both strength and rigidity whilst an optimum wheelbase gives the machine stability when operating at height. The integral hydraulic tank adds weight to the rear of the chassis to reduce the need for additional counterweight and increase the structural integrity. To maximise machine life, all hydraulic rams are centrally mounted on their pivot point.



The chassis incorporates a sway facility as standard which provides +/- 9 degrees of chassis levelling for operation on uneven terrain and maximum load retention.

Boom-

The boom structure as with all Loadall machines is strong and rigid. The 540-180 outer and intermediate boom sections are made from 6mm high grade steel and formed into a 'U' pressing with a thick closing plate (See Fig 5). This process produces a light yet extremely strong boom section to maximise lift capacity at height and reach.



Fig 5

The inner boom structure uses a similar 'U' shape pressing with a thick closing plate that incorporates the one piece boom nose to maximize structural strength and absorb the stresses encountered in heavy duty applications.

Spacious & ergonomic cab-

The cab is taken from the existing side engine Loadall range and retains the spacious and comfortable layout of existing models with plenty of elbow and leg room. The controls are logically displayed for effortless operation with the analogue dials grouped in one cluster for ease of reading.

JCB Tier4i 55kW EcoMAX engine-

Fitted to the 540-180 as standard is the 55kW (74 Hp) engine (dependent upon territory), delivers high torque at low revs. This is linked to a 4 speed JCB Powershift transmission which has a travel speed of 29kph.

Easy service access-

The JCB Loadall side engine design facilitates easy daily maintenance, with all daily checks being easily carried out at ground level. The wide opening bonnet gives excellent service access whilst for total service access, the engine pod and bonnet can be easily and quickly removed. The diesel filler cap is recessed into the cab structure for excellent protection and accessibility, whilst the hydraulic filler neck and cap are fully protected by the rear door.

JCB Livelink and immobiliser-

Dependent upon territory, the 540-180 will have both JCB Livelink and the immobiliser system fitted. The immobiliser has the same options as the existing Loadall machines with the unique key as standard and a keypad option.

EN15000 compliant for EU territories-

As with all EU territory JCB Loadalls, the 540-180 machine fully complies with the EN15000 directive. JCB supply the patented 'Adaptive Load Control' system to ensure the machine maintains longitudinal stability through a progressive cut-out of the hydraulic services. This ensures both safe and comfortable operation of the machinery whilst also maintaining productivity.

EN15830 compliant for EU territories-

As with all EU territory JCB Loadalls, the 540-180 machine fully complies with the EN15830 visibility directive.

Steering

The 540-180 is only available with manual steer. There is no auto steer option.

Standard Specifications

<u>SPECIFICATION</u>	<u>JCB 540-180</u>
Payload (kg)	4000
Lift height (m)	17.51
Lift capacity at full height (kgs)	2500
Maximum forward reach (m)	13.5
Lift capacity at full reach (kgs)	550
Overall height (mm)	2590
Overall width (mm)	2350
Outside turn radius (over tires)	3.75
Weight (kg)	11380
Engine	JCB EcoMax
Engine power (HP/kW)	75/55
Travel speed (kph)	29