HYDRAULIC EXCAVATOR | JS300 LC

Net engine power: 165kW (221hp)  Operating weight: 32430kg
PERFORMANCE AND PRODUCTIVITY.

BEFORE YOU BUY AN EXCAVATOR, YOU NEED TO KNOW IT’S GOING TO BE TOUGH ENOUGH TO PERFORM ANY JOB YOU ASK OF IT. FORTUNATELY, WITH A JCB JS300, STRENGTH AND DURABILITY COME AS STANDARD.

**Boom and dipper.**

1. A JCB JS300 reinforced boom and dipper is made of high tensile strength steel, with internal baffle plates for long life durability. In addition we fit heavy-duty wear strips at the dipper end for increased durability.

2. Our advanced manufacturing and assembly processes produce high precision and quality assembled components.

**Componentry.**

3. JCB JS300 boast the best components in the industry, including new Berco running gear, Kawasaki pumps and Kayaba main control valves.

The JCB 6-cylinder 165kW DIESELMAX engine uses a multi-stage fuel filtration system. This consists of water separation and first stage 10 micron filtration followed by 2 micron fine filtration and finally an ultra-fine 2 micron filter. This system protects against a wide range of types of contaminants in fuel.

We use Finite Element Analysis with extensive rig and endurance testing to make key components last longer.
**Structural strength.**

1. The high-strength undercarriage of a JCB JS300 uses a fully-welded X frame construction for long-term durability even in the most demanding applications.

2. A closed box section revolving frame increases strength and reduces stress. It is also highly resistant to impact damage.

3. The JS300’s high-strength rigid upper frame provides maximum durability and support.

4. Our stiff, durable door design gives great strength and rigidity.

**UNEARTHED: KEY FACT**
The JCB JS300 turret is welded to both the upper and lower undercarriage frame.

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**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.

**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, advanced ECU matching (pairs Livelink with the immobiliser or ECU).

**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.
MAXIMUM PRODUCTIVITY, MINIMUM SPEND.

IT’S MORE IMPORTANT THAN EVER TO SAVE MONEY AND TIME; THE JCB JS300 RANGE IS DESIGNED TO MAKE THE MOST OF BOTH.

Upping output.
1. With up to a massive 245kN of bucket tearout and fast cycle times, the JS300 is extremely productive in all applications.
2. Simultaneous tracking and excavating is smooth and fast with an intuitive multifunction operation.

Efficiency.
Advanced hydraulic technology ensures that the machines always start in idle for maximum fuel efficiency, contributing to fuel savings.

Optimised hydraulic pump settings and a revised spool configuration within the main valve block, only delivers the required oil flow, preventing wasted energy.

3. The new SMART Control electronics and JCB DIESELMAX engine benefit by working together to deliver a smooth high torque power band even at low engine speed up to the max of 165kW 221hp.
Stability, hydraulics and attachments.

1. JCB’s innovative hydraulic regeneration system means oil is recycled across the cylinders for faster cycle times and reduced fuel consumption.

2. A JCB JS300 has cushioned boom and dipper ends to prevent shock loadings, protect your machine and increase operator comfort.

3. A JCB JS300 has a solid, stable work platform for fast cycle times.

For ultra versatility, JCB offers a full list of auxiliary pipework options including hammer, auxiliary, merged and low flow.

UNEARTHED: KEY FACT
To save fuel, JCB Auto-Idle technology automatically reduces engine speed when hydraulics aren’t in use.
A COMFORTABLE FAVOURITE.

JCB EXCAVATORS ARE DESIGNED AROUND THE OPERATOR. THAT’S GOOD FOR THEM BUT EVEN BETTER FOR YOU; AFTER ALL, GREAT COMFORT AND EASE OF USE EQUALS GREAT PRODUCTIVITY.

Visibly better.

1. A 70/30 front screen split gives JCB JS300s excellent front visibility. A clear view of the front right track provides easy, safe trench digging and manoeuvring.

2. An innovative low-level bonnet provides excellent rearward visibility.

Comfortably in control.

3. The 7” display is easy to read in all light conditions, provides instant operational information, and has a customisable home screen.

JCB’s new basic tool select system (fitted as standard) allows the operator to set up the single direction auxiliary and hammer circuit to match flow the requirements. The selected flow is achieved by automatically adjusting the engine rpm when the hydraulic service is operated.
The working environment.

1. The JS300 creates a quieter working environment inside and out. Because we’ve reduced noise levels to 74dB(A) inside and 104dB(A) outside, you can use the machine at any location, any time.

JCB JS300 cabs use 6 viscous rubber mounts to minimise noise and vibration.

The positive pressure cab keeps out dirt and dust.

2. JCB’s climate control option offers a precisely controlled cab temperature with fresh or recirculated air. Demisting/defrosting functions keep a JS300’s front window clear.

3. There’s a spacious luggage tray behind the operator’s seat.

4. A large floor area with large high grip pedals gives easy and precise tracking.

A COMFORTABLE FAVOURITE

The JS300’s cab and controls are independently adjustable so that it’s easy to find the perfect operating position.

We offer tailored seating options to suit many different applications.
WE’VE DESIGNED JCB JS300 TO BE LOW MAINTENANCE AND EASILY SERVICEABLE. WHICH MAKES THEM AFFORDABLE, EFFICIENT AND HIGHLY PRODUCTIVE. HELPING YOU GET THE BEST SERVICE FROM YOUR MACHINE.

Easy does it.
1. The air filter on a JS300 is easily accessible, and a double-element construction simplifies cleaning.
2. The filters on a JCB JS300 (engine oil, hydraulic oil and fuel) are centrally located for fast, easy servicing.

Service Intervals

<table>
<thead>
<tr>
<th>Component</th>
<th>Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine oil and oil filter</td>
<td>Every 500 hours</td>
</tr>
<tr>
<td>Hydraulic oil</td>
<td>Every 5000 hours</td>
</tr>
<tr>
<td>Hydraulic oil filter</td>
<td>Every 1000 hours</td>
</tr>
</tbody>
</table>

By using graphite impregnated bronze bushes, we’ve reduced the JS300’s boom and dipper greasing intervals to 1000 hours for normal applications.
Here to help.

1. JCB’s Smart Control automatically checks the engine oil and engine coolant level on machine start up.

2. Because they’re mounted side by side on a JCB JS300, the engine radiator, hydraulic cooler and intercooler can be serviced individually yet cleaned easily.

3. Service your JCB JS300 with your local main dealer and our trained engineers can minimise downtime. Order genuine JCB parts online and, in 95% of cases, they’ll be with you next day. For extra security and machine protection, opt for a package like JCB LiveLink remote machine monitoring.

4. JCB JS300 bucketets open and close easily with gas-assisted cylinders, and the service bays are large and wide for good access.

UNERTHED: KEY FACT

JCB JS300 grease points are centralised for safe and easy access to high level pivots.
THE SAFE CHOICE.

ON-SITE SAFETY IS CRUCIAL, SO WE’VE DESIGNED THE JS300 TO INCORPORATE AS MANY CUTTING EDGE SAFEGUARDS AS POSSIBLE. IN SHORT, YOUR OPERATORS ARE IN SAFE HANDS.

1. JCB JS300 bonnet opens front-to-rear for easy and safe engine service access.
2. For extra peace of mind, JCB JS300 cabs are available with an optional external ROPS and FOPS protection.
3. JCB’s Safety Level Lock fully isolates hydraulic functions to avoid unintended movements. Our 2GO system means a JCB JS300 can only be started in a safe locked position via two separate inputs.
4. JCB JS300s have a large glass area and low bonnet line for superb visibility.
5. A JCB JS300’s steps and platforms have anti-slip punched steel plates for optimum grip, even in wet or icy conditions. Bolt-on plates have recessed bolts to reduce trip hazard.
6. JCB’s optional rear-view and optional side view camera displays an uninterrupted rearward and sideward view on the smart controller display.
7. Equip your JCB JS300 with a full set of side and rear view mirrors for all round visibility and safety compliance.

We’ve fitted as standard a bulk head heat shield between the pumps and the engine to guard against heat and noise.
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 cut-off alerts inform you of unauthorised usage. Further benefits include real-time location information, advanced ECU matching (pair Livelink with the immobiliser or ECU).
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 Assiccare 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 LIVE LINK and JCB ASSET CARE may not be available in your region, so please check with your local dealer.
**STATIC DIMENSIONS**

<table>
<thead>
<tr>
<th>Model</th>
<th>LC</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
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<td>B</td>
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<tr>
<td>C</td>
<td>2600</td>
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<td>D</td>
<td>3220</td>
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<td>E</td>
<td>3300</td>
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<td>D</td>
<td>3400</td>
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<td>F</td>
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<td>1198</td>
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<td>3251</td>
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<td>1011</td>
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<tr>
<td>M</td>
<td>3385</td>
</tr>
<tr>
<td>N</td>
<td>3344</td>
</tr>
</tbody>
</table>

**Engine**

- **Model**: JCB Dieselmax 672
- **Type**: 4-stroke, 6-cylinder in-line, common rail direct injection, turbocharged and intercooled diesel
- **Rated power**: 165kW (221 hp) at 1900 rpm
- **Piston displacement**: 7.8 litres
- **Air filtration**: Dry element with secondary safety element and in-cab warning indicator
- **Starting system**: 24 volt
- **Batteries**: 2 x 12 volt
- **Alternator**: 24 volt. 50 ampere

**Swing System**

- **Swing motor**: Axial piston type
- **Swing brake**: Hydraulic locking plus automatic spring applied disc type parking brake
- **Swing torque**: 100.3 kNm
- **Swing speed**: 9.4 rpm
- **Swing gear**: Large diameter, internally toothed. Fully sealed. Grease bath lubricated

**Undercarriage**

- **Carriage options**: LC = Long Carriage
- **Construction**: Fully welded, 'X' frame type with central bellygirdling and sloping sidemembers with dirt relief holes under top rollers
- **Recovery point**: Front and rear
- **Track shoe options**: 600mm
- **Upper and lower rollers**: Heat treated, sealed and lubricated
- **Track adjustment**: Grease cylinder type
- **Track Idler**: Sealed and lubricated with spring cushioned recoil
- **Track type**: Sealed and lubricated
- **No. of track guides**: 2 per side
- **No. of lower rollers**: 9 per side
- **No. of upper rollers**: 2 per side
- **No. of track shoes**: 50 per side

**Dipper lengths**

<table>
<thead>
<tr>
<th>Dipper lengths</th>
<th>2.5m</th>
<th>3.1m</th>
<th>3.7m</th>
</tr>
</thead>
<tbody>
<tr>
<td>E Transport length</td>
<td>10738</td>
<td>10800</td>
<td>10853</td>
</tr>
<tr>
<td>F Transport height</td>
<td>3375</td>
<td>3344</td>
<td>3344</td>
</tr>
</tbody>
</table>
## Specifications

### Hydraulic System

- **Open centered, negative control hydraulic system with twin variable flow piston pumps providing flow-on-demand.**
- **Pumps**
  - **Main pumps**: 2 variable displacement axial piston type.
  - **Servo pump**: Gear type.
  - **Maximum flow**: 2 x 252 l/min
  - **Control valve**: A combined four and five spool control valve with auxiliary service spool as standard.
- **Relief valve settings**
  - **Boom/Arm/Bucket**: 343 bar
  - **Swing circuit**: 290 bar
  - **Travel circuit**: 343 bar
  - **Pilot control**: 39 bar
  - **Filtration**
    - **In tank**: 150 micron, suction strainer.
    - **Main return line**: 10 micron, glass fibre element.
    - **Pilot line**: 10 micron, paper element.
    - **Hydraulic hammer return**: 10 micron, reinforced microform element.

### Excavator – Monoboom

- **6.2m Monoboom available along with a choice of dipper lengths to suit the requirements of reach, dig-depth, loadover height and tearouts.**
- **Reserve strength is built into the fully welded structures for hydraulic hammer and other arduous operations.**
- **Fabricated bucket tipping links are provided with a choice of lift points.**

## Controls

- **Excavator**
  - All servo lever operated to ISO control pattern, independently adjustable to the seat.
- **Tracks**
  - Individually servo operated by foot pedal or hand lever, and speed selection via machine control interface switch.
- **Auxiliary**
  - Via servo operated foot pedal.
- **Control isolation**
  - Via gate lock lever at cab entrance or rocker switch.
- **Engine speed**
  - Dial type throttle control plus servo lever mounted one-touch idle control or separate selectable auto-idle with adjustable time delay using SMART control.
- **Engine stop**
  - Ignition key operated and emergency shut down switch.
- **Horn**
  - Operated via servo lever mounted button.
**BUCKET AND ARM COMBINATION**

- **Bucket width** mm: 900, 1000, 1200, 1600, 1800, 2100
- **Bucket capacity** m³: 0.15, 0.48, 1.245, 1.45, 1.49, 1.61, 1.845
- **Bucket weight** kg: 817, 871, 979, 1046, 1093, 1133, 1177

**Dipper length**

- 2.5 m: □ □ □ □ □ □ □
- 3.1 m: □ □ □ □ □ □ □
- 3.7 m: □ □ □ □ □ □ □

- □ = Suitable for general excavating (materials up to 2000kg/m³)
- ■ = Suitable for light excavating (materials up to 1600kg/m³)
- ● = Suitable for grading & loading (materials up to 1200kg/m³)
- * = Bucket capacity recommendations with no quick hitch fitted
- + = Not recommended

**SERVICE CAPACITIES**

- **Fuel tank** Litres: 590
- **Engine coolant** Litres: 45
- **Engine oil** Litres: 25
- **Swing reduction gear** Litres: 14.5
- **Track reduction gear (each side)** Litres: 2.5
- **Hydraulic system** Litres: 480
- **Hydraulic tank** Litres: 239

**WEIGHTS AND GROUND BEARING PressURES**

<table>
<thead>
<tr>
<th>600mm shoes</th>
<th>700mm shoes</th>
<th>800mm shoes</th>
<th>900mm shoes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LC</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Machine weight kg: 31.140</td>
<td>31.490</td>
<td>32.278</td>
<td>32.687</td>
</tr>
<tr>
<td>Ground bearing pressure kg/pcm²: 0.61</td>
<td>0.52</td>
<td>0.47</td>
<td>0.42</td>
</tr>
</tbody>
</table>

Plus additional 800kg HD counterweight

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**WORKING RANGE MONOBOSOM 6.2M**

<table>
<thead>
<tr>
<th>Dipper length</th>
<th>2.5m</th>
<th>3.1m</th>
<th>3.7m</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Maximum digging reach mm</td>
<td>10591</td>
<td>10655</td>
<td>11291</td>
</tr>
<tr>
<td>B Maximum digging reach (on ground) mm</td>
<td>9871</td>
<td>10447</td>
<td>11096</td>
</tr>
<tr>
<td>C Maximum digging depth mm</td>
<td>6477</td>
<td>7062</td>
<td>7637</td>
</tr>
<tr>
<td>D Maximum digging height mm</td>
<td>9769</td>
<td>10130</td>
<td>10719</td>
</tr>
<tr>
<td>E Maximum backhoe height mm</td>
<td>6980</td>
<td>7298</td>
<td>7915</td>
</tr>
<tr>
<td>F Maximum vertical wall cut depth mm</td>
<td>3397</td>
<td>4228</td>
<td>5070</td>
</tr>
<tr>
<td>G Minimum swing radius mm</td>
<td>4183</td>
<td>4427</td>
<td>4946</td>
</tr>
<tr>
<td>H Bucket rotation deg</td>
<td>180</td>
<td>180</td>
<td>180</td>
</tr>
<tr>
<td>I Bucket breakout kgf</td>
<td>23774</td>
<td>23774</td>
<td>23774</td>
</tr>
<tr>
<td>J Bucket breakout with boost kgf</td>
<td>25853</td>
<td>25853</td>
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</tr>
<tr>
<td>K Dipper breakout kgf</td>
<td>16240</td>
<td>13116</td>
<td>11303</td>
</tr>
<tr>
<td>L Dipper breakout with boost kgf</td>
<td>17644</td>
<td>14349</td>
<td>12103</td>
</tr>
</tbody>
</table>
### LIFT CAPACITIES – Dipper length: 2.5m, Boom: 6.2m, Trackshoes: 600mm.

<table>
<thead>
<tr>
<th>Load Point</th>
<th>1.5m</th>
<th>3m</th>
<th>4.5m</th>
<th>6m</th>
<th>7.5m</th>
<th>9m</th>
<th>Max Reach</th>
</tr>
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<tbody>
<tr>
<td>Height:</td>
<td></td>
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<tr>
<td>7.5m</td>
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</tbody>
</table>

**Notes:**
1. Lifting capacities are based on ISO 6017, that is, 75% of minimum tipping load or 87% of hydraulic lifting capacity, whichever is the less. Lifting capacities marked * are based on hydraulic capacity.
2. Lift capacities assume that the machine is on firm, level ground.
3. Lift capacities may be limited by local regulations. Please refer to your dealer.
Hydraulic Excavator JS300 LC/NLC

Net engine power: 165kW (221hp)   Operating weight: 31013/32687kg

Visit jcbcea.com.au to find your nearest dealer.

JCB Construction Equipment Australia
1300 522 232  |  jcbcea.com.au