
CATERPILLAR VS. JOHN DEERE

HEAD-TO-HEAD

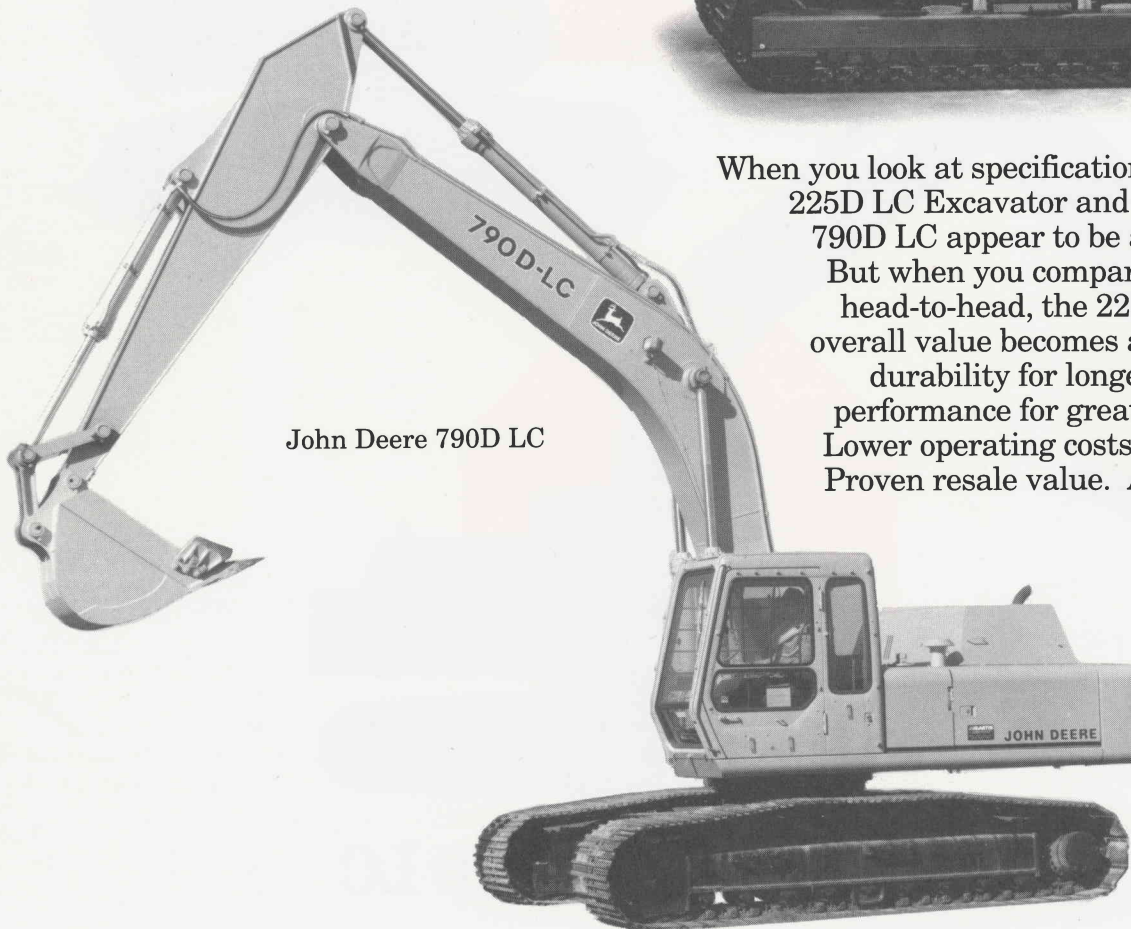


CATERPILLAR® 225D LC
VS.
JOHN DEERE 790D LC

COMPARE SYSTEMS AND COMPONENTS



Caterpillar 225D LC



John Deere 790D LC

When you look at specifications, Caterpillar's 225D LC Excavator and the John Deere 790D LC appear to be about the same. But when you compare their features head-to-head, the 225D LC's greater overall value becomes apparent. More durability for longer life. Superior performance for greater productivity. Lower operating costs. Rebuildability. Proven resale value. And unmatched dealer backup.



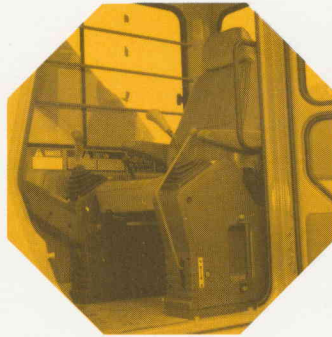
790D LC



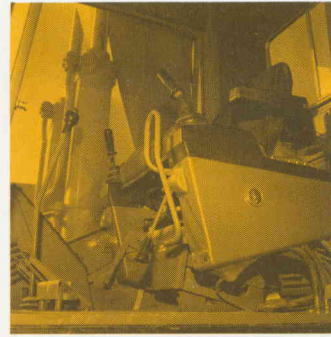
225D LC

Cabs

With a heavy-fabricated construction weighing over 50% more than the Deere 790D LC cab, the Cat cab structure stays tight even after years of use. The 790D LC's automotive-type cab design features two thin steel sheets press-formed and tack-welded together, resulting in a structure that is not only lighter, but also less durable than the Caterpillar machine's. Cat's operator's compartment is sound-suppressed with large rubber cab mounts and a thick, lead-lined floor mat. Compare this to Deere's small rubber mounts and thin, loose rubber mat.



790D LC



225D LC

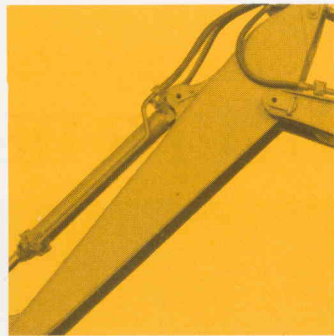
Controls and Comfort

The 225D LC has a single-pedal travel control for each direction, allowing good "inching" capability. On the Deere machine, the rocker pedals must be moved simultaneously, making "inching" and straight travel difficult.

225D LC joysticks are on side consoles which move up and down with the seat...a feature the 790D LC doesn't have. And Cat's four-way adjustable suspended cloth seat offers the operator far greater comfort than Deere's non-suspended vinyl seat.



790D LC



225D LC

Hydraulic System Performance

Powerful, dependable hydraulics...combined with an aggressive boom and stick design...make the 225D LC an exceptionally productive and efficient machine.

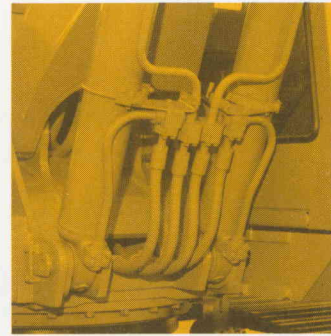
The Heavy Lift system on the 225D LC provides lift capacities that are substantially better than the 790D LC's in all the important positions. For example, when both models are equipped with boom and stick combinations providing similar reach capability, the 225D LC has 61% more at ground level over the front at 15 ft/4.5 m...25% greater above ground over the front at 20 ft/6.0 m and 25 ft/7.5 m!

The Heavy Lift system can also be activated whenever minimum flow is required...as in tight quarters and when loading on lowboys. Engine speed remains constant, while pressure in the implement circuit is increased to allow additional lifting capability. This feature is not available on the 790D LC.

And a 225D LC standard feature not offered on the 790D LC is a swing cushion control that can be switched "on" for pipe handling, "off" for general work. This swing cushion makes pipe handling and setting far easier and more precise.



790D LC

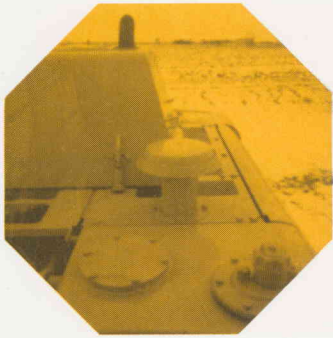


225D LC

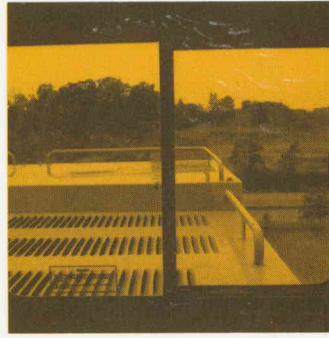
Hydraulic System Durability

Cat's durable XT-5 hydraulic hose and reusable couplings provide outstanding long-life performance. The 225D LC also has significantly larger hydraulic valves and motors than the 790D LC. And with the 225D LC's larger hoses and tubes, flow is less restricted. Each of these advantages translates into extra reliability for the 225D LC.

And self-aligning spherical bearings in the 225D LC cylinder mountings minimize twisting forces, while the conventional bearings on the Deere 790D LC will not. One more 225D LC feature to extend machine life.



790D LC



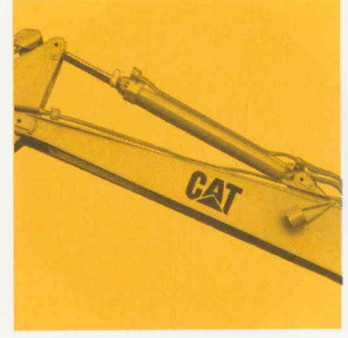
225D LC

Visibility

All-around visibility on the 225D LC is far superior to that on the 790D LC. The 225D LC has non-glare, shock-resistant Lexan windows...and features Cat's exclusive multi-position front windshield. There's excellent visibility to the rear, with well-guarded standard mirrors. The Deere 790D LC has tinted glass windows that are easy to break...no mirrors...and a protruding engine hood that restricts rear visibility.



790D LC



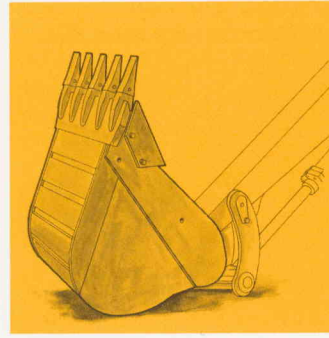
225D LC

Booms and Sticks

Cat's field-proven boom and stick design assures you maximum performance and life. The top and bottom one-piece boom plates on the 225D LC are thicker and more durable than Deere's welded multi-piece construction. You'll see there are transverse welds on the Deere boom...none on the Cat boom. Another Cat quality feature that means greater reliability. Also, Cat's front linkage pins are hardened and chromed for increased durability and wear life. Deere's front linkage pins are not chromed and are likely to wear faster.



790D LC



225D LC

Buckets

Now there are **9** Cat buckets to match the 225D LC...so you can optimize performance in a wide variety of materials and applications. These include buckets for:

- General trenching;
- Trenching in tough materials such as fragmented rock, frozen ground and caliche;
- Volume truck loading;
- Volume truck loading in more tough and abrasive materials;
- Handling light materials and utility work, such as finish grading and cleanup;
- Extreme digging and work in rocky conditions.

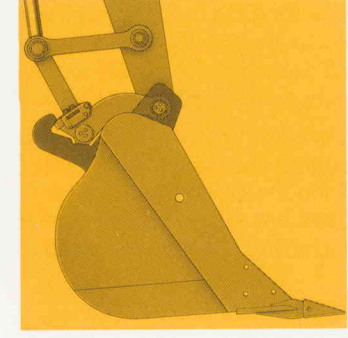
Cat also offers 6 tips and 4 side cutters to meet application needs. The benefit: one parts and warranty source for all your bucket needs.

Deere, on the other hand, builds only **2** buckets for the 790D LC...and no tip or side cutter options. They rely on buckets from other manufacturers to complete or supplement their line.

The stronger design of Cat buckets features large-sectioned torque tubes, as well as transverse wear strips for structural rigidity. Transverse wear strips are also more simple to rebuild and replace. And bushings at pin bores are another feature to make Cat buckets easier to rebuild.



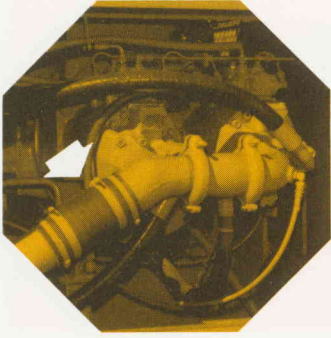
790D LC



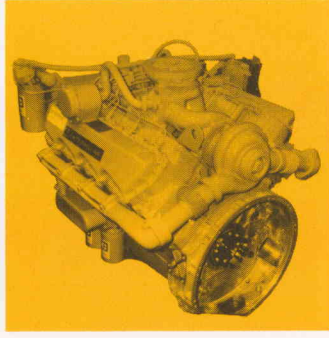
225D LC

Coupling Systems

With Cat's **VERSA-LINK** Coupling System, one man can change attachments in 2-3 minutes. There's no reduction in bucket capacity, no loss of bucket breakout force. It's light-weight and compact, yet durable in severe work. And since **VERSA-LINK** is a Caterpillar exclusive, Deere cannot offer this advanced coupling system.



790D LC - Note no firewall.



225D LC

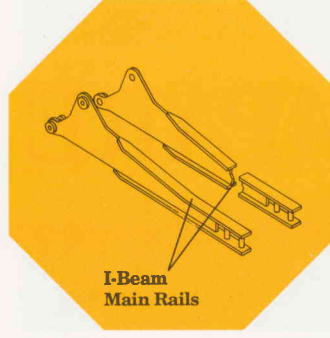
Engines

Cat diesel Engines are known around the world for outstanding performance, economy and long life. And the Cat 3208 diesel Engine in the 225D LC is no different. With 36% more displacement than the Deere engine, the Cat 3208 offers a superior displacement/HP ratio. Plus 5% more drawbar pull for excellent traction and performance in all types of ground conditions.

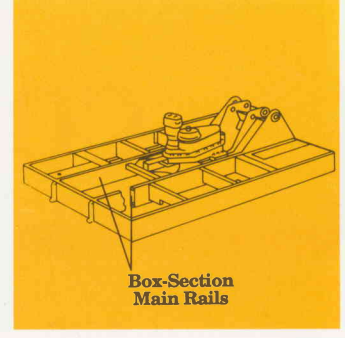
The 3208 is turbocharged, allowing operation to 15,000 ft / 4575 m before derating and providing 10-13% better heat efficiency.

The 225D LC's 3208 Engine comes equipped with an Automatic Engine Speed Control (AESC), with three positions (on-off-economy) for significant fuel savings. The 790D LC offers only a standard engine control with two positions (on-off).

There's a protective firewall between 225D LC pumps and engine...but not on the 790D LC. And for additional value John Deere can't offer, your Cat Dealer can keep your repair costs low with a wide range of engine exchange products... including a complete Cat Remanufactured 3208 Engine.



790D LC

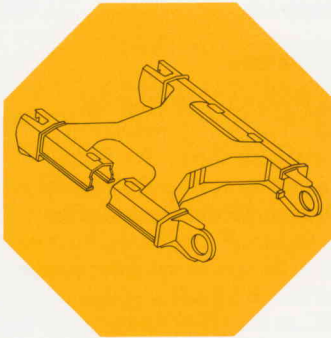


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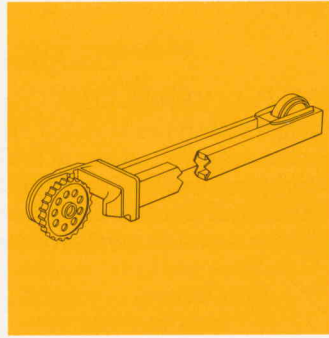
Upper Structures

The Cat 225D LC's upper structure is 21% heavier than that of the 790D LC. Compare the Cat 225D LC's rugged box-section main frame with the 790D LC's I-beam main frame. And note the area where the boom attaches to the upper structure: the 225D LC features a durable four-plate boom tower, while the 790D LC has only a two-plate tower.

Caterpillar completely encloses the fuel and hydraulic tanks with heavy-gauge sheet metal; the Deere machine does not have this protection. There's heavier sheet metal in the upper house of the 225D LC...plus catwalks all around and a handrail. The 790D LC uses light-gauge sheet metal and has no circumference catwalks.



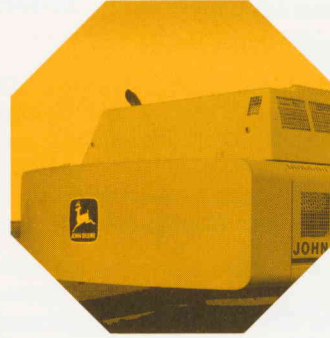
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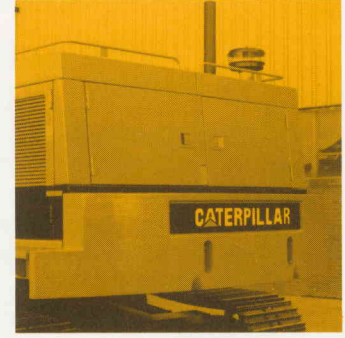
225D LC

Track Roller Frames

Cat's box-section track roller frames are bolted to the carbody for ease of servicing and maintenance, as well as to simplify customizing with gauge wideners. The Deere 790D LC has inverted U-shaped track roller frames that are welded on, making maintenance, servicing and customizing more difficult.



790D LC



225D LC

Counterweights

The Cat 225D LC is three tons heavier than the 790D LC, yet only 15% of the machine's weight is counterweight...compared to 20% on the Deere machine. This means more 225D LC weight in key structural components like the main frame, carbody and track roller frames...less in idle counterweight. You'll appreciate that extra durability at resale time!

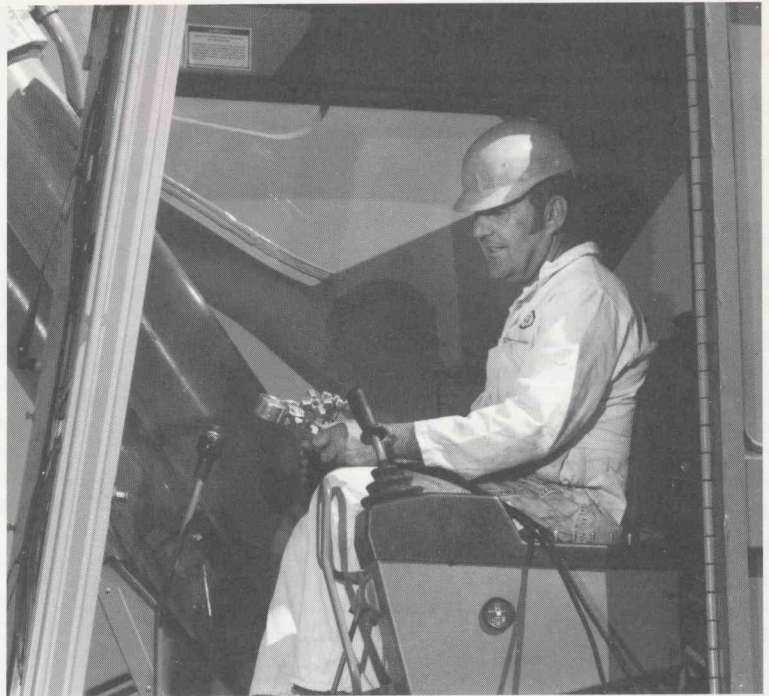
Specifications Comparison

	Caterpillar 225D LC	John Deere 790D LC
Operating Weight	59,100 lb/26 810 kg	51,460 lb/23 340 kg
Engine Model	Cat 3208 DIT	Deere 6-466A
Flywheel Power	165 HP/123 kW	155 HP/116 kW
Displacement	636 in ³ /10.43 L	466 in ³ /7.64 L
Displacement/Power	3.85 in ³ /HP/84.8 cm ³ /kW	3.01 in ³ /HP/49.3 cm ³ /kW
Drawbar Pull	39,750 lb/177 kN	37,250 lb/166 kN
Lift Capacity:		
At Ground Level, Over Front @ 15 ft/4.5 m Reach	26,900 lb/12 450 kg	16,680 lb/7565 kg
10 ft/3.0 m Above Ground, Over Front @ 20 ft/6.0 m Reach	14,600 lb/6760 kg	11,670 lb/5295 kg
10 ft/3.0 m Above Ground, Over Front @ 25 ft/7.5 m Reach	12,500 lb/5740 kg	9830 lb/4460 kg

Materials and specifications subject to change without notice.

YOUR CAT DEALER VS. OTHER DEALERS... THERE IS NO COMPARISON

Compare your Caterpillar Dealer head-to-head with the competition and the results will be clear...there is no comparison. In product support, service, parts availability, financing and commitment to customers, your Cat Dealer sets the standards that other dealers can only hope to meet.



CATERPILLAR®

1 - DEC. 1992