

LX145E-2 / 170E-2

HITACHI

LX145E LX170E

W H E E L L O A D E R

LX145E-2 / LX170E-2

Engine Rated Power :

108 kW (147 PS) / 123 kW (167 PS)

Operating Weight :

12 950 kg / 13 630 - 14 690 kg

Bucket Capacity :

2.2 m³ / 2.5 m³ - 2.7 m³

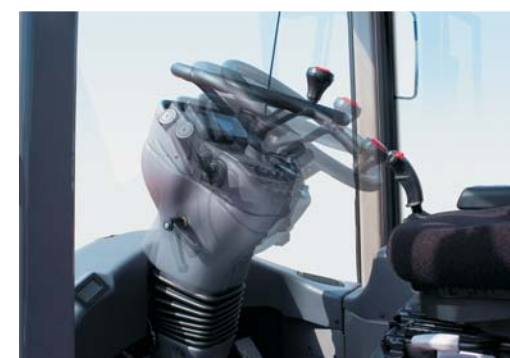


HITACHI WHEEL LOADERS: DESIGNED FROM EXPERIENCE



The main design criteria for the LX145E-2 and LX170E-2 are the tough conditions under which wheel loaders must operate daily. In both machines all components have been placed as far to the rear and as close to the ground as possible, without affecting the machine's ground clearance. This has made the LX145E-2 and LX170E-2 extremely stable and allows high tipping moments in spite of the relatively low machine weight, significantly improving the machines' capacity. All components are engineered to deal with the tough environment and meet Hitachi's high quality standards.

DESIGNED FOR COMFORT



Cab

The cab of the LX145E-2 and LX170E-2 is very comfortable and has been designed with the aim of optimizing the performance delivered by operator and machine. The level of sound and vibrations penetrating into the cab has been minimized. The cab is built in accordance with ROPS/FOPS and has special rubber support strips all round to reduce shocks. The operator is under minimum stress and therefore able to fully concentrate on the job.

The comfort inside the driver's cab is further enhanced by the presence of high-capacity heating and air-conditioning systems that filter the air in the cab. In addition, the window on the right-hand side can be opened and locked in several positions.

Seat

The comfortable driver's seat with air suspension is easy to reach thanks to the spacious access. The seat is easily adjusted according to the driver's preferences; the steering column is telescopic and can be tilted to allow the optimum seating position to be selected at all times. The cab has a large window surface, allowing a clear view in all circumstances. The windscreen has parallel, large-surface windscreen wipers and a windscreen washer. This guarantees an excellent view under all weather conditions and improves work safety.

Controls

All controls are within easy reach, where you would expect them, and constructed according to the latest ergonomic standards. The machine's driving direction can be controlled in two ways: using a lever on the steering column or a switch on the operating joystick. If the machine is fitted with two lever controls (optional), a switch next to the lever changes the driving direction. Control of the (optional) auxiliary hydraulic circuit is by means of a separate lever. The indicator lights are placed according to a logical layout to allow the driver to see them at a glance. Furthermore, an acoustic signal is sounded when any important system malfunctions.

DESIGNED FOR POWER



Frame

Years of experience and state-of-the-art production technology have resulted in a frame that is capable of high loads. All load-bearing parts are made in one piece without any joints being affected by cracks or stresses. The two bearings at the tilting point are positioned far apart to reduce any forces. Remaining forces are absorbed by the tapered roller bearings. The loading frame is over-engineered and made of solid steel. The Z-bar linkage loading equipment delivers maximum breakout force throughout the entire lifting range. The operator can easily handle heavy materials and maintain full control in all positions.

Engine

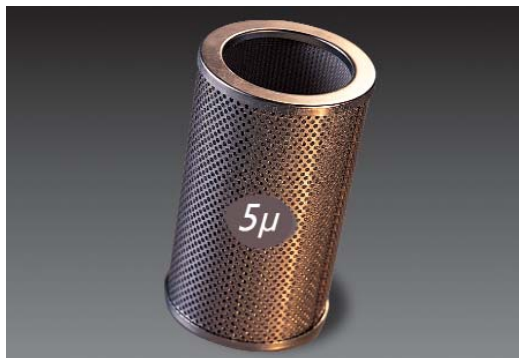
The LX145E-2 and LX170E-2 both have a 6-cylinder direct injection turbocharged engine from Isuzu. This engine was developed to deliver excellent results and operational reliability. Of course the engines comply with EU Stage II standards. Even in the toughest conditions the engine is properly cooled thanks to its large fan and radiator.

DESIGNED FOR QUALITY



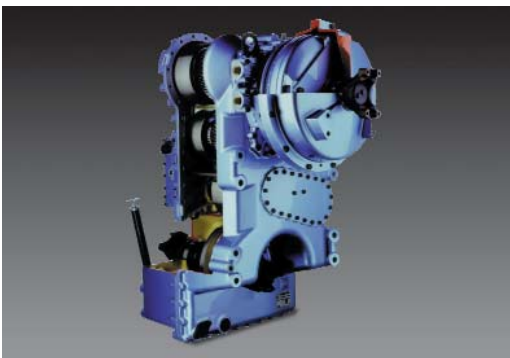
Hydraulic system

The Hitachi LX145E-2 and LX170E-2 have been fitted with a high-capacity hydraulic system. This system was developed to direct the oil to the function that needs it the most. An optimum balance has been found between the power required for the engine and the output of the hydraulic system. When extra power is required to fill the bucket, the power that is normally used for driving is now made available to the hydraulic system. This results in shorter cycle times. The pre-tensioned hydraulic tank fitted over the pump ensures a trouble-free supply of oil to the pumps, even under the most extreme conditions. A standard floating valve filter system with 5 micron nominal rate filter on return to tank allows the system to function without any problems for a long period. The built-in cylinders are melted together by heat (friction) to create a stronger connection.



Hitachi Ride Control (HRC)

Through continuous product development we can ensure that product quality is constantly improved. One of these developments is the Hitachi Ride Control system (HRC). This system ensures optimum shock-absorption of the loading frame, independent of the density of the material that is being transported or the filling volume of the bucket. The HRC automatically chooses the optimum setting. This allows higher productivity thanks to the higher transport speeds and the reduced loss of material made possible by this system. In addition, this system reduces the degree of machine wear.



Transmission

Hitachi fits every machine with a full automatic transmission that can be changed under full load and that allows the driver to set the maximum gear. The transmission has highly advanced switching electronics and always changes to the right gear, without interrupting the drive action and independent of the speed or the load on the machine. If a certain speed is to be maintained when driving downhill, you only have to press one button to prevent the transmission changing to a higher gear.

The transmission is a compact unit. The short change times, helical gears and optimally designed gear housing enhance the unit's operational reliability, while minimizing the maintenance requirements and producing less noise, specifically in the higher gear range. The transmission has been set up so that even if a malfunction occurs inside it, the wheel loader can be driven to its destination at limited speed, after which the malfunction can be diagnosed using a computer. The combination of the machine's impressive operating performance and its economical fuel consumption ensure high productivity and low operating costs. With the optional dual-mode shift selector it is possible to shift gears 15% faster than normally.



Axles

The machines have solid axles and one-piece, cast axle housings with integrated brake channels to allow the machine to operate even in the heaviest conditions. The axles have limited slip differentials to allow a smooth drive action on all four wheels when driving through bends or on difficult surfaces. The centrally oscillating rear axle makes all wheels remain in contact with the ground, regardless of surface conditions. In addition, this central oscillation action prevents the propeller shaft from distorting due to extreme movement, thus improving the shaft's reliability and lifetime.

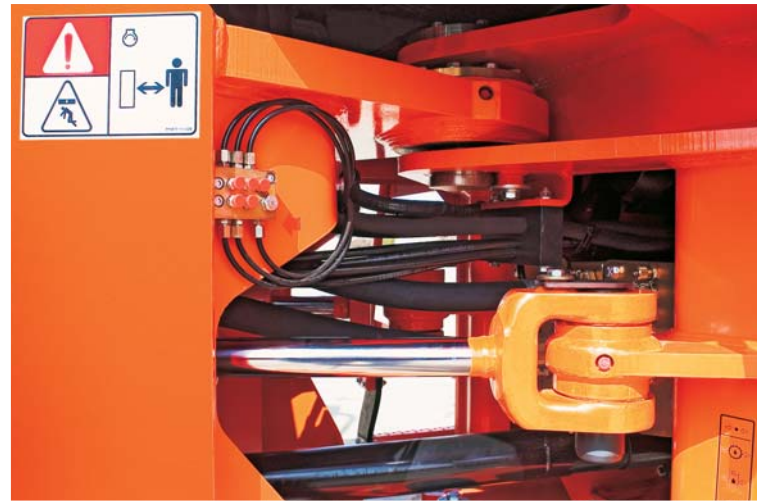


DESIGNED FOR PERFORMANCE

Maintenance

The LX145E-2 and LX170E-2 require little maintenance. The (optional) full rear fenders can be folded away and the large engine cover can be opened to ease access to the engine and other components. Daily engine inspection has been simplified and can be carried out from the floor. The lubrication points that were difficult to reach have been moved to a central position close to the machine's tilting point. From this position 80% of all lubrication points can be accessed quickly and easily, without the need to climb onto the machine.

Hydraulic oil, engine oil and transmission oil can be renewed fast and easily thanks to the quick drain facility. Inspection glasses make it possible to check the fluid level of hydraulic oil and transmission oil from the ground. Engine oil change intervals have increased to 500 hours. When the cab is in the tilted position all components are within easy reach. An extra advantage is that the main machine functions remain intact so that they can be tested immediately.



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These specifications are subject to change without notice.
Illustrations and photos show the standard models, and may or may not include optional equipment, accessories, and all standard equipment with some differences in color and features.