# BROOKS HIRE

**"Better Being With Brooks"** 





# PC490LC-11 PC490LCi-11

EPA Tier 4 Final Engine Australia and New Zealand Specifications



## 1300 BROOKS (1300 276 657)

sales@brookshire.com.au



Bucket Capacity Range 1.45 - 2.7m<sup>3</sup>

Operating weight range 47,890 - 49,680 kg

Horsepower Gross & NET 268 kW/359 HP @ 1900 rpm

# **Greater performance and Faster cycle times**



Photos may include optional equipment.

### Komatsu's Closed-centre Load Sensing System (CLSS)

provides quick response and smooth operation to maximise productivity. \*All Models

# New engine and hydraulic control technology

improves operational efficiency and lowers fuel consumption by up to 11%.

#### A powerful Komatsu SAA6D114E-6 engine provides a net output of 192 kW 257 HP. This engine is EPA Tier 4 Final emissions certified.

Komatsu Variable Geometry Turbocharger (KVGT) uses a hydraulic actuator to provide optimum air flow under all speed and load conditions.

#### Komatsu Diesel Particulate Filter (KDPF) and Selective Catalytic Reduction (SCR) system reduce particulate matter and NOx while providing automatic regeneration that does

not interfere with daily operation.

Large displacement high efficiency pumps provide high flow output at lower engine speed, improving efficiency.

**Two boom mode settings** provide power mode for maximum digging force or smooth mode for fine grading operations.

Komtrax<sup>®</sup> equipped machines can send location, SMR and operation maps to a secure website or smart phone utilising wireless technology. Machines also relay error codes, cautions, maintenance items, fuel and Diesel Exhaust Fluid (DEF) levels, and much more.

# Komatsu designed and manufactured components

Handrails (standard) located on the machine upper structure provide a convenient work area in front of the engine.

Lockable single pole battery isolation switch allows a technician to disconnect the power supply before servicing the machine.

**Heavy duty boom** design with large one piece castings provide increased strength and durability.

Komatsu Auto Idle Shutdown helps reduce nonproductive engine idle time and reduces operating costs.

**Operator Identification System** records Komtrax<sup>®</sup> machine operation and application data for up to 100 individual ID codes.

# PC490LC11 / PC490LCi-11

#### Large LCD colour machine monitor:

- 7" high resolution display
- Enhanced hydraulic attachment control with one way/two way flow and programmable work tool names and settings
- Key machine settings and controls easily accessible through the monitor.

**Rearview monitoring system (standard)** with integrated camera display in

the default monitor screen.

**KomVision (standard)** are designed to match engine speed, pump delivery and system pressure to the application.

#### **Enhanced working environment:**

- High back, heated air suspension seat with new adjustable arm rests
- Integrated ROPS cab design

   Conforms to [ISO 12117-2] for excavators, also satisfies Level 1 operator Protective Guard [OPG] and Top guard [ISO 10262]
- AUX jack and [2] 12V power outlets.



# Komatsu new engine technologies

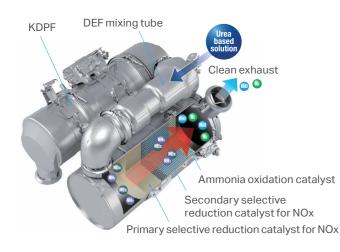
## Komatsu's new emission regulations-compliant engine

New regulations effective in 2018 require the reduction of NOx emissions to one tenth or below from the preceding regulations. In addition to refining the Tier 4 Interim technologies, Komatsu has w developed a new Selective Catalytic Reduction KDPF (SCR) device in-house.

## **Technologies applied** to new engine

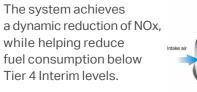
## Heavy-duty aftertreatment system

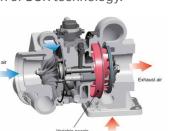
This new system combines a Komatsu Diesel Particulate Filter (KDPF) and Selective Catalytic Reduction (SCR). The SCR NOx reduction system injects the correct amount of Diesel Exhaust Fluid (DEF) at the proper rate, thereby decomposing NOx into non-toxic water vapour (H<sup>2</sup>O) and nitrogen gas (N<sup>2</sup>).

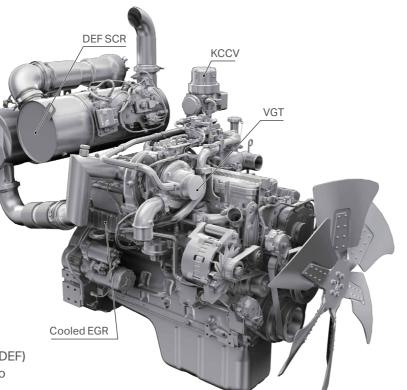


## Heavy-duty cooled Exhaust Gas **Recirculation (EGR) system**

The system recirculates a portion of exhaust gas into the air intake and lowers combustion temperatures, thereby reducing NOx emissions. EGR gas flow has been decreased for Tier 4 Final with the addition of SCR technology.





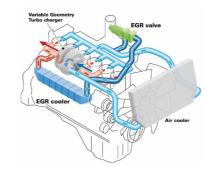


### Advanced electronic control system

The electronic control system performs high-speed processing of all signals from sensors installed in the vehicle providing total control of equipment in all conditions of use. Engine condition information is displayed via an on-board network to the monitor inside the cab, providing necessary information to the operator. Additionally, managing the information via Komtrax<sup>®</sup> helps customers keep up with required maintenance.

## Komatsu Variable Geometry Turbocharger (KVGT) system

The VGT system features proven Komatsu design hydraulic technology for variable control of air-flow and supplies optimal air according to load conditions. The upgraded version provides better exhaust temperature management.



## Komatsu auto idle shutdown

Komatsu auto idle shutdown automatically shuts the engine down after idling for a set period of time to reduce unnecessary fuel consumption and exhaust emissions.



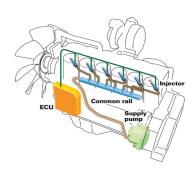


# PC490LC11 / PC490LCi-11

## Heavy-Duty High-Pressure Common Rail (HPCR) fuel injection system

The system is designed to achieve an optimal injection of high-pressure fuel by means of computerised control, providing close to complete combustion to reduce PM emissions. While this technology is already used in current engines, the new system uses high pressure injection,

thereby reducing both PM emissions and fuel consumption over the entire range of engine operating conditions. The Tier 4 Final engine has advanced fuel injection timing for reduced fuel consumption and lower soot levels



# **Performance features**

## **Reduced fuel consumption**

The PC490LC-11's enhanced P Mode provides more hydraulic flow and increases productivity.

#### **Fuel consumption**

# Up to 13% Increase

(compared to the PC450LC-8 in standard P Mode)

P mode (90° swing and loading onto truck)

1 Large counterweight	7 HD carrier rollers and idlers
2 High capacity	8 Reinforced crawler frames
swing bearing	9 Reinforced revolving frame
3 3 Reinforced track	10 Track roller guards
links and shoes	11 Deck guard
4 Large final drive	12 Centre frame swivel guard
5 HD sprockets	•
6 Reinforced centre frame	

## Increased work efficiency

### Large digging force

With the one-touch Power Max. function, digging force is increased for 8.5 seconds of operation.

#### Maximum arm crowd force (ISO)

200 kN(20.4t) ➡	<b>214 kN(21.8t)</b> (With Power Max.)	<b>7</b> % up

### Maximum bucket digging force (ISO)

256 kN(26.1t) → 275 kN(28.0t) 7% UP

Measured with Power Max. function, 3400 mm arm and ISO rating.



## Hydraulic variable speed fan

The electronic control system sets the rotation speed of the cooling fan according to the coolant, hydraulic oil, and ambient temperatures; effectively uses the engine output to reduce wasteful fuel consumption; and reduces noise during low-speed fan operation.



## Efficient hydraulic system

The PC490LC-11 uses a Closed Centre Load Sensing (CLSS Hydraulic System that improves fuel efficiency and provides quick response to the operator's demands.) The PC490LC-11 also incorporates new technology to enhance the engine and hydraulic pump control. This total control system matches the engine and hydraulics at the most efficient point under any load condition. There have also been improvements in the main valve and hydraulic circuit to reduce hydraulic loss, resulting in higher efficiency and lower fuel consumption.

# Large displacement high efficiency pump

Large displacement hydraulic implement pumps provide high flow output at lower engine RPM as well as operation at the most efficient engine speed.



## Faster arm cycle speeds

Two return hoses improve arm cylinder hydraulic flow for faster arm out performance.

## Two-mode settings for boom

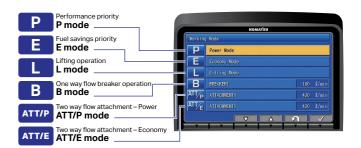
- Smooth boom mode provides easy operation for gathering material or scraping down.
- Power boom mode maximises digging force for more effective excavating.

# PC490LC11 / PC490LCi-11

## Working mode selection

The PC490LC-11 excavator is equipped with six working modes (P, E, L, B, ATT/P and ATT/E). Each mode is designed to match engine speed, pump flow, and system pressure to the application. The PC490LC-11 features an attachment mode (ATT/E) that allows operators to run attachments while in Economy mode.

Working mode	Application	Advantage
Р	Power Mode	Maximum production/ power & Fast cycle times
E	Economy Mode	Good cycle times & Better Fuel Economy
L	Lifting Mode / Fine Control	Increases Hydrolic Pressure
В	Breaker Mode	Optimum engine RPM, hydraulic flow
ATT/P	Attachment Power Mode	Optimum engine rpm, hydraulic flow, 2-way Power mode
ATT/E	Attachment Economy Mode	Optimum engine rpm, hydraulic flow, 2-way Economy mode



## High rigidity work equipment

Booms and arms are constructed with thick plates of high tensile strength steel. In addition, these structures are designed with large cross sectional areas and large one piece castings in the boom

foot, the boom tip, and the arm tip. The result is work equipment that exhibits long term durability and high resistance to bending and torsional stress. A standard HD boom design provides increased strength and reliability.



# **Working environment**





## **Comfortable working space**

## Wide, spacious, pressurised cab

Wide spacious cab includes seat with reclining backrest. The seat height and longitudinal inclination are easily adjusted using a pull-up lever. You can set the appropriate operational posture of armrest together with the console. Reclining the seat further enables you to place it into the fully flat state with the headrest attached.

# Arm rest with simple height adjustment function

The addition of a knob and a plunger to the armrest permits the height of the armrest to be easily adjusted without the use of tools.

Low vibration with cab damper mounting Automatic climate control.

# IMC 2.0 UHF and network antenna

UHF and Netwrok Antenna - providing corrections, service and Remote support capibility.





# PC490LC11 / PC490LCi-11

## Standard equipment

Sliding window glass (left side)



Remote intermittent wiper with windshield washer



ISO Level 2 OPG



Defroster (conforms to the ISO standard)





Emergency stop and level indicator



Magazine box and cup holder



One-touch storable front window lower glass



# **Working environment**

# Large high resolution LCD monitor



# New monitor panel interface design

An updated large high resolution LCD colour monitor enables accurate and smooth work. The interface has been redesigned to display key machine information in a new user friendly interface. A rear view camera and a DEF level gauge display have been added to the default main screen. The interface has a function that enables the main screen mode to be switched, thus enabling the optimum screen information for the particular work situation to be displayed.

#### Indicators

<ol> <li>Auto-decelerator</li> </ol>	8 Fuel gauge
2 Working mode	9 DEF level gauge
3 Travel speed	Service metre, clock
Ecology gauge	11 Fuel consumption gauge
Camera display	12 Guidance icon
Engine coolant	Function switches
temperature gauge	<sup>14</sup> Camera direction displa
Hydraulic oil	DEF level caution
temperature gauge	lamp

#### **Basic operation switches**

Visual user menu

Auto-decelerator
 Working mode selector
 Travel speed selector
 Buzzer cancel
 Window washer

Pressing the F6 key on the main screen

are grouped for each function, and use

easy-to-understand icons which enable

the machine to be operated easily.

displays the user menu screen. The menus

## KomVision

Images from 4 camera's are combined to display a "birds eye" view of the area around the machine for improved operator awareness. A second display with selectable individual

camera views of the left, rear, and right sides is easily changed using the F4 button. A red line continuously shows where the counterweight will be during swinging and a camera icon indicates which camera is being displayed on individual camera display screen.







 Energy saving guidance
 Machine settings
 Aftertreatment devices regeneration 4 SCR information
5 Maintenance
6 Monitor setting
7 Message check



## Support efficiency improvement

# Ecology gauge and fuel consumption gauge

The monitor screen is provided with an ecology gauge and also a fuel consumption gauge which is displayed continuously.

In addition, the operator can set any desired target value of fuel consumption (within the range of the green display), enabling the machine to be operated with better fuel economy.



cology gauge Fuel consum

## **Operator identification function**

An identification ID can be set up for individual operator, application or jobs, and used to manage operation information of individual



machines using Komtrax<sup>®</sup> data. Data sent from Komtrax<sup>®</sup> can be used to analyse operation status by operator as well as by machine.

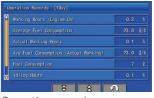
# PC490LC11 / PC490LCi-11

## **Ecology guidance**

While the machine is operating, ecology guidance pops up on the monitor screen to notify the operator of the status of the machine in real time.

# Operation record, fuel consumption history, and ecology guidance record

The ecology guidance menu enables the operator to check the operation record, fuel consumption history and ecology guidance record from the ecology guidance menu, using a single touch, thus enabling the total fuel consumption to be reduced.





Operation record

CD Guidance Records [1Day]	[ Times ]
	1
Hydraulic Pressure Relief Event	1
	0
Operational Advice Avoiding Unnecessary Hydraulic Relief is Effective to Save Fuel	Pressure

Ecology guidance record

Fuel consumption history



#### Make every pass count

Improve your efficiency - intelligent Machine Control means fast excavation to finish grade.

Semi-automatic operation – new features such as bucket angle hold control provide high levels of accuracy and comfort.



#### Innovative

- intelligent Machine Control excavator features semi-automatic operation of work equipment for highly accurate work.
- **NEW** Compact 10.4" iMC monitor with increased memory capacity, processing speed, and pinch to zoom capability.

#### Integrated

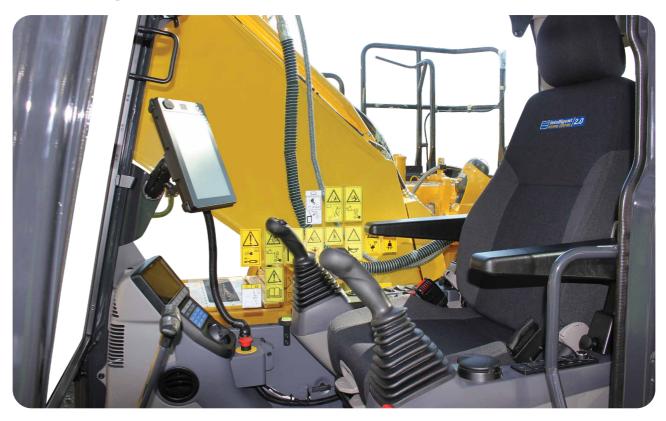
- Complete factory-installed and integrated intelligent Machine Control system comes standard with stroke sensing hydraulic cylinders.
- Multiple Global Navigation Satellite System (Multi-GNSS) components and an Inertial Measurement Unit (IMU) sensor. All components are validated to Komatsu's rigid quality and durability standards.
- **NEW** Multi-band UHF/915SS radio improves job site flexibility.
- NEW 3G/4G LTE connectivity for fast reliable job site connectivity.
- DUHF II Radio Standard fitment & 915SS Optional equipment - offers improved jobsite flexibility.

### Intelligent

- intelligent Machine Control excavator allows the operator to focus on moving material efficiently while semi-automatically tracing the target surface and limiting over-excavation.
- Facing angle compass, light bar and sound guidance aid in ease of operation and bucket positioning.
- NEW Bucket Angle Hold and optional Auto-Tilt Attachment Control increase ease of operation and improve productivity and efficiency.



# intelligent Machine Control



### intelligent Machine Control

intelligent Machine Control is based on Komatsu's unique sensor package, including stroke sensing hydraulic cylinders, an IMU sensor, and GNSS antennas. It utilises 3D design data loaded in the control box to accurately check its position against the target. If the bucket hits the target surface, it is semi-automatically limited to minimise over-excavation. If the operator turns off Auto mode, the machine can be operated with highly accurate, responsive machine guidance, with the machine only providing indication guidance.



Auto grade assist

With the auto grade assist function, the operator moves the arm, the boom adjusts the bucket height automatically, tracing the target surface and minimising digging too deep. This allows the operator to perform rough digging without worrying about the design surface, and to perform fine digging by operating the arm lever only. The working range is extended by holding the lever to move the boom downward.



### Auto stop control

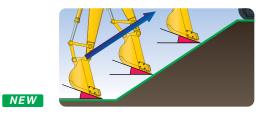
During boom or bucket operation, the work equipment automatically stops when the bucket edge reaches the design surface, thus minimising damage to the design surface.

# PC490LC11 / PC490LCi-11



### Minimum distance control

The intelligent Machine Control excavator controls the bucket by automatically selecting the point on the bucket closest to the target surface. Should the machine not be facing a sloped surface at a right angle, it will still follow the target surface and minimise digging below it.



#### · Bucket angle hold control

Operator sets desired bucket angle and the system automatically maintains bucket angle throughout the grading pass. Angle hold control increases ease of operation and improves final grading accuracy.

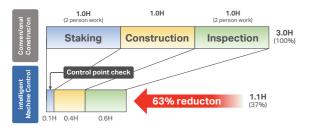


#### Auto-tilt Attachment Control

Automatically tilts bucket to design surface and returns it to horizontal to unload. Using auto tilt control with the existing minimum distance control and auto grade assist makes complex grading quicker and easier.

## Improved construction efficiency

Staking, survey and final inspection (which is usually done manually), can be reduced with the intelligent Machine Control excavator by setting 3D design data on the control box. Also, use of the facing angle compass can minimise leveling work for the surface on which the machine sits. Even if the machine is inclined while working, the facing angle compass allows the operator to ensure that the machine is facing perpendicular to the target surface. The intelligent Machine Control technology allows the operator to improve work efficiency (i.e. shorter construction time) while minimising over-excavating the target surface from rough digging to finish grading.



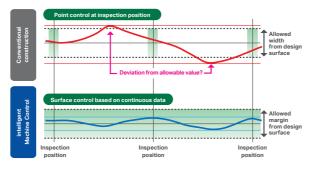
\* When used by a qualified iMC operator, the Komatsu intelligent Machine Control system increases construction efficiency.

\* he above data does not include design time or working data creation time. The above data is based on in-house construction tests, performed by Komatsu, whose conditions may differ from actual construction.

#### Improved work accuracy

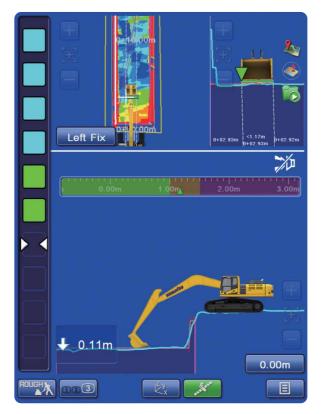
The bucket edge/tip position is instantly displayed on the control box, eliminating the wait time for display on the monitor during construction. The large and easy-to-view control box displays information clearly, aiding in highly accurate work. With manual operation and conventional machine guidance, finish grade guality and excavating accurately depends heavily on the skill of the operator. With the intelligent Machine Control excavator, the bucket is automatically limited to follow the target grade without over-excavating.

## Relationship between finished surface and allowable value



## As-built surface mapping

Operator can display and check the as-built status and find where to cut and fill.



# intelligent Machine Control

#### **Control box**

The monitor of the Komatsu intelligent Machine Control (control box) uses a compact 10.4" screen for visibility and ease of use. The simple screen layout displays the necessary information in an easily understood fashion. Touch screen icon interface instead of multi-step menu simplifies operation.



monitor to allow an operator to easily switch NEW between preset grades. Offset preset 0.000' Appl 0.500' Appl 1.500' Appl Button switch mode Offset preset **Quick Bucket Swap Button** NEW Allows users to quickly swap between various

buckets without having to enter main menu. This lessens the time a user takes to change

out a bucket on the monitor.



# PC490LC11 / PC490LCi-11

The orientation and colour of the facing angle compass's arrow shows the operator the facing angle of the bucket edge relative to the target surface.



This allows the bucket edge to be accurately positioned square with the target surface, which is useful when finishing slopes.

## Enhanced operability of the machine control

Semi-auto/manual mode switching and design surface offset function can be operated with switches on the control levers.





NFW

# Factory installed Komatsu intelligent Machine Control components



## **Standard local options providing first 12 months support:**

(includes: Standard 3G/4G modem with DATA & SIM, industry leading ICT machine OEM service support agreement with iMC 2.0)



**Remote control** Assist the operator by taking control of their GNSS equipment in real-time.



**Remote view** Real-time remote image of the GNSS equipment.



Machine to office transfer Download files that have been collected on your system (survey results, as-built data, ...)



Office to machine transfer

Send the latest design files from the office to your machines.



#### Offline file transfer Machine offline? No issue. Files are stored in cloud, operator will see updated model at machine switch on.





**Batch file transfer** Send files to multiple machines in one click.

# Work smarter from rough digging to finish grade

Give your operators the power to work more effectively than with conventional aftermarket machine guidance (indicate only) or manual operation. Intelligent Machine Control (iMC) excavators with semi-automatic control offer the capability to work smart from rough digging to finish grading, and help minimise over-excavation to make every pass count.



# PC490LC11 / PC490LCi-11



• Semi-automatic for trenching, slope work and high production applications

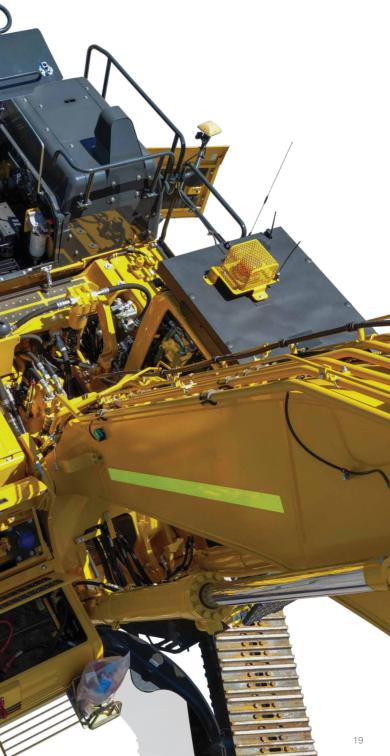
 Protection + precision + performance
 = the formula for pursuing maximum productivity versus conventional machine guidance



## **Maintenance features**



# PC490LC11 / PC490LCi-11



# **Maintenance features**

# Centralised engine check points

Locations of the engine oil check and filters are integrated into one side to allow easy maintenance and service.

#### **Battery isolation switch**

A standard battery isolation switch allows a technician to disconnect the power supply and lock out before servicing the machine.

#### Easy cleaning of cooling unit

Reverse-rotation function of the hydraulic driven fan facilitates cleaning of the cooling unit.

#### Fuel pre-filter with water separator

#### High efficiency fuel filter

Easy access to engine oil filter, engine oil, Ecology drain valve, fuel drain valve and water separator drain valve

Water

Cab air filter

Washable cab floormat

#### **Sloping track frame**

#### DT-type connectors

Sealed DT-type electrical connectors provide high reliability, water and dust resistance.

#### Maintenance Information



Maintenance screen

# "Maintenance time caution lamp" display

When the remaining time to maintenance becomes less than 30 hours\*, a maintenance time monitor appears. Pressing the F6 key switches the monitor to the maintenance screen.

\* : The setting can be changed within the range between 10 and 200 hours.



## Long-life oils, filters

High performance filters are used in the hydraulic circuit and engine. By increasing the oil and filter replacement intervals, maintenance costs can be significantly reduced.

## Engine oil &

Engine oil filter every 500 hours Hydraulic oil every 5000 hours Hydraulic oil filter every 1000 hours

#### Large capacity air cleaner

Large capacity air cleaner is comparable to that of larger machines. The larger air cleaner can extend air cleaner life during long-term operation and helps prevent early clogging, and resulting power



Hydraulic oil filter

(Ecology-white element)

loss. A radial seal design is used for reliability.

#### Diesel Exhaust Fluid (DEF) tank

A large tank volume extends operating time before refilling and is installed on the right front stairway for ease of access.



#### Soot level indicator

Aftertreatment device regeneration screen

Manual Stationary Regeneration

active regeneration or initiate a manual

soot is trapped In the KDPF.

stationary regeneration, this can be easily

Under most conditions, active regeneration will

occur automatically with no effect on machine

operation. In case the operator needs to disable

accomplished through the monitor panel. A soot

level indicator is displayed to show how much

Antonia Ant



DEF level gauge

e DEF low level guidance

## Supports the DEF level and refill timing

The DEF level gauge is displayed continuously on the right side of the monitor screen. In addition, when DEF level is low, DEF low level guidance messages appear in pop up displays to inform the operator in real time.

## **General features**

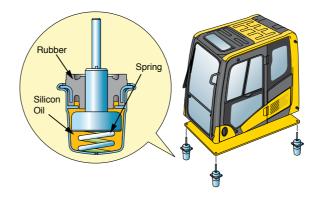
## ROPS cab structure ROPS Cab (ISO 12117-2)

The machine is equipped with a ROPS cab that conforms to ISO 12117-2 for excavators as standard equipment. It also satisfies the requirements for Level 1 Operator Protective Guard (OPG) and top guard (ISO 10262).



#### Low vibration with viscous cab mounts

The PC360LC-11 uses viscous mounts for the cab that incorporate a longer stroke and the addition of a spring. The cab damper mounting combined with a high rigidity deck reduces vibration at the operator's seat.





# PC490LC11 / PC490LCi-11



## **General features**

• Secondary engine shut down switch at base of seat to shutdown the engine



- Lock lever
- Retractable seat belt
- Tempered & tinted glass
- Large cab entrance step
- Left and right side hand rails

Seat belt caution indicator



- Large mirrors
- Slip-resistant plates
- Thermal and fan guards
- Pump/engine compartment partition
- Travel alarm



# **KALSS** Australian standard specification





Level indicator, overload alarm & anti-burst valves Enable safety and compliance when lifting suspended loads.



Additional lighting Extra lighting on cab and counterweight for improved visibility.



**Proportional hand controls** Enables proportional hand control of attachment speed.



E-Stops Allow compliance to site safety requirements.



OPG level 2 (ISO 10262) for falling object protection.

Specification also includes factory fitted provisions for fire extinguisher, turbo timer, UHF and vandal covers to reduce lead times and costs. Photos may include optional equipment.

**Battery Isolation** 

battery isolation.

Single pole, lockable Bosch-type

# **Specifications**

#### ENGINE

Model	Komatsu SAA6D125E-7*
Туре	Water-cooled, 4-cycle, direct injection
Aspiration	Variable geometry turbocharged aftercooled, cooled EGF
Number of cylinders	6
Bore	125 mm 4.92
Stroke	150 mm 5.91
Piston displacement	11.04 ltr 674 in
Horsepower:	
SAE J1995	Gross 270 kW 362 HI
ISO 9249 / SAE J1349	Net 268 kW 359 HI
Rated rpm	1900
Governor	All-speed control, electroni
Fan drive method for radiator cooling	Hydrauli

\*EPA Tier 4 Final emissions certified

#### **HYDRAULICS**

Туре	system, close	Hydraulic Mechanica ed-centre system wit nd pressure compens selectable w	h load sensing
Main pump:			
Pumps for	Boom, arn	n, bucket, swing, and	travel circuits
Туре	Varia	able displacement ax	ial piston type
Maximum flow		780 ltr/m	in 206 gal/min
Hydraulic motors:			
Travel	2 x ax	ial piston motor with	parking brake
Swing	1 x axial pist	ton motor with swing	holding brake
Relief valve setting:			
Implement circuits	37.3 MPa	380 kgf/cm2	5,400 psi
Travel circuit	37.3 MPa	380 kgf/cm2	5,400 psi
Swing circuit	27.9 MPa	285 kgf/cm2	4,050 psi
Pilot circuit	3.2 MPa	33 kgf/cm <sup>2</sup>	470 psi
Boom	2–160 mm x 15	70 mm x 110 mm 6.3	" x 61.8" x 4.3"
Arm	1–185 mm x 18	20 mm x 120 mm 7.3	" x 71.7" x 4.7"
Bucket	1–160 mm x 1	1270 mm x 110 mm 6	.3" x 50" x 4.3"

#### **DRIVES AND BRAKES**

Steering control	Two lever with pedals
Drive method	Hydrostatio
Maximum drawbar pull	329 kN 33510 kgf 73,880 lb
Gradeability	70%, 35
Maximum travel speed (auto shift):	
High	5.5 km/h 3.4 mph
Mid	4.2 km/h 2.6 mph
Low	3.0 km/h 1.9 mpł
Service brake	Hydraulic lock
Parking brake	Mechanical disc

Lower Front Window Guard

Protects cabin windscreen

against rocks and debris.

## PC490LC11 / PC490LCi-11

#### SWING SYSTEM

Driven by	Hydraulic motor
Swing reduction	Planetary gear
Swing circle lubrication	Grease-bathed
Service brake	Hydraulic lock
Holding brake/Swing lock	Mechanical disc brake
Swing speed	9.1 rpm
Swing torque	13414 kg•m 97,024 ft lbs

#### UNDERCARRIAGE

Centre frame	X-frame
Track frame	Box-section
Track type	Sealed
Track adjuster	Hydraulic
Number of shoes (each side)	49
Number of carrier rollers (each side)	2
Number of track rollers (each side)	8

#### **COOLANT & LUBRICANT CAPACITY**

Fuel tank	650 ltr 172 U.S. gal
Radiator	47.0 ltr 12.4 U.S. gal
Engine	38 ltr 10.0 U.S. gal
Final drive, each side	11.0 ltr 2.9 U.S. gal
Swing drive	20.0 ltr 5.3 U.S. gal
Hydraulic tank	248 ltr 65.5 U.S. gal
Diesel Exhaust Fluid (DEF) tank	39 ltr 10.3 U.S. gal

#### **OPERATING WEIGHT** (APPROXIMATE)

Operating weight includes **7000 mm** one-piece HD boom, **3400 mm** arm, rated capacity of lubricants, coolant, full fuel tank, operator, standard equipment, KGA dual lock quick hitch, and SAE heaped **2.5 m<sup>3</sup>** bucket.

Triple-Grouser Shoes	Operating Weight	Ground Pressure
600 mm	48,690 kg	0.86 kg/cm <sup>2</sup>
700 mm	49,190 kg	0.65 kg/cm <sup>2</sup>
800 mm	49,680 kg	0.58 kg/cm <sup>2</sup>

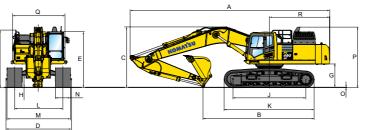
#### **Component Weights**

Arm including bucket cylinder and linkage <b>3400 mm</b> 11'1" arm assembly	2141 kg	4,720 lb
One piece HD boom including arm cylinder <b>7000 mm</b> 23'2" boom asssembly	4017 kg	8,856 lb
Boom cylinders x 2	366 kg	807 lb
Counterweight (standard)	9570 kg	21,098 lb

#### Dimensions

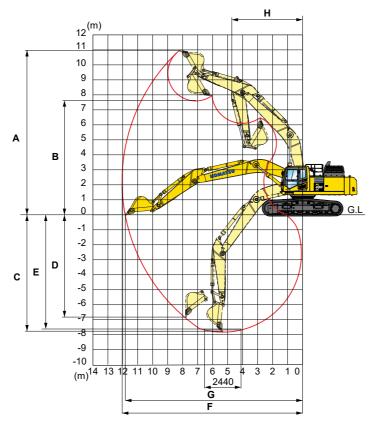
	Arm Length	3400 mm
Α	Overall length	11930 mm
В	Length on ground (transport)	6705 mm
С	Overall height (to top of boom)*	3635 mm
D	Overall width	3565 mm
Е	Overall height (to top of cab)*	3360 mm
F	Overall height (to top of handrail)*	3450 mm
G	Ground clearance, counterweight	1385 mm
Н	Ground clearance, minimum	568 mm
Ι	Tail swing radius	3645 mm
J	Track length on ground	4350 mm
Κ	Track length	5385 mm
L	Track gauge	2740 mm
Μ	Width of crawler	3340 mm
Ν	Shoe width	600 mm
0	Grouser height	37 mm
Р	Machine height to top of engine cover	3630 mm
Q	Machine upper width **	3360 mm
R	Distance, swing centre to rear end	3605 mm

\* : Including grouser height \*\* : Including handrail



#### Working range

WOII	king range	
	Arm Length	3400 mm
А	Max. digging height	10980 mm
В	Max. dumping height	7630 mm
С	Max. digging depth	7755 mm
D	Max. vertical wall digging depth	6805 mm
Е	Max. digging depth for 8' level bottom	7615 mm
F	Max. digging reach	12030 mm
G	Max. digging reach at ground level	11810 mm
Н	Min. swing radius	4735 mm
-	Bucket digging force at power max.	239 kN
atinç	bucket digging force at power max.	24,400 kg
SAE rating	Arm crowd force at power max.	205 kN
		20900 kg
ISO rating	Bucket digging force at power max.	275 kN
		28000 kg
ISO	Arm crowd force at power max.	214 kN
		21800 kg



# Lift capacities



					6.0	) m						Unit: kg		
A	3.0	3.0 m		4.5 m		6.0 m		7.5 m				⊖ MAX		
В	-	-	-	-	-	-	-	-	-	-	-	-		
7.5 m	-	-	-	-	-	-	-	-	-	-	*6350	*6350		
6.0 m	-	-	-	-	-	-	*9700	*9700	*8950	7000	*6400	6000		
4.5 m	-	-	-	-	*12590	*12590	*10700	9400	*9350	6800	*6600	5400		
3.0 m	-	-	*21250	20000	*15200	12750	*11900	8950	*9950	6550	*7050	5050		
1.5 m	-	-	*16000	*16000	*16850	12100	*12900	8550	*10500	6350	*7750	4950		
0.0 m	-	-	*16450	*16450	*17500	11650	*13400	8250	10550	6150	8700	5050		
-1.5 m	*9950	*9950	*22300	18250	*17250	11450	*13300	8100	10450	6050	9350	5400		
-3.0 m	*20250	*20250	*21050	18450	*16150	11500	*12450	8100	*9450	6100	*9450	6150		
-4.5 m	*22450	*22450	*17750	*17750	*13800	11700	*10350	8250	-	-	*9250	7700		
-6.0 m	-	-	*12500	*12500	*9300	*9300	-	-	-	-	*8150	*8150		

\*Load is limited by hydraulic capacity rather than tipping. Ratings are based on SAE standard No. J1097. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.



## PC490LC11 / PC490LCi-11

A: Reach from swing centre

- Conditions: Boom length: 7000 mm Arm length: 3400 mm
- Shoes: 600 mm triple grouserBucket: 1914 kg

#### **Standard equipment**

٠	3 speed travel with auto shift
	Access handrails - counterweight

- Alternator, 90 A, 24 V
- Arm, 3200 mm
- Auto idle
- Auto idle shut down
- Automatic air conditioner, large capacity
- Automatic engine warm-up system

1.0

- Auxiliary input (3.5 mm jack)
- Batteries, large capacity
- · Battery isolation switch, lockable
- Boom, 6500 mm
- Boom and arm burst valve protection
- Bump rails
- · Cab guards
- Lower front window guard
- Integrated top guard, OPG Level 1
- Bolt on top guard, OPG Level 2
- Carrier rollers, (2 each side)
- Converter, (2) x 12 V
- Dry type air cleaner, double element
- Dual flow hammer piping
- Electric horn
- Emergency stops (3)
- EMMS monitoring system
- Engine, Komatsu SAA6D107E-3

(includes data & SIM)

Fan guard structure

## intelligent Machine Control

• 12 month remote access to your machine

#### • Fire extinguisher, 1.5 kg (for PC360LCi-11) • ROPS cab (ISO 12117-2) with vandal guard provisions

- Fuel system pre-filter 10 micron • Guard belly plate (for PC360LCi-11)
- High back air suspension seat, with heat
- High pressure in-line hydraulic filters
- Hydraulic track adjusters
  - Hydraumind closed centre load sensing system
  - Komtrax<sup>®</sup>
  - Komvision (Standard on all models
  - manufactured after August 2021)
  - Large LCD colour monitor, high resolution
  - Level indicator
  - Lock lever
  - Lock lever, auto-lock
  - Mirrors (LH, RH & sidewise)

Proportional control handles

Provision for tilt circuit, including valve

Quick hitch piping with safety switch and alarm

• Pump/engine room partition cover

· Radiator and oil cooler dustproof net

Radio Bluetooth USB media system

- Operator identification system
- (available August 2021)
- Overload alarm

Rear reflectors

- Power maximising system PPC hydraulic control system
- · Counterweight, 6920 kg

#### Revolving frame undercovers

#### Bucket angle hold Komatsu PH700 monitor Dual multi-constellation GNSS antennas Komatsu stroke sensors [boom/arm & bucket]

- 12 months service level support agreemen Excavator weighing system MC-i4 with internal 4G modem • Factory integrated 3D machine control Auto grade assist Minimum distance control Auto stop control boom and bucket Network and UHF antennas iMC 2.0 canvas seat cover Auto tilt attachment control • Komatsu chassis mounted iMU Receiver- UR-1 UHF and 915SS radio [when tilt bucket fitted] **Optional equipment**  Radio 915SS Autogrease system Canvas seat cover · Battery isolation switch, dual pole, lockable • Fire extinguisher, 1.5 kg Starter circuit isolation, lockable Belly plates, 8 mm • Fire extinguisher, 4.5 kg • Track shoes, triple grouser, 700 mm • Fire extinguisher, 9 kg Cab guard • Track shoes, triple grouser, 850 mm
  - Window tinting
  - · Fuel cap vandal guard Jump start receptacle

• Ripper, KGA, single tyne

• Rearview monitoring system (1 camera)

• Rotating beacon (LED) with guard

Secondary engine shutdown switch

• Seat belt, retractable, 78 mm

August 2021)

Seat belt indicator

Side access hand rails

 Slip resistant foot plates • Starter motor, 11 kW/24 V x 1

• Thermal and fan guards

• Track rollers, 8 each side

• Track frame swivel guard

• Track roller guides, 3 each side

• Track shoes, triple grouser, 600 mm

Side by side coolers

Suction fan

Travel alarm

• Turbo timer Working lights

1 x boom

- 1 x RH

- 3 x cab

- 1 x counterweight

· Working mode selection system

(For PC360LC-11 models manufactured before

Attachment options

Hydraulic Breaker

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Cab vandal guard set

- Full front guard, OPG Level 2

#### Bucket, general purpose, KGA 650 mm, 0.53 m<sup>3</sup> Bucket, general purpose, KGA 1700 mm, 1.80 m<sup>3</sup> Quick hitch, KGA, dual lock

- Bucket, general purpose, KGA 1300 mm, 1.35 m<sup>3</sup> Bucket, rock, direct pin, KGA 1600 mm, 1.66 m<sup>3</sup>
- Bucket, general purpose, KGA 1500 mm, 1.61 m<sup>3</sup>
   Bucket, slope finishing, KGA 2200 mm, 2.20 m<sup>3</sup>
- - Now available JMHB460H-1 Model Type kg 3,261 Working weight Komatsu JMHB460H-1 Oil flow (min - max) ℓ/min 250 - 320 Operating pressure (max) MPa 17.5 Impact rate 350-700 bpm Chisel diameter mm 175 Variable frequencies 2 Acceptable back pressure bar 1.5 Base machine (min - max) Ton 35-60

# Notes

# PC490LC11 / PC490LCi-11