KOMATSU®

PC490LCi-11

Tier 4 Final Engine

PC490LCi

HYDRAULIC EXCAVATOR

Photo may include optional equipment.

NET HORSEPOWER
359 HP @ 1900 rpm
268 kW @ 1900 rpm

OPERATING WEIGHT
105,670–107,850 lb
47930–48920 kg

BUCKET CAPACITY
1.47–4.15 yd^3
1.12–3.17 m^3

intelligent MACHINE CONTROL

WALK-AROUND

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359 HP @ 1900 rpm
268 kW @ 1900 rpm

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intelligent MACHINE CONTROL

MAKE EVERY PASS COUNT

Improve your efficiency – less time required to complete excavation to finish grade with intelligent Machine Control (see pg 5).

Semi-automatic operation – next generation technology goes beyond traditional machine guidance (indicate only) type systems.

Innovative

- intelligent Machine Control excavator features semi-automatic operation of work equipment for highly accurate work.
- Large 12.1" (30.7 cm) monitor neatly displays simultaneous information such as magnified fine grading view, 3D view, current as-built status, etc.

Integrated

- Complete factory installed integrated intelligent Machine Control system comes standard with stroke sensing hydraulic cylinders, Global Navigation Satellite System (GNSS) components and an Inertial Measurement Unit (IMU) sensor. All components are validated to Komatsu's rigid quality & durability standards.

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.

Photo may include optional equipment

iNTELLIGENT MACHINE CONTROL

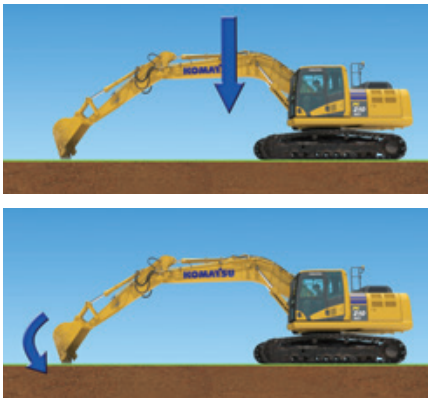
Photo may include optional equipment

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 utilizes 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 minimize over-excavation. If the operator turns off Auto mode, the machine can be operated with highly accurate, responsive machine guidance (indicate only).

• 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 minimizing 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 expanded 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 minimizing damage to the design surface.

• Minimum distance control

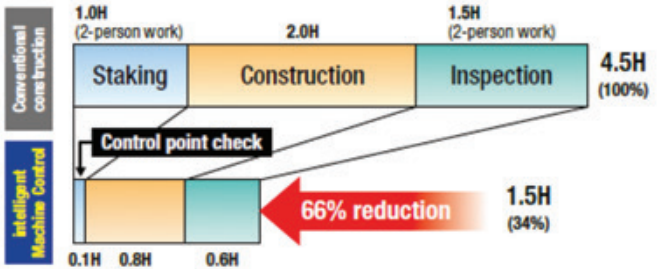
The intelligent Machine Control excavator controls the bucket by automatically selecting the point on the bucket closest to the target surface. Should the machine not be facing a sloped surface at a right angle, it will still follow the target surface and minimize digging below it.

intelligent MACHINE CONTROL

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 minimize 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 minimizing over-excavating the target surface from rough digging to finish grading.

Comparison of construction time based on in-house test of excavation and grading slope surface



* When used by an expert operator, the Komatsu intelligent Machine Control system increases construction efficiency.
* The above data does not include design time or working data creation time. The above data are based on in-house construction tests whose conditions may differ from actual construction.

Comparison of slope shaping work

Conventional construction

Shaping with reference to finishing stakes

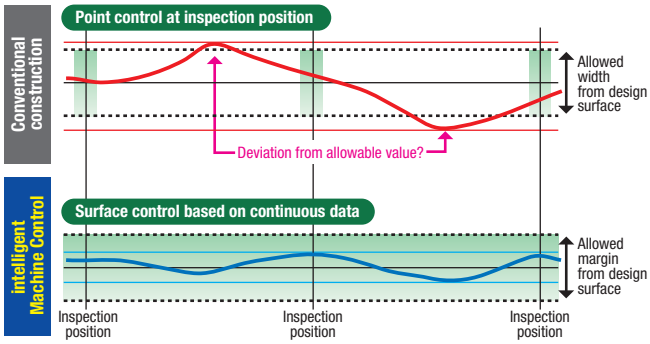
intelligent Machine Control

Reduces staking work and the number of assistant workers.

Improved Work Accuracy

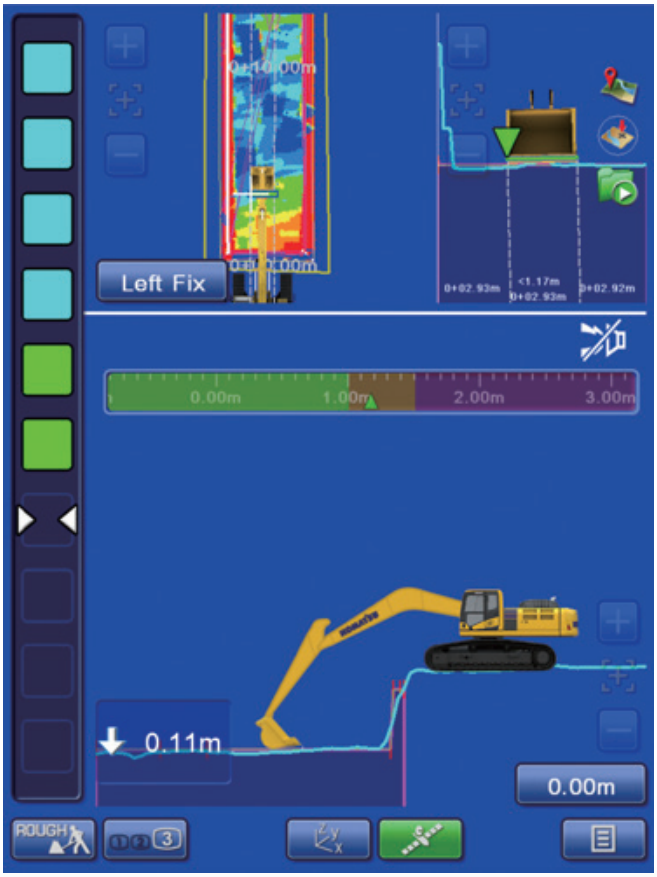
The bucket edge/tip position is instantly displayed on the control box, eliminating the wait time for display on the monitor during construction. The large and easy-to-view control box displays information clearly, aiding in highly accurate work. With manual operation and conventional machine guidance, finish grade quality 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



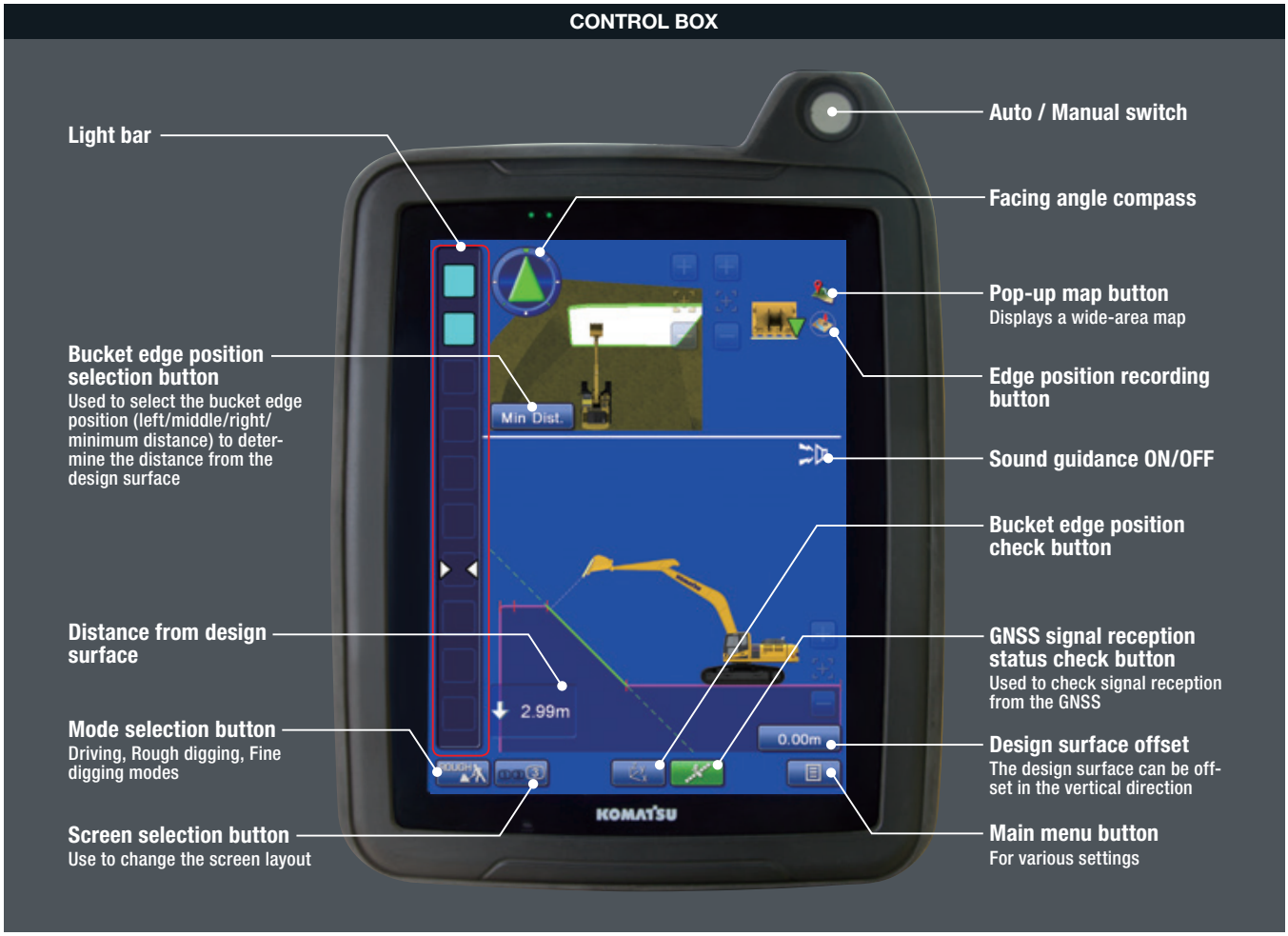
As-Built Surface Track Mapping

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



iNTELLIGENT MACHINE CONTROL

CONTROL BOX



Control Box

The monitor of the Komatsu intelligent Machine Control (control box) uses a large 12.1" (30.7 cm) 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.

Realistic 3D display

The machine and design surfaces are shown in realistic 3D. The angle and magnification of the views can be changed, which allows the operator to select the optimum view depending on the work conditions.

Machine Navigation

Facing angle compass

The orientation and color 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.

Bucket Edge Guidance with Eyesight and Sound

Light bar

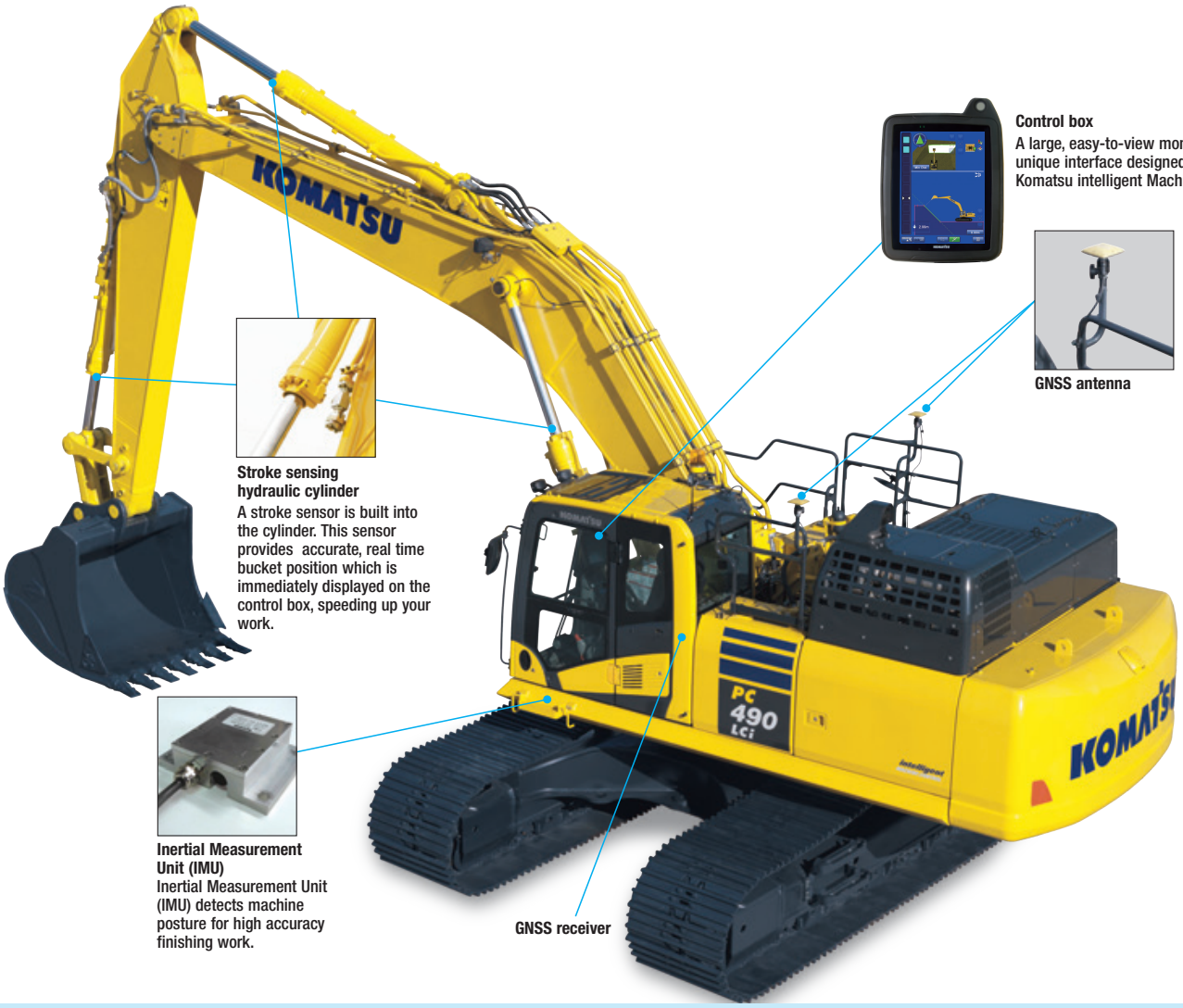
Colors show the bucket edge position relative to the target surface. Since the light bar is located on the left side of the screen, the bucket edge position can be viewed simply while operating, which increases the work efficiency.

Sound guidance

The operator can recognize the target surfaces not only by eyesight, but also by sound. Unique tones can be programmed for various bucket edge distances from the target surface.

intelligent MACHINE CONTROL

Factory installed Komatsu intelligent Machine Control components



Control box
A large, easy-to-view monitor and unique interface designed for Komatsu intelligent Machine Control.

GNSS antenna

Stroke sensing hydraulic cylinder
A stroke sensor is built into the cylinder. This sensor provides accurate, real time bucket position which is immediately displayed on the control box, speeding up your work.

Inertial Measurement Unit (IMU)
Inertial Measurement Unit (IMU) detects machine posture for high accuracy finishing work.

GNSS receiver

TOPCON Sitelink 3D Enterprise

The Sitelink 3D Enterprise connects the office and machine via a network, visualize the worksite clearly.

Transmission of design data from office to machine

Sending messages from office to machine or vice versa

Progress information and as-built data can be sent to the office from the machine in real time.

Remote assistance function enables troubleshooting from afar via the internet.

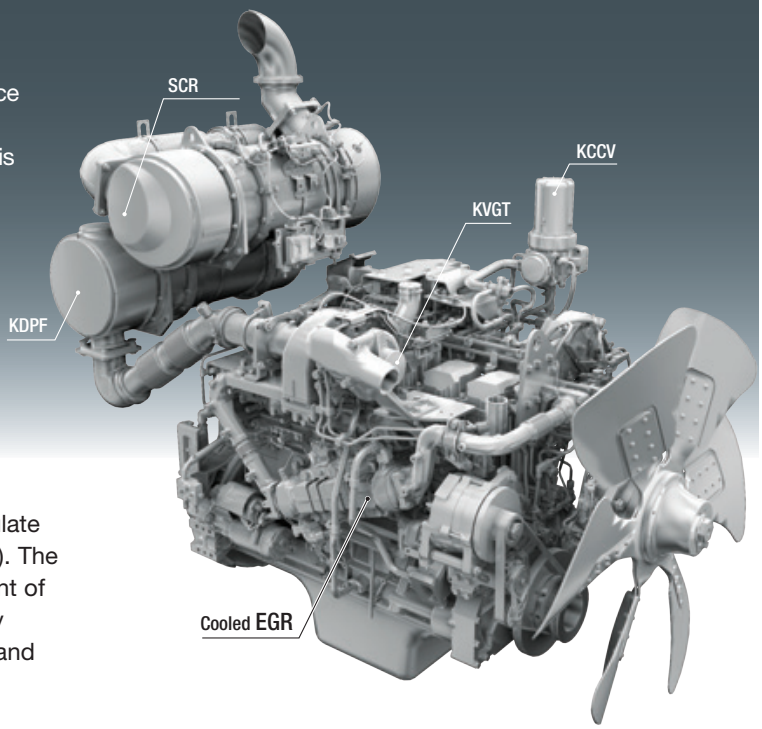
Please contact your local Topcon dealer for details.

PERFORMANCE FEATURES

KOMATSU NEW ENGINE TECHNOLOGIES

New Tier 4 Final Engine

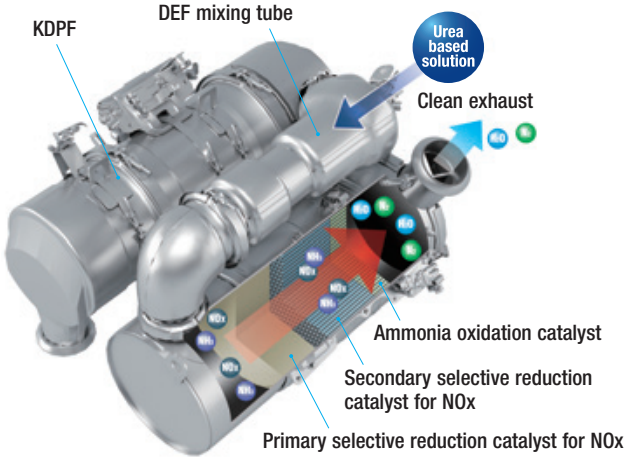
The Komatsu SAA6D125E-7 engine is EPA Tier 4 Final emissions certified and provides exceptional performance while reducing fuel consumption. Based on Komatsu proprietary technologies developed over many years, this new diesel engine reduces nitrogen oxides (NOx) by more than 80% when compared to Tier 4 interim levels. Through the in-house development and production of engines, electronics, and hydraulic components, Komatsu has achieved great advancements in technology, providing high levels of performance and efficiency in virtually all applications.



Technologies Applied to New Engine

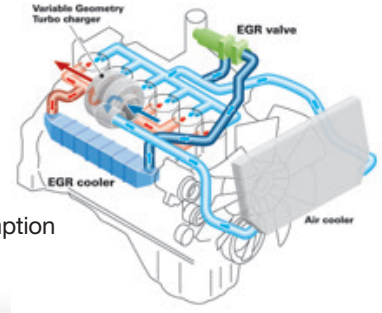
Heavy-duty aftertreatment system

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 vapor (H_2O) and nitrogen gas (N_2).



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. The system achieves a dynamic reduction of NOx, while helping reduce fuel consumption below Tier 4 Interim levels.

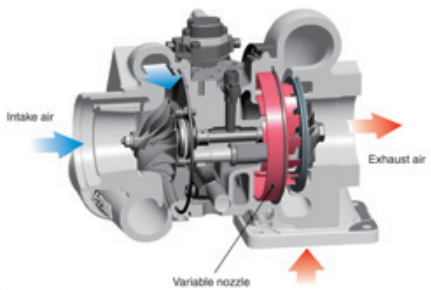


Advanced Electronic Control System

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 helps customers keep up with required maintenance.

Komatsu Variable Geometry Turbocharger (KVGT) system

The KVGT 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.



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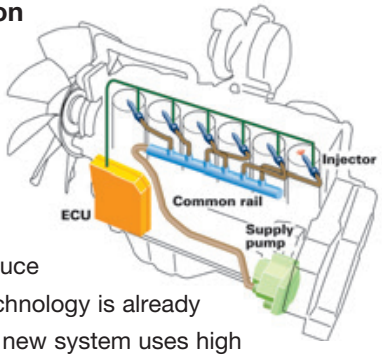
Komatsu Auto Idle Shutdown

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. The amount of time before the engine is shutdown can be easily programmed from 5 to 60 minutes.

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 computerized 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.

Photo many include optional equipment – PC490LC-11 Shown

PERFORMANCE FEATURES

Enhanced Productivity

The PC490LCi-11's enhanced P Mode provides more hydraulic flow and increases productivity.

Productivity

Up to 13% increase
(compared to the PC490LC-10 in standard P Mode)

P mode (90° swing and loading onto truck)

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

Increased Work Efficiency

Large digging force

With the one-touch Power Max. function digging force has been further increased. (8.5 seconds of operation)

Maximum arm crowd force (ISO)

200 kN(20.4t) ➡ 214 kN(21.8t) (with Power Max.) **7% UP**

Maximum bucket digging force (ISO)

256 kN(26.1t) ➡ 275 kN(28.0t) (with Power Max.) **7% UP**

Measured with Power Max. function, 3380 mm arm and ISO rating

Faster arm cycle speeds

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

Two boom mode settings for boom function

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

Photo many include optional equipment – PC490LC-11 Shown

intelligent MACHINE CONTROL

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.

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.

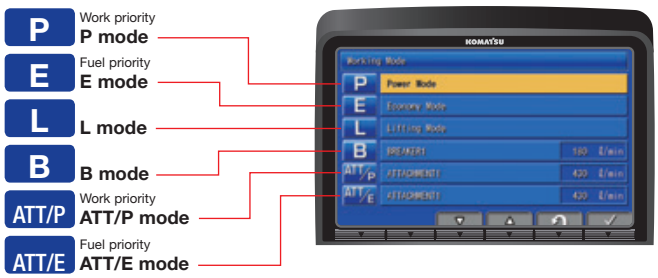
High Rigidity Work Equipment

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 Mode Selection

The PC490LCi-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 PC490LCi-11 features an attachment mode (ATT/E) that allows operators to run attachments while in Economy mode.

Working Mode	Application	Advantage
P	Power mode	•Maximum production/power •Fast cycle times
E	Economy mode	•Good cycle times •Better fuel economy
L	Lifting mode	•Increases hydraulic pressure
B	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



WORKING ENVIRONMENT

LARGE HIGH RESOLUTION LCD MONITOR

New Monitor Panel Interface Design

An updated large high resolution LCD color 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 an 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

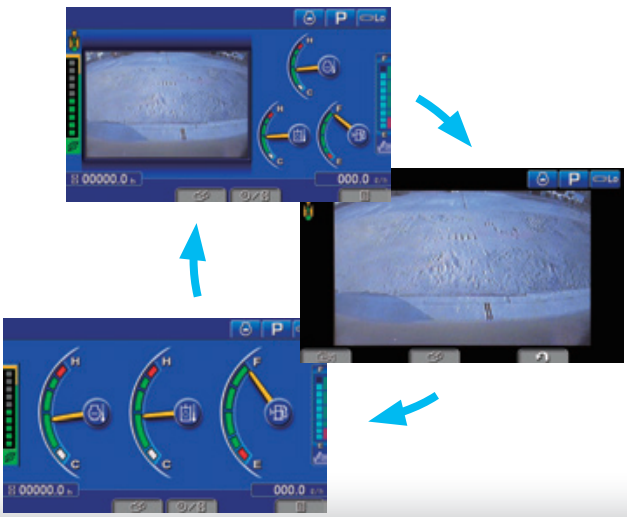
1. Auto-decelerator
2. Working mode
3. Travel speed
4. Ecology gauge
5. Camera display
6. Engine coolant temperature gauge
7. Hydraulic oil temperature gauge
8. Fuel gauge
9. DEF level gauge
10. Service meter, clock
11. Fuel consumption gauge
12. Guidance icon
13. Function switches
14. Camera direction display
15. DEF level caution lamp

Basic operation switches

1. Auto-decelerator
2. Working mode selector
3. Travel speed selector
4. Buzzer cancel
5. Wiper
6. Window washer
7. Auto climate controls

Switchable Display Modes

The main screen display mode can be changed by pressing the F3 key.



Visual user menu

Pressing the F6 key on the main screen displays the user menu screen. The menus are grouped for each function, and use easy-to-understand icons which enable the machine to be operated easily.

1 Energy saving guidance 2 Machine settings
3 Aftertreatment devices regeneration 4 SCR information
5 Maintenance 6 Monitor setting 7 Message check

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Support Efficiency Improvement

Ecology guidance

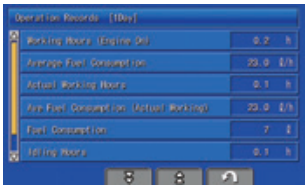
While the machine is operating, ecology guidance pops up on the monitor screen to notify the operator of the status of the machine in real time.

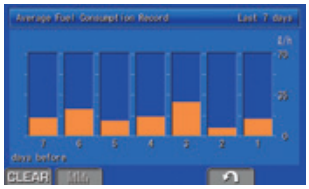
Ecology gauge & fuel consumption gauge

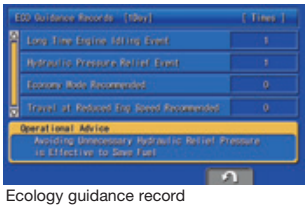
The monitor screen is provided with an ecology gauge and also a fuel consumption gauge which is displayed continuously. In addition, the operator can set any desired target value of fuel consumption (within the range of the green display), enabling the machine to be operated with better fuel economy.

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


Fuel consumption history


Ecology guidance record

Operator Identification Function

An operator identification ID can be set up for each operator, and used to manage operation information of individual machines using KOMTRAX data. Data sent from KOMTRAX can be used to analyze operation status by operator as well as by machine.

Photo many include optional equipment – PC490LC-11 Shown

WORKING ENVIRONMENT

Photo many include optional equipment – PC490LC-11 Shown

Comfortable Working Space

Wide spacious cab

The wide spacious cab includes a heated air suspension seat with reclining backrest. The seat height and position are easily adjusted using a pull-up lever. The armrest position is easily adjusted together with the console. Reclining the seat further enables it to be fully laid back with the headrest attached.

Arm rest with simple height adjustment function

A knob and plunger on the armrests allows easy height adjustment without the use of tools.

Low vibration with cab damper mounting

Automatic climate control

Pressurized cab

Auxiliary input jack

Connecting a regular audio device to the auxiliary jack allows the operator to hear the sound from the stereo speakers installed in the cab.

Standard Equipment

Sliding window glass (left side)

AM/FM stereo radio & ashtray

Remote intermittent wiper with windshield washer

Cigarette lighter

Opening & closing skylight

Magazine box & cup holder

Defroster
(conforms to the ISO standard)

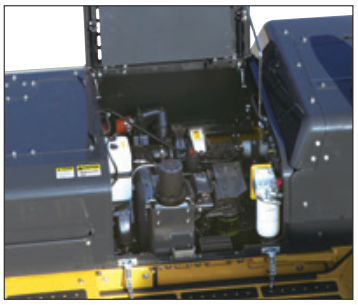
One-touch storable front window lower glass

MAINTENANCE FEATURES

intelligent MACHINE CONTROL

Centralized engine check points

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



Battery disconnect switch

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

Cab air filter

Washable cab floormat

Sloping track frame

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

Electric fuel priming pump

High efficiency fuel filter with water separator

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

Photo many include optional equipment – PC490LC-11 Shown

MAINTENANCE FEATURES

PC490LCi-11

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

Hydraulic oil filter
(Ecology-white element)

Large capacity air cleaner

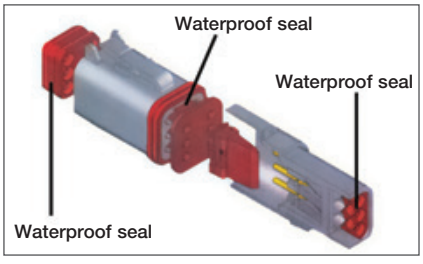
Large capacity air cleaner is comparable to that of larger machines. The larger air cleaner can extend air cleaner life during long-term operation and helps prevent early clogging, and resulting power loss. A radial seal design is used for reliability.

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.

DT-type connectors

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



Maintenance Information

"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.

Maintenance screen

Manual Stationary Regeneration

Under most conditions, active regeneration will occur automatically with no effect on machine operation. In case the operator needs to disable active regeneration or initiate a manual stationary regeneration, this can be easily accomplished through the monitor panel. A soot level indicator is displayed to show how much soot is trapped in the KDPF.

Aftertreatment device regeneration screen

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.

DEF level gauge

DEF low level guidance

GENERAL FEATURES

intelligent MACHINE CONTROL

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).

Rear View Monitoring System

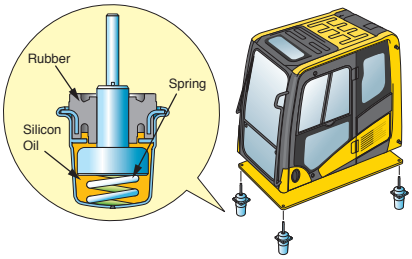
A new rear view monitoring system display has a rear view camera image that is continuously displayed together with the gauges and important vehicle information. This enables the operator to carry out work while easily checking the surrounding area.

Rear view camera

Rear view image on monitor

Low Vibration with Viscous Cab Mounts

The PC490LCi-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.



General Features

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

Left and right side hand rails

Seat belt caution indicator

Lock lever

Seat belt retractable

Tempered & tinted glass

Large mirrors

Slip-resistant plates

Thermal and fan guards

Pump/engine room partition

Travel alarm

Large cab entrance step

KOMATSU PARTS & SERVICE SUPPORT

KOMATSU CARE®

Every new Komatsu Tier 4 Final construction machine is covered.

The Komatsu CARE program covers all new Komatsu Tier 4 Final construction equipment, whether rented, leased or purchased. For the first 3 years or 2,000 hours, whichever occurs first, you'll receive:

- Regular service at 500, 1,000, 1,500 and 2,000-hr. intervals
- DEF tank breather element replacement at 1,000 hours
- DEF and CCV filters replacement at 2,000 hours
- 50-point inspection by factory-trained technician at each scheduled interval
- Technician labor
- Fluids, oils, coolant, filters, SCR screen, tank breather and parts
- Technician travel to and from your equipment location

Plus two complimentary scheduled KDPF exchanges and SCR system service for 5 years-no hours limits. *

Service will be performed by a Komatsu Distributor and only Komatsu genuine fluids and filters will be used.

Komatsu CARE® services are available from every Komatsu Distributor in the U.S. and Canada.

Komatsu CARE – Extended Coverage

- Extended Coverage can provide peace of mind by protecting customers from unplanned expenses that effect cash flow
- Purchasing extended coverage locks-in the cost of covered parts and labor for the coverage period and helps turn these into fixed costs

* Some exclusions apply. Please contact your Komatsu distributor for specific programs details.

Komatsu Parts Support

- 24/7/365 to fulfill your parts needs
- 9 parts Distribution Centers strategically located across the U.S. and Canada
- Distributor network of more than 300 locations across U.S. and Canada to serve you
- Online part ordering through Komatsu eParts
- Remanufactured components with same-as-new warranties at a significant cost reduction

Komatsu Oil and Wear Analysis (KOWA)

- KOWA detects fuel dilution, coolant leaks, and measures wear metals
- Proactively maintain your equipment
- Maximize availability and performance
- Can identify potential problems before they lead to major repairs
- Reduce life cycle cost by extending component life

KOMTRAX EQUIPMENT MONITORING

intelligent MACHINE CONTROL

GET THE WHOLE STORY WITH KOMTRAX®

WHAT

- KOMTRAX is Komatsu's remote equipment monitoring and management system
- KOMTRAX **continuously monitors and records** machine health and operational data
- Information such as fuel consumption, utilization, and a detailed history **lowering owning and operating cost**

WHO

- KOMTRAX is **standard** equipment on all Komatsu construction products

WHEN

- Know when your machines are **running or idling** and make decisions that will improve your fleet utilization
- Detailed movement records ensure you know when and where your equipment is moved
- Up to date records allow you to **know when maintenance is due** and help you plan for future maintenance needs

WHERE

- KOMTRAX data **can be accessed virtually anywhere** through your computer, the web or your smart phone
- Automatic alerts keep fleet managers up to date on the latest machine notifications

WHY

- Knowledge is power - **make informed decisions** to manage your fleet better
- Knowing your idle time and fuel consumption will help maximize your machine efficiency
- **Take control of your equipment** - any time, anywhere

Photo many include optional equipment – PC490LC-11 Shown

KOMTRAX®

For construction and compact equipment.

KOMTRAX Plus®

For production and mining class machines.

SPECIFICATIONS

PC490LCi-11

ENGINE

Model ..... Komatsu SAA6D125E-7*
Type ..... Water-cooled, 4-cycle, direct injection
Aspiration ..... Komatsu Variable Geometry Turbocharger with air-to-air aftercooled EGR
Number of cylinders 6
Bore ..... 125 mm **4.92"**
Stroke ..... 150 mm **5.91"**
Piston displacement ..... 11.04 ltr **674 in³**
Horsepower:
SAE J1995 ..... Gross 270 kW **362 HP**
ISO 9249 / SAE J1349 ..... Net 268 kW **359 HP**
Rated rpm 1900
Governor ..... All-speed control, electronic
Fan drive method for radiator cooling ..... Hydraulic

*EPA Tier 4 Final emissions certified

HYDRAULICS

Type .. HydrauMind (Hydraulic Mechanical Intelligence) system, closed-center system with load sensing valve and pressure compensated valves, 6 selectable working modes
Main pump:
Pumps for ..... Boom, arm, bucket, swing, and travel circuits
Type ..... Variable displacement axial piston type
Maximum flow ..... 780 ltr/min **206 gal/min**

Hydraulc motors:

Travel ..... 2 x axial piston motor with parking brake
Swing ..... 1 x axial piston 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/cm² **470 psi**

Hydraulic cylinders:

(Number of cylinders – bore x stroke x rod diameter)

Boom ..... 2–160 mm x 1570 mm x 110 mm **6.3" x 61.8" x 4.3"**
Arm ..... 1–185 mm x 1820 mm x 120 mm **7.3" x 71.7" x 4.7"**
Bucket ..... 1–160 mm x 1270 mm x 110 mm **6.3" x 50" x 4.3"**

DRIVES AND BRAKES

Steering control ..... Two lever with pedals
Drive method ..... Hydrostatic
Maximum drawbar pull ..... 329 kN 33510 kgf **73,880 lbf**
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 mph**
Service brake ..... Hydraulic lock
Parking brake ..... Mechanical disc

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 ..... 9.0 rpm
Swing torque ..... 13414 kg•m **97,024 ft lbs**

UNDERCARRIAGE

Center 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 (REFILLING)

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 7060 mm **23'2"** one-piece HD boom, 3380 mm **11'1"** arm, SAE heaped 2.25 m³ **2.94 yd³** bucket, rated capacity of lubricants, coolant, full fuel tank, operator, and standard equipment.

Triple-Grouser Shoes	Fixed Gauge	
	Operating Weight	Ground Pressure
700 mm **28"**	47930 kg **105,670 lb**	0.73 kg/cm² **10.38 psi**
800 mm **31.5"**	48430 kg **106,770 lb**	0.65 kg/cm² **9.20 psi**
900 mm **35.5"**	48920 kg **107,850 lb**	0.58 kg/cm² **8.32 psi**

WORKING FORCES

	Arm Length	3380 mm 11'1"	4000 mm 13'1"
ISO rating	Bucket digging force	275 kN 28000 kgf / **61,730 lb**	275 kN 28000 kgf / **61,730 lb**
	Arm crowd force	214 kN 21800 kgf / **48,060 lb**	190 kN 19400 kgf / **42,770 lb**
SAE rating	Bucket digging force	239 kN 24400 kgf / **53,790 lb**	239 kN 24400 kgf / **53,790 lb**
	Arm crowd force	205 kN 20900 kgf / **46,080 lb**	184 kN 18800 kgf / **41,450 lb**

Component Weights

Arm including bucket cylinder and linkage
3380 mm **11'1"** arm assembly ..... 2141 kg **4,720 lb**
4000 mm **13'1"** arm assembly ..... 2408 kg **5,309 lb**

One piece HD boom including arm cylinder
7060 mm **23'2"** boom asssembly ..... 4017 kg **8,856 lb**
Boom cylinders x 2 ..... 366 kg **807 lb**
Counterweight (standard) ..... 9573 kg **21,105 lb**
2.25 m³ **2.94 yd³** bucket - 54" width ..... 1867 kg **4,117 lb**

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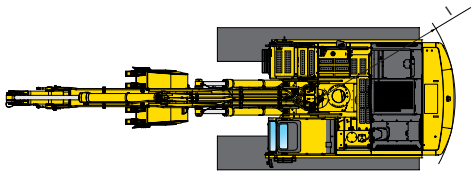
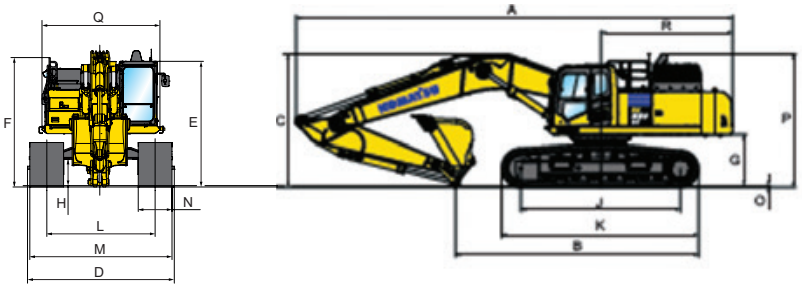
DIMENSIONS

	Arm Length	3380 mm	11'1"	4000 mm	13'1"
A	Overall length	11930 mm	**39'2"**	11950 mm	**39'2"**
B	Length on ground (transport)	6660 mm	**21'10"**	6330 mm	**20'9"**
C	Overall height (to top of boom)*	3635 mm	**11'11"**	3885 mm	**12'9"**
D	Overall width	3910 mm	**10'6"**		
E	Overall height (to top of cab)*	3360 mm	**11'0"**		
F	Overall height (to top of handrail)* (including GNSS antenna installing parts)	3630 mm	**11'11"**		
G	Ground clearance, counterweight	1385 mm	**4'7"**		
H	Ground clearance, minimum	700 mm	**2'4"**		
I	Tail swing radius	3645 mm	**12'0"**		
J	Track length on ground	4350 mm	**14'3"**		
K	Track length	5385 mm	**17'8"**		
L	Track gauge	2890 mm	**9'6"**		
M	Width of crawler	3790 mm	**12'2"**		
N	Shoe width	700 mm	**2'4"**		
O	Grouser height	37 mm	**1.5"**		
P	Machine height to top of engine cover	3630 mm	**11'11"**		
Q	Machine upper width **	3145 mm	**10'4"**		
R	Distance, swing center to rear end	3605 mm	**11'10"**		

* : Including grouser height
** : Including handrail





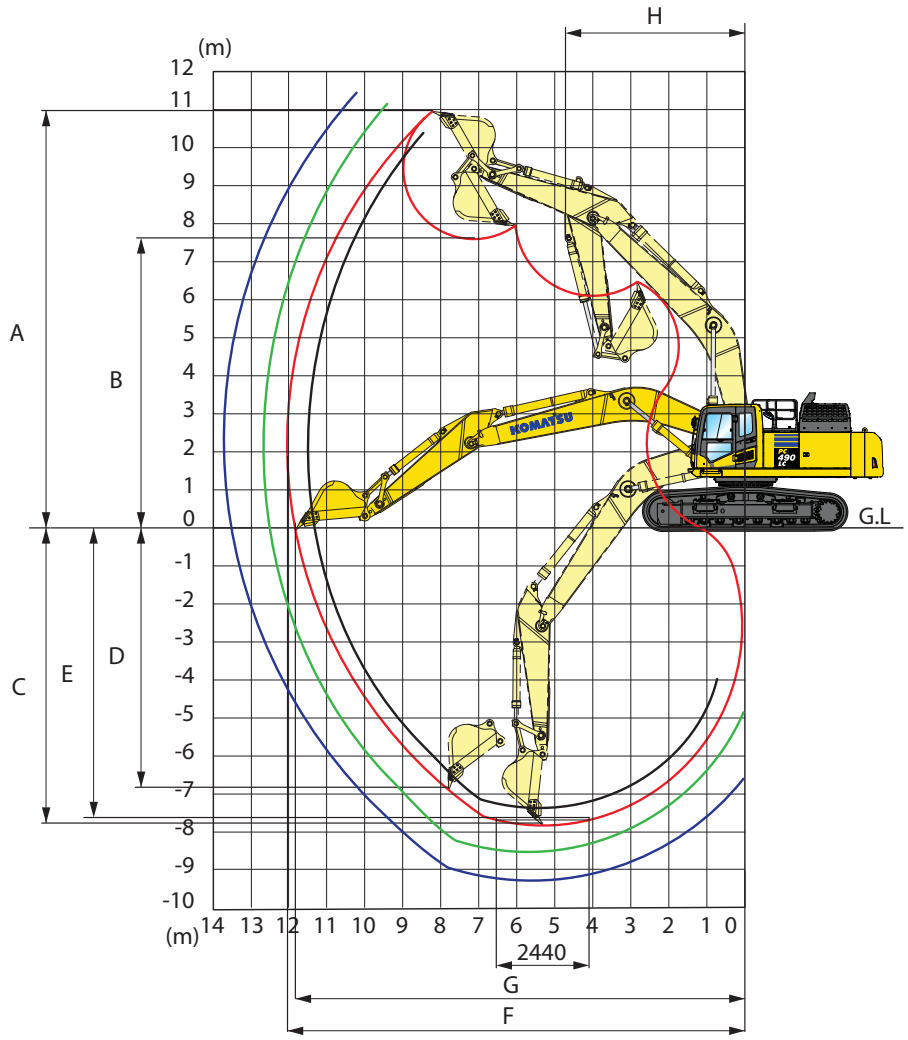
BACKHOE BUCKET, ARM AND BOOM COMBINATION

Bucket Type	Capacity		Teeth	Width		Weight		Tip Radius		3.4 m (11'1")	4.0 m (13'1")
Komatsu TL	1.12 m³	**1.47 yd³**	3	762 mm	**30"**	1287 kg	**2838 lb**	1826 mm	**72"**	●	●
	1.35 m³	**1.76 yd³**	4	914 mm	**36"**	1441 kg	**3176 lb**	1826 mm	**72"**	●	●
	1.64 m³	**2.15 yd³**	4	1067 mm	**42"**	1561 kg	**3442 lb**	1826 mm	**72"**	●	●
	1.94 m³	**2.54 yd³**	5	1219 mm	**48"**	1714 kg	**3779 lb**	1826 mm	**72"**	●	○
	2.25 m³	**2.94 yd³**	6	1372 mm	**54"**	1867 kg	**4117 lb**	1826 mm	**72"**	●	○
	2.55 m³	**3.34 yd³**	6	1524 mm	**60"**	1988 kg	**4382 lb**	1826 mm	**72"**	○	□
	2.87 m³	**3.75 yd³**	7	1676 mm	**66"**	2141 kg	**4720 lb**	1826 mm	**72"**	□	⊙
	3.17 m³	**4.15 yd³**	7	1829 mm	**72"**	2261 kg	**4985 lb**	1826 mm	**72"**	⊙	⊙
Komatsu HP	1.12 m³	**1.47 yd³**	3	762 mm	**30"**	1508 kg	**3324 lb**	1826 mm	**72"**	●	●
	1.35 m³	**1.76 yd³**	4	914 mm	**36"**	1663 kg	**3667 lb**	1826 mm	**72"**	●	●
	1.64 m³	**2.15 yd³**	4	1067 mm	**42"**	1835 kg	**4046 lb**	1826 mm	**72"**	●	●
	1.94 m³	**2.54 yd³**	5	1219 mm	**48"**	1978 kg	**4360 lb**	1826 mm	**72"**	●	●
	2.25 m³	**2.94 yd³**	6	1372 mm	**54"**	2151 kg	**4741 lb**	1826 mm	**72"**	○	□
	2.55 m³	**3.34 yd³**	6	1524 mm	**60"**	2293 kg	**5056 lb**	1826 mm	**72"**	□	□
	2.87 m³	**3.75 yd³**	7	1676 mm	**66"**	2466 kg	**5437 lb**	1826 mm	**72"**	⊙	⊙
	3.17 m³	**4.15 yd³**	7	1829 mm	**72"**	2609 kg	**5752 lb**	1826 mm	**72"**	⊙	X
Komatsu HPS	1.12 m³	**1.47 yd³**	3	762 mm	**30"**	1632 kg	**3597 lb**	1826 mm	**72"**	●	●
	1.35 m³	**1.76 yd³**	4	914 mm	**36"**	1806 kg	**3981 lb**	1826 mm	**72"**	●	●
	1.64 m³	**2.15 yd³**	4	1067 mm	**42"**	2003 kg	**4416 lb**	1826 mm	**72"**	●	●
	1.94 m³	**2.54 yd³**	5	1219 mm	**48"**	2172 kg	**4789 lb**	1826 mm	**72"**	●	○
	2.25 m³	**2.94 yd³**	6	1372 mm	**54"**	2371 kg	**5228 lb**	1826 mm	**72"**	○	□
	2.55 m³	**3.34 yd³**	6	1524 mm	**60"**	2540 kg	**5600 lb**	1826 mm	**72"**	□	⊙
	2.87 m³	**3.75 yd³**	7	1676 mm	**66"**	2739 kg	**6039 lb**	1826 mm	**72"**	⊙	X
Komatsu HPX	1.12 m³	**1.47 yd³**	3	762 mm	**30"**	1759 kg	**3877 lb**	1826 mm	**72"**	●	●
	1.35 m³	**1.76 yd³**	4	914 mm	**36"**	1933 kg	**4261 lb**	1826 mm	**72"**	●	●
	1.64 m³	**2.15 yd³**	4	1067 mm	**42"**	2130 kg	**4696 lb**	1826 mm	**72"**	●	●
	1.94 m³	**2.54 yd³**	5	1219 mm	**48"**	2299 kg	**5069 lb**	1826 mm	**72"**	●	○
	2.25 m³	**2.94 yd³**	6	1372 mm	**54"**	2498 kg	**5508 lb**	1826 mm	**72"**	○	□
	2.55 m³	**3.34 yd³**	6	1524 mm	**60"**	2667 kg	**5880 lb**	1826 mm	**72"**	□	⊙
	2.87 m³	**3.75 yd³**	7	1676 mm	**66"**	2866 kg	**6319 lb**	1826 mm	**72"**	⊙	X

● - Used with material weights up to 3,500 lb/yd³ - Quarry/rock/high abrasion applications
○ - Used with material weights up to 3,000 lb/yd³ – Tough digging applications
□ - Used with material weights up to 2,500 lb/yd³ – General construction
⊙ - Used with material weights up to 2,000 lb/yd³ – Light materials applications
X - Not useable

SPECIFICATIONS

WORKING RANGE



	Arm Length	3380 mm	11'1"	4000 mm	13'1"
A	Max. digging height	10980 mm	**36'0"**	11090 mm	**36'5"**
B	Max. dumping height	7630 mm	**25'0"**	7780 mm	**25'6"**
C	Max. digging depth	7755 mm	**25'5"**	8380 mm	**27'6"**
D	Max. vertical wall digging depth	6805 mm	**22'4"**	7220 mm	**23'8"**
E	Max. digging depth for 8' level bottom	7615 mm	**25'0"**	8250 mm	**27'0"**
F	Max. digging reach	12030 mm	**39'6"**	12565 mm	**41'3"**
G	Max. digging reach at ground level	11810 mm	**38'9"**	12365 mm	**40'7"**
H	Min. swing radius	4735 mm	**15'6"**	4800 mm	**15'9"**
SAE rating	Bucket digging force at power max.	239 kN 24,400 kg / **53,790 lb**		239 kN 24,400 kg / **53,790 lb**	
	Arm crowd force at power max.	205 kN 20900 kg / **46,080 lb**		184 kN 18800 kg / **41,450 lb**	
ISO rating	Bucket digging force at power max.	275 kN 28000 kg / **61,730 lb**		275 kN 28000 kg / **61,730 lb**	
	Arm crowd force at power max.	214 kN 21800 kg / **48,060 lb**		190 kN 19400 kg / **42,770 lb**	

LIFT CAPACITIES

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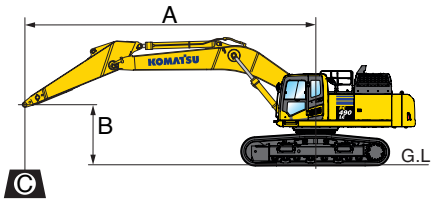


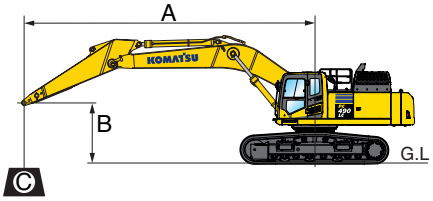
A: Reach from swing center
B: Bucket hook height
C: Lifting capacity
Cf: Rating over front
Cs: Rating over side
⊗: Rating at maximum reach

Conditions:
- Boom length: 7060 mm **23' 2"**
- Bucket: None
- Undercarriage: Fixed Gauge
- Lifting mode: On

Arm: 3380 mm **11'1"** **Bucket:** None **Shoes:** 900 mm **35.5"** triple grouser **Unit:** kg **lb**

A / B	MAX	3.0 m **10'**		4.6 m **15'**		6.1 m **20'**		7.6 m **25'**		9.1 m **30'**		⊗ MAX	
		Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
9.1 m	7.5 m											* 9700	* 9700
30'	**24'**											* **21300**	* **21300**
7.6 m	8.6 m							* 11720	11460			* 9200	9200
25'	**28'**							* **25800**	**25200**			* **20200**	**20200**
6.1 m	9.4 m							* 12230	11270	* 11430	8590	* 9070	8190
20'	**31'**							* **26900**	**24800**	* **25200**	**18900**	* **20000**	**18000**
4.6 m	9.9 m			* 20080	* 20080	* 15510	15000	* 13160	10950	* 11770	8460	* 9210	7500
15'	**33'**			* **44200**	* **44200**	* **34200**	**33000**	* **29000**	**24100**	* **25900**	**18600**	* **20300**	**16500**
3.0 m	10.1 m			* 24120	21240	* 17470	14300	* 14190	10590	* 12260	8270	* 9580	7150
10'	**33'**			* **53100**	**46800**	* **38500**	**31500**	* **31200**	**23300**	* **27000**	**18200**	* **21100**	**15700**
1.5 m	10.1 m			* 19210	* 19210	* 18890	13740	* 15020	10270	12460	8090	* 10240	7050
5'	**33'**			* **42300**	* **42300**	* **41600**	**30300**	* **33100**	**22600**	**27400**	**17800**	* **22500**	**15500**
0 m	9.9 m			* 21790	20000	* 19390	13410	* 15390	10040	12320	7970	11050	7190
0'	**33'**			* **48000**	**44100**	* **42700**	**29500**	* **33900**	**22100**	**27100**	**17500**	**24300**	**15800**
-1.5 m	9.4 m	* 15850	* 15850	* 24430	19990	* 18910	13290	* 15080	9940	* 12170	7930	* 11600	7640
-5'	**31'**	* **34900**	* **34900**	* **53800**	**44000**	* **41600**	**29300**	* **33200**	**21900**	* **26800**	**17400**	* **25500**	**16800**
-3.0 m	8.7 m	* 24660	* 24660	* 21940	20160	* 17370	13340	* 13810	9980			* 11490	8560
-10'	**28'**	* **54300**	* **54300**	* **48300**	**44400**	* **38300**	**29400**	* **30400**	**22000**			* **25300**	**18800**
-4.6 m	7.5 m	* 21900	* 21900	* 17970	* 17970	* 14350	13570					* 10930	10450
-15'	**25'**	* **48200**	* **48200**	* **39600**	* **39600**	* **31600**	**29900**					* **24100**	**23000**

*Load is limited by hydraulic capacity rather than tipping. Ratings are based on ISO standard No. 10567. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.



A: Reach from swing center
B: Bucket hook height
C: Lifting capacity
Cf: Rating over front
Cs: Rating over side
⊗: Rating at maximum reach

Conditions:
- Boom length: 7060 mm **23' 2"**
- Bucket: None
- Undercarriage: Fixed Gauge
- Lifting mode: On

Arm: 4000 mm **13'1"** **Bucket:** None **Shoes:** 900 mm **35.5"** triple grouser **Unit:** kg **lb**

A / B	MAX	3.0 m **10'**		4.6 m **15'**		6.1 m **20'**		7.6 m **25'**		9.1 m **30'**		⊗ MAX	
		Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
9.1 m	8.2 m											* 8240	* 8240
30 '	**27'**											* **18100**	* **18100**
7.6 m	9.3 m									* 8750	8670	* 7890	* 7890
25'	**30'**									* **19200**	**19100**	* **17400**	* **17400**
6.1 m	10.0 m							* 11350	11330	* 10650	8610	* 7810	7470
20 '	**33'**							* **25000**	**24900**	* **23400**	**18900**	* **17200**	**16400**
4.6 m	10.5 m					* 14350	* 14350	* 12350	10980	* 11120	8440	* 7930	6890
15'	**34'**					* **31600**	* **31600**	* **27200**	**24200**	* **24500**	**18600**	* **17400**	**15100**
3.0 m	10.7 m			* 22270	21570	* 16440	14370	* 13480	10570	* 11710	8210	* 8230	6570
10'	**35'**			* **49100**	**47500**	* **36200**	**31600**	* **29700**	**23300**	* **25800**	**18100**	* **18100**	**14400**
1.5 m	10.7 m			* 25080	20330	* 18130	13700	* 14470	10190	* 12240	7990	* 8760	6470
5'	**35'**			* **55300**	**44800**	* **39900**	**30200**	* **31900**	**22400**	* **26900**	**17600**	* **19300**	**14200**
0 m	10.5 m			* 23770	19770	* 19010	13260	* 15050	9900	12190	7820	* 9590	6570
0'	**34'**			* **52400**	**43500**	* **41900**	**29200**	* **33100**	**21800**	**26800**	**17200**	* **21100**	**14400**
-1.5 m	10.0 m	* 15460	* 15460	* 25010	19610	* 18940	13050	* 15040	9740	12090	7730	10720	6920
-5'	**33'**	* **34100**	* **34100**	* **55100**	**43200**	* **41700**	**28700**	* **33100**	**21400**	**26600**	**17000**	**23600**	**15200**
-3.0 m	9.3 m	* 22240	* 22240	* 23040	19700	* 17870	13040	* 14220	9720	* 11220	7760	* 10930	7640
-10'	**30'**	* **49000**	* **49000**	* **50800**	**43400**	* **39400**	**28700**	* **31300**	**21400**	* **24700**	**17100**	* **24100**	**16800**
-4.6 m	8.2 m	* 25460	* 25460	* 19730	* 19730	* 15550	13200	* 12100	9870			* 10700	9040
-15'	**27'**	* **56100**	* **56100**	* **43500**	* **43500**	* **34200**	**29100**	* **26600**	**21700**			* **23600**	**19900**
-6.1 m	6.6 m			* 14280	* 14280	* 10970	* 10970					* 9670	* 9670
-20'	**22'**			* **31400**	* **31400**	* **24100**	* **24100**					* **21300**	* **21300**

*Load is limited by hydraulic capacity rather than tipping. Ratings are based on ISO standard No. 10567. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.

STANDARD EQUIPMENT

- 3 speed travel with auto shift
- Alternator, 90 Ampere, 24V
- AM/FM radio
- Arm holding valve
- Automatic engine warm-up system
- Automatic climate control/air conditioner/heater/defroster
- Auto idle
- Auto idle shut down, programmable
- Auxiliary input (3.5mm jack)
- Batteries, large capacity (2 x 12V)
- Battery master disconnect switch
- Boom holding valves
- Carrier rollers, (2 each side)
- Converter, (2) x 12V
- Counterweight, 9573 kg **21,105 lb**
- Dry type air cleaner, double element
- Electric horn
- Engine, Komatsu SAA6D125E-7
- Engine coolant to -25°C **-13°F**
- EMMS monitoring system
- Engine overheat prevention system
- Extended work equipment grease interval
- Fan guard structure
- Fuel priming pump, 24V
- Fuel system pre-filter 10 micron
- Grease sealed track chain
- High back air suspension seat, with heat
- Hydraulic cooling fan (reversible)
- Hydraulic track adjusters
- KOMTRAX® Level 5.0
- Large LCD color monitor, high resolution
- Lock lever
- Mirrors, (LH and RH)
- Operator Protective Top Guard (OPG), Level 1
- Operator identification system
- Pattern change valve (ISO to BH control)
- Power maximizing system
- PPC hydraulic control system
- Pump/engine room partition cover
- Radiator and oil cooler dustproof net
- Rear reflectors
- Rearview monitoring system (1 camera)
- Revolving frame deck guard
- Revolving frame undercovers
- ROPS cab (ISO12117-2)
- Seat belt indicator
- Seat belt, retractable, 76mm **3"**
- Secondary engine shutoff switch
- Service valve
- Skylight
- Slip resistant foot plates
- Starter motor, 11.0kW/24V x 1
- Suction fan
- Thermal and fan guards
- Track frame swivel guard
- Track roller guards, center section
- Track rollers, 8 (each side)
- Track shoes, triple grouser, 700mm **28"**
- Travel alarm
- Two boom mode settings
- Working lights, 2 (boom and RH front)
- Working mode selection system

OPTIONAL EQUIPMENT

- Arms
  - 3380 mm **11'1"** arm assembly
  - 4000 mm **13'1"** arm assembly
- Booms
  - 7000 mm **23'2"** HD boom assembly
- Counterweight, 12316 kg **27,153 lb** with revolving frame reinforcement
- Track roller guards, full length
- Track shoes, triple grouser, 800 mm **31.5"**
- Track shoes, triple grouser, 900 mm **35.5"**

AESS885-00

AD02(Electronic View Only) 03/16 (EV-2)

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Note: All comparisons and claims of improved performance made herein are made with respect to the prior Komatsu model unless otherwise specifically stated.