



WB97R-5E0

Backhoe loader
EPA Tier III EU stage 3A



Photos may include optional equipment.

Engine power

74 kW / 99.2 hp @ 2,200 rpm (ISO 14396).

Operating weight

7,510 - 8,115 kg.

Bucket capacity

Front loader 1.03 m³.
Backhoe loader 0.19 m³.

Walk around

The WB97R-5E0 model is part of the last generation of Komatsu backhoes that introduces several innovations to the market. This model considers the needs of our customers around the world. The result is a user-friendly machine that offers high level performance.



Photo may include optional equipment.

WB97R-5E0 Backhoe loader

Exclusive design

- Optimal parallel lifting.
- Excellent loading performance.
- S-shape backhoe boom.
- Functional design with hydraulic pipes and hoses along the boom.
- Increased breakout force and lifting capacity of front bucket.

Superior performance

- Standard PPC servo control in front loader.
- Full servo transmission.
- CLSS (Closed load sensing system).
- Variable flow pistons pump.
- "Power" and "Economy" working modes.

Exceptional comfort

- Ergonomic interior design.
- Reduced noise inside the cab.
- Air conditioning.
- Fully adjustable air-to-air suspension seats.

Excellent visibility

- Round and wide glass surface.
- Inclined narrow bonnet.
- Upper and front windows provide full view of front bucket.
- Permanent control of surrounding area.



Total versatility

- Several different configurations (optional).
- X-type rear outriggers with reversible rubber pads and hydraulic safety valve.
- Hydraulic quick couplers for front and rear accessories (optional).

Superior performance

Hydraulic system

The WB97R-5E0 model offers high productivity, maximum performance, increased breakout force and lifting capacity.

With all certainty, the core of the hydraulic system of the Komatsu backhoe is the consolidated CLSS (closed load sensing system). Thanks to its variable flow, the CLSS supplies the required power efficiently. With two working modes "Power" and "Economy", the operator can choose maximum power and minimum fuel consumption.



Absolute control

PPC servo-controls are standard for the front loader and backhoe.

A swing lever that controls the "Power Shift" transmission and switches speeds automatically is included as standard. It also reduces speed sequentially from second to first by only pressing the switch.



Exclusive design



Loader

Design of the front loader ensures optimal parallel lifting. Additionally, the divergent shape of the arm improves visibility significantly and provides excellent loading performance. The backhoe has a completely new, clean and functional design with hydraulic pipes and hoses along the boom.

S-shape

The S-shaped boom of the backhoe increases the loading ability, overcomes difficulties more easily and guarantees breakout force. The telescopic arm improves the equipment versatility considerably.



Exceptional comfort

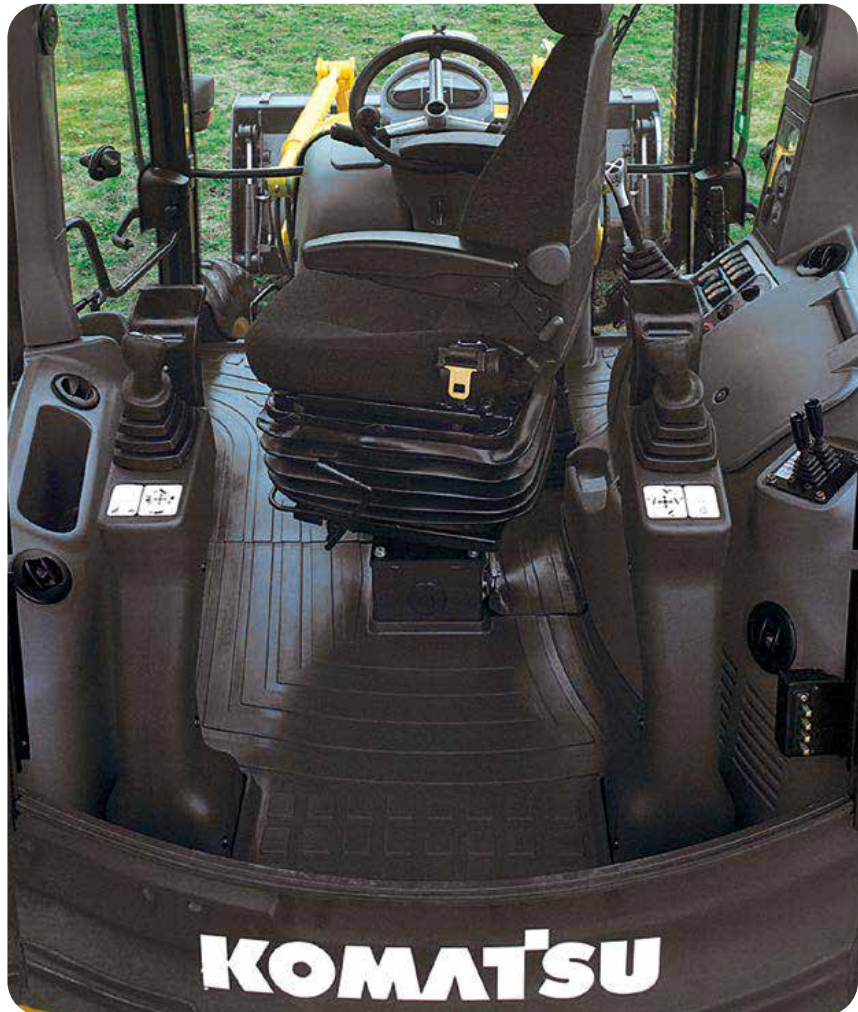
Working environment

The fully equipped cab has a modern design and ROPS/FOPS structure. Its spacious interior and wide round glass offer great comfort to the operator. The backhoe joysticks are mounted independently on two independent columns thus ensuring excellent control of the equipment.

The loader's multifunctional joystick controls operation of the 4x1 bucket, declutching and acceleration. A complete and easy-to-reach instruments panel, together with different holders and storage compartments, make this equipment the best among its kind.

New range of seats

The Deluxe suspension seat ensures better interaction between the operator and the machine. The suspension seat also includes armrests, adjustable headrest and lumbar support as standard equipment.



Excellent visibility



Telescopic arm (optional).

360° perfect view

The round and wide glass surface provides more visibility. The shape of the bonnet and the upper front window make working with the front loader easy and safe. When operating the backhoe, the operator can separate the window easily from the frame to open it and look around comfortably.



Specifications

Engine

Model	Komatsu SAA4D104E-1.
Type	Water-cooled, 4-cycle, direct injection.
Aspiration	Turbocharged and aftercooled.
Number of cylinders	4.
Compression ratio	17.5:1.
Bore	104 mm / 4.09".
Stroke	132 mm / 5.2".
Displacement	4.49 L / 274 plg ³ .
Engine power	
SAE J1995	74 kW / 99.2 hp.
ISO 14396	74 kW / 99.2 hp.
Rpm nominal	2,200 rpm.
Engine torque / max speed	420 Nm / 1,200 rpm.
Type of impeller of fan	Mechanical.
Starting system	Electric with air preheating for cold start.
Air filter	Dry with safety elements and saturation indicator.
Cooling	Coolant.
In compliance with EU State 3A emission standards.	

Operating weight

Operating weight with standard equipment	7,600 kg.
Optional counterweight	+ 230 kg.
Optional counterweight for telescopic boom	+ 170 kg. + 205 kg.

Steering system

A hydrostatic load sensor that includes a steering priority valve system controls the front wheels.

Turning radii (no brakes applied)	
Bucket corner	4,350 mm.
Front wheel external corner	4,000 mm.
Turning radius (with brakes applied)	
Bucket corner	4,700 mm.
Front wheel external corner	3,200 mm.

Hydraulic system

The Syncro System (synchronization system) allows the operator to make simultaneous and precise movements. This system incorporates two different working modes "Power" and "Economy". In addition, the advanced hydraulic system includes the "Speed-Up" function that accelerates the front loader movements only by pressing the button in the joystick.

System	Syncro System.
Type	CLSS (closed load sensing system).
Number of selectable working modes	2.
Pump type	Variable displacement piston.
Control pump system	Load sensor.
Maximum flow	165 L / min - 43 US gal / min.
Main valve	Modular LIFD (Load independent flow divider).
Maximum pressure	250 bar.

Transmission

Full "Power Shift" servo transmission with 4-WD automatic electronic control and travel lever with dial at its end to select speed without losing drive power.

Travel speed

Speed	Forward	Reverse
1st	6 km/h.	6 km/h.
2nd	10 km/h.	10 km/h.
3rd	23 km/h.	23 km/h.
4th	40 km/h.	40 km/h.

Axles

Heavy-duty axles with reduction planetary gears in wheel hubs. Front axle total swing angle is 20°. An electro-hydraulic switch in the load lever controls the differential lock in the rear axle.

Maximum front strength (dynamic)	8,500 DAn / 19,109 lb.
Maximum rear strength (dynamic)	7,600 DAn / 17,086 lb.

Brakes

Two separate pedals activate the oil-bathed brake discs individually. When both pedals are pushed simultaneously, the brakes actuate on the four wheels to stop the engine.

Disc diameter	300 mm / 11.8".
The parking and emergency brakes operate manually.	

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Electric system

With integrated ROPS (ISO 3471, SAE J1040) and FOPS (ISO 3449 SAE J231) systems for improved visibility, ergonomics, reduced noise level and better comfort for the operator. It has two doors, wide-opening rear window and front and rear wipers. Characteristics in the interior include adjustable seat, filtered air intake ventilation and readable front and side instruments panel.

Tension	12 V.
Battery	155 Ah.
Alternator	120 A.
Starter	3 kW.

Frame

Its closed and reinforced structure increases stiffness and reliability.

Capacity

Engine oil	12.8 L 3.38 US gal.
Cooling system	16.5 L 4.35 US gal.
Fuel tank	150 L 39.6 US gal.
Hydraulic oil tank	41 L 10.83 US gal.
Hydraulic oil system	97 L 25.62 US gal.
Front axle oil	8.5 L 2.25 US gal.
Rear axle oil	14.5 L 3.83 US gal.
Transmission	16 L 4.23 US gal.

Tires

Standard

Front	12.5/80 R18 - 10 PR
Rear	16.9 x 28 - 12 PR

Cab

With integrated ROPS (ISO 3471, SAE J1040) and FOPS (ISO 3449 SAE J231) systems for improved visibility, ergonomics, reduced noise level and better comfort for the operator. It has two doors, wide-opening rear window and front and rear wipers. Characteristics in the interior include adjustable seat, filtered air intake ventilation and readable front and side instruments panel.

Loader

Design of the front loader distributes load optimally when bucket is lifted or lowered. Additionally and thanks to its linkage geometry, the number of greasing points is less.

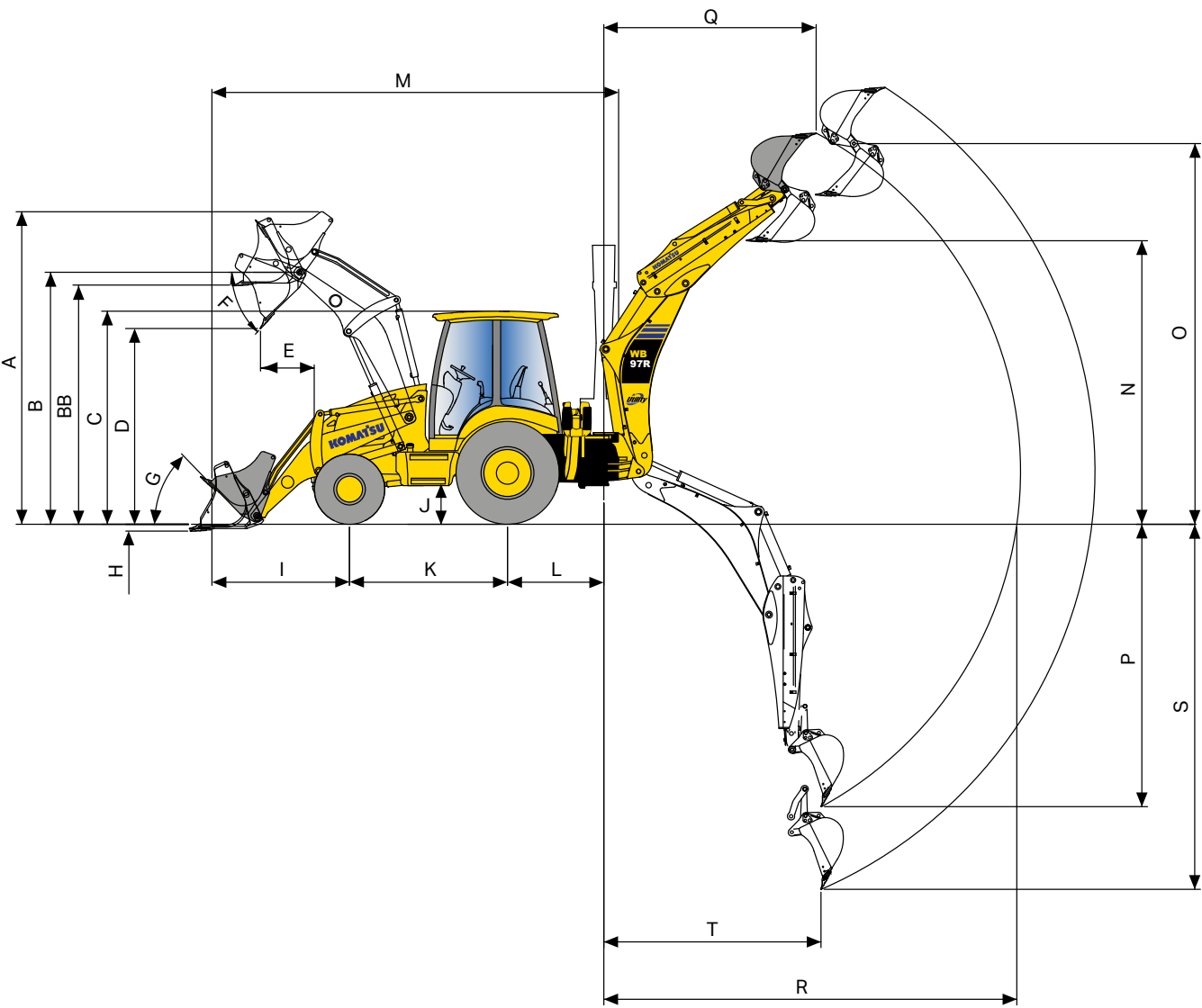
Standard bucket width	2,320 mm / 7' 7".
Standard bucket capacity (ISO 7546)	1.03 m ³ / 1.34 yd ³
Standard bucket weight	430 kg / 948 lb.
Lifting capacity	
At maximum height	3,900 kg / 8,598 lb.
At ground level (ISO 14.397)	5,300 kg / 11,684 lb.
Bucket breakout force (ISO 14.397)	6,500 kg / 14,330 lb.
Bucket width 4x1 optional	2,340 mm.
Bucket capacity 4x1 (ISO 7.546) optional	1.0 m ³

Excavator

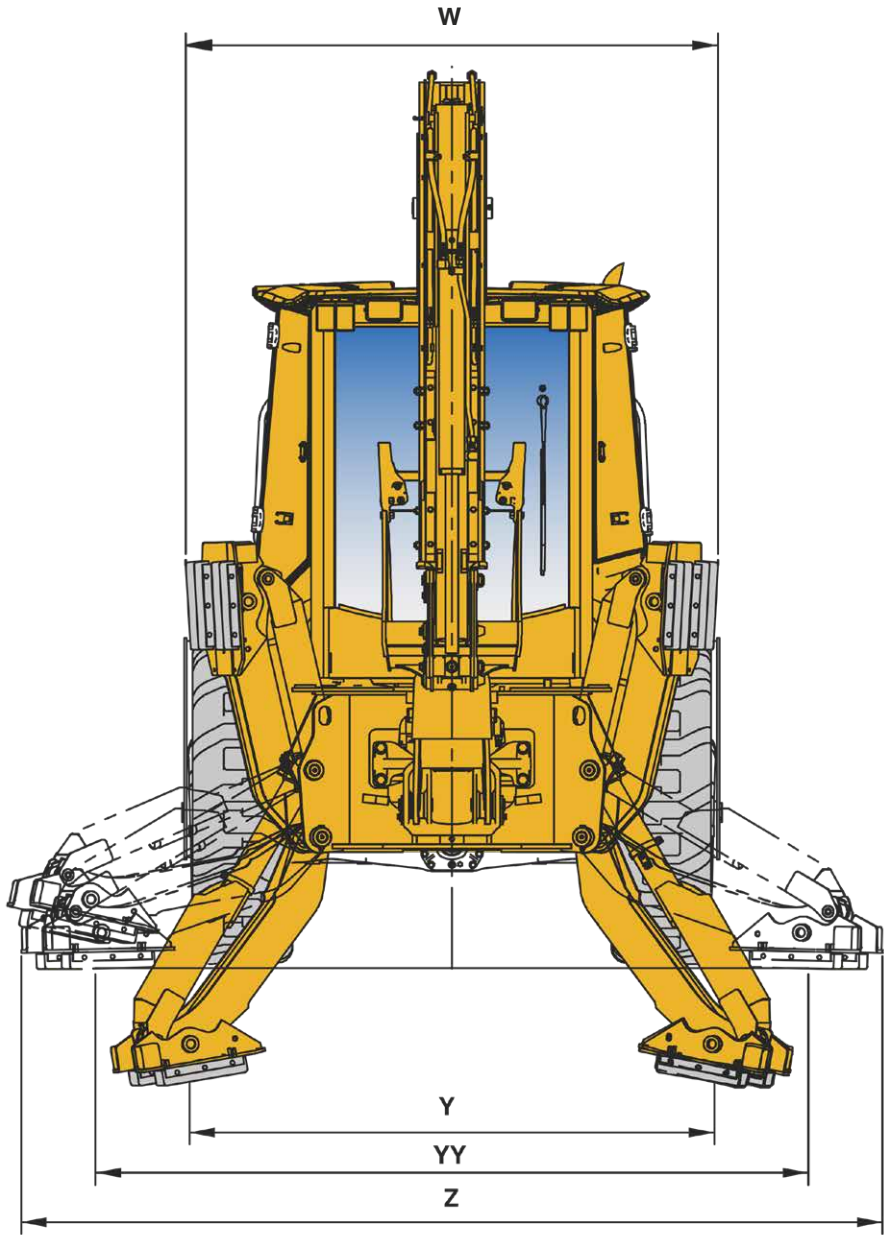
Rotation of the boom's reinforced structure reaches 180° preserving high torque. The casted swing support and arm end ensure high resistance to fatigue. X-type rear hydraulic outriggers with reversible rubber pads and safety valve.

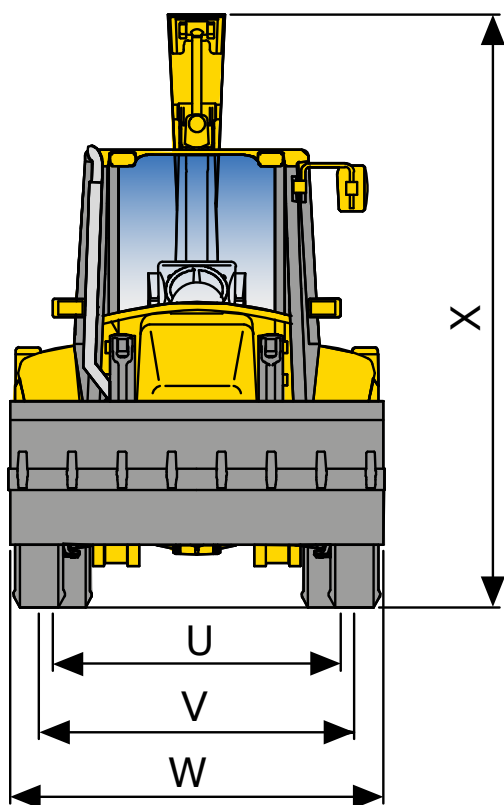
Standard bucket width	600 mm / 1'11".
Standard bucket capacity (ISO 7.546)	0.19 m ³ .
Bucket breakout force (ISO 6.015)	6,100 kg / 13,448 lb.
Arm breakout force (ISO 7.546)	4,000 kg / 8,819 lb.

Dimensions



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A	Maximum height	4,298 mm.
B	Pin height	3,428 mm.
BB	Fork loading maximum height	3,182 mm.
C	Cab height	2,900 mm.
D	Dumping maximum height	2,778 mm.
E	Dumping maximum reach (45°)	724 mm.
F	Dump angle	43°
G	Digging angle	45°
H	Digging depth	137 mm.
I	Bucket reach (transport)	2,133 mm.
J	Ground clearance	380 mm.
K	Wheel base	2,173 mm.
L	Backhoe swing center distance	1,325 mm.
M	Transport distance	5,933 mm.
N	SAE dumping height	3,895 mm.
	Maximum dumping height	4,386 mm.
	SAE with extended telescopic arm	4,796 mm.
	With extended telescopic arm	5,152 mm.
O	Maximum digging height	6,011 mm.
	With extended telescopic arm	6,789 mm.
P	SAE digging depth	4,557 mm.
	With extended telescopic arm	5,806 mm.
Q	Maximum height reach	2,760 mm.
	With extended telescopic arm	4,176 mm.
R	Maximum reach from swing center	6,039 mm.
	With extended telescopic arm	7,175 mm.
S	Maximum digging depth	5,270 mm.
	With telescopic arm	6,430 mm.
T	Digging reach	1,973 mm.
U	Rear wheelbase	1,800 mm.
V	Front wheelbase	1,910 mm.
W	Total width (bucket included)	2,320 mm.
X	Backhoe transport height	3,750 mm.
	With telescopic arm	3,860 mm.
Y	Distance from center with outriggers fully extended	2,256 mm.
YY	Distance from center of outriggers	3,063 mm.
Z	Distance from outside outriggers	3,702 mm.

If used to handle objects, the backhoe must be equipped with safety check valves (arm and overload warning device) as stipulated in standard EN474-5. The operator must comply with all local related regulations.

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Standard equipment

Engine:

- Komatsu turbo diesel engine in compliance with emission standard EU Stage 3A and EPA Tier.
- Parallel radiator.
- Coolant (-36° C).
- Road homologation.
- Dry air filter with clogging indicator.

Electric system:

- 155 Ah maintenance-free battery.
- 12V external electric supply plug.
- 12V internal electric supply plug.
- Horn.

Powertrain and controls:

- Full servo automatic transmission with reducing function.
- 100% electro-hydraulic differential lock.
- Declutch switch.

Undercarriage:

- Four-wheel drive.

Hydraulics and controls:

- CLSS (closed load sensing system).
- Variable flow pistons pump.

Cab:

- Hand and pedal accelerator.
- Deluxe seat with air suspension.
- Rearview mirrors.
- ROPS/FOPS cab with heater and fan.
- Tinted glasses.
- Adjustable steering column.
- Adjustable seat with safety belt.
- Cup holder.
- Front and rear wipers.
- Interior compartments.
- Sun visor.
- Pre-setting radio/cassette.

Lights system:

- Front and rear work lights.
- Road lights.
- Rotating light.

Safety equipment:

- Seat safety sensors.
- PPC lock control switch.

Other:

- Tilttable bonnet.
- Toolbox with lock.
- Fuel filter with integrated water separator.

Service and maintenance equipment:

- KOMTRAX - Komatsu monitoring system.
- Indicators: Transmission oil temperature, four-wheel drive connections, brake oil level, differential lock, fuel level, hour meter, pre-heater, rpm meter, coolant temperature, engine oil pressure and air filter clogging.

Tires:

- Front tires: 12.5/80 R18 - 10 PR.
- Rear tires: 16.9 x 28 - 12 PR.

Loader:

- PPC servo controls.
- Acceleration function.
- Heavy-duty safety lock.
- Self-levelling.
- Multipurpose bucket with standard teeth.

Optional equipment



Telescopic arm



4X1 multipurpose bucket



Komatsu JTHB 50 hydraulic breaker

Satellite monitoring system



KOMTRAX is an innovative equipment tracking system designed to save time and money. Now you can track your equipment at any time and from any place. Use the valuable information that you receive through the KOMTRAX webpage to optimize maintenance planning of your equipment and performance.

Characteristics

Location

KOMTRAX uses a satellite positioning network to inform the location of the equipment.

Meter reading service

Daily report of the working hours of the work ☐s team, which allows to project maintenance and replacement of components.

Locking the anti-theft engine

KOMTRAX has a system of locking and unlocking the motor of the equipment, which will allow them to only operate in the days, hours and areas assigned.

Geofence

In partnership with your Komatsu Distributor, owners can create virtual fences (Geo) to receive alerts when teams enter or leave the designated range for operations.

Komtrax operational maps

In the operations maps you can check the times of day when the equipment is in operation and if the workers are performing their duties in the stipulated times.

Check with your Komatsu dealer for the information available for your model and service availability in your country.



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