

KOMATSU®

WHEEL DOZER

WD600-6R

NET HORSEPOWER

Gross: **396 kW** 530 hp @ 1,800 rpm

Net: **393 kW** 527 hp @ 1,800 rpm

BLADE CAPACITY

8.0 - 10.6 m³

10.5 - 13.8 yd³



ORIGIN JAPAN / KLTD

Photos of the equipment are referential, may include optional equipment.

I WD600-6R WALK-AROUND

**ENGINE
POWER
527 hp**



*Photo may include optional equipment.

»High productivity & low fuel consumption

- »High performance Komatsu SAA6D170E-5 engine.
- »Low fuel consumption.
- »Dual-mode engine power select system.
- »Variable traction control system.
- »Lock-up torque converter.
- »Variable displacement piston pump & closed-center load sensing system (CLSS).
- »Long wheelbase.

See page 4.

»Excellent operator environment

- »Automatic transmission with electronic controlled modulation valve.
- »Low-noise designed cab.
- »Modulated clutch system.
- »Engine RPM set system with auto decel.
- »Electronic pilot control mono lever.
- »Pillar-less large ROPS/FOPS (ISO 3471/ISO 3449) integrated cab.
- »Easy entry/exit, front-hinged door.
- »Advanced joystick steering system.

See page 6.

»Harmony with environment

- »EPA Tier 2 and EU Stage 2 emissions equivalent.
- »Low exterior noise.
- »Low fuel consumption.

»Reliability

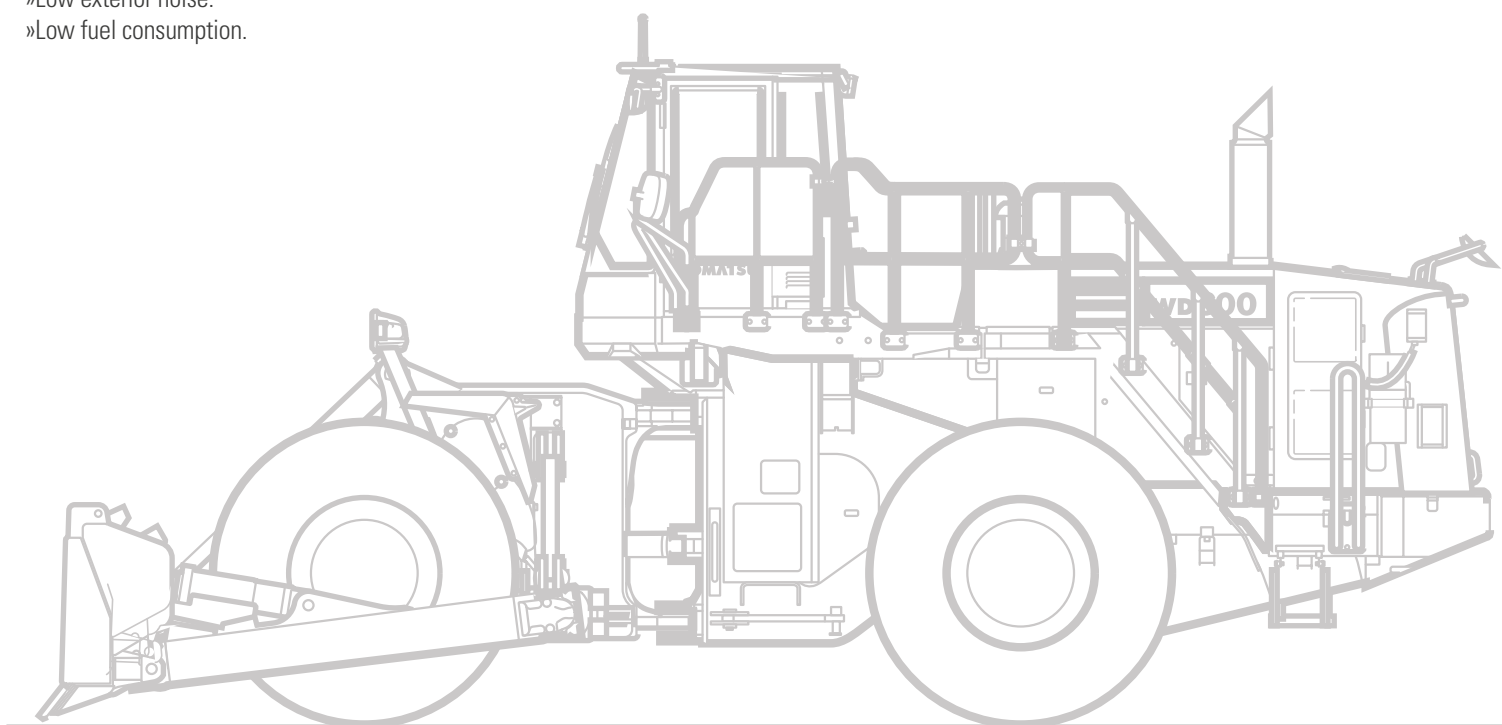
- »Reliable Komatsu designed and manufactured components.
- »Sturdy main frame.
- »Adjustment-free, fully hydraulic, wet disc service and parking brakes.
- »Hydraulic hoses use flat face O-ring seals.
- »Cation electrodeposition process is used to apply primer paint.
- »Powder coating process is used to apply main structure paint.
- »Weatherproof connectors for electrical connections.

See page 5.

»Easy maintenance

- »Equipment management monitoring system.
- »Ease of radiator cleaning.
- »Modular radiator core system.
- »KOMTRAX Plus (optional).

See page 5.



HIGH PRODUCTIVITY AND LOW FUEL CONSUMPTION



»High performance Komatsu SAA6D170E-5 engine

»Electronic heavy duty common rail fuel injection system provides optimum combustion of fuel. This system also provides fast throttle response to match the machine's powerful tractive effort and fast hydraulic response.

Net: 393 kW 527 hp.

»Low fuel consumption

»The fuel consumption is reduced greatly because of the low-noise, high-torque engine and the large-capacity torque converter with maximum efficiency in the low-speed range.

»Dual-mode engine power select system

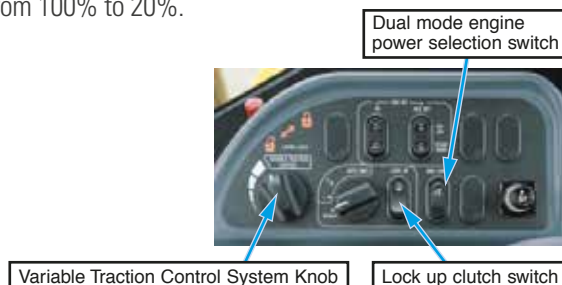
»This wheel dozer offers two selectable operating modes - E and P. The operator can adjust the machine's performance with the selection switch.

- E mode:** Provides maximum fuel efficiency for general dozing.
- P mode:** Provides maximum power output for hard dozing operation or hill climb.

»Variable traction control system

»In limited traction situations where the operator would like to avoid tire slippage (such as sandy or muddy ground operation), operator can reduce slippage by activating the Variable traction control system.

»The optimum rim pull (F1) is controlled by adjusting control knob from 100% to 20%.



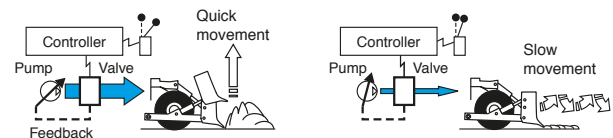
»Lock-up torque converter

»The Komatsu designed lock-up torque converter provides increased production efficiency, reduced cycle times and optimum fuel savings in hill-climb operations. This optional feature allows the operator to activate the system on/off with a switch located on the right-side control panel.

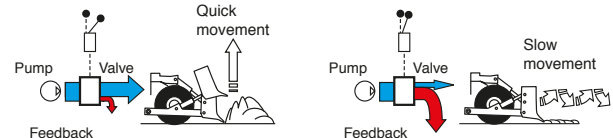
»Variable displacement piston pump & CLSS

»New design variable displacement piston pump combined with the CLSS delivers hydraulic flow just as the job requires preventing wasted hydraulic pressure. Minimized waste loss contributes to better fuel economy.

- New variable displacement piston pump:** The pump delivers only necessary amounts minimizing waste loss.



- Fixed displacement piston pump:** The pump delivers the maximum amount at any time and the unused flow is disposed.



»Durable blade

»Komatsu blades are manufactured using high-tensile strength steel providing excellent rigidity and increased dozing capacity.
Blade capacities: 8.0-10.6 m³ (10.5-13.8 yd³).

»Built-in blade tilt piping

»Blade piping is built into the straight frame to protect it from damage.



RELIABILITY



»Komatsu components

»Komatsu manufactures the engine, torque converter, transmission, hydraulic units, electric parts, on this wheel dozer. Komatsu dozers are manufactured with an integrated production system under a strict quality control system.

»Wet multiple-disc brakes and fully hydraulic braking system

»This means lower maintenance costs and high reliability. Wet multiple-disc brakes are fully sealed. Contaminants are kept out, reducing wear and maintenance. Brakes require no adjustments for wear. The new parking brake is also an adjustment-free, wet multiple-disc for high reliability and long life.

»Added reliability is designed into the braking system by the use of two independent hydraulic circuits. Provides hydraulic backup should one of the circuits fail.

»High-rigidity frames

»Front and rear frames are designed to work in the toughest applications and provide high rigidity for the power train and dozer equipment. The high-rigidity frames, together with the reinforced dozer linkage, reduce dozing stress and shock.

»Limited slip differential (F & R) (optional)

»The field-proven limited slip differential prevents tire slippage on slippery terrain such as soft or sandy ground, so stable travel is ensured and tire wear is reduced to a minimum for maximum tire life.

»Flat face-to-face O-ring seals

»Flat face-to-face O-ring seals are used to securely seal hydraulic hose connections and to prevent oil leakage. In addition, buffer rings are installed to the head side of the all-hydraulic cylinders to lower the load on the rod seals and maximize the reliability.

»Weatherproof connectors

»Main harnesses and controller connectors are equipped with weatherproof connectors providing high reliability, dust and corrosion resistance.

»Cation electrodeposition primer paint/ Powder coating final paint

EASY MAINTENANCE

»Equipment management monitoring system

»Monitor is mounted in front of the operator for easy viewing, allowing the operator to easily check gauges and warning lights.



»Maintenance control and troubleshooting functions.

•**Action code display function:** If abnormality occurs, the monitor displays action details on the character display at the bottom center of the monitor.

•**Monitor function:** Controller monitors engine oil level, pressure, coolant temperature, air cleaner clogging, etc. If controller finds abnormalities, the error is displayed on Liquid Crystal Display (LCD).

•**Replacement time notice function:** Monitor informs replacement time of oil and filters on LCD when replacement intervals are reached.

•**Trouble data memory function:** Monitor stores abnormalities for effective troubleshooting.

»Modular radiator core system

»The modular radiator core is easy to replace without removing the entire radiator assembly.

»Ease of radiator cleaning

»If the machine is operating in adverse conditions, the operator can reverse the hydraulic cooling fan from inside the cab by turning a switch on the control panel.

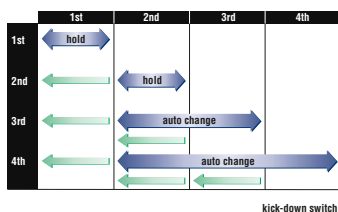
OPERATOR ENVIRONMENT

EASY OPERATION

»Automatic transmission with electronically controlled modulation valve (ECMV)

»Automatic transmission with ECMV automatically selects the proper gear speed based on travel speed, engine speed, and other travel conditions. The electronically controlled modulation valve engages the clutch smoothly to help prevent lag and shock when shifting. This system provides efficient machine operation for a comfortable ride.

•**Kick-down switch:** Consider this valuable feature for added productivity. With the touch of a finger, the kick-down switch automatically downshifts from second to first when beginning the dozing. It automatically upshifts from first to second when the direction control lever is placed in reverse. This results in increased rim pull for better blade penetration and reduced cycle times for higher productivity.



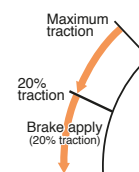
•**Holdswitch:** Auto shift is selected and if the operator turns on this switch when the lever is at the 3rd or 4th gear speed position, the transmission is fixed to that gear speed.



»Modulated clutch system

»The modulated clutch system controls the tractive effort with left brake pedal from 100% to 20% of the converter output torque.

- Useful for smooth speed reduction when approaching dump trucks for loading.
- Easy control of tire slippage.
- Reduction of shocks in shifting from forward to reverse.



OPTIONAL EQUIPMENT

»Steering wheel with telescopic/tilt column

»As an alternative to the Advanced joystick steering system, a steering wheel is also available. The operator can tilt and telescope the steering column to provide a comfortable working position.

»Electronic controlled transmission lever

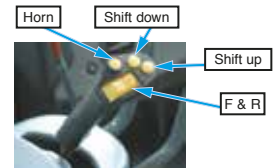
»Change direction or shift gears with a touch of a finger without removing the shifting hand from the steering wheel. Solid state electronics and conveniently located direction and gear shift controls make this possible. Automatic shifts in ranges 2 to 4 keep production high and manual shifting at a minimum.

»Electronic pilot control mono lever

»The finger control Electronic pilot control work equipment lever has light operating effort and short stroke facilitating easy operation. The operator's comfort is further increased by the full large size adjustable arm rests. Combined with CLSS, this system allows the following new functions for easy and efficient operation:

»Advanced joystick steering system

»Advanced joystick steering system is a feedback steering system which has been incorporated to allow steering and forward and reverse selection to be controlled by wrist and finger control. With the feedback function added, the machine steering angle is defined exactly the same angle as the lever tilt angle.



COMFORTABLE OPERATION



»Low-noise design

»Noise at operator's ear noise level (ISO 6396:2008): 76 dB(A)
Dynamic noise level (outside) (ISO 6395:2008): 113 dB(A)

»Pillar-less large cab

»A wide pillar-less flat glass provides excellent front visibility. The wiper arm covers a large area to provide great visibility even on rainy days. The cab area is the largest in its class providing maximum space for the operator.



SPECIFICATIONS



ENGINE

MODEL	Komatsu SAA6D170E-5.
TYPE	Water-cooled, 4-cycle.
ASPIRATION	Turbocharged, aftercooled.
NUMBER OF CYLINDERS	6.
BORE X STROKE	170 mm x 170 mm 6.69" x 6.69".
PISTON DISPLACEMENT	23.15 L 1,413 in ³ .
GOVERNOR	All-speed, electronic.
HORSEPOWER:	
SAEJ1995	Gross 396 kW 530 hp.
ISO9249/SAEJ1349*	Net 393 kW 527 hp.
RATED RPM	1,800 rpm.
FAN DRIVE METHOD FOR RADIATOR COOLING	Hydraulic.
FUELSYSTEM	Direct injection.
LUBRICATION SYSTEM:	
METHOD	Gear pump, force-lubrication.
FILTER	Full-flow type.
AIRCLEANER	Dry type with double elements and dust evacuator, plus dust indicator.

*Net horsepower at the maximum speed of radiator cooling fan is 374 kW 502 hp.
EPA Tier 2 and EU Stage 2 emissions equivalent.



TRANSMISSION

TORQUE CONVERTER:	
TYPE	3-element, single-stage, double-phase.
TRANSMISSION:	
TYPE	Full-powershift, planetary type.
TRAVEL SPEED: KM/H MPH	
MEASURED WITH 35/65-33 TIRES	

() : Look-up clutch ON

	1st	2nd	3rd	4th
Forward	6.7 4.2	11.7 7.3	20.3 12.6	33.0 20.5
	—	(12.4 7.7)	(21.7 13.5)	(37.7 23.4)
Reverse	7.3 4.5	12.8 8.0	22.0 13.7	36.0 22.4



AXLES AND FINAL DRIVES

DRIVE SYSTEM	Four-wheel drive.
FRONT	Fixed, full-floating.
REAR	Center-pin support, full-floating, 26° total oscillation.
REDUCTION GEAR	Spiral bevel gear.
DIFFERENTIAL GEAR	Conventional type.
FINAL REDUCTION GEAR	Planetary gear, single reduction.



BRAKES

SERVICE BRAKES	Hydraulically actuated, wet multiple-disc brakes actuate on four wheels.
PARKING BRAKE	Wet multiple-disc brake.
SECONDARY BRAKE	Parking brake is commonly used.



STEERING SYSTEM

TYPE	Articulated type, full-hydraulic power steering.
STEERING ANGLE	43° each direction.
MINIMUM TURNING RADIUS AT THE CENTER OF OUTSIDE TIRE	7,075 mm 23'3".



HYDRAULIC SYSTEM

STEERING CONTROL:	
HYDRAULIC PUMP	Piston pump.
CAPACITY	163 L / min 43.1 U.S. gal. / min at rated rpm.
RELIEF VALVE SETTING	34.3 MPa 350 kgf / cm ² 4,980 psi.
HYDRAULIC CYLINDERS:	
TYPE	Double - acting, piston type.
NUMBER OF CYLINDERS	2.
BORE X STROKE	130 mm x 510 mm 5.1" x 20"
IMPLEMENT CONTROL:	
HYDRAULIC PUMP	Piston pump.
CAPACITY	180 + 180 L / min 47.6 + 47.6 U.S. gal. / min at rated rpm.
RELIEF VALVE SETTING	24.5 MPa 250 kgf / cm ² 3,560 psi.
HYDRAULIC CYLINDERS:	
TYPE	Double - acting, piston type.
NUMBER OF CYLINDERS - BORE X STROKE:	
BLADE LIFT	1 - 160 mm x 1,080 mm 6.3" x 42.5".
TILT AND PITCH	2 - 180 mm x 237 mm 7.0" x 9.3".
CONTROL VALVE	3 - Spool type.
CONTROL POSITIONS:	
BLADE LIFT	Raise, hold, lower and float.
TILT AND PITCH	Tilt-left, tilt-right, hold, pitch forward and back.
HYDRAULIC CYCLE TIME	
RAISE	2.0 sec.
LOWER	1.3 sec.
TILT (LEFT/RIGHT)	0.8/1.1 sec.
PITCH (FRONT/REAR)	2.1/1.6 sec.



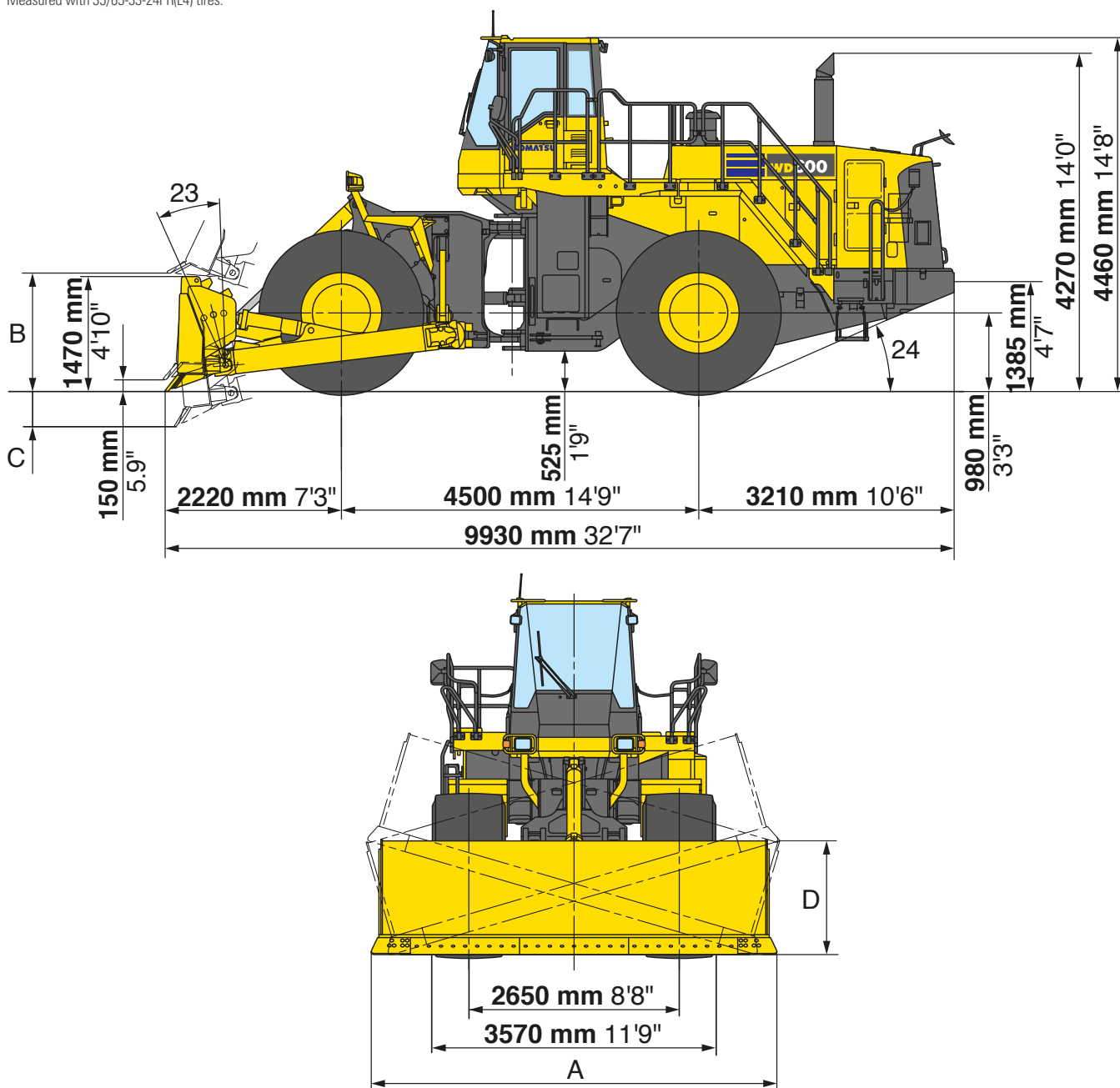
SERVICE REFILL CAPACITIES

COOLING SYSTEM	147 L 38.8 U.S. gal.
FUEL TANK	718 L 189.7 U.S. gal.
ENGINE	86 L 22.7 U.S. gal.
HYDRAULIC SYSTEM	443 L 117.0 U.S. gal.
AXLE (EACH FRONT AND REAR)	155 L 41.0 U.S. gal.
TORQUE CONVERTER AND TRANSMISSION	83 L 21.9 U.S. gal.



DIMENSIONS

Measured with 35/65-33-24PR(L4) tires.



Blade type		Straight blade		U-blade	
Blade capacity (SAE Rated)		8.0 m ³ 10.5 yd ³		10.6 m ³ 13.8 yd ³	
A	Blade width	5,100 mm	16'9"	4,870 mm	16'0"
B	Max. lift above ground	1,500 mm	4'11"	1,485 mm	4'10"
C	Max. drop below ground	450 mm	1'6"	490 mm	1'7"
D	Max. tilt adjustment	1,430 mm	4'8"	1,340 mm	4'5"
Operating weight		48,090 kg 106,020 lb		49,105 kg 108,260 lb	



STANDARD EQUIPMENT

- »3-spool valve for raise, lower and pitch controls.
- »Advanced joystick steering system.
- »Alternator, 24 V/90 A.
- »Auto air conditioner.
- »Auto shift transmission with mode select system.
- »Back-up alarm.
- »Back-up lamp.
- »Batteries, 2 x 12 V/ 200 Ah.
- »Cap lock & cover lock.
- »Cigar lighter & ashtray.
- »Directional signal.
- »Electric supply, 12 V.
- »Engine, Komatsu SAA6D170E-5 diesel.
- »Engine RPM set.
- »Electronic pilot control fingertip lever.
- »Floormat.
- »Front fender.
- »Hard water area arrangement (corrosion resistor).
- »Hydraulic-driven fan with reverse rotation.
- »Lift cylinder, tilt and pitch cylinders.
- »Lock-up clutch torque converter.
- »Main monitor panel with equipment management monitoring system.
- »Pm service connector.
- »Radiator mask, lattice type.
- »Rear access stairs.
- »Rear defroster (electric).
- »Rear under view mirror.
- »Rearview mirrors.
- »Rear window washer and wiper.
- »ROPS/FOPS (ISO 3471/ISO 3449) cab.
- »Seat belt.
- »Seat, suspension type with reclining.
- »Service brakes, wet disc type.
- »Standard counterweight.
- »Starter receptacle.
- »Starting motor, 2 x 24 V/11.0 kW.
- »Straight blade, 8.0 m³ 10.5 yd³ with straight end bit.
- »Sun visor.
- »Tires (35/65-33-24PR L4 tubeless) and rims.
- »Transmission, 4 forward and 4 reverse.



OPTIONAL EQUIPMENT

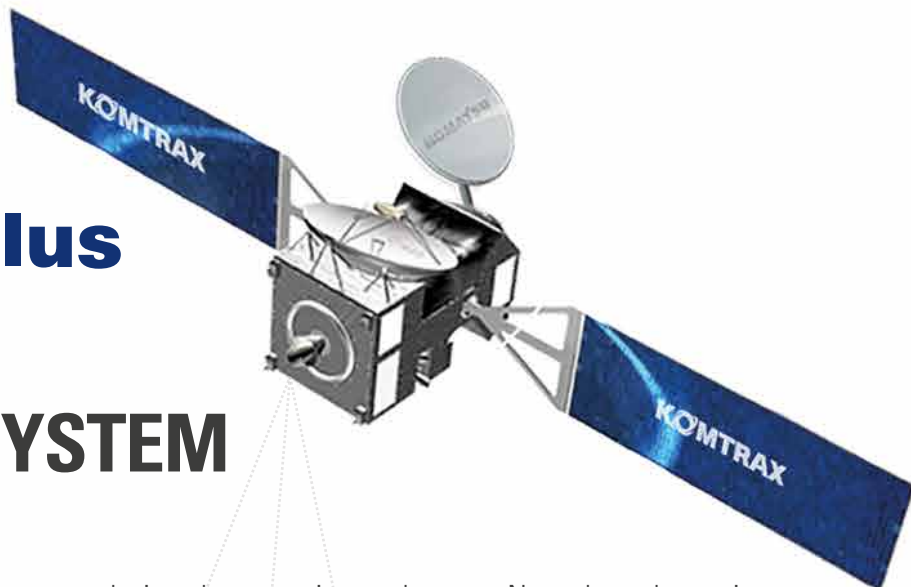
- »AM/FM radio.
- »AM/FM radio with cassette.
- »Battery disconnect switch.
- »Secondary steering (ISO 5010).
- »Fire extinguisher.
- »Fuel quick coupler.
- »In line filter hydraulic.
- »In line filter steering.
- »Limited slip differential (F&R).
- »Ordinary spare parts.
- »Power train guard.
- »Rear fenders.
- »Steering wheel, tiltable.
- »Straight blade, 8.0 m³ 10.5 yd³ with angle end bit.
- »Tool kit.
- »U-blade, 10.6 m³ 13.8 yd³.
- »KOMTRAX Plus.

**Optional equipment may not be available in your country.
Please contact your Distributor for further information.**

The logo features the word "KOMTRAX" in a bold, blue, sans-serif font, followed by "Plus" in a smaller, italicized blue font. A stylized blue globe icon is positioned between the two words. A vertical yellow bar is located to the left of the text.

KOMTRAX Plus

SATELLITE MONITORING SYSTEM



KOMTRAX PLUS is a revolutionary tracking system designed to save time and money. Nowadays, the equipment can be tracked anytime and anywhere. This valuable data, received via the KOMTRAX website, can be used to optimize planning of the movements and performance of the equipment.

FEATURES

» ANOMALY CODES

Display of the fault codes presented in the equipment on a daily and monthly basis.

» TRENDS

Time-graftable curves to evaluate the condition of major components such as engine, transmissions, torque converter, propulsion system, etc.

» METER READING SERVICE

Daily advance of the hours of the equipment, which allows planning maintenance and replacement of components.

» REPORTING

Together with the Distributor, condition reports and operational practices can be defined to ensure correct equipment performance.

» FUEL CONSUMPTION

Daily average in L / h.

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



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