



STANDARD EQUIPMENT FOR BASE MACHINE
(EXCEPT PLANTER HEAD / AUTO STEERING CONTROL)

- 600 mm single grouser shoe
- Air cleaner, double element with dust indicator
- Air conditioner (A/C)
- Alternator, 24 V/90 A
- Backup alarm
- Battery disconnect switch
- Cab accessories
 - Cup holder
 - Rear view mirror
 - Rear view monitor system (1 camera)
 - AM/FM radio w/remote AUX plug (3.5 mm)
- Closed engine hood
- Color monitor, LCD
- Decelerator/brake pedal (Single pedal)
- Engine intake centrifugal precleaner
- Engine shutdown secondary switch
- Engine, swing open side cover
- Front pull hook
- Fuel prefilter with water separator
- High mount foot rests
- Horn, warning
- Hydraulic driven radiator cooling fan with reverse clean mode
- Locks, filler caps and covers
- Muffler with curved exhaust pipe
- Radiator mask, heavy-duty, swing up
- Radiator reserve tank
- ROPS (ISO 3471) cab*
- Sealed electrical connectors
- Seat belt indicator
- Seat belt, 78 mm, retractable
- Side by side rear mounted cooling package
- Starting motor, 5.5 kW/24 V
- Steering system, hydrostatic
- Suspension seat
- Track roller guards, center and end sections
- Transmission, hydrostatic
- Two batteries, 2 x 12 V/170 Ah
- Under guards, heavy duty
 - Engine
 - Transmission
- Work equipment lift cylinders
- Work lights
 - 7 front, cab mounted
 - 4 rear, cab mounted

* Cab meets ROPS (ISO 3471) and FOPS (ISO 3449) level 2 standards.



OPTIONAL EQUIPMENT

- Track roller guard, full length

KOMATSU®

D61EM-23M0 CRAWLER PLANTER

D
61EM

HORSEPOWER

Gross: 127 kW 170 HP / 2200 min⁻¹
Net: 125 kW 168 HP / 2200 min⁻¹

OPERATING WEIGHT

21500 kg

<https://home.komatsu/en/>

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KOMATSU®



CEN00865-00

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Photos may include optional equipment.

WALK-AROUND



PRODUCTIVITY

- | Brazil PROCONVE MAR-I Emission Certified Engine
- | New HST Technology

WORKING ENVIRONMENT

- | New Integrated ROPS (ISO 3471) Cab
- | Large Multi-lingual LCD 7" Color Monitor
- | Complete Operator Work Equipment Control

MAINTENANCE & DURABILITY

- | Hydraulically-driven Swing-up Fan
- | Engine Side Door and Covers for Easy Servicing
- | Self-adjusting Idler Support
- | Modular Design

KOMTRAX

- | KOMTRAX

PLANTING

- | Planter Units
- | Machine Control by Auto Pilot System
- | Planting Machine Control

D61EM-23M0

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Mechanization in Planting Process by Komatsu



High Speed Planting by One-man-operation

High speed and automatic planting by three new planting units

- Cycle time: 12 sec/3 seedlings
- Theoretical planting speed: 900 seedlings/H
(Planting pitch: 2 m, excluding seedling refill time)

Auto pilot system for machine control

- Automatic moving and steering system with guidance of GNSS*
- Auto measuring of planting pitch

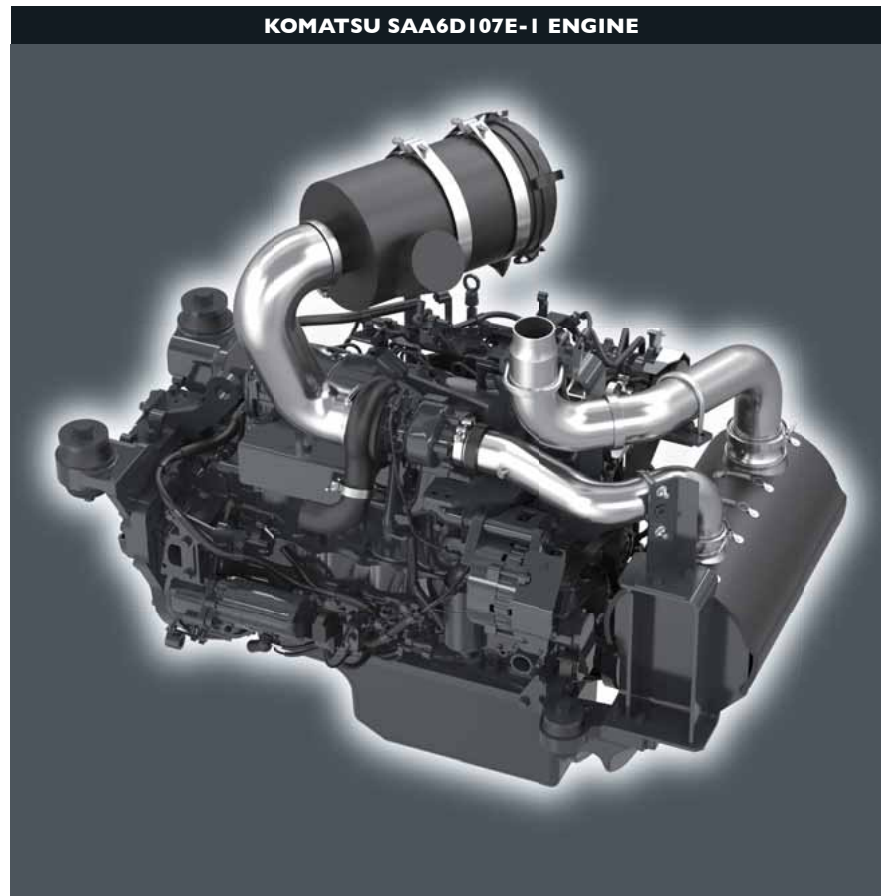
* GNSS (Global Navigation Satellite System)

Accurate Planting Led by As-built Data of the Subsoiler

As-built data of the sub soiler machine helps planting

- Automatic designing of planting points
- Accurate planting by following as-built lines from the sub soiler machine
- High planting accuracy

PRODUCTIVITY



KOMATSU SAA6D107E-1 ENGINE

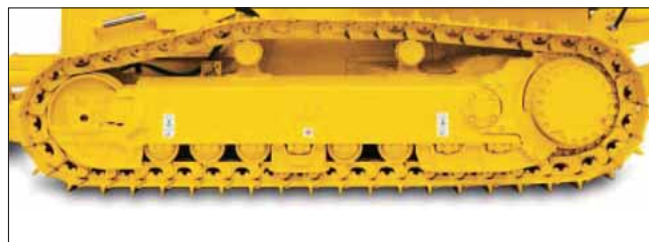
Brazil PROCONVE MAR-I Emission Certified Engine

The Komatsu SAA6D107E-1 engine delivers 168 HP (125 kW) at 2200 min⁻¹. The engine is Brazil PROCONVE MAR-I emission certified, and features direct fuel injection, turbocharger, air-to-air and aftercooler to maximize fuel efficiency. To minimize noise and vibration, the engine is mounted to the main frame with rubber cushions.



Low Drive and Long Track Undercarriage

Komatsu's design is extraordinarily tough and offers excellent grading ability and stability. The track seal life is increased by using large-size bulldozer type seals.



High Efficiency Fuel Filter

A new high efficiency fuel filter improves fuel system reliability. The dual-type filter offers twice the filtration capacity.



Single Pedal (Decelerator/Brake Pedal) to be Operated for Speed Control, During Operation

Machine operation becomes simple because brake function has been integrated into decelerator pedal. Machine moving speed including/excluding engine speed can be controllable by using only one pedal of decelerator/brake pedal. Operation of pedal function can be changed by the mode selector switch.



New HST Technology

The D61EM-23M0 incorporates new proprietary engine and hydrostatic transmission pump control technology to improve operational efficiency and reduce fuel consumption to levels lower than a conventional HST control system can obtain.

Variable and New Customizable Quick-Shift Modes

The D61EM-23M0 offers two gearshift modes: Variable and the new customizable Quick-Shift. Variable shift mode provides 7 incremental speed settings for the operator, while the new customizable Quick-Shift provides 1st speed settings; all can be adjusted in the monitor.

Decelerator Mode

The pedal can decelerate engine RPM and vehicle travel speed.

Brake Mode

The pedal can decelerate vehicle travel speed, keeping high engine revolution. This mode can be helpful to keep work equipment controllability and/or force, even during braking.

WORKING ENVIRONMENT



Large Multi-lingual LCD 7" Color Monitor

A large user-friendly color monitor enables accurate and smooth work. Excellent screen visibility is achieved with a high resolution LCD monitor that can easily be read at various angles and lighting conditions. Simple and easy to operate switches. Function keys facilitate multi-function operations.

Indicators

- 1 Working mode
- 2 Steering mode
- 3 Engine preheating
- 4 Fan reverse
- 5 Service meter or clock
- 6 Float mode
- 7 Work equipment fine control mode
- 8 Seat belt
- 9 Engine stop
- 10 Parking brake
- 11 Work equipment lock
- 12 Message
- 13 Engine coolant temperature gauge
- 14 Hydraulic oil temperature gauge
- 15 Speed range display
- 16 Multi-gauge
- 17 Fuel level gauge
- 18 ECO gauge or Drawbar pull range
- 19 Fuel consumption gauge
- 20 Function switches

Basic operation switches

- 1 Working mode selector switch
- 2 Gear shift mode selector switch
- 3 Reverse travel speed setting switches
- 4 Buzzer cancel switch
- 5 Pedal mode selector switch

New Integrated ROPS (ISO 3471) Cab

A new design cab; wider, deeper and taller, is integrated with the ROPS (ISO 3471). High rigidity and superb sealing performance greatly reduce noise and vibration for the operator and minimize dust entering the cab. Larger glass area improves visibility of the blade, sides, and rear of the machine. Cab meets ROPS (ISO 3471) and FOPS (ISO 3449) level 2 standards.

Suspension Seat

The seat has many adjustments to accommodate different operators comfortably.



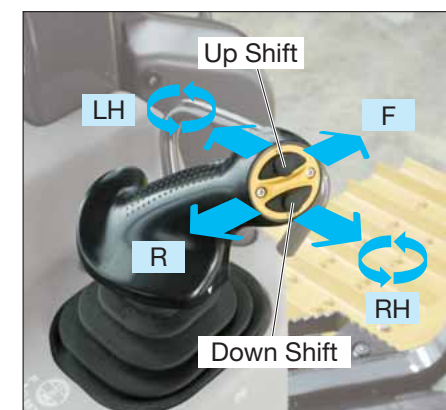
Auxiliary Input Jack

By connecting an auxiliary device to this plug input, the operator can hear sound through the speakers installed in the cab.



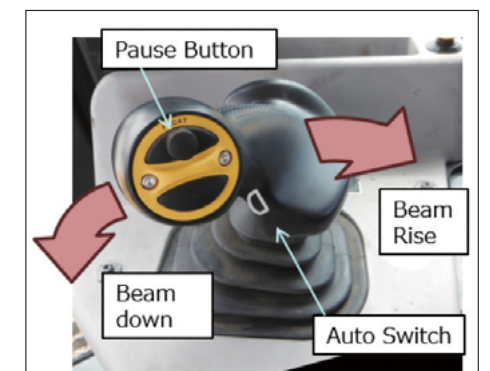
Palm Command Control System (PCCS)

Palm command travel joystick provides the operator with a relaxed posture and superb fine control. Transmission shifting is simplified with thumb push buttons.



Electronic Controlled Hydraulic System

Work equipment control joystick uses the Electromagnetic Proportional Control valve and joystick, similar to the travel control joystick. Electronic Pilot Control combined with the highly reliable Komatsu hydraulic system enables superb fine control.



MAINTENANCE & DURABILITY

Planned maintenance is the best way to ensure long service life from your equipment. That's why Komatsu designed the D61EM-23M0 with conveniently located maintenance points to make necessary inspections and maintenance quick and easy.

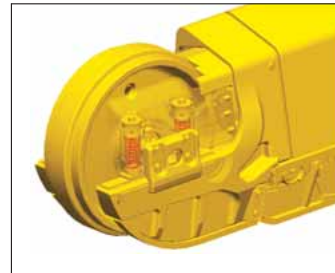
Hydraulically-driven Swing-up Fan

The D61EM-23M0 utilizes a swing-up fan with a gas strut-assisted lift locking system to provide easy access to the (Side-by-side) radiator, oil cooler, and charge air cooler. The swing-up feature makes it easier to access cooling cores. The hydraulic fan has a "cleaning" mode. The fan rotates in the reverse direction and helps to clear off objects in front of the cooling areas.



Self-adjusting Idler Support

The self-adjusting idler support provides constant and even tension on idler guide plates reducing noise and vibration and increasing undercarriage life.



Modular Design

One of the design goals behind the creation of the D61EM-23M0 was to manufacture a more durable machine. This was achieved by reducing component complexity and using a strong modular design for increased serviceability and durability. Steel castings reduce the number of welds, improving rigidity and strength.



Engine Side Door and Covers for Easy Servicing

All daily checks can be performed efficiently from the left side of the machine.



KOMTRAX EQUIPMENT MONITORING

KOMTRAX

✓ WHAT

- KOMTRAX is Komatsu's remote equipment monitoring management system
- KOMTRAX continuously monitors and records machine health and operational data
- Information such as fuel consumption, utilization, and a detailed history aids in making repair or replacement decisions.

✓ 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 was done and help you plan for future maintenance needs.

✓ WHERE

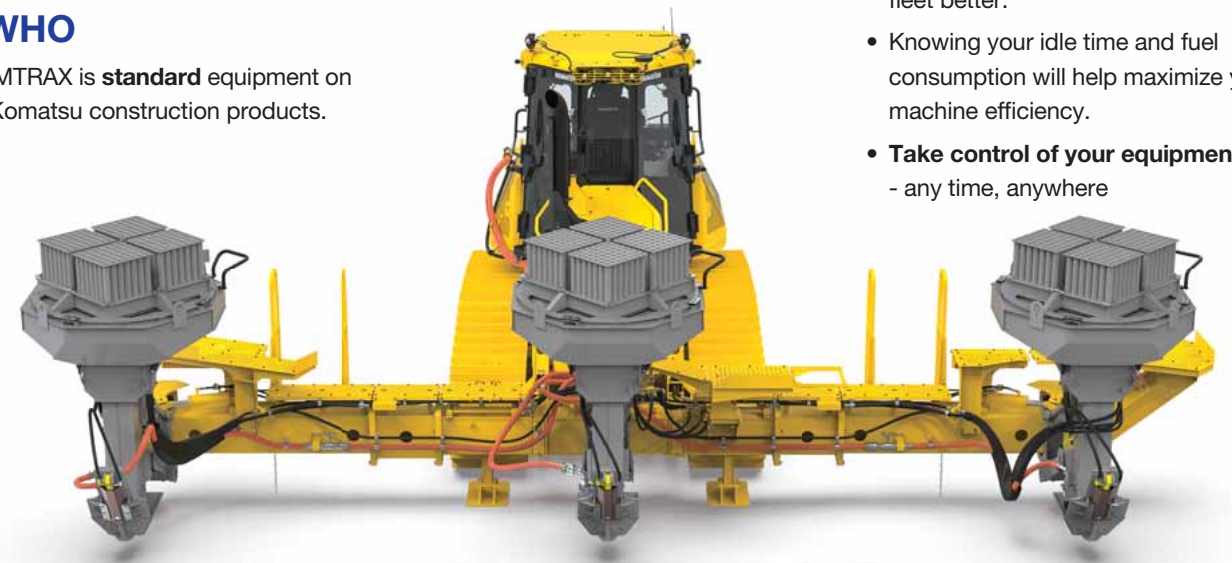
- KOMTRAX data can be accessed virtually anywhere through your computer, the web or your smart phone.
- Automatic alerts keep fleet managers up to date on the latest machine notifications.

✓ 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

✓ WHO

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



KOMTRAX™

For construction and compact equipment.

KOMTRAX Plus

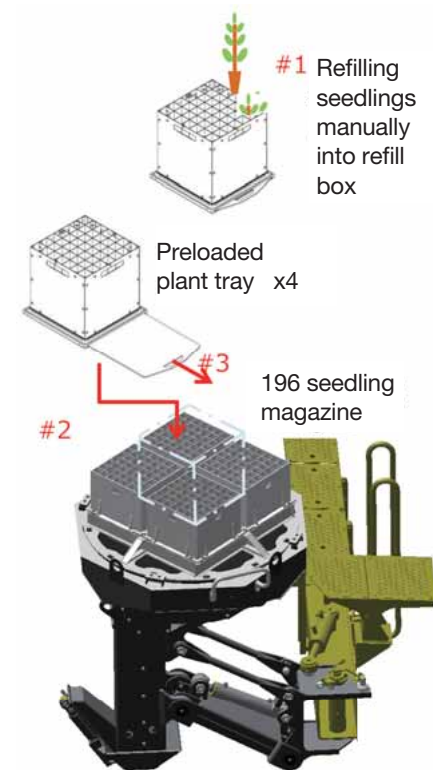
For production and mining class machines.

PLANTING

Planter Unit

This unit suitable for plantation forestry, e.g. eucalyptus plantations. This unit can perform the entire planting process. This unit has the new* 196 plant magazine that is loaded manually. The magazine consists of 4 plant trays, each with 49 plants.

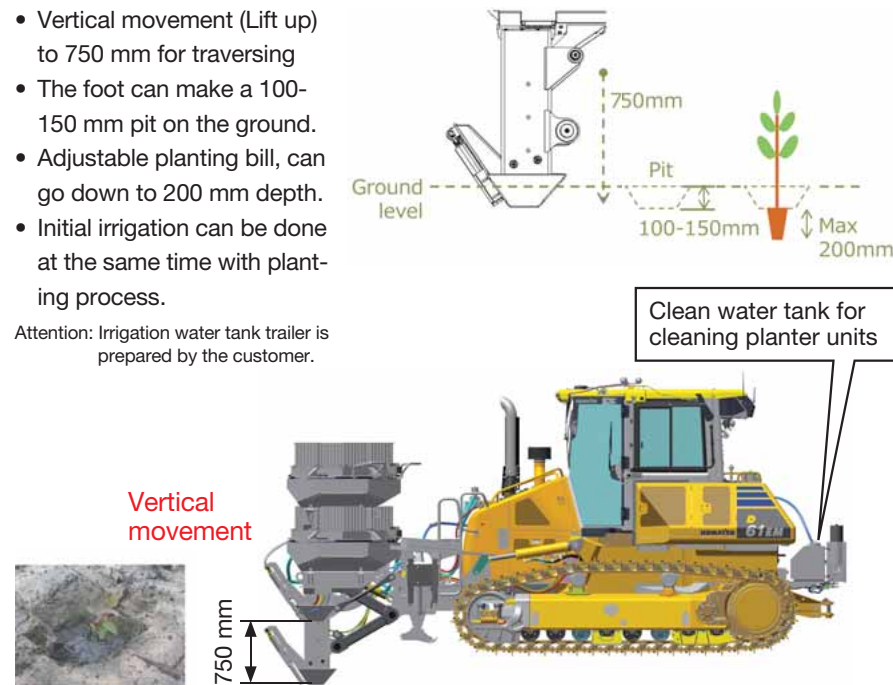
* 196 stored magazine has been newly developed for Komatsu planter machine.



Function

- Vertical movement (Lift up) to 750 mm for traversing
- The foot can make a 100-150 mm pit on the ground.
- Adjustable planting bill, can go down to 200 mm depth.
- Initial irrigation can be done at the same time with planting process.

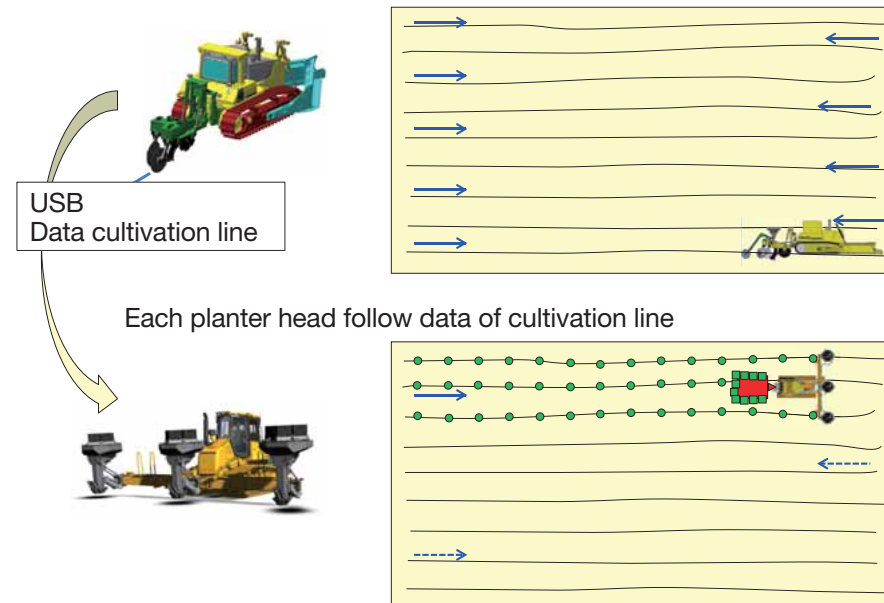
Attention: Irrigation water tank trailer is prepared by the customer.



Machine Control by Auto Pilot System

- As-build map by sub-soiling process, and GNSS positioning system provide to planting line and auto pilot control drive the machine.
- Automatic planter swing control to follow each sub-soiled row.

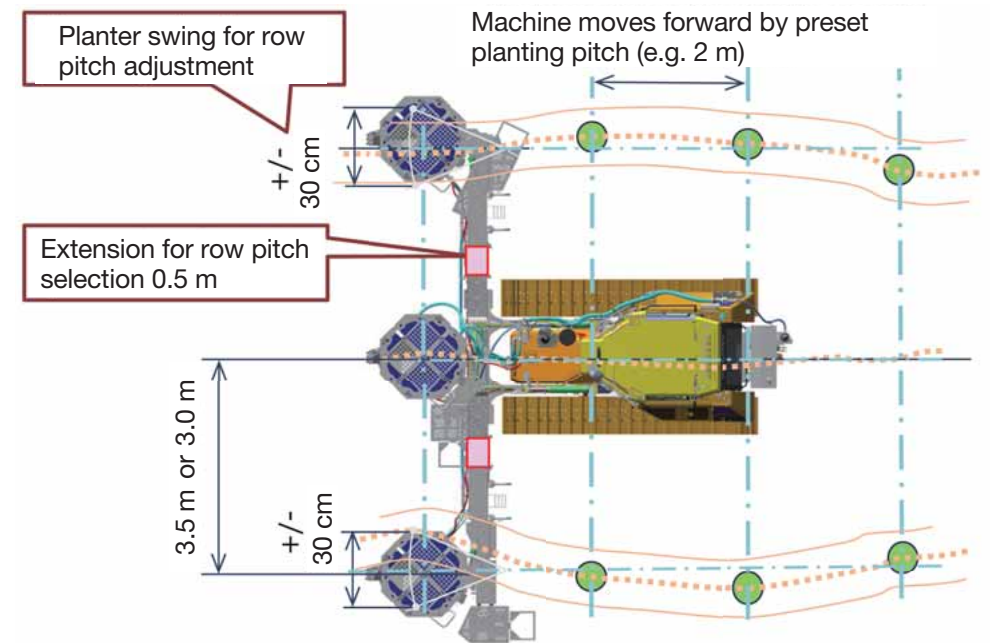
Subsoiler cultivate soil using auto steering to follow planted line.



Planting Machine Control

- Accuracy of the planting for this planter is guided by subsoiling GIS* mapping (Auto steering).
- Left and right planters can move in transverse direction, allowing +/- 30 cm misalignment during subsoiling. System provides one controller for all planters to guarantee cross-track alignment for trees.
- After a "start" command, the machine starts moving, then stops in the next planting placement and automatically resumes moving, in a cyclic workflow.

* GIS (Geographic Information System).



SPECIFICATIONS



ENGINE

Model Komatsu SAA6D107E-1
 Type 4-cycle, water-cooled, direct injection
 Aspiration Turbocharged, air-to-air aftercooled
 Number of cylinders 6
 Bore x stroke 107 mm x 124 mm
 Piston displacement 6.69 L
 Governor All-speed and mid-range, electronic
 Horsepower
 SAE J1995 Gross 127 kW 170 HP
 ISO 14396 126 kW 169 HP
 ISO 9249 / SAE J1349 Net 125 kW 168 HP
 Rated rpm 2200 min⁻¹
 Fan drive type Hydraulic
 Lubrication system
 Method Gear pump, forced lubrication
 Filter Full-flow

Brazil PROCONVE MAR-I (U.S. EPA Tier 3) emission certified.



HYDROSTATIC TRANSMISSION

Dual-path, hydrostatic transmission provides Infinite speed changes. The variable capacity travel motors allow the operator to select the optimum speed to match specific jobs. Travel control lock lever and neutral switch.

Travel Speed (Quick Shift Mode)	Forward	Reverse
1st	3.4 km/h	4.1 km/h

Travel Speed (Variable Mode)	Forward	Reverse
	0-3.4 km/h	0-4.1 km/h



FINAL DRIVES

In-shoe mounted axial piston type travel motors with integrated two stage planetary gear reduction. Compact in-shoe mount reduces risk of damaged by debris. Bolt-on sprocket for easy displacement.



STEERING SYSTEM

PCCS joystick control for all directional movements. Pushing the joystick forward results in forward machine travel, while pulling it rearward reverses the machine. Simply tilt the joystick to the left or right to make a turn. Tilting the joystick fully to the left or right activates counter-rotation.
 HST provides smooth powerful turns. Fully electronic control enables smooth control. The PCCS utilizes shift buttons to increase and decrease speed.
 Minimum turning radius 2.1 m
 As measured by track marks on the ground at pivot turn.



UNDERCARRIAGE

Suspension . . . Oscillation-type with a equalizer bar and pivot shafts
 Track roller frame Monocoque, large section, durable construction
 Rollers and idlers Lubricated track rollers
 Track shoes . . . Lubricated tracks. Unique dust seals for preventing entry of foreign abrasives into pin-to-bushing clearances for extended service. The track tension can be easily adjusted with grease gun.

	D61EM-23M0
Number of Track Rollers (Each Side)	8
Type of Shoes (Standard)	single grouser
Number of Shoes (Each Side)	46
Grouser Height	57.5 mm
Shoe Width (Standard)	600 mm
Ground Contact Area	37980 cm ²
Ground Pressure (With Planter Unit, ROPS (ISO 3471) Cab)	55.5 kPa 0.57 kgf/cm ²
Track Gauge	1900 mm
Length of Track on Ground	3165 mm



COOLANT AND LUBRICANT CAPACITY (REFILL)

Coolant 45 L
 Fuel tank 372 L
 Engine oil 27 L
 Hydraulic tank 101 L
 Final drive (Each side) 8.1 L
 Water tank for planter head cleaning pipe 120 L

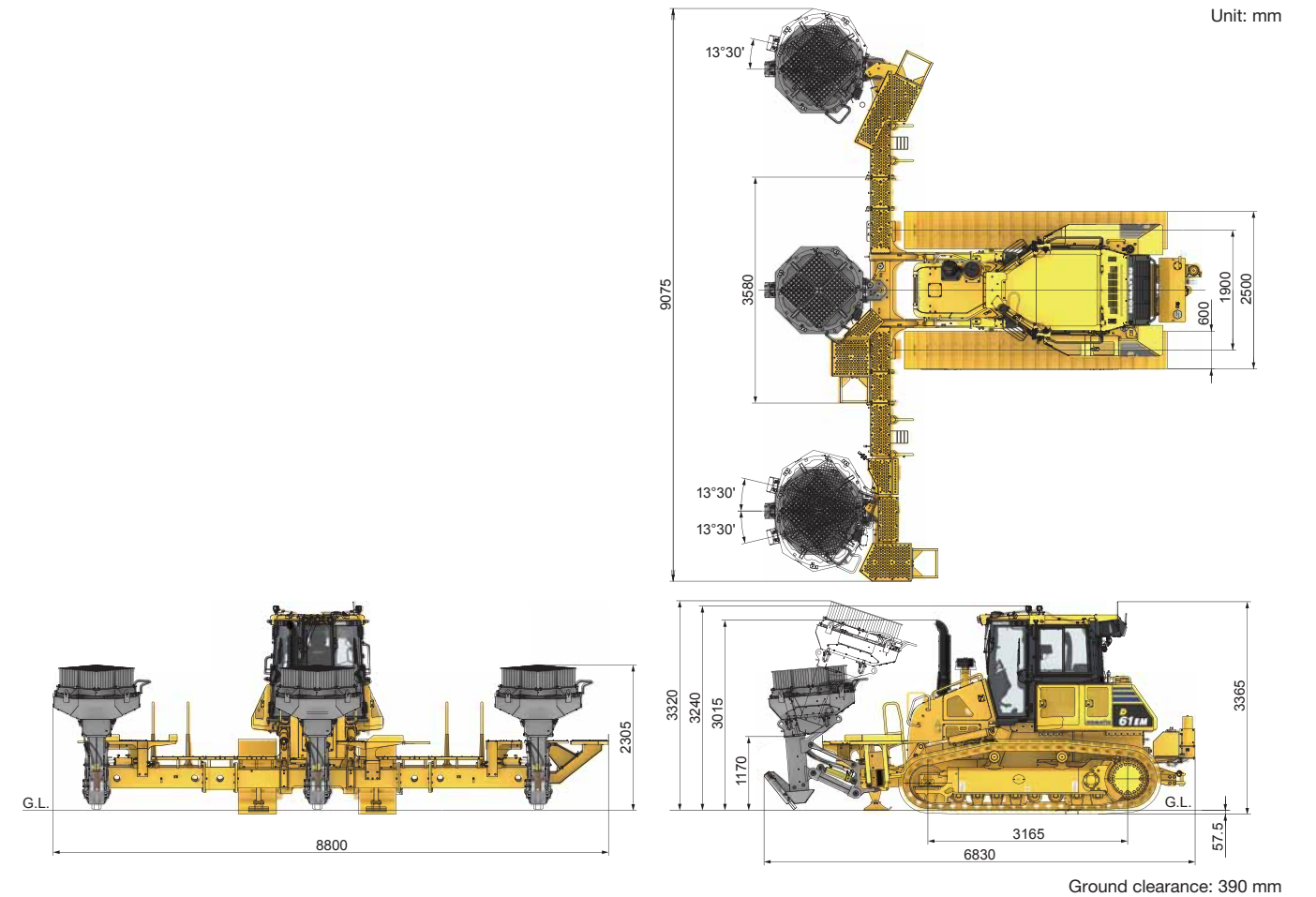


OPERATING WEIGHT (APPROXIMATE)

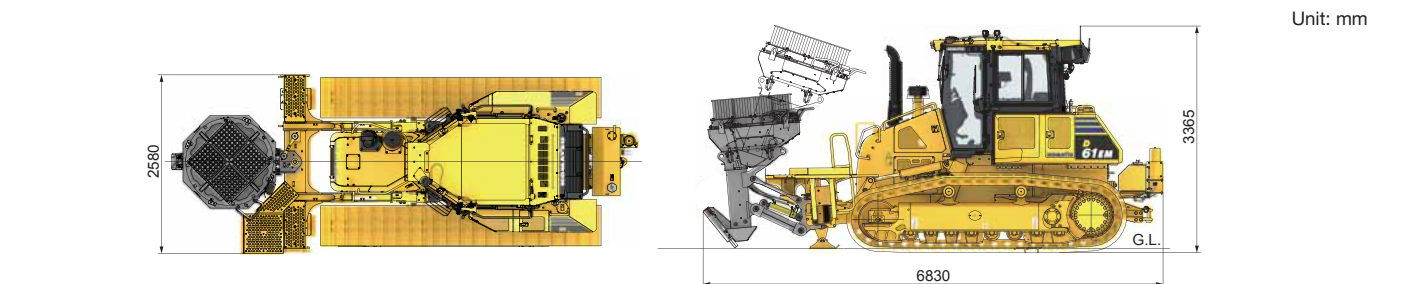
Operating weight 21500 kg
 Including planter unit, ROPS (ISO 3471) cab, operator, standard equipment, rated capacity of lubricant, coolant, and full fuel tank.



DIMENSIONS



TRANSPORT DIMENSIONS



HYDRAULIC SYSTEM

Closed-center Load Sensing System (CLSS) designed for precise and responsive control and for efficient simultaneous operation.

Hydraulic control unit:
 All spool control valves externally mounted remote to the hydraulic tank. Piston-type hydraulic pump with capacity (Discharge flow) of 171 L/min at rated engine rpm.

Relief valve setting 27.4 MPa, 280 kgf/cm²
 Hydraulic cylinders Double-acting, piston type

	Number of Cylinders	Bore
Work Equipment Lift	2	100 mm

Hydraulic oil capacity (Refilling):
 Power angle tilt dozer 101 L
 Control valves:
 Positions:
 Blade lift Raise, hold, lower