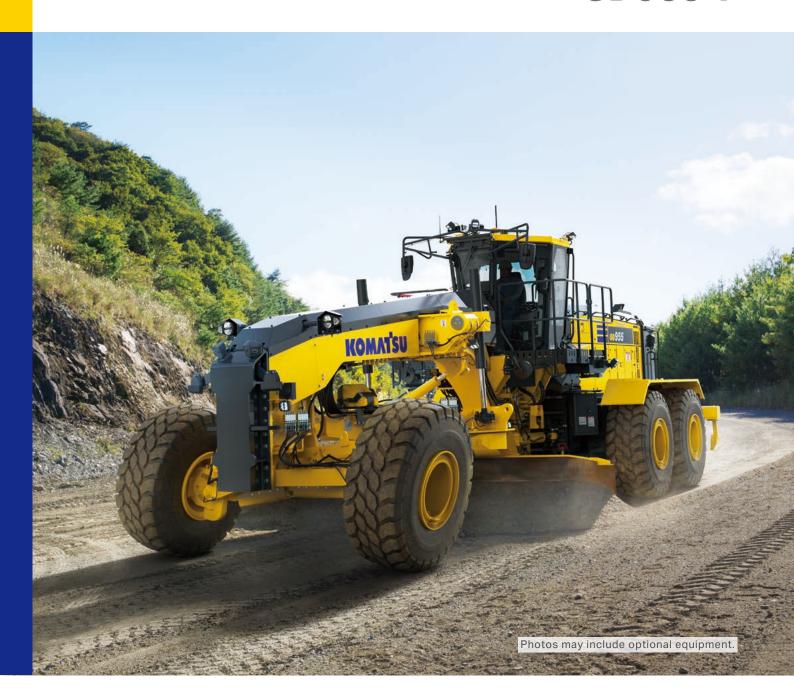
# **KOMATSU**

# GD955-7



Motor grader

### **Engine power**

Gross: 318 kW / 426 HP @ 1900 min<sup>-1</sup> Net: 311 kW / 417 HP @ 1900 min<sup>-1</sup>

# **Operating weight**

47320 kg (U.S. EPA Tier 4 Final)

#### **Emissions**

U.S. EPA Tier 4 Final / Tier 3 / Tier 2 equivalent

Blade length

5.5 m (6.1 m optional)

Production [m²/h] increased by 33%

(Compared with GD825A-2)

## **Productivity features**

• Productivity increased by enlarging machine size and increasing machine weight to match full 5.5 m specification with high power

#### **Maintenance features**

- Bearing type circle to greatly reduce downtime
- · Easy access to service areas
- · Maintenance information display
- · Long oil change intervals

### **Control features**

- Auto-manual selectable lockup torque converter transmission
- Articulate auto center return system to return to neutral with one switch

## **Ecology features**

• Three variations of engine are prepared One meets U.S. EPA Tier 4 Final emission certified

The other options meets Tier 2 equivalent or Tier 3 emission certified

• Engine power mode selection system

# **Durability features**

· Main structure completely redesigned for mining, reducing lifecycle costs with over 30% longer durability life

# **Operator environment** features

· Electrical fingertip control

· Steering wheel and steering lever for easy and safety operation

· Cab design for wide view and operator comfort



# Exceptional workability and maintenability

# **Information and Communication Technology (ICT)**

- Machine monitor with improved operator interface
- KOMTRAX Plus

# **Safety features**

- Built-in ROPS (ISO 3471) / FOPS (ISO 3449) cab
- Engine shutdown secondary switch

**Engine power** 

Gross: 318 kW / 426 HP @ 1900 min<sup>-1</sup> Net: 311 kW / 417 HP @ 1900 min<sup>-1</sup>

Operating weight

47320 kg (U.S. EPA Tier 4 Final)

Blade length

5.5 m (6.1 m optional)



# **Productivity features**



#### **High productivity**

GD955-7 can grade 33% more area per hour than GD825A-2 with standard 5.5 m blade. Extended blade width and 48% higher engine output for increased working speed enable more efficient operation which is required in mining operation. Optional 6.1 m blade provides more working width in easy operation and keeps working speed by using aggressive blade angle in heavy grading.

#### Production [m<sup>2</sup>/h]

33% UP (P mode)

(Compared with GD825A-2)
\* Production varies depending on the job
conditions.

#### **Blade stability**

Thanks to 50% operating weight heavier than GD825A-2, GD955-7 can more easily grade hard packed road surface. In addition, expanded tread and increased weight on axles keep work stable in various condition. A long wheel base allows the operator to obtain an aggressive moldboard angle. This wide blade angle permits material to roll more freely along the blade, which reduces power requirements.

#### **Easy to operate**

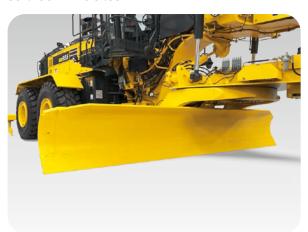
Although GD955-7 has long wheel base geometry common to Komatsu graders, it can turn sharply with wide steering angle and articulate angle. GD955-7 can turn on 24 m width road without cutting of the wheel, and has wider working range thanks to extended blade width and wide articulate angle.



# Work equipment

#### Moldboard

5.5 m moldboard is standard for GD955-7.
Optional 6.1 m moldboard is available for boosting up haul road maintenance especially for soft rock mine sites.



### Ripper

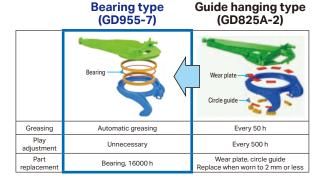
Ripper beam and link are strengthened according to the increased machine size. Number of shanks ranges from 3 as standard to 7.



# **Maintenance features**

# Bearing type circle to greatly reduce downtime

With the bearing type circle, "Circle play adjustment" is unnecessary which has occupied a large part of downtime. In addition, the work equipment maintenance time is greatly decreased and the maintenance cost is reduced largely since the automatic greasing system is installed as standard.



#### Adjustable blade rail guide

Play in the blade rail guide must be adjusted to maintain precise blade control. In GD955-7, no shims are used and the play can be adjusted easily in a short time with the adjustment bolt.

### **Automatic greasing system**

This system automatically supplies grease to each greasing point every preset hours, and it is not necessary to periodically lubricate by a manual pump. Refill port to the reservoir is accessible from the ground level.





#### Easy access to service areas

- Large hinged lockable doors are standard and provide easy access to the engine and radiator service points. Spin-on filters can be changed quickly.
- Circuits and fuse sizes are clearly identified in the fuse panel located in the cab.
- The tandem oil check point is conveniently located at the end of the tandem.
- Refueling from the ground is easy.
- Engine oil, hydraulic oil and coolant drains are positioned for easy maintenance.
- The tandem axle step is provided with a punched metal foot plate to ensure stable footing during maintenance and inspection.





### **Easy component removal**

The transmission can be removed without removing the cab since the cab is mounted on the front frame. Service downtime is reduced since the transmission is removed easily.

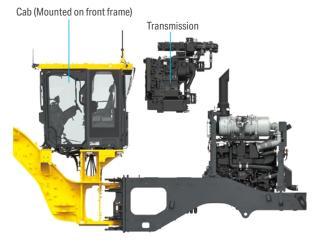


Photo is for Tier 4 Final machine.

# **Ground level battery disconnect** switch

For convenience in maintenance / service, a battery disconnect switch is located on the left side of the vehicle, and accessible from the ground level.



### **Ground level emergency stop switch**

For convenience in maintenance / service, four emergency engine stop switches are located on the vehicle, and accessible from the ground level.



Emergency stop switch

#### **Electric circuit breaker**

Circuit breakers are used for important electric circuits that need to be restored quickly if a

problem occurs in the electrical system.



#### Tie-off anchor points for maintenance

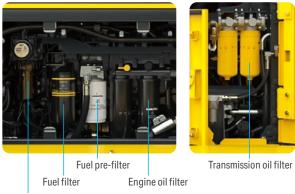
Anchors mounted to ROPS (ISO 3471) frame roof provide secure locations for attaching fall protection harnesses.

#### **Machine lockout (Optional)**

Machine lockout switch invalidates steering cylinders, operation of blade and ripper work equipment and machine moving forward or backward when engine is ON.

### **Centralized arrangement of filters**

The filters are centralized for easy service.

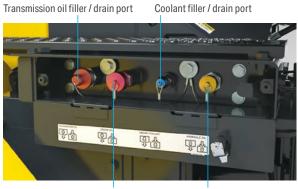


Komatsu Closed Crankcase Ventilation (KCCV) filter

Photo is for Tier 4 Final machine.

#### Service center

A ground level service center is located in front of rear tire on the right side. Engine oil, transmission oil, hydraulic oil, and coolant refilling ports are accessible in one location for quick preventative maintenance servicing.



Engine oil filler / drain port

Hydraulic oil filler / drain port

# **Maintenance features**

### Easy access DEF tank (Only Tier 4 Final)

The DEF tank is located at the right middle side of the vehicle and accessible from ground level. A

lockable, hinged door prevents the need to open the hood during refilling. An external sight gauge aids in preventing overflow and spillage while refilling.



### Supports the DEF level and refill timing (Only Tier 4 Final)

The DEF level gauge is displayed continuously on the right side of the monitor screen. In addition, when the refill timing\* is reached, the DEF low level guidance appears as a pops up display to inform the operator in real time.

\* The 2014 standard covering specific special automobile exhaust gases stipulates that when the DEF level becomes very low, the engine output is limited by law.





DEF level gauge



DEF low level guidance

### **Aftertreatment devices regeneration** automatic display (Only Tier 4 Final)

When it is necessary to carry out manual regeneration (The manual stationary regeneration) of the Komatsu Diesel Particulate Filter (KDPF), the display automatically switches to the aftertreatment device regeneration screen to inform the operator.





Aftertreatment device regeneration screen

### "Maintenance time caution lamp" display

When the remaining time to maintenance becomes less than 30 hours\*, the maintenance time monitor appears. Pressing the menu switch the monitor to the maintenance screen.

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





Photo is for Tier 4 Final machine.

Maintenance screen

### Long oil change intervals



#### Reversible fan

The radiator fan is hydraulically driven and reversible. The fan reverse mode can be controlled by use of the monitor.





Fan reverse indicator



# **Operator environment features**



## **Cab and control system**

From our experience of motor grader development, we believe that industrial standard lever pattern will provides the operator most precise operation. So that our new control system keeps same approach, but expand comfort with the fingertip control levers next to the operator seat. And the GD955-7 still has steering wheel, this is based on the customer feedback, who emphasize safety on road-going equipment.



#### **Less effort**

New control system reduces the movement of arm and relieves stress, owing to ergonomic console layout. The cab also has more room behind the seat, gives more adjustment capability of the backward of the seat.

**Movement of arm** 

Reduce up to 92%

Stress during operation

Reduce up to 10%

Typical test data at Komatsu test center

### **Fingertip control**

Short lever throws and low effort in both directions allows the operator to use multiple controls with one hand.

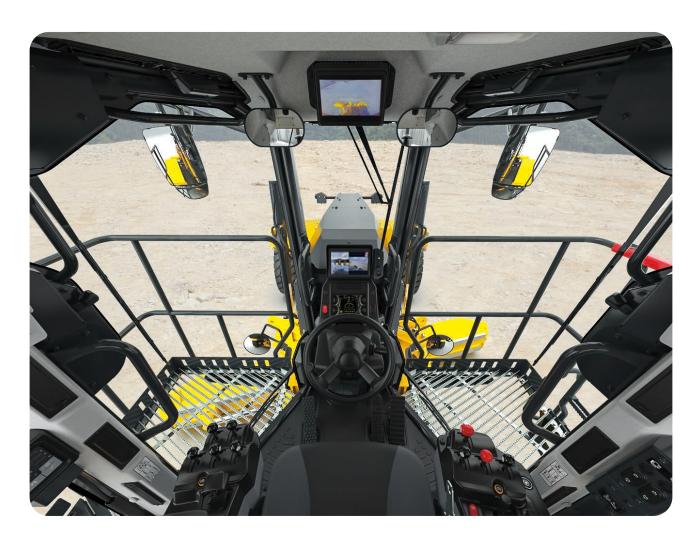


### Steering wheel and steering lever

For more safer traveling, we have steering wheel. While working, steering lever on the left console enables the operator to steer the machine and control work equipment without changing arm position.



# **Operator environment features**



## **Visibility**

Excellent visibility from the hexangular cab and layout of the rear side pillars boost operator confidence and productivity in all grader applications. Well-positioned blade linkage provides an unobstructed view of the moldboard and front tires.





## **Rear view monitor system**

The operator can view the rear of the machine with a full color monitor that is located above the windshield. Visual guidelines can also be added for additional convenience.





#### Low noise

New hydraulically driven fan and redesigned layout of the cooling system provide a low noise level.

Operator's ear dynamic noise level (ISO 6396)

75 dB (A)

Circumference dynamic noise level (ISO 6395)

109 dB (A)

Typical test data at Komatsu test center

### Work equipment lock switch

The operator can lock working lever function with the electrical switch.

### Seat belt warning indicator

A warning indicator on the monitor appears when the seat belt is not fastened.



Photo is for Tier 4 Final machine. (DEF level gauge is only for Tier 4 Final machine.)

#### Air Conditioner (A/C)

Well-positioned air conditioning vents keep the cab temperature comfortable regardless of weather conditions.

# Adjustable tilt / telescopic steering wheel

The steering wheel also has flip-up function, ensures easy entry and exit from the cab.



### **Suspension seat**

The air suspension, fabric covered seat which is adjustable to the operator's weight is provided

as standard. The suspension seat dampens vibrations transmitted from the machine and reduces operator fatigue.



### Power console height adjustment

The control lever console can be adjusted only with push of a button. The console also has manual

forwardbackward adjustment.



## **Self-canceling turn signals**

By turning the steering wheel back to the straight, the turn signal goes off and the lever back to its original position.



Lunch box tray



Multifunction audio

Engine shutdown secondary switch



24 V and 2 x 12 V Power outlet



Magazine box



Mobile phone tray



# **Control features**

#### Lockup torque converter transmission

The GD955-7 features dual mode transmission for pursuing ease of operation. This unique system provides both efficiency of direct drive and controllability of torque converter drive. With this outstanding power transmitting system, the GD955-7 delivers advanced productivity in any applications from fine grading to heavy grading.

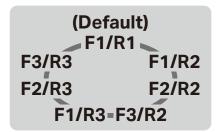


# Shift Lever and F-N-R switch

The GD955-7 offers finger control shift lever and F-N-R switch near the right control levers. The operator can easily shift the gear and set direction during work equipment control.

#### **Gearshift preset function**

F-N-R switch can set initial shift position to start, which reduces frequent shift lever operation during shuttle shifting.



#### **Transmission mode selection**

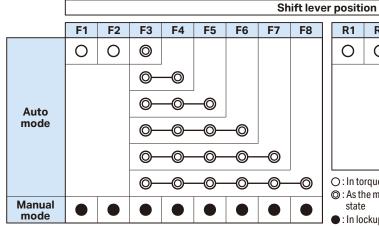
There is two transmission mode to enhance productivity. With the push of a button, transmission mode is selected to fit in working condition and preference of operators.

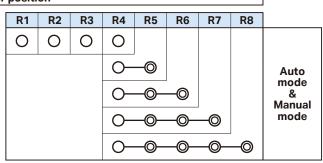
#### **Auto mode**

Drive with torque converter in all shift position. This mode maximizes torque converter benefits. Lockup will works in F3-F8 and R4-R8 position. Shifting F8 position serves automatic shifting through F3-F8 in responsible to machine speed.

#### Manual mode

Works like a same way as conventional power shift, by engaging lockup clutch with all gears. This mode maximizes efficiency of direct shifting. In reverse travelling, works same way as Auto mode, serves less shift lever operation frequency.

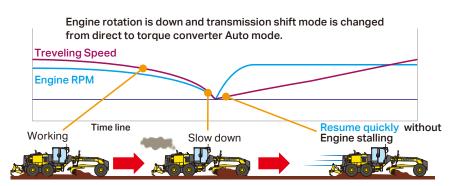




- O: In torque converter state
- As the machine speed increases, torque converter state changes to lockup state
- : In lockup state (Torque converter is not in use)

#### Anti stall

Prevents engine stalling while in manual mode by automatically disengaging the lockup clutch and shifting to torque converter mode. The torque converter absorbs the load allowing the machine to keep moving and not stall or stop.



#### **Power train protection**

Electronic over-speed protection prevents downshifting until reducing the travel speed to the safe range of shift changing. FR Inhibitor restricts excessive shuttle shifting at high traveling speed. When the inching clutch is used, if the travel speed is reduced by the automatic downshift function in the inching mode, the gear speed is automatically lowered to prevent an engine stall and clutch seizure.

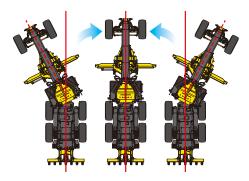
#### Articulate auto center return system

It is difficult for the operator to directly see the articulate neutral position, but the operator can return the articulate position to neutral with one switch. With this system, combined operations with steering etc. are reduced and the controllability during the work is improved.









# Reduce shift shock for driving comfort

Torque converter allows to absorb torque fluctuation of the engine. Even in shifting the gear during lockup, torque converter temporally absorb shift shock and contributes high driving comfort.

#### **Electric throttle control**

An RPM set switch allows the operator to perfectly match ground speed to working conditions. The switch has three positions, auto, off, and manual. When the engine speed is set and the switch is positioned in Auto, the brake or acceleration pedal will temporarily override the RPM set point.

#### **Automatic differential lock**

The automatic differential lock / unlock selection mode is installed which works according to the steering angle. The operator does not need to operate the switch each time the straight travel and turning are changed between them.

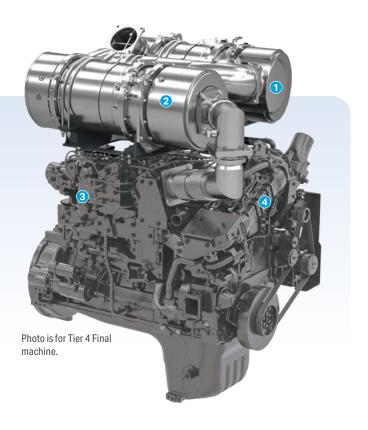
#### **During turning During straight travel** Differential Machine can travel straight is effective since there with differential is difference locked even on between right soft ground and left loci Differential Differential (Unlocked) (Locked)

# **Ecology features**

# Komatsu's new emission regulations-compliant engine

Komatsu provides a powerful and economical U.S. EPA Tier 4 Final compliant engine with latest emission control technologies and fuel saving features.

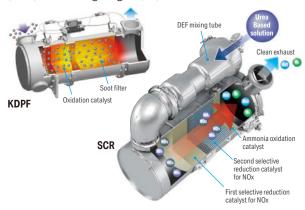
- 1 Komatsu Diesel Particulate Filter (KDPF)
- 2 Selective Catalytic Reduction (SCR)
- 3 Variable Geometry Turbocharger (VGT)
- 4 Heavy-duty cooled Exhaust Gas Recirculation (EGR) system



### Technologies applied to new engine

# Heavy-duty aftertreatment system (Only Tier 4 Final)

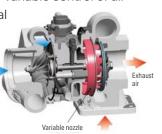
This new system combines a KDPF and SCR. The SCR NOx reduction system injects the correct amount of DEF at the proper rate, thereby decomposing NOx into non-toxic water vapor  $(H_2O)$  and nitrogen gas  $(N_2)$ .



#### **VGT** system

The VGT system features proven Komatsu design hydraulic technology for variable control of air-

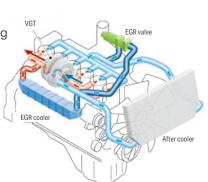
flow and supplies optimal
air according to load
conditions. The
upgraded version
provides better
exhaust temperature
management.
Vari



# Heavy-duty cooled EGR system (Only Tier 4 Final and Tier 3)

The system recirculates a portion of exhaust gas into the air intake and lowers combustion

temperatures, thereby reducing NOx emissions. The system dramatically reduces NOx, while helping cut fuel consumption.



# 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, thereby achieving near complete combustion to reduce PM emissions.



#### • P mode

Maximize production by taking full advantage of engine output. Appropriate for job sites which emphasize productivity.

#### • E mode

Suited for carrying out lighter work economically. This feature provides the sufficient power, better fuel consumption, and prevents tire slipping to extend tire life.

#### Middle speed mode

The operator can finely change the travel speed while working at full throttle since the intermediate gear speeds (F2.5, F3.5) are provided by controlling the engine. With this, the operator can work at optimum travel speed.

	Shift range	F1	F2	F3	F4	F5	F6	F7	F8
	Selected gear	1st	2nd	3rd	4th	5th	6th	7th	8th
E mode	Travel speed (km/h)	5	7	9	13	16	22	34	44
P mode	Travel speed (km/h)	6	8	11	15	18	24	34	44

						,					
	Shift range	F1	F2	F2.5	F3	F3.5	F4	F5	F6	F7	F8
	Selected gear	1st	2nd	3	rd		4th	5th	6th	7th	8th
Middle speed	Engine rpm limit			•		•					
mode	Travel speed (km/h)	6	8	9	11	12	15	18	24	34	44

Travel speeds calculated with 26.5R25 L3 tires at full accelerator and hard flat road

# **Information and Communication Technology (ICT)**

#### Machine monitor

The machine monitor display various machine information and allows for various settings of the machine. The Liquid Crystal Display (LCD) monitor is a 7-inch color and displays maintenance information, operation record, ECO guidance record, etc. The switch panel is used to select various screens. By using the switch panel, you can display various user menus on the LCD screen and adjust the machine settings.



Photo is for Tier 4 Final machine. (DEF level gauge is only for Tier 4 Final machine.)

#### Visual user menu

Pressing the menu switch on the switch panel displays the user menu screen. The menus are grouped by their functions. Easy-to-understand icons enable intuitive use.



#### **ECO** guidance

In order to optimum operation, the following 4 guidance messages are displayed for fuel saving operation

- 1) Excessive engine idling event
- Excessive stepping on accelerator event
- Recommendation of release acceleration at direction change.
- 4) Recommendation of shift up.



Photo is for Tier 4 Final machine. (DEF level gauge is only for Tier 4 Final machine.)

# Machine monitor with troubleshooting function to minimize downtime

Various meters, gauges and warning functions are centrally arranged on the machine monitor. The monitor simplifies startup inspection and promptly warns the operator with a lamp and buzzer if any abnormalities should occur. In addition, countermeasures are indicated in 4 levels to ensure safety and help prevent the machine from having major problems. Replacement times for oil and filters are also indicated.



Photo is for Tier 4 Final machine. (DEF level gauge is only for Tier 4 Final machine.)

#### ECO gauge

In order to help the operator to perform in an environmentally friendly way and minimize energy consumption, an easy-to-read "ECO gauge" is displayed on the machine monitor screen.

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

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







# Safety features

#### **Built-in ROPS / FOPS cab**

Operator cab structure conforms to ISO 3471 ROPS standard, and ISO 3449 FOPS Level II standard.



# Secondary engine shutdown switch

A secondary engine shutdown switch is located in the cab for abnormal use.

# Rear entry access platform (Optional)

The rear entry access platform provides safety and easy access / egress to / from the cab.



Route of getting on



\* Standard specification

#### KomVision with radars

The 5-camera and 5-radar system provides the bird's-eye view of around the vehicle with the KomVision monitor and an additional rear view monitor to operator. Object detection by radar is helpful when moving near other vehicles. If an object is detected in the area, a small circle is displayed on the monitor screen and system informs the operator by an alarm sound.









### Three-point seat belt (Optional)

A three-point operator seat belt is available as an option with heated and ventilated air suspension seat. This is made possible by changing operating position with electric control levers. It can also be used as conventional two-point seat belt depending on the work application.

#### **Full LED lighting**

Standard 14 LED working lamps improve safety and efficiency during night shift. Convenient LED access lamp and service lamp contribute to safety. All other roading lamps are also changed to LED type to reduce service bulb replacement.





#### What

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

#### 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

#### When

- Know when your machines are running or idling and make decisions that will improve your fleet utilisation
- 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

### Why

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



# **KOMTRAX Plus**

#### **Equipment management support**

KOMTRAX Plus enables expanded monitoring of the fleet via satellite. Users can analyse "machine health" and performance

from a remote location. This includes component condition and trend data. By making this critical information readily accessible, KOMTRAX Plus is an effective tool in maximising productivity and lowering operating cost.



# **Support**





### Komatsu total support

To keep your machine available and minimize operation cost when you need it, Komatsu Distributor is ready to provide a variety of supports before and after procuring the machine.

#### Fleet recommendation

Komatsu Distributor can study the customer's job site and provide the most optimum fleet recommendation with detailed information to meet all of your application needs when you are considering to buy new machines or replace the existing ones from Komatsu.

#### **Product support**

Komatsu Distributor gives the proactive support and secures the quality of the machinery that will be delivered.

#### **Parts availability**

Komatsu Distributor is available for emergency inquiry by the customers for genuine, quality guaranteed Komatsu parts.

#### **Technical support**

Komatsu product support service (Technical support) is designed to help customer. Komatsu Distributor offers a variety of effective services to show how much Komatsu is dedicated to the maintenance and support of Komatsu machine.

- Preventive Maintenance (PM) clinic
- Oil & Wear analysis program

### Repair & maintenance service

Komatsu Distributor offers quality repair and maintenance service to the customer, utilizing and promoting Komatsu developed programs.

# Komatsu Reman (Remanufactured) components

Komatsu Reman products are the result of the implementation of the Komatsu global policy which establishes and agrees to reduce the owning, operating and total Life Cycle Costs (LCC) to Komatsu's customer through high quality, prompt delivery and competitively priced in own remanufactured products (QDC).



# **Specifications**

#### **Engine**

Liigiiio	
Model	
Tier 4 Final	Komatsu SAA6D140E-7
Tier 3 / Tier 2 equivalent	Komatsu SAA6D140E-5
Туре	Water-cooled, 4-cycle, direct injection
Aspiration	Turbocharged and air to air aftercooled
No. of cylinders	6
Bore	140 mm
Stroke	165 mm
Piston displacement	15.24 L
Engine power (Manual mode)	
SAE J1995	Gross 318 kW 426 HP/1900 min <sup>-1</sup>
ISO 14396	318 kW 426 HP/1900 min <sup>-1</sup>
ISO 9249 (Net engine power)	Net 311 kW 417 HP/1900 min <sup>-1</sup>
Maximum torque	2150 N·m 219 kgf·m/1350 min <sup>-1</sup>
Torque rise	37%
Fan speed	Max 1300 min <sup>-1</sup>
Air cleaner	2-stage, dry-type

Three variations of engine are prepared.

One meets U.S. EPA Tier 4 Final emission certified. The other options meet Tier 2 equivalent or Tier 3 emission certified.

#### **Transmission and torque converter**

Full power shift transmission with torque converter and lockup.				
Gear	Forv	vard	Reve	erse
	*1	*2	*1	*2
1st	5.3 km/h	(5.7 km/h)	4.5 km/h	(4.9 km/h)
2nd	7.2 km/h	(7.8 km/h)	6.1 km/h	(6.6 km/h)
3rd	10.2 km/h	(11.0 km/h)	8.7 km/h	(9.4 km/h)
4th	13.7 km/h	(14.6 km/h)	11.7 km/h	(12.6 km/h)
5th	16.8 km/h	(17.9 km/h)	15.9 km/h	(17.0 km/h)
6th	23.0 km/h	(24.2 km/h)	21.8 km/h	(23.0 km/h)
7th	32.5 km/h	(33.7 km/h)	30.8 km/h	(32.1 km/h)
8th	43.6 km/h	(44.4 km/h)	41.4 km/h	(42.3 km/h)

<sup>\*1</sup> Travel speeds calculated with 26.5R25 L3 tires at rated engine rpm and hard flat road

#### **Tandem drive**

Oscillating welded box section	739 mm x 296 mm
Side wall thickness: Inner	25 mm
Outer	25 mm
Wheel axle spacing	1981 mm
Tandem oscillation, forward or reverse	15°

#### Front axle

Туре	Solid bar construction welded steel sections
Ground clearance at pivot	710 mm
Wheel lean angle, right or left	14°
Oscillation, total	32°

#### Rear axle

Alloy steel, heat treated, semi floating axle with lock / unlock differential (Auto / manual)

#### **Steering**

Hydraulic power steering providing stopped engine steering mee	ting ISO 5010.
Minimum turning radius	9.3 m
Maximum steering range, right or left	50°
Articulation	27°

#### **Brakes**

Service brake	Foot operated, wet multiple-disc brakes,
	hydraulically actuated on four tandem wheels.
Parking brake	Manually actuated, spring applied on four tandem wheels. Hydraulically released wet disc.
	wileeis. Hydraulically released wet disc.

#### Frame

504 mm
470 mm
25/32 mm
28/32 mm

#### Drawbar

A-shaped, welded construction for maximum strength with a replaceable drawbar ball.

Drawbar frame 310 mm x 32 mm

#### Circle

Lubricated bearing type circle; Circle and pinion require no adjustment		
Diameter (outside)	1822 mm	
Circle reversing control hydraulic rotation	130°	

<sup>\*2</sup> Travel speeds calculated with 26.5R25 L3 tires at full accelerator and hard flat road

#### Moldboard

Hydraulic power shift fabricated from steel. Includes replaceable metal wear inserts, cutting edge and end bits.

Cutting edge and end bits are hardened.

Dimensions	5489 mm x 960 mm x 25 mm
Arc radius	414 mm
Cutting edge	254 mm x 25 mm
Replaceable / Reversible side edges	204 mm x 490 mm x 19 mm
Blade pull (Tier 4 Final)	26816 kgf
Blade down pressure (Tier 4 Final)	22230 kgf

#### **Blade range**

Moldboard side shift:	
Right	818 mm
Left	916 mm
Maximum shoulder reach outside rear tires (frame s	traight)
Right	2126 mm
Left	2119 mm
Maximum lift above ground	542 mm
Maximum cutting depth	498 mm
Blade tip angle	53° forward, 3° backward

#### **Hydraulics**

Load-sensing closed center hydraulics with variable displacement piston pump. Short stroke / low effort direct acting control valves with preselected maximumflow setting to each function. Double acting anti-drift check valves on blade lift, tip, drawbar shift, articulation, ripper, and leaning wheels

Output (At engine rated rpm)	315.2 L/min
Maximum system pressure	27.5 MPa 280 kgf/cm <sup>2</sup>

#### Instrument

Electric monitoring	system with diagnostics:
Gauges:	
Standard	Articulation, engine coolant temperature, fuel level, speedometer, transmission shift indicator, engine tachometer, torque converter oil temperature, DEF level (Only Tier4 Final), hydraulic oil temperature, ECO gauge

#### **Capacities (refilling)**

Fuel tank	717 L
DEF tank (Only Tier 4 Final)	36 L
Cooling system	
Tier 4 Final	80 L
Tier 2 equivalent and Tier 3	72 L
Crank case	50 L
Transmission	85 L
Final drive	56 L
Tandem housing (each)	199 L
Hydraulic system	147 L
Circle reverse housing	27.5 L

#### **Operating weight Tier4 Final (Approximate)**

Includes lubricants, coolant, full fuel tank, 5.5 m blade, L3 tire, ripper (3 shanks), pusher Total 47320 kg On front wheels 13800 kg On rear wheels  $33520\,kg$ Includes lubricants, coolant, full fuel tank, 6.1 m blade, L4 tire, ripper (5 shank), pusher, access platform Total 48570 kg On front wheels 14070 kg On rear wheels 34500 kg

#### Operating weight Tier 3 and Tier 2 equivalent (Approximate)

Includes lubricants, coolant, full fuel tank,  $5.5\,\mathrm{m}$  blade, L3 tire, ripper (3 shanks), pusher Total 46740 kg On front wheels 13800 kg On rear wheels 32940 kg Includes lubricants, coolant, full fuel tank, 6.1 m blade, L4 tire, ripper (5 shank), pusher, access platform Total 47990 kg On front wheels 14070 kg On rear wheels 33920 kg

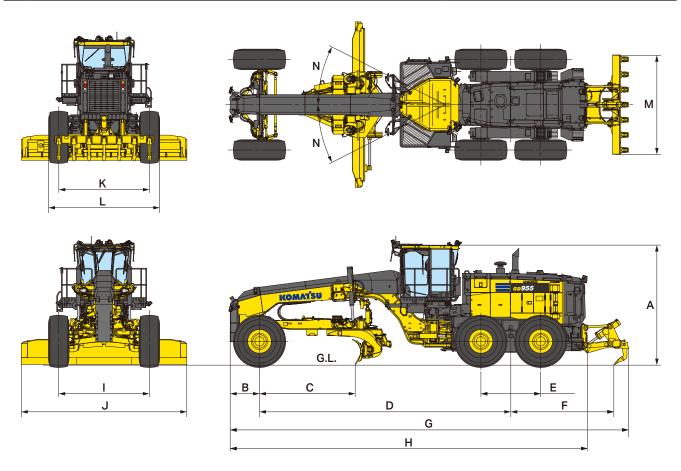
#### **Ripper**

Ripping depth, maximum	537 mm
Ripper shank holders	7
Ripper shank holder spacing	501 mm
Penetration force	232 kN
Pryout force	242 kN

# **Specifications**

#### **Machine dimensions**

IVIA	Chine dimensions	
Α	Height (Without antenna)	3990 mm
В	Center of front axle to counterweight (Pusher)	970 mm
С	Cutting edge to center of front axle	3160 mm
D	Wheelbase to center of tandem	8330 mm
Е	Tandem wheelbase	1980 mm
F	Center of tandem to back of ripper	3400 mm
G	Overall length	13200 mm
Н	Counterweight (Pusher) to ripper base bracket rear end	11860 mm
1	Tread (Front)	3005 mm
J	Width of standard moldboard	5490 mm
K	Tread (Rear)	3005 mm
L	Width over tires	3685 mm
М	Ripper beam width	3298 mm
N	Articulation, left or right	27°



#### Wheels, front and rear

Tire	Rim size	Wheel group
26.5R25	22.0	Multi-piece

# Standard and optional equipment

#### **Engine**

Air cleaner, double element with dust indicator	•
Alternator, 24 V / 140 A (Tier 4 Final)	•
Alternator, 24 V / 100 A (Tier 3 / Tier 2 equivalent)	•
Batteries, maintenance free, 2 x 12 V	•
Coolant filter (Only Tier 3 / Tier 2 equivalent)	•
Electric priming fuel pump	•
Three variations of engine are prepared	
One meets U.S. EPA Tier 4 Final emission certified	
The other options meet Tier 2 equivalent or Tier 3 emission certified	
Engine power mode select (Power, Economy and Middle speed)	•
Fuel line pre-filter	•
Hydraulically driven reversible cooling fan	•
KDPF (Only Tier 4 Final)	•
SCR (Only Tier 4 Final)	•
Starting motor, 11.0 kW	•
O-f-tt	

Safety equipment	
4 x Emergency stop switches	•
Alarm, back up	•
Anchor point for tie offs	•
Disconnect switches, battery and starting motor	•
Engine shutdown secondary switch (In cab)	•
Fire extinguisher	0
Hammer (Emergency exit)	•
Horn, electric	•
KomVision less	0
KomVision system (With cameras and radars)	•
KomVision system (With cameras, radar-less)	0
Machine lock out system	0
(Engine coolant, Engine oil, Transmission oil, Differential oil)	
Operator presence monitoring system	•
Parking brake, spring applied, hydraulic release, wet disc	•
Rearview monitor and camera	•
Secondary brake (ISO 3450)	•
Secondary steering, automatic, electric	•
Service brakes, fully hydraulic wet multiple-disc	

#### **Lighting system**

Access lamps, LED	
Back-up lamps, LED	•
Beacon lamp, LED	•
Cab mounted work lamps, LED	•
Engine bay lamp, LED	•
Front work lamps, LED	•
Head lamps, high and low beam, LED	•
Rear work lamps, LED	•
Stop and tail lamps, LED	•
Turn signal lamps, LED	•

#### **Oprator environment**

Air conditioner (R134a) with heater	•
Cab mount, viscous	•
Defogger glass, rear	•
Doors, left and right side with wipers	•
Electrical height adjustable consoles, left and right	•
Electrical outlets (2 x 12 V outlets, 1 x 24 V outlet)	•
Floor mat	•
Heater, 230 V	0
Instrument panel and monitoring system	•

Mirrors, interior cab, left and left exterior mirrors	•
Mirrors, outside heated and power adjustable	0
Multi-color monitor with 7-inch LCD display	•
Operator seat with 2-point seat belt, reclining, air suspension type	•
Operator seat with 3-point seat belt, reclining, air suspension type	0
Radio, AM / FM with aux input, Bluetooth®	•
Radio, AM / FM with aux input	0
Room lamp, LED	•
ROPS / FOPS (ISO 3471 / ISO 3449)	•
Space for lunch box	•
Steering lever, electric, palm control	•
Steering wheel, tilt and telescopic	•
USB port for charging	•
Wipers, front, doors and rear	•

#### **Power train**

Automatic differential lock	•
Axle, rear semi floating, planetary type	•
Brake, parking, spring applied, hydraulically released wet disc	•
Differential, manual lock / unlock	•
Dual mode transmission (8F / 8R) power shift direct drive and torque converter with auto shift	•
Engine overrun warning and protection	•

#### Work equipment and hydraulics

Accumulators, blade lift	•
Articulation, automatic Return-to-Center	•
Clutch, circle drive slip	•
Cutting edges, flat, 254 mm x 25 mm, 19 mm mounting bolts	•
Drawbar, bearing type circle	•
End bits, 204 mm x 19 mm, 19 mm mounting bolts	•
Moldboard, hydraulic side shift and tilt, 5.5 m x 810 mm x 25 mm	•
Moldboard, hydraulic side shift and tilt, 6.1 m x 810 mm x 25 mm	0
Rail guide with backlash adjustment bolts	•
Ripper, rear, 3 tooth	•
Tooth, ripper (1 additional, 2 additional, 4 additional)	0

### Other equipment

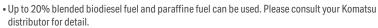
- the squipment	
Auto-lube, Graco	•
Fast fill coupler for fuel tank	•
General Toolkit	0
Ground level service center (Engine coolant, Engine oil, Transmission oil, Hydraulic oil)	•
In conformity with lockout tagout regulation	•
KOMTRAX Plus	•
KOWA sampling ports	•
Painting, Komatsu standard color scheme	•
Platform, access platfrom with ladders	•
Platform, rear entry access platform	0
Pre-cleaner, Turbo II	0
Pusher plate	•
Rear fenders	0
Tires and rims: 26.5R25 (L-3) with multi piece rim	•
Tires and rims: 26.5R25 (L-4) with multi piece rim	0
Tool box with lock	•
Transmission under guard	•
Vandalism protection, lockable fuel tank, hydraulic tank, battery cover, engine side covers	•
Wheel chocks (2)	

Further equipment on request

Standard equipment

Optional equipment

This specification sheet may contain attachments and optional equipment that are not available in your area. Please consult your local Komatsu distributor for those items you may require. Materials and specifications are subject to change without notice.



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