

GD555-5

**HORSEPOWER** 

Gross: 146kW 196 HP @ 2000 rpm Net: 144kW 193 HP @ 2000 rpm

> OPERATING WEIGHT 18120 kg 39947 lb

> > BLADE LENGTH 3.71 m 12 ft

GD655-5

**HORSEPOWER** 

Gross: 165kW 221 HP @ 2100 rpm Net: 163kW 218 HP @ 2100 rpm

> OPERATING WEIGHT 18520 kg 40744 lb

> > BLADE LENGTH 4.32 m 14 ft

# GD555-5 & GD655-5

**Australia / NZ Version** 

ecot3

555-5 & 655-5



**MOTOR GRADER** 





#### **GD555-5 MOTOR GRADER GD655-5**

GD555-5

**HORSEPOWER** 

Gross: 146kW 196 HP @ 2000 rpm

Net: 144kW

193 HP @ 2000 rpm

**18120 kg** *39947 lb* 

**BLADE LENGTH** 

**3.71 m** *12 ft* 

**OPERATING WEIGHT** 

HORSEPOWER Gross: 165kW

221 HP @ 2100 rpm Net: 163kW

GD655-5

18520 kg 40744 lb

218 HP @ 2100 rpm **OPERATING WEIGHT** 

> **BLADE LENGTH 4.32 m** *14 ft*

#### **Easy Serviceability**

- » Easy radiator cleaning with reversing fan. See page 7.
- » Easy fuelling from the ground level. See page 7.
- » Hydraulic driven, air compressor with tank (air on demand).

**Ground level refuelling** 

## **Full under guard protection**

**Power on demand industry** leading Komatsu hydraulic technology

#### The Dual Mode Transmission Includes a **Non-Stall Function,**

**WALK-AROUND** 

a great improvement on the conventional reputable GD555-3 & GD655-3 now achieving smoother operation at low speed. See page 5.

**Economical Fuel Consumption by Two Mode Operation,** 

decreased by 20% compared with Komatsu's conventional model typical test data. See page 4.

#### **Operator Friendly Cab,**

excellent visibility, low operation noise. See pages 8 and 9.

A simple blade

#### **Excellent Operator Environment**

- » Environment friendly Komatsu SAA6D107E-1 engine complies with EPA Tier 3, EU Stage 3A emission. See page 4.
- » Exceptional visibility by **hexangular** cab with front Y shape pillar and rear layout side pillar.
- » Low operating noise. The dynamic noise is lowered significantly compared with the GD555-3. See page 8.

**Class Leading Lighting Package** 

#### **Excellent Performance**

- » Smooth operation without the engine stalling at low speed and maximise productivity. See page 5.
- » Excellent blade controllability with multifunctional control valves with float and PCV (Pilot Check Valve). See page 6.
- » Aggressive moldboard angles are possible with a long wheel base. See page 6.

**LED Guarded Rotating Beacons** 

#### **Economy Features**

- » Selectable working mode, <P mode> and <E mode>. See page 4.
- » Operator can choose <Auto mode> or < Manual mode>. See page 5.



**KØMTRAX** Komatsu Satellite Monitoring Syetem.

**Machine Control "READY"** 

Photo may include optional equipment.

### GD555-5 GD655-5

## **ECOLOGY FEATURES**

#### **Komatsu Technology**

Komatsu develops and produces all major components, such as engines, electronics and hydraulic components in house.

Since all components can be matched, efficiencies are increased achieving high levels of productivity and ecology. With this "Komatsu Technology", and through customer feedback, Komatsu is achieving great advancements in technology.

The result is a new generation of high performance and environment friendly machines.

#### High Performance SAA6D107E-1 Komatsu 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 productivity.

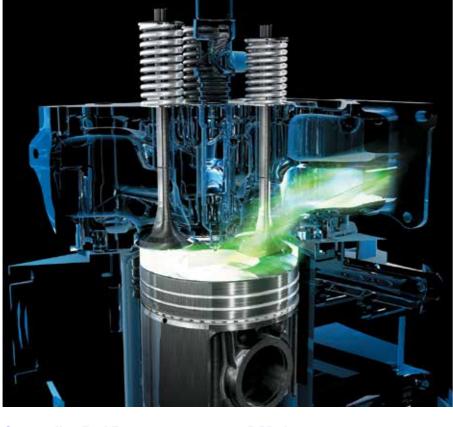
GD555-5 NET: **144kW** 193HP GD655-5 NET: **163kW** 218HP

#### **Low Emission Engine**

This engine is EPA Tier 3 emission regulation and EU Stage 3A emission regulation certified, without sacrificing power or machine productivity.

## Hydraulic Driven and Reversing Cooling Fan

Reduce power loss in case of low temperature and reduce engine noise.



#### **Outstanding Fuel Economy**

A significant reduction in fuel consumption is achieved by the control of the engine speed.

#### 2 Mode 3 Stage VHPC

The system allows selection of the appropriate mode between two modes <P mode> or <E mode> according to each working condition. The mode is easily selected with a switch in the operator's cab.

- » P Mode Greater productivity can be attained by taking full advantage of high output power. It is appropriate for job sites where the motor grader meets high resistance.
- **E Mode** This mode is selected for maximum economy and lighter work applications. This feature provides the appropriate power and better fuel consumption.

#### GD655-5 GD555-5

|    |       |        |              | kW (HP)      |
|----|-------|--------|--------------|--------------|
|    |       | Р      | E            |              |
|    | AUTO  | MANUAL | AUTO         | MANUAL       |
| F1 | 134   | 40.4   | 400          | 400          |
| F2 | (180) | (180)  | 108<br>(145) | 108<br>(145) |
| F3 |       | (100)  | (143)        | (145)        |
| F4 | 149   |        |              |              |
| F5 | (200) | (200)  | 134<br>(180) | (180)        |
| F6 | 1     | (200)  | (100)        | (100)        |
| F7 | 163   | 163    | 149          | 149          |
| F8 | (218) | (218)  | (203)        | (203)        |
| R1 | 134   | 134    | 108          | 108          |
| R2 | (180) | (180)  | (145)        | (145)        |
| R3 | 149   | 149    | 134          | 134          |
| R4 | (200) | (200)  | (180)        | (180)        |

|    |              |              |              | kW (HP)      |
|----|--------------|--------------|--------------|--------------|
|    | Р            |              | E            |              |
|    | AUTO         | MANUAL       | AUTO         | MANUAL       |
| F1 | 118          |              |              | 40.4         |
| F2 | (158)        | 118<br>(158) | 104<br>(140) | 104<br>(140) |
| F3 |              | (130)        | (140)        | (140)        |
| F4 | 131<br>(176) |              |              |              |
| F5 |              | (176)        | 118<br>(158) | 118<br>(158) |
| F6 |              | (170)        | (100)        | (100)        |
| F7 | 144          | 144          | 131          | 131          |
| F8 | (193)        | (193)        | (176)        | (176)        |
| R1 | 118          | 118          | 104          | 104          |
| R2 | (158)        | (158)        | (140)        | (140)        |
| R3 | 131          | 131          | 118          | 118          |
| R4 | (176)        | (176)        | (158)        | (158)        |

# Electronic control technology COCOMBON Hydraulic technology Engine technology Engine

## **Converter Drive: Designed to Provide Power and Performance**

#### **Komatsu Power Shift Transmission**

Is designed and built specifically for Komatsu graders. The transmission provides on-thego, full power shifting as well as inching capability and automatic shifting in the higher ranges.

## Lock-up Torque Converter (Auto Mode)

Or direct drive (manual mode), the operator chooses the optimum transmission set-up for the job at hand. If power for tough grading or low speed fine control is required, the operator can select the auto mode. With the torque converter, the operator has tremendous tractive effort and control.

More importantly, you can achieve fine control at low speed without shifting or using an inching pedal. Auto mode is available in gears 1-8. If high transport speed or high speed for snow removal is needed, the operator can select manual drive. The operator has the best of both worlds.

#### **Gear Selections**

Eight forward speeds and four reverse speeds give the operator a wide operating range. With four gears when in auto mode, shifting is automatic in speeds five through eight. The operator sets the maximum gear for operation and the transmission then shifts automatically between gears four through eight up to the operator selected maximum gear.

#### **Electronic Overspeed Protection**

Helps prevent engine and transmission damage from premature downshifting and grade-induced overspeeding.

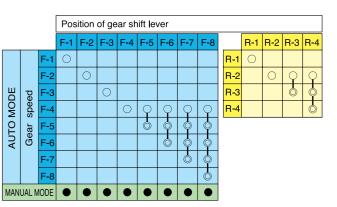
#### **Electronic Transmission Control**

Produces smooth shifting, which enables the operator to maintain a uniform grading surface if shifting is required. Smooth shifts also extend the life of the transmission clutches. A single lever controls direction, speed and parking brake.

#### **Low Effort Inching Pedal**

Gives the operator precise control of machine movement.



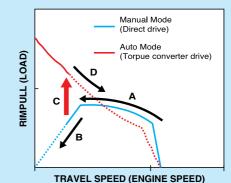


- In lockup state (torque converter is not in use)
- : In torque converter state
- : As the machine speed increases, torque converter state changes to lockup state.
- : Automatic gear shift

# **Superior Transmission** with a **New Function**

Combination of a manual mode and auto mode is very effective for avoiding engine stalling which leads to low speed smooth operation.

No engine stalling when in manual mode due to the 'Non Stall Function'.



- A If the load increases, the engine speed will down
- **B** If the load increases further, the engine may stall
- C Just before the engine stall, it automatically changes to auto mode (with torque converter) to avoid stalling
- D When the load decreases and travel speed has recovered, it automatically returns to manual mode

A = 0.00

## **ADVANCED CONTROL FEATURES**

#### **Power on Demand**

Normally, the variable displacement pump idles at low output. When it senses a load requirement, the pump slides quick flow and pressure to match the demand. The result is less hydraulic system heat, quick response and lower fuel consumption. The bottom line is greater efficiency.

#### **Implement Control Valves**

Designed and built by Komatsu specifically for motor graders. The valves are direct acting and provide outstanding operator "feel" and predictable system response to precise implement control. To help maintain exact blade settings, lock valves are built into the hydraulic circuits. Relief valves are also incorporated into selected circuits to protect the cylinders from over-pressurisation.

#### **Low Operating Effort**

Implement controls are designed to reduce operator fatigue. They feature short lever throws and effort in both directions. Properly spaced control levers and short lever throws allow the operator to use multiple controls with one hand.

#### **Balanced Flow**

When the operator uses several controls at the same time, flow is proportional to ensure several implements can operate simultaneously.

#### **Constant Implement Speed**

Implement speed is constant regardless of engine speed because of the large pump output and proportional flow control function.



#### **Blade Angle**

A long wheel base allows the operator to obtain an aggressive moldboard angle. This large blade angle permits material to roll more freely along the blade, which reduces power requirements. This is particularly helpful in dry soil or clay or for snow and ice removal.

#### **Rugged Construction**

A one-piece forged circle is built to stand up to high stress loads. To reduce wear, teeth are induction hardened in the front 180 deg. of the circle. For maximum support, the circle is secured to the drawbar by six support shoes.

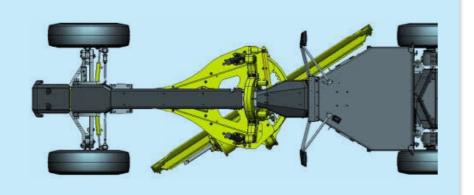
## **Blade Protection System**

#### Standard Fitment

Blade Lift Accumulators absorb shocks when the moldboard contacts immovable objects. This is especially useful in rough grading and rocky areas. It allows precise control while allowing relief from vertical impact loads. This option is most useful in applications where hidden objects are frequently encountered.

## **Versatile Moldboard Geometry**

Komatsu graders feature a versatile moldboard geometry. Save time and money when pulling ditches by throwing the window to the right, not into the roadway, without narrowing the road bed. It's made possible by Komatsu's extraordinary reach and aggressive blade angle. Ample clearance between the heel of the blade and main frame, even with the toe sharply angled down.



## **Superior Serviceability**

#### **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.
- » The fuse panel is located in the cab. Circuits and fuse sizes are clearly identified.
- The tandem oil check point is conveniently located at the end of the tandem.
- The service meter is located in the electronic monitoring system.
- » Refuelling from the ground is easy.
- Engine oil, hydraulic oil and coolant drains are eco friendly positioned with excellent accessibility.

## Easy Radiator Cleaning with Reversing Fan

Dust stuck to the radiator and cooler fins is blown off with reversal of the hydraulic drive fan.

#### **Power Train Components**

With a modular design, you can remove the engine, transmission or final drives independently for quick service.

#### **Character Display is Easy to See**

During normal operation, the service meter/ odometer is displayed in this area. If abnormality or machine overload occurs, or if machine maintenance and inspection are required, action codes appear on the display to allow the operator to take appropriate action.

#### **Adjustment-free Oil Disc Brakes**

Komatsu designs and builds multiple-disc brakes that are completely sealed and adjustment-free. The brakes are immersed in oil, and are hydraulically actuated. A fully hydraulic brake system eliminates problems associated with air systems. The large braking surface provides dependable braking capability and increased life before a rebuild is required.

#### **Environment Friendly**

The engine and transmission are rubbermounted to transmit less engine noise and vibtration to the operator and extend component life. A lead-free aluminium core is used for the radiator to comply with global environmental requirements. Easy radiator cleaning with reverse fan



Tandem tool box - standard equipment









Lockable- ground level refuelling.



Console with central warning lamp. Internal monitoring system with error codes appearing in the display screen.



## **WORKING ENVIRONMENT**



#### **Operator Ear Dynamic** noise level: **74 dB** (ISO 6396)

#### **Roomy Interior**

Extra leg and foot room create a spacious, open cab. The cab includes built-in storage space for personal items such as a lunch box, cup holder and a coat hook.

#### **Air Suspension Seat 150kgs**

The seat features fold-up armrests and a retractable seat belt. The seat follows the contour of the body and can be easily adjusted for optimal support and comfort.

#### **Electric Throttle Control**

The RPM mode select switch allows the operator to perfectly match the working condition by selecting between three modes: Auto, Off and Manual. The engine speed set by throttle switch is temporarily cancelled when operating the brake/acceleration pedal at Auto mode.

#### **Electronic Monitoring System**

Electronic monitoring system monitors important machine systems and provides the operator with a warning if an abnormality occurs.

#### **Adjustable Control Console**

The control console is adjustable backward and forward to facilitate entry and exit from the cab. The steering wheel also tilts to the operators preference.

#### **Air Conditioner**

Well positioned air conditioning vents keep the operator comfortable through a wide range of outside conditions.

#### **Safety Machine**

Cab is low profile enclosed ROPS/FOPS. (SAE J1040, J2311) Retractable seat belt.



Reversing Camera - standard equipment







**Excellent Visibility from cab.** 

Picture does not include factory fitted reversing camera

#### **Excellent Visibility**

Exceptional visibility by hexangular cab with front Y shape pillar and rear layout side pillar (patent pending) helps increase operator confidence and productivity in all grader applications. The well positioned blade linkage provides an unobstructed view of the moldboard and front tyres. The tapered engine hood provides good visibility to the rear of the machine, especially the rear ripper.



Turbo II pre-cleaner - standard equipment



Reserving Camera - standard equipment

## **SPECIFICATIONS**

#### **GD555-5**



#### **ENGINE**

| Type<br>Aspiration            | KOMATSU SAA6D107E-1<br>Water-cooled, 4 cycle, direct injection<br>.Turbocharged and air to air aftercooled |
|-------------------------------|------------------------------------------------------------------------------------------------------------|
|                               |                                                                                                            |
| Stroke                        | 124 mm                                                                                                     |
| Piston displacement           | 6.69 ltr                                                                                                   |
| Gross horsepower (Manual mode |                                                                                                            |
| P-mode                        | -1                                                                                                         |
| Gear 1-3                      | <b>120 kW</b> <i>161 HP@2000 rpm</i>                                                                       |
| Gear 4-6                      | <b>134 kW</b> 179 HP@2000 rpm                                                                              |
|                               | <b>146 kW</b> 196 HP@2000 rpm                                                                              |
| E-mode                        | ,                                                                                                          |
| Gear 1-3                      | <b>107 kW</b> <i>143 HP@2000 rpm</i>                                                                       |
|                               | <b>120 kW</b> 161 HP@2000 rpm                                                                              |
|                               | <b>134 kW</b> <i>179 HP@2000 rpm</i>                                                                       |
| Net flywheel horsepower* (Man | ual mode)                                                                                                  |
| P-mode                        |                                                                                                            |
|                               | <b>118 kW</b> <i>158 HP@2000 rpm</i>                                                                       |
| Gear 4-6                      | <b>131 kW</b> <i>176 HP@2000 rpm</i>                                                                       |
|                               | <b>144 kW</b> 193 HP@2000 rpm                                                                              |
| E-mode                        |                                                                                                            |
|                               | <b>104 kW</b> 140 HP@2000 rpm                                                                              |
| Gear 4-6                      | <b>118 kW</b> <i>158 HP@2000 rpm</i>                                                                       |
| Gear 7-8                      | <b>131 kW</b> <i>176 HP@2000 rpm</i>                                                                       |
|                               | <b>.880 Nm</b> 89.8 kg.m 649 lb.ft@1450 rpm                                                                |
| lorque rise                   | 29%                                                                                                        |
|                               |                                                                                                            |
|                               |                                                                                                            |
| Electrical                    | 24 volt with 90 amp alternator                                                                             |
| <i>ваттегу</i>                | low maintenance plus, 12 volt, 1146 cca                                                                    |

<sup>\*</sup> Net flywheel HP output for standard (SAE J1349) including air cleaner, alternator (not charging), water pump, lubricating oil, fuel pump, muffler and fan running at minimum speed.



#### TRANSMISSION & TORQUE CONVERTER

Full power shift transmission with integral free wheeling stator torque converter and lock-up.

**Speeds** (at rated engine speed)

| Gear | Forward                         | Reverse                          |
|------|---------------------------------|----------------------------------|
| 1st  | <b>3.4 km/h</b> 2.1 mph         | <b>4.5 km/h</b> 2.8 mph          |
| 2nd  | <b>5.0 km/h</b> 3.1 mph         | <b>9.2 km/h</b> 5.7 mph          |
| 3rd  | <b>7.0 km/h</b> 4.3 mph         | <b>20.3 km/h</b> <i>12.6 mph</i> |
| 4th  | <b>10.2 km/h</b> 6.3 mph        | <b>40.3 km/h</b> <i>25.0 mph</i> |
| 5th  | <b>15.4 km/h</b> <i>9.6 mph</i> |                                  |
| 6th  | <b>22.3 km/h</b> 13.9 mph       |                                  |
| 7th  | <b>30.6 km/h</b> 19.0 mph       |                                  |
| 8th  | <b>44.3 km/h</b> 27.5 mph       |                                  |



#### **TANDEM DRIVE**

| Oscillating welded box section | 520 mm x 202 mm |
|--------------------------------|-----------------|
| Side wall thickness: Inner     | 22 mm           |
| Outer                          |                 |
| Wheel axle spacing             | 1525 mm         |
| Tandem oscillation             |                 |



#### **FRONT AXLE**

| Туре                      | Solid bar construction welded steel sections |
|---------------------------|----------------------------------------------|
| Ground clearance at pivot | 620 mm                                       |
|                           | eft20 °                                      |
|                           | 32 °                                         |



#### **REAR AXLE**

Alloy steel, heat treated, full floating axle with lock/unlock differential.



#### **WHEELS, FRONT & REAR**

| Bearings                | Tapered roller       |
|-------------------------|----------------------|
| Tyres                   |                      |
| Tyre rims (demountable) | 10" three piece rims |



#### **STEERING**

Hydraulic power steering providing stopped engine steering complies with SAE J23 and J1151.

| Minimum turning radius                | 7.3 m |
|---------------------------------------|-------|
| Maximum steering range, right or left | 49 °  |
| Articulation                          | 25 °  |



#### **BRAKES**

Service brake ......Foot operated, oil disc brakes, hydraulically actuated on four tandem wheels, **13691 cm<sup>2</sup>** 2122 in<sup>2</sup> total braking

Parking brake .......Manually actuated, spring applied, hydraulically released caliper with transmission interlock



#### **FRAME**

| 300 mm | ront Frame Structure - Height    |
|--------|----------------------------------|
|        | ront Frame Structure - Width     |
| 14 mm  | ront Frame Structure - Thickness |

#### **GD655-5**



#### **ENGINE**

| Model                             | KOMATSU SAA6D107E-1                                     |
|-----------------------------------|---------------------------------------------------------|
| Туре                              | Water-cooled, 4 cycle, direct injection                 |
| Aspiration                        | Turbocharged and air to air aftercooled                 |
| Number of cylinders               |                                                         |
| Bore                              | <b>107 mm</b> <i>4.21"</i>                              |
| Stroke                            | <b>124 mm</b> <i>4.88"</i>                              |
| Piston displacement               | <b>6.69 ltr</b> 408 in <sup>3</sup>                     |
| Gross horsepower (Manua           | l mode)                                                 |
| P-mode                            |                                                         |
| Gear 1-3                          | <b>136 kW</b> <i>183 HP@2000 rpm</i>                    |
| Gear 4-6                          | <b>151 kW</b> 203 HP@2000 rpm                           |
| Gear 7-8                          | <b>165 kW</b> 221 HP@2100 rpm                           |
| E-mode                            | ,                                                       |
| Gear 1-3                          | <b>110 kW</b> 143 HP@2000 rpm                           |
|                                   | <b>136 kW</b> 183 HP@2000 rpm                           |
| Gear 7-8                          | <b>151 kW</b> 203 HP@2000 rpm                           |
| Net flywheel horsepower*          | (Manual mode)                                           |
| P-mode                            |                                                         |
| Gear 1-3                          | <b>134 kW</b> 180 HP@2000 rpm                           |
|                                   | 149 kW 200 HP@2000 rpm                                  |
| Gear 7-8                          | <b>163 kW</b> 218 HP@2100 rpm                           |
| E-mode                            | ,                                                       |
| Gear 1-3                          | <b>108 kW</b> 145 HP@2000 rpm                           |
| Gear 4-6                          | <b>134 kW</b> 180 HP@2000 rpm                           |
| Gear 7-8                          | <b>149 kW</b> 203 HP@2000 rpm                           |
|                                   | <b>941 Nm</b> <i>96.0 kg.m 694 lb.ft@1450 rpm</i>       |
|                                   |                                                         |
|                                   |                                                         |
| Air cleaner                       | 2-stage, dry-type                                       |
| Electrical                        | 24 volt with 90 amp alternator                          |
| Battery                           | 2, low maintenance plus, 12 volt, 1146 cca              |
| * Net flywheel HP output for stan | dard (SAE J1349) including air cleaner, alternator (not |

charging), water pump, lubricating oil, fuel pump, muffler and fan running at minimum



#### TRANSMISSION & TORQUE CONVERTER

Full power shift transmission with integral free wheeling stator torque converter and lock-up.

**Speeds** (at rated engine speed)

| Gear | Forward                         | Reverse                   |
|------|---------------------------------|---------------------------|
| 1st  | <b>3.4 km/h</b> 2.1 mph         | <b>4.5 km/h</b> 2.8 mph   |
| 2nd  | <b>5.0 km/h</b> 3.1 mph         | <b>9.2 km/h</b> 5.7 mph   |
| 3rd  | <b>7.0 km/h</b> 4.3 mph         | <b>20.3 km/h</b> 12.6 mph |
| 4th  | <b>10.2 km/h</b> 6.3 mph        | <b>40.3 km/h</b> 25.0 mph |
| 5th  | <b>15.4 km/h</b> <i>9.6 mph</i> |                           |
| 6th  | <b>22.3 km/h</b> 13.9 mph       |                           |
| 7th  | <b>30.6 km/h</b> 19.0 mph       |                           |
| 8th  | <b>44.3 km/h</b> 27.5 mph       |                           |



#### **TANDEM DRIVE**

| Oscillating welded box section | 520 mm x 202 mm |
|--------------------------------|-----------------|
| Side wall thickness: Inner     | 22 mm           |
| Outer                          |                 |
| Wheel axle spacing             | 1525 mm         |
| Tandem oscillation             |                 |



#### **FRONT AXLE**

| Type Solid bar construction welded steel sections |        |
|---------------------------------------------------|--------|
| Ground clearance at pivot                         | 620 mm |
| Wheel lean angle, right or left                   | 20 °   |
| Oscillation, total                                |        |



#### **REAR AXLE**

Alloy steel, heat treated, full floating axle with lock/unlock differential.



#### **WHEELS, FRONT & REAR**

| Bearings                | Tapered roller       |
|-------------------------|----------------------|
|                         | 17.5 - 25 radial     |
| Tyre rims (demountable) | 14" three niece rims |



#### **STEERING**

Hydraulic power steering providing stopped engine steering complies with SAE J23 and J1151.

| Minimum turning radius                | 7.4 m |
|---------------------------------------|-------|
| Maximum steering range, right or left |       |
| Articulation                          |       |



#### **BRAKES**

Service brake ......Foot operated, oil disc brakes, hydraulically actuated on four tandem wheels, **13691 cm²** 2122 in² total braking

Parking brake .......Manually actuated, spring applied, hydraulically released caliper with transmission interlock



#### **FRAME**

| Front Frame Structure - Height    | 300 mm |
|-----------------------------------|--------|
| Front Frame Structure - Width     |        |
| Front Frame Structure - Thickness |        |

10

## **SPECIFICATIONS**



#### **DRAWBAR**

A-shaped, u-section press formed and welded construction for maximum strength with a replaceable drawbar ball.

Drawbar frame 210 x 25 mm



#### **CIRCLE**

Single piece rolled ring forging. Six circle support shoes with replaceable wear surface. Circle teeth hardened on front 180° of circle.

Diameter (outside) 1530 mm Circle reversing control hydraulic rotation 360 °



#### **MOLDBOARD**

Hydraulic power shift fabricated from high carbon steel. Includes replaceable metal inserts, cutting edge and end bits. Cutting edge and end bits are hardened.

 GD555-5 Dimensions
 3710 x 645 x 22 mm 12'2" x 2'1" x 0.75"

 GD655-5 Dimensions
 4320 x 645 x 25 mm 14'2" x 2'1" x 0.98"

 Arc radius
 329 mm

 Cutting Edge
 152 x 16 mm 6" x 0.63"



#### **BLADE RANGE**

| Circle center shift:                        |         |
|---------------------------------------------|---------|
| Right                                       | 590 mm  |
| Left                                        |         |
| Moldboard side shift:                       |         |
| Right                                       | 820 mm  |
| Left                                        |         |
| Maximum shoulder reach outside rear tyres ( |         |
| Right                                       | 2000 mm |
| Left                                        | 2000 mm |
| Maximum lift above ground                   |         |
| Maximum cutting depth                       |         |
| Maximum blade angle, right or left          | 90 °    |
| Blade tip angle                             |         |



#### **HYDRAULICS**

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

| Output | <b>200 ltr/min</b> 52.8 U.S.gal/min@ 2000 rpm |
|--------|-----------------------------------------------|
|        | <b>3.4 MPa</b> 35 kg/cm² 500 psi              |
|        | <b>20.6 MPa</b> 210 kg/cm² 3,000 psi          |

#### اعدا) اعدا) اعداني اعدان

#### **INSTRUMENT**

Electronic monitoring system with diagnostics:

Articulation, engine coolant temperature, fuel level, speed meter, T/M shift indicator, engine tachometer, torque converter oil temperature. Warning lights/indicator:

Battery charge, brake oil pressure, blade float, brake oil pressure, inching temperature, directional indicator, engine oil pressure, hydraulic oil temperature, heater signal, lift arm lock, parking brake, differential lock, torque converter oil temperature, eco, P mode, fan reverse, rpm set, high beam, working lights



#### **CAPACITIES** (refilling)

| Fuel tank              | 416 ltr  |
|------------------------|----------|
| Cooling system         | 24.9 ltr |
| Crank case             |          |
| Transmission           |          |
| Final Drive            |          |
| Tandem Housing (each)  |          |
| Hydraulic system       | 69 ltr   |
| Circle reverse housing | 7 ltr    |



#### **OPERATING WEIGHT (approx)**

GD555-5 Includes lubricants, coolant, full fuel tank

| (Including Standard Equipment) Total                 | 18,120 kg |
|------------------------------------------------------|-----------|
| On rear wheels                                       |           |
| On front wheels                                      |           |
| GD555-5 Blade Down pressure                          |           |
| GD555-5 Blade pull                                   |           |
| 14.00 x 24 Tyres & Rims / 3.71m Blade                | -         |
| GD655-5 Includes lubricants, coolant, full fuel tank |           |
| (Including Standard Equipment) Total                 | 18,520 kg |
| On rear wheels                                       |           |
| On front wheels                                      |           |
| GD655-5 Blade Down pressure                          | 8,920 kg  |
| GD655-5 Blade pull                                   |           |
| 17.5 x 25 Tyres & Rims / 4.32m Blade                 | _         |

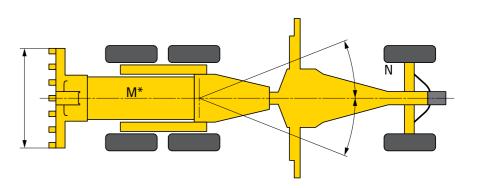


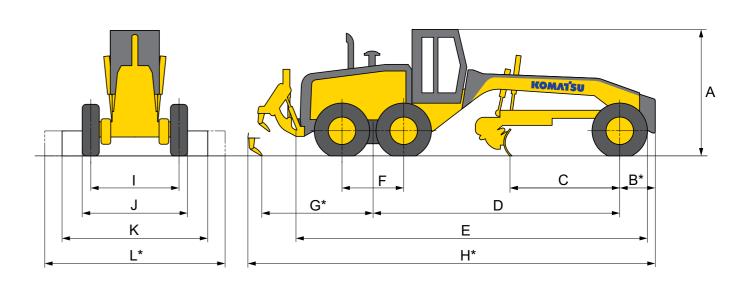
#### RIPPER

| Ripper Penetration Force - fitted with standard e   | quipment              |
|-----------------------------------------------------|-----------------------|
| GD655                                               | 9,202 kgf (90.0 kN)   |
| GD555                                               |                       |
| Ripper Pry Out Force - fitted with standard equipme |                       |
| GD655                                               | 13,020 kgf (127.6 kN) |
| GD555                                               |                       |



#### **DIMENSIONS**





|    | Dimensions                                     | GD555-5  | GD655-5  |  |
|----|------------------------------------------------|----------|----------|--|
| Α  | Height: Low profile cab:                       | 3200 mm  | 3200 mm  |  |
| В  | Center of front axle to counterweight (Pusher) | 927 m    | 927 mm   |  |
| С  | Center edge to center of front axle            | 2380 mm  | 2580 mm  |  |
| D  | Wheel base to center of tandem                 | 6270 mm  | 6480 mm  |  |
| Ε  | Front tyre to rear bumper                      | 8995 mm  | 9205 mm  |  |
| F  | Tandem wheelbase                               | 1524 mm  | 1524 mm  |  |
| G* | Center of tandem to back of ripper             | 2780 mm  | 2780 mm  |  |
| Н* | Overall length                                 | 10365 mm | 10575 mm |  |
| 1  | Track gauge                                    | 2060 mm  | 2165 mm  |  |
| J  | Width of tyres                                 | 2490 mm  | 2600 mm  |  |
| К  | Width of moldboard (standard)                  | 3710 mm  | 4320 mm  |  |
| L* | Width of moldboard (optional)                  | 4320 mm  | 3710 mm  |  |
| M* | Ripper beam width                              | 2305 mm  | 2305 mm  |  |
| Ν  | Articulation, left or right                    | 25       | 25 °     |  |
|    | Clearance                                      | 390 mm   | 390 mm   |  |

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## **SPECIFICATIONS**



#### STANDARD EQUIPMENT

#### **Engine And Related Items**

- » Double Element Air Cleaner And Dust Indicator
- » Engine: Komatsu SAA6D107E-1, EPA Tier-3 Certified,
- » Turbocharged and Air Aftercooled, Standard VHP
- » GD555-5 144kW Net kw
- » GD655-5 163kW Net kw
- » Fuel Line Pre-Filter
- » Hood-Sides For Engine Compartment
- » Air Intake Extension
- » Pre-Cleaner, Turbo II

#### **Electrical Systems**

- » Reverse Alarm
- » Alternator, 90 Amp. 24 V
- » Battery, Extreme Duty, 1146 Cca Each
- » Dome Light Cab
- » Horn, Electric
- » Lights: Back-Up, Stop, Tail, Directional, Headlights (2) Halogen Type, Front Bar Mounted
- » Work Lamps: Front (4), Rear (2)
- » Cab Mount Work Lamps (4)
- » Warning Light, Guarded LED Amber Coloured Beacon, Cab Roof Mounted (2)
- » Speedometer
- » Indicators: Parking Brake, Differential Lock, Blade Float, Lift Arm Lock, High Beam, Eco, Engine P Mode, Cooling Fan Reverse, Rpm Set, Engine Oil Pressure, Battery Charge, Brake Oil Pressure, Differential Oil Temperature
- » Rear Mounting Reversing Camera with Colour Monitor

#### **Operator Environment**

- » Cab: Low Profile Enclosed Rops/Fops (Sae J1040, J2311) With Safety Tinted Glass Windows With Wiper And Washer
- » Air Conditioner (R134a)
- » Console, Adjustable With Instrumental Panel Monitoring System
- » Mirrors: Interior Cab, Right And Left Exterior Mirrors
- » Seat, Air Suspension (150kg Capacity) Deluxe Adjustable Cloth with Retractable Seat Belt
- » Sound Suppression, Cab And Floor Mat
- » Wipers, Front, Doors And Rear
- » 12V (10A) Power Port Including 24V Power Port

#### Power Train

- » Dual Mode Transmission (8F-4R) Power Shift, Direct Drive And Torque Converter With Auto Shift and Non-Stall Function
- » Axle, Rear Full Floating, Planetary Type
- » Service Brakes, Fully Hydraulic Wet Disc
- » Brake, Parking, Spring Applied, Hydraulic Release, Disc Type
- » Differential, Lock/Unlock

#### **Work Equipment And Hydraulics**

- » Circle, Drawbar Mounted, 360° Rotation Hydraulic Blade Lift And Circle Side Shift
- » Circle Slip Clutch
- » Hydraulic System, Closed Center, Load Sensing
- » Accumulators, Anti-Shock For Blade Lift
- » Moldboard: **3710 mm x 645 mm x 22 mm**
- » Moldboard: 4320 mm x 645 mm x 25 mm Hydraulic Blade Side Shift And Hydraulic Tilt With Anti-Drift Check
- Valves. Maximum Moldboard Angle Position 90° Right And Left.

  » Steering, Full Hydraulic With Tilt Steering Wheel Plus Leaning Front
- » Steering, Full Hydraulic With 11t Steering Wheel Plus Leaning From Wheels And Frame Articulation W/Anti-Drift Check Valves
- » 10 Section Hydraulic Control Valve
- » Blade Lift Float Detent Style, Lh And Rh
- » Ripper, Assembly, Rear Mounted
- » Ripper Shanks And Points (3)
- » Scarifier, Shanks And Points (9)

#### **Other Standard Equipment**

- » Painting, Komatsu Standard Colour Scheme
- » Steps And Handrails, Rear, Right And Left Side
- » Vandalism Protection Includes Lockable Access To Fuel Tank, Battery Cover, And Engine Side Covers
- » Tool Box With Lock On Tandem
- » Fuel Tank, Ground Level Access
- » Battery Disconnect Switch
- » Push Plate
- » Komtrax Step 2.5 Total Fleet Management Tool
- » Am/Fm Radio
- » Hydraulic Driven Air Compressor With Tank
- » Tyres: 14.00 x 24 Radial On 3 Piece 10" Rim
- » Tyres: 17.5 R25 Radial On 3 Piece 13: Rim
- » Front Steering, Cylinder Guards
- » Large Aluminum Powdered Coated Tool Box In 'Y' Frame
- » Machine Control "READY"

## \*

#### OPTIONAL EQUIPMENT

- » Moldboard: 4320 mm x 645 mm x 25 mm 14'2" x 2'1" x 0.98
- » Moldboard: 3710 mm x 645 mm x 22 mm 14'2" x 2'1" x 0.86
- » Front Blade (Tilt or Standard)
- » Tyres: 17.5-25 Radial On 3 Piece 14" Rims (Width 2,600 Mm; Add 100 Kg For 6 Tyres And Rims)
- » Tyres: 14.00-24 Radial On 3 Piece 10" Rims (Width 2,490 Mm; Deduct 100 Kg For 6 Tyres And Rims)
- » Spare Tyre Carrier (Rear- Electric or Hydraulic)
- » Spare Scarifier Carrier
- » Spare Cutting Edge Carrier
- » Tow Hitch

- » Moldboard Overlays
- » Hinged Rearview Side Mirrors
- » Grass Seed Kit for Service Applications
- » Cabin Pressuriser for Severe Applications
- » Excessive Idle Shutdown
- » Engel Fridge 14 Litre

## KOMTRAX

## Why you need Komtrax

In today's fast changing environment information is key and the status and location of your equipment is paramount to successfully delivering on-time and on-budget. Komtrax gathers the information you need to manage your business easily and cost effectively.

Using the new Komtrax system you can track your equipment in the field and maximise output through increased efficiencies and just-in-time maintenance.

Komatsu has introduced Komtrax – the technologically advanced satellite equipment monitoring system to provide you with the following key features:

## FLEET MANAGEMENT Improve your fleet utilisation

#### MACHINE LOCATION

Know exactly where your machine is

#### **WORK MONITORING**

Know what your machine is doing

#### **SECURITY**

Know if your machine is safe

## **How does Komtrax work?**

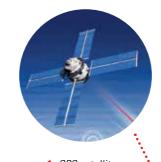
Komtrax is a system which allows you to view all the information about your Komatsu equipment directly on your computer.

This information is downloaded via satellite and you can view what the operator sees on his monitor panel and the type of work the machine is doing.

The Komtrax information format is universal and allows you to see your complete Komtrax equipped fleet on one system.

Komtrax can be easily accessed through a generic web browser.

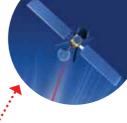




1. GPS satellite provides position information to your equipment in the field.

2. The Komtrax unit in your machine gathers engine data and position, and sends this information to the satellite.

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3. The communication satellite transmits information to the Komtrax data centre.





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5. You can access
the information
gathered from your
machine directly via

the Internet from the

Komtrax data centre.

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