**HORSEPOWER**
- Gross: 146 kW (196 HP @ 2000 rpm)
- Net: 144 kW (193 HP @ 2000 rpm)

**OPERATING WEIGHT**
- 15135 kg (33,370 lb)

**BLADE LENGTH**
- 3.71 m (12 ft)

Photo may include optional equipment.
**WALK-AROUND**

**The New Transmission Includes a Non-stall Function,**

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

**Operator Friendly Cab**

(Excellent visibility, low operation noise)

See pages 8 and 9.

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**Excellent Performance**

- Smooth operation without the engine stalling at low speed and maximize 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.

**Excellent Operator Environment**

- Environment friendly Komatsu SAA6D107E-1 engine complies with EPA Tier 3 and EU Stage 3A emissions certified.
  See page 4.
- Excellent visibility of the moldboard and front by the hexangular cab with front Y pillar and rear layout side pillar.
  See page 9.
- Low operating noise
  The dynamic noise is lowered significantly compared with the GD555-3.
  See page 8.

**Economy Features**

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

**Easy Serviceability**

- Easy radiator cleaning with a reversing fan
  See page 7.
- Easy fueling from the ground level
  See page 7.

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Photo may include optional equipment.
**ECOLOGY FEATURES**

**DUAL MODE TRANSMISSION**

Converter Drive: Designed to Provide Power and Performance

Komatsu Power Shift Transmission is designed and built specifically for Komatsu graders. The transmission provides on-the-go, 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.

**Electronic Transmission Control**

produces smooth shifting, which helps the operator to maintain a uniform grading surface if shifting is required. Smooth shifts also extend the life of the transmission by placing less stress on transmission clutches. 

A single lever controls direction, speed and parking brake.

**Low Effort Inching Pedal**

gives the operator precise control of machine movement. This is especially important for operators who have previous experience with operating a manual mode motor grader.

**Superior Transmission with a New Function**

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

Electronic Overspeed Protection helps prevent engine and transmission damage from premature downshifting and grade-induced overspeeding.

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 engine’s powerful tractive effort and fast hydraulic response.

NET: 144kW  193HP

Low Emission Engine

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

Hydraulic Driven and Auto 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.

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**Electronic Control 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 eco-friendly technologies.

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.

**Engine Technology**

Komatsu Technology
ADVANCED CONTROL FEATURES

Power on Demand

Normally, the variable displacement pump idles at low output. When it senses a load requirement, the pump supplies 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 for 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-pressurization.

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.

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.

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

The A-frame drawbar is U-shape welded 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 four support shoes.

Optional Protection System

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

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.
• Refueling from the ground is easy.
• Engine oil, hydraulic oil and coolant drains are in the place maintained easily.

Easy Radiator Cleaning with a Reversing Fan

Dust stuck to radiator and cooler fin 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 an 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.

MOTOR GRADER

MAINTENANCE FEATURES

Easy Access to Service Areas

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Rugged Construction

The A-frame drawbar is U-shape welded 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 four support shoes.

Optional Protection System

Blade Lift Accumulators absorb shocks when the moldboard contacts immovable objects. This option is especially useful in rough grading and rocky areas. It provides precious control while allowing relief from vertical impact loads. This option is most useful in applications where hidden objects are frequently encountered.
Motor Grader GD555-5

Working Environment

A Comfortable Houseroom of Class’s Greatest Wide Cab

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.

Suspension Seat
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)

Excellent Visibility
Exceptional visibility by hexagonal 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 tires. The tapered engine hood provides good visibility to the rear of the machine, especially the rear ripper.

Excellent Visibility from cab

Excellent Visibility from cab

Excellent Visibility from cab

Excellent Visibility from cab

Excellent Visibility from cab

Excellent Visibility from cab

Excellent Visibility from cab

Excellent Visibility from cab

Excellent Visibility from cab

Excellent Visibility from cab

Excellent Visibility from cab

Excellent Visibility from cab

Excellent Visibility from cab
**ENGINE**

- **Model:** KOMATSU SA60D107E-1
- **Type:** Turbocharged and air to air aftercooled 6-cylinder water-cooled, 4-cycle, direct injection
- **Aspiration:** Turbocharged
- **Number of cylinders:** 6
- **Bore:** 107 mm (4.21"")
- **Stroke:** 124 mm (4.88"")
- **Piston displacement:** 6.69 ltr
- **Gross horsepower (Manual mode):**
  - Gear 1-3: 120 kW (161 HP) @ 2000 rpm
  - Gear 4-6: 134 kW (179 HP) @ 2000 rpm
  - Gear 7-8: 146 kW (196 HP) @ 2000 rpm
- **Type:** Water-cooled, 4-cycle, direct injection

**Aspiration**
- Turbocharged

**Brake system**
- Front: 1525 mm (5") Tandem oscillation
- Single piece rolled ring boring. Four circle support shafts with replaceable wear surface. Circle teeth hardened on front 180° of circle.
- Diameters (outside):
  - 1530 mm (5")

**TRANSMISSION AND TORQUE CONVERTER**

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

**WHEELS, FRONT AND REAR**

- **Dimensions:**
  - 3710 x 645 x 19 mm

**STEERING**

- Hydraulic power steering providing stopped engine steering meeting SAE J53 and J1151.

**HYDRAULICS**

- Load-sensing 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.

**CAPACITIES (REFILLING)**

- **Fuel tank:** 6.6 U.S. gal
- **Cooling system:** 6 ltr
- **Transmission:** 17 ltr
- **Final drive:** 69 ltr
- **Hydraulic system:** 12095 kg
- **Total:** 15780 kg

**OPERATING WEIGHT (APPROXIMATE)**

- **Total:** 37,620 lb
- **On front wheels:** 24,240 lb
- **On rear wheels:** 13,370 lb
- **With rear mounted ripper and front push plate:** 52,840 lb
- **On front wheels:** 26,665 lb
- **On rear wheels:** 26,175 lb

**Instruments**

- Electric monitoring system with diagnostics:
  - Standard: articulation, engine coolant temperature, fuel level, speed meter, TM shift indicator, engine tachometer, torque converter oil temperature
  - Warning lights/indicator:
    - Standard: 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

**Gross horsepower (Manual mode)**

- Gear 1-3: 116 kW (158 HP) @ 2000 rpm
- Gear 4-6: 131 kW (176 HP) @ 2000 rpm
- Gear 7-8: 144 kW (193 HP) @ 2000 rpm

**Frame**

- Front Frame Structure - Height: 300 mm (11.8")
- Front Frame Structure - Width: 300 mm (11.8")
- Front Frame Structure - Thickness: 12 mm (0.47")
A  Height: Low profile cab: 3000 mm  10’6”
B  Center of front axle to counterweight (Pusher) 927 mm  3’0”
C  Cutting edge to center of front axle 2380 mm  7’10”
D  Wheel base to center of tandem 6270 mm  20’7”
E  Front tire to rear bumper 8995 mm  29’6”
F  Tandem wheelbase 1525 mm  5’0”
G  Center of tandem to back of ripper 2780 mm  9’1”
H  Overall length 10365 mm  34’0”
I  Track of gauge 2060 mm  6’9”
J  Width of tires 2485 mm  8’2”
K  Width of standard moldboard 3710 mm  12’2”
L  Width of optional moldboard 4320 mm  14’2”
M  Ripper beam width 2305 mm  7’7”
N  Articulation, left or right 35°

*optional
## MOTOR GRADER GD555-5

### Standard Equipment

**Engine and Related Items**
- Double element air cleaner and dust indicator
- Engine: Komatsu SAA6D107E-1, EPA Tier 3 certified, turbocharged and air-to-air aftercooled, standard VHPC, 140-193 net horsepower
- Fuel line pre-filter
- Hood-sides for engine compartment
- Air intake extension

**Electrical Systems**
- Alarm, back-up
- Alternator, 65 amp, 24V
- 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)
- 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

**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 instrument panel monitoring system
- Mirrors: interior cab, right and left exterior mirrors
- Seat, deluxe adjustable cloth with retractable seat belt
- Sound suppression, cab and floor mat
- Wipers, front, doors, and rear
- 12V (10A) power port

**Power Train**
- Dual mode Transmission (8F-4R) power shift, direct drive and torque converter with auto shift
- Axle, rear full floating, planetary type
- Service brakes, fully hydraulic wet disc
- Brake, parking, spring applied, hydraulic release, disc type
- Differential, lock/unlock
- Tires and rims: 17.5R25 tubeless radial tires on 13” rims (6)

**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
- Moldboard: 3710 mm x 645 mm x 19 mm 12’2” x 2’1” x 0.75” with replaceable end bits, through-hardened cutting edges 4320 mm x 645 mm x 25 mm 14’2” x 2’1” x 0.98” with replaceable end bits, through-hardened cutting edges 152 mm x 16 mm 6” x 0.63”

### Optional Equipment

**Accumulators, anti-shock for blade lift**
- 10 section hydraulic control valve
- Cab mount work lamps (4)
- General toolkit
- Pre-cleaner, Turbo II
- Pusher plate, additional
- Additional heater
- AM/FM radio
- Moldboard, 3710 mm x 645 mm x 25 mm 12’2” x 2’1” x 0.98”
- 4320 mm x 645 mm x 19 mm 14’2” x 2’1” x 0.75”
- 4320 mm x 645 mm x 25 mm 14’2” x 2’1” x 0.98”
- with replaceable end bits, through-hardened cutting edges 152 mm x 16 mm 6” x 0.63”

**Tires and rims:** 17.5R25 tubeless radial tires on 13” rims (6)
- Front blade
- Ripper, assembly, rear mounted
- Ripper shanks and points, 2 additional
- Scarifier, assembly, 11-shank type
- Scarifier, shanks and points (9) for ripper
- Warning light, amber colored rotating beacon, cab roof mounted
- Alternator, 90 amp, 24V

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Standard equipment may vary for each country, and this specification sheet may contain attachments and optional equipment that are not available in your area. Please consult your Komatsu distributor for detailed information.