

KOMATSU®

GD655-3

NET HORSEPOWER
142 kW **190 HP**
OPERATING WEIGHT
14070 kg **31,020 lb**
BLADE LENGTH
3.71 m **12 ft**



Model shown may include optional equipment.

MOTOR GRADER

WALK-AROUND

NET HORSEPOWER
142 kW **190 HP**
OPERATING WEIGHT
14070 kg **31,020 lb**
BLADE LENGTH
3.71 m **12 ft**

A simple **blade suspension system** allows good forward visibility.



The **advanced monitoring system**

delivers self-diagnostics and can provide historical diagnostic information.



Excellent visibility to the rear. Front and rear glass is angled to prevent dust build up.

Stable work equipment speeds are unaffected by engine speed.



Low front nose providing good visibility.

High performance engine **Komatsu SAA6D114E turbocharged and air to air aftercooled** diesel provides 142 kW **190 HP** for demanding applications.

Access to all necessary **engine** maintenance items is easy with wide hinged compartment doors.

Model shown may include optional equipment.

Brakes are hydraulically operated wet type multiple-disc and maintenance free. No air system.



A **wide working range** is accomplished through unsurpassed blade geometry,

Bronze alloy guides on blade and circle provide long service life.

The **lock-up torque converter** provides smooth power for grading and speed for roading or snow removal.

Wheel spin is reduced with the **manual lock/unlock differential. (optional)**

KOMATSU DESIGNED

Converter Drive: Designed to Provide Power and Performance on the Job Site



High Performance Komatsu SAA6D114E Engine

The GD655 gets exceptional power and efficiency from the turbocharged and air to air aftercooled engine. Output is 142 kW 190 HP SAA6D114E (variable horsepower in higher gears) providing excellent tractive effort with good fuel efficiency.

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 by placing less stress on transmission clutches. A single lever controls direction, speed and parking brake.

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

or direct drive 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 torque converter mode. With the torque converter, the operator has tremendous tractive effort. More importantly, is the fine control at low speed without shifting or using an inching pedal. Torque converter drive is available in gears 1-4. If high transport speed or high speed for snow removal is needed, the operator can select direct drive. The operator has the best of both worlds, torque converter or direct drive, at his fingertips.

Gear Selections

Eight forward speeds and four reverse speeds give the operator a wide operating range. With four gear selections below 9.7km/h(6mph), the operator can precisely match working speeds to job conditions for maximum productivity in earthmoving applications. Gears five, six and seven provide optimal speed range for snow removal operations. When in torque converter mode, shifting is automatic in speeds five through eight. The operator sets the maximum gear he wishes to operate in and the transmission will then shift automatically between gears five through eight up to the operator selected maximum gear.

Low Effort Inching Pedal

gives the operator, when in direct drive mode, precise control of machine movement. This is especially important for operators who are not familiar with operating a torque converter drive motor grader.



CLSS with Proportional Flow Hydraulic System

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. They are direct acting and provide outstanding operator "feel" and predictable system response for unmatched 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 low 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 one 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.



GD655-3 MOTOR GRADER

The Most Versatile Moldboard Geometry in the Business

Komatsu graders boast the industry's most versatile moldboard geometry. Save time and money when pulling ditches by throwing the windrow to the right, not into the roadway—without narrowing the road bed. No extra machines or crew are needed to pick up the windrow. It's made possible by Komatsu's extraordinary reach. Plus, there is generous clearance between the heel of the blade and main frame, even with the toe sharply angled down.

Extra-long lift cylinders let the moldboard reach 815 mm 2'8" below grade.

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 or clay soil and snow and ice removal.

Rugged Construction The A-frame drawbar 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° of the circle. For maximum support, the circle is secured to the drawbar by six support shoes.

Replaceable Metal Wear Inserts

Replaceable metal wear inserts are located between the drawbar and circle and the support shoes and circle. This wear system helps keep components tight for fine grading and allows easy replacement. Komatsu also uses replaceable metal wear items in the following areas:

- Circle and moldboard tip bracket bearings
- Moldboard slide rail

Cylinder Socket Dust Seals

• Blade Lift and Drawbar Sideshift

Cylinder sockets have dust seals to prevent dust from entering inside the sockets causing wear.

Optional Protection Systems

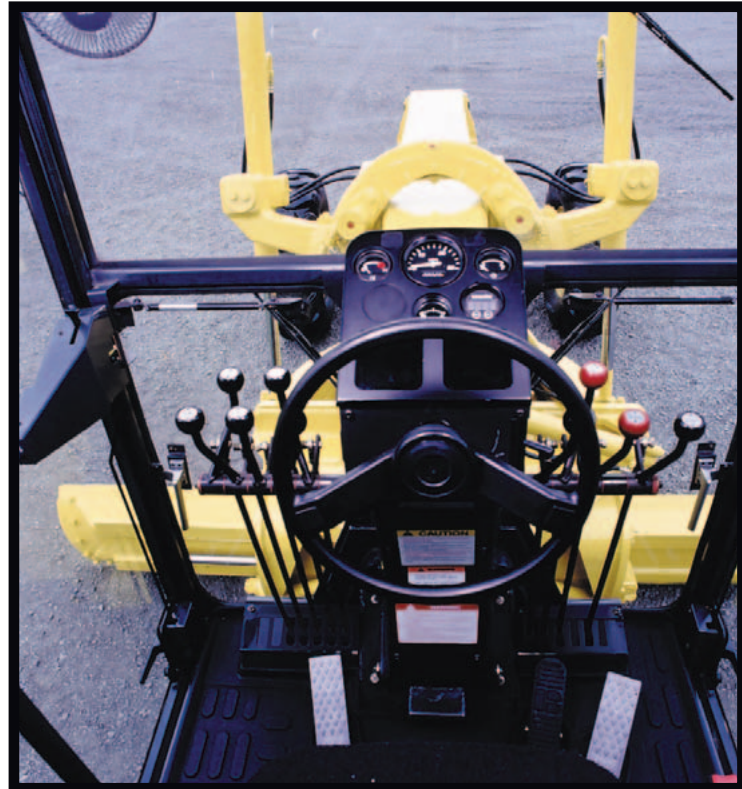
• **Blade Lift Accumulators** absorb shocks when the moldboard contacts immovable objects. This option is especially useful in rough grading and rocky areas. It provides precise control while allowing relief from vertical impact loads.

• **Circle Drive Slip Clutch** protects the drawbar, circle and moldboard from horizontal shocks when an object is hit near the toe or heel of the blade. This option is most useful in applications where hidden objects are frequently encountered.

WORKING ENVIRONMENT

Excellent Visibility

Exceptional visibility helps improve operator confidence and productivity in all grader applications. Well positioned blade linkage provide an unobstructed view of the moldboard and front tires. Tapered engine hood provide good visibility to the rear of the machine, especially to the rear ripper.



Quiet Cab (Optional)

With the doors closed, the quiet environment keeps the operator alert and focused. 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, coffee cup, and a hook for a coat.

Low Effort

Pedals, hydraulic controls, and transmission shifter reduce operator strain and fatigue. Pedals are angled and raised off the cab floor to make them easy to reach.

Easy-to-Read Gauges

Electronic monitoring system checks important machine systems and provides the operator with three levels of warning.

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. There are handrails on both sides of the cab so the operator need not grasp the steering wheel when entering the cab.

Optional Air Conditioner

Well-positioned air conditioning vents keep the operator comfortable through a wide range of outside conditions. In warm weather, the operator can get cold air flow towards his/her back even when the front lower window is opened.



Excellent Serviceability

- Large hinged engine service doors
- Maintenance free all hydraulic disc brakes
- Message center
- Self-diagnostic system



 **DRAWBAR**

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

Drawbar frame 210 x 25 mm **8.3" x 1"**

 **CIRCLE**

Single piece rolled ring forging. Six circle support shoes with replaceable wear surface. Circle teeth hardened .

Diameter (outside) 1530 mm **5'0"**
Circle reversing control hydraulic rotation 360°

 **MOLDBOARD**

Hydraulic power shift fabricated from high carbon steel. Includes replaceable end bits. Cutting edge is through hardened.

Dimensions 3710 x 645 x 19 mm **12'2" x 2'1" x 0.75"**
Arc radius 329 mm **1'1"**
Cutting edge 152 x 16 mm **6" x 0.63"**
Replaceable/reversible end bits 152 x 16 mm **6" x 0.63"**

 **BLADE RANGE**

Circle center shift: Right 300 mm **1'0"**
Left 215 mm **8"**

Moldboard side shift:
Right 820 mm **2'8"**
Left 820 mm **2'8"**

Maximum shoulder reach outside rear tires (frame straight)
Right 2000 mm **6'7"**
Left 2000 mm **6'7"**

Maximum lift above ground 505 mm **1'8"**
Maximum cutting depth 815 mm **2'8"**
Maximum blade angle, right or left 90°
Blade tip angle 40° forward, 5° backward

 **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, tilt, circle shift, articulation, and leaning wheels.

Output 194 ltr/min **51 gal**
Standby pressure 3.4 MPa 35 kg/cm² **500 psi**
Maximum system pressure 20.6 MPa 210 kg/cm² **3,000 psi**

 **INSTRUMENT**

Electric monitoring system with diagnostics:

Gauges:
Standard articulation, engine coolant temperature, fuel level, hour meter, message center, torque converter oil temperature
Optional speedometer

Warning lights:
Standard battery charge, engine oil pressure, heater signal, lift arm lock, parking brake, transmission electric circuit and torque converter oil temperature
Optional blade accumulator, blade float, differential lock, differential oil temperature, directional indicator, high beam, working lights

 **CAPACITIES**

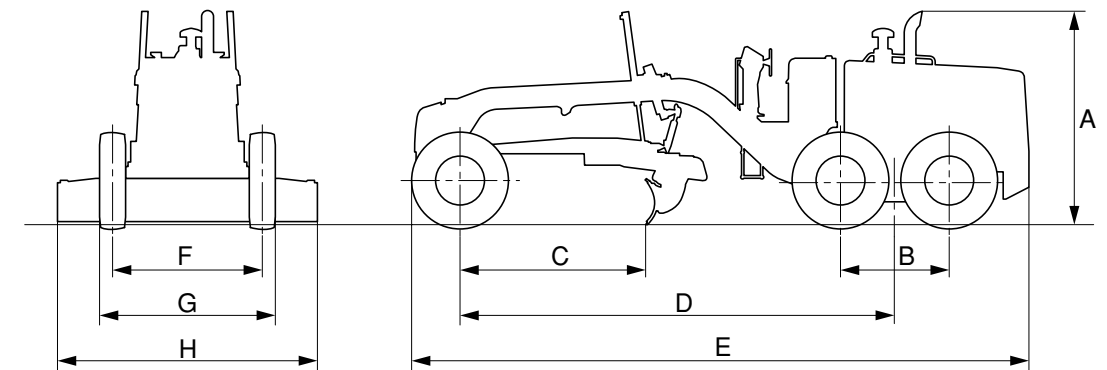
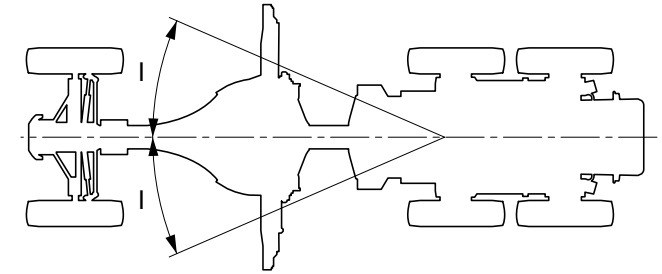
Fuel tank 340 ltr **89.8 U.S. gal**
Cooling system 45 ltr **11.9 U.S. gal**
Crankcase 19 ltr **5.0 U.S. gal**
Transmission 45 ltr **11.9 U.S. gal**
Final drive 12 ltr **3.2 U.S. gal**
Tandem housing (each) 83 ltr **21.9 U.S. gal**
Hydraulic tank 45 ltr **11.9 U.S. gal**
Circle drive housing:
Standard 5 ltr **1.3 U.S. gal**

 **OPERATING WEIGHT (APPROXIMATE)**

Includes lubricants, coolant, full fuel tank, and operator.

Total 14,070 kg **31,020 lb**
On rear wheels 10,060 kg **22,180 lb**
On front wheels 4,010 kg **8,840 lb**

 **DIMENSIONS**



A	Height	3000 mm	9'10"
B	Tandem wheelbase	1535 mm	5'0"
C	Cutting edge to center of front axle	2600 mm	8'6"
D	Wheel base to center of tandem	6070 mm	19'11"
E	Overall length	8595 mm	28'2"
F	Tread	2130 mm	7'0"
G	Width over tires	2550 mm	8'4"
H	Width of standard moldboard	3710 mm	12'2"
I	Articulation	23°	23°



STANDARD EQUIPMENT

- Air cleaner, dual element , dry type, and service indicator
- Air intake extension
- Alarm, back-up
- Alternator, **60 amp**
- Batteries, heavy-duty, 112 Ah
- Brakes, sealed oil disc brakes
- Console adjustable
- Control valve bank, 8-section
- Decelerator/accelerator pedal
- Electrical system, 24 volt
- Engine
Komatsu SAA6D114E turbocharged and air to air aftercooled diesel
- Engine preheat
- Frame articulation
- Full hydraulic steering, leaning front wheels
- Hinged hood-sides for engine compartment
- Horn
- Hydraulic circle shift, blade shift, and blade lift
- Hydraulic system, load sensing closed center
- Lights, rear back-up, stop/tail
- Moldboard, 3710 x 645 x 19 mm **12'2" x 2'1" x 0.75"**
- Maximum moldboard angle position 90° right and left
- Overlay end bits
- Throttle, hand control
- Tilt steering wheel
- Tires, 14.00-24-10PR-G2 with 9" rims, tubeless
- Transmission, full power shift with selectable torque converter or direct drive
- Monitoring system with diagnostics/message center
- Vandalism protection



OPTIONAL EQUIPMENT

- Accumulators, anti-shock for blade lift
- Air conditioner
- AM/FM radio with cassette
- Cab, deluxe enclosed ROPS/FOPS
- Canopy ROPS/FOPS
- Circle slip clutch
- Defroster fan, front and rear
- Differential, lock/unlock with planetaries
- Dome light
- Hazard lights
- Headlights:
—Front bar mounted with turn and hazard
- Moldboard 4319 mm x 645 mm x 19 mm **14'2" x 2'1" x 0.75"**
- Optional cutting edges
- Optional hydraulic control valves
- Optional paint
- Optional tires
- Outside convex mirrors
- Pusher block
- Ripper, rear mounted with holding valve
- Scarifier, forward mounted with holding valve
- Speedometer
- Suspension seat
- Tachometer
- Transmission guard
- Turn signals
- Windshield wipers, two lower, rear dual with washer
- Work lights

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