



**Operating Weight**

16,500 kg

**Rated Power**

162 kW (217 hp / 220 ps) @ 2,200 rpm

**Draw Bar Pull**

90 kN

**Blade Width**

4,270 mm

# 4215D MOTOR GRADER

TOUGH WORLD. TOUGH EQUIPMENT.





# TOUGH WORLD. TOUGH EQUIPMENT.

The construction world is your reality, you live it every day and you know how hard it can be to make your business pay. Rising costs, increasing legislation and greater competition all combine to put the pressure on. We understand and we've put that understanding into action with a game changing new motor grader that is inspired by you.

## THE NEW 4215D


### WHERE WE LEAD, OTHERS FOLLOW


We don't follow the expensive trend towards over-engineered products. We know where real customer value lies. With the new 4215D we've used our deep customer insight to re-think the traditional grader to create an award-winning, class leading machine.


## WRITING A NEW STORY


With the new 4215D, we've written a new chapter in the motor grader story with a machine that delivers unparalleled visibility, control sensitivity and job-site performance. A machine which has been globally recognised for its innovative design and technical excellence with a Red Dot Award.

## YOU WANTED A HARD-WORKING MOTOR GRADER THAT DELIVERS ON 4 ESSENTIAL NEEDS

- 1 

**BEST IN CLASS VISIBILITY**
- 2 

**ULTIMATE GRADING POWER**
- 3 

**ENHANCED OPERATOR PERFORMANCE**
- 4 

**SIMPLE & COST-EFFECTIVE MAINTENANCE**



With the new 4215D, we've risen to your challenge and given you a machine designed to exceed your expectations.

**TOUGH TALK?** Judge for yourself.





# INSIGHT DRIVES OUR AWARD-WINNING DESIGN

Award-winning design is about insight, not guesswork. There are no shortcuts in our design process. Our UK based design team have invested thousands of hours to really understand how motor graders are used day-to-day.

In award-winning design, form always follows function, so the distinctive visual styling of the new 4215D goes way beyond the cosmetic.

It looks different because it has a cohesive design which considers every angle from the operator's perspective.

It performs better because operational performance lies at the heart of the design concept.

Red Dot Awards are not won by accident, they are the result of genuine innovation and that innovation is fundamental to our design DNA.



## RED DOT AWARD-WINNING DESIGN

“ Our UK design team were recently recognised with a prestigious Red Dot Award for our new 4215D motor grader recognising its innovation and excellence in product design.



reddot design award



# DESIGN IN ACTION

Our design DNA is clear in the bold lines and distinctive appearance of our new 4215D. It was designed as a cohesive form – not simply a collection of components – giving it a dynamic and purposeful stance. As you would expect, its performance is matched to its looks.

## 1 ULTIMATE VISIBILITY

When it comes to visibility, our 4215D rewrites the rule book with 324° panoramic view.

## 2 IMPROVED OPERATOR ENVIRONMENT

New ergonomic design creates the ultimate operating environment for getting the job done in safety and comfort.

## 3 POWERFUL AND RELIABLE ENGINE

Our award-winning grader is powered by a proven Guangxi Cummins Tier 2/Stage II approved engine with turbocharger and air-to-air intercooler.

## 4 LONGER LASTING TRANSMISSION

Our ZF 6-speed powershift transmission is designed to get the job done, again and again.

## 5 DRIVE AXLE

Our maintenance-free limited slip differential axle transfers all of the torque to the tyres, improving traction and grading capability.

## 6 EVEN TOUGHER

We've reinforced the moldboard with heat-treatment to create a tough, longer-lasting cutting edge.

## 7 GREATER STABILITY

The A-shape drawbar has been designed to deliver outstanding stability, whatever the grading environment. Its high-strength construction significantly reduces component wear and downtime.

## 8 WEAR RESISTANT GEARS

With a one piece, wear resistant design our reinforced worm gearbox works harder for longer.

## 9 MAINTENANCE-FREE BEARINGS

The slewing ring bearing has been designed for high loads and rigidity and is completely maintenance-free.

## 10 HIGHER GROUND CLEARANCE

The pendulum mechanism has been upgraded to achieve 602 mm ground clearance making the grader safer to load onto a trailer or move onsite.







# BEST-IN-CLASS VISIBILITY

Our UK design team really understand the operator's world. Thousands of hours of insight have allowed them to gain a unique understanding of motor graders and their limitations. This insight has enabled them to redesign our new 4215D with the operator at the heart.



## 324° VISIBILITY

Clear visibility is key to operator performance, satisfaction and safety on the job site. Our team rose to the challenge with a cohesive design that radically improved visibility to create a 324° panoramic view.

## THE NEW 5 PILLAR CAB IS PERFECTLY ALIGNED

It sounds obvious, but to increase visibility you have to remove obstructions from the operator's view. Our innovative 5 pillar cab benefits from a slimline, A-pillar which is perfectly aligned with the lifting cylinder. This clever alignment reduces obstructions by 45% and significantly improves the operator's forward view.



## FORWARD VIEW IMPROVED BY 115%

### FRONT VIEW

Labels: EYE, A-PILLAR, LIFTING CYLINDER

OTHERS

4215D

### OTHERS

150°  
BLOCKED VISIBILITY

### 4215D

80°  
BLOCKED VISIBILITY

This diagram graphically illustrates how obstructions have been reduced to increase visibility from every angle

## CLEAR REAR VIEW

The rear view has also been radically improved thanks to the intelligent positioning of the C-pillar directly behind the operator. The pre-cleaner and exhaust are aligned along the tapered, "wasp waisted" hood to reduce obstructions and improve sightlines by 149% to the rear.

### REAR VIEW

Labels: EYE, C-PILLAR, PRE-CLEANER, EXHAUST

OTHERS

4215D



## SEEING IS BELIEVING

With the 4215D, we have revolutionised motor grader visibility. Climb into the cab, take a look for yourself, your eyes will give you all the proof you need.



**149%**  
IMPROVEMENT  
TO REAR VIEW





# ULTIMATE GRADING POWER

A motor grader is a tool and its real value lies in its ability to help the operator move the maximum amount of material in the most efficient way. It's all about blade control, power and maneuverability.

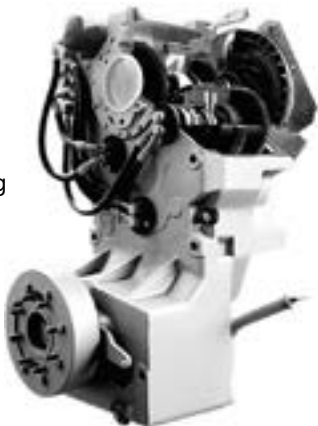
## THE POWER IN YOUR HANDS

At the heart of our award-winning 4215D beats world leading engine technology, powering a high performance driveline. The Cummins engine has been carefully chosen to deliver operational performance and economy to meet Stage II legislation standards.



## PRECISION TRANSMISSION

ZF's 6-speed powershift transmission gives the operator a simple, precise and light gear changing capability allowing him to fully concentrate on doing the very best job in the fastest possible time. Fully equipped with heavy duty rolling chains (140% stronger than the average) our transmission promises to keep on working harder, for longer.



**ROLLING CHAINS 140% STRONGER THAN AVERAGE**

## HIGH-TORQUE AXLE

Our NoSPIN, limited slip differential axles deliver all of the torque to the tires, giving traction and confidence the operator can really feel. The strengthened rear axle is perfect for light or heavy duty conditions and its integral structure makes it maintenance-free.

## KLEANAIRE AIR PRE-CLEANER

Improving engine performance and fuel economy, and reducing downtime, our pre-cleaner neutralises the negative effects of the toughest, dustiest environments.



## GREATER MANEUVERABILITY

On job sites turning space can be very limited, so we've reduced the turning radius of the 4215D down to 7.2 m, one of the narrowest in the industry.



## 7.2 M TURNING RADIUS



## PATENTED SWING SYSTEM

To further enable a precision cut, our new 4215D is equipped with our patented swing system. Here the pitch cylinders are cleverly positioned to allow the blade to cut directly into the ground at a depth of 60-270 mm, with greater stability and control. In addition, the patented swing system allows the blade to be lifted higher, achieving a ground clearance of over 600 mm, making it safer and easier to transport or move it over rough ground.



**Over 600 mm GROUND CLEARANCE**

GRADING POWER WHERE YOU NEED IT.



**HIGH EFFICIENCY**



# ENHANCED OPERATOR PERFORMANCE

**High performance at its best.** We've used our insight to not only improve visibility, but to create a high performance working environment. Comfortable, flexible and with a range of smart options that actually help the operator do more – every shift.

## NEW ERGONOMICS

Slope grading and finish grading are demanding tasks requiring skill and precision. We've given the operator the ultimate control. Our redesigned control cluster brings the action closer to the operator.



### ONE-HAND OPERATION

In addition, subtle design changes allow the operator to manipulate multiple levers with one hand, helping them to enjoy the finest, most sensitive control.



## LOW VIBRATION – HIGH PERFORMANCE

Improved damping cab mounts significantly reduce vibrations even during the toughest tasks, helping to keep the operator comfortable and focused.

Our new, improved, suspended seat also helps keep the operator comfortable no matter how rough the terrain, This combined with sophisticated temperature control and air-conditioning and fully pressurised cab, help the operator stay warm in the snow and cool in the sun.

## SMOOTHER RIDE

Ripping and rock spreading can be tough jobs but we've protected the operator by creating a quieter cab, with in-cab noise reduced by up to 10%.



### UP TO 10% QUIETER

## AUTOMATIC GRADE CONTROL

When precision is everything, our laser guidance and cross slope system helps your operator to grade faster, more accurately and with fewer passes.

The laser transmitter accurately and automatically guides and controls the blade, ensuring a top quality finish. Real-time information is relayed to the operator via the in-cab monitor.

## HIGH PERFORMANCE OPTIONS

No grading job is too tough to handle with our range of performance enhancing options.

## ONE GRADER – MULTIPLE APPLICATIONS

We give you the widest choice of tools to tackle any surface.

- 3 optional moldboards from 28 to 74 degrees ✓
- Scarifier for light soil preparation ✓
- 5-tooth ripper for tough soil and roots ✓
- Front blade for dozing applications ✓



**WE HELP THE OPERATOR DO MORE, EVERY SHIFT.**



**30%  
REDUCTION IN  
OPERATOR FATIGUE**





# SIMPLE & COST-EFFECTIVE MAINTENANCE

You challenged us to make maintenance checks even faster and easier. We listened, understood and responded by creating a “one-stop” maintenance concept for all key components such as; fuel and oil filters, hydraulics and electronics system. Our centralised system saves on downtime and makes routine maintenance simple.

## EASY SERVICE ACCESS

We can save you time and stress with improved service access. Here are just some of our improvements.

- Remotely activated oil drain ✓
- Wide opening spread hitch improves service access to the gearbox and hydraulics ✓
- Transmission refuelling can be completed at the distal end ✓
- Disconnect switch is located close to the cab for added convenience ✓
- Easy maintenance modulated wiring harness ✓
- Battery and fuel tank filler are safely positioned within the rear hood ✓

## EXTENDED SERVICE INTERVALS

In order to reduce downtime and operating costs our 4215D benefits from longer service intervals for oil, lubricant and coolant.

## MORE FUEL – LESS DOWNTIME

The intelligently positioned, super-sized 348 L fuel tank holds more fuel and reduces downtime without creating visual obstructions for the operator.

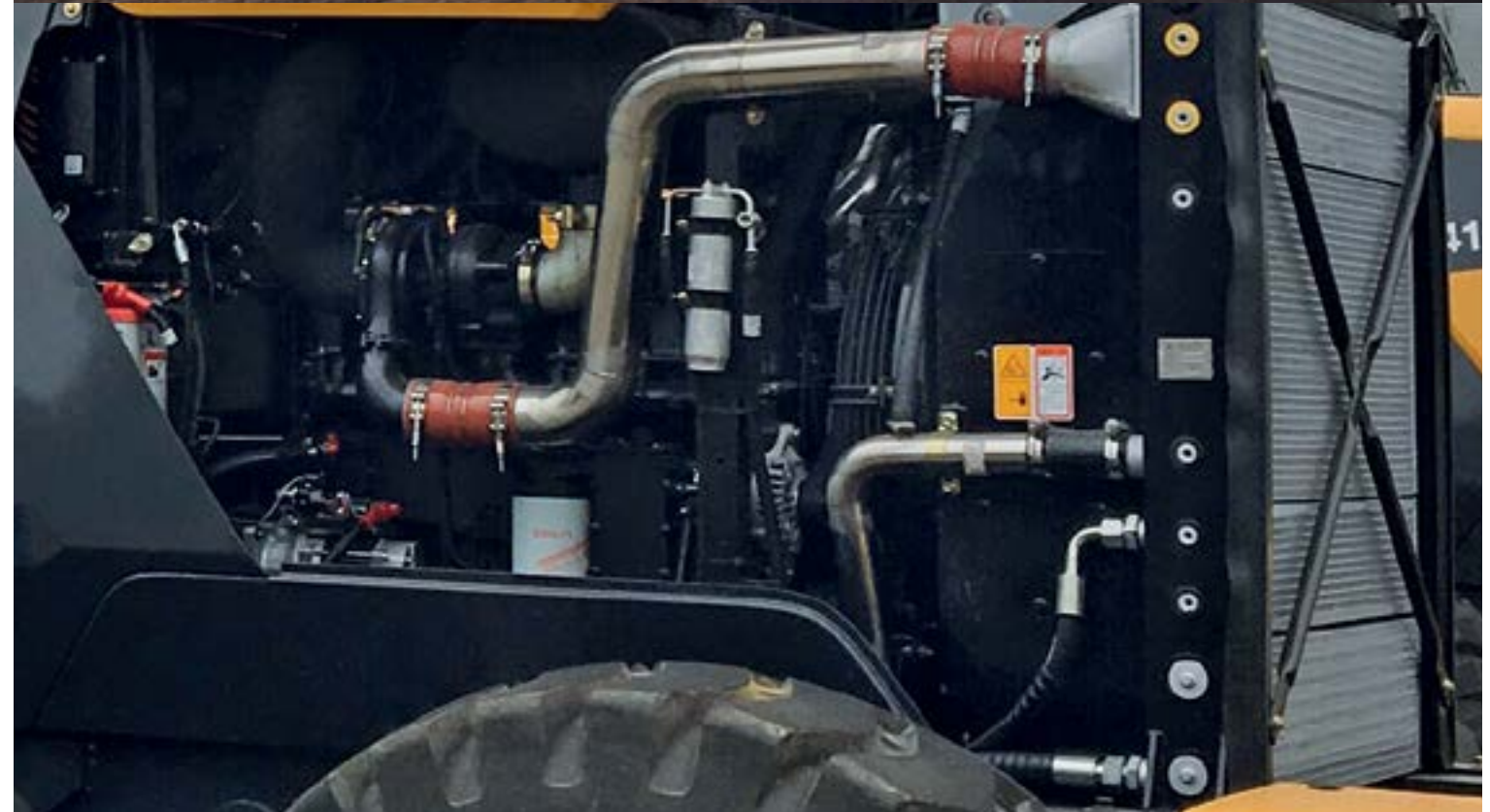


## REAL-TIME INFORMATION

In-cab displays allow the operator and service technician to constantly monitor the machine’s performance, improving diagnostic accuracy and reducing maintenance time.

## MORE SPACE TO WORK

To further improve service access, all service points are centralised on the left of the machine. The one-piece hood opens to a 50° angle, improving visibility and giving plenty of space to work.



WITH OUR NEW 4215D WE’VE WORKED HARD TO MAKE MAINTENANCE EASY – SO YOU DON’T HAVE TO.



**LONGER SERVICE INTERVALS**





# BACKING YOU ALL THE WAY

You challenged us to make maintenance checks even faster and easier. We listened, understood and responded by creating a “one-stop” maintenance concept for all key components.



## MAINTENANCE AND SUPPORT PACKAGES

From genuine LiuGong parts, to full repair and maintenance contracts, LiuGong has the flexibility to offer the level of support and response to suit your business and applications. Whatever level of support you choose you can be confident that it is backed up by LiuGong’s service promise.



## COMMUNICATION IS KEY

We always aim to keep you informed on service and maintenance work and provide you with clear and accurate estimates, invoices and information in a timely manner. These may be small things, but your feedback tells us that these basics really matter – so we aim to get them right.

Right parts.  
Right price.  
Right service.



Above all,  
we get it right  
the first time.



## WE ARE LIUGONG. WORKING HARD TO KEEP OUR GLOBAL CUSTOMERS EARNING



## LIUGONG SERVICE PROMISE



PARTS AVAILABILITY IS HIGH ON OUR AGENDA. WE'RE WORKING HARD TO GET YOU THE PARTS YOU NEED WHEN YOU NEED THEM.



HIGH PARTS AVAILABILITY





# TOTAL COST OF OWNERSHIP

High visibility, grading power and operator performance are two key motor grader purchasing criteria, but ultimately, the machine's earning potential, its overall life cost and its trade-in value really matter too.

When it comes to total cost of ownership, LiuGong has a strong story to tell.

## PROFESSIONAL ADVICE

We are committed to reducing your total cost of ownership and increasing your profits. Our experts will provide targeted advice on everything, from choosing the right machine to maximizing its efficiency on-site.

## MACHINE AVAILABILITY

Our extensive manufacturing operation right in the heart of Europe, enables us to offer significantly shorter lead times on a range of models, compared with some manufacturers.

In fact, we can deliver selected machines in as little as 4 weeks. The faster you can get a machine, the faster you can get working and earning.

## TICKET PRICE

At LiuGong, our aim is to give you everything you need and nothing you don't.

For example, we choose high quality, proven components such as Cummins engines and Permco hydraulic pumps.

These proven components, combined with LiuGong design and manufacturing quality, result in a high quality, competitive machine.

## RESIDUAL VALUE

With the combination of LiuGong design and manufacturing excellence, world-class components and comprehensive uptime support, our quality holds its value.



## IT ALL ADDS UP

With our new 4215D we've listened to operators and given you everything you need and nothing you don't. We've given you a choice of tough motor graders all backed up by LiuGong's service promise.

When it comes to performance, we've got it covered, on the job site and on the balance sheet. Add up the benefits and you'll see that our new 4215D has the formula for success.



**BEST-IN-CLASS VISIBILITY**

+

**ULTIMATE GRADING POWER**

+

**ENHANCED OPERATOR PERFORMANCE**

+

**SIMPLE & COST-EFFECTIVE MAINTENANCE**

**CUSTOMER SATISFACTION**



# SPECIFICATIONS

## OPERATING WEIGHT 16,500 kg

Operating weight includes the machine weight with standard work device (no additional equipment or accessories), full fuel tank, all fluids at required level and an operator 75 kg.

## DRAW BAR PULL 90 kN

## ENGINE

### Description

Cummins Tier 2/Stage II approved, 9.3 liter, 6-cylinder straight turbocharged diesel engine with mechanical direct fuel injection system.

Cummins turbocharged system, high transient response.

Cummins fuel filtration system, high filtration efficiency.

Air cleaning: Whirlwind pre filter, two stage air filter.

Cooling system: Air-to-air intercooler, single radiator layout.

Emission Rating Tier 2/Stage II

Engine Manufacturer Cummins

Engine Model 6LTAA9.3

Rated Power 162 kW (217 hp / 220 ps) @ 2,200 rpm

Peak Torque 940 N·m @ 1,400-1,600 rpm

Torque Rise 17.5%

Displacement 9.3 L

Number of Cylinders 6

Bore x Stroke 107x124 mm

Aspiration Turbocharged, air-to-air inter-cooled

Derating Altitude 3,500 m

## AXLE

Differential Limited slip

Rear Axle Tandem Oscillation  $\pm 15^\circ$

Front Axle Type All welded front frame

Front Axle, wheel Lean Angle Left/right  $18^\circ$

## HYDRAULIC SYSTEM

### Description

System supply: Two gear pumps with fix displacement.

Multi- spool valves distribute the oil independently for controlling the position of a grader blade: lift, hold, lower, shift, roll-over and rotation.

Tilt function: With a tilt cylinder, the front wheel lean angle can be up to a maximum of  $18^\circ$ .

Pump Type Gear

System Pressure 20 MPa

Pump Flow 122 L/min

## TRANSMISSION

### Description

Torque converter: three - member single turbine.

Transmission: powershift, electronic shift change control.

Gear shifting system: Number of speeds, forward-6, reverse-3. Compact, high efficiency, low noise, easy to operation.

Drive 4 Wheel Drive

Forward

1st 6.3 km/h

2nd 10. km/h

3rd 12.5 km/h

4th 21.4 km/h

5th 26.5 km/h

6th 40 km/h

Reverse

1st 6.3 km/h

2nd 12.5 km/h

3rd 26.5 km/h

## SERVICE CAPACITY

Fuel Tank 348 L

Engine Oil 19 L

Cooling System 35 L

Hydraulic Reservoir 115 L

Transmission & Torque Converter 33 L

Axle Oil 90 L

## STEERING

### Description

Steering system: Load-sensing hydraulic steering.

System supply: The steering system has priority feed from a gear pump with fix displacement.

Steering cylinders: Two double-acting cylinders.

Steering Configuration Front wheel steering

Steering Relief Pressure 16.7 MPa

Minimum Turning Radius 7,200 mm

Steering Angle  $\pm 50^\circ$

Frame Articulation Angle  $\pm 27^\circ$

## BRAKES

### Description

Single brake circuit, accurate control with the brake valve & gear pump.

Service Brake Type Fully hydraulic, drum type

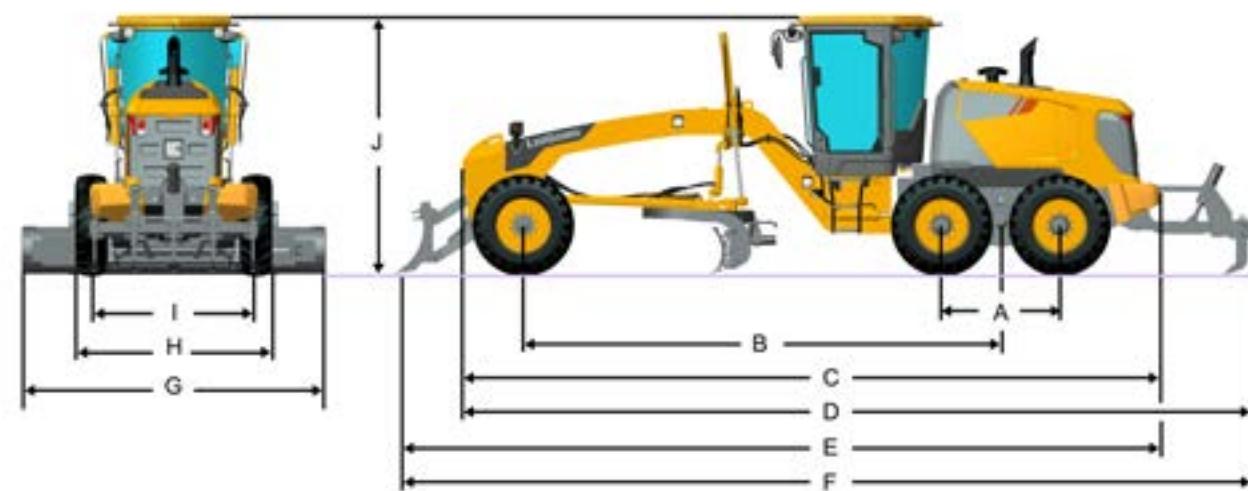
Parking Brake Type Mechanical handbrake

## TIRES

Standard Tire Size 17.5-25 PR12

Inflation Pressure 0.26~0.30 MPa

# DIMENSIONS



## CAB

### Description

Instrumentation: All important information is centrally located in the central instrument panel and operator's field of vision.

Adjustable steering column, high back seat and A/C with all-around air outlets.

## SOUND & ENVIRONMENT

Sound Level in Cab According to ISO 6396-2008 80 dB(A)

External Sound Level According to ISO 6394-2008 111 dB(A)

Heating Capacity 6 kW

Air Conditioning 5 kW

## BLADE RANGE

Blade Width 610 mm

Blade Length 4,270 mm

Maximum Lift Above Ground 600 mm

Maximum Depth of Cut 680 mm

Blade Tilt Angle  $90^\circ$

Circle Rotation  $360^\circ$

Cutting Angle  $28^\circ-74^\circ$

Blade Ground Pressure  $\geq 8,050$  kg

## DIMENSIONS

A Length - Between Tandem Axles 1,517 mm

B Length - Front Axle to Mid Tandem 6,230 mm

C Length - Counterweight to Rear of Machine 9,140 mm

D Length - Counterweight to Ripper 10,280 mm

E Length - Dozer to Rear of Machine 10,010 mm

F Length - Dozer to Ripper 11,140 mm

G Width - Blade 4,270 mm

H Width - Outside Tires 2,675 mm

I Width - Tire Center Lines 2,230 mm

J Height - Top of Cab 3,380 mm

## ATTACHMENTS

Dozer option 1 option 2

Width 2,740 mm 2,500 mm

Depth Below Ground 215 mm 215 mm

Lift Above Ground 850 mm 850 mm

Weight 1,051 kg 1,012 kg

### Ripper

Width 2,200 mm

Ripping Depth - Maximum 435 mm

Lifting Height 716 mm

Ripper Shank Holders, Quantity 5

Space Width 516 mm

Weight 1,147 kg

### Scarifier

Working Width 1,720 mm

Scarifying Depth - Maximum 165 mm

Lifting Height 221 mm

Scarifier Shank Holders, Quantity 11

Space Width 115 mm

Weight 849 kg

### Counterweight

Front 1,083 kg

Rear 1,280 kg



# STANDARD EQUIPMENT

## ENGINE

- Air filter dust valve
- Cummins 6BTAA9.3 Engine, Tier 2 / Stage II Engine, rated power 162 kW (217 hp / 220 ps), air- to-air intercooled, 6 cylinders, 4 stroke
- High pressure common rail, electronically controlled injection
- Pre-filter with water separator
- Fuel filter
- Electrical stopping engine
- Engine intake preheating
- Foot throttle
- Hand pump
- Fuel-tank fill strainer
- Fuel-tank set washport
- Engine oil filter
- Dipstick
- Fuel-tank with respiratory function
- Fuel-tank drain port
- Fuel moisture alarm
- Intake resistance indicator
- Air filter dust valve

## TRANSMISSION

- ZF 6WG200 automatic power shift transmission
- F6/R3
- Transmission oil level sight gauge
- Transmission oil filler

## AXLE

- Front axle - LiuGong
- Oscillating front axle
- Front axle tilt
- Front axle steering
- Front axle locking device
- Rear axle - Liugong axle with limited slip differentials
- Drum service brake system
- Tandem oscillation
- Tandem chain drive

## HYDRAULIC SYSTEM

- Two gear pumps with fix displacement hydraulic system
- Lift cylinder with hydraulic lock
- Articulated steering with hydraulic lock
- Hydraulic oil tank with filter
- Hydraulic oil tank with visual level gauge
- Hydraulic oil tank breathing port
- Hydraulic oil tank with oil return filter
- Swing arm hydraulic latch

## STEERING SYSTEM

- Load sensing system with steering in priority

## TIRE & RIM

- 17.5 - 25 PR12 bias tire

## WORK DEVICE

- A-shape drawbar structure
- Large sectional boxed frame
- Circle bearing
- Worm gearbox

## ELECTRIC SYSTEM

- Headlights on top of cab, 2 front, 2 rear
- Two headlights
- Two front combination lights
- Two rear combination lights
- Four lights on front frame
- Batteries, free of maintenance
- Cigarette lighter, 24 V power outlet
- Electric horn
- Front windshield wiper
- Back-up alarm
- Radio/player with USB port

## BRAKE SYSTEM

- Emergency brake
- Hydraulic brake system
- Single circuit brake

## INDICATOR GROUP

- Intake air filter alert
- Battery charging
- Parking brake applied
- Power cut-off
- Turning lights
- Transmission oil pressure alarm
- Beam of front light
- Intake heating indication
- Headlight high beam indicator
- Low engine oil pressure
- Engine coolant temperature
- Transmission oil temperature
- Fuel level
- Hour meter
- Voltage
- Service brake low pressure alarm protection
- Parking brake low pressure alarm protection
- Travelling speed

## CAB

- 2-way adjustable steering column
- Air conditioner
- Coat hook
- Document pocket
- ROPS & FOPS
- Front sunshade
- Mechanical suspension seat with 2 inch seat belt
- One interior & dual exterior rear-view mirrors
- Rubber cab mounts

## COOLING SYSTEM

- Aluminum radiator with grille
- Coolant level sight gauge
- Direct drive fan

# OPTIONAL EQUIPMENT

## ENGINE

- Engine coolant heating
- Oil bath air filter
- Silencer heat shield

## CAB

- Rear windshield wiper
- Fire extinguisher
- Rear-view camera display
- Rotating beacon
- Rear glass washer
- Cab activity window
- Cab fan
- Driving shed (awning)
- Rear glass electric defrosting

## CANOPY

- Fire extinguisher
- Rotating beacon

## HYDRAULIC SYSTEM

- AWD
- Blade floating function
- Blade lifting buffer
- Variable displacement hydraulic system

## BRAKE SYSTEM

- Brake double circuits

## ELECTRIC SYSTEM

- Arrow light
- LED
- License plate light
- Strip warning light

## STEERING SYSTEM

- Emergency steering

## ATTACHMENTS

- Blades
  - 3660\*610\*19 mm
  - 3660\*550\*19 mm
  - 3960\*610\*19 mm
  - 3660\*610\*25 mm
  - 3660\*550\*25 mm
  - 3960\*610\*25 mm
  - 4270\*610\*25 mm
- Dozer (2,740 mm)
- Dozer (2,500 mm)
- Ripper
- Scarifier
- Snow wings

## COOLING SYSTEM

- Hydraulic motor driving fan
- Intelligent system fan speed control thermostat
- Manual multi-speed fan system
- Reversible fan system

## TIRE & RIM

- Front fender
- Rear fender
- Snow chain
- Tire protection chain

## REAR AXLE

- Liugong Wet axle

## OTHERS

- Ultrasonic leveling system
- Laser leveling system
- Liugong Telematics
- Centralized lubrication
- Overload protection worm gear box







**Guangxi LiuGong Machinery Co., Ltd.**

No. 1 Liutai Road, Liuzhou, Guangxi 545007, PR China  
T: +86 772 388 6124 E: overseas@liugong.com  
www.liugong.com

Like and follow us:



**LG-PB-4215D-Stage II-24-032023-ENG**

The LiuGong series of logos herein, including but not limited to word marks, device marks, letter of alphabet marks and combination marks, as the registered trademarks of Guangxi LiuGong Group Co., Ltd. are used by Guangxi LiuGong Machinery Co., Ltd. with legal permission, and shall not be used without permission. Specifications and designs are subject to change without notice. Illustrations and pictures may include optional equipment and may not include all standard equipment. Equipment and options varies by regional availability.