

WHEEL LOADER XC978U



EU Stage V/EPA Tier IV

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INTRODUCTION OF XCMG

XCMG is the leading construction equipment manufacture in China and is the third largest equipment manufacture in the world. In addition, XCMG ranks 305th among the worlds top brands. XCMG builds 16 categories of equipment including cranes, excavators, concrete production and transporting, earth moving, mining, and road reclamation and paving. XCMG also produces many of its own hydraulic, power transmission, and electronic control systems components. XCMG is the top manufacture in the world of cranes, foundation machines and concrete production and distribution equipment. XCMG's research and development groups have accumulated more than 9000 patents in China and 130 international patents. There are R&D centers and manufacturing facilitates in 10 countries including Germany, the United States, Brazil and India. The manufacturing facility in Brazil has become a model of economic cooperation between China and Brazil. XCMG exports equipment to 187 countries around the world.

OVERVIEW

— Cummins Engine

The EU Stage V/ Tier4 Final certified Cummins L9 engine provides a output power at 242 KW.

— Z-bar linkage

Adopted multi-objective working device hinge point optimization technology, enhance the hinge pin, improve the breakout force and lifting capacity.

— Intelligent cooling system

Hydraulically driven cooling fan, auto-reversing fan is controlled by program; based on temperature ,it adjust speed automatically

— Versatility

The quick coupler and third function hydraulic are standard,can be easily and quickly switching between a range of attachments.

— Transmission

ZF full powershift transmission with torque converter allows the operator to select manual shifting or automatic shifting, excellent shifting performance.

— Hydraulic

Variable displacement piston pump and load sensing system, the and load sensing system, the advanced hydraulic system is high efficiency and energy efficient.

— Visibility

Once in the cab, experience the great view;New larger convex mirrors improve visibility to the both sides.



— Serviceability

Electric back-turning large side door hood , centralized electrical fuse box, remote centralized lubrication, centralized drainage, centralized pressure measurement etc. easy for maintenance

— AXLE

Wet axle is standard, accommodate to long distance transportation and high dust environment.

— Control

The EH control joystick provide the operator with precise control of the work tool,Kick-down and FNR buttons located on the lever is convenient and efficient for operator



performance and features

The XC978U integrates a world famous brand Cummins L9 Tier 4 Final engine. Cummins award-winning VGT Turbocharger sets the industry standard for reliability and durability as it increases equipment productivity. Increased fuel economy and longer maintenance intervals contribute to a reduced cost of operation and lower Total Cost of Ownership. EGR-free architecture reduces complexity, improves reliability and reduces the cooling system space claim. Torque output more power while also low fuel consumption.



The XC978U is equipped with a ZF powershift transmission available in 4F/3R. The XC978U Achieves high gear ranges and maintains high travel speed when working in long distance transport application. In most applications, production is increased and fuel consumption is reduced, resulting in optimized gear ratios and auto-shift functionality. Kick down and FNR buttons are conveniently located on joystick. With the kick-down function, can lower the gear and increase the torque generated by the engine for more traction force and loading capacity.

The axle has been proven in market for a long time. The XC978U utilizes limited-slip differential axles that automatically deliver power to the tiers, take advantage of the powerful traction, with better passability in slippery terrain. XCMG axles are stability and excellent service brakes with wet disc, traction further enhanced by front axle rigidly mounting to the frame to support the entire weight.



XCMG advanced variable hydraulic system continuously and automatically matches the hydraulic flow with the machine performance desired base on need, ensures the working device and steering functions high efficiency and lower fuel consumption. Steering functions with load-sensing hydraulic system, ensure smooth operation and fast response, optional secondary steering. Auxiliary third hydraulic function is standard, can be equipment with versatile attachment easily.

Comfortable operation surrounding



Luxury Operator Seat with Electrical Joystick

Heat, air-suspension seat provides the operator a maximum comfortable and less fatigue ride, Vertically and horizontally adjustable seat is further comfortable for the operator. A console lever is built into and moves with the seat, FNR switch and kick-down function are integrated into working equipment lever, it is easier operation and high efficiency.



Seal and Soundproof Cab

A pressurized and low noise cab provides the operator a sustainable and well-rest working environment, result from cab mounts connecting the cab to the frame, the cab sealing is also improved to provide a low-vibration, dustproof and comfortable operating surrounding

Fresh Air and Suitable Cab Temperature

Luxury automatic AC is a standard equipment on the XC978U, the XC978U cab is designed with optimized ventilation. AC is equipped with eleven all-around outlets to keep the cabin at a comfortable temperature. Dual filter easily replaced protect cab from dust entering.

Tiltable /extend-retract Steering Wheel

The operator can tilt and telescope the steering wheel with adjusting the seat to allow maximum comfort and control. Tilting forward angle: 15°, Tilting back angle: 25°.



Ride Control

Shock absorber ride control is designed to improve ride quality on rough road, improve the operator comfort and efficiency, ensure excellent material retention working in long distance.

Comfortable operation surrounding



— Rear view camera

Operators benefit from a view of their surroundings all the time. The standard rear view camera provides visibility behind the machine, helping the operator work confidently.



— Excellent visibility

The XC978U has been optimized visibility, the cab with well-positioned column provide a 316° visibility around the operator. Cab with cured front glass provides an excellent front visibility. New larger inside convex mirrors improve visibility to the rear, heated integrated outside mirrors provide excellent visibility to both sides of the machine.

— High Resolution Machine Monitor

The color monitor can display working hour, temperature, fuel level, maintenance information and many other outputs. The panel has a large text box, operator can select language about machine information.



— Easy of operation

The centralized switch panel is designed sealed against moisture and dirt, the ISO standard symbols located on each membrane switch are molded to ensure the image will not wear off over time. Focusing on convenient, the control panel has been designed to be easy to reach the machine controls.



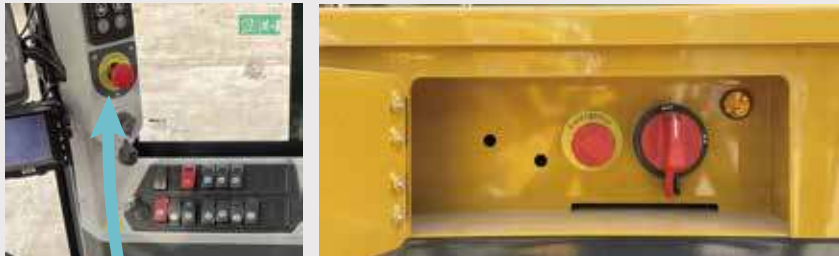
No Compromise On Safety

— ROPS&FOPS Cab

ROPS (Rollover Protective System) and FOPS (Falling Object Protective Structure) are standard equipment to protect operator. The ROPS and FOPS cab is certified, satisfy with ISO standard.

— Engine Shutdown Emergency Switch

Emergency Switches are designed for engine shutdown when the key switch is unavailable. There are two emergency switches, one is for operator in cab, the other under the left side platform is convenient to operate on ground level.



— Safe Access

Safe from the inside out, welded anti-slip bars and placed handrails, the space between the steps and the access to the cab are satisfy ISO standards.

Maintenance Make Easy



— Large angle tilting hood

The electrically actuated, large angle tilting hood make access and daily maintenance easy, provide the best service access to engine air filter and oil levels. The single row radiator and AC cooler core swung out make easy to clean.

— Fuel refilling

The fuel refilling port is front a lockable door for security and designed for easy-to-reach ground level access, fuel filter can be replaced easily without the need for tools.



— DEF Tank

The DEF tank is located on the right side of the machine and easy to refill ground level access.



— Maintenance Information

When the time arrived for maintenance, the monitor appears a wrench symbol; after maintenance can clear the symbol.

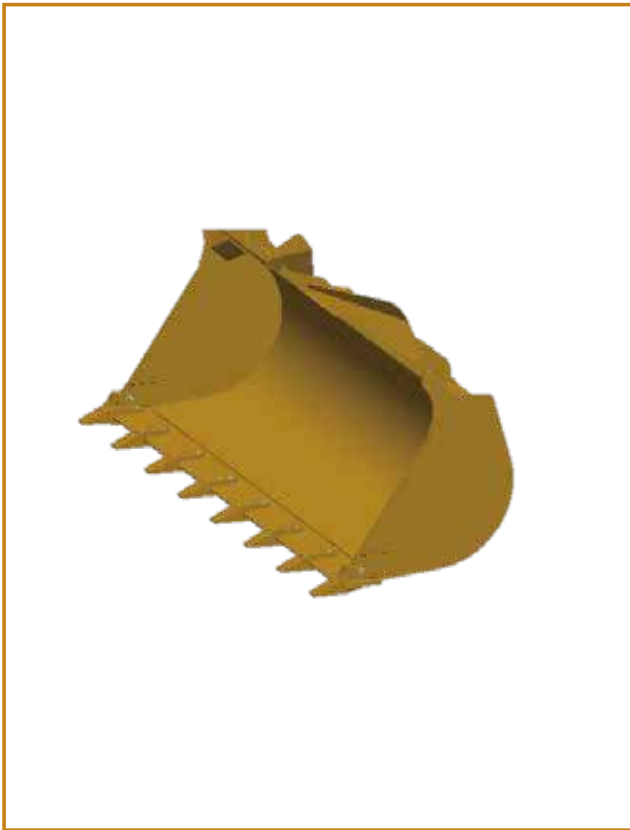
The monitor panel also display troubleshooting number for quickly locking the problem and repairing.

The fuel and DEF level gauge are displayed on the monitor panel.



— JRB Quick Coupler and attachments

Our quick coupler is designed as JRB Standard which is widely used in North America, the standard quick coupler not only allows one machine to use a series of attachments, but also allows one attachment to be equipped by machines of different sizes. The operator can switch attachments in cab by EH joystick. Also can select different sizes of attachment to suit for different applications.



Technical Specifications

ENGINE

Cummins EU Stage V/ Tier 4 Final emissions certified		
Model	L9	
Type	Water-cooled, 4-cycle	
Aspiration	Turbocharged & air-to-air intercooled	
Number of cylinders	6	
Displacement	8.9L	
SAE J1995	Gross power	242kW
Peak torque	1636Nm/1100	
Fuel system	Direct injection	
Air cleaner	Pre-cleaner and dry type with double elements	

TRANSMISSION

ZF counter-shaft transmission, Automatic Power Shift, integrated joystick with FNR and KD(kick-down)		
Torque converter	Single-stage, three-element	
Transmission type	Counter-shaft, Power shift	
Travel speed	Forward Reverse	Reverse
1st	7 km/h	7 km/h
2nd	13 km/h	13 km/h
3rd	28 km/h	28 km/h
4th	39 km/h	
Measured with 26.5 tires		

AXLES AND FINAL DRIVES

Model	XCMG Wet Axle
Drive system	Four-wheel drive
Front	Fixed,Full-Floating
Rear	"Fixed on Swing frame,Full-Floating 24° total oscillation"
Reduction gear	Spiral bevel gear
Differential gear	Conventional type
Final reduction gear	Planetary gear, Single reduction

HYDRAULIC SYSTEM

Steering system	
Hydraulic pump	Piston type
Relief valve setting	21MPa
Hydro-cylinders	2
Loader system	
Hydraulic pump	Piston type
Relief valve setting	24MPa
Number of boom cylinders	2
Number of bucket cylinders	1
Raise time	5.9s
Dump time	1.4s
Lower time(empty)	3.5s
Total cycle time	10.8s
Controls	Joystick

STEERING SYSTEM

Load-sensing hydraulic articulated steering, the steering system has priority feed from a load-sensing piston pump with variable displacement.	
Type	Articulated type
Steering angle	40°

BRAKES

Service brakes	Wet discs actuate on four wheels
Service brake actuation	Hydraulic
Parking brake type	Manual electrical control
Parking brake actuation	Hydraulic

Cooling

Fan drive	Hydraulically driven, Automatic reversing
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Technical Specifications

CAB

The cab is ROPS & FOPS certified, ROPS/FOPS meet ISO 3471 and ISO 3449
Pressurized cab with lower interior sound level
Adjustable steering column, heated air suspension seat, AM/FM radio, armrest box, and AC with optimized air outlets
Large heated rearview external mirrors, rear-view camera and mirrors ensure great visibility.
High resolution larger color LCD panel, all important informations are located in the panel.

SOUND

The sound values indicated below are for specific operating conditions only. Machine and operator sound levels will vary at different engine and/or cooling fan speeds. Hearing protection may be needed when the machine is operated with a cab that is not properly maintained, or when the doors and/or windows are open for extended periods or in a noisy environment	
Operator Sound Pressure level according to ISO 6396-2008	≤78dB
Exterior Sound Power level according to ISO 6395-2008	114dB
Heating capacity	>8000W
Air conditioning	>5200W

SERVICE REFILL CAPACITIES

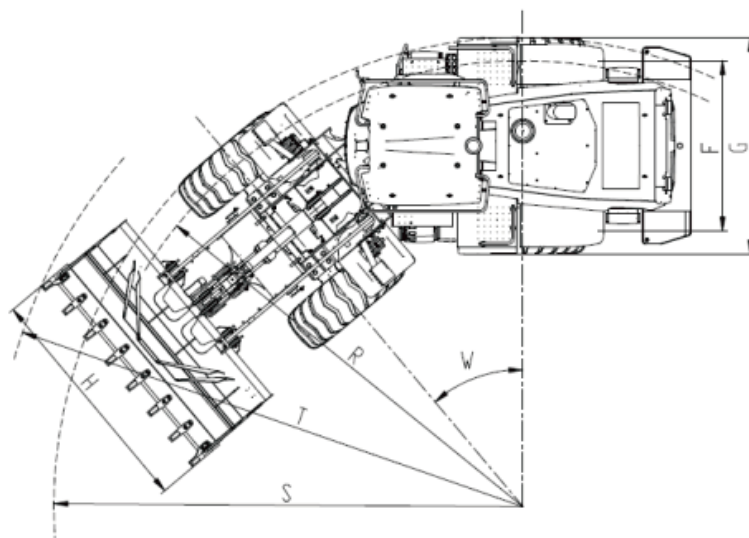
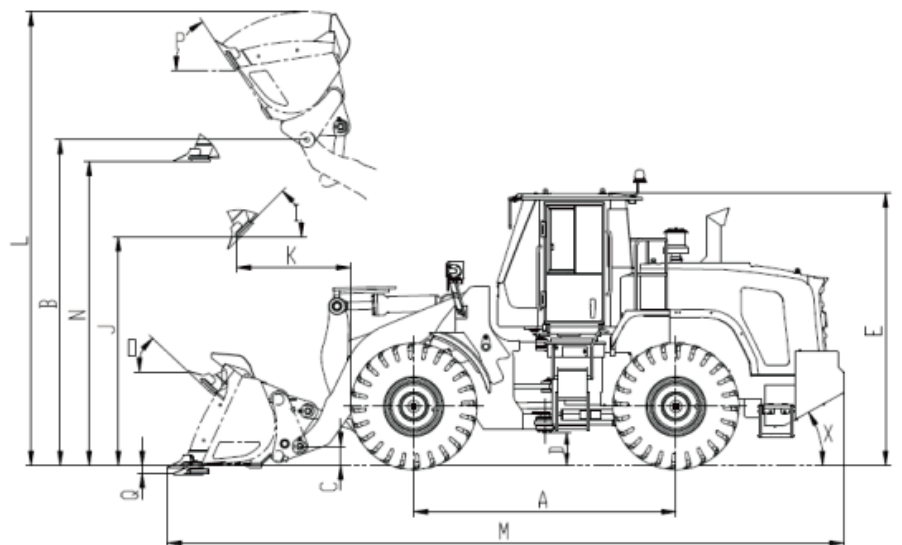
Fuel Tank	400L
DEF Tank	34L
Cooling System	62L
Crankcase	20.3L
Transmission	50L
Differentials and Final Drives-Front	60L
Differentials and Final Drives-Rear	55L
Hydraulic Tank	160L

ELECTRICAL SYSTEM

Voltage	24V
Batteries	6-QW-120B
Battery capacity	120AH
Cold cranking capacity	-12C
Alternator rating	2.2KW
Starter motor output	7.8kW

Technical Specifications

DIMENSIONS



F Tread	
G Width over tires	2995mm
A Wheelbase	3550mm
B Hinge pin height	4395mm
C Ground clearance	544mm
D Hitch height	1230mm
E Overall height, ROPS cab	3620mm

Z-Bar	
Bucket capacity	4.5m ³
H Bucket width	3230mm
I Maximum dump angle at full height	45°
J Dump clearance, max height and 45° dump angle	1217mm
K Reach at max.height and 45° dump angle	3221mm
L Operating height(fully raised)	6040mm
M Overall length(bucket on ground)	8850mm
N Maximum digging depth	106mm
O Bucket rollback at ground level	43°
Bucket rollback at carry	48°
P Bucket rollback at maximum height	56.2°
S Turning radius, outside of tire	6374mm
R Turning radius, center of tire	6037mm
T Turning radius, bucket carry	7210mm
Static tipping load:straight	18500kg
40° full turn	15600kg
Breakout force	220kN
Operating weight	24500kg

STANDARD EQUIPMENT

ENGINE

"Engine, Cummins L9 Tier 4 Final/Stage V emission standards"

High pressure common rail

Automatic derating for exceeded system temperatures

Engine-block heater

Aftertreatment, Cummins

Centrifugal engine air pre-cleaner

Reversing fan cooling

POWERTRAIN

ZF power shift transmission

Programmable maximum high gear

Transmission fill tube and sight gauge

Transmission diagnostic ports

Kick-down function, FNR, F4/R3

XCMG front limited slip differential

XCMG rear convention wet axle

Wet disc service brake system

Disc parking brake system

TIRE & RIM

26.5R25 L3

OTHER STANDARD EQUIPMENT

Full rear fender

Hydraulic articulation stops

Automatic lubrication

Sight gauges: Hydraulic oil

HYDRAULIC SYSTEM

Load sensing system with flow amplification and steering priority

Piston pump with variable displacement

Joystick control

Automatic return-to-dig bucket positioner

Automatic boom kick out

Hydraulic diagnostic ports

3-spool valve with lever and piping

Hydraulic control system for quick-coupler

Adjustable and continuous hydraulic-flow settings

ELECTRIC SYSTEM

Wipers front and rear

AM/FM radio

Batteries, free of maintenance

Battery-terminal safety covers

Horn, electric

Revere warning alarm

Four LED work lights(cab mounted)

Two halogen roading lights

Two LED turn tail lights

CAB

Cab, pressurized and sound suppressed, ROPS/FOPS certified

Air suspension seat

Air conditioning, heater and defroster

Cab fresh air filter

Heated rearview external mirrors

Adjustable steering column

Beverage holders with storage

Sun visor, front

GAUGE GROUP

Engine coolant temperature

Transmission oil temperature

Engine oil pressure

LINKAGE

Optimized Z-bar linkage

Quick coupler

OPTIONAL EQUIPMENT

4.2m³-7m³Bucket

Electrical weight system

Quick-change Clamp

Quick-change Bucket

Optimum Services , XCMG Guaranteed



XCMG approved attachments



Genuine parts



Financial solutions



Maintenance contract



Full Range of Services Ready for You

In order to respond to your needs as fast as possible, XCMG experts can be dispatched to your job site from a facility near you. A full range of services are available to reduce your total cost of ownership and increase your revenue.

Professional Integrated Complete Solutions

XCMG group has built a strong reputation based on the quality, reliability and durability of its construction machinery. XCMG has established a world wide service and parts network to provide support to every customer regardless of location.

XCMG Global Spare Parts System



Mobile cranes



Excavators



Aerial work platforms



Wheel loaders



Road machinery



