

## STRONG PRESENCE, SUBLIME SUPPORT

LiuGong has established a solid infrastructure with over 12,000 employees worldwide, 320 dealers, 7 regional parts depots and 9 strategically placed global offices to support its dealer and serve customers properly result in less damage and machine downtime.



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Always a LiuGong dealer near you.



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Version 1.0

06/2015 Designed by LiuGong



<b>Engine</b>	Cummins QSB7
<b>Gross Power</b>	120 kW (160.9 hp)
<b>Net Power</b>	117 kW (156.9 hp)
<b>Maximum Digging Depth</b>	6,615 mm
<b>Bucket Capacity</b>	1.0 m <sup>3</sup>
<b>Operating Weight</b>	22,000 kg

# 922D

EXCAVATOR

**LIUGONG**



TOUGH WORLD. TOUGH EQUIPMENT.







**BUILT TO  
OUTLAST**





## SUMMARIZED BENEFITS

### **ALWAYS RELIABLE**

Major parts are all from world class suppliers.  
The improved boom and arm, reinforced undercarriage are designed to withstand some of the toughest working environments.

### **EFFICIENT AND ENVIRONMENTAL FRIENDLY**

Equipped with a fuel efficient world-class Cummins QSB7 engine, and the advanced CAPC(Computer Aided Power Control) system balances the engine and hydraulic pump to achieve high efficiency and low fuel consumption.

### **OPERATOR COMFORT**

Ergonomically designed cab for Liugong D series excavator, with great visibility, expansive leg room, new multi-function LCD monitor, automatic air conditioner, large storage space, provide most comfortable working environment.

### **ENHANCED VERSATILITY**

Additional lines for the easy installation of attachments.

### **HIGHEST SAFETY STANDARDS**

The cab of machine meets EU standard.

Rearview camera

Rearview mirrors

Escape hammer

Locking lever

### **COMPLETE CUSTOMER CARE**

Inspection parts, filters and water separator are conveniently located.





# ALWAYS RELIABLE

## WORLD CLASS COMPONENTS

The 922D uses major components and systems from advanced suppliers like Cummins, in addition to advanced in-house technology from LiuGong.

## PARTS, SERVICE AND ATTACHMENTS TO COUNT ON

Part of a reliable excavators is having parts, service and attachments so reliable you can count on them whenever, wherever. Genuine LiuGong parts are the perfect match to keep your investment working over the years and can be counted on when you need. Service is reliable and can be counted on to keep your excavators up and running. Attachments for the machine have been made in-house and are part of a complete LiuGong system.

## RUGGED DESIGN

Single piece plates and castings are used in key areas of the machine's structure for good load distribution. Highly durable rubbing strips on the underside of the arm protect the structure against material falling from the bucket.

Grease lubrication sealed track links are assembled and sealed with grease to decrease internal bushing wear, this reduces noise, and lowers operating costs by extending the track service life.







**CONSTRUCTION  
EQUIPMENT  
AHEAD**





# EFFICIENT AND ENVIRONMENTAL FRIENDLY

## **CAPC SYSTEM**

AdvancedCAPC (Computer Aided Power Control) system, make full use of engine oil consumption characteristics, make the engine-hydraulic pump to the best matching, achieve high efficiency, low and economical fuel consumption homework.

## **FUEL EFFICIENT CUMMINS QSB7 ENGINE**

Equipped with a fuel efficient world- class Cummins QSB7 engine , the 922D provides power 120 kW@ 2,100 rpm while saving money on fuel costs.

The QSB7 series come with a combination of a proven cooled-EGR system, High Pressure Common Rail (HPCR) fuel system. It is also complemented by Cummins patented VGTTM Turbocharger, which continuously varies the airflow boost to precisely match engine rpm and load demand for optimal performance.

## **ADVANCED HYDRAULIC SYSTEM**

Proven negative flow hydraulics, optimizing the main control valve and cylinders improves the speed of front end working equipment, while cutting down on the hydraulic system's damper loss, leading to much better working efficiency. The pilot valves matching with the main control valve offer precise control.

## **AUTO-IDLE SPEED FUNCTION**

Automatic speed reduction in lever neutral gear can reduce fuel consumption and noise.

When the pilot valves are in neutral for more than 7 seconds, the engine speed is reduced to 1000 rpm. This decreases fuel consumption and lowers cabin noise levels.

## **ANTI-REVERSAL VALVE IN SWING MOTOR**

Makes swinging smoother, especially when starting and stopping.







# OPERATOR COMFORT

## ERGONOMICALLY DESIGNED CAB WITH GREAT VISIBILITY

Specifically designed for LiuGong D series excavator, this spacious cab is ergonomically designed for safer and more efficient operating. The glass windows are widened for excellent visibility, especially the right side downward view during travel and excavation. An enlarged skylight with rolling sunshade provides excellent visibility and good ventilation.

## NEW MULTI-FUNCTIONAL COLOR LCD MONITOR

New monitor bracket is designed for greater stability and is positioned to be easy to check. Machine operational states, warnings, audible alarms and maintenance information are clearly displayed to help the operator. The LCD monitor also serves as the crystal clear display for the optional rearview camera to improve safety for all people and machines on the worksite. It is programmable to provide information in a choice of more than 10 languages.

## COMFORTABLE AND SAFETY OPERATOR ENVIRONMENT

High-power air conditioning and specialized arrangement of air outlets for maximum cooling. Through advanced control valve to control the flow of air, to maintain indoor comfort all year round. In order to prevent dust into the bad environment, adopted high sealing pressure cabin.

The pilot lock handle installed on the handrail box prevents unexpected movement as it interlocks the machine ignition system. Soft and flexible pilot control operating handles are convenient and comfortable for long operating hours.

Large swing design foot pedals are more comfortable and allow the operator to keep their feet on the foot rest and still operate the machine.

Easy to clean and form-fitted floor mat is more practical and durable.

High-back suspension seat with heater is adjustable for all operator weights and heights and dampens vibrations felt.

Storage space is located in the front, rear, and side consoles.





**DELIVERING  
ALL-ROUND  
PERFORMANCE  
WITH LOW  
RUNNING COSTS**

**TOUGH WORLD. TOUGH EQUIPMENT.>>>**



## ENHANCED VERSATILITY

### **PTO PUMP**

Additional lines for the easy installation of attachments.

### **REFILLING PUMP**

Electrical fuel refilling pump makes it easy to fill fuel oil tank.

### **SECURITY VALVE**

When the hose which joints to cylinder cracks, the anti-explosion could prevent the work equipment down

## HIGHEST SAFETY STANDARDS

### **CAB**

The cab of machine meets EU standard. Falling Object Protection System (FOPS) is optional. An optional rearview camera gives an exceptionally clear view of the rear work zone on the wide-screen monitor.

### **REARVIEW CAMERA**

An optional rearview camera gives an exceptionally clear view of the rear work zone on the wide-screen monitor.

### **REARVIEW MIRRORS**

4 mirrors make the operator to watch surrounding area easily.

### **ESCAPE HAMMER**

Escape hammer in cab helps the operator to escape from cab in emergency.

### **LOCKING LEVER**

Locking lever prevent wrong operation.







# COMPLETE CUSTOMER CARE

## CONVENIENT MAINTENANCE PORTS

The 922D is designed for convenient maintenance. The engine is conveniently accessible when the rear hood is lifted up it provides plenty of space for maintenance, which can be done from a standing level.

## A/C FRESH-AIR FILTER AND FUSE BOX

The fresh air filter and fuse box are located on the side of the cab to make it easier to reach, replace or check as needed.

## COOLING COMPARTMENT

Over flow bottle, washer bottle and air-conditioner refrigerant are located on cooling compartment for easy maintenance.

## LARGE TOOL BOX AREA

A large tool box keeps tools for maintenance close at hand and dry.

## FAULT DIAGNOSTIC SYSTEM

The on board fault diagnostic system monitors machine functions and performance in real time and will inform the operator of small issues before they grow via the LCD monitor. The error codes can also be used by your LiuGong certified service technician to simplify and quicken repairs.

## EASY ENGINE ACCESS

The 922D is designed for convenient maintenance. The engine is conveniently accessible when the rear hood is lifted up it provides plenty of space of maintenance.





## STANDARD EQUIPMENT

### ENGINE SYSTEM

- Cummins QSB7, turbocharged, 6 Cylinder 4 stroke water cooled, Diesel Engine
- Auto-idle speed control
- Air filter with pre-cleaner
- Engine oil filter
- Pre-filter with water separator
- Radiator, oil cooler and intercooler
- CAPC (Computer Full Power Control System) System
- Automatic engine warm-up system
- Engine overheat prevention system

### HYDRAULIC SYSTEM

- Power boost
- Boom and arm holding system
- Boom and arm regeneration circuits
- Pilot oil filter

### OPERATOR STATION

- Highly pressurized and tightly sealed

cab with all-around visibility, large roof window with slide sun shade, front window wiper, removable lower window

- Air conditioner, heater, defroster
- Suspension seat with height adjustable arm rests and retractable seat belt
- AM/FM Radio with MP3 audio jack
- Color LCD monitor with alarms, filter/ fluid change, fuel rate, water temperature, fault code, working hour, etc
- Travel alarm
- Pilot control shut-off lever
- Glass-breaking hammer
- Ashtray, cigarette lighter
- Cup holder
- Floor mat
- Storage box
- Front glass lower guard

### UPPERSTRUCTURE

- Rear view mirror (right & left side)

- 2 batteries
- One key for door locks, cap locks
- Fuel gauge
- Hydraulic oil level gauge
- Storage box
- Swing parking brake
- Boom lights
- Exterior lights integrated into storage box

### UNDERCARRIAG

- 600 mm double grouser track-shoes
- 2 track frame under-guards (each-side)
- Towing eye on base frame

### FRONT ATTACHMENTS

- 5.68 m boom and 2.91 m arm
- 1.0 m<sup>3</sup> (SAE, heaped) bucket

## OPTIONAL EQUIPMENT

0.73 m<sup>3</sup> general bucket  
0.87 m<sup>3</sup> rock bucket  
0.9 m<sup>3</sup> wide bucket  
0.95 m<sup>3</sup> general bucket  
1.0 m<sup>3</sup> general bucket  
Arm: 2,400 mm  
Arm: 2,700 mm  
Arm: 4,400 mm, boom 6,680 mm  
800 mm wide tracks

OPG (operation protection guard)  
Structure  
2 outside rearview mirrors  
Heavy lift and power boost  
Boom/arm holding Valves (2 on Boom  
1 on arm)  
Control pattern change valve  
Travel alarm  
Power outlet 24V to 12V converter

In cab rearview mirror  
Rotating beacon  
Refuel pump  
Hammer piping  
2 way aux. piping  
Hydraulic jackhammer  
Hydraulic quick coupler  
Ripper Shank



# SPECIFICATIONS

ENGINE	
Emission Regulation	Tier 2 / Stage II
Model	Cummins QSB7
Type	6-cylinder, 4-stroke, in line, water-cooled, turbocharged, diesel engine.
Gross Power	120 kW(160.9 hp) @ 2,100 rpm
Net Power	117 kW(156.9 hp) @ 2,100 rpm
Maximum Torque	658 N·m @1,300 rpm
Bore x Stroke	107 x 124 mm
Displacement	6.7 L

DRIVE AND BRAKES	
Driven by a one-piece two-gear piston hydraulic motor and reducer with small volume and strong traction; the motor and hydraulic pipelines are hidden in the track mechanism to prevent damage from rugged road surfaces; parking brake and shock-absorbing valve are installed inside the motor, ensuring stable travelling and parking as well as reliable braking.	
Max. Travel Speed	High: 4.9 km/h Low: 2.9 km/h
Gradeability	70 %
Drawbar Pull	195 kN

SWING SYSTEM	
The high- torque piston swing motor, with integral spring set, and automatic hydraulic release swing brake, is bolted directly to the swing reduction planetary swing gear box. The swing brake automatically resets for safer operation within five seconds of the swing function lever being brought to neutral. This insures safe travel and parking conditions.	
Swing Speed	12 rpm

HYDRAULIC SYSTEM	
Main Pump	Two variable displacement piston pumps
Main Pumps Total Flow	2×210 L/min
Relief Pressure, main	33.3 MPa

UNDERCARRIAGE	
Center Frame	X-Frame
Track Adjustment	Hydraulic
Number of Carrier Rollers	2 each side
Number of Track Rollers	8 each side
Number of Idler Rollers	2 each side
Number of Shoes	49 each side
Width of Track Shoes	600 mm

ELECTRIC SYSTEM	
System Voltage	24 V
Batteries	2 x 12 V

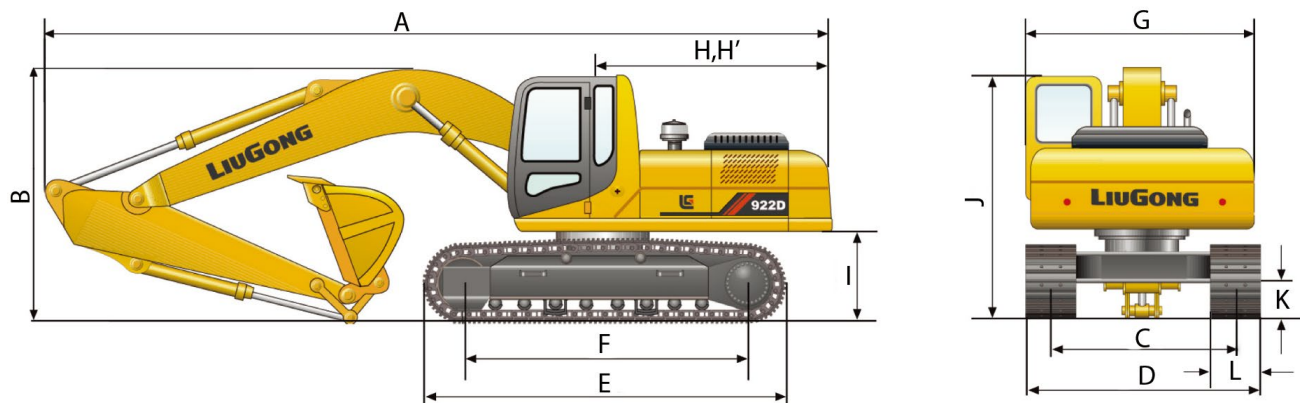
SERVICE CAPACITIES	
Fuel Tank	412 L
Engine Oil	25 L
Final Drive (each)	5.5 L
Swing Drive	3.4 L
Cooling System	39 L
Hydraulic Reservoir	230 L
Hydraulic System Total	330 L

OPERATING WEIGHT (APPROXIMATION)	
The operating weight includes 5680 mm boom, 2910 mm arm, SAE heaped 1.0 m³ bucket, 600 mm shoes, operator, lubricating oil, cooling liquid, full fuel tank, and standard configuration.	
Shoe Ground Pressure	45.8 kPa
Operating Weight	22,000 kg



# 922D SPECIFICATIONS >>>

## DIMENSIONS



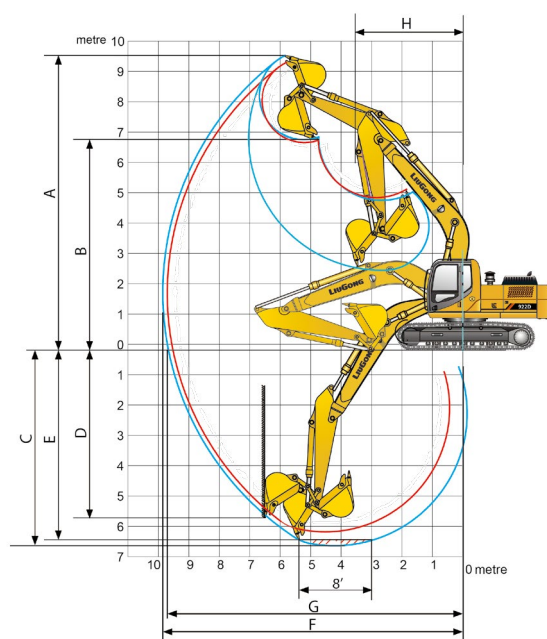
Unit: mm

Boom length	Boom length	5,680			6,680	8,500
Arm length	Arm length	2,400	2,700	2,910	4,400	6,400
A	Overall length	9,712	9,690	9,690	10,620	12,530
B	Overall height of boom	3,050	3,050	3,100	3,200	3,500
C	Track gauge	2,390				
D	Overall width	2,990				
E	Overall length of crawler	4,456				
F	Track length on ground	3,650				

G	Overall width of upperstructure	2,990
H	Tail swing radius	2,860
H'	Rear-end length	2,855
I	Counterweight ground clearance	1,070
J	Overall height of cab	3,050
K	Min. ground clearance	440
L	Track shoe width	600

Unit: mm

Boom length	Boom length		5,680			6,680	8,500
Arm length	Arm length	2,400	2,700	2,910	4,400	6,400	
Bucket capacity	Bucket capacity	1.2 m³	1.1 m³	1.0 m³	0.6 m³	0.4 m³	
A	Dig height	9,369	9,517	9,540	10,851	13,900	
B	Dump height	6,594	6,748	6,770	8,451	11,490	
C	Dig depth	5,875	6,187	6,615	8,551	11,510	
D	Dig depth of vertical	4,578	4,805	5,655	7,011	/	
E	Depth of 8 bottom	5,662	5,993	6,410	8,411	/	
F	Max reach	9,435	9,715	9,850	12,110	15,780	
G	Reach at ground level	9,256	9,540	9,705	12,000	15,670	
H	Min swing radius	3,652	3,225	3,510	4,150	/	
SAE	Bucket breakout force	133 kN			67 kN	/	
SAE	Arm breakout force	109 kN	103 kN	93 kN	60 kN	/	
ISO	Bucket breakout force	159 kN			76 kN	/	
ISO	Arm breakout force	113 kN	108 kN	103 kN	62 kN	/	







## Note:

- ※ Indicates the load is limited by hydraulic capacity rather than tipping capacity.
- The above rated loads are in compliance with ISO 10567 hydraulic excavator lift capacity rating standard. They do not exceed 87% of hydraulic lifting capacity or 75% tipping load.
- Rating at bucket lift hook.



Rating over-side



Rating over-front

Arm: 2,910 mm		Bucket: SAE 1.0 m <sup>3</sup> , 950 kg				Boom: 5,680 mm		Shoes: 600 mm		Counterweight: 4,300 kg				
Lift Point Height														mm
		3 m		4 m		5 m		6 m		7 m		8 m		Max. Reach
6 m	kg							※3,294	※3,294	※3,253	※3,253	※3,288	2,962	※3,288 2,962 8,000
5 m	kg							※3,294	※3,294	※3,253	※3,253	※3,288	2,962	※3,288 2,962 8,000
4 m	kg							※3,294	※3,294	※3,253	※3,253	※3,288	2,962	※3,288 2,962 8,000
3 m	kg	※8,789	※8,789	※6,234	※6,234	※6,234	※5,015	※4,323	※4,323	※3,897	3,612	※3,638	2,846	※3,563 2,537 8,500
2 m	kg	※11,896	※11,896	※7,835	※7,835	※7,835	※5,967	※4,931	4,488	※4,296	3,490	※3,892	2,772	※3,725 2,418 8,625
1 m	kg	※13,723	12,664	※9,122	※9,122	8,007	5,710	※5,501	4,319	※4,681	3,381	※4,143	2,706	※3,901 2,373 8,625
0	kg	※14,374	12,488	※9,933	※9,933	7,776	5,531	※5,966	4,193	※5,007	3,297	※4,352	2,656	※4,096 2,402 8,500
-1 m	kg	※14,421	12,490	※10,308	※10,308	7,687	5,437	※6,279	4,119	※5,228	3,247	※4,473	2,632	※4,391 2,569 8,125
-2 m	kg	※14,084	12,586	※10,322	※10,322	7,695	5,416	※6,402	4,097	※5,298	3,238			※4,638 2,775 7,750
-3 m	kg	※13,380	12,758	※9,995	※9,995	7,777	5,459	※6,286	4,129	※5,132	3,279			※5,000 3,195 7,125
-4 m	kg			※9,271	※9,271	7,931	5,568	※5,815	4,226					※5,322 3,868 6,375

Arm: 2,700 mm		Bucket: SAE 1.1 m <sup>3</sup> , 950 kg				Boom: 5,680 mm		Shoes: 600 mm		Counterweight: 4,300 kg				
Lift Point Height														mm
		3 m		4 m		5 m		6 m		7 m		8 m		At Max. Reach
6 m	kg							※3,287	※3,287	※3,378	3,210			※3,425 2,947 7300
5 m	kg							※3,576	※3,576	※3,509	3,155			※3,526 2,543 7800
4 m	kg							※4,027	4,024	※3,776	3,062	※3,655	2,368	※3,652 2,309 8100
3 m	kg	※9,593	※9,593	※6,679	※6,679	※5,335	5,153	※4,582	3,836	※4,125	2,948	※3,853	2,305	3,705 2,094 8400
2 m	kg	※12,622	10,379	※8,237	6,768	※5,335	4,846	※5,171	3,649	※4,508	2,832	3,963	2,237	3,648 2,042 8400
1 m	kg	※14,129	9,920	※9,437	6,393	※7,066	4,600	※5,715	3,490	4,834	2,729	3,896	2,176	3,598 1,995 8400
0	kg	※14,515	9,831	※10,145	6,201	※7,653	4,441	6,055	3,375	4,749	2,653	3,849	2,133	3,633 2,006 8300
-1 m	kg	※14,411	9,870	※10,427	6,140	※7,985	4,364	5,984	3,312	4,704	2,612	3,833	2,118	3,833 2,118 8000
-2 m	kg	※13,973	9,983	※10,359	6,167	8,019	4,357	5,971	3,301	4,704	2,612			4,242 2,356 7500
-3 m	kg	※13,179	10,164	※9,953	6,264	※7,830	4,413	6,022	3,345					4,868 2,723 6900
-4 m	kg					※7,223	4,537	※5,748	3,460					※5,748 3,460 6000

Arm: 2,400 mm		Bucket: SAE 1.2 m <sup>3</sup> , 950 kg				Boom: 5,680 mm		Shoes: 600 mm		Counterweight: 4,300 kg				
Lift Point Height														mm
		3 m		4 m		5 m		6 m		7 m		At Max. Reach		
6 m	kg							※3,750	※3,750			※3,800	3,740	6,800
5 m	kg							※4,030	※4,030	※3,920	3,500	※3,920	3,150	7,400
4 m	kg	※7,960	※7,960	※6,000	※6,000	※5,030	※5,030	4,480	4,460	※4,150	3,420	※4,050	2,950	7,600
3 m	kg	※8,270	※8,270	※7,630	※7,630	※5,940	5,710	※5,030	4,280	※4,500	3,310	※4,230	2,750	7,800
2 m	kg			※9,140	7,590	※6,840	5,440	※5,610	4,110	※4,860	3,220	※4,460	2,680	7,800
1 m	kg			※10,180	7,300	※7,590	5,230	※6,110	3,980	※5,190	3,130	4,650	2,630	7,800
0	kg	※5,920	※5,920	※10,690	7,170	※8,100	5,110	※6,500	3,890	※5,460	3,060	4,610	2,590	7,800
-1 m	kg	※9,020	※9,020	※10,780	7,170	※8,310	5,070	※6,690	3,840	5,420	3,040	4,980	2,800	7,400
-2 m	kg	※12,640	11,890	※10,530	7,230	※8,260	5,090	※6,670	3,850	5,460	3,070	5,460	3,070	7,000
-3 m	kg	※12,930	12,100	※9,940	7,360	※7,880	5,170	※6,340	3,940			※5,800	3,570	6,400
-4 m	kg	※11,390	※11,390	※8,860	7,570	※7,010	5,320					※6,360	4,760	5,400