

## U18/U20 Technical Specification

### Basic parameters

Machine weight	1800kg(Canopy)   2000kg(Cabin)
Bucket capacity	0.05m <sup>3</sup>
Width of bucket	450mm

### Performance parameters

Engine model	Yanmar 3TNV80F
Emission Standard	Euro V / EPA Tier 4F / CN IV
Engine power	15.2kW/2500rpm
Max. Gradeability	30°
Max. digging force of arm	8.5 kN
Max. digging force of bucket	15.5 kN
Traveling speed	2/4 km/h
Max. hauling force	22 kN
Slewing speed of platform	8.5~10.5 rpm

### Operating parameters

	Standard / Longer arm
Max. digging height	3600 mm/3770 mm
Max. digging depth	2310 mm/2560 mm
Max. digging radius	4125 mm/4355 mm
Max. digging radius on ground level	4060 mm/4300 mm
Max. dumping height	2485 mm/2655 mm
Min. slewing radius	1690 mm/1765 mm
Max. vertical digging depth	1920 mm/2160 mm

### Transportation dimensions

Overall length	3750 mm
Overall width	1080 mm
Overall height	2335 mm(Canopy) / 2345 mm(Cabin)

### Other Parameters

Width of undercarriage	1080~1400 mm
Length of track	1600 mm
Width of track	230 mm
Minimum ground clearance	145 mm
Height between platform and ground	450 mm
Platform tail turning radius	700 mm
Length to center of rollers	1230 mm
Fuel tank capacity	23 L
Hydraulic oil tank capacity	20 L
Track gauge	850 mm/1170 mm
Working Pressure	24 Mpa
Flow rate	61.6 L/Min
AUX1 Pressure/ Flow rate	21 Mpa  18/10 L/Min
AUX2 Pressure/ Flow rate	21 Mpa  36 L/Min
Arm length (standard /longer)	950 mm /1200 mm
Boom length	1828 mm
Steering head angle	60°(L)/70° (R)

\*Specifications are subject to change without prior notice .

## GUANGXI YUCHAI EQUIPMENT TECHNOLOGY CO., LTD.

Address: Yuchai Engineering Machinery Industry Center, Luchuan, Guangxi, China

Email: dig@yuchai.cn, ychi-export@yuchai.cn | Website: www.yuchaicm.com

Tel: +86-775-3223503 | Fax: +86-775-3223503



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CE EAC MINI EXCAVATOR

Machine weight : 1800kg(Canopy)/ 2000kg(Cabin) | Engine model : Yanmar 3TNV80F

Bucket capacity: 0.05 m<sup>3</sup> | Engine power : 15.2 kW / 2500 rpm

Overall dimensions (L x W x H): 3750mm x 1080mm x 2345 mm(Cabin)

# U20

# Yuchai – Pioneering Compact Construction Solutions

- ▶ Yuchai, the manufacturer of China's first mini excavator (Model: WY4, 1990) and a professional producer of compact construction equipment, brings you the all-new Yuchai U18/U20 mini excavator.
- ▶ This powerhouse mini excavator delivers exceptional capabilities that surpass expectations – whether you're new to Yuchai or a longtime partner – redefining operational excellence on every jobsite.



YUCHAI

# Yuchai U18/U20 Mini-Excavator

▶ The **U18/U20** is designed to be compact yet robust, powered by a Yanmar engine that meets the Euro V emission standard, delivering exceptional power performance. Meticulously engineered by Yuchai's hydraulic design team, the load-sensing hydraulic system ensures efficient, reliable, and smooth hydraulic movements even in demanding working conditions, making it ideal for both construction and landscaping applications.

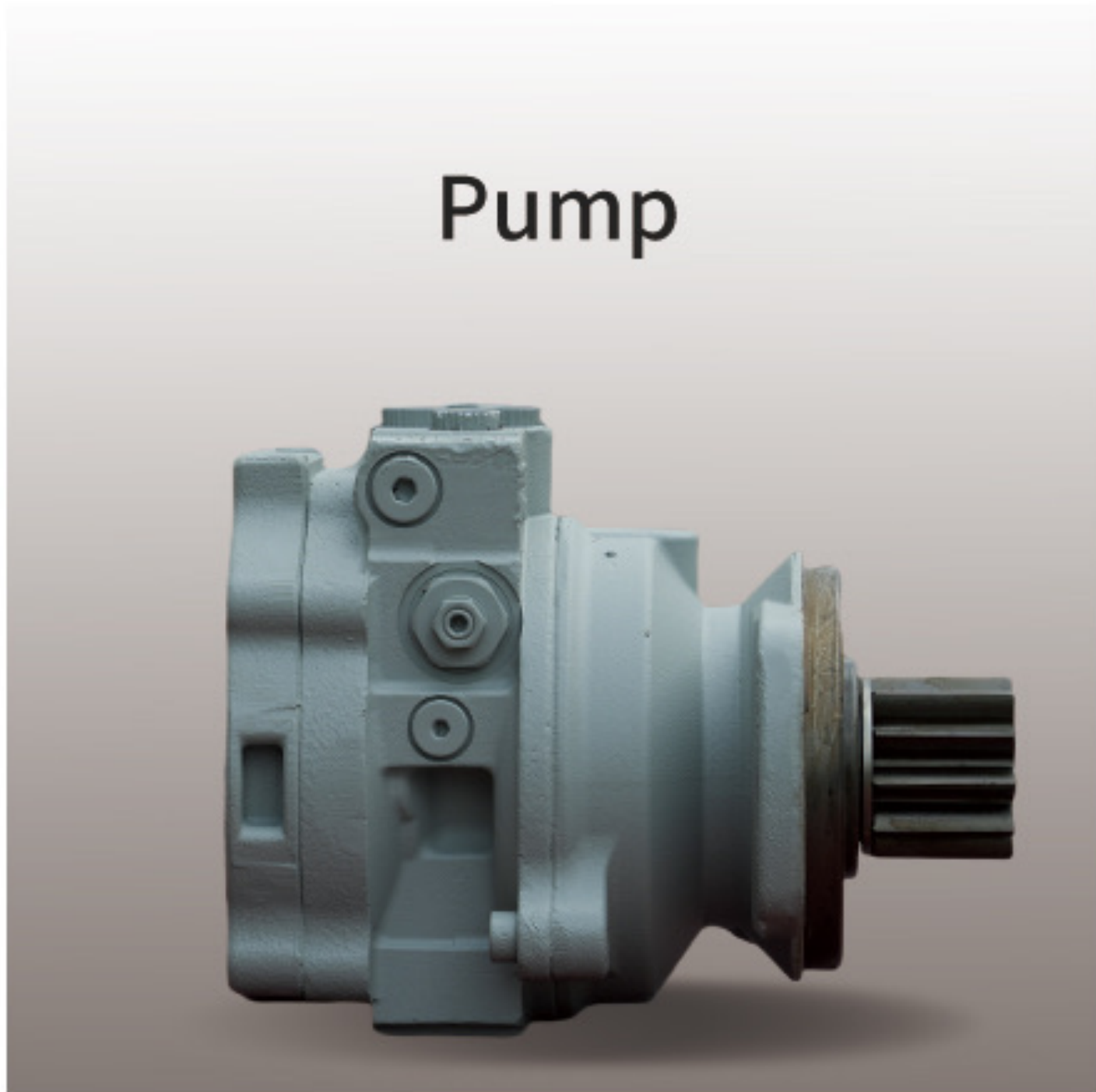
- ▶ The **U18/U20** is more than a conventional mini excavator—its exceptional productivity will boost your bottom line.
- ▶ Discover its technical features now and contact us to unlock further advantages.

## Intelligent Pilot Hydraulic System

- ▶ With soft and coordinated composite movements (boom/arm/bucket/travel), precise micro-control down to millimeter level;
- ▶ Load-sensing technology adjusts power output in real time, reducing fuel consumption compared to similar products.



Distributor



Pump



Traveling motor

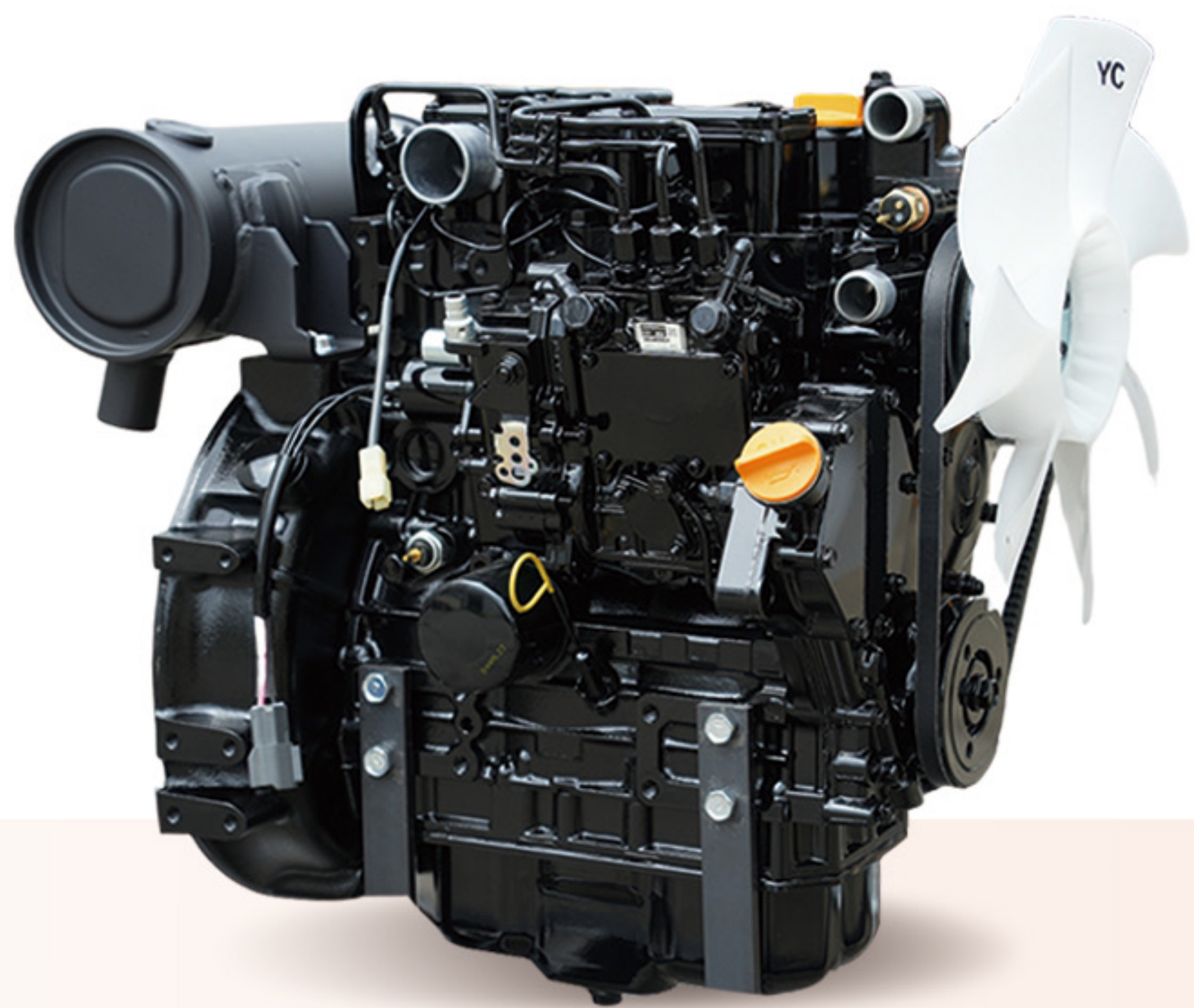


Slewing motor



## Compact Design, Superior Performance

- ▶ The U18/U20 mini excavator is powered by a Japanese-engineered **Yanmar 3TNV76 or 3TNV80F** engine, complying with the strictest Euro V and EPA T4F emission standards.
- ▶ Exceptional reliability with superior fuel efficiency.
- ▶ Substantial low-speed torque delivery for digging and heavy lifting operations.
- ▶ Globally established service network ensuring readily available spare parts.



- ▶ The **U18/U20** comes standard with **3 pcs** auxiliary hydraulic circuits, enabling quick-connect compatibility with a range of attachments such as buckets, hydraulic breakers, augers, and log grapples.
- ▶ Combined with the electronically proportional **joysticks**, operation becomes exceptionally smooth and effortless.

## High-Reliability Structure

Upgraded cast steel steeringhead boasts a lifespan of **8,000-10,000 hours**, three times longer than welded counterparts.

## Compact Dimensions

- ▶ Space-optimized design for operation in confined spaces.
- ▶ Transportable via standard light-duty trailers across Europe.

## Outstanding Hydraulic Design

- | Operating pressure of **24 Mpa** with max.
- | Flow rate of **61.6 L/min.**
- | Key specs: **0.05 m³** bucket.
- | **8.5~10.5 rpm** swing .
- | **15.5 kN** bucket force.



U18 Detachable Canopy

# Premium Cab

## Where safety meets comfort

### Ergonomically Engineered Cab

- ▶ Incorporates **36 years** of European users feedback to optimize Seat Index Point (**SIP**) positioning, delivering superior seating comfort.
- ▶ The ergonomically designed bilateral armrests significantly reduce hand fatigue during prolonged operation.

**1** The cab, equipped with a Tip-Over Protective Structure (**TOPS**), along with additional features such as a radio, an elastic fabric seat with a high backrest and headrest, a heater, and safety elements including seat belts and a safety hammer, offers multifaceted advantages, providing the operator with both comfort and safety.

**2** The **U18/U20** offers both **regular joysticks** and **proportional joysticks (for Premium model)(optional)**.

- ▶ The proportional joystick is with thumb roller operation, delivering intuitive and precise hydraulic control.
- ▶ The option of **ISO/SAE** modes adapts to global operation habits.

**3 U18 Detachable Canopy:** Two-section design for easy transportation and disassembly, suitable for low-clearance spaces (such as basement construction).

Concise user interface



▶ LCD instrument

▶ Wide and comfortable foot space



Large windows for all-round visibility and safe work

fabric suspension seat(Optional)

TOPS Cabin

Proportional -Joysticks (Optional)

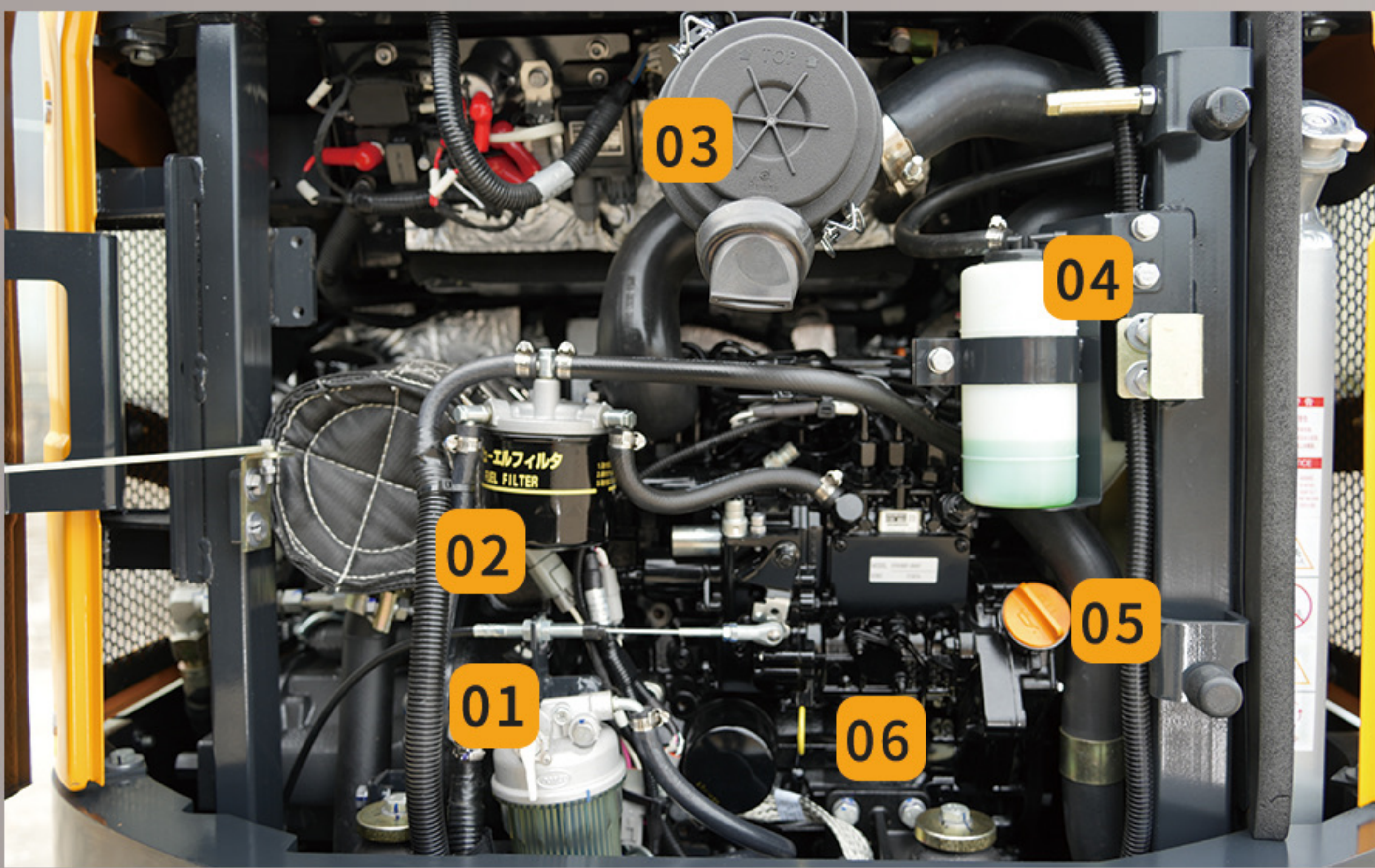
▶ Spacious and comfortable cabin

# Simple and Convenient Maintenance

- ▶ Opening bonnet design optimum arrangement of internal parts for quick and efficient service and a shorter downtime.
- ▶ Metal covers are stronger and easier to repair.

## Optimal Maintenance Points

- ▶ The U18/U20 mini excavator's centralized maintenance points enable quick and efficient maintenance, maximizing uptime and minimizing maintenance



# High Cost-Performance

- ▶ The U18/U20 mini excavator delivers exceptional cost-performance. With its heavy-duty structure, powerful engine, and versatile capabilities, the U18/U20 maximizes your investment return.
- ▶ Its efficient and reliable performance enables you to complete construction and excavation projects with the lowest operating costs and highest productivity. More than just a purchase, the U18/U20 is a long-term investment in your operational efficiency and profitability.



01 Oil filter



02 Fuel filter



03 Air filter



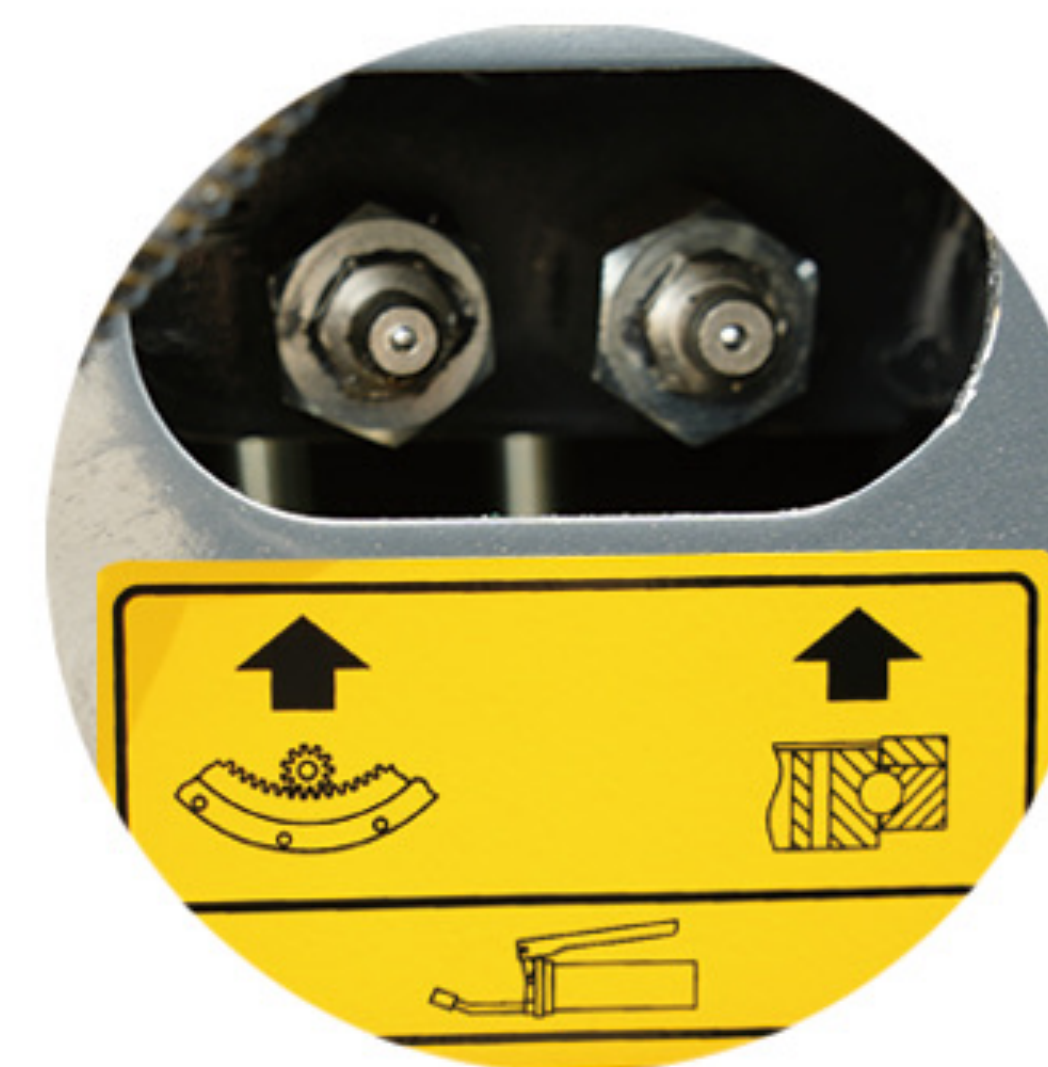
04 Coolant



05 Oil filler port



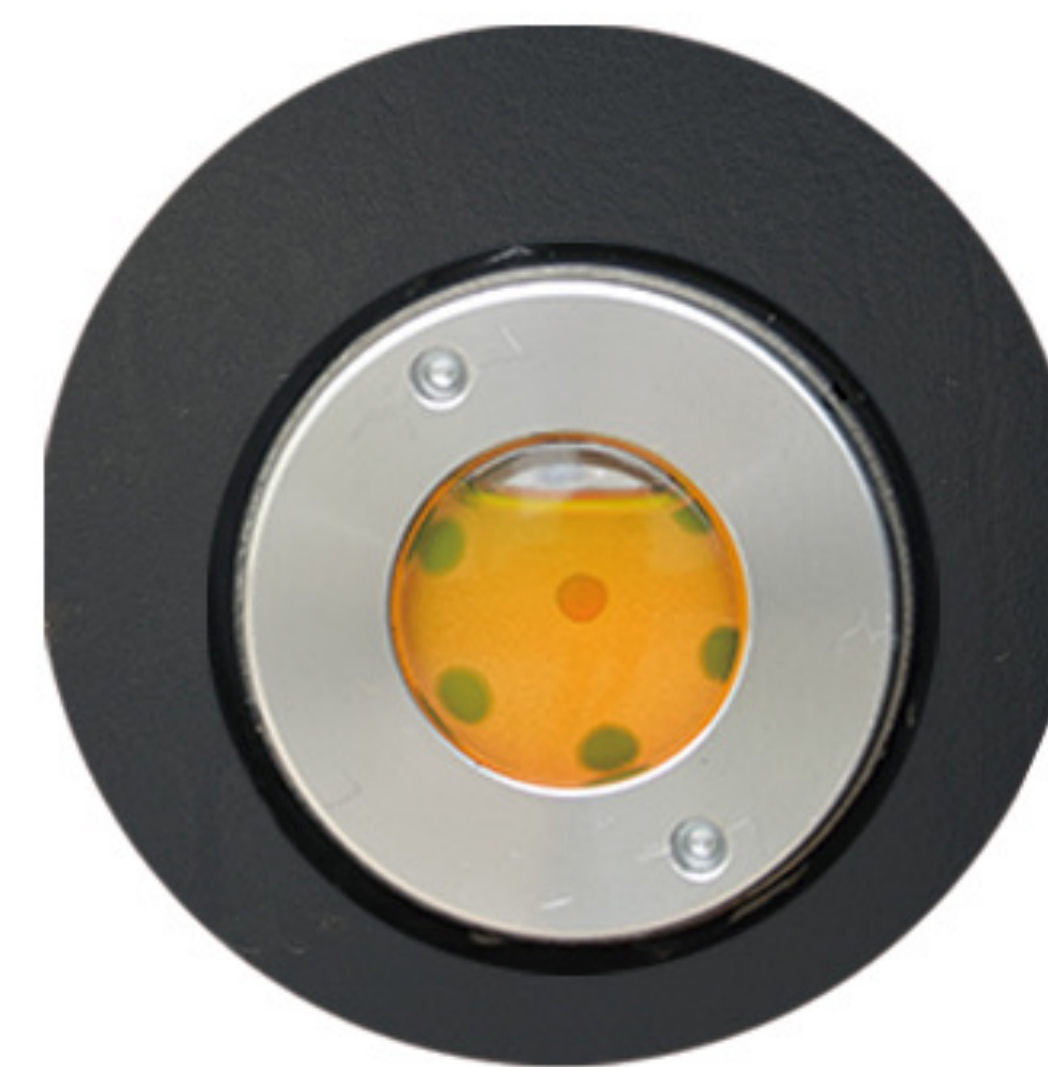
06 Oil dipstick



07 Centralized lubrication points



08 Fuel filler port



09 Hydraulic Oil Gauge



11 Hydraulic Quick Coupler Adapter



10 Holding Valve

Equipment

- ▶ Standards and requirements for special equipment vary by country.
- ▶ For more details on equipment options, please feel free to contact us.

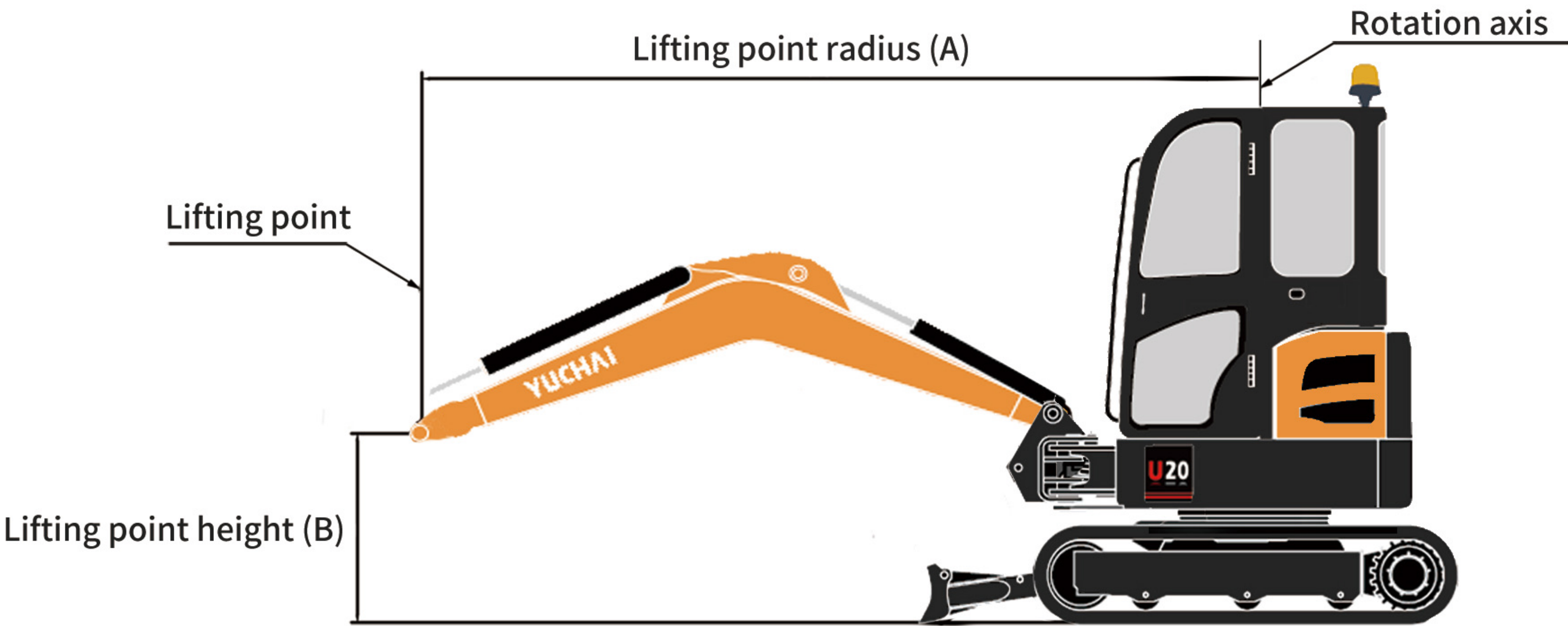
Component Part	Description	Standard	Optional
Cabin/Canopy	LCD instrument	•	
	High-back suspension seat		•
	FOPS		•
	TOPS	•	
	Heater (For cabin only)	•	
	Fan (For cabin only)	•	
	Radio (For cabin only)	•	
	USB port (For cabin only)	•	
	Rearview mirror (For cabin only)	•	
Working device	Steering head	•	
	Quick connector for AUX. pipes		•
	Mechanical quick coupler	•	
	Hydraulic quick coupler Lines		•
	Hydraulic quick coupler		•
	Tilt rotator		•
	250mm Bucket		•
	450mm Bucket	•	
	1,000mm Ditch cleaning bucket		•
	950mm Arm	•	
	1,200mm Arm		•
	AUX 1 + hammer line	•	
	Hydraulic hammer		•
	Auger		•
	Thumb		•
	Dozer blade	•	
	Dozer cylinder protection plate	•	
	Arm cylinder protection plate		•
	Bucket cylinder protection plate		•
	Boom holding valve		•
	Arm holding valve		•
Tracks	230mm Rubber tracks	•	
	230mm Steel tracks		•
	Telescopic chassis	•	
Hydraulic system	Single electric proportional control joystick		•
	Load-sensing hydraulic system	•	
	ISO&SAE control switch		•
	AUX1	•	
	AUX2		•
Lighting	2 LED Work lights at the Front	•	
	1 Rear LED work light	•	
	1 Boom work light	•	
	Beacon on the Cabin/canopy	•	
Others	Extra counterweight		•



U18/U20 Max. digging radius-4125 mm (without quick coupler)

Standard Arm's Digging Force: 8.5 kN (market-leading performance)

- ▶ **Dual-arm versatility:** Standard/extended arm can meet the needs of different working conditions.
- ▶ **Key specs:** 0.05m³ bucket | 10.5 rpm swing | 15.5kN bucket digging force.
- ▶ **Robust construction:** The heavy-duty machine structure, engineered for China's demanding applications, handles North American and European job sites with ease.



Standard arm, standard counterweight(C=kg) ---Cabin/Canopy(width of undercarriage)										
A	Arm	Max.		2.0 m		1.5 m		---		---
B	(A=)									
2.0 m	950mm	---	---	270/270	270	---	---	---	---	---
	1100mm	---	---	---	---	---	---	---	---	---
1.5 m	950mm	---	---	390/350	320	450/450	450	---	---	---
	1100mm	---	---	310/310	310	---	---	---	---	---
0.5 m	950mm	280/160	150	590/310	290	---	---	---	---	---
	1100mm	250/140	130	550/300	280	---	---	---	---	---
0 m	950mm	---	---	560/310	280	---	---	---	---	---
	1100mm	---	---	540/290	270	510/440	400	---	---	---
0.5 m	950mm	---	---	500/300	280	690/470	430	---	---	---
	1100mm	---	---	490/290	260	710/440	400	---	---	---
-1.5 m	950mm	---	---	320/310	290	460/460	440	---	---	---
	1100mm	---	---	330/290	270	480/450	400	---	---	---

Explanation

The data contained in these tables represent the lifting capacity in accordance with ISO standard 10567. They don't include the weight of the bucket and correspond to 75% of the maximum static tipping load or 87% of the hydraulic lifting power. Data marked \* are the hydraulic limits of the lifting power.