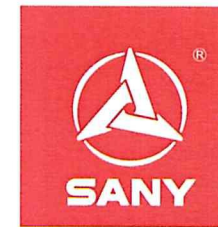




SANY HEAVY MACHINERY LTD
<http://www.sanyglobal.com>

This manual was printed in 2023. The product information may have been changed when you read it. Products (including specific configuration detail, etc.) are based on the specific models and products applicable to markets outside China, which are displayed and sold by agents. For more details, please visit the local authorized agent of SANY Heavy Machinery Ltd.



SY155U PB

Engine power
78.5kw/2000rpm

Bucket capacity
0.6m³

Operating weight
16200kg



Stable and reliable



Excellent operability

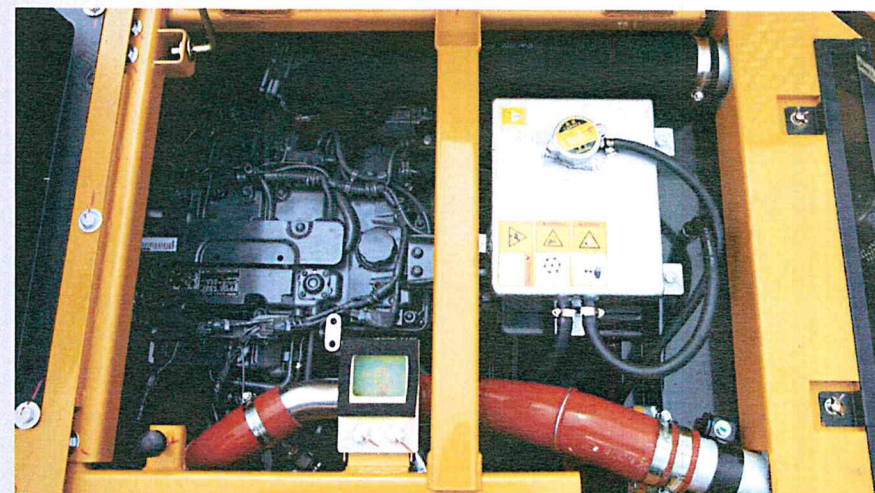


With multiple functions



Flexible





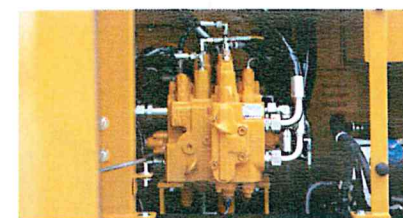
Strong power



Standard high-power Trinity custom Isuzu engine 4JJ1X, the application of accurate fuel injection, accurate flow distribution technology, strong power, to ensure the perfect output of the machine under harsh conditions; DOC + DPF + SCR post-processing system the Euro 5 emission standards.



Add external gear pump and two-way valve to realize multi-action simultaneous operation and more coordinated work;



A new external confluence function is added to the first set of auxiliary pipelines, which increases the maximum flow rate by 114%, meeting the requirements of high-flow attachments.

Precision guarantees Robustness

Durability and robustness are standard features on all SANY excavators. The welded seams, for instance, are done by robots with a high degree of precision. This guarantees maximum load-bearing capacity and a long service life. In addition, there is another advantage that all access panels parts are made exclusively from metal – perfect for the harsh everyday conditions on the construction site.



Quality

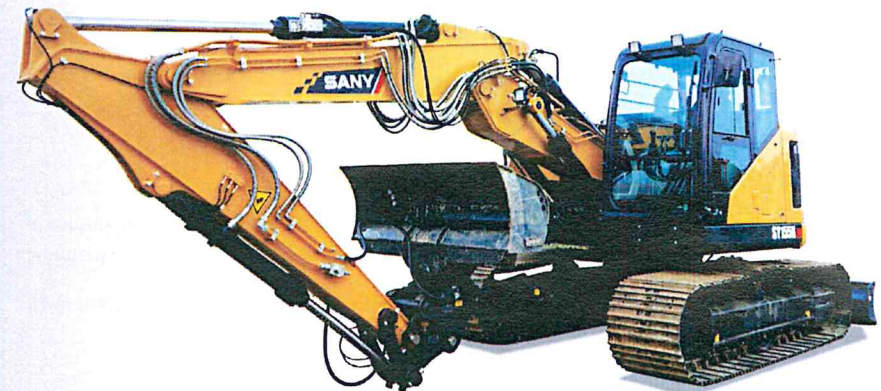
Stable foundation – For those who value durability and stability, the HD chassis is essential. The SY155UPB ensures your needs are met with its standard HD chassis.

Dimensions

The unique double-section boom structure – Known for its small turning radius and increased maneuverability, the SY155UPB finds extensive applications in urban municipal engineering, road maintenance, hillside forest roads, and other settings with restricted working spaces.

User experience

Ergonomic design and enhanced user experience – The wide opening engine bonnet and clear, central arrangement of the key components make routine tasks, such as maintenance and servicing, simple and quick.



Safety

Protection for both people and the machine – From the stable, non-slip hand rails to the large mirrors, camera and emergency stop button, the safety package ensures that your construction site runs safely every day.

Components

Thoroughly reliable – The quality and the stability of the boom are particular priorities for SANY. The topside and underside of the SY155UPB are also manufactured from one continuous metal sheet.

Economy

Economically impressive – The smart control system adjusts the pump capacity to the available engine power, enhancing performance and reducing fuel consumption for increased profitability on every construction site.

Always optimally configured



A monitor with a high-resolution display shows all important data at a glance. The menu navigation is extremely user-friendly and enables the driver to manage machine functions safely and comfortably. The camera image can also be shown on the display if required. The next inspection due and basic data, such as torque and oil and cooling water temperatures, are also displayed. Various attachment devices can also be easily changed at the touch of monitor within the programme. By touching the corresponding function keys you can easily choose the operating mode that best suits the task at hand. The smart SANY drive control takes care of the rest. It always adjusts the engine and hydraulic power precisely to your requirements.

Safety-enhanced cab

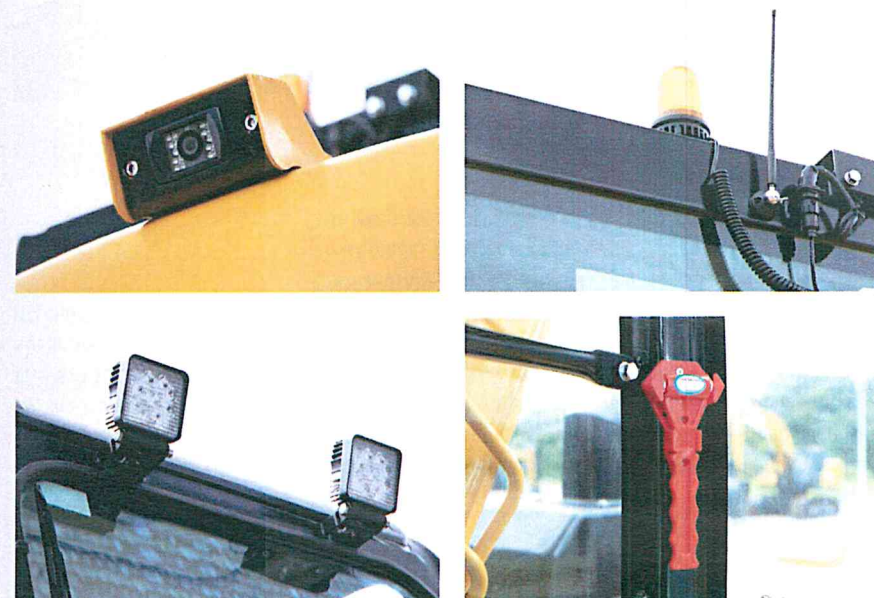
Brand new upgrade of cab

Protection for people and machines

With the ROPS- or FOPS-tested operator's platform, the SY155UPB ensures optimal protection for people, machines, tools, buildings, and the environment. A battery disconnection switch and an emergency stop button are provided as standard, while the travel alarm aids the operator in maintaining focus during operation.

The individual that already has everything

Standard rear view camera, wide and comfortable air suspension seat, multi-functional proportional control handle, ePad integrated button panel, simple and comfortable operation.





The driver's cab welcome to the comfort zone

Safe, easy entry, plenty of room and full visibility outside – the driver's cab leaves nothing to be desired. The driver can also enjoy a comfortable, fully adjustable air-suspension seat, ergonomic controls and a modern audio system. The automatic climate control and powerful ventilation and heating ensure that the temperature and fresh air levels in the cab are always perfect.

Complete research & development and test system

SANY has established complete machine endurance test center with full functions. Each model of excavator must be subjected to over 2,000h field excavating test.

Key components like working device, cab and hydraulic components etc., must be subject to fatigue test over 800,000 times.



Advanced manufacturing technology

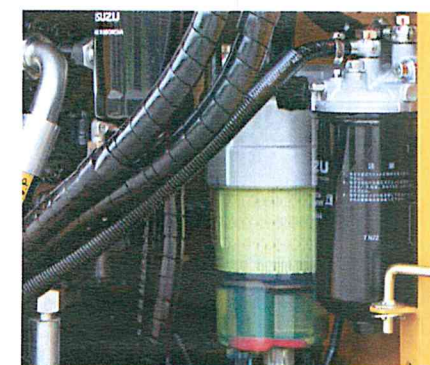
SANY has RGV assembling line and full automatic welding robots, and possesses high precision machining equipment and precise machining center.

SANY's manufacturing and assembling lines won five-star national site in 2013 and national quality award in 2014. In 2023, SANY Mini Excavator Factory was awarded as the intelligent factory.



Convenient maintenance

The SY155UPB's maintenance-friendly concept is based on simplicity. The engine bonnet is easy to open, which makes all components needed for regular checks and maintenance easily accessible. The filter, radiator and battery are arranged centrally and can therefore be accessed easily and quickly. Particularly long oil change intervals also help keep downtimes to a minimum.



Technical specifications

Specification		Main performance	
Operating weight	16200 kg	Gyration speed	12 rpm
Engine	ISUZU	Max. travel speed	High 5.3 km/h, slow 3.1 km/h
Model	4JJ1X	Max. travel force	114 kN
Type	Water-cooled, 4 cylinder, with commonrail and Adblue	Bucket capacity	0.6 m³
Engine power	78.5 kw/2000 rpm	Ground pressure	35.3 kpa
Maximum torque	375 Nm/1800 rpm	Grade ability	70%/35°
Displacement	2.999 L	Digging force of bucket	103 kN
Startig motor	24 V/4 kW	Digging force of arm	67 kN
Electric generator	50 A	Engine max. torque	375 Nm/1800 rpm
Traveling traction	114 kN		
Boom cylinder diameter×distance	105×920 mm		
Arm cylinder diameter×distance	115×1165 mm		
Bucket cylinder diameter×distance	100×885 mm		
Shovel bucket cylinder diameter×distance	130×145 mm		

Service Refill Capacities / Traveling part / Structural Parts / Optioanal

Fuel tank	220 L	Each carrier roller side	/
Engine coolant	23.6 L	Each side of supporting wheel	3
Engine oil	15 L	Standard track	600 mm
Drive (per side)	1.8 L	Final drive	2×2.2 L
Adblue	20 L	Number of track shoe (per side)	44
Hydraulic oil tank	110 L	Number of upper rollers (per side)	1
Water radiator	27 L	Number of lower rollers (per side)	7
Boom	2.35m (Lower Boom) +2.55m (Upper Boom)	Optioanl track width	500/600/700 mm
Arm	2.5 m	Optional arm	2500/3000 mm

Lifting capacities of lower dozer blade

SY155U PB BLADE (ABOVE GROUND)

Conditions: Upper Boom Assembly 2.55m(8.37 ft); Lower Boom Assembly 2.35m (7.71 ft); Arm 2.50 m (8.2 ft); Counterweight 3720 kg (8201 lb); Triple Track Shoes 600 mm
Unit : kg

B	A						At Max. Reach	
	1.5m 4.9ft	3m 9.8ft	4.5m 14.8ft	6m 19.7ft	7.5m 24.6ft			
								D
7m	*4368 *4368						*2856 *2856	4.0m
23ft	*9630 *9630						*6296 *6296	13.0ft
6m	*4039 3094						*2233 *2233	5.7m
19.7ft	*8904 6821						*4923 *4923	18.6ft
4.5m	*4024 *4024	*4273 3007	2853 2063				*2048 1658	6.7m
14.8ft	*8871 *8871	*9420 6629	6290 4548				*4515 3655	21.84ft
3m	6031 4451	3834 2781	2689 1899				*2093 1432	7.2m
9.8ft	13296 9813	8453 6131	5928 4187				*4614 3157	23.55ft
1.5m		3568 2515	2570 1780				*2079 1339	7.4m
4.9ft		7866 5545	5666 3924				*4583 2952	24.13ft
0m	*4895 3546	3387 2333	2475 1685				*2272 1346	7.2m
0ft	*10792 7818	7467 5143	5456 3715				*5009 2967	23.67ft
-1.5m	*5739 3544	3342 2288	2440 1649				*4151 2640	3.7m
-4.9ft	*12652 7813	7368 5044	5379 3635				*9151 5820	12.26ft

1. The lifting capacity is calculated in accordance with ISO10560 and SAEJ1097, where the limit coefficient of hydraulic system is 0.87 and tilting limit coefficient is 0.75;

2. Item with * is limited by hydraulic pressure and item without "*" is limited by stability;

3. Lifting point is front support hole of arm (excluding the weight of bucket). It is necessary to deduct from the above lifting capacity if additional accessory is installed, such as a bucket;

Lifting capacities of lower dozer blade

SY155UPB BLADE (ON GROUND)

Conditions: Upper Boom Assembly 2.55m(8.37 ft); Lower Boom Assembly 2.35m (7.71 ft); Arm 2.50 m (8.2 ft); Counterweight 3720 kg (8201 lb); Triple Track Shoes 600 mm Unit : kg

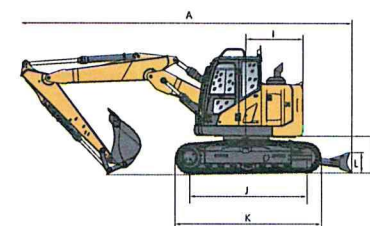
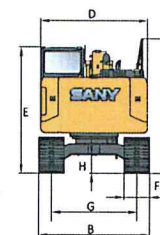
B	A						D
	1.5m 4.9ft	3m 9.8ft	4.5m 14.8ft	6m 19.7ft	7.5m 24.6ft	At Max. Reach	
7m		*4368 *4368				*2856 *2856	4.0m
23ft		*9630 *9630				*6296 *6296	13.0ft
6m			*4039 3094			*2233 *2233	5.7m
19.7ft			*8904 6821			*4923 *4923	18.6ft
4.5m		*4024 *4024	*4273 3007	*3347 2063		*2048 1658	6.7m
14.8ft		*8871 *8871	*9420 6629	*7379 4548		*4515 3655	21.84ft
3m		*7583 4451	*4714 2781	*3464 1899		*2584 1432	7.2m
9.8ft		*16718 9813	*10393 6131	*7637 4187		*5697 3157	23.55ft
1.5m			*5520 2515	*3705 1780		*2079 1339	7.4m
4.9ft			*12170 5545	*8168 3924		*4583 2952	24.13ft
0m		*4895 3546	*5450 2333	*3910 1685		*2272 1346	7.2m
0ft		*10792 7818	*12015 5143	*8620 3715		*5009 2967	23.67ft
-1.5m		*5739 3544	*4495 2288	*3123 1649		*4151 2640	3.7m
-4.9ft		*12652 7813	*9910 5044	*6885 3635		*9151 5820	12.26ft

- The lifting capacity is calculated in accordance with ISO10560 and SAEJ1097, where the limit coefficient of hydraulic system is 0.87 and tilting limit coefficient is 0.75;
- Item with * is limited by hydraulic pressure and item without "*" is limited by stability;
- Lifting point is front support hole of arm (excluding the weight of bucket). It is necessary to deduct from the above lifting capacity if additional accessory is installed, such as a bucket;

Machine dimensions

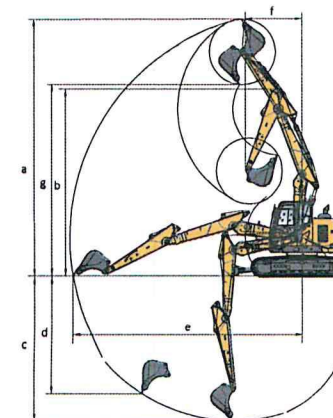
DIMENSIONS (TRANSPORT) (mm) SY155U PB

A. Transport length	8345
B. Transport width	2590
C. Overall height (for transportation)	3063
D. Upperstructure carriage	2490
E. Height over cabin/ROPS	3022
F. Standard track shoe width	600
G. Track gauge	1990
H. Min. ground clearance	425
I. Tail length	1500
J. Distance between tumblers	2930
K. Track length	3665
L. Bulldozer height	510
M. Ground clearance of counterweight	880



Working Area (mm) SY155U PB

a. Max. digging height	9528
b. Overall height over arm by min. swing radius	6902
c. Max. digging depth	5274
d. Max. vertical digging depth	4176
e. Max. digging reach	8591
f. Min. front swing radius	2535
g. Min. dumping height	7060



*arm 2.5m