





### Call for Yanmar solutions









# COMPACTNESS

The combination of creative body design and reliable power, providing "ultra-tight turning" to realize increased versatility and greater work potential.

## The only 10-ton midi-excavator with short tail swing that can operate in jobsites where other 8-ton machines have difficulties

- > Rear overhang of only 17 cm.
- > Undercarriage width reduced to 2,320 mm.
- > Ultra-short rear swing radius of 1,330 mm.

The SV100-1 is exceptionally compact for an excavator in its weight category:

- Increased productivity: the operator can concentrate on his work without worrying about the size of his machine.
- > Easy to dig right up close to walls.
- > Reduced risks of damaging the machine.





### Rear blind spot reduced to a minimum: optimum visibility around the machine

- > Wide windows for perfect all around visibility.
- The front field of vision has also increased greatly and the front glass slides up and down for better communication with others on the outside.



### Side ditch digging right next to walls without ticking out beyond the track

With the front end designed not to stick out beyond the track, the SV100-1 offers extraordinarily tight turning. You can work confidently and efficiently in narrow places and operate smoothly at more work sites.







Particularly well suited to work in urban areas: no requirement to block traffic in both directions.

#### Advantages for the user: power and productivity

- > Ability to carry out major works such as laying drains or digging foundations, due to high performance levels.
- > Excellent dumping height: 5,150 mm.
- > Digging forces similar to that of full-size excavators.



## HIGH PERFORMANCE

### SV100-1

A variety of operator-friendly functions and equipment come together in one unit, adding up to "huge efficiency".

#### Exceptional stability and lifting strength



The combination of a wide counterweight, asymmetric crawlers (system patented by Yanmar VICTAS®), and excellent weight distribution provide the SV100-1 with

an impressive level of stability and exceptional lifting capacities.

The VICTAS® system consists in increasing the bearing surface by increasing the track path and using asymmetric crawlers:

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- > Increased lateral stability and lifting capacity.
- > Reduced ground damage and track wear.
- > Quiet, vibration free movement.



YANMAR has been the world's leading manufacturer of diesel engines since it developed the world's first small diesel engine. Based on original technology developped for more than 100 years, we have studied the improvement of thermal efficiency and cleaner exhaust gases, and have pursued highly efficient, low emission power sources.





Hydraulic circuit fitted with a variable-flow dual piston pump, a gear pump and a multiple combination directional control valve:

- Increased working speed due to the cumulative pump capacities.
- Smooth, simultaneous operation of all functions, even when travelling.









Combining long experience and unrivalled expertise, YANMAR's diesel technology ensures environmental performance and high efficiency.



### Electronically controlled water-cooled EGR\* system reduces air-polluting oxides of nitrogen (NOx)

This system cools a portion of the exhaust gases and mixes them with intake air to lower the concentration of oxygen in air intake. That drops the combustion temperature, limits NOx emissions and boosts fuel efficiency.

\*EGR: Exhaust Gas Recirculation



### Auto-deceleration mechanism to lower engine speed when not in operation

After the operating lever has been in neutral 4 seconds, the engine automatically goes to idle. This lowers noise and emissions in the surrounding area and improves fuel economy while the operator waits for the next dump truck. When the lever is moved again, the engine returns to its previous speed.

### A high-power, eco-friendly engine meeting Stage IIIA emission regulations

The YANMAR TNV direct injection diesel engine was built for clean emissions and powerful output. With its improved fuel injection system, it meets Stage IIIA / Interim Tier 4 emissions regulations of the European Commission (EC) and the US Environmental Protection Agency (EPA). Its quiet operation makes it both people- and planetfriendly.

#### Eco-Mode setting vastly lowers fuel consumption

Switching to eco-mode controls engine speed efficiently while letting you use less fuel as you work. Moved again, the engine returns to its previous speed.



### Electronically controlled engine and new hydraulic system for more work with less fuel

The SV100-1's electronic control of engine speed and torque synergizes with the new high efficiency hydraulic system to yield a fast activation. This lets you do more work while greatly cutting fuel consumption.





### COMFORT SV100-1

Brimming with comfort and ease of use, the SV100-1 is a perfect fit from the operator's vantage point.

Large-sized cabin

### Large, comfortable cabin ensures plenty of operating space

Wider than previous models, the SV100-1 cabin offers lots of elbow room. Generous leg room lets you work in comfort, and entrances are wide enough to get in and out easily.



### Double-slide pneumatic suspension seat for relaxed operation

Not just the seat, but the operating levers and seat can slide back and forth simultaneously, enabling optimal lever position and operating posture for the operator's body type.

#### Standard pneumatic suspension seat

The SV100-1's pneumatic seat can be adjusted either alone or together with operating levers. This improves the driver's work position and his comfort, while reducing shocks and vibrations.



Proportional control modulation switch PTO operation vastly enhances attachment operability.



Large travel pedals are easy to press, allow confident and reliable work.

#### Wrist control levers + adjustable arm rests

Non-tiring wrist control levers are easy to grasp, and arm rests can be repositioned to meet the operator's preferences and work posture, so that even delicate control and long hours of operation are comfortable.

Automatic two-speed travel system switches from high travel speed to low when handling heavy loads and returns to high speed when load lightens.

#### Air-conditioner

### Enhanced air conditioning performance, highly improved cooling over earlier model

The SV100-1's air conditioner lets you work all seasons at a comfortable temperature. Changing the blower vent position to the front of the operator and adjusting the air direction allow the system to keep the cabin 7°C cooler than the previous model when the ambient temperature is 35°C. That creates a much cooler environment during the summer. In addition, air volume has been raised.

### A / C using outside air + defroster function enable comfort on the job

The air conditioner's use of outside air keeps the pressure high in the cabin so that dust stays out, ensuring that the cabin is clean and fresh. Also comes with a defroster function to remove front glass clouding.

#### Low-noise cabin

### Much quieter cabin for better comfort and work performance

Made with a sturdy, sound-blocking advanced antivibration construction, the SV100-1 offers a quieter environment than ever. The noise level reaching the operator is just 74 dB(A), greatly reducing fatigue over long hours of work.

#### Liquid-filled cab anti-vibration mount for excellent sound blocking and comfortable ride

The cab mount uses anti-vibration rubber filled with silicon oil. Five-point support gently absorbs even great vibration. This also greatly reduces cab noise and operator stress on the job.



#### Other equipment

Radio with USB plug



#### Storage space



Cup holder





Tool box





# SV100-1

Dependability and confidence which are critical to work going smoothly. The SV100-1 delivers the protection that gives you breathing room.

#### ISO-conforming cabin with sharply enhanced rigidity for safety and confidence

The cabin's use of a high-strength, high-rigidity ROPS enhances protects operator space in the event of a rollover. It also conforms to the FOPS 1 standard for structures protecting the operator from falling objects.



(FOPS 2 protection bars are available in option)

### Track frame provides handy anchor holes for secure machine



## Lock lever includes engine neutral start mechanism to prevent danger of accidental operation

The engine will not start unless the lock lever is completely locked, which prevents equipment from moving suddenly if the lever is accidentally operated when the engine is started.





Unlocked

#### Standard equipment retracting seat belt is easy to fasten, withdraws out of the way when it's unfastened



### Upward blower designed to protect workers, landscaping

The SV100-1's upward blower grill ventilates at an upward angle, keeping hot exhaust away from surrounding workers and landscaping.

Standard back and side mirrors let operator check for safety around and behind machine and keep others safe



### 2 bright front lights improve visibility and give you better night work performance

- > 2 bright front lights on top of the cabin come as standard equipment. With wide-angle front visibility secure, you can work with confidence at evening and night without sacrificing efficiency and precision.
- > Work lamp built into lower part of boom, where it is protected from breaking.



The travelling alarm, which comes standard, makes electronic noise to warn others the machine is moving backwards.





#### Other enhancing equipment

Evacuation hammer



Large steps for getting on and off



Large hand grips





## > MAINTENANCE

Simple maintenance structure for fast and easy access wherever it's needed.





> Open the cover on the upper

the back of the radiator.

right to fill the fuel tank, access

the reserve tank and easily clean

> Easy to adjust the fan belt and air conditioning belt.

- > Troublesome maintenance is now a thing of the past. Take satisfaction in quicker checks and the advanced durability they produce.
- > Covers open easily, with no special tools needed, enabling fast and smooth checks and minimizing maintenance and cleaning time.
- > Air conditioning filter inside the cab removes easily without tools for easy cleaning and replacement.



> Wide-opening rear hood for easy checks and maintenance of the engine area and air cleaner.





fin style that avoids clogging.

> The right hood similarly opens

wide and without tools to facilitate

battery checks. It's also easy to

- > Careful routing and protection of the hydraulic pipes



- > The bottom of the fuel tank has a flange for easy cleaning.
- > Iron plate hood is highly durable, makes damage repair easy.
- > Ridged crawler frame easily sheds soil, reducing cleanup time and effort.





## TECHNICAL SPECIFICATIONS

#### Operating weight +-2% (EC Norms):

- > 9625/9675 kg (rubber/steel crawlers without hyd. quick hitch)
- > 9775/9825 kg (rubber/steel crawlers with hyd. quick hitch)

#### Transport weight +-2% (EC Norms):

- > 9550/9600 kg (rubber/steel crawlers
- without hyd. quick hitch) > 9700/9750 kg (rubber/steel crawlers with hyd. quick hitch)







		SV100-1		
	Туре	4TNV98T-ZSBV1		
4-cylinder	Rated output	54.7 kw / 74.4 HP / 2200 rpm		
Yanmar engine	Displacement	3318 cm <sup>3</sup>		
	Max. torque	299.1 N.m. / 1650 rpm		
	System capacity	1151		
Hydraulic circuit	Max. pressure	280 bar		
	2 variable displacement piston pumps	2 x 77.7 l/mn		
	1 fixed displacement gear pomp	58.8 l/mn		
	1 gear pump	22.5 l/mn		
Performances	Travelling speed	2.5 / 4.4 km/h		
	Swing speed	9.2 rpm		
	Arm digging force	4760 kgf		
	Bucket digging force	6980 kgf		
	Grade ability	30°		
Undercarriage	Ground pressure	0.38 / 0.39 kg/cm <sup>2</sup>		
	Shoe width	485 mm		
Undercamage	Ground clearance	450 mm		
	Blade (width x height)	2320 x 520 mm		
	Fuel tank capacity	1151		
	Cooling system	10.4		
Miscellaneous	Transport dimensions $(L \times w \times h)$	6390 x 2320 x 2800 mm		
	Noise level (2000/14/EC & 2005/88/EC)	74 dBA (LpA) 98 dBA (LwA)		
Optional equipment	<ul> <li>Special paint</li> <li>Standard, ditch cleaning &amp; swivelling buckets</li> <li>Kit of safety valves</li> <li>Quick couplers</li> <li>3<sup>rd</sup> hydraulic proportional circuit to arm end</li> <li>Proportional 4<sup>th</sup> hydraulic circuit</li> </ul>	<ul> <li>Anti-theft device (with key / with keyboard)</li> <li>FOPS 2 protection bars on cab roof + front bars</li> <li>Beacon light</li> <li>Yanmar hydraulic quick hitch</li> <li>Hydraulic breaker</li> </ul>		
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The data contained in these tables represent the lifting capacity in accordance with ISO standard 10567. They do not 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.

Subject to any technical modifications. Dimensions given in mm with standard Yanmar bucket.

PTO	I neoretical da	ta at 2100 rpm
FIU	Pressure	Oil flow
	0 ~ 240 bar	136.5 ~ 60 l/mn
	0 ~ 240 bar	136.5 ~ 60 l/mn

 $\land$  > The oil flow reduces as the pressure increases.

#### Machine with cabin, rubber crawlers, without bucket, without quick hitch.

A: Overhang from rotational axis (m). B: Height of hooking point (m). C: Safe working load (kg).

ł Tipping load, rating over front

⊨D Tipping load, rating over side 90°

Blade on ground									
А	M	axi	5.0		4.0		3.0		
В	=D	ŀ	۳Ď	ŀ	۳Ď	ŀ	۳Ď	ŀ	
5.0	*1840	*1840	-	-	*1800	*1800	-	-	
4.0	1380	*1840	*1860	*1860	*1860	*1860	-	-	
3.0	1220	*1910	1660	*1880	*2210	*2210	-	-	
2.0	1140	*1940	1580	*2230	2210	*2670	3330	*3880	с
1.0	1130	*1980	1530	*2450	2090	*3250	2970	*4630	C
0	1160	*2060	1490	*2620	2000	*3420	3010	*4700	
-1.0	1280	*2140	1490	*2540	2000	*3320	2900	*4410	
-2.0	1550	*2060	-	-	2000	*2880	3030	*3840	

#### Blade above ground

А	Maxi		5.0		4.0		3.0		
В	۳Ď	ł	۳Þ	ŀ	ĦĎ	ŀ	۳Ď	ŀ	
5.0	*1840	*1840	-	-	*1800	*1800	-	-	
4.0	1380	1600	*1860	*1860	*1860	*1860	-	-	
3.0	1210	1430	1640	*1880	*2210	*2210	-	-	
2.0	1130	1340	1560	1850	2180	*2670	3330	*3880	с
1.0	1100	1280	1510	1800	2090	2520	2960	3630	C
0	1150	1360	1470	1730	1960	2330	2970	3500	
-1.0	1250	1470	1460	1760	1960	2330	2860	3610	
-2.0	1510	1790	-	-	1970	2370	2930	*3840	





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