



YANMAR

Vi017

MINI-EXCAVATOR



Operating weight

1830 kg

Engine

3TNV70-XBV

Digging force (short arm / long arm)

9,6 kN / 8,6 kN

Digging force (bucket)

16,1 kN

COMPACT DESIGN AND RELIABLE – PERFORMANCE AT YOUR FINGERTIPS





COMPACT & ROBUST DESIGN

The zero-tail swing ViO17 is the perfect choice for working in tight areas such as urban renewal, grading or landscaping. The machine upper frame slews within its track width, allowing you to focus fully on the tasks to perform. Additionally, cylinder guards come as standard to offer maximum protection and minimize unnecessary downtime.



EFFICIENT ENGINE

Combining performance and capability with efficiency and low fuel consumption, the ViO17 adopts Yanmar's TNV series engine platform. The Stage V-compliant 3-cylinder direct injection engine offers impressive power and class-leading performance.



VERSATILITY

Adapted to suit a variety of applications, the ViO17 now comes with the option of a long digging arm to improve its working range. To further increase its range of applications, an additional counterweight of 83kg is now available. Coupled with its variable under-carriage, the ViO17 boasts an outstanding stability. Finally, 4 tie-down points are now available on the track frame to make it safer to transport.



INNOVATIVE SYSTEM

The 3rd hydraulic circuit mounted as standard is equipped with proportional control, which provides operators with greater control over the work tools. Additionally, adjustable potentiometers can also be mounted (as options) on the 3rd and 4th hydraulic circuits to further increase the precision of operations.



MAXIMUM SAFETY

With safety considered a key priority, the ViO17 achieves ROPS, TOPS and FOPS certification for the canopy. Other safety features include an orange seatbelt and LED work lights as standard, while seatbelt sensor, orange/green beacons, travel alarm, and a polycarbonate front shield to provide maximum protection when working with a breaker, come as options.



SMOOTH & ACCURATE HYDRAULICS

Powered by a ViPPS hydraulic system, which cumulates the flow of separate pumps in order to obtain the optimal combination in terms of speed, power, smoothness and balance, the ViO17 guarantees smooth and simultaneous operation of working movements, even while traveling.



LOW COST OF OWNERSHIP

Delivering impressive productivity in a compact package, the ViO17 has been designed to have an easy access to service points in order to facilitate its simple maintenance. Furthermore, Yanmar's full cylinder protection and the 4 tie-down points to make the machine easy to transport help reduce the total cost of ownership.



EASY TO TRANSPORT

Efficient and lightweight, the ViO17 boasts a transport weight of just 1,695kg, meaning it can be easily towed between work sites, along with buckets or a light work tool, on a standard 2.5 tons GVW trailer. Four tie-down points on the track frames (standard) make transport preparation fast and simple.

When the under-carriage is fully retracted the ViO17 can access the most restricted areas and becomes perfect for trenching and landscaping work in tight urban areas or at residential properties. Operators benefit from a short turning radius at the front and rear, and once the under-carriage is extended the ViO17 benefits from excellent stability.



ROBUST AND RELIABLE

Durable, dependable and rental tough, the ViO17 has been designed to excel in even the toughest environments. All cylinders are protected by a spring type steel plate, which reduces drastically the Total Cost of Ownership of the machine. Structure of the chassis and durable steel covers provide bullet-proof resistance. The large counterweight protects against possible shocks and friction against the walls.



IMPROVED WORKING RANGE

Adaptable to suit a variety of applications, the ViO17 comes now with a long arm (1100mm) in standard, a short arm (950mm) being available as option.

UNMATCHED STABILITY

With an operating weight of 1,830kg, variable undercarriage (955–1,280mm) and optional additional counterweight (83kg), the ViO17 ensures optimum stability and outstanding flexibility to suit every application.

The ViO17 features an extendable undercarriage with reduced clearance between sliding parts, which prevents soil build-up.



Extended undercarriage: 1280 mm



Retracted undercarriage : 955 mm



CONTROLABLE & VERSATILE

Thanks to the 3-pump ViPPS hydraulics system that works with a double variable displacement piston pump and a gear pump, operators benefit from a maximum hydraulic flow and pressure of respectively 48,4 l/min and 210 bars. Furthermore, both the 3rd (standard) and 4th (option) hydraulic lines come equipped with proportional controls and can be further enhanced with the addition of potentiometers (option), giving operators greater control and flexibility over their work tools.

With a digging force of 9.6/16.1kN (short arm/bucket), traction force of 16.9kN (first speed) and two travel speeds (2.1 or 4.3km/h) the ViO17 delivers the power and performance operators require.



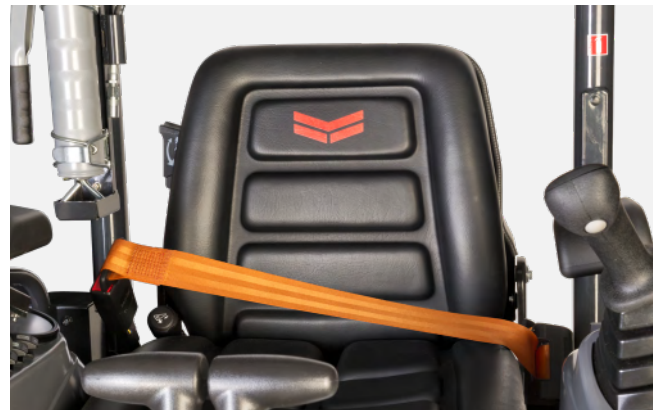


ERGONOMIC DESIGN

Thanks to its ergonomic layout, the ViO17 provides a comfortable and practical working environment for the operator. The easy-access canopy features excellent visibility, fully-adjustable suspension seat, and perfect position of joysticks and armrests. Large travel pedals are now available (option) to further improve operators' comfort. The track frame layout features three bottom rollers that ensure a comfortable and stable ride.

SAFETY CONSCIOUS

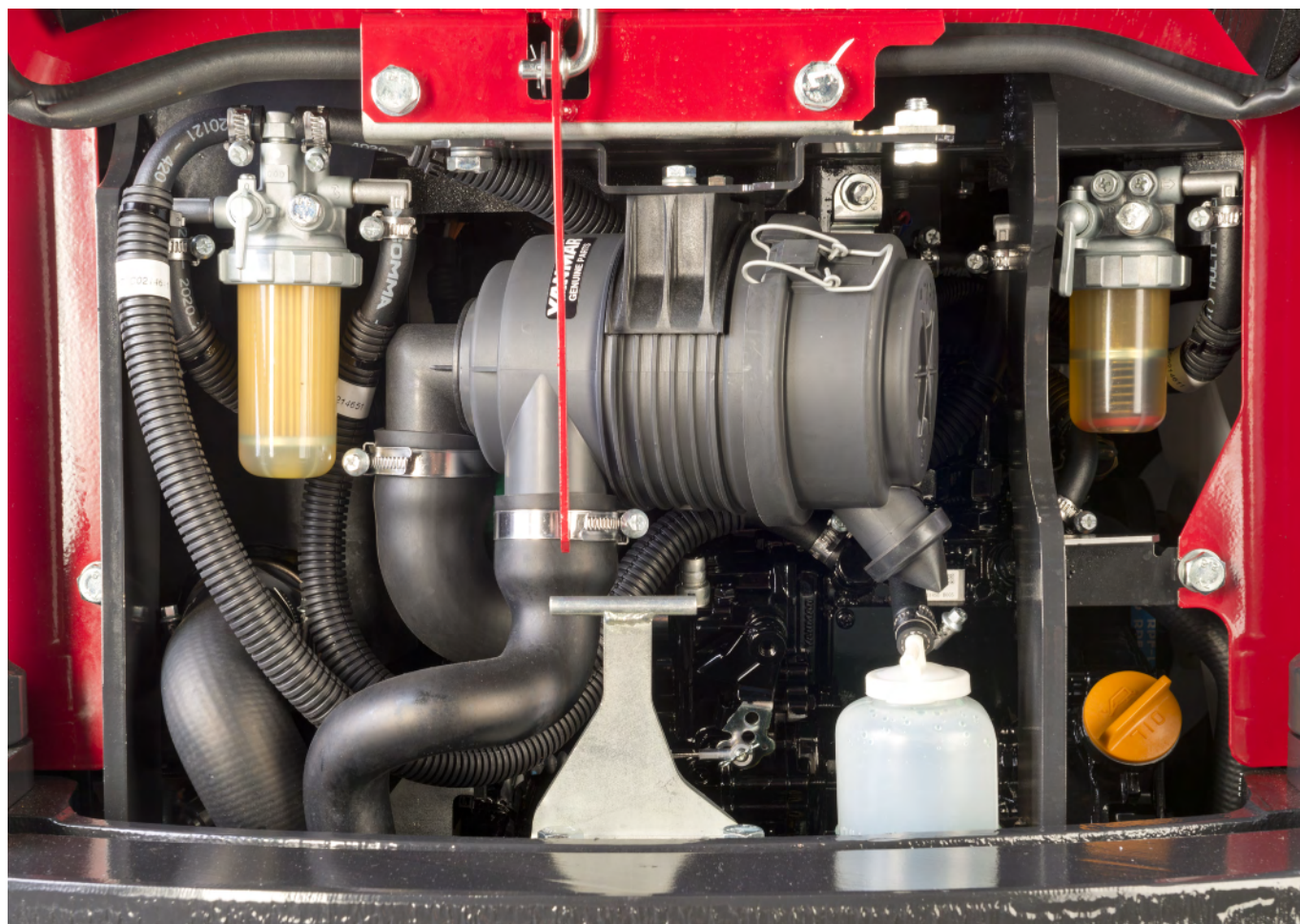
As with every Yanmar excavator, safety has been prioritized throughout design and build. Alongside ensuring 360° visibility from the operator seat, the ViO17 features powerful LED boom work light and an orange seatbelt as standard. Flashing green/orange beacons, travel alarms, additional work lights and seatbelt sensor can be specified as optional extras. A polycarbonate protective shield is also available to protect the operator when using a breaker.



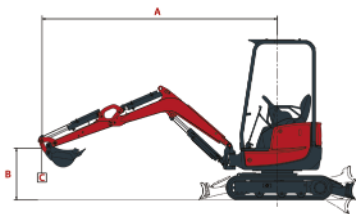
SIMPLE MAINTENANCE

The excellent accessibility to engine components from the hood allow for easy and quick daily maintenance checks. The seamless disassembly of side panels offers a straight and quick way to other key components (hydraulics, radiator, etc.).

The battery and fuse boxes are located in a lockable compartment under the operator's seat to maximize security, while ground-level access removes the need for specialist equipment.



LIFTING CAPACITY



Tipping load,
rating over front























Tipping load,
rating over side 90°





















A: Overhang from
rotational axis (m)

B: Height of hooking point (m)
C: Safe working load (kg)





















Short arm

	Blade down										Blade up											
A	Max.			3,0 m		2,5 m		2,0 m		1,5 m		Max.			3,0 m		2,5 m		2,0 m		1,5 m	
B	(A=)											(A=)										
2,5 m	2,63	325*	335*	--	--	315*	330*	--	--	--	--	2,63	325*	320*	--	--	310*	320*	--	--	--	--
2,0 m	2,96	250	335*	--	--	305*	315*	--	--	--	--	2,96	240	235	--	--	305*	305*	--	--	--	--
1,5 m	3,12	210	340*	250	340*	360*	355*	400*	395*	--	--	3,12	210	205	235	225	355*	350*	390*	390*	--	--
1,0 m	3,23	205	350*	235	365*	315	415*	435	545*	--	--	3,23	200	195	230	225	310	285	415	410	--	--
0,5 m	3,26	200	370*	220	395*	295	480*	400	655*	--	--	3,26	195	195	220	210	285	270	390	370	--	--
0 m	3,12	205	385*	220	400*	290	515*	390	705*	560	1030*	3,12	205	195	215	210	290	260	385	355	540	550
-0,5 m	2,94	225	395*	--	--	280	490*	375	680*	590	1010*	2,94	220	215	--	--	275	255	370	350	565	535
-1,0 m	2,58	270	405*	--	--	--	--	385	605*	585	885*	2,58	265	255	--	--	--	--	375	355	570	540
-1,5 m	1,95	385*	385*	--	--	--	--	--	--	565*	575*	1,95	375*	385*	--	--	--	--	--	--	565*	590*



















Short arm, additional counterweight

	Blade down										Blade up											
A	Max.			3,0 m		2,5 m		2,0 m		1,5 m		Max.			3,0 m		2,5 m		2,0 m		1,5 m	
B	(A=)											(A=)										
2,5 m	2,63	330*	335*	--	--	315*	325*	--	--	--	--	2,63	325*	330*	--	--	315*	315*	--	--	--	--
2,0 m	2,96	330*	340*	--	--	310*	315*	--	--	--	--	2,96	270	270	--	--	310*	310*	--	--	--	--
1,5 m	3,12	245	345*	265	345*	350*	350*	395*	400*	--	--	3,12	240	240	260	255	350*	345*	390*	400*	--	--
1,0 m	3,23	235	355*	260	365*	330	330*	540*	545*	--	--	3,23	230	225	255	250	330	325	545*	445	--	--
0,5 m	3,26	230	370*	265	385*	325	325*	435	675*	--	--	3,26	220	220	250	240	320	310	430	435	--	--
0 m	3,12	235	380*	245	400*	320	320*	435	690*	630	1015*	3,12	230	225	245	235	315	310	430	405	610	620
-0,5 m	2,94	260	395*	--	--	310	310*	430	700*	625	1025*	2,94	255	250	--	--	310	300	425	415	615	645
-1,0 m	2,58	310	415*	--	--	--	--	435	590*	650	890*	2,58	305	305	--	--	--	--	425	400	635	640
-1,5 m	1,95	375*	375*	--	--	--	--	--	--	565*	560*	1,95	375*	380*	--	--	--	--	--	--	560*	565*

Long arm

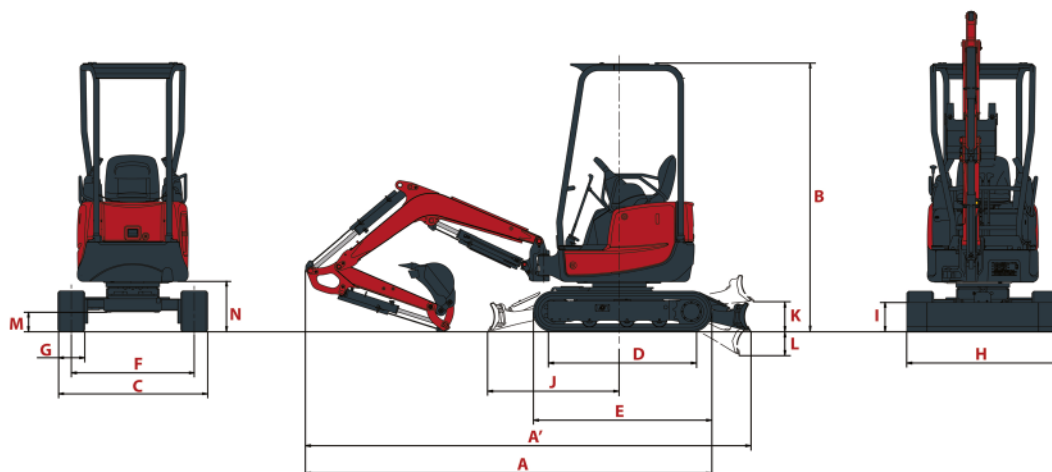
	Blade down										Blade up											
A	Max.			3,0 m		2,5 m		2,0 m		1,5 m		Max.			3,0 m		2,5 m		2,0 m		1,5 m	
B	(A=)											(A=)										
2,5 m	2,72	275*	295*	--	--	270*	275*	--	--	--	--	2,72	275*	300*	--	--	270*	265*	--	--	--	--
2,0 m	3,08	240	310*	250	305*	270*	280*	--	--	--	--	3,08	240	220	245	235	270*	270*	--	--	--	--
1,5 m	3,27	215	320*	240	320*	315*	315*	--	--	--	--	3,27	215	190	235	220	315*	315*	--	--	--	--
1,0 m	3,35	200	330*	230	345*	320	395*	475*	480*	--	--	3,35	200	180	230	210	315	295	475*	385	--	--
0,5 m	3,36	195	345*	235	380*	290	455*	415	640*	--	--	3,36	195	180	230	205	285	265	410	370	--	--
0 m	3,25	200	360*	230	395*	285	495*	405	725*	605	985*	3,25	200	180	230	200	280	255	400	360	595	500
-0,5 m	3,12	220	380*	220	405*	290	525*	400	700*	610	1055*	3,12	220	195	220	200	285	260	385	340	605	520
-1,0 m	2,84	250	395*	--	--	280	465*	380	670*	605	990*	2,84	250	220	--	--	280	250	375	340	590	525
-1,5 m	2,21	335	400*	--	--	--	--	395	495*	610	710*	2,21	335	300	--	--	--	--	385	350	600	515

Long arm, additional counterweight

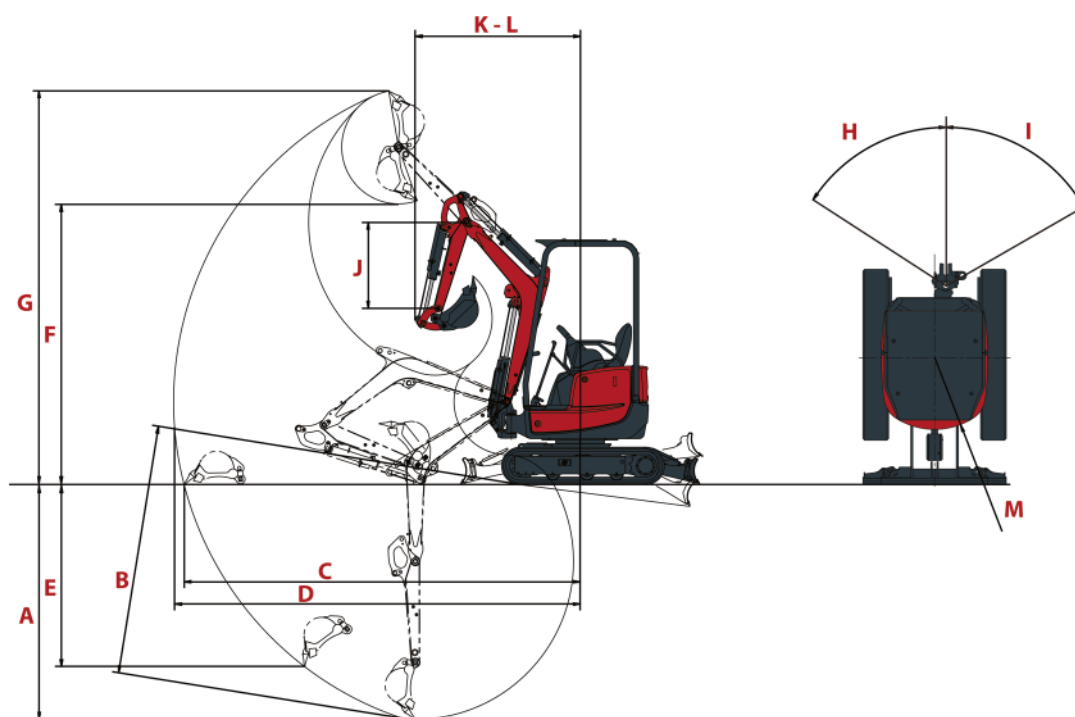
	Blade down										Blade up											
A	Max.			3,0 m		2,5 m		2,0 m		1,5 m		Max.			3,0 m		2,5 m		2,0 m		1,5 m	
B	(A=)											(A=)										
2,5 m	2,72	280*	295*	--	--	270*	275*	--	--	--	--	2,72	280*	290*	--	--	265*	265*	--	--	--	
2,0 m	3,08	255	305*	295*	305*	270*	270*	--	--	--	--	3,08	255	255	295*	295*	270*	265*	--	--	--	
1,5 m	3,27	240	310*	300*	310*	310*	315*	--	--	--	--	3,27	235	235	300*	300*	310*	310*	--	--	--	
1,0 m	3,35	220	325*	260	340*	385*	380*	485*	485*	--	--	3,35	220	215	255	255	380*	375*	485*	480*	--	
0,5 m	3,36	215	340*	255	375*	330	460*	455	625*	--	--	3,36	210	210	250	255	325	330	445	435	--	
0 m	3,25	220	360*	250	405*	320	505*	435	705*	630	975*	3,25	220	215	245	245	310	310	425	415	560	
-0,5 m	3,12	245	375*	250	395*	315	520*	425	715*	635	1060*	3,12	240	230	245	240	310	305	420	415	610	
-1,0 m	2,84	285	400*	--	--	315	470*	430	675*	640	995*	2,84	280	270	--	--	310	300	420	415	655	
-1,5 m	2,21	400*	390*	--	--	--	--	470*	485*	720*	700*	2,21	400*	395*	--	--	--	--	475*	410	585	

[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.**]

WORKING RANGE



A Overall length	3 460 mm / 3 480 mm	H Overall blade width	955-1 280 mm
A' Overall length with blade at the back	3 790 mm / 3 810 mm	I Overall blade height	250 mm
B Overall height	2300 mm	J Blade distance	1 130 mm
C Overall width	955-1 280 mm*	K Max. lifting height above the ground	260 mm
D Length of track on ground	1 175 mm	L Max. lowering depth from the ground	205 mm
E Undercarriage length	1 525 mm	M Min. ground clearance under lower frame	175 mm
F Lane	720-1 050 mm*	N Min. ground clearance under upper frame	415 mm
G Track width	230 mm		



A Overall length	2 160 mm / 2 310 mm	H Boom swinging base to left	42°
B Overall length with blade at the back	2 260 mm / 2 410 mm	I Boom swinging base to right	65°
C Overall height	3 660 mm / 3 810 mm	J Arm length	950 mm / 1 100 mm
D Overall width	3 760 mm / 3 900 mm	K Front turning radius	1 644 mm / 1 670 mm
E Length of track on ground	810 mm / 930 mm	L Front turning radius with boom swing	1 130 mm / 1 140 mm
F Undercarriage length	2 500 mm / 2 590 mm	M Rear turning radius w/o / with counterweight	640 mm / 725 mm
G Lane	3 350 mm / 3 440 mm		

Balancier standard / **Balancier long**
 *Retracted undercarriage / Extended undercarriage

TECHNICAL SPECIFICATIONS

[WEIGHT +/- 2% (EU-STANDARDS)]

Operating weight (rubber tracks – including quick hitch & ditch cleaning bucket)
 Transport weight (rubber tracks – bare stick)

Canopy	Ground pressure
1 830 kg	0,306 kPa (kg/cm ²)
1 695 kg	0,283 kPa (kg/cm ²)


[ENGINE]

Type	3TNV70-XBV
Regulation	Stage V
Fuel	Diesel
Net power (kW)	10,1 kW
Gross power (kW)	10,34 kW
Displacement	0,854 liter
Maximum torque	47,8 – 52 N.m
Cooling	Water-cooling
Starter (V-kW)	12 V - 1,4 kW
Battery (V-Ah)	12 V – 45 Ah
Alternator (V-A)	12 V - 20A

[HYDRAULIC SYSTEM]

Maximum pressure	210 bars
1 double piston pump with variable flow	2 x 17.6 l.min ⁻¹
1 gear up	13.2 l.min ⁻¹
1 gear pump for pilot line	11.2 l.min ⁻¹

PTO	Measured data at max. engine speed	
	Pressure (bar)	Oil flow
1 way	0 – 150 bar	32,2 – 16,5 (l.min ⁻¹)
0 – 150 bars	0 – 150 bar	32,2 – 16,5 (l.min ⁻¹)

 Oil flow decreases as the pressure increase.

[PERFORMANCE]

Travel speed (low / high)	2,1 / 4,3 km.h ⁻¹
Rotation speed	9,5 rpm
Digging force (short arm / long)	9,623 kN / 8,627 kN
Digging force (European bucket)	16,123 kN
Traction force (1st speed)	16,95 kN
Gradeability	30°
Noise level (2000 / 14 / CE & 2005 / 88 / CE)	-

[UNDERCARRIAGE]

Number of slide shoe plate	1
Number of bottom rollers	3
Track tensioning system	Grease adjuster

[CAPACITIES]

Fuel tank	20 liters
Coolant	3,1 liters
Engine oil	2,8 liters
Hydraulic circuit (including hydraulic tank)	28,8 liters
Hydraulic tank	16,5 liters

[MAINTENANCE FREQUENCY]

[Change engine oil and filter: **500 hours**] [Change fuel filter: **250 hours**] [Change hydraulic oil filter: **500 hours**]
 [Change hydraulic oil: **1000 hours**] [Change hydraulic oil return filter: **500 hours**] [Change cooling fluid: **2000 hours**]

STANDARD EQUIPMENT

PERFORMANCE

3TNV70-XBV Yanmar diesel engine | Stage V compliant | Direct injection | Air filter clogging indicator | Water separator | Long arm (1100 mm) | Extendable undercarriage (950-1 280 mm) | 1 auxiliary hydraulic line with proportional control on right joystick | 2nd travel speed control on blade lever | 1 LED work light under the boom.

COMFORT & EASE OF USE

Adjustable mechanical suspension vinyl seat with logo | Adjustable armrests | 1 x 12V electric supply + 2 x 5V USB charging ports | Cup holder | Lockable document box.

SAFETY AND DURABILITY

ROPS / TOPS / FOPS1 protection rating canopy | Access handrails | Orange seatbelt | Support bracket for fire extinguisher | 4 tie down points on the undercarriage | Bucket, arm and blade cylinder guard.

MISCELLANEOUS

Toolkit | Grease pump | Blue quick connector on battery terminal.

OPTIONAL EQUIPMENT

PERFORMANCE

Short arm (950mm) | 1/2 hydraulic circuit (clamshell bucket line) | Flat face hydraulic quick couplers | 2 additional front LED work lights | 1 additional rear LED work light | 1 pluggable LED orange flashing beacon | Special paint | 4th auxiliary proportional and adjustable hydraulic line | additional counterweight of 83kg.

COMFORT & EASE OF USE

Large travel pedals | Greasing pump bracket.

SAFETY AND DURABILITY

Safety valves for lifting applications | Seatbelt sensor (visual/sound warning) with or without pluggable LED green flashing beacon | Front polycarbonate operator protection shield (canopy) | Variety of anti-theft systems | Travel alarms.

MISCELLANEOUS

Internal/external battery cut-off removable handles (plastic/steel).

[ATTACHMENTS]

We offer a range of factory fitted attachments to maximize the versatility of your mini excavator. Yanmar offers selected mechanical and hydraulic quick couplers, Powertilt, digging buckets, ditch cleaning buckets, rippers and breakers.



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