



YANMAR

TRUE ZERO TAIL SWING MINI EXCAVATOR

Vi020-6 / Vi023-6

[Gross] 15.0kW <20.1HP>







Vi020-6 ***Vi023-6***

**Power, flexibility and stability
in a compact package**



BUILDING
WITH YOU

Features of ViO20-6 / ViO23-6

Spring Steel Cylinder Guards **YANMAR ORIGINAL**

To prevent cylinder rods from damage.

— **Page 10**

Hydraulic Quick Coupler **YANMAR ORIGINAL**

No tools required to change the attachments.
(Optional)

— **Page 13**

LED Working Lights

Provide brighter light.

— **Page 10**

Undercarriage Options

ViO20-6: Fixed undercarriage
ViO23-6: Sliding Variable Undercarriage

— **Page 7**

Low-Noise Carrier Rollers

Makes low noise while traveling.
Noise friendly to surroundings.

— **Page 10**





ROPS*1 & FOPS*2 4-Pole Canopy

The protective structure that meets ISO standards, minimizes the damage in case of an accident.

Page 12

Boom-Inside Hoses

The hoses are designed to pass through the boom structure for protection.

Page 10

SMARTASSIST Remote

Advanced fleet management system.

Page 13

YANMAR Engine YANMAR ORIGINAL

Powerful, reliable and efficient.

Page 8, 9

Auto Deceleration & Eco Mode

Efficient automatic engine deceleration. Eco mode reduces fuel consumption by 20%.

Page 9

True Zero Tail Swing

Ensures safer operation on the tight job sites.

Page 6



Watch the video

*1 Roll-Over Protective Structure (ROPS): A structure to protect the operator wearing a seat belt, in case the machine rolls over.
*2 Falling Objective Structure (FOPS): A structure to protect the operator from falling objects.



Machine width **Vi020-6 1380mm / Vi023-6 1380mm - 1550mm**

True Zero Tail Swing

YANMAR pioneered the concept of a true zero tail swing excavator. The upper frame doesn't extend beyond the track width, enabling operator to tackle jobs safely in tighter spaces.

Operating Weight

Vi020-6 2125kg

Vi023-6 2295kg

*Canopy and rubber track type

Pick the right excavator for your job

Vi023-6 Undercarriage



Sliding Variable Undercarriage & Foldable Blade

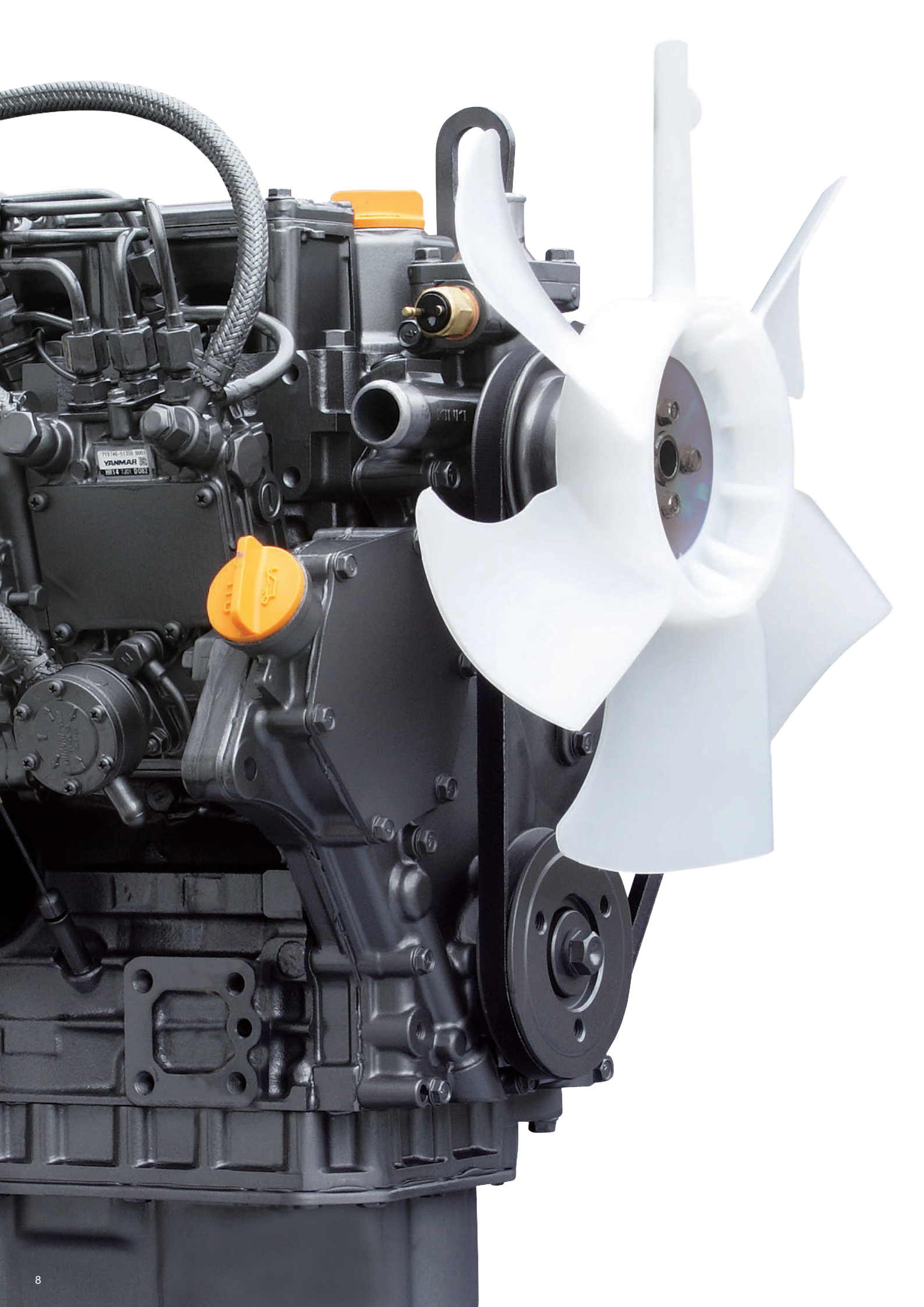
The undercarriage retracts to 1380mm to enter narrow job sites and extends to 1550mm for stability while working. The width of the blade can be adjusted to width of the excavator thanks to foldable blade.

Vi020-6 Undercarriage



Fixed Undercarriage

Fixed robust undercarriage provides excellent stability and long lasting lifetime.



Reliable YANMAR engine designed to deliver powerful output and fuel efficiency

YANMAR Engine

Equipped with legendary YANMAR TNV engine. It guarantees high quality, power and efficiency thanks to advanced technologies.

Model **3TNV76-PBV1** Output (Gross) **15.0kW**



Auto Deceleration

Automatically lowers the engine speed to idle when the machine stops for more than 4 seconds. Reverts to the original speed, once the operation lever is moved.



Eco Mode

Lower fuel consumption by reducing the engine speed to 88% from maximum speed.

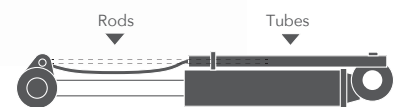
Proven durability



Watch the video

Spring Steel Cylinder Guards

All cylinders are protected with unique spring steel structured guards to reduce machine downtime .



Boom-Inside Hoses

The hoses are designed to pass through the boom structure for protection.

The picture illustrates the inside boom structure.



LED Working Lights

Provide brighter light for work safely and with accuracy in dark spaces.



Boom light



Headlight



Cabin light



Low-Noise Carrier Rollers

Makes low noise while traveling. Noise friendly to surroundings.



Comfortable operator space



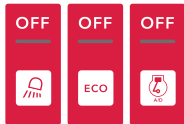
1
Large LCD Monitor with LED Backlight

Easy-to-read display showing operating status and maintenance information.



2
Dial Accelerator

Fingertip control dial easy to change the engine speed.



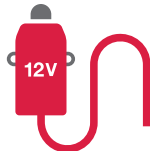
3
Ergonomically Designed Controls

Ergonomically arranged operating controls and switches are within the reach of one hand.



4
Reclining and Sliding Seat

Adjustable to fit the operator's body and posture.



5
External Power Outlet (12V)

The 12V power socket can be used for charging your cell phone and other devices.



6
P.T.O. Switch and Flow Adjustment

Hydraulic P.T.O. lines can be controlled with the tip of your fingers. Ensures precise operation of attachments.



Easy maintenance and enhanced safety



1 Engine, Radiator and Air Cleaner

The engine and right-hand side bonnets have wide openings. This allows you to have an easy access engine, radiator and air cleaner.



2 Battery, Hydraulic Oil and Fuel Tanks

Lockable right upper hand bonnet provides easy access and security.



3 ROPS and FOPS 4-Pole Canopy

The protective structure that meets ISO standards minimizes the damage in case of an accident.



4 Grease Pump Holder

A secure location for grease pump holder.



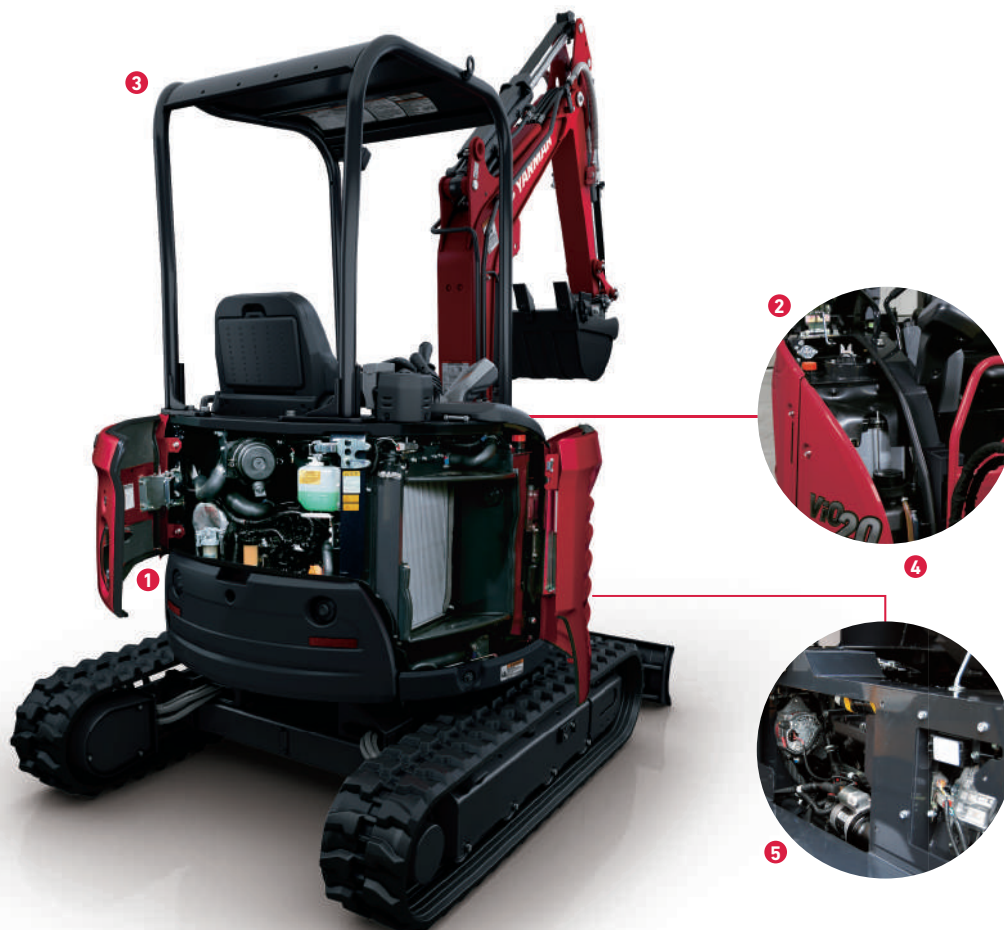
5 Engine, Hydraulics and Electric Components

Seat mount and floor covers are easily removed to access components.

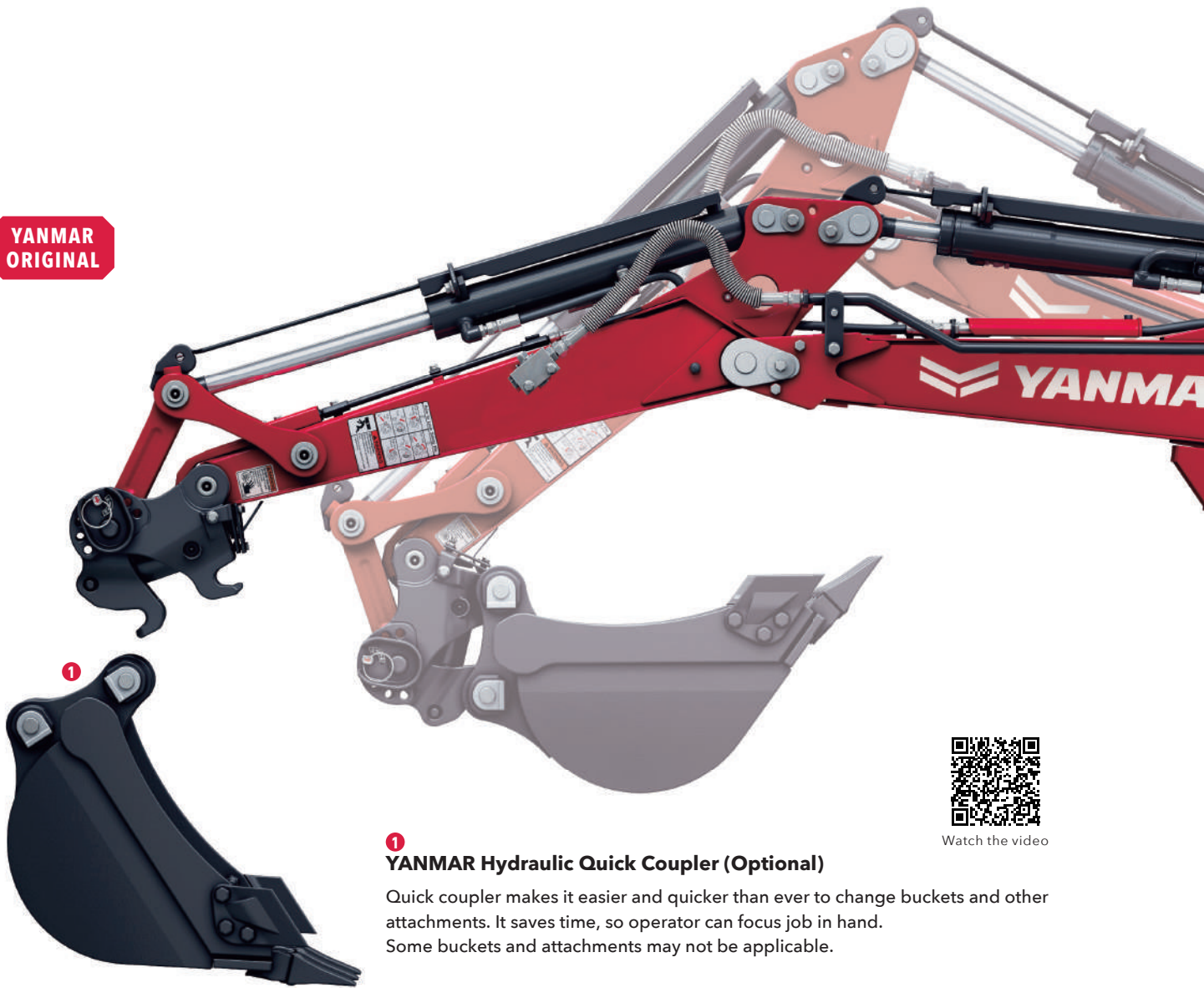


Emergency Engine Stop Switch

In case of emergency, the engine can be shut down easily with emergency switch.



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1 YANMAR Hydraulic Quick Coupler (Optional)

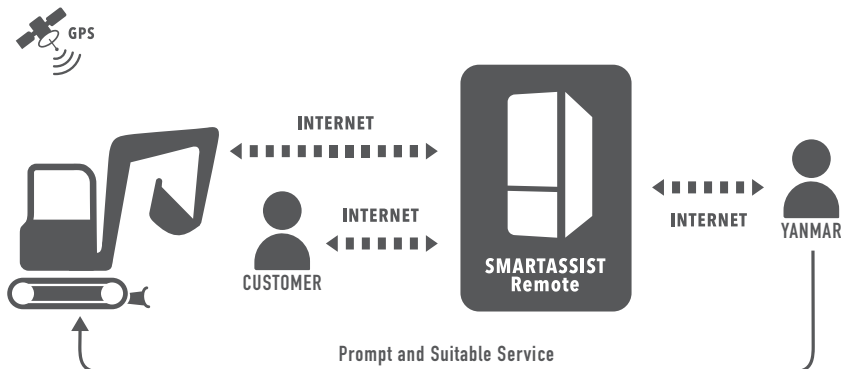
Quick coupler makes it easier and quicker than ever to change buckets and other attachments. It saves time, so operator can focus job in hand. Some buckets and attachments may not be applicable.

SMARTASSIST

Remote



Watch the video



Our service to avoid machine downtime

SMARTASSIST Remote is a telematic system that provides sophisticated management for construction equipment equipped with a GPS transmission terminal. This system monitors construction equipment remotely and ascertains maintenance intervals and troubles in a timely manner via the Internet, which allows YANMAR to constantly provide the customers with suitable services and support.

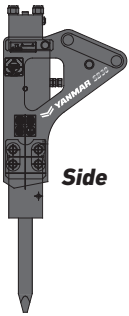
Attachments

YANMAR Hydraulic Breaker

A wide range of hydraulic breakers are available for demolition applications. Each model delivers reliability, productivity and durability. Refer to breaker's catalog for more information.



Product Lineup



Side



Pin Mounted



Cap Mounted



Box Housing
(Silenced)

YANMAR's recommended parts

ecoY
GUARANTEED QUALITY & DURABILITY



Watch the video



ecoY Bucket Tooth-Adapter



ecoY Idler



ecoY Rubber Track



ecoY Rubber Pad



ecoY Carrier Roller

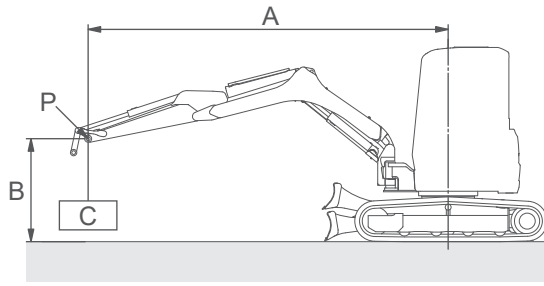


ecoY Sprocket



ecoY Track Roller

ViO20-6 / ViO23-6 Lifting Capacity



With: Canopy and rubber track

Without: Quick coupler and bucket

A: Reach from swing center line [m (in.)]

B: Load point height [m (in.)]

C: Lifting load [kg (lbs.)]

P: Load point

: Rating over front

: Rating over side or 180 degrees

ViO20-6

Loads shown in table include weight of standard bucket [55kg (122lbs.)] and quick coupler [40kg (89lbs.)].

Blade on ground

Unit: kg (lbs.)

A [m (in.)]	Max.		2.5 (98.4)		2.0 (78.7)		Min.	
B [m (in.)]								
2.0 (78.7)	*510 (1124)	270 (595)	—	—	—	—	—	—
1.5 (59.1)	*510 (1124)	240 (529)	*620 (1366)	390 (859)	—	—	—	—
1.0 (39.4)	*530 (1168)	230 (507)	*730 (1609)	380 (837)	*1000 (2204)	520 (1146)	*1060 (2336)	550 (1212)
0.5 (19.7)	*530 (1168)	230 (507)	*810 (1785)	370 (815)	*1100 (2425)	490 (1080)	*1200 (2645)	520 (1146)
0 (0)	*540 (1190)	240 (529)	*820 (1807)	360 (793)	*1090 (2403)	480 (1058)	—	670 (1477)
-0.5 (-19.7)	*550 (1212)	260 (573)	*770 (1697)	350 (771)	*1040 (2292)	480 (1058)	—	—
-1.0 (-39.4)	*520 (1146)	310 (683)	*630 (1388)	350 (771)	*850 (1873)	460 (1014)	—	—

Blade above ground

Unit: kg (lbs.)

A [m (in.)]	Max.		2.5 (98.4)		2.0 (78.7)		Min.	
B [m (in.)]								
2.0 (78.7)	310 (683)	260 (573)	—	—	—	—	—	—
1.5 (59.1)	280 (617)	240 (529)	450 (992)	390 (859)	—	—	—	—
1.0 (39.4)	270 (595)	230 (507)	450 (992)	380 (837)	610 (1344)	510 (1124)	640 (1410)	540 (1190)
0.5 (19.7)	270 (595)	230 (507)	430 (947)	360 (793)	590 (1300)	490 (1080)	640 (1410)	520 (1146)
0 (0)	280 (617)	240 (529)	420 (925)	350 (771)	580 (1278)	480 (1058)	860 (1895)	670 (1477)
-0.5 (-19.7)	310 (683)	260 (573)	420 (925)	350 (771)	580 (1278)	470 (1036)	—	—
-1.0 (-39.4)	360 (793)	300 (661)	410 (903)	340 (749)	570 (1256)	460 (1014)	—	—

ViO23-6

Blade on ground [Track width : 1380mm (retracted)]

Unit: kg (lbs.)

A [m (in.)]	Max.		2.5 (98.4)		2.0 (78.7)		Min.	
B [m (in.)]								
2.0 (78.7)	*510 (1124)	290 (639)	—	—	—	—	—	—
1.5 (59.1)	*510 (1124)	270 (595)	*620 (1366)	440 (970)	—	—	—	—
1.0 (39.4)	*530 (1168)	260 (573)	*730 (1609)	410 (903)	*1000 (2204)	560 (1234)	*1060 (2336)	570 (1256)
0.5 (19.7)	*530 (1168)	260 (573)	*810 (1785)	410 (903)	*1100 (2425)	540 (1190)	*1200 (2645)	570 (1256)
0 (0)	*540 (1190)	270 (595)	*820 (1807)	380 (837)	*1090 (2403)	510 (1124)	—	660 (1455)
-0.5 (-19.7)	*550 (1212)	300 (661)	*770 (1697)	390 (859)	*1040 (2292)	520 (1146)	—	—
-1.0 (-39.4)	*520 (1146)	360 (793)	*630 (1388)	390 (859)	*850 (1873)	530 (1168)	—	—

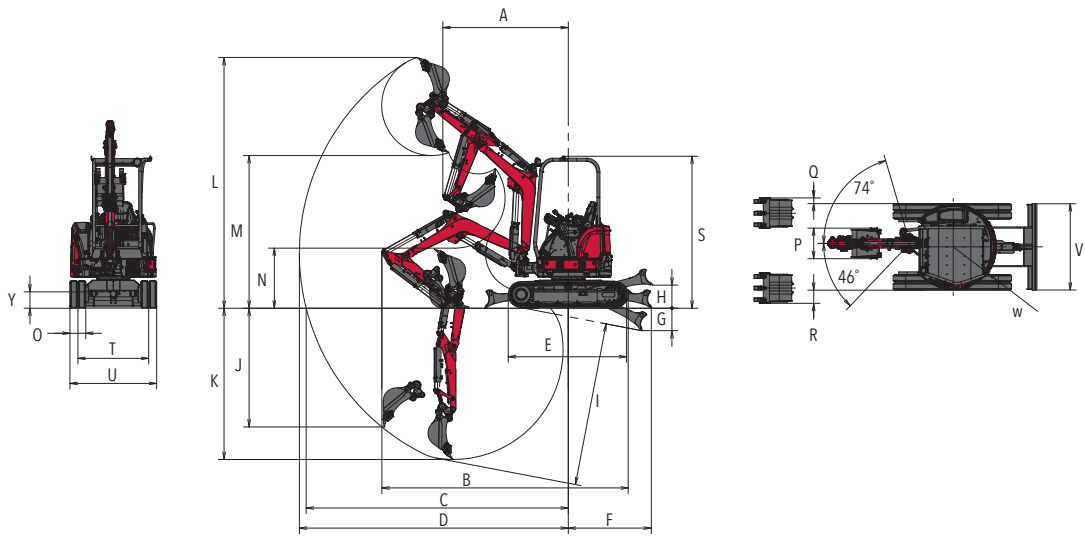
Blade above ground [Track width : 1380mm (retracted)]

Unit: kg (lbs.)

A [m (in.)]	Max.		2.5 (98.4)		2.0 (78.7)		Min.	
B [m (in.)]								
2.0 (78.7)	350 (771)	290 (639)	—	—	—	—	—	—
1.5 (59.1)	320 (705)	270 (595)	*620 (1366)	440 (970)	—	—	—	—
1.0 (39.4)	300 (661)	250 (551)	500 (1102)	410 (903)	680 (1499)	550 (1212)	710 (1565)	570 (1256)
0.5 (19.7)	320 (705)	260 (573)	490 (1080)	410 (903)	670 (1477)	540 (1190)	730 (1609)	570 (1256)
0 (0)	320 (705)	260 (573)	460 (1014)	380 (837)	640 (1410)	500 (1102)	860 (1895)	650 (1433)
-0.5 (-19.7)	350 (771)	290 (639)	470 (1036)	380 (837)	640 (1410)	510 (1124)	—	—
-1.0 (-39.4)	420 (925)	350 (771)	470 (1036)	390 (859)	660 (1455)	520 (1146)	—	—

Note:
The lifting load with the asterisk (*) mark is limited by hydraulic lifting capacity rather than tipping. The lifting capacity shown in the above list is based on the ISO Standard No. 10567 and represents either 87% of hydraulic lifting capacity or 75% of tipping load, which is smaller.

● Dimensions



Rubber track specification
Unit: mm (in.)

		A <at boom swing>	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	Y
ViO20-6 Canopy	With quick coupler	2000 (78.7) <1700 (66.9)>	3930 (154.7)	4180 (164.6)	4290 (168.9)			360 (14.2)	365 (14.4)	2610 (102.8)	1890 (74.4)	2410 (94.9)	4000 (157.5)	2430 (95.7)	955 (37.6)			90 (3.5)	210 (8.3)		1130 (44.5)	1380 (54.3)	1380 (54.3)		
	Without quick coupler	1820 (71.7) <1530 (60.2)>	3890 (153.1)	4020 (158.3)	4140 (163.0)	1890 (74.4)	1320 (52.0)				2460 (96.9)	1870 (73.6)	2270 (89.4)	3840 (151.2)	2570 (101.2)	1050 (41.3)	250 (9.8)	490 (19.3)			2420 (95.3)				690 (27.2)
ViO23-6 Canopy	With quick coupler	2000 (78.7) <1700 (66.9)>	3930 (154.7)	4180 (164.6)	4290 (168.9)			335 (13.2)	355 (14.0)	2600 (102.4)	1890 (74.4)	2410 (94.9)	4000 (157.5)	2430 (95.7)	955 (37.6)			5-90 (0.2-3.5)	125-210 (4.9-8.3)		1130-1300 (44.5-51.2)	1380-1550 (54.3-61.0)	1380/1550 (54.3/61.0)		
	Without quick coupler	1820 (71.7) <1530 (60.2)>	3890 (153.1)	4020 (158.3)	4140 (163.0)					2450 (96.5)	1870 (73.6)	2270 (89.4)	3840 (151.2)	2570 (101.2)	1050 (41.3)										

● Specifications

MODEL		ViO20-6				ViO23-6			
TYPE		Canopy				Canopy			
		With quick coupler		Without quick coupler		With quick coupler		Without quick coupler	
WEIGHT	Operating weight	Rubber track	kg (lbs.)		2165 (4773)	2125 (4685)		2335 (5148)	2295 (5060)
		Steel track	kg (lbs.)		2225 (4905)	2185 (4817)		2395 (5280)	2355 (5192)
ENGINE	Type	Vertical 3-cylinder water-cooled diesel engine							
	Model	3TNV76-PBV1							
	Rated output, gross	kW (HP) / rpm		15.0 (20.1) / 2400					
BUCKET	Capacity, standard	cu.m (cu.ft)		0.06 (2.12)					
	Width, standard	mm (in.)		490 (19.3)					
PERFORMANCE	Max. digging force	Bucket	kN (lbs.)		16.3 (3682)	17.5 (3934)		16.3 (3682)	17.5 (3934)
		Arm	kN (lbs.)		12.7 (2844)	13.1 (2954)		12.7 (2844)	13.1 (2954)
	Max. digging depth <at the blade down>	mm (in.)		2410 (94.9) <2610 (102.8)>	2270 (89.4) <2460 (96.9)>		2410 (94.9) <2600 (102.4)>		2270 (89.4) <2450 (96.5)>
		mm (in.)		1890 (74.4)	1870 (73.6)		1890 (74.4)		1870 (73.6)
	Max. vertical wall digging depth	mm (in.)		1890 (74.4)	1870 (73.6)		1890 (74.4)		1870 (73.6)
	Max. cutting height	mm (in.)		4000 (157.5)	3840 (151.2)		4000 (157.5)		3840 (151.2)
	Max. dumping height	mm (in.)		2430 (95.7)	2570 (101.2)		2430 (95.7)		2570 (101.2)
	Max. digging radius of the ground	mm (in.)		4180 (164.6)	4020 (158.3)		4180 (164.6)		4020 (158.3)
	Front min. swing radius <at swinging the boom>	mm (in.)		2000 (78.7) <1700 (66.9)>	1820 (71.7) <1530 (60.2)>		2000 (78.7) <1700 (66.9)>		1820 (71.7) <1530 (60.2)>
Boom swing angle: left / right	degrees		46 / 74						
SPEED	Travel speed: high / low	Rubber track	km/h (mph)		4.2 (2.6) / 2.2 (1.4)				
		Steel track	km/h (mph)		4.2 (2.6) / 2.2 (1.4)				
	Swing speed	rpm		10					
GROUND PRESSURE	With standard track	Rubber track	kPa (PSI)		26.3 (3.81)	25.8 (3.74)		28.3 (4.10)	27.8 (4.03)
		Steel track	kPa (PSI)		27.2 (3.94)	26.7 (3.87)		29.2 (4.24)	28.8 (4.18)
TANK CAPACITY	Fuel tank	L (gal)		27.5 (7.3)					
	Hydraulic oil tank	L (gal)		25.1 (6.6)					
HYDRAULIC SYSTEM	Pump displacement	L/min (gpm)		21.6 (5.70)×2 <Variable displacement pump> 20.4 (5.39)×1 <Gear pump>, 10.8 (2.85)×1 <Gear pump>					
	Relief set pressure	MPa (PSI)		20.6 (2988)×2, 16.7 (2422)×1, 2.9 (421)×1					
	Max. P.T.O. output	L/min (gpm)		42 (11.1)					

All data are subject to change without notice. Note that the standard equipment may vary. Consult your YANMAR dealer for confirmation.

YANMAR COMPACT EQUIPMENT



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