



**YANMAR**

TRUE ZERO TAIL SWING EXCAVATOR

# **Vi080-1**

[Gross] 39.3kW <52.7HP>











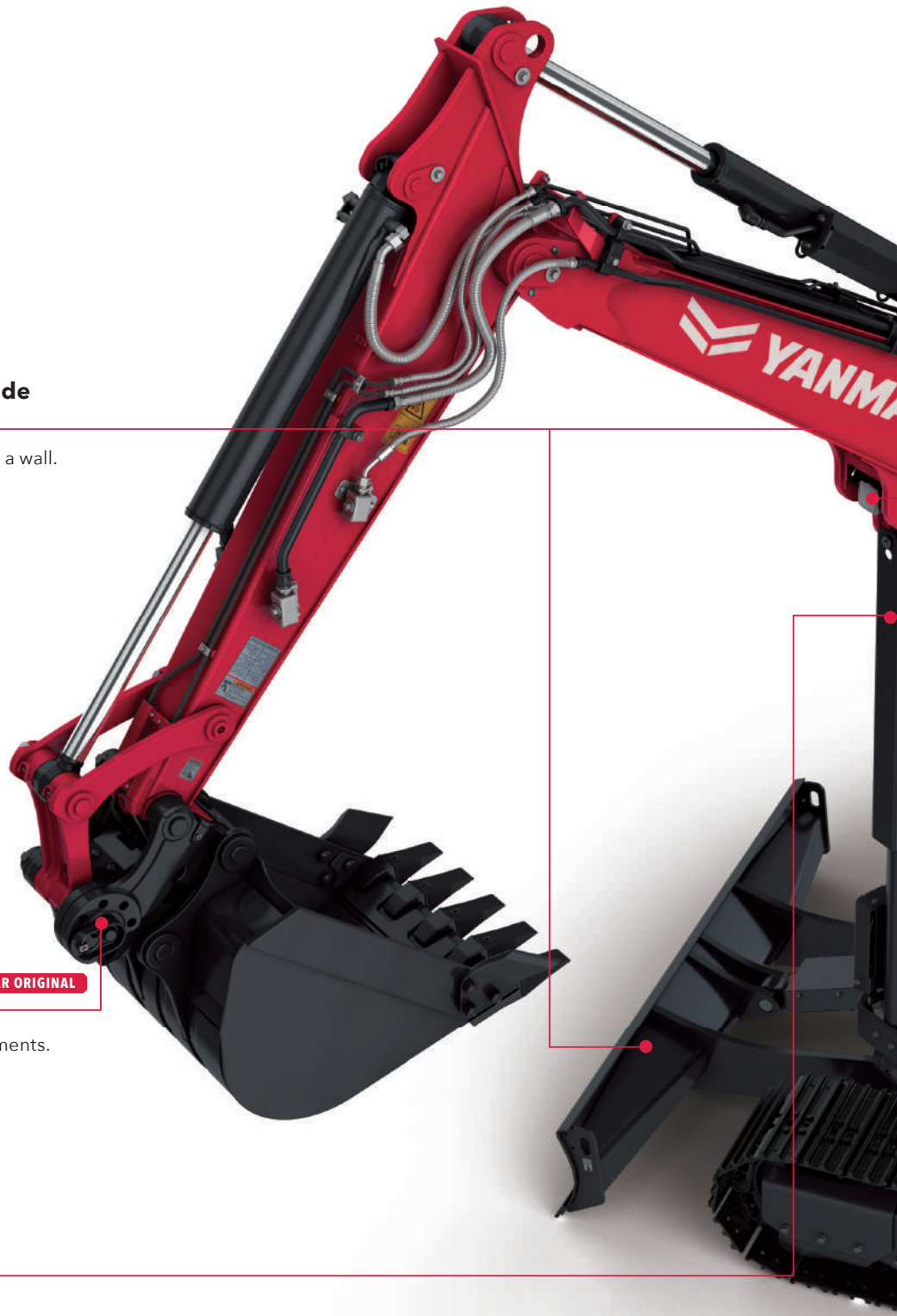
## ***Vi080-1***

**Offers the performance of  
a large excavator while  
enjoying the benefits of  
mini excavator**



***BUILDING  
WITH YOU***

# Features of Vi080-1



## Standard Boom Swing and Blade

Boom swing enables parallel digging to a wall.  
Blade is useful for grading and stability.

Page 7

## Hydraulic Quick Coupler **YANMAR ORIGINAL**

No tools required to change the attachments.  
(Optional)

Page 13

## Boom Cylinder Guard

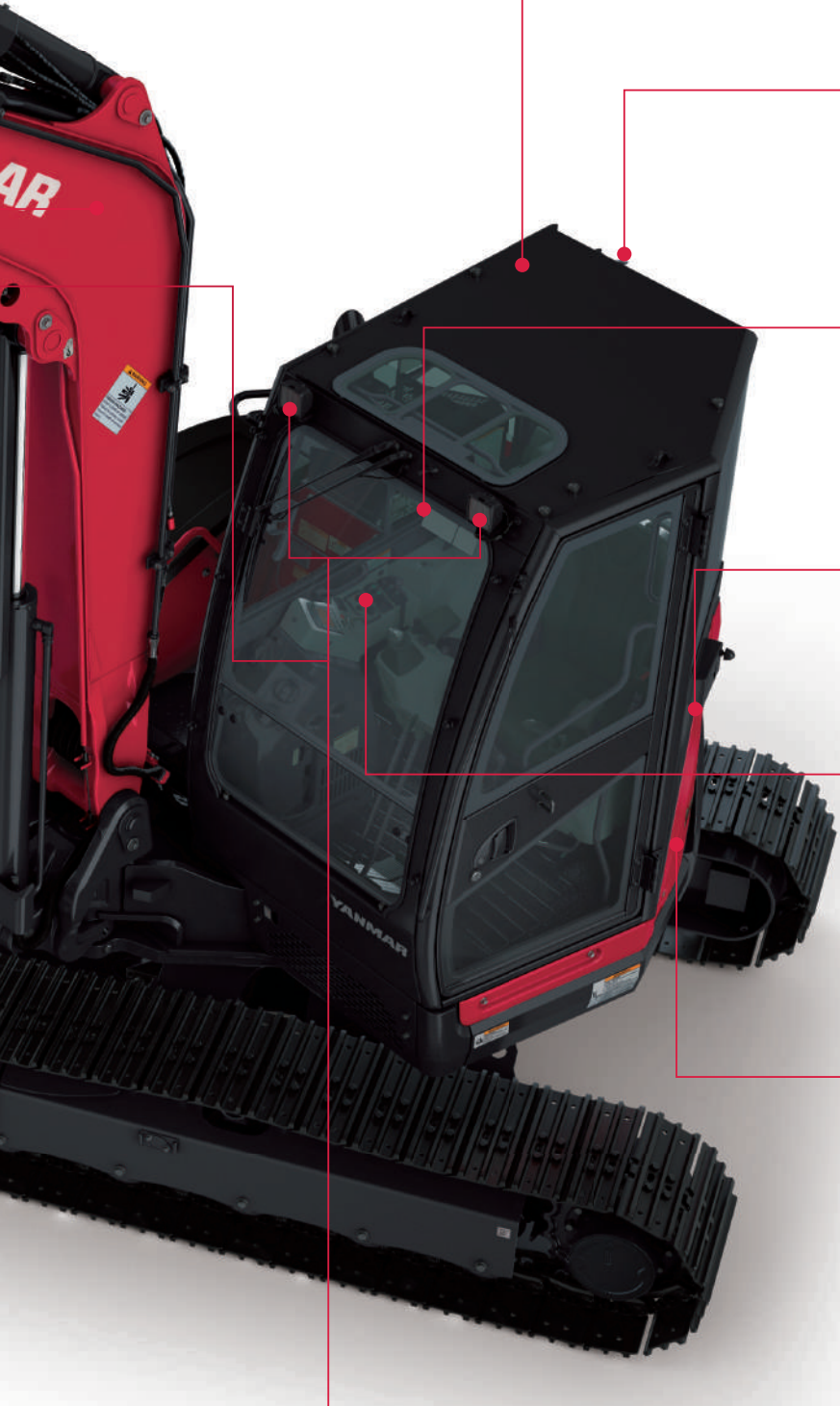
To prevent cylinder rod from damage.

Page 10

## LED Working Lights

Provide brighter light.

Page 10



### **ROPS\*1 and OPG\*2 TOP Guard (Level I) Cabin**

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

**Page 10**

### **Back Mirror**

Standard back mirror provides sufficient visibility. Ensures safer operation on the job sites.

**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 15%.

**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 Operator Protective Guard (OPG): A structure to protect the operator from falling objects.





Machine width **2270mm**

### **True Zero Tail Swing**

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

Operating Weight

**8125kg**

\*Cabin and steel track type

# Delivers the performance of a large excavator while keeping the benefits of a mini excavator



Boom swing angle  
**60°** to right and  
**57°** to left.

### Standard Boom Swing

One of the major advantages of mini excavator over heavy excavator is a boom swing. It provides the necessary flexibility for parallel digging to obstacles.



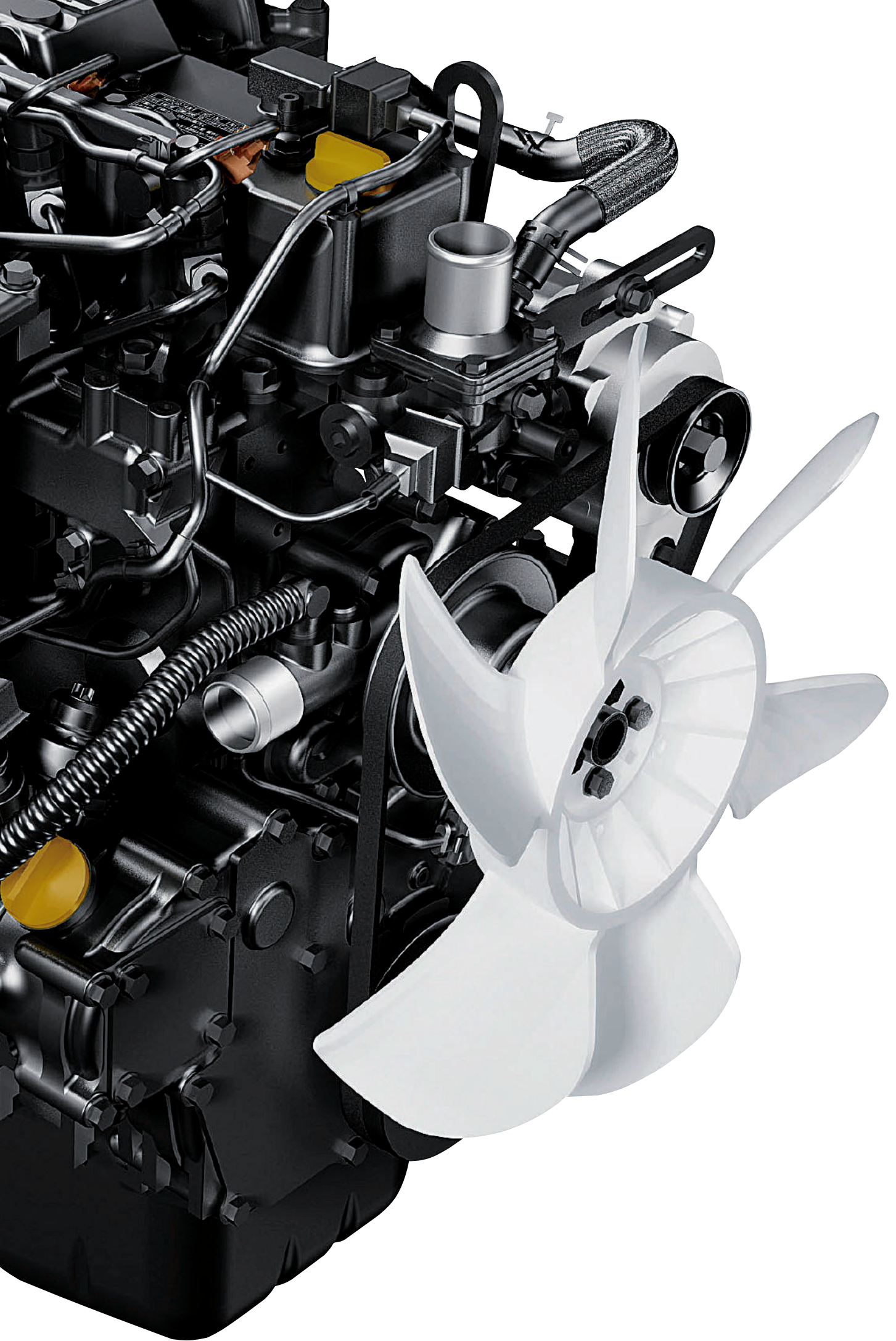
Min. swing radius  
**2720 mm**  
Min. boom swing radius  
**2370 mm**

Tail swing radius  
**1135 mm**

### Standard Blade

The efficient dozing can be achieved thanks to the perfectly shaped blade. It also provides an extra stability during digging and lifting.







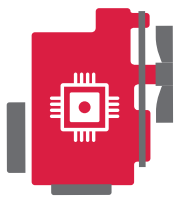
# Reliable YANMAR engine designed to deliver powerful output and fuel efficiency

## YANMAR Engine

Equipped with powerful and highly fuel-efficient engine.

4TNV98-Z benefits from the latest electronically controlled direct injection and the Exhaust Gas Recirculation (EGR) technologies.

Model **4TNV98-ZWBV2** Output (Gross) **39.3kW**



### Isochronous Control

The ECU controller helps to maintain constant engine speed even in high loads. Enables operator to work stress-free.



### 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 90% from maximum speed.

## The Exhaust Gas Recirculation (EGR)

It partially cools the exhaust gas, and by mixing with suction air and circulating it within the cylinder, lower the burning temperature inside the cylinder and decrease emission (NOx).

# Enhanced safety



## 1 LED Working Lights

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

## 2 Boom Cylinder Guard

To prevent cylinder rod from damage.



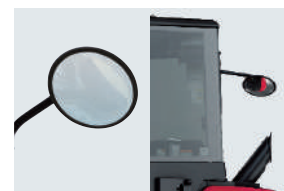
## ROPS and OPG TOP Guard (Level I) Cabin

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



## Emergency Engine Stop Switch

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



## Back Mirror

Standard back mirror provides sufficient visibility. Ensures safer operation on the job sites.



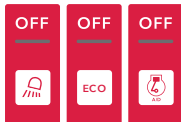
# Comfortable operator space



**1**  
**Large LCD Monitor with LED Backlight**  
Easy-to-read display showing operating status and maintenance information.



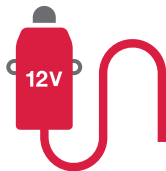
**2**  
**Dial Accelerator**  
Fingertip control dial easy to change the engine speed.



**3**  
**Ergonomically Designed Controls**  
Ergonomically arranged operating controls and switches are within the reach of one hand.



**4**  
**Suspension and Reclining Seat**  
A suspension and adjustable seat allow the operator to find their perfect working position while reducing shocks and vibrations.



**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



## 1 Engine, Air Cleaner

Wide opening of engine bonnet makes inspection and maintenance of the engine and air cleaner simple.



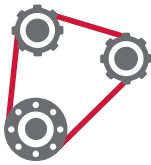
## 2 Hydraulic Oil Tank, Fuel Tank, Grease Pump Holder

Lockable right upper hand side bonnet provides easy access and security.



## 3 Radiator, Battery

No tools required to open the right-hand side bonnet, making battery inspection and cleaning the radiator an easy task.



## 4 Fan Belt, Air Conditioner Belt

Large inspection window for easy access.

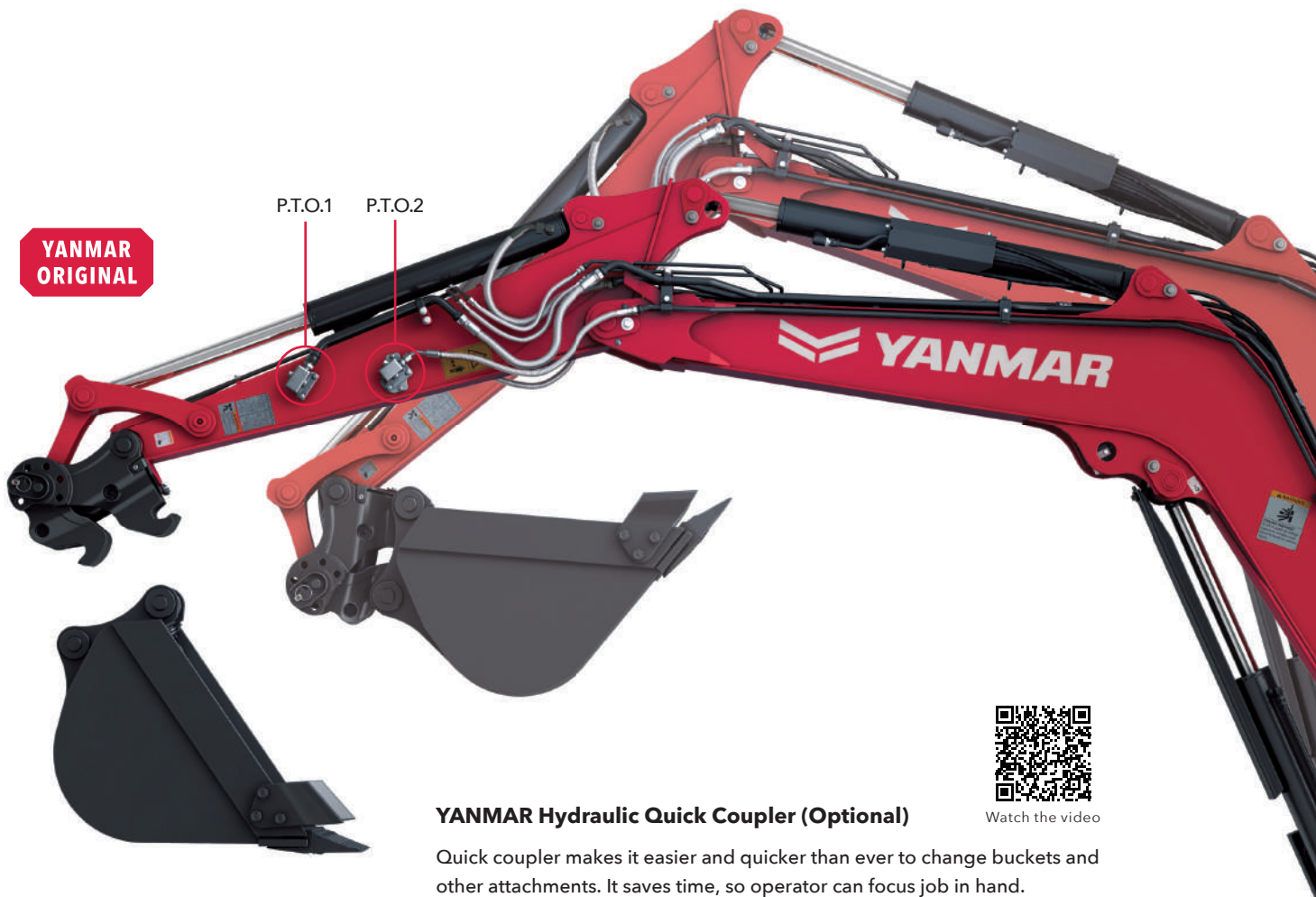


## 5 Tool Box

Secure place to keep tools.







**YANMAR ORIGINAL**

P.T.O.1 P.T.O.2

**YANMAR Hydraulic Quick Coupler (Optional)**



Watch the video

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.

**P.T.O. Hydraulic Lines (Optional)**

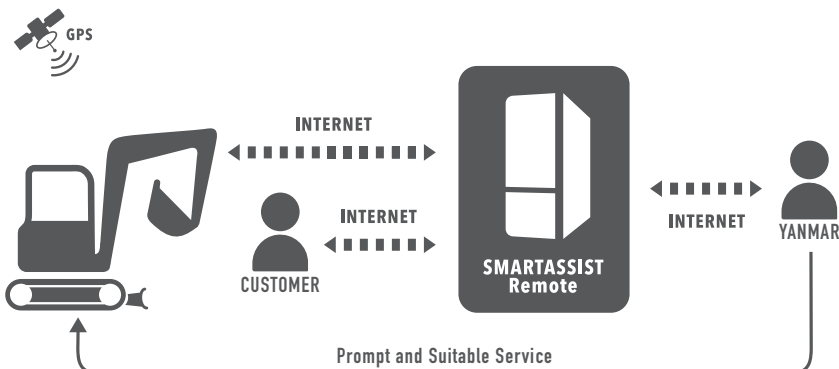
Powerful hydraulic P.T.O.1 and 2 lines are available with adjustable proportional control. Enables easy, fast and intuitive control of various attachments.

**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.

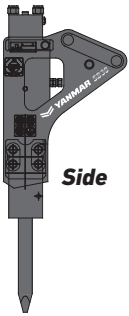
## Attachments

# 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.



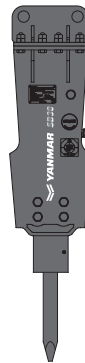
### Product Lineup



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



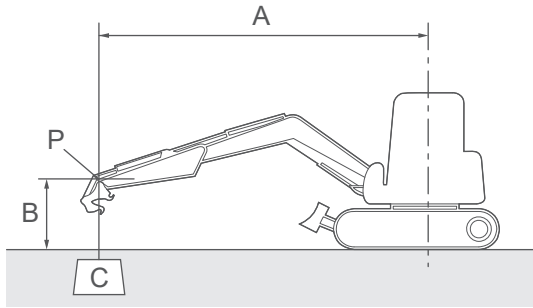
ecoY Sprocket



ecoY Track Roller



# Lifting Capacity



With: Cabin, rubber track and quick coupler  
Without: 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

Loads shown in table include weight of standard bucket [195kg (430lbs.)].

## Blade on ground

Unit: kg (lbs.)

| A [m (in.)]  | Max.            |                | 5.0 (196.9)     |                | 4.0 (157.5)     |                 | 3.0 (118.1)     |                 |
|--------------|-----------------|----------------|-----------------|----------------|-----------------|-----------------|-----------------|-----------------|
| B [m (in.)]  |                 |                |                 |                |                 |                 |                 |                 |
| 5.0 (196.9)  | *1650<br>(3638) | 1240<br>(2734) | -               | -              | *1620<br>(3572) | *1610<br>(3550) | -               | -               |
| 4.0 (157.5)  | *1550<br>(3417) | 1040<br>(2293) | *1550<br>(3417) | 1160<br>(2557) | *1620<br>(3572) | *1600<br>(3528) | -               | -               |
| 3.0 (118.1)  | *1580<br>(3483) | 890<br>(1962)  | *1640<br>(3616) | 1140<br>(2513) | *1920<br>(4233) | *1890<br>(4167) | *2480<br>(5468) | *2500<br>(5512) |
| 2.0 (78.7)   | *1520<br>(3351) | 790<br>(1741)  | *1790<br>(3946) | 1080<br>(2381) | *2280<br>(5027) | *1850<br>(4079) | *3120<br>(6879) | *2580<br>(5688) |
| 1.0 (39.4)   | *1540<br>(3395) | 770<br>(1697)  | *1930<br>(4255) | 1040<br>(2293) | *2590<br>(5710) | *1720<br>(3792) | *3470<br>(7651) | *2300<br>(5071) |
| 0 (0)        | *1530<br>(3373) | 790<br>(1741)  | *1960<br>(4321) | 1010<br>(2227) | *2660<br>(5865) | *1690<br>(3726) | *3660<br>(8070) | *2410<br>(5314) |
| -1.0 (-39.4) | *1510<br>(3329) | 890<br>(1962)  | *1840<br>(4057) | 1010<br>(2227) | *2480<br>(5468) | *1670<br>(3682) | *3440<br>(7585) | *2550<br>(5622) |
| -2.0 (-78.7) | *1350<br>(2976) | 1090<br>(2403) | -               | -              | *2040<br>(4498) | *1700<br>(3748) | *2820<br>(6218) | *2690<br>(5931) |

## Blade above ground

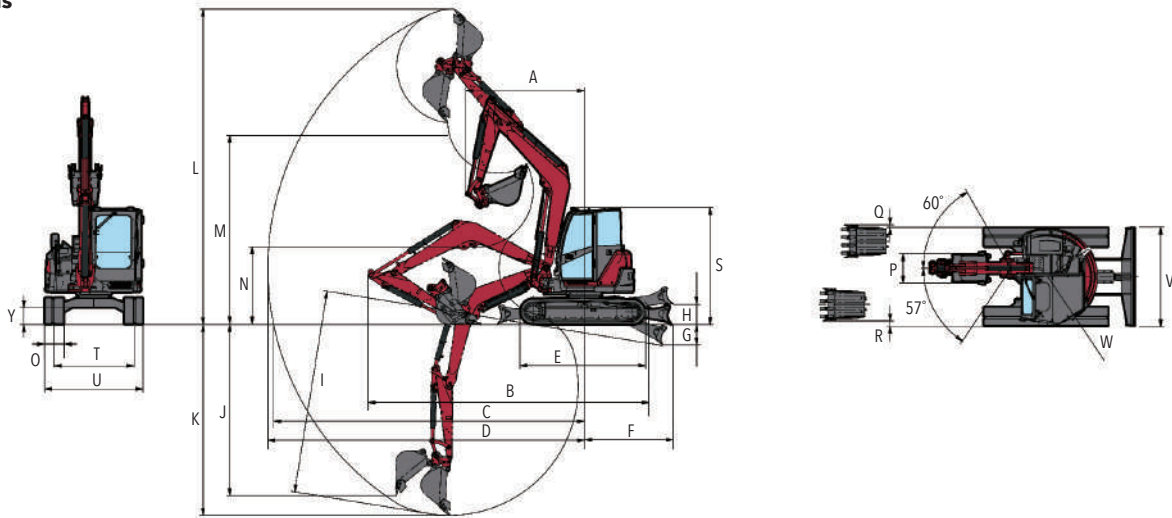
Unit: kg (lbs.)

| A [m (in.)]  | Max.            |                | 5.0 (196.9)    |                | 4.0 (157.5)     |                 | 3.0 (118.1)     |                 |
|--------------|-----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|
| B [m (in.)]  |                 |                |                |                |                 |                 |                 |                 |
| 5.0 (196.9)  | *1610<br>(3550) | 1240<br>(2734) | -              | -              | *1570<br>(3461) | *1610<br>(3550) | -               | -               |
| 4.0 (157.5)  | 1090<br>(2403)  | 1030<br>(2271) | 1240<br>(2734) | 1130<br>(2491) | *1550<br>(3417) | *1600<br>(3528) | -               | -               |
| 3.0 (118.1)  | 920<br>(2028)   | 860<br>(1896)  | 1210<br>(2668) | 1110<br>(2447) | *1870<br>(4123) | *1880<br>(4145) | *2420<br>(5336) | *2510<br>(5534) |
| 2.0 (78.7)   | 830<br>(1830)   | 770<br>(1697)  | 1140<br>(2513) | 1050<br>(2315) | 1630<br>(3594)  | 1540<br>(3395)  | *2800<br>(6174) | 2180<br>(4806)  |
| 1.0 (39.4)   | 800<br>(1764)   | 760<br>(1675)  | 1080<br>(2381) | 1020<br>(2249) | 1560<br>(3439)  | 1440<br>(3175)  | 2070<br>(4564)  | 1930<br>(4255)  |
| 0 (0)        | 830<br>(1830)   | 780<br>(1719)  | 1060<br>(2337) | 980<br>(2160)  | 1500<br>(3307)  | 1430<br>(3153)  | 2210<br>(4873)  | 2060<br>(4542)  |
| -1.0 (-39.4) | 920<br>(2028)   | 870<br>(1918)  | 1050<br>(2315) | 980<br>(2160)  | 1490<br>(3285)  | 1400<br>(3087)  | 2330<br>(5137)  | 2120<br>(4674)  |
| -2.0 (-78.7) | 1130<br>(2491)  | 1100<br>(2425) | -              | -              | 1530<br>(3373)  | 1450<br>(3197)  | 2400<br>(5292)  | 2250<br>(4961)  |

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.)

| ViO80-1 Cabin |                       | 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          |
|---------------|-----------------------|-----------------------------|------------|------------|------------|------------|-------------|------------|------------|----------------------------|------------|------------|------------|------------|-------------|------------|-------------|-----------|------------|------------|-------------|-------------|-------------|-------------|------------|
|               | With quick coupler    | 2720 (107)<br><2370 (93.3)> | 6460 (254) | 7140 (281) | 7280 (287) | 2890 (114) | 1990 (78.3) | 480 (18.9) | 460 (18.1) | 4680 (184)<br><4440 (175)> | 3940 (155) | 4400 (173) | 7230 (285) | 4620 (182) | 1750 (68.9) | 450 (17.7) | 750 (29.53) | 60 (2.36) | 120 (4.72) | 2680 (106) | 1870 (73.6) | 2270 (89.4) | 2260 (89.0) | 1135 (44.7) | 390 (15.4) |
|               | Without quick coupler | 2470 (97)<br><2130 (83.9)>  | 6410 (252) | 6820 (269) | 6960 (274) |            |             |            |            |                            |            |            |            |            |             |            |             |           |            |            |             |             |             |             |            |

## ●Specifications

| MODEL            |  |   |            | ViO80-1   |  |                            |  |
|------------------|--|---|------------|---|--|----------------------------|--|
| TYPE             |  |   |            | Cabin   |  |                            |  |
|                  |  |   |            | With quick coupler  |  | Without quick coupler      |  |
| WEIGHT           | Operating weight                               | Rubber track  | kg (lbs.)  | 8225 (18136)  |  | 8065 (17783)               |  |
|                  |  | Steel track   | kg (lbs.)  | 8285 (18268)  |  | 8125 (17916)               |  |
| ENGINE           | Type   | Vertical 4-cylinder water-cooled direct injection diesel engine |            |   |  |                            |  |
|                  | Model  | 4TNV98-ZWBV2  |            |   |  |                            |  |
| BUCKET           | Rated output, gross                            | kW (HP) / rpm   |            | 39.3 (52.7) / 1900  |  |                            |  |
|                  | Capacity, standard                             | cu.m (cu.ft)  |            | 0.28 (9.89)   |  |                            |  |
| PERFORMANCE      | Width, standard                                | mm (in.)  |            | 750 (29.53)   |  |                            |  |
|                  | Max. digging force                             | Bucket  | kN (lbs.)  | 50.4 (11332)  |  | 63.5 (14275)               |  |
|                  |  | Arm   | kN (lbs.)  | 37.2 (8356)   |  | 40.8 (9172)                |  |
|                  | Max. digging depth <at the blade down>         | mm (in.)  |            | 4400 (173)<br><4680 (184)>  |  | 4150 (163)<br><4440 (175)> |  |
|                  | Max. vertical wall digging depth               | mm (in.)  |            | 3940 (155)  |  | 3800 (150)                 |  |
|                  | Max. cutting height                            | mm (in.)  |            | 7230 (285)  |  | 6790 (267)                 |  |
|                  | Max. dumping height                            | mm (in.)  |            | 4620 (182)  |  | 4680 (184)                 |  |
|                  | Max. digging radius of the ground              | mm (in.)  |            | 7140 (281)  |  | 6820 (269)                 |  |
|                  | Front min. swing radius <at swinging the boom> | mm (in.)  |            | 2720 (107)<br><2370 (93)>   |  | 2470 (97)<br><2130 (83.9)> |  |
|                  | Boom swing angle: left / right                 | degrees   |            | 57 / 60   |  |                            |  |
| SPEED            | Travel speed: high / low                       | Rubber track  | km/h (mph) | 4.5 (2.8) / 2.5 (1.6)   |  |                            |  |
|                  |  | Steel track   | km/h (mph) | 4.1 (2.5) / 2.3 (1.4)   |  |                            |  |
|                  | Swing speed                                    | rpm   |            | 9   |  |                            |  |
| GROUND PRESSURE  | With standard track                            | Rubber track  | kPa (PSI)  | 35.8 (5.19)   |  | 35.1 (5.09)                |  |
|                  |  | Steel track   | kPa (PSI)  | 36.2 (5.25)   |  | 35.5 (5.15)                |  |
| TANK CAPACITY    | Fuel tank                                      | L (gal)   |            | 115 (30.4)  |  |                            |  |
|                  | Hydraulic oil tank                             | L (gal)   |            | 60 (15.8)   |  |                            |  |
| HYDRAULIC SYSTEM | Pump displacement                              | L/min (gpm)   |            | 70.3 (18.6)×2 <Variable displacement pump><br>53.2 (14.1)×1, 19 (5.0)×1 <Gear pump> |  |                            |  |
|                  | Relief set pressure                            | MPa (PSI)   |            | 25.5 (3698)×2, 24.0 (3481)×1, 2.9 (421)×1   |  |                            |  |
|                  | Max. P.T.O. output                             | L/min (gpm)   |            | 120 (31.7)  |  |                            |  |

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

YANMAR COMPACT EQUIPMENT



yanmar.com

Printed in Japan  
031D0-G01350 2208