

MINI CRAWLER EXCAVATOR

ZT27 C

Mini Crawler Excavator

Product Technology & Selection Manual

A 2.45 t tailless mini crawler excavator with an open operator canopy, Yanmar 3TNV80F engine, 15.7 kW rated power, rubber tracks and a 0.068 m³ standard bucket.

2.45 T

15.7 kW • 0.068 m³



MANUAL MAP

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KEY PRODUCT DATA

OPERATING WEIGHT

2.45 t

RATED POWER

15.7 kW

STANDARD BUCKET CAPACITY

0.068 m³

Product code EXC-1786006065425370

Technical Specifications

Core product and configuration data

OPERATING WEIGHT

2.45 t

RATED POWER

15.7 kW

TRAVEL SPEED

2.0 / 3.5 km/h

STANDARD BUCKET CAPACITY

0.068 m³

GROUP	SPECIFICATION	VALUE
Machine	Product type	Mini crawler excavator
	Operating weight	2.45 t
	Upper-structure form	Tailless upper structure
Operator Station	Operator station	Open operator canopy
Undercarriage	Track type	Rubber track
Engine	Engine brand	Yanmar
	Engine model	3TNV80F
	Rated power	15.7 kW
	Engine displacement	1.267 L
	Rated speed	2,500 rpm
Capacity	Fuel tank capacity	20 L
	Hydraulic oil tank capacity	18 L
Performance	Travel speed	2.0 / 3.5 km/h
	Swing speed	9.5 rpm
	Bucket digging force	20 kN
Work Tool	Standard bucket capacity	0.068 m³

Dimensions & Working Range

Overall dimensions and working envelope



DIMENSION / RANGE	VALUE	SELECTION RELEVANCE
Overall length	4,100 mm	Compare with route length, staging space and site access.
Overall width	1,500 mm	Compare with gates, corridors and available access width.
Overall height	2,440 mm	Compare with overhead clearance and working-space limits.
Maximum digging depth	2,590 mm	Compare with the required excavation depth.
Maximum digging radius	4,520 mm	Compare with the required horizontal reach.
Maximum digging height	4,370 mm	Compare with the required work height and clearance.
Maximum dumping height	3,060 mm	Compare with the intended discharge interface.

05 — MACHINE OVERVIEW

Machine Overview

Complete machine profile and component details

Complementary complete-machine views show the tailless upper-body form, open operator canopy, work equipment, front blade and crawler undercarriage.



Complete left-rear view

Left-rear view showing the tailless upper-body profile and open operator station.

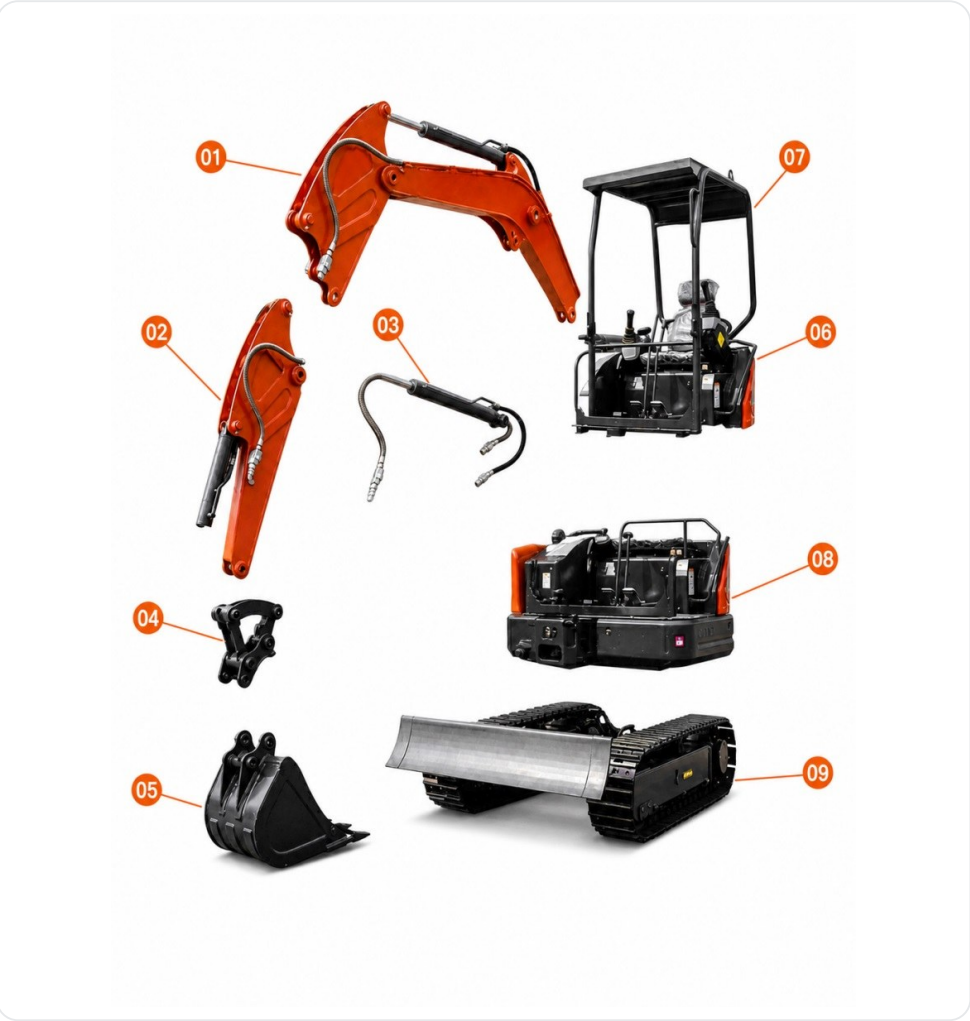


Complete right-rear view

Right-rear view showing the upper structure, work equipment and crawler undercarriage.

Machine Structure

Main assemblies and their functional roles



NO.	ASSEMBLY	ROLE
01	Boom Assembly	Main lift-and-reach work group.
02	Dipper Arm Assembly	Positions the bucket across the working envelope.
03	Hydraulic Cylinder and Hoses	Actuation and hydraulic routing for the work group.
04	Quick Coupler	Connection group shown between arm linkage and bucket.
05	Digging Bucket	Standard digging interface; stated capacity 0.068 m³.
06	Open Operator Station	Seat and control area with open sides.
07	Canopy Frame and Roof	Overhead frame-and-roof group above the station.
08	Upper Slew Body	Upper assembly supported on the slewing base.
09	Track Undercarriage and Dozer Blade	Crawler base and front blade assembly.

Machine Systems & Interfaces 1

Product component details for product recognition



OFFSET WORK GROUP

Side-swing joint

COMPONENT	Side-swing group
POSITION	Boom-base assembly
CONTEXT	Offset-work layout



HYDRAULIC ACTUATION

Boom cylinder and hoses

COMPONENT	Boom cylinder
RELATED GROUP	Boom assembly
VISIBLE ROUTING	Hydraulic hoses



CRAWLER MOBILITY

Rubber-track undercarriage

TRACK TYPE	Rubber track
TRAVEL SPEED	2.0 / 3.5 km/h
OPERATING WEIGHT	2.45 t



WORK TOOL

Digging bucket and connection

CAPACITY	0.068 m³
DIGGING FORCE	20 kN
CONNECTION GROUP	Quick coupler

Machine Systems & Interfaces 2

Product component details for product recognition



OPERATOR STATION

Hand-control area

STATION	Open operator canopy
VISIBLE AREA	Seat and hand controls
OVERHEAD GROUP	Frame and roof



CONTROL INTERFACE

Control console

COMPONENT	Control console
STATION FORM	Open operator canopy
MACHINE FORM	Tailless



SWITCH INTERFACE

Control-button cluster

COMPONENT	Control buttons
LOCATION	Beside operator seat
STATION	Open operator canopy



HAND CONTROLS

Paired control levers

COMPONENT	Control levers
VISIBLE GROUP	Paired hand controls
STATION	Open operator canopy

Application Fit

Application context and selection checkpoints

**LISTED APPLICATION****Drainage Trench Digging****Depth and reach screen**

Compare the 2,590 mm digging depth and 4,520 mm digging radius with the required trench profile.

**LISTED APPLICATION****Landscape Edge Shaping****Access and surface**

Review the 1,500 mm overall width, rubber-track configuration and travel-speed values against access and surface conditions.

**LISTED APPLICATION****Utility Corridor Excavation****Corridor and envelope**

Compare the 4,100 × 1,500 × 2,440 mm overall envelope with corridor access and available workspace.

**LISTED APPLICATION****Foundation Edge Cutting****Force and capacity**

Compare the 20 kN bucket digging force and 0.068 m³ bucket capacity with the intended material and task.

Selection Summary

A practical product-configuration checklist

DECISION FACTOR	PRODUCT BASIS	USE IN SELECTION
Machine class	2.45 t; tailless; rubber track	Compare machine form and ground interface with the intended site.
Engine identity	Yanmar 3TNV80F; 15.7 kW at 2,500 rpm	Use the stated engine identity and rated output for comparison.
Overall envelope	4,100 × 1,500 × 2,440 mm	Compare with routes, gates and available clearance.
Working range	2,590 / 4,520 / 4,370 / 3,060 mm	Compare depth, radius, height and dumping height with the task.
Mobility	Rubber track; 2.0 / 3.5 km/h; 9.5 rpm	Review track type, travel speed and swing speed for the site.
Work tool	20 kN; 0.068 m³	Compare stated digging force and bucket capacity with task demand.



CONFIGURE IN FOUR DECISIONS

- 01

Check access
Compare the overall envelope with route and workspace limits.
- 02

Check work range
Review digging and dumping ranges against the intended task.
- 03

Check output
Review engine identity, rated power, speed and displacement.
- 04

Check task fit
Compare mobility and bucket data with material and site needs.

WHY SELECT ZT27 C

- 1

Tailless machine form, 1,500 mm width and rubber tracks support confined-site screening.
- 2

Specified Yanmar engine, rated power, speed and displacement support direct comparison.
- 3

Seven unit-bearing dimension and working-range values support site and task evaluation.
- 4

Four listed application scenes provide task-specific visual context.