

MINI CRAWLER EXCAVATOR

ZT27 Cabin Mini Crawler Excavator

Product Technology & Selection Manual

A 2.45 t tailless mini crawler excavator with a Yanmar 3TNV80F engine, 15.7 kW rated power, rubber-track mobility and a 0.068 m³ 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

BUCKET CAPACITY

0.068 m³

Product code EXC-1786006099511404

Technical Specifications

Core product and configuration data

OPERATING WEIGHT

2.45 t

RATED POWER

15.7 kW

BUCKET CAPACITY

0.068 m³

MAXIMUM DIGGING DEPTH

2,590 mm

GROUP	SPECIFICATION	VALUE
Machine	Operating weight	2.45 t
	Upper-body form	Tailless upper structure
Engine	Engine brand	Yanmar
	Engine model	3TNV80F
	Rated power	15.7 kW
	Engine displacement	1.267 L
	Rated speed	2,500 rpm
Travel	Track type	Rubber track
	Travel speed	3.5 / 2.0 km/h
	Swing speed	9.5 rpm
Performance	Bucket digging force	20 kN
Work Tool	Bucket capacity	0.068 m³
Capacity	Fuel tank capacity	20 L
	Hydraulic oil tank capacity	18 L
Operator Station	Visible operator interfaces	Foot controls and control consoles
Structure	Visible assemblies	Main boom assembly; dipper arm; hydraulic cylinders and lines; quick-hitch and digging bucket; upper swing platform; slew ring assembly; twin-track undercarriage and dozer blade

Dimensions & Working Range

Overall dimensions and working envelope

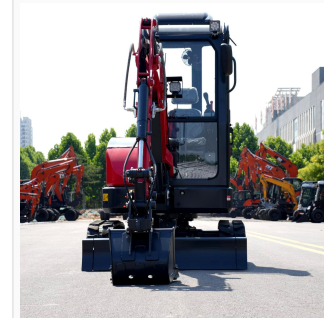


DIMENSION / RANGE	VALUE	SELECTION RELEVANCE
Overall length	4,100 mm	Compare with route length, storage space and site access.
Overall width	1,500 mm	Compare with gates, corridors and available access width.
Overall height	2,440 mm	Compare with overhead clearance and storage access.
Maximum digging depth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

Machine Overview

Complete machine profile and component details

Multi-angle views show the front work group, tailless upper body, dozer blade and rubber-track undercarriage.



Complete front view

Front profile showing machine width blade and work-group alignment.



Complete rear view

Rear profile showing the upper body and crawler stance.

Machine Architecture

Main assemblies and their functional roles



NO.	ASSEMBLY	ROLE
01	Main boom assembly	Primary front-group member supporting reach and lift geometry.
02	Dipper arm	Connects the boom assembly with the work-tool joint.
03	Hydraulic cylinder and lines	Visible actuation components serving the front work group.
04	Quick-hitch and bucket group	Visible connection and ground-engaging tool at the dipper end.
05	Upper swing platform	Upper machine body carried above the slew interface.
06	Slew ring assembly	Visible rotating interface between the upper body and lower frame.
07	Undercarriage and blade	Twin-track crawler base and front blade form the lower machine group.

Machine Structure & Interfaces 1

Visible hydraulic, work-equipment and crawler details



CONTROL LINKAGE

Pedal and hydraulic valve group

The detail shows pedal linkages above the visible multi-section valve and hose connections.



COMPONENT BAY

Hydraulic component group

The grouped detail shows the reservoir top, fluid connections and adjacent electrical isolation hardware.



GROUND-ENGAGING TOOL

Digging bucket and joint

The visible bucket group is paired with a stated 0.068 m³ capacity and 20 kN digging force.



WORK EQUIPMENT

Arm-cylinder group

The detail shows the arm-cylinder body, rod end, pinned joints and adjacent hoses.

Machine Structure & Interfaces 2

Visible hydraulic, work-equipment and crawler details



WORK EQUIPMENT

Boom-cylinder group

The detail shows the boom cylinder aligned with its mounting points and hydraulic connections.



HYDRAULIC ROUTING

Boom hydraulic lines

The visible lines follow the boom structure with fixed routing clips and flexible end connections.



FRONT SUPPORT

Dozer blade assembly

The visible front blade, lift cylinder and mounting members form the lower front support group.



CRAWLER MOBILITY

Rubber-track undercarriage

The crawler detail shows the rubber track, side frame and the upper-to-lower body relationship.

Application Fit

Application context and selection checkpoints



DRAINAGE

Drainage trench digging

DIGGING DEPTH	2,590 mm
DIGGING RADIUS	4,520 mm
BUCKET CAPACITY	0.068 m³



LANDSCAPE

Landscape edge shaping

OVERALL WIDTH	1,500 mm
BUCKET FORCE	20 kN
TRACK TYPE	Rubber track



UTILITY

Utility corridor excavation

OVERALL LENGTH	4,100 mm
OVERALL WIDTH	1,500 mm
OVERALL HEIGHT	2,440 mm



FOUNDATION

Foundation edge cutting

BUCKET FORCE	20 kN
BUCKET CAPACITY	0.068 m³
MAXIMUM HEIGHT	4,370 mm

Selection Summary

A practical product-configuration checklist

DECISION FACTOR	PRODUCT BASIS	USE IN SELECTION
Machine class	2.45 t operating weight	Compare machine mass with the intended task and supporting ground.
Upper-body form	Tailless upper structure	Compare upper-body form with the available working space.
Overall envelope	4,100 × 1,500 × 2,440 mm	Check route, gate, overhead and storage constraints.
Working range	2,590 mm depth; 4,520 mm radius	Compare excavation depth and reach with the task geometry.
Power baseline	Yanmar 3TNV80F; 15.7 kW at 2,500 rpm	Use engine identity, output and rated speed for model comparison.
Mobility	Rubber track; 3.5 / 2.0 km/h	Compare track type and stated speed values with site movement needs.
Bucket baseline	0.068 m³; 20 kN	Compare bucket capacity and digging force with material and task demand.



CONFIGURE IN FOUR DECISIONS

- 01

Check access

Compare the overall dimensions with route, gate and overhead limits.
- 02

Match the task

Compare digging depth, radius, height and dumping height with the work geometry.
- 03

Review mobility

Use the rubber-track arrangement and stated travel-speed values for site screening.
- 04

Set the baseline

Compare engine output, bucket capacity and digging force with the intended duty.

WHY SELECT ZT27 Cabin

- 1

A 2.45 t tailless crawler platform provides a compact model baseline for confined-site evaluation.
- 2

The Yanmar 3TNV80F engine is rated at 15.7 kW at 2,500 rpm.
- 3

A 2,590 mm digging depth and 4,520 mm digging radius define the stated work envelope.
- 4

The stated bucket baseline combines 0.068 m³ capacity with 20 kN digging force.