

MINI CRAWLER EXCAVATOR

ZT20 Cabin Mini Crawler Excavator

Product Technology & Selection Manual

A 2.2 t tailless mini crawler excavator with a Yanmar 3TNV80F engine, 15.2 kW rated power, rubber-track mobility and a 0.068 m³ bucket.

2.2 T

15.2 kW • 0.068 m³



MANUAL MAP

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KEY PRODUCT DATA

OPERATING WEIGHT

2.2 t

RATED POWER

15.2 kW

BUCKET CAPACITY

0.068 m³

Product code EXC-1786006030624220

Technical Specifications

Core product and configuration data

OPERATING WEIGHT

2.2 t

RATED POWER

15.2 kW

BUCKET CAPACITY

0.068 m³

MAXIMUM DIGGING DEPTH

2,410 mm

GROUP	SPECIFICATION	VALUE
Machine	Operating weight	2.2 t
	Upper-body form	Tailless upper structure
Engine	Engine brand	Yanmar
	Engine model	3TNV80F
	Rated power	15.2 kW
	Engine displacement	1.267 L
	Rated speed	2,500 rpm
Travel	Track type	Rubber track
	Travel speed	2.0 / 3.8 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	Seat and hand-control consoles
Structure	Visible assemblies	Boom assembly; dipper arm assembly; hydraulic cylinder and hoses; quick coupler; digging bucket; upper slew body; 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	2,410 mm	Compare with the required excavation depth.
Maximum digging radius	4,520 mm	Compare with the intended horizontal reach.
Maximum digging height	4,190 mm	Compare with the required above-ground work envelope.
Maximum dumping height	2,880 mm	Compare with the intended discharge or placement height.

05 — MACHINE OVERVIEW

Machine Overview

Complete machine profile and component details

Multi-angle views show the work equipment, tailless upper body, operator area, front blade and rubber-track undercarriage.

**Complete left-rear view**

Rear upper body with crawler base shown from the left rear.

**Complete rear view**

Rear profile showing the upper body and crawler stance.

Machine Architecture

Main assemblies and their functional roles



NO.	ASSEMBLY	ROLE
01	Boom assembly	Primary front-group member supporting reach and lift geometry.
02	Dipper arm assembly	Connects the boom assembly with the work-tool linkage.
03	Hydraulic cylinder and hoses	Visible actuation components serving the front work group.
04	Quick coupler	Visible connection between the dipper end and digging bucket.
05	Digging bucket	Ground-engaging work tool at the end of the front group.
06	Upper slew body	Upper machine body carried above the crawler undercarriage.
07	Undercarriage and blade	Crawler base and front blade form the lower machine group.

Machine Structure & Interfaces 1

Visible work-equipment, mobility and control-area details



FRONT-GROUP OFFSET

Side-swing pivot group

The visible pivot assembly connects the front work group to the upper body for offset positioning.



WORK EQUIPMENT

Boom cylinder and hoses

The detail shows the boom cylinder body, rod end and visible hydraulic hose routing.



CRAWLER MOBILITY

Rubber-track running gear

The crawler detail shows the rubber track, rollers and side-frame relationship.



GROUND-ENGAGING TOOL

Digging bucket and linkage

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

Machine Structure & Interfaces 2

Visible work-equipment, mobility and control-area details



LOWER STRUCTURE

Crawler chassis

The underside view shows the central lower-frame structure between the crawler assemblies.



OPERATOR AREA

Seat and access space

The detail shows the operator seat and the adjacent access area without assigning control functions.



FRONT SUPPORT

Dozer blade assembly

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



CONTROL AREA

Hand-control console

The control-area detail shows the joystick and adjacent switch bank as visible interfaces.

Application Fit

Application context and selection checkpoints



DRAINAGE

Drainage trench digging

DIGGING DEPTH	2,410 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	4,190 mm

Selection Summary

A practical product-configuration checklist

DECISION FACTOR	PRODUCT BASIS	USE IN SELECTION
Machine class	2.2 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	2,410 mm depth; 4,520 mm radius	Compare excavation depth and reach with the task geometry.
Power baseline	Yanmar 3TNV80F; 15.2 kW at 2,500 rpm	Use engine identity, output and rated speed for model comparison.
Mobility	Rubber track; 2.0 / 3.8 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 ZT20 Cabin

- 1

A 2.2 t tailless crawler platform provides a compact model baseline for confined-site evaluation.
- 2

The Yanmar 3TNV80F engine is rated at 15.2 kW at 2,500 rpm.
- 3

A 2,410 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.