

ECO MINI CRAWLER EXCAVATOR

EXC003-12ECO

ECO Mini Crawler Excavator

Product Technology & Selection Manual

A 1,200 kg compact crawler excavator with a Koop 192 diesel engine, 7.6 kW rated power, mechanical operation, rubber tracks and a 400 mm standard bucket width.

1,200 KG

7.6 kW • 0.025 m³



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Product code EXC25KBX121

Technical Specifications

Core product and configuration data

OPERATING WEIGHT

1,200 kg

RATED POWER

7.6 kW

BUCKET CAPACITY

0.025 m³

OVERALL WIDTH

850 mm

GROUP	SPECIFICATION	VALUE
Machine	Operating weight	1,200 kg
Engine	Standard engine	Koop 192 diesel engine
	Rated power	7.6 kW
	Optional engines	KOOP 192F 7 kW; Briggs & Stratton 420 cc 13.5 HP; Changchai 8.6 kW
	Engine types	Diesel / gasoline
Controls	Control type	Mechanical operation
Undercarriage	Track type	Rubber tracks
Operator Station	Operator station	Roofed open operator station
	Optional cab	No optional cab listed
Work Tool	Standard bucket width	400 mm
	Bucket capacity	0.025 m ³
Options	Machine options	Swing arm; telescopic chassis
Color	Standard colors	Blue / Yellow / Red
	Custom colors	Supported

Dimensions & Working Range

Overall dimensions and working envelope



DIMENSION / RANGE	VALUE	SELECTION RELEVANCE
Overall length	2,876 mm	Assess the overall machine footprint and approach space.
Overall width	850 mm	Check gates, paths and restricted access points.
Overall height	2,200 mm	Check overhead and doorway clearance.
Maximum digging height	2,550 mm	Compare with the required above-ground work envelope.
Maximum dumping height	1,687 mm	Compare with the intended placement or receiving height.
Maximum digging depth	1,790 mm	Compare with the required trench or excavation depth.
Maximum digging radius	2,250 mm	Compare with the required horizontal work envelope.

05 — MACHINE OVERVIEW

Machine Overview

Complete machine profile and component details

The complete machine view shows the articulated front work group, rear-side enclosure, front dozer blade and crawler undercarriage used across the illustrated compact-site applications.



Boom assembly

Main boom section, pivot points and visible hydraulic routing.



Bucket and tooth profile

Bucket side profile, cutting edge and replaceable teeth.



Dozer blade assembly

Front blade plate and visible actuation linkage.

Major Machine Assemblies

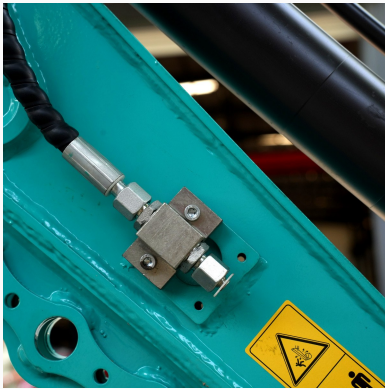
Main assemblies and their functional roles



NO.	ASSEMBLY	ROLE
01	Canopy Frame Assembly	Defines the roof geometry over the open operator station; no protection certification is inferred.
02	Operator Station Assembly	Groups the seat, mechanical controls and operator interfaces on the upper structure.
03	Boom Assembly	Carries the boom structure, cylinders and visible hydraulic routing of the front work group.
04	Dipper Arm & Bucket	Forms the terminal excavation linkage and standard bucket interface.
05	Rear Engine Cover	Encloses the rear power-package area shown in the exploded view.
06	Upper Body Housing	Carries the rear enclosure and station above the slew interface.
07	Lower Boom Mounting Interface	Identifies the visible lower boom mounting and pivot area above the chassis.
08	Crawler Undercarriage Assembly	Provides the rubber-track ground-contact structure below the upper machine body.
09	Dozer Blade Assembly	Forms the visible front blade group below the working equipment.

Hydraulic Work Group & Crawler Details

Visible connections, crawler contact and lighting



FRONT WORK GROUP

Boom hydraulic routing

The image shows the protected hydraulic-line path along the boom; no unsupported flow or pressure value is stated.



CONNECTION POINT

Boom-base hydraulic valve

The close view identifies the visible valve and connection area at the boom base without assigning an unverified circuit specification.



CRAWLER GROUND CONTACT

Rubber-track undercarriage

The standard rubber-track configuration provides the crawler ground-contact interface.



VISIBILITY AID

Front work light

The front-mounted work light is visible beside the boom and operator-station interface.

Operator Station & Interfaces

Visible station and interface configuration

The standard machine uses mechanical operation in a roofed open operator station. No optional cab configuration is listed for this model.



Control panel

Switches, levers and shut-off control on the side panel.



Hand-control interface

Mechanical hand-control levers and adjacent operator-console interfaces.

OPERATOR STATION	CONTROL TYPE	OPTIONAL CAB
Roofed open configuration	Mechanical operation	Not listed for this configuration

Standard & Optional Configuration

Base configuration and orderable choices

STANDARD CONFIGURATION	DESCRIPTION
Standard engine	Koop 192 diesel engine
Rated power	7.6 kW
Control type	Mechanical operation
Track type	Rubber tracks
Operator station	Roofed open operator station
Standard bucket width	400 mm
Bucket capacity	0.025 m³
Standard colors	Blue / Yellow / Red

OPTIONAL CONFIGURATION	DESCRIPTION
Optional engines	KOOP 192F 7 kW; Briggs & Stratton 420 cc 13.5 HP; Changchai 8.6 kW
Engine types	Diesel / gasoline
Machine options	Swing arm; telescopic chassis
Custom colors	Supported



DEFINE THE ORDER FROM THE BASE MACHINE

- BASE MACHINE**
Koop 192, mechanical operation and rubber tracks
- ENGINE CHOICE**
Confirm the selected engine and fuel type in writing
- MACHINE OPTIONS**
Swing arm and telescopic chassis

Engine choice, swing arm, telescopic chassis and color must be defined in the written order. No optional cab configuration is listed for this model.

Application Fit

Application context and selection checkpoints



APPLICATION SCENE

Tight-access drainage trench

The machine is shown cleaning a drainage trench in restricted access. Confirm soil, edge conditions and the required work envelope.



APPLICATION SCENE

Planting-soil shaping

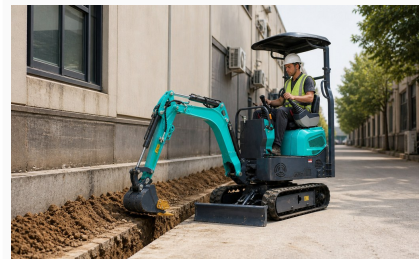
The machine is shown shaping soil for planting. Confirm access, ground condition and the required finish profile.



APPLICATION SCENE

Retaining-wall excavation

The machine is shown excavating beside a retaining wall. Confirm clearance, stability and excavation geometry before selection.



APPLICATION SCENE

Narrow-route utility excavation

The machine is shown cutting a trench along a narrow route. Confirm buried services, access width and required depth.

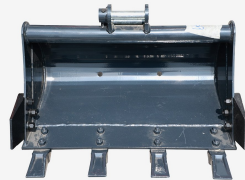
11 — ATTACHMENTS

Optional Attachment Range 1

Optional work tools; confirm fitment in writing

**Screening Bucket**

Screening or sorting suitable material after confirming mounting geometry and carrier limits.

**Toothed Digging Bucket**

General excavation in suitable soils; confirm width and mounting geometry.

**Clamshell Bucket**

Controlled material handling or excavation where the hydraulic circuit and mounting interface are suitable.

**Compact Digging Bucket**

Compact excavation where width, clearance and mounting geometry suit the site.

**Ditch Cleaning Bucket**

Ditch profiling and clean-up where bucket width and linkage geometry are suitable.

**Earth Auger**

Drilling suitable holes using an approved drive interface, hydraulic supply and bit.

**Hydraulic Breaker**

Breaking suitable material after confirming flow, pressure, mounting and carrier limits.

**Hydraulic Quick Coupler**

Hydraulic work-tool changes after confirming circuit, locking system and pin geometry.

**Hydraulic Thumb**

Hydraulic retention of irregular objects after confirming circuit and bucket compatibility.

Confirm mounting geometry, mass and hydraulic requirements before an attachment is included in the written order.

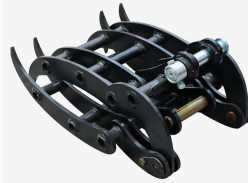
12 — ATTACHMENTS

Optional Attachment Range 2

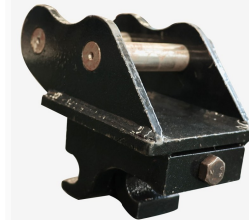
Optional work tools; confirm fitment in writing

**Hydraulic Tilt Bucket**

Grading or shaping where tilt circuit, mounting geometry and bucket width are suitable.

**Log Grapple**

Handling logs and similar irregular materials where the approved interface and load are suitable.

**Mechanical Quick Coupler**

Mechanical work-tool changes using the approved pin geometry and locking method.

**Mechanical Thumb**

Mechanical retention of irregular objects when the mounting positions match the bucket geometry.

**Narrow Digging Bucket**

Narrow trenching where the selected width and linkage geometry match the task.

**Pallet Forks**

Handling compatible palletized loads within an approved stability and load plan.

**Rake Attachment**

Surface clearing, sorting and light material raking in suitable ground conditions.

**Ripper Attachment**

Loosening compacted or resistant ground in conditions appropriate for the carrier and tooth.

Confirm mounting geometry, mass and hydraulic requirements before an attachment is included in the written order.

Attachment Selection Guide

Choose by task, then verify interface requirements

ATTACHMENT	PRIMARY TASK	VERIFY
Screening Bucket	Screening or sorting suitable material after confirming mounting geometry and carrier limits.	Mounting geometry, load, material and order scope
Toothed Digging Bucket	General excavation in suitable soils; confirm width and mounting geometry.	Width, mounting geometry and written status versus the standard 400 mm bucket
Clamshell Bucket	Controlled material handling or excavation where the hydraulic circuit and mounting interface are suitable.	Mounting geometry, hydraulic demand, material and order scope
Compact Digging Bucket	Compact excavation where width, clearance and mounting geometry suit the site.	Width, mounting geometry, clearance and order scope
Ditch Cleaning Bucket	Ditch profiling and clean-up where bucket width and linkage geometry are suitable.	Width, mounting geometry, material and order scope
Earth Auger	Drilling suitable holes using an approved drive interface, hydraulic supply and bit.	Drive interface, hydraulic demand, bit choice and order scope
Hydraulic Breaker	Breaking suitable material after confirming flow, pressure, mounting and carrier limits.	Flow, pressure, mounting geometry and order scope
Hydraulic Quick Coupler	Hydraulic work-tool changes after confirming circuit, locking system and pin geometry.	Hydraulic circuit, locking method, pin geometry and order scope
Hydraulic Thumb	Hydraulic retention of irregular objects after confirming circuit and bucket compatibility.	Hydraulic demand, mounting positions, bucket geometry and order scope
Hydraulic Tilt Bucket	Grading or shaping where tilt circuit, mounting geometry and bucket width are suitable.	Hydraulic demand, mounting geometry, width and order scope
Log Grapple	Handling logs and similar irregular materials where the approved interface and load are suitable.	Mounting geometry, hydraulic demand, load and order scope
Mechanical Quick Coupler	Mechanical work-tool changes using the approved pin geometry and locking method.	Pin geometry, locking method and order scope
Mechanical Thumb	Mechanical retention of irregular objects when the mounting positions match the bucket geometry.	Mounting positions, bucket geometry and order scope
Narrow Digging Bucket	Narrow trenching where the selected width and linkage geometry match the task.	Mounting geometry, width, clearance and order scope
Pallet Forks	Handling compatible palletized loads within an approved stability and load plan.	Mounting geometry, rated load, stability and order scope
Rake Attachment	Surface clearing, sorting and light material raking in suitable ground conditions.	Mounting geometry, width, material and order scope
Ripper Attachment	Loosening compacted or resistant ground in conditions appropriate for the carrier and tooth.	Mounting geometry, material condition and order scope

SELECTION RULE

Define task, interface, hydraulic demand and intended configuration before order confirmation.

Selection Summary

A practical product-configuration checklist

DECISION FACTOR	PRODUCT BASIS	USE IN SELECTION
Machine class	1,200 kg operating weight	Compare the machine class with the intended task and site constraints.
Overall envelope	2,876 × 850 × 2,200 mm	Check access width, overhead clearance and the total machine footprint.
Working range	2,550 / 1,687 / 1,790 / 2,250 mm	Compare digging height, dumping height, digging depth and radius with the task.
Standard bucket	400 mm width; 0.025 m³	Confirm bucket width and capacity against material and excavation geometry.
Ground and station	Rubber tracks; roofed open station	Confirm the ground-contact and operator-station configuration for the site.
Power and controls	Koop 192; 7.6 kW; mechanical operation	Use the confirmed standard power and control configuration as the baseline.
Orderable choices	Engine choices; swing arm; telescopic chassis	Define the engine, fuel type and every machine option before order confirmation.
Attachments	17 optional work tools shown	Confirm interface, hydraulic demand and order scope in writing.



CONFIGURE IN FIVE DECISIONS

- 01

Site access

Check the 850 mm width, 2,200 mm height and total approach space.
- 02

Task envelope

Match the four working-range values with the intended work geometry.
- 03

Power and controls

Use the Koop 192, 7.6 kW rating and mechanical operation as the standard baseline.
- 04

Machine options

Specify engine, swing arm, telescopic chassis and color choices in writing.
- 05

Attachment choice

Select by task and confirm interface, hydraulic demand and order scope.

WHY SELECT EXC003-12ECO

- 1

1,200 kg crawler configuration with rubber tracks.
- 2

Koop 192 diesel power package rated at 7.6 kW.
- 3

Confirmed overall dimensions and working-range values support site-fit comparison.
- 4

Mechanical operation and a roofed open operator station define the standard interface.
- 5

Engine, machine and optional work-tool choices can be defined before ordering.