

# JY644E

## CRAWLER HYDRAULIC EXCAVATOR

- Horsepower, gross :  
250kW (335hp) @ 2000rpm
- Operating weight :  
44000 - 45000kg
- Standard bucket :  
SAE heaped 2.0m<sup>3</sup>



**TRXBUILD™**  
ENGINEERING PRODUCTIVITY

# Specifications

## Standard Configuration

Model		JY644E
		
Boom length	mm	6950
Arm length	mm	3300
Bucket capacity, SAE heaped	m <sup>3</sup>	2
Arm crowd force	kN	169
Bucket digging force	kN	198
Ground pressure	kPa	85
Operating weight	kg	44000

## Engine, Hydraulics and Drive Systems

Make/model		Cummins QSM11
Horsepower, gross		250kW (335hp) @ 2000rpm
Hydraulic system		Load-sensing
Hydraulic main pump		Variable displacement
Hydraulic flow, Max.	Liter/min	2 x 360
Hydraulic pressure, Max.	Mpa	30
Swing drive system		Hydrostatic
Swing speed	rpm	9
Travel drive system		Hydrostatic
Travel speed, Max.	km/h	2.9(Lo) / 4.9(Hi)
Gradeability		65%

## Fuel and Lubricant Refill Capacities

Fuel tank (diesel)	Liter	650
Hydraulic oil tank	Liter	500
Engine oil	Liter	38
Swing motor	Liter	10.6
Travel motors (L&R)	Liter	10

## Loading Passes

### JY644E 2.8m<sup>3</sup> Bucket



D20	 Nominal Payload 20000kg	3 to 4
D32	 Nominal Payload 32000kg	5 to 6
D45	 Nominal Payload 45000kg	8 to 9
A300D	 Nominal Payload 28000kg	5 to 6

Estimation based on material density 1.8t/m<sup>3</sup> and bucket fill factor 1.1

## Bucket and Arm Configuration

Bucket capacity, type(SAE heaped)	Arm length (mm)		
	2400	2800	3300
1.85m <sup>3</sup> , rock	○	○	×
2.0m <sup>3</sup> , general purpose	○	○	○
2.5m <sup>3</sup> , heavy duty	△	□	×
2.8m <sup>3</sup> , heavy duty	●	×	×

- Digging and loading of material density up to 1.8 ton/m<sup>3</sup>
- △ Digging and loading of material density up to 1.5 ton/m<sup>3</sup>
- No digging, for loading of blasted and loose materials of density up to 1.5 ton/m<sup>3</sup>
- No digging, for loading of blasted and loose materials of density up to 1.2 ton/m<sup>3</sup>
- × Not applicable

# Features



## Efficient Operation

User-friendly, multi-function digital color monitor panel and electronic fuel control allow the operator to select the best setting for the job across a wide range of applications. Operational efficiency is thus maximized.



## Easy Maintenance

Service points are easily accessible for operator and service personnel. Centralized greasing is standard equipment on JY644E.



## Superior Structure

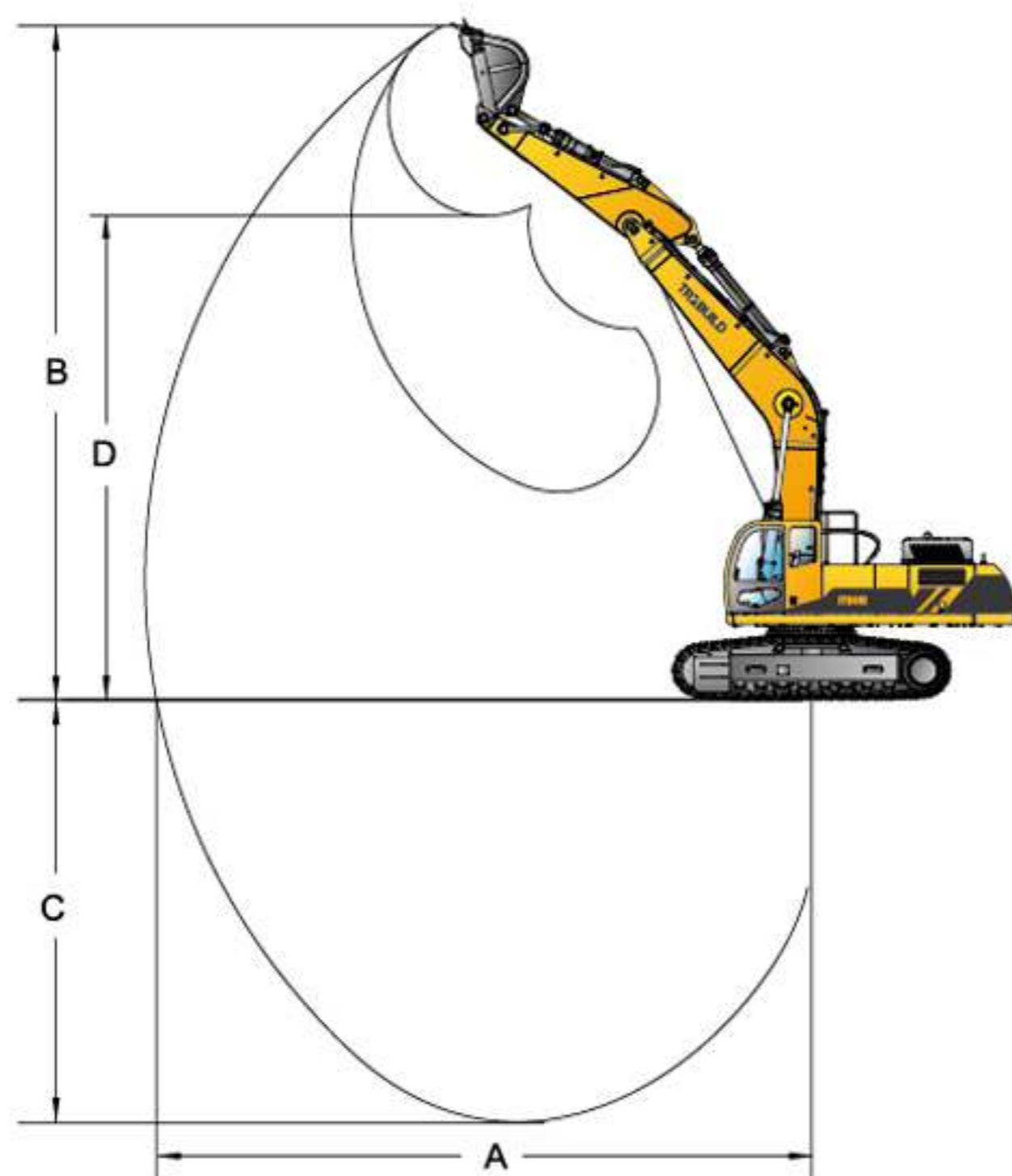
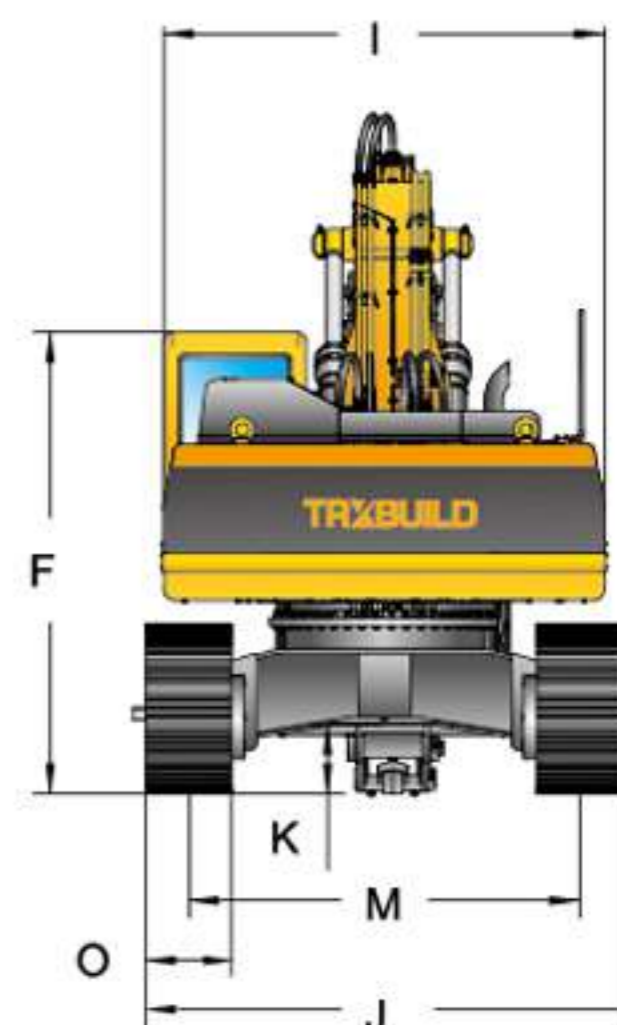
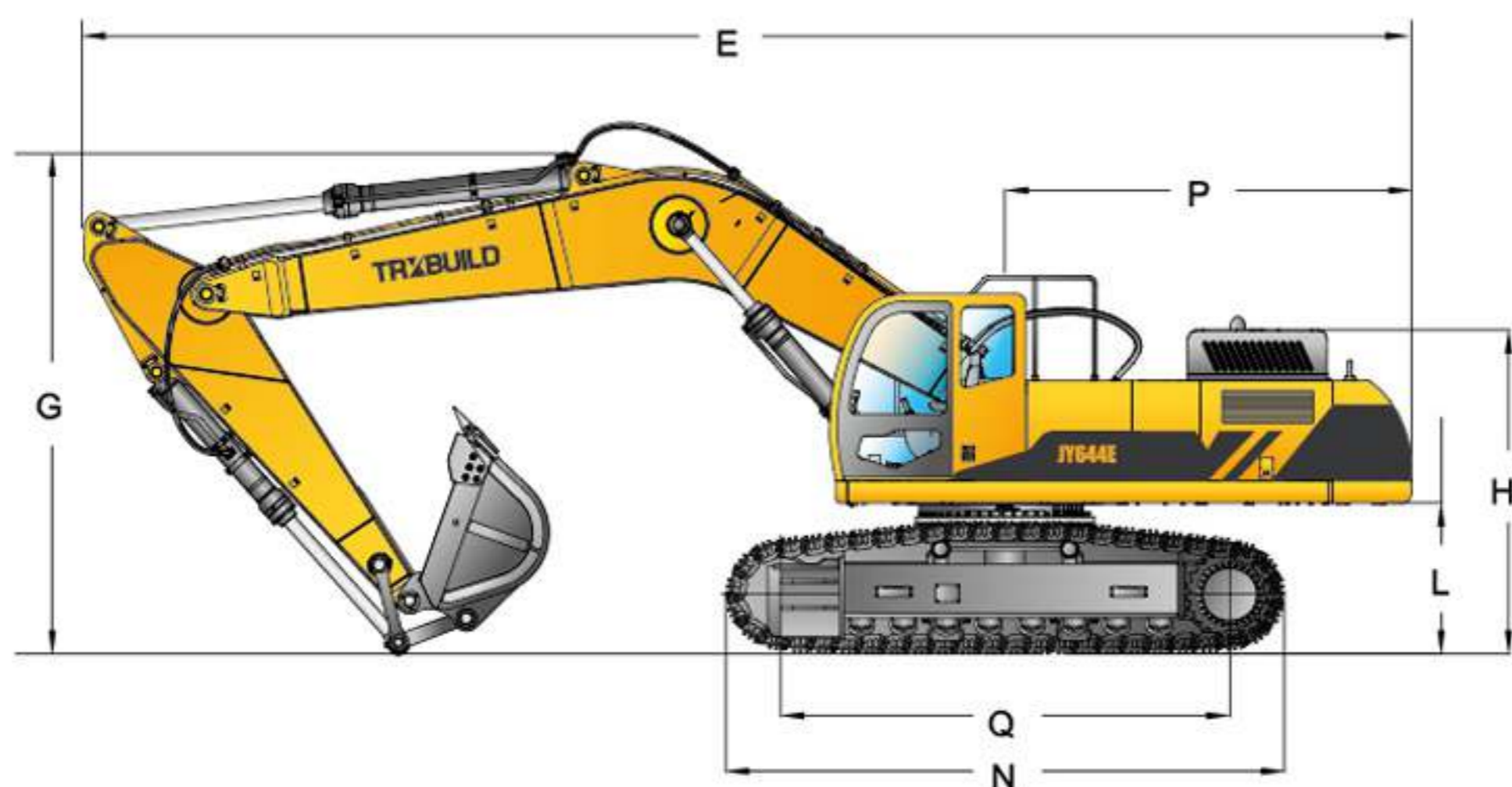
JY644E is designed for up to 45-ton operating capacity. The superior structure allows multiple work equipment configurations for wide range of applications.



## Heavy-Duty Undercarriage

The Heavy Duty Long Crawler (HDLC) undercarriage is standard feature on JY644E. HDLC undercarriage offers longer life span, lower ground pressure and improved stability for all applications.

# Dimensions & Working Range



	Model		Standard	(Option) Mass Excavation
A	Maximum reach	mm	12090	11010
B	Maximum digging height	mm	12195	12093
C	Maximum digging depth	mm	7745	6716
D	Maximum dumping height	mm	8725	8298
E	Overall length	mm	12035	12035
F	Overall height, top of cab	mm	3200	3200
G	Overall height, top of boom	mm	3610	3610
H	Overall height, top of engine cover	mm	2820	2820
I	Overall width, upper structure	mm	3100	3100
J	Overall width, undercarriage	mm	3350	3350
K	Ground clearance, track frame	mm	496	496
L	Ground clearance, counterweight	mm	1295	1295
M	Track gauge	mm	2750	2750
N	Track length	mm	5235	5235
O	Shoe width	mm	600	600
P	Tail swing radius	mm	3670	3670
Q	Track length on ground	mm	4235	4235



### Operator Comfort

Adjustable operator seat offers best operating position. High-capacity air-conditioner provides comfortable operating environment. Pilot-actuated low-effort control levers are designed for long hours of operation, thus helping to reduce operator fatigue.



### Safety

Safety is top priority in JY644E. High-visibility cabin with pull-up front window gives better views of the working area. Large handrails make it easier and safer for operator and service personnel to get in and out of the cabin and maintenance areas. Emergency escape hatch is standard equipment.



### High Performance and Reliable Components

Industry-proven, high-torque 6-cylinder diesel engine, coupled with a reliable variable-displacement hydraulic pump and load-sensing hydraulic system, ensure high performance and reliability.

# TRX Support



## CUSTOMER FOCUS

Our customers are our strategic partners and as partners we develop long-term relationships based on trust and professionalism. Through our international network of distribution channels, we are committed to provide all our partners with comprehensive training programs, strong technical and spare parts support. At TRXBUILD, this is what customer service is all about.

## PRODUCT TRAINING NETWORK

As a global construction and mining equipment manufacturer, we deliver maximum benefits from our products through our professional training programs.

Our network of trainers and specialists conduct structured product trainings for all customers. This is to equip operators and technical personnel with the necessary machine-operating skills, safety awareness and maintenance proficiency.

## TECHNICAL SUPPORT CHANNELS

Every TRXBUILD machine is packaged with technical support as part of the TRXBUILD product ownership experience.

Our partners and their experienced field technical support specialists are strategically located in each continent and ready to attend to service calls. These professionals recommend machine maintenance programs and provide cost-effective engineering solutions when required.

## SPARE PARTS SUPPORT

We strive to maintain high spare parts availability through our network of distribution centers. This strategic support infrastructure helps us to achieve timely delivery of spares. Ultimately, this will help you to reduce your operating cost while improving productivity.

# Standard & Optional Equipment



Electric fuel refill pump



Arm reinforcement



Cyclone-type air pre-cleaner



Centralized greasing



FOPS and cab front guard

## Standard Equipment

Engine, Cummins QSM11
Hydraulic main pump, variable displacement
Hydraulic control valves, load sensing
Standard arm, 3300mm
Arm reinforcement
General purpose bucket, SAE heaped, 2.0 m <sup>3</sup>
Swing motor, hydrostatic
Travel motors, hydrostatic
Heavy Duty Upper Structure, HDUS
Heavy Duty Long Crawler Undercarriage, HDLC
Multi-function digital color monitor panel
Adjustable operator seat
High capacity air conditioner (heating and cooling)
Air cleaner with dust ejector
Working lights (2 on deck, 2 on boom)
Batteries, 75Ah, 2x12V
Electric horn
Safety handrails
Rear view mirrors
Track link guards
Track shoe, 600mm, triple grouser

Centralized greasing
----------------------

Wiper
-------

## Optional Equipment and Attachments

Auxiliary hydraulic valves and piping for attachments
Amphibious undercarriage
Cyclone type air pre-cleaner
Electric fuel-refill pump
Electronic lifting and load monitoring system
Falling Object Protective Structure (FOPS) cabin and front guard ISO 10262
GPS excavator control and monitoring system
Lifting magnet system
Long reach boom and arm
Long reach bucket, SAE heaped 0.8m <sup>3</sup>
Log grapple, hydraulic or mechanical
Mass excavation arm, 2400mm
Mass excavation bucket, SAE heaped 2.8m <sup>3</sup>
Safety beacon light
Scrap grapple, hydraulic or mechanical
Soosan hydraulic breaker
Track shoe, 800mm, triple grouser

[www.TRXBUILD.com](http://www.TRXBUILD.com)

TRXBUILD/EX/EXCAVATOR/JY644E/SEP2012



Copyright 2012 by Singapore Technologies Kinetics Ltd. All rights reserved.

All information and specifications are correct at the time of print and are subject to change without prior notice.

