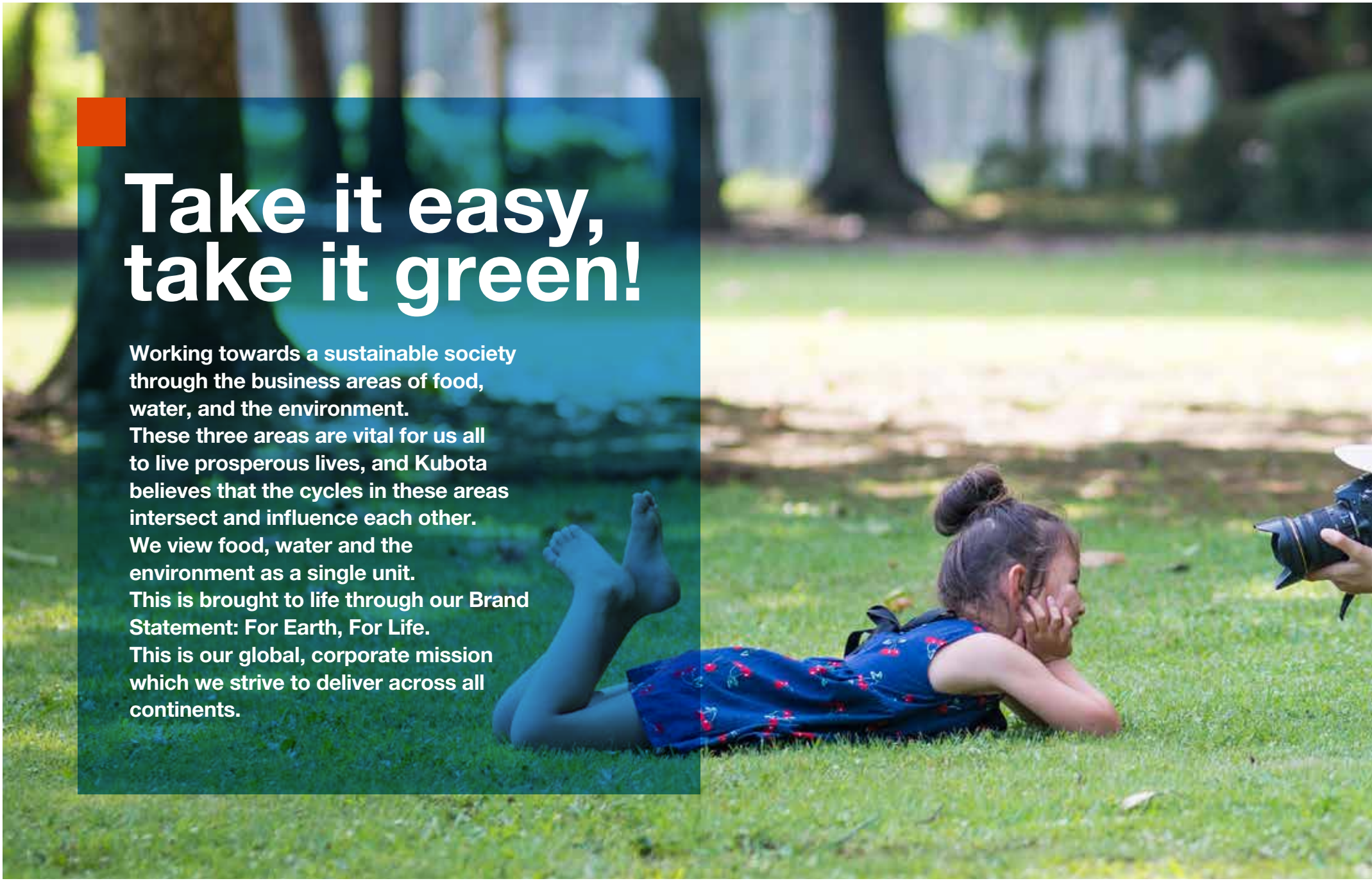
For Earth, For Life

Kubota

Ze Series

Ze-421 | Ze-481



Take it easy, take it green!

Working towards a sustainable society through the business areas of food, water, and the environment.
These three areas are vital for us all to live prosperous lives, and Kubota believes that the cycles in these areas intersect and influence each other.
We view food, water and the environment as a single unit.
This is brought to life through our Brand Statement: For Earth, For Life.
This is our global, corporate mission which we strive to deliver across all continents.

#Introduction

Smart, Simple, Silent: innovation in 3 words.

Welcome to Kubota's latest generation of zero turn mowers the Ze ELECTRIC ZERO-TURN.

As technological advances accelerate at an ever-increasing pace, Kubota is yet again at the forefront of this technology. The simple fact that these machines will spend the majority of their working lives in an urban environment means zero-emissions and low noise levels are paramount.

The Kubota reputation for quality and reliability has made them a market leader within the ground care sector and the advancement of the Ze Series will further enhance this reputation.

ELECTRIC

Kubota
ZE-481

Remove, replace. How easy is that

The Ze electric drive basically consists of a battery pack which drives motors on each rear axle and a motor to drive the cutting deck.

The drive, control and operation provides the same feel as a petrol commercial zero-turn mower. The “heart” of the machine is a 48V / 10kW.h battery located to the rear of the machine, pretty much where an engine would sit.

Typical continuous cutting time is up to 4 hours (depending on cutting conditions), however the Ze has a unique feature in that the battery pack can be quickly and easily removed and another fully charged battery fitted. A second battery and fitting attachment trolley is available as an option.

This will allow the operator to work continuously during the busy grass cutting season. Charging of the battery can be done from the charge connector on the Ze or independently away from the machine.

For the professional contractor this feature is time saving and money making as the cutting areas per day can be greatly increased.

Great cutting performance, whatever the conditions

MUNICIPALS

Public sector areas like recreation and parks are extremely sensitive to environmental issues. There is still a requirement to maintain and service these locations. The Ze ZERO-TURN SERIES is the ideal solution from both a practical point and public reaction. Not only is the Ze making a clear statement to the general public that the local authorities are reacting to the world demand for change, but also when working near urban communities, there is no disruptive noise levels.
360° turning technology lets you mow around obstacles with incredible ease, making every mowing manoeuvre more efficient.

HOLIDAY PARKS

General maintenance and working within a leisure complex, the fact that the Ze mower operates at extremely low noise levels is an obvious benefit. The zero-turn operation is also an extremely attractive feature.

PROFFESIONAL LANDSCAPE CONTRACTORS

The benefits for the contractors are obvious. High output at low costs. And if the contractor has the optional battery pack, the days can be even longer with greater financial rewards.
Add to that the renowned reliability and quality that Kubota offer, and the complete package is an attractive proposition. Built for longer life, the Ze Series provides a sound return on investment through lower maintenance and minimal operating costs. Full 2-years or 1000 hours peace of mind machine warranty. The battery itself carries 3-years or 1500 hours warranty.

Clean energy, all day long

“An electric professional mower that can be used all day long” is the concept of the Ze. Do not compromise between work and environmental footprint, this gap has been connected with this zero turn mower.

Key features:

- 5 hours charging on a domestic plug
- external charger sold with the battery
- full day at work with additional battery pack

Relax
enjoy the ride

Operator comfort
A big benefit for the operator during work is the large reduction of noise and vibration compared to petrol engine machines. With the deluxe seat and all controls positioned to either side the comfort is clear to see.

Mower deck operation
A choice of 42” or 48” side discharge mower deck. Both decks comes with the option of a mulching kit. The lifting / lower of the deck is easy thanks to a low effort foot pedal. Height setting is also effortless with a quick dial indicator.
Slight offset of the front axle ensures optimum grass intake and cut quality.

The Ze Series gives you battery benefits with the performance equaling that of a petrol mower.
These machines will operate in a quiet and emission-free way without discharging any harmful CO2 gas. Simply charge overnight and be ready for work the next day.

Helping the environment
Electrification has several advantages. Probably the biggest is the ability to work and emit zero grams of CO2. Working in public areas with these machines is a huge bonus.

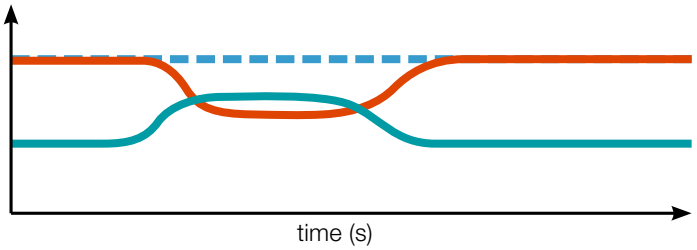
Reduced operating costs
Operating without the use of petrol fuel and no engine servicing significantly reduces the overall running costs.

Excellent performance
The large capacity battery allows work to be carried out up to 4 hours. Quick fit replaceable packs extend up to a full working day.

Model	Battery	Battery capacity (kWh)	Drive control	Mower deck
ZE-421	48V	10	Two levers with independent operation	Side discharge 42”
ZE-481	48V	10	Two levers with independent operation	Side discharge 48”

Kubota Ze K-sense!

In all operating modes there is a control function that automatically optimizes vehicle speed according to deck motor load. If a large load is applied to the deck motor and causes poor cutting, the vehicle automatically decelerates, and when the load is removed, it automatically accelerates.This control is carried out without discomfort for the operator, and it is controlled so that good cutting performance can be maintained at all times. As a result, the operator can work comfortably while keeping the lever constant. This is Kubota‘s original technology that adjusts the traction motor according to the load on the deck motor in order to achieve clean cuts and facilitate operation.



- Command Speed
- Actual Speed
- Deck Load (Motor Current)

Benefits of the Ze electric Zero-turn mower

Eco-Friendly
These machines don‘t emit CO2 which is really a very strong point in today‘s environmentally sensitive world.

Operating Costs
One of the obvious benefits to the Ze Series is that it does not require fuel. Fuel costs fluctuate and the running costs of an engine are hard to predict. Batteries do need to be re-charged but if the charging point is powered by solar or wind then the running costs can be much lower.

Efficiency
Very few moving parts. The generation and transfer of drive from the motor means the Ze has a high efficiency rate which means the power draw on the battery is low. A choice of three operating modes ensures that the optimum mode can be selected for the conditions.

Noise
Unlike an engine, the electric Ze runs much quieter. This is particularly advantageous when working close to housing and within public areas.

Key features

Incorporated within the right-hand console is the meter panel. This panel lets you know the current battery status as regards to discharge levels. Also built into the panel is an error code diagnostic display which allows quick and easy recognition of any faults that may occur. Sensors provide safety and machine protection by constantly monitoring the Ze performance.

Meter Function:

1. Ignition button and magnetic key
2. Colour display
3. Mower deck engage/disengage
4. Working mode button
5. Travelling speed ((transport and working speed)

Built-in machine protection:

High temperature protection

- The maximum driving speed can be limited.

Low battery operation

- The PTO drive to the mower will be automatically dis-engaged

Key features

Replaceable battery packs
The machine is provided with its own trolley in order to carry the battery. The trolley is design to facilate the battery pack handling in every terrain. The fact that the battery packs are quick and easy to remove, and re-fit makes these machines indispensable during busy seasonal periods.

3 working modes
ECO mode with lower blade speed, quiet operation and long working hours.
STANDARD mode with medium blade speed at rated output of the deck motor. Long working hours.
FINE CUT mode with high blade speed, increased power output with shorter working hours.

Superior comfort
K-ride comfort system. Deluxe high back seat with position adjustment, armrests and additional lumbar support.
Angled floor plate provides an excellent footrest.
When the motion levers are returned to the neutral position, the auto parking brake is engaged. No need for you to worry about anything.

Electric drive mower deck (Patented technology)
The deck is powered by a single high brushless motor. All the blades are driven by one motor and one inverter. This allows the drive power to be equally distributed to all the cutting blades. The cutting quality is homogenous on all the deck width and does not vary according to the grass density varition.

Foot pedal deck raise / lower
Low effort, simple foot pedal operation for in and out of work. Saving time and effort.
Quick-dial deck height setting adjustment ensures cutting height can be set quickly and easily.

Technical data

Model		Ze-421	Ze-481
Dimensions			
Tyres	Front	11 x 4-5 (4PR)	
	Rear	18 x 7.5-10 (4PR)	
Wheelbase (A)	mm	1234	
Length (B)	mm	1789	
Width (C)	mm	1400	1550
Height W / ROPS (D)	mm	1669	
Weight	kg	395	410

Model		Ze-421	Ze-481
Motor			
Battery capacity	kW.h	10	
Battery type		Lithium-ion	
No. of batteries		1	
Transmission			
Type of transmission		Electric drive transaxle	
No. of work modes		3	
Max. Speed on tyres – Rear 18 x 7.5 - 10	Km/hr	9.8	
Steering		2 hand levers with height and angle adjustment	
Braking		Auto parking brake	
Mower deck			
Deck cutting width	mm (inch)	1066 (42”)	1219 (48”)
Discharge		Side (Mulching optional)	
Deck mounting		Parallel linkage	
No. of blades		2	3
Deck raise lower		Mechanical Foot Lift Pedal	
Operator platform			
Operator seat		Deluxe high back	
Meter panel		•	
ROPS		Foldable	
Storage box		•	
USB port		•	

„Check that the electrical installation is suitable for the charger. If necessary consult someone with expertise or qualifications.If the capacity of the electrical equipment is insufficient, or if a device with large current flow such as a motor is connected, this may cause the voltage of the power supply to drop. Charging may stop if the voltage of the charger‘s power supply drops even for a moment.“

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