

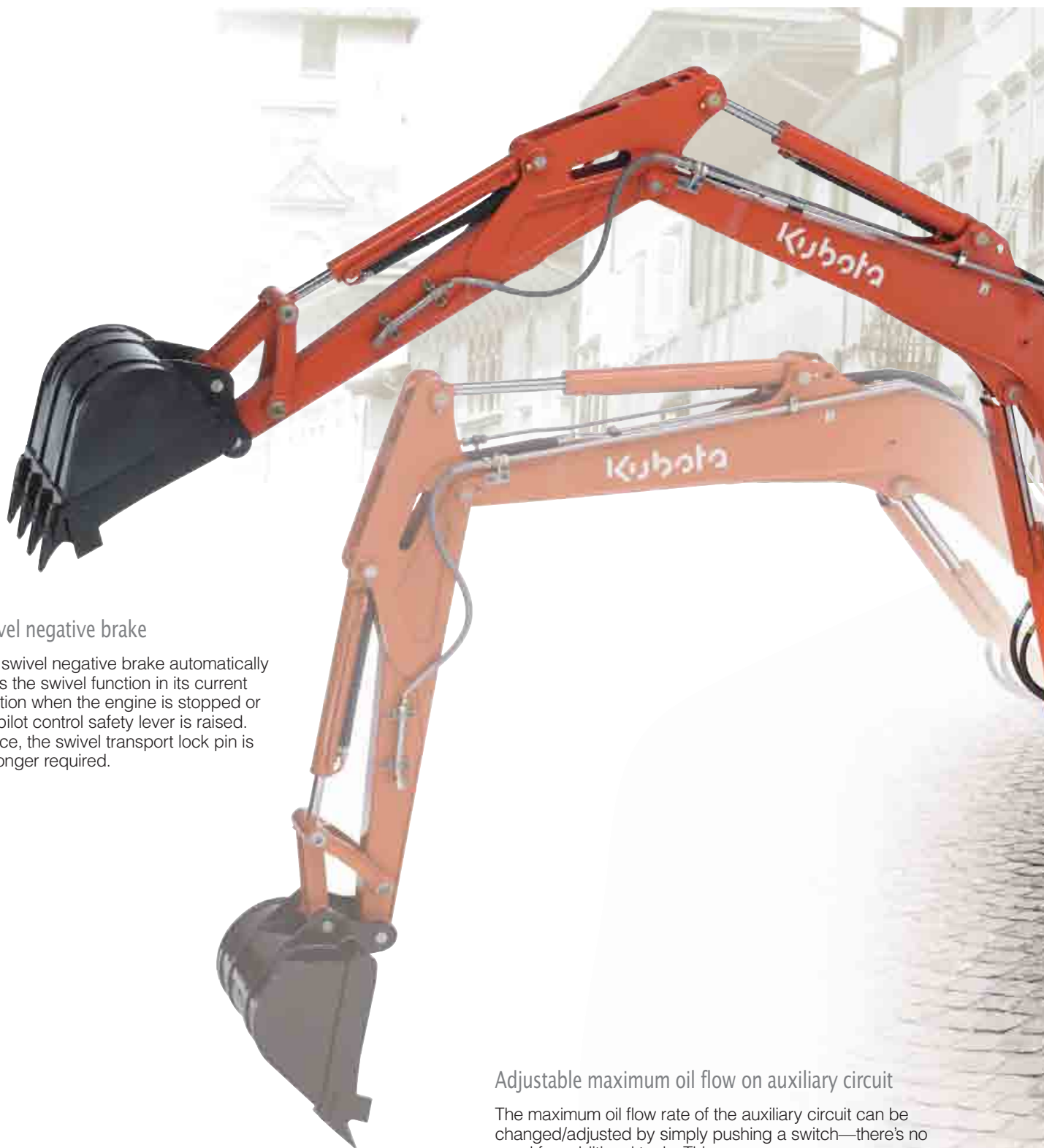


KUBOTA ZERO-TAIL SWING MINI EXCAVATOR

U35-3a2



For smooth simultaneous operation, powerful digging force, and superb attachment versatility, the U35-3 α 2 is the excavator of choice.



Swivel negative brake

The swivel negative brake automatically locks the swivel function in its current position when the engine is stopped or the pilot control safety lever is raised. Hence, the swivel transport lock pin is no longer required.

Four simultaneous operations

When simultaneous operation of the boom, arm, bucket, and swing are required, the pump distributes the adequate oil flow to each actuator according to the amount of lever stroke. Now, high-performance lifting, loading, digging, and dozing are assured without a loss of speed or power.

Adjustable maximum oil flow on auxiliary circuit

The maximum oil flow rate of the auxiliary circuit can be changed/adjusted by simply pushing a switch—there's no need for additional tools. This simplifies the utilisation of front attachments like tilt buckets, brush cutters and hydraulic hammers—you can reduce or increase the flow to get just the right amount of control.

**The maximum oil flow can vary according to the load of front attachments.*



KUBOTA ZERO-TAIL SWING MINI EXCAVATOR

U35-3 α 2

Zero-tail swing

Kubota's zero-tail swing is a pivotal advancement in mini excavators. Unmatched power, worry-free 360° swivel and excellent stability mean there are no limits to what you can accomplish, especially in tight spaces. In fact, the excavator's smooth control, improved efficiency and superior value make it ideally suited for jobs in congested urban areas. Plus, enhanced operator comfort and environmental friendliness not only complete the package, but also make the U35-3 α 2 your ultimate mini excavator choice.

ROPS/FOPS cabin (Level 1)

For maximum operator safety, the cabin provides a Roll-over Protection Structure (ROPS) and a Falling Object Protection Structure (FOPS).

Strong digging force

A well-balanced arm and bucket guarantee superior digging force whenever you need it. Kubota's unique, powerful hydraulic system, combined with large-capacity variable displacement pumps, delivers precise control of arm and bucket movements. This maximum operating pressure generates faster job speed, even in tough digging situations.

With a host of advanced features, Kubota excavators deliver the security and ease of operation users demand.

ANTI-THEFT SYSTEM

The ultimate in security that's as easy as turning a key. It's the industry's first standard-equipped anti-theft system, and another original only from Kubota.

Protected by KUBOTA
ANTI-THEFT
SYSTEM

THE SYSTEM

Introducing Kubota's new simple and secure anti-theft system. Our one-key-system has an IC chip, which only starts the engine when the system recognises the appropriate key. Standard equipment includes one Red programming key, plus two Black operational keys. And up to four Black keys can be programmed. What's more, you get peace of mind knowing your construction equipment couldn't be in safer hands.

EASY OPERATION

No special procedures needed. No PIN numbers needed. Just turn the key. Plus, our simple "one-key-security system" allows access to the cabin door and engine bonnet as well as the fuel tank.

SAFETY/SECURITY

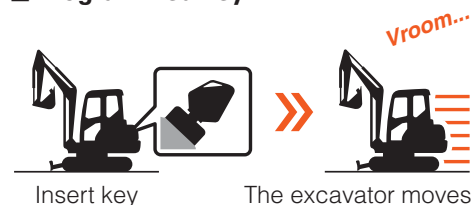
Only "programmed keys" will enable the engine to start. Even identically shaped keys can't start the engine unless they are programmed. In fact, attempting to start the engine with an un-programmed key will activate the system's alarm. This alarm will continue even after the un-programmed key is removed. It will only stop once a programmed key is inserted into the ignition and switched on to start the engine.

EASY PROGRAMMING

One Red programming key and two pre-programmed Black operational keys come standard. If a Black key is misplaced, or if additional Black keys are needed (a maximum of two can be added), key programming is easy. Simply insert the Red key, followed by the Black keys.



Programmed key



Un-programmed key



1 Insert the Red programming key, then press the monitor button.

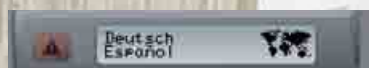


2 Insert new individual Black operational key.

DIGITAL PANEL



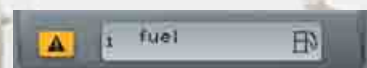
Informative, interactive and functional. Kubota's Intelligent Control System keeps you in tune of the U35-3 α 2's vital signs. It accurately displays easy-to-understand diagnostics of current working conditions and warning indicators for engine rpm and hour meter, as well as for fuel, temperature and oil levels. When filling up with fuel, our panel also informs the operator that the tank is nearly full, and alerts the operator to when routine maintenance is due. Overall, the panel reduces excavator downtime and repair fees for a decrease in total operating costs.



Language selection display



Information when service is required



Low fuel display

EASY OPERATION

1 Proportional flow auxiliary switch

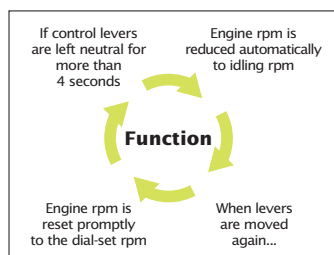
A convenient thumb-operated switch enables easy operation of auxiliary equipment.

2 2-speed switch

The advanced 2-speed travel switch allows user-friendly travel speed changes, improved operation, comfort and control.

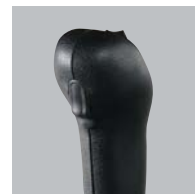
3 Auto Idling system (AI)

Whenever high engine rpm isn't needed, this system automatically reduces the engine to idling rpm, and revs it back to its original setting when work resumes. This helps to reduce noise and exhaust emissions, and saves on fuel, energy and running costs.



4 Convenient breaker switch

A simple forefinger operation is all that's needed to activate the hydraulic breaker.



With the U35-3 α 2, maintenance is fast and easy, so you can work more productively.

Engine inspection

Primary points, like the engine and air cleaner, can be inspected and maintained easily via the rear engine cover. The fuel filter and water separator are independently installed and both are located inside the strong and durable steel-plated bonnet, which opens widely for quick inspection and routine maintenance. An engine inspection window is also located behind the seat for easier access to the engine's injection nozzles.



Front bush pins

To maximise durability, we've introduced bushings on all of the pivot points on the front attachment and connecting points on the swing bracket. Kubota even uses bushings on the swing bracket's fixed joints—between the pin and the boss—to prevent potential damage caused by shock and vibration over many years of use. This minimises attachment play and helps maintain operating precision for a long time.

Kubota engine

Kubota's unique new E-TVCS (Three Vortex Combustion System) enables high-energy output, low vibration and low fuel consumption, while minimising exhaust emissions.

Two-piece hose design

The two-piece hose design on the dozer and boom cylinders reduces hose replacement time by 60% compared to non-joint types. What's more, this design virtually eliminates the need to enter the machine for maintenance.

Control valve inspection

A quick and easy inspection of the control valve is possible simply by opening the latch on the bonnet, located to the right of the cabin. When more detailed maintenance or repairs are required, the remaining panels on the swing frame can be easily removed using standard tools.

Third line hydraulic return

The Third Line Hydraulic Return enables greater oil flow efficiency by reducing back pressure when working with hydraulically actuated attachments, such as a hydraulic hammer.





Standard Equipment

Engine/Fuel System

- Double element air cleaner
- Electric fuel pump
- Auto idling system

Undercarriage

- 300 mm rubber track
- 1 x upper track roller
- 4 x outer flange-type track roller
- 2-speed travel switch on dozer lever
- Bracket for anti-theft locking device

Hydraulic System

- Adjustable maximum oil flow on auxiliary circuit (SP1)
- Pressure accumulator
- Hydraulic pressure checking ports
- Straight travel circuit
- Third line hydraulic return
- Auxiliary switch on right control lever

Safety System

- Engine start safety system on the left console
- Travel lock system on the left console
- Swivel lock system
- Boom check valve
- Anti-theft system

Working Equipment

- 1350 mm arm
- Auxiliary hydraulic circuit piping to the arm end
- 2 working lights on cabin and 1 light on the boom

Cabin

- ROPS (Roll-over Protective Structure, ISO3471)
- FOPS (Falling Object Protective Structure) Level 1
- Weight-adjustable semi-suspension seat
- Seatbelt
- Hydraulic pilot control levers with wrist rests
- Travel levers with foot pedals
- Cabin heater for defrosting & demisting
- Emergency exit hammer
- Front window power-assisted with 2 gas dampers
- 12 V power source for radio-stereo
- 2 speakers and radio aerial
- Location for radio
- Cup holder

Canopy

- ROPS (Roll-over Protective Structure, ISO3471)
- FOPS (Falling Object Protective Structure) Level 1
- Weight-adjustable semi-suspension seat
- Seatbelt
- Hydraulic pilot control levers with wrist rests
- Travel levers with foot pedals

Optional Equipment

Working Equipment

- 1550 mm arm

Undercarriage

- 300 mm steel track (+ 95 kg)

Safety System

- Overload warning buzzer
- Anti-fall valve unit (boom, arm, dozer)

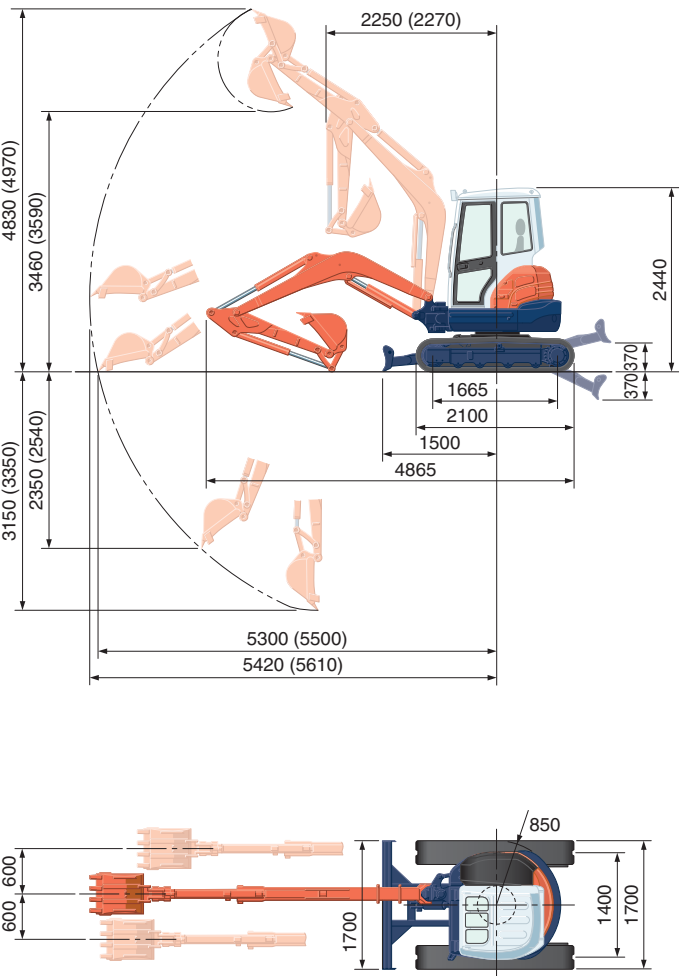
Others

- Special paint upon request

SPECIFICATIONS

*Rubber shoe type			
Machine weight	Cabin	kg	3590
	Canopy	kg	3480
Bucket capacity, std. SAE/CECE		m ³	0.11/0.10
Bucket width	With side teeth	mm	575
	Without side teeth	mm	550
Engine	Model		DI1503-M-EBH-4-EC-N
	Type		Water-cooled, diesel engine E-TVCS (Economical, ecological type)
	Output ISO9249	PS/rpm	27.5/2300
		kW/rpm	20.3/2300
	Number of cylinders		3
	Bore × Stroke		mm 83 × 92.4
	Displacement		cc 1499
Overall length		mm	4865
Overall height	Cabin	mm	2440
	Canopy	mm	2440
Swivelling speed		rpm	8.9
Rubber shoe width		mm	300
Tumbler distance		mm	1665
Dozer size (width × height)		mm	1700 × 335
Hydraulic pumps	P1, P2		Variable displacement pump
	Flow rate	ℓ/min	40 + 40
	Hydraulic pressure	MPa (kgf/cm ²)	24.5 (250)
	P3		Gear type
	Flow rate	ℓ/min	21
	Hydraulic pressure	MPa (kgf/cm ²)	19.6 (200)
Max. digging force	Arm	kN (kgf)	18.3 (1870)
	Bucket	kN (kgf)	31.1 (3180)
Boom swing angle (left/right)		deg	70/50
Auxiliary circuit	Flow rate	ℓ/min	40
	Hydraulic pressure	MPa (kgf/cm ²)	24.5 (250)
Hydraulic reservoir		ℓ	36
Fuel tank capacity		ℓ	41.5
Max. travelling speed	Low	km/h	3.0
	High	km/h	4.6
Ground contact pressure	Cabin	kPa (kgf/cm ²)	33.0 (0.34)
	Canopy	kPa (kgf/cm ²)	32.0 (0.33)
Ground clearance		mm	290

WORKING RANGE

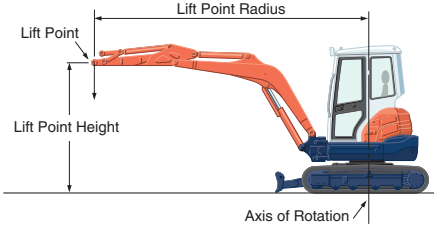


(): Long Arm
Unit: mm

LIFTING CAPACITY

*With cabin, rubber shoe and standard arm kN (ton)									
Lift Point Height	Lifting point radius (1.5m)			Lifting point radius (3m)			Lifting point radius (4.5m)		
	Over-front		Over-side	Over-front		Over-side	Over-front		Over-side
	Blade Down	Blade Up		Blade Down	Blade Up		Blade Down	Blade Up	
3m	-	-	-	-	-	-	-	-	-
2m	-	-	-	9.0 (0.92)	8.9 (0.91)	8.3 (0.85)	7.4 (0.76)	4.7 (0.48)	4.4 (0.45)
1m	-	-	-	12.4 (1.27)	8.3 (0.84)	7.7 (0.79)	7.9 (0.81)	4.6 (0.47)	4.3 (0.44)
0m	-	-	-	14.3 (1.46)	7.9 (0.80)	7.3 (0.75)	8.2 (0.84)	4.5 (0.46)	4.2 (0.43)
-1m	20.6 (2.10)	20.6 (2.10)	20.6 (2.10)	13.8 (1.40)	7.8 (0.79)	7.2 (0.74)	-	-	-
-2m	24.7 (2.52)	24.7 (2.52)	23.9 (2.44)	10.0 (1.02)	7.9 (0.81)	7.4 (0.75)	-	-	-

Please note:
* The lifting capacities are based on ISO 10567 and do not exceed 75% of the static tilt load of the machine or 87% of the hydraulic lifting capacity of the machine.
* The excavator bucket, hook, sling and other lifting accessories are not included on this table.



* Working ranges are with Kubota standard bucket, without quick coupler.
* Specifications are subject to change without notice for purpose of improvement.

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