

# Kubota®



## KUBOTA COMPACT EXCAVATOR

# KX

## KX91-3 SUPER SERIES 2

The KX91-3S2 takes you to a new level of performance, so you can dig deeper, reach farther and work more efficiently.



# AB

FLOAT ANGLE BLADE

# T4

Interim  
TIER



**With its wide assortment of innovative features, including Kubota's Float Angle Blade, the compact KX91-3 Super Series 2 is the ideal choice for the job.**

The KX91-3S2 is loaded with features that make it the smart choice for your digging or dozing needs. Now, an exclusive hydraulic Float Angle Blade is available, so you'll complete your backfilling chores quickly and easily. Plus, with its hydraulic versatility, powerful and clean-running engine, and more, the KX91-3S2 will boost your efficiency and productivity. It offers all the tools you need to get the job done in comfort, and on time.

**AB**  
FLOAT ANGLE BLADE



# Hydraulic Angle Blade

Save time and work more efficiently. With a simple movement of the dozer lever, the hydraulic angle blade can be angled to the right or left to push soil to the side as the machine moves forward, eliminating the need for repetitive repositioning at right angles when backfilling trenches.

## Tight spots

The angle blade lets you work efficiently in confined spaces, alongside walls, and near busy roads. No wider than the tracks, it's also easy to transport between jobs.



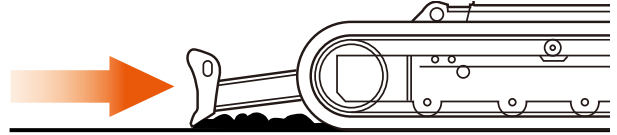
## Easy operation

Up, down, left and right—the angle blade can be moved and positioned with just a single lever.

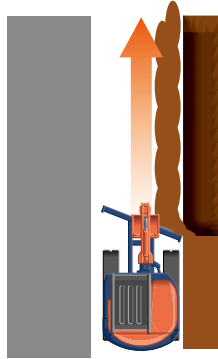


## Float position

You don't need to adjust the dozer height to make a clean ground surface—after backfilling, just travel backward along the covered ditch with the dozer in the float position. Ground finishing work is now fast and easy!



## What makes our KX91-3S2 Angle Blade excavator so productive? Check it out.



### With Angle Blade

Moving only in a forward direction one time, which is equivalent to a trencher backfilling its one side, the KX91-3S2 Angle Blade excavator backfills smoothly and efficiently.



### Without Angle Blade

Without the angle blade feature, time-consuming, repetitive repositioning at right angles to the trench is required.

## Comfort that keeps you working at peak efficiency.

### Spacious operating area with deluxe suspension seat

More spacious than standard tail-swing excavators, the KX91-3S2's comfortable operating area helps reduce operator fatigue. The high-back deluxe suspension seat is equipped with wrist rests. Moreover, the height and spring firmness are adjustable, ensuring optimum comfort for every operator.

### Convenient Two-pattern Selection System (TPSS)

Change between ISO and SAE operating patterns with a quick flip of the TPSS switch, without tools or leaving your seat.



## User-friendly operation



### 1. Simple forefinger operation

Used for some special applications that require continuous oil flow, such as a brush cutter. The on/off button controlled by the forefinger reduces operator fatigue.

### 2. Short stroke operating levers

The operating levers require less effort and shorter movements,

ensuring improved control, responsiveness and comfort, and reduced operator fatigue. Only a flick of the wrist is needed for smooth excavator operation.

### 3. Proportional flow auxiliary switch

A convenient bi-directional switch enables easy operation of hydraulic thumbs and other hydraulic attachments such as augers and breakers.

### 4. 2-speed travel switch

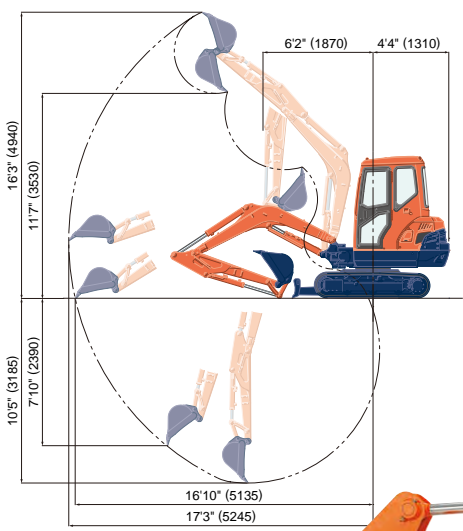
The 2-speed travel switch is mounted on the dozer lever for easy operation and control, and advanced, user-friendly travel speed changes.

### 5. Wrist rests

Adjust the custom wrist rests to your favorite position, or just move them aside. Either way, they help reduce arm movement and operator fatigue for increased job efficiency.

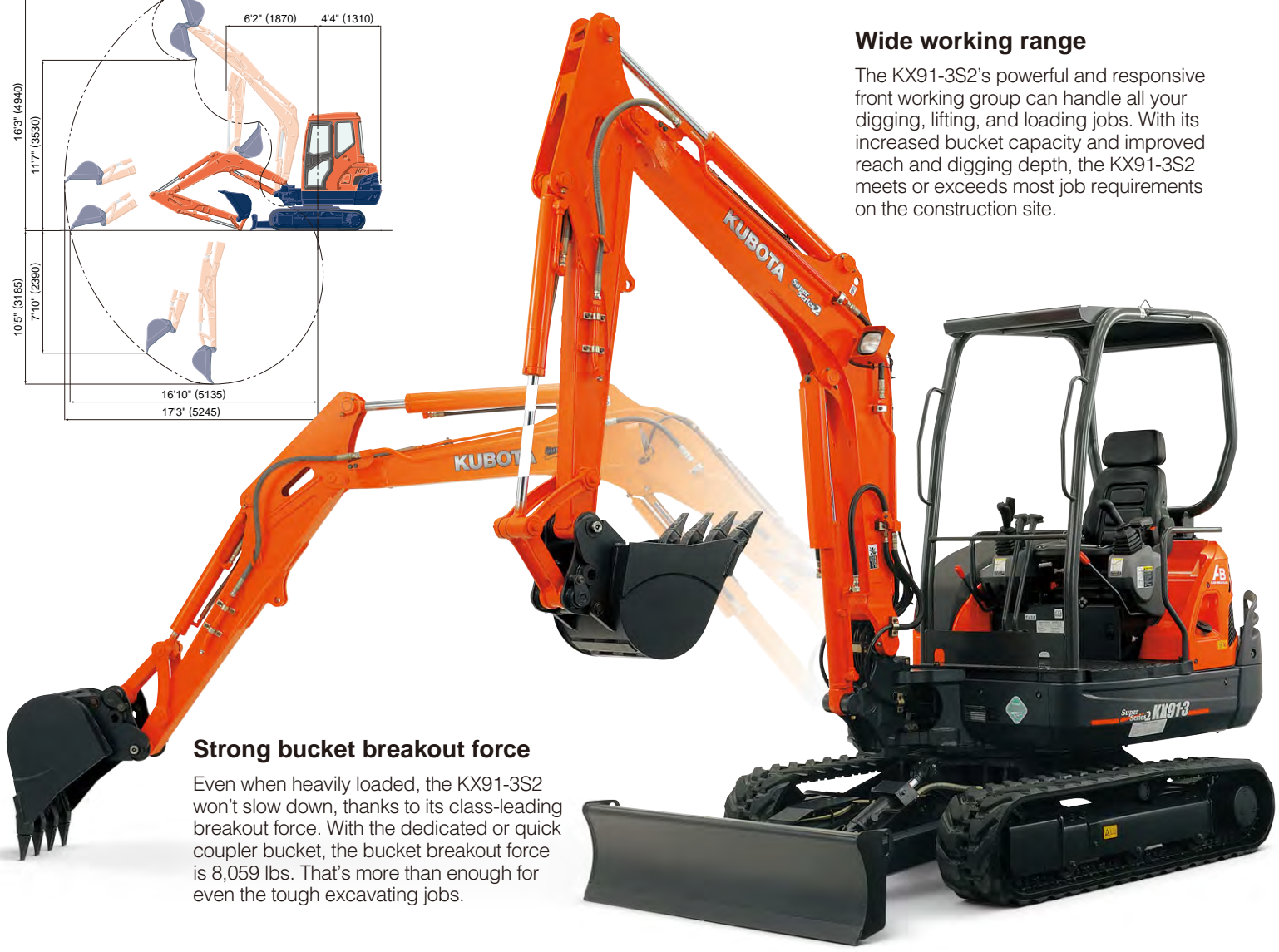


The power and versatility to take on a variety of tough jobs.



**Wide working range**

The KX91-3S2's powerful and responsive front working group can handle all your digging, lifting, and loading jobs. With its increased bucket capacity and improved reach and digging depth, the KX91-3S2 meets or exceeds most job requirements on the construction site.



**Strong bucket breakout force**

Even when heavily loaded, the KX91-3S2 won't slow down, thanks to its class-leading breakout force. With the dedicated or quick coupler bucket, the bucket breakout force is 8,059 lbs. That's more than enough for even the tough excavating jobs.



## Clean-running Kubota Engine

Powerful and dependable, the KX91-3S2's diesel engine delivers superior horsepower and performance. It offers low noise and vibration levels, exceptional fuel efficiency, and complies with the EPA's 2008 interim Tier IV emissions regulations.



Complies with Interim Tier IV!

## Auto idling system

Save fuel with Kubota's Auto Idle. Reduce engine RPM instinctively when high engine speed isn't needed. When the control levers are in neutral for more than 4 seconds, the engine RPM automatically idles. Move any control lever and the engine RPM immediately returns. This innovative feature reduces noise and exhaust emissions while reducing operating costs.



## Adjustable maximum oil flow control for auxiliary port

This unique function lets you control the oil flow according to your needs or the attachment in use. It eliminates the hassle of using tools to change settings manually, so you don't have to leave the cabin. When using a tilt bucket, you can slow the flow to get just the right control to gently shape a swale.

Alternatively, for a brush cutter, direct the oil flow to one side of the excavator arm. The system will even store your settings for the next time you need it, saving time and quickly regulating the flow requirements. Adjustable oil flow enhances performance and saves fuel.

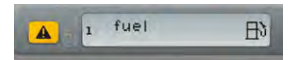


## Digital panel

A digital panel and the Kubota Intelligent Control System (KICS) help reduce excavator downtime and repair fees by providing accurate and timely diagnostic readings and routine maintenance alerts. The panel not only lets you know when fuel is running low, but warns you during refueling when the tank is nearly full.



Routine maintenance alert display



Low fuel display

## Value Thumb bracket

The factory-installed thumb bracket and relief valve significantly reduce the time needed to mount the optional hydraulic thumb, which makes short work of a variety of loading and material handling jobs.



## Extraordinary stability and lifting capacity

Innovative counter balancing technology provides superior excavator stability. Long tumbler distance, a lower center of gravity and Double Flanged Lower Track Rollers combine to deliver safe and effective performance when working to the side, with hydraulic attachments, or lifting heavy objects.

## Rear corner protectors

Two heavy-duty protectors—one on each rear corner—protect the engine hood and side covers from damage when working in tight spaces.



# Simple maintenance keeps the KX91-3S2 working longer.

## ROPS/OPG (TOP Guard, Level I) canopy and cab

The ROPS/OPG (TOP Guard, Level I) canopy and cab provide complete protection from accidental rollovers and falling objects. Both the ROPS and the OPG (TOP Guard, Level I) meet the applicable, ISO, SAE, and OSHA standards to ensure an extra level of safety and security on the job.

## Two-piece hose design

The two-piece hose connections for the dozer and boom cylinder hoses simplify hose replacement and reduce downtime.

## Protected cylinder hoses

The bucket cylinder hoses are located inside the arm. And the boom cylinder hoses are routed under the boom bottom.

## Centralized swivel bearing lubrication

Grease ports for the swivel bearing, gear teeth, and swing cylinder pin are conveniently grouped on the front of the house.

## Steel-plated panels

The KX91-3S2 features long-lasting rear and side panels that open easily for quick inspection and routine maintenance. These panels are made of steel for enhanced strength and durability.

## Front bush pins

To maximize durability, we've introduced bushings on all of the pivot points on the front attachment and connecting points on the swing bracket.

## Third-line hydraulic return

When working with one-way hydraulic attachments, such as a breaker or brush cutter, the standard third-line hydraulic return system allows oil to flow directly back to the tank without running through the control valves. This contributes to less oil contamination, reduced back pressure, and greater oil flow efficiency.



## Easy maintenance

The KX91-3S2 is a breeze to maintain. The side and rear covers open wide and the main components are centrally located, giving you quick and easy access to all vital areas, including the engine, fuel tank, water separator, radiator, coolant reservoir, air filter, control valve and hydraulic tank.



## Safety

Safety is designed into every detail of the KX91-3S2. An Engine Start Lockout System prevents the engine from starting when the safety levers are lowered. A Safety Lever Lockout System helps prevent unexpected excavator and attachment movement when entering or exiting the machine. An Auto House Parking Brake automatically locks the house in the position it was in when the engine was shut off, eliminating the need for a swing lock pin. It also makes the excavator more compact during transport and more secure when parked on an incline.

## Travel negative brake

The travel negative brake locks the tracks to prevent unwanted movement. This keeps the excavator secure while transporting it on the back of trucks or parking it on slopes.

## Swivel negative brake

The swivel negative brake automatically locks the swivel function in its current position. This prevents unexpected machine movement. It's particularly useful during work on slopes or when towing the excavator between worksites.

## Accumulator

The accumulator makes replacing attachments safer and more efficient. Turning the key to the "on" position clears residual pressure in the auxiliary hydraulic hose. If the engine is accidentally shut off while the front attachment is raised, turning the key to the "on" position allows you to safely lower it.



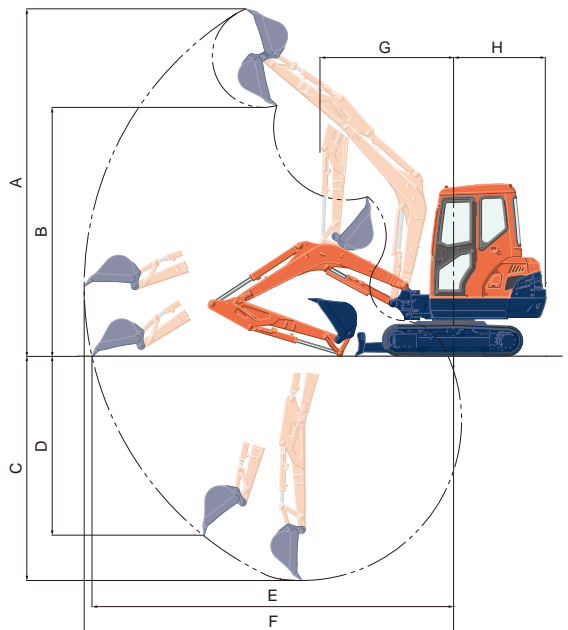
# KX91-3S2 OPTIONS

- Buckets
- Spark arrest muffler
- Travel alarm
- Hydraulic auger
- Canopy lights
- Hydraulic thumb
- Quick coupler
- Hydraulic hammer



## WORKING RANGE

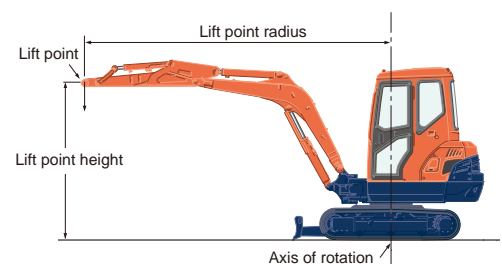
Model		KX91-3S2	
A	Max. digging height	ft. in. (mm)	16'3" (4940)
B	Max. dumping height	ft. in. (mm)	11'7" (3530)
C	Max. digging depth	ft. in. (mm)	10'5" (3185)
D	Max. vertical digging depth	ft. in. (mm)	7'10" (2390)
E	Max. digging radius, at ground level	ft. in. (mm)	16'10" (5135)
F	Max. digging radius	ft. in. (mm)	17'3" (5245)
G	Min. turning radius	W/o swing	ft. in. (mm) 6'2" (1870)
		With swing	ft. in. (mm) 4'9" (1440)
H	Min. tail turning radius	ft. in. (mm)	4'4" (1310)



## LIFTING CAPACITY

LIFT POINT HEIGHT (ft)	LIFTING CAPACITY OVER THE FRONT, BLADE DOWN unit=1000lbs				LIFTING CAPACITY OVER THE SIDE unit=1000lbs		
	LIFT POINT RADIUS (ft)			LIFT POINT RADIUS (ft)			
	8	12	MAX	8	12	MAX	
6	1.78	1.42	1.36	1.78	1.30	1.03	
4	2.42	1.58	1.43	2.29	1.27	1.01	
2	2.95	1.74	1.50	2.18	1.23	0.99	
GL	3.22	1.84	1.53	2.11	1.20	0.97	

Machine with ROPS canopy and rubber crawler, without bucket

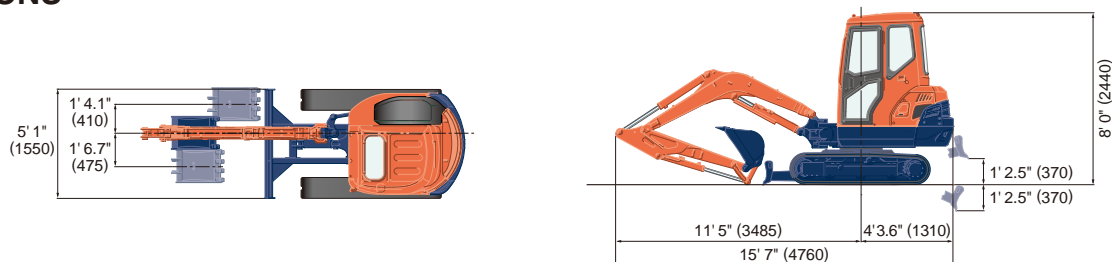


## SPECIFICATIONS

Model		KX91-3S2		KX91-3S2 angle blade	
Type of ROPS / OPG (TOP Guard, Level I)		Canopy / Cab			
Type of tracks		Steel / Rubber			
Engine	Model		Kubota D1703-M-E3		
	Output (SAEJ 1995 gross)	HP (kW)/rpm	28.2 (21.0) / 2250		
	Output (SAEJ 1349 net)	HP (kW)/rpm	26.9 (20.1) / 2250		
	Displacement	cu. in. (cc)	100.5 (1647)		
Dimensions	Overall length		ft. in. (mm)		
			15'7" (4760)		
	Overall height	Canopy / Cab	ft. in. (mm)		
			8'0" (2440) / 8'0" (2440)		
Overall width		ft. in. (mm)			
		5'1" (1550)			
Min. ground clearance		in. (mm)			
		11.6" (295)			
Hydraulic system	Pump capacity		GPM (ℓ/min)		
			10.9 (41.4) variable × 2 / 5.5 (20.9) Gear × 1		
	Auxiliary hydraulic flow		GPM (ℓ/min)		
		10.9 (41.4)			
Drive system	Max. breakout force	Bucket / Arm	lbs. (kgf)		
			8059 (3655) / 3592 (1629)		
	Travel speed	Low / High	mph (km/h)		
			1.9 (3.1) / 2.9 (4.8)		
	Max. traction force	Low speed	lbs. (kgf)		
			5600 (2540)		
	Tumbler distance		ft. in. (mm)		
		5'1.4" (1560)			
Crawler length		ft. in. (mm)			
		6'6.7" (2000)			
Shoe width		ft. in. (mm)			
		0'11.8" (300)			
Ground contact pressure	Canopy	Rubber / Steel	psi (kgf/cm <sup>2</sup> )		
			4.457 (0.313) / 4.575 (0.322) / 4.727 (0.332) / 4.844 (0.341)		
Cab	Rubber / Steel	psi (kgf/cm <sup>2</sup> )			
			4.596 (0.323) / 4.713 (0.331) / 4.865 (0.342) / 4.983 (0.350)		
Swing system	Unit swing speed		rpm		
			9.4		
Boom swing angle	Left / Right		degree		
			80 / 50		
Blade	Dimensions		ft. in. (mm)		
	Width		5'1" (1550)		
	Height		ft. in. (mm)		
			1'1.2" (335) / 1'3.2" (385)		
	Max. lift above ground		ft. in. (mm)		
		1'2.6" (370) / 1'4.1" (410)			
Max. drop below ground		ft. in. (mm)			
		1'2.6" (370) / 1'6.5" (470)			
Angle		degree			
		— / 25			
Hydraulic oil (reservoir / system)		gal (ℓ)			
		9.5 (36) / 14.5 (55)			
Fuel reservoir		gal (ℓ)			
		13.2 (50)			
Operating weight (Including operator's weight 175 lbs.)	Canopy	Rubber / Steel	lbs. (kgf)		
			7110 (3225) / 7297 (3310) / 7540 (3420) / 7727 (3505)		
Cab	Rubber / Steel	lbs. (kgf)			
			7330 (3325) / 7518 (3410) / 7760 (3520) / 7948 (3605)		

The company reserves the right to change the above specifications without notice. This brochure is for descriptive purposes only. Please contact your local Kubota dealer for warranty information. For your safety, Kubota strongly recommends the use of a Rollover Protective Structure (ROPS) and seat belt for almost all applications.

## DIMENSIONS



Unit: ft. in. (mm)

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