



For Earth, For Life
Kubota

M

KUBOTA DIESEL TRACTOR
M5-091/M5-111

A new wide cabin, dramatically cleaner emissions, and powerful engines highlight the new M5-091/M5-111 diesel tractors from Kubota.



NEW M5-091

**Spacious, clean, and dependable.
The new M5-091/M5-111 tractors.**



/M5-111

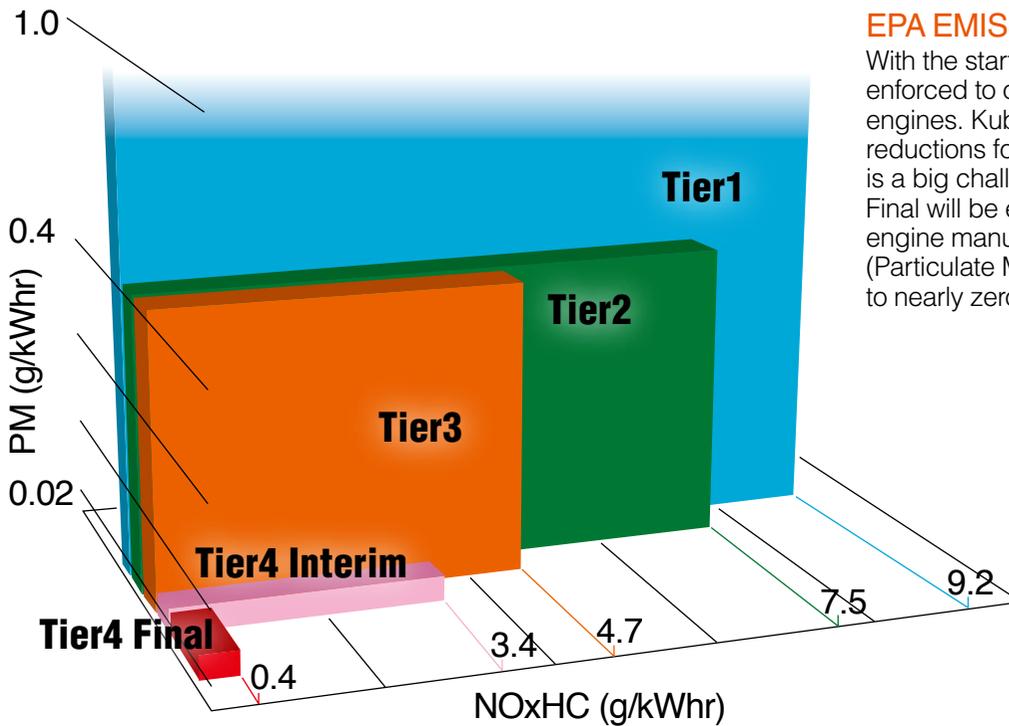
The M5-091/M5-111 tractors have been redesigned and re-engineered inside and out for greater comfort and cleaner emissions. You'll work comfortably, thanks to a new extra-wide, ultra-spacious cabin that features a convenient optional instructor's seat and a glass sunroof with retractable sun shade. And you'll work clean, thanks to a re-engineered exhaust system that combines Selective Catalytic Reduction with a Common Rail System, Diesel Particulate Filter muffler, and Exhaust Gas Recirculation system to dramatically reduce emissions without sacrificing power or economical performance. Best of all, the M5-091/M5-111 carry the Kubota name, so you can depend on them to get the job done.



Kubota Clean Diesel Solution (K-CDS)

Re-engineered to exceed the latest emissions standards

Kubota engines offer clean performance that exceeds even the latest emissions standards, thanks to the latest advances in clean-engine technology. Selective Catalytic Reduction (SCR) sprays the hot exhaust from the engine with diesel exhaust fluid (DEF), which transforms the exhaust into harmless water vapor and nitrogen. The Common Rail System (CRS) electronically controls the timing and amount of high-pressure injected fuel in stages for optimal combustion, which results in greater efficiency, better fuel economy, and less engine noise. The combination of these two system with a Diesel Particulate Filter (DPF) muffler and an Exhaust Gas Recirculation (EGR) system ensure the M5-091 and M5-111 meet the Tier4 Final emissions regulations.



EPA EMISSION REGULATION

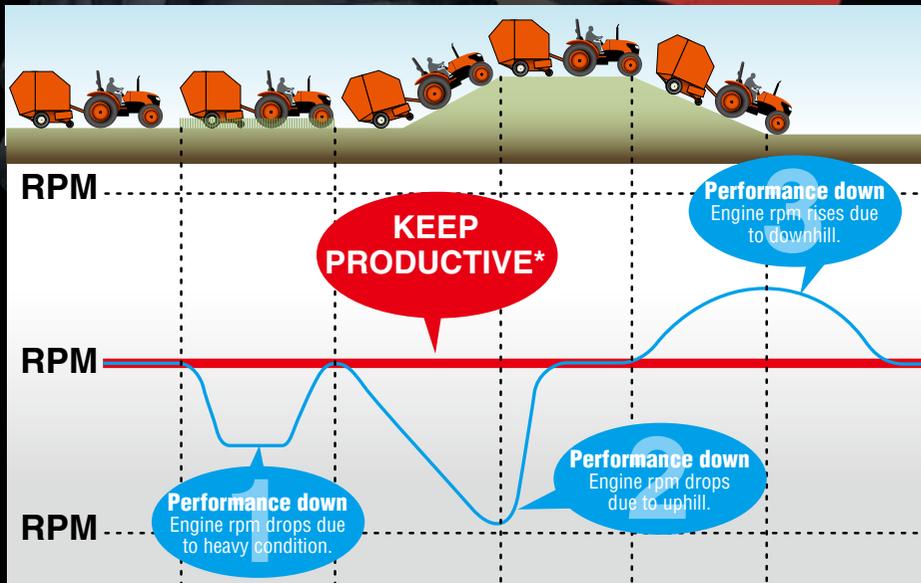
With the start of 2012, EPA Tier4 Interim will be enforced to over 56kW off-highway diesel engines. Kubota has been executing emissions reductions for more than a decade. However, it is a big challenge this time. Furthermore, Tier 4 Final will be enforced in 2015, and by which engine manufacturer must lower both PM (Particulate Matter) and NOx (Nitrogen Oxide) to nearly zero level.

- 1996 Tier1
- 2004 Tier2
- 2008 Tier3
- 2010 Tier4 Interim
- 2015 Tier4 Final

EPA nonroad emission regulations:
56-75 kW



• Stay Productive On Your Farm By Using Constant RPM Management



— Constant RPM Management Switch ON
 — Constant RPM Management Switch OFF

**The engine speed drops when the load exceeds the engine performance.*

Note:

In a mechanically-controlled engine, the engine speed changes according to increases and decreases in the load. For example, when working in a hilly area, the load increases and engine speed drops while ascending a slope, and conversely the load drops when descending. These changes in engine speed affect the travel speed and PTO-driven implements. In order to minimize these effects, the operator must make fine adjustments to the travel speed and hand throttle lever.

When the Constant RPM Management switch

is turned "On", the engine speed will be kept nearly constant in response to a certain level of work fluctuations. This improves the accuracy of work without the need for troublesome manipulation of the travel speed and hand throttle lever. There is a limit to the range within which a constant speed can be maintained. If a load exceeding the engine performance is applied, the engine speed will drop. The purpose of Constant RPM Management is not to increase the engine power.



Constant RPM Management

The M5-091/M5-111 engines feature a new electronic governor that gives you electronic control of engine RPM. Activating the system keeps engine revolution constant, preventing drops in PTO speed and enabling stable operation. It makes working with PTO-driven implements much more efficient.

RPM Memory

RPM memory lets you save the RPM setting for an oft-performed task, such as PTO work, front loader work, or changing directions. To recall that setting, simply press a single button, and you can start working immediately without having to adjust the throttle.

More space and more visibility make our cab a great place to work.



Sunroof with Retractable Sunshade

A glass sunroof provides a clear view of the front loader fully raised and pallet forks. The non-opening sunroof is equipped with a retractable sunshade to keep the sun out of the cab while traveling or performing low-level types of work.



Ultra Grand Cab II

Here's a feature you can really get into: an extra-wide, ultra-spacious, fully enclosed cab. One of the largest in its class, this stylish new cab is equipped with air conditioning, a sunroof with retractable sunshade, and rubber cushions that provide new levels of comfort and operating efficiency all year round. Full-length doors open wide for easy access, while the flat floor and unobstructed ceiling provide more head and leg room. All displays, levers and controls are ergonomically located for easy access and intuitive operation.

Rounded Glass

We've rounded the cab glass of our Ultra Grand CAB II to provide the operator with more visibility and a more spacious feel—ideal for long days inside the cab. Furthermore, we've increased the glass coverage area on the cab door, which makes it easier to get in and out of the cab.

A spacious and ergonomically designed cab brings comfort to the workplace.

Instructor's Seat (Optional)

The optional instructor's seat is useful when training new operators. When not in use, it can be folded down to increase spaciousness.

New Functional Platform

The M5-091/M5-111 cab has been redesigned for better ergonomics. All levers (except the 4WD lever) and electrical switches are located on the right side for easy access and continuous operations.

Easy-Step Tilt Steering Wheel

The steering wheel of the cab gets out of the way when the operator is dismounting the tractor. Just step on a pedal and raise the steering wheel to its original position.

Heater/Air Conditioner

The heating and cooling unit is now located under the seat. The overall air circulation in the cab has been optimized by the cab's rounded glass as well as by placing the air outlets in the dash tower to keep you cooler on hot summer days and warmer on cold mornings, for year around environment control.



Standard Equipment

- Front halogen work lights
- Front windshield wiper and washer
- Rear halogen work lights
- Interior dome light
- External left and right mirrors
- Sun visor
- Cup holder
- Power outlet
- 7-pin trailer coupler

Options

- Additional 2 front work lights for CAB models
- Rear wiper and washer
- Rear defogger
- 130Amp for CAB (80 Amp for ROPS) alternator
- Air ride seat suspension
- CD/radio with weather band
- Radio with weather band

A choice of three transmissions gives you the tractor performance you need with less hassle.

F8/R8 Transmission

The synchronized four speeds of the main shift and a high/low range supply tractors with 8 Forward and 8 Reverse speeds.

F12/R12 Transmission (Factory option)

For heavy-duty work such as plowing, hay work and heavy trailer applications, the M5-091 and M5-111 can be equipped with an F12/R12 transmission. This transmission features six speeds of the main shift and a high/low range giving it a total of 12 Forward and 12 Reverse speeds.

F24/R24 Transmission Non-Clutch Shift with Dual Speed (Factory option)

The M5-111 CAB models can be fitted with the F24/R24 transmission for users who demand maximum performance. With six synchromesh speeds in the main shift, Dual Speed which offers instant upshifts and downshifts, and a high/low range, it offers 24 Forward and 24 Reverse speeds.

Over Drive (F12/R12 and F24/R24 models only)

The Over Drive function keeps the engine revolutions at around 2000 rpm during high speed driving for better fuel economy.

Electro Hydraulic Shuttle

Better than ever, our Electro Hydraulic Shuttle for the M5-091/M5-111 makes shifting between forward and reverse smooth and quick. With the Hydraulic Shuttle, a column-mounted lever, conveniently located next to the steering wheel, does all the work. Boost productivity, especially while using loaders, by eliminating the need to depress the clutch every time you change directions. And when attaching



implements, our improved inching feature is easy to perform, giving you the same feel as a half-clutch operation.

Hydraulic Wet Disc Brakes

To decrease operator effort and increase overall tractor longevity, the Kubota M5-091 and M5-111 is standard with Hydraulic Wet Disc Brakes. These brakes require less pedal effort and retain high performance efficiency even after repeated heavy-duty work.

Multiple Wet Disc Clutch

The multiple wet disc clutch provides durability and a long operating life.

Limited Slip Differential

Limited Slip Differential on the front helps you maintain a stable travel speed should the drive wheel on either side of the tractor slip. A standard feature on the M5-091 and M5-111, Limited Slip Differential is perfect when reliable traction is essential.

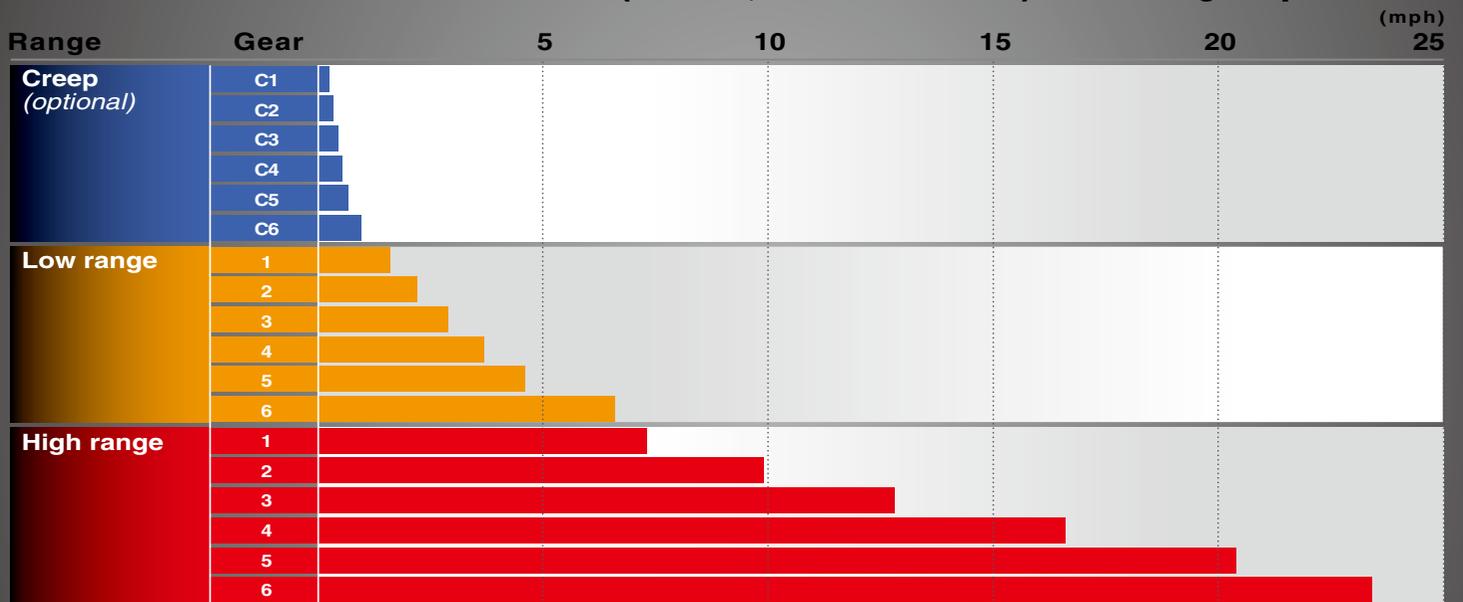
Easy to shift 4WD Engagement

Switching the 4-wheel drive on and off is easy and quick, and done with one simple lever (One simple switch for M5-111 HDC24). Best of all, there's no need to stop the tractor even when moving out of a field onto a road, so you can stay productive. The 4WD indicator on the LED readout lets you know you're in 4WD.

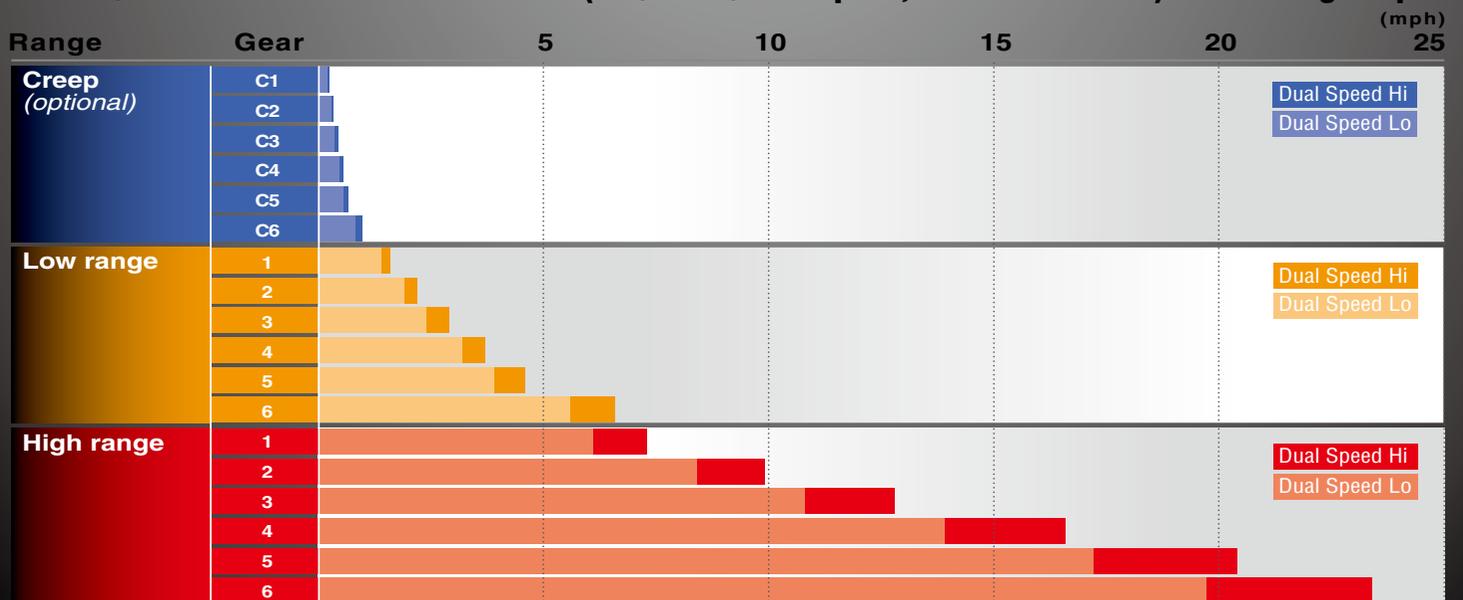
(Do not engage while carrying heavy loads, or when rear wheel is spinning.)



M5-091/M5-111 HDC12 TRAVELING SPEED (F12/R12, 18.4-30 rear tires) @ rated engine rpm



M5-091/M5-111 HDC24 TRAVELING SPEED (F24/R24 w/ Dual Speed, 18.4-30 rear tires) @ rated engine rpm



Long-lasting strength, durability and reliability to tackle just about anything with ease.

Hydraulics

The hydraulics on the M5-091/M5-111 are powerful and fast-acting. External hydraulic cylinders improve lifting power and ensure easier maintenance, while the large pump capacity (17 gpm; 15.9 gpm for ROPS models) shortens front-loader cycle times, enhancing productivity and performance. One (SCD) hydraulic remote valve is standard, with the option to add up to 2 more. An optional flow control valve lets you adjust the oil flow volume.

540/540E Change Lever

The PTO lever is now located inside the cabin for more convenient access. You no longer have to exit the cabin to operate the PTO lever when working with PTO implements.

Bevel-Gear Front Axle

The bevel-gear front axle provides the M5-091/M5-111 with greater all-around maneuverability. It enables M5-091/M5-111 tractors a tighter turning radius than ever before—an amazing 55 degrees. This makes easy work of jobs in tight spaces. Limited Slip Differential on the front and Differential Lock on the rear are standard features, offering increased stability and traction on challenging ground conditions.

Hydraulic Independent PTO

Pulling, lifting, cutting or baling; the standard 540 rpm hydraulic independent PTO of the Kubota M-Series tractors makes your toughest work easier. The PTO brake engages when the clutch is shut off and securely holds the PTO shaft. The PTO clutch can be hydraulically engaged and disengaged on the go. This means mowing, operating hay equipment or spraying orchards are all made more efficient. 1000rpm and 540E PTOs are optionally available.



3-Point Hitch

The Category II 3-point hitch provide fast and simple attachment of rear-mounted implements weighing up to 4,630 lbs./2,100 kg (ISO standard) or 5182lbs./2350 kg (ASAE standard) and optionally up to 6064 lbs./2,750 kg (ISO standard) or 7275 lbs./3,300 kg (ASAE standard). On models with the FR12/R12 or F24/R24 transmission, the hitch is compatible with implements weighing up to 6064 lbs./2,750 kg (ISO standard) or 7275 lbs./3,300 kg (ASAE standard).

Floating Lift Rods

Floating lift rods are standard on both sides of the M5-091 and M5-111. Floating lift rods give the M5-091/M5-111 tractors a smoother ride and enhanced traction while using the 3-point hitch, especially on uneven terrain.

Economy PTO (standard on F12/R12 and F24/R24 models)

The M5-091/M5-111 optional economy PTO can save you money as well as reduce operating noise. Simply select "540E" and the PTO shaft rotation speed is maintained at 540 rpm while the engine speed runs at 1519rpm with limitation to 1772rpm. Thereby reducing both operating noise and fuel consumption.

The M-Series Front Loader puts power and visibility front and center.

Quick Coupler

This standard M-Series feature makes attaching buckets, bale spears and pallet forks quick and easy. A Euro type quick coupler is optionally available.

4-Bar Linkage

Thanks to an upgraded 4-bar bucket linkage, the rollback and dumping angle has been increased for quicker scooping and dumping.

Loader Lever

Conveniently located in the central console, the Loader Lever provides quick and easy control of loader operations.

Quick-Mount Attach/Detach

Attach or detach the front loader in moments without the use of tools. The boom stands and mounting pins make this task a snap, allowing an extra measure of productivity and tractor versatility. A single-lever valve hose Quick Coupler (option), available for the loader's hydraulic fittings, allows you to release all four lines at once.



Front Loader Specifications

Model	LA1854		
Tractor applications	M5-091, M5-111		
Boom Cylinder Fulcrum	Height position	Power position	
Maximum Lift Height (Pivot pin)	in. (mm)	145.7 (3700) 131.9 (3350)	
Clearance w/Attachment Dump	in. (mm)	110.6 (2808) 94.7 (2405)	
Reach @ Maximum Height	in. (mm)	19.1 (484) 34.4 (875)	
Maximum Dump Angle	degrees	52 64	
Reach w/Attachment on Ground	in. (mm)	87.9 (2233)	
Maximum Rollback Angle	degrees	40	
Digging Depth (When Bucket is Level)	in. (mm)	7.8 (198)	7.3 (185)
Overall Height in Carry Position	in. (mm)	66.7 (1695)	
Material Bucket Width / capacity (Heaped)	in. /cu.ft.(m³)	72 / 19.43 (0.55), 84 / 22.60 (0.64)	
Lift Capacity (Pivot pin)	lbs. (kg)	3990 (1810)	4144 (1880)
Raising Time to Full Height w/out Load ^{*)}	second	4.2	
Lowering time w/out Load (powerdown) ^{*)}	second	2.9	
Attachment Rollback Time	second	2.4	
Attachment Dumping Time	second	2.2	

^{*)}w/Standard valves.

Specifications

Model	M5-091						M5-111						
	2WD		4WD				2WD		4WD				
ROPS / CAB	HF ROPS	HFC CAB	HD ROPS	HD12 ROPS	HDC CAB	HDC12 CAB	HF ROPS	HFC CAB	HD ROPS	HD12 ROPS	HDC CAB	HDC12 CAB	HDC24 CAB
Engine	V3800CR-TIEF4						V3800CR-TIEF4						
Type (Make : KUBOTA)	4 cylinders in-line, Common Rail System, direct injection, w/intercooler, DPF, DOC, SCR						4 cylinders in-line, Common Rail System, direct injection, w/intercooler, DPF, DOC, SCR						
No. of cylinders/Aspiration	4 turbocharged												
Rated Engine HP (97/68/EC) HP (kW)	92.5 (69.0)						105.6 (78.8)						
Engine net power (SAE J1349) HP (kW)	85.5 (63.8)						100 (74.6)						
PTO power (at rated engine RPM) HP (kW)	76 (56.7)						89 (66.4)						
Total displacement cu.in. (cc)	230 (3769)												
Rated engine RPM	2400	2600	2400		2600		2400	2600	2400			2600	
Fuel tank capacity gal. (ℓ)	27.7 (105)												
Alternator	60A	80A	60A		80A		60A	80A	60A			80A	
Transmission													
No. of speeds	F8 / R8		F12 / R12	F8 / R8	F12 / R12		F8 / R8		F12 / R12	F8 / R8	F12 / R12	F24 / R24	
Main gear shift	(4 speed)		(6 speed)	(4 speed)	(6 speed)		(4 speed)		(6 speed)	(4 speed)	(6 speed)		
Dual speed (Hi-Lo)	N/A												
Shuttle shift	Electro hydraulic shuttle												
Non-Clutch shift	N/A												
Main clutch type	Multiple wet disc												
Brake type	Hydraulic wet disc												
Differential lock (Front / Rear)	Limited Slip Differential / mechanical												
4WD clutch type	mechanical, on the go												
PTO													
Type	Live-independent PTO, electro-hydraulic clutch with brake												
Speed rpm	540		540/540E	540	540/540E		540		540/540E	540	540/540E		
Hydraulics													
Pump capacity (3-Point Hitch) ROPS/CAB gpm (ℓ/min.)	15.9 (60)	17.0 (64.3)	15.9 (60)		17.0 (64.3)		15.9 (60)	17.0 (64.3)	15.9 (60)			17.0 (64.3)	
3-Point Hitch	Telescopic lower link ends, Telescopic Stabilizers												
Category	II												
Control system	Position, draft (top link sensing) & mixed control												
Lift capacity at 24 in. behind lift point (ISO) lbs. (kg)	4630 (2100)		6063 (2750)	4630 (2100)	6063 (2750)		4630 (2100)		6063 (2750)	4630 (2100)	6063 (2750)		
Lift capacity at 24 in. behind lift point (ASAE) lbs. (kg)	5181 (2350)		7275 (3300)	5181 (2350)	7275 (3300)		5181 (2350)		7275 (3300)	5181 (2350)	7275 (3300)		
Cylinder type	2 External cylinders												
No. of standard remote valves	1 (Max3)												
Other features													
4WD system	N/A		Bevel gear type with 55 degree turning angle				N/A		Bevel gear type with 55 degree turning angle				
Steering	Hydrostatic power steering												
Tilt steering	Standard												
Hood type / Pedal type	Full open, slanted, steel / hanging												
Deck type (w/rubber mat)	Full-flat on ROPS/CAB models												
Panel type	Electronic												
Roof window	N/A	Std	N/A		Std		N/A	Std	N/A			Std	
RPM memory	Standard												
Standard tire size													
Front	7.5-18 F2		11.2-24 R1				7.5-18 F2		12.4-24 R1				
Rear	18.4-28 R1						18.4-30 R1						
Dimensions & weight													
Overall length in. (mm)	156.0 (3975)		155.9 (3960)				156.5 (3975)		155.9 (3960)				
Overall height top of ROPS in. (mm)	98.8 (2510)	-	98.8 (2510)		-		99.8 (2535)	-	99.8 (2535)			-	
Overall height top of CAB in. (mm)	-	100.2 (2545)	-		100.2 (2545)		-	101.2 (2570)	-			101.2 (2570)	
Overall width (minimum) in. (mm)	77.2 (1960)		78.3 (1990)				78.3 (1990)		79.1 (2010)				
Wheelbase in. (mm)	90.0 (2285)		88.6 (2250)				90.0 (2285)		88.6 (2250)				
Crop clearance (Front axle) in. (mm)	20.5 (520)		18.7 (475)				20.5 (520)		19.7 (500)				
Tread width Front in. (mm)	56.7-80.3 (1440-2040)		59.8-63.8 (1520-1620)				56.7-80.3 (1440-2040)		59.8, 63.8 (1520, 1620)				
Tread width Rear in. (mm)	59.8-75.6 (1520-1920)												
Turning radius (w/o brake) ft. (m)	12.1 (3.7)		13.8 (4.2)				12.1 (3.7)		13.8 (4.2)				
Tractor weight ROPS models lbs. (kg)	5622 (2580)	-	6041 (2770)		-		5754 (2640)	-	6173 (2830)			-	
Tractor weight CAB models lbs. (kg)	-	6482 (2940)	-		6900 (3130)		-	6614 (3000)	-			7033 (3190)	

The company reserves the right to change the above specifications without notice. This brochure is for descriptive purpose only. Some of the items pictured in this brochure are optional, and not standard equipment. Please contact your local Kubota dealer for warranty, safety or product information. For your safety, KUBOTA strongly recommends the use of a Rollover Protective Structure (ROPS) and seat belt in almost all applications. Not for sale in Nebraska.



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