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OLD MANUAL RESTORATIONS TECHNIQUES

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WORKSHOP MANUAL
KUBOTA TRACTOR

B4200
(RC44-42)



KUBOTA

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TO THE READER

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This Workshop Manual has been prepared to provide servicing personnel with information on the mechanism, service and maintenance of KUBOTA Tractor B4200. It is divided into two parts, "Mechanism" and "Disassembling and Servicing".

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■ Mechanism

Information on the construction and function are included in this section. This part should be understood before proceeding with trouble-shooting, disassembling and servicing.

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■ Disassembling and servicing

The heading "General" includes general precautions, check and maintenance and special tools. For each tractor section, there are "Trouble-shooting", "Servicing Specifications", "Checking and Adjusting", "Disassembling and Assembling", and "Servicing" which cover procedures, precautions, factory specifications and allowable limits.

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All information, illustrations and specifications contained in this manual are based on the latest production information available at the time of publication.

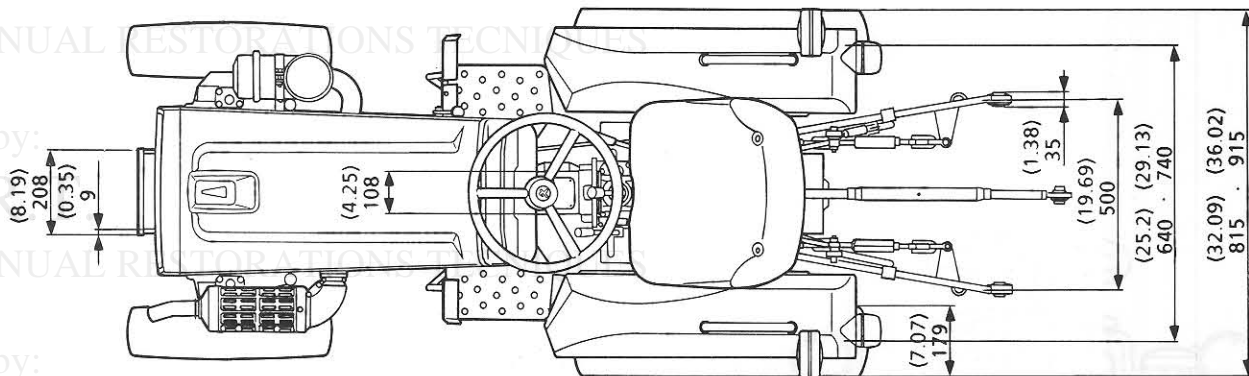
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December '86

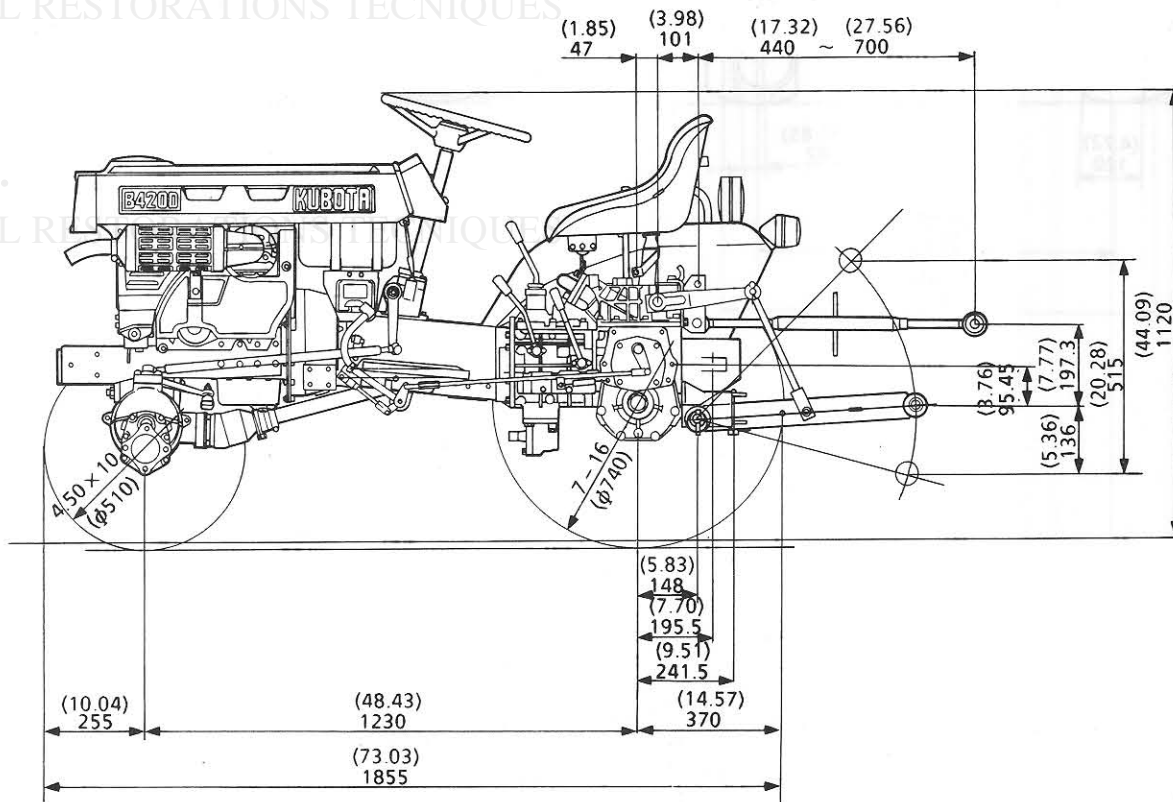
SPECIFICATIONS

Model		B4200 4WD		
P.T.O. power		7.5 kW (10.0 HP)		
Engine gross H.P.		9.3 kW (12.5 HP)		
Engine	Model	Z600-A		
	Type	Vertical, water-cooled, 4-cycle diesel		
	Number of cylinders	2		
	Bore and stroke	72 mm x 70 mm (2.76 in. x 2.83 in.)		
	Total displacement	570 cm ³ (34.8 cu. in.)		
	Rated revolution	43.3 r/s (2600 rpm)		
	Maximum torque (NET)	34.91 N·m, 3.56 kgf·m, 25.75 ft·lb/2000rpm		
	Combustion chamber	Spherical type		
	Fuel injection pump	Boshch K type mini pump (NP-PFR2KD50/2NP3)		
	Governor	Centrifugal Ball Mechanical Governor		
	Injection nozzle	Throttle type (ND-DN 12SD12)		
	Injection timing	0.37 to 0.40 rad. (21 to 23 deg.) before TDC		
	Injection order	1-2		
	Injection pressure	13.73 to 14.71 MPa (140 to 150 kgf/cm ² , 1991 to 2133 psi)		
	Compression ratio	22		
	Lubricating system	Forced Lubrication by Rotor-type Pump		
	Cooling system	Water with pressurized radiator		
	Starting system	Electric starting with cell starter (12V, 0.8kW), glow plug and decompression device		
	AC dynamo	14V, 10.4 Amps		
	Battery	12V, 35Ah		
Fuel	Diesel fuel No. 2-D, No. 1 diesel fuel [below-10°C (15°F)]			
Lubricating oil	MIL-L-46152 or MIL-L-2104C, API service CC or CD			
Weight (Dry)	82.3 kg (181.4 lbs)			
Capacities	Fuel tank	8ℓ (8.5 U.S.qts., 7.04 Imp. qts.)		
	Engine crankcase	2.3ℓ (2.4 U.S.qts., 2.02 Imp. qts.)		
	Engine coolant	3ℓ (3.2 U.S.qts., 2.64 Imp. qts.)		
	Transmission case	8.5ℓ (9.0 U.S.qts., 7.48 Imp. qts.)		
	Steering gear box	0.2ℓ (0.2 U.S.qts., 0.18 Imp. qts.)		
	Front axle diff. case	0.5ℓ (0.5 U.S.qts., 0.44 Imp. qts.)		
	Front axle case	0.15ℓ (0.16 U.S.qts., 0.132 Imp. qts.)		
	Tires	Front	Farm 4.50-10	Turf 20 x 8.00 - 10
Rear		7-16 212/80D-15		
Dimensions	Overall length mm (in.)		2215 (87.20) 2210 (87.01)	
	Overall width mm (in.)		840 (33.07) 915 (36.02) 980 (38.58) 1010 (39.76)	
	Overall height with muffler mm (in.)		1120 (44.09) 1110 (43.70)	
	Wheel base mm (in.)		1230 (48.43) 1230 (48.43)	
	Minimum ground clearance mm (in.)		220 (8.66) 210 (8.27)	
	Treads	Front mm (in.)	685 (26.97) 785 (30.91)	
		Rear mm (in.)	640 (25.20) 720 (28.35)	
740 (29.13) 805 (31.69)				
Weight kg (lbs)		420 (926)	430 (948)	
P.T.O. shaft		Transmission case (Rear P.T.O., Mid P.T.O.) and engine front (Front P.T.O.)		
Rear P.T.O.		SAE 1-3/8, 2 speeds (540 and 860 rpm at 2350 engine rpm)		
Mid P.T.O.		2563 rpm		
Clutch		Dry single plate		
Steering		Ball screw type		
Transmission		Gear shift, 6 forward and 2 reverse		
Minimum turning radius m (feet)		1.9 (6.2)		
Brake		Internal expanding type, right and left independent with interlocking device		

DIMENSIONS



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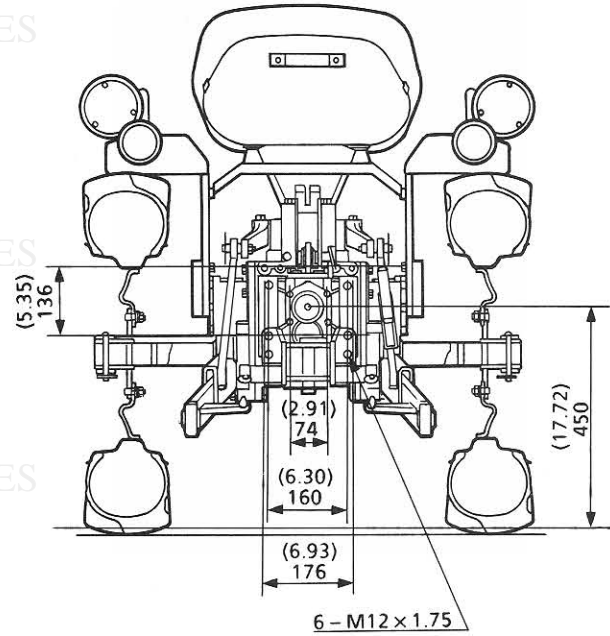
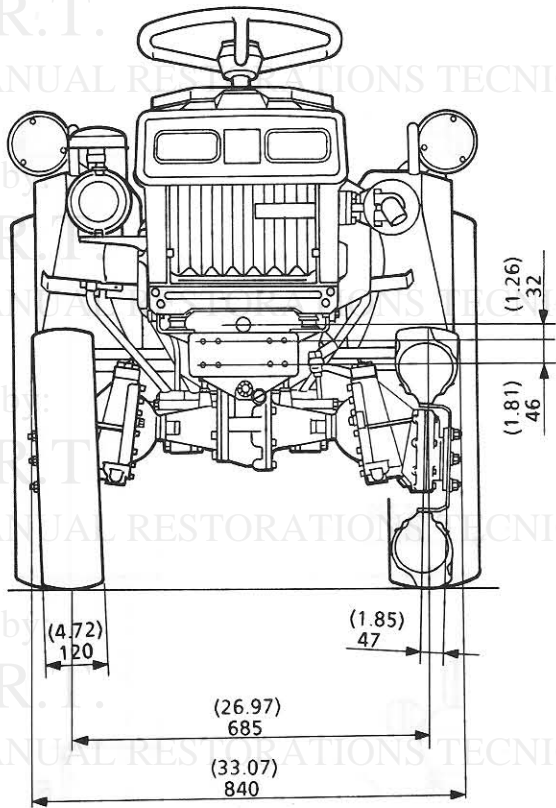
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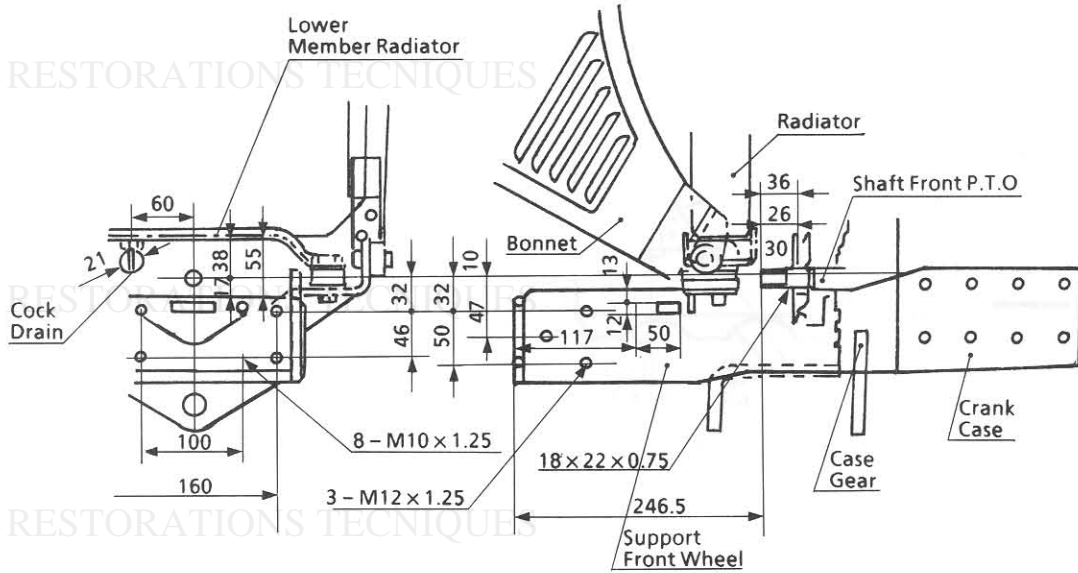
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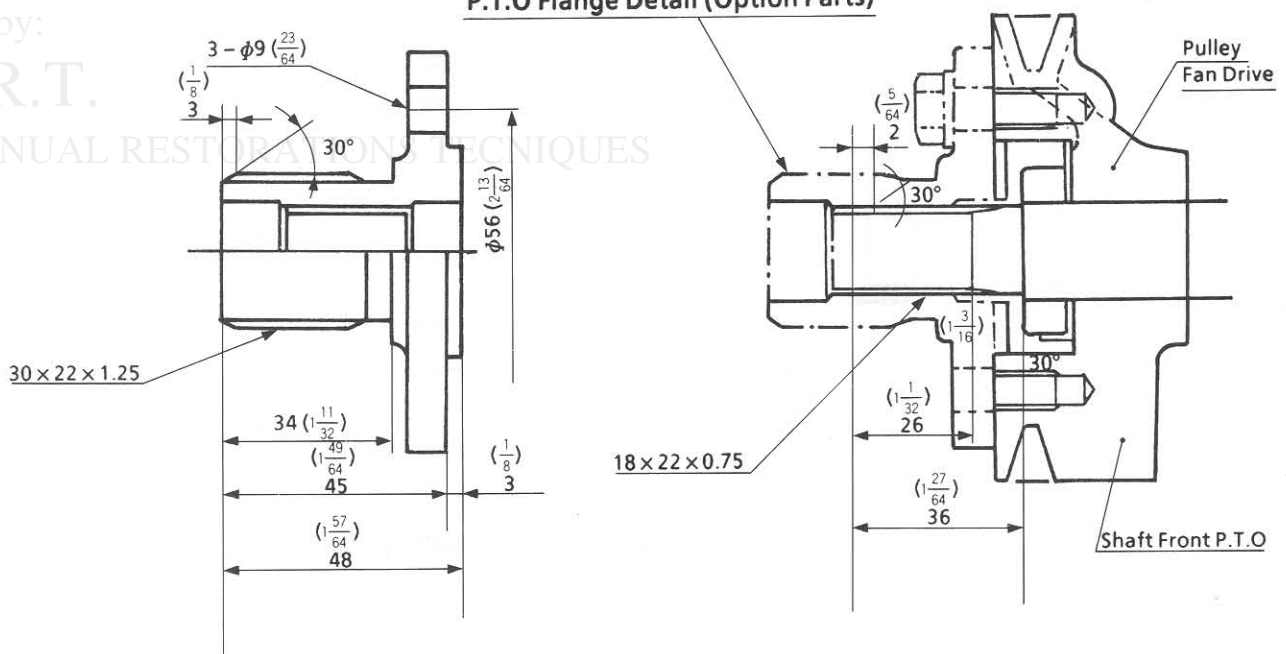
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Front P.T.O Detail



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P.T.O Flange Detail (Option Parts)



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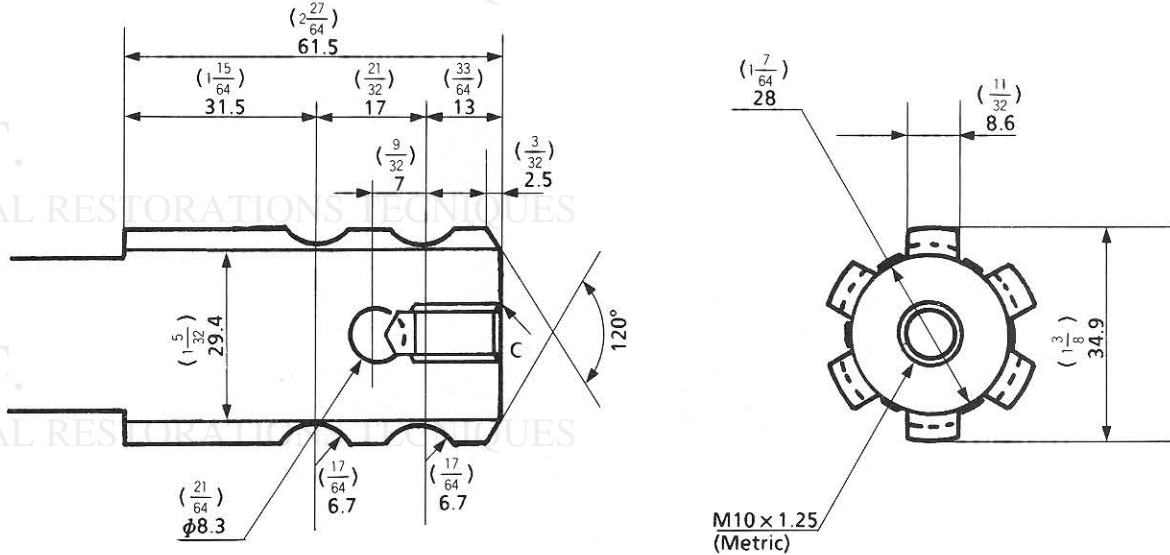
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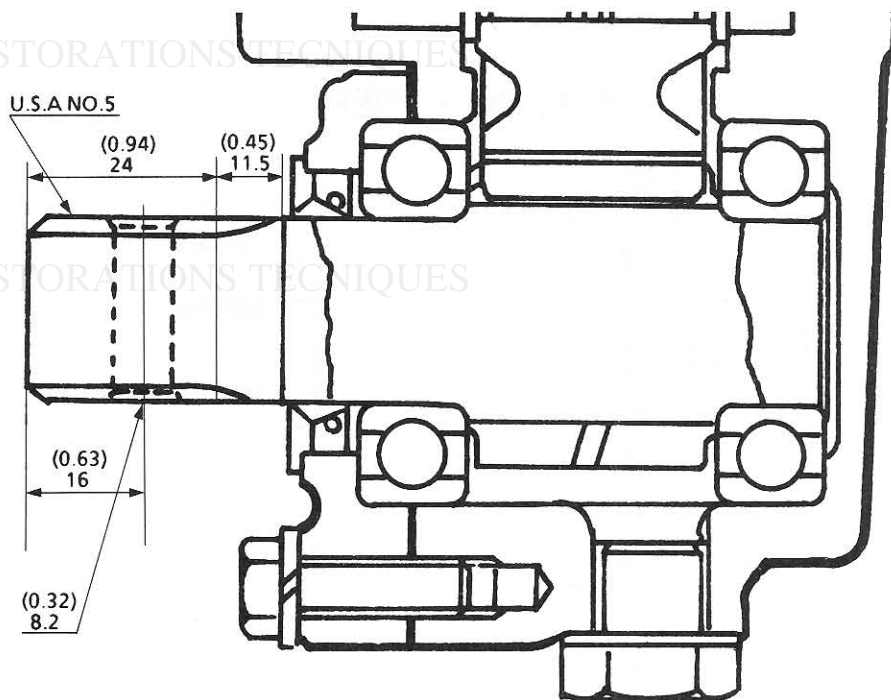
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Direction of Rotating
Clockwise from Rear

Rear P.T.O Shaft Detail

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MID P.T.O Shaft Detail

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M MECHANISM

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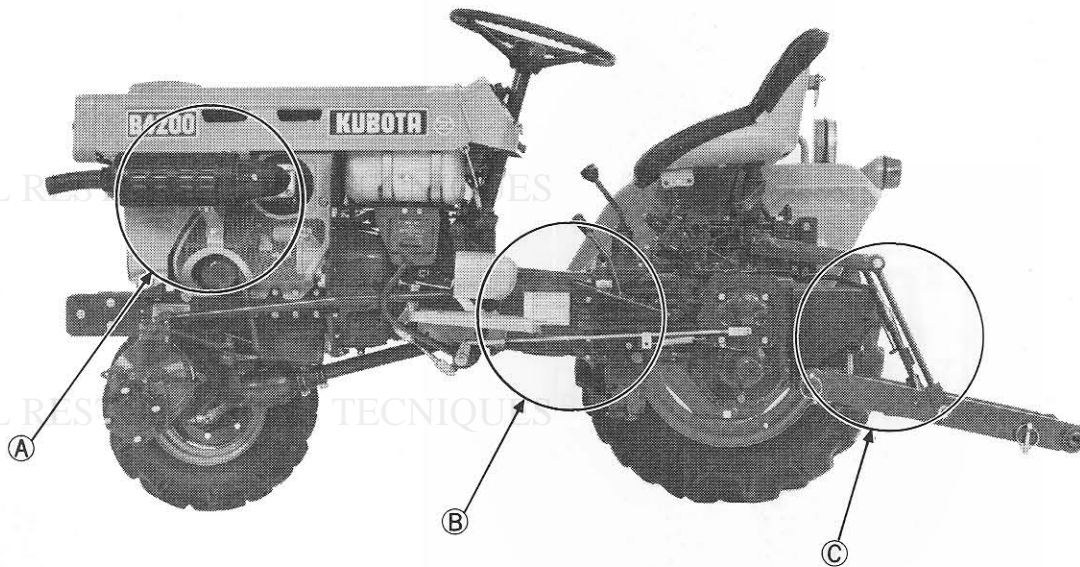
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F FEATURES

THE KUBOTA B4200 IS AN EXCEPTIONALLY COMPACT DIESEL TRACTOR WITH MID-PTO THAT PERFORMS A VARIETY OF JOBS WITH REMARKABLE OPERATING ECONOMY.



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[A] ENGINE

AN EXCEPTIONAL DESIGN

The B4200's four-cycle, 2-cylinder, 12.5 HP engine has been designed to provide exceptionally high torque rise.

POWER-TO-WEIGHT RATIO

The B4200 proves that you don't have to own a large tractor to handle really rugged jobs. The result is greater efficiency and economy.

AIR CLEANER

A large capacity, dry-type air cleaner also helps extend the durability and life of engine parts.

[B] TRANSMISSION

PERFORMANCE DESIGN

The B4200's transmission offers a wide selection of six forward and two reverse speeds for versatile performance.

MAIN SHIFT LEVER

The B4200's main shift lever positions First and Reverse are in a straight line, permitting quick, efficient forward / reverse directional changes.

MID PTO

With the engine running at 2600 rpm, the B4200's mid PTO speed is 2563 rpm.

MID-MOUNT MOWER MOUNTING

The KUBOTA RC44-42 mid-mount mower can be mounted on the B4200 simultaneously with the front loader.

DIRECT SHAFT DRIVE

Power to the mower is transferred from the mid-PTO via a universal joint, bevel gears and pinion gears. This gives you smoother and more direct power transfer in addition to greatly reducing the maintenance worries and repair downtime common to the belt system used by many conventional mowers.

[C] REAR PTO & 3P-LINKAGE

TWO SPEED REAR PTO

The B4200's two speed rear 10 HP PTO operates at 540 / 860 rpm. at 2350 engine rpm.

THREE POINT LINKAGE

The B4200's 3-point linkage permits fast mounting and dismounting of implements, while keeping them precisely positioned during operation.



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