

 **DRESSTA**

RD-165C
MOTOR GRADER

EXTRA



- **Net Horsepower**
119 kW (159 hp)
- **Operating Weight**
14300 kg (31,526 lb)

RD-165C MOTOR GRADER



- Excellent visibility and operator comfort
- Efficient performance
- Ease of operation

ENGINE

* Make and Model	CUMMINS QSB 6.7
Type	In-line, 6-cylinder
Aspiration	Turbocharged and CAC
Fuel system	HPCR Electronic
Gross Horsepower, SAE J1995	129 kW (173 hp)
Net Horsepower, SAE J1349/ISO 9249	119 kW (159 hp)
Rated rpm	2500 rpm
Maximum torque @ 1500 rpm	803 Nm (592 lb-ft)
Displacement	6.7 L (409 in ³)
Bore and Stroke	107 x 124 mm (4.2" x 4.9")
Air cleaner	2-stage, with service indicator

* Meets EU Stage IIIA and EPA Tier 3 emission regulations

TRANSMISSION AND TORQUE CONVERTER

Electronically controlled powershift transmission with integral torque converter provides 6 speeds forward and 3 reverse. Automatic or manual mode.

TRAVEL SPEEDS

Gear	Forward		Reverse	
	km/h	(mph)	km/h	(mph)
1 st	4.9	(3.0)	4.9	(3.0)
2 nd	7.5	(4.7)	7.5	(4.7)
3 rd	11.6	(7.2)	11.6	(7.2)
4 th	17.9	(11.1)	-	
5 th	26.0	(16.2)	-	
6 th	40.0	(24.9)	-	

FRAME

Material: construction steel, welded unit.	
Section	282 x 320 mm (11.1" x 12.6")
Wall thickness	16 mm (0.63")
Vertical section module, min.	1730 cm ³ (106 in ³)
Linear weight per length, average	235.7 kg/m (158.4 lb/ft)

FRONT AXLE

Wheel lean angle, left or right	22°
Oscillation, total	40°
Articulation, left or right	31°
Ground clearance at the center	600 mm (23.6")

REAR AXLE

Lug mounted, bevel gear with No Spin differential.

CIRCLE

Fabricated from heat treated carbon steel.	
Diameter (outside)	1350 mm (53.1")
Circle reversing control hydraulic rotation	360°

TANDEM DRIVE

Oscillating, welded box section, oil tight housing	
Dimensions	2038x630x148 mm (80.2x24.8"x5.8")
Axle spacing	1498 mm (59")
Tandem oscillation	17° forward, 17° reverse

STEERING

Hydraulic power steering system with emergency steering capability.	
Steering column, adjustable height and angle.	
Minimum turning radius	7000 mm (23')
Articulation, left or right	27°

BRAKES

Service - disc type, hydraulic applied, two-circuit with gas accumulators, effective on four tandem wheels
Parking/Emergency - disc type, mounted on output shaft of the transmission

HYDRAULIC SYSTEM

Load sensing system including variable displacement axial piston pump, multisection control valve and hydraulic lock valves automatically matches flow and pressure requirements for reduced heat generation and increased hydraulic efficiency and fuel economy.

Hydraulic pump displacement	61.6 l/min (16.3 gal/min)
Max. system pressure	140 bar (2030 psi)

CAPACITIES

	Liter	(US gal)
Fuel tank	325	(86)
Cooling system	40	(10.6)
Engine oil	30	(7.9)
Transmission	35	(9.2)
Rear axle	35	(9.2)
Tandem housing	44	(11.6)
Hydraulic reservoir	117	(31)

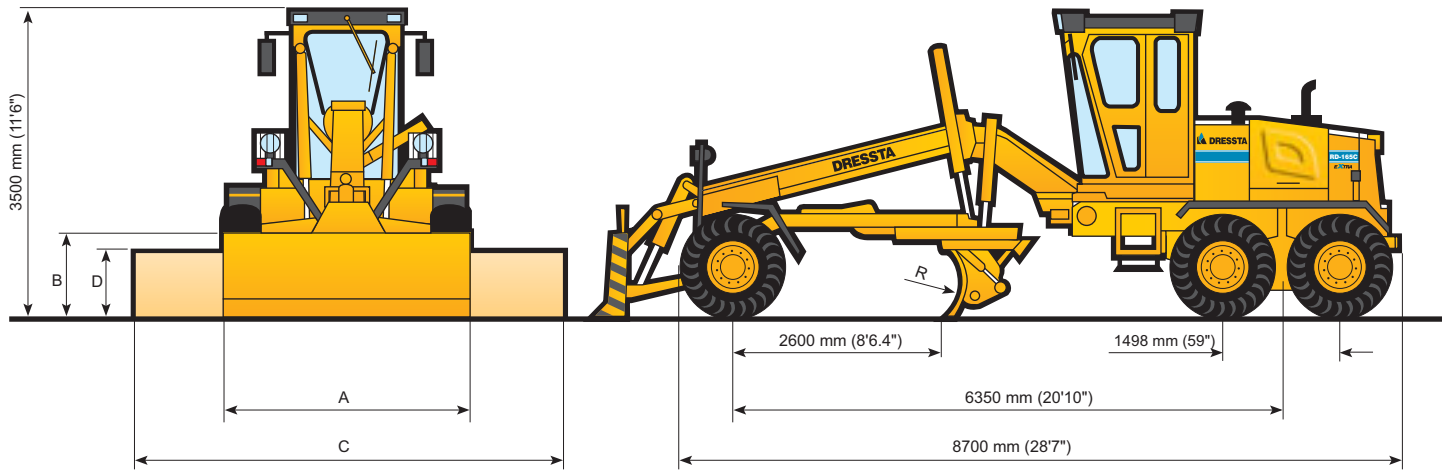
INSTRUMENTATION

Indicators: brakes, transmission and operative condition, hand brake, flashlight, road and turn lights, transmission display: actual gear selected and error codes

Gauges: engine rpm, fuel level, engine coolant temperature, transmission oil temperature, battery charge, hourmeter (daily and actual hrs)

OPERATING WEIGHT

Standard machine	14300 kg (31,526 lb)
Front and rear mounted optional attachments are tailored to maintain grader operating weight within	14100 - 14400 kg (31,085 - 31,746 lb).



DIMENSIONS

Length, standard machine	8700 mm (28'7")
Length, machine equipped with ripper	9000 mm (29'6")
Length, machine equipped with front blade, dozer / angle	9400/9700 mm (30'10"/31'10")
Length, machine equipped with front blade and ripper	10000 mm (33')
Width, rear tires center line	2086 mm (6'10")
Width, outside tires	2550 mm (8'5")
Height, high profile cab	3500 mm (11'6")
Height, beacon light mtd	3750 mm (12'4")
Height to axle	777 mm (2'7")
Height to exhaust pipe	2650 mm (8'8")

MOLDBOARD

Blade width (C)	3640 mm (143.3")
Blade height (D)	650 mm (25.6")
Arc radius (R)	370 mm (14.6")
Blade thickness	16 mm (0.63")
Cutting edge thickness	12 mm (0.5")
End bits thickness	12 mm (0.5")
Sideshift, RH/LH	800 mm (31.5")
Full circle rotation	360°
Max. blade position angle	90°
Blade pitch	35°
Max. lift above ground	500 mm (19.7")
Max. cutting depth	350 mm (13.8")

SCARIFIER

Working depth	1260 mm (50")
Scarifying depth	250 mm (10")
Shanks holders	9
Shank holder spacing	150 mm (5.9")
Weight	350 kg (772 lb)

BLADE EQUIPMENT, FRONT

Type of blade	DOZER	ANGLE
Blade width (A)	2500 mm (98.4")	3080 mm (121.3")
Blade height (B)	850 mm (33.5")	850 mm (33.5")
Max. lift	430 mm (16.9")	430 mm (16.9")
Cutting depth	50 mm (2")	50 mm (2")
Max. blade angle	–	33°
Weight	700 kg (1543 lb)	
808 kg (1781 lb)		

RIPPER

Width of ripping	1320 mm (52")
Ripping depth	250 mm (9.8")
Shanks holders	5
Shank holder spacing	350 mm (13.8")
Weight	380 kg (838 lb)
Penetration force	10800 kg (23,810 lb)
Pryout force	9200 kg (20,282 lb)

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STANDARD EQUIPMENT

- Air cleaner, 2-stage, dry type w/service indicator
- Alarm, back-up
- Alternator
- Axles, planetary type
- Batteries, (2) 12 V, 180 Ah, low maintenance
- Beacon light, rotating
- Brakes, service: disc type, hydraulic applied, two-circuit with gas accumulators, effective on four tandem wheels; parking: disc type, mounted on output shaft of the transmission
- Cab ROPS w/sound suppression, heater, front and rear wipers and washers, lockable door
- Cooling system for transmission and torque converter oil
- Differential, No Spin
- Electrical system, 24 V
- Extinguisher
- Fenders
- Horn, electric
- Hood sides for engine compartment
- Hydraulic system, load sensing, 9-spool valve
- Instrument panel
- Lights, travelling - front and rear, turn signals
- Lights, working, cab and radiator bonnet mounted
- Manuals, parts and operator's
- Mirrors, rear view, R. H. and L. H., heated
- Moldboard, full 360° circle rotation, hydraulic sideshift and pitch
- Monitoring and control system
- Muffler with exhaust pipe
- Pusher plate, front
- Rear ballast plate
- Rear door for engine and radiator compartment
- Seat, adjustable, suspension type, with arm rests and seat belt (SAEJ386)
- Steering column, adjustable and tilt
- Steering, hydrostatic
- Steps, left and right
- Tires (6), 16.9 - 24 IND, TI04
- Tool kit
- Transmission, full powershift, 6-speed forward and 3-reverse, electronically controlled, automatic or manual mode

OPTIONAL ATTACHMENTS

- Air conditioner, roof mounted
- Batteries (2) 12 V, 170 Ah, maintenance free
- Blade equipment, front mounted, instead of pusher plate:
 - angle blade, 3080 mm
 - dozer blade, 2500 mm
- Canopy ROPS
- FOPS structure, for use with cab
- Hydraulic system, additional control valves for front and rear mounted equipment
- Lockable access to radiator, engine side covers, fuel tank and hydraulic tank
- Optional painting (color upon request)
- Ripper, instead of rear ballast plate mounted
- Sun visor, for use with cab
- Scarifier, front mounted
- Spare wheel
- Tires: 14.00-24 S29 24PR, rock application

Specifications subject to change without notice. Illustrations and pictures may include optional equipment and may not include all standard equipment.

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