



RM120

MOTORGRADER



Unprecedented precision and ease of operation.



The frame, drawbar forged steel circle are designed for durability in heavy duty applications. The strong frame drawbar uses a durable material. The top surface of the circle teeth are hardened to reduce wear and ensure component reliability. A large tapered roller bearing at the lower pivot carries loads evenly and smoothly.



1. Angled cab doors, big rear window assure excellent visibility to the work area.
2. Easy-to-read, high-visibility gauges and warning lamps keep the operator aware of critical system information.
3. The Rhino Comfort seat and arm/wrist rests are fully adjustable for improved comfort and productivity.

ENGINE

Engine Make / Engine Model	Rhino RM804J22T - 115
Emissions (optional)	Tier 2 (Tier 3, Tier 4)
Net Power kW (Hp) @2,800 rpm	85(114)
Displacement L (cu. In)	4,3(264)
Net Peak Torque Nm (lb-ft) @2,000rpm	200(148)
Net Torque Rise (%)	35
Aspiration	Turbocharged
Lubrication	Full-flow spin-on filter
Air Cleaner	Under-hood, dual element dry

ELECTRICAL

Volts	24
Alternator Amps	55

POWERTRAIN

Transmission	Fixed shaft power stage, single stage, single phase three element torque converter
Speed Range - Forward	4
Speed Range - Reverse	4
Max. Travel Speeds with 16/70-20 Tires	
Max. Travel Speed - fwd. kph (mph)	40(25)
Max. Travel Speed - rev. kph (mph)	30(19)
Front Axle	
Oscilation (Total) (°)	32 (16 each side)
Wheel Turning Angle (°)	45
Differentials	Spiral bevel gear with automatic differential lock
Steering	Fully hydraulic power frame articulation for increased productivity and maneuverability
Turning Radius mm (ft)	7,000(23.0)
Articulation (both right and left) (°)	23
Brakes	Foot pedal activation, hydraulically operated drums on rear wheels
Service Brakes	Hydraulically actuated drums effective on rear wheels
Parking Brake	Manually actuated with drum mounted on output shaft of transmission

BLADE FUNCTION

Function	Fully hydraulic, industry standard lever placement of blade-function controls, Adjustable angle for added comfortability to the operator
Blade Lift Above Ground mm (in)	450(17.7)
Blade Side Shift Right mm (in)	550(21.7)
Blade Side Shift Left mm (in)	550(21.7)
Pitch at Ground Line	
Forward (°)	47
Back (°)	5

ELECTRICAL

Voltage	24
Number of Batteries	2
Battery Capacity	1,700CCA
Reserve Capacity	460 min
Amp-Hour Rating	12 Amp-hour
Alternator Rating	55 Amp
Lights	6 front lights and 2 rear lights, one orange rotating light on the back of the cab

MAINFRAME

Type	Welded box construction
Thickness mm (in)	100(3.9)

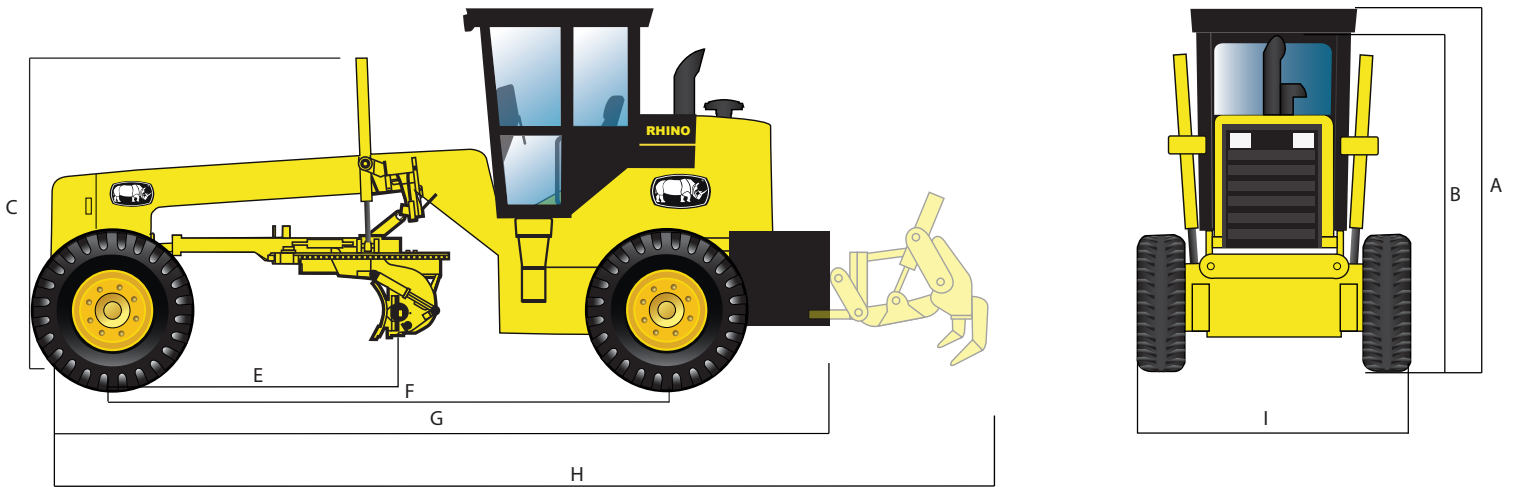
CIRCLE

Type	Welded structure, heat treated for extra strength, machined for flatness
Circle Diameter mm (in)	1,250(49.2)
Rotation (°)	360
Drive	Hydraulic motor and worm gear
Circle Side Shift (right and left) mm (in)	550(21.7)

HYDRAULIC SYSTEM

Pump Type	Gear pump, open type
Pump Flow L/min (gum)	200(52.8)
System Pressure Mpa (psi)	16(2.321)
Pump Displacement cm ³ (cu.in)	35(2.1)

MOLDBOARD	
Moldboard	High strength, heat treated high-carbon steel and reversible end bits, blade side shift system includes replaceable wear inserts
Base Length mm (ft)	3,000(9.8)
Height mm (in) measured from edge including cutting edge	450(17.7)
Thickness mm (in)	18(0.7)
CUTTING EDGE	
Heat Treated Carbon Steel	
Thickness mm (in)	17(0.7)
Width mm (in)	154(6.1)
REAR RIPPER	
Parallelogram linkage	
Width of Cut mm (ft)	2,100(6.9)
Number of Shanks	5
Lift Above Ground mm (in)	260(10.2)
Max. Penetration mm (in)	320(12.6)
Shank Size mm (in)	63x293(2.5x11.5)
TIRES	
Type	16/70-20 tires on 508mm (20in) rim
Overall Width mm (in)	2,050(6.7)
Ground Clearance (front axle) mm (in)	450(17.7)
REFILL CAPACITIES L (gal)	
Fuel Tank	90(24)
Cooling System	40(11)
Engine Oil	15(4)
Transmission Fluid	20(5)
Differentials	60(16)
Hydraulic Tank	70(18)
Brakes	0,8(0.2)
OPERATING WEIGHTS	
Front kg (lb)	2,100(4.431)
Rear kg (lb)	4,100(9.039)
Total kg (lb)	6,110(13.470)



MACHINE DIMENSIONS

A. Height to Top of Cab mm (ft)	3,200(10.3)
B. Height to Top of Exhaust mm (ft)	2,710(8.9)
C. Height to Top of Blade-Lift Cylinders mm (ft)	2,730(9.0)
E. Blade Base mm (ft)	2,200(7.2)
F. Wheelbase mm (ft)	4,950(16.2)
G. Overall Length mm (ft)	6,900(22.6)
H. Overall Length with Ripper mm (ft)	7,700(25.3)
I. Overall Width with 16/70-20 Tires mm (ft)	2,050(6.7)
Tread Width with 16/70-20 Tires mm (ft)	1,590(5.2)

OPTIONS

Rhino Motor Graders can come standard with rear ripper. They can come with front scarifier, front dozer blade, mid-body scarifier, and rear scarifier. As well as many other options depending on client requirements.

Available Tier 3 and Tier 4 Final engines.

Grader operating information is based on machine with identified linkage and standard equipment, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments.