

mahindra
CONSTRUCTION
EQUIPMENT

**AFFORDABLE
AND OPTIMISED
SOLUTION FOR
HIGHER PROFITS.**

ROADMASTER G90 DR



ENGINE	
Model	G90 DR
Form of Air Aspiration	Turbo Charged
Number of Cylinders	4
Displacement	3532 cc
High idle	850±50
Low idle	2150±50
Cooling system	Water cooled
Type of fuel	Diesel
Gross power	55kw(74hp) @ 1950 rpm
Peak gross torque	400Nm @ 1100 -1200 rpm
Electrical system voltage	12 V

OPERATING SPECIFICATIONS		
Gross Vehicle Weight	8596	
Front Axle Weight	3175	
Rear Axle Weight	5521	
Speed @gear (Km/hr.)	Forward	Reverse
	1st	4.0 to 5.5
	2nd	6.5 to 8.0
	3rd	14.5 to 16.5
	4th	29.0 to 32.5
Turning radius outside tyre (m) R1	10	
Steering angle inner wheel (degree)	45°	
steering angle outer wheel (degree)	32°	

MOLD BOARD	
Base length of MB (mm)	3000
Thickness of Mold board (mm)	16
Blade Height (mm)	H19 516

CUTTING EDGE (BLADE)	
Standard length of cutting edge (mm)	W8 2600 (Optional) {3 piece cutting edge} {1100 + 1100 + 400}
Standard length of cutting edge with side extension (mm)	3000 {4 piece cutting edge} {1100 + 1100 + 400 + 400}
Width of Cutting Edge	152
Thickness of Cutting Edge	16

FRONT AXLE	
Type	Non-Driven, Steerable, Central Pivoted
Front Axle Oscillation (degree)	10°

MIDDLE AXLE	
Type Central Pivoted	Driven, Non-Steerable, Rigid

REAR AXLE	
Type	Driven, Non-Steerable, Central Pivoted
Oscillation angle (degree)	5°

TYRES & WHEELS	
Type	13 x 24 - 12PR
Wheel rim size	9 x 24

TYRE PRESSURE	
Front/Middle/Rear	304 kPa

TRANSMISSION	
Model Name	Carraro 4WD Transmission
Gear Ratios	Forward / Reverse
	1st 5.603/4.643
	2nd 3.481/2.884
	3rd 1.585/1.313
	4th 0.793/0.657

HYDRAULICS	
System	Open Centre
Pump Type	Fixed displacement tandem gear pump
Max Pump Flow rate	96 lpm @ 1950 rpm
Max Working pressure	21.0 bar
Other Features	Load holding with pressure relief valves for lift and sensing cylinder

DEALER NAME

ROADMASTER G90 DR

Mahindra Construction Equipment, Mahindra & Mahindra Ltd. | MCE division | Plot No #A-1/1, Chakan Industrial Area, Phase-IV, Village Nigoje Chakan, Taluka-Khed, Dist: Pune - 410501, Maharashtra, India.
Toll Free Helpline: 1800 547 0086, **Website:** www.MahindraConstructionEquipment.com **Email:** mce.marketing@mahindra.com

DIMENSIONS		
Distance between mid and rear axle (mm)	L9	1850
Distance between front and middle axle (mm)	A	4300
Wheel base	L3	5225
Distance - Front axle to mold board blade base (mm)	L12	1691
Transport length - with Dozer (mm)	L1	8594
Transport length - with Dozer and Ripper (mm)	L1	9270
Ground clearance below front axle beam (mm)	H18	528
Minimum ground clearance (mm)	H4	467
Max vehicle height (mm)	H1	3290
Track width - Front (mm)	W3F	1674
Track width - Rear (mm)	W3R	1654
Width - outside front tires (mm)	W1F	2021
Width - outside rear tires (mm)	W1R	2001

BLADE RANGE		
Circle rotation angle AB	50° from transverse of vehicle	
Circle drive	Hydraulic cylinders with no end mechanical stoppers	
Blade side shift (mm) - LH/RH	513	
Blade tilt angle/Bank cut angle (RH/LH) at ground level measured on blade (degree)	A9	(20°/15°)
Blade tilt angle/bank cut angle (RH/LH) at ground level measured on drawbar (degree)	A9	(25.6°/20°)
Blade pitch angle at ground line (degree)	A11	Forward 40° Backward 5°
Blade without extension outside front tyre with blade positioned parallel to wheel axis	W9	289.5
Blade outside front tyre with blade positioned parallel to wheel axis	W9	489.5
Blade lift at normal blade pitch angle	395	
Max blade cut depth below ground at nominal blade	300	
Attachment oscillation angle (degree)	E	Upward 10° Downward 15°

END BIT		
Width (mm)	C	200
Thickness (mm)	16	
Blade pull force	kN	27
Blade down force	kN	27

SERVICE CAPACITIES	
Hydraulic Oil (L) - Replacement	50
Hydraulic oil (L) - System	60
Fuel Tank (L)	100
Engine coolant (L)	17
Engine oil (L)	13.5
Transmission (L) - Replacement	16
Middle axle or rear axle (Differential) - (L)	14.5
Middle axle or rear axle (Final drive) - (L)	1.5 (on each wheel end)

OPTIONAL FITMENT	
Ripper	Number of Ripper Shank Module - 5 No.

BRAKES	
Service Brake type	Foot operated hydraulically actuated oil immersed disc in middle axle
Parking Brake type	Hand operated, mechanically actuated caliper brakes system (integral with Axle)

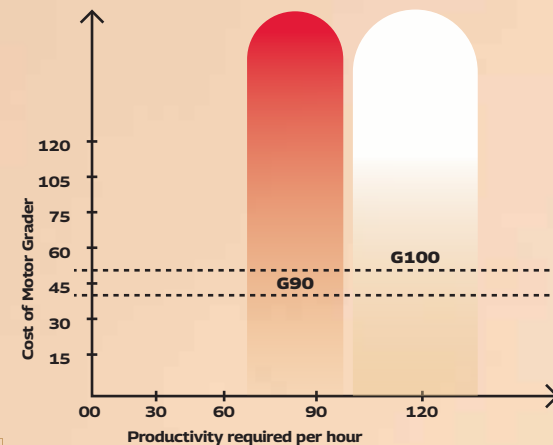
STEERING	
Type	Power Steering
Pump Displacement (cc)	200
Steering Valve	Load sensing with priority valve
Other Features	Emergency steering in case of pump failure

ELECTRICAL	
System Voltage	12 V
Battery Rating	12 V, 100 Ah
Alternator type	12 V, 90 Amp

Technical specifications, features are subject to change without prior notice. Images used are for representative purpose only. Accessories shown may not be a part of the standard product. Actual colors may vary. E&O.E. All dimensions are variable within +/-5%. For further details on warranty, please visit your nearest dealer.

G90 ROAD NOVEMBER 24

THE PROBLEM: UNDERUTILISATION.



Underutilisation of Motor Graders

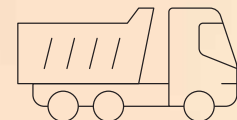
Equipment	Avg. Daily Working (h/day)
Backhoe Loader	8 - 10 h
Excavator	8 - 12 h
Motor Graders	4 - 6 h

Most motor graders in developing countries are used between 4-6 hours per day. There is a prominent underutilisation because:

The motor graders are not purpose-designed specifically for these markets. The supporting conditions like material availability on-site are also not optimal.

INCREASED PRODUCTIVITY AND OPTIMUM UTILISATION

Highest fuel efficiency in the segment, just like our **CEV V** Backhoe Loader category. Lowest per-hour scheduled maintenance cost. Lowest owning & operating cost in the industry. G90 is used for road construction such as PMGSY, SH Expansion, National Highway, MDR, ODR Roads, Railways Construction.



Around **7 Tipper** material in **1 hour**

BRAND-NEW CEV V ENGINE. DRIVING YOUR PROFITS HIGHER.

MAHINDRA'S PROVEN ENGINE NOW OFFERS BEST-IN-CLASS FUEL EFFICIENCY FOR BETTER SAVINGS.

Mahindra has taken its learnings from tractor engines to bring its fuel consumption down impacting the overall savings of our customers positively.

The **55 kW (74 HP), 3.5 litre, 4 cylinder** CRDI engine offers **400 Nm torque** for high-level grading performance.

The proven Mahindra engine offers assured reliability.

This is a low maintenance engine with a widespread availability of parts.

16% better torque compared to CEV IV

A PLETHORA OF FEATURES. A PROMISE OF PROFITABILITY.

HYDRAULICS

New and improved hydraulic pump for smooth performance. Higher maximum pressure around 200 bar for more power on blade. Bigger size of 26+26 cm³ gear pump for increased per-hour productivity.

CIRCLE ASSEMBLY

Easy adjustable Wear pad arrangement increases life of mold board & circle assembly

PERFORMANCE

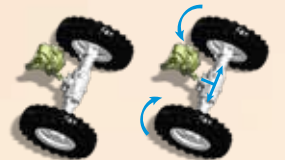
DAMPENING CYLINDER

Ensures comfort in road marching and stops fluctuation during grading in final cut. Ensures more comfort to the operator and better finishing during the last cut of grading.



FINAL DRIVE WITH DIFFERENTIAL LOCK

100% Mechanical Differential Lock helps in higher power generation and equal distribution of motion in the rear tyres. Ensures better performance in grading and is useful on muddy, marshy soils. The machine does not get stuck anywhere.



OPERATOR STATION



Mahindra believes that the most important part of the machine is the person operating it. That's why we have worked hard to make the operator experience comfortable for long hours of work. Ergonomic layout and seating - so that all controls are smooth and easy to reach. Including spacious canopy, lockable storage and mobile charging.



BLADE RANGE

Longer moldboard base length, increased support, less vibration, and blade length of 3000 mm for better quality work and finishing. Higher Rotation angle of around 50° from the transverse of the vehicle provides faster grading in heavy material. Blades easily accommodate between tyres while the machine is travelling. This helps in a smooth machine movement.

ATTACHMENT

HEAVY DUTY DOZER BLADE



Standard Attachment: The RoadMaster G90 comes with the Standard Dozer Blade fitment. This adds power and efficiency in the grading process as the Dozer breaks the material stock in advance.



5 TYNE RIPPER

Optional Attachment: The RoadMaster G90 comes with the option of having additional ripper fitments for added versatility. The Ripper is perfect for ripping hard compacted surfaces before grading.



MAHINDRA IMAXX[®] CONTROL YOUR BUSINESS FROM YOUR POCKET

