

# ***PERFORMANCE PAR EXCELLENCE MOST VERSATILE BACKHOE LOADER***

***THE NEW MAHINDRA EARTHMASTER SX90 4WD***



**Mahindra**  
Construction Equipment  
GENUINE SERVICE



**Mahindra**  
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LUBRICANTS



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ATTACHMENTS



**Mahindra**  
Construction Equipment  
GENUINE PARTS

**EARTHMASTER**

**SX90 4WD**



SPECIFICATION SHEET

Engine		
Model	4915-IA-CEV	
Emission Standard	BS III	
Type	Turbocharged Intercooled	
No. of Cylinders	4	
Displacement	3532 cc	
Gross Horse Power	91 HP (66.9 kW) @ 2200 RPM	
Peak Gross Torque	345 Nm ± 5% @ 1400 - 1600 RPM	
Hydraulics		
System Type and Pressure	Open Centre: 250 Bars (3675 PSI)	
Pump Type	Fixed Displacement, Gear Pump	
Pump Delivery	117 litres @ 2250 RPM	
Control Valves (Backhoe and Loader)	Sectional Valves (Sandwich Type, Individually Replaceable)	
Transmission		
<b>Type:</b> Four Speed (4 Forward, 4 Reverse), Four Wheel Drive (4 WD), Synchro Shuttle Transmission with Electrically Operated Reversing Shuttle and Torque Converter having Stall Ratio of 2.64:1		
Axles		
<b>Rear Axle:</b> Rigidly mounted drive axle, with outbound planetary final drives, driven by short drive shaft.		
<b>Front Axle:</b> Centrally pivoted, driven unbalanced type axle, with total oscillation of 16°, with remote greasing facility for the main pin.		
Brakes		
<b>Service Brakes:</b> Hydraulically actuated, self adjusting, maintenance free, oil immersed multi-disc, on the rear axle, operated by independent foot pedals, joined together for normal operation.		
<b>Parking Brakes:</b> Hand operated, inbuilt in the rear axle, low maintenance.		
Electricals		
Dust-proof switches, ignition controls for engine start and stop, horn and reverse alarm, water and dust-proof electrical connectors. Electric: 12V, Battery: 100Ah Alternator: 90 Ampere for Non-AC Version		
Cabin		
Ergonomically designed cabin with contemporary styling, excellent operator comfort, day and night time visibility, rear view mirror; multiple storage options, two door access, sliding rear window, stowable doors and an integrated tool box. Cabin frame built with sturdy tubular sections and protected with CED technology for longer rust protection. Fully adjustable premium operator seat with safety belt. Excellent leg space, conveniently positioned control levers and pedals. Low line curved hood to enhance operator visibility. ROPS, FOPS Compliance - Yes. Climate control optional		
Steering		
Front wheel hydrostatic power steering with priority function and pressure relief setting of 145 bar.		
Operator information and Entertainment System		
M-Star Non - CAN cluster with Water and Dust-proof connectors (IP-67) with Speedometer; Turn and Head Light Signals. Gauges : Temperature, Oil, Fuel, RPM gauge		
Gear Speed (Max with IT Tyres)		
1st F/R	5.33 km/hr	
2nd F/R	8.58 km/hr	
3rd F/R	18.83 km/hr	
4th F/R	37.64 km/hr	
Service Capacities	System Capacities	Service Replacement Capacities
Hydraulic Oil Capacity	100 Litres	100 Litres
Fuel Tank	120 Litres	120 Litres
Engine Coolant	Ready Mix (17 Litres)	17 Litres
Engine Oil	13.7 Litres	13 Litres
Transmission	22 Litres	12 Litres
Rear Axle	17.1Litres	17.1 Litres
Front Axle	9.1 Litres	9.1 Litres

Tyres		Standard (Industrial/Heavy Duty)	
Front	12.5 / 80 X 18 -12PR (IT/HD)		
Rear	16.9 X 28 - 12PR (IT), 14 X 25 - 12PR/20PR (HD)		
Backhoe Static Dimension			
		SX90 4WD IT	SX90 4WD HD
AA	Overall Length	5864 mm	5856 mm
AB	Wheelbase	2175 mm	2175 mm
AE	Height to top of Cab	2950 mm	2950 mm
AF	Overall Height	3665 mm	3634 mm
AG	Track Width Rear	1720 mm	1720 mm
AH	Track Width Front	1920 mm	1920 mm
AJ	Width over Bucket	2404 mm	2404 mm
AK	Max Length From Front Axle Center (Carry Position)	1836 mm	1829 mm
AL	Max Length From Rear Axle Center (Carry Position)	3207 mm	3210 mm
AM	Width During Transport Condition	2422 mm	2422 mm
AN	Max Length (Carry Position)	7218 mm	7215 mm
Backhoe Performance			
A	Max Dig Depth*	4959 mm	4959 mm
B	Reach at ground level to Wheel Center	7092 mm	7101 mm
C	Reach at ground level to Slew Center	5761 mm	5773 mm
D	Reach at full height to Slew Center	2676 mm	2676 mm
E	Side Reach to Center of Machine	6291 mm	6303 mm
F	Max Working Height*	6043 mm	6043 mm
G	Max Load Over Height*	4302 mm	4302 mm
H	King Post Travel	1060 mm	1060 mm
Y	Bucket Tearout Force	5828 kg	5828 kg
Z	Dipper Tearout Force	3182 kg	3182 kg
	Lift capacity to bucket pivot at full reach w/o bucket	1449 kg	1449 kg
	Bucket (Standard)	0.3 CuM	
Loader Performance			
M	Dump Height	2715 mm	2723 mm
N	Load Over Height	3267 mm	3277 mm
O	Pin Height	3477 mm	3482 mm
P	Pin Forward Reach	220 mm	204 mm
Q	Reach at Ground	1350 mm	1350 mm
R	Max Reach at Full Height	1100 mm	1084 mm
S	Reach at Full Height - Bucket Dump	706 mm	694 mm
T	Below Ground Level Dig Depth	107 mm	97 mm
U	Roll Back Angle at Ground	43°	44°
V	Dump Angle	44°	44°
W	Roll Back Angle at Max Lift	48°	49°
X	Overall Height Bucket Raised	4415 mm	4415 mm
1	Bucket Breakout Force	6243 kg	6243 kg
2	Loader Arm Breakout Force	5594 kg	5594 kg
	Shovel	1.1 CuM (6-in-1)	1.1 CuM (6-in-1)
	Lift Capacity at Max Height	3428 kg	3428 kg
	Payload	1800 kg	1800 kg
Turning Radius			
Inner Wheel Braked			
Turning Radius outside bucket		4494 mm	4494 mm
Turning Radius outside wheels		3083 mm	3083 mm
Inner Wheel Not Braked			
Turning Radius outside bucket		5150 mm	5150 mm
Turning Radius outside wheels		3825 mm	3825 mm
Shipping Weight of Vehicle			
Net Weight of Machine		7592 kg	7742 kg

Technical specifications, features are subjected to change without prior notice. Image used are for representative purpose only. Accessories shown may not be a part of the standard product. Actual colours may vary. E&O.E.^Standard exclusions apply. For further details on the warranty, please contact your dealer. According to government approved independent agency, under manufacturer standard PER/VEH/21 certified at 1450 RPM. #When compared to a standard excavation cycle. ##Value measured under specific measuring condition.

Mahindra Construction Equipment

Mahindra & Mahindra Ltd | CE Business | Gate No. 2 | 1st Floor | Powerol Building | Akurli Road | Kandivali(E) | Mumbai-400 101.

Toll Free Helpline: 1800 209 6006 | Website: www.mahindraconstructionequipment.com | E-mail: mce.marketing@mahindra.com