

**mahindra**  
CONSTRUCTION  
EQUIPMENT



**EARTHMASTER VX90 4WD**

## **Performance Par Excellence most versatile Backhoe Loader**

**Available with HVAC cabin and Optional Extendable Dipper.**



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### BEST-IN-CLASS FUEL EFFICIENCY WITH THE PROVEN MAHINDRA DITEC ENGINE

Mahindra has taken its learnings from tractor engines, to bring its fuel efficiency down incredible

- 10%\*\* more savings with Mahindra's engine
- 66.9 kW (91 HP) Turbocharged intercooled diesel engine
- Fuel efficient, compact, 4 cylinder, 3532cc engine.
- BSIII CEV / EU Stage III A Emission norms compliant

### LOW MAINTENANCE COST, MORE SAVINGS

With better technology and design enhancements, Mahindra has been able to lower lubricant refilling requirement with extended service intervals, thus reducing the overall maintenance cost.

- Hydraulic Oil: 50 litres with 3000 hours change interval
- Rear Axle Oil: 17.10 litres with 1500 hours change interval
- Engine Oil: 13 litres with 500 hours change interval
- Transmission Oil: 12 litres with 1000 hours change interval



LOW MAINTENANCE

SUPER  
SAVING



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### HVAC CABIN FOR ALL WEATHER COMFORT

- HVAC system with 6 air vents positioned all around the cabin ensures quick & even cooling from all directions
- Dust free & comfortable environment for the operator enables better productivity with low fatigue for longer working hours
- Efficient cooling with minimal impact on fuel consumption
- HVAC unit positioned at a convenient location for easy service & maintenance access
- Superior leak free cabin ensures zero dust & debris entry inside the cabin

### SUPERIOR PRODUCTIVITY AND PERFORMANCE

Simple ideas, lead to great improvements. Mahindra EarthMaster is a substantially faster machine loaded with features that lead to far greater productivity.

- Banana Boom with 7 % ## more reach

With Special Condition	Standard Dipper	Extendable Dipper	
		Dipper Closed	Dipper Open
Maximum Dig Depth	4959mm	5097 mm	5987 mm

- Loader Dump Height: 2715 mm
- Maximum Load Over Height (Loader): 3267 mm



### SUPERIOR CONVENIENCE AND COMFORTABLE DESIGN

Mahindra believes that the most important part of the machine, is the person operating it. That's why we have worked hard to make his experience the most comfortable for his long hours of work.

- Ergonomic layout and seating - all controls are smooth and easy to reach.
- Joystick controls for Backhoe operations
- 21st century styling, with plush car like interiors
- Personal Storage Space and Metallic toolbox with easy access.



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## SPECIFICATION SHEET

Engine		
Model	49154A-CEV	
Emission Standard	BSIII CEV / EU Stage III A	
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	Fixed Displacement, Gear Pump with 117 litres @ 2250 RPM	
Control Valves (Backhoe and Loader)	Sectional Valves (Sandwich Type, Individually Replaceable)	
Transmission		
Type: Four Speed [4 Forward, 4 Reverse], Four Wheel Drive [4WD], Synchro Shuttle Transmission with Electrically Operated Reversing Shuttle and Torque Converter having Stall Ratio of 2.64:1		
Axles		
Rear Axle: Rigidly mounted drive axle, with outboard planetary final drives, driven by short drive shaft.		
Front Axle: Four Wheel Drive (4WD) Centrally pivoted, driven type balanced axle, with total oscillation of 16°, with remote greasing facility for the main pin.		
Brakes		
Service Brakes: Hydraulically actuated, self adjusting, maintenance free, oil immersed multi-disc, on the rear axle, operated by independent foot pedals, joined together for normal operation.		
Parking Brakes: Hand operated, mechanically actuated, caliper type brake system (Integral with system)		
Electricals		
Dust-proof switches, ignition controls for engine start and stop, horn and reverse alarm, water and dust-proof electrical connectors. Electric: 12V, Battery: 100 Ah Alternator: 90 Ampere		
Cabin		
ROPS, FOPS compliant ergonomically designed HVAC cabin with contemporary styling, excellent operator comfort. Cabin frame built with sturdy tubular sections and protected with CED technology for longer rust protection. Fully adjustable premium operator seat with safety belt.		
Steering		
Front wheel hydrostatic power steering with priority function and pressure relief setting of 145 bar.		
Operator Information and Entertainment System		
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	102 Litres	50 Litres
Fuel Tank	120 Litres	120 Litres
Engine Coolant	Ready Mix [1.7 Litres]	1.7 Litres
Engine Oil	13.7 Litres	13 Litres
Transmission	20 Litres	12 Litres
Rear Axle	17.5 Litres	17.1 Litres
Front Axle	8.9 Litres	7.6 Litres
Types		
Standard (Industrial/Heavy Duty)		
Front	12.5 / 18 - 18 12PR	
Rear	18.0 - 16.9 - 28 12PR, HD - 14.00 - 25 12PR	

### Mahindra Construction Equipment,

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Backhoe Static Dimensions		VX90 4WD IT (with Standard Dipper)	VX90 4WD IT (with Extendable Dipper)	
			Dipper Closed	Dipper Open
AA	Overall Length	5864	5825	-
AB	Wheel Base	2175	-	-
AE	Height to Top of Cab	2950	-	-
AF	Overall Height	3665	-	-
AG	Track Width Rear	1720	-	-
AH	Track Width Front (4WD)	1920	-	-
AJ	Width Over Bucket	2404	-	-
AK	Max. Length From Front Axle Center (Carry position)	1836	-	-
AL	Max. Length From Rear Axle Center (Carry position)	3207	3578	-
	Width During Transport Condition	2422	2907	-
	Max. Length (Carry position)	7218	7589	-
Backhoe Performance				
A	Max. Dig Depth*	4350 / 4959*	4542 / 5097*	5432 / 5987*
B	Reach at ground level to Wheel Center	7092	7268	8116
C	Reach at ground level to Slew Center	5761	5992	6776
D	Reach at full height to Slew Center	2774	2915	3611
E	Side Reach to Center of Machine	6291	6453	7301
F	Max. working Height*	5474 / 6043*	5549 / 6295*	6104 / 6850*
G	Max. Load over Height*	3606 / 4131*	3703 / 4335*	4257 / 4889*
H	King Post Travel	1060	1060	-
Y	Bucket Tearout Force	5828 kg	5297 kg	5297 kg
Z	Dipper Tearout Force	3182 kg	3014 kg	2330 kg
	Lift capacity to bucket pivot at full reach w/o bucket	1449 kg	1255 kg	850 kg
	Bucket (Standard)	0.30 CuM	0.18 CuM	-
Loader Performance				
M	Dump Height	2715	-	-
N	Load Over Height	3267	-	-
O	Pin Height	3477	-	-
P	Pin forward Reach	220	-	-
Q	Reach at Ground	1350	-	-
R	Max. Reach at Full Height	1100	-	-
S	Reach at Full Height - Bucket Dump	706	-	-
T	Below Ground Level Dig Depth	107	-	-
U	Roll back Angle at Ground	43°	-	-
V	Dump Angle	44°	-	-
W	Roll Back Angle at Max. Lift	48°	-	-
X	Overall Height Bucket Raised	4415	-	-
1	Bucket Breakout Force	6243 kg	-	-
2	Shovel	1.1 CuM	-	-
	Lift Capacity at Max. Height	3428 kg	-	-
	Payload	1800 kg	-	-
Turning Radius				
	Inner Wheel Braked outside bucket / wheels	4494/3083	-	-
	Inner Wheel Not Braked Outside bucket / wheels	5150/3825	-	-
	Net Weight of Machine (Std. Bucket)	7592 kg	-	7901 kg

\*SAE condition / Special condition

**SDE Equipment Trading LLC**