



# 2009 Matrix 50

by E-TON



*Just go there!*

## 2009 Matrix 50

Metallic Red  
Midnight Black

Introducing the restyled 2009 E-TON Matrix 50 Scooter, the next generation of the popular Beamer scooter line. This scooter is powered by a 50cc 2 cycle oil injected engine that gives you great performance and an economical transportation alternative. With estimated mileage of 85 MPG\*, the Matrix 50 is easy on the fuel bill.

The 2009 model is EPA approved and meets or exceed all other Federal DOT regulations.

The Matrix 50 is fully decked out with our Powder Coat 12" Aluminum Mag Wheels and front and rear Hydraulic Disc HydrDisc® Brakes, and race spec front suspension system.

The sporty look of the Matrix 50 gives you a stylish economical ride.

**ETON AMERICA**  
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<b>Engine</b>		
Type	Two stroke, air cooled (EPA Compliant)	
Displacement	49.3cc	
Bore / Stroke	φ40.0 * 39.2mm	
Compression - Ratio / Pressure	6.8 : 1 / 120-140psi	
Torque	4.79@7000rpm	
Estimated MPG	85+ MPG (MPG under test conditions)	
Starting	Electrical with Kick starter back up	
<b>Transmission</b>		
Type	Automatic (C.V.T. V-Belt)	
<b>Chassis</b>		
Overall Length	1830mm / 72.0"	
Overall Width	650mm / 25.6"	
Overall Height	1100mm / 43.3"	
Wheel Base	1260mm / 49.6"	
Dry Weight	91kg / 201lb	
<b>Suspension</b>		
Front	Telescopic Fork	
Rear	Unit Swing Arm / Single Shock	
<b>Brakes</b>		
Front	HydrDisc® Hydraulic Disc	
Rear	HydrDisc® Hydraulic Disc	
<b>Tires</b>		
Front	120/70-12	
Rear	130/70-12	
Tire Pressure	Front	Front 18psi / 1.25kg/cm2 (Cold)
	Rear	Rear 25psi / 1.75kg/cm2 (Cold)
<b>Carburetor</b>		
Make/Size	SW 18mm (Manual Choke)	
Main Jet	#80	
Pilot Jet	#17.5	
Air Mixture Adjustment	Back out 1¼ - 1½ turns	
Idle Speed	Idle 1700 - 1900rpm	
<b>Battery</b>		
Jell Acid (Maintenance Free)	12V-4AH/5AH - GTX5L-BS	
	Main Fuse	7A
<b>Fluids</b>		
Fuel	Type	Unleaded Gasoline 89 octane
	Volume	4.5 liters / 1.2gal
2 Cycle Oil	Type	High grade synthetic 2 cycle injector oil
	Volume	1.1 liters / 1.2qts
Transmission	Type	SAE 80/90 weight
	Volume	100cc / 3.4oz
<b>Spark Plug</b>		
NGK (recommended)	BPR7HS	
Nipendenso	W22FRP-U	
Champion	QL82YC	
	Electrode Gap	0.6-0.7mm / 0.023"
<b>GVWR</b>		240kg. / 530lbs.
<b>GAWR (Front)</b>		76kg. / 167lbs.
<b>GAWR (Rear)</b>		165kg. / 164lbs.

