



Automobile Carbon Brush

1. From the intuitive point of view, **automobile carbon brush** (motorcycle carbon brush) should have a proper chamfer, appropriate specifications, standard structures, sections and lengths of wires that are in line with the requirements. There should be no loosening, getting off, damaged parts, dislodged angles or edges or clamps.

2. The symbols of a good performance of **automobile carbon brush** (motorcycle carbon brush) are as follows:

- (1) Long duration and not damaging the commutation or the collecting ring.
- (2) Good commutation and collecting capability to limit the sparks within the capacity and minimize the energy consumption.
- (3) No over heat, low noise and no wearing out when the automobile's brush is in operation (the motorcycle's brush).
- (4) Able to form a film of even, moderate and stable oxygen quickly on the surface of the commutation or the collecting ring when in operation.

Starter Motor Carbon Brush

The starter motor uses series motors. Its rated voltage and power are as follows: for gasoline cars (with the displacement of 360-2000 ml), 12V/0.4-1.2kw; for small diesel vehicles (with the displacement of 2000-3000ml), 12V/1.5-3kw; for large diesel cars, 24V/3.7-11kw.

High torque and instantaneous overload durability are required of the brush when it is in low speed. Since the starting current is very large, the contact voltage drop should be paid attention to and the spring pressure should be increased. In theory, the carbon brush with a low contact voltage will have a large degree of wear. Therefore, the materials of the carbon brush should be determined according to the torque and the longevity. When in operation, the motor's rotating speed increases as the brush's weight decreases. The brush's longevity is calculated on the assumption that it is started for 20,000 to 50,000 times (10 times per day, totaling 6 years).

The carbon brush is more vulnerable to the low temperature and low moisture compared with brushes used in other motors because of its high percentage of metal in its ingredients. Lead, tin and other special ingredients are usually added to the brush to reduce the wear between the carbon brush and the commutation.

Generator Carbon Brush

DC shunt generators can also improve output power/weight rate. As for the choice of the carbon brush's

materials, motors that have difficulties in commutation use power graphite brush. Those with extreme difficulties use natural graphite with high resistance. Using soft graphite can lower the noise caused by the carbon brush.

Accessory Motor Carbon Brush

heating equipment, including water heaters, scrubbers have been widely installed in automobiles.

Air-conditioning, air-conditioners, window lifters and seat adjustment devices all need carbon brush.

Specifications of **Automobile Carbon Brush** (Motorcycle Carbon Brush)

Model	Resistivity ($\mu\Omega\text{m}$)	Shore Hardness	Bulk Density (g/cm^3)	Flexural Strength (MPa)	Contact Relief (V)	Friction Coefficient	Rated Current Density (g/cm^2)	Allow Circumferential Speed (m/s)	Major Usage
CA345	0.76	28	2.65	21.9	L	L	13	30	Heater motors, AC Generators, Door Lock Mortisers, Auxiliary Motors
CM8100	0.83	28	2.63	29.2	VL	L	13	30	
CM8130	3.43	30	2.68	26.7	L	L	13	30	
CM8105	0.70	25	2.63	19.5	VL	L	13	30	
CM5H	0.51	11	3.65	12.6	VL	L	12	30	Winding Liner Magnetic Activated, Slip Ring Motors
CM802	0.52	20	3.85	34.5	VL	L	19	25	Low Voltage, High Current Work Locations, Especially Applicable to 12V Automotive Starters and Light Motorcycle Starters
CM836	0.51	22	3.68	44.6	VL	L	19	25	Low Voltage, High Current Work Place, Especially in 12V

									Automotive Starters and Motorcycle Starters
CM812 1 GA	0.76	20	3.45	38.9	VL	L	13	30	12V Starters, Window Lift Motors. Wiper Motor, Oil Pump Motors, Sump Pumps
CM835 GA	0.09	7	6.75	79.8	L	M	20	25	12V Starters, Slip Contact
CM871	0.43	21.5	3.88	44.7	L	L	13	30	Films, Contact.
CM896	0.11	11.5	5.75	48.6	VL	L	20	25	DC Motors
CN880	1.50	26	2.425	26.3	L	L	13	30	Low Noise/Longevity Heater Motors
J215	5.00	78*	2.70	/	≤1.6	≤0.25	15	20	Generators, Heater Motors
J245	0.65	76*	4.60	/	≤0.856	≤0.25	15	15	120V Vackers
J240	2.50	86*	3.35	/	≤1.3	≤0.25	15	35	Automotive Starters and Synchronous Collecting Rings

Contact Relief:

Very High ≥3.6 V

High: 2.4V-3.6V

Medium: 1.4V-2.3V

Low: 0.8V-1.3V

Very Low ≤0.8V

2. Friction Factor:

High ≥0.20

Medium: 0.15-0.20

Low: 0.10-0.15

Very Low ≤0.10

3. Rockwell Hardness - Carbon and Graphite Products

Automobile carbon brush (motorcycle carbon brush) can be applied to A/C blower motor, alternator, accessory motor, slip and ring motor, motorcycle starter, Automotive starter, A/C Blower motor, accessory motor, B/V application, Automotive alternator.

Our company is a China-based **automobile carbon brush** (motorcycle carbon brush) manufacturer and supplier. We produce carbon brushes of over 1000 specifications for the clients' choice. Meanwhile, we continue our research and development of new **automobile carbon brush** (motorcycle carbon brush) to satisfy the increasing demands of our clients. Our company has already passed the International Quality System Certification known as ISO9001:2000. The competitive price is another edge that wins the clients' recognition besides our products' high quality. We can manufacture the products according to the clients' own designs. We are surely willing to offer you OEM (original equipment manufacture).

Add: East Port Industrial Zone lesions,Haimen, Jiangsu Province,China

Tel: +86-513-82896666 / 82896066

Fax: +86-513-82896066

E-mail: yuqiangjiang@yahoo.com

Contact Person: Mr jiang

Website: <http://www.encarbon.com>